City Council Meeting

Aubrey City Council Chambers
226 Countryside Dr.
Aubrey, TX 76227
April 23, 2026
6:00 PM

**(Notice of Potential Quorum for Planning & Zoning Commission, Board of Adjustment, Library Board, Municipal Development District, and Parks and Recreation Board - even though a quorum of the members of these boards may or may not be present, no official action will be taken by their members.)*

Notice Regarding Remote Participation of Council Members

Pursuant to Section 551.127, Texas Government Code, one or more Council Members may attend this meeting remotely using videoconferencing technology. A quorum of the board will be physically present at the location provided above.

Call to Order - Determine if a Quorum is Present:

Invocation & Pledge of Allegiance: Pledge of Allegiance to the Texas Flag - “Honor the Texas flag; I pledge allegiance to thee, Texas, one state, under God, one, and indivisible.”

Community Announcements: Items of community interest may include recognizing Citizens and Staff for outstanding contributions to the community, a reminder about an upcoming event that is organized or sponsored by the governing body, and announcements of an imminent threat to public safety that has arisen after the posting of this agenda.

1. - Police Department New Hire Introduction — Rachal Pineda — Crime Victim Advocate

Citizen Input: Any person may address the City Council. If your comments are concerning an agenda item, you may wait until the discussion on that item if you prefer. Once recognized by the Mayor, please step forward to the speaker’s podium, state your name and address and speak

directly into the microphone so that people in the room can hear comments and see presentations. Citizen comments are limited to three (3) minutes per individual unless additional time is otherwise required by law. No discussion or action may be taken at this meeting on any item not listed on the agenda, other than to make statements of factual information or recite existing policy in response to a citizen's inquiry.

Consent Items: Items placed on the Consent Agenda are considered routine in nature and non-controversial. The Consent Agenda can be acted upon in one motion. Items may be removed from the Consent Agenda by the request of Council, board members or staff. Consideration and action on the following:

2. Approve minutes of the March 26, 2026 meeting.

3. Approve Monthly Staff Reports

4. Approve Monthly Financial Report.

5. Approve Quarterly Investment Report.

6. Approve the request from Council Member(s) identified in the Staff report as an excused absence from the March 26, 2026 regular meeting.

7. Approve Resolutions 1040-26, 1041-26, 1042-26, and 1043-26, temporarily closing Main Street for Summer Music Series, Main Street Motorfest, Peanut Festival, and Holiday Tree Lighting.

8. Approve an Amended and Restated Interlocal Agreement for Billing Services between the City of Aubrey and Mustang Special Utility District.

9. Approve Change Order No. 1 for F.M. 428 18-Inch Parallel Force Main in the amount not to exceed $212,220.00.

10. Approve Resolution 1044-26, authorizing the Aubrey Municipal Development District to enter an Economic Development Agreement and Performance Agreement between the City of Aubrey, Aubrey Municipal Development District, and Walmart Real Estate Business Trust.

11. Approve the final acceptance of Highpointe Ranch, Phase 3, Public Improvements.

New Business: New items requested for consideration.

12. Consideration and action on a Preliminary Plat for Solid Rock, consisting of three (3) lots (Lots 1 and 2, Block A, and Lot 1, Block B), being approximately 10.407 acres out of the James Bridges Jr. Survey, Abstract No. 36, generally located west of Silverado Parkway, south of Frontier Parkway, and north of FM 2931 and Liberty Road, within the City of Aubrey ETJ, Denton County, Texas. (Cre8stone DFW LLC)

13. Consideration and action on Ordinance 946-26 amending Chapter 3 “Building Regulations”, Article 3.04.062 “Nuisances on Exterior of Property”, adopting a new Section 3.04.062 (i) “Exterior Property Maintenance”, adopting a new Article 3.04.070 “Fence Maintenance”, and amending Article 3.10 “Streets and Sidewalks” by adopting a new Article 3.10.001 “Encroachment on Public Property”; providing a penalty of a fine for violations; and providing an effective date.

14. Consideration and action on a Resolution nominating a candidate for the DENCO Area 9-1-1 District Board of Managers.

15. Consideration and action on an Ordinance amending Chapter 1, "General Provisions", Article 10, "Parks and Recreation", Division 3, "Park and Community Center Rules" Section 1.10.073, "Prohibitions and Standards of Conduct", Subsections 19 and 26 regulating park hours and other standards; providing a penalty, and providing for publication and an effective date.

16. Consideration and action on the final acceptance of Winn Ridge First Responders Park Public Improvements and authorize the final payment in the amount of $62,318.92 to Perfect Finish Landscaping.

17. Consideration and action on an agreement with Fransen Pittman for Construction Manager At-Risk services and General Construction on the Aubrey MDD Development Project at 204-208 S. Main Street, and authorize the City Manager to sign necessary documents.

18. Consideration and action on approving Ordinance 951-26 amending the Fiscal Year 2025-2026 budget.**

****Taxpayer Impact Statement**

Property Tax Due on Median Valued Homestead

2024 Rate vs 2025 Adopted Rate vs 2025 No New Revenue Rate

	Rate per $100 of Value	**Median Valued Homestead Property**	**Tax Due**
2024 Adopted Rate	0.464000	$339,000	$1,573
2025 Adopted Rate (Effective October 1, 2026)	0.450000	$339,000	$1,526
2025 No New Revenue Rate	0.450674	$339,000	$1,528

19. Consideration and action on Ordinance 952-26, amending Chapter 12, “Traffic and Vehicles”, Section 12.03, “Operation of Vehicles” to establish prima facie maximum Speed Limits on identified portions of FM 1385 within City limits; providing for a fine amount not to exceed $200 for each violation; and providing an effective date.

20. Consideration and action on a Resolution establishing an approximate population of the City and the ETJ of the City and certifying and attesting to the combined population exceeds the population threshold required by Texas Transportation Code Section 644.101 for eligibility and participation in the Commercial Vehicle Enforcement program operated by the Texas Department of Public Safety; and providing an effective date.

21. Consideration and action on approving a mural concept that will be located at 200 W Sycamore and authorize City Manager to execute necessary documents.

Department Updates and Discussion:

22. Administration & Finance:

23. Library:

24. Fire Department:
    - Records Management System

25. Police Department:

26. Public Works:

27. Human Resources:

28. Municipal Development:

Future Agenda Requests: Council or Board Members, City Staff, and Citizens may request items to be included on future agendas. Discussion is limited to what the request is for, and if and when the item can be put on a future agenda.

*****EXECUTIVE SESSION***** In accordance with Texas Government Code, Section 551.001, et seq., the City Council will recess into Executive Session (closed meeting) to discuss the following:

29. **Section 551.071(1) and (2) Consultation with Attorney.** For Council to seek the advice of its attorney about pending or contemplated litigation or a settlement offer and to consult with the City Attorney on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act:
    -*City of Aubrey v. Jerry H. Simmon*s, et al, Cause No. PR-2024-01392-B, Denton County, Texas.
    -500 Main Street
    -Coffee Road Development

30. **Section 551.072 Real Property.** Deliberate the purchase, exchange, lease, or value of real property if deliberation in an open meeting would have a detrimental effect on the position of the governmental body in negotiations with a third person.
    - Downtown Property Acquisition.

31. **Section 551.087 Economic Development Negotiations.** To discuss or deliberate regarding commercial or financial information that the City has received from a business prospect that the City seeks to have locate, stay, or expand in or near the territory of the City and with which the City is conducting economic development negotiations; and/or to deliberate the offer of a financial or other incentive to the business prospect:
    -Purchase of Downtown Property for Economic Development
    -Aubrey 165 - Bridleridge Development
    -Coffey Road Tract Development
    -Coffey Road and Bonar Development
    -Nash 160 Development
    -The Vibe & Elite Developments
    -Hwy 377 & Friendship Commercial
    -7118 FM 2931 Commercial Development

Motion to Recess into Executive Session.

Reconvene into Open Session: In accordance with Texas Government Code, Chapter 551, the City Council will reconvene into Regular Session to consider and take appropriate action, if any, regarding any items discussed in Executive Session.

-ADJOURN-

I, Jenny Hicks, City Secretary, certify that this Notice of Meeting was posted, per the Open Meetings Act, on the official bulletin board at the City Hall of the City of Aubrey, Texas and on the City's website at www.aubreytx.gov in accordance with Chapter 551, Texas Government Code, and shall remain posted until the meeting is adjourned.

I certify that the attached notice and agenda of items to be considered by the City Council of the City of Aubrey, Texas was removed by me from the official bulletin board of the City of Aubrey, Texas, 107 S. Main St, Aubrey, Texas on the _____day of _____, 2026.

(The City Council reserves the right to adjourn into closed session at any time during the course of this meeting to consult with its attorney regarding any of the matters listed on this document, as authorized by Texas Government Code Section 551.071 Consultation with Attorney.)

This facility is wheelchair accessible and accessible parking spaces are available. Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services such as interpreters for persons who are deaf or hearing impaired, readers, or large print, need to contact the ADA Coordinator at least 48-hours prior to the meeting. Please e-mail your request to: swilliams@aubreytx.gov.gov or call (940) 440-9343 ext 106. BRAILLE IS NOT AVAILABLE.

City Council Meeting Minutes

Aubrey City Council Chambers
226 Countryside Dr.
Aubrey, TX 76227
March 26, 2026
6:00 PM

The meeting was called to order at 6:00 PM.

Present: Jeff Perry, Chuck Fikes, Matt Jones, Mike Browning, Chris Rich Absent: Randy Jones

Staff Present: City Attorney Patricia Adams, City Manager Charles Kreidler, City Secretary Jenny Hicks, Finance Director Mike English, Fire Chief Eric Schlotter, Police Chief Richard Brooks, Assistant City Manager Leanne Wilson, Public Works Director Dean Rylant, Library Manager Brittany McLain, HR Director Shaena Williams, Administrative Clerk Kacey Hagen, Assistant to the City Manager Bailey Thompson, Development Manager Shanda Guffee

Council Member Mike Browning offered the Invocation and led the Pledge of Allegiance.

Community Announcements:

1. **Mayor Rich announced the City's upcoming events in March and April:**
   - Annual Aubrey Easter Egg Hunt - March 28th at Veterans Memorial Park from 9:00 AM until 12:00 PM
   - Fruit Jar Junction market begins April 4th, and continues on the first Saturday of each month from 9:00 AM until 1:00 PM at Veterans Memorial Park
   - City of Aubrey Touch-a-Truck event - April 11th at Veterans Memorial Park from 10:00 AM until 2:00 PM

   New firefighters Dakota Hunter and Eloy Arizmendi were sworn in.

   New Police Officer Ryan Getty was sworn in, and Louis Morales was introduced as a new Code Compliance Officer.

   Public Works Director Dean Rylant announced Sean Harmon as the new Water Superintendent.

Citizen Input:

Dustin Clay, 1619 Goodwin Dr in Providence Village, announced his candidacy for Aubrey ISD board of trustees.

Consent Items: Items placed on the Consent Agenda are considered routine in nature and non-controversial. The Consent Agenda can be acted upon in one motion. Items may be removed from the Consent Agenda by the request of Council, board members or staff. Consideration and action on the following:

2. Approve minutes of the February 26, 2026 meeting.

3. Approve Monthly Staff Reports

4. Approve Monthly Financial Report.

5. Ratify approval and execution of an Economic Development Incentive Agreement between the City of Aubrey, the Aubrey Municipal Development District and Wal-Mart Real Estate Business Trust providing economic development incentives for a Wal-Mart retail facility pursuant to the authority of the AMDD under Chapter 377 and City authority under Chapter 380 of the Texas Local Government Code (Project Anchor).

6. Approve the 2026 Consumer Price Index adjustment to municipal telecommunications right-of-way access line rates.

7. Approve Easement Acquisitions for the Rockhill Water Pump Station Improvement Project, and FM 428 Sewer Lift Station Improvements, and authorize the City Manager to execute necessary documents.

8. Approve a Professional Services Agreement between the MDD and Parkhill for Architecture and Engineering Services for MDD building project not to exceed $80,800, and authorize the City Manager to sign necessary documents.

9. Approve a professional services agreement with Kimley-Horn for site development services for the intersection of FM 2931 & Blackjack for an amount not to exceed $52,000, and authorize the City Manager to execute the agreement.

10. Approve submission of the Texas Public Libraries Annual Report and Application for Accreditation for Local Fiscal Year 2025.

11. Approval of the Authorized Personnel List.

12. Consideration and action of the purchase of land from Steve Wilson in the amount of $27,619.65 for Dane Street Right-of-way, and authorize the City Manager to execute necessary documents.

City Manager Charles Kreidler pulled item number 5 and provided information.

Council Member Jeff Perry made a motion to approve the remaining consent items. Council Member Chuck Fikes seconded. Motion Passed (4:0). None opposed.

Council Member Jeff Perry made a motion to approve item number 5. Council Member Chuck Fikes seconded. Motion Passed (4:0).

New Business: New items requested for consideration.

13. Presentation, discussion and action to accept the Fiscal Year 2025 Audit from Whitley Penn.

    Roger Tovar, with Whitley Penn, presented the FY25 Audit.

    Council Member Jeff Perry made a motion to accept the fiscal year 2025 audit. City Council Member Mike Browning seconded. Motion Passed (4:0). None opposed.

14. Hold a public hearing, consider and act on an Ordinance annexing a 10-acre tract of land situated in the John Ryan Survey, Abstract No. 1069, Denton County, Texas, and being part of a called 14.898 acre tract of land as described in General Warranty Deed to Javier Alonzo and Thelma Alonzo, as recorded in Instrument Number 2014-8402, of the Official Public Records of Denton County, Texas; identified as Denton Central Appraisal District Property ID Number 52432; generally located at 8445 FM 2931, Pilot Point, Denton County, TX, into the corporate limits of the City of Aubrey, Texas. (Owner: City of Aubrey).

    City Manager Charles Kreidler provided information.

    The Public Hearing opened at 6:32 PM and closed at 6:34 PM. No citizens spoke.

    Council Member Jeff Perry made a motion to approve the Ordinance for annexation. Council Member Chuck Fikes seconded. Motion Passed (4:0). None opposed. (Ordinance 950-26)

15. Consideration and action on Ordinance No. 949-26 authorizing the use of the name "Ray Roberts Parkway" as a permitted roadway designation along the corporate limits of Highway 377 ; and providing an effective date.

    City Manager Charles Kreidler provided information.

    Council Member Jeff Perry made a motion to approve the Ordinance giving US 377 the additional name of Ray Roberts Parkway. City Council Member Mike Browning seconded. Motion Passed (4:0). None opposed. (Ordinance 949-26)

16. Consideration and action on a Professional Engineering Services Agreement with Plummer Associates, Inc. for the Rockhill Street Well Corrosivity Engineer Report for an amount not to exceed $45,700 and authorize the City Manager to execute the agreement.

    Public Works Director Dean Rylant provided information.

    Council Member Matt Jones made a motion to approve the Professional Services Agreement. Council Member Jeff Perry seconded. Motion Passed (4:0). None opposed.

17. Consideration and action on appointing a member to the Aubrey Parks and Recreation Board.

    City Secretary Jenny Huckabee provided information.

    Council Member Jeff Perry made a motion to appoint Nicole Nelson to the Parks and Recreation Board. City Council Member Mike Browning seconded. Motion Passed (4:0). None opposed.

18. Consideration and action on a Resolution of the City Council approving the expenditure of funds by the Aubrey Municipal Development District for Targeted Improvement Grants in amounts up to $30,000 per grant, and cumulatively up to the budgeted amount of $200,000 for the Fiscal Year 2025-2026 without the requirement for additional approval by the City Council; approving the Targeted Improvement Program as a Project; and proving an effective date.

    MDD Board President Holly Drew provided information.

    City Council Member Mike Browning made a motion to approve the Resolution. Council Member Chuck Fikes seconded. Motion Passed (4:0). None opposed.

Department Updates and Discussion:

19. Administration & Finance:
20. Library:
21. Fire Department:
22. Police Department: Chief Brooks thanked Assistant Chief Johnson for his preparedness with the Ironman 2026 and that there were no issues in our jurisdiction.
23. Public Works:
24. Human Resources:
25. Municipal Development:

Future Agenda Requests: None

*****EXECUTIVE SESSION***** In accordance with Texas Government Code, Section 551.001, et seq., the City Council will recess into Executive Session (closed meeting) to discuss the following:

26. **Section 551.071(1) and (2) Consultation with Attorney.** For Council to seek the advice of its attorney about pending or contemplated litigation or a settlement offer and to consult with the City Attorney on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act: *City of Aubrey v. Jerry H. Simmon*s, et al, Cause No. PR-2024-01392-B, Denton County, Texas.
    -500 Main Street
    -Charter Provisions
    -Mustang Property
    -Tyler Florence, individually and as Next Friend of Minors, KTL and KAF, and Noel Boyd, individually and on behalf of the Estate of Dontarianna Boyd v. City of Aubrey, Cause No. 25-7942-467 (467th Judicial District - Denton County)

27. **Section 551.072 Real Property.** Deliberate the purchase, exchange, lease, or value of real property if deliberation in an open meeting would have a detrimental effect on the position of the governmental body in negotiations with a third person.
    - Downtown Property Purchase

28. **Section 551.087 Economic Development Negotiations.** To discuss or deliberate regarding commercial or financial information that the City has received from a business prospect that the City seeks to have locate, stay, or expand in or near the territory of the City and with which the City is conducting economic development negotiations; and/or to deliberate the offer of a financial or other incentive to the business prospect:
    -Purchase of Downtown Property for Economic Development
    -Aubrey 165 Development
    -Coffey Road Development
    -Nash 160 Development

29. **Section 551.071 (2) and 551.074 Personnel Matters.** Consultation with the City Attorney on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act (551.071), and Deliberation regarding the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of public officer or employee or to hear a complaint or charge against an officer or employee (551.074):
    - City Secretary (Goals & Duties)

City Council Member Mike Browning made a motion to recess into executive session at 6:43 PM. Council Member Jeff Perry seconded. Motion Passed (4:0). None opposed.

Reconvene into Open Session: In accordance with Texas Government Code, Chapter 551, the City Council will reconvene into Regular Session to consider and take appropriate action, if any, regarding any items discussed in Executive Session.

City Council reconvened into open session at 8:30 PM. No action was taken on items discussed in Executive Session.

The meeting was adjourned at 8:30 PM.

PASSED and APPROVED by the City Council of the City of Aubrey, Texas this 23rd day of April, 2026.

Chris Rich, Mayor

ATTEST:

Jenny Hicks, City Secretary

City of Aubrey - Municipal Court Report

New Cases Filed	
March -Traffic	125
March - Non Traffic	5

Total Fines Collected	
March - State	$10,168.00
March - City	$20,533.00

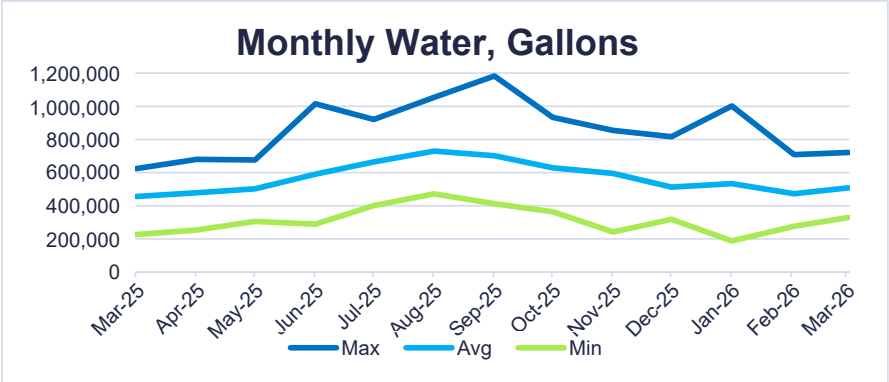
Final Disposition	
March - Traffic	142
March - Non Traffic	9

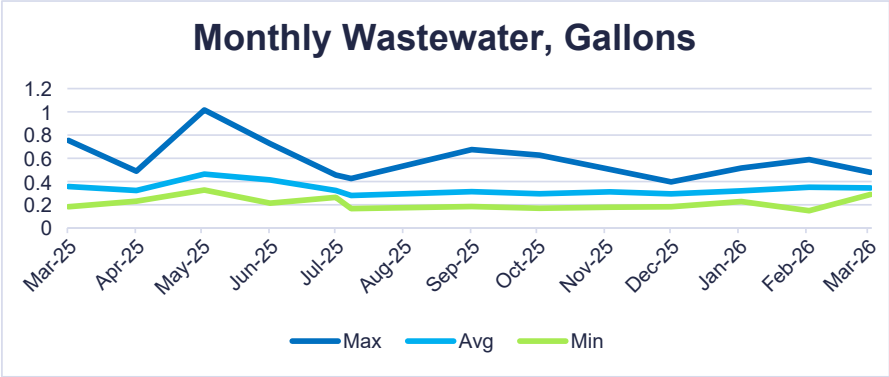
Fiscal YTD Collected	
YTD - State	$ 70,590.00
YTD - City	$ 113,429.00

Warrants	
Issued	0
Cleared	23
Pending	1306

City of Aubrey - Public Works

March 2026 Activity Report





Water Production MG

Mar-26	15,751,800
Feb-26	13,234,600
Jan-26	16,537,900
Daily Average Gal	505,826

Wastewater Treatment MG

Mar-26	10,354,000
Feb-26	9,832,000
Jan-26	9,594,000
Daily Average Gal	330,889

Work Orders

Water & Sewer Maintenance	165
Cut-offs Non Payment	18
Street/Parks	49
Line Locates	159
Billing and Meters	137
Total	528

Fees Collected	Mar-26
Water Impact	$218,832.00
Sewer Impact	$423,297.00
Roadway Impact	$103,799.64
Parks Fee	$211,500.00
Total	$957,428.64

Projects

Highpointe Commercial Area	Grading is complete.
HighPointe Phase 3	Final walk-thru complete. Waiting on storm drain & retention pond to be cleaned.
HighPointe Phase 4A	Finishing up grading.
HighPointe 4B	Grading is complete.
HighPointe East Phase 1	Franchise utilities complete. Cleaning & putting everything back to grade.
HighPointe East Phase 2	Grading is complete.
Rockhill Well	Pump and motor are installed.
Rockhill Pump Station	Foundation is poured for GST. TNMP has installed electrical.
Veterans Park Phase 2	Pending the marquis sign. Will be replacing two dead trees along main street.
WinnRidge 1st Responder Park	Will attempt final acceptance at the April City Council.
Sports Complex	Moving forward with CMAR and are reviewing the RFQ document.
Aubrey Heights	Fixed drainage issues on retaining wall, turn lane is not approved by TXDOT or ISD.
Palomino	Installing franchise utilities, started building back screenwall, installing light poles.
City Hall/Dane Street	Been installed. Working on grading and sidewalks. City Hall parking 90% complete.
Blackjack/Dane Water Line	Concrete pads poured around hydrants and valve boxes. Leveled ground and spread seed.
Chaparral Ridge	Grade work continues, moving dirt, building lots and cutting in streets.
3.1 Water Line(Simmons Track)	Re-boarding casement to the right location as well as the right elevation.
Aubrey Retail	Set sanitary sewer manhole and installed sewer main and cleanouts. Installed inlets.
Redfearn	Builder agreed to install sewer manhole, starting on sewer main installation.
18" Parallel Force Main	Completed all 18" & 14" bores. All 18" sewer main installed thru Highpoint Frontage.

WW YEARLY FLOW AVG.

	AVG	MAX	MIN	TOTAL	RAIN FALL
Jan-16	0.278	0.386	0.226	8.616	1.35"
Feb-16	0.246	0.468	0.204	7.621	2.5"
Mar-16	0.359	0.775	0.257	11.141	4.25"
Apr-16	0.382	0.744	0.222	11.844	7.45"
May-16	0.433	1.213	0.300	13.409	14.3"
Jun-16	0.433	1.213	0.300	13.409	6.2"
Jul-16	0.282	0.448	0.254	8.728	5.1"
Aug-16	0.223	0.420	0.169	6.909	7.8"
Sep-16	0.214	0.283	0.174	6.639	3.20"
Oct-16	0.201	0.346	0.161	6.243	3.75"
Nov-16	0.201	0.346	0.161	6.243	3.75"
Dec-16	0.194	0.242	0.155	6.019	1.10"
Jan-17	0.226	0.514	0.162	7.017	4.45"
Feb-17	0.211	0.338	0.176	6.532	2.60"
Mar-17	0.222	0.661	0.174	6.885	1.85"
Apr-17	0.235	1.230	0.193	7.273	3.58"
May-17	0.211	0.250	0.179	6.537	2.48"
Jun-17	0.241	0.536	0.175	7.476	8.5"
Jul-17	0.204	0.468	0.136	6.311	6"
Aug-17	0.201	0.450	0.108	6.246	8.75"
Sep-17	0.182	0.241	0.141	5.639	.10"
Oct-17	0.196	0.237	0.135	6.070	2.85"
Nov-17	0.181	0.249	0.138	5.607	.75"
Dec-17	0.209	0.425	0.155	6.490	3.5"
Jan-18	0.198	0.228	0.160	6.133	.10"
Feb-18	0.271	1.038	0.168	8.396	8.60"
Mar-18	0.278	0.777	0.197	8.617	5.25"
Apr-18	0.232	0.298	0.177	7.183	1.5"
May-18	0.249	0.414	0.211	7.722	2.8"
Jun-18	0.180	0.263	0.126	5.566	1.2"
Jul-18	0.182	0.256	0.144	5.652	.5"
Aug-18	0.213	0.512	0.161	6.592	5.5"
Sep-18	0.279	0.917	0.159	8.396	11.70"
Oct-18	0.380	0.876	0.210	11.804	10.75"
Nov-18	0.266	0.457	0.207	8.001	1.75"
Dec-18	0.313	0.780	0.204	9.727	5.75"
Jan-19	0.338	0.677	0.253	10.491	1.5"
Feb-19	0.288	0.344	0.244	8.072	2.25"
Mar-19	0.337	0.666	0.249	10.116	3.25"
Apr-19	0.361	0.624	0.248	10.855	6.25"
May-19	0.502	1.052	0.305	15.557	11.75"

Jun-19	0.350	0.749	0.256	10.503	6.25"
Jul-19	0.214	0.415	0.127	6.639	2"
Aug-19	0.261	0.380	0.159	8.113	4.75"
Sep-19	0.229	0.443	0.119	6.882	.60"
Oct-19	0.165	0.387	0.069	4.937	7.45"
Nov-19	0.108	0.219	0.059	3.243	5"
Dec-19	0.108	0.281	0.061	3.231	.85"
Jan-20	0.260	0.438	0.177	7.799	3.83"
Feb-20	0.290	0.633	0.21	8.419	3.66"
Mar-20	0.374	0.754	0.217	11.224	10 3/10
Apr-20	0.305	0.423	0.197	9.168	2.25"
May-20	0.255	0.593	0.131	7.647	8.95"
Jun-20	0.166	0.294	0.111	4.977	5"
Jul-20	0.087	0.231	0.051	2.611	2.5"
Aug-20	0.067	0.111	0.027	2.015	4.75"
Sep-20	0.108	0.402	0.055	3.248	6.50"
Oct-20	0.177	0.292	0.092	5.321	3.25"
Nov-20	0.174	0.255	0.15	5.221	1.75"
Dec-20	0.176	0.286	0.147	5.283	2.20"
Jan-21	0.219	0.535	0.177	6.569	3.75"
Feb-21	0.217	0.373	0.135	6.073	1.75"
Mar-21	0.234	0.386	0.186	7.005	2.75"
Apr-21	0.232	0.513	0.131	6.946	4.75"
May-21	0.398	0.752	0.251	11.947	10.35"
Jun-21	0.347	0.727	0.232	10.423	6.75"
Jul-21	0.247	0.396	0.198	7.421	3.20"
Aug-21	0.242	0.655	0.173	7.249	5.70"
Sep-21	0.193	0.242	0.151	5.783	.10"
Oct-21	0.187	0.293	0.136	5.620	3.10"
Nov-21	0.204	0.293	0.170	6.126	3.85"
Dec-21	0.185	0.272	0.089	5.564	5.13"
Jan-22	0.186	0.216	0.144	5.575	0.5"
Feb-22	0.2	0.245	0.141	5.601	3.3"
Mar-22	0.19	0.232	0.139	5.697	1"
Apr-22	0.222	0.406	0.184	6.663	4"
May-22	0.285	0.532	0.186	8.552	7"
Jun-22	0.268	0.608	0.193	8.034	3.75"
Jul-22	0.201	0.277	0.154	6.044	0
Aug-22	0.209	0.278	0.172	6.486	2.2"
Sep-22	0.21	0.265	0.182	6.314	0
Oct-22	0.207	0.329	0.117	6.218	4.25"
Nov-22	0.239	0.448	0.183	7.161	6"
Dec-22	0.268	0.572	0.186	8.045	5.13"
Jan-23	0.233	0.363	0.19	7.003	1.5"
Feb-23	0.324	0.595	0.24	9.071	2.75"
Mar-23	0.331	0.541	0.256	9.929	2.75"

Apr-23	0.249	0.338	0.163	7.484	**0.05"**
May-23	0.258	0.365	0.215	7.784	**1.48"**
Jun-23	0.247	0.301	0.211	7.418	**2.75"**
Jul-23	0.219	0.262	0.179	6.561	**0.5"**
Aug-23	0.222	0.268	0.194	6.872	**0.1"**
Sep-23	0.227	0.299	0.149	6.811	**0.27"**
Oct-23	0.262	0.802	0.181	8.186	**9.7"**
Nov-23	0.248	0.301	0.144	7.454	**0.6"**
Dec-23	0.257	0.631	0.14	7.938	**4.4"**
Jan-24	0.282	0.42	0.19	8.751	**1.15"**
Feb-24	0.294	0.459	0.133	8.519	**1.5"**
Mar-24	0.357	0.754	0.183	11	**7.75"**
Apr-24	0.395	0.958	0.265	11.861	**5.25"**
May-24	0.46	1.024	0.199	13.813	**11.22"**
Jun-24	0.427	0.918	0.272	12.805	**4"**
Jul-24	0.243	0.306	0.199	7.301	**0.1"**
Aug-24	0.248	0.423	0.199	7.265	**0.1"**
Sep-24	0.243	0.299	0.189	7.283	**2.16"**
Oct-24	0.237	0.286	0.206	7.104	**0.05"**
Nov-24	0.243	0.369	0.179	7.281	**0.91"**
Dec-24	0.253	0.394	0.187	7.592	**0.06"**
Jan-25	0.285	0.49	0.15	8.546	**2.85"**
Feb-25	0.3	0.407	0.205	8.406	**0.65"**
Mar-25	0.357	0.754	0.183	10.714	**1 1/10"**
Apr-25	0.323	0.489	0.231	9.7	**2.9"**
May-25	0.464	1.016	0.327	14.383	**10.31"**
Jun-25	0.414	0.726	0.214	12.413	**4.01"**
Jul-25	0.323	0.456	0.264	9.694	**2.75"**
Aug-25	0.28	0.426	0.167	8.412	**1.48"**
Sep-25	0.313	0.675	0.185	9.391	4.28"
Oct-25	0.2948	0.627	0.17	8.844	2.6"
Nov-25	0.3114	0.505	0.179	9.342	2.74
Dec-25	0.294	0.397	0.183	8.832	0.14"
Jan-26	0.32	0.516	0.228	9.594	2.44"
Feb-26	0.351	0.589	0.149	9.832	1.99"
Mar-26	0.345	0.479	0.289	10.354	3.57"

	AVG	MAX	MIN	TOTALS
Jan-19	281,816	436,400	217,100	8,736,300
Feb-19	244,368	329,900	195,000	6,842,300
Mar-19	289,555	603,500	229,100	8,976,200
Apr-19	268,167	330,700	214,500	8,045,000
May-19	275,426	353,300	218,700	8,538,200
Jun-19	285,133	370,700	218,100	8,554,200
Jul-19	371,380	446,300	241,700	11,512,800
Aug-19	374,403	479,200	232,000	11,606,500
Sep-19	365,573	491,300	275,400	10,967,200
Oct-19	300,116	436,400	206,700	9,303,600
Nov-19	234,076	295,700	187,000	7,022,300
Dec-19	243,174	292,200	190,800	7,538,400
Jan-20	225,735	274,700	162,300	6,997,800
Feb-20	231,972	275,500	201,100	6,727,200
Mar-20	232,236	271,300	192,900	6,976,100
Apr-20	261,576	386,900	188,500	7,847,300
May-20	300,870	419,600	195,500	9,026,100
Jun-20	367,936	486,900	234,000	11,038,100
Jul-20	410,661	572,900	279,000	12,730,500
Aug-20	403,530	519,300	253,800	12,100,363
Sep-20	331,180	457,100	249,600	9,935,400
Oct-20	300,116	436,400	206,700	9,303,600
Nov-20	277,676	549,800	209,900	8,330,300
Dec-20	242,703	286,700	186,600	7,523,800
Jan-21	252,429	549,800	209,900	7,825,300
Feb-21	304,357	606,300	196,500	8,522,000
Mar-21	258,935	321,800	207,300	8,027,000
Apr-21	293,960	376,800	207,300	8,818,800
May-21	278,948	403,300	192,400	8,647,400
Jun-21	306,343	416,600	194,500	9,190,300
Jul-21	356,487	544,200	264,900	11,051,100
Aug-21	394,380	482,999	266,500	12,225,799
Sep-21	421,753	518,000	307,300	12,652,600
Oct-21	333,613	448,200	241,800	10,008,400
Nov-21	297,714	364,000	178,700	8,931,440
Dec-21	280,080	361,400	182,700	8,682,500
Jan-22	282,764	369,400	235,100	8,765,700
Feb-22	288,275	358,600	227,100	8,071,700
Mar-22	293,577	383,700	214,500	9,100,900
Apr-22	354,967	407,600	279,400	10,649,000
May-22	364,900	522,200	235,700	11,311,900
Jun-22	444,470	576,600	225,900	13,334,100
Jul-22	558,283	779,800	423,900	17,306,800
Aug-22	413,851	656,800	256,700	12,829,400
Sep-22	427,623	535,200	319,000	12,828,700

Oct-22	375,512	524,000	264,800	11,640,900
Nov-22	293,390	406,900	210,500	8,801,700
Dec-22	295,351.00	419,800	221,000	9, 155,900
Jan-23	301,698	392,190	177,887	9,352,659
Feb-23	286,315	708,837	94,458	8,016,829
Mar-23	317,567	700,100	100,000	9,844,600
Apr-23	377,153	486,600	242,900	11,314,600
May-23	415,716	655,100	251,300	12,887,200
Jun-23	443,187	662,100	227,300	13,295,600
Jul-23	534,303	739,700	330,200	16,563,400
Aug-23	662,245	738,600	551,800	20,529,600
Sept.23	602,050	902,900	446,800	18,061,500
Oct-23	446,603	706,100	90,900	13,844,700
Nov-23	364,970	808,600	170,354	10,949,100
Dec-23	370,796	831,600	140,365	11,494,700
Jan-24	328,461	678,600	225,368	10,182,300
Feb-24	375,072	525,500	182,521	10,877,100
Mar-24	360,438	663,301	285,900	11,173,600
Apr-24	391,193	472,300	316,300	11,735,800
May-24	372,961	522,700	116,900	11,561,800
Jun-24	411,023	792,700	123,600	12,330,700
Jul-24	598,348	933,500	354,300	18,548,800
Aug-24	605,984	933,500	354,300	22,081,000
Sep-24	519,666	638,000	308,900	15,590,000
Oct-24	565,019	882,400	320,600	17,515,600
Nov-24	416,006	578,600	259,900	12,480,200
Dec-24	392,938	593,200	237,800	12,181,100
Jan-25	378,648	576,500	165,000	11,738,100
Feb-25	409,696	534,400	242,100	11,471,500
Mar-25	456,009	624,100	226,400	14,136,300
Apr-25	478,413	679,900	253,800	14,352,400
May-25	502,235	676,300	305,500	15,569,300
Jun-25	590,523	1,015,300	289,200	17,715,700
Jul-25	664,483	920,600	400,900	20,599,000
Aug-25	729,693	1,053,800	471,800	22,620,500
Sep-25	701,726	1,182,800	412,300	21,051,800
Oct-25	629,000	933,000	363,700	19,499,000
Nov-25	595,076	854,500	242,100	17,852,300
Dec-25	512,638	816,500	318,300	15,891,800
Jan-26	533,481	1,002,000	187,900	16,537,900
Feb-26	472,664	708,300	276,300	13,234,600
Mar-26	508,122	721,500	329,100	15,751,800

MARCH 2026 STAFF REPORT
Aubrey Municipal Development District

Christine Gossett – Executive Director

Commercial Property for Sale/Lease/Build-to-Suit:

Combined commercial land for sale/lease 200+ acres in City and ETJ, with combined 15,000+/- sq ft commercial space available for sale/lease. See Aubrey MDD Real Estate/Sites web page for details:

Real Estate & Maps – Aubrey Municipal Development District

MDD Executive Director participated in a panel discussion with north Denton County Economic Development directors at T.A.P.P.S./ Realtors event in Pilot Point.

Highest performing FB post featured owners of the soon-to-open Aubrey Bahama Bucks with 41,130 Views and 5,901 Engagements.

Project and Program Updates:

- CSL kicked off the Hotel and Amateur Indoor Sports Facility Feasibility Study with stakeholder interviews and tour March 4-5, 2026.
- Bids received for the 204-208 S. Main Street Building Improvement Project.
- Executive Director completed the requirements of TEDC and TEEX Certified Texas Economic Developer (CTED) on March 25 - 26, 2026.
- On-Going:
  - Site Selection GIS Map Page: continuous monitoring and updating of properties and photos for commercial sites available in Aubrey City Limits and ETJ.

Marketing:

- Marketing and promotion planning with ads and exhibits/trade shows to promote Aubrey – placed ad in March 2026 Ray Roberts Visitor Guide
- Participation in Economic Development Update Panel at T.A.P.P.S. Realtors in north Denton County event.
- Social media/Facebook: On-going posts about businesses, activites, events, and business education. March's post on 3/3/2026 with 41,130 Views and 5,901 Engagements.
- Website Statistics: March '26 – 2,130 Visitors; February '26 – 1,968 Visitors; January '26 - 2,128 Visitors
- Commercial Development: Calls and meetings with prospective businesses, developers, local entrepreneurs seeking space.

Business Activity and Updates

- New Opening – Massage & Glo, 104 Redfearn Rd., Ste. 103
- Closure/Relocation - Casey & Co. downtown storefront closed.

Sales & Use-Tax Allocation:

- Payment received in March 2026: $92,911.41; ($2,601.46 gross collections derived from audit payments.)

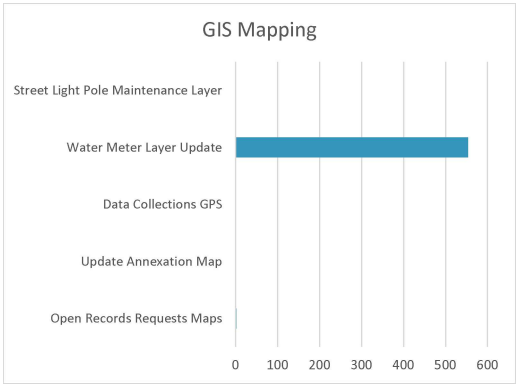
City of Aubrey - Development Services
March 2026 Activity Report

No. Permits Issued

New Single Family	54
Residential Misc	100
Commercial	14
Plat, Re-Plat, Site Plan, or Variance	0
Total	**168**

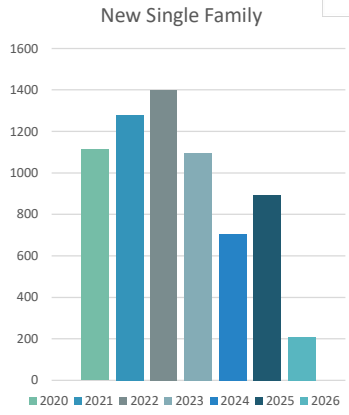
Fees Collected

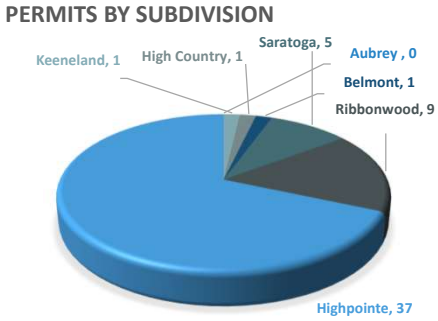
New Single Family	$	1,086,982.29
Residential Misc	$	13,865.30
Commercial	$	12,699.00
Variance or Zoning	$	-
Total	**$**	**1,113,546.59**

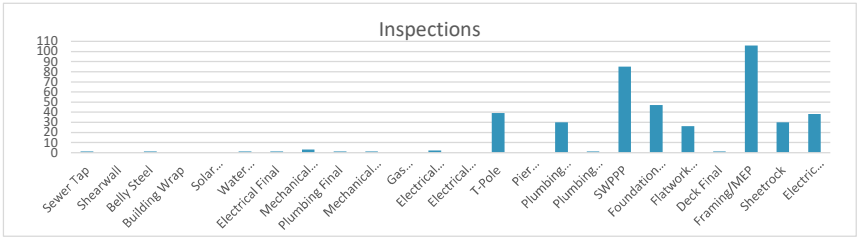


Annual New Single Family

2019	556
2020	1,113
2021	1,279
2022	1,400
2023	1,095
2024	706
2025	892
2026 YTD	208
2019 - 2026 Total:	**7,041**







Total House Count

10099

Location	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
Aubrey Proper	1457	1444	1442	1386	1360	1522
Winn Ridge	1746	1746	1746	1746	1746	1746
Silverado & High Country	3761	3779	3811	3818	3861	3981
Aspen Meadows	312	312	312	312	312	312
Keeneland	173	175	177	183	186	188
Sandbrock	1821	1853	1874	1891	1914	1925
Highpointe	281	292	292	342	365	377
Belmont	16	28	34	45	46	48
Saratoga	0	0	0	0	0	0
Ribbonwood	0	0	0	0	0	0

Project Status

ORD 950-26 Annexation of 8445 FM 2931	City Council made a motion to approve ordinance 950-26 annexing a 10-acre tract of land situated in the John Ryan Survey, Abstract No. 1069, Denton County, Texas, and being part of a called 14.898 acre tract of land as described in General Warranty Deed to Javier Alonzo and Thelma Alonzo, as recorded in Instrument Number 2014-8402, of the Official Public Records of Denton County, Texas; identified as Denton Central Appraisal District Property ID Number 52432; generally located at 8445 FM 2931, Pilot Point, Denton County, TX, into the corporate limits of the City of Aubrey, Texas. (Owner: City of Aubrey).
ORD 949-26 Sreet Name Change	City Council made a motion to approve ordinance 949-26 authorizing the use of the name "Ray Roberts Parkway" as a permitted roadway designation along the corporate limits of Highway 377 ; and providing an effective date. Giving US 377 the additional name of Ray Roberts Parkway.

City of Aubrey - Police Department

March 2026 Statistical Report

Calls for Police Service		%+/-
March 2026	845	21%
March 2025	698	
YTD - 2026	2,323	14%
YTD - 2025	2,038	

Calls for Service - Dispatched		%+/-
March 2026	662	28%
March 2025	516	
YTD - 2026	1,701	14%
YTD - 2025	1,497	

Calls for Service - Officer Initiated		%+/-
March 2026	183	1%
March 2025	181	
YTD - 2026	622	15%
YTD - 2025	540	

Calls for Service By Area

Aubrey		%+/-
March 2026	227	28%
March 2025	177	
YTD - 2026	601	8%
YTD - 2025	557	

Providence Village		%+/-
March 2026	265	-3%
March 2025	273	
YTD - 2026	791	7%
YTD - 2025	737	

Sandbrock		%+/-
March 2026	67	16%
March 2025	58	
YTD - 2026	174	7%
YTD - 2025	163	

Silverado		%+/-
March 2026	162	45%
March 2025	112	
YTD - 2026	425	30%
YTD - 2025	326	

Winn Ridge		%+/-
March 2026	98	75%
March 2025	56	
YTD - 2026	258	32%
YTD - 2025	195	

Outside ETJ		%+/-
March 2026	12	-8%
March 2025	13	
YTD - 2026	45	13%
YTD - 2025	40	

Criminal Offenses/Arrests

Criminal Offenses		%+/-
March 2026	106	100%
March 2025	53	
YTD - 2026	258	32%
YTD - 2025	195	

Arrests		%+/-
March 2026	19	-17%
March 2025	23	
YTD - 2026	67	-15%
YTD - 2025	79	

Motor Vehicle Crashes - Aubrey

Non-Injury Crashes		%+/-
March 2026	11	0%
March 2025	11	
YTD - 2026	28	33%
YTD - 2025	21	

Injury Crashes		%+/-
March 2026	4	33%
March 2025	3	
YTD - 2026	11	0%
YTD - 2025	11	

Motor Vehicle Crashes - Providence Village

Non-Injury Crashes		% +/-
March 2026	6	-14%
March 2025	7	
YTD - 2026	19	27%
YTD - 2025	15	

Injury Crashes		% +/-
March 2026	1	-67%
March 2025	3	
YTD - 2026	4	-50%
YTD - 2025	8	

Traffic Stops and Citations

Traffic Stops		% +/-
March 2026	865	54%
March 2025	561	
YTD - 2026	2,254	14%
YTD - 2025	1,969	

Warnings		% +/-
March 2026	840	42%
March 2025	592	
YTD - 2026	2,069	0%
YTD - 2025	2,075	

Total Citations		% +/-
March 2026	394	44%
March 2025	274	
YTD - 2026	1,074	5%
YTD - 2025	1,022	

Citations - Aubrey		% +/-
March 2026	180	3%
March 2025	174	
YTD - 2026	534	-8%
YTD - 2025	583	

Citations - Providence Village		% +/-
March 2026	153	119%
March 2025	70	
YTD - 2026	380	12%
YTD - 2025	340	

Citations - JP 5		% +/-
March 2026	61	103%
March 2025	30	
YTD - 2026	160	62%
YTD - 2025	99	

Top 10 Calls

Top 10 Calls			
Type of Call	Providence Village	Aubrey	Total
Suspicious Activity	23	53	76
Welfare Concern	17	50	67
Disturbance	25	34	59
Alarm	13	43	56
Motorist Assist	13	22	35
Traffic Crash	10	23	33
Noise Complaint	12	18	30
Vehicle Complaint	12	17	29
911 Hangup	11	16	27
Road Blockage/ Hazard	6	20	26

Neighborhood Safety Initiative		% +/-
March 2026	17,538	37%
March 2025	12,809	
YTD - 2026	56,412	58%
YTD - 2025	35,601	

Providence Village Data

Close Patrols - Providence Village		% +/-
March 2026	4,480	4%
March 2025	4,324	
YTD - 2026	14,156	18%
YTD - 2025	11,997	

Walk Through - Providence Village		% +/-
December 2026	107	13%
December 2025	95	
YTD - 2025	319	5%
YTD - 2024	305	

Total - Providence Village		% +/-
March 2026	4,587	4%
March 2025	4,419	
YTD - 2026	14,475	18%
YTD - 2025	12,302	

Department Data

Percentage - Crime/Order Maintenance/Service Calls		
Top 10 Calls Total		438
Crime	29	6%
Service Calls	379	87%
Order Maintenance	30	7%
Reported Crime	106	13%

Authorized Strength		% + / -
Sworn - Authorized	37	92%
Sworn - Current	34	
Civilian Authorized	5	80%
Civilian - Current	4	

Criminal Investigations Statistical Data

CID Case Assignment		% + / -
March 2026	106	100%
March 2025	53	
YTD - 2026	258	32%
YTD - 2025	195	

Patrol Case Assignment		% + / -
March 2026	19	-17%
March 2025	23	
YTD - 2026	67	-15%
YTD - 2025	79	

CID Arrests		% + / -
March 2026	2	0%
March 2025	2	
YTD - 2026	4	-50%
YTD - 2025	8	

Case Status - Cleared by Arrest		% + / -
March 2026	21	-16%
March 2025	25	
YTD - 2026	71	-15%
YTD - 2025	84	

Case Status - Suspended		% + / -
March 2026	75	525%
March 2025	12	
YTD - 2026	143	155%
YTD - 2025	56	

Case Status - Cleared by Exception		% + / -
March 2026	1	0%
March 2025	1	
YTD - 2026	4	-33%
YTD - 2025	6	

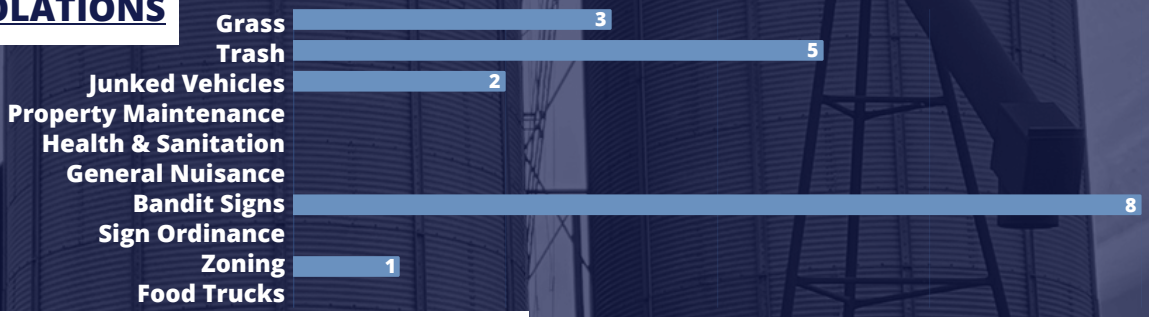
Case Status - Unfounded		% + / -
March 2026	0	-1%
March 2025	1	
YTD - 2026	3	-63%
YTD - 2025	8	

Cases - Open		% + / -
Yearly Total	703	

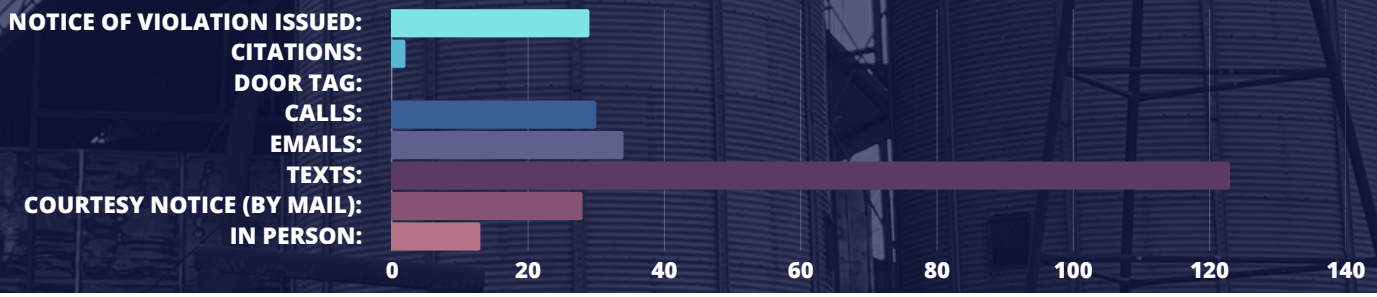
MUNICIPAL SERVICES REPORT FOR MARCH 2026

AUBREY VIOLATIONS

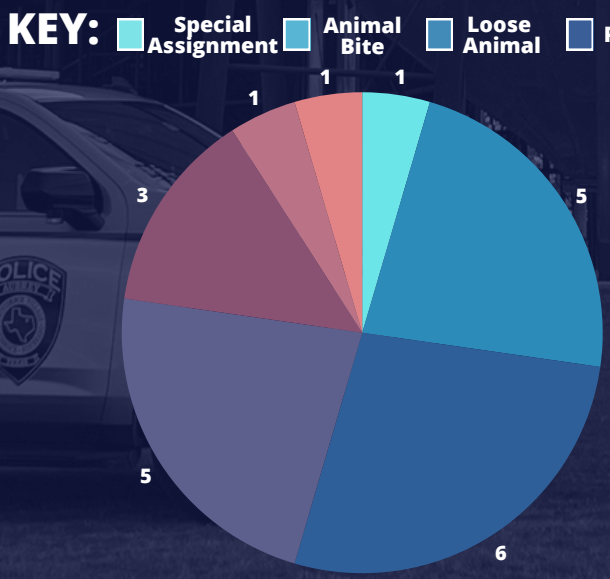
WINN RIDGE VIOLATIONS



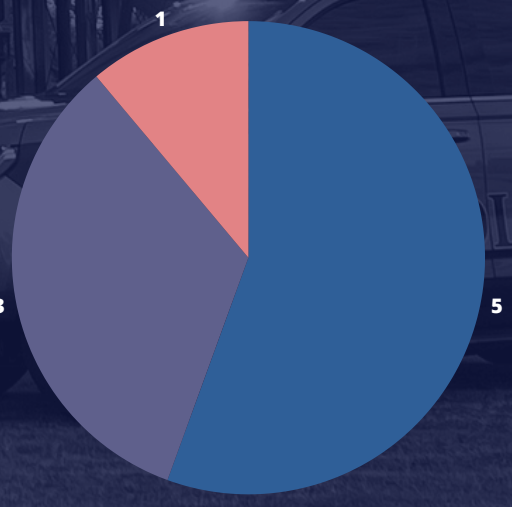
OFFICER COMMUNICATION WITH THE COMMUNITY



ANIMAL SERVICES IN AUBREY



ANIMAL SERVICES IN WINN RIDGE



City of Aubrey
Departmental Report
Library

To: City Council Members

From: Brittany McLain, Library Director

RE: Departmental Report - Mar. 2026

Monthly Report	March 2026		Fiscal Year to date
People & Activity	New Cards Issued	137	601
	Number of Patrons	3254	17408
	Patrons per Hour (Average)	19	18
	Volunteer Hours / Persons	23/5	129
	Number of Days Open	21	118
	Number of Hours Open	173	965
Material Usage	Total Items checked out	10048	57806
	Items per Hour (Average)	58	60
	Adult Material Checked Out	1338	7819
	Juvenile Material Checked Out	6869	39675
	Notary Sessions	66	131
	Digital Materials Checked Out	1841	10312
	Interlibrary shipped	169	890
	Interlibrary received	116	741
	Reference	217	1234
	Computer Sessions	243	1156
	Computer Usage (hours)	203	921
Programs	Community Center Event Hrs	2	3.5
	Total Number of Programs	40	204
	Total Program Attendance	1119	3511

Mar 1, 2026 @ 00:00:00.000 → Mar 31, 2026 @ 23:30:00.0...

Incident Discipline: Any | Incident Type: Any | Incident ID: Any

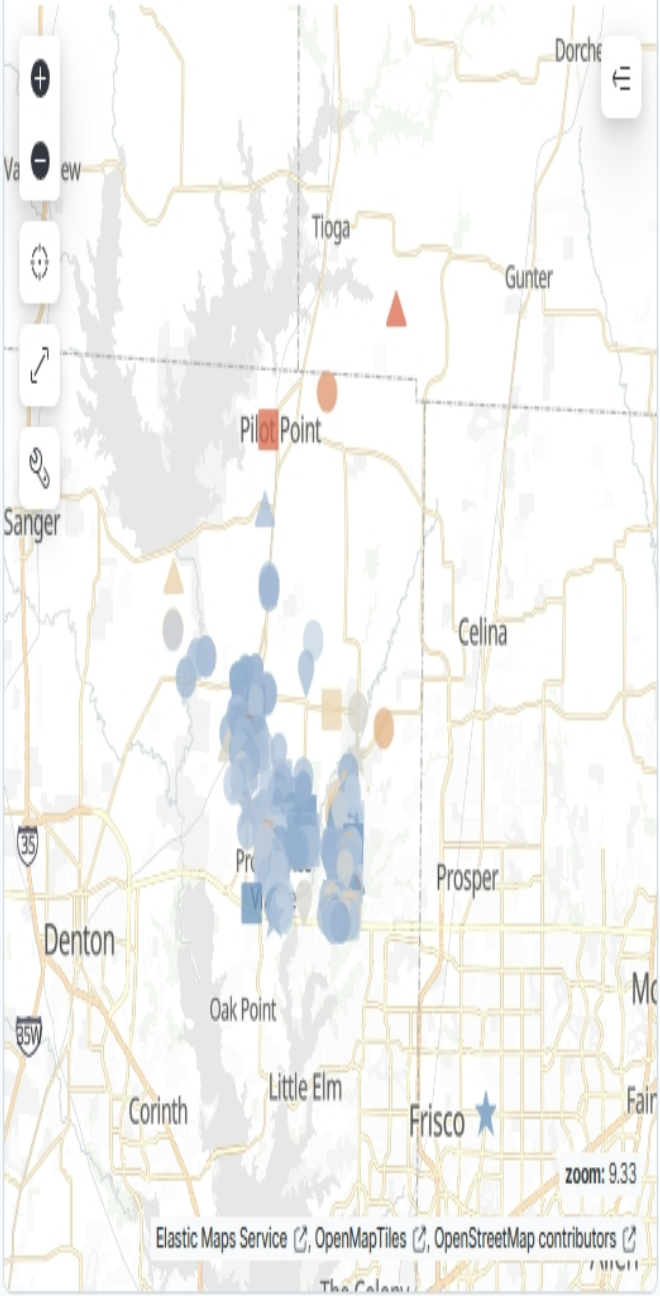
Incidents 357

Unit Responses 818

Displacements 13

Location Category	Location Type
RESIDENTIAL	DETATCHED_S
RESIDENTIAL	ATTACHED_SI
RESIDENTIAL	MULTI_FAMILY
RESIDENTIAL	MANUFACTUI
RESIDENTIAL	DETATCHED_(

Incident Response

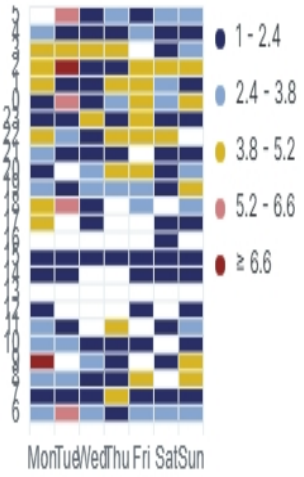


Incident Discipline P...

Incident Count Per Week

Incidents with Single...

Incident Count by Hour and Day



Incident Table (Times in UTC)

Call Create Time	IncidentID	ResponseTime	Incident Type
2026-04-01T02:32:19.000Z	26000996_639106064012248396	3:32	ILLNESS
2026-04-01T00:54:34.000Z	26000995_639106064110057241	6:31	ILLNESS
2026-03-31T22:36:13.000Z	26000994_639106064586584136	5:21	INJURY
2026-03-31T21:34:57.000Z	26000993_639106065030086125	4:49	ILLNESS

Account	Name	Balance	
Fund: 101 - GENERAL FUND			
Assets			
101-1-1-000-00	General Fund Cash	3,919,833.04	
101-1-1-000-10	Cash on hand - Court drawer	200.00	
101-1-1-000-84	Claim on Cash General	6,212,979.37	
101-1-1-000-90	Investment Account	4,552,631.32	
101-1-1-013-20	Taxes Receivable	29,733.55	
101-1-1-013-25	Emergicon EMS AR	2,436,287.00	
101-1-1-013-33	Allowance for Taxes	-6,317.42	
101-1-1-013-35	Allowance for EMS AR	-2,059,539.00	
101-1-1-013-37	Sales Tax Receivable	415,328.60	
101-1-1-015-00	Court Fees Receivable	485,879.43	
101-1-1-015-50	Allowance for Court Fees	-315,018.34	
101-1-1-021-00	Prepaids	221,150.00	
101-1-1-050-00	Inventory	38,009.02	
101-1-3-000-80	Due from other funds EBT	50,000.00	
	Total Assets:	**15,981,156.57**	**15,981,156.57**
Liability			
101-2-1-000-00	PY Correction	-452,854.64	
101-2-1-010-00	Accounts Payable Pooled	720,631.80	
101-2-1-010-01	Accounts Payable-General Fund	11,675.20	
101-2-1-010-14	Deferred Revenue Taxes	23,416.13	
101-2-1-010-15	Deferred Revenue Court	170,861.39	
101-2-1-010-16	Deferred Revenue EMS	376,748.00	
101-2-1-021-02	Payroll Benefits Liability	125.00	
101-2-1-023-40	Collection fees payable-MVBA	1,809.01	
101-2-1-023-70	OMNI fee - court	67.82	
101-2-1-029-80	104 Sycamore Deposit	1,300.00	
101-2-3-901-00	Due to Payroll Fund	-0.02	
	Total Liability:	**853,779.69**	
Equity			
101-3-1-033-00	Fund Balance General Fund	14,265,636.99	
	Total Beginning Equity:	**14,265,636.99**	
Total Revenue		12,130,536.46	
Total Expense		11,268,796.57	
Revenues Over/Under Expenses		**861,739.89**	
	Total Equity and Current Surplus (Deficit):	**15,127,376.88**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**15,981,156.57**

Account	Name	Balance	
Fund: 201 - WATER FUND			
Assets			
201-1-1-000-00	Water Fund Cash	206,246.75	
201-1-1-000-10	Cash Drawer	200.00	
201-1-1-000-84	Claim on Cash Water	9,949,181.07	
201-1-1-000-90	Investment Account	265,045.11	
201-1-1-000-91	Water Impact Fees	575,307.11	
201-1-1-000-95	Cash - CO 2023 Ph1 Offsites	2,271,360.98	
201-1-1-000-96	Cash CO 2025 - Utility	19,891,386.39	
201-1-1-013-00	Accounts receivable - UB	119,766.80	
201-1-1-013-21	Accounts Receivable - Unbilled	97,051.57	
201-1-1-013-22	Allowance for Uncollect Water	-35,079.55	
201-1-1-027-00	Discount on Bonds	139,048.80	
201-1-1-050-00	Inventory	346,867.83	
201-1-2-016-10	Land	227,028.41	
201-1-2-016-30	Water System	22,296,175.84	
201-1-2-016-50	Machinery and Equipment	1,634,858.40	
201-1-2-016-60	Vehicles	477,075.44	
201-1-2-016-67	Office Equipment	29,862.00	
201-1-2-016-80	Buildings and improvements	236,414.92	
201-1-2-016-90	Construction in Progress	437,827.49	
201-1-2-017-00	Accumulated Depreciation	-7,699,119.53	
201-1-3-000-00	Due from other funds	368,290.00	
201-1-9-000-00	Net Pension Asset	10,700.00	
	Total Assets:	**51,845,495.83**	**51,845,495.83**
Liability			
201-2-1-010-00	Accounts Payable Pooled	48,830.74	
201-2-1-010-05	Unapplied Credits	18,450.50	
201-2-1-010-17	Deferred Pension Inflows	10,300.00	
201-2-1-010-18	Net Pension Liability	6,500.00	
201-2-1-010-19	Deferred Pension Outflows	-35,200.00	
201-2-1-020-17	Deferred OPEB Inflows	4,100.00	
201-2-1-020-19	Deferred OPEB Outflows	-1,900.00	
201-2-1-021-10	Accrued Vacation Payable- wate	24,067.25	
201-2-1-021-11	Accrued Sick Leave	14,732.40	
201-2-1-021-20	Accrued Interest Payable	55,381.75	
201-2-1-021-60	Unearned Revenue HPR256	762,419.70	
201-2-1-023-41	Credit Card Fees Payable	9,537.33	
201-2-1-027-00	Bond Premium	575,593.26	
201-2-1-029-10	Bonds Payable - Series 2016	3,775,000.00	
201-2-1-029-75	Bonds Payable - Series 2023	8,050,000.00	
201-2-1-029-76	Bonds Payable - Series 2025	19,842,700.00	
201-2-1-029-80	Customer Deposits	256,835.70	
201-2-1-029-81	Customer Refunds Payable	3,145.89	
201-2-3-901-00	Due to Payroll Fund	-3,102.78	
	Total Liability:	**33,417,391.74**	
Equity			
201-3-1-033-02	Fund balance - Water/Sewer	18,681,225.29	
201-3-1-033-10	Developer Contributions	0.47	
201-3-1-033-80	Net Pension Benefit Obligation	9,219.00	
	Total Beginning Equity:	**18,690,444.76**	
Total Revenue		1,817,817.64	
Total Expense		2,080,158.31	
Revenues Over/Under Expenses		**-262,340.67**	
	Total Equity and Current Surplus (Deficit):	**18,428,104.09**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**51,845,495.83**

Account	Name	Balance	
Fund: 202 - SEWER FUND			
Assets			
202-1-1-000-84	Claim on Cash Sewer	25,329,116.13	
202-1-1-000-91	Sewer Impact Fees	679,075.43	
202-1-1-000-92	Utility Funding Series 2024A	26,887,221.40	
202-1-1-013-01	Accounts Receivable - UB	63,460.95	
202-1-1-013-21	Accounts Receivable - Unbilled	49,620.20	
202-1-1-013-22	Allowance for Doubtful Account	-18,587.63	
202-1-1-050-00	Inventory	42,955.19	
202-1-2-016-40	Sewer System	18,651,770.61	
202-1-2-016-61	Vac Truck Lease Asset	469,107.00	
202-1-2-016-90	Construction in Progress	1,731,991.68	
202-1-2-017-01	Accum Amort Vac Trk Lease	-67,015.29	
	Total Assets:	**73,818,715.67**	**73,818,715.67**
Liability			
202-2-1-010-00	Accounts Payable Pooled	28,953.14	
202-2-1-021-10	Accrued Vacation Payable	14,044.97	
202-2-1-021-11	Accrued Sick Leave	10,562.05	
202-2-1-021-60	Unearned Revenue HPR256	1,386,766.00	
202-2-1-027-00	Bond Premium	2,564,850.30	
202-2-1-028-02	Vac Truck Lease	417,987.56	
202-2-1-028-80	Bonds Payable - Series 2013	37,200.00	
202-2-1-029-20	Bonds Payable - Series 2024A	50,095,000.00	
202-2-3-000-00	Due to other funds	114,820.00	
202-2-3-901-00	Due to Payroll Fund	-13,116.03	
	Total Liability:	**54,657,067.99**	
Equity			
202-3-1-033-00	Fund Balance	18,626,957.68	
202-3-1-033-10	Developer Contributions	-0.09	
202-3-1-033-50	Restricted for Sewer Impact	739,050.73	
	Total Beginning Equity:	**19,366,008.32**	
Total Revenue		1,585,352.26	
Total Expense		1,789,712.90	
Revenues Over/Under Expenses		**-204,360.64**	
	Total Equity and Current Surplus (Deficit):	**19,161,647.68**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**73,818,715.67**

Account	Name	Balance	
Fund: 205 - SOLID WASTE FUND			
Assets			
205-1-1-000-84	Claim on Cash Garbage	-357,134.84	
205-1-1-013-00	Accounts Receivable - UB	30,483.90	
205-1-1-013-10	Accounts receivable	95,428.23	
205-1-1-013-21	Accounts Receivable - Unbilled	33,322.40	
205-1-1-013-22	Allowance for Doubtful Account	-8,928.70	
	Total Assets:	**-206,829.01**	**-206,829.01**
Liability			
205-2-1-010-00	Accounts Payable Pooled	224,402.49	
205-2-1-021-90	Sales Tax Payable	9,131.29	
205-2-3-000-00	Due to other funds	16,219.00	
	Total Liability:	**249,752.78**	
Equity			
205-3-1-033-00	Fund Balance	-266,232.87	
	Total Beginning Equity:	**-266,232.87**	
Total Revenue		1,297,577.53	
Total Expense		1,487,926.45	
Revenues Over/Under Expenses		**-190,348.92**	
	Total Equity and Current Surplus (Deficit):	**-456,581.79**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**-206,829.01**

Account	Name	Balance	
Fund: 301 - DEBT SERVICE FUND			
Assets			
301-1-1-000-00	Debt Service Cash	347,760.22	
301-1-1-000-84	Claim on Cash Debt Service	-616,933.54	
301-1-1-000-90	Investment Account	268,594.45	
301-1-1-013-00	Property Taxes Receivable	17,494.72	
301-1-1-013-10	Allowance for Uncollect Taxes	-5,000.38	
301-1-3-000-00	Due from other funds	114,820.00	
	Total Assets:	**126,735.47**	**126,735.47**
Liability			
301-2-1-029-90	Deferred Taxes-I&S	12,494.34	
	Total Liability:	**12,494.34**	
Equity			
301-3-1-033-01	Fund Balance - Restricted	1,016,250.96	
	Total Beginning Equity:	**1,016,250.96**	
Total Revenue		1,544,799.15	
Total Expense		2,446,808.98	
Revenues Over/Under Expenses		**-902,009.83**	
	Total Equity and Current Surplus (Deficit):	**114,241.13**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**126,735.47**

Account	Name	Balance	
Fund: 401 - SPECIAL REVENUE FUND			
Assets			
401-1-1-000-00	Special Revenue Cash	56,385.95	
401-1-1-000-84	Claim on Cash Special Revenue	43,110.76	
	Total Assets:	**99,496.71**	**99,496.71**
Liability			
	Total Liability:	**0.00**	
Equity			
401-3-1-033-02	Fund Balance - Child Safety	4,021.19	
401-3-1-033-04	Fund Balance - Court Security	6,920.50	
401-3-1-033-05	Fund Balance - PD Officers Tra	65,847.12	
401-3-1-033-06	Fund Balance - Seizure Funds	3,228.17	
401-3-1-033-07	FUND BALANCE HOT	540.76	
	Total Beginning Equity:	**80,557.74**	
Total Revenue		28,819.38	
Total Expense		9,880.41	
Revenues Over/Under Expenses		**18,938.97**	
	Total Equity and Current Surplus (Deficit):	**99,496.71**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**99,496.71**

Account	Name	Balance	
Fund: 403 - IMPACT FEES			
Assets			
403-1-1-000-00	Impact Fees Cash	2,089,949.79	
403-1-1-000-10	HPR Capital Funding	500,738.42	
403-1-1-000-84	Claim on Cash Impact Fees	-2,120,301.93	
	Total Assets:	**470,386.28**	**470,386.28**
Liability			
403-2-1-010-00	Accounts Payable Pooled	880.00	
	Total Liability:	**880.00**	
Equity			
403-3-1-033-20	Restricted FB- Street Impact	418,881.37	
	Total Beginning Equity:	**418,881.37**	
Total Revenue		55,391.82	
Total Expense		4,766.91	
Revenues Over/Under Expenses		**50,624.91**	
	Total Equity and Current Surplus (Deficit):	**469,506.28**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**470,386.28**

Account	Name	Balance	
Fund: 404 - DEVELOPMENT FEES			
Assets			
404-1-1-000-50	Investment Acct-Park Fees	1,889,363.64	
404-1-1-000-51	Park Fees Account	562,036.31	
404-1-1-000-60	Investment acct-Fire Station	3,208,569.23	
404-1-1-000-70	Investment Acct-Street Fees	1,891,809.30	
404-1-1-000-84	Claim on Cash Development Fees	5,951,271.83	
404-1-1-000-90	Investment Account	1,910.50	
	Total Assets:	**13,504,960.81**	**13,504,960.81**
Liability			
	Total Liability:	**0.00**	
Equity			
404-3-1-033-00	Fund Balance	11,952,282.87	
	Total Beginning Equity:	**11,952,282.87**	
Total Revenue		1,662,793.11	
Total Expense		110,115.17	
Revenues Over/Under Expenses		**1,552,677.94**	
	Total Equity and Current Surplus (Deficit):	**13,504,960.81**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**13,504,960.81**

Balance Sheet **As Of 03/31/2026**

Account	Name	Balance	
Fund: 406 - HOLDING ACCT DEV AGREEMTS			
Assets			
406-1-1-000-84	Claim on Cash Holding	352,700.22	
	Total Assets:	**352,700.22**	**352,700.22**
Liability			
406-2-1-010-00	Accounts Payable Pooled	54,884.01	
406-2-3-000-00	Due to Other Funds	368,290.00	
	Total Liability:	**423,174.01**	
Equity			
406-3-1-033-00	Fund Balance	404,676.33	
	Total Beginning Equity:	**404,676.33**	
Total Revenue		-307,291.36	
Total Expense		167,858.76	
Revenues Over/Under Expenses		**-475,150.12**	
	Total Equity and Current Surplus (Deficit):	**-70,473.79**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**352,700.22**

Account	Name	Balance	
Fund: 501 - CAPITAL PROJECTS FUND			
Assets			
501-1-1-000-55	Vehicle Replacement Fund	1,763,170.12	
501-1-1-000-58	Escrow Cash - AHE	228,186.43	
501-1-1-000-59	Cash - CO 2022 Public Safety	62.80	
501-1-1-000-61	Cash - CO 2024 Station 2	74.16	
501-1-1-000-62	ABP LLC Cash Escrow	5,084,982.74	
501-1-1-000-63	HPR Lennar Escrow	650,079.51	
501-1-1-000-64	Cash CO 2025 Govt	40,230,802.02	
501-1-1-000-84	Claim on Cash Capital Projects	-43,614,005.54	
501-1-1-008-38	Cash - Water Bond S16	912.79	
	Total Assets:	**4,344,265.03**	**4,344,265.03**
Liability			
501-2-1-010-00	Accounts Payable Pooled	2,688,983.70	
501-2-1-010-02	Accounts payable	179,563.00	
501-2-1-010-11	Accounts Payable - Capital Pro	41,819.00	
501-2-1-021-60	Unearned Revenue - ABP	5,058,838.77	
501-2-1-021-61	Unearned Revenue - HPR Lennar	907,512.68	
501-2-1-021-65	Unearned Revenue - AHE	228,186.43	
501-2-1-028-36	Bonds Payable Series 2025 Govt	49,607,300.00	
501-2-1-028-37	Bond Premium - Series 2025 Gov	1,038,703.39	
	Total Liability:	**59,750,906.97**	
Equity			
501-3-1-033-03	Restricted FB - Contruction	-38,714,408.47	
	Total Beginning Equity:	**-38,714,408.47**	
Total Revenue		3,575,145.74	
Total Expense		20,267,379.21	
Revenues Over/Under Expenses		**-16,692,233.47**	
	Total Equity and Current Surplus (Deficit):	**-55,406,641.94**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**4,344,265.03**

Balance Sheet **As Of 03/31/2026**

Account	Name	Balance	
Fund: 701 - MDD			
Assets			
701-1-1-000-00	MDD Cash	2,595,269.41	
701-1-1-000-84	Claim on Cash MDD	-114,955.57	
701-1-1-000-90	Investment Account	1,735,452.06	
701-1-1-013-37	Sales Tax Receivable	203,710.56	
701-1-2-015-00	Land	1,046,886.75	
701-1-2-015-10	Buildings and improvements	1,517,787.80	
701-1-2-017-00	Accumulated Depreciation	-94,025.00	
	Total Assets:	**6,890,126.01**	**6,890,126.01**
Liability			
701-2-1-010-00	Accounts Payable Pooled	24,463.57	
701-2-1-021-10	Accrued Vacation	944.23	
701-2-1-029-10	Bank Note Payable 2025	1,292,607.73	
	Total Liability:	**1,318,015.53**	
Equity			
701-3-1-040-10	Fund Balance - MDD	5,119,492.62	
	Total Beginning Equity:	**5,119,492.62**	
Total Revenue		734,414.20	
Total Expense		281,796.34	
Revenues Over/Under Expenses		**452,617.86**	
	Total Equity and Current Surplus (Deficit):	**5,572,110.48**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**6,890,126.01**

Balance Sheet **As Of 03/31/2026**

Account	Name	Balance	
Fund: 801 - EMPLOYEE BENEFIT TRUST			
Assets			
801-1-1-000-00	Employee Benefit Trust Cash	809,077.52	
801-1-1-000-84	Claim on Cash EBT	-65,942.42	
	Total Assets:	**743,135.10**	**743,135.10**
Liability			
801-2-1-010-13	Accounts Payable	-121,302.35	
801-2-1-021-02	Payroll Benefits Liability	-1,480.00	
801-2-3-000-00	Due to other funds	50,000.00	
	Total Liability:	**-72,782.35**	
Equity			
801-3-1-033-00	Fund Balance	398,403.36	
	Total Beginning Equity:	**398,403.36**	
Total Revenue		1,121,297.00	
Total Expense		703,782.91	
Revenues Over/Under Expenses		**417,514.09**	
	Total Equity and Current Surplus (Deficit):	**815,917.45**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**743,135.10**

Balance Sheet **As Of 03/31/2026**

Account	Name	Balance	
Fund: 901 - POOLED CASH FUND			
Assets			
901-1-1-000-00	Pooled Cash	1,988,110.32	
901-1-3-101-00	Due from General Fund	720,631.80	
901-1-3-201-00	Due from Water Fund	48,830.74	
901-1-3-202-00	Due from Sewer Fund	28,953.14	
901-1-3-205-00	Due from Solid Waste Fund	224,402.49	
901-1-3-403-00	Due from Impact Fee Fund	880.00	
901-1-3-406-00	Due from Holding Acct	54,884.01	
901-1-3-501-00	Due from Capital Projects Fund	2,688,983.70	
901-1-3-701-00	Due from MDD	24,463.57	
	Total Assets:	**5,780,139.77**	**5,780,139.77**
Liability			
901-2-1-010-01	Accounts Payable Control	3,792,029.45	
901-2-3-000-00	Due to Other Funds	1,988,110.32	
	Total Liability:	**5,780,139.77**	
	Total Equity and Current Surplus (Deficit):	**0.00**	
	Total Liabilities, Equity and Current Surplus (Deficit):		**5,780,139.77**

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Approve Quarterly Investment Report.

Staff Contact
Mike English, Finance Director
menglish@aubreytx.gov
940-440-9343

Summary

The quarterly investment report provides an overview of the City's investment portfolio for the reporting period, including balances, allocation of funds, and compliance with the City's Investment Policy and the Public Funds Investment Act. The report reflects that all investments were made in accordance with applicable laws and adopted policies, with a focus on preservation of principal, liquidity, and yield.

The City's investment portfolio remains stable, with funds appropriately diversified and available to meet operational and capital needs. Interest earnings continue to perform in line with current market conditions.

Financial Summary

Staff Recommended Action
Approve

Staff Recommended Motion
Move to (Approve, Deny, Table) the Quarterly Investment Report

City of Aubrey, Texas
Quarterly Investment Report
January 1, 2025 to March 31,2025
Portfolio Summary Management Report

This quarterly report is in full compliance with the investment policy and strategy as established for the City of Aubrey, Texas, and the Public Funds Investment Act (Chapter 2256, Government Code).

12/31/25		03/31/26	
Beginning Book Value:	$130,660,381	Beginning Book Value:	$120,855,614
Beginning Market Value:	130,660,381	Beginning Market Value:	120,855,614
Beginning Par Value:	130,660,381	Beginning Par Value:	120,855,614
WAM at Beginning Period Date	49 days	WAM at Ending Period Date	47 days
		Increase/(Decrease) in Investment Holdings Market Value	($9,804,767)

Average Yield to Maturity for quarter	3.816%
Average Yield to Maturity 6-month T-Bill	3.720%

Chris Rich, Mayor

Mike English, Finance Director

CITY OF AUBREY, TEXAS
CURRENT INVESTMENT PORTFOLIO AS OF
MARCH 31, 2026

ALL FUND TYPES (EXCEPT MDD/EDC) AS DEFINED IN CITY'S INVESTMENT POLICY

CUSIP	TYPE OF SECURITY	PAR	CURRENT RATE	PURCHASE SETTLEMENT DATE	MATURITY DATE	TERM	DAYS HELD 3/31/2026	DAYS TO MATURITY 3/31/2026	% TOTAL	WEIGHTED AVG MATURITY	WEIGHTED AVG YIELD
Cash Positions : Bank Cash Investments											
Point Bank	DDA	$10,743,255	3.7500%	3/31/2026	3/31/2026	1	0	0	8.89%	0	3.8133%
Subtotal Cash Positions		$10,743,255									
Cash Positions : Pooled Investments											
LOGIC	Pool	$110,112,359	3.7875%	3/31/2026	3/31/2026	1	0	0	91.11%	47	3.8192%
Subtotal Cash Positions		$110,112,359									
Cash Positions : Treasuries, Agencies, CD Investments											
		$0									
Subtotal Cash Positions		$0									
Grand Total		$120,855,614							100.00%	47	3.8187%

CITY OF AUBREY, TEXAS
QUARTERLY POSITION CHANGE REPORT
January 1, 2025 to March 31,2025

ALL FUND TYPES (EXCEPT MDD/EDC) AS DEFINED IN CITY'S INVESTMENT POLICY

CUSIP	TYPE OF SECURITY	PAR	CURRENT RATE	PURCHASE SETTLEMENT DATE	MATURITY DATE	BOOK VALUE BEGINNING 12/31/2025	BOOK VALUE ENDING 3/31/2026	BOOK VALUE CHANGE	MARKET VALUE BEGINNING 12/31/2025	MARKET VALUE ENDING 3/31/2026	MARKET VALUE CHANGE
Cash Positions : Bank Cash Investments											
Bank Deposits	DDA	$10,743,255	3.7500%	3/31/2026	3/31/2026	$10,638,384	$10,743,255	$104,871	$10,638,384	$10,743,255	$104,871
Subtotal Cash Positions		$10,743,255				$10,638,384	$10,743,255	$104,871	$10,638,384	$10,743,255	$104,871
Cash Positions : Pooled Investments											
LOGIC	Pool	$110,112,359	3.7875%	3/31/2026	3/31/2026	$120,021,997	$110,112,359	($9,909,638)	$120,021,997	$110,112,359	($9,909,638)
Subtotal Cash Positions		$110,112,359				$120,021,997	$110,112,359	($9,909,638)	$120,021,997	$110,112,359	($9,909,638)
Cash Positions : Treasuries, Agencies, CD Investments											
		$0				$0	$0	$0	$0	$0	$0
Subtotal Cash Positions		$0				$0	$0	$0	$0	$0	$0
Grand Total		$120,855,614				$130,660,381	$120,855,614	($9,804,767)	$130,660,381	$120,855,614	($9,804,767)

INTEREST EARNED FOR QUARTER

MONTH	TYPE OF SECURITY	AVERAGE BALANCE	AVERAGE RATE	INTEREST EARNED
Cash Positions : Bank Cash Investments				
Apr-25	DDA	$7,160,954	4.4200%	$ 26,376.18
May-25	DDA	$9,449,834	4.4200%	$ 34,806.89
Jun-25	DDA	$7,731,392	4.3900%	$ 28,284.01
Jul-25	DDA	$8,031,540	4.3800%	$ 29,315.12
Aug-25	DDA	$7,124,613	4.4000%	$ 26,123.58
Sep-25	DDA	$8,564,736	4.3900%	$ 31,332.66
Oct-25	DDA	$6,646,953	4.3800%	$ 24,261.38
Nov-25	DDA	$6,541,084	4.2300%	$ 23,057.32
Dec-25	DDA	$8,993,870	4.0600%	$ 30,429.26
Jan-26	DDA	$11,753,736	3.9100%	$ 38,297.59
Feb-26	DDA	$10,941,965	3.7800%	$ 34,467.19
Mar-26	DDA	$10,796,326	3.7500%	$ 33,738.52
TOTAL INTEREST EARNED FOR FISCAL YEAR-TO-DATE				$ 184,251.26
TOTAL INTEREST EARNED FOR QUARTER				$ 106,503.30
Cash Positions : Pooled Investments				
Apr-25	Pool	$82,488,154	4.4512%	$ 305,976.06
May-25	Pool	$80,925,310	4.4223%	$ 298,230.00
Jun-25	Pool	$70,799,040	4.4108%	$ 260,233.67
Jul-25	Pool	$74,241,595	4.4097%	$ 272,819.30
Aug-25	Pool	$95,802,717	4.3944%	$ 350,829.55
Sep-25	Pool	$131,561,884	4.3317%	$ 474,905.51
Oct-25	Pool	$128,422,748	4.2418%	$ 453,953.01
Nov-25	Pool	$121,619,028	4.0905%	$ 414,568.86
Dec-25	Pool	$122,482,335	3.9519%	$ 403,364.95
Jan-26	Pool	$120,962,414	3.8625%	$ 389,347.77
Feb-26	Pool	$106,938,433	3.8077%	$ 339,324.56
Mar-26	Pool	$112,940,211	3.7875%	$ 356,467.54
TOTAL INTEREST EARNED FOR FISCAL YEAR-TO-DATE				$ 2,357,026.69
TOTAL INTEREST EARNED FOR QUARTER				$ 1,085,139.87
TOTAL INTEREST EARNED FOR FISCAL YEAR-TO-DATE				$ 2,541,277.95
TOTAL INTEREST EARNED FOR QUARTER				$ 1,191,643.17

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Approve the request from Council Member(s) identified in the Staff report as an excused absence from the March 26, 2026 regular meeting.

Staff Contact
Jenny Hicks, City Secretary
jhicks@aubreytx.gov
940-440-9343

Summary
Randy Jones' absence from the March 26, 2026 regular meeting.

Financial Summary

Staff Recommended Action
Approve

Staff Recommended Motion

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Approve Resolutions 1040-26, 1041-26, 1042-26, and 1043-26, temporarily closing Main Street for Summer Music Series, Main Street Motorfest, Peanut Festival, and Holiday Tree Lighting.

Staff Contact
Kurt Karnowski, Public Works Manager
kkarnowski@aubreytx.gov
940-440-9343

Summary
The City Council is being asked to consider approval of four resolutions authorizing the temporary closure of Main Street for multiple City-sponsored community events throughout 2026. These closures are requested by the Parks and Recreation Department to support event operations, public safety, and community engagement.

The proposed closures include:

- **Summer Music Series: May 16, June 20, and July 18, 2026 (5:00 PM – 9:00 PM)**
- **Main Street Motor Fest: August 1, 2026 (6:00 AM – 3:00 PM)**
- **Peanut Festival: October 3, 2026 (5:00 AM – 8:30 PM)**
- **Holiday Tree Lighting & Parade: December 5, 2026 (5:00 PM – 9:00 PM)**

These events are longstanding and anticipated to draw residents and visitors to the downtown area, supporting community engagement, local businesses, and Aubrey's identity as a destination for family-oriented events.

The Parks and Recreation Department will coordinate with the Police Department, Fire Department, and Public Works to ensure appropriate traffic control, public safety measures, and signage are in place during each closure.

Approval of these resolutions will authorize the temporary street closures necessary to safely conduct these events and continue the City's tradition of hosting community-focused programming.

Financial Summary
None financial impact.

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve/table/deny) the Resolutions.

City of Aubrey

Resolution Number 1040-26

Closing of Main Street for Summer Music Series

A RESOLUTION TEMPORARILY CLOSING MAIN STREET FOR ONE HALF DAY ON MAY 16, JUNE 20, AND JULY 18, 2026 FOR THE SUMMER MUSIC SERIES.

WHEREAS, a request was received from the City of Aubrey Parks and Recreation Department to temporarily close Main Street on May 16, June 20, and July 18, 2026 from 5:00 PM until 9:00 PM for the Summer Music Series; and

WHEREAS, the City Council voted to officially close Main Street on May 16, June 20, and July 18, 2026, from 5:00 PM until 9:00 PM for the Summer Music Series.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS: Main Street will be temporarily closed on May 16, June 20, and July 18, 2026 from 5:00 PM until 9:00 PM for the Summer Music Series. The City of Aubrey Parks Department will coordinate with the Aubrey Police Chief, Fire Chief, and the Director of Public Works to provide adequate signage and instruction for closing of the street.

This resolution shall be in full force and effect from and after its adoption.

PASSED AND APPROVED by the City Council of the City of Aubrey this 23rd day of April, 2026.

APPROVED:

_____
Chris Rich, Mayor

ATTEST:

_____
Jenny Hicks, City Secretary

City of Aubrey

Resolution Number 1041-26

Closing of Main Street for Peanut Festival

A RESOLUTION TEMPORARILY CLOSING MAIN STREET FOR ONE DAY ON OCTOBER 3, 2026, FOR THE ANNUAL PEANUT FESTIVAL.

WHEREAS, a request was received from the City of Aubrey Parks and Recreation Department to temporarily close Main Street on October 3, 2026 from 5:00 AM until 8:30 PM for the Annual Peanut Festival.

WHEREAS, the City Council voted to officially close Main Street from 5:00 AM until 8:30 PM on October 3, 2026 for the Annual Peanut Festival.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS: that Main Street be temporarily closed from 5:00 AM until 8:30 PM on October 3, 2026, for the Annual Peanut Festival. The City of Aubrey Parks Department will coordinate with the Aubrey Police Chief, Fire Chief, and the Director of Public Works to provide adequate signage and instruction for closing the street.

This resolution shall be in full force and effect from and after its adoption.

PASSED AND APPROVED by the City Council of the City of Aubrey this 23rd day of April, 2026.

APPROVED:

_____
Chris Rich, Mayor

ATTEST:

_____
Jenny Hicks, City Secretary

City of Aubrey

Resolution Number 1042-26

Closing of Main Street for Main Street Motor Fest

A RESOLUTION TEMPORARILY CLOSING MAIN STREET FOR ONE HALF DAY ON AUGUST 1, 2026, FOR MAIN STREET MOTOR FEST.

WHEREAS, a request was received from the City of Aubrey Parks and Recreation Department to temporarily close Main Street on August 1, 2026 from 6:00 AM until 3:00 PM for the Main Street Motor Fest; and

WHEREAS, the City Council voted to officially close Main Street from 6:00 AM until 3:00 PM on August 1, 2026, for the Main Street Motor Fest.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS: Main Street will be temporarily closed from 6:00 AM until 3:00 PM on August 1, 2026, for the Main Street Motor Fest. The City of Aubrey Parks Department will coordinate with the Aubrey Police Chief, Fire Chief, and the Director of Public Works to provide adequate signage and instruction for closing of the street.

This resolution shall be in full force and effect from and after its adoption.

PASSED AND APPROVED by the City Council of the City of Aubrey this 23rd day of April 2026.

APPROVED:

_____
Chris Rich, Mayor

ATTEST:

_____
Jenny Hicks, City Secretary

City of Aubrey

Resolution Number 1043-26

Closing of Main Street for Holiday Tree Lighting & Parade

A RESOLUTION TEMPORARILY CLOSING MAIN STREET FOR ONE HALF DAY ON DECEMBER 5, 2026, FOR THE HOLIDAY TREE LIGHTING.

WHEREAS, a request was received from the City of Aubrey Parks and Recreation Department to temporarily close Main Street on December 5, 2026, from 5:00 PM until 9:00 PM for the Holiday Tree Lighting; and

WHEREAS, the City Council voted to officially close Main Street from 5:00 PM until 9:00 PM on December 5, 2026, for the Holiday Tree Lighting and Parade.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS: Main Street will be temporarily closed from 5:00 PM until 9:00 PM on December 5, 2026, for the Holiday Tree Lighting and Parade. The City of Aubrey Parks Department will coordinate with the Aubrey Police Chief, Fire Chief, and the Director of Public Works to provide adequate signage and instruction for closing of the street.

This resolution shall be in full force and effect from and after its adoption.

PASSED AND APPROVED by the City Council of the City of Aubrey this 23rd day of April, 2026.

APPROVED:

_____
Chris Rich, Mayor

ATTEST:

_____
Jenny Hicks, City Secretary

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Approve an Amended and Restated Interlocal Agreement for Billing Services between the City of Aubrey and Mustang Special Utility District.

Staff Contact
Leanne Wilson, Assistant City Manager
lwilson@aubreytx.gov

Summary
Aubrey entered into an agreement with the Mustang Special Utility District in 2017 for Mustang to act as the city's billing agent by including the city's fees for city services on Mustang billing statements.

The 2017 Interlocal Agreement has been amended by the approval of addenda to include the Winn Ridge, Silverado, and Sandbrock subdivisions.

This amended and restated agreement adds the Belmont, Chaparral Ridge, Palomino, Ribbonwood, and Saratoga subdivisions. Exhibit A will be amended on a yearly basis as developments are added and city services are provided.

Financial Summary
NA

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve, table or deny) the Interlocal Agreement.

AMENDED AND RESTATED INTERLOCAL AGREEMENT FOR BILLING SERVICE BETWEEN THE CITY OF AUBREY, TEXAS AND MUSTANG SPECIAL UTILITY DISTRICT

This Amended and Restated Interlocal Agreement for Billing Services (the "Agreement") is made this the between the City of Aubrey, Texas ("City"), 107 S. Main Street, Aubrey, Texas 76227, and Mustang Special Utility District, a special utility district established under the authority of Article XVI, Section 59, of the Texas Constitution, as amended, Chapters 49 and 65 of the Texas Water Code ("Mustang"), with its principal offices at 7985 FM 2931, Aubrey Texas 76227. City and Mustang may also be individually referred to as a "Party" or collectively referred to as "Parties".

RECITALS

WHEREAS, Mustang provides certain utility services to certain areas which are located within Mustang's certificated service areas, within the City's corporate limits, and within the City's extraterritorial jurisdiction (collectively the "Service Area"); and

WHEREAS, the City also provides certain services to those areas such as stormwater management and drainage protection and solid waste/trash pickup services (the "City Services") to property owners within those Service Areas (the "City Customers"), for which it charges or assesses a fee (the "Fees"); and

WHEREAS, the City has entered into development agreements with property owners in the Service Area which require the City to provide City Services to City Customers residing or doing business within the Service Area; and

WHEREAS, the terms of such development agreements require the City to provide solid waste services to property within those developments and obligate property owners within those developments to pay fees for solid waste and to pay a storm management fee; and

WHEREAS, in 2017, the Parties entered into an Interlocal Agreement (the "2017 ILA") wherein Mustang agreed to act as billing agent for the City by including the City fees charged for City Services on Mustang's billing statements, thereby providing City Customers with a consolidated billing statement and streamlining the processes (the "Billing Services"); and

WHEREAS, the 2017 ILA has been amended by the approval of Addenda thereto for the addition of the Winn Ridge, the Silverado/High Country, and the Sandbrock subdivisions for Mustang to provide Billing Services to new customers living within those developments as customers requested by City to have City Customers n added to the Service Area due to the ongoing expansion of development and the provision of City Services to customers residing in the Service Area; and

WHEREAS, multiple residential and commercial development projects are currently under construction or planned within the Service Area, and as a result new City Customers are expected to move into the Service Area and City desires to continue receiving Billing Services

from Mustang for those new developments, and the Mustang has agreed to continue to provide Billing Services to City Customers upon approval of additional Addenda to this Agreement; and

WHEREAS, the Parties have determined it necessary to adopt this Amended and Restated Interlocal Agreement setting forth new terms pursuant to which Mustang will provide Billing Services upon approval of addenda to this Agreement, and City will compensate Mustang for Billing Services pursuant to this Agreement, which supersedes the 2017 Agreement and all prior amendments thereto; and

WHEREAS, the City agrees to timely notify Mustang of new occupancies within the Service Area and to provide all necessary customer and property data to enable accurate billing by Mustang, through addenda to this Agreement; and

WHEREAS, Mustang agrees to include all new City Customers taking occupancy in the Service Area in its billing system and to collect and remit City Fees collected on behalf of the City for City Services in accordance with the terms of this Agreement, any addenda hereto, and any applicable laws or regulations; and

WHEREAS, the Parties agree that this Agreement shall automatically apply to all future residents and units within the Service Area receiving City Services, upon approval of addenda to this Agreement pursuant to the procedures set forth herein in writing; and

WHEREAS, the Parties are authorized to enter into this Agreement pursuant to the Interlocal Cooperation Act ("Act"), Chapter 791 of the Texas Government Code, as amended; and

WHEREAS, both Parties are units of local government that have the statutory authority under the Act to perform the services set forth in this Agreement, the Parties agree that payments made by City for services rendered by Mustang fairly compensate Mustang for the services provided hereunder, and each Party further represents that all costs and payments hereunder will be paid from current revenues legally available to the paying Party;

NOW THEREFORE in consideration of the foregoing recitals, each of which are incorporated herein, the mutual agreements and covenants hereinafter contained and other and valuable consideration, the receipt and adequacy of which is hereby mutually acknowledged, the Parties hereby agree as follows:

ARTICLE 1
DEFINITIONS

Billing Services means any and all services necessary for the collection of City Fees from City Customers for City Services and the remittance of City Fees to City, including without limitation, the inclusion of City Fees for City Services on the utility bills generated by Mustang for the collection of water and wastewater fees from City Customers within the Services Area, the mailing or other delivery of the utility bills, the collection of the City Fees, and the remittance of the City Fees to City in accordance with the terms of this Agreement.

Billing Services Fee means three percent (3%) of the amount of all City Fees, excluding applicable sales tax, collected by Mustang on behalf of the City pursuant to this Agreement for

all accounts or connections of City Customers.

City Customer(s) means person(s) residing within and/or businesses, including those located within the corporate limits of the City to which the City provides City Services and/or person(s) residing within and/or businesses located within a subdivision or otherwise in the extraterritorial jurisdiction of the City to which the City provides City Services pursuant to a written agreement, including a development agreement or an interlocal agreement. This term includes City Customers for which accounts are in place on the Effective Date of this Agreement and City Customers added after the Effective Date of this Agreement pursuant to any Addenda to this Agreement. City Customers currently include customers in the Winn Ridge, Silverado/High Country, Sandbrock, Ribbonwood, Palomino, Aspen Meadows, Belmont, Saratoga, and Chaparral Ridge subdivisions.

City Fees means all fees and charges adopted and assessed by City to residents located within the Service Area for City Services pursuant to ordinance or written agreement whether such fees and charges are in effect on the date that this Agreement is executed or at a future date, including without limitation, fees assessed for solid waste services, and stormwater management and drainage fees (Exhibit A).

City Services means all government services that City provides directly to or causes to be provided to City Customers located within the Service Area, including stormwater management and drainage protection, and solid waste/trash pickup/recycling services.

Mustang Customer(s) means person(s) residing within the area for which Mustang holds and certificate of convenience and necessity and to whom Mustang is providing utility services.

Mustang Fees means all fees and charges adopted and assessed by Mustang to Mustang Customers.

Service Area means the geographic area in which Mustang holds the certificate of convenience and necessity to provide and does provide water utility services to persons residing within such geographic area which includes land located within the City's corporate limits and within the City's extraterritorial jurisdiction.

Summary Billing Statement or **Statement** means the utility bill sent by Mustang to City Customer(s) that includes all City Fees and Mustang Fees due from City Customer(s).

ARTICLE 2
PARTY OBLIGATIONS

2.1 Mustang Billing Services Obligations. Mustang agrees to provide Billing Services to City Customers for City Services on a monthly basis during the Term of this Agreement. Within thirty (30) days of the date of City's submission of any Addendum as defined in and pursuant to **Section 2.3, "City Notices and Payments"**, Mustang agrees that during the Term of this

Agreement, Mustang will provide Billing Services to those City Customers identified in the Addendum for which City requests Billing Services, and the Parties agree that the terms of this Agreement shall be automatically extended to newly added City Customers and become effective thirty (30) days after City's date of submission unless Mustang provides City written notice within that thirty (30) day period that it declines to provide the requested Billing Services. This Agreement shall be automatically amended to include the City Customers for the development identified in each Addendum accepted by Mustang, which Addenda shall be incorporated herein by reference. Mustang agrees to take all actions necessary to provide Billing Services to City Customers on behalf of the City in accordance with this Agreement and any Addenda hereto and those standard operating procedures that Mustang utilizes to bill and collect payments from Mustang Customers. Mustang agrees to keep City Customer information confidential in accordance with applicable law. Mustang further understands and agrees that City Fees collected pursuant to this Agreement, less the Billing Services Fee due to Mustang hereunder, are public funds that are the sole property of the City during the Term of this Agreement and after termination of this Agreement.

2.2 Mustang Summary Billing Statement, Billing Cycle, and Reports. Mustang will render one Summary Billing Statement for each City Customer each month which shall include all City Fees. Mustang shall prepare and mail the Summary Billing Statement for City Customers on or about the first day of each month. The due date for City Customers payment of City Fees on a Statement shall be fifteen (15) days after the date of mailing of the Statement, and all City Fees not paid within such fifteen (15) day period shall be delinquent. Mustang agrees to utilize the same collection procedures for delinquent City Customer accounts that it utilizes for delinquent accounts of Mustang Customers. Mustang shall comply with all applicable statutory or regulatory requirements when providing the Billing Services pursuant to this Agreement. Additionally, on or before the fifteenth (15^{th}) day of each month, Mustang will provide City a monthly report of the accounts of the City Customers billed and City Fees collected by Mustang during the preceding month. The report shall provide details of the associated City Customer accounts.

2.3 City Notices and Payment Obligations. As City Customers are added with the addition of residential and commercial developments included within the Service Area, the City shall submit a written addendum to this Agreement to Mustang identifying the subdivision to be added and the City Fees to be billed and collected. City shall submit a written addendum to this Agreement for each such addition to the Service Area to Mustang identifying such new developments and specifying the applicable City Fees to be charged to the City Customers located therein and to be billed and collected by Mustang (the "Addenda" or "Addendum"). Mustang shall apply those City Fees as specified by the City to those City Customers and shall provide Billing Services upon commencement of City Services by City Customers. Billing Services Fees assessed to City Customers pursuant to **Article 4** of this Agreement shall be retained by Mustang in consideration for providing Billing Services pursuant to this Agreement. Mustang shall be entitled to deduct the Billing Services Fees prior to remittance of City Fees to City.

ARTICLE 3
APPLICATION OF PAYMENTS; COLLECTIONS; BILLING

3.1 Delinquent Accounts/City Fees. City Fees will be considered delinquent if not received by Mustang on or before the due date specified in **Section 2.2**. If the City establishes a late fee or other type of City Fee, and provides notice of such fee to Mustang, Mustang agrees to include such fee(s) with the next Summary Billing Statement. By approving and executing this Agreement, the City agrees to adopt the same procedures for termination of delinquent accounts as set out in the most current Mustang rate order and applicable tariffs. Mustang agrees to process any delinquent City Customer accounts in the same manner as Mustang processes Mustang Customer accounts including, but not limited to, the assessment of late fees, disconnection of service, and other remedies.

3.2 Partial Payments. Mustang may accept partial payments from City Customers; however, all such partial payments paid towards a Summary Billing Statement containing City Fees and Mustang Fees shall be applied on a pro rata basis to the City Fees due and to the Mustang Fees due, unless the City Customer making such payment specifies in writing the allocation of the partial payment.

3.3 Past Due Balances and Overpayments. Payments made to accounts of City Customers for which there is a past due balance from a Summary Billing Statement shall be applied first to the arrearage balances on such Summary Billing Statements, and second shall be applied on a pro rata basis to the City Fees due and to the Mustang Fees due. Overpayments shall be credited to a master account and applied to the next billing cycle on a pro rata to the City Fees due and to the Mustang Fees due.

3.4 Service Applications/Deposits. Applications for service shall be filed with the City. Any Deposits required by the City shall be collected by the City. Mustang will not be entitled to receive any portion of any forfeited deposits for storm management and/or solid waste/trash pickup services.

3.5 Billing Errors. Mustang shall make adjustments as necessary to correct billing errors on City Customer accounts, and such corrections shall be reflected in the Summary Billing Statement for the following month.

ARTICLE 4
SUMMARY BILLING SERVICE FEE

As consideration for the Billing Services rendered by Mustang to the City pursuant to this Agreement, the City agrees that Mustang shall be entitled to payment in the amount of three percent (3%) of all City Fees, excluding applicable sales tax, collected by Mustang on behalf of the City for all City Customer accounts or connections each month, (the "Service Charge"). Mustang shall be entitled to deduct such Service Charge from the amount collected from City Customers for City Fees, and shall remit the balance to the City of Aubrey, 107 S Main Street, Aubrey, Texas, 76227 within thirty (30) days of the end of each monthly billing cycle. Payment to City shall be made by wire or ACH transfer as agreed upon by the Parties.

ARTICLE 5
CHANGES IN RATES/INCLUSION OF ADDITIONAL CITY FEES

The City shall give Mustang notice of change in City Fees at least thirty (30) days prior to effective date of such change. Within ten (10) calendar days of receipt of such written notice from City, Mustang agrees to provide confirmation to City that it will incorporate the changes in City Fees with such changes to become effective upon the commencement of the next billing cycle following the date of City's notice. Mustang agrees to implement procedures for collecting any change in City Fees on the effective date for such change. The City may request, in writing, that Mustang provide Billing Services for additional City Fees other than the City's **storm management and drainage protection fee** and the City's solid waste/trash pickup services fees on the Summary Billing Statements to City Customers. Should Mustang, in its sole discretion, decide to bill for those additional fees, such fees shall be subject to the terms of this Agreement and no amendment of the Agreement will be necessary to include such fees within the scope of this Agreement.

ARTICLE 6
TERM/ TERMINATION OF AGREEMENT

This Agreement shall become effective on **June 1, 2026,** and shall continue in effect for a period of five (5) years unless terminated earlier by either Party as provided herein (the "Initial Term"). The Initial Term of this Agreement shall automatically renew for five (5) additional terms of five (5) years each unless terminated earlier by either Party as provided herein (the "Renewal Term(s)"). The Initial Term and Renewal Term are individually and collectively referred to herein as "Term". Either Party hereto may terminate this Agreement for any reason upon ninety (90) days written notification to the other Party during any Term of this Agreement. Upon the effective date of termination, the Parties agree that the accounts of City Customers shall revert to the City, and likewise Mustang Customers shall be retained by Mustang. Prior to the effective date of any termination, Mustang agrees to coordinate with City and to take such actions as necessary to transition the Billing Services provided for City Customers and the account information of City Customers to City or its designated third party billing vendor and to ensure that all amounts collected by Mustang from City Customers are remitted to City, including amounts remitted after the effective date of termination of this Agreement.

ARTICLE 7
MISCELLANEOUS PROVISIONS

7.1 Entire Agreement/Amendments/Modifications. This Agreement constitutes the entire agreement between the Parties and supersedes all prior agreements, whether oral or written, covering the subject matter of this Agreement. Except as expressly provided herein, this Agreement shall not be modified or amended except in writing signed by the Parties .

7.2 Representations. By execution of this Agreement, each Party represents to the other that:

(1) In performing its duties and obligations hereunder, it will be carrying out one or more governmental functions or services which it is authorized to perform;

(2) The undersigned officer or agent of the Party has been properly authorized by

that Party's respective governing body to execute this Agreement and that any actions or resolutions necessary to extend such authority have been duly passed and are now in effect;

(3) All payments required or permitted to be made by a Party will be made from current revenues available to the paying Party; and

(4) All payments provided to be made hereunder by one Party to the other are intended to and do fairly compensate the other Party for the services or functions performed hereunder.

7.3 Notices. Any notice and/or statement required and permitted to be delivered under this Agreement shall be sent by depositing same in the United States Mail, certified, return receipt requested, postage prepaid, or sent by overnight courier, or hand-delivered, addressed to the appropriate Party at the addresses set forth in the preamble to this Agreement. Notice shall be effective five (5) days after deposit in the United States Mail or effective immediately upon personal delivery via courier or hand delivery.

7.4 No Waiver of Immunity. The City and Mustang agree that neither Party waives any sovereign or governmental immunity available to either the City or Mustang under Texas law and neither waives any available defenses under Texas law. Nothing in this Agreement shall be construed to create or grant any rights, contractual or otherwise, in or to any third persons or entities. This Agreement is not intended to extend the liability of the Parties beyond that provided by law. Neither the Mustang nor City waives any immunity or defense that would otherwise be available to it against claims by third parties.

7.5 Assignment; Third-Party Beneficiaries. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, and assigns as allowed herein, as of the Effective Date, even if later executed. This Agreement may not be assigned by either Party without the other's consent, which consent shall not be unreasonably denied, withheld or conditioned. This Agreement only inures to the benefit of and may only be enforced by the Parties. No other person or entity shall have any right, title, or interest under this Agreement or otherwise be deemed to be a third-party beneficiary of this Agreement.

7.6 Applicable Law/Venue. This Agreement is made and shall be construed in accordance with the laws of the State of Texas. The Parties agree that Denton County, Texas, is the place of performance of this Agreement. Exclusive venue for any legal proceeding related to this Agreement shall lie in a court of competent jurisdiction in Denton County, Texas.

7.7 Independent Parties. The City and Mustang agree and acknowledge that each entity is not an agent of the other entity and that each entity is responsible for its own acts, forbearance, negligence and deeds, and for those of its agents or employees, except as expressly set forth to the contrary in this Agreement. This Agreement does not and shall not be construed to entitle either Party or any of their respective employees, if applicable, to any benefit, privilege or other amenities of employment applicable to the other Party. The City understands and agrees that the City, its employees, servants, agents, and representatives shall not represent themselves to be

employees, servants, agents, and/or representatives of Mustang. Mustang understands and agrees that the Mustang, its employees, servants, agents, and representatives shall not represent themselves to be employees, servants, agents, and/or representatives of the City.

7.8 Force Majeure. Each Party shall use good faith, due diligence and reasonable care in the performance of its respective obligations under this Agreement, and time shall be of the essence in such performance; however, in the event a Party is unable, due to force majeure, to perform its obligations under this Agreement, then obligations affected by the force majeure shall be temporarily suspended. Within three (3) business days after the occurrence of a force majeure, the party claiming the right to suspend its performance shall give notice to all the Parties, including a detailed explanation of the force majeure and a description of the action that will be taken to remedy the force majeure and resume full performance at the earliest possible time. The term "force majeure" shall include events or circumstances that are not within the reasonable control of the Party whose performance is suspended, and that could not have been avoided by such Party with the exercise of good faith, due diligence and reasonable care.

7.9 Severability. If any provision of this Agreement is determined by a Court of competent jurisdiction to be unenforceable for any reason, then (a) such unenforceable provision shall be deleted from this Agreement; (b) the unenforceable provision shall, to the extent possible, be rewritten to be enforceable and to give effect to the intent of the Parties; and (c) the remainder of this Agreement shall remain in full force and effect and shall be interpreted to give effect to the intent of the Parties.

7.10 Nonwaiver. No course of conduct on the part of the City or Mustang nor any failure or delay by the City or Mustang with respect to exercising any right, power or privilege pursuant to this Agreement will operate to be construed as a waiver thereof.

7.11 Interpretation. The Parties acknowledge that each of them has been actively involved in negotiating this Agreement. Accordingly, the rule of construction that any ambiguities are to be resolved against the drafting Party will not apply to interpreting this Agreement. In the event of any dispute over the meaning or application of any provision of this Agreement, the provision will be interpreted fairly and reasonably and neither more strongly for or against any Party, regardless of which Party originally drafted the provision.

City of Aubrey, Texas

_____
Chris Rich, Mayor
Date: _____

ATTEST:

_____
Jenny Hicks, City Secretary

APPROVED AS TO FORM:

_____
Patricia Adams, City Attorney

Mustang Special Utility District

By: _____
_____, President
Date: _____

ATTEST:

By: _____
_____,Secretary

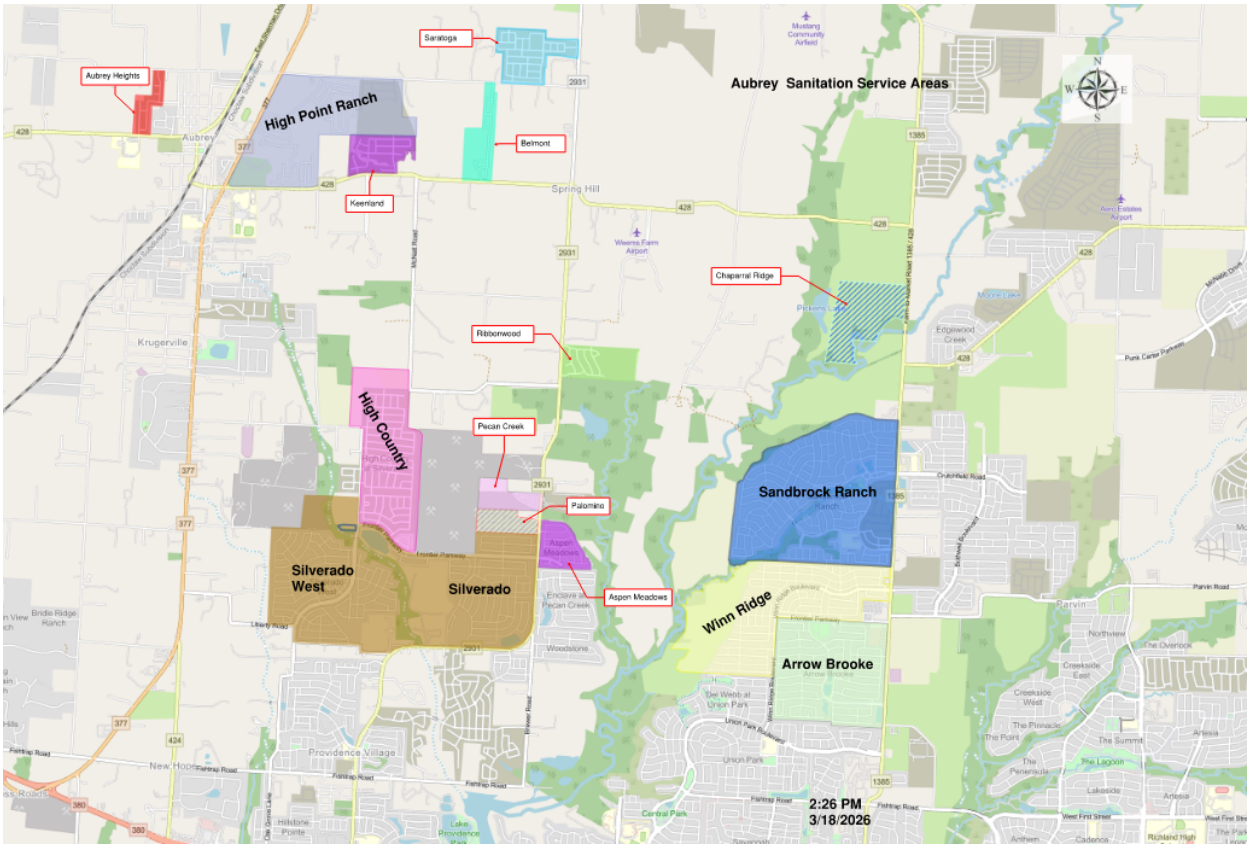
APPROVED AS TO FORM:

_____
_____, Attorney for Mustang

Exhibit A
Rates effective December 1, 2025

Subdivision Name	Monthly Solid Waste	Monthly Senior Rate	Extra Trash Cart	Extra Recycle Cart	Monthly Drainage Fee
Aspen Meadows	$20.34	$18.52	$8.81	$6.38	$0
Belmont	$20.34	$18.52	$8.81	$6.38	$0
Chaparral Ridge	$20.34	$18.52	$8.81	$6.38	$0
Palomino	$20.34	$18.52	$8.81	$6.38	$0
Ribbonwood	$20.34	$18.52	$8.81	$6.38	$0
Sandbrock Ranch	$20.34	$18.52	$8.81	$6.38	$0
Saratoga	$20.34	$18.52	$8.81	$6.38	$0
Silverado/High Country	$20.34	$18.52	$8.81	$6.38	$0
Winn Ridge	$20.34	$18.52	$8.81	$6.38	$0

Note: fees do not include sales tax.



City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Approve Change Order No. 1 for F.M. 428 18-Inch Parallel Force Main in the amount not to exceed $212,220.00.

Staff Contact
Dean Rylant, Public Works Director
drylant@aubreytx.gov

Summary
Pittard Construction has requested a change order in the amount of $212,220.00. The change involves modifying the provisions of the contract by covering the installation of a 24-inch steel encasement pipe with a 14-inch carrier pipe crossing U.S.377 for lowering of an existing 14-inch force main, transferal of service from the existing 14-inch force main to the proposed 14-inch force main, removal of the existing 14-inch force main crossing U.S.377 and grouting of the existing steel encasement pipe, and installation of two additional air release valve manholes across along Stonehurst Trail.

The referenced proposed contract modifications (PCMs) contain different amounts. Below, you can see why the Change Order is being asked for:
1. Item No. 12 - Furnish & Install 14-Inch PVC Force Main Pipe by Other than Open Cut - **$43,200.00**
2. Item No. 13 - Furnish & Install 24-Inch Steel Encasement Pipe (3/8-Inch Thick) by Other than Open Cut - **$81,600.00**
3. Item No. 14 - Connect to Existing 14-Inch Force Main and Transfer Service to Proposed 14-inch Force Main, including Removal of Existing 14-inch Force Main and Pressure Grouting of Existing Steel Encasement Pipe Crossing U.S.377 and all Pumping, Bypass Pumping, Fittings, etc. Required to Complete Transfer of Service - **$54,100.00**
4. Item No. 7 - Furnish & Install 2-inch Air Release & Vacuum Valve with 6-foot Diameter Manhole - **$33,320.00**

In conclusion, this proposal will add 10 additional working calendar days to the project's schedule, making the revised contract time now 190 days. The President and Contractor of Pittard, as well as our Public Works Director have reviewed the change order and recommend approval.

Financial Summary
This project will be funded with the 2024 Bond.

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve/deny or request changes) to the change order.

CITY OF AUBREY, TEXAS

F.M. 428 18-INCH PARALLEL FORCE MAIN

CHANGE ORDER NO. 1

A. INTENT OF CHANGE ORDER

The intent of this change order is to modify the provisions of the contract entered into between the City of Aubrey, Texas and Pittard Construction Company, Inc., 190 E. Stacy Rd. Suite 306 Box 306, Allen, Texas 75002, for construction of the F.M. 428 18-Inch Parallel Force Main project, dated November 20, 2025.

B. DESCRIPTION OF CHANGE

This change order covers the installation of a 24-inch steel encasement pipe with 14-inch carrier pipe crossing U.S. 377 for lowering of an existing 14-inch force main, transferal of service from the existing 14-inch force main to the proposed 14-inch force main, removal of the existing 14-inch force main crossing U.S. 377 and grouting of the existing steel encasement pipe, and installation of two additional air release valve manholes across along Stonehurst Trail.

C. EFFECT OF CHANGE ON CONTRACT AMOUNT

This change order will have the following effect on the cost of this project:

Item No.	Description	Previous Quantity	Quantity This C.O.	Revised Quantity	Unit	Unit Price	Amount of Change
12	Furnish & Install 14-Inch PVC Force Main Pipe by Other than Open Cut	0	180	180	L.F.	$ 240.00	$ 43,200.00
13	Furnish & Install 24-Inch Steel Encasement Pipe (3/8-Inch Thick) by Other than Open Cut	0	170	170	L.F.	$ 480.00	$ 81,600.00
14	Connect to Existing 14-inch Force Main and Transfer Service to Proposed 14-inch Force Main, including Removal of Existing 14-inch Force Main and Pressure Grouting of Existing Steel Encasement Pipe Crossing U.S. 377 and all Pumping, Bypass Pumping, Fittings, Etc. Required to Complete Transfer of Service	0	1	1	L.S.	$ 54,100.00	$ 54,100.00
7	Furnish & Install 2-Inch Air Release & Vacuum Valve with 6-Foot Diameter Manhole	3	2	5	Ea.	$ 16,660.00	$ 33,320.00
						Total:	**$ 212,220.00**

Original Contract Amount:	$ 1,808,163.00
Change Order No. 1	$ 212,220.00
Revised Contract Amount:	**$ 2,020,383.00**

D. EFFECT OF CHANGE ON CONTRACT TIME

The work required under this change order will add ten (10) additional calendar days to this project.

Original Contract Time	180	calendar days
Change Order No. 1	10	calendar days
Revised Contract Time:	**190**	**calendar days**

E. AGREEMENT

By the signatures below of duly authorized agents, the City of Aubrey, Texas and Pittard Construction Company, Inc., do hereby agree to append this Change Order No. 1 to the original contract between themselves, dated November 20, 2025.

CITY OF AUBREY, TEXAS	**PITTARD CONSTRUCTION COMPANY, INC.**
Owner	Contractor
By: _____ *(signature)*	By: _____ *(signature)*
Name: Mr. Dean Rylant *(print name)*	Name: Rob Pittard *(print name)*
Title: Public Works Director	Title: President
Date: _____	Date: 3/17/26
Attest: _____	Attest: Chris Mercier

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Approve Resolution 1044-26, authorizing the Aubrey Municipal Development District to enter an Economic Development Agreement and Performance Agreement between the City of Aubrey, Aubrey Municipal Development District, and Walmart Real Estate Business Trust.

Staff Contact
Christine Gossett, MDD Executive Director
cgossett@aubreytx.gov
940-440-9343

Summary
The Resolution authorizes the Aubrey Municipal Development District to enter an Economic Development Agreement and Performance Agreement between the City of Aubrey, Aubrey Municipal Development District, and Walmart Real Estate Business Trust.

Financial Summary
N/A

Staff Recommended Action

Staff Recommended Motion

RESOLUTION NO. 1044-26

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS, AUTHORIZING THE AUBREY MUNICIPAL DEVELOPMENT DISTRICTS' PARTICIPATION IN AN ECONOMIC DEVELOPMENT AGREEMENT AND PERFORMANCE AGREEMENT BETWEEN THE CITY OF AUBREY, AUBREY MUNICIPAL DEVELOPMENT DISTRICT AND WAL-MART REAL ESTATE BUSINESS TRUST; PROVIDING FOR TWO SEPARATE READINGS IN COMPLIANCE WITH SECTION 505.158, TEXAS LOCAL GOVERNMENT CODE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Aubrey, Texas ("City"), is a home rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5, of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, the Aubrey Municipal Development District ("AMDD") is a political subdivision of the State of Texas and the City of Aubrey, Texas (the "City"), created in accordance with Chapter 377 of the Texas Local Government Code, as amended (the "Act"); and

WHEREAS, under the Act, the AMDD may contract with a public or private person for development projects, and defines a development project as the term is defined by Sections 55-151-505.158 of the Texas Local Government Code; and

WHEREAS, the AMDD board has held a public hearing on entering a Economic Development Agreement and Performance Agreement to provide certain incentives, including a sales tax rebate to Wal-Mart Real Estate Business Trust by the AMDD for the construction and operation of a Wal-Mart located at the northeastern corner of HWY 377 and Spring Hill Road intersection, City of Aubrey, Denton County, Texas (the "Project"); and

WHEREAS, the AMDD board has found and determined that the Project will promote new or expanded business enterprises in the City; and

WHEREAS, the City Council desires to authorize the Project and the proposed expenditure by the AMDD and participation in the Project as requested.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUBREY THAT:

SECTION 1.
Incorporation of Premises

The City Council hereby finds that the statements set forth in the recitals of this Resolution are true and correct legislative findings of the City Council, and such findings are incorporated into this Resolution in their entirety.

SECTION 2.
Project Approval

The City Council hereby authorizes AMDD's participation in the Project and the Economic Development Agreement and Performance Agreement with the City of Aubrey and Wal-Mart Real Estate Business Trust, a copy of which is attached hereto and incorporated herein as **Exhibit A**.

SECTION 3.
Open Meeting

This Resolution was read and adopted at a meeting that were open to the public and notice of the time, place and purpose of said meetings was given as required by the Open Meetings Act, Chapter 551 of the Texas Government Code.

SECTION 4.
Effective Date

This Resolution shall take effect upon its passage and approval.

PASSED AND APPROVED this 23rd day of April 2026.

_____
Chris Rich, Mayor

Attest:

_____
Jenny Huckabee, City Secretary

Approved as to Form:

_____
Patricia Adams, City Attorney

EXHIBIT A
ECONOMIC DEVELOPMENT AGREEMENT AND PERFORMANCE AGREEMENT

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Approve the final acceptance of Highpointe Ranch, Phase 3, Public Improvements.

Staff Contact
Dean Rylant, Public Works Director
drylant@aubreytx.gov

Summary
Highpointe Ranch, Ph 3 consists of 145 residential lots and 1 HOA lot with onsite concrete streets, drainage, water and wastewater, utilities, streetlights, and signage. The maintenance bond for Utilities includes Phase 2 and 3 as it was constructed and completed together. See the Phase 3 breakdown below, the WS&D portions are for Phase 3 specifically.

The following includes the actual assets.

Description	Unit	Quantity
Paving	LF	4,600
Sidewalk	LF	400
Drainage Pipe	LF	2,624
Signs	EA	11
Water Main	LF	4,473
Sewer Main	LF	3,731
Sewer MH	EA	11
Fire Hydrants	EA	11

Phase 3 Water: $492,444.00
Phase 3 Sanitary Sewer: $394,344.50
Phase 3 Storm: $493,984.00
Phase 3 Paving: $896,228.80
Total $2,277,001.30

A final walk-through was conducted on March 25, 2026, and all public improvement punch list items were completed successfully.

The contractor has provided 2-year Maintenance Bonds and a Contractor's Affidavit of Final Payment and Release. As-built file has been received, and the city engineer has provided a letter of recommendation for acceptance.

Financial Summary
NA

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve/deny/table) Highpointe Ranch Phase 3, Public Improvements

MAINTENANCE BOND **Bond** 022243013

KNOW ALL BY THESE PRESENTS, That we, Gilco Contracting, Inc.

as Principal, and Liberty Mutual Fire Insurance Company,

a corporation organized under the laws of the State of Wisconsin and duly authorized to do business in the State of Texas, as Surety, are held and firmly bound unto City of Aubrey

as Obligee, in the penal sum of Eight Hundred Ninety Six Thousand Two Hundred Twenty Eight and 80/100 ($ 896,228.80)

to which payment well and truly to be made we do bind ourselves, our and each of our heirs, executors, administrators, successors and assigns jointly and severally, firmly by these presents.

WHEREAS, the said Principal entered into a Contract with the Lennar Homes of Texas Land & Construction, Ltd. dated

for Highpointe Ranch Phase 3 - Paving Improvements

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, That if the Principal shall guarantee that the work will be free of any defective materials or workmanship which became apparent during the period of Two (2) year(s) following completion of the Contract then this obligation shall be void, otherwise to remain in full force and effect, provided however, any additional warranty or guarantee whether expressed or implied is extended by the Principal or Manufacturer only, and the Surety assumes no liability for such a guarantee.

Signed and sealed this 4th day of March 2026, .

Gilco Contracting, Inc. (Seal)

(Seal)

Leia McQuien, Vice President, Operations

(Seal)

Liberty Mutual Fire Insurance Company

By Sophinie Hunter

Sophinie Hunter Attorney-in-Fact

POWER OF ATTORNEY

Certificate No: **8213588-022020**

Liberty Mutual Fire Insurance Company
Wausau, Wisconsin

KNOWN ALL PERSONS BY THESE PRESENTS: Liberty Mutual Fire Insurance Company, being a Wisconsin Corporation having its principal office in the City of Wausau, State of Wisconsin does hereby make, constitute and appoint Don E. Cornell; Sophinie Hunter; Tina McEwan; Robbi Morales; Mikaela Peppers; Tonie Petranek; Ricardo J. Reyna; Joshua Saunders; Kelly A. Westbrook

all of the city of Dallas state of TX each individually if there be more than one named, its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred in their/its name, place and stead, to sign, execute, acknowledge and deliver in their/its behalf, and as their/its act and deed, without power of redelegation, as follows:

Bonds, undertakings, recognizances, contracts of indemnity, and all other surety obligations, as required, unlimited as to Dollar amount

and to bind the Company(ies) making this appointment thereby as fully and to the same extent as if such bond or undertaking was signed by the duly authorized officers of the Company(ies), and all the acts of said attorney(s), pursuant to the authority herein given, are hereby ratified and confirmed.

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

AUTHORITY FOR MAKING APPOINTMENT OF ATTORNEYS-IN-FACT

Appointment of Attorneys-in-Fact by Liberty Mutual Fire Insurance Company are made pursuant to Article V, Section 10 of Liberty Mutual Fire Insurance Company's By-Laws, as amended and by Unanimous Consent of the Board of Directors dated May 21st, 2013. Further, the President of Liberty Mutual Fire Insurance Company, executed a Delegation of Authority and authorized the assistant secretary signing below to appoint attorneys-in-fact as may be necessary to act on behalf of Liberty Mutual Fire Insurance Company to make execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances, and other surety obligations.

IN WITNESS WHEREOF, Liberty Mutual Fire Insurance Company has caused these presents to be signed by its authorized representatives, and its Corporate Seal to be hereto affixed, this 2nd day of April, 2025.

Liberty Mutual Fire Insurance Company

By: _____
Nathan J. Zangerle, Assistant Secretary

Attest: _____
Heather B. Magee

State of PENNSYLVANIA
County of MONTGOMERY ss

The foregoing instrument was acknowledged before me this 2nd day of April, 2025 by Nathan J. Zangerle, an authorized representative of Liberty Mutual Fire Insurance Insurance Company.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2029
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, an Assistant Secretary of Liberty Mutual Fire Insurance Company, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney was one of the officers or officials specially authorized by the Board of Directors to appoint attorneys-in-fact as provided in the Unanimous Consent and Vote of the Board of Directors of Liberty Mutual Fire Insurance Company dated May 21, 2013.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the Board of Directors of Liberty Mutual Fire Insurance Company evidenced by the Unanimous Consent and Vote of the Board of Directors dated June 28, 2006 wherein it was

VOTED that the signatures of such officers and the seal of the Company may be affixed to any such power of attorney or to any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signature and facsimile seal shall be valid and binding upon the Company when so affixed and in the future with respect to any surety undertakings, bonds, recognizances and other surety obligations to which it is attached.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, affixed, this 4th day of March, 2026.

By: _____
Renee C. Llewellyn, Assistant Secretary

LMS-22023 02/24

Liberty Mutual
SURETY

TEXAS
IMPORTANT NOTICE

To obtain information or make a complaint:

You may call toll-free for information or to make a complaint at
1-877-751-2640

You may also write to:

2200 Renaissance Blvd., Ste. 400
King of Prussia, PA 19406-2755

You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at
1-800-252-3439

You may write the Texas Department of Insurance
Consumer Protection (111-1A)
P. O. Box 149091
Austin, TX 78714-9091
FAX: (512) 490-1007
Web: http://www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

PREMIUM OR CLAIM DISPUTES:

Should you have a dispute concerning your premium or about a claim you should first contact the agent or call 1-800-843-6446. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR POLICY:

This notice is for information only and does not become a part or condition of the attached document.

TEXAS
AVISO IMPORTANTE

Para obtener informacion o para someter una queja:

Usted puede llamar al numero de telefono gratis para informacion o para someter una queja al
1-877-751-2640

Usted tambien puede escribir a:

2200 Renaissance Blvd., Ste. 400
King of Prussia, PA 19406-2755

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al
1-800-252-3439

Puede escribir al Departamento de Seguros
de Texas Consumer Protection (111-1A)
P. O. Box 149091
Austin, TX 78714-9091
FAX # (512) 490-1007
Web: http://www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

DISPUTAS SOBRE PRIMAS O RECLAMOS:

Si tiena una disputa concerniente a su prima o a un reclamo, debe comunicarse con el agente o primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI)

UNA ESTE AVISO A SU POLIZA:

Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del documento adjunto.

OFFICE PHONE
(817) 735-1600

GILCO CONTRACTING, INC.
6331 SOUTHWEST BLVD
BENBROOK, TEXAS 76132

FAX NUMBER
(817) 735-1613

LENNAR HOMES OF TEXAS LAND & CONST, LTD.
1707 N. MARKET PLACE BLVD., SUITE 100
IRVING, TEXAS 75063

ATTN: Aaron Woods
Supply Pro
Kyle Brockman
Traci McHenry

ESTIMATE NUMBER: SIX AND FINAL

DATE: 3/4/2026

PROJECT: HIGHPOINTE RANCH PHASE 3

GILCO'S JOB NUMBER: 1698

PAY PERIOD FROM: RETAINAGE

INVOICE NO: 1698-006 fbi

ITEM NO	DESCRIPTION	CONTRACT QUANTITY	UNIT	UNIT PRICE	CONTRACT PRICE	QTY TO DATE	AMOUNT TO DATE	QTY THIS ESTIMATE	TOTAL THIS EST	% COMP.
	PAVING IMPROVEMENTS									
1	6" THICK CONCRETE PAVEMENT	15,840	SY	$46.40	$734,976.00	15,840	$734,976.00			100.00%
2	6" LIME SUBGRADE	16,824	SY	$3.20	$53,836.80	16,824	$53,836.80			100.00%
3	LIME MATERIAL @ 27 #/SY	227	TON	$310.00	$70,370.00	227	$70,370.00			100.00%
4	REMOVE TYPE III BARRICADE	4	EA	$500.00	$2,000.00	4	$2,000.00			100.00%
5	24" SOLID WHITE CROSSWALK LINE (TXDOT PM(4)-22)	240	LF	$18.90	$4,536.00	240	$4,536.00			100.00%
6	TYPE W11-2 & W13-1P SIGN	5.0	EA	$1,840.00	$9,200.00	5.0	$9,200.00			100.00%
7	STREET NAME SIGN (2 BLADES PER) WITH POST	3	EA	$1,575.00	$4,725.00	3	$4,725.00			100.00%
8	COMBINATION STOP SIGN AND STREET SIGN (2 BLADES PER) WITH POST	3	EA	$2,100.00	$6,300.00	3	$6,300.00			100.00%
9	5' WIDE, (4" THICK) CONCRETE SIDEWALK	400	LF	$39.75	$15,900.00	400	$15,900.00			100.00%
10	TRAFFIC CONTROL	1	LS	$2,500.000	$2,500.00	1.00	$2,500.00			100.00%
	BONDS									
1	PAYMENT, PERFORMANCE AND MAINTENANCE BOND	1	LS	$12,000.00	$12,000.00	1	$12,000.00			100.00%

1698 fbi

OFFICE PHONE
(817) 735-1600

GILCO CONTRACTING, INC.
6331 SOUTHWEST BLVD
BENBROOK, TEXAS 76132

FAX NUMBER
(817) 735-1613

LENNAR HOMES OF TEXAS LAND & CONST, LTD.
1707 N. MARKET PLACE BLVD., SUITE 100
IRVING, TEXAS 75063

ATTN: Aaron Woods
Supply Pro
Kyle Brockman
Traci McHenry

ESTIMATE NUMBER: SIX AND FINAL

DATE: 3/4/2026

PROJECT: HIGHPOINTE RANCH PHASE 3

GILCO'S JOB NUMBER: 1698

PAY PERIOD FROM: RETAINAGE

INVOICE NO: 1698-006 fbi

ITEM NO	DESCRIPTION	CONTRACT QUANTITY	UNIT	UNIT PRICE	CONTRACT PRICE	QTY TO DATE	AMOUNT TO DATE	QTY THIS ESTIMATE	TOTAL THIS EST	% COMP.
	CHANGE ORDER #1									
1	TYPE W11-2 & W13-1P SIGN	-5.0	EA	$1,840.00	-$9,200.00	-5	-$9,200.00			100.00%
2	STREET NAME SIGN (2 BLADES PER) WITH POST	-3	EA	$1,575.00	-$4,725.00	-3	-$4,725.00			100.00%
3	COMBINATION STOP SIGN AND STREET SIGN (2 BLADES PER) WITH POST	-3	EA	$2,100.00	-$6,300.00	-3	-$6,300.00			100.00%
4	PAVING REPAIR	1	LS	$6,000.00	$6,000.00	1	$6,000.00			100.00%
5	LIME MATERIAL	-19	TON	$310.00	-$5,890.00	-19	-$5,890.00			100.00%
	TOTAL AMOUNT				**$896,228.80**		**$896,228.80**			

ORIGINAL CONTRACT AMOUNT:	**$916,343.80**	
TOTAL CONTRACT AMOUNT:	$896,228.80	
TOTAL AMOUNT TO DATE:	$896,228.80	
RETAINAGE:		
SUB TOTAL:	$896,228.80	
TOTAL THIS ESTIMATE:	$89,622.88	**RETAINAGE**
RETAINAGE:		
SUBTOTAL THIS ESTIMATE:	$89,622.88	
PREVIOUS ESTIMATE:	$806,605.92	
PAYMENT AMOUNT:	$89,622.88	

MAINTENANCE BOND

STATE OF TEXAS)
)
COUNTY OF DENTON)

KNOW ALL BY THESE PRESENTS: That Interstate Pipeline Utility Construction, LLC whose address is P.O. Box 152957, Dallas, TX 75315, hereinafter referred to as "Principal," and Hudson Insurance Company, a corporate surety/sureties organized under the laws of the State of Delaware and fully licensed to transact business in the State of Texas, as Surety, hereinafter referred to as "Surety" (whether one or more), are held and firmly bound unto the **High Pointe Ranch Municipal Utility District No. 1**, a Texas municipal utility district, hereinafter referred to as "Owner," in the penal sum of Three Million Eight Hundred Eighty-Three Thousand Three Hundred One and 00/100 Dollars ($ 3,883,301.00), in lawful money of the United States to be paid to Owner, its successors and assigns, for the payment of which sum well and truly to be made, we bind ourselves, our successors, heirs, executors, administrators and successors and assigns, jointly and severally; and firmly by these presents, the condition of this obligation is such that:

WHEREAS, Principal entered into a certain written Contract with the Owner, dated on or about the 7th day of November, 20 24, to furnish all permits, licenses, bonds, insurance, products, materials, equipment, labor, supervision, and other accessories necessary for the construction of:

Highpointe Ranch
Phase 2 & 3 Utilities Package

in Denton County, Texas, as more particularly described and designated in the above-referenced contract, such contract being incorporated herein and made a part hereof as fully and to the same extent as if written herein word for word:

WHEREAS, in said Contract, the Principal binds itself to use first class materials and workmanship and of such kind and quality that for a period of two (2) years from the completion and final acceptance of the improvements by Owner the said improvements shall require no repairs, the necessity for which shall be occasioned by defects in workmanship or materials and during the period of two (2) years following the date of final acceptance of the Work by Owner, Principal binds itself to repair or reconstruct said improvements in whole or in part at any time within said period of time from the date of such notice as the Engineer shall determine to be necessary for the preservation of the public health, safety or welfare. If Principal does not repair or reconstruct the improvements within the time period designated, Owner shall be entitled to have said repairs made and charge Principal and/or Surety the cost of same under the terms of this Maintenance Bond.

NOW, THEREFORE, if Principal will maintain and keep in good repair the Work herein contracted to be done and performed for a period of two (2) years from the date of final

acceptance and do and perform all necessary work and repair any defective condition (it being understood that the purpose of this section is to cover all defective conditions arising by reason of defective materials, work or labor performed by Principal) then this obligation shall be void; otherwise it shall remain in full force and effect and Owner shall have and recover from Principal and its Surety damages in the premises as provided in the Plans and Specifications and Contract.

PROVIDED, however, that Principal hereby holds harmless and indemnifies Owner from and against any claim or liability for personal injury or property damage caused by and occurring during the performance of said maintenance and repair operation.

PROVIDED, further, that if any legal action be filed on this Bond, exclusive venue shall lie in Denton County, Texas.

AND PROVIDED FURTHER, Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work performed thereunder, or the Plans, Specifications, Drawings, etc. accompanying same shall in any way affect its obligation on this Bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder.

The undersigned and designated agent is hereby designated by Surety as the resident agent in Texas for service of process to whom all requisite notice may be delivered and on whom service of process may be had in matters arising out of this suretyship.

IN WITNESS WHEREOF, this instrument is executed in six copies, each one of which shall be deemed an original, on this the 15th day of October, 20 25.

ATTEST:	**PRINCIPAL:**
	Interstate Pipeline Utility Construction, LLC
	Company Name
By: _____	By: _____
Signature	Signature
_____	_____
Typed/Printed Name	Typed/Printed Name
_____	_____
Title	Title
P.O. Box 152957	P.O. Box 152957
Address	Address
Dallas, TX 75315	Dallas, TX 75315
City State Zip	City State Zip
214-296-9744 N/A	214-296-9744 N/A
Phone Fax	Phone Fax

ATTEST:

By: _____
Signature

Katie Vanikiotis
Printed Name

Witness
Title

500 N Central Expy., Ste 550
Address

Plano, TX 75074
City State Zip

972-331-3759 N/A
Phone Fax

SURETY: Hudson Insurance Company

By: _____
Signature

Yamillec Ramos
Printed Name

Attorney-in-Fact
Title

100 William Street, 5th Floor
Address

New York, NY 10038
City State Zip

212-978-2800 N/A
Phone Fax

The Resident Agent of the Surety in Texas, for delivery of notice and service of the process is:

NAME: Brady K. Cox
STREET ADDRESS: 500 N Central Expy., Ste 550
CITY, STATE, ZIP: Plano, TX 75074

HUDSON INSURANCE GROUP®

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That HUDSON INSURANCE COMPANY, a corporation of the State of Delaware, with offices at 100 William Street, New York, New York, 10038, has made, constituted and appointed, and by these presents, does make, constitute and appoint **William D. Baldwin, Darrell B. Allen, Michael B. Hill, Brent E. Baldwin, Brady K. Cox, Neira Hernandez**

Brock A. Baldwin, Russ Frenzel, John A. Aboumrad, Cynthia Alford, Yamillec Ramos, Kristi Meek

of the State of Texas

its true and lawful Attorney(s)-in-Fact, at New York, New York, each of them alone to have full power to act without the other or others, to make, execute and deliver on its behalf, as Surety, bonds and undertakings given for any and all purposes, also to execute and deliver on its behalf as aforesaid renewals, extensions, agreements, waivers, consents or stipulations relating to such bonds or undertakings provided, however, that no single bond or undertaking shall obligate said Company for any portion of the penal sum thereof in excess of the sum of **Twenty Five Million Dollars (25,000,000.00).**

Such bonds and undertakings when duly executed by said Attorney(s)-in-Fact, shall be binding upon said Company as fully and to the same extent as if signed by the President of said Company under its corporate seal attested by its Secretary.

In Witness Whereof, HUDSON INSURANCE COMPANY has caused these presents to be of its Senior Vice President thereunto duly authorized, on this 11th day of July, 20 23 at New York, New York.

(Corporate seal)

HUDSON INSURANCE COMPANY

Attest.....
Dina Daskalakis No. 01MU6067553
Corporate Secretary

By.....
Michael P. Cifone
Senior Vice President

STATE OF NEW YORK
COUNTY OF NEW YORK. SS.

On the 11th day of July, 20 23 before me personally came Michael P. Cifone to me known, who being by me duly sworn did depose and say that he is a Senior Vice President of **HUDSON INSURANCE COMPANY**, the corporation described herein and which executed the above instrument, that he knows the seal of said Corporation, that the seal affixed to said instrument is such corporate seal, that it was so affixed by order of the Board of Directors of said Corporation, and that he signed his name thereto by like order.

(Notarial Seal)

ANN M. MURPHY
NOTARY PUBLIC
STATE OF NEW YORK

.....
ANN M. MURPHY
Notary Public, State of New York
No. 01MU6067553
Qualified in Nassau County
Commission Expires December 10, 2025

CERTIFICATION

STATE OF NEW YORK
COUNTY OF NEW YORK SS.

The undersigned **Dina Daskalakis** hereby certifies:

That the original resolution, of which the following is a true and correct copy, was duly adopted by unanimous written consent of the Board of Directors of Hudson Insurance Company dated July 27th, 2007, and has not since been revoked, amended or modified:

"RESOLVED, that the President, the Executive Vice Presidents, the Senior Vice Presidents and the Vice Presidents shall have the authority and discretion, to appoint such agent or agents, or attorney or attorneys-in-fact, for the purpose of carrying on this Company's surety business, and to empower such agent or agents, or attorney or attorneys-in-fact, to execute and deliver, under this Company's seal or otherwise, bonds obligations, and recognizances, whether made by this Company as surety thereon or otherwise, indemnity contracts, contracts and certificates, and any and all other contracts and undertakings made in the course of this Company's surety business, and renewals, extensions, agreements, waivers, consents or stipulations regarding undertakings so made; and

FURTHER RESOVLED, that the signature of any such Officer of the Company and the Company's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seal when so used whether heretofore or hereafter, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed."

THAT the above and foregoing is a full, true and correct copy of Power of Attorney issued by said Company, and of the whole of the original and that the said Power of Attorney is still in full force and effect and has not been revoked, and furthermore that the Resolution of the Board of Directors, set forth in the said Power of Attorney is now in force.

Witness the hand of the undersigned and the seal of said Corporation this 15th day of October, 20 25.

(Corporate seal)

By.....
Dina Daskalakis, Corporate Secretary

IMPORTANT NOTICE

TO OBTAIN INFORMATION OR TO MAKE A COMPLAINT

You may contract the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at

1-800-252-3439

You may write the Texas Department of Insurance:

P.O. Box 149104
Austin, Texas 78714-9104
Fax No. (512) 475-1771

PREMIUM or CLAIM DISPUTES

Should you have a dispute concerning your premium or about a claim, you should contact the company first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR POLICY

This notice is for information only and does not become a part or condition of the attached document.

Notice of Applicability of Chapter 2253 of the Texas Government Code

These bonds are furnished in an attempt to comply with Chapter 2253 of the Texas Government Code. These bonds shall be construed to comply with such Chapter regarding the rights created, limitations on those rights, and remedies provided. Any provision in the bonds to which this Rider is attached that expands or restricts a right or liability under such Chapter shall be disregarded, and such Chapter shall apply to these bonds.

[Final] Bills-Paid Affidavit
Basic Information

Date: October 2, 2025

Owner: Lennar Homes of Texas Land and Construction, LTD.

Owner's Mailing Address: 1707 MARKET PLACE BLVD STE 210 IRVING, TX 75063

Contractor: Interstate Pipeline Utility Construction, LLC

Contractor's Mailing Address: PO BOX 152957 DALLAS, TX 75315

Affiant: Jason Daniels, President

Affiant's Mailing Address: PO BOX 152957 DALLAS, TX 75315

Property: Highpointe Ranch Phase 2 & 3 (Aubrey #24-083)

Improvements:

Affiant swears individually and on behalf of Contractor that the following statements are true and within the personal knowledge of Affiant:

1. Affiant has personal knowledge of the facts stated in this affidavit. Affiant has full authority to make the agreements in this affidavit on behalf of Contractor.

2. Affiant understands that Owner has required this affidavit as a condition of payment for labor or materials used in construction of the Improvements.

3. Contractor has paid each of Contractor's subcontractors, laborers, and materialmen in full for all labor and materials provided to Owner or Contractor for construction of the Improvements, excepting only the amounts owed to the persons identified below:

Name: N/A

Address:

Telephone number:

Amount owed:

Contractor warrants and represents that the following specified bills or classes of bills will be paid by Contractor from the funds paid to Contractor by Owner in reliance on this affidavit:

Name of payee or description of class: N/A

Amount:

Contractor agrees to indemnify and hold Owner harmless from any loss or expense resulting from false or incorrect information in this affidavit.

[SIGNATURES ON FOLLOWING PAGE]

AFFIANT:

Name (printed): Jason Daniels

SUBSCRIBED AND SWORN TO before me on 20th of October, 2025 by Jason Daniels.

Notary Public, State of Texas

KATHLEEN ANNE DONAHUE
Notary Public, State of Texas
Comm. Expires 05-08-2026
Notary ID 10290589

DAWN WAYE
DENTON COUNTY TAX ASSESSOR/COLLECTOR
P O BOX 90223
DENTON, TX 76202
(940) 349-3500

Tax Certificate

Property Account Number:
1050124DEN

Statement Date: 03/30/2026
Owner: KL LB BUY 3 LLC
Mailing Address: 6900 E CAMELBACK RD STE 800
SCOTTSDALE AZ 852512431

Property Location:
Legal: A1243A F. TREVINO|TR 36G|31.067 ACRES

TAX CERTIFICATE FOR ACCOUNT : 1050124DEN
AD NUMBER: A1243A-000-036G-0000
GF NUMBER:
CERTIFICATE NO : 47036350

DATE : 3/30/2026
FEE : $10.00

PROPERTY DESCRIPTION
A1243A F. TREVINO|TR 36G|31.06
7 ACRES

31.067 ACRES

COLLECTING AGENCY
DENTON COUNTY
P O BOX 90223
DENTON TX 76202

REQUESTED BY
KIMLEY HORN & ASSOCIATES INC

6160 WARREN PARKWAY SUITE 210
FRISCO TX 75034

PROPERTY OWNER
KL LB BUY 3 LLC

6900 E CAMELBACK RD STE 800
SCOTTSDALE AZ 852512431

THIS IS TO CERTIFY THAT, AFTER A CAREFUL CHECK OF THE RECORDS OF THE DENTON COUNTY TAX OFFICE, TH FOLLOWING DELINQUENT TAXES, PENALTIES, AND INTEREST ARE DUE ON THE DESCRIBED PROPERTY.

THE ABOVE DESCRIBED PROPERTY TAX MAY BE RECEIVING SPECIAL APPRAISAL BASED ON ITS USE, AND ADDITIONAL ROLLBACK TAXES MAY BECOME DUE BASED ON THE PROVISIONS OF THE SPECIAL APPRAISAL. (IF APPLICABLE).

✓ TAXES FOR 2026 HAVE NOT BEEN BILLED OR CALCULATED.
_____ 26.11 GOVERNMENT AQUISITION - PLEASE SEE ATTACHED WORKSHEET.

CURRENT VALUES

LAND MKT VALUE:	2,837,015	IMPROVEMENT :	0
AG LAND VALUE:	0	DEF HOMESTEAD:	0
APPRAISED VALUE:	2,837,015	LIMITED VALUE:	0

EXEMPTIONS:
LAWSUITS:

YEAR	TAX UNIT	LEVY	PEN	INT	DEF INT	ATTY	AMOUNT DUE
2025	AUBREY ISD	0.00	0.00	0.00	0.00	0.00	0.00
2025	CITY OF AUBREY	0.00	0.00	0.00	0.00	0.00	0.00
2025	DENTON COUNTY	0.00	0.00	0.00	0.00	0.00	0.00
2025	HIGH POINTE RANCH MUD 1	0.00	0.00	0.00	0.00	0.00	0.00
						2025 SUB TOTAL	$0.00

TOTAL CERTIFIED TAX DUE 3/2026 : **$0.00**

ISSUED TO : KIMLEY HORN & ASSOCIATES INC
ACCOUNT NUMBER: 1050124DEN

DENTON COUNTY TAX OFFICE
DENTON, TEXAS

CERTIFIED BY: Dawn Wayne
AUTHORIZED AGENT OF DENTON COUNTY

1 pages attached

43

Denton County Tax Office

Printed: 3/30/2026 9:12:42AM

Multiple Account

Batch Number = 202603305005 and Payment Number = 17323763

Remitted By:
KL LB BUY 3 LLC
6900 E CAMELBACK RD STE 800
SCOTTSDALE, AZ 852512431

Cash/Check #: CASH

Amount Paid: $30.00

1050124DEN Acres: 31.06700 Property Location:

Owner: KL LB BUY 3 LLC
6900 E CAMELBACK RD STE 800
SCOTTSDALE,AZ 852512431

Legal: A1243A F. TREVINO|TR 36G|31.067 ACRES

Year	Tax Unit	Taxable Value	Tax Rate Per $100	Payment Date	Amount Paid
2025	DENTON COUNTY	$2,837,015.00	$0.185938	03/30/2026	$10.00
Exemptions					**$10.00**

1060175DEN Acres: 10.82400 Property Location: 0001146 E BLACKJACK RD

Owner: ANDIRON TX 5 LLC
520 MADISON AVE FL 21
NEW YORK,NY 100224336

Legal: A1243A F. TREVINO|TR 28A|10.8240

Year	Tax Unit	Taxable Value	Tax Rate Per $100	Payment Date	Amount Paid
2025	DENTON COUNTY	$357.00	$0.185938	03/30/2026	$10.00
Exemptions	AG002				**$10.00**

1060177DEN Acres: 23.68800 Property Location: E BLACKJACK RD

Owner: ANDIRON TX 5 LLC
520 MADISON AVE FL 21
NEW YORK,NY 100224336

Legal: A1243A F. TREVINO|TR 29A|23.6880

Year	Tax Unit	Taxable Value	Tax Rate Per $100	Payment Date	Amount Paid
2025	DENTON COUNTY	$782.00	$0.185938	03/30/2026	$10.00
Exemptions	AG002				**$10.00**

Denton County
Juli Luke
County Clerk

Instrument Number: 47164

ERecordings-RP

RESTRICTIONS

Recorded On: May 06, 2024 11:31 AM

Number of Pages: 53

" Examined and Charged as Follows: "

Total Recording: $233.00

********** **THIS PAGE IS PART OF THE INSTRUMENT** **********
Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

File Information:

Document Number:	47164
Receipt Number:	20240506000274
Recorded Date/Time:	May 06, 2024 11:31 AM
User:	Arie G
Station:	Station 24

Record and Return To:

Simplifile

STATE OF TEXAS
COUNTY OF DENTON

I hereby certify that this Instrument was FILED In the File Number sequence on the date/time printed hereon, and was duly RECORDED in the Official Records of Denton County, Texas.

Juli Luke
County Clerk
Denton County, TX

AFTER RECORDING RETURN TO:
KRISTI E. STOTTS, ESQ.
WINSTEAD PC
600 W. 5TH STREET, SUITE 900
AUSTIN, TEXAS 78701
EMAIL: KSTOTTS@WINSTEAD.COM

HIGHPOINTE RANCH
COMMUNITY MANUAL

LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., a Texas limited partnership, as the Declarant under the Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded under Document No. 2024-47109, Official Public Records of Denton County, Texas, certifies that this Community Manual was adopted for the benefit of Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation (the "**Association**"), as part of the initial project documentation for Highpointe Ranch. This Community Manual becomes effective when Recorded.

[Signatures are on the following pages.]

Cross-reference to Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded under Document No. 2024-47109, Official Public Records of Denton County, Texas, as may be amended from time to time.

IN WITNESS WHEREOF, the undersigned has executed this Community Manual on the 29 day of April, 2024.

DECLARANT:

LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., a Texas limited partnership,

By: U.S. Home LLC, a Delaware limited liability company (as successor-in-interest by conversion from U.S. Home Corporation, a Delaware corporation), its General Partner

By: _____
Printed Name: Jennifer Eller
Title: Authorized Signatory

STATE OF TEXAS §
§
COUNTY OF Dallas §

This instrument was acknowledged before me this 29 day of April, 2024 by Jennifer Eller, Authorized Signatory of U.S. Home LLC, a Delaware limited liability company (as successor-in-interest by conversion from U.S. Home Corporation, a Delaware corporation), general partner of LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., a Texas limited partnership, on behalf of said entities.

(SEAL)

_____
Notary Public Signature

LYNN SCIANDRA
Notary Public, State of Texas
Comm. Expires 12-13-2027
Notary ID 134679944

The undersigned (the "**Development Owner**") executes this Community Manual solely for the purpose of evidencing its consent to subject the Property to the terms and provisions of this Community Manual. Such joinder shall not be deemed to impose any liabilities, duties or obligations of Declarant on Development Owner, nor shall such joinder be construed as confirming the legality or enforceability of any provisions of this Community Manual.

ACKNOWLEDGED AND AGREED:

KLLB AIV LLC,
a Delaware limited liability company

By: Nathan Holt
Printed Name: Nathan Holt
Title: Authorized Signatory

STATE OF Arizona §
§
COUNTY OF Maricopa §

This instrument was acknowledged before me this 29th day of April, 2024, by Nathan Holt, the Authorized Signatory of KLLB AIV LLC, a Delaware limited liability company, on behalf of said company.

MICHELLE BOWEN
Notary Public - Arizona
Maricopa County
Commission # 663626
My Comm. Expires Mar 15, 2028

Notary Public, State of Arizona
Printed Name: Michelle Bowen
My commission expires: March 15 2028

[SEAL]

COMMUNITY MANUAL

for

Highpointe Ranch

A Residential Community in Denton County

LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., a Texas limited partnership, is the developer of Highpointe Ranch (the "**Community**"). The guiding principles for the Community have been set forth in the governing documents for Highpointe Ranch, which include the Development Documents and the Association Documents (both defined below) and are collectively referred to as the Documents (the "**Documents**"). The Documents include such instruments as the Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch (the "**Declaration**"), the Design Guidelines, if any, and this Community Manual (collectively referred to as the "**Development Documents**"), all of which are recorded in the property records by the developer generally prior to the time that you purchased your property. The Development Documents contain covenants, conditions and restrictions which not only encumber your property, but also have a legal and binding effect on all Owners and Residents in the Community, now or in the future.

Under the Development Documents, the developer is the "**Declarant**" who has reserved certain rights to facilitate the development, construction, and marketing of the Community, including its size, shape and composition, while the Community is being built-out (the "**Development Period**"). Furthermore, the Development Documents identify and set forth the obligations of Highpointe Ranch Residential Community, Inc., the nonprofit corporation created by the Declarant to exercise the authority and assume the powers described in the Declaration (the "**Association**"). Integral to the functioning of the Community, the Association's roles include owning, operating and maintaining various Common Areas and Community amenities, as well as administering and enforcing all of the Documents.

Other specific Documents include such instruments as the Certificate of Formation and Bylaws which set forth the corporate governance structure of the Association as well as the various Rules and Regulations, which include rules, regulations, policies and procedures outlining the operation of the Association and required standards for use of property, activities and conduct (collectively referred to as the "**Association Documents**"). It is the Association Documents which are included within this Community Manual, as further set forth herein.

Capitalized terms used but not defined in this Community Manual shall have the meanings ascribed to such terms in the Declaration.

This Community Manual becomes effective when Recorded.

HIGHPOINTE RANCH

COMMUNITY MANUAL

TABLE OF CONTENTS

1.	CERTIFICATE OF FORMATION	ATTACHMENT 1
2.	BYLAWS	ATTACHMENT 2
3.	FINE AND ENFORCEMENT POLICY	ATTACHMENT 3
4.	ASSESSMENT COLLECTION POLICY	ATTACHMENT 4
5.	RECORDS INSPECTION, COPYING AND RETENTION POLICY	ATTACHMENT 5
6.	STATUTORY NOTICE OF POSTING AND RECORDATION OF ASSOCIATION GOVERNANCE DOCUMENTS	ATTACHMENT 6
7.	EMAIL REGISTRATION POLICY	ATTACHMENT 7
8.	GENERATOR POLICY	ATTACHMENT 8
9.	RELIGIOUS DISPLAY POLICY	ATTACHMENT 9
10.	POOL FENCING AND SECURITY DEVICES/FENCES POLICY	ATTACHMENT 10
11.	CORPORATE TRANSPARENCY ACT COMPLIANCE POLICY	ATTACHMENT 11

ATTACHMENT 1

CERTIFICATE OF FORMATION

FOR

HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.

[*SEE ATTACHED*]

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

Jane Nelson
Secretary of State

Office of the Secretary of State

CERTIFICATE OF FILING
OF

Highpointe Ranch Residential Community, Inc.
File Number: 805530234

The undersigned, as Secretary of State of Texas, hereby certifies that a Certificate of Formation for the above named Domestic Nonprofit Corporation has been received in this office and has been found to conform to the applicable provisions of law.

ACCORDINGLY, the undersigned, as Secretary of State, and by virtue of the authority vested in the secretary by law, hereby issues this certificate evidencing filing effective on the date shown below.

The issuance of this certificate does not authorize the use of a name in this state in violation of the rights of another under the federal Trademark Act of 1946, the Texas trademark law, the Assumed Business or Professional Name Act, or the common law.

Dated: 04/30/2024

Effective: 04/30/2024

Jane Nelson
Secretary of State

CERTIFICATE OF FORMATION
OF
HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.

The undersigned natural person, being of the age of eighteen (18) years or more, a citizen of the State of Texas, acting as incorporator of a nonprofit corporation under the Texas Business Organizations Code, does hereby adopt the following Certificate of Formation for such corporation:

ARTICLE I
NAME

The name of the corporation is: Highpointe Ranch Residential Community, Inc. (hereinafter called the "**Association**").

ARTICLE II
NONPROFIT CORPORATION

The Association is a nonprofit corporation.

ARTICLE III
INITIAL MAILING ADDRESS

The initial mailing address of the Association for the purpose of receiving state franchise tax correspondence is: c/o Winstead PC, 600 W. 5th Street, Suite 900, Austin, Texas 78701, Attn.: Kristi E. Stotts.

ARTICLE IV
DURATION

The Association shall exist perpetually.

ARTICLE V
PURPOSE AND POWERS OF THE ASSOCIATION

The Association is organized in accordance with, and shall operate for nonprofit purposes pursuant to, the Texas Business Organizations Code, and does not contemplate pecuniary gain or profit to its members. In furtherance of its powers, the Association shall have the following powers which, unless indicated otherwise by this Certificate of Formation, that certain Declaration of Covenants, Conditions, and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time (the "**Declaration**"), the Bylaws, or Applicable Law, may be exercised by the Board of Directors:

(a) all rights and powers conferred upon nonprofit corporations by Applicable Law;

(b) all rights and powers conferred upon property associations by Applicable Law, in effect from time to time, provided, however, that the Association shall not have the power to institute, defend, intervene in, settle or compromise proceedings: (i) in the name of any Member or Lot Owner (whether one or more); or (ii) pertaining to a Claim, as defined in Section 12.1 of the Declaration, relating to the design or construction of Improvements on a Lot (whether one or more); and

(c) all powers necessary, appropriate, or advisable to perform any purpose or duty of the Association as set out in this Certificate of Formation, the Bylaws, the Declaration, or Applicable Law.

Notwithstanding any provision in *Article XV* to the contrary, any proposed amendment to the provisions of this *Article V* shall be adopted only upon an affirmative vote of Members holding one hundred percent (100%) of the total number of votes of the Association and the Declarant.

Terms used but not defined in this Certificate of Formation shall have the meaning subscribed to such terms in the Declaration.

ARTICLE VI
REGISTERED OFFICE; REGISTERED AGENT

The street address of the initial registered office of the Association is 600 W. 5th Street, Suite 900, Austin, Texas 78701. The name of its initial registered agent at such address is Kristi E. Stotts.

ARTICLE VII
MEMBERSHIP

Membership in the Association shall be dependent upon ownership of a qualifying property interest as defined and set forth in the Declaration. Any person or entity acquiring such a qualifying property interest shall automatically become a member of the Association, and such membership shall be appurtenant to, and shall run with, the property interest. The foregoing shall not be deemed or construed to include persons or entities holding an interest merely as security for performance of an obligation. Membership may not be severed from or in any way transferred, pledged, mortgaged, or alienated except together with the title to the qualifying property interest, and then only to the transferee of title to said property interest. Any attempt to make a prohibited severance, transfer, pledge, mortgage, or alienation shall be void.

ARTICLE VIII
VOTING RIGHTS

Voting rights of the members of the Association shall be determined as set forth in the Declaration.

ARTICLE IX
INCORPORATOR

The name and street address of the incorporator is:

NAME	ADDRESS
Kristi E. Stotts	600 W. 5th Street, Suite 900 Austin, Texas 78701

ARTICLE X
BOARD OF DIRECTORS

The affairs of the Association shall be managed by an initial Board of Directors consisting of three (3) individuals, who need not be members of the Association. The Board shall fulfill all of the functions of, and possess all powers granted to, Boards of Directors of nonprofit corporations pursuant to the Texas Business Organizations Code. The number of Directors of the Association may be changed by amendment of the Bylaws of the Association. The names and addresses of the persons who are to act in the capacity of initial Directors until the selection of their successors are:

NAME	ADDRESS
Annie Hepner	1707 Market Place Blvd. Irving, Texas 75063
Sandra Lee	1707 Market Place Blvd. Irving, Texas 75063
Aaron Woods	1707 Market Place Blvd. Irving, Texas 75063

All of the powers and prerogatives of the Association shall be exercised by the Board of Directors named above until their successors are elected or appointed in accordance with the Declaration.

ARTICLE XI
LIMITATION OF DIRECTOR LIABILITY

A member of the Board of Directors of the Association shall not be personally liable to the Association for monetary damages for any act or omission in his capacity as a board member, except to the extent otherwise expressly provided by Applicable Law. Any repeal or modification of this *Article XI* shall be prospective only, and shall not adversely affect any limitation of the personal liability of a member of the Board of Directors existing at the time of the repeal or modification.

ARTICLE XII
INDEMNIFICATION

Each person who acts as a member of the Board of Directors, officer or committee member of the Association shall be indemnified by the Association against any costs, expenses and liabilities which may be imposed upon or reasonably incurred by him or her in connection with any civil or criminal action, suit or proceeding in which he or she may be named as a party defendant or in which he or she may be a witness by reason of his or her being or having been a member of the Board of Directors, officer, or committee member of the Association, or by reason of any action alleged to have been taken or omitted by him or her in either such capacity. Such indemnification shall be provided in the manner and under the terms, conditions and limitations set forth in Section 4.7 of the Declaration.

ARTICLE XIII
DISSOLUTION

The Association may be dissolved with the written and signed assent of not less than ninety percent (90%) of the total number of votes of the Association, as determined under the Declaration. Upon dissolution of the Association, other than incident to a merger or consolidation, the assets of the Association shall be dedicated to an appropriate public agency to be used for purposes similar to those for which this Association was created. In the event that such dedication is refused acceptance, such assets shall be granted, conveyed, and assigned to any nonprofit corporation, association, trust, or other organization to be devoted to such similar purposes.

ARTICLE XIV
ACTION WITHOUT MEETING

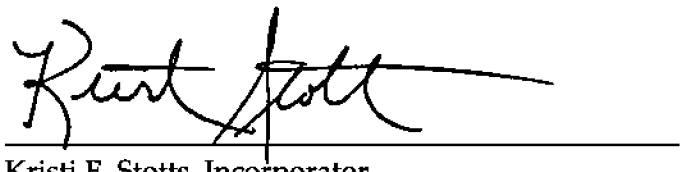
Any action required or permitted by Applicable Law to be taken at a meeting of the Members may be taken without a meeting, without prior notice, and without a vote if written consent specifically authorizing the proposed action is signed by the Members holding at least the minimum number of votes necessary to authorize such action at a meeting if all the Members entitled to vote thereon were present. If the action is proposed by the Association, the Board of Directors shall provide each Member written notice at least ten (10) days in advance of

the date the Board proposes to initiate securing consent as contemplated by this *Article XIV*. Consents obtained pursuant to this *Article XIV* shall be dated and signed within sixty (60) days after receipt of the earliest dated consent and delivered to the Association at its principal place of business in Texas. Such consents shall be filed with the minutes of the Association and shall have the same force and effect as a vote of the Members at a meeting. Within ten (10) days after receiving authorization for any action by written consent, the Secretary shall give written notice to all Members entitled to vote who did not give their written consent, fairly summarizing the material features of the authorized action.

ARTICLE XV
AMENDMENT

Except as otherwise provided by the terms and provisions of *Article V* of this Certificate of Formation, this Certificate of Formation may be amended by the Declarant during the Development Period or by a Majority of the Board of Directors; provided, however, that any amendment to this Certificate of Formation by a Majority of the Board of Directors must be approved in advance and in writing by the Declarant during the Development Period; and further provided that for so long as Development Owner owns any Lot or portion of the Property, any amendment to this Certificate of Formation will require the prior written consent of Development Owner.

IN WITNESS WHEREOF, the undersigned has hereunto set her hand, this 30th day of April, 2024.



Kristi E. Stotts, Incorporator

ATTACHMENT 2

BYLAWS
OF
HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.

ARTICLE I
INTRODUCTION

The name of the corporation is Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation, hereinafter referred to as the "**Association**". The principal office of the Association shall be located in Denton County, Texas, but meetings of Members and directors may be held at such places within the State of Texas, County of Denton, as may be designated by the Board (as defined below), as provided in these Bylaws.

The Association is organized to be a nonprofit corporation.

Notwithstanding anything to the contrary in these Bylaws, a number of provisions are modified by the Declarant's and the Development Owner's reservations in that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, including the number, qualification, appointment, removal, and replacement of directors.

ARTICLE II
DEFINITIONS

Unless the context otherwise specifies or requires, the following words and phrases when used in these Bylaws shall have the meanings hereinafter specified:

Section 2.1. Assessment. "**Assessment**" or "**Assessments**" shall mean assessment(s) levied by the Association under the terms and provisions of the Declaration.

Section 2.2. Association. "**Association**" shall mean and refer to Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation.

Section 2.3. Association Property. "**Association Property**" shall mean all real or personal property now or hereafter owned by the Association, including without limitation, all easement estates, licenses, leasehold estates and other interests of any kind in and to real or personal property which are now or hereafter owned or held by the Association.

Section 2.4. Association Rules. "**Association Rules**" shall mean the Rules and Regulations adopted by the Declarant or the Board pursuant to the Declaration, as the same may be amended from time to time.

Section 2.5. Board. "**Board**" shall mean the Board of Directors of the Association.

Section 2.6. Bylaws. "**Bylaws**" shall mean the bylaws of the Association, which may be initially adopted and Recorded by Declarant or the Board and Recorded as part of the initial project documentation

for the benefit of the Association. The Bylaws may be amended, from time to time, by the Declarant until expiration or termination of the Development Period (as defined in the Declaration). Any amendment to the Bylaws proposed by the Board must be approved in advance and in writing by the Declarant until expiration or termination of the Development Period. Upon expiration of the Development Period, the Bylaws may be amended by a Majority of the Board. Notwithstanding the foregoing or anything herein to the contrary, for so long as Development Owner owns any Lot or portion of the Property, any amendment or supplement to the Bylaws will require the prior written consent of Development Owner.

Section 2.7. Certificate. "**Certificate**" shall mean the Certificate of Formation of Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation, filed in the office of the Secretary of State of the State of Texas, as the same may from time to time be amended.

Section 2.8. Community Manual. "**Community Manual**" shall mean the community manual of the Association, which may be initially adopted and Recorded by the Declarant or the Board of the Association and Recorded as part of the initial project documentation for the benefit of the Association and the Property. The Community Manual may include the Bylaws, Rules and Regulations and other policies governing the Association. The Bylaws, Rules and Regulations and other policies set forth in the Community Manual may be amended, from time to time, by the Declarant until expiration or termination of the Development Period (as defined in the Declaration). Any amendment to the Bylaws, Rules and Regulations and other policies governing the Association prosecuted by the Board must be approved in advance and in writing by the Declarant until expiration or termination of the Development Period. Upon expiration or termination of the Development Period, the Community Manual may be amended by a Majority of the Board. Notwithstanding the foregoing or anything herein to the contrary, for so long as Development Owner owns any Lot or portion of the Property, any amendment or supplement to the Community Manual, including any amendment or supplement to the Bylaws, Rules and Regulations, or other policies contained therein, will require the prior written consent of Development Owner.

Section 2.9. Declarant. "**Declarant**" shall mean **LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.**, a Texas limited partnership, its successors or assigns; provided that any assignment(s) of the rights of **LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.**, a Texas limited partnership, as Declarant, (i) must be expressly set forth in writing and recorded in the Official Public Records of Denton County, Texas, and (ii) is subject to the limitations and requirements regarding any such assignment(s) set forth in the Declaration and to Development Owner's rights set forth in the Declaration.

Section 2.10. Declaration. "**Declaration**" shall mean the "Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch", recorded in the Official Public Records of Denton County, Texas, as the same may be amended and/or supplemented from time to time.

Section 2.11. Majority. "**Majority**" shall mean more than half.

Section 2.12. Manager. "**Manager**" shall mean the person, firm, or corporation, if any, employed by the Association pursuant to the Declaration and delegated the duties, powers, or functions of the Association.

Section 2.13. Member. "**Member**" or "**Members**" shall mean any person(s), entity or entities holding membership privileges in the Association as provided in the Declaration.

Section 2.14. Mortgage. "**Mortgage**" or "**Mortgages**" shall mean any mortgage(s) or deed(s) of trust covering any portion of the Property given to secure the payment of a debt.

Section 2.15. Mortgagee. "**Mortgagee**" or "**Mortgagees**" shall mean the holder or holders of any lien or liens upon any portion of the Property.

Section 2.16. Option Agreement. means that certain Option Agreement dated as of September 6, 2023, by and between Declarant and Development Owner, pursuant to which, among other things, Declarant has the right to acquire the Property and/or Lots from Development Owner, as evidenced by that certain Memorandum of Option Agreement, recorded under Document No. 2023-105608, Official Public Records of Denton County, Texas, as the same may be amended from time to time.

Section 2.17. Owner. "**Owner**" or "**Owners**" shall mean the person(s), entity or entities, including Declarant and Development Owner, holding a fee simple interest in any Lot, but shall not include the Mortgagee of a Mortgage.

Section 2.18. Property. "**Property**" shall mean and refer to the property subject to the terms and provisions of the Declaration.

Section 2.19. Restrictions. "**Restrictions**" means, singularly or collectively as the case may be, the Declaration, the Certificate, Bylaws, the Community Manual, the Design Guidelines, if any, and any Rules and Regulations promulgated by the Association pursuant to the Declaration, as adopted and amended from time to time. An appendix, exhibit, schedule, or certification accompanying a Restriction is part of a Restriction.

ARTICLE III
MEMBERSHIP, MEETINGS, QUORUM, VOTING, PROXIES

Section 3.1. Membership. Each Owner of a Lot is a mandatory Member of the Association, as more fully set forth in the Declaration.

Section 3.2. Place of Meetings. Meetings of the Association shall be held where designated by the Board, either within the Property or as convenient as possible and practical.

Section 3.3. Annual Meetings. There shall be an annual meeting of the Members of the Association for the purposes of Association-wide elections or votes and for such other Association business at such reasonable place, date and time as set by the Board.

Section 3.4. Special Meetings. Special meetings of Members may be called in accordance with Section 22.155 of the Texas Business Organizations Code or any successor statute.

Section 3.5. Notice of Meetings. Written or printed notice stating the place, day, and hour of any meeting of the Members shall be delivered, either personally, by mail or email to each Member entitled to vote at such meeting or by publication in a newspaper of general circulation, not less than ten (10) nor more than sixty (60) days before the date of such meeting, by or at the direction of the president, the secretary, or the officers or persons calling the meeting. Notwithstanding the foregoing, such notice may be sent by email at least seventy-two (72) hours prior to such meeting to Members who have registered an email address with the Association in accordance with the Association's Email Registration Policy. In the case of

a special meeting or when otherwise required by statute or these Bylaws, the purpose or purposes for which the meeting is called shall be stated in the notice. No business shall be transacted at a special meeting except as stated in the notice. If mailed, the notice of a meeting shall be deemed to be delivered when deposited in the United States mail, addressed to the Member at their address as it appears on the records of the Association, with postage prepaid. If sent via email, the notice of a meeting shall be deemed to be delivered when the email is transmitted to an email address provided by the Member, or to which the Member consents, for the purpose of receiving notices. If an election or vote of the Members will occur outside of a meeting of the Members (*i.e.*, absentee or Electronic Ballot), then the Association shall provide notice to each Member no later than the twentieth (20th) day before the latest date on which a ballot may be submitted to be counted.

Section 3.6. Waiver of Notice. Waiver of notice of a meeting of the Members shall be deemed the equivalent of proper notice. Any Member may, in writing, waive notice of any meeting of the Members, either before or after such meeting. Attendance at a meeting by a Member shall be deemed a waiver by such Member of notice of the time, date, and place thereof, unless such Member specifically objects to lack of proper notice at the time the meeting is called to order. Attendance at a special meeting by a Member shall be deemed a waiver of notice of all business transacted at such meeting unless an objection by a Member on the basis of lack of proper notice is raised before the business is put to a vote.

Section 3.7. Quorum. Except as provided in these Bylaws or in the Declaration, the presence of the Members representing ten percent (10%) of the total votes in the Association shall constitute a quorum at all Association meetings. The Members present at a duly called or held meeting at which a quorum is present may continue to do business until adjournment, notwithstanding the departure of enough Members to leave less than a quorum, provided that Members representing at least five percent (5%) of the total votes in the Association remain in attendance, and provided that any action taken is approved by at least a Majority of the votes present at such adjourned meeting, unless otherwise provided in the Declaration.

Section 3.8. Conduct of Meetings. The president or any other person appointed by the Board shall preside over all Association meetings, and the secretary, or the secretary's designee, shall keep the minutes of the meeting and record in a minute book all resolutions adopted at the meeting, as well as a record of all transactions occurring at the meeting.

Section 3.9. Voting. The voting rights of the Members shall be as set forth in the Declaration, and such voting rights provisions are specifically incorporated by reference. Except as otherwise provided in the Declaration, action may be taken at any legally convened meeting of the Members upon the affirmative vote of the Members having a Majority of the total votes present at such meeting in person or proxy or by absentee ballot or electronic voting, if such votes are considered present at the meeting as further set forth herein. Cumulative voting shall not be allowed. The person holding legal title to a Lot shall be entitled to cast the vote allocated to such Lot and not the person merely holding beneficial title to the same unless such right is expressly delegated to the beneficial Owner thereof in writing. **Any provision in the Association's governing documents that would disqualify an Owner from voting in an Association election of Board members or on any matter concerning the rights or responsibilities of the Owner is void**.

Section 3.10. Methods of Voting: In Person; Proxies; Absentee Ballots; Electronically. The voting rights of an Owner may be cast or given: (a) in person or by proxy at a meeting of the Association;

(b) by absentee ballot; or (c) by Electronic Ballot. Any vote cast in an election or vote by a Member of the Association must be in writing and signed by the Member. Electronic votes constitute written and signed ballots. In an Association election, written and signed ballots are not required for uncontested races. Votes shall be cast as provided in this *Section 3.10*:

(A) Proxies. Any Member may give a revocable written proxy in the form as prescribed by the Board from time to time to any person authorizing such person to cast the Member's vote on any matter. A Member's vote by proxy is subject to any limitations of Texas law relating to the use of general proxies and subject to any specific provision to the contrary in the Declaration or these Bylaws. No proxy shall be valid unless signed by the Member for which it is given or his or her duly authorized attorney-in-fact, dated, and filed with the secretary of the Association prior to the meeting for which it is to be effective. Proxies shall be valid only for the specific meeting for which given and for lawful adjournments of such meeting. In no event shall a proxy be valid more than eleven (11) months after the effective date of the proxy. Every proxy shall be revocable and shall automatically cease upon conveyance of the Lot for which it was given.

(B) Absentee and Electronic Ballots. An absentee or Electronic Ballot: (1) may be counted as an Owner present and voting for the purpose of establishing a quorum only for items appearing on the ballot; (2) may not be counted, even if properly delivered, if the Owner attends any meeting to vote in person, so that any vote cast at a meeting by an Owner supersedes any vote submitted by absentee or Electronic Ballot previously submitted for that proposal; and (3) may not be counted on the final vote of a proposal if the proposal was amended at the meeting to be different from the exact language on the absentee or Electronic Ballot. For the purposes of this *Section 3.10*, a nomination taken from the floor in a Board member election is not considered an amendment to the proposal for the election.

(i) *Absentee Ballots.* No absentee ballot shall be valid unless it is in writing, signed by the Member for which it is given or his or her duly authorized attorney-in-fact, dated, and filed with the secretary of the Association prior to the meeting for which it is to be effective. Absentee ballots shall be valid only for the specific meeting for which given and for lawful adjournments of such meeting. In no event shall an absentee ballot be valid after the specific meeting or lawful adjournment of such meeting at which such ballot is counted or upon conveyance of the Lot for which it was given. Any solicitation for votes by absentee ballot must include:

a. an absentee ballot that contains each proposed action and provides an opportunity to vote for or against each proposed action;

b. instructions for delivery of the completed absentee ballot, including the delivery location; and

c. the following language: *"By casting your vote via absentee ballot you will forgo the opportunity to consider and vote on any action from the floor on these proposals, if a meeting is held. This means that if there are amendments to these proposals your votes will not be counted on the final vote on these measures. If you desire to retain this ability, please attend any meeting in person. You may submit an absentee ballot and later choose to attend any meeting in person, in which case any in-person vote will prevail."*

(ii) *Electronic Ballots.* "**Electronic Ballot**" means a ballot: (a) given by email, facsimile or posting on a website; (b) for which the identity of Owner submitting the ballot can be confirmed; and (c) for which the Owner may receive a receipt of the electronic transmission and receipt of the Owner's ballot. If an Electronic Ballot is posted on a website, a notice of the posting shall be sent to each Owner that contains instructions on obtaining access to the posting on the website.

Section 3.11. Tabulation of and Access to Ballots. A person who is a candidate in an Association election or who is otherwise the subject of an Association vote, or a person related to that person within the third degree by consanguinity or affinity may not tabulate or otherwise be given access to the ballots cast in that election or vote except such person may be given access to the ballots cast in the election or vote as part of a recount process. A person tabulating votes in an Association election or vote or who performs a recount pursuant to *Section 3.12* may not disclose to any other person how an individual voted. Notwithstanding any provision of these Bylaws to the contrary, only a person who tabulates votes pursuant to this *Section 3.11* or performs a recount pursuant to *Section 3.12* shall be given access to any Association ballots.

Section 3.12. Recount of Votes. Any Member (the "**Recount Requesting Member**") may, not later than the fifteenth (15th) day after the later of the date of any meeting of Members at which an election or vote was held, or the date of the announcement of the results of the election or vote, require a recount of the votes (the "**Recount Request**"). A Recount Request must be submitted in writing either: (i) by any method of mailing for which evidence of mailing is provided by the United States Postal Service or a common carrier, with signature confirmation service to the Association's mailing address as reflected on the latest management certificate; or (ii) in person to the Association's managing agent as reflected on the latest management certificate or to the address to which absentee and proxy ballots are mailed. The Recount Requesting Member shall be required to pay, in advance, expenses associated with the recount as estimated by the Association, pursuant to subsection (a) below.

(a) Cost of Recount. The Association shall estimate the costs for performing the recount by a person qualified to tabulate votes under subsection (b), and no later than the twentieth (20th) day after the date the Association receives the Recount Request, shall send an invoice for the estimated costs (the "**Initial Recount Invoice**") to the Recount Requesting Member at the Recount Requesting Member's last known address according to the Association's records. The Recount Requesting Member must pay the Initial Recount Invoice in full to the Association on or before the thirtieth (30th) day after the date the Initial Recount Invoice was delivered to the Recount Requesting Member (the "**Deadline**"). If the Initial Recount Invoice is not paid by the Recount Requesting Member by the Deadline, the Recount Requesting Member's Recount Request shall be considered withdrawn and the Association shall not be required to perform a recount. If the Initial Recount Invoice is paid by the Recount Requesting Member by the Deadline, then on or before the thirtieth (30th) day after the date of receipt of payment of the Invoice, the recount must be completed and the Association must provide each Recount Requesting Member with notice of the results of the recount. If the recount changes the results of the election, the Association shall reimburse the Recount Requesting Member for the cost of the recount not later than the thirtieth (30th) day after the date the results of the recount are provided. If the recount does not change the results of the election, and the estimated costs included on the Initial Recount Invoice are either lesser or greater than the actual costs of the recount, the Association shall send a final invoice (the "**Final Recount Invoice**") to the Recount Requesting Member on or before the thirtieth (30th) business day after the date the results of the recount are provided. If the Final Recount Invoice reflects that additional amounts are owed by the Recount Requesting Member, the Recount Requesting Member shall remit such additional amounts to the Association immediately. Any

additional amounts not paid to the Association by the Recount Requesting Member before the thirtieth (30th) business day after the date the Final Recount Invoice is sent may be charged as an Individual Assessment against the Recount Requesting Member. If the costs estimated in the Initial Recount Invoice costs exceed the amount reflected in the Final Recount Invoice, then the Recount Requesting Member shall be entitled to a refund, which such refund shall be paid at the time the Final Recount Invoice is delivered pursuant to this *Section 3.12(a)*.

(b) Vote Tabulator. Following receipt of payment of the Initial Recount Invoice, the Association shall retain for the purpose of performing the recount, the services of a person qualified to tabulate votes. The Association shall enter into a contract for the services of a person who: (i) is not a Member of the Association or related to a Member of the Association Board within the third degree by consanguinity or affinity; and (ii) is either a person agreed on by the Association and each person requesting a recount or is a current or former county judge, county elections administrator, justice of the peace or county voter registrar.

(c) Board Action. Any action taken by the Board in the period between the initial election vote tally and the completion of the recount is not affected by any recount.

Section 3.13. Action without a Meeting. Any action required or permitted by law to be taken at a meeting of the Members may be taken without a meeting, without prior notice, and without a vote if written consent specifically authorizing the proposed action is signed by Members holding at least the minimum number of votes necessary to authorize such action at a meeting if all Members entitled to vote thereon were present. Such consents shall be signed within sixty (60) days after receipt of the earliest dated consent, dated, and delivered to the Association at its principal place of business in Texas. Such consents shall be filed with the minutes of the Association and shall have the same force and effect as a vote of the Members at a meeting. Within ten (10) days after receiving authorization for any action by written consent, the secretary shall give written notice to all Members entitled to vote who did not give their written consent, fairly summarizing the material features of the authorized action.

Section 3.14. Telephone and Electronic Meetings. Members of the Association may participate in and hold meetings of the Association via video conferencing, conference telephone, or any other such similar technology by means of which all persons participating in the meeting can hear each other. Participation in the meeting constitutes presence in person at the meeting, except where a person participates in the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

ARTICLE IV
BOARD OF DIRECTORS

Section 4.1. Authority; Number of Directors.

(a) The affairs of the Association shall be governed by the Board. The number of directors shall be fixed by the Board from time to time. The initial directors shall be three (3) in number and shall be those directors named in the Certificate. The initial directors shall serve until their successors are elected and qualified.

(b) In accordance with Section 4.3 of the Declaration, within one hundred twenty (120) days after seventy-five percent (75%) of the Maximum Number of Lots (as defined in the Declaration) have been made subject to the terms and provisions of the Declaration and have been conveyed to Owners other than the Declarant, Development Owner or a Homebuilder, the president of the Association will thereupon call a meeting of the Members of the Association (the "**Initial Member Election Meeting**") where the Members will elect one (1) director for a one (1) year term ("**Initial Member Elected Director**"). Declarant will continue to appoint and remove two-thirds (2/3) of the Board from and after the Initial Member Election Meeting until expiration or termination of the Development Period. Notwithstanding the foregoing, the Initial Member Elected Director's term (or his or her successor's term) shall expire as of the date of the Member Election Meeting (hereinafter defined). Furthermore, this *Section 4.1* is subject in all events to Development Owner's rights under Section 4.3 of the Declaration.

(c) At the expiration or termination of the Development Period, provided Development Owner no longer owns any Lot or portion of the Property, the Declarant will thereupon call a meeting of the Members of the Association where the existing directors will resign and the Members, including Declarant, will elect three (3) new directors (to replace all existing directors, including the Initial Member Elected Director and his or her successors) (the "**Member Election Meeting**"), one (1) director for a three (3) year term, one (1) director for a two (2) year term, and one (1) director for a one (1) year term (with the individual receiving the highest number of votes to serve the three (3) year term, the individual receiving the next highest number of votes to serve the two (2) year term, and the individual receiving the third highest number of votes to serve a one (1) year term). Upon expiration of the term of a director elected by the Members pursuant to this *Section 4.1(c)*, his or her successor will be elected for a term of two (2) years.

(d) A director takes office upon the adjournment of the meeting or balloting at which he or she is elected or appointed and, absent death, ineligibility, resignation, or removal, will hold office until his or her successor is elected or appointed.

(e) Each director, other than directors appointed by Declarant or Development Owner, shall be a Member. In the case of corporate, partnership, or other entity ownership of a Lot, the director must be a duly authorized agent or representative of the corporation, the partnership, or other entity which owns the Lot. Other than as set forth in this subparagraph (e), the Association may not restrict an Owner's right to run for a position on the Board.

Section 4.2. Compensation. The directors shall serve without compensation for such service. As determined by the Board, directors may be reimbursed for any reasonable and necessary out-of-pocket expenses.

Section 4.3. Nominations to Board of Directors. Members may be nominated for election to the Board in either of the following ways:

(a) A Member who is not a director and who desires to run for election to that position shall be deemed to have been nominated for election upon his or her filing with the Board a written petition of nomination; or

(b) A director who is eligible to be re-elected shall be deemed to have been nominated for re-election to the position he or she holds by signifying his or her intention to seek reelection in a writing addressed to the Board.

Section 4.4. Vacancies on Board of Directors. Except with respect to directors appointed by the Declarant or the Development Owner, if the office of any elected director shall become vacant by reason of death, resignation, or disability, the remaining directors, at a special meeting duly called for this purpose, shall choose a successor who shall fill the unexpired term of the directorship being vacated. If there is a deadlock in the voting for a successor by the remaining directors, the one director with the longest continuous term on the Board shall select the successor. At the expiration of the term of his or her position on the Board, the successor director shall be re-elected or his or her successor shall be elected in accordance with these Bylaws. Except with respect to directors appointed by the Declarant or the Development Owner, any Board member whose term has expired or who has been removed from the Board must be elected by the Members.

Section 4.5. Removal of Directors. Subject to the right of Declarant to nominate and appoint directors as set forth in *Section 4.1* of these Bylaws and to the right of Development Owner to nominate and appoint directors as set forth in Section 4.3 of the Declaration, an elected director may be removed, with or without cause, by the vote of Members holding a Majority of the votes entitled to be cast in the Association.

Section 4.6. Solicitation of Candidate for Election to the Board. At least thirty (30) days before the date an Association disseminates absentee ballots or other ballots to Members for the purpose of voting in a Board election, the Association shall provide notice (the "**Solicitation Notice**") of the election to the Members. The Solicitation Notice shall: (a) solicit candidates that are eligible under *Section 4.1(e)* and interested in running for a position on the Board; (b) state that an eligible candidate has fifteen (15) days to respond to the Solicitation Notice and request to be placed on the ballot; and (c) must be: (1) mailed to each Member; (2) emailed to each Member that has registered their email address with the Association; or (3) posted in a conspicuous manner reasonably designed to provide notice to Members, such as: (i) within the Common Area or, with the Member's consent, on other conspicuously located privately owned property within the subdivision; or (ii) on any website maintained by the Association or other internet media.

ARTICLE V
MEETINGS OF DIRECTORS

Section 5.1. Development Period. The provisions of this *Article V* do not apply to Board meetings during the Development Period (as defined in the Declaration) during which period the Board may take action by unanimous written consent in lieu of a meeting pursuant to *Section 5.10*, except with respect to a meeting conducted for the purpose of: (a) adopting or amending the Documents (*i.e.*, declarations, bylaws, rules, and regulations); (b) increasing the amount of Regular Assessments of the Association or adopting or increasing a Special Assessment; (c) electing non-Declarant Board members or establishing a process by which those members are elected; or (d) changing the voting rights of Members.

Section 5.2. Definition of Board Meetings. A meeting of the Board means a deliberation between a quorum of the Board, or between a quorum of the Board and another person, during which Association business is considered and the Board takes formal action.

Section 5.3. Regular Meetings. Regular meetings of the Board shall be held annually or such other frequency as determined by the Board, at such place and hour as may be fixed from time to time by resolution of the Board.

Section 5.4. Special Meetings. Special meetings of the Board shall be held when called by the president of the Association, or by any two (2) directors, after not less than three (3) days' notice to each director.

Section 5.5. Quorum. A Majority of the number of directors shall constitute a quorum for the transaction of business. Every act or decision done or made by a Majority of the directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the Board.

Section 5.6. Open Board Meetings. All regular and special Board meetings must be open to Owners. However, the Board has the right to adjourn a meeting and reconvene in closed executive session to consider actions involving: (a) personnel; (b) pending or threatened litigation; (c) contract negotiations; (d) enforcement actions; (e) confidential communications with the Association's attorney; (f) matters involving the invasion of privacy of individual Owners, or matters that are to remain confidential by request of the affected parties and agreement of the Board. Following an executive session, any decision made by the Board in executive session must be summarized orally in general terms and placed in the minutes. The oral summary must include a general explanation of expenditures approved in executive session.

Section 5.7. Location. Except if otherwise held by electronic or telephonic means, a Board meeting must be held in the county in which all or a part of the property in the subdivision is located or in a county adjacent to that county, as determined in the discretion of the Board.

Section 5.8. Record; Minutes. The Board shall keep a record of each regular or special Board meeting in the form of written minutes of the meeting. The Board shall make meeting records, including approved minutes, available to a Member for inspection and copying on the Member's written request to the Association's managing agent at the address appearing on the most recently filed management certificate or, if there is not a managing agent, to the Board.

Section 5.9. Notices. Members shall be given notice of the date, hour, place, and general subject of a regular or special Board meeting, including a general description of any matter to be brought up for deliberation in executive session. The notice shall be: (a) mailed to each Member not later than the tenth (10th) day or earlier than the sixtieth (60th) day before the date of a special or regular Board meeting; **or** (b) provided at least one hundred forty-four (144) hours before the start of a regular Board meeting and at least seventy-two (72) hours before the start of a special Board meeting by: (i) posting the notice in a conspicuous manner reasonably designed to provide notice to Members in a place located on the Association's Common Area ***or*** on any internet website available to the Association's Members that is maintained by the Association or by a management company on behalf of the Association ***and***; (ii) by sending the notice by email to each Member who has registered an email address with the Association. It is the Member's duty to keep an updated email address registered with the Association. The Board may establish a procedure for registration of email addresses, which procedure may be required for the purpose of receiving notice of Board meetings. If the Board recesses a regular or special Board meeting to continue the following regular business day, the Board is not required to post notice of the continued meeting if the recess is taken in good faith and not to circumvent this *Section 5.9*. If a regular or special Board meeting is continued to the following regular business day, and on that following day the Board continues the meeting to another day, the Board shall give notice of the continuation in at least one manner as set forth above within two (2) hours after adjourning the meeting being continued.

Section 5.10. Unanimous Consent. During the Development Period, directors may vote by unanimous written consent. Unanimous written consent occurs if all directors individually or collectively consent in writing to a Board action. The written consent must be filed with the minutes of Board meetings. Action by written consent shall be in lieu of a meeting and has the same force and effect as a unanimous vote of the directors. As set forth in *Section 5.1*, directors may not vote by unanimous consent if the directors are considering any of the following actions: (a) adopting or amending the Documents (*i.e.*, declarations, bylaws, rules, and regulations); (b) increasing the amount of Regular Assessments of the Association or adopting or increasing a Special Assessment; (c) electing non-Declarant Board members or establishing a process by which those members are elected; or (d) changing the voting rights of Members.

Section 5.11. Meeting without Prior Notice. The Board may take action outside a meeting, including voting by electronic or telephonic means, without prior notice to the Members if each Board member is given a reasonable opportunity (i) to express his or her opinions to all other Board members and (ii) to vote. Any action taken without notice to Members must be summarized orally, including an explanation of any known actual or estimated expenditures approved at the meeting, and documented in the minutes of the next regular or special Board meeting. After the expiration of the Development Period, the Board may not, unless done in an open meeting for which prior notice was given to the Members pursuant to *Section 5.9* above, consider or vote on: (a) fines; (b) damage Assessments; (c) the initiation of foreclosure actions; (d) the initiation of enforcement actions, excluding temporary restraining orders or violations involving a threat to health or safety; (e) increases in Assessments; (f) levying of Special Assessments; (g) appeals from a denial of architectural control approval; (h) a suspension of a right of a particular Member before the Member has an opportunity to attend a Board meeting to present the Member's position, including any defense, on the issue; (i) the lending or borrowing of money; (j) the adoption of any amendment of a dedicatory instrument; (k) the approval of an annual budget or the approval of an amendment of an annual budget; (l) the sale or purchase of real property; (m) the filling of a vacancy on the Board; (n) the construction of capital improvements other than the repair, replacement, or enhancement of existing capital improvements; or (o) the election of an officer.

Section 5.12. Telephone and Electronic Meetings. Any action permitted to be taken by the Board without prior notice to Owners may be taken by telephone or electronic methods provided that: (1) each Board member may hear and be heard by every other Board member; (2) except for any portion of the meeting conducted in executive session: (i) all Members in attendance at the meeting may hear all Board members; and (ii) any Members are allowed to listen using any electronic or telephonic communication method used or expected to be used by a participating Board member at the same meeting; and (3) the notice of the Board meeting provides instructions to the Members on how to access the electronic or telephonic communication method used in the meeting. Participation in such a meeting constitutes presence in person at the meeting, except where a person participates in the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

ARTICLE VI
POWERS AND DUTIES OF THE BOARD

Section 6.1. Powers. The Board shall have power and duty to undertake any of the following actions, in addition to those actions to which the Association is authorized to take in accordance with the Declaration:

(a) Adopt and publish the Association Rules, including regulations governing the use of the Association Property and facilities, and the personal conduct of the Members and their guests thereon, and to establish penalties for the infraction thereof;

(b) Suspend the right of a Member to use of the Association Property during any period in which such Member shall be in default in the payment of any Assessment levied by the Association, or after notice and hearing, for any period during which an infraction of the Association Rules by such Member exists;

(c) Exercise for the Association all powers, duties and authority vested in or related to the Association and not reserved to the membership by other provisions of the Restrictions;

(d) To enter into any contract or agreement with a municipal agency or utility company to provide electric utility service to all or any portion of the Property;

(e) Declare the office of a member of the Board to be vacant in the event such member shall be absent from three (3) consecutive regular meetings of the Board;

(f) Employ such employees as they deem necessary, and to prescribe their duties;

(g) As more fully provided in the Declaration, to:

(1) Fix the amount of the Assessments against each Lot in advance of each annual Assessment period and any other Assessments provided by the Declaration; and

(2) Foreclose the lien against any property for which Assessments are not paid within thirty (30) days after due date or to bring an action at law against the Owner personally obligated to pay the same;

(h) Issue, or to cause an appropriate officer to issue, upon demand by any person, a certificate setting forth whether or not any Assessment has been paid and to levy a reasonable charge for the issuance of these certificates (it being understood that if a certificate states that an Assessment has been paid, such certificate shall be conclusive evidence of such payment);

(i) Procure and maintain adequate liability and hazard insurance on Association Property;

(j) Cause all officers or employees having fiscal responsibilities to be bonded, as it may deem appropriate; and

(k) Exercise such other and further powers or duties as provided in the Declaration or by law.

ARTICLE VII
OFFICERS AND THEIR DUTIES

Section 7.1. Enumeration of Offices. The officers of the Association shall be a president and a vice president, who shall at all times be members of the Board, a secretary and a treasurer, and such other officers as the Board may from time to time create by resolution.

Section 7.2. Election of Officers. The election of officers shall take place at the first meeting of the Board following each annual meeting of the Members.

Section 7.3. Term. Except for those officers appointed by the Declarant pursuant to *Section 4.3* of the Declaration, the officers of the Association shall be elected annually by the Board and each shall hold office for one (1) year unless he or she resigns sooner, or shall be removed or otherwise disqualified to serve.

Section 7.4. Special Appointments. The Board may elect such other officers as the affairs of the Association may require, each of whom shall hold office for such period, have such authority, and perform such duties as the Board may, from time to time, determine.

Section 7.5. Resignation and Removal. Any officer may be removed from office with or without cause by the Board. Any officer may resign at any time by giving written notice to the Board, the president, or the secretary. Such resignation shall take effect on the date of receipt of such notice or at any later time specified therein, and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 7.6. Vacancies. A vacancy in any office may be filled through appointment by the Board. The officer appointed to such vacancy shall serve for the remainder of the term of the officer he or she replaces.

Section 7.7. Multiple Offices. The offices of secretary and treasurer may be held by the same person. No person shall simultaneously hold more than one of any of the other offices except in the case of special offices created pursuant to *Section 7.4*.

Section 7.8. Duties. The duties of the officers are as follows:

(a) President. The president shall preside at all meetings of the Board; shall see that orders and resolutions of the Board are carried out; shall sign all leases, mortgages, deeds and other written instruments and shall co-sign all checks and promissory notes.

(b) Vice President. The vice president, if any, shall generally assist the president and shall have such powers and perform such duties and services as shall from time to time be prescribed or delegated to him or her by the president or the Board.

(c) Secretary. The secretary shall record the votes and keep the minutes of all meetings and proceedings of the Board and of the Members; serve notice of meetings of the Board and of the Members; keep appropriate current records showing the Members of the Association together with their addresses; and shall perform such other duties as required by the Board.

(d) Assistant Secretaries. Each assistant secretary shall generally assist the secretary and shall have such powers and perform such duties and services as shall from time to time be prescribed or delegated to him or her by the secretary, the president, the Board or any committee established by the Board.

(e) Treasurer. The treasurer shall receive and deposit in appropriate bank accounts all monies of the Association and shall disburse such funds as directed by resolution of the Board; shall sign all checks

and promissory notes of the Association; keep proper books of account in appropriate form such that they could be audited by a public accountant whenever ordered by the Board or the membership; and shall prepare an annual budget and a statement of income and expenditures to be presented to the membership at its regular meeting, and deliver a copy of each to the Members.

Section 7.9. Execution of Instruments. Except when the Restrictions require execution of certain instruments by certain individuals, the Board may authorize any person to execute instruments on behalf of the Association, including without limitation checks from the Association's bank account. In the absence of Board designation, and unless otherwise provided herein, the president and the secretary are the only persons authorized to execute instruments on behalf of the Association.

ARTICLE VIII
OTHER COMMITTEES OF THE BOARD OF DIRECTORS

The Board may, by resolution adopted by affirmative vote of a Majority of the number of directors fixed by these Bylaws, designate two (2) or more directors or Members (with such alternates, if any, as may be deemed desirable) to constitute another committee or committees for any purpose; provided, that any such other committee or committees shall have and may exercise only the power of recommending action to the Board and of carrying out and implementing any instructions or any policies, plans, programs and rules theretofore approved, authorized and adopted by the Board.

ARTICLE IX
BOOKS AND RECORDS

The books, records and papers of the Association shall at all times, during reasonable business hours, be subject to inspection by any Member. The Restrictions shall be available for inspection by any Member at the principal office of the Association, where copies may be purchased at reasonable cost.

ARTICLE X
ASSESSMENTS

As more fully provided in the Declaration, each Member is obligated to pay to the Association Assessments which are secured by a continuing lien upon the property against which the Assessments are made. Assessments shall be due and payable in accordance with the Declaration.

ARTICLE XI
CORPORATE SEAL

The Association may, but shall have no obligation to, have a seal in a form adopted by the Board.

ARTICLE XII
AMENDMENTS

These Bylaws may be amended by: (i) the Declarant until expiration or termination of the Development Period; or (ii) a Majority vote of the members of the Board with the advance written consent of the Declarant until expiration or termination of the Development Period. Notwithstanding the foregoing or anything to the contrary herein, for so long as Development Owner owns any Lot or portion of the Property, any amendment to the Bylaws will require the prior written consent of the Development Owner.

ARTICLE XIII
INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Association shall indemnify every director, officer and committee member against, and reimburse and advance to every director, officer and committee member for, all liabilities, costs and expenses' incurred in connection with such directorship or office and any actions taken or omitted in such capacity to the greatest extent permitted under the Texas Business Organizations Code and all other Applicable Laws at the time of such indemnification, reimbursement or advance payment; provided, however, no director, officer or committee member shall be indemnified for: (a) a breach of duty of loyalty to the Association or its Members; (b) an act or omission not in good faith or that involves intentional misconduct or a knowing violation of the law; (c) a transaction from which such director, officer or committee member received an improper benefit, whether or not the benefit resulted from an action taken within the scope of directorship or office; or (d) an act or omission for which the liability of such director, officer or committee member is expressly provided for by statute.

ARTICLE XIV
MISCELLANEOUS

Section 14.1. Fiscal Year. The fiscal year of the Association shall begin on the first day of January and end on the 31st day of December of every year, except that the first fiscal year shall begin on the date of incorporation.

Section 14.2. Review of Statutes and Court Rulings. Users of these Bylaws should also review statutes and court rulings that may modify or nullify provisions of this document or its enforcement, or may create rights or duties not anticipated by these Bylaws.

Section 14.3. Conflict. In the case of any conflict between the Certificate and these Bylaws, the Certificate shall control; and in the case of any conflict between the Declaration and these Bylaws, the Declaration shall control. In the case of any conflict between these Bylaws and any provision of Applicable Laws, the conflicting aspect of the Bylaws provision is null and void, but all other provisions of these Bylaws remain in full force and effect.

Section 14.4. Interpretation. The effect of a general statement is not limited by the enumerations of specific matters similar to the general. The captions or articles and sections are inserted only for convenience and are in no way to be construed as defining or modifying the text to which they refer. The singular is construed to mean the plural, when applicable, and the use of masculine or neuter pronouns includes the feminine.

Section 14.5. No Waiver. No restriction, condition, obligation, or covenant contained in these Bylaws may be deemed to have been abrogated or waived by reason of failure to enforce the same, irrespective of the number of violations or breaches thereof which may occur.

ATTACHMENT 3

HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.
FINE AND ENFORCEMENT POLICY

1. Background. Highpointe Ranch is subject to that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time (the "**Declaration**"). In accordance with the Declaration, Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation (the "**Association**") was created to administer the terms and provisions of the Declaration. Unless the Declaration or Applicable Law expressly provides otherwise, the Association acts through a Majority of its board of directors (the "**Board**"). The Association is empowered to enforce the covenants, conditions and restrictions of the Declaration, Certificate, Bylaws, Community Manual, and any Rules and Regulations promulgated by the Association pursuant to the Declaration, as adopted and amended from time to time (collectively, the "**Restrictions**"), including the obligation of Owners to pay Assessments pursuant to the terms and provisions of the Declaration and the obligations of the Owners to compensate the Association for costs incurred by the Association for enforcing violations of the Restrictions.

   The Board hereby adopts this Fine and Enforcement Policy to establish equitable policies and procedures for the levy of fines within the Association in compliance with the Chapter 209 of the Texas Property Code, titled the "Texas Residential Property Owners Protection Act," as it may be amended (the **"Act"**). To the extent any provision within this policy is in conflict with the Act or any other Applicable Law, such provision shall be modified to comply with the Applicable Law.

   Terms used in this policy, but not defined, shall have the meanings ascribed to such terms in the Restrictions.

2. Policy. The Association uses fines to discourage violations of the Restrictions, and to encourage compliance when a violation occurs – not to punish violators or generate revenue for the Association. Although a fine may be an effective and efficient remedy for certain types of violations or violators, it is only one of several methods available to the Association for enforcing the Restrictions. The Association's use of fines does not interfere with its exercise of other rights and remedies for the same violation.

3. Owner's Liability. An Owner is liable for fines levied by the Association for violations of the Restrictions by the Owner and the relatives, guests, employees, and agents of the Owner and Residents. Regardless of who commits the violation, the Association may direct all communications regarding the violation to the Owner.

4. Amount. The Association may set fine amounts on a case by case basis, provided the fine is reasonable in light of the nature, frequency, and effects of the violation. The Association may establish a schedule of fines for certain types of violations. The amount and cumulative total of a fine must be reasonable in comparison to the violation, and should be uniform for similar violations of the same provision of the Restrictions. If the Association allows fines to accumulate, the Association may establish a maximum amount for a particular fine, at which point the total fine will be capped.

5. Violation Notice. Except as set forth in *Section 5(C)* below, the Association will give (i) a written violation notice via certified mail to the Owner (at the Owner's last known address as shown in the Association records) (the "**Violation Notice**") and (ii) an opportunity to be heard, if requested by the Owner. The Association's Violation Notice will contain the following items: (1) the date the Violation Notice is prepared or mailed; (2) a description of the violation or property damage that is the basis for the Individual Assessment, suspension action, or other charge; (3) a reference to the rule or provision that is being violated; (4) a description of the action required to cure the violation and a reasonable timeframe in which the violation is required to be cured to avoid the fine or suspension; (5) the amount of the possible fine; (6) a statement that no later than the thirtieth (30th) day after the date the notice was mailed, the Owner may request a hearing pursuant to Section 209.007 of the Texas Property Code; and (7) a statement that the Owner may have special rights or relief related to the enforcement action under federal law, including the Servicemembers Civil Relief Act (50 U.S.C. app. section *et seq*), if the Owner is serving on active military duty. The Violation Notice sent out pursuant to this paragraph is further subject to the following:

(A) First Violation. If the Owner has not been given notice and a reasonable opportunity to cure the same or similar violation within the preceding six (6) months, the Violation Notice will state those items set out in (1) – (7) above, along with a reasonable timeframe by which the violation must be cured to avoid the fine. The Violation Notice must state that any future violation of the same rule may result in the levy of a fine. A fine pursuant to the *Schedule of Fines* may be levied if an Owner does not cure the violation within the timeframe set forth in the notice.

(B) Uncurable Violation/Violation of Public Health or Safety. If the violation is of an uncurable nature or poses a threat to public health or safety (as exemplified in Section 209.006 of the Texas Property Code), then the Violation Notice shall state those items set out in (1), (2), (3), (5), (6), and (7) above, and the Association shall have the right to exercise any enforcement remedy afforded to it under the Restrictions, including but not limited to the right to levy a fine pursuant to the *Schedule of Fines*.

(C) Repeat Violation without Attempt to Cure. If the Owner has been given a Violation Notice and a reasonable opportunity to cure the same or similar violation within the preceding six (6) months but commits the violation again, then the Owner shall not be entitled to an additional Violation Notice or a hearing pursuant to Section 209.007 of the Texas Property Code, and the Association shall have the right to exercise any enforcement remedy afforded to it under the Restrictions, including but not limited to the right to levy a fine pursuant to the *Schedule of Fines*. After an Owner has been provided a Violation Notice as set forth herein and assessed fines in the amounts set forth in the *Schedule of Fines*, if the Owner has never cured the violation in response to any Violation Notices sent or any fines levied, then the Board, in its sole discretion, may determine that such a circumstance is a continuous violation which warrants a levy of a fine based upon a daily, monthly, or quarterly amount as determined by the Board.

6. Violation Hearing. If the Owner is entitled to an opportunity to cure the violation, then the Owner has the right to submit a written request to the Association for a hearing before the Board to discuss and verify the facts and resolve the matter. To request a hearing, the Owner must submit a written request (the "**Request**") to the Association's manager (or the Board if there is no manager) within

thirty (30) days after receiving the Violation Notice. The Association must then hold the hearing requested no later than thirty (30) days after the Board receives the Request. The hearing will be scheduled to provide a reasonable opportunity for both the Board and the Owner to attend. The Board or the Owner may request a postponement, and if requested, a postponement shall be granted for a period of not more than ten (10) days. Additional postponements may be granted by agreement of the parties. Notwithstanding the foregoing, the Association may exercise its other rights and remedies as set forth in Section 209.007(d) and (e) of the Texas Property Code. Any hearing before the Board will be held in a closed or executive session of the Board. At the hearing, the Board will consider the facts and circumstances surrounding the violation. Not later than ten (10) days before the Board holds a hearing under this Section, the Board shall provide notice to the Owner of the date, time and place of the hearing and shall provide a packet containing all documents, photographs, and communications relating to the matters the Board intends to introduce at the hearing. If the Board does not provide a packet within the ten (10) day time period described above, the Owner is entitled to an automatic fifteen (15) day postponement of the hearing. During the hearing, the Board or a representative of the Board shall first present the Board's case against the Owner. The Owner shall attend the hearing in person, but may be represented by another person (i.e., attorney) during the hearing, upon advance written notice to the Board. If an Owner intends to make an audio recording of the hearing, such Owner's request for hearing shall include a statement noticing the Owner's intent to make an audio recording of the hearing, otherwise, no audio or video recording of the hearing may be made, unless otherwise approved by the Board. The minutes of the hearing must contain a statement of the results of the hearing and the fine, if any, imposed. A copy of the Violation Notice and request for hearing should be placed in the minutes of the hearing. If the Owner appears at the meeting, the notice requirements will be deemed satisfied. Unless otherwise agreed by the Board, each hearing shall be conducted in accordance with the agenda attached hereto as Exhibit A.

7. Due Date. Fine and/or damage charges are due immediately if the violation is uncurable or poses a threat to public health or safety. If the violation is curable, the fine and/or damage charges are due immediately after the later of: (1) the date that the cure period set out in the first Violation Notice ends and the Owner does not attempt to cure the violation or the attempted cure is unacceptable to Association, or (2) if a hearing is requested by the Owner, such fines or damage charges will be due immediately after the Board's final decision on the matter, assuming that a fine or damage charge of some amount is confirmed by the Board at such hearing.

8. Lien Created. The payment of each fine and/or damage charge levied by the Board against the Owner of a Lot is, together with interest as provided in *Section 6.9* of the Declaration and all costs of collection, including attorneys' fees as herein provided, secured by the lien granted to the Association pursuant to *Section 6.1.2* of the Declaration. The fine and/or damage charge will be considered an Assessment for the purpose of this Article and will be enforced in accordance with the terms and provisions governing the enforcement of Assessments pursuant to *Article 6* of the Declaration.

9. Levy of Fine. Any fine levied shall be reflected on the Owner's periodic statements of account or delinquency notices.

10. Foreclosure. The Association may not foreclose its Assessment lien on a debt consisting solely of fines.

11. Amendment of Policy. This policy may be revoked or amended from time to time by the Board. This policy will remain effective until the Association records an amendment to this policy in the county's official public records.

Schedule of Fines

The Board has adopted the following general schedule of fines. The number of notices set forth below does not mean that the Board is required to provide each notice prior to exercising additional remedies as set forth in the Restrictions. The Board may elect to pursue such additional remedies at any time in accordance with Applicable Law. The Board also reserves the right to set fine amounts on a case by case basis, provided the fine is reasonable in light of the nature, frequency, and effect of the violation:

FINES‡:

New Violation: **Notice of Violation**	**General Violation Categories** • *Unsightly conditions on a Lot* • *Unauthorized construction or modification of Improvements* • *Landscape violations (mowing, etc.)* • *Trash container violations* • *Failure to maintain dwelling (exterior) or fencing* • *Other violations*	**Fine Amount:** **$25.00 (if a curable violation, may be avoided if Owner cures the violation by the time specified in the notice)**
Repeat Violation (No Right to Cure or Uncurable Violation):		**Fine Amount:** **1st Notice $50.00** **2nd Notice $75.00** **3rd Notice $100.00** **4th Notice $125.00**
Continuous Violation: **Continuous Violation Notice**		**Amount TBD**

‡ The Board reserves the right to adjust these fine amounts based on the severity and/or frequency of the violation.

EXHIBIT A

HEARING BEFORE THE BOARD

Note: An individual will act as the Association's representative (the "**Association Representative**"). The Association Representative will provide introductory remarks and administer the hearing agenda.

I. **Introduction**

Association Representative: The Board of Directors has convened to conduct a hearing at the written request of an Owner.

This hearing is being conducted as required by Section 209.007 of the Texas Property Code, and is an opportunity for the Association and the Owner to discuss and verify facts and attempt to resolve the matter at issue. If no resolution is reached during the hearing, the Association will communicate its decision in writing within fifteen (15) days.

II. **Presentation of Facts**

Association Representative: This portion of the hearing is to permit a representative of the Association the opportunity to describe the violation and to present any information the Association wishes to offer. After the Association's representative has finished the presentation, the Owner or any representative will be given the opportunity to present information and issues relevant to the appeal or dispute.

[Presentations]

III. **Discussion**

Association Representative: This portion of the hearing is to permit the Board and the Owner to discuss matters relevant to the violation.

IV. **Resolution**

Association Representative: [Announce any agreement or resolution or state that the Board will take the matter under advisement]

V. **Adjournment**

Association Representative: At this time the hearing is adjourned.

ATTACHMENT 4

HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.
ASSESSMENT COLLECTION POLICY

Highpointe Ranch is a community (the "**Community**") created by and subject to the Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, and any amendments or supplements thereto (the "**Declaration**"). The operation of the Community is vested in Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation (the "**Association**"), acting through its board of directors (the "**Board**"). The Association is empowered to enforce the covenants, conditions and restrictions of the Declaration, Certificate, Bylaws, Community Manual, and any Rules and Regulations promulgated by the Association pursuant to the Declaration, as adopted and amended from time to time (collectively, the "**Restrictions**"), including the obligation of Owners to pay Assessments pursuant to the terms and provisions of the Declaration.

The Board hereby adopts this Assessment Collection Policy to establish equitable policies and procedures for the collection of Assessments levied pursuant to the Restrictions. Terms used in this policy, but not defined, shall have the meanings ascribed to such terms in the Restrictions.

SECTION 1. DELINQUENCIES, LATE CHARGES & INTEREST

1-A. Due Date. An Owner will timely and fully pay Assessments. Regular Assessments are assessed annually and are due and payable on the first calendar day of the month at the beginning of the fiscal year, or in such other manner as the Board may designate in its sole and absolute discretion.

1-B. Delinquent. Any Assessment that is not fully paid when due is delinquent. When the account of an Owner becomes delinquent, it remains delinquent until paid in full — including collection costs, interest and late fees.

1-C. Late Fees & Interest. If the Association does not receive full payment of an Assessment by 5:00 p.m. on the due date established by the Board, the Association may levy a late fee of $25 per month and/or interest at the highest rate allowed by applicable usury laws then in effect on the amount of the Assessment from the due date thereof (or if there is no such highest rate, then at the rate of 1 and 1/2% per month) until paid in full.

1-D. Liability for Collection Costs. The defaulting Owner is liable to the Association for the cost of title reports, certified mail, long distance calls, court costs, filing fees, and other reasonable costs and attorneys' fees incurred by the Association in collecting the delinquency.

1-E. Insufficient Funds. The Association may levy a charge of $25 for any check returned to the Association marked "not sufficient funds" or the equivalent.

1-F. Waiver. Properly levied collection costs, late fees, and interest may only be waived by a Majority of the Board.

SECTION 2. INSTALLMENTS & ACCELERATION

If an Assessment, other than a Regular Assessment, is payable in installments, and if an Owner defaults in the payment of any installment, the Association may declare the entire Assessment in default and accelerate the due date on all remaining installments of the Assessment. An Assessment, other than a Regular Assessment, payable in installments may be accelerated only after the Association gives the Owner at least fifteen (15) days prior notice of the default and the Association's intent to accelerate the unpaid balance if the default is not timely cured. Following acceleration of the indebtedness, the Association has no duty to reinstate the installment program upon partial payment by the Owner.

SECTION 3. PAYMENTS

3-A. Application of Payments. After the Association notifies the Owner of a delinquency and the Owner's liability for late fees or interest, and collection costs, any payment received by the Association shall be applied in the following order, starting with the oldest charge in each category, until that category is fully paid, regardless of the amount of payment, notations on checks, and the date the obligations arose:

(1) Delinquent Assessments	(4) Other reasonable attorneys' fees
(2) Current Assessments	(5) Reasonable fines
(3) Reasonable attorneys' fees and costs associated solely with delinquent Assessments or any other charge that could provide the basis for foreclosure	(6) Any other reasonable amount

3-B. Payment Plans. The Association shall offer a payment plan to a delinquent Owner with a minimum term of at least three (3) months and a maximum term of twelve (12) months from the date the payment plan is requested for which the Owner may be charged reasonable administrative costs and interest. The Association will determine the actual term of each payment plan offered to an Owner in their sole and absolute discretion, but such term shall not be longer than eighteen (18) months. An Owner is not entitled to a payment plan if the Owner has defaulted on a previous payment plan in the last two (2) years. The Association is not required to make a payment plan available to a Member after the Delinquency Cure Period allowed under Paragraph 5-B expires. If an Owner is in default at the time the Owner submits a payment, the Association is not required to follow the application of payments schedule set forth in Paragraph 3-A.

3-C. Form of Payment. The Association may require that payment of delinquent Assessments be made only in the form of cash, cashier's check, or certified funds.

3-D. Partial and Conditioned Payment. The Association may refuse to accept partial payment (*i.e.,* less than the full amount due and payable) and payments to which the payer attaches conditions or directions contrary to the Board's policy for applying payments. The Association's endorsement and deposit of a payment does not constitute acceptance. Instead, acceptance by the Association occurs when the Association posts the payment to the Owner's account. If the Association does not

accept the payment at that time, it will promptly refund the payment to the payer. A payment that is not refunded to the payer within thirty (30) days after being deposited by the Association may be deemed accepted as to payment, but not as to words of limitation or instruction accompanying the payment. The acceptance by the Association of partial payment of delinquent Assessments does not waive the Association's right to pursue or to continue pursuing its remedies for payment in full of all outstanding obligations.

3-E. Notice of Payment. If the Association receives full payment of the delinquency after Recording a notice of lien, the Association will cause a release of notice of lien to be publicly Recorded, a copy of which will be sent to the Owner. The Association may require the Owner to prepay the cost of preparing and Recording the release.

3-F. Correction of Credit Report. If the Association receives full payment of the delinquency after reporting the defaulting Owner to a credit reporting service, the Association will report receipt of payment to the credit reporting service.

SECTION 4. LIABILITY FOR COLLECTION COSTS

4-A. Collection Costs. The defaulting Owner may be liable to the Association for the cost of title reports, certified mail, long distance calls, filing fees, and other reasonable costs and attorneys' fees incurred in the collection of the delinquency.

SECTION 5. COLLECTION PROCEDURES

5-A. Delegation of Collection Procedures. From time to time, the Association may delegate some or all of the collection procedures, as the Board in its sole discretion deems appropriate, to the Association's Manager, an attorney, or a debt collector.

5-B. Delinquency Notices. If the Association has not received full payment of an Assessment by the due date, the Association may send written notice of nonpayment to the defaulting Owner, by certified mail, stating: (a) the amount delinquent and the total amount of the payment required to make the account current, (b) the options the Owner has to avoid having the account turned over to a collection agent, as such term is defined in Texas Property Code Section 209.0064, including information regarding availability of a payment plan through the Association, and (c) that the Owner has forty-five (45) days for the Owner to cure the delinquency before further collection action is taken (the "**Delinquency Cure Period**"). The Association's delinquency-related correspondence may state that if full payment is not timely received, the Association may pursue any or all of the Association's remedies, at the sole cost and expense of the defaulting Owner.

5-C. Verification of Owner Information. The Association may obtain a title report to determine the names of the Owners and the identity of other lien-holders, including the mortgage company.

5-D. Collection Agency. The Board may employ or assign the debt to one or more collection agencies.

5-E. Notification of Mortgage Lender. The Association may notify the Mortgage lender of the default obligations.

5-F. Notification of Credit Bureau. The Association may report the defaulting Owner to one or more credit reporting services. In that event, at least thirty (30) business days prior to reporting to a credit bureau, a copy of the notice shall be sent via certified mail, hand delivery or electronic delivery to the defaulting Owner, which shall include a detailed report of all delinquent charges owed and information regarding any payment plan opportunities offered to the defaulting Owner. The Association shall not report to a credit report service any delinquent charges, fines, or fees that are the subject of a pending dispute between the defaulting Owner and the Association. The defaulting Owner will not be liable for any costs or fees associated with any actual reporting of any delinquency to the credit reporting services.

5-G. Collection by Attorney. If Owner's account remains delinquent for a period of sixty (60) days or more, the Manager of the Association or the Board of the Association shall refer the delinquent account to the Association's attorney for collection. In the event an account is referred to the Association's attorney, the Owner will be liable to the Association for its legal fees and expenses. The Association's attorney will ensure the following notices are provided, or have been provided, in accordance with Applicable Law:

(1) Notice of Delinquency: Preparation of written notice of delinquency. If the account is not paid in full by the deadline set forth in the notice letter, then

(2) Second Notice: Preparation of the second written notice of delinquency. If the account is not paid in full by the deadline set forth in the notice letter, then

(3) Lien Notice: Preparation of the Lien Notice Letter and recordation of a Notice of Unpaid Assessment Lien. If the account is not paid in full by the deadline set forth in the notice letter, then

(4) Final Notice: Preparation of the Final Notice of Demand for Payment Letter and any notice required to be sent to any holder of a lien of record on the property whose lien is evidenced by a deed of trust and is inferior or subordinate to the Association's lien. If the account is not paid in full by the deadline set forth in the notice letter, then

(5) Foreclosure of Lien: Only upon specific approval by a Majority of the Board.

5-H. Notice of Lien. The Association's attorney may cause a notice of the Association's Assessment lien against the Owner's home to be publicly Recorded. In that event, a copy of the notice will be sent to the defaulting Owner, and may also be sent to the Owner's Mortgagee.

5-I. Cancellation of Debt. If the Board deems the debt to be uncollectible, the Board may elect to cancel the debt on the books of the Association, in which case the Association may report the full amount of the forgiven indebtedness to the Internal Revenue Service as income to the defaulting Owner.

5-J. Suspension of Use of Certain Facilities or Services. The Board may suspend the use of the Common Area amenities by an Owner, or such Owner's tenant, whose account with the Association is delinquent for at least forty-five (45) days.

NOTE: Texas law requires that at least two (2) notices precede the recording of any lien. For accounts that become delinquent on or after September 1, 2023, a lien may only be recorded after notice of the delinquency has been sent: (1) to the Owner by email using an email address the Owner has provided to the Association **or, alternatively** by first-class mail (the first-class mail requirement may be satisfied by a letter sent by USPS certified mail) sent to the Owner's last known mailing address, as reflected in the records maintained by the Association; **and also** (2) to the Owner, by certified mail, return receipt requested, directed to the Owner's last known mailing address, as reflected in the records maintained by the Association. The certified letter must be sent at least thirty (30) days after the first required notice of delinquency has been sent to the Owner, and the lien may only be recorded if at least ninety (90) days have passed since the date the certified delinquency notice was sent to the Owner. The foregoing requirements conform to the requirements set forth in Chapter 209 of the Texas Property Code and apply only to the extent Applicable Law continues to require such notices before a lien may be recorded.

SECTION 6. GENERAL PROVISIONS

6-A. Independent Judgment. Notwithstanding the contents of this detailed policy, the officers, directors, Manager, and attorney of the Association may exercise their independent, collective, and respective judgment in applying this policy.

6-B. Other Rights. This policy is in addition to and does not limit the rights of the Association to collect Assessments under the Restrictions and Applicable Law.

6-C. Limitations of Interest. The Association, and its officers, directors, Managers, and attorneys, intend to conform strictly to the applicable usury laws of the State of Texas. Notwithstanding anything to the contrary in the Restrictions or any other document or agreement executed or made in connection with this policy, the Association will not in any event be entitled to receive or collect, as interest, a sum greater than the maximum amount permitted by Applicable Law. If from any circumstances whatsoever, the Association ever receives, collects, or applies as interest a sum in excess of the maximum rate permitted by law, the excess amount will be applied to the reduction of unpaid Assessments, or reimbursed to the Owner if the Assessments are paid in full.

6-D. Notices. Unless the Restrictions, Applicable Law, or this policy provide otherwise, any notice or other written communication given to an Owner pursuant to this policy will be deemed delivered to the Owner upon depositing same with the U.S. Postal Service, addressed to the Owner at the most recent address shown on the Association's records, or on personal delivery to the Owner. If the Association's records show that an Owner's property is owned by two (2) or more persons, notice to one co-Owner is deemed notice to all co-Owners. Similarly, notice to one Resident is deemed notice to all Residents. Written communications to the Association, pursuant to this policy, will be deemed given on actual receipt by the Association's president, secretary, managing agent, or attorney.

6-E. Amendment of Policy. This policy may be amended from time to time by the Board.

ATTACHMENT 5

HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.
RECORDS INSPECTION, COPYING AND RETENTION POLICY

Terms used but not defined in this policy will have the meanings ascribed to such terms in that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time.

Note: Texas statutes presently render null and void any restriction in the Declaration which restricts or prohibits the inspection, copying and/or retention of association records and files in violation of the controlling provisions of the Texas Property Code or any other applicable state law. The Board has adopted this policy in lieu of any express prohibition or any provision regulating such matters which conflict with Texas law, as set forth in the Declaration.

1. *Written Form*. The Association shall maintain its records in written form or in another form capable of conversion into written form within a reasonable time.

2. *Request in Writing; Pay Estimated Costs In Advance*. An Owner (or an individual identified as an Owner's agent, attorney or certified public accountant, provided the designation is in writing and delivered to the Association) may submit a written request via certified mail to the Association's mailing address or authorized representative listed in the management certificate to access the Association's records. The written request must include sufficient detail describing the books and records requested and whether the Owner desires to inspect or copy the records. Upon receipt of a written request, the Association may estimate the costs associated with responding to each request, which costs may not exceed the costs allowed pursuant to Texas Administrative Code Section 70.3, as may be amended from time to time (a current copy of which is attached hereto). Before providing the requested records, the Association will require that the Owner remit such estimated amount to the Association. The Association will provide a final invoice to the Owner on or before the thirtieth (30th) business day after the records are provided by the Association. If the final invoice includes additional amounts due from the requesting party, the additional amounts, if not reimbursed to the Association before the thirtieth (30th) business day after the date the invoice is sent to the Owner, may be added to the Owner's account as an Assessment. If the estimated costs exceeded the final invoice amount, the Owner is entitled to a refund, and the refund shall be issued to the Owner not later than the thirtieth (30th) business day after the date the final invoice is sent to the Owner.

3. *Period of Inspection*. Within ten (10) business days from receipt of the written request, the Association must either: (1) provide the copies to the Owner; (2) provide available inspection dates; or (3) provide written notice that the Association cannot produce the documents within the ten (10) business days along with either: (i) another date within an additional fifteen (15) business days on which the records may either be inspected or by which the copies will be sent to the Owner; or (ii) a notice that after a diligent search, the requested records are missing and cannot be located.

4. *Records Retention*. The Association shall keep the following records for at least the time periods stated below:

a. **PERMANENT**: The Articles of Incorporation or the Certificate of Formation, the Bylaws and the Declaration, any and all other governing documents, guidelines, rules, regulations

and policies and all amendments thereto Recorded in the property records to be effective against any Owner and/or Member of the Association.

b. **FOUR (4) YEARS**: Contracts with a term of more than one (1) year between the Association and a third party. The four (4) year retention term begins upon expiration of the contract term.

c. **FIVE (5) YEARS**: Account records of each Owner. Account records include debit and credit entries associated with amounts due and payable by the Owner to the Association, and written or electronic records related to the Owner and produced by the Association in the ordinary course of business.

d. **SEVEN (7) YEARS**: Minutes of all meetings of the Board and the Owners.

e. **SEVEN (7) YEARS**: Financial books and records produced in the ordinary course of business, tax returns and audits of the Association.

f. **GENERAL RETENTION INSTRUCTIONS**: "**Permanent**" means records which are not to be destroyed. Except for contracts with a term of one (1) year or more (See item 4.b. above), a retention period starts on the last day of the year in which the record is created and ends on the last day of the year of the retention period. For example, if a record is created on June 14, 2024, and the retention period is five (5) years, the retention period begins on December 31, 2024 and ends on December 31, 2029. If the retention period for a record has elapsed and the record will be destroyed, the record should be shredded or otherwise safely and completely destroyed. Electronic files should be destroyed to ensure that data cannot be reconstructed from the storage mechanism on which the record resides.

5. *Confidential Records*. As determined in the discretion of the Board, certain Association records may be kept confidential such as personnel files, Owner account or other personal information (except addresses) unless the Owner requesting the records provides a court order or written authorization from the person whose records are sought.

6. *Attorney Files*. Attorney's files and records relating to the Association (excluding invoices requested by an Owner pursuant to Texas Property Code Section 209.008(d)), are not records of the Association and are not: (a) subject to inspection by the Owner; or (b) subject to production in a legal proceeding. If a document in an attorney's files and records relating to the Association would be responsive to a legally authorized request to inspect or copy Association documents, the document shall be produced by using the copy from the attorney's files and records if the Association has not maintained a separate copy of the document. The Association is not required under any circumstance to produce a document for inspection or copying that constitutes attorney work product or that is privileged as an attorney-client communication.

7. *Presence of Board Member or Manager; No Removal*. At the discretion of the Board or the Association's Manager, certain records may only be inspected in the presence of a Board member or employee of the Association's Manager. No original records may be removed from the office without the express written consent of the Board.

TEXAS ADMINISTRATIVE CODE
TITLE 1, PART 3, CHAPTER 70
RULE § 70.3 - CHARGES FOR PROVIDING COPIES OF PUBLIC INFORMATION

(a) The charges in this section to recover costs associated with providing copies of public information are based on estimated average costs to governmental bodies across the state. When actual costs are 25% higher than those used in these rules, governmental bodies other than agencies of the state, may request an exemption in accordance with § 70.4 of this title (relating to Requesting an Exemption).

(b) Copy charge.

(1) Standard paper copy. The charge for standard paper copies reproduced by means of an office machine copier or a computer printer is $.10 per page or part of a page. Each side that has recorded information is considered a page.

(2) Nonstandard copy. The charges in this subsection are to cover the materials onto which information is copied and do not reflect any additional charges, including labor, that may be associated with a particular request. The charges for nonstandard copies are:

(A) Diskette--$1.00;

(B) Magnetic tape--actual cost;

(C) Data cartridge--actual cost;

(D) Tape cartridge--actual cost;

(E) Rewritable CD (CD-RW)--$1.00;

(F) Non-rewritable CD (CD-R)--$1.00;

(G) Digital video disc (DVD)--$3.00;

(H) JAZ drive--actual cost;

(I) Other electronic media--actual cost;

(J) VHS video cassette--$2.50;

(K) Audio cassette--$1.00;

(L) Oversize paper copy (e.g.: 11 inches by 17 inches, greenbar, bluebar, not including maps and photographs using specialty paper--See also § 70.9 of this title)--$.50;

(M) Specialty paper (e.g.: Mylar, blueprint, blueline, map, photographic--actual cost.

(c) Labor charge for programming. If a particular request requires the services of a programmer in order to execute an existing program or to create a new program so that requested information may be accessed and copied, the governmental body may charge for the programmer's time.

(1) The hourly charge for a programmer is $28.50 an hour. Only programming services shall be charged at this hourly rate.

(2) Governmental bodies that do not have in-house programming capabilities shall comply with requests in accordance with § 552.231 of the Texas Government Code.

(3) If the charge for providing a copy of public information includes costs of labor, a governmental body shall comply with the requirements of § 552.261(b) of the Texas Government Code.

(d) Labor charge for locating, compiling, manipulating data, and reproducing public information.

(1) The charge for labor costs incurred in processing a request for public information is $15 an hour. The labor charge includes the actual time to locate, compile, manipulate data, and reproduce the requested information.

(2) A labor charge shall not be billed in connection with complying with requests that are for 50 or fewer pages of paper records, unless the documents to be copied are located in:

(A) Two or more separate buildings that are not physically connected with each other; or

(B) A remote storage facility.

(3) A labor charge shall not be recovered for any time spent by an attorney, legal assistant, or any other person who reviews the requested information:

(A) To determine whether the governmental body will raise any exceptions to disclosure of the requested information under the Texas Government Code, Subchapter C, Chapter 552; or

(B) To research or prepare a request for a ruling by the attorney general's office pursuant to § 552.301 of the Texas Government Code.

(4) When confidential information pursuant to a mandatory exception of the Act is mixed with public information in the same page, a labor charge may be recovered for time spent to redact, blackout, or otherwise obscure confidential information in order to release the public information. A labor charge shall not be made for redacting confidential information for requests of 50 or fewer pages, unless the request also qualifies for a labor charge pursuant to Texas Government Code, § 552.261(a)(1) or (2).

(5) If the charge for providing a copy of public information includes costs of labor, a governmental body shall comply with the requirements of Texas Government Code, Chapter 552, § 552.261(b).

(6) For purposes of paragraph (2)(A) of this subsection, two buildings connected by a covered or open sidewalk, an elevated or underground passageway, or a similar facility, are not considered to be separate buildings.

(e) Overhead charge.

(1) Whenever any labor charge is applicable to a request, a governmental body may include in the charges direct and indirect costs, in addition to the specific labor charge. This overhead charge would cover such costs as depreciation of capital assets, rent, maintenance and repair, utilities, and administrative overhead. If a governmental body chooses to recover such costs, a charge shall be made in accordance with the methodology described in paragraph (3) of this subsection. Although an exact calculation of costs will vary, the use of a standard charge will avoid complication in calculating such costs and will provide uniformity for charges made statewide.

(2) An overhead charge shall not be made for requests for copies of 50 or fewer pages of standard paper records unless the request also qualifies for a labor charge pursuant to Texas Government Code, § 552.261(a)(1) or (2).

(3) The overhead charge shall be computed at 20% of the charge made to cover any labor costs associated with a particular request. Example: if one hour of labor is used for a particular request, the formula would be as follows: Labor charge for locating, compiling, and reproducing, $15.00 x .20 = $3.00; or Programming labor charge, $28.50 x .20 = $5.70. If a request requires one hour of labor charge for locating, compiling, and reproducing information ($15.00 per hour); and one hour of programming labor charge ($28.50 per hour), the combined overhead would be: $15.00 + $28.50 = $43.50 x .20 = $8.70.

(f) Microfiche and microfilm charge.

(1) If a governmental body already has information that exists on microfiche or microfilm and has copies available for sale or distribution, the charge for a copy must not exceed the cost of its reproduction. If no copies of the requested microfiche or microfilm are available and the information on the microfiche or microfilm can be released in its entirety, the governmental body should make a copy of the microfiche or microfilm. The charge for a copy shall not exceed the cost of its reproduction. The Texas State Library and Archives Commission has the capacity to reproduce microfiche and microfilm for governmental bodies. Governmental bodies that do not have in-house capability to reproduce microfiche or microfilm are encouraged to contact the Texas State Library before having the reproduction made commercially.

(2) If only a master copy of information in microfilm is maintained, the charge is $.10 per page for standard size paper copies, plus any applicable labor and overhead charge for more than 50 copies.

(g) Remote document retrieval charge.

(1) Due to limited on-site capacity of storage documents, it is frequently necessary to store information that is not in current use in remote storage locations. Every effort should be made by governmental bodies to store current records on-site. State agencies are encouraged to store inactive or non-current records with the Texas State Library and Archives Commission. To the extent that the retrieval of documents results in a charge to comply with a request, it is permissible to recover costs of such services for requests that qualify for labor charges under current law.

(2) If a governmental body has a contract with a commercial records storage company, whereby the private company charges a fee to locate, retrieve, deliver, and return to storage the needed record(s), no additional labor charge shall be factored in for time spent locating documents at the storage

location by the private company's personnel. If after delivery to the governmental body, the boxes must still be searched for records that are responsive to the request, a labor charge is allowed according to subsection (d)(1) of this section.

(h) Computer resource charge.

(1) The computer resource charge is a utilization charge for computers based on the amortized cost of acquisition, lease, operation, and maintenance of computer resources, which might include, but is not limited to, some or all of the following: central processing units (CPUs), servers, disk drives, local area networks (LANs), printers, tape drives, other peripheral devices, communications devices, software, and system utilities.

(2) These computer resource charges are not intended to substitute for cost recovery methodologies or charges made for purposes other than responding to public information requests.

(3) The charges in this subsection are averages based on a survey of governmental bodies with a broad range of computer capabilities. Each governmental body using this cost recovery charge shall determine which category(ies) of computer system(s) used to fulfill the public information request most closely fits its existing system(s), and set its charge accordingly. Type of System--Rate: mainframe--$10 per CPU minute; Midsize--$1.50 per CPU minute; Client/Server--$2.20 per clock hour; PC or LAN--$1.00 per clock hour.

(4) The charge made to recover the computer utilization cost is the actual time the computer takes to execute a particular program times the applicable rate. The CPU charge is not meant to apply to programming or printing time; rather it is solely to recover costs associated with the actual time required by the computer to execute a program. This time, called CPU time, can be read directly from the CPU clock, and most frequently will be a matter of seconds. If programming is required to comply with a particular request, the appropriate charge that may be recovered for programming time is set forth in subsection (d) of this section. No charge should be made for computer print-out time. Example: If a mainframe computer is used, and the processing time is 20 seconds, the charges would be as follows: $10 / 3 = $3.33; or $10 / 60 x 20 = $3.33.

(5) A governmental body that does not have in-house computer capabilities shall comply with requests in accordance with the § 552.231 of the Texas Government Code.

(i) Miscellaneous supplies. The actual cost of miscellaneous supplies, such as labels, boxes, and other supplies used to produce the requested information, may be added to the total charge for public information.

(j) Postal and shipping charges. Governmental bodies may add any related postal or shipping expenses which are necessary to transmit the reproduced information to the requesting party.

(k) Sales tax. Pursuant to Office of the Comptroller of Public Accounts' rules sales tax shall not be added on charges for public information (34 TAC, Part 1, Chapter 3, Subchapter O, § 3.341 and § 3.342).

(l) Miscellaneous charges: A governmental body that accepts payment by credit card for copies of public information and that is charged a "transaction fee" by the credit card company may recover that fee.

(m) These charges are subject to periodic reevaluation and update.

Source Note: The provisions of this § 70.3 adopted to be effective September 18, 1996, 21 TexReg 8587; amended to be effective February 20, 1997, 22 TexReg 1625; amended to be effective December 3, 1997, 22 TexReg 11651; amended to be effective December 21, 1999, 24 TexReg 11255; amended to be effective January 16, 2003, 28 TexReg 439; amended to be effective February 11, 2004, 29 TexReg 1189; transferred effective September 1, 2005, as published in the Texas Register September 29, 2006, 31 TexReg 8251; amended to be effective February 22, 2007, 32 TexReg 614.

ATTACHMENT 6

HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.
STATUTORY NOTICE OF POSTING AND RECORDATION OF ASSOCIATION GOVERNING DOCUMENTS

Terms used but not defined in this policy will have the meanings ascribed to such terms in that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time.

1. *Dedicatory Instruments*. As set forth in Texas Property Code Section 202.001, "dedicatory instrument" means each document governing the establishment, maintenance or operation of a residential subdivision, planned unit development, condominium or townhouse regime, or any similar planned development. The term includes the Declaration or similar instrument subjecting real property to: (a) restrictive covenants, bylaws, or similar instruments governing the administration or operation of a property owners' association; (b) properly adopted Rules and Regulations of the property owners' association; or (c) all lawful amendments to the covenants, bylaws, instruments, rules, or regulations, or as otherwise referred to in this notice as the "Governing Documents."

2. *Recordation of All Governing Documents*. The Association shall file all of the Governing Documents in the real property records of each county in which the property to which the documents relate is located. Any dedicatory instrument comprising one of the Governing Documents of the Association has no effect until the instrument is filed in accordance with this provision, as set forth in Texas Property Code Section 202.006.

3. *Online Posting of Restrictions*. The Association shall make the current versions of the Recorded Restrictions relating to the Association or subdivision available on an internet website maintained by the Association, or a management company on behalf of the Association, and available to the Association's Members.

4. *Management Certificate*. The Association will maintain and update, as needed, a Management Certificate that contains: (a) the name of the subdivision; (b) the name of the Association; (c) the recording data for the subdivision; (d) the recording data for the declaration and any amendments; (e) the name and mailing address of the Association; (f) the name, and mailing address, telephone number, and email address of the person managing the Association or the Association's designated representative; (g) the website address where the Association's dedicatory instruments are available; (h) the amount and description of fees charged by the Association relating to a property transfer in the subdivision; and (i) any other information the Association considers appropriate. The Management Certificate must be signed and acknowledged by an officer or the managing agent of the Association. An amended Management Certificate must be recorded not later than the thirtieth (30th) day after the date the Association has notice of a change in any information in the recorded certificate. Not later than the seventh day after the date a Management Certificate or amendment is recorded, the document will also be electronically filed with the Texas Real Estate Commission.

ATTACHMENT 7

HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.
EMAIL REGISTRATION POLICY

Terms used but not defined in this policy will have the meanings ascribed to such terms in that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time.

1. *Purpose*. The purpose of this Email Registration Policy is to facilitate proper notice of annual and special meetings of members of the Association pursuant to Section 209.0051(e) of the Texas Property Code.

2. *Email Registration*. Should the Owner wish to receive any and all email notifications of annual and special meetings of members of the Association, it is the Owner's sole responsibility to register his/her email address with the Association and to continue to keep the registered email address updated and current with the Association. In order to register an email address, the Owner must provide their name, address, phone number and email address through the method provided on the Association's website, if any, and/or to the official contact information provided by the Association for the community manager.

3. *Failure to Register*. An Owner may not receive email notification or communication of annual or special meetings of members of the Association should the Owner fail to register his/her email address with the Association and/or properly and timely maintain an accurate email address with the Association. Correspondence to the Association and/or Association manager from an email address or by any method other than the method described in Paragraph No. 2 above will not be considered sufficient to register such email address with the Association.

4. *Amendment*. The Association may, from time to time, modify, amend, or supplement this Policy or any other rules regarding email registration.

ATTACHMENT 8

HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.
GENERATOR POLICY

Terms used but not defined in this policy will have the meanings ascribed to such terms in that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time.

A. ARCHITECTURAL REVIEW APPROVAL REQUIRED

As part of the installation and maintenance of a generator on an Owner's Lot, an Owner may submit plans for and install a standby electric generator ("**Generator**") upon written approval by the architectural review authority under the Declaration (the "**ACC**").

B. GENERATOR PROCEDURES AND REQUIREMENTS

1. Application. Approval by the ACC is required prior to installing a Generator. To obtain the approval of the ACC for a Generator, the Owner shall provide the ACC with the following information: (i) the proposed site location of the Generator on the Owner's Lot; (ii) a description of the Generator, including a photograph or other accurate depiction; and (iii) the size of the Generator (the "**Generator Application**"). A Generator Application may only be submitted by a tenant if the Owner's tenant provides written confirmation at the time of submission that the Owner consents to the Generator Application. The ACC is not responsible for: (i) errors or omissions in the Generator Application submitted to the ACC for approval; (ii) supervising installation or construction to confirm compliance with an approved Generator Application or (iii) the compliance of an approved application with Applicable Law.

2. Approval Conditions. Each Generator Application and all Generators to be installed in accordance therewith must comply with the following:

(i) The Owner must install and maintain the Generator in accordance with the manufacturer's specifications and meet all applicable governmental health, safety, electrical, and building codes.

(ii) The Owner must use a licensed contractor(s) to install all electrical, plumbing, and fuel line connections and all electrical connections must be installed in accordance with all applicable governmental health, safety, electrical, and building codes.

(iii) The Owner must install all natural gas, diesel fuel, biodiesel fuel, and/or hydrogen fuel line connections in accordance with applicable governmental health, safety, electrical, and building codes.

(iv) The Owner must install all liquefied petroleum gas fuel line connections in accordance with the rules and standards promulgated and adopted by the Railroad Commission of Texas and other applicable governmental health, safety, electrical, and building codes.

(v) The Owner must install and maintain all non-integral standby Generator fuel tanks in compliance with applicable municipal zoning ordinances and governmental health, safety, electrical, and building codes.

(vi) The Owner must maintain in good condition the Generator and its electrical lines and fuel lines. The Owner is responsible to repair, replace, or remove any deteriorated or unsafe component of a Generator, including electrical and fuel lines.

(vii) The Owner must screen a Generator if it is visible from the street faced by the residence, located in an unfenced side or rear yard of a Lot, and is visible either from an adjoining residence or from adjoining property owned by the Association, and/or is located in a side or rear yard fenced by a wrought iron or residential aluminum fence and is visible through the fence either from an adjoining residence or from adjoining property owned by the Association.

(viii) The Owner may only perform periodic testing of the Generator consistent with the manufacturer's recommendations between the hours of 9 a.m. to 5 p.m., Monday through Friday.

(ix) No Owner shall use the Generator to generate all or substantially all of the electric power to the Owner's residence unless the utility-generated electrical power to the residence is not available or is intermittent due to causes other than nonpayment for utility service to the residence.

(x) No Owner shall locate the Generator (i) in the front yard of a residence; or (ii) in the side yard of a residence facing a street.

(xi) No Owner shall locate a Generator on property owned by the Association.

(xii) No Owner shall locate a Generator on any property owned in common by members of the Association.

3. Process. Any proposal to install a Generator on property owned by the Association or property owned in common by members of the Association must be approved in advance and in writing by the Board, and the Board need not adhere to the requirements set forth in this Generator Policy when considering any such request.

4. Approval. Each Owner is advised that if the Generator Application is approved by the ACC, installation of the Generator must: (i) strictly comply with the Generator Application; (ii) commence within thirty (30) days of approval; and (iii) be diligently prosecuted to completion. If the Owner fails to cause the Generator to be installed in accordance with the approved Generator Application, the ACC may require the Owner to: (a) modify the Generator Application to accurately reflect the Generator installed on the Property; or (b) remove the Generator and reinstall the Generator in accordance with the approved Generator Application. Failure to install the Generator in accordance with the approved Generator Application or an Owner's failure to comply with the post-approval requirements constitutes a violation of the Declaration and may subject the Owner to fines and penalties. Any requirement imposed by the ACC to resubmit a Generator Application or remove and relocate a Generator in accordance with the approved Generator Application shall be at the Owner's sole cost and expense.

ATTACHMENT 9
RELIGIOUS DISPLAY POLICY

Terms used but not defined in this policy will have the meanings ascribed to such terms in that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time.

1. **Display of Religious Items**. Section 202.018 of the Texas Property Code provides certain rights for an Owner or Resident to display or affix one or more religious items on the Owner's or Resident's property. The display of which is motivated by the Owner's or Resident's sincere religious belief.

2. **Content Prohibitions**. No religious item may be displayed that: (a) threatens the public health or safety; (b) violates a law other than a law prohibiting the display of religious speech; or (c) contains language, graphics, or any display that is patently offensive to a passerby for reasons other than its religious content.

3. **Location Restrictions**. No religious item may be displayed that: (a) is installed on property owned or maintained by the Association; (b) installed on or within Common Area; (c) violates any applicable building line, right-of-way, setback, or easement; or (d) is attached to a traffic control device, street lamp, fire hydrant, or utility sign, pole, or fixture.

4. **Removal**. The Association may cause to be removed any item which is in violation of the terms and provisions of this policy.

5. **Conflicts**. To the extent that any provision of the Association's recorded covenants restrict or prohibit an Owner or Resident from displaying or affixing a religious item in violation of the controlling provisions of Section 202.018 of the Texas Property Code, the Association shall have no authority to enforce such provisions, and the provisions of this policy shall control.

6. **Amendment**. This policy may be amended from time to time by the Board.

ATTACHMENT 10

POOL FENCING AND SECURITY DEVICES/FENCES POLICY

Terms used but not defined in this policy will have the meanings ascribed to such terms in that certain Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, recorded in the Official Public Records of Denton County, Texas, as the same may be amended from time to time.

1. **Approval Required**. All improvements, including the installation of pool fencing, security measures, and security fencing, must be submitted for approval in accordance with the Association's architectural review requirements. Written approval must be furnished to the Owner before installation or construction may commence.

2. **Swimming Pool Enclosures**. The term "**Swimming Pool Enclosure**" means a fence surrounding a water feature, including a swimming pool or spa, consisting of transparent mesh or clear panels set in metal frames, is not more than six feet (6') in height and is designed not to be climbable. An Owner must submit any request to install a Swimming Pool Enclosure to the ACC for approval. The ACC will apply its architectural requirements to the request; however, the ACC may not deny an Owner's request to install a Swimming Pool Enclosure if the Swimming Pool Enclosure conforms to Applicable Law and the Swimming Pool Enclosure is black in color and consists of transparent mesh set in metal frames.

3. **Security Measures**. To the extent an Owner is authorized by law to build or install security measures, including, but not limited to, a security camera, motion detector, or security/perimeter fencing, the Owner must still submit a request for architectural approval to the ACC in accordance with the Association's architectural review requirements for the construction or installation of Improvements. Front yard fencing is discouraged. However, if an Owner desires to install security fencing in the front yard, the fencing must consist of ornamental wrought iron or metal fencing (painted black) with the following general specifications: pickets ¾" square; rails 1 ½" square; standard posts 2 ½" square; picket spacing between 3" and 4"; post spacing 8' OC; height between 48" and 60". Slats, planks, or other solid material may not be installed on metal fencing.

4. **Amendment**. This policy may be amended from time to time by the Board.

ATTACHMENT 11

HIGHPOINTE RANCH

CORPORATE TRANSPARENCY ACT COMPLIANCE POLICY

Highpointe Ranch is a community (the "**Community**") created by and subject to the Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch, Recorded in the Official Public Records of Denton County, Texas, and any amendments or supplements thereto (the "**Declaration**"). The operation of the Community is vested in Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation (the "**Association**"), acting through its board of directors (the "**Board**"). The Association is empowered to enforce the covenants, conditions and restrictions of the Declaration, Certificate, Bylaws, Community Manual, and any Rules and Regulations promulgated by the Association pursuant to the Declaration, as adopted and amended from time to time (collectively, the "**Restrictions**"), including the obligation to ensure the Association complies with all legal reporting obligations.

The Board hereby adopts this Corporate Transparency Act Compliance Policy ("**Policy**") to establish procedures for compliance with the Corporate Transparency Act (the "**CTA**"). This Policy and the terms set forth herein shall serve as supplemental provisions of the Association's Bylaws and the Policy shall apply for so long as the Association is required to comply with the reporting obligations of the CTA, as described further herein. Terms used in this Policy, but not defined, shall have the meanings ascribed to such terms in the Restrictions.

1. **Background**:

The CTA is a federal statute that became effective on January 1, 2024. The CTA requires entities to report information about governing persons to the U.S. Department of the Treasury's Financial Crimes Enforcement Network ("**FinCEN**"). The information reported to FinCEN is intended to assist law enforcement in combating money laundering, tax fraud, terrorist financing, and other unlawful activities.

2. **Overview of CTA Compliance Requirements**:

The CTA requires any non-exempt entity to provide information about the entity's beneficial owners. The term "beneficial owner" includes any individual who exercises substantial control over the reporting entity, to include directors and officers. A beneficial owner report must include the person's full legal name, date of birth, and address, as well as supporting documentation (a scan or image of a person's driver's license or passport).

3. **Director and Officer Reports**:

Upon election or appointment to the Association's Board or election or appointment as an officer of the Association, the person so elected or appointed must elect to register directly with FinCEN and provide the assigned ID number to the Association or provide the required information to the Association. The options are described below:

(A) **Obtain and Provide a FinCEN ID**. In lieu of providing the required beneficial owner information to the Association, a beneficial owner may, instead, provide the information

directly to FinCEN and obtain a unique number known as a FinCEN identifier ("**FinCEN ID**") that would then be provided to the Association's Manager or, if no Manager has been appointed, to the Association's Board; or

(B) **Provide all Necessary CTA Reporting Information**. Provide his or her name, date of birth, and address, as well as supporting documentation (a scan or image of the person's state-issued driver's license or United States passport) (the "**CTA Information**") to the Association's Manager or, if no Manager has been appointed, to the Association's Board.

A FinCEN ID or, alternatively, CTA Information, must be provided on or before the twentieth (20th) day after such person's election or appointment.

4. **Removal for Noncompliance:**

Any person who fails to provide a FinCEN ID or CTA Information by the deadline provided herein is, as of the deadline, immediately ineligible to serve on the Board of the Association or as an officer of the Association, and automatically considered removed from the Board and/or the appointed officer position.

5. **Reinstatement:**

If the removed director/officer provides the CTA Information on or before the fifteenth (15th) day after the deadline provided in *Section 4* above, the person will automatically be reinstated to the position from which he or she was removed. Following removal and after the reinstatement period expires, if there has been no reinstatement, the remaining directors shall choose a successor who shall fill the unexpired term of the vacant directorship or officer position at a special meeting of the Board duly called for such purpose.

Denton County
Juli Luke
County Clerk

Instrument Number: 47109

ERecordings-RP

DECLARATION

Recorded On: May 06, 2024 10:29 AM

Number of Pages: 87

" Examined and Charged as Follows: "

Total Recording: $369.00

********** **THIS PAGE IS PART OF THE INSTRUMENT** **********
Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

File Information:

Document Number:	47109
Receipt Number:	20240506000204
Recorded Date/Time:	May 06, 2024 10:29 AM
User:	Calinda B
Station:	Station 20

Record and Return To:

Simplifile

STATE OF TEXAS
COUNTY OF DENTON

I hereby certify that this Instrument was FILED In the File Number sequence on the date/time printed hereon, and was duly RECORDED in the Official Records of Denton County, Texas.

Juli Luke
County Clerk
Denton County, TX

AFTER RECORDING RETURN TO:
KRISTI E. STOTTS, ESQ.
WINSTEAD PC
401 CONGRESS AVE., SUITE 2100
AUSTIN, TEXAS 78701
EMAIL: KSTOTTS@WINSTEAD.COM

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR

HIGHPOINTE RANCH

[*DENTON COUNTY, TEXAS*]

Declarant: **LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.**, a Texas limited partnership

This Declaration of Covenants, Conditions and Restrictions may be used only in connection with the residential community known as Highpointe Ranch in Denton County, Texas and the operation of Highpointe Ranch Residential Community, Inc., a Texas nonprofit corporation.

4872-3982-0467v.2 54969-156

TABLE OF CONTENTS

PAGE

ARTICLE 1 DEFINITIONS **1**

ARTICLE 2 GENERAL AND USE RESTRICTIONS **7**

2.1 General. 8
2.2 Conceptual Plans 8
2.3 Single-Family Residential Use 9
2.4 Subdividing 10
2.5 Hazardous Activities 10
2.6 Insurance Rates 10
2.7 Mining and Drilling 10
2.8 Noise 11
2.9 Animals - Household Pets 11
2.10 Rubbish and Debris 11
2.11 Maintenance 12
2.12 Street Landscape Area-Owner's Obligation to Maintain Landscaping 12
2.13 Antennas 13
2.14 Location of Permitted Antennas 13
2.15 Signs 14
2.16 Flags – Approval Requirements 15
2.17 Flags – Installation and Display 15
2.18 Tanks 16
2.19 Temporary Structures 16
2.20 Outside Storage Buildings 16
2.21 Unsightly Articles; Vehicles 16
2.22 Mobile Homes, Travel Trailers and Recreational Vehicles 17
2.23 Basketball Goals; Permanent and Portable 17
2.24 Compliance with Restrictions 17
2.25 Liability of Owners for Damage to Common Area 18
2.26 Party Wall Fences; Party Walls 18
2.27 Playscapes and Sports Courts 20
2.28 Decorations and Lighting 20
2.29 Water Quality Facilities, Drainage Facilities and Drainage Ponds 20
2.30 Cell Tower and Telecommunications Equipment 21
2.31 Shared Mailboxes 21
2.32 Release and Indemnity 21

ARTICLE 3 CONSTRUCTION RESTRICTIONS **22**

3.1 Approval for Construction 22
3.2 Rentals 22
3.3 Fences; Sidewalks 22
3.4 Trash Containers 22

TABLE OF CONTENTS

PAGE

3.5 Drainage 23
3.6 Construction Activities 23
3.7 Roofing 23
3.8 Swimming Pools 24
3.9 Compliance with Setbacks 24
3.10 Solar Energy Device 24
3.11 Rainwater Harvesting Systems 25
3.12 Xeriscaping 26
3.13 Utility Lines 28
3.14 Garages 28
3.15 Flood Zone(s) 28

ARTICLE 4 HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC. 28
4.1 Organization 28
4.2 Membership. 28
4.3 Governance 30
4.4 Voting Allocation 31
4.5 Powers 31
4.6 Conveyance of Common Area to the Association 35
4.7 Indemnification 35
4.8 Insurance 36
4.9 Bulk Rate Contracts 36
4.10 Community Services and Systems 37
4.11 Protection of Declarant's Interests 38
4.12 Administration of Common Area 38
4.13 Right of Action by Association 38
4.14 Resolution of Board Deadlock 39

ARTICLE 5 INSURANCE AND RESTORATION 39
5.1 Insurance 39
5.2 Restoration 39
5.3 Mechanic's and Materialmen's Lien 40
5.4 Flood Insurance 40

ARTICLE 6 COVENANT FOR ASSESSMENTS 41
6.1 Assessments. 41
6.2 Maintenance Fund 41
6.3 Regular Assessments 41
6.4 Working Capital Assessment 42
6.5 Special Assessments 43
6.6 Individual Assessments 43
6.7 Amount of Assessment. 43
6.8 Late Charges 44

TABLE OF CONTENTS

PAGE

6.9 Owner's Personal Obligation; Interest 44
6.10 Assessment Lien and Foreclosure 44
6.11 Exempt Property 46
6.12 Fines and Damages Assessment. 46

ARTICLE 7 ARCHITECTURAL CONTROL COMMITTEE 47
7.1 Construction of Improvements 47
7.2 Architectural Control Committee. 47

ARTICLE 8 MORTGAGE PROVISIONS 50
8.1 Notice of Action 51
8.2 Examination of Books 51
8.3 Taxes, Assessments and Charges 51

ARTICLE 9 EASEMENTS 51
9.1 Right of Ingress and Egress 51
9.2 Reserved Easements 52
9.3 Roadway and Utility Easements 52
9.4 Subdivision Entry, Screening Walls and Fencing Easement 53
9.5 Landscape, Monumentation and Signage Easement 53
9.6 Easement for Special Events 53
9.7 Solar Equipment Easement 53
9.8 Cellular Tower and Telecommunications Easement 54
9.9 Easement to Inspect and Right to Correct 55
9.10 Shared Facilities Agreement 55

ARTICLE 10 DEVELOPMENT RIGHTS 56
10.1 Development by Declarant 56
10.2 Special Declarant Rights 56
10.3 Addition of Land 56
10.4 Withdrawal of Land 57
10.5 Notice of Plat Recordation 57
10.6 Assignment of Declarant's Rights 58
10.7 Limitation on Rights of Declarant 59

ARTICLE 11 GENERAL PROVISIONS 59
11.1 Term 59
11.2 Eminent Domain 60
11.3 Amendment 60
11.4 Enforcement 61
11.5 No Warranty of Enforceability 62
11.6 Declarant Fine Authority 62
11.7 Higher Authority 62

TABLE OF CONTENTS

PAGE

11.8 Severability 63
11.9 Conflicts 63
11.10 Gender 63
11.11 Acceptance by Owners 63
11.12 Damage and Destruction 63
11.13 No Partition 64
11.14 View Impairment 64
11.15 Safety and Security 64
11.16 Notices 65

ARTICLE 12 DISPUTE RESOLUTION 65
12.1 Introduction and Definitions 65
12.2 Mandatory Procedures 66
12.3 Claim Affecting Common Areas 67
12.4 Claim by Lot Owners 71
12.5 Notice 71
12.6 Negotiation 72
12.7 Mediation 72
12.8 Binding Arbitration-Claims 73
12.9 Allocation of Costs 74
12.10 Waiver of Rights under Certain Statutory Provisions 75
12.11 General Provisions 75
12.12 Period of Limitation 75
12.13 Funding the Resolution of Claims 76

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR HIGHPOINTE RANCH

This Declaration of Covenants, Conditions and Restrictions for Highpointe Ranch (the "**Declaration**") is made by **LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.**, a Texas limited partnership (the "**Declarant**"), and is as follows:

R E C I T A L S:

A. This Declaration is filed with respect to that certain real property located in Denton County, Texas, as more particularly described on Exhibit "A" attached hereto and incorporated herein by reference (the "**Property**"). Declarant has the right to acquire the Property pursuant to the Option Agreement (as defined in *Article 1*).

B. KLLB AIV LLC, a Delaware limited liability company (the "**Development Owner**") is the current record title owner of the Property and executes this Declaration to evidence its consent to subject the Property to the terms and provision of this Declaration.

C. Declarant, as the developer, desires to create and carry out a uniform plan for the development, improvement, and sale of the Property.

D. By the Recording of this Declaration, Declarant serves notice that the Property is subject to the terms and provisions of this Declaration.

NOW, THEREFORE, it is hereby declared: (i) that the Property (or any portion thereof) will be held sold, conveyed, and occupied subject to the following covenants, conditions and restrictions which will run with such portions of the Property and will be binding upon all parties having right, title, or interest in or to such portions of the Property or any part thereof, their heirs, successors, and assigns and will inure to the benefit of each owner thereof; and (ii) that each contract or deed conveying the Property (or any portion thereof) will conclusively be held to have been executed, delivered, and accepted subject to the following covenants, conditions and restrictions, regardless of whether or not the same are set out in full or by reference in said contract or deed.

This Declaration uses notes (text set apart in boxes) to illustrate concepts and assist the reader. If there is a conflict between any note and the text of this Declaration, the text will control.

ARTICLE 1
DEFINITIONS

Unless the context otherwise specifies or requires, the following words and phrases when used in this Declaration will have the meanings hereinafter specified:

"**Applicable Law**" means all statutes, public laws, ordinances, policies, rules, regulations and orders of all federal, state, county and municipal governments or their agencies having jurisdiction and control over the Property in effect at the time a provision of the Restrictions is applied, and pertaining to the subject matter of the Restriction provision, and all other ordinances and any other applicable building codes, zoning restrictions and permits or other applicable regulations. Statutes and ordinances specifically referenced in the Restrictions are "Applicable Law" on the date of the Restrictions, and are not intended to apply to the Property if they cease to be applicable by operation of law, or if they are replaced or superseded by one or more other statutes or ordinances.

"**Architectural Control Committee**" or "**ACC**" means the committee created pursuant to this Declaration to review and approve or deny plans for the construction, placement, modification, alteration or remodeling of any Improvements on a Lot. As provided in *Article 7* below, the Declarant acts as the ACC and the ACC is not a committee of the Association until the Declarant has assigned its right to appoint and remove all ACC members to the Association in a Recorded written instrument.

"**Assessment**" or "**Assessments**" means all assessments imposed by the Association under this Declaration.

"**Assessment Unit**" has the meaning set forth in *Section 6.7.2*.

"**Association**" means **HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.**, a Texas nonprofit corporation, which will be created by Declarant to exercise the authority and assume the powers specified in *Article 4* and elsewhere in this Declaration. The failure of the Association to maintain its corporate charter from time to time does not affect the existence or legitimacy of the Association, which derives its authority from this Declaration, the Certificate, the Bylaws, and Applicable Law.

"**Board**" means the Board of Directors of the Association.

"**Bulk Rate Contract**" or "**Bulk Rate Contracts**" means one or more contracts which are entered into by the Association for the provision of utility services or other services of any kind or nature to the Lots. The services provided under Bulk Rate Contracts may include, without limitation, cable television services, telecommunications services, internet access services, "broadband" services, security services, trash pick-up services, propane service, natural gas service, lawn maintenance services, wastewater services, and any other services of any kind or nature which are considered by the Board to be beneficial to all or a portion of the Property. Each Bulk Rate Contract must be approved in advance and in writing by the Declarant until expiration or termination of the Development Period.

"**Bylaws**" means the Bylaws of the Association.

"**Certificate**" means the Certificate of Formation of the Association, filed in the Office of the Secretary of State of Texas, as the same may be amended from time to time.

"**City**" means the City of Aubrey, Texas.

"**Common Area**" means any property and facilities that the Association owns or in which it otherwise holds rights or obligations, including any property or facilities (i) held by the Declarant for the benefit of the Association or its Members or (ii) designated by the Declarant as Common Area in accordance with *Section 4.6*. Upon the Recording of such designation, the portion of the Property identified therein shall be considered Common Area for the purpose of this Declaration. Common Area also includes any property that the Association holds under a lease, license, or any easement in favor of the Association. Some Common Area shall be solely for the common use and enjoyment of the Owners, while other portions of the Common Area may be designated by the Declarant or the Board for the use and enjoyment of the Owners and members of the public.

"**Community Manual**" means the community manual of the Association, which may be initially adopted and Recorded by the Declarant as part of the initial project documentation for the benefit of the Association and the Property. The Community Manual may include the Bylaws, Rules and Regulations and other policies governing the Association. The Bylaws, Rules and Regulations and other policies set forth in the Community Manual may be amended or supplemented, from time to time, by the Declarant during the Development Period. Any amendment to the Bylaws, Rules and Regulations and other policies governing the Association prosecuted by the Board must be approved in advance and in writing by the Declarant until expiration or termination of the Development Period. Upon expiration or termination of the Development Period, the Community Manual may be amended or supplemented by a Majority of the Board. Notwithstanding the foregoing or anything to the contrary herein, for so long as Development Owner owns any Lot or portion of the Property, any amendment or supplement to the Community Manual, including any amendment or supplement to the Bylaws, Rules and Regulations, or other policies contained therein, will require the prior written consent of Development Owner.

"**Declarant**" means **LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.**, a Texas limited partnership, or any of its successors or assigns; provided that any assignment(s) of the rights of **LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.**, a Texas limited partnership, as Declarant, or of any successor Declarant, must be expressly set forth in writing and Recorded. Declarant's right to assign all or a portion of any rights granted to the Declarant, or any obligations of the Declarant, in this Declaration is subject to the rights of Development Owner as provided herein (including, without limitation, the terms and provisions of *Section 10.6* of this Declaration) and to the terms and provisions of this paragraph and elsewhere in this Declaration. Except as otherwise provided in the instrument of assignment, in the event of a partial assignment of some, but not all, of the Declarant's rights and/or obligations, the assignee shall not be deemed the Declarant hereunder, but may exercise

only those rights, or shall be responsible for only those obligations, of the Declarant assigned to such assignee, and provided further that as long as Development Owner owns any of the Property, Declarant (and any assignee(s) of Declarant, if applicable) may only assign its rights, powers, authority and obligations under the Declaration with the prior written consent of Development Owner (which consent may be given or withheld by Development Owner in its sole and absolute discretion). Any purported assignment without such consent shall be deemed void and of no force and consent.

Declarant enjoys special rights and privileges to help protect its investment in the Property. These special rights are described in this Declaration. Many of these rights do not terminate until either Declarant: (i) has conveyed all Lots which may be created out of the Property; or (ii) voluntarily terminates these rights by a Recorded written instrument.

"**Design Guidelines**" means the standards for design, construction, landscaping, and exterior items proposed to be placed on any Lot adopted pursuant to *Section 7.2.3*, as the same may be amended from time to time. The Design Guidelines may consist of multiple written design guidelines applying to specific portions of the Property. At Declarant's option, Declarant may adopt or amend from time to time Design Guidelines for the Property or any portion thereof; provided, however, that for so long as Development Owner owns any Lot or portion of the Property, any adoption of or amendment to the Design Guidelines will require the prior written consent of Development Owner. Notwithstanding anything in this Declaration to the contrary, Declarant will have no obligation to establish Design Guidelines for the Property or any portion thereof.

"**Development Owner**" means **KLLB AIV LLC**, a Delaware limited liability company, or any of its successors or assigns.

"**Development Period**" means the period of time beginning on the date when this Declaration has been Recorded, and ending thirty (30) years thereafter, unless earlier terminated by a Recorded written instrument executed by the Declarant; provided, however, that for so long as Development Owner owns any Lot or portion of the Property, any termination of the Development Period will require the prior written consent of Development Owner (which consent may be given or withheld by Development Owner in its sole and absolute discretion). Declarant may terminate the Development Period by an instrument executed by Declarant and Recorded. The Development Period is the period in which Declarant reserves the right to facilitate the development, construction, and marketing of the Property, and the right to direct the size, shape and composition of the Property. The Development Period is for a term of years and does not require that Declarant own any portion of the Property.

"**Homebuilder**" means an Owner (other than the Declarant) who acquires a Lot for the construction of a single-family residence for resale to a third party.

"**Improvement**" means all physical enhancements and alterations to the Property, including but not limited to grading, clearing, removal of trees, alteration of drainage flow, and site work, and every structure and all appurtenances of every type and kind, whether temporary or permanent in nature, including, but not limited to, buildings, outbuildings, storage sheds, patios, tennis courts, sport courts, recreational facilities, swimming pools, putting greens, garages, driveways, parking areas and/or facilities, storage buildings, sidewalks, fences, gates, screening walls, retaining walls, stairs, patios, decks, walkways, landscaping, mailboxes, poles, signs, antennas, exterior air conditioning equipment or fixtures, exterior lighting fixtures, water softener fixtures or equipment, and poles, pumps, wells, tanks, reservoirs, pipes, lines, meters, antennas, towers and other facilities used in connection with water, sewer, gas, electric, telephone, regular or cable television, or other utilities.

"**Lot**" means any portion of the Property designated by Declarant in a Recorded written instrument or as shown as a subdivided Lot on a Plat other than Common Area.

"**Majority**" means more than half.

"**Manager**" has the meaning set forth in *Section 4.5.8*.

"**Maximum Number of Lots**" means the maximum number of Lots that may be created and made subject to the terms and provisions of this Declaration. The Maximum Number of Lots for the purpose of this Declaration is one thousand seven hundred fifty (1,750). Until expiration or termination of the Development Period, Declarant may unilaterally increase or decrease the Maximum Number by Recorded written instrument.

"**Members**" means every person or entity that holds membership privileges in the Association.

"**Mortgage**" or "**Mortgages**" means any mortgage(s) or deed(s) of trust securing indebtedness and covering any Lot.

"**Mortgagee**" or "**Mortgagees**" means the holder(s) of any Mortgage(s).

"**Option Agreement**" means that certain Option Agreement dated as of September 6, 2023, by and between Declarant and Development Owner, pursuant to which, among other things, Declarant has the right to acquire the Property and/or Lots from Development Owner, as evidenced by that certain Memorandum of Option Agreement, recorded under Document No. 2023-105608, Official Public Records of Denton County, Texas, as the same may be amended from time to time.

"**Owner**" means the person(s), entity or entities, including Declarant and Development Owner, holding all or a portion of the fee simple interest in any Lot, but does not include the Mortgagee under a Mortgage prior to its acquisition of fee simple interest in such Lot pursuant to foreclosure of the lien of its Mortgage.

"**Plat**" means a Recorded subdivision plat of all or any portion of the Property, and any amendments thereto.

"**Property**" means that certain real property located in Denton County, Texas, as more particularly described on Exhibit "A" attached hereto and incorporated herein, subject to such additions thereto and deletions therefrom as may be made pursuant to *Section 10.3* and *Section 10.4* of this Declaration.

"**Record, Recordation, Recorded and Recording**" means recorded or to be recorded in the Official Public Records of Denton County, Texas.

"**Resident**" means an occupant or tenant of a Lot, regardless of whether the person owns the Lot.

"**Restrictions**" means the restrictions, covenants, terms and conditions contained in this Declaration, the Design Guidelines, Bylaws, Community Manual, Rules and Regulations, or in any other rules and regulations promulgated by the Association pursuant to this Declaration, as adopted and amended from time to time. See Table 1 for a summary of the Restrictions.

"**Rules and Regulations**" means any instrument, however denominated, which may be adopted by the Declarant as part of the Community Manual or subsequently adopted by the Board for the regulation and management of the Property or the Common Area, including any amendments and/or supplements to those instruments. Until expiration or termination of the Development Period, the Declarant may unilaterally amend the Rules and Regulations and must approve any amendment to the Rules and Regulations adopted by a Majority of the Board. Notwithstanding the foregoing, for so long as Development Owner owns any Lot or portion of the Property, any amendment or supplement to the Rules and Regulations will require the prior written approval of Development Owner.

"**Solar Energy Device**" means a system or series of mechanisms designed primarily to provide heating or cooling or to produce electrical or mechanical power by collecting and transferring solar-generated energy. The term includes a mechanical or chemical device that has the ability to store solar-generated energy for use in heating or cooling or in the production of power.

TABLE 1: RESTRICTIONS	
Declaration (Recorded)	Creates obligations that are binding upon the Association and all present and future owners of the Property.
Certificate of Formation (Recorded)	Establishes the Association as a Texas nonprofit corporation.

Bylaws (Recorded)	Governs the Association's internal affairs, such as elections, meetings, etc.
Community Manual (Recorded)	Establishes Rules and Regulations and policies governing the Association and the Property.
Design Guidelines (if adopted, Recorded)	Governs the design and architectural standards for the construction of Improvements and modifications thereto. The Declarant shall have no obligation to adopt the Design Guidelines.
Rules and Regulations (if adopted, Recorded)	Regulates the use of property, activities, and conduct within the Property or the Common Area.
Board Resolutions (adopted by the Board of the Association)	Establishes rules, policies, and procedures for the Property, Owners and Association.
Notice of Withdrawal of Land (if applicable, Recorded)	Withdraws and removes land from the Property so that such land is no longer burdened by the terms of this Declaration and no longer under the jurisdiction of the Association.
Notice of Addition of Land (if applicable, Recorded)	Adds additional land to the Property, so such land will be considered part of the Property and subject to the terms of this Declaration and under the jurisdiction of the Association.
Notice of Plat Recordation (Recorded)	Identifies specific residential Lots within a Plat. Upon recordation of a Notice of Plat Recordation, the Property included within the Plat not comprising a residential Lot will automatically be withdrawn from the terms and provisions of this Declaration. Declarant shall have no obligation to Record a Notice of Plat Recordation.

ARTICLE 2
GENERAL AND USE RESTRICTIONS

All of the Property shall be owned, held, encumbered, leased, used, occupied, and enjoyed subject to the following limitations and restrictions:

2.1 General.

2.1.1 Conditions and Restrictions. All Lots within the Property will be owned, held, encumbered, leased, used, occupied and enjoyed subject to the Restrictions and Applicable Law.

2.1.2 Ordinances. Ordinances and requirements imposed by governmental authorities are applicable to all Lots within the Property. Compliance with the Restrictions is not a substitute for compliance with Applicable Law. Please be advised that the Restrictions do not purport to list or describe each restriction which may be applicable to a Lot located within the Property. Each Owner is advised to review all ordinances, requirements, regulations and encumbrances affecting the use and improvement of their Lot prior to submitting plans to the ACC for approval. Furthermore, approval by the ACC should not be construed by the Owner that any Improvement complies with the terms and provisions of any ordinances, requirements, regulations or encumbrances which may affect the Owner's Lot. Certain encumbrances may benefit parties whose interests are not addressed by the ACC.

2.1.3 Compliance with Development Agreement. The Association, each Owner, Homebuilder, Resident or other user of any portion of the Property must comply with the Restrictions and Applicable Law, as well as those certain obligations and requirements set forth in that certain Development Agreement by and among the City and ALW 377 LLC, a Texas limited liability company, and FM Land I, LLC, a Texas limited liability company, dated June 30, 2021, and recorded under Document No. 2021-131889, Official Public Records of Denton County, Texas (the "**Development Agreement**"). The Development Agreement contains certain development and maintenance standards for Lots and residential homes constructed on the Lots. Each Owner and Homebuilder is advised to review the Development Agreement prior to acquisition of a Lot and prior to commencement of construction of any Improvements on the Property.

NOTICE
The Restrictions are subject to change from time to time. By owning or occupying a Lot, you agree to remain in compliance with the Restrictions, as they may change from time to time.

2.2 Conceptual Plans. All master plans, site plans, brochures, illustrations, information and marketing materials relating to the Property or the Common Area (collectively, the "**Conceptual Plans**") are conceptual in nature, may change, and are intended to be used for illustrative purposes only. The land uses and Improvements, including but not limited to the design and style of homes and/or amenity centers (if any), reflected on the Conceptual Plans are subject to change at any time and from time to time, and it is expressly agreed and understood that the land uses within the Property or the Common Area may include uses which are not shown on the Conceptual Plans. Neither Declarant, Development Owner, nor any

Homebuilder or other developer of any portion of the Property or the Common Area makes any representation or warranty concerning land uses, architectural design or style, available amenities, or Improvements shown on the Conceptual Plans or otherwise planned for the Property or the Common Area, and it is expressly agreed and understood that no Owner will be entitled to rely upon the Conceptual Plans or any statements made by the Declarant, Development Owner or any of their respective representatives regarding the proposed land uses or proposed or planned Improvements in making the decision to purchase any land or Improvements within the Property. Each Owner who acquires a Lot within the Property acknowledges that development of the Property and/or the Common Area will likely extend over many years, and agrees that the Association will not engage in, or use Association funds to support, protest, challenge, or make any other form of objection to development of the Property or the Common Area or changes in the Conceptual Plans as they may be amended or modified from time to time.

2.3 Single-Family Residential Use. The Lots shall be used solely for private single-family residential purposes.

No professional, business, or commercial activity to which the general public is invited shall be conducted on any Lot, except an Owner or Resident may conduct business activities within a residence so long as: (i) such activity complies with all Applicable Law; (ii) the business activity is conducted without the employment of persons other than the Residents of the home constructed in the Lot; (iii) the business activity does not involve customers, contractors, clients, or the general public visiting the residence to conduct activities related to the business; (iv) the existence or operation of the business activity is not apparent or detectable by sight, i.e., no sign may be erected advertising the business on any Lot, sound, or smell from outside the residence; (v) the business activity does not involve door-to-door solicitation of Residents within the Property; (vi) the business does not, in the Board's judgment, generate a level of vehicular or pedestrian traffic or a number of vehicles parked within the Property which is noticeably greater than that which is typical of residences in which no business activity is being conducted; (vii) the business activity is consistent with the residential character of the Property and does not constitute a nuisance, or a hazardous or offensive use, or threaten the security or safety of other Residents of the Property as may be determined in the sole discretion of the Board; and (viii) the business does not require the installation of any machinery other than that customary to normal household operations. In addition, for the purpose of obtaining any business or commercial license, neither the residence nor Lot will be considered open to the public. The terms "business" and "trade", as used in this provision, shall be construed to have their ordinary, generally accepted meanings and shall include, without limitation, any occupation, work, or activity undertaken on an ongoing basis which involves the provision of goods or services to persons other than the provider's family and for which the provider receives a fee, compensation, or other form of consideration, regardless of whether: (x) such activity is engaged in full or part-time; (y) such activity is intended to or does generate a profit; or (z) a license is required.

Leasing of a residence shall not be considered a business or trade within the meaning of this subsection. This subsection shall not apply to any activity conducted by the Declarant, Development Owner or a Homebuilder.

Notwithstanding any provision in this Declaration to the contrary, until the expiration or termination of the Development Period:

(i) Declarant and/or its licensees may construct and maintain upon portions of the Common Area, any Lot, or portion of the Property owned by the Declarant, such facilities and may conduct such activities, which, in Declarant's sole opinion, may be reasonably required, convenient, or incidental to the construction or sale of single-family residences or other Improvements constructed upon the Lots, including, but not limited to, business offices, signs, model homes, and sales offices. Declarant and/or its licensees shall have an easement over and across the Common Area for access and use of such facilities at no charge; and

(ii) Declarant and/or its licensees will have an access easement over and across the Common Area for the purpose of making, constructing and installing Improvements upon the Common Area.

2.4 Subdividing. No Lot shall be further divided or subdivided, nor may any easements or other interests therein less than the whole be conveyed by the Owner thereof without the prior written approval of the ACC; provided, however, that when Declarant is the Owner thereof, Declarant may further divide and subdivide any Lot and convey any easements or other interests less than the whole, all without the approval of the ACC.

2.5 Hazardous Activities. No activities may be conducted on or within the Property and no Improvements may be constructed on or within any portion of the Property which, in the opinion of the Board, are or might be unsafe or hazardous to any person or property. Without limiting the generality of the foregoing, no firearms or fireworks may be discharged upon any portion of the Property unless discharged in conjunction with an event approved in advance by the Board and no open fires may be lighted or permitted except within safe and well-designed fireplaces or in contained barbecue units while attended and in use for cooking purposes. No portion of the Property may be used for the takeoff, storage, or landing of aircraft (including, without limitation, helicopters) except for medical emergencies.

2.6 Insurance Rates. Nothing shall be done or kept on the Property which would increase the rate of casualty or liability insurance or cause the cancellation of any such insurance on the Common Area, or the Improvements located thereon, without the prior written approval of the Board.

2.7 Mining and Drilling. No portion of the Property or the Common Area may be used for the purpose of mining, quarrying, drilling, boring, or exploring for or removing oil,

gas, or other hydrocarbons, minerals of any kind, rocks, stones, sand, gravel, aggregate, or earth. This provision will not be construed to prevent the excavation of rocks, stones, sand, gravel, aggregate, or earth or the storage of such material for use as fill provided that such activities are conducted in conjunction with the construction of Improvements and/or the development of the Property or the Common Area by the Declarant. Furthermore, this provision will not be interpreted to prevent the drilling of water wells by the Declarant or Development Owner or otherwise approved in advance by the ACC which are required to provide water to all or any portion of the Property. All water wells, other than those constructed by the Declarant, Development Owner, or their respective designees, must also be approved in advance by the ACC and any applicable regulatory authority.

2.8 Noise. No noise or other nuisance shall be permitted to exist or operate upon any portion of the Property so as to be offensive or detrimental to any other portion of the Property or to its Residents.

2.9 Animals - Household Pets. No animals, including pigs, hogs, swine, poultry, fowl, wild animals, horses, cattle, sheep, goats, or any other type of animal not considered to be a domestic household pet within the ordinary meaning and interpretation of such words may be kept, maintained, or cared for on or within the Property (as used in this paragraph, the term "domestic household pet" shall not mean or include non-traditional pets such pot-bellied pigs, miniature horses, exotic snakes or lizards, monkeys, chickens, or other exotic animals). The Board may determine, in its sole discretion, whether a particular pet is a domestic household pet within the ordinary meaning and interpretation of such words. No Owner may keep on such Owner's Lot more than four (4) cats and dogs, in the aggregate. No animal may be allowed to make an unreasonable amount of noise, or to become a nuisance, and no domestic pets will be allowed on the Property other than within the Owner's residence, or the fenced yard space associated therewith, unless confined to a leash. The Association may restrict pets to certain areas on the Property. No animal may be stabled, maintained, kept, cared for, or boarded for hire or remuneration on the Property, and no kennels or breeding operation will be allowed. No animal may be allowed to run at large, and all animals must be kept within enclosed areas which must be clean, sanitary, and reasonably free of refuse, insects, and waste at all times. No pet may be left unattended in unfenced yards, porches or other unfenced outside area. All pet waste will be removed and appropriately disposed of by the owner of the pet. All pets must be registered, licensed, and inoculated as required by Applicable Law. If the Board determines, in its sole discretion, that a pet becomes a source of unreasonable annoyance to others, or the owner of the pet fails or refuses to comply with these restrictions, the Owner, upon written notice, may be required to remove the pet from the Property.

2.10 Rubbish and Debris. As determined by the Board, no rubbish or debris of any kind may be placed or permitted to accumulate on or within the Property, and no odors will be permitted to arise therefrom so as to render all or any portion of the Property unsanitary, unsightly, offensive, or detrimental to any other property or Residents. Refuse, garbage, and trash must be kept at all times in covered containers, and such containers must be kept within

enclosed structures or appropriately screened from view. Each Owner will contract with an independent disposal service to collect all garbage or other wastes, if such service is not provided by a governmental entity or the Association.

2.11 Maintenance. The Owners of each Lot shall jointly and severally have the duty and responsibility, at their sole cost and expense, to keep their Lot and all Improvements thereon in good condition and repair and in a well-maintained, safe, clean and attractive condition at all times. The Board, in its sole discretion, shall determine whether a violation of the maintenance obligations set forth in this *Section 2.11* has occurred. Such maintenance includes, but is not limited to the following, which shall be performed in a timely manner, as determined by the Board, in its sole discretion:

(i) Prompt removal of all litter, trash, refuse, and wastes.

(ii) Lawn mowing and edging.

(iii) Tree and shrub pruning.

(iv) Watering of lawn and landscaping.

(v) Keeping exterior lighting and mechanical facilities in working order.

(vi) Keeping lawn and garden areas alive, free of weeds, and attractive.

(vii) Keeping planting beds free of turf grass.

(viii) Keeping sidewalks and driveways in good repair.

(ix) Complying with Applicable Law.

(x) Repainting of Improvements.

(xi) Repair of exterior damage, and wear and tear to Improvements.

2.12 Street Landscape Area-Owner's Obligation to Maintain Landscaping. Each Owner will be responsible, at such Owner's sole cost and expense, for maintaining mowing, replacing, pruning, and irrigating the landscaping between the boundary of such Owner's Lot and the curb of any adjacent right-of-way, street or alley (the "**ST Landscape Area**") unless the responsibility for maintaining the ST Landscape Area is performed by the Association and/or the City. If the maintenance of any ST Landscape Area is the responsibility of the City, and the City fails to properly maintain the ST Landscape Area as determined in the sole and absolute discretion of the Board, the Association, if allowed by Applicable Law, may have the

responsibility for maintaining such ST Landscape Area and the costs incurred, or estimated to be incurred by the Association, shall be discharged through Assessments.

2.13 Antennas. Except as expressly provided below, no exterior radio or television antennas, or aerial or satellite dish or disc, nor any Solar Energy Device, shall be erected, maintained or placed on a Lot without the prior written approval of the ACC; provided, however, that:

(i) an antenna designed to receive direct broadcast services, including direct-to-home satellite services, that is one meter or less in diameter; or

(ii) an antenna designed to receive video programming services via multipoint distribution services, including multi-channel multipoint distribution services, instructional television fixed services, and local multipoint distribution services, that is one meter or less in diameter or diagonal measurement; or

(iii) an antenna that is designed to receive television or radio broadcast signals.

(collectively, (i) through (iii) are referred to herein as the "**Permitted Antennas**") will be permitted subject to reasonable requirements as to location and screening as may be set forth in rules adopted by the ACC, consistent with Applicable Law, in order to minimize obtrusiveness as viewed from streets and adjacent property. Declarant and/or the Association will have the right, but not the obligation, to erect an aerial, satellite dish, or other apparatus for a master antenna, cable, or other communication system for the benefit of all or any portion of the Property.

2.14 Location of Permitted Antennas. A Permitted Antenna may be installed solely on the Owner's Lot and shall not encroach upon any street, Common Area, or any other portion of the Property. A Permitted Antenna shall be installed in a location on the Lot from which an acceptable quality signal can be obtained and where least visible from the street and the Property, other than the Lot. In order of preference, the locations of a Permitted Antenna which will be considered least visible by the ACC are as follows:

(i) Attached to the back of the principal single-family residence constructed on the Lot, with no part of the Permitted Antenna any higher than the roof fascia, soffit, or bargeboard and screened from view of adjacent Lots and the street; then

(ii) Attached to the side of the principal single-family residence constructed on the Lot, with no part of the Permitted Antenna any higher than the roof fascia, soffit, or bargeboard and screened from view of adjacent Lots and the street.

The ACC may, from time to time, modify, amend, or supplement the rules regarding installation and placement of Permitted Antennas.

Satellite dishes one meter or less in diameter, e.g., DirecTV or Dish satellite dishes, are permitted, HOWEVER, you are required to comply with the Rules and Regulations regarding installation and placement. These Rules and Regulations may be modified by the ACC from time to time. Please contact the ACC for the current Rules and Regulations regarding installation and placement.

2.15 Signs. Unless otherwise permitted by Applicable Law, no sign of any kind may be displayed to the public view on any Lot without the prior written approval of the ACC, except for:

(i) signs which are expressly permitted pursuant to the Design Guidelines or Rules and Regulations;

(ii) signs which are part of Declarant or Homebuilder's overall marketing, sale, or construction plans or activities for the Property;

(iii) one (1) temporary "For Sale" sign placed on the Lot. The sign must be professionally made and shall be limited to a maximum face area of five (5) square feet on each visible side and, if free standing, is mounted on a single or frame post. The overall height of the sign from the finished grade of the Lot at the spot where the sign is located may not exceed four feet (4'). The sign must be removed within two (2) business days following the sale of the Lot;

(iv) candidate or measure signs may be erected provided the sign: (a) is erected no earlier than the ninetieth (90th) day before the date of the election to which the sign relates; (b) is removed no later than the tenth (10th) day after the date of the election to which the sign relates; and (c) is ground-mounted. Only one sign may be erected for each candidate or measure. In addition, signs which include any of the components or characteristics described in Section 259.002(d) of the Texas Election Code are prohibited;

(v) permits as may be required by legal proceedings;

(vi) permits as may be required by any governmental entity; and

(vii) one (1) "no soliciting" and "security warning" sign near or on the front door of the residence, provided, that the sign may not exceed twenty-five (25) square inches.

For Lease and For Rent signs are expressly prohibited.

2.16 Flags – Approval Requirements. An Owner is permitted to display the flag of the United States of America, the flag of the State of Texas, an official or replica flag of any branch of the United States armed forces, or one (1) flag with official insignia of a college or university (**"Permitted Flag"**) and to install a flagpole no more than five feet (5′) in length affixed to the front of a residence near the principal entry or affixed to the rear of a residence (**"Permitted Flagpole"**). Only two (2) Permitted Flagpoles are allowed per residence. A Permitted Flag or Permitted Flagpole need not be approved in advance by the ACC. Approval by the ACC is required prior to installing vertical freestanding flagpoles installed in the front or back yard area of any Lot (**"Freestanding Flagpole"**).

2.17 Flags – Installation and Display. With the exception of flags displayed on or within the Common Area or any Lot which is being used for marketing purposes by the Declarant or a Homebuilder, unless otherwise approved in advance and in writing by the ACC, Permitted Flags, Permitted Flagpoles and Freestanding Flagpoles, installed in accordance with the Restrictions, must comply with the following:

(i) No more than one (1) Freestanding Flagpole OR no more than two (2) Permitted Flagpoles are permitted per Lot, on which only Permitted Flags may be displayed;

(ii) Any Permitted Flagpole must be no longer than five feet (5′) in length and any Freestanding Flagpole must be no more than twenty feet (20′) in height

(iii) Any Permitted Flag displayed on either a Permitted Flagpole or a Freestanding Flagpole may not be more than three feet in height by five feet in width (3′x5′);

(iv) The flag of the United States of America must be displayed in accordance with 4 U.S.C. Sections 5-10 and the flag of the State of Texas must be displayed in accordance with Chapter 3100 of the Texas Government Code;

(v) The display of a Permitted Flag, or the location and construction of a Permitted Flagpole or Freestanding Flagpole must comply with all Applicable Law, easements and setbacks of record;

(vi) Each Permitted Flagpole and Freestanding Flagpole must be constructed of permanent, long-lasting materials, with a finish appropriate to the materials used in the construction thereof and harmonious with the residence;

(vii) Any Permitted Flag, Permitted Flagpole, and Freestanding Flagpole must be maintained in good condition and any deteriorated Permitted Flag or deteriorated or structurally unsafe Permitted Flagpole or Freestanding Flagpole must be repaired, replaced or removed;

(viii) A Permitted Flag may be illuminated by no more than one (1) halogen landscaping light of low beam intensity which shall not be aimed towards or directly affect any neighboring Lot; and

(ix) Any external halyard of a Permitted Flagpole or Freestanding Flagpole must be secured so as to reduce or eliminate noise from flapping against the metal of the Permitted Flagpole or Freestanding Flagpole.

2.18 Tanks. The ACC must approve any tank used or proposed in connection with a residence, including tanks for storage of fuel, water, oil, or liquid petroleum gas (LPG), and including swimming pool filter tanks. No elevated tanks of any kind may be erected, placed or permitted on any Lot without the advance written approval of the ACC. All permitted tanks must be screened from view in accordance with a screening plan approved in advance by the ACC. This provision will not apply to a tank used to operate a standard residential gas grills, nor will it apply to barrels used as part of a Rainwater Harvesting System with capacity of less than fifty (50) gallons, so long as such barrels are actively being used for rainwater collection and storage.

2.19 Temporary Structures. No tent, shack, or other temporary building, Improvement, or structure shall be placed upon the Property without the prior written approval of the ACC; provided, however, that temporary structures necessary for storage of tools and equipment, and for office space for Declarant, Homebuilders, architects, and foremen during actual construction may be maintained with the prior approval of Declarant (unless placed by the Declarant), approval to include the nature, size, duration, and location of such structure.

2.20 Outside Storage Buildings. Outside storage buildings located in a fenced rear yard of a Lot are allowed with the prior written approval of the ACC. One (1) permanent storage building will be permitted if: (i) the surface area of the pad on which the storage building is constructed is no more than one hundred (100) square feet; (ii) the height of the storage building, measured from the surface of the Lot, is no more than eight feet (8'); (iii) the exterior of the storage building is constructed of the same or substantially similar materials and of the same color as the principal residential structure constructed on the Lot; (iv) the roof of the storage building is the same material and color as the roof of the principal residential structure constructed on the Lot; and (v) the storage building is constructed within all applicable building setbacks. No storage building may be used for habitation.

2.21 Unsightly Articles; Vehicles. No article deemed to be unsightly by the Board will be permitted to remain on any Lot so as to be visible from adjoining property or from public or private thoroughfares. Without limiting the generality of the foregoing, trailers, graders, trucks other than pickups, boats, tractors, campers, wagons, buses, motorcycles, motor scooters, all-terrain vehicles and garden maintenance equipment shall be kept at all times except when in actual use, in enclosed structures or screened from view and no repair or maintenance work shall be done on any of the foregoing, or on any automobile (other than minor emergency

repairs), except in enclosed garages or other structures. Service areas, storage areas, compost piles and facilities for hanging, drying or airing clothing or household fabrics shall be appropriately screened from view, and no lumber, grass, plant waste, shrub or tree clippings, metals, bulk materials, scrap, refuse or trash shall be kept, stored, or allowed to accumulate on any portion of the Property except within enclosed structures or appropriately screened from view. No: (i) racing vehicles; or (ii) other vehicles (including, without limitation, motorcycles or motor scooters) which are inoperable or do not have a current license tag shall be permitted to remain visible on any Lot or to be parked on any roadway within the Property or the Common Area.

2.22 Mobile Homes, Travel Trailers and Recreational Vehicles. No mobile homes, travel trailers or recreational vehicles shall be parked or placed on any street right of way, Lot, or used as a residence, either temporary or permanent, at any time. However, such vehicles may be parked temporarily for a period not to exceed seventy-two (72) consecutive hours during each two (2) month period. Notwithstanding the foregoing, sales trailers or other temporary structures expressly approved by the ACC or allowed pursuant to *Section 10.2* of this Declaration will be permitted.

2.23 Basketball Goals; Permanent and Portable. Permanent basketball goals are permitted in the front of the residence on a Lot provided the basketball goal is located a minimum of twenty feet (20′) from the street curb. The basketball goal backboard must be perpendicular to the street and mounted on a black metal pole permanently installed in the ground. Neither permanent nor portable basketball goals are permitted in any street right-of-way. Portable basketball goals are permitted on a Lot, but must be stored in the rear of the Lot or inside garage from sundown to sunrise. Basketball goals must be properly maintained and painted, with the net in good repair. All basketball goals, whether permanent or portable, must be approved by the ACC prior to being placed on any Lot.

2.24 Compliance with Restrictions. Each Owner, his or her family, Residents of a Lot, tenants, and the guests, invitees, and licensees of the preceding shall comply strictly with the provisions of the Restrictions as the same may be amended from time to time. Failure to comply with any of the Restrictions shall constitute a violation of the Restrictions and may result in a fine against the Owner in accordance with *Section 6.12* of this Declaration, and shall give rise to a cause of action to recover sums due for damages or injunctive relief, or both, maintainable by the Declarant, the Board on behalf of the Association, the ACC, or by an aggrieved Owner. The result of every act or omission that violates any provision(s) of the Restrictions is a nuisance, and any remedy allowed by Applicable Law against a nuisance, either public or private, is applicable against the violation. Without limiting any rights or powers of the Association, the Board may (but shall not be obligated to) remedy or attempt to remedy any violation of any of the provisions of the Restrictions, and the Owner whose violation has been so remedied shall be personally liable to the Association for all costs and expenses of effecting (or attempting to effect) such remedy. If such Owner fails to pay such costs and expenses upon demand by the Association, such costs and expenses (plus interest

from the date of demand until paid at the maximum lawful rate, or if there is no such maximum lawful rate, at the rate of one and one-half percent (1-1/2%) per month) shall be assessed against and chargeable to the Owner's Lot(s). Any such amounts assessed and chargeable against a Lot shall be secured by the liens reserved in this Declaration for Assessments and may be collected by any means provided in this Declaration for the collection of Assessments, including, but not limited to, foreclosure of such liens against the Owner's Lot(s). **Each such Owner shall release and hold harmless the Association and its officers, directors, employees and agents from any cost, loss, damage, expense, liability, claim or cause of action incurred or that may arise by reason of the Association's acts or activities under this *Section 2.24* (including any cost, loss, damage, expense, liability, claim or cause of action arising out of the Association's negligence in connection therewith), except for such cost, loss, damage, expense, liability, claim or cause of action arising by reason of the Association's gross negligence or willful misconduct. "Gross negligence" as used herein does not include simple negligence, contributory negligence or similar negligence short of actual gross negligence**.

2.25 Liability of Owners for Damage to Common Area. No Owner shall in any way alter, modify, add to or otherwise perform any work upon the Common Area without the prior written approval of the Board and the Declarant during the Development Period. Each Owner shall be liable to the Association for any and all damages to: (a) the Common Area and any Improvements constructed thereon; or (b) any Improvements constructed on any Lot, the maintenance of which has been assumed by the Association, which damages were caused by the neglect, misuse or negligence of such Owner or Owner's family, or by any tenant or other Resident of such Owner's Lot, or any guest or invitee of such Owner or Resident. The full cost of all repairs of such damage shall be an Individual Assessment against such Owner's Lot, secured by a lien against such Owner's Lot and collectable in the same manner as provided in *Section 6.10* of this Declaration.

2.26 Party Wall Fences; Party Walls. A fence or wall located on or near the dividing line between two (2) Lots and intended to benefit both Lots constitutes a "**Party Wall**" and, to the extent not inconsistent with the provisions of this *Section 2.26*, is subject to the general rules of law regarding party walls and liability for property damage due to negligence, willful acts, or omissions and are subject to the following:

2.26.1 Encroachments & Easement. If the Party Wall is on one Lot due to an error in construction, the Party Wall is nevertheless deemed to be on the dividing line for purposes of this *Section 2.26*. Each Lot sharing a Party Wall is subject to an easement for the existence and continuance of any encroachment of the Party Wall as a result of construction, repair, shifting, settlement, or movement in any portion of the Party Wall, so that the encroachment may remain undisturbed as long as the Party Wall stands. Each Lot is subject to a reciprocal easement for the maintenance, repair, replacement, or reconstruction of the Party Wall.

2.26.2 Right to Repair. If the Party Wall is damaged or destroyed from any cause, then to the extent that such damage is not covered by insurance and repaired out of the proceeds of insurance, the Owner of either Lot may repair or rebuild the Party Wall to its previous condition, and the other Owner or Owners that the Party Wall serves will thereafter contribute to the cost of restoration thereof in equal proportions without prejudice, subject however, to the right of any such Owners to call for a larger contribution from the others under any rule or law regarding liability for negligent or willful acts or omissions. The Owners of both Lots, their successors and assigns, have the right to the full use of the repaired or rebuilt Party Wall. No Party Wall may be constructed, repaired, or rebuilt without the advance written approval of the ACC in accordance with *Article 7* of this Declaration.

2.26.3 Maintenance Costs. The Owners of the adjoining Lots share equally the costs of repair, reconstruction, or replacement of the Party Wall, subject to the right of one Owner to call for larger contribution from the other under any rule of law regarding liability for negligence or willful acts or omissions. If an Owner is responsible for damage to or destruction of the Party Wall, that Owner will bear the entire cost of repair, reconstruction, or replacement. If an Owner fails or refuses to pay his share of costs of repair or replacement of the Party Wall, the Owner advancing monies has a right to file a claim of lien for the monies advanced in the Official Public Records of Denton County, Texas, and has the right to foreclose the lien as if it were a mechanic's lien. The right of an Owner to require contribution from another Owner under this *Section 2.26* is appurtenant to the Lot and passes to the Owner's successors in title. If the Owners of adjoining Lots fail to maintain the Party Wall located upon such Owner's Lot in good condition and repair, the Association may undertake such measures as may be required to maintain and/or repair the Party Wall, and, in such event, the Association will levy an Individual Assessment on the Lot Owners responsible for maintenance of the Party Wall.

2.26.4 Alterations. The Owner of a Lot sharing a Party Wall may not cut openings in the Party Wall or alter or change the Party Wall in any manner that affects the use, condition, or appearance of the Party Wall to the adjoining Lot. The Party Wall will always remain in the same location as when erected unless otherwise approved by the Owner of each Lot sharing the Party Wall and the ACC.

2.26.5 Dispute Resolution. In the event of any dispute arising concerning a Party Wall, or under the provisions of this *Section 2.26* (the "**Dispute**"), the parties will submit the Dispute to mediation. Should the parties be unable to agree on a mediator within ten (10) days after written request therefore by the Board, the Board will appoint a mediator. If the Dispute is not resolved by mediation, the Dispute will be resolved by binding arbitration. Either party may initiate the arbitration. Should the parties be unable to agree on an arbitrator within ten (10) days after written request therefore by the Board, the Board will appoint an arbitrator. The decision of the arbitrator will be binding upon the parties and will be in lieu of any right of legal action that either party may have against the other. In the event an Owner fails to properly and on a timely basis (both standards to be determined by the Board in

the Board's sole and absolute discretion) implement the decision of the mediator or arbitrator, as applicable, the Board may implement said mediator's or arbitrator's decision, as applicable. If the Board implements the mediator's or arbitrator's decision on behalf of an Owner, the Owner otherwise responsible therefor will be personally liable to the Association for all costs and expenses incurred by the Association in conjunction therewith. If such Owner fails to pay such costs and expenses upon demand by the Association, such costs and expenses (plus interest from the date of demand until paid at the maximum lawful rate, or if there is no such maximum lawful rate, at the rate of one and one-half percent (1-1/2%) per month) will be assessed against and chargeable to the Owner's Lot(s). Any such amounts assessed and chargeable against a Lot hereunder will be secured by the liens reserved in this Declaration for Assessments and may be collected by any means provided in this Declaration for the collection of Assessments, including, but not limited to, foreclosure of such liens against the Owner's Lot(s).

2.27 Playscapes and Sports Courts. Playscapes and sport courts are permissible at the sole discretion of the ACC. If allowed, these facilities must be: (i) properly sited and screened so as to minimize the visual and audio impact of the facility on adjacent properties; (ii) the height of a playscape, measured from the surface of the Lot, is no more than ten (10) feet; (iii) the canopy cover of any playscape will be constructed of earth tone materials; and (iv) sport courts may not be lighted or enclosed with netting. Tennis courts are not permitted.

2.28 Decorations and Lighting. No decorative appurtenances such as sculptures, birdbaths and birdhouses, fountains, or other decorative embellishments will be placed on the residence or on the front yard or on any other portion of a Lot which is visible from any street, unless such specific items have been approved in writing by the ACC. Customary seasonal decorations for holidays are permitted without approval by the ACC but must be removed within thirty (30) days of the applicable holiday. Outside lighting fixtures will be placed so as to illuminate only the yard of the applicable Lot and so as not to affect or reflect into surrounding residences or yards. No mercury vapor, sodium or halogen light will be installed on any Lot which is visible from any street unless otherwise approved by the ACC.

2.29 Water Quality Facilities, Drainage Facilities and Drainage Ponds. The Property may include, now or in the future, one or more water quality facilities, sedimentation, drainage and detention facilities, or ponds which serve all or a portion of the Property and are inspected, maintained and administered by the Association in accordance with all Applicable Law. Access to these facilities and ponds is limited to persons engaged by the Association or its agents to periodically maintain such facilities. Each Owner is advised that the water quality facilities, sedimentation, drainage and detention facilities and ponds are an active utility feature integral to the proper operation of the Property and may periodically hold standing water. Each Owner is advised that entry into the water quality facilities, sedimentation, drainage and detention facilities or ponds may result in injury and is a violation of the Rules and Regulations.

2.30 Cell Tower and Telecommunications Equipment. Telecommunications, cellular, video and digital equipment, including without limitation, broadcast antennas and related equipment, cell towers, cell tower equipment, or other wireless communication antennas and related equipment, cable or satellite television equipment and equipment for high-speed internet access (collectively, the "**CTT Equipm**ent") may be located on or near the Property or may be constructed on or near the Property. As more particularly described in *Section 9.8* of this Declaration, Declarant has reserved the right, for the benefit of itself, its affiliates and assigns, to construct, install, use, maintain, repair, replace, improve, remove, and operate CTT Equipment upon all or any portion of the Common Area. Parties other than the Declarant, its affiliates or assigns may also have easements for the construction, installation, use, maintenance, repair, replacement, improvement, removal and operation of CTT Equipment.

2.31 Shared Mailboxes. Mailbox kiosks (the "**Shared Mailboxes**") may be installed on the Property to serve the Owners. Such Shared Mailboxes, if installed, will be Common Area, and the Association will maintain the Shared Mailboxes in good condition and repair in accordance with United States Postal requirements. The costs incurred, or estimated to be incurred, by the Association for maintenance of the Shared Mailboxes, if installed, will be discharged through Assessments. Notwithstanding the foregoing, individual Owners are required to replace the locks and/or keys as needed and are responsible for the cost associated therewith. Neither the Association, the Declarant nor any Homebuilder will be responsible for any locks or key replacements.

2.32 Release and Indemnity. EACH OWNER AND OWNER'S FAMILY MEMBERS, GUESTS, TENANTS, INVITEES, AGENTS, AND CONTRACTORS (EACH, A "**USER**" HEREIN) HEREBY RELEASE AND HOLD HARMLESS THE ASSOCIATION, DECLARANT, DEVELOPMENT OWNER, THE ACC AND THEIR RESPECTIVE AFFILIATES, OFFICERS, DIRECTORS, MANAGERS, MEMBERS, COMMITTEE MEMBERS, EMPLOYEES AND AGENTS FROM ANY COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION INCURRED OR THAT MAY ARISE BY REASON OF USER'S USE OF ANY COMMON AREA PROPERTY, COMMUNITY AMENITIES, OR COMMUNITY FACILITIES. EVERY USER IDENTIFIED ABOVE SHALL INDEMNIFY AND HOLD HARMLESS THE ASSOCIATION, DECLARANT, DEVELOPMENT OWNER, THE ACC AND THEIR RESPECTIVE AFFILIATES, OFFICERS, DIRECTORS, MANAGERS, MEMBERS, COMMITTEE MEMBERS, EMPLOYEES AND AGENTS FROM ANY COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION FOR PERSONAL INJURY OR PROPERTY DAMAGE INCURRED OR THAT MAY ARISE BY REASON OF THE USE OF OR ENTRY UPON ANY COMMON AREA PROPERTY, COMMUNITY AMENITIES, OR COMMUNITY FACILITIES (INCLUDING ANY COST, FEES, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION ARISING OUT OF THE ASSOCIATION'S, DECLARANT'S OR DEVELOPMENT OWNER'S NEGLIGENCE IN CONNECTION THEREWITH), EXCEPT FOR SUCH COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION ARISING BY REASON OF THE ASSOCIATION'S, DECLARANT'S OR DEVELOPMENT OWNER'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. "**GROSS NEGLIGENCE**" AS USED HEREIN

DOES NOT INCLUDE SIMPLE NEGLIGENCE, CONTRIBUTORY NEGLIGENCE, OR SIMILAR NEGLIGENCE SHORT OF ACTUAL GROSS NEGLIGENCE. USE OF ANY COMMON AREA PROPERTY, COMMUNITY AMENITIES, OR COMMUNITY FACILITIES IS CONDITIONED UPON ACCEPTANCE OF THE FOREGOING RELEASE AND INDEMNITY OBLIGATIONS.

ARTICLE 3
CONSTRUCTION RESTRICTIONS

3.1 Approval for Construction. Unless prosecuted by the Declarant, no Improvements will hereafter be placed, maintained, erected, or constructed upon any Lot without the prior written approval of the ACC in accordance with *Article 7* of this Declaration.

3.2 Rentals. Nothing in this Declaration will prevent the rental of any Lot and the Improvements thereon by the Owner thereof for residential purposes; provided that all rentals must be for terms of at least thirty (30) days. All leases must be in writing. The Owner must provide to its lessee copies of the Restrictions. Notice of any lease, together with such additional information as may be required by the Board, will be remitted to the Association by the Owner on or before the expiration of ten (10) days after the effective date of the lease.

3.3 Fences; Sidewalks. All fences and walls must comply with all Applicable Law. Unless otherwise approved by the ACC, no fence, wall or hedge will be erected or maintained on any Lot nearer to the street than the front elevation of the residence constructed on the Lot, except for fences erected in conjunction with the model homes or sales offices. The ACC will have the sole discretion to determine the front elevation of the residence for the purpose of this *Section 3.3*. No chain-link, metal cloth or agricultural fences may be installed or maintained on a Lot, except by Declarant. Each Owner must maintain all fences on such Owner's Lot in good condition, including but not limited to periodically re-staining all fences using stain substantially similar to the stain applied to the fences as originally constructed by Declarant or Homebuilder, as determined by the ACC. The Board, in its sole discretion, may undertake the maintenance and staining of the fences for corner Lots and on the main streets or public rights-of-way of the subdivision. If required by the Plat, the Owner of each Lot will construct, at such Owner's sole cost and expense and prior to occupying any Improvement, a sidewalk on such Owner's Lot, located and designed in conformance with the Plat.

3.4 Trash Containers. Trash containers and recycling bins must be stored in one of the following locations:

(i) inside of the garage of the single-family residence constructed on the Lot; or

(ii) behind the single-family residence, retaining wall, or fence constructed on the Lot, or concealed by landscaping, in such a manner that the

trash container and recycling bin is not visible from any street, alley, or adjacent Lot.

The Board will have the right to specify additional locations on each Owner's Lot in which trash containers or recycling bins must be stored.

3.5 Drainage. There will be no interference with the established drainage patterns over any of the Property, including the Lots, except by Declarant, unless adequate provision is made for proper drainage and such provision is approved in advance by the ACC. Specifically, and not by way of limitation, no Improvement, including landscaping, may be installed which impedes the proper drainage of water between Lots.

3.6 Construction Activities. The Restrictions will not be construed or applied so as to unreasonably interfere with or prevent normal construction activities during the construction of Improvements by an Owner (including Declarant or a Homebuilder) upon or within the Property. Specifically, no such construction activities will be deemed to constitute a nuisance or a violation of the Restrictions by reason of noise, dust, presence of vehicles or construction machinery, posting of signs or similar activities, provided that such construction is pursued to completion with reasonable diligence and conforms to usual construction practices in the area. In the event that construction upon any Lot does not conform to usual practices in the area as determined by the ACC in its sole and reasonable judgment, the ACC will have the authority to seek an injunction to stop such construction. In addition, if during the course of construction upon any Lot there is excessive accumulation of debris of any kind which would render the Lot or any portion thereof unsanitary, unsightly, offensive, or detrimental to it or any other portion of the Property, then the ACC may contract for or cause such debris to be removed, and the Owner of the Lot will be liable for all reasonable expenses incurred in connection therewith.

3.7 Roofing. The roofs of all buildings must be approved by the ACC. In addition, roofs of buildings may be constructed with "**Energy Efficient Roofing**" with the advance written approval of the ACC. For the purpose of this *Section 3.7*, "Energy Efficient Roofing" means shingles that are designed primarily to: (a) be wind and hail resistant; (b) provide heating and cooling efficiencies greater than those provided by customary composite shingles; or (c) provide solar generation capabilities. The ACC will not prohibit an Owner from installing Energy Efficient Roofing provided that the Energy Efficient Roofing shingles: (i) resemble the shingles used or otherwise authorized for use within the Property; (ii) are more durable than, and are of equal or superior quality to, the shingles used or otherwise authorized for use within the Property; and (iii) match the aesthetics of adjacent Lots. An Owner who desires to install Energy Efficient Roofing will be required to comply with the architectural review and approval procedures set forth the Restrictions. In conjunction with any such approval process, the Owner should submit information which will enable the ACC to confirm the criteria set forth in this *Section 3.7*. Any other type of roofing material will be permitted only with the advance written approval of the ACC.

3.8 Swimming Pools. Any swimming pool constructed on a Lot must be enclosed with a fence or other enclosure device completely surrounding the swimming pool which, at a minimum, satisfies all Applicable Law and be approved in advance by the ACC. Nothing in this *Section 3.8* is intended or will be construed to limit or affect an Owner's obligation to comply with any Applicable Law concerning swimming pool enclosure requirements. Unless otherwise approved in advance by the ACC, above-ground or temporary swimming pools are not permitted on a Lot.

3.9 Compliance with Setbacks. No residence or Improvement may be constructed on any Lot nearer to a street than the minimum building setback lines shown on the Plat, and no Improvement shall be located on or within any drainage or utility easement unless otherwise permitted pursuant to Applicable Law.

3.10 Solar Energy Device. Solar Energy Devices may be installed with the advance written approval of the ACC, in accordance with the procedures and requirements set forth below.

3.10.1 Application. To obtain ACC approval of a Solar Energy Device, the Owner shall provide the ACC with the following information: (i) the proposed installation location of the Solar Energy Device; and (ii) a description of the Solar Energy Device, including the dimensions, manufacturer, and photograph or other accurate depiction (the "**Solar Application**"). A Solar Application may only be submitted by an Owner unless the Owner's tenant provides written confirmation at the time of submission that the Owner consents to the Solar Application. The Solar Application shall be submitted in accordance with the provisions of *Article 7* of this Declaration.

3.10.2 Approval Process. The ACC will review the Solar Application in accordance with the terms and provisions of *Article 7* of this Declaration. The ACC will approve a Solar Energy Device if the Solar Application complies with *Section 3.10.3* below **UNLESS** the ACC makes a written determination that placement of the Solar Energy Device, despite compliance with *Section 3.10.3*, will create a condition that substantially interferes with the use and enjoyment of the property within the Property by causing unreasonable discomfort or annoyance to persons of ordinary sensibilities. The ACC's right to make a written determination in accordance with the foregoing sentence is negated if all Owners of Lots immediately adjacent to the Owner/applicant provide written approval of the proposed placement. Any proposal to install a Solar Energy Device on Common Area or property owned or maintained by the Association must be approved in advance and in writing by the Board, and the Board need not adhere to this *Section 3.10* when considering any such request.

3.10.3 Approval Conditions. Unless otherwise approved in advance and in writing by the ACC, each Solar Application and each Solar Energy Device to be installed in accordance therewith must comply with the following:

(i) The Solar Energy Device must be located on the roof of the residence located on the Owner's Lot, entirely within a fenced area of the Owner's Lot, or entirely within a fenced patio located on the Owner's Lot. If the Solar Energy Device will be located on the roof of the residence, the ACC may designate the location for placement unless the location proposed by the Owner increases the estimated annual energy production of the Solar Energy Device, as determined by using a publicly available modeling tool provided by the National Renewable Energy Laboratory, by more than ten percent (10%) above the energy production of the Solar Energy Device if installed in the location designated by the ACC. If the Owner desires to contest the alternate location proposed by the ACC, the Owner should submit information to the ACC which demonstrates that the Owner's proposed location meets the foregoing criteria. If the Solar Energy Device will be located in the fenced area of the Owner's Lot or patio, no portion of the Solar Energy Device may extend above the fence line.

(ii) If the Solar Energy Device is mounted on the roof of the principal residence located on the Owner's Lot, then: (A) the Solar Energy Device may not extend higher than or beyond the roofline; (B) the Solar Energy Device must conform to the slope of the roof and the top edge of the Solar Device must be parallel to the roofline; and (C) the frame, support brackets, or visible piping or wiring associated with the Solar Energy Device must be silver, bronze or black.

3.11 Rainwater Harvesting Systems. Rain barrels or rainwater harvesting systems (a "Rainwater Harvesting System") may be installed with the advance written approval of the ACC.

3.11.1 Application. To obtain ACC approval of a Rainwater Harvesting System, the Owner shall provide the ACC with the following information: (i) the proposed installation location of the Rainwater Harvesting System; and (ii) a description of the Rainwater Harvesting System, including the color, dimensions, manufacturer, and photograph or other accurate depiction (the "**Rain System Application**"). A Rain System Application may only be submitted by an Owner unless the Owner's tenant provides written confirmation at the time of submission that the Owner consents to the Rain System Application.

3.11.2 Approval Process. The decision of the ACC will be made in accordance with *Article 7* of this Declaration. Any proposal to install a Rainwater Harvesting System on Common Area must be approved in advance and in writing by the Board, and the Board need not adhere to this *Section 3.11* when considering any such request.

3.11.3 Approval Conditions. Unless otherwise approved in advance and in writing by the ACC, each Rain System Application and each Rainwater Harvesting System to be installed in accordance therewith must comply with the following:

(i) The Rainwater Harvesting System must be consistent with the color scheme of the residence constructed on the Owner's Lot, as reasonably determined by the ACC.

(ii) The Rainwater Harvesting System does not include any language or other content that is not typically displayed on such a device.

(iii) The Rainwater Harvesting System is in no event located between the front of the residence constructed on the Owner's Lot and any adjoining or adjacent street.

(iv) There is sufficient area on the Owner's Lot to install the Rainwater Harvesting System, as reasonably determined by the ACC.

3.11.4 Guidelines. If the Rainwater Harvesting System will be installed on or within the side yard of a Lot, or would otherwise be visible from a street, Common Area, or another Owner's Lot, the ACC may regulate the size, type, shielding of, and materials used in the construction of the Rainwater Harvesting System. Accordingly, when submitting a Rain System Application, the application should describe methods proposed by the Owner to shield the Rainwater Harvesting System from the view of any street, Common Area, or another Owner's Lot. When reviewing a Rain System Application for a Rainwater Harvesting System that will be installed on or within the side yard of a Lot, or would otherwise be visible from a street, Common Area, or another Owner's Lot, any additional regulations imposed by the ACC to regulate the size, type, shielding of, and materials used in the construction of the Rainwater Harvesting System, may not prohibit the economic installation of the Rainwater Harvesting System, as reasonably determined by the ACC.

3.12 Xeriscaping. As part of the installation and maintenance of landscaping on an Owner's Lot, an Owner may submit plans for and install drought tolerant landscaping ("**Xeriscaping**") upon written approval by the ACC. All Owners implementing Xeriscaping shall comply with the following:

3.12.1 Application. Approval by the ACC is required prior to installing Xeriscaping. To obtain the approval of the ACC for Xeriscaping, the Owner shall provide the ACC with the following information: (i) the proposed site location of the Xeriscaping on the Owner's Lot; (ii) a description of the Xeriscaping, including the types of plants, border materials, hardscape materials and photograph or other accurate depiction and (iii) the percentage of yard to be covered with gravel, rocks and cacti (the "**Xeriscaping Application**"). A Xeriscaping Application may only be submitted by an Owner unless the Owner's tenant provides written confirmation at the time of submission that the Owner consents to the Xeriscaping Application. The ACC is not responsible for: (i) errors or omissions in the Xeriscaping Application submitted to the ACC for approval; (ii) supervising installation or

construction to confirm compliance with an approved Xeriscaping Application or (iii) the compliance of an approved application with Applicable Law.

3.12.2 Approval Conditions. Unless otherwise approved in advance and in writing by the ACC, each Xeriscaping Application and all Xeriscaping to be installed in accordance therewith must comply with the following:

(i) The Xeriscaping must be aesthetically compatible with other landscaping in the community as reasonably determined by the ACC. For purposes of this *Section 3.12*, "aesthetically compatible" shall mean overall and long-term aesthetic compatibility within the community. For example, an Owner's Lot plan may be denied if the ACC determines that: a) the proposed Xeriscaping would not be harmonious with already established turf and landscaping in the overall community; and/or b) the use of specific turf or plant materials would result in damage to or cause deterioration of the turf or landscaping of an adjacent property owner, resulting in a reduction of aesthetic appeal of the adjacent property Owner's Lot.

(ii) No Owners shall install gravel, rocks or cacti that in the aggregate encompass over thirty percent (30%) of such Owner's front yard or fifty percent (50%) of such Owner's back yard.

(iii) The Xeriscaping must not attract diseases and insects that are harmful to the existing landscaping on neighboring Lots, as reasonably determined by the ACC.

3.12.3 Process. The decision of the ACC will be made within a reasonable time, or within the time period otherwise required by the principal deed restrictions which govern the review and approval of improvements. A Xeriscaping Application submitted to install Xeriscaping on property owned by the Association or property owned in common by members of the Association will not be approved. Any proposal to install Xeriscaping on property owned by the Association or property owned in common by members of the Association must be approved in advance and in writing by the Board, and the Board need not adhere to the requirements set forth in this *Section 3.12* when considering any such request.

3.12.4 Approval. Each Owner is advised that if the Xeriscaping Application is approved by the ACC, installation of the Xeriscaping must: (i) strictly comply with the Xeriscaping Application; (ii) commence within thirty (30) days of approval; and (iii) be diligently prosecuted to completion. If the Owner fails to cause the Xeriscaping to be installed in accordance with the approved Xeriscaping Application, the ACC may require the Owner to: (i) modify the Xeriscaping Application to accurately reflect the Xeriscaping installed on the Property; or (ii) remove the Xeriscaping and reinstall the Xeriscaping in accordance with the approved Xeriscaping Application. Failure to install Xeriscaping in accordance with the

approved Xeriscaping Application or an Owner's failure to comply with the post-approval requirements constitutes a violation of this Declaration and may subject the Owner to fines and penalties. Any requirement imposed by the ACC to resubmit a Xeriscaping Application or remove and relocate Xeriscaping in accordance with the approved Xeriscaping Application shall be at the Owner's sole cost and expense.

3.13 Utility Lines. No sewer, drainage or water lines shall be constructed, placed or maintained anywhere in or upon any portion of the Property other than within buildings or structures unless the same shall be constructed, placed or maintained underground. No wires or other devices for the communication or transmission of electric current, power, or signals including telephone, television, microwave or radio signals, shall be constructed, placed or maintained anywhere in or upon any portion of the Property other than within buildings or structures unless the same shall be contained in conduits or cables constructed, placed or maintained underground or concealed in or under buildings or other structures.

3.14 Garages. All garages must be built to accommodate at least two (2) full-sized automobiles. No garage may be permanently enclosed or otherwise used for habitation. Each driveway must be built to accommodate at least two (2) vehicles in front of the garage. Rear, detached garages are permitted so long as they are constructed in accordance with this Declaration and Applicable Law.

3.15 Flood Zone(s). A portion or portions of the Property may lie within the floodplain or areas subject to a flooding event. No Improvements shall be placed within the floodplain. Any filling or other Improvements placed within the floodplain shall require review and approval from the applicable governmental authority prior to construction of such Improvements or fill material being placed.

ARTICLE 4
HIGHPOINTE RANCH RESIDENTIAL COMMUNITY, INC.

4.1 Organization. The Association will be a nonprofit corporation created for the purposes, charged with the duties, and vested with the powers of a Texas nonprofit corporation. Neither the Certificate nor Bylaws will for any reason be amended or otherwise changed or interpreted so as to be inconsistent with this Declaration. Unless expressly provided in the Restrictions, the Association acts through a Majority of the Board. Certain acts and activities of the Association and the Board must be approved by the Declarant during the Development Period (and by Development Owner, if Development Owner owns any Lot or portion of the Property at such time). If Declarant and/or Development Owner approval is required, such approval must be evidenced in writing.

4.2 Membership.

4.2.1 Mandatory Membership. Any person or entity, upon becoming an Owner, will automatically become a Member of the Association. Membership will be

appurtenant to and will run with the ownership of the Lot that qualifies the Owner thereof for membership, and membership may not be severed from the ownership of the Lot, or in any way transferred, pledged, mortgaged or alienated, except together with the title to such Lot. Within thirty (30) days after acquiring legal title to a Lot, if requested by the Board, an Owner must provide the Association with: (i) a copy of the recorded deed by which the Owner has acquired title to the Lot; (ii) the Owner's address, email address, phone number, and driver's license number, if any; (iii) any Mortgagee's name and address; and (iv) the name, phone number, and email address of any Resident other than the Owner.

If you acquire a Lot you automatically become a member of the Association. Membership is Mandatory!

4.2.2 Easement of Enjoyment – Common Area. Every Member will have a right and easement of enjoyment in and to all of the Common Area and an access easement by and through any Common Area, which easements will be appurtenant to and will pass with the title to such Member's Lot, subject to the following restrictions and reservations:

(i) The right of the Declarant, or the Declarant's designee, to cause such Improvements and features to be constructed upon the Common Area, as determined from time to time by the Declarant, in the Declarant's sole and absolute discretion;

(ii) The right of the Association to suspend the Member's right to use the Common Area for any period during which any Assessment against such Member's Lot remains past due and for any period during which such member is in violation of any provision of this Declaration;

(iii) The right of the Declarant, during the Development Period, and the Board thereafter, to dedicate or transfer all or any part of the Common Area to any public agency, authority or utility for any purpose;

(iv) The right of the Declarant, during the Development Period, and the Board thereafter to grant easements or licenses over and across the Common Area;

(v) With the advance written approval of the Declarant during the Development Period, the right of the Board to borrow money for the purpose of improving the Common Area and, in furtherance thereof, mortgage the Common Area;

(vi) The right of the Declarant, during the Development Period, and the Board, with the advance written approval of the Declarant during the Development Period, to promulgate Rules and Regulations regarding the use of

the Common Area and any Improvements thereon; provided, however, that for so long as Development Owner owns any Lot or portion of the Property, any adoption of or amendment or supplement to the Rules and Regulations will require the prior written consent of Development Owner; and

(vii) The right of the Association to contract for services with any third parties on such terms as the Board may determine, except that during the Development Period, all such contracts must be approved in advance and in writing by the Declarant.

4.3 Governance. As more specifically described in the Bylaws, the Board will consist of at least three (3) persons elected at the annual meeting of the Association, or at a special meeting called for such purpose. **Notwithstanding the foregoing provision or any provision in this Declaration to the contrary, but subject in all events to the last sentence of this *Section 4.3*, until one hundred twenty (120) days after seventy-five percent (75%) of the Maximum Number of Lots have been made subject to the terms and provisions of this Declaration and have been conveyed to Owners other than the Declarant, a Homebuilder or Development Owner, Declarant will have the sole right to appoint and remove all members of the Board and all officers of the Association. Within one hundred twenty (120) days after seventy-five percent (75%) of the Maximum Number of Lots have been made subject to the terms and provisions of this Declaration and have been conveyed to Owners other than Declarant, a Homebuilder or Development Owner, the Board will call a meeting of Members of the Association for the purpose of electing one-third (1/3) of the Board (the "Initial Member Election Meeting"), which Board member(s) must be elected by Owners other than the Declarant. Declarant shall continue to have the sole right to appoint and remove two-thirds (2/3) of the Board from and after the Initial Member Election Meeting until expiration or termination of the Development Period. The individual(s) elected to the Board at the Initial Member Election Meeting shall be elected for a one (1) year term and shall serve until his or her successor is elected or he or she is replaced in accordance with the Bylaws. Notwithstanding anything to the contrary herein or in the Bylaws, (A) in the event (i) the Option Agreement is terminated prior to the purchase by Declarant from Development Owner of all of the Lots and other portions of the Property thereunder, as evidenced by the Recording of a notice of termination of Option Agreement, and (ii) the Development Period has not yet expired at the time of such termination, Development Owner may, at its sole election (but is not obligated to), and regardless of whether or not Development Owner has taken an assignment of the Declarant rights pursuant to *Section 10.6* below, remove any or all of the then-current members of the Board and/or the then-current officers of the Association and replace them with persons chosen by Development Owner in its sole discretion, and in such event, Declarant shall take all such actions as are necessary to effectuate such changes to the Board and/or to the officers of the Association, and (B) such Board members and/or officers appointed by Development Owner shall serve until the earlier of (x) the Member Election Meeting (as defined in the Bylaws) or (y) his or her successor is elected or he or she is replaced in accordance with the Bylaws.**

4.4 Voting Allocation. The number of votes which may be cast to elect members to the Board (except as provided by *Section 4.3*) and on all other matters the Members may vote on shall be calculated as set forth below.

4.4.1 Owner Votes. The Owner of each Lot will have one (1) vote for each Lot so owned.

4.4.2 Declarant Votes. In addition to the votes to which Declarant is entitled by reason of *Section 4.4.1*, for every one (1) vote outstanding in favor of any other person or entity, Declarant will have four (4) additional votes until the expiration or termination of the Development Period. Declarant may cast votes allocated to the Declarant pursuant to this *Section 4.4.2* and shall be considered a Member for the purpose of casting such votes, and need not own any portion of the Property as a pre-condition to exercising such votes.

4.4.3 Development Owner Votes. In addition to the votes to which Development Owner is entitled by reason of *Section 4.4.1* and *Section 4.4.2* above, for every one (1) vote allocated to Declarant pursuant to *Section 4.4.2*, Development Owner will have an equal number of additional votes until such time as Development Owner no longer owns any Lot or portion of the Property. Development Owner may cast votes allocated to the Development Owner pursuant to this *Section 4.4.3* and shall be considered a Member for the purpose of casting such votes.

4.4.4 Co-Owners. When more than one person or entity owns a portion of the fee simple interest in any Lot, all such persons or entities will be Members. The vote or votes (or fraction thereof) for such Lot will be exercised by the person so designated in writing to the Secretary of the Association by the Owner of such Lot, and in no event will the vote for such Lot exceed the total votes to which such Lot is otherwise entitled under this *Section 4.4*.

4.4.5 Tie Votes. In the event of a tie vote, the vote of the Development Owner shall control until such time as Development Owner no longer owns any Lot or portion of the Property.

4.5 Powers. The Association will have the powers of a Texas nonprofit corporation. It will further have the power to do and perform any and all acts that may be necessary or proper, for or incidental to, the exercise of any of the express powers granted to it by Applicable Law or this Declaration. Without in any way limiting the generality of the two preceding sentences, the Board, acting on behalf of the Association, will have the following powers at all times:

4.5.1 Rules and Regulations, Bylaws and Community Manual. To make, establish and promulgate, and in its discretion to amend from time to time, or repeal and re-enact, such rules, regulations, policies, Bylaws and Community Manual not in conflict with this Declaration, as the Board deems proper, covering any and all aspects of the Property or the Common Area (including the operation, maintenance and preservation thereof) or the

Association. Any Rules and Regulations, policies, Bylaws and Community Manual and any modifications thereto proposed by the Board must be approved in advance and in writing by the Declarant until expiration or termination of the Development Period and must also be approved in advance and in writing by Development Owner if Development Owner owns any Lot or portion of the Property at such time.

4.5.2 Insurance. To obtain and maintain in effect, policies of insurance that, in the opinion of the Board, are reasonably necessary or appropriate to carry out the Association's functions.

4.5.3 Records. To keep books and records of the Association's affairs, and to make such books and records, together with current copies of the Restrictions available for inspection by the Owners, Mortgagees, and insurers or guarantors of any Mortgage upon request during normal business hours.

4.5.4 Assessments. To levy and collect Assessments, as provided in *Article 6* below.

4.5.5 Right of Entry and Enforcement. To enter at any time without notice in an emergency (or in the case of a non-emergency, after twenty-four (24) hours written notice), without being liable to any Owner or Resident, upon any Lot and into any Improvement thereon for the purpose of enforcing the Restrictions or for the purpose of maintaining or repairing any area, Improvement or other facility or removing any item to conform to the Restrictions. The expenses incurred by the Association in connection with the entry upon any Lot and the removal or maintenance and repair work conducted thereon or therein will be a personal obligation of the Owner of the Lot so entered, will be deemed an Individual Assessment against such Lot, will be secured by a lien upon such Lot, and will be enforced in the same manner and to the same extent as provided in *Article 6* hereof for Assessments. The Association will have the power and authority from time to time, in its own name and on its own behalf, or in the name of and on behalf of any Owner who consents thereto, to commence and maintain actions and suits to enforce, by mandatory injunction or otherwise, or to restrain and enjoin, any breach or threatened breach of the Restrictions. The Association is also authorized to settle claims, enforce liens and take all such action as it may deem necessary or expedient to enforce the Restrictions; provided, however, that the Board will never be authorized to expend any Association funds for the purpose of bringing suit against Declarant, or its successors or assigns. The Association may not alter or demolish any Improvements on any Lot other than Common Area in enforcing these Restrictions before a judicial order authorizing such action has been obtained by the Association, or before the written consent of the Owner(s) of the affected Lot(s) has been obtained. **EACH SUCH OWNER AND RESIDENT WILL RELEASE AND HOLD HARMLESS THE ASSOCIATION, ITS OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS FROM ANY COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION INCURRED OR THAT MAY ARISE BY REASON OF THE ASSOCIATION'S ACTS OR ACTIVITIES UNDER THIS**

SECTION 4.5.5 (INCLUDING ANY COST, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION ARISING OUT OF THE ASSOCIATION'S NEGLIGENCE IN CONNECTION THEREWITH), EXCEPT FOR SUCH COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION ARISING BY REASON OF THE ASSOCIATION'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. "GROSS NEGLIGENCE" DOES NOT INCLUDE SIMPLE NEGLIGENCE, CONTRIBUTORY NEGLIGENCE OR SIMILAR NEGLIGENCE SHORT OF ACTUAL GROSS NEGLIGENCE.

4.5.6 Legal and Accounting Services. To retain and pay for legal and accounting services necessary or proper in the operation of the Association.

4.5.7 Conveyances. To grant and convey to any person or entity the real property and/or other interest, including fee title, leasehold estates, easements, rights-of-way or mortgages, out of, in, on, over, or under any Common Area for the purpose of constructing, erecting, operating or maintaining the following:

(i) Parks, parkways or other recreational facilities or structures;

(ii) Roads, streets, sidewalks, signs, street lights, walks, driveways, perimeter fencing, trails and paths;

(iii) Lines, cables, wires, conduits, pipelines or other devices for utility purposes;

(iv) Sewers, water systems, storm water drainage systems, sprinkler systems and pipelines; and/or

(v) Any similar Improvements or facilities.

Nothing set forth above, however, will be construed to permit use or occupancy of any Improvement or other facility in a way that would violate applicable use and occupancy restrictions imposed by the Restrictions or by Applicable Law. In addition, until expiration or termination of the Development Period, any grant or conveyance under this *Section 4.5.7* must be approved in advance and in writing by the Declarant. In addition, the Association (with the advance written approval of Declarant during the Development Period) and Declarant are expressly authorized and permitted to convey easements over and across Common Area for the benefit of property not otherwise subject to the terms and provisions of this Declaration.

4.5.8 Manager. To retain and pay for the services of a person or firm (the "**Manager**"), which may include Declarant or any affiliate of Declarant, to manage and operate the Association, including its property, to the extent deemed advisable by the Board. Personnel may be employed directly by the Association or may be furnished by the Manager. To the extent permitted by Applicable Law, the Board may delegate any other duties, powers and functions to the Manager. In addition, the Board may adopt transfer fees, resale certificate fees

or any other fees associated with the provision of management services to the Association or its Members. **THE MEMBERS HEREBY RELEASE THE ASSOCIATION AND THE MEMBERS OF THE BOARD AND COMMITTEE MEMBERS FROM LIABILITY FOR ANY OMISSION OR IMPROPER EXERCISE BY THE MANAGER OF ANY SUCH DUTY, POWER OR FUNCTION SO DELEGATED.**

4.5.9 Property Services. To pay for water, sewer, garbage removal, street lights, landscaping, gardening and all other utilities, services, repair and maintenance for any portion of the Property, Common Area, private or public recreational facilities, easements, roads, roadways, access drives, rights-of-way, signs, parks, parkways, median strips, sidewalks, paths, trails, ponds, canals, and lakes.

4.5.10 Other Services and Properties. To obtain and pay for any other property, services, permits or other governmental approvals, and to pay any other taxes or assessments that the Association or the Board is required or permitted to secure or to pay for pursuant to Applicable Law or under the terms of the Restrictions or as determined by the Board.

4.5.11 Construction on Common Area. To construct new Improvements or additions to any property owned, leased, or licensed by the Association, including but not limited to the Common Area, subject to the approval of the Board and the Declarant until expiration or termination of the Development Period.

4.5.12 Contracts. To enter into Bulk Rate Contracts or other contracts or licenses with Declarant or any third party on such terms and provisions as the Board will determine, to operate and maintain any Common Area or other property, or to provide any service, including but not limited to cable, utility, or telecommunication services, or perform any function on behalf of Declarant, the Board, the Association, or the Members. During the Development Period, all Bulk Rate Contracts must be approved in advance and in writing by the Declarant.

4.5.13 Property Ownership. To acquire, own and dispose of all manner of real and personal property, including habitat, whether by grant, lease, easement, gift or otherwise. During the Development Period, all acquisitions and dispositions of the Association hereunder must be approved in advance and in writing by the Declarant (and must also be approved in advance and in writing by Development Owner if Development Owner owns any Lot or portion of the Property at such time, which approval may be given or withheld by Development Owner in its sole and absolute discretion).

4.5.14 Allocation of Votes. To determine votes when permitted pursuant to *Section 4.4* above.

4.5.15 Membership Privileges. To establish Rules and Regulations governing and limiting the use of the Common Area and any Improvements thereon. All Rules and Regulations governing and limiting the use of the Common Area, and any Improvements

thereon, must be approved in advance and in writing by the Declarant during the Development Period.

4.6 Conveyance of Common Area to the Association. The Association may acquire, hold, and dispose of any interest in tangible and intangible personal property and real property. Declarant, and its assignees, reserve the right, from time to time and at any time, to designate, convey, assign or transfer, by written and Recorded instrument portions of the Property being held by the Declarant for the benefit of the Association. Upon the Recording of such designation, the portion of the Property identified therein will be considered Common Area for the purpose of this Declaration, and the Association shall have an easement over and across the Common Area as necessary or required to discharge the Association's obligations under this Declaration, subject to any terms and limitations to such easement set forth in the designation. Declarant and its assignees may also assign, transfer or convey to the Association interests in real or personal property within or for the benefit of the Property, for the Property and the general public, or otherwise, as determined in the sole and absolute discretion of the Declarant. All or any real or personal property assigned, transferred and/or conveyed by the Declarant to the Association shall be deemed accepted by the Association upon Recordation, and without further action by the Association, and shall be considered Common Area without regard to whether such real or personal property is designated by the Declarant as Common Area. If requested by the Declarant, the Association will execute a written instrument, in a form requested by the Declarant, evidencing acceptance of such real or personal property; provided, however, execution of a written consent by the Association shall in no event be a precondition to acceptance by the Association. The assignment, transfer, and/or conveyance of real or personal property to the Association may be by deed without warranty, may reserve easements in favor of the Declarant or a third party designated by Declarant over and across such property, and may include such other provisions, including restrictions on use, determined by the Declarant, in the Declarant's sole and absolute discretion. Property assigned, transferred, and/or conveyed to the Association may be improved or unimproved and may consist of fee simple title, easements, leases, licenses, or other real or personal property interests. Upon Declarant's written request, the Association will re-convey to Declarant any unimproved real property that Declarant originally conveyed to the Association for no payment. Declarant and/or its assignees may construct and maintain upon portions of the Common Area such facilities and may conduct such activities which, in Declarant's sole opinion, may be required, convenient, or incidental to the construction or sale of Improvements on the Property, including, but not limited to, business offices, signs, model homes, and sales offices. Declarant and its assignees shall have an easement over and across the Common Area for access and shall have the right to use such facilities and to conduct such activities at no charge.

4.7 Indemnification. To the fullest extent permitted by Applicable Law but without duplication (and subject to) any rights or benefits arising under the Certificate or Bylaws of the Association, the Association will indemnify any person who was, or is, a party, or is threatened to be made a party to any threatened pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative by reason of the fact that such person is, or was, a

director, officer, committee member, employee, servant or agent of the Association against expenses, including attorneys' fees, reasonably incurred by such person in connection with such action, suit or proceeding if it is found and determined by the Board or a court of competent jurisdiction that he or she: (i) acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the Association; or (ii) with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit or proceeding by settlement, or upon a plea of nolo contendere or its equivalent, will not of itself create a presumption that the person did not act in good faith or in a manner which was reasonably believed to be in, or not opposed to, the best interests of the Association or, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

IT IS EXPRESSLY ACKNOWLEDGED THAT THE INDEMNIFICATION IN THIS SECTION PROTECTS DECLARANT AND DEVELOPMENT OWNER (AND/OR THEIR RESPECTIVE OFFICERS, DIRECTORS, MANAGERS, PARENT AND/OR SUBSIDIARY ENTITIES, PARTNER(S) AND ANY RELATED PERSONS OR CORPORATIONS, AND THEIR EMPLOYEES, PROFESSIONALS AND AGENTS) FROM THE CONSEQUENCES OF THEIR RESPECTIVE ACTS OR OMISSIONS, INCLUDING WITHOUT LIMITATION, DECLARANT'S AND/OR DEVELOPMENT OWNER'S (AND/OR THEIR RESPECTIVE OFFICERS', DIRECTORS', MANAGERS' PARENT AND/OR SUBSIDIARY ENTITIES', PARTNER(S)' AND ANY RELATED PERSONS' AND AGENTS') NEGLIGENT ACTS OR OMISSIONS, TO THE FULLEST EXTENT ALLOWED BY LAW.

4.8 Insurance. The Board may purchase and cause to be maintained, at the expense of the Association, insurance on behalf of any person who is acting as a director, officer, committee member, employee, servant or agent of the Association against any liability asserted against or incurred by such person in their capacity as a director, officer, committee member, employee, servant or agent of the Association, or arising out of such person's status as such, whether or not the Association would have the power to indemnify such person against such liability or otherwise.

4.9 Bulk Rate Contracts. Without limitation on the generality of the Association powers set out in *Section 4.5* hereinabove (except that during the Development Period, all Bulk Rate Contracts must be approved in advance and in writing by the Declarant), the Association will have the power to enter into Bulk Rate Contracts at any time and from time to time. The Association may enter into Bulk Rate Contracts with any service providers chosen by the Board (including Declarant, and/or any entities in which Declarant, or the owners or partners of Declarant are owners or participants, directly or indirectly). The Bulk Rate Contracts may be entered into on such terms and provisions as the Board may determine in its sole and absolute discretion. The Association may, at its option and election, add the charges payable by such Owner under such Bulk Rate Contract to the Assessments against such Owner's Lot. In this regard, it is agreed and understood that, if any Owner fails to pay any charges due by such Owner under the terms of any Bulk Rate Contract, then the Association will be entitled to

collect such charges by exercising the same rights and remedies it would be entitled to exercise under this Declaration with respect to the failure by such Owner to pay Assessments, including without limitation the right to foreclose the lien against such Owner's Lot which is reserved under the terms and provisions of this Declaration. In addition, in the event of non-payment by any Owner of any charges due under any Bulk Rate Contract and after the lapse of at least twelve (12) days since such charges were due, the Association may, upon five (5) days' prior written notice to such Owner (which may run concurrently with such twelve (12) day period), in addition to all other rights and remedies available pursuant to Applicable Law, terminate, in such manner as the Board deems appropriate, any utility service or other service provided at the cost of the Association and not paid for by such Owner (or the Resident of such Owner's Lot) directly to the applicable service or utility provider. Such notice will consist of a separate mailing or hand delivery at least five (5) days prior to a stated date of termination, with the title "termination notice" or similar language prominently displayed on the notice. The notice will include the office or street address where the Owner (or the Resident of such Owner's Lot) can make arrangements for payment of the bill and for re-connection or re-institution of service. No utility or cable television service will be disconnected on a day, or immediately preceding a day, when personnel are not available for the purpose of collection and reconnecting such services.

4.10 **Community Services and Systems**. The Declarant, or an affiliate or designee of the Declarant, is specifically authorized, but not required, to install, provide, maintain or furnish, or to enter into contracts with other persons to install, provide, maintain or furnish, central telecommunication receiving and distribution systems (*e.g.*, cable television, high speed data/Internet/intranet services, and security monitoring) and utility services (*e.g.*, electricity, solar, gas, water), and related components, including associated infrastructure, equipment, hardware, and software to serve all or any portion of the Property ("**Community Services and Systems**"). The Community Services and Systems may be located on Common Area and on or in any Improvements constructed upon the Common Area, and an easement is herein reserved in favor of Declarant, Declarant's affiliate or its designee for the purpose of installing, operating, managing, maintaining, upgrading and modifying the Community Services and Systems. In the event the Declarant, or an affiliate or designee of the Declarant, elects to provide any of the Community Services and Systems to all or any portion of the Property, the Declarant or an affiliate or designee of the Declarant, may enter into an agreement with the Association with respect to such services. In the event Declarant, or any affiliate or designee of the Declarant, enters into a contract with a third party for the provision of any Community Services and Systems to serve all or any portion of the Property, the Declarant or an affiliate or designee of the Declarant may assign any or all of the rights or obligations of the Declarant or an affiliate or designee of the Declarant under the contract to the Association or any individual or entity; provided however, as long as Development Owner owns any of the Property, the Declarant (or any affiliate or designee of the Declarant) may only assign its rights or obligations under such contract with the prior written consent of Development Owner (which consent may be given or withheld by Development Owner in its sole and absolute discretion). Any such contracts may provide for installation, operation, management, maintenance, and upgrades or modifications

to the Community Services and Systems as the Declarant or its affiliate or designee determines appropriate. **Each Owner acknowledges that interruptions in Community Services and Systems will occur from time to time. The Declarant, the Development Owner and the Association, or any of their respective affiliates, directors, managers, officers, employees and agents, or any of their successors or assigns shall not be liable for, and no Community Services and Systems user shall be entitled to refund, rebate, discount, or offset in applicable fees for, any interruption in Community Services and Systems and services, regardless of whether or not such interruption is caused by reasons within the service provider's control.**

4.11 Protection of Declarant's Interests. Despite any assumption of control of the Board by Owners other than Declarant, until the expiration or termination of the Development Period, the Board is prohibited from taking any action which would discriminate against Declarant or Development Owner, or which would be detrimental to the sale of Lots or any portion of the Property owned by Declarant or Development Owner. Declarant and Development Owner shall each be entitled to determine, in its sole and absolute discretion, whether any such action discriminates or is detrimental to Declarant or Development Owner, as the case may be. Unless the Declarant (and the Development Owner, if it still owns any Lots or any portions of the Property at the time in question) agrees otherwise in advance and in writing, the Board will be required to continue the same level and quality of maintenance, operations and services as that provided immediately prior to assumption of control of the Board by Owners other than Declarant until the expiration or termination of the Development Period.

4.12 Administration of Common Area. The administration, maintenance, repair and replacement of the Common Area by the Association (such Common Area includes, without limitation, any Improvements and/or facilities thereon and appurtenances thereto), shall be in accordance with the provisions of Applicable Law and the Restrictions, and of any other agreements, documents, amendments or supplements to the foregoing which may be duly adopted or subsequently required by any institutional or governmental lender, purchaser, insurer or guarantor of mortgage loans (including, for example, the Federal Home Loan Mortgage Corporation) designated by Declarant or by any governmental or quasi-governmental agency having regulatory jurisdiction over the Common Area or by any title insurance company selected by Declarant to insure title to any portion of the Common Area.

4.13 Right of Action by Association. The Association shall not have the power to institute, defend, intervene in, settle or compromise litigation or administrative proceedings: (i) in the name of or on behalf of any Lot Owner (whether one or more); or (ii) pertaining to a Claim, as defined in *Section 12.1* below, relating to the design or construction of Improvements on a Lot (whether one or more). This *Section 4.13* may not be amended or modified without: (a) Declarant's written and acknowledged consent; (b) Development Owner's written and acknowledged consent, for so long as Development Owner owns any Lot or portion of the Property; and (c) Members entitled to cast at least one hundred percent (100%) of the total

number of votes of the Association, which must be part of the Recorded amendment instrument.

4.14 Resolution of Board Deadlock. In the event the Board is deadlocked, meaning a decision of a Majority of the Board cannot be obtained as a result of a disagreement between Board members, the decision will be considered a "Claim" as defined in *Article 12* and, notwithstanding any provision in *Article 12* to the contrary, will be resolved by binding arbitration in accordance with the procedures set forth in *Section 12.8* of this Declaration.

ARTICLE 5
INSURANCE AND RESTORATION

5.1 Insurance. Each Owner will be required to purchase and maintain commercially standard insurance on the Improvements located upon such Owner's Lot. The Association will not be required to maintain insurance on the Improvements constructed upon any Lot. The Association may, however, obtain such insurance as it may deem necessary, including but not limited to such policies of liability and property damage insurance as the Board, in its discretion, may deem necessary. Insurance premiums for such policies will be a common expense to be included in the Assessments levied by the Association. The acquisition of insurance by the Association will be without prejudice to the right and obligation of any Owner to obtain additional individual insurance. During the Development Period, Declarant reserves the right to satisfy the insurance obligations of the Association with a master insurance program controlled by Declarant.

ARE YOU COVERED?

The Association will not provide insurance which covers an Owner's Lot or any Improvements or personal property located on a Lot.

5.2 Restoration. In the event of any fire or other casualty, unless otherwise approved by the ACC, the Owner shall: (i) promptly repair, restore and replace any damaged or destroyed structures to their same exterior condition existing prior to the damage or destruction thereof or (ii) in the case of substantial or total damage or destruction of any Improvement, remove all such damaged Improvements and debris from the Property within sixty (60) days after the occurrence of such damage. Such repair, restoration or replacement will be commenced and completed in a good and workmanlike manner using exterior materials substantially similar to those originally used in the structures damaged or destroyed. To the extent that the Owner fails to commence such repair, restoration or replacement of substantial or total damage or destruction within one hundred twenty (120) days after the occurrence of such damage or destruction, and thereafter prosecute the same to completion, or if the Owner does not clean up any debris resulting from any damage within sixty (60) days after the occurrence of such damage, the Association may commence, complete or effect such repair, restoration, replacement, removal or clean-up, and such Owner will be personally liable to the

Association for the cost of such work; provided, however, that if the Owner is prohibited or delayed under Applicable Law from commencing such repair, restoration, replacement, removal or clean-up, the rights of the Association under this provision will not arise until the expiration of thirty (30) days after such prohibition or delay is removed. If the Owner fails to pay such cost upon demand by the Association, the cost thereof (plus interest from the date of demand until paid at the maximum lawful rate, or if there is no such maximum lawful rate, then at the rate of one and one-half percent (1½%) per month) will be added to the Assessment chargeable to the Owner's Lot. Any such amounts added to the Assessments chargeable against a Lot will be secured by the liens reserved in this Declaration for Assessments and may be collected by any means provided in this Declaration for the collection of Assessments, including, but not limited to, foreclosure of such liens against the Owner's Lot. **EACH OWNER, BY ACCEPTING TITLE TO ALL OR ANY PORTION OF THE PROPERTY, HEREBY RELEASES AND HOLDS HARMLESS THE ASSOCIATION AND ITS OFFICERS, DIRECTORS, COMMITTEE MEMBERS, EMPLOYEES AND AGENTS FROM ANY COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION INCURRED OR THAT MAY ARISE BY REASON OF THE ASSOCIATION'S ACTS OR ACTIVITIES UNDER THIS *SECTION 5.2*, EXCEPT FOR SUCH COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR COST OF ACTION ARISING BY REASON OF THE ASSOCIATION'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. "GROSS NEGLIGENCE" AS USED HEREIN DOES NOT INCLUDE SIMPLE NEGLIGENCE, CONTRIBUTORY NEGLIGENCE OR SIMILAR NEGLIGENCE SHORT OF ACTUAL GROSS NEGLIGENCE.**

5.3 Mechanic's and Materialmen's Lien. Each Owner whose structure is repaired, restored, replaced or cleaned up by the Association pursuant to the rights granted under this *Article 5*, hereby grants to the Association an express mechanic's and materialmen's lien for the reasonable cost of such repair, restoration, replacement or clean-up of the damaged or destroyed Improvement to the extent that the cost of such repair, restoration, replacement, or clean-up exceeds any insurance proceeds allocable to such repair, restoration, replacement, or clean-up and delivered to the Association. Upon request by the Board, and before the commencement of any reconstruction, repair, restoration, replacement or clean-up, such Owner will execute all documents sufficient to effectuate such mechanic's and materialmen's lien in favor of the Association.

5.4 Flood Insurance. Each Owner and Resident of a Lot is advised that portions of the Property may be located in a floodplain, floodway or area(s) prone to flooding. Each Owner and Resident is advised to strongly consider purchasing flood insurance on the Owner's or Resident's Lot. The Association will not obtain flood insurance on any portion of the Property. Each Owner and Resident is advised to: (i) contact local governmental authorities to review flood zone maps for such Owner's or Resident's Lot; (ii) review the flood maps published by the Federal Emergency Management Agency; (iii) review the Plat(s); and (iv) periodically contact responsible insurance companies licensed to do business in the State of Texas to determine whether flood insurance should be purchased by an Owner or Resident for

the Owner's or Resident's Lot and all Improvements thereon. The floodplain and floodway boundaries are subject to change and flooding can occur outside of these areas. Neither the Association nor Declarant shall be held liable for any loss or damage by reason of flooding occurring on any Lot or the Improvements thereon.

ARTICLE 6
COVENANT FOR ASSESSMENTS

6.1 Assessments.

6.1.1 Established by the Board. Assessments established by the Board pursuant to the provisions of this *Article 6* will be levied against each Lot in amounts determined by the Board pursuant to *Section 6.7* below. The total amount of Assessments will be determined pursuant to *Section 6.3* through *Section 6.6*.

6.1.2 Personal Obligation; Lien. Each Assessment, together with such interest thereon and costs of collection as hereinafter provided, will be the personal obligation of the Owner of the Lot against which the Assessment is levied and will be secured by a lien hereby granted and conveyed by Declarant to the Association against each such Lot and all Improvements thereon. The Association may enforce payment of such Assessments in accordance with the provisions of this *Article 6*.

6.1.3 Declarant Subsidy. Declarant may, but is not obligated to, reduce Assessments which would otherwise be levied against Lots for any fiscal year by the payment of a subsidy to the Association. Any subsidy paid to the Association by Declarant may be treated as a contribution or a loan, in Declarant's sole and absolute discretion. Any subsidy and the characterization thereof may be disclosed as a line item in the annual budget prepared by the Board and attributable to such Assessments. The payment of a subsidy in any given year will not obligate Declarant to continue payment of a subsidy to the Association in future years.

6.2 Maintenance Fund. The Board will establish a maintenance fund into which will be deposited all monies paid to the Association and from which disbursements will be made in performing the functions of the Association under this Declaration. The funds of the Association may be used for any purpose authorized by the Restrictions and Applicable Law.

6.3 Regular Assessments. Prior to the beginning of each fiscal year, the Board will prepare a budget for the purpose of determining amounts sufficient to pay the estimated net expenses of the Association (the "**Regular Assessments**") which sets forth: (i) an estimate of the expenses to be incurred by the Association during such year in performing its functions and exercising its powers under the Restrictions, including, but not limited to, the cost of all management, repair and maintenance, the cost of providing any lighting, the cost of administering and enforcing the Restrictions, and (ii) an estimate of the amount needed to maintain a reasonable provision for contingencies and an appropriate replacement reserve, and will give due consideration to any expected income and any surplus from the prior year's fund.

The level of Regular Assessments should be based on an accredited cost project analysis with a specific reserve account for maintaining the Common Area in good repair and condition. Assessments sufficient to pay such estimated net expenses will then be levied at the level of Assessments set by the Board in its sole and absolute discretion, and the Board's determination will be final and binding so long as it is made in good faith. If the sums collected prove inadequate for any reason, including non-payment of any Assessment, the Association may at any time, and from time to time, levy further Assessments in the same manner. All such Regular Assessments will be due and payable to the Association annually on or before the first day of the month, or in such other manner as the Board may designate in its sole and absolute discretion.

6.4 Working Capital Assessment. Each Owner (other than Declarant and Development Owner) will pay a one-time working capital assessment (the "**Working Capital Assessment**") to the Association in such amount, if any, as may be determined by the Declarant, until expiration or termination of the Development Period, and the Board thereafter. The Working Capital Assessment hereunder will be due and payable to the Association by the transferee immediately upon each transfer of title to the Lot, including upon transfer of title from one Owner of such Lot to any subsequent purchaser or transferee thereof. Such Working Capital Assessment need not be uniform among all Lots, and the Declarant, until expiration or termination of the Development Period, and the Board thereafter is expressly authorized to levy Working Capital Assessments of varying amounts depending on the size, use and general character of the Lots then being made subject to such levy. The Association may use the working capital to discharge operating expenses. The levy of any Working Capital Assessment will be effective only upon the Recordation of a written notice, signed by the Declarant, during the Development Period, or a duly authorized officer of the Association thereafter, setting forth the amount of the Working Capital Assessment and the Lots to which it applies.

Notwithstanding the foregoing provision, the following transfers will not be subject to the Working Capital Assessment: (i) foreclosure of a deed of trust lien, tax lien, or the Association's Assessment lien; (ii) transfer to, from, or by the Association; or (iii) voluntary transfer by an Owner to one or more co-Owners, or to the Owner's spouse, child, or parent, including conveyances to trusts. Additionally, neither the Declarant, Development Owner, nor an Owner who is a Homebuilder will not be subject to the Working Capital Assessment; however, the Working Capital Assessment will be payable by any Owner who acquires a Lot from the Declarant, Development Owner or a Homebuilder. In the event of any dispute regarding the application of the Working Capital Assessment to a particular Owner, the determination by the Declarant during the Development Period, and the Board thereafter, regarding application of the exemption will be binding and conclusive without regard to any contrary interpretation of this *Section 6.4*. The Working Capital Assessment will be in addition to, not in lieu of, any other Assessments levied in accordance with this *Article 6* and will not be considered an advance payment of such Assessments. The Working Capital Assessment hereunder will be due and payable to the Association immediately upon each transfer of title to the Lot, including upon transfer of title from one Owner of such Lot to any subsequent

purchaser or transferee thereof. The Declarant during the Development Period, and thereafter the Board, will have the power to waive the payment of any Working Capital Assessment attributable to a Lot (or all Lots) by the Recordation of a waiver, which waiver may be temporary or permanent.

6.5 Special Assessments. In addition to the Regular Assessments provided for above, the Board may levy special assessments (the "**Special Assessments**") whenever in the Board's opinion such Special Assessments are necessary to enable the Board to carry out the functions of the Association under the Restrictions. The amount of any Special Assessments will be at the reasonable discretion of the Board. In addition to the Special Assessments authorized above, the Association may, in any fiscal year, levy a Special Assessment for the purpose of defraying, in whole or in part, the cost of any construction, reconstruction, repair or replacement of a capital improvement upon the Common Area. Any Special Assessment levied by the Association for the purpose of defraying, in whole or in part, costs of any construction, reconstruction, repair or replacement of capital improvement upon the Common Area will be levied against all Owners based on Assessment Units.

6.6 Individual Assessments. In addition to any other Assessments, the Board may levy an individual assessment (the "**Individual Assessment**") against an Owner and the Owner's Lot. Individual Assessments may include, but are not limited to: interest, late charges, and collection costs on delinquent Assessments; reimbursement for costs incurred in bringing an Owner or the Owner's Lot into compliance with this Declaration; fines for violations of the Restrictions; transfer-related fees and resale certificate fees; fees for estoppel letters and project documents; insurance deductibles; reimbursement for damage or waste caused by willful or negligent acts of the Owner, the Owner's guests, invitees or Residents of the Owner's Lot; common expenses that benefit fewer than all of the Lots, which may be assessed according to benefit received; fees or charges levied against the Association on a per-Lot basis; and "pass through" expenses for services to Lots provided through the Association and which are equitably paid by each Lot according to the benefit received.

6.7 Amount of Assessment.

6.7.1 Assessments to be Levied. The Board shall levy Assessments against each "Assessment Unit" (as defined in *Section 6.7.2* below). Unless otherwise provided in this Declaration, Assessments levied pursuant to *Section 6.3* and *Section 6.5* shall be levied uniformly against each Assessment Unit allocated to a Lot.

6.7.2 Assessment Unit. Each Lot shall constitute one "Assessment Unit" unless otherwise provided in *Section 6.7.3* and *Section 6.7.4*.

6.7.3 Declarant and Development Owner Exemption. Notwithstanding anything in this Declaration to the contrary, no Assessments shall be levied upon Lots owned by Declarant or Development Owner.

6.7.4 Other Exemptions. Declarant may, in its sole discretion, elect to: (i) exempt any un-platted or unimproved portion of the Property or any Lot from any Assessments levied or charged pursuant to this *Article 6*; (ii) delay the levy of Assessments against any un-platted, unimproved or improved portion of the Property; or (iii) reduce the Assessments against any un-platted, unimproved or improved portion of the Property. Declarant or the Board may also exempt any portion of the Property which is dedicated and accepted by public authority from Assessments.

6.8 Late Charges. If any Assessment is not paid by the due date applicable thereto, the Owner responsible for the payment may be required by the Board, at the Board's election at any time and from time to time, to pay a late charge in such amount as the Board may designate, and the late charge (and any reasonable handling costs) will be levied as an Individual Assessment against the Lot owned by such Owner, collectible in the manner as provided for collection of Assessments, including foreclosure of the lien against such Lot; provided, however, such charge will never exceed the maximum charge permitted under Applicable Law.

6.9 Owner's Personal Obligation; Interest. Assessments levied as provided for herein will be the personal and individual debt of the Owner of the Lot against which are levied such Assessments. No Owner may exempt himself or herself from liability for such Assessments. In the event of default in the payment of any such Assessment, the Owner of the Lot will be obligated to pay interest on the amount of the Assessment at the highest rate allowed by applicable usury laws then in effect on the amount of the Assessment from the due date therefor (or if there is no such highest rate, then at the rate of one and one-half percent (1½%) per month), together with late charges, if any, all costs and expenses of collection, including reasonable attorney's fees. Such amounts will be levied as an Individual Assessment against the Lot owned by such Owner.

6.10 Assessment Lien and Foreclosure. The payment of all sums assessed in the manner provided in this *Article 6* is, together with late charges as provided in *Section 6.8* and interest as provided in *Section 6.9* hereof and all costs of collection, including attorney's fees as herein provided, secured by the continuing Assessment lien granted to the Association pursuant to *Section 6.1.2* above, and will bind each Lot in the hands of the Owner thereof, and such Owner's heirs, devisees, personal representatives, successors or assigns. The aforesaid lien will be superior to all other liens and charges against such Lot, except only for: (i) tax liens and governmental assessment liens; (ii) all sums secured by a Recorded first mortgage lien or Recorded first deed of trust lien of record, to the extent such lien secures sums borrowed for the acquisition or improvement of the Lot in question, (iii) home equity loans or home equity lines of credit which are secured by a Recorded second mortgage lien or Recorded second deed of trust lien of record; or (iv) as otherwise required by Applicable Law; provided that, in the case of subparagraphs (ii), (iii) and (iv) above, such Mortgage was Recorded before the delinquent Assessment was due. The Association will have the power to subordinate the aforesaid Assessment lien to any other lien. Such power will be entirely discretionary with the Board,

and such subordination shall be signed by an authorized officer, agent or attorney of the Association. The Association may, at its option and without prejudice to the priority or enforceability of the Assessment lien granted hereunder, prepare a written notice of Assessment lien setting forth the amount of the unpaid indebtedness, the name of the Owner of the Lot covered by such lien and a description of the Lot. Such notice may be signed by one of the authorized officers, agents, or attorneys of the Association and will be Recorded. Each Owner, by accepting a deed or ownership interest to a Lot subject to this Declaration, will be deemed conclusively to have granted a power of sale to the Association to secure and enforce the Assessment lien granted hereunder. The Assessment liens and rights to foreclosure thereof will be in addition to and not in substitution of any other rights and remedies the Association may have by law and under this Declaration, including the rights of the Association to institute suit against such Owner personally obligated to pay the Assessment and/or for foreclosure of the aforesaid lien. In any foreclosure proceeding, such Owner will be required to pay the costs, expenses and reasonable attorney's fees incurred. The Association will have the power to bid (in cash or by credit against the amount secured by the lien) on the property at foreclosure or other legal sale and to acquire, hold, lease, mortgage, convey or otherwise deal with the same. Upon the written request of any Mortgagee, the Association will report to said Mortgagee any unpaid Assessments remaining unpaid for longer than sixty (60) days after the same are due. The lien hereunder will not be affected by the sale or transfer of any Lot; except, however, that in the event of foreclosure of any lien superior to the Assessment lien, the lien for any Assessments that were due and payable before the foreclosure sale will be extinguished, provided that past-due Assessments will be paid out of the proceeds of such foreclosure sale only to the extent that funds are available after the satisfaction of the indebtedness secured by the Mortgage. The provisions of the preceding sentence will not, however, relieve any subsequent Owner (including any Mortgagee or other purchaser at a foreclosure sale) from paying Assessments becoming due and payable after the foreclosure sale. Upon payment of all sums secured by a lien of the type described in this *Section 6.10*, the Association will upon the request of the Owner, and at such Owner's cost, execute a release of lien relating to any lien for which written notice has been Recorded as provided above, except in circumstances in which the Association has already foreclosed such lien. Such release will be signed by an authorized officer, agent, or attorney of the Association. In addition to the lien hereby retained, in the event of nonpayment by any Owner of any Assessment and after the lapse of at least twelve (12) days since such payment was due, the Association may, upon five (5) days' prior written notice (which may run concurrently with such twelve (12) day period) to such Owner, in addition to all other rights and remedies available pursuant to Applicable Law, equity or otherwise, terminate, in such manner as the Board deems appropriate, any utility or cable service provided through the Association and not paid for directly by an Owner or Resident to the utility or service provider. Such notice will consist of a separate mailing or hand delivery at least five (5) days prior to a stated date of disconnection, with the title "termination notice" or similar language prominently displayed on the notice. The notice will include the office or street address where the Owner or the Owner's tenant can make arrangements for payment of the bill and for reconnection of service. Utility or cable service will not be disconnected on a day, or

immediately preceding a day, when personnel are not available for the purpose of collection and reconnecting such services. Except as otherwise provided by Applicable Law, the sale or transfer of a Lot will not relieve the Owner of such Lot or such Owner's transferee from liability for any Assessments thereafter becoming due or from the lien associated therewith. If an Owner conveys its Lot and on the date of such conveyance Assessments against the Lot remain unpaid, or said Owner owes other sums or fees under this Declaration to the Association, the Owner will pay such amounts to the Association out of the sales price of the Lot, and such sums will be paid in preference to any other charges against the Lot other than liens superior to the Assessment lien and charges in favor of the State of Texas or a political subdivision thereof for taxes on the Lot which are due and unpaid. The Owner conveying such Lot will remain personally liable for all such sums until the same are fully paid, regardless of whether the transferee of the Lot also assumes the obligation to pay such amounts. The Board may adopt an administrative transfer fee to cover the expenses associated with updating the Association's records upon the transfer of a Lot to a third party; provided, however, that no transfer fee will be due upon the transfer of a Lot (i) from Declarant to a third party or (ii) from Development Owner to Declarant or a Homebuilder.

Yes, the Association *can* foreclose on your Lot!

If you fail to pay assessments to the Association, you may lose title to your Lot if the Association forecloses its assessment lien.

6.11 Exempt Property. The following areas will be exempt from the Assessments provided for in this *Article 6*:

(i) All area dedicated and accepted by a public authority;

(ii) The Common Area; and

(iii) Any portion of the Property owned by Declarant or Development Owner.

6.12 Fines and Damages Assessment.

6.12.1 Board Assessment. The Board may assess fines against an Owner for violations of the Restrictions which have been committed by an Owner, a Resident, or the Owner or Residents guests, agents or invitees, pursuant to the *Fine and Collection Policy* adopted by the Board. Any fine and/or charge levied in accordance with this *Section 6.12* will be considered an Individual Assessment pursuant to this Declaration. Each day of violation may be considered a separate violation if the violation continues after written notice to the Owner. The Board may assess damage charges against an Owner for pecuniary loss to the Association from property damage or destruction of Common Area or any facilities caused by the Owner, Resident, or their guests, agents, or invitees. The Manager will have authority to send notices to

alleged violators, informing them of their violations and asking them to comply with the Rules and Regulations and/or informing them of potential or probable fines or damage assessments. The Board may from time to time adopt a schedule of fines.

6.12.2 Lien Created. The payment of each fine and/or damage charge levied by the Board against the Owner of a Lot is, together with interest as provided in *Section 6.9* hereof and all costs of collection, including attorney's fees as herein provided, secured by the lien granted to the Association pursuant to *Section 6.1.2* of this Declaration. The fine and/or damage charge will be considered an Assessment for the purpose of this *Article 6* and will be enforced in accordance with the terms and provisions governing the enforcement of assessments pursuant to this *Article 6*.

ARTICLE 7
ARCHITECTURAL CONTROL COMMITTEE

Declarant has a substantial interest in ensuring that Improvements within the Property maintain and enhance Declarant's reputation as a community developer and do not impair Declarant's ability to market and sell all or any portion of the Property. Until Declarant has delegated its right to appoint and remove all members of the ACC to the Board as provided in *Section 7.2.1* below, the ACC will be acting solely in Declarant's interest and will owe no duty to any other Owner or the Association. Notwithstanding any provision in this Declaration to the contrary, Declarant may appoint a single person to exercise the rights of the ACC.

7.1 Construction of Improvements. No Improvement may be erected, placed, constructed, painted, altered, modified or remodeled on any Lot, and no Lot may be re-subdivided or consolidated with other Lots or Property, by anyone other than Declarant or Development Owner without the prior written approval of the ACC. No Improvement constructed or caused to be constructed by the Declarant or Development Owner will be subject to the terms and provisions of this *Article 7* and need not be approved in accordance herewith.

7.2 Architectural Control Committee.

7.2.1 Composition. The ACC will be composed of not more than three (3) persons (who need not be Members or Owners) appointed as provided below, who will review Improvements proposed to be made by any Owner other than Declarant and Development Owner. Declarant will have the right to appoint and remove (with or without cause) all members of the ACC. Declarant may assign its right to appoint all members of the ACC to the Association by Recorded written instrument, and thereafter, the Board will have the right to appoint and remove (with or without cause) all members of the ACC. Any assignment by Declarant of the right to appoint and remove all members of the ACC (a) must be approved in writing and in advance by the Development Owner, for so long as Development Owner owns any Lot or portion of the Property; and (b) may be withdrawn until expiration of twenty-four (24) months after the expiration of the Development Period. If Declarant withdraws its

assignment of the right to appoint and remove all members of the ACC, then on the date of such withdrawal, Declarant will have the right to appoint and remove (with or without cause) all members of the ACC. Declarant's right to appoint all members of the ACC will automatically be assigned to the Association upon the expiration of twenty-four (24) months after the expiration of the Development Period. Declarant, at its option, may create and assign specific duties and responsibilities to one or more sub-committees consisting of members and/or nonmembers of the ACC. In the event responsibilities and duties are assigned to a sub-committee, those responsibilities and duties will no longer be discharged by the ACC unless the sub-committee exercising such duties and responsibilities is dissolved by Declarant. The right to create, dissolve, and appoint members of such sub-committees will reside exclusively with Declarant until such time as Declarant has assigned its right to appoint members of the ACC to the Association. The ACC will have the right to employ consultants and advisors as it deems necessary or appropriate.

7.2.2 Submission and Approval of Plans and Specifications. Construction plans and specifications or, when an Owner desires solely to re-subdivide or consolidate Lots, a proposal for such re-subdivision or consolidation, will be submitted in accordance with the Design Guidelines, if any, or any additional rules adopted by the ACC together with any review fee which is imposed by the ACC in accordance with *Section 7.2.3* to the ACC at the offices of Declarant, at such address as may hereafter be designated in writing from time to time. No re-subdivision or consolidation will be made, nor any Improvement placed or allowed on any Lot, until the plans and specifications and the builder which the Owner intends to use to construct the proposed structure or Improvement have been approved in writing by a Majority of the members of the ACC. The ACC may, in reviewing such plans and specifications consider any information that it deems proper; including, without limitation, any permits, environmental impact statements or percolation tests that may be required by the ACC or any other entity; and harmony of external design and location in relation to surrounding structures, topography, vegetation, and finished grade elevation. The ACC may postpone its review of any plans and specifications submitted for approval pending receipt of any information or material which the ACC, in its sole discretion, may require. Site plans must be approved by the ACC prior to the clearing of any Lot, or the construction of any Improvements. The ACC may refuse to approve plans and specifications for proposed Improvements, or for the re-subdivision or consolidation of any Lot on any grounds that, in the sole and absolute discretion of the ACC, are deemed sufficient, including, but not limited to, purely aesthetic grounds. Notwithstanding any provision to the contrary in this Declaration, the ACC may issue an approval to Homebuilders for the construction of Improvements based on the review and approval of plan types and adopt a procedure which differs from the procedures for review and approval otherwise set forth in this Declaration.

7.2.3 Design Guidelines. Declarant shall have the right, but shall have no obligation, to adopt Design Guidelines and, during the Development Period, will have the power from time to time, to adopt (unless previously adopted by Declarant), amend, modify, or supplement the Design Guidelines, if any. Upon expiration or termination of the Development

Period, the ACC, or any sub-committee thereof created pursuant to *Section 7.2.1*, will have the power from time to time, to adopt (if not previously adopted by Declarant) and to amend, modify, or supplement the Design Guidelines, if any; provided, however, that any amendment to the Design Guidelines made by a sub-committee will only apply to the Improvements under the jurisdiction of such sub-committee, and during the Development Period, any such amendment, modification or supplement must be approved in advance and in writing by the Declarant. In the event of any conflict between the terms and provisions of the Design Guidelines, if any, and the terms and provisions of this Declaration, the terms and provisions of this Declaration will control. In addition, the ACC will have the power and authority to impose a fee for the review of plans, specifications and other documents and information submitted to it pursuant to the terms of this Declaration. Such charges will be held by the ACC and used to defray the administrative expenses incurred by the ACC in performing its duties hereunder; provided, however, that any excess funds held by the ACC will be distributed to the Association at the end of each calendar year. The ACC will not be required to review any plans until a complete submittal package, as required by this Declaration and the Design Guidelines, is assembled and submitted to the ACC. The ACC will have the authority to adopt such additional procedural and substantive rules and guidelines (including, without limitation, the imposition of any requirements for certificates of compliance or completion relating to any Improvement and the right to approve in advance any contractor selected for the construction of Improvements), not in conflict with this Declaration, as it may deem necessary or appropriate in connection with the performance of its duties hereunder. Notwithstanding the foregoing or anything to the contrary herein, for so long as Development Owner owns any Lot or portion of the Property, any adoption of or modification, amendment or supplement to the Design Guidelines, whether adopted by the Declarant, the ACC, or a sub-committee, will require the prior written consent of Development Owner.

7.2.4 Actions of the Architectural Control Committee. The ACC may, by resolution unanimously adopted in writing, designate one or more of its members, or an agent acting on its behalf, to take any action or perform any duties for and on behalf of the ACC, except the granting of variances. In the absence of such designation, the vote of a Majority of all of the members of the ACC taken at a duly constituted meeting will constitute an act of the ACC.

7.2.5 Failure to Act. In the event that any plans and specifications are submitted to the ACC as provided herein, and the ACC fails either to approve or reject such plans and specifications for a period of sixty (60) days following such submission, rejection of such plans and specifications by the ACC will be presumed. In furtherance, and not in limitation, of the foregoing, any failure of the ACC to act upon a request for a variance will not be deemed a consent to such variance, and the ACC's written approval of all requests for variances will be expressly required.

7.2.6 Variances. The ACC may grant variances from compliance with any of the provisions of the Design Guidelines, if any, or this Declaration, when, in the opinion of the

ACC, in its sole and absolute discretion, such variance is justified. All variances must be evidenced in writing and must be signed by at least a Majority of the members of the ACC. Each variance must also be Recorded; provided however, that failure to Record a variance will not affect the validity thereof or give rise to any claim or cause of action against the ACC, including the Declarant or its designee, the Association, or the Board. If a variance is granted, no violation of the covenants, conditions, or restrictions contained in this Declaration or the Design Guidelines, if any, will be deemed to have occurred with respect to the matter for which the variance was granted. The granting of such variance will not operate to waive or amend any of the terms and provisions of this Declaration or the Design Guidelines, if any, for any purpose except as to the particular property and in the particular instance covered by the variance, and such variance will not be considered to establish a precedent for any future waiver, modification, or amendment of the terms and provisions of this Declaration or the Design Guidelines, if any.

7.2.7 Duration of Approval. The approval of the ACC of any plans and specifications, and any variances granted by the ACC, will be valid for a period of one hundred twenty (120) days only. If construction in accordance with such plans and specifications or variance is not commenced within such one hundred twenty (120) day period and diligently prosecuted to completion within either: (i) one year after issuance of approval of such plans and specifications; or (ii) such other period thereafter as determined by the ACC, in its sole and absolute discretion, the Owner will be required to resubmit such plans and specifications or request for a variance to the ACC, and the ACC will have the authority to re-evaluate such plans and specifications in accordance with this *Section 7.2.7* and may, in addition, consider any change in circumstances which may have occurred since the time of the original approval.

7.2.8 No Waiver of Future Approvals. The approval of the ACC to any plans or specifications for any work done or proposed in connection with any matter requiring the approval or consent of the ACC will not be deemed to constitute a waiver of any right to withhold approval or consent as to any plans and specifications on any other matter, subsequently or additionally submitted for approval by the same or a different person, nor will such approval or consent be deemed to establish a precedent for future approvals by the ACC.

7.2.9 Non-Liability of Committee Members. NEITHER DECLARANT, DEVELOPMENT OWNER, THE BOARD, THE ARCHITECTURAL CONTROL COMMITTEE, NOR ANY MEMBER WILL BE LIABLE TO ANY OWNER OR TO ANY OTHER PERSON FOR ANY LOSS, DAMAGE OR INJURY ARISING OUT OF THE PERFORMANCE OF THE ARCHITECTURAL CONTROL COMMITTEE'S DUTIES UNDER THIS DECLARATION.

ARTICLE 8
MORTGAGE PROVISIONS

The following provisions are for the benefit of holders, insurers and guarantors of first Mortgages on Lots within the Property. The provisions of this *Article 8* apply to this Declaration and the Bylaws of the Association.

8.1 Notice of Action. An institutional holder, insurer, or guarantor of a first Mortgage which provides a written request to the Association (such request to state the name and address of such holder, insurer, or guarantor and the street address of the Lot to which its Mortgage relates (thereby becoming an "**Eligible Mortgage Holder**")), will be entitled to timely written notice of:

(i) Any condemnation loss or any casualty loss which affects a material portion of the Property or which affects any Lot on which there is an eligible Mortgage held, insured, or guaranteed by such Eligible Mortgage Holder;

(ii) Any delinquency in the payment of assessments or charges owed for a Lot subject to the Mortgage of such Eligible Mortgage Holder, where such delinquency has continued for a period of sixty (60) days, or any other violation of the Restrictions relating to such Lot or the Owner or Resident which is not cured within sixty (60) days; or

(iii) Any lapse, cancellation, or material modification of any insurance policy maintained by the Association.

8.2 Examination of Books. The Association will permit Mortgagees to examine the books and records of the Association during normal business hours.

8.3 Taxes, Assessments and Charges. All taxes, assessments and charges that may become liens prior to first lien mortgages under Applicable Law will relate only to the individual Lots and not to any other portion of the Property.

ARTICLE 9
EASEMENTS

9.1 Right of Ingress and Egress. Declarant, its agents, employees, affiliates, designees, successors and assigns will have a right of ingress and egress over and the right of access to the Common Area to the extent necessary to use the Common Area and the right to such other temporary uses of the Common Area as may be required or reasonably desirable (as determined by Declarant in its sole discretion) in connection with the construction and development of the Property. The Property shall be subject to a perpetual non-exclusive easement for the installation and maintenance of, including the right to read meters, service or repair lines and equipment, and to do everything and anything necessary to properly maintain and furnish the Community Services and Systems and the facilities pertinent and necessary to the same, which easement shall run in favor of Declarant and its affiliates, successors and

assigns. Declarant and its affiliates, successors and assigns shall have the right, but not the obligation, to install and provide the Community Services and Systems and to provide the services available through the Community Services and Systems to any and all Lots within the Property. Neither the Association nor any Owner shall have any interest therein. Any or all of such services may be provided either directly through the Association and paid for as part of the Assessments or directly to Declarant, any affiliate of Declarant, or a third party, by the Owner who receives the services. The Community Services and Systems shall be the property of Declarant or its affiliate unless transferred by Declarant or its affiliate, as applicable, whereupon any proceeds of such transfer shall belong to Declarant or its affiliate, as applicable. Declarant or its affiliate shall have the right but not the obligation to convey, transfer, sell or assign all or any portion of the Community Services and Systems or all or any portion of the rights, duties or obligations with respect thereto, to the Association or to any person or entity. The rights of Declarant or its affiliate with respect to the Community Services and Systems installed by Declarant or its affiliate and the services provided through such Community Services and Systems are exclusive, and no other person or entity may provide such services through the Community Services and Systems installed by Declarant or its affiliate without the prior written consent of Declarant. In recognition of the fact that interruptions in cable television and other Community Services and Systems will occur from time to time, no person or entity described above shall in any manner be liable, and no user of any Community Services and Systems shall be entitled to any refund, rebate, discount or offset in applicable fees, for any interruption in Community Services and Systems, regardless of whether or not same is caused by reasons within the control of the then-provider of such services.

9.2 Reserved Easements. All dedications, limitations, restrictions and reservations shown on any Plat and all grants and dedications of easements, rights-of-way, restrictions and related rights made by Declarant or any third party prior to the Property becoming subject to this Declaration are incorporated herein by reference and made a part of this Declaration for all purposes as if fully set forth herein, and will be construed as being adopted in each and every contract, deed or conveyance executed or to be executed by or on behalf of Declarant. Declarant reserves the right to relocate, make changes in, and additions to said easements, rights-of-way, dedications, limitations, reservations and grants for the purpose of most efficiently and economically developing the Property.

9.3 Roadway and Utility Easements. Declarant hereby reserves for itself, its affiliates and assigns a perpetual non-exclusive easement over and across the Property for: (i) the installation, operation and maintenance of utilities and associated infrastructure to serve the Property and any other property owned by Declarant; (ii) the installation, operation and maintenance of cable lines and associated infrastructure for sending and receiving data and/or other electronic signals, security and similar services to serve the Property and any other property owned by Declarant; (iii) the installation, operation and maintenance of, walkways, pathways and trails, drainage systems, street lights and signage to serve the Property and any other property owned by Declarant; and (iv) the installation, location, relocation, construction, erection and maintenance of any streets, roadways, or other areas to serve the Property and any

other property owned by Declarant. Declarant, its affiliate(s) or assigns will be entitled to unilaterally assign the easements reserved hereunder to any third party who owns, operates or maintains the facilities and Improvements described in (i) through (iv) of this *Section 9.3*. In addition, Declarant may designate all or any portion of the easements or facilities constructed therein as Common Area.

9.4 Subdivision Entry, Screening Walls and Fencing Easement. Declarant reserves for itself and the Association, an easement over and across the Property and any Common Area for the installation, maintenance, repair or replacement of certain subdivision entry facilities, screening walls, and/or fencing which serve the Property, the Common Area or any other property owned by the Declarant. Declarant will have the right, from time to time, to Record a written notice which identifies the subdivision entry facilities, screening walls and/or fencing to which the easement reserved hereunder applies. Declarant may designate all or any portion of the subdivision entry facilities, screening walls and/or fencing as Common Area by Recorded written notice. The exercise of the easements reserved hereunder will not extend to permitting entry into any residence, nor will it unreasonably interfere with the use of any Lot or residence or Improvement constructed thereon.

9.5 Landscape, Monumentation and Signage Easement. Declarant hereby reserves for itself and the Association, an easement over and across the Property and the Common Area for the installation, maintenance, repair or replacement of landscaping, monumentation and signage which serves the Property, the Common Area or any other property owned by the Declarant. Declarant will have the right, from time to time, to Record a written notice which identifies the landscaping, monumentation or signage to which the easement reserved hereunder applies. Declarant may designate all or any portion of the landscaping, monumentation or signage as Common Area.

9.6 Easement for Special Events. The Declarant reserves for itself and the Association, and their successors, assigns, and designees, a perpetual, non-exclusive easement over the Common Area, for the purpose of conducting educational, cultural, artistic, musical and entertainment activities; and other activities of general community interest at such locations and times as the Declarant or the Association, in their reasonable discretion, deem appropriate. Members of the public may have access to such events. Each Owner, by accepting a deed or other instrument conveying any interest in a Lot subject to this Declaration acknowledges and agrees that the exercise of this easement may result in a temporary increase in traffic, noise, gathering of crowds, and related inconveniences, and each Owner agrees on behalf of itself and the Residents to take no action, legal or otherwise, which would interfere with the exercise of such easement.

9.7 Solar Equipment Easement. Declarant hereby reserves for itself and the Association, and their successors, assigns, and designees, a perpetual, non-exclusive easement over and across the Property and Common Area for the installation, maintenance, repair or replacement of a rooftop solar electric generating system designed to deliver electric power to a

particular residence built on a Lot or Common Area. Declarant will have the right, from time to time, to Record a written notice which identifies the solar equipment to which the easement reserved hereunder applies. Declarant will be entitled to unilaterally assign the easements reserved hereunder to any third party.

9.8 Cellular Tower and Telecommunications Easement. Declarant hereby grants and reserves for itself, its affiliates and assigns, an exclusive, perpetual and irrevocable easement, license and right to use any portion of the Common Area, or any portion of the Property which Declarant intends to designate as Common Area (the "**CTT Easement Area**") for the construction, installation, use, maintenance, repair, replacement, improvement, removal and operation of CTT Equipment. Declarant, its affiliates or assignee will have the right, from time to time, but no obligation, to Record a written notice which identifies the portion of the Common Area to which the CTT Easement Area pertains, and Declarant, its affiliate(s) or assignee, may fence, install landscaping, or otherwise install improvements restricting access to the CTT Easement Area identified in such Recorded instrument. Neither the Association, nor any Owner other than the Declarant, its affiliate(s) or assignee(s) hereunder, may use the CTT Easement Area in any manner which interferes with operation of the CTT Equipment. Declarant hereby reserves for itself, its affiliates and assigns the right to use, sell, lease or assign all or any portion of the CTT Easement Area, for the construction, installation, use, maintenance, repair, replacement, improvement, removal and operation of the CTT Equipment. In addition, Declarant hereby reserves for itself, its affiliates and assigns a non-exclusive, perpetual and irrevocable easement over the Property for access to and from the CTT Easement Area and to construct, install, use, maintain, repair, replace, improve, remove, and operate, or allow others to do the same, any utility lines servicing the CTT Equipment. Declarant also reserves for itself, its affiliates and assigns the right to select and contract with any third-party for the construction, installation, use, maintenance, repair, replacement, improvement, removal and operation of the CTT Equipment and to provide any telecommunication, cellular, video or digital service associated therewith. Declarant shall have and hereby reserves for itself, its affiliates and assigns the sole and exclusive right to collect and retain any and all income and/or proceeds received from or in connection with use or services provided by the CTT Equipment and the rights described in this *Section 9.8*. The rights reserved to Declarant under this *Section 9.8* shall benefit only Declarant, its affiliates and assigns, and no other Owner or successor-in-title to any portion of the Property shall have any rights to income derived from or in connection with the rights and easements granted in this *Section 9.8*, except as expressly approved in writing by Declarant. EACH OWNER AND RESIDENT HEREBY RELEASES AND HOLDS HARMLESS THE DECLARANT, ITS AFFILIATES AND ASSIGNS FROM ANY COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION INCURRED OR THAT MAY ARISE BY REASON OF ANY ACTS, ACTIONS OR ACTIVITIES PERMITTED BY DECLARANT, ITS AFFILIATES AND ASSIGNS UNDER THIS SECTION (INCLUDING ANY COST, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION ARISING OUT OF NEGLIGENCE IN CONNECTION THEREWITH), EXCEPT FOR SUCH COST, LOSS, DAMAGE, EXPENSE, LIABILITY, CLAIM OR CAUSE OF ACTION ARISING BY REASON OF

GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. "GROSS NEGLIGENCE" DOES NOT INCLUDE SIMPLE NEGLIGENCE, CONTRIBUTORY NEGLIGENCE OR SIMILAR NEGLIGENCE SHORT OF ACTUAL GROSS NEGLIGENCE. The provisions of this *Section 9.8* shall not be amended without the written and acknowledged consent of Declarant, its affiliate(s) or the assignee(s) of all or any portion of Declarant's rights hereunder.

9.9 Easement to Inspect and Right to Correct. For a period of ten (10) years after the expiration of the Development Period, Declarant reserves for itself and for the Declarant's architect, engineer, other design professionals, builder and general contractor the right, but not the duty, to inspect, monitor, test, redesign, correct, and relocate any structure, Improvement, or condition that may exist on any portion of the Property, including the Lots, and a perpetual non-exclusive easement of access throughout the Property to the extent reasonably necessary to exercise this right. The party exercising such rights will promptly repair, at its sole expense, any damage resulting from the exercise of this right. By way of illustration but not limitation, relocation of mechanical or electrical facilities may be warranted by a change of circumstance, imprecise siting of the original facilities, or the desire or necessity to comply more fully with Applicable Law. This *Section 9.9* may not be construed to create a duty for Declarant, Development Owner, the Association, or any architect, engineer, other design professionals, builder or general contractor, and may not be amended without Declarant's advanced written consent and the consent of Development Owner, for so long as Development Owner owns any Lot or portion of the Property. In support of this reservation, each Owner, by accepting an interest in or title to a Lot, hereby grants to Declarant an easement of access and entry over, across, under, and through the Property, including without limitation, all Common Areas and the Owner's Lot and all Improvements thereon for the purposes contained in this *Section 9.9*.

9.10 Shared Facilities Agreement. Certain property adjacent to or in close proximity to the Property may be developed for commercial and/or other uses (the "**Adjacent Development**"), and may share certain Common Area, facilities, including entryways, monument signage, landscaping and/or amenities (the "**Shared Facilities**") with the Association. Declarant reserves the right to: (i) grant and convey easements to the owners(s) of the Adjacent Development and/or the property owners' association established for the Adjacent Development (the "**Adjacent Parties**") over and across the Common Area that may be necessary or required to access, utilize and/or maintain the Shared Facilities and Adjacent Development; (ii) require the Association and the Adjacent Parties to share in the expenses associated with the use and maintenance of the Shared Facilities; and (iii) enter into one or more shared facilities and cost sharing agreements, by and on behalf of the Association, to govern the rights and responsibilities of both the Association and the Adjacent Parties with regard to use and maintenance of the Shared Facilities, to allocate costs for the operation, maintenance and reserves for the Shared Facilities between the Association and the Adjacent Parties and to grant easements for access and use of the Shared Facilities. Notwithstanding the foregoing, each Owner acknowledges and agrees that the Adjacent Parties may have access to certain Shared Facilities at no cost to the Adjacent Parties.

ARTICLE 10
DEVELOPMENT RIGHTS

10.1 Development by Declarant. It is contemplated that the Property will be developed pursuant to a plan, which may, from time to time, be amended or modified. Declarant reserves the right, but will not be obligated, to pursue the development, construction and marketing of the Property, the right to direct the size, shape, and composition of the Property, the right to create and/or designate Lots and Common Areas and to subdivide all or any portion of the Property pursuant to the terms of this *Section 10.1*, subject to any limitations imposed on portions of the Property by any applicable Plat. These rights may be exercised with respect to any portions of the Property and the Common Area. As each area is developed or dedicated, Declarant may designate the use, classification and such additional covenants, conditions and restrictions as Declarant may deem appropriate for that area. Notwithstanding the foregoing or anything to the contrary herein, for so long as Development Owner owns any Lot or portion of the Property, any additional covenants, conditions and restrictions adopted by Declarant pursuant to this *Section 10.1* will require the prior written consent of Development Owner (which consent may be given or withheld by Development Owner in its sole and absolute discretion).

10.2 Special Declarant Rights. Notwithstanding any provision of this Declaration to the contrary, at all times, Declarant will have the right and privilege: (i) to erect and maintain advertising signs (illuminated or non-illuminated), sales flags, other sales devices and banners for the purpose of aiding the sale of Lots in the Property; (ii) to maintain Improvements upon Lots as sales, model, management, business and construction offices; and (iii) to maintain and locate construction trailers and construction tools and equipment within the Property and the Common Area. The construction, placement or maintenance of Improvements by Declarant will not be considered a nuisance, and Declarant hereby reserves the right and privilege for itself to conduct the activities enumerated in this *Section 10.2* until twenty-four (24) months after expiration or termination of the Development Period.

10.3 Addition of Land. Declarant may, at any time and from time to time, add additional lands to the Property. Upon the Recording of a notice of addition of land, such land will be considered part of the Property for purposes of this Declaration, and such added lands will be considered part of the Property subject to this Declaration and the terms, covenants, conditions, restrictions and obligations set forth in this Declaration, and the rights, privileges, duties and liabilities of the persons subject to this Declaration will be the same with respect to such added land as with respect to the lands originally covered by this Declaration. To add lands to the Property, Declarant will be required only to Record a notice of addition of land containing the following provisions:

(i) A reference to this Declaration, which reference will state the document number or volume and initial page number wherein this Declaration is Recorded;

(ii) A statement that such land will be considered Property for purposes of this Declaration, and that all of the terms, covenants, conditions, restrictions and obligations of this Declaration will apply to the added land; and

(iii) A legal description of the added land.

Notwithstanding the foregoing or anything to the contrary herein, for so long as Development Owner owns any Lot or portion of the Property, any addition of land to the Property will require the prior written consent of Development Owner (which consent may be given or withheld by Development Owner in its sole and absolute discretion).

10.4 Withdrawal of Land. Declarant may, at any time and from time to time, reduce or withdraw from the Property, and remove and exclude from the burden of this Declaration and the jurisdiction of the Association any portion of the Property. Upon any such withdrawal and removal this Declaration and the covenants conditions, restrictions and obligations set forth herein will no longer apply to the portion of the Property withdrawn. To withdraw lands from the Property hereunder, Declarant will be required only to Record a notice of withdrawal of land containing the following provisions:

(i) A reference to this Declaration, which reference will state the document number or volume and initial page number wherein this Declaration is recorded;

(ii) A statement that the provisions of this Declaration will no longer apply to the withdrawn land; and

(iii) A legal description of the withdrawn land.

Notwithstanding the foregoing or anything to the contrary herein, for so long as Development Owner owns any Lot or portion of the Property, any withdrawal of land from the Property will require the prior written consent of Development Owner (which consent may be given or withheld by Development Owner in its sole and absolute discretion).

10.5 Notice of Plat Recordation. Declarant may, at any time and from time to time, file a notice of plat recordation (a "**Notice of Plat Recordation**"). A Notice of Plat Recordation is Recorded for the purpose of more clearly identifying specific Lots subject to the terms and provisions of this Declaration after portions of the Property are made subject to a Plat. Unless otherwise provided in the Notice of Plat Recordation, portions of the Property included in the Plat identified in the Notice of Plat Recordation, but not shown as a residential Lot on such Plat, shall be automatically withdrawn from the terms and provisions of this Declaration (without the necessity of complying with the withdrawal provisions set forth in *Section 10.4*). Declarant shall have no obligation to Record a Notice of Plat Recordation and failure to Record a Notice of Plat Recordation shall in no event remove any portion of the Property from the terms and provisions of this Declaration.

10.6 **Assignment of Declarant's Rights**. Notwithstanding any provision in this Declaration to the contrary, but subject to the provisions of the paragraph entitled "Declarant" in *Article 1* hereof, Declarant may, by written instrument, assign, in whole or in part, any of its privileges, exemptions, rights, authorizations, options, reservations, easements and/or duties under this Declaration to any person or entity and may permit the participation, in whole, in part, exclusively, or non-exclusively, by any other person or entity in any of its privileges, exemptions, rights and duties hereunder; provided, however, that for so long as Development Owner owns any Lot or portion of the Property, any assignment of the Declarant's rights under this Declaration (whether by the original Declarant or by any subsequent assignee(s)) will require the prior written consent of Development Owner (which consent may be given or withheld by Development Owner in its sole and absolute discretion). Any purported assignment without such consent from Development Owner shall be deemed void and of no force and effect. Notwithstanding the foregoing or anything to the contrary herein, in the event the Option Agreement is terminated prior to the purchase by Declarant from Development Owner of all of the Lots and other portions of the Property thereunder, as evidenced by the Recording of a notice of termination of the Option Agreement, Development Owner shall, at its option (but is not obligated to), upon Recordation of an Assignment of Declarant Rights or similar instrument by Development Owner (if elected by Development Owner at its sole option), become the Declarant under this Declaration only for the Lots and other portions of the Property still owned by Development Owner (the "**Development Owner Property**"), in which event all references to "Declarant" shall thereafter (A) mean and refer only to Development Owner or its successors or assigns for the Development Owner Property only, and (B) mean and refer to Declarant (i.e., **LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.**, a Texas limited partnership ("**Lennar**")) or its successors or permitted assigns for the balance of the Property, with each party entitled to exercise the rights of Declarant for Development Owner Property and the balance of the Property, respectively; provided, however, that (i) Development Owner shall not be liable to any Owner, Member or any other person for any act or omission of Declarant (including, without limitation, Declarant's failure to pay any amounts owing or to be paid or reserved for hereunder or as may otherwise be required by statute or at law or to perform any act or obligation required to be performed by Declarant hereunder or as may otherwise be required by statute or at law) with respect to the Development Owner Property, arising prior to the date Development Owner succeeds to Declarant's rights hereunder for the Development Owner Property, (ii) in the event Development Owner elects to become the Declarant under this Declaration with respect to the Development Owner Property, Development Owner shall assume the obligations of the Declarant under this Declaration for the Development Owner Property only (and not for any other portions of the Property) for matters and obligations first arising or first to be performed from and after the date Development Owner succeeds to Declarant's rights hereunder for the Development Owner Property, and Development Owner is hereby released and discharged from any and all obligations under this Declaration (x) accruing prior to the date Development Owner succeeds to Declarant's rights hereunder (regardless of whether pertaining to the Development Owner Property and/or the balance of the Property) and/or (y) pertaining to the portions of the

Property excluding the Development Owner Property, and (iii) **Lennar (or its successors or permitted assigns, as applicable) shall indemnify, defend and hold Development Owner (and its officers, directors, managers, members, employees and agents) harmless from and against any and all costs, losses, expenses, suits, claims, demands, actions, causes of action, liabilities and damages, including attorneys' fees and costs of suit, which Development Owner suffers or incurs by reason of or in connection with Lennar's (or its successors' or permitted assigns') acts and omissions as the Declarant hereunder (regardless of whether pertaining to the Development Owner Property and/or the balance of the Property) prior to the date Development Owner succeeds to Declarant's rights hereunder for the Development Owner Property and as to its acts and omissions as the Declarant hereunder with respect to the portions of the Property excluding the Development Owner Property from and after the date Development Owner succeeds to Declarant's rights hereunder for the Development Owner Property**.

10.7 Limitation on Rights of Declarant. Notwithstanding any other provision contained in this Declaration, as long as Development Owner or its designated successors and/or assigns owns any Lot or portion of the Property, Declarant shall not, without the prior written consent of Development Owner, have the right to exercise any of the rights under this Declaration in any manner that will have (or could be reasonably expected to have) a material impact on Development Owner or its designated successors and/or assigns, and/or on any of the Lots or other portions of the Property owned by Development Owner or its designated successors and/or assigns, as determined by Development Owner in its sole and absolute discretion. Without restricting the generality of the foregoing, and notwithstanding anything to the contrary herein, Declarant hereby appoints Development Owner as the attorney-in-fact of Declarant, with full power of substitution, and in the name of Declarant, to do any and all things necessary in Development Owner's sole judgment to enforce any provisions of this Declaration, the Community Manual, the Design Guidelines, the Rules and Regulations, any other Restrictions, the Certificate, the Bylaws and/or any other documents regarding the governance, regulation and/or management of the Property or any portion thereof. The power-of-attorney granted hereby is a power coupled with an interest and irrevocable by action of Declarant without the joinder of Development Owner; provided however, the power-of-attorney will automatically terminate when Development Owner or its designated successors and/or assigns no longer owns any Lot or portion of the Property. Development Owner shall have no obligation to undertake any of the foregoing actions, and if Development Owner should do so, it shall have no liability to Declarant for the sufficiency or adequacy of any such actions taken by Development Owner.

ARTICLE 11
GENERAL PROVISIONS

11.1 Term. The terms, covenants, conditions, restrictions, easements, charges, and liens set out in this Declaration will run with and bind the Property, and will inure to the benefit of and be enforceable by the Association, and every Owner, including Declarant and

Development Owner, and their respective legal representatives, heirs, successors, and assigns, for a term beginning on the date this Declaration is Recorded, and continuing through and including January 1, 2073, after which time this Declaration will be automatically extended for successive periods of ten (10) years unless a change (the word "change" meaning a termination, or change of term or renewal term) is approved in a resolution adopted by Members entitled to cast at least sixty-seven percent (67%) of the total number of votes of the Association, voting in person or by proxy at a meeting duly called for such purpose, written notice of which will be given to all Members at least thirty (30) days in advance and will set forth the purpose of such meeting; provided, however, that such change will be effective only upon the Recording of a certified copy of such resolution. The foregoing sentence shall in no way be interpreted to mean sixty-seven percent (67%) of a quorum as established pursuant to the Bylaws. Notwithstanding any provision in this *Section 11.1* to the contrary, if any provision of this Declaration would be unlawful, void, or voidable by reason of any Applicable Law restricting the period of time that covenants on land may be enforced, such provision will expire twenty-one (21) years after the death of the last survivor of the now living descendants, as of the date this Declaration is Recorded, of Charles III, King of England.

11.2 **Eminent Domain**. In the event it becomes necessary for any public authority to acquire all or any part of the Common Area for any public purpose during the period this Declaration is in effect, the Board is hereby authorized to negotiate with such public authority for such acquisition and to execute instruments necessary for that purpose. Should acquisitions by eminent domain become necessary, only the Board need be made a party, and in any event the proceeds received will be held by the Association for the benefit of the Owners. In the event any proceeds attributable to acquisition of Common Area are paid to Owners, such payments will be allocated on the basis of Assessment Units and paid jointly to the Owners and the holders of Mortgages or deeds of trust on the respective Lot.

11.3 **Amendment**. This Declaration may be amended or terminated by the Recording of an instrument executed and acknowledged by: (i) Declarant acting alone; (ii) by a Majority of the Board, for the purpose of meeting the requirements, standards, or recommended guidelines of an institutional or governmental lender to enable such lender to make or purchase mortgage loans on the Lots, provided such amendment has been approved by Declarant (until expiration or termination of the Development Period); or (iii) by the president and secretary of the Association setting forth the amendment and certifying that such amendment has been approved by Declarant (until expiration or termination of the Development Period) and Members entitled to cast at least sixty-seven percent (67%) of the total number of votes entitled to be cast by members of the Association. The foregoing sentence shall in no way be interpreted to mean sixty-seven percent (67%) of a quorum as established pursuant to the Bylaws. No amendment will be effective without the written consent of Declarant, its successors or assigns, during the Development Period. No amendment may affect Declarant's rights under this Declaration without Declarant's written and acknowledged consent, which must be part of the Recorded amendment instrument. Notwithstanding anything to the contrary herein, for so long as Development Owner owns any Lot or portion of the Property, any amendment to the

Restrictions, including but not limited to this Declaration, will require the prior written consent of Development Owner or its designated successors and/or assigns (and as to any amendments to this Declaration, and as may be expressly provided elsewhere, such consent may be given or withheld by Development Owner in its sole and absolute discretion). Any purported amendment without such approval shall be deemed void and of not force and effect unless subsequently approved by a written consent signed by Development Owner or such designated successor and/or assign and Recorded.

Subject to any express limitation on amendments set forth in this Declaration, the broad scope of amendment authority set forth in this *Section 11.3* is expressly intended to allow for the addition, removal, or modification of terms, restrictions, conditions, covenants, rights, benefits, reservations, and obligations, including, without limitation, use and occupancy restrictions, leasing restrictions, setbacks, voting rights, lien rights, design criteria, maintenance obligations, and disclosures. EACH OWNER OF A LOT OR OTHER REAL PROPERTY INTEREST IN THE PROPERTY (INCLUDING EACH SUBSEQUENT PURCHASER), BY THE ACCEPTANCE OF A DEED OF CONVEYANCE, ACCEPTS THE SAME SUBJECT TO THE AMENDMENT AUTHORITY SET FORTH IN THIS *SECTION 11.3*, AND ACKNOWLEDGES, AGREES, AND IS PUT ON NOTICE THAT: (I) AN AMENDMENT TO THIS DECLARATION DULY APPROVED AND RECORDED IN ACCORDANCE HEREWITH SHALL BE VALID AND BINDING ON THE OWNER AND THE OWNER'S LOT; AND (II) THE BROAD SCOPE OF AMENDMENT AUTHORITY MAY RESULT IN AN AMENDMENT TO THIS DECLARATION THAT: (A) ADDS, REMOVES, OR MODIFIES ANY TERM, RESTRICTION, CONDITION, COVENANT, RIGHT, BENEFIT, RESERVATION, OR OBLIGATION OF EVERY CHARACTER HEREBY GRANTED, CREATED, RESERVED OR DECLARED, INCLUDING WITHOUT LIMITATION, USE AND OCCUPANCY RESTRICTIONS, LEASING RESTRICTIONS, SETBACKS, VOTING RIGHTS, LIEN RIGHTS, DESIGN CRITERIA, MAINTENANCE OBLIGATIONS, DISPUTE RESOLUTION PROCEDURES, AND DISCLOSURES; AND/OR (B) MAY RESULT IN CHANGES OR MODIFICATIONS TO USE AND OCCUPANCY RESTRICTIONS, LEASING RESTRICTIONS, SETBACKS, VOTING RIGHTS, LIEN RIGHTS, DESIGN CRITERIA, MAINTENANCE OBLIGATIONS, OR DISPUTE RESOLUTION PROCEDURES THAT ARE EITHER MORE OR LESS RESTRICTIVE THAN THE RIGHTS, RESTRICTIONS AND OBLIGATIONS APPLICABLE TO THE LOT ON THE DATE THE OWNER ACQUIRED THE LOT. THE FOREGOING LIST IS INTENDED TO BE ILLUSTRATIVE BUT IN NO WAY IMPOSES LIMITATIONS ON THE BROAD SCOPE OF AMENDMENT AUTHORITY SET FORTH IN THIS *SECTION 11.3*.

11.4 Enforcement. The Association, Declarant and Development Owner will have the right to enforce, by a proceeding at law or in equity, the Restrictions. The Association, Declarant and/or the Development Owner may initiate, defend, or intervene in any action brought to enforce any provision of the Restrictions. Such right of enforcement will include both damages for and injunctive relief against the breach of any provision hereof. Every act or omission whereby any provision in the Restrictions is violated, in whole or in part, is hereby declared to be a nuisance and may be enjoined or abated by any Owner of a Lot (at such

Owner's own expense), Declarant, Development Owner or the Association. Any violation of any Applicable Law pertaining to the ownership, occupancy, or use of any portion of the Property is hereby declared to be a violation of this Declaration and subject to all of the enforcement procedures set forth herein. Failure of the Declarant, Development Owner or the Association to enforce any right, provision, covenant, or condition set forth in the Restrictions will not constitute a waiver of the right to enforce such right, provision, covenants or condition in the future. Failure of the Declarant, Development Owner or the Association to enforce the terms and provisions of the Restrictions shall in no event give rise to any claim or liability against the Declarant, Development Owner or the Association, or any of their partners, directors, officers, or agents. **EACH OWNER, BY ACCEPTING TITLE TO ALL OR ANY PORTION OF THE PROPERTY, HEREBY RELEASES AND SHALL HOLD HARMLESS EACH OF THE DECLARANT, DEVELOPMENT OWNER, THE ASSOCIATION, AND THEIR RESPECTIVE PARTNERS, DIRECTORS, OFFICERS, MANAGERS OR AGENTS FROM AND AGAINST ANY DAMAGES, CLAIMS OR LIABILITY ASSOCIATED WITH THE FAILURE OF THE DECLARANT, DEVELOPMENT OWNER OR THE ASSOCIATION TO ENFORCE THE RESTRICTIONS.**

11.5 No Warranty of Enforceability. Neither Declarant nor Development Owner makes any warranty or representation as to the present or future validity or enforceability of the Restrictions. Any Owner acquiring a Lot in reliance on one or more of the Restrictions shall assume all risks of the validity and enforceability thereof and, by acquiring the Lot, agrees to hold Declarant and Development Owner harmless therefrom.

11.6 Declarant Fine Authority. During the Development Period, Declarant may assess fines against an Owner for violations of the Restrictions which have been committed by an Owner, a Resident, or any guests, agents, family members, or invitees of an Owner or Resident. The Declarant uses fines to discourage violations of the Restrictions, and to encourage compliance when a violation occurs - not to punish violators or generate revenue for the Declarant. Although a fine may be an effective and efficient remedy for certain types of violations or violators, it is only one of several methods available to the Declarant for enforcing the Restrictions. The Declarant may from time to time adopt a schedule of fines. If the violation of the Restrictions is ongoing or continuous, the fine may be assessed on a periodic basis (such as daily, monthly, or quarterly). If the violation is not ongoing, but is instead sporadic or periodic, the fine may be levied on a per occurrence basis. An Owner is liable for fines levied by the Declarant for violations of the Restrictions by the Owner, a Resident, or any guests, agents, family members or invitees of the Owner or Resident. Regardless of who commits the violation, the Declarant will direct its communications to the Owner, although the Declarant may send copies of its notices to the Residents.

11.7 Higher Authority. The terms and provisions of this Declaration are subordinate to Applicable Law. Generally, the terms and provisions of this Declaration are enforceable to the extent they do not violate or conflict with Applicable Law.

11.8 Severability. If any provision of this Declaration is held to be invalid by any court of competent jurisdiction, such invalidity will not affect the validity of any other provision of this Declaration, or, to the extent permitted by Applicable Law, the validity of such provision as applied to any other person or entity.

11.9 Conflicts. If there is any conflict between the provisions of this Declaration, the Certificate, the Bylaws, or any Rules and Regulations adopted pursuant to the terms of such documents, the provisions of this Declaration, the Certificate, the Bylaws, and the Rules and Regulations, in such order, will govern.

11.10 Gender. Whenever the context so requires, all words herein in the male gender will be deemed to include the female or neuter gender, all singular words will include the plural, and all plural words will include the singular.

11.11 Acceptance by Owners. Each Owner of a Lot or other real property interest in the Property, by the acceptance of a deed of conveyance, or each subsequent purchaser, accepts the same subject to all terms, restrictions, conditions, covenants, reservations, easements, liens and charges, and the jurisdiction rights and powers created or reserved by this Declaration or to whom this Declaration is subject, and all rights, benefits and privileges of every character hereby granted, created, reserved or declared. Furthermore, each Owner agrees that no assignee or successor to Declarant hereunder (including, without limitation, the Development Owner) will have any liability for any act or omission of Declarant which occurred prior to the effective date of any such succession or assignment. All impositions and obligations hereby imposed will constitute covenants running with the land within the Property, and will bind any person having at any time any interest or estate in the Property, and will inure to the benefit of each Owner in like manner as though the provisions of this Declaration were recited and stipulated at length in each and every deed of conveyance.

11.12 Damage and Destruction. The Association shall undertake the following actions subsequent to damage or destruction to all or any part of the Common Area covered by insurance:

11.12.1 Claims. Promptly after damage or destruction by fire or other casualty to all or any part of the Common Area covered by insurance, the Board, or its duly authorized agent, will proceed with the filing and adjustment of all claims arising under such insurance and obtain reliable and detailed estimates of the cost of repair of the damage. Repair, as used in this *Section 11.12.1*, means repairing or restoring the Common Area to substantially the same condition as existed prior to the fire or other casualty.

11.12.2 Repair Obligations. Any damage to or destruction of the Common Area will be repaired unless a Majority of the Board decides within sixty (60) days after the casualty not to repair. If for any reason either the amount of the insurance proceeds to be paid as a result of such damage or destruction, or reliable and detailed estimates of the cost of repair, or both,

are not made available to the Association within said period, then the period will be extended until such information will be made available.

11.12.3 Restoration. In the event that it should be determined by the Board that the damage or destruction of the Common Area will not be repaired and no alternative Improvements are authorized, then the affected portion of the Common Area will be restored to its natural state and maintained as an undeveloped portion of the Common Area by the Association in a neat and attractive condition.

11.12.4 Special Assessment. If insurance proceeds are paid to restore or repair any damaged or destroyed Common Area, and such proceeds are not sufficient to defray the cost of such repair or restoration, the Board may levy a Special Assessment, as provided in *Article 6*, against all Owners. Additional Assessments may be made in like manner at any time during or following the completion of any repair.

11.12.5 Proceeds Payable to Owners. In the event that any proceeds of insurance policies are paid to Owners as a result of any damage or destruction to any Common Area, such payments will be allocated based on Assessment Units and paid jointly to the Owners and the holders of Mortgages or deeds of trust on their Lots.

11.13 No Partition. Except as may be permitted in this Declaration or amendments thereto, no physical partition of the Common Area or any part thereof will be permitted, nor will any person acquiring any interest in the Property or any part thereof seek any such judicial partition unless the portion of the Property or Common Area in question has been removed from the provisions of this Declaration pursuant to *Section 10.4* above. This *Section 11.13* will not be construed to prohibit the Board from acquiring and disposing of tangible personal property or from acquiring title to real property that may or may not be subject to this Declaration.

11.14 View Impairment. Neither Declarant nor the Association guarantee or represent that any view over and across the Lots, or any open space or Common Area within the Property will be preserved without impairment. Neither the Declarant, the ACC, nor the Association shall have any obligation to relocate, prune, thin trees or perform other landscaping. The Association (with respect to any Common Area) will have the right to add trees and other landscaping from time to time, subject to Applicable Law. There shall be no express or implied easements for view purposes or for the passage of light and air.

11.15 Safety and Security. Each Owner and Resident of a Lot, and their respective guests and invitees, shall be responsible for their own personal safety and the security of their property within the Property and the Common Area. The Association may, but shall not be obligated to, maintain or support certain activities within the Property and the Common Area designed to promote or enhance the level of safety or security which each person provides for himself or herself and his or her property. However, neither the Association, Declarant nor

Development Owner, nor their respective directors, officers, managers, employees or agents, shall in any way be considered insurers or guarantors of safety or security within the Property or the Common Area, nor shall any of them be held liable for any loss or damage by reason of failure to provide adequate security or ineffectiveness of security measures undertaken.

No representation or warranty is made that any systems or measures, including security monitoring systems or any mechanism or system for limiting access to the Property or the Common Area, cannot be compromised or circumvented; or that any such system or security measures undertaken will in all cases prevent loss or provide the detection or protection for which the system is designed or intended. Each Owner acknowledges, understands, and shall be responsible for informing any Residents of such Owner's Lot that the Association, its Board and committees, the Declarant and the Development Owner are not insurers or guarantors of security or safety and that each person within the Property assumes all risks of personal injury and loss or damage to the property, including any residences or Improvements constructed upon any Lot and the contents thereof, resulting from acts of third parties.

11.16 Notices. Any notice permitted or required to be given to any person by this Declaration will be in writing and may be delivered either personally or by mail, or as otherwise required by Applicable Law. If delivery is made by mail, it will be deemed to have been delivered on the third (3rd) day (other than a Sunday or legal holiday) after a copy of the same has been deposited in the United States mail, postage prepaid, addressed to the person at the address given by such person to the Association for the purpose of service of notices. Such address may be changed from time to time by notice in writing given by such person to the Association.

ARTICLE 12
DISPUTE RESOLUTION

This Article 12 is intended to encourage the resolution of disputes involving the Property. A dispute regarding the Lots, Common Area, and/or Improvements can create significant financial exposure for the Association and its Members, interfere with the resale and refinancing of Lots, and increase strife and tension among the Owners, the Board and the Association's management. Since disputes may have a direct effect on each Owner's use and enjoyment of their Lot and the Common Area, this Article 12 requires Owner transparency and participation in certain circumstances. Transparency means that the Owners are informed in advance about a dispute, the proposed arrangement between the Association and a law firm or attorney who will represent the Association in the dispute, and that each Owner will have an opportunity to participate in the decision-making process prior to initiating the dispute resolution process.

12.1 Introduction and Definitions. The Association, the Owners, Declarant, Development Owner, Homebuilders, and all persons subject to this Declaration, and each person not otherwise subject to this Declaration who agrees to submit to this *Article 12* by

written instrument delivered to the Claimant, which may include, but is not limited to, a Homebuilder, a general contractor, sub-contractor, design professional, or other person who participated in the design or construction of Lots, Common Area or any Improvement within, serving or forming a part of the Property (individually, a "**Party**" and collectively, the "**Parties**") agree to encourage the amicable resolution of disputes involving the Property and the Common Area to avoid the emotional and financial costs of litigation and arbitration if at all possible. Accordingly, each Party hereby covenants and agrees that this *Article 12* applies to all Claims as hereafter defined. Notwithstanding anything contained in this *Article 12*, any Claim brought by an Owner related to a residence that is subject to a warranty agreement provided by the Declarant or Homebuilder will not be subject to this *Article 12* and will be governed by the warranty agreement, unless the Parties agree to have the dispute governed by this *Article 12*. Notwithstanding anything to the contrary in this *Article 12*, any claim brought by Development Owner against Declarant (together with any affiliated parties), or *vice versa*, will not be subject to this *Article 12* and will be governed by the Option Agreement. A restrictive covenant enforcement action against an Owner that is brought by the Association, the Declarant, Development Owner, or another Owner, is not subject to the alternative dispute resolution procedures that would otherwise require: (1) an inspection; (2) an engineering report; (3) an owner approval vote; (4) negotiation; and (5) mediation. This *Article 12* may only be amended with the prior written approval of the Declarant, Development Owner (for so long as Development Owner owns any Lot or portion of the Property), the Association (acting through a Majority of the Board), and Owners holding one hundred percent (100%) of the votes in the Association. As used in this *Article 12* only, the following words, when capitalized, have the following specified meanings:

12.1.1 "**Claim**" means:

(i) Claims relating to the rights and/or duties of Declarant, the Association, or the ACC, under the Restrictions.

(ii) Claims relating to the acts or omissions of the Declarant, the Association or a Board member or officer of the Association during Declarant's control and administration of the Association, and any claim asserted against the ACC.

(iii) Claims relating to the design or construction of the Common Area or any Improvements located within or on Common Area.

12.1.2 "**Claimant**" means any Party having a Claim against any other Party.

12.1.3 "**Respondent**" means any Party against which a Claim has been asserted by a Claimant.

12.2 **Mandatory Procedures**. Claimant may not initiate any proceeding before any judge, jury, arbitrator or any judicial or administrative tribunal seeking redress of resolution of

its Claim until Claimant has complied with the procedures of this *Article 12*. As provided in *Section 12.8* below, a Claim must be resolved by binding arbitration.

12.3 Claim Affecting Common Areas. In accordance with *Section 4.13* of this Declaration, the Association does not have the power or right to institute, defend, intervene in, settle, or compromise litigation, arbitration or other proceedings: (i) in the name of or on behalf of any Lot Owner (whether one or more); or (ii) pertaining to a Claim, as defined in *Section 12.1* above, relating to the design or construction of Improvements on a Lot (whether one or more). Additionally, no Lot Owner shall have the power or right to institute, defend, intervene in, settle or compromise litigation, arbitration or other proceedings relating to the design or construction of the Common Area. Each Lot Owner, by accepting an interest in or to title to a Lot, hereby grants to the Association the exclusive right to institute, defend, intervene in, settle or compromise litigation, arbitration or other proceedings relating to the design or construction of the Common Area. In the event the Association asserts a Claim related to the Common Area, as a precondition to providing the Notice defined in *Section 12.5*, initiating the mandatory dispute resolution procedures set forth in this *Article 12*, or taking any other action to prosecute a Claim related to the Common Area, the Association must:

12.3.1 Obtain Owner Approval of Engagement.

The requirements related to Owner approval set forth in this Section 12.3.1 are intended to ensure that the Association and the Owners approve and are fully informed of the financial arrangements between the Association and a law firm or attorney engaged by the Association to prosecute a Claim relating to the design or construction of the Common Area. The engagement agreement between the Association and the law firm or attorney may include requirements that the Association pay costs, fees, and expenses to the law firm or attorney which will be paid through Assessments levied against Owners. The financial agreement between the Association and the law firm or attorney may also include obligations related to payment, and the conditions and circumstances when the payment obligations arise, if the relationship between the Association and the law firm or attorney is terminated or if the Association agrees to settle the Claim. In addition, the financial arrangement between the Association and the law firm or attorney may include additional costs, expenses, and interest charges. This financial obligation can be significant. The Board may not engage a law firm or attorney to prosecute a Claim relating to the design or construction of the Common Area or execute a written agreement between the Association and a law firm or attorney for the purpose of prosecuting a Claim relating to the design or construction of Common Area unless the law firm or attorney and the financial arrangements between the Association and the law firm or attorney are approved by the Owners in accordance with this Section 12.3.1.

Unless otherwise approved by Members holding eighty percent (80%) of the votes in the Association, the Association, acting through its Board, shall in no event have the authority to engage a law firm or attorney to prosecute a Claim relating to the design or construction of the Common Area if the agreement between the Association and law firm or attorney includes any

provision or requirement that would obligate the Association to pay any costs, expenses, fees, or other charges to the law firm or attorney, including but not limited to, costs, expenses, fees, or other charges payable by the Association: (i) if the Association terminates the engagement with the law firm or attorney or engages another firm or third-party to assist with the Claim; (ii) if the Association agrees to settle the Claim for a cash payment or in exchange for repairs or remediation performed by the Respondent or any other third-party; (iii) if the Association agrees to pay interest on any costs or expenses incurred by the law firm or attorney; and/or (iv) for consultants, expert witnesses, and/or general contractors hired by the law firm or attorney. For avoidance of doubt, it is intended that Members holding eighty percent (80%) of the votes in the Association must approve the law firm and attorney who will prosecute the Claim and the written agreement between the Association and the law firm and/or attorney.

The approval of the Members required under this *Section 12.3.1* must be obtained at a meeting of Members called in accordance with the Bylaws. The notice of Member meeting will be provided pursuant to the Bylaws but the notice must also include: (a) the name of the law firm and attorney; (b) a copy of the proposed written agreement between the Association and the law firm and/or attorney; (c) a narrative summary of the types of costs, expenses, fees, or other charges that may be required to be paid by the Association; (d) the conditions upon which such types of costs, expenses, fees, or other charges are required to be paid by the Association; (e) an estimate of the costs, expenses, fees, or other charges that may be required to be paid by the Association if the conditions for payment occur, which estimate shall be expressed as a range for each type of cost, expense, fee, or other charge; and (f) a description of the process the law firm and/or attorney will use to evaluate the Claim and whether destructive testing will be required (i.e., the removal of all or portions of the Common Area or Improvements on the Property). If destructive testing will be required or is likely to occur, the notice shall include a description of the destructive testing, likely locations of the destructive testing, whether the Owner's use of their Lots or the Common Area will be affected by such testing, and if the destructive testing occurs the means or method the Association will use to repair the Common Area or Improvements affected by such testing and the estimated costs thereof. The notice required by this paragraph must be prepared and signed by a person other than the law firm or attorney who is a party to the proposed agreement being approved by the Members. In the event Members holding eighty percent (80%) of the votes in the Association approve the law firm and/or attorney who will prosecute the Claim and the written agreement between the Association and the law firm and/or attorney, the Board shall have the authority to engage the law firm and/or attorney and enter into the written agreement approved by the Members.

12.3.2 Provide Notice of the Inspection. As provided in *Section 12.3.3* below, a Common Area Report is required which is a written inspection report issued by the Inspection Company. Before conducting an inspection that is required to be memorialized by the Common Area Report, the Association must have provided at least ten (10) days prior written notice of the date on which the inspection will occur to each Respondent which notice shall identify the Inspection Company preparing the Common Area Report, the specific Common Areas to be

inspected, and the date and time the inspection will occur. Each Respondent may attend the inspection, personally or through an agent.

12.3.3 Obtain a Common Area Report.

The requirements related to the Common Area Report set forth in this Section 12.3.3 are intended to provide assurance to the Claimant, Respondent, and the Owners that the substance and conclusions of the Common Area Report and recommendations are not affected by influences that may compromise the professional judgement of the party preparing the Common Area Report, and to avoid circumstances which would create the appearance that the professional judgment of the party preparing the Common Area Report is compromised.

Obtain a written independent third-party report for the Common Area (the "**Common Area Report**") from a professional engineer licensed by the Texas Board of Professional Engineers with an office located in Denton County, Texas (the "**Inspection Company**"). The Common Area Report must include: (i) a description with photographs of the Common Area subject to the Claim; (ii) a description of the present physical condition of the Common Area subject to the Claim; (iii) a detailed description of any modifications, maintenance, or repairs to the Common Area performed by the Association or a third-party, including any Respondent; and (iv) specific and detailed recommendations regarding remediation and/or repair of the Common Area subject to the Claim. For the purpose of subsection (iv) of the previous sentence, the specific and detailed recommendations must also include the specific process, procedure, materials, and/or improvements necessary and required to remediate and/or repair the deficient or defective condition identified in the Common Area Report and the estimated costs necessary to effect such remediation and/or repairs. The estimate of costs required by the previous sentence shall be obtained from third-party contractors with an office located in Denton County, Texas, and each such contractor providing the estimate must hold all necessary or required licenses from the Texas Department of Licensing and Regulation or otherwise required by Applicable Law for the work to which the cost estimate relates.

The Common Area Report must be obtained by the Association. The Common Area Report will not satisfy the requirements of this *Section 12.3.3* and is not an "independent" report if: (a) the Inspection Company has an arrangement or other agreement to provide consulting and/or engineering services with the law firm or attorney that presently represents the Association or proposes to represent the Association; (b) the costs and expenses for preparation of the Common Area Report are not required to be paid directly by the Association to the Inspection Company at the time the Common Area Report is finalized and delivered to the Association; or (c) the law firm or attorney that presently represents the Association or proposes to represent the Association has agreed to reimburse (whether unconditional or conditional and based on the satisfaction of requirements set forth in the Association's agreement with the law firm or attorney) the Association for the costs and expenses for preparation of the Common Area Report. For avoidance of doubt, an "independent" report means that the Association has independently contracted with the Inspection Company on an arms-length basis based on

customary terms for the preparation of engineering reports and that the Association will directly pay for the report at the time the Common Area Report is finalized and delivered to the Association.

12.3.4 Provide a Copy of Common Area Report to all Respondents and Owners. Upon completion of the Common Area Report, and in any event no later than three (3) days after the Association has been provided a copy of the Common Area Report, the Association will provide a full and complete copy of the Common Area Report to each Respondent and to each Owner. The Association shall maintain a written record of each Respondent and Owner who was provided a copy of the Common Area Report which will include the date the report was provided. The Common Area Report shall be delivered to each Respondent by hand-delivery and to each Owner by mail.

12.3.5 Provide a Right to Cure Defects and/or Deficiencies Noted on Common Area Report. Commencing on the date the Common Area Report has been completed and continuing for a period of ninety (90) days thereafter, each Respondent shall have the right to: (i) inspect any condition identified in the Common Area Report; (ii) contact the Inspection Company for additional information necessary and required to clarify any information in the Common Area Report; and (iii) correct any condition identified in the Common Area Report. As provided in *Section 9.9* of this Declaration, the Declarant has an easement throughout the Property for itself, and its successors, assigns, architects, engineers, other design professionals, each Homebuilder, other builders, and general contractors that may be utilized during such ninety (90) day period and any additional period needed thereafter to correct a condition identified in the Common Area Report.

12.3.6 Hold Owner Meeting and Obtain Approval. In addition to obtaining approval from Members for the terms of the attorney or law firm engagement agreement, the Association must obtain approval from Members holding eighty percent (80%) of the votes in the Association to provide the Notice described in *Section 12.5*, initiate the mandatory dispute resolution procedures set forth in this *Article 12*, or take any other action to prosecute a Claim, which approval from Members must be obtained at a meeting of Members called in accordance with the Bylaws. The notice of meeting required hereunder will be provided pursuant to the Bylaws but the notice must also include: (i) the nature of the Claim, the relief sought, the anticipated duration of prosecuting the Claim, and the likelihood of success; (ii) a copy of the Common Area Report; (iii) a copy of any engagement letter between the Association and the law firm and/or attorney selected by the Association to assert or provide assistance with the Claim; (iv) a description of the attorney fees, consultant fees, expert witness fees, and court costs, whether incurred by the Association directly or for which the Association may be liable as a result of prosecuting the Claim; (v) a summary of the steps previously taken by the Association to resolve the Claim; (vi) a statement that initiating the lawsuit or arbitration proceeding to resolve the Claim may affect the market value, marketability, or refinancing of a Lot while the Claim is prosecuted; and (vii) a description of the manner in which the Association proposes to fund the cost of prosecuting the Claim. The notice required by this

paragraph must be prepared and signed by a person who is not (a) the attorney who represents or will represent the Association in the Claim; (b) a member of the law firm of the attorney who represents or will represent the Association in the Claim; or (c) employed by or otherwise affiliated with the law firm of the attorney who represents or will represent the Association in the Claim. In the event Members approve providing the Notice described in *Section 12.5*, or taking any other action to prosecute a Claim, the Members holding a Majority of the votes in the Association, at a special meeting called in accordance with the Bylaws, may elect to discontinue prosecution or pursuit of the Claim.

12.3.7 Provide Officer Certification. Within ten (10) days after a vote of Members called pursuant to this *Article 12*, the secretary or another officer of the Association will provide to Declarant and any Respondent (if different than Declarant): (i) a true and correct copy of the meeting notice provided to Members, for the meeting at which such vote was taken; (ii) copies of the ballots cast at such meeting (whether in person, electronic, or by proxy); (iii) a certification, executed by the issuing officer of the Association that: (a) the information set forth in (i) and (ii) hereinabove is true and correct; (b) the meeting notice provided to Members was provided in accordance with this *Article 12*; and (c) the vote was held in accordance with the Bylaws and this *Article 12*.

12.4 Claim by Lot Owners. Pursuant to *Section 12.3* above, an Owner does not have the power or right to institute, defend, intervene in, settle or compromise litigation, arbitration or other proceedings relating to the design or construction of the Common Area. In the event that a court of competent jurisdiction or arbitrator determines that an Owner does have the power or right to institute, defend, intervene in, settle or compromise litigation, arbitration or other proceedings relating to the design or construction of the Common Area, such Owner shall be required, since a Claim affecting the Common Area could affect all Owners, as a precondition to providing the Notice defined in *Section 12.5*, initiating the mandatory dispute resolution procedures set forth in this *Article 12*, or taking any other action to prosecute a Claim, to comply with the requirements imposed by the Association in accordance with *Section 12.3.2* (Provide Notice of Inspection), *Section 12.3.3* (Obtain a Common Area Report), *Section 12.3.4* (Provide a Copy of Common Area Report to all Respondents and Owners), *Section 12.3.5* (Provide Right to Cure Defects and/or Deficiencies Noted on Common Area Report), *Section 12.3.6* (Owner Meeting and Approval), *Section 12.3.7* (Officer Certification), and *Section 12.5* (Notice). Additionally, class action proceedings are prohibited, and no Owner shall be entitled to prosecute, participate, initiate, or join any litigation, arbitration or other proceedings as a class member or class representative in any such proceedings under this Declaration.

12.5 Notice. Claimant must notify Respondent in writing of the Claim (the "**Notice**"), stating plainly and concisely: (i) the nature of the Claim, including date, time, location, persons involved, and Respondent's role in the Claim; (ii) the basis of the Claim (i.e., the provision of the Restrictions or other authority out of which the Claim arises); (iii) what Claimant wants Respondent to do or not do to resolve the Claim; and (iv) that the Notice is given pursuant to

this *Section 5*. For Claims governed by Chapter 27 of the Texas Property Code, the time period for negotiation in *Section 12.6* below, is equivalent to the sixty (60) day period under Section 27.004 of the Texas Property Code. If a Claim is subject to Chapter 27 of the Texas Property Code, the Claimant and Respondent are advised, in addition to compliance with *Section 12.6*, to comply with the terms and provisions of Section 27.004 of the Texas Property Code during such sixty (60) day period. *Section 12.6* does not modify or extend the time period set forth in Section 27.004 of the Texas Property Code. Failure to comply with the time periods or actions specified in Section 27.004 of the Texas Property Code could affect a Claim if the Claim is subject to Chapter 27 of the Texas Property Code. The one hundred twenty (120) day period for mediation set forth in *Section 12.7* below, is intended to provide the Claimant and Respondent with sufficient time to resolve the Claim in the event resolution is not accomplished during negotiation. If the Claim is not resolved during negotiation, mediation pursuant to *Section 12.7* is required without regard to the monetary amount of the Claim.

If the Claimant is the Association, the Notice will also include: (a) if the Claim relates to the design or construction of the Common Area, a true and correct copy of the Common Area Report and any and all other reports, studies, analyses, and recommendations obtained by the Association related to the Common Area; (b) a copy of any engagement letter between the Association and the law firm and/or attorney selected by the Association to assert or provide assistance with the Claim; (c) if the Claim relates to the design or construction of the Common Area, reasonable and credible evidence confirming that Members holding eighty percent (80%) of the votes in the Association approved the law firm and attorney and the written agreement between the Association and the law firm and/or attorney in accordance with *Section 12.3.1*; (d) a true and correct copy of the special meeting notice provided to Members in accordance with *Section 12.3.6* above; and (e) reasonable and credible evidence confirming that Members holding eighty percent (80%) of the votes in the Association approved providing the Notice. If the Claimant is not the Association and pertains to the Common Areas, the Notice will also include a true and correct copy of the Common Area Report.

12.6 Negotiation. Claimant and Respondent will make every reasonable effort to meet in person to resolve the Claim by good faith negotiation. Within sixty (60) days after Respondent's receipt of the Notice, Respondent and Claimant will meet at a mutually acceptable place and time to discuss the Claim. If the Claim involves all or any portion of the Property, then at such meeting or at some other mutually-agreeable time, Respondent and Respondent's representatives will have full access to the Property that is subject to the Claim for the purposes of inspecting the Property.

12.7 Mediation. If the parties negotiate, but do not resolve the Claim through negotiation within one-hundred twenty (120) days from the date of the Notice (or within such other period as may be agreed on by the parties), Claimant will have thirty (30) additional days within which to submit the Claim to mediation under the auspices of a mediation center or individual mediator on which the parties mutually agree. The mediator must have at least five (5) years of experience serving as a mediator and must have technical knowledge or expertise

appropriate to the subject matter of the Claim. If Claimant does not submit the Claim to mediation within the 30-day period, Respondent will submit the Claim to mediation in accordance with this *Section 12.7*. If the Parties do not settle the Claim within thirty (30) days after submission to mediation, Respondent or Claimant may initiate arbitration proceedings in accordance with *Section 12.8*.

12.8 Binding Arbitration-Claims. All Claims must be settled by binding arbitration. Claimant or Respondent may, by summary proceedings (e.g., a plea in abatement or motion to stay further proceedings), bring an action in court to compel arbitration of any Claim not referred to arbitration as required by this *Section 12.8*.

12.8.1 Governing Rules. If a Claim has not been resolved after mediation in accordance with *Section 12.7*, the Claim will be resolved by binding arbitration in accordance with the terms of this *Section 12.8* and the American Arbitration Association (the "**AAA**") Construction Industry Arbitration Rules and Mediation Procedures and, if applicable, the rules contained in the AAA Supplementary Procedures for Consumer Related Disputes, as each are supplemented or modified by the AAA (collectively, the Construction Industry Arbitration Rules and Mediation Procedures and AAA Supplementary Procedures for Consumer Related Disputes are referred to herein as the "**AAA Rules**"). In the event of any inconsistency between the AAA Rules and this *Section 12.8*, this *Section 12.8* will control. Judgment upon the award rendered by the arbitrator shall be binding and not subject to appeal, but may be reduced to judgment or enforced in any court having jurisdiction. Notwithstanding any provision to the contrary or any applicable rules for arbitration, any arbitration with respect to Claims arising hereunder shall be conducted by a panel of three (3) arbitrators, to be chosen as follows:

(i) One arbitrator shall be selected by Respondent, in its sole and absolute discretion;

(ii) One arbitrator shall be selected by the Claimant, in its sole and absolute discretion; and

(iii) One arbitrator shall be selected by mutual agreement of the arbitrators having been selected by Respondent and the Claimant, in their sole and absolute discretion.

12.8.2 Exceptions to Arbitration; Preservation of Remedies. No provision of, nor the exercise of any rights under, this *Section 12.8* will limit the right of Claimant or Respondent, and Claimant and the Respondent will have the right during any Claim, to seek, use, and employ ancillary or preliminary remedies, judicial or otherwise, for the purposes of realizing upon, preserving, or protecting upon any property, real or personal, that is involved in a Claim, including, without limitation, rights and remedies relating to: (i) exercising self-help remedies (including set-off rights); or (ii) obtaining provisions or ancillary remedies such as injunctive relief, sequestration, attachment, garnishment, or the appointment of a receiver from a court

having jurisdiction before, during, or after the pendency of any arbitration. The institution and maintenance of an action for judicial relief or pursuit of provisional or ancillary remedies or exercise of self-help remedies shall not constitute a waiver of the right of any party to submit the Claim to arbitration nor render inapplicable the compulsory arbitration provisions hereof.

12.8.3 Statute of Limitations. All statutes of limitation that would otherwise be applicable shall apply to any arbitration proceeding under this *Section 12.8*.

12.8.4 Scope of Award; Modification or Vacation of Award. The arbitrator shall resolve all Claims in accordance with Applicable Law. The arbitrator may grant any remedy or relief that the arbitrator deems just and equitable and within the scope of this *Section 12.8* and subject to *Section 12.9* below; provided, however, attorney's fees and costs may not be awarded by the arbitrator to either Claimant or Respondent. In addition, for a Claim, or any portion of a Claim governed by Chapter 27 of the Texas Property Code, or any successor statute, in no event shall the arbitrator award damages which exceed the damages a Claimant would be entitled to under Chapter 27 of the Texas Property Code, except that the arbitrator may not award attorney's fees and/or costs to their Claimant or Respondent. In all arbitration proceedings, the arbitrator shall make specific, written findings of fact and conclusions of law. In all arbitration proceedings the parties shall have the right to seek vacation or modification of any award that is based in whole, or in part, on: (i) factual findings that have no legally or factually sufficient evidence, as those terms are defined in Texas law; (ii) conclusions of law that are erroneous; (iii) an error of Applicable Law; or (iv) a cause of action or remedy not expressly provided under Applicable Law. In no event may an arbitrator award speculative, consequential, special, exemplary, treble, or punitive damages for any Claim.

12.8.5 Other Matters. To the maximum extent practicable, an arbitration proceeding hereunder shall be concluded within one hundred eighty (180) days of the filing of the Claim for arbitration. Arbitration proceedings hereunder shall be conducted in Denton County, Texas. Unless otherwise provided by this *Section 12.8*, the arbitrator shall be empowered to impose sanctions and to take such other actions as the arbitrator deems necessary to the same extent a judge could pursuant to the Federal Rules of Civil Procedure, the Texas Rules of Civil Procedure and Applicable Law. Claimant and Respondent agree to keep all Claims and arbitration proceedings strictly confidential, except for disclosures of information required in the ordinary course of business of the parties or by Applicable Law. In no event shall Claimant or Respondent discuss with the news media or grant any interviews with the news media regarding a Claim or issue any press release regarding any Claim without the written consent of the other parties to the Claim.

12.9 Allocation of Costs. Notwithstanding any provision in this Declaration to the contrary, each Party bears all of its own costs incurred prior to and during the proceedings described in the Notice, Negotiation, Mediation, and Arbitration sections above, including its attorney's fees. Respondent and Claimant will equally divide all expenses and fees charged by the mediator and arbitrator.

12.10 Waiver of Rights under Certain Statutory Provisions. EACH PARTY EXPRESSLY WAIVES ANY RIGHT TO RECOVERY OF ATTORNEY'S FEES AND COSTS UNDER: (i) Texas Civil Practice & Remedies Code § 38.001, *et. seq.*; (ii) Texas Civil Practice & Remedies Code § 37.001, *et. seq.*; (iii) Texas Civil Practice & Remedies Code § 10.001, *et. seq.*; (iv) Texas Civil Practice & Remedies Code § 9.001, *et. seq.*; (v) Texas Civil Practice & Remedies Code § 27.01, *et. seq.*; (vi) Texas Civil Practice & Remedies Code § 17.41, *et. seq.*; (vii) Texas Property Code § 27.001, *et. seq.*; (viii) Texas Property Code § 82.001, *et. seq.*; (ix) Texas Property Code § 209.001, *et. seq.*; (x) Texas Property Code § 53.001, *et. seq.*; (xi) Texas Property Code § 5.006, *et. seq.*; (xii) Texas Finance Code § 392.001, *et. seq.*; and (xiii) 15 USC 1562, *et. seq.*

12.11 General Provisions. A release or discharge of Respondent from liability to Claimant on account of the Claim does not release Respondent from liability to persons who are not party to Claimant's Claim.

12.12 Period of Limitation.

12.12.1 For Actions by an Owner or Resident. The exclusive period of limitation for any of the Parties to bring any Claim, shall be the earliest of: (i) for Claims alleging construction defect or defective design, two (2) years and one (1) day from the date that the Owner or Resident discovered or reasonably should have discovered evidence of the Claim; (ii) for Claims other than those alleging construction defect or defective design, four (4) years and one (1) day from the date that the Owner or Resident discovered or reasonably should have discovered evidence of the Claim; or (iii) the applicable statute of limitations for such Claim. In the event that a court of competent jurisdiction determines that an Owner does have the power or right to institute, defend, intervene in, settle or compromise litigation, arbitration or other proceedings relating to the design or construction of the Common Area, the exclusive period of limitation for a Claim of construction defect or defective design of the Common Areas, shall be the earliest of: (a) two (2) years and one (1) day from the date that the Owner or the Association discovered or reasonably should have discovered evidence of the Claim; or (b) the applicable statute of limitations for such Claim. In no event shall this *Section 12.12.1* be interpreted to extend any period of limitations.

12.12.2 For Actions by the Association. The exclusive period of limitation for the Association to bring any Claim, including, but not limited to, a Claim of construction defect or defective design of the Common Areas, shall be the earliest of: (i) for Claims alleging construction defect or defective design, two (2) years and one (1) day from the date that the Association or its manager, board members, officers or agents discovered or reasonably should have discovered evidence of the Claim; (ii) for Claims other than those alleging construction defect or defective design of the Common Areas, four (4) years and one (1) day from the date that the Association or its manager, board members, officers or agents discovered or reasonably should have discovered evidence of the Claim; or (iii) the applicable statute of limitations for such Claim. In no event shall this *Section 12.12.2* be interpreted to extend any period of limitations.

12.13 Funding the Resolution of Claims. The Association must levy a Special Assessment to fund the estimated costs to resolve a Claim pursuant to this *Article 12*. The Association may not use its annual operating income or reserve funds to fund the costs to resolve a Claim unless the Association has previously established and funded a dispute resolution fund.

[SIGNATURE PAGES FOLLOW]

EXECUTED to be effective on the date this instrument is Recorded.

DECLARANT:

LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., a Texas limited partnership,

By: U.S. Home LLC, a Delaware limited liability company (as successor-in-interest by conversion from U.S. Home Corporation, a Delaware corporation), its General Partner

By: _____
Printed Name: Jennifer Eller
Title: Authorized Agent

STATE OF TEXAS §
§
COUNTY OF Dallas §

This instrument was acknowledged before me this 29 day of April, 2024 by Jennifer Eller, Authorized Agent of U.S. Home LLC, a Delaware limited liability company (as successor-in-interest by conversion from U.S. Home Corporation, a Delaware corporation), general partner of LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., a Texas limited partnership, on behalf of said entities.

(SEAL)

_____
Notary Public Signature

LYNN SCIANDRA
Notary Public, State of Texas
Comm. Expires 12-13-2027
Notary ID 134679944

The undersigned executes this Declaration solely for the purpose of evidencing its consent to subject the Property to the terms and provisions of this Declaration. Such joinder shall not be deemed to impose any liabilities, duties or obligations of Declarant on Development Owner, nor shall such joinder be construed as confirming the legality or enforceability of any provisions of this Declaration.

ACKNOWLEDGED AND AGREED:

KLLB AIV LLC,
a Delaware limited liability company

By: Nathan Holt
Printed Name: Nathan Holt
Title: Authorized Signatory

STATE OF Arizona §
§
COUNTY OF Maricopa §

This instrument was acknowledged before me this 29th day of April, 2024, by Nathan Holt, the Authorized Signatory of KLLB AIV LLC, a Delaware limited liability company, on behalf of said company.

MICHELLE BOWEN
Notary Public - Arizona
Maricopa County
Commission # 663626
My Comm. Expires Mar 15, 2028

Notary Public, State of Arizona
Printed Name: Michelle Bowen
My commission expires: March 15 2028

[SEAL]

EXHIBIT A

PROPERTY DESCRIPTION

BEING a tract of land situated in the F. Trevino Survey, Abstract No. 1243, Denton County, Texas, and being a portion of a called 357.561 acre tract of land described in a Special Warranty Deed with Vendor's Lien to Aubrey Blackjack Partners, LLC, as recorded in Instrument No. 2021-213816 of the Official Records of Denton County, Texas, and being more particularly described as follows:

BEGINNING at a 1/2 inch iron rod with plastic cap stamped "RPLS 1849" found for the southerly southeast corner of said 357.561 acre tract, common to the southwest corner of a called 27.37 acre tract of land described in a deed to Deccan Ranch, LLC, as recorded in Instrument No. 2019-327 of the Official Records of Denton County, Texas, being on the northerly right-of-way line of F.M. Highway No. 428, an 80 foot wide right-of-way, from which, a 1/2 inch iron rod with plastic cap stamped "Price Surveying" bears North 19°34' West, 0.46 feet;

THENCE along the southerly line of said 357.561 acre tract and the northerly right-of-way line of said F.M. Highway No. 428, the following courses and distances:

South 71°19'16" West, a distance of 109.37 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set at the beginning of a tangent curve to the right having a central angle of 17°19'10", a radius of 778.51 feet, a chord bearing and distance of South 79°58'51" West, 234.44 feet;

In a southwesterly direction, with said curve to the right, an arc distance of 235.33 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

South 88°38'26" West, a distance of 384.98 feet to a point for corner; South 89°31'26" West, a distance of

1348.99 feet to a point for corner;

South 89°48'26" West, a distance of 217.13 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

THENCE departing the southerly line of said 357.561 acre tract and the northerly right-of-way line of said F.M. Highway No. 428, and crossing said 357.561 acre tract, the following courses and distances:

North 00°11'34" West, a distance of 463.71 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set at the beginning of a tangent curve to the right with a radius of 470.00 feet, a central angle of 20°43'21", and a chord bearing and distance of North 10°10'07" East, 169.06 feet;

In a northerly direction, with said tangent curve to the right, an arc distance of 169.99 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

North 20°31'47" East, a distance of 278.24 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set at the beginning of a tangent curve to the left with a radius of 530.00 feet, a central angle of 76°50'48", and a chord bearing and distance of North 17°53'37" West, 658.75 feet;

In a northwesterly direction, with said tangent curve to the left, an arc distance of 710.85 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

North 16°57'32" West, a distance of 30.44 feet to a point for corner; North 23°28'36" East, a distance of

161.44 feet to a point for corner; North 66°31'22" West, a distance of 50.00 feet to a point for corner;

North 23°28'38" East, a distance of 311.70 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

North 64°41'01" West, a distance of 456.97 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set on the westerly line of said 357.561 acre tract and the easterly right-of-way line of U.S. Highway 377, a 120 foot wide right-of-way;

THENCE North 25°19'18" East, along the westerly line of said 357.561 acre tract and the easterly right-of-way line of said U.S. Highway 377, a distance of 1,033.00 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

THENCE departing the westerly line of said 357.561 acre tract and the easterly right-of-way line of said U.S. Highway 377, and crossing said 357.561 acre tract, the following courses and distances:

South 64°52'24" East, a distance of 40.72 feet to a point for corner; South 19°41'04" East, a distance of

42.91 feet to a point for corner; South 64°41'01" East, a distance of 105.11 feet to a point for corner;

North 70°18'59" East, a distance of 14.14 feet to a point for corner;

North 25°18'59" East, a distance of 9.50 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

South 64°41'01" East, a distance of 50.00 feet to a mag nail set for corner; South 25°18'59" West, a

distance of 9.50 feet to a point for corner;

South 19°41'01" East, a distance of 14.14 feet to a point for corner;

South 64°41'01" East, a distance of 43.05 feet to a point at the beginning of a tangent curve to the left with a radius of 1,220.00 feet, a central angle of 14°04'04", and a chord bearing and distance of South 71°43'03" East,
298.79 feet;

In an easterly direction, with said tangent curve to the left, an arc distance of 299.55 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set at the beginning of a compound curve to the left with a radius of 606.00 feet, a central angle of 50°17'09", and a chord bearing and distance of North 76°06'20" East, 514.95 feet;

In an easterly direction, with said compound curve to the left, an arc distance of 531.86 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

South 39°02'15" East, a distance of 60.35 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

South 49°05'58" West, a distance of 37.53 feet to a point at the beginning of a tangent curve to the right with a radius of 1,030.00 feet, a central angle of 04°29'37", and a chord bearing and distance of South 51°20'47" West,
80.76 feet;

In a southwesterly direction, with said tangent curve to the right, an arc distance of 80.78 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

South 18°52'48" East, a distance of 22.14 feet to a point for corner; South 16°16'48" East, a distance of 586.78 feet to a point for corner; South 15°44'48" East, a distance of 57.73 feet to a point for corner; South 14°57'29" East, a distance of 58.74 feet to a point for corner; South 14°10'31" East, a distance of 58.77 feet to a point for corner; South 13°28'00" East, a distance of 58.83 feet to a point for corner; South 12°40'49" East, a distance of 58.93 feet to a point for corner; South 11°44'07" East, a distance of 59.05 feet to a point for corner; South 11°39'38" East, a distance of 118.09 feet to a point for corner; South 07°13'03" East, a distance of 130.00 feet to a point for corner;

North 82°46'57" East, a distance of 53.97 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

South 07°13'03" East, a distance of 50.00 feet to a point for corner; South 82°46'57" West, a distance of 10.50 feet to a point for corner; South 37°46'57" West, a distance of 14.14 feet to a point for corner; South 07°13'03" East, a distance of 104.65 feet to a point for corner; South 05°51'50" East, a distance of 15.35 feet to a point for corner;

South 03°37'22" East, a distance of 10.07 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

North 78°28'29" East, a distance of 0.63 feet to a point for corner;

North 82°46'57" East, a distance of 197.96 feet to a point for corner; North 81°37'31" East, a distance of 72.04 feet to a point for corner; North 76°22'26" East, a distance of 76.43 feet to a point for corner; North 70°38'40" East, a distance of 76.47 feet to a point for corner; North 64°54'53" East, a distance of 76.51 feet to a point for corner; North 58°44'40" East, a distance of 87.61 feet to a point for corner; North 54°31'20" East, a distance of 25.63 feet to point for corner;

North 55°42'11" East, a distance of 93.22 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

North 00°10'40" West, a distance of 154.85 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner;

North 89°44'50" East, a distance of 228.99 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for corner on the easterly line of said 357.561 acre tract and the westerly line of aforesaid 27.37 acre tract;

THENCE South 00°10'43" East, along the easterly line of said 357.561 acre tract and the westerly line of said
27.37 acre tract, a distance of 682.37 feet to a 1/2 inch iron rod with plastic cap stamped "Price Surveying" found for corner;

THENCE South 00°56'03" West, a distance of 1,132.59 feet to the POINT OF BEGINNING and containing
125.827 acres (5,481,039 square feet) of land, more or less.

DirtSavers, LLC.

PO Box 566
Aledo, Texas 76008
PH: 469.834.7446

dirtsavers@gmail.com
F-14138

Date: 04.10.2026
C&W Stoneworks, LLC.
PO Box 1023
Rockwall, TX 75087

RE: Construction Review of Masonry Stone Retaining Walls

Job Name:	Highpointe Ranch Ph 3,
Job Location:	Aubrey, Texas
DirtSavers Job:	RW010925-4 dated 01.09.2025

To whom it may concern:

A representative of DirtSavers, LLC. visited the above-mentioned site to review the construction of the masonry stone retaining walls designed by DirtSavers. The construction of the walls was found to be acceptable, and in accordance with the plans and specifications designed by DirtSavers, LLC.

The retaining walls were designed using the 2021 IBC.

Sincerely,

Michael Marshall, P.E.

04.10.2026

October 7, 2025

Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

RE: **Highpointe Ranch Phase 3 Paving Package**

Pay Estimate No: 2

Dear Board,

The attached Pay Estimate #2 was received from Gilco Contracting, Inc. as it relates to the construction of the Highpointe Ranch Phase 3 Paving Package.

Based upon site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation and projected completion as of 9/30/2025, Kimley-Horn is in agreement with the amount of work illustrated on the attached estimate which indicates a total balance due in the amount of:

$ 662,603.40

Please let us know if you have any questions or need further assistance in processing this estimate.

Sincerely,

Aubrey M. Brockman, PE
TBPE Registration No. F-928

Attachments

cc: Gilco Contracting, Inc.
Lennar Homes

Kimley»Horn

PROGRESS ESTIMATE

Progress Period: September 1, 2025 TO September 30, 2025

Pay Estimate No: 2
Project Name: Highpointe Ranch Phase 3 Paving Package
Project Number: 063451879
Contract Date: 6/2/2025

OWNER
Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

CONTRACTOR
Gilco Contracting, Inc.
6331 Southwest Blvd.
Benbrook, TX 76132

Original Contract Amount:	$	916,343.80
Change Orders: (see attached summary)		*$0.00*
Revised Contract Amount:	$	916,343.80
Amount Placed to Date:	$	857,082.80
Less 10% Retainage:	$	85,708.28
Total Earned Less Retainage:	$	771,374.52

Previous Payments:

Progress Estimate #	Invoice Date	Total Invoice Amount
1	8/31/2025	**$ 108,771.12**
		$ -
		$ -
		$ -
		$ 108,771.12

Balance to finish:	$	59,261.00
Amount Due This Period:	**$**	**662,603.40**

High Pointe Ranch Phase 3 Paving	
Original Contract Time to SubCom (Days):	35
Original Contract Time to Final Completion (Days)	35
Approved Time Extensions:	0
Approved Change Order Days:	0
Revised Contract Time:	35
Days Remaining:	35
Notice to Proceed:	8/4/2025
Construction Start (+ 7 days):	8/11/2025
Original Substantial Completion:	9/15/2025
Revised Substantial Completion:	9/15/2025
Final Completion Date:	10/13/2025

ENGINEER'S RECOMMENDATION STATEMENT

I, Aubrey M. Brockman, PE, engineer of record with Kimley-Horn & Associates, Inc., based on my knowledge, information and belief, recommend approval of this draw request. Recommendation is based on site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation. In my opinion, Contractor's work has progressed to the point indicated, subject to any qualifications stated in the recommendation. In the case of unit price work, the recommendation of payment includes determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests. This recommendation is not a representation that my observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work, or involved detailed inspections.

Recommended for Approval:

10/7/2025
Aubrey M. Brockman, PE Date
Kimley-Horn and Associates, Inc.
TBPE Registration No. F-928

1698

OFFICE PHONE
(817) 735-1600

GILCO CONTRACTING, INC.
6331 SOUTHWEST BLVD
BENBROOK, TEXAS 76132

FAX NUMBER
(817) 735-1613

LENNAR HOMES OF TEXAS LAND & CONST, LTD.
1707 N. MARKET PLACE BLVD., SUITE 100
IRVING, TEXAS 75063

ATTN: Aaron Woods
Supply Pro

ESTIMATE NUMBER: TWO

DATE: 9/30/2025

PROJECT: HIGHPOINTE RANCH PHASE 3

GILCO'S JOB NUMBER: 1698

PAY PERIOD FROM: SEPTEMBER 1, 2025 TO SEPTEMBER 30, 2025

INVOICE NO: 1698-002

ITEM NO	DESCRIPTION	CONTRACT QUANTITY	UNIT	UNIT PRICE	CONTRACT PRICE	QTY TO DATE	AMOUNT TO DATE	QTY THIS ESTIMATE	TOTAL THIS EST	% COMP.
	PAVING IMPROVEMENTS									
1	6" THICK CONCRETE PAVEMENT	15,840	SY	$46.40	$734,976.00	15,840	$734,976.00	15,840	$734,976.00	100.00%
2	6" LIME SUBGRADE	16,824	SY	$3.20	$53,836.80	16,824	$53,836.80			100.00%
3	LIME MATERIAL @ 27 #/SY	227	TON	$310.00	$70,370.00	167	$51,770.00			73.57%
4	REMOVE TYPE III BARRICADE	4	EA	$500.00	$2,000.00	4	$2,000.00			100.00%
5	24" SOLID WHITE CROSSWALK LINE (TXDOT PM(4)-22)	240	LF	$18.90	$4,536.00					
6	TYPE W1 1-2 & W13-1P SIGN	5.0	EA	$1,840.00	$9,200.00					
7	STREET NAME SIGN (2 BLADES PER) WITH POST	3	EA	$1,575.00	$4,725.00					
8	COMBINATION STOP SIGN AND STREET SIGN (2 BLADES PER) WITH POST	3	EA	$2,100.00	$6,300.00					
9	5' WIDE, (4" THICK) CONCRETE SIDEWALK	400	LF	$39.75	$15,900.00					
10	TRAFFIC CONTROL	1	LS	$2,500.000	$2,500.00	1.00	$2,500.00	0.50	$1,250.00	100.00%
	BONDS									
1	PAYMENT, PERFORMANCE AND MAINTENANCE BOND	1	LS	$12,000.00	$12,000.00	1	$12,000.00			100.00%
	TOTAL AMOUNT				**$916,343.80**		**$857,082.80**		**$736,226.00**	

ORIGINAL CONTRACT AMOUNT:	**$916,343.80**	
TOTAL CONTRACT AMOUNT:	$916,343.80	
TOTAL AMOUNT TO DATE:	$857,082.80	
10.00% RETAINAGE:	$85,708.28	
SUB TOTAL:	$771,374.52	
TOTAL THIS ESTIMATE:	$736,226.00	**GROSS AMOUNT**
10.00% RETAINAGE:	$73,622.60	
SUBTOTAL THIS ESTIMATE:	$662,603.40	
PREVIOUS ESTIMATE:	$108,771.12	
PAYMENT AMOUNT:	$662,603.40	

Traffic Impact Analysis

High Pointe Ranch Site
Aubrey, Texas

November 25, 2024

Kimley-Horn and Associates, Inc.
Richardson, Texas

Project #063451861
Registered Firm F-928

Kimley»Horn

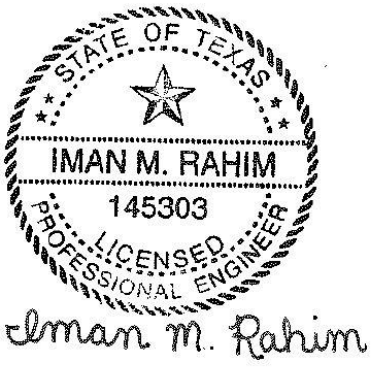
Traffic Impact Analysis

High Pointe Ranch Development
Aubrey, Texas

Prepared by:

Kimley-Horn and Associates, Inc.
2600 N Central Expressway Suite 400
Richardson, TX 75080
Registered Firm F-928

11-25-2024



Contact:
Iman M. Rahim, P.E.
214-617-0535
Revised Submittal: November 25, 2024

TABLE OF CONTENTS

EXECUTIVE SUMMARY iii
I. INTRODUCTION 1
A. Purpose 1
B. Methodology 1
C. Roadway Characteristics 1
D. Existing Study Area 2
E. Proposed Site Improvements 2
F. Future Study Area Projects 4
G. Existing Traffic Volumes 4
II. PROJECT TRAFFIC CHARACTERISTICS 10
A. Site-Generated Traffic 10
B. Trip Distribution and Assignment 11
C. Background Growth 11
D. Development of Background Traffic 12
E. Development of Total Traffic 12
III. TRAFFIC OPERATIONS ANALYSIS 19
A. Analysis Methodology 19
B. Analysis Results 19
C. 2022 Existing Traffic Operations 22
D. 2025 Background Traffic Operations 22
E. 2025 Background Plus 2025 Scenario Site-Generated Traffic Operations 22
F. 2026 Background Traffic Operations 22
G. 2026 Background Plus 2026 Scenario Site-Generated Traffic Operations 22
H. 2028 Background Traffic Operations 23
I. 2028 Background Plus Full Buildout Site-Generated Traffic Operations 23
J. US 377 at Blackjack Road Mitigation 24
K. Right-Turn Lane Analysis 26
L. Left-Turn Lane Analysis 27
M. Access Spacing 28
N. Intersection Sight Distance 29
IV. CONCLUSIONS AND RECOMMENDATIONS 30
APPENDIX 31

LIST OF TABLES

Table 1 – Trip Generation 10
Table 2 – Growth Rate Analysis 11
Table 3 – Level of Service Definitions 19
Table 4 – Traffic Operational Results – Weekday AM Peak Hour 20
Table 5 – Traffic Operational Results – Weekday PM Peak Hour 21
Table 6 – Traffic Signal Warrant Results at US 377 and Blackjack Road 25
Table 7 – Traffic Operations Analysis at Highway 377 and Blackjack Road Mitigation 25
Table 8 – Right-Turn Lane Analysis 26
Table 9 – Left-Turn Lane Analysis 28
Table 10 – Access Spacing 29
Table 11 – Intersection Sight Distance 29

LIST OF EXHIBITS

EXHIBIT 1: VICINITY MAP 5
EXHIBIT 2: CONCEPTUAL SITE PLAN.....6
EXHIBIT 3: LANE ASSIGNMENTS AND INTERSECTION CONTROL – THROUGH 2026 BUILDOUT.....7
EXHIBIT 4: LANE ASSIGNMENTS AND INTERSECTION CONTROL – 2028 8
EXHIBIT 5: 2022 EXISTING TRAFFIC VOLUMES.....9
EXHIBIT 6: 2025 BACKGROUND TRAFFIC VOLUMES 13
EXHIBIT 7: 2025 BACKGROUND PLUS 2025 SCENARIO SITE-GENERATED TRAFFIC VOLUMES.....14
EXHIBIT 8: 2026 BACKGROUND TRAFFIC VOLUMES 15
EXHIBIT 9: 2026 BACKGROUND PLUS 2026 SCENARIO SITE-GENERATED TRAFFIC VOLUMES.....16
EXHIBIT 10: 2028 BACKGROUND TRAFFIC VOLUMES 17
EXHIBIT 11: 2028 BACKGROUND PLUS FULL BUILDOUT SCENARIO SITE-GENERATED TRAFFIC VOLUMES 18

EXECUTIVE SUMMARY

November 2024 Note
This report has been updated to address TIA Review comments dated August 7, 2023. A comment response form is included in the **Appendix**.

The proposed High Pointe Ranch development is located between E Blackjack Road and Spring Hill Road along the eastern side of Highway 377 in Aubrey, Texas. The development, as proposed, includes 1,452 single-family residential units and 345,000 SF of retail use. The residential units are divided into High Pointe East and High Pointe West. Construction for the east and west sides will be constructed in phases, three phases for the eastern units and five phases for the western units. The residential development phases are as follows:

- Phase 1A West: 225 single-family residential homes
- Phase 1B West: 184 single-family residential homes
- Phase 2 West: 225 single-family residential homes
- Phase 3 West: 152 single-family residential homes
- Phase 4 West: 172 single-family residential homes
- Phase 5 West: 71 single-family residential homes
- Phase 1 East: 192 single-family residential homes
- Phase 2 East: 114 single-family residential homes
- Phase 3 East: 117 single-family residential homes

Note: Phase 1C West includes thirteen units on the attached phasing plan. These thirteen units are included in the Phase 2 West and Phase 3 West unit counts.

For purposes of this study, the development was analyzed in three scenarios. The three analysis scenarios and its associated development phases are as follows:

- 2025 Scenario: Phase 1A West & Phase 1B West
- 2026 Scenario: Phase 1A West through Phase 3 West, Phase 1 East, Retail
- 2028 Full Buildout Scenario: Phase 1A West through Phase 5 West, Phase 1 East through Phase 3 East, Retail

Traffic operations were analyzed at the study intersections for existing volumes, 2025, 2026, and 2028 background traffic volumes, and 2025, 2026, and 2028 background plus site-generated traffic volumes. Conditions were analyzed for the weekday AM and PM peak hours.

The background traffic conditions included existing traffic with compound growth rates, plus explicit modeling of the following development in the vicinity:

- Keenland site, a development consisting of 279 single-family homes. The site is located on the north side of FM 423, west of FM 2931 and is expected to be built out by 2025.

The following existing intersections were selected to be part of this study:

- Spring Hill Road at Highway 377
- Spring Hill Road at Neubauer Ranch Road
- Highway 377 at De Moye Lane
- Highway 377 at Blackjack Road

The analysis also included the following driveways having access in and out of the site:

- Access A, which is a full-access driveway to Spring Hill Road and is already constructed to serve Phase 1A of the development.
- Access B, which is a full-access driveway to Spring Hill Road, is opposite Neubauer Ranch Road, and is already constructed to serve Phase 1A of the development.
- Access C, which is a full-access driveway to Highway 377 and will be constructed with Phase 1B of the development (2025).
- Access D, which is a full-access driveway to Blackjack Road and will be constructed with Phase 1 East of the development (2026).
- Access E, which is a full-access driveway to Blackjack Road and will be constructed with Phase 1 East of the development (2026).
- Access F, which is a full-access driveway to Blackjack Road and will be constructed with Phase 2 of the development (2026).
- Access G, which is a full-access driveway to Highway 377, is opposite De Mayo Road, and will be constructed with the SW Retail development (2026).
- Access H, which is a full-access driveway to Spring Hill Road and will be constructed with the SW Retail development (2026).

The High Pointe Ranch development is expected to generate approximately 1,033 new weekday AM peak hour one-way vehicle trips and 1,396 new weekday PM peak hour one-way vehicle trips at buildout. The distribution of the site-generated traffic volumes onto the street system was based on the surrounding roadway network, existing traffic patterns, and the project's proposed access locations.

Based on the analysis presented in this report, the proposed High Pointe Ranch development can be successfully incorporated into the surrounding roadway network given the following recommendations are implemented. Two major roadway construction projects in the project vicinity, the Collin County Outer Loop and TxDOT Highway 377 Expansion project, are planned and will help alleviate some of the regional traffic congestion. However, due to unknown timeline of Collin County Outer Loop, the improvement from the project is not modeled. Highway 377 is planned for widening to a six-lane divided roadway with construction to begin in 2027. The Highway 377 widening is reflected in the 2028 background and buildout scenarios. Southbound left-turn lanes to the proposed site access points along Highway 377 will be constructed with TxDOT's widening project. Stop-controlled approaches along Highway 377 and the driveways serving the SW retail parcel are expected to operate with heavy delay. Analysis of Highway 377 and Blackjack Road showed that this intersection will meet warrants for signalization by 2028

with the High Pointe Ranch site traffic. This intersection is expected to be utilized by regional traffic and signalization should be considered by the City to help alleviate regional delay.

The following improvements to the external roadway network are the responsibility of the developer and recommended for the site:

Year 2025:

- Construct an eastbound left-turn lane from Spring Hill Road to serve Access A.
- Construct an eastbound left-turn lane from Spring Hill Road to serve Access B.
- Construct Access C with one inbound lane and two outbound lanes.

Year 2026:

- Construct an eastbound left-turn lane from Spring Hill Road to serve Access H.
- Construct a westbound right-turn lane from Spring Hill Road to serve Access H.
- Construct Access G with one inbound lane and two outbound lanes.
- Construct Access H with one inbound lane and two outbound lanes.
- Stripe the shoulder to serve as a northbound right-turn lane on Highway 377 at Access C and Access G.

Year 2028:

- Construct an eastbound right-turn lane from Blackjack Road to Access D.
- Construct an eastbound right-turn lane from Blackjack Road to Access E.
- Construct an eastbound right-turn lane from Blackjack Road to Access F.

The following improvements to the external roadway network are recommended for the site by Year 2028. They should be considered at a regional level and are not the responsibility of the developer:

- Install a signal US 377 at Blackjack Road

The following improvements should be built by 2028 and constructed by TxDOT with its Highway 377 widening project:

- Construct a northbound right-turn lane from Highway 377 to serve Access C.
- Construct a southbound left-turn lane from Highway 377 to service Access C.
- Construct a northbound right-turn lane from Highway 377 to serve Access G.
- Construct a southbound left-turn lane from Highway 377 to service Access G.

I. INTRODUCTION

A. Purpose

Kimley-Horn was retained to conduct a Traffic Impact Analysis (TIA) of future traffic conditions associated with the development of the High Pointe Ranch site located between Spring Hill Road and East Blackjack Road along the eastern side of US Highway 377. A site vicinity map is provided as **Exhibit 1**. **Exhibit 2** shows the proposed conceptual site plan. This study is intended to identify traffic generation characteristics, identify potential traffic related impacts on the local street system, and to develop mitigation measures required for identified impacts.

B. Methodology

Traffic operations were analyzed at the study intersections for AM and PM peak hours for the following scenarios:

- 2022 existing traffic
- 2025 background traffic
- 2025 Scenario
  - Phase 1A West
  - Phase 1B West
- 2026 background traffic
- 2026 Scenario
  - Phase 1A West through Phase 3 West
  - Phase 1 East
  - 345,000 SF Retail
- 2028 background traffic
- 2028 Buildout
  - Phase 1A West through Phase 5 West
  - Phase 1 East through Phase 3 East
  - 345,000 SF Retail

The capacity analyses were conducted using the *Synchro*™ software package and its associated *Intersection* reports for signalized intersections and *Highway Capacity Manual* reports for unsignalized intersections.

C. Roadway Characteristics

The following signalized intersection was evaluated as part of this study:

- Spring Hill Road at Highway 377

The following unsignalized intersections were evaluated as part of this study:

- Spring Hill Road at Neubauer Ranch Road
- Highway 377 at De Moye Lane
- Highway 377 at Blackjack Road

The major study area roadways are described below.

Highway 377

- Road Size: 2 Lanes, Undivided
- Posted Speed Limit: 55 MPH
- City of Aubrey Thoroughfare Classification: Principal Arterial

Spring Hill Road

- Road Size: 2-Lanes, Undivided
- Posted Speed Limit: 45 MPH west of Neubauer Ranch Road, 55 MPH east of Neubauer Ranch Road
- City of Aubrey Thoroughfare Classification: Major Arterial

Blackjack Road

- Road Size: 2-Lanes, Undivided
- Posted Speed Limit: 45 MPH
- City of Aubrey Thoroughfare Classification: Major Collector

De Moye Lane

- Road Size: 2-Lanes, Undivided
- Posted Speed Limit: 20 MPH
- City of Aubrey Thoroughfare Classification: Unclassified

Exhibit 3 illustrates the intersection geometry prior to Highway 377 widening used for the traffic analysis through 2026 buildout. **Exhibit 4** illustrates the intersection geometry after the Highway 377 widening used for the traffic analysis in 2028.

D. Existing Study Area

The property is located within the City of Aubrey. Since the original TIA was submitted, Access A and Access B have already been constructed. The development has been approved to begin initial phases of construction.

E. Proposed Site Improvements

The development, as proposed, includes 1,452 single-family residential units to be built in five phases and 345,000 SF of retail use. The residential units are divided into High Pointe East and High Pointe West. Construction for the east and west sides will be constructed in phases, three phases for the eastern units and five phases for the western units. The residential phases are as follows:

- Phase 1A West: 225 single-family residential homes
- Phase 1B West: 184 single-family residential homes
- Phase 2 West: 225 single-family residential homes
- Phase 3 West: 152 single-family residential homes
- Phase 4 West: 172 single-family residential homes
- Phase 5 West: 71 single-family residential homes

- Phase 1 East: 192 single-family residential homes
- Phase 2 East: 114 single-family residential homes
- Phase 3 East: 117 single-family residential homes

Note: Phase 1C West includes thirteen units on the attached phasing plan. These thirteen units are included in the Phase 2 West and Phase 3 West unit counts.

As shown in **Exhibit 3** (through 2026) and **Exhibit 4** (2028), the site has six proposed residential driveways and two proposed retail driveways. The driveways to be modeled in this analysis are as follows:

Access A – would be a new full-access driveway to Spring Hill Road located opposite an existing private driveway approximately 3,175 feet east of the Spring Hill Road/Highway 377 intersection. The driveway was modeled with one inbound and one outbound lane. Access A has been constructed.

Access B – would be a new full-access driveway to Spring Hill Road located opposite Neubauer Ranch Road. The driveway was modeled with one inbound and one outbound lane. Access B has been constructed.

Access C – would be a new full-access driveway to Highway 377 located opposite an existing private driveway approximately 1,670 feet south of the Highway 377/Blackjack Road intersection. The driveway was modeled with one inbound and two outbound lanes. Access C will be constructed with Phase 1B of development.

Access D – would be a new full-access driveway to Blackjack Road located approximately 4,530 feet east of the Highway 377/Blackjack Road intersection. The driveway was modeled with one inbound and one outbound lane. Access D will be constructed with Phase 1 East of development.

Access E – would be a new full-access driveway to Blackjack Road located approximately 3,300 feet east of the Highway 377/Blackjack Road intersection. The driveway was modeled with one inbound and one outbound lane. Access E will be constructed with Phase1 East of development.

Access F – would be a new full-access driveway to Blackjack Road located approximately 1,635 feet east of the Highway 377/Blackjack Road intersection. The driveway was modeled with one inbound and one outbound lane. Access F will be constructed with Phase 2 of development.

Access G – would be a new full-access driveway to Highway 377 located opposite De Moye Lane. The driveway was modeled with one inbound and two outbound lanes. Access G will be constructed with the SW Retail development.

Access H – would be a new full-access driveway to Spring Hill Road located approximately 1,450 feet east of the Spring Hill Road/Highway 377 intersection. The driveway was modeled with one inbound and two outbound lanes. Access H will be constructed with the SW Retail development.

F. Future Study Area Projects

Two major roadway projects are planned near the project site. The Collin County Outer Loop project will run east/west from the Denton/Collin County line to the Rockwall/Collin County line going through the City of Aubrey. It is assumed part of the freeway will be located alongside the north portion of the site and replace the existing Blackjack Road. Construction and completion of this project is unknown and therefore, was not included in the analysis in this report.

TxDOT currently has plans for reconstruction and widening along US 377 from Pilot Point to Cross Roads (CSJ: 0081-06-040). As part of the project, Highway 377 adjacent to the site, will be improved to a six-lane roadway with a raised median. The project is expected to begin construction in 2027. As part of the Highway 377 construction, TxDOT will construct the southbound left-turn lanes on Highway 377 to Access C and Access G. **Exhibit 3** shows the intersection and lane geometry prior to US 377 widening and **Exhibit 4** shows the intersection and lane geometry with the US 377 widening complete.

G. Existing Traffic Volumes

Exhibit 5 shows the existing weekday AM and PM peak hour traffic volumes. 24-hour machine counts were collected near the site on Spring Hill Road and Highway 377 in 2022. The raw count sheets are provided in the **Appendix** of this report.

The 2022 24-hour counts showed the daily volume on the roadway link as follows:

- Spring Hill Road: 4,277 vehicles per day (vpd)
- Highway 377: 12,426 vpd

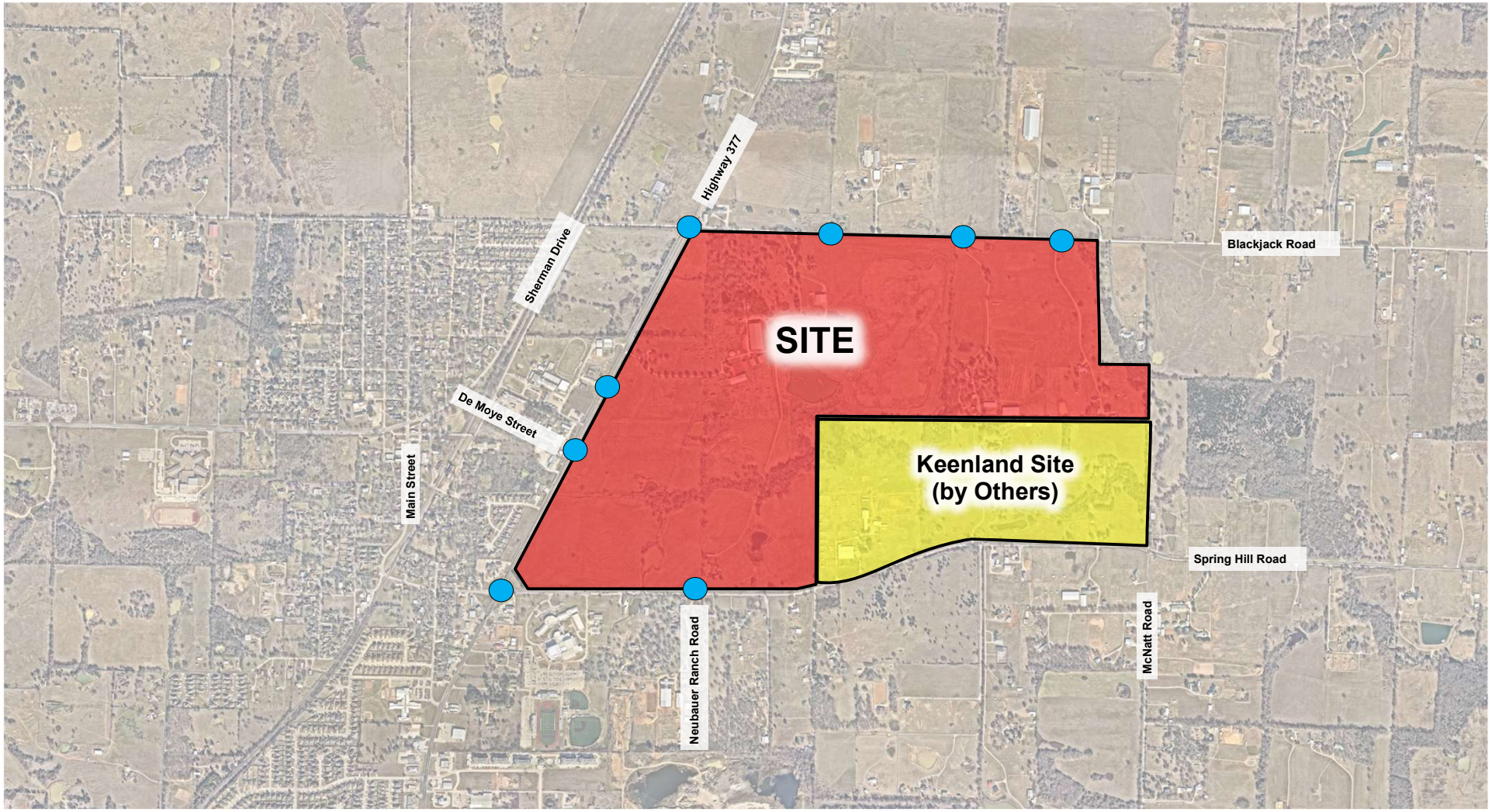


EXHIBIT 1

Vicinity Map

High Pointe Ranch - Aubrey, Texas

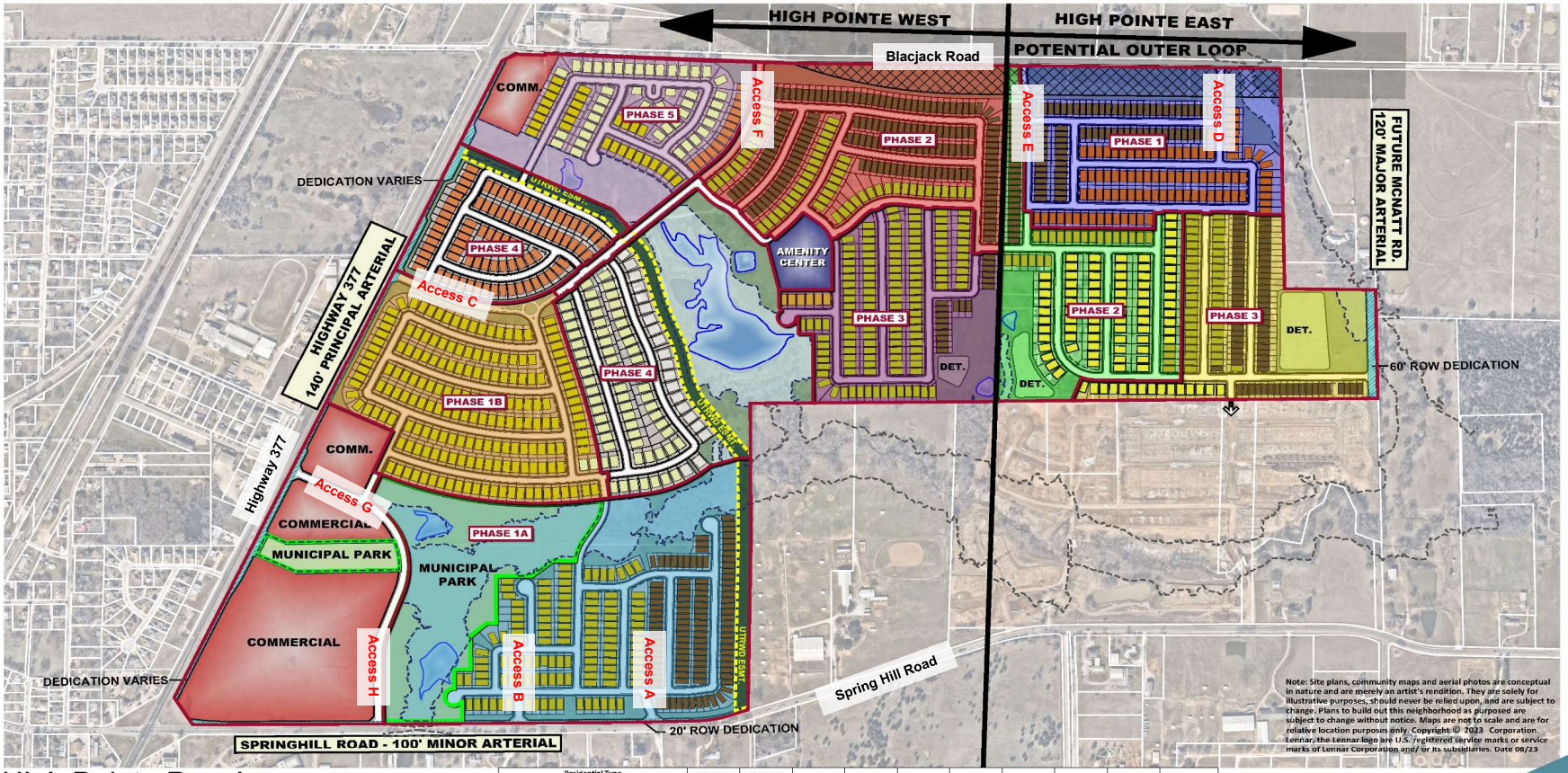
Kimley»Horn

LEGEND:

= Study Intersection

North

Not To Scale



High Pointe Ranch
Phasing Plan

Aubrey Texas
May 2023

Land Use Acreage Summary

Residential Lots / Residential Rights of Way	287.2	62.3%
Commercial	39.5	8.6%
Right of Way Dedication	9.3	2.0%
Open Space / Floodplain / Detention	82.7	17.9%
Municipal Park	29.9	6.5%
Amenity Center	3.7	0.8%
MMSD Easement	8.5	1.8%
Total	460.8	100.0%

Potential Outer Loop (Overlay)

Residential Type	Name	Pad Size	Lot Size	Phase 1 A West	Phase 1 B West	Phase 2 West	Phase 3 West	Phase 4 West	Phase 5 West	Phase 1 East	Phase 2 East	Phase 3 East	Total Lots
	Cottage	30'x75'	40'x115'	106	-	149	18	-	-	74	24	73	444
	Cottage	30'x75'	50'x120'	-	-	-	-	-	-	91	-	-	91
	Watermill	35'x75'	50'x120'	119	-	57	132	-	-		25	44	377
	Watermill	35'x75'	55'x130'	-	-	-	6	-	-	-	-	-	6
	Watermill	35'x75'	60'x130'	-	-	-	-	-	-	-	77	15	92
	Classic	40'x75'	50'x120'	-	-	-	-	86	13	-	-	-	99
	Classic	40'x75'	55'x130'	-	182	-	-	-	28	-	-	-	210
	Classic	40'x75'	65'x130'	-	2	-	-	66	43	-	-	-	111
	Classic	40'x75'	75'x130'	-	-	-	-	20	-	-	-	-	20
Total Lots				225	184	206	156	172	84	165	126	132	1450

GRAPHIC SCALE IN FEET
1"=300' @ 22x34

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034
972-335-3580
State of Texas Registration No. F-928

EXHIBIT 2
Conceptual Site Plan
High Pointe Ranch - Aubrey, Texas

Kimley»Horn

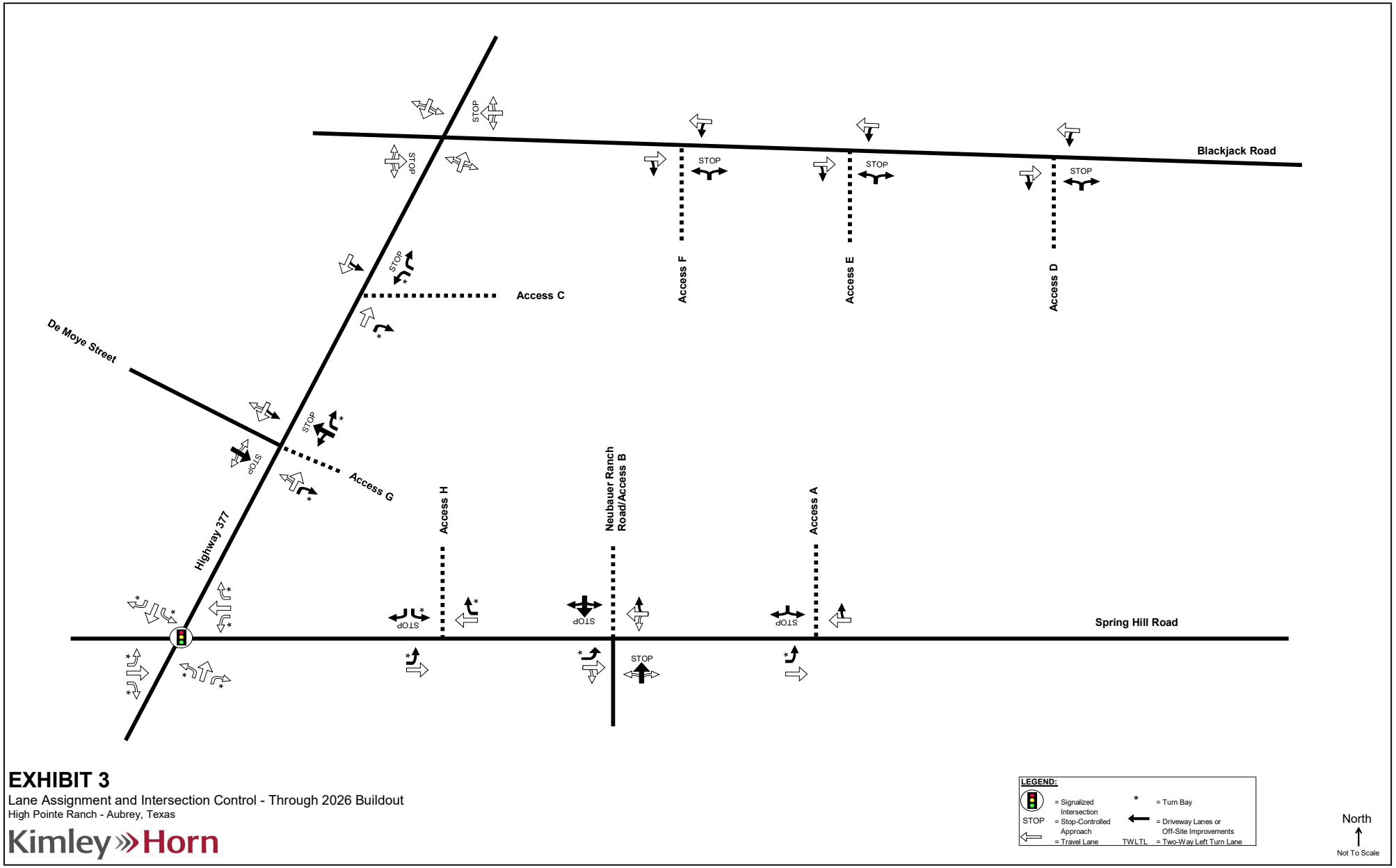


EXHIBIT 3

Lane Assignment and Intersection Control - Through 2026 Buildout

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

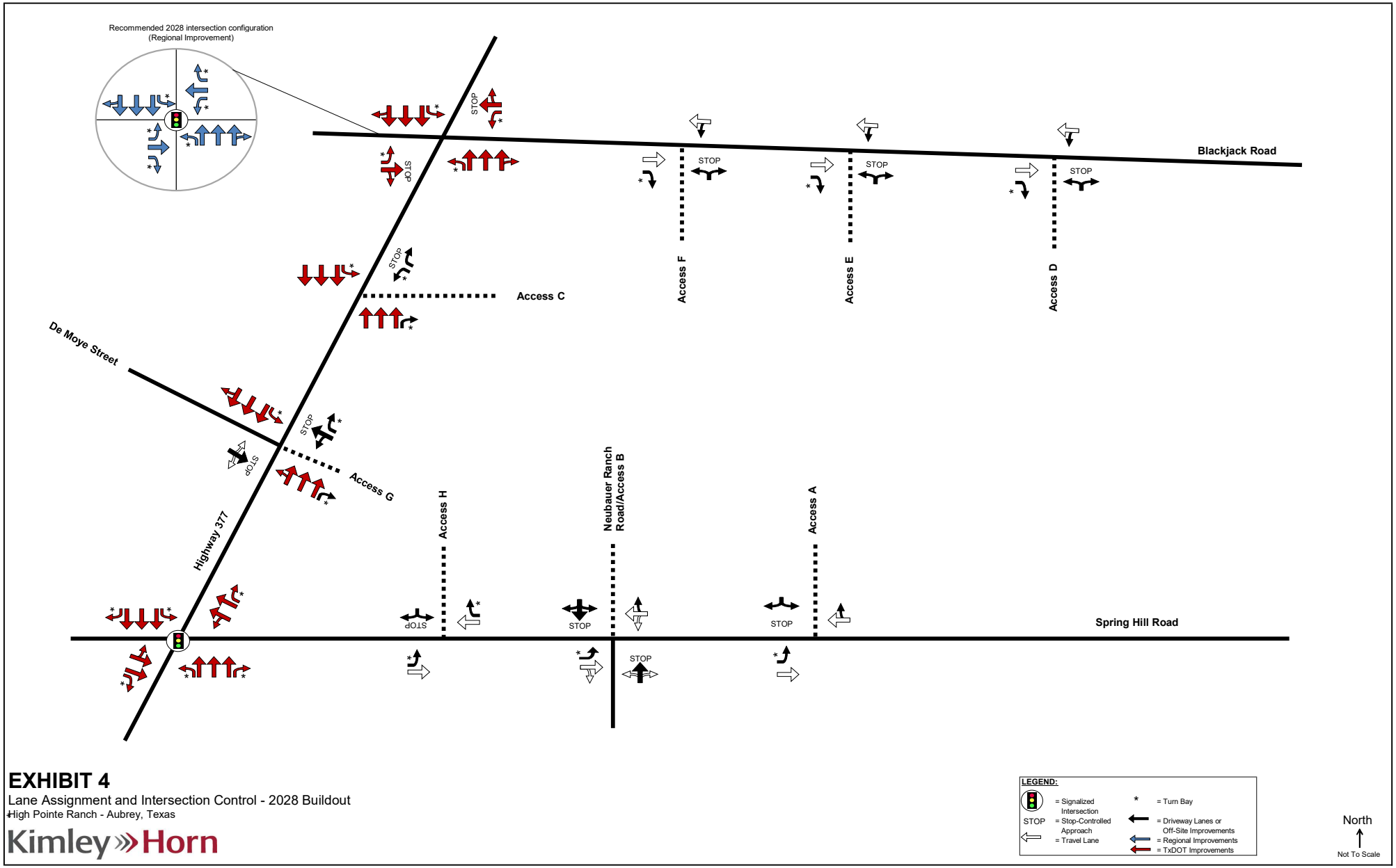


EXHIBIT 4

Lane Assignment and Intersection Control - 2028 Buildout

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

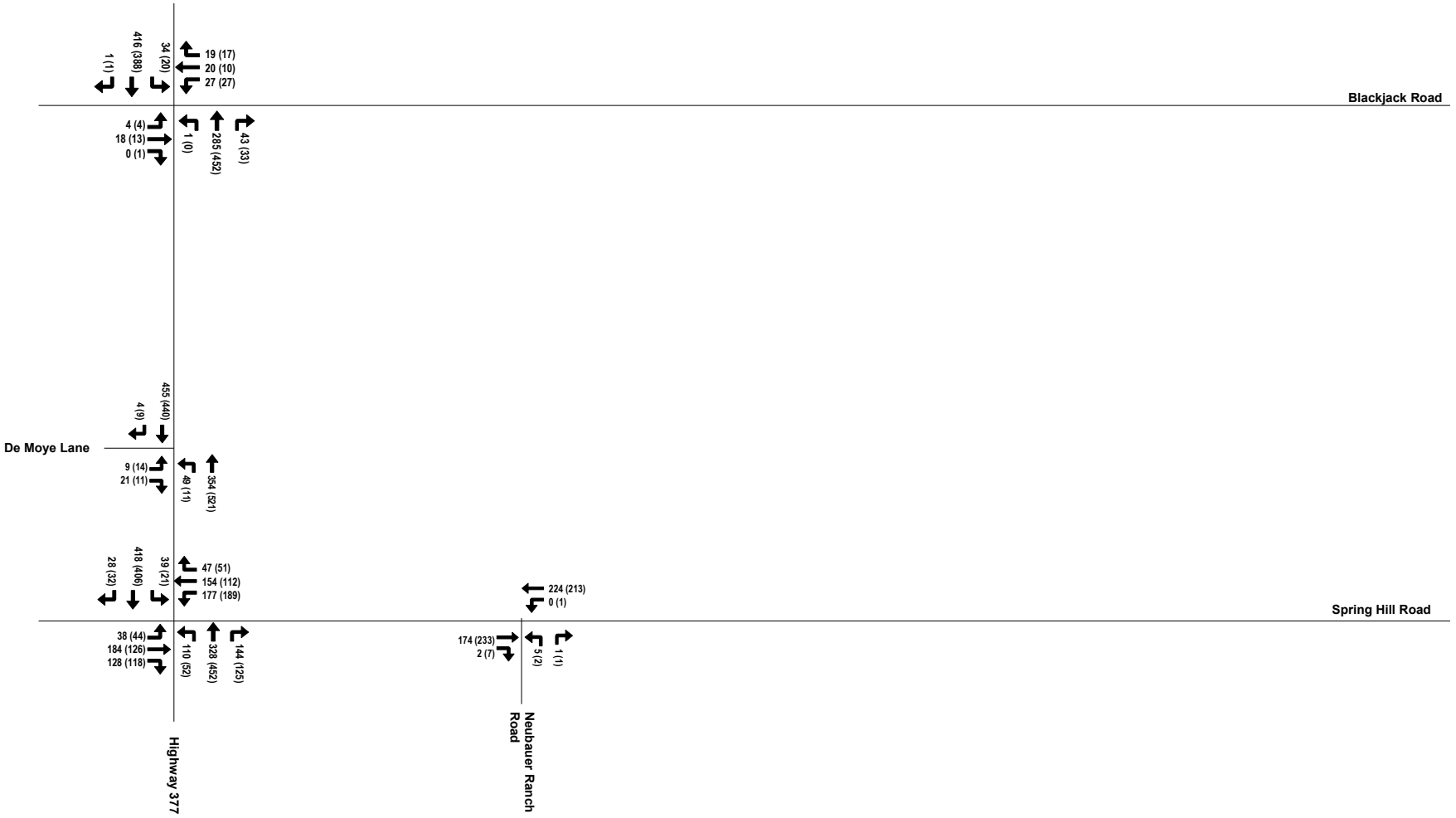


EXHIBIT 5

2022 Existing Traffic Volumes

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:

X (Y)

X = Weekday AM Peak Hour Turning Movements

Y = Weekday PM Peak Hour Turning Movements

Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

III. PROJECT TRAFFIC CHARACTERISTICS

A. Site-Generated Traffic

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the 11th edition of *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. The trips indicated are actually one-way trips or *trip ends*, where one vehicle entering and exiting the site is counted as one inbound trip and one outbound trip.

For the retail parcels at the northwest and southwest corners of the site, a 0.2 floor to area ratio was used to determine the site size for trip generation.

No reductions were taken for pass-by trips, internal capture, or multimodal use.

Table 1 shows the resulting daily and weekday AM and PM peak hour trip generation for the proposed development, showing new external trips.

Table 1 – Trip Generation

Land Uses	Amount	Units	ITE Code	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Detached Housing (Phase 1A West)	225	DU	210	2,128	39	117	156	134	79	213
Single Family Detached Housing (Phase 1B West)	184	DU	210	1,768	33	97	130	111	65	176
2025 Scenario Total Vehicle Trips:				**3,896**	**72**	**214**	**286**	**245**	**144**	**389**
Single Family Detached Housing (Phase 2 West)	225	DU	210	2,128	39	117	156	134	79	213
Single Family Detached Housing (Phase 3 West)	152	DU	210	1,483	27	82	109	93	54	147
Single Family Detached Housing (Phase 1 East)	192	DU	210	1,839	34	101	135	115	68	183
Strip Retail Plaza (<40k) (NW Corner)	30,000	SF	822	1,634	43	28	71	85	85	170
Shopping Center (>150k) (SW Corner)	315,000	SF	820	14,088	198	121	319	619	670	1,289
2026 Scenario Total Vehicle Trips:				**9,346**	**172**	**514**	**686**	**587**	**345**	**932**
Single Family Detached Housing (Phase 4 West)	172	DU	210	1,662	31	91	122	104	61	165
Single Family Detached Housing (Phase 5 West)	71	DU	210	736	14	41	55	45	27	72
Single Family Detached Housing (Phase 2 East)	114	DU	210	1,138	21	63	84	71	41	112
Single Family Detached Housing (Phase 3 East)	117	DU	210	1,166	22	64	86	72	43	115
2028 Full Buildout Total Vehicle Trips:				**14,048**	**260**	**773**	**1,033**	**879**	**517**	**1,396**
Development Totals										
Total Net New External Vehicle Trips:				**14,048**	**260**	**773**	**1,033**	**879**	**517**	**1,396**

Trip Generation rates based on *ITE's Trip Generation Manual*, 11th Edition.

B. Trip Distribution and Assignment

The distribution of the site-generated traffic volumes in to and out of the site driveways and onto the street system was based on the area street system characteristics, existing traffic patterns, relative land use density, and the locations of the proposed driveway access to/from the site.

The corresponding inbound and outbound traffic assignment, where the directional distribution is applied using the most probable paths to and from the site, can be found for each individual Phase in the **Appendix**. **Exhibit 6** shows the resulting site-generated weekday AM and weekday PM peak hour turning movements after multiplying the new external trip generation by the respective traffic assignment percentages for the 2025 Scenario. **Exhibit 7** shows the resulting site-generated weekday AM and weekday PM peak hour turning movements after multiplying the new external trip generation by the respective traffic assignment percentages for the 2026 Scenario. **Exhibit 8** shows the resulting site-generated weekday AM and weekday PM peak hour turning movements after multiplying the new external trip generation by the respective trip assignment percentages for the 2028 Full Buildout Scenario.

C. Background Growth

The distribution and volumes for the Keenland development was obtained from the TIA submitted for the background site (Dated October 27, 2021). The volumes were explicitly modeled and added to the network in all three study scenarios.

To determine the growth rate, the existing traffic counts and historic counts near the site on Spring Hill Road and Highway 377 were compared to find expected growth trends within the study area.

Table 2 – Growth Rate Analysis

Year	24-Hr Vol. Spring Hill Road (east of Highway 377)	24-Hr Vol. Highway 377 (south of Spring Hill Road)
2011	3,571	-
2013	4,110	-
2014	4,230	8,983
2015	4,960	-
2016	4,077	-
2017	5,270	-
2018	4,803	-
2019	-	10,516
2021	5,065	-
2022	4,277	12,426
Avg. Growth Rate	*2.0%*	*4.0%*
Annual Growth Rate Used:		**3.0%**

As seen in **Table 2**, the average growth rate on Spring Hill Road was calculated to be 2% over eleven years. Highway 377 had an average growth rate of 4% over three years. The average of the two growth rates, 3%, was applied annually to existing counts through the full buildout of the development in 2028. This is the same growth rate utilized in the Keenland TIA.

D. Development of Background Traffic

To calculate the background traffic for the three scenarios, the existing 2022 traffic counts were grown by 3% annually. Traffic generated from the Keenland development was also added to the roadway network. The resulting 2025, 2026 and 2028 background weekday AM and PM peak hour traffic volumes are shown in **Exhibit 6, Exhibit 8** and **Exhibit 10.**

E. Development of Total Traffic

Site traffic volumes were added to the background volumes to represent the estimated total (background plus site-generated) traffic conditions for the three study scenarios. **Exhibit 7**, **Exhibit 9**, and **Exhibit 11** show the resulting weekday AM and PM peak hour total traffic volumes for the 2025, 2026 and 2028 study years.

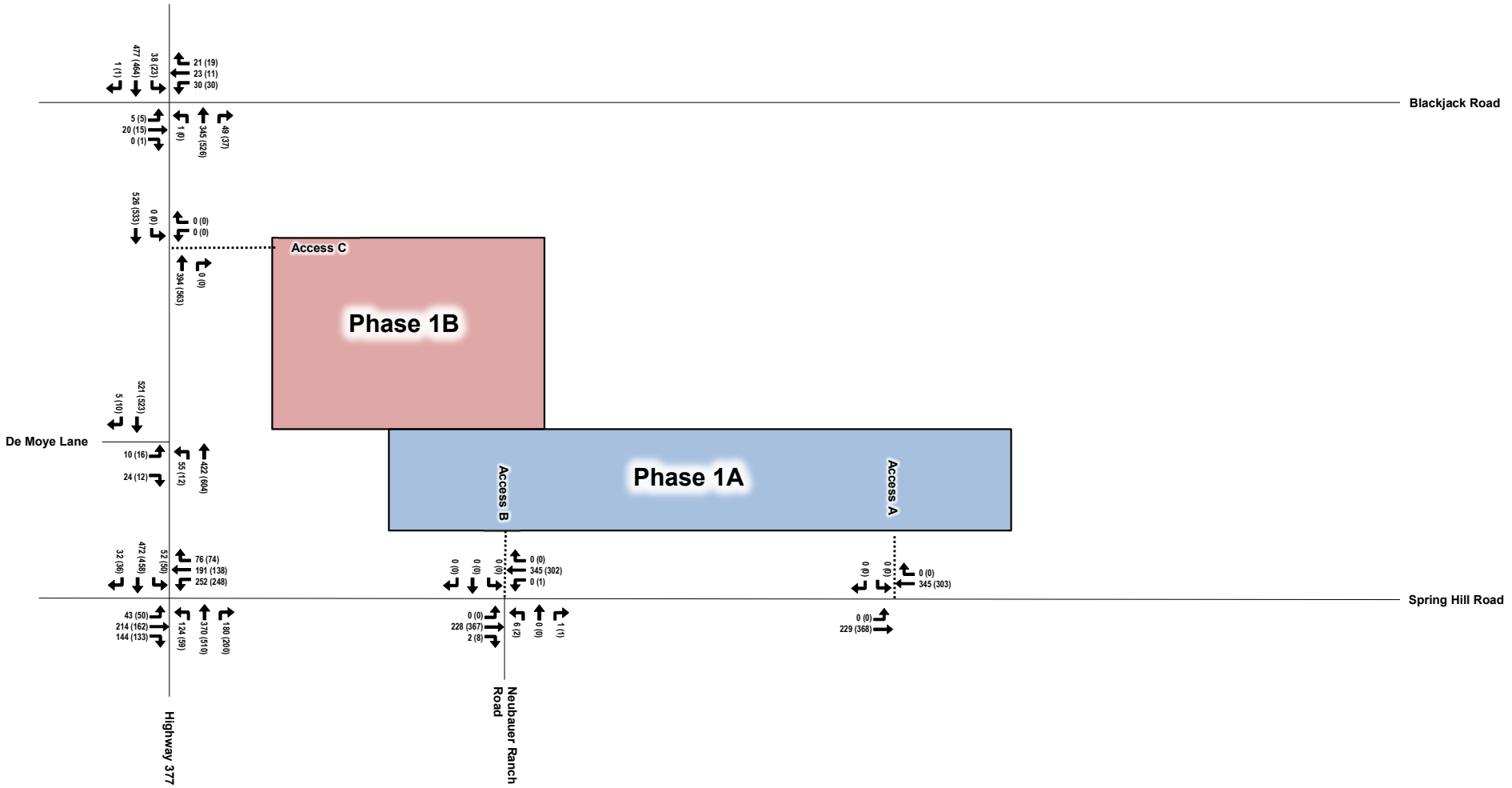


EXHIBIT 6

2025 Background Traffic Volumes

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

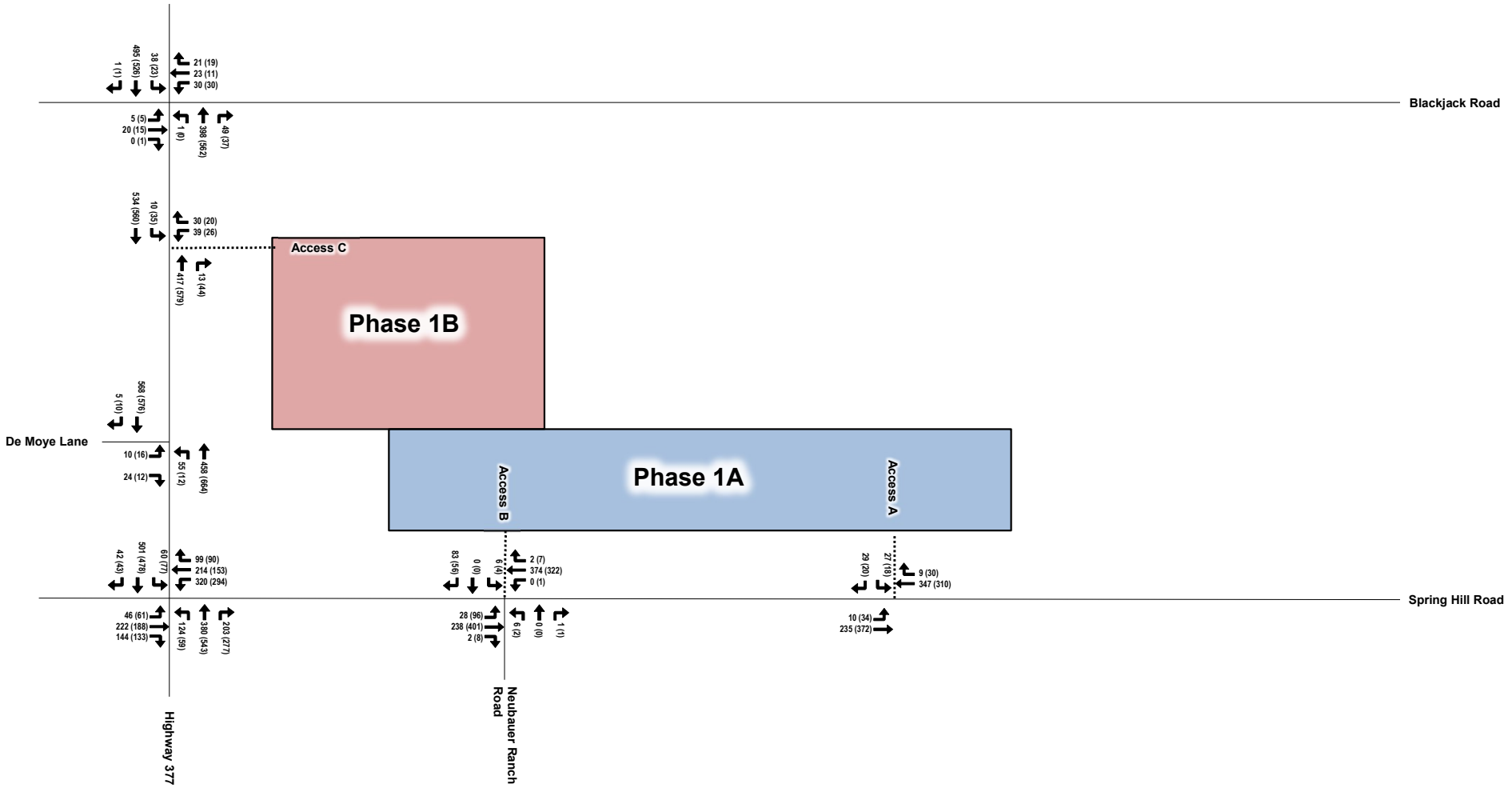


EXHIBIT 7

2025 Background + 2025 Scenario Site-Generated Traffic Volumes

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

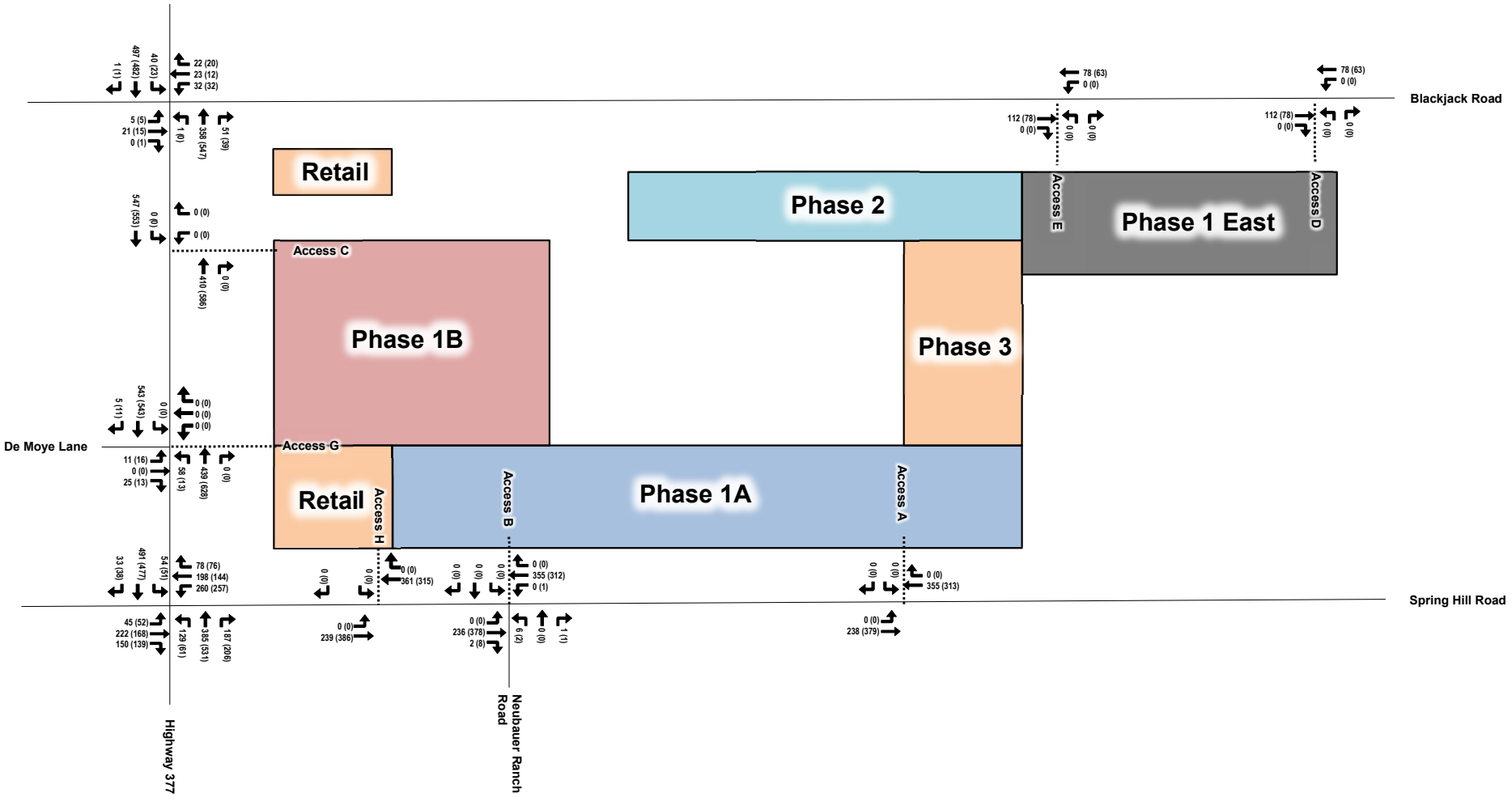


EXHIBIT 8

2026 Background Traffic Volumes

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

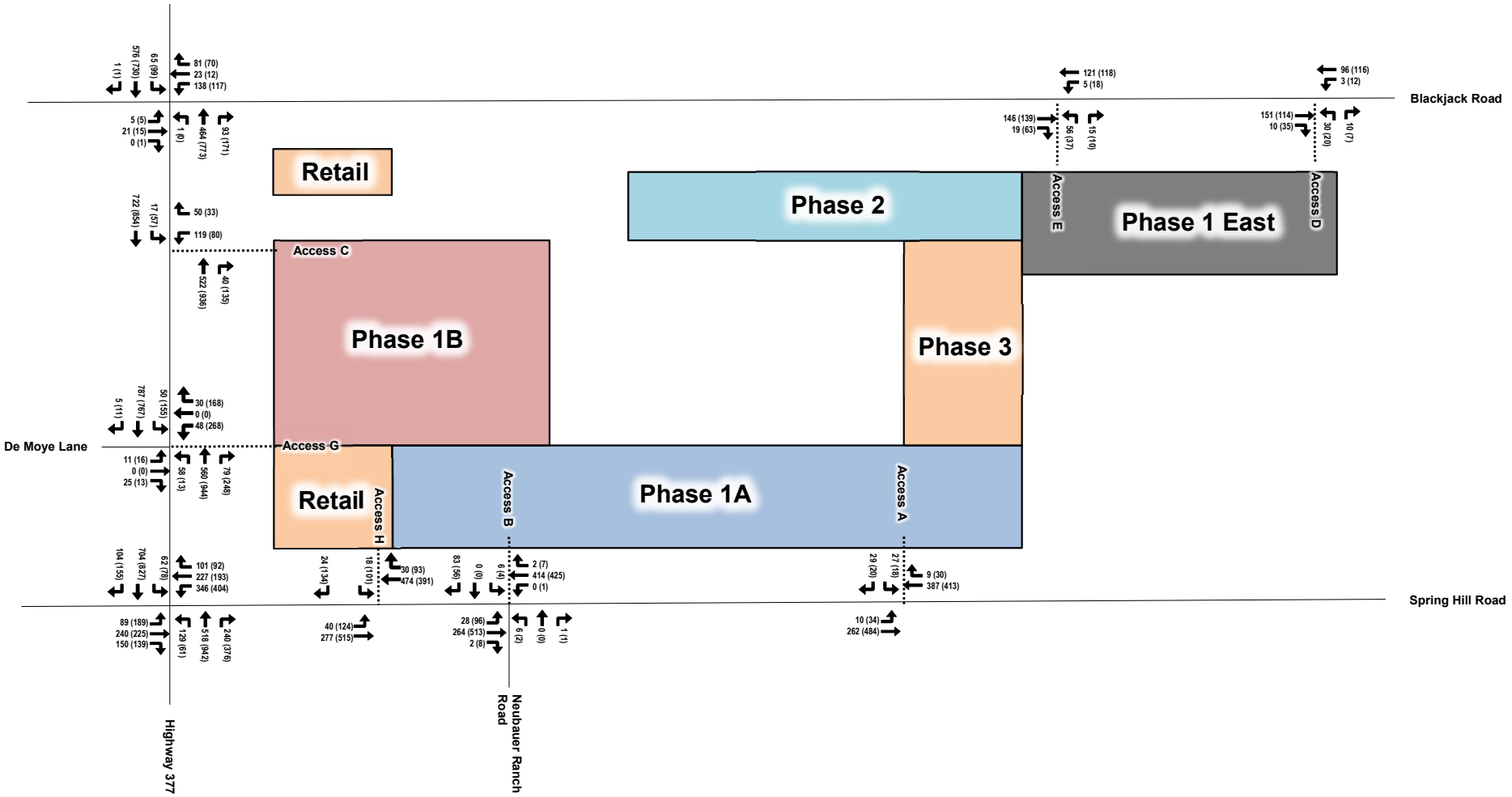


EXHIBIT 9

2026 Background + 2026 Scenario Site-Generated Traffic Volumes

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

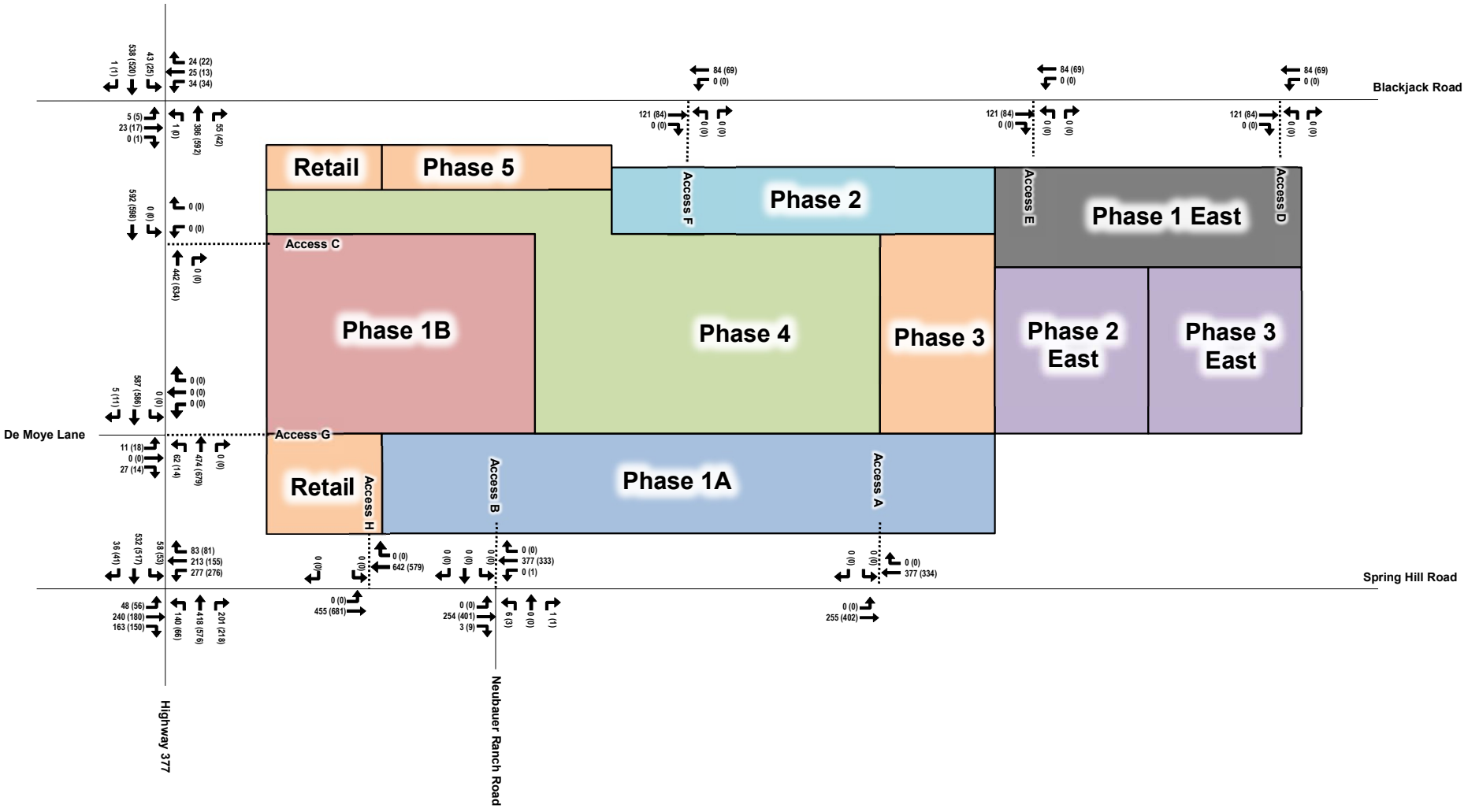


EXHIBIT 10

2028 Background Traffic Volumes

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

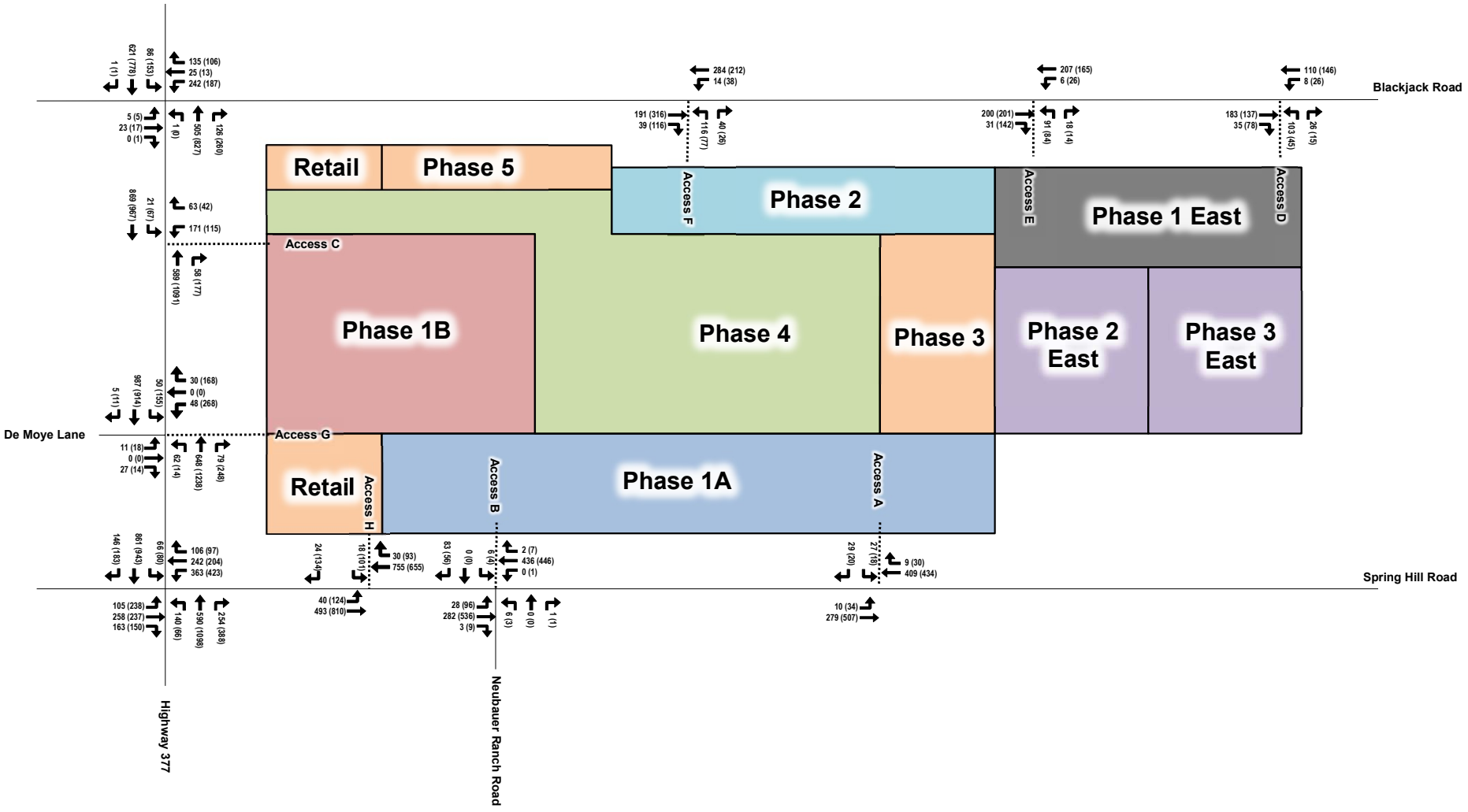


EXHIBIT 11

2028 Background + Full-Buildout Site-Generated Traffic Volumes

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

III. TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn conducted a traffic operations analysis to determine potential capacity deficiencies in the 2023, 2025, 2026, and 2028 study years at the study intersections. The acknowledged source for determining overall capacity is the current edition of the *Highway Capacity Manual.*

A. Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). **Table 3** shows the definition of level of service for signalized and unsignalized intersections.

Table 3 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Definitions provided from the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2010.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. For the unsignalized analysis, the level of service (LOS) for a two-way stop-controlled intersection is defined for each movement. Unlike signalized intersections which define LOS for each approach and for the intersection as a whole, LOS for two-way stop-controlled intersections is not defined as a whole. The signal timing was obtained from TxDOT for the intersection of Highway 377 at Spring Hill Road.

The analyses assumed the lane geometry and intersection control shown in **Exhibit 3** and **Exhibit 4**. The peak hour factors (PHF) for the existing traffic are known from the counts collected at the site. PHF for the future traffic and the site-generated traffic is unknown, so where this occurred the PHF was assumed to be the observed PHF.

B. Analysis Results

Table 4 and **Table 5** show the intersection operational results for the weekday AM and PM peak hours, respectively.

Table 4 – Traffic Operational Results – Weekday AM Peak Hour

INTERSECTION	APPROACH	2022 Existing Traffic		2025 Background Traffic		2025 Buildout Traffic		2026 Background Traffic		2026 Buildout Traffic		2028 Background Traffic		2028 Buildout Traffic	
		AM PEAK HOUR		AM PEAK HOUR		AM PEAK HOUR		AM PEAK HOUR		AM PEAK HOUR		AM PEAK HOUR		AM PEAK HOUR	
		DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
Signalized Intersection															
Spring Hill Road & Highway 377	EB	36.8	D	47.2	D	51.8	D	50.7	D	62.5	E	11.8	B	17.6	B
	WB	28.7	C	35.3	D	39.1	D	38.0	D	56.0	E	18.8	B	28.8	C
	NB	29.0	C	36.2	D	39.4	D	37.7	D	49.6	D	18.4	B	21.7	C
	SB	42.3	D	52.2	D	56.2	E	53.6	D	105.9	F	25.0	C	30.8	C
	Overall	**34.1**	**C**	**42.2**	**D**	**45.8**	**D**	**44.3**	**D**	**70.0**	**E**	**19.0**	**B**	**25.5**	**C**
Unsignalized Intersection															
Spring Hill Road @ Access A	EBL	-	-	-	-	8.5	A	-	-	8.7	A	-	-	8.8	A
	SB	-	-	-	-	16.2	C	-	-	18.4	C	-	-	19.6	C
Spring Hill Road @ Neubauer Ranch Road/Access B	EBL	-	-	-	-	8.4	A	-	-	8.6	A	-	-	8.7	A
	WBL	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	NB	11.6	B	13.9	B	20.7	C	14.2	B	24.2	C	14.3	B	26.2	D
	SB	-	-	-	-	13.3	B	-	-	14.3	B	-	-	14.8	B
Spring Hill Road @ Access H	EBL	-	-	-	-	-	-	-	-	9.5	A	-	-	11.7	B
	SB	-	-	-	-	-	-	-	-	20.3	C	-	-	58.2	F
Highway 377 @ De Moye Lane/Access G	EB	15.0	B	17.3	C	18.5	C	18.5	C	60.0	F	14.4	B	39.9	E
	WB	-	-	-	-	-	-	-	-	200+	F	-	-	78.7	F
	NBL	8.7	A	9.0	A	9.1	A	9.1	A	10.3	B	12.0	B	18.6	C
	SBL	-	-	-	-	-	-	-	-	9.4	A	-	-	13.7	B
Highway 377 @ Blackjack Road	EB	20.8	C	25.9	D	27.5	D	27.8	D	51.4	F	26.3	D	67.1	F
	WB	20.5	C	27.5	D	30.1	D	30.5	D	200+	F	20.7	C	200+	F
	NBL	8.3	A	8.5	A	8.5	A	8.6	A	8.8	A	10.7	B	11.6	B
	SBL	8.1	A	8.4	A	8.5	A	8.4	A	9.1	A	10.5	B	13.1	B
Highway 377 @ Access C	WB	-	-	-	-	31.0	D	-	-	200+	F	-	-	200+	F
	SBL	-	-	-	-	8.8	A	-	-	9.7	A	-	-	14.6	B
Blackjack Road @ Access D	WBL	-	-	-	-	0.0	A	-	-	7.7	A	-	-	7.9	A
	NB	-	-	-	-	0.0	A	-	-	11.0	B	-	-	14.1	B
Blackjack Road @ Access E	WBL	-	-	-	-	0.0	A	-	-	7.7	A	-	-	8.0	A
	NB	-	-	-	-	0.0	A	-	-	12.0	B	-	-	16.5	C
Blackjack Road @ Access F	WBL	-	-	-	-	0.0	A	-	-	7.8	A	-	-	8.0	A
	NB	-	-	-	-	0.0	A	-	-	13.3	B	-	-	23.3	C

Table 5 – Traffic Operational Results – Weekday PM Peak Hour

INTERSECTION	APPROACH	2022 Existing Traffic		2025 Background Traffic		2025 Buildout Traffic		2026 Background Traffic		2026 Buildout Traffic		2028 Background Traffic		2028 Buildout Traffic	
		PM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR	
		DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
Signalized Intersection															
Spring Hill Road & Highway 377	EB	27.0	C	38.4	D	44.9	D	41.3	D	54.0	D	10.5	B	23.3	C
	WB	22.5	C	29.4	C	34.6	C	31.5	C	53.2	D	15.8	B	33.5	C
	NB	24.4	C	34.2	C	40.2	D	34.7	C	174.3	F	14.9	B	26.9	C
	SB	32.7	C	35.0	C	37.7	D	35.4	D	127.9	F	18.6	B	24.7	C
	Overall	**26.7**	**C**	**34.1**	**C**	**39.1**	**D**	**35.3**	**D**	**120.2**	**F**	**15.3**	**B**	**26.9**	**C**
Unsignalized Intersection															
Spring Hill Road @ Access A	EBL	-	-	-	-	8.2	A	-	-	8.6	A	-	-	8.7	A
	SB	-	-	-	-	14.4	B	-	-	18.4	C	-	-	19.4	C
Spring Hill Road @ Neubauer Ranch Road/Access B	EBL	-	-	-	-	8.4	A	-	-	8.9	A	-	-	9.0	A
	WBL	7.8	A	8.3	A	8.4	A	8.3	A	8.8	A	8.3	A	8.9	A
	NB	11.5	B	14.1	B	23.8	C	14.3	B	34.7	D	14.5	B	41.3	E
	SB	-	-	-	-	12.5	B	-	-	14.9	B	-	-	15.5	C
Spring Hill Road @ Access H	EBL	-	-	-	-	-	-	-	-	9.2	A	-	-	10.8	B
	SB	-	-	-	-	-	-	-	-	51.1	F	-	-	200+	F
Highway 377 @ De Moye Lane/Access G	EB	16.8	C	20.4	C	21.9	C	21.2	C	200+	F	14.4	B	200+	F
	WB	-	-	-	-	-	-	-	-	200+	F	-	-	200+	F
	NBL	8.4	A	8.6	A	8.8	A	8.7	A	9.6	A	11.1	B	14.4	B
	SBL	-	-	-	-	-	-	-	-	14.4	B	-	-	71.4	F
Highway 377 @ Blackjack Road	EB	20.6	C	26.1	D	27.9	D	27.6	D	174.7	F	25.0	C	200+	F
	WB	20.8	C	27.5	D	30.7	D	30.4	D	200+	F	19.7	C	200+	F
	NBL	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	SBL	8.5	A	8.8	A	8.8	A	8.8	A	11.1	B	11.4	B	25.5	D
Highway 377 @ Access C	WB	-	-	-	-	26.9	D	-	-	200+	F	-	-	200+	F
	SBL	-	-	-	-	9.3	A	-	-	12.4	B	-	-	29.4	D
Blackjack Road @ Access D	WBL	-	-	-	-	0.0	A	-	-	7.6	A	-	-	7.8	A
	NB	-	-	-	-	0.0	A	-	-	10.3	B	-	-	11.2	B
Blackjack Road @ Access E	WBL	-	-	-	-	0.0	A	-	-	7.8	A	-	-	8.2	A
	NB	-	-	-	-	0.0	A	-	-	11.1	B	-	-	13.3	B
Blackjack Road @ Access F	WBL	-	-	-	-	0.0	A	-	-	8.0	A	-	-	8.6	A
	NB	-	-	-	-	0.0	A	-	-	12.2	B	-	-	16.7	C

C. 2022 Existing Traffic Operations

- The existing study intersections currently operate acceptably at LOS C during each of the peak periods analyzed.

D. 2025 Background Traffic Operations

- 3 years of 3% background growth and site generated traffic from the Keenland site added to network.
- No notable changes in LOS or delay values at any of the study intersections.

E. 2025 Background Plus 2025 Scenario Site-Generated Traffic Operations

- 2025 Scenario (Phase 1A + Phase 1B) site-generated traffic added to 2025 background traffic.
- Left-turn lanes modeled at Access A and Access B.
- Spring Hill Road at Highway 377 is expected to operate at LOS D, with a maximum overall delay of approximately 42 seconds in the AM peak hour.
    - The maximum increase in overall intersection delay is approximately 6 seconds when compared to the background conditions. This indicates that the intersection is able to accommodate the site-generated traffic with minimal increases in delay.
- Based on anticipated queues it is recommended to construct Access C with one inbound lane and two outbound lanes. The recommended lane assignment is one left-turn lane and one right-turn lane.

F. 2026 Background Traffic Operations

- 1 year of 3% background growth and site generated traffic from the Keenland site added to the network.
- No notable changes in LOS or delay values at any of the study intersections when compared to the 2025 background conditions.

G. 2026 Background Plus 2026 Scenario Site-Generated Traffic Operations

- 2026 Scenario (Phase 1A West through Phase 3 West, Phase 1 East) site-generated traffic added to 2026 background traffic.
- Northbound right-turn lane modeled at Access C and Access G.
- The signalized intersection, Spring Hill Road at Highway 377, operates at LOS E in the AM peak hour and LOS F in the PM peak hour.
    - The northbound and southbound approach along Highway 377 have volume-to-capacity (v/c) ratios close to or exceeding 1.0. This indicates that the approaches are operating over capacity and additional capacity along Highway 377 will be necessary. The widening of Highway 377 will be part of TxDOT's future project (CSJ: 0081-06-040).
- The stop-controlled approaches along Highway 377 at Blackjack Road, Access C, and Access G operate at LOS F in both peak hours.

- Although the westbound approach at Access C operates poorly, having separate westbound left and right turn lanes allows for right-turning vehicles to separate from those who are turning left and might have to wait longer for a gap in traffic.
- Due to the high volumes along Highway 377, which is a regional highway, vehicles must wait until an acceptable gap is present before completing a left-turning movement. These delays are common and expected at unsignalized intersections along Highway 377.
- Based on anticipated queues it is recommended to construct Access G with one inbound lane and two outbound lanes. The recommended lane assignment is one through/left lane and one right-turn lane.
- Based on anticipated queues it is recommended to construct Access H with one inbound lane and two outbound lanes. The recommended lane assignment is one left-turn lane and one right-turn lane.
- Highway 377 at Blackjack Road was evaluated for Mitigation Analysis. Refer to Section J for further analysis at this intersection.

H. 2028 Background Traffic Operations

- 2 years of 3% background growth added to network.
- Highway 377 widened to six-lane divided road. With greater capacity along Highway 377, Spring Hill Road at Highway 377 signalized operation improves to LOS B overall and unsignalized intersections mostly maintain or have improved LOS.
- Stop-controlled approaches at Highway 377 and Blackjack Road operate at LOS D or better in both peak hours.

I. 2028 Background Plus Full Buildout Site-Generated Traffic Operations

- Full Buildout (Phase 1A West through Phase 5 West, Phase 1 East through Phase 3 East) site-generated traffic added to 2028 background traffic.
- Eastbound right-turn lanes modeled at Access D, Access E and Access F.
- Spring Hill Road at Highway 377 operates at LOS C in both peak hours.
  - As previously noted, additional capacity is provided along this corridor with the Highway 377 widening.
- Stop-controlled approaches along Highway 377 at Blackjack Road, Access C, and Access G operate with heavy delay due to the addition of site-generated traffic along Highway 377. This is expected as regional traffic in the project vicinity continues to grow and signalization should be considered at Highway 377 and Blackjack Road at a regional level.
- The southbound approach at Spring Hill Road at Access H operates at LOS F in both peak hours due to an increased amount of through traffic on Spring Hill Road.

J. US 377 at Blackjack Road Mitigation

Based on the high delays at this intersection with its current two-way stop control, US 377 at Blackjack Road was evaluated for traffic signalization based on guidelines in the TxMUTCD. At Buildout 2028, this intersection meets Warrants 1A, 1B, and 2. The traffic signal warrant analysis results are summarized in **Table 6** and the analysis worksheets are in the **Appendix**.

Traffic volumes on US 377 were taken directly from the 24-hour counts which were collected on Wednesday, August 24th, 2022. The traffic volumes on Blackjack Road were taken directly from TxDOT STARS TCDS data collected in 2014. The daily volumes on Blackjack Road were grown from 2014 to 2022 by an annual growth rate of 3%. The existing counts were used directly with 3% adjustment for background growth through 2028. The Keenland background site was also included in the peak hours of the daily volumes.

The site traffic at US 377 and Blackjack Road throughout the day was projected using the time-of-day adjustments for Single-Family Detached Housing, Strip Retail Plaza, and Shopping Center (>150k) land uses in the Hourly Distribution of Entering and Exiting Vehicle trips in ITE *Trip Generation Manual*. These percentages of daily traffic were used to find the inbound and outbound traffic in each hour from 6 AM until 10 PM. The percentage of inbound and outbound traffic using US 377 at Blackjack Road was then applied to find the turning movements in each hour.

As seen in **Table 7**, installing a signal can significantly reduce delay for all approaches at this intersection. As a stop-controlled approach, the eastbound and westbound movements operate at LOS F. After the implementation of a signal, these minor street approaches operate at LOS C with a maximum expected delay of approximately 29 seconds in the PM peak hour. The overall intersection is expected to operate favorably at LOS B in both peak hours after signalization.

As the area around the site continues to develop and additional traffic is generated along Blackjack Road, signalization at this intersection will help regional traffic access Highway 377. Based on the City of Aubrey's Future Land Use Plan (Adopted July 28, 2020), regional commercial and employment/industrial sites are expected to develop surrounding the intersection. With the anticipated traffic along Highway 377, it is recommended that a signal be installed with TxDOT's Highway 377 widening project to help reduce minor street delay and allow for improved access to Highway 377. Installation of a signal at this location will require approval and coordination with TxDOT.

Table 6 – Traffic Signal Warrant Results at US 377 and Blackjack Road

		Warrant 1A 8 Hour - Minimum Vehiclular Traffic		Warrant 1B 8 Hour - Interruption of Continuous		Warrant 2 4-Hour	
Intersection	**Scenario**	**Hours Met**	**Warrant Met?**	**Hours Met**	**Warrant Met?**	**Hours Met**	**Warrant Met?**
US 377 at Blackjack Road	Buildout (2028)	11	Yes	15	Yes	15	Yes

Table 7 – Traffic Operations Analysis at Highway 377 and Blackjack Road Mitigation

INTERSECTION	APPROACH	2028 Buildout Traffic		2028 Buildout Traffic Mitigated		2028 Buildout Traffic		2028 Buildout Traffic Mitigated	
		AM PEAK HOUR		AM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR	
		DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS
Signalized Intersection									
Highway 377 @ Blackjack Road	EB	-	-	24.3	C	-	-	28.6	C
	WB	-	-	24.5	C	-	-	26.8	C
	NB	-	-	17.1	B	-	-	18.8	B
	SB	-	-	12.1	B	-	-	10.8	B
	Overall	-	**-**	**16.9**	**B**	-	**-**	**16.8**	**B**
Unsignalized Intersection									
Highway 377 @ Blackjack Road	EB	67.1	F	-	-	200+	F	-	-
	WB	200+	F	-	-	200+	F	-	-
	NBL	11.6	B	-	-	0.0	A	-	-
	SBL	13.1	B	-	-	25.5	D	-	-

K. Right-Turn Lane Analysis

Where justified, the addition of right-turn deceleration lanes can help inbound turning vehicles separate from the through traffic, avoiding conflicts and smoothing traffic flow. TxDOT has identified right-turning volume thresholds where right-turn lanes are justified. **Table 8** shows the driveway locations with right-turn driveway access to the site, and how they compare with the TxDOT threshold. As seen in **Table 8,** right-turn lanes are warranted and recommended at Access C, Access D, Access E, Access F, Access G, and Access H. The northbound right-turn lanes on Highway 377 to Access C and Access G exceed the TxDOT thresholds for right-turn lane warrants in 2026. Since Highway 377 will be widened within two years of the driveways meeting warrants, it is recommended that the existing shoulder along Highway 377 be restriped as a right-turn lane at both Access C and Access G as an interim condition. The full right-turn deceleration lanes should be installed as part of TxDOT's Highway 277 widening project in 2028.

Table 8 – Right-Turn Lane Analysis

Right-Turn Location	2025 Scenario Peak Hour Right-Turn Volume (vph)	2026 Scenario Peak Hour Right-Turn Volume (vph)	2028 Full-Buildout Peak Hour Right-Turn Volume (vph)	TxDOT Threshold (vph) (Access Management Manual, Table 2-3)	Right-Turn Lane Recommended?	Recommended Installation Year
WB Spring Hill Road at Access A	30	30	30	50	No	-
WB Spring Hill Road at Access B	7	7	7	50	No	-
WB Spring Hill Road at Access H	-	93	93	50	Yes	2026
NB Highway 377 at Access C	44	135	177	50	Yes	2028
NB Highway 377 at Access G	-	248	248	50	Yes	2028
EB Blackjack Road at Access D	-	35	78	60	Yes	2028
EB Blackjack Road at Access E	-	63	142	60	Yes	2028
EB Blackjack Road at Access F	-	80	116	60	Yes	2028

L. Left-Turn Lane Analysis

All site driveways were also evaluated for left-turn lanes. The criteria for left-turn lanes under TxDOT guidelines is based on major road and left-turn volume. Volumes for the three scenarios were analyzed to determine if left-turn lane thresholds would be met at each driveway. Left-turn lane analysis worksheets are included in the **Appendix**. Based on the projected volumes at buildout, all of the site driveways will meet left-turn lane thresholds. However, as stated in the TxDOT guidance, the additional expense of installing a left-turn lane on two-lane highways at intersecting cross roads is often not justified due to low volumes. Based on the 2028 Full Buildout volumes, left-turn lanes are not recommended at the three driveways along Blackjack Road (Access D, Access E and Access F) due to the expected low number of left-turn lanes. In addition, since Access D, Access E and Access F will not be built until the last two development phases in 2028 and the future general location of the future Collin County Outer Loop will replace the existing Blackjack Road, left-turn lanes are not recommended. Left-turn lanes are recommended at Access A, Access B, Access C, Access G, and Access H. **Table 9** below shows the volumes during the applicable scenario years when the driveways meet left-turn lane thresholds.

A memo analyzing US 377 improvements at Access C February 2024, approved by the City of Aubrey, states the southbound left-turn lane warranted on US 377 should be constructed with the US 377 widening. Although the left-turn lane on US 377 to Access C is warranted in 2025, it is only modeled in the 2028 scenario with the US 377 widening. **Table 4** and **Table 5** show the southbound left delay at 2026 buildout is LOS A/B in both peak hours. In 2028 buildout, the delay for this movement is showing LOS B in the AM peak hour and LOS D in the peak hour indicating that the driveway operates with low delay. Therefore, it is recommended that the left-turn lane on US 377 and Access C can be constructed at the time of US 377 widening. Access G off Highway 377 is also recommended to be constructed with the Highway 377 widening since there is no significant southbound left delay at 2026 buildout. The left-turn lanes on Spring Hill Road should be constructed at the same time as their respective access points.

Table 9 – Left-Turn Lane Analysis

Site Criteria	Spring Hill Road at Access A		Spring Hill Road at Access B		Highway 377 at Access C	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
	2025 Scenario					
Left-Turn Lane Peak Hour Volume	10	34	28	96	10	35
TxDOT's Threshold for Major Road Peak Hour Volume (veh/hr/ln)	100	50	< 50	< 50	100	50
Major Road Peak Hour Volume (veh/hr/ln)	301	373	322	418	487	609
Left Turn Threshold Met?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Left-Turn Lane Recommended?	**Yes**		**Yes**		**Yes**	
Site Criteria	**Highway 377 at Access G**		**Spring Hill Road at Access H**			
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
	2026 Full Buildout Scenario					
Left-Turn Lane Peak Hour Volume	50	155	40	124		
TxDOT's Threshold for Major Road Peak Hour Volume (veh/hr/ln)	200	200	200	200		
Major Road Peak Hour Volume (veh/hr/ln)	770	1069	411	562		
Left Turn Threshold Met?	*Yes*	*Yes*	*Yes*	*Yes*		
Left-Turn Lane Recommended?	**Yes**		**Yes**			
Site Criteria	**Blackjack Road at Access D**		**Blackjack Road at Access E**		**Blackjack Road at Access F**	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
	2028 Full Buildout Scenario					
Left-Turn Lane Peak Hour Volume	8	26	6	26	14	38
TxDOT's Threshold for Major Road Peak Hour Volume (veh/hr/ln)	140	50	180	50	100	50
Major Road Peak Hour Volume (veh/hr/ln)	168	194	222	267	264	341
Left Turn Threshold Met?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Left-Turn Lane Recommended?	**No**		**No**		**No**	

M. Access Spacing

The TxDOT Access Management Manual Table 2-1 defines driveway and intersection spacing. The spacing distance is determined based on the roadway's posted speed limit. **Table 10** below shows the proposed driveway spacing and TxDOT's access spacing requirement. All proposed driveways meet TxDOT's spacing requirement.

Table 10 – Access Spacing

Main Roadway	Intersecting Roadway	TxDOT AMM Criteria	Spacing Length
Springhill Road	Access A to Access B/Neubauer Ranch Road	425 ft	760 ft
Springhill Road	Access B/Neubauer Ranch Road to Aubrey High Schol Drive	360 ft	1,230 ft
Highway 377	Access C to Springhill Road and to BlackJack Road	425 ft	1,000+ ft
Blackjack Road	Access D to Access E	360 ft	1,170 ft
Blackjack Road	Access E to Access F	360 ft	1,580 ft
Blackjack Road	Access F to Springhill Road	360 ft	1,570 ft

N. Intersection Sight Distance

Sight distance is the metric used to describe the ability of a motorist to physically see (via a direct line of sight) objects and/or other vehicles to a degree sufficient to allow safe and efficient use of a roadway in the intended manner. AASHTO has provided minimum intersection sight distance lengths based on roadway speed limits.

Table 11 – Intersection Sight Distance

Speed (mph) *	Stopping Sight Distance (ft.)	Design Intersection Sight Distance (ft.)
25	155	280
30	200	335
35	250	390
40	305	445
45	360	500
50	425	555
55	495	610
60	570	665
65	645	720
Source : *A Policy on Geometric Design of Highway and Streets*, 5th Edition, American Association of State Highway and Transportation Officials (AASHTO), 2004.		

Since all driveways are located along flat segments of the roadway, no intersection sight distance obstruction is expected. An exhibit showing the sight distance from each driveway is included in the **Appendix** of this report.

IV. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, the proposed High Pointe Ranch development can be successfully incorporated into the surrounding roadway network given the following recommendations are implemented. Two major roadway constructions projects in the project vicinity, the Collin County Outer Loop and TxDOT Highway 377 Expansion project, are planned and will help alleviate some of the regional traffic congestion. However, due to unknown timeline of Collin County Outer Loop, the improvement from the project is not modeled. Highway 377 is planned for widening to a six-lane divided roadway with construction to begin in 2027. The Highway 377 widening is reflected in the 2028 background and buildout scenarios. Stop-controlled approaches along Highway 377 are expected to operate with heavy delay and signalization should be considered at Highway 377 and Blackjack Road at a regional level.

The following improvements to the external roadway network are the responsibility of the developer and recommended for the site:

Year 2025:

- Construct an eastbound left-turn lane from Spring Hill Road to serve Access A.
- Construct an eastbound left-turn lane from Spring Hill Road to serve Access B.
- Construct Access C with one inbound lane and two outbound lanes.

Year 2026:

- Construct an eastbound left-turn lane from Spring Hill Road to serve Access H.
- Construct a westbound right-turn lane from Spring Hill Road to serve Access H.
- Construct Access G with one inbound lane and two outbound lanes.
- Construct Access H with one inbound lane and two outbound lanes.
- Stripe the shoulder to serve as a northbound right-turn lane on Highway 377 at Access C and Access G.

Year 2028:

- Construct an eastbound right-turn lane from Blackjack Road to Access D.
- Construct an eastbound right-turn lane from Blackjack Road to Access E.
- Construct an eastbound right-turn lane from Blackjack Road to Access F.

The following improvements to the external roadway network are recommended for the site by Year 2028. They should be considered at a regional level and are not the responsibility of the developer:

- Install a signal US 377 at Blackjack Road

The following improvements should be built by 2028 and constructed by TxDOT with its Highway 377 widening project:

- Construct a northbound right-turn lane from Highway 377 to serve Access C.
- Construct a southbound left-turn lane from Highway 377 to service Access C.
- Construct a northbound right-turn lane from Highway 377 to serve Access G.
- Construct a southbound left-turn lane from Highway 377 to service Access G.

APPENDIX

Comment Response

Traffic Counts and Historical Data

High Pointe Ranch Phasing Plan

US 377 Improvements Memo

High Pointe Ranch Residential and Retail Trip Distribution

Left-Turn Lane Analysis Worksheets

Traffic Signal Warrant Analysis – US 377 at Blackjack Road

Sight Distance Exhibit

Synchro Results

Kimley»Horn

November 21, 2024

RE: High Pointe TIA Response to Comments

Listed below are the comments received from the previous submittal and the comment responses where necessary. Kimley-Horn responses will be ***red and italicized.***

Sub-Consultant Action Comments August 7, 2023

The subject TIA was reviewed by sub-consultant, Lee Engineering. The action comments, those that require a response or action by the City or applicant, are below:

1. Please note that this is a 'draft' report for review purposes only. Please provide a final, signed, and sealed version.

Response: The final report is signed and sealed.

2. Please include City of Aubrey classifications for all study roadways.

Response: The roadways classifications are updated to reflect the City of Aubrey Master Thoroughfare Plan.

3. The exhibit numbers referenced in the 2nd paragraph on page 10 are incorrect and should reference the exhibit numbers in the Appendix.

Response: The exhibit numbers are consistent throughout the report.

4. Please provide existing traffic signal timing sheets from TxDOT.

Response: See Appendix

5. Exhibit 3 – Graphic for westbound Neubauer Ranch Road/Access B appears to indicate an existing through and right turn movement that does not presently exist at this intersection. This item is not carried throughout the study, does not appear in Synchro analysis for existing conditions, and does not appear to impact the analysis.

Response: The westbound right-turn movement at Spring Hill Road and Neubauer Road/Access B is shown as a site improvement in Exhibit 3.

6. The provided report did not include traffic counts. The report states that they are in the Appendix; however, there were no counts in the Appendix. Please provide counts.

Response: The 2022 traffic counts are attached to the report.

7. The trip generation calculations for the land use and quantities specified, identified in Table 1, appear to be correct for Total and PM Peak movements. The AM Peak movement calculations do not appear to include the recent ITE Trip Generation Manual errata (12/9/22). While not overly large, these changes may impact delay calculations later in the analysis.

Response: The trip generation for daily trips, AM peak hour, and PM peak hour are from ITE Trip Generation Manual, 11th Edition.

8. The report states that the proposed drives meet or exceed TxDOT spacing requirements and AASHTO minimum intersection sight distance requirements for currently posted speed limits. Field verification needed.

Response: See the Appendix for a figure showing each AASHTO intersection sight distance guidelines at each site driveway.

9. Peak Hour Factors used in Synchro analysis changed without a provided reason. The shift to a higher PHF in the buildout year could create inaccurate predictions. At existing intersections, the Peak Hour Factor (PHF) used in Synchro analysis should remain the same for all scenarios. It should be the PHF measured in the field.

Response: The peak hour factors are consistent throughout the study years.

10. Synchro analysis results improve in 2028 from 2026 despite added traffic and no added capacity. This seems counterintuitive, please review and update.

Response: The updated study models US 377 with greater capacity in 2028, so this comment is not applicable.

11. The 2026 Left-Turn Lane Analysis graph in the Appendix appears to indicate that a left-turn lane is recommended for Access D in the PM Peak. This does not match the chart. The same chart states that a left-turn lane is warranted for Access E, but the graph appears to indicate otherwise. Please verify both PM Peak left turn analysis for the 2026 site conditions for Access D and Access E in the Appendix.

Response: The left-turn lane analysis graph in the Appendix and table in the report have consistent values and conclusions.

12. Counts shown in Exhibits 5 through 10 do not match the counts input into Synchro files. This is likely simple rounding. These differences should not impact the results of the study.

Response: In the updated study, the volumes in the background and buildout exhibits match with the Synchro model. Small discrepancies could be present due to rounding.

13. The Synchro output provided in the Appendix does not include data needed to verify Tables 4 and 5 at some of the stop-controlled intersections. It appears that the author printed the wrong report in Synchro beginning with the Appendix section titled 2024 Background Plus 2024 Scenario Site Traffic stop-controlled Synchro and continuing to the end of the document. Please provide the HCM 6th Edition report from Synchro as was provided earlier in the Appendix.

Response: The HCM 6th Edition Synchro reports are attached to this study.

14. The report recommends no mitigation. Discussed roadway improvements by TxDOT may not be in place before development completes. Please identify potential improvements to operation at study intersections.

Response: Mitigations are provided in the Traffic Operations Analysis, Section J of this report.

15. The uncertainty of construction for Outer Loop creates concern for the left turn analysis on Blackjack Road. Development should consider the need for the left turn lanes in the event that construction is delayed past the development buildout.

Response: The geometry on Blackjack Road is consistent throughout the report as Collin County Outer Loop is not included in this study. The left-turn analysis section indicated that left-turn lanes are not recommended along Blackjack Road.

16. The timeline of constructing driveway separate from right and left turn lane construction should be reconsidered. It makes more sense to construct all turn lanes at the same time as the drive itself.

Response: Access A and Access B are already constructed. The recommended eastbound left-turn lanes on Spring Hill Road should be constructed on conjunction with Phase 1A and Phase 1B. Access C will be built with Phase 1B (2025), but it is not recommended for construction until 2028 to coincide with the US 377 widening. Similarly, Access G will be built with the SW Retail development (2026), but it is not recommended for construction until 2028 to coincide with the US 377 widening. The right-turn lane on Blackjack Road to Access D does not warrant until 2028 buildout per TxDOT guidelines. Although the right-turn lanes on Blackjack Road at Access E, F warrant in 2026, these access points operate well even with installation in 2028.

17. The comment, "…drivers will be able to alter their route to any of the drives along Spring Hill Road if the determine the delay is too great…" creates concern given the distance and route from Spring Hill Road and Blackjack Road. Please clarify or reconsider this position statement.

Response: Mitigations are provided in Traffic Operations Analysis, Section E in lieu of this statement.

18. Please verify the correct spelling for Outer Loop in the document. The report spells it “Outerloop” throughout, while the City of Aubrey Throughfare Plan spells it “Outer Loop”.

Response: Updated.

END

Kimley»Horn

TRAFFIC COUNTS AND HISTORICAL DATA

High Pointe Ranch - Aubrey, Texas
Historical Link Volumes and Growth Rates

Spring Hill Road						
Record	**Year**	**Link Start**	**Link End**	**Source**	**24-Hour Volume**	**Annual Growth Rate**
1	2011	Highway 377	McNatt Road	TxDOT	3,571	-
2	2013	Highway 377	McNatt Road	TxDOT	4,110	7.3%
3	2014	Highway 377	McNatt Road	TxDOT	4,230	2.9%
4	2015	Highway 377	McNatt Road	TxDOT	4,960	17.3%
5	2016	Highway 377	McNatt Road	TxDOT	4,077	-17.8%
6	2017	Highway 377	McNatt Road	TxDOT	5,270	29.3%
7	2018	Highway 377	McNatt Road	TxDOT	4,803	-8.9%
8	2021	Highway 377	McNatt Road	TxDOT	5,065	1.8%
9	2022	Highway 377	McNatt Road	KH	4,277	-15.6%
				Average Growth 2011 - 2022:		**2.0%**

Highway 377						
Record	**Year**	**Link Start**	**Link End**	**Source**	**24-Hour Volume**	**Annual Growth Rate**
1	2014	Spring Hill Road	Blackjack Road	TxDOT	8,983	-
2	2019	Spring Hill Road	Blackjack Road	TxDOT	10,516	3.2%
3	2022	Spring Hill Road	Blackjack Road	KH	12,426	5.7%
				Average Growth 2014 - 2022:		**4.0%**

Average Annual Growth: **3.0%**

1. Spring Road at Highway 377 - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978839, Location: 33.298682, -96.982754

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

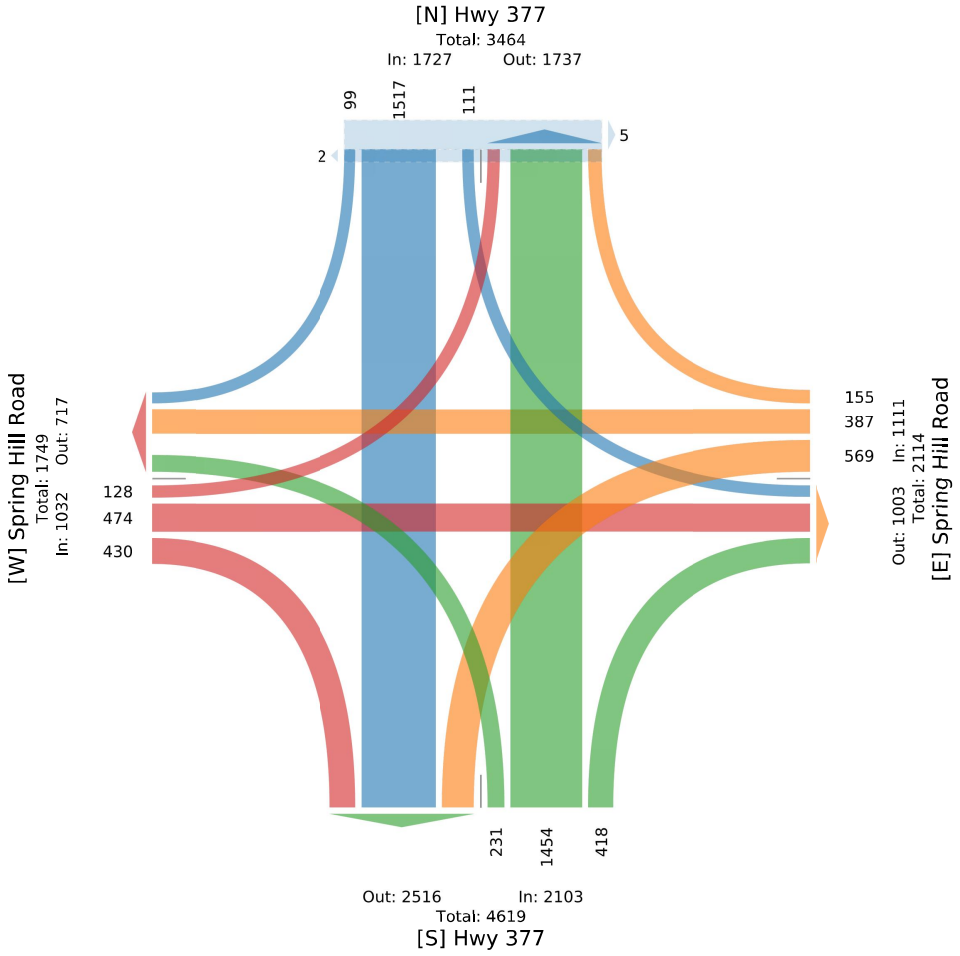
Leg / Direction	Spring Hill Road Eastbound						Spring Hill Road Westbound						Hwy 377 Northbound						Hwy 377 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-24 6:30AM	5	27	42	0	**74**	0	17	14	4	0	**35**	0	8	39	23	0	**70**	0	6	94	2	0	**102**	0	**281**
6:45AM	3	30	19	0	**52**	0	17	9	5	0	**31**	0	7	56	18	0	**81**	0	13	88	6	0	**107**	0	**271**
Hourly Total	8	57	61	0	**126**	0	34	23	9	0	**66**	0	15	95	41	0	**151**	0	19	182	8	0	**209**	0	**552**
7:00AM	9	41	27	0	**77**	0	20	20	9	0	**49**	0	9	72	17	0	**98**	0	9	73	4	0	**86**	0	**310**
7:15AM	6	48	33	0	**87**	0	41	31	7	0	**79**	0	40	84	42	0	**166**	0	7	81	17	0	**105**	0	**437**
7:30AM	15	57	30	0	**102**	0	49	44	12	0	**105**	0	32	99	49	0	**180**	0	8	109	5	0	**122**	3	**509**
7:45AM	11	55	41	0	**107**	0	60	56	21	0	**137**	0	24	69	41	0	**134**	0	21	107	3	0	**131**	2	**509**
Hourly Total	41	201	131	0	**373**	0	170	151	49	0	**370**	0	105	324	149	0	**578**	0	45	370	29	0	**444**	5	**1765**
8:00AM	6	24	24	0	**54**	0	27	23	7	0	**57**	0	14	76	12	0	**102**	0	3	121	3	0	**127**	0	**340**
8:15AM	5	11	21	0	**37**	0	18	6	12	0	**36**	0	9	58	14	0	**81**	0	10	88	3	0	**101**	0	**255**
Hourly Total	11	35	45	0	**91**	0	45	29	19	0	**93**	0	23	134	26	0	**183**	0	13	209	6	0	**228**	0	**595**
4:30PM	4	10	15	0	**29**	0	41	18	10	0	**69**	0	11	104	28	0	**143**	0	3	79	4	0	**86**	1	**327**
4:45PM	14	37	22	0	**73**	0	41	24	10	0	**75**	0	16	106	24	0	**146**	0	5	88	5	0	**98**	0	**392**
Hourly Total	18	47	37	0	**102**	0	82	42	20	0	**144**	0	27	210	52	0	**289**	0	8	167	9	0	**184**	1	**719**
5:00PM	11	35	40	0	**86**	0	51	34	16	0	**101**	0	8	118	46	0	**172**	0	8	97	12	0	**117**	0	**476**
5:15PM	5	25	36	0	**66**	0	52	25	13	0	**90**	0	14	100	34	0	**148**	0	4	117	3	0	**124**	0	**428**
5:30PM	14	29	20	0	**63**	0	45	29	12	0	**86**	0	14	128	21	0	**163**	0	4	104	12	0	**120**	0	**432**
5:45PM	5	16	19	0	**40**	0	38	21	7	0	**66**	0	5	129	18	0	**152**	0	4	80	7	0	**91**	0	**349**
Hourly Total	35	105	115	0	**255**	0	186	109	48	0	**343**	0	41	475	119	0	**635**	0	20	398	34	0	**452**	0	**1685**
6:00PM	6	15	22	0	**43**	0	25	22	5	0	**52**	0	6	104	17	0	**127**	0	3	97	7	0	**107**	0	**329**
6:15PM	9	14	19	0	**42**	0	27	11	5	0	**43**	0	14	112	14	0	**140**	0	3	94	6	0	**103**	1	**328**
Hourly Total	15	29	41	0	**85**	0	52	33	10	0	**95**	0	20	216	31	0	**267**	0	6	191	13	0	**210**	1	**657**
Total	128	474	430	0	**1032**	0	569	387	155	0	**1111**	0	231	1454	418	0	**2103**	0	111	1517	99	0	**1727**	7	**5973**
% Approach	12.4%	45.9%	41.7%	0%	-	-	51.2%	34.8%	14.0%	0%	-	-	11.0%	69.1%	19.9%	0%	-	-	6.4%	87.8%	5.7%	0%	-	-	-
% Total	2.1%	7.9%	7.2%	0%	**17.3%**	-	9.5%	6.5%	2.6%	0%	**18.6%**	-	3.9%	24.3%	7.0%	0%	**35.2%**	-	1.9%	25.4%	1.7%	0%	**28.9%**	-	-
Lights	124	445	422	0	**991**	-	560	360	141	0	**1061**	-	223	1402	397	0	**2022**	-	108	1455	91	0	**1654**	-	5728
% Lights	96.9%	93.9%	98.1%	0%	**96.0%**	-	98.4%	93.0%	91.0%	0%	**95.5%**	-	96.5%	96.4%	95.0%	0%	**96.1%**	-	97.3%	95.9%	91.9%	0%	**95.8%**	-	95.9%
Articulated Trucks	0	15	1	0	**16**	-	4	10	1	0	**15**	-	0	9	8	0	**17**	-	2	15	0	0	**17**	-	65
% Articulated Trucks	0%	3.2%	0.2%	0%	**1.6%**	-	0.7%	2.6%	0.6%	0%	**1.4%**	-	0%	0.6%	1.9%	0%	**0.8%**	-	1.8%	1.0%	0%	0%	**1.0%**	-	1.1%
Buses and Single-Unit Trucks	4	14	7	0	**25**	-	5	17	13	0	**35**	-	8	43	13	0	**64**	-	1	47	8	0	**56**	-	180
% Buses and Single-Unit Trucks	3.1%	3.0%	1.6%	0%	**2.4%**	-	0.9%	4.4%	8.4%	0%	**3.2%**	-	3.5%	3.0%	3.1%	0%	**3.0%**	-	0.9%	3.1%	8.1%	0%	**3.2%**	-	3.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. Spring Road at Highway 377 - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978839, Location: 33.298682, -96.982754

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



1. Spring Road at Highway 377 - TMC

Wed Aug 24, 2022
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978839, Location: 33.298682, -96.982754

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

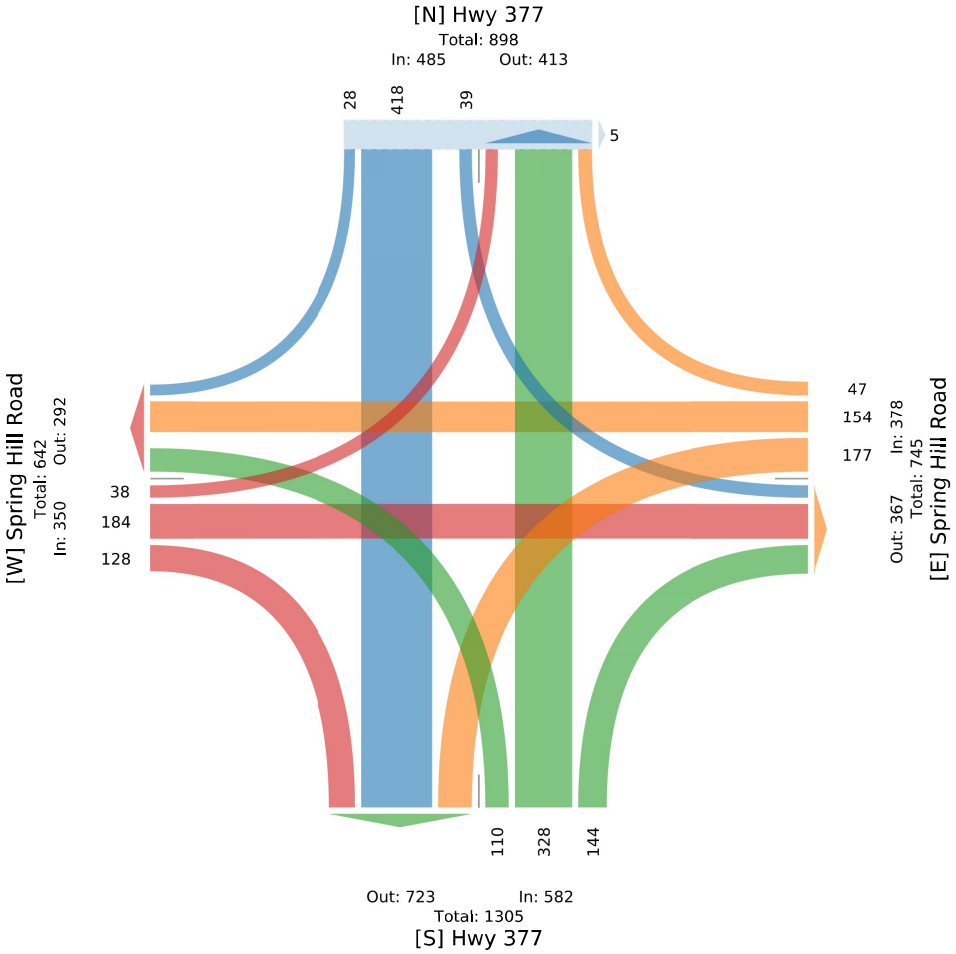
Leg / Direction	Spring Hill Road Eastbound						Spring Hill Road Westbound						Hwy 377 Northbound						Hwy 377 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-24 7:15AM	6	48	33	0	**87**	0	41	31	7	0	**79**	0	40	84	42	0	**166**	0	7	81	17	0	**105**	0	**437**
7:30AM	15	57	30	0	**102**	0	49	44	12	0	**105**	0	32	99	49	0	**180**	0	8	109	5	0	**122**	3	**509**
7:45AM	11	55	41	0	**107**	0	60	56	21	0	**137**	0	24	69	41	0	**134**	0	21	107	3	0	**131**	2	**509**
8:00AM	6	24	24	0	**54**	0	27	23	7	0	**57**	0	14	76	12	0	**102**	0	3	121	3	0	**127**	0	**340**
Total	38	184	128	0	**350**	0	177	154	47	0	**378**	0	110	328	144	0	**582**	0	39	418	28	0	**485**	5	**1795**
% Approach	10.9%	52.6%	36.6%	0%	-	-	46.8%	40.7%	12.4%	0%	-	-	18.9%	56.4%	24.7%	0%	-	-	8.0%	86.2%	5.8%	0%	-	-	-
% Total	2.1%	10.3%	7.1%	0%	**19.5%**	-	9.9%	8.6%	2.6%	0%	**21.1%**	-	6.1%	18.3%	8.0%	0%	**32.4%**	-	2.2%	23.3%	1.6%	0%	**27.0%**	-	-
PHF	0.633	0.807	0.780	-	**0.818**	-	0.738	0.688	0.560	-	**0.690**	-	0.688	0.828	0.735	-	**0.808**	-	0.464	0.864	0.412	-	**0.926**	-	0.882
Lights	37	164	125	0	**326**	-	176	134	41	0	**351**	-	107	310	130	0	**547**	-	37	395	26	0	**458**	-	1682
% Lights	97.4%	89.1%	97.7%	0%	**93.1%**	-	99.4%	87.0%	87.2%	0%	**92.9%**	-	97.3%	94.5%	90.3%	0%	**94.0%**	-	94.9%	94.5%	92.9%	0%	**94.4%**	-	93.7%
Articulated Trucks	0	9	0	0	**9**	-	1	5	1	0	**7**	-	0	3	5	0	**8**	-	1	5	0	0	**6**	-	30
% Articulated Trucks	0%	4.9%	0%	0%	**2.6%**	-	0.6%	3.2%	2.1%	0%	**1.9%**	-	0%	0.9%	3.5%	0%	**1.4%**	-	2.6%	1.2%	0%	0%	**1.2%**	-	1.7%
Buses and Single-Unit Trucks	1	11	3	0	**15**	-	0	15	5	0	**20**	-	3	15	9	0	**27**	-	1	18	2	0	**21**	-	83
% Buses and Single-Unit Trucks	2.6%	6.0%	2.3%	0%	**4.3%**	-	0%	9.7%	10.6%	0%	**5.3%**	-	2.7%	4.6%	6.3%	0%	**4.6%**	-	2.6%	4.3%	7.1%	0%	**4.3%**	-	4.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. Spring Road at Highway 377 - TMC

Wed Aug 24, 2022
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978839, Location: 33.298682, -96.982754

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



1. Spring Road at Highway 377 - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978839, Location: 33.298682, -96.982754

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

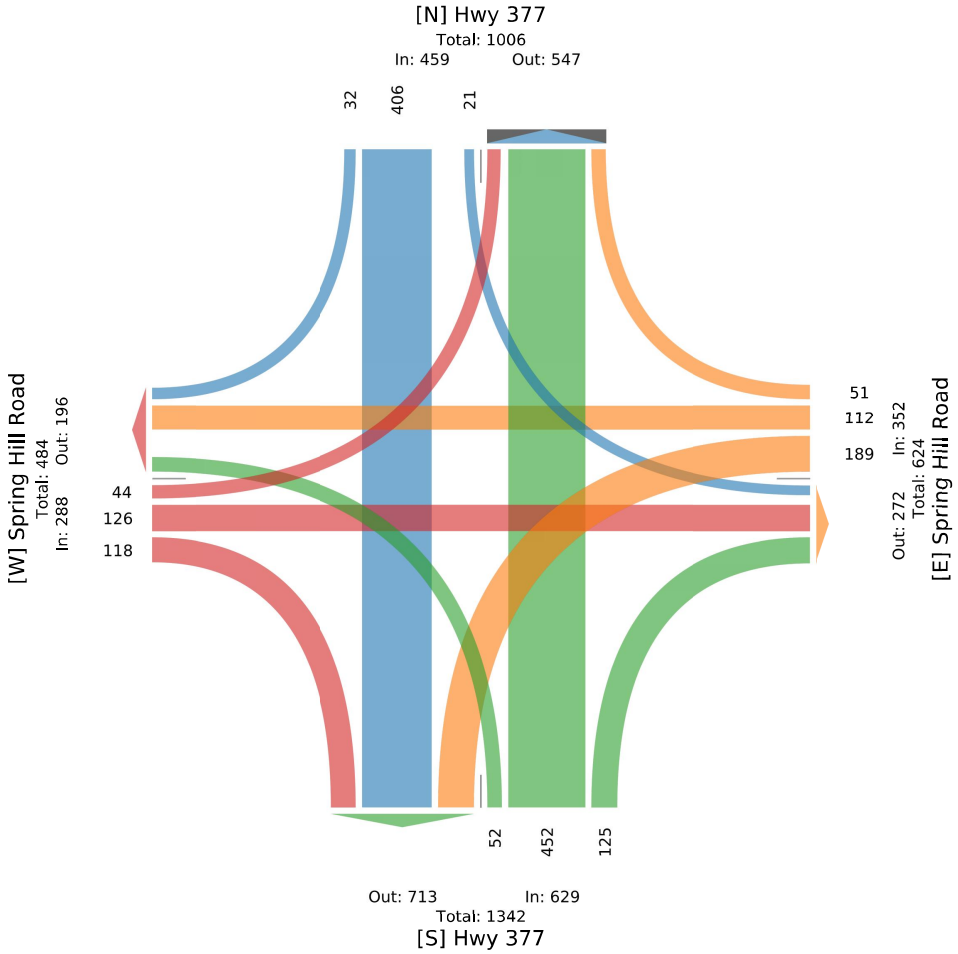
Leg	Spring Hill Road Eastbound						Spring Hill Road Westbound						Hwy 377 Northbound						Hwy 377 Southbound						
Direction																									
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-24 4:45PM	14	37	22	0	73	0	41	24	10	0	75	0	16	106	24	0	146	0	5	88	5	0	98	0	392
5:00PM	11	35	40	0	86	0	51	34	16	0	101	0	8	118	46	0	172	0	8	97	12	0	117	0	476
5:15PM	5	25	36	0	66	0	52	25	13	0	90	0	14	100	34	0	148	0	4	117	3	0	124	0	428
5:30PM	14	29	20	0	63	0	45	29	12	0	86	0	14	128	21	0	163	0	4	104	12	0	120	0	432
Total	44	126	118	0	288	0	189	112	51	0	352	0	52	452	125	0	629	0	21	406	32	0	459	0	1728
% Approach	15.3%	43.8%	41.0%	0%	-	-	53.7%	31.8%	14.5%	0%	-	-	8.3%	71.9%	19.9%	0%	-	-	4.6%	88.5%	7.0%	0%	-	-	-
% Total	2.5%	7.3%	6.8%	0%	16.7%	-	10.9%	6.5%	3.0%	0%	20.4%	-	3.0%	26.2%	7.2%	0%	36.4%	-	1.2%	23.5%	1.9%	0%	26.6%	-	-
PHF	0.786	0.851	0.738		0.837	-	0.909	0.824	0.797		0.871	-	0.813	0.883	0.679		0.914	-	0.656	0.868	0.667		0.925	-	0.908
Lights	44	122	117	0	283	-	185	112	44	0	341	-	50	435	123	0	608	-	21	398	29	0	448	-	1680
% Lights	100%	96.8%	99.2%	0%	98.3%	-	97.9%	100%	86.3%	0%	96.9%	-	96.2%	96.2%	98.4%	0%	96.7%	-	100%	98.0%	90.6%	0%	97.6%	-	97.2%
Articulated Trucks	0	4	1	0	5	-	2	0	0	0	2	-	0	2	1	0	3	-	0	2	0	0	2	-	12
% Articulated Trucks	0%	3.2%	0.8%	0%	1.7%	-	1.1%	0%	0%	0%	0.6%	-	0%	0.4%	0.8%	0%	0.5%	-	0%	0.5%	0%	0%	0.4%	-	0.7%
Buses and Single-Unit Trucks	0	0	0	0	0	-	2	0	7	0	9	-	2	15	1	0	18	-	0	6	3	0	9	-	36
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-	1.1%	0%	13.7%	0%	2.6%	-	3.8%	3.3%	0.8%	0%	2.9%	-	0%	1.5%	9.4%	0%	2.0%	-	2.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. Spring Road at Highway 377 - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978839, Location: 33.298682, -96.982754

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



2. Spring Hill Road at Neubauer Ranch Road - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978840, Location: 33.298623, -96.975062

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

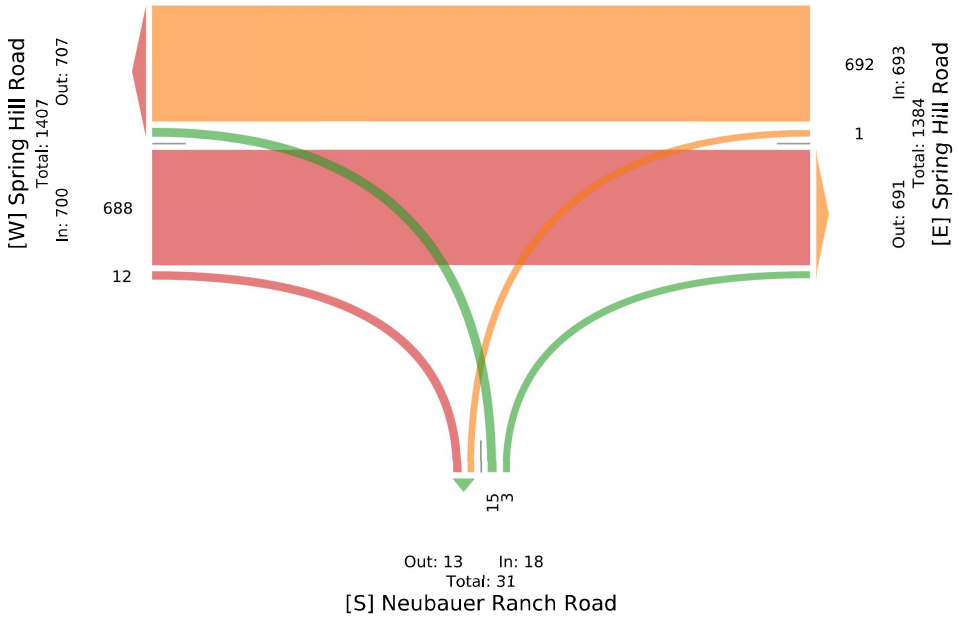
Leg	Spring Hill Road					Spring Hill Road					Neubauer Ranch Road					
Direction	Eastbound					Westbound					Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2022-08-24 6:30AM	39	0	0	**39**	0	0	22	0	**22**	0	1	0	0	**1**	0	**62**
6:45AM	38	0	0	**38**	0	0	17	0	**17**	0	0	0	0	**0**	0	**55**
Hourly Total	77	0	0	**77**	0	0	39	0	**39**	0	1	0	0	**1**	0	**117**
7:00AM	38	0	0	**38**	0	0	33	0	**33**	0	1	0	0	**1**	0	**72**
7:15AM	47	0	0	**47**	0	0	52	0	**52**	0	0	0	0	**0**	0	**99**
7:30AM	34	0	0	**34**	0	0	66	0	**66**	0	3	1	0	**4**	0	**104**
7:45AM	55	2	0	**57**	0	0	73	0	**73**	0	1	0	0	**1**	0	**131**
Hourly Total	174	2	0	**176**	0	0	224	0	**224**	0	5	1	0	**6**	0	**406**
8:00AM	36	0	0	**36**	0	0	30	0	**30**	0	0	0	0	**0**	0	**66**
8:15AM	29	0	0	**29**	0	0	25	0	**25**	0	1	0	0	**1**	0	**55**
Hourly Total	65	0	0	**65**	0	0	55	0	**55**	0	1	0	0	**1**	0	**121**
4:30PM	37	1	0	**38**	0	0	42	0	**42**	0	1	1	0	**2**	0	**82**
4:45PM	53	5	0	**58**	0	0	40	0	**40**	0	2	1	0	**3**	0	**101**
Hourly Total	90	6	0	**96**	0	0	82	0	**82**	0	3	2	0	**5**	0	**183**
5:00PM	73	0	0	**73**	0	0	66	0	**66**	0	0	0	0	**0**	0	**139**
5:15PM	60	0	0	**60**	0	0	58	0	**58**	0	0	0	0	**0**	0	**118**
5:30PM	47	2	0	**49**	0	1	49	0	**50**	0	0	0	0	**0**	0	**99**
5:45PM	36	0	0	**36**	0	0	47	0	**47**	0	3	0	0	**3**	0	**86**
Hourly Total	216	2	0	**218**	0	1	220	0	**221**	0	3	0	0	**3**	0	**442**
6:00PM	38	1	0	**39**	0	0	46	0	**46**	0	1	0	0	**1**	0	**86**
6:15PM	28	1	0	**29**	0	0	26	0	**26**	0	1	0	0	**1**	0	**56**
Hourly Total	66	2	0	**68**	0	0	72	0	**72**	0	2	0	0	**2**	0	**142**
Total	688	12	0	**700**	0	1	692	0	**693**	0	15	3	0	**18**	0	**1411**
% Approach	98.3%	1.7%	0%	-	-	0.1%	99.9%	0%	-	-	83.3%	16.7%	0%	-	-	-
% Total	48.8%	0.9%	0%	**49.6%**	-	0.1%	49.0%	0%	**49.1%**	-	1.1%	0.2%	0%	**1.3%**	-	-
Lights	648	12	0	**660**	-	1	655	0	**656**	-	15	3	0	**18**	-	1334
% Lights	94.2%	100%	0%	**94.3%**	-	100%	94.7%	0%	**94.7%**	-	100%	100%	0%	**100%**	-	94.5%
Articulated Trucks	26	0	0	**26**	-	0	15	0	**15**	-	0	0	0	**0**	-	41
% Articulated Trucks	3.8%	0%	0%	**3.7%**	-	0%	2.2%	0%	**2.2%**	-	0%	0%	0%	**0%**	-	2.9%
Buses and Single-Unit Trucks	14	0	0	**14**	-	0	22	0	**22**	-	0	0	0	**0**	-	36
% Buses and Single-Unit Trucks	2.0%	0%	0%	**2.0%**	-	0%	3.2%	0%	**3.2%**	-	0%	0%	0%	**0%**	-	2.6%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Spring Hill Road at Neubauer Ranch Road - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978840, Location: 33.298623, -96.975062

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



2. Spring Hill Road at Neubauer Ranch Road - TMC

Wed Aug 24, 2022
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978840, Location: 33.298623, -96.975062

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

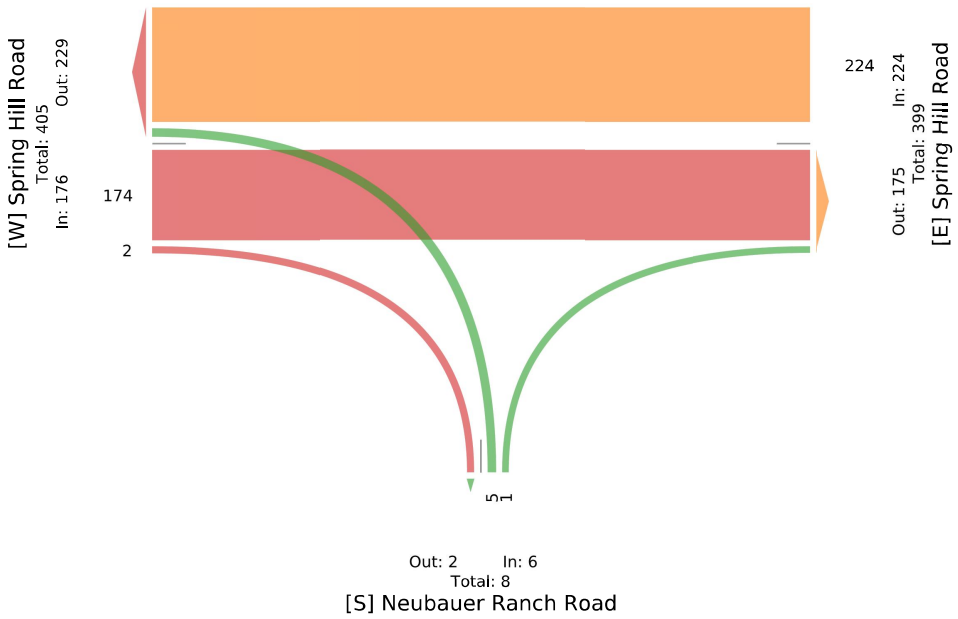
Leg / Direction	Spring Hill Road Eastbound					Spring Hill Road Westbound					Neubauer Ranch Road Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2022-08-24 7:00AM	38	0	0	**38**	0	0	33	0	**33**	0	1	0	0	**1**	0	**72**
7:15AM	47	0	0	**47**	0	0	52	0	**52**	0	0	0	0	**0**	0	**99**
7:30AM	34	0	0	**34**	0	0	66	0	**66**	0	3	1	0	**4**	0	**104**
7:45AM	55	2	0	**57**	0	0	73	0	**73**	0	1	0	0	**1**	0	**131**
Total	174	2	0	**176**	0	0	224	0	**224**	0	5	1	0	**6**	0	**406**
% Approach	98.9%	1.1%	0%	**-**	-	0%	100%	0%	**-**	-	83.3%	16.7%	0%	**-**	-	-
% Total	42.9%	0.5%	0%	**43.3%**	-	0%	55.2%	0%	**55.2%**	-	1.2%	0.2%	0%	**1.5%**	-	-
PHF	0.791	0.250	-	**0.772**	-	-	0.767	-	**0.767**	-	0.417	0.250	-	**0.375**	-	0.775
Lights	157	2	0	**159**	-	0	208	0	**208**	-	5	1	0	**6**	-	373
% Lights	90.2%	100%	0%	**90.3%**	-	0%	92.9%	0%	**92.9%**	-	100%	100%	0%	**100%**	-	91.9%
Articulated Trucks	11	0	0	**11**	-	0	7	0	**7**	-	0	0	0	**0**	-	18
% Articulated Trucks	6.3%	0%	0%	**6.3%**	-	0%	3.1%	0%	**3.1%**	-	0%	0%	0%	**0%**	-	4.4%
Buses and Single-Unit Trucks	6	0	0	**6**	-	0	9	0	**9**	-	0	0	0	**0**	-	15
% Buses and Single-Unit Trucks	3.4%	0%	0%	**3.4%**	-	0%	4.0%	0%	**4.0%**	-	0%	0%	0%	**0%**	-	3.7%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Spring Hill Road at Neubauer Ranch Road - TMC

Wed Aug 24, 2022
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978840, Location: 33.298623, -96.975062

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



2. Spring Hill Road at Neubauer Ranch Road - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978840, Location: 33.298623, -96.975062

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

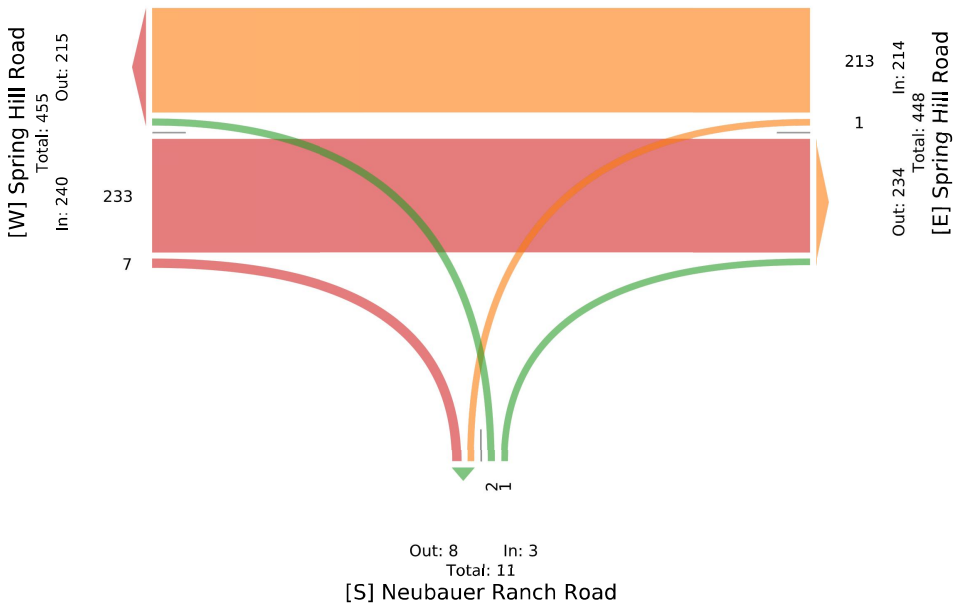
Leg / Direction	Spring Hill Road Eastbound					Spring Hill Road Westbound					Neubauer Ranch Road Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2022-08-24 4:45PM	53	5	0	**58**	0	0	40	0	**40**	0	2	1	0	**3**	0	**101**
5:00PM	73	0	0	**73**	0	0	66	0	**66**	0	0	0	0	**0**	0	**139**
5:15PM	60	0	0	**60**	0	0	58	0	**58**	0	0	0	0	**0**	0	**118**
5:30PM	47	2	0	**49**	0	1	49	0	**50**	0	0	0	0	**0**	0	**99**
Total	233	7	0	**240**	0	1	213	0	**214**	0	2	1	0	**3**	0	**457**
% Approach	97.1%	2.9%	0%	**-**	-	0.5%	99.5%	0%	**-**	-	66.7%	33.3%	0%	**-**	-	-
% Total	51.0%	1.5%	0%	**52.5%**	-	0.2%	46.6%	0%	**46.8%**	-	0.4%	0.2%	0%	**0.7%**	-	-
PHF	0.798	0.350	-	**0.822**	-	0.250	0.807	-	**0.811**	-	0.250	0.250	-	**0.250**	-	0.822
Lights	227	7	0	**234**	-	1	202	0	**203**	-	2	1	0	**3**	-	440
% Lights	97.4%	100%	0%	**97.5%**	-	100%	94.8%	0%	**94.9%**	-	100%	100%	0%	**100%**	-	96.3%
Articulated Trucks	5	0	0	**5**	-	0	1	0	**1**	-	0	0	0	**0**	-	6
% Articulated Trucks	2.1%	0%	0%	**2.1%**	-	0%	0.5%	0%	**0.5%**	-	0%	0%	0%	**0%**	-	1.3%
Buses and Single-Unit Trucks	1	0	0	**1**	-	0	10	0	**10**	-	0	0	0	**0**	-	11
% Buses and Single-Unit Trucks	0.4%	0%	0%	**0.4%**	-	0%	4.7%	0%	**4.7%**	-	0%	0%	0%	**0%**	-	2.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Spring Hill Road at Neubauer Ranch Road - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978840, Location: 33.298623, -96.975062

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



3. Hwy 377 at De Moye Lane - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978841, Location: 33.303608, -96.979867

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

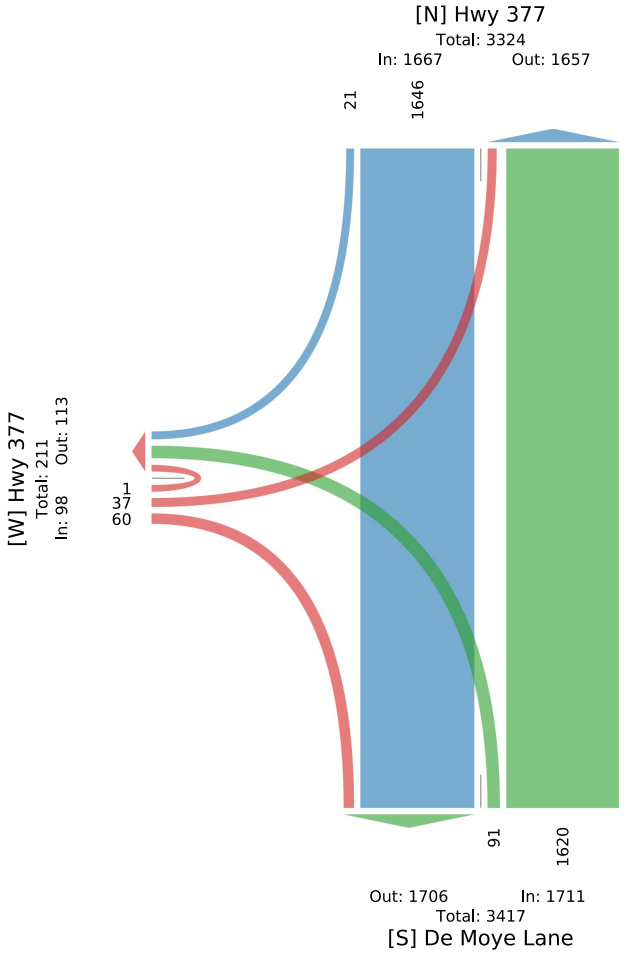
Leg	Hwy 377					De Moye Lane					Hwy 377					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2022-08-24 6:30AM	1	6	0	**7**	0	3	43	0	**46**	0	92	2	0	**94**	0	**147**
6:45AM	0	5	0	**5**	0	5	55	0	**60**	0	104	2	0	**106**	0	**171**
Hourly Total	1	11	0	**12**	0	8	98	0	**106**	0	196	4	0	**200**	0	**318**
7:00AM	2	6	0	**8**	0	3	83	0	**86**	0	86	0	0	**86**	0	**180**
7:15AM	1	5	0	**6**	0	16	88	0	**104**	0	98	1	0	**99**	0	**209**
7:30AM	2	7	1	**10**	0	20	92	0	**112**	0	112	3	0	**115**	0	**237**
7:45AM	4	8	0	**12**	0	11	104	0	**115**	0	129	0	0	**129**	0	**256**
Hourly Total	9	26	1	**36**	0	50	367	0	**417**	0	425	4	0	**429**	0	**882**
8:00AM	2	1	0	**3**	0	2	70	0	**72**	0	116	0	0	**116**	0	**191**
8:15AM	3	3	0	**6**	0	4	80	0	**84**	0	99	0	0	**99**	0	**189**
Hourly Total	5	4	0	**9**	0	6	150	0	**156**	0	215	0	0	**215**	0	**380**
4:30PM	4	1	0	**5**	0	2	116	0	**118**	0	82	1	0	**83**	0	**206**
4:45PM	3	2	0	**5**	0	4	128	0	**132**	0	98	2	0	**100**	0	**237**
Hourly Total	7	3	0	**10**	0	6	244	0	**250**	0	180	3	0	**183**	0	**443**
5:00PM	3	2	0	**5**	0	3	127	0	**130**	0	113	3	0	**116**	0	**251**
5:15PM	2	4	0	**6**	0	3	116	0	**119**	0	123	1	0	**124**	0	**249**
5:30PM	6	3	0	**9**	0	1	150	0	**151**	0	106	3	0	**109**	0	**269**
5:45PM	2	3	0	**5**	0	6	133	0	**139**	0	88	1	0	**89**	0	**233**
Hourly Total	13	12	0	**25**	0	13	526	0	**539**	0	430	8	0	**438**	0	**1002**
6:00PM	2	2	0	**4**	0	3	117	0	**120**	0	101	2	0	**103**	0	**227**
6:15PM	0	2	0	**2**	0	5	118	0	**123**	0	99	0	0	**99**	0	**224**
Hourly Total	2	4	0	**6**	0	8	235	0	**243**	0	200	2	0	**202**	0	**451**
Total	37	60	1	**98**	0	91	1620	0	**1711**	0	1646	21	0	**1667**	0	**3476**
% Approach	37.8%	61.2%	1.0%	**-**	-	5.3%	94.7%	0%	**-**	-	98.7%	1.3%	0%	**-**	-	-
% Total	1.1%	1.7%	0%	**2.8%**	-	2.6%	46.6%	0%	**49.2%**	-	47.4%	0.6%	0%	**48.0%**	-	-
Lights	35	59	1	**95**	-	88	1549	0	**1637**	-	1577	19	0	**1596**	-	3328
% Lights	94.6%	98.3%	100%	**96.9%**	-	96.7%	95.6%	0%	**95.7%**	-	95.8%	90.5%	0%	**95.7%**	-	95.7%
Articulated Trucks	0	0	0	**0**	-	0	9	0	**9**	-	17	0	0	**17**	-	26
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.6%	0%	**0.5%**	-	1.0%	0%	0%	**1.0%**	-	0.7%
Buses and Single-Unit Trucks	2	1	0	**3**	-	3	62	0	**65**	-	52	2	0	**54**	-	122
% Buses and Single-Unit Trucks	5.4%	1.7%	0%	**3.1%**	-	3.3%	3.8%	0%	**3.8%**	-	3.2%	9.5%	0%	**3.2%**	-	3.5%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. Hwy 377 at De Moye Lane - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978841, Location: 33.303608, -96.979867

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



3. Hwy 377 at De Moye Lane - TMC

Wed Aug 24, 2022
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978841, Location: 33.303608, -96.979867

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

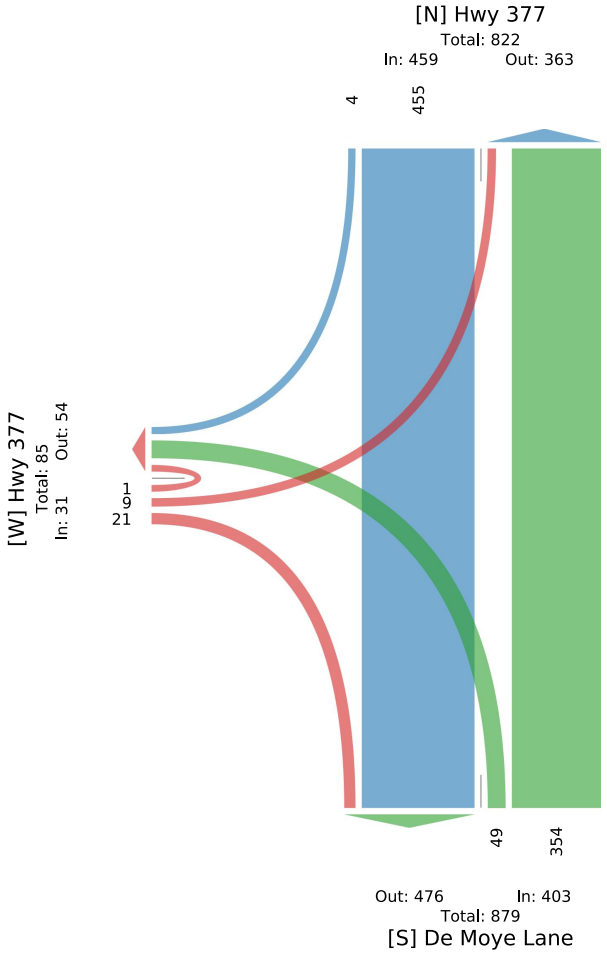
Leg	Hwy 377 Eastbound					De Moye Lane Northbound					Hwy 377 Southbound					
Direction																
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2022-08-24 7:15AM	1	5	0	**6**	0	16	88	0	**104**	0	98	1	0	**99**	0	**209**
7:30AM	2	7	1	**10**	0	20	92	0	**112**	0	112	3	0	**115**	0	**237**
7:45AM	4	8	0	**12**	0	11	104	0	**115**	0	129	0	0	**129**	0	**256**
8:00AM	2	1	0	**3**	0	2	70	0	**72**	0	116	0	0	**116**	0	**191**
Total	9	21	1	**31**	0	49	354	0	**403**	0	455	4	0	**459**	0	**893**
% Approach	29.0%	67.7%	3.2%	-	-	12.2%	87.8%	0%	-	-	99.1%	0.9%	0%	-	-	-
% Total	1.0%	2.4%	0.1%	**3.5%**	-	5.5%	39.6%	0%	**45.1%**	-	51.0%	0.4%	0%	**51.4%**	-	-
PHF	0.563	0.656	0.250	**0.646**	-	0.613	0.851	-	**0.876**	-	0.882	0.333	-	**0.890**	-	0.872
Lights	7	21	1	**29**	-	47	332	0	**379**	-	430	4	0	**434**	-	842
% Lights	77.8%	100%	100%	**93.5%**	-	95.9%	93.8%	0%	**94.0%**	-	94.5%	100%	0%	**94.6%**	-	94.3%
Articulated Trucks	0	0	0	**0**	-	0	3	0	**3**	-	7	0	0	**7**	-	10
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.8%	0%	**0.7%**	-	1.5%	0%	0%	**1.5%**	-	1.1%
Buses and Single-Unit Trucks	2	0	0	**2**	-	2	19	0	**21**	-	18	0	0	**18**	-	41
% Buses and Single-Unit Trucks	22.2%	0%	0%	**6.5%**	-	4.1%	5.4%	0%	**5.2%**	-	4.0%	0%	0%	**3.9%**	-	4.6%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. Hwy 377 at De Moye Lane - TMC

Wed Aug 24, 2022
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978841, Location: 33.303608, -96.979867

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



3. Hwy 377 at De Moye Lane - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978841, Location: 33.303608, -96.979867

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

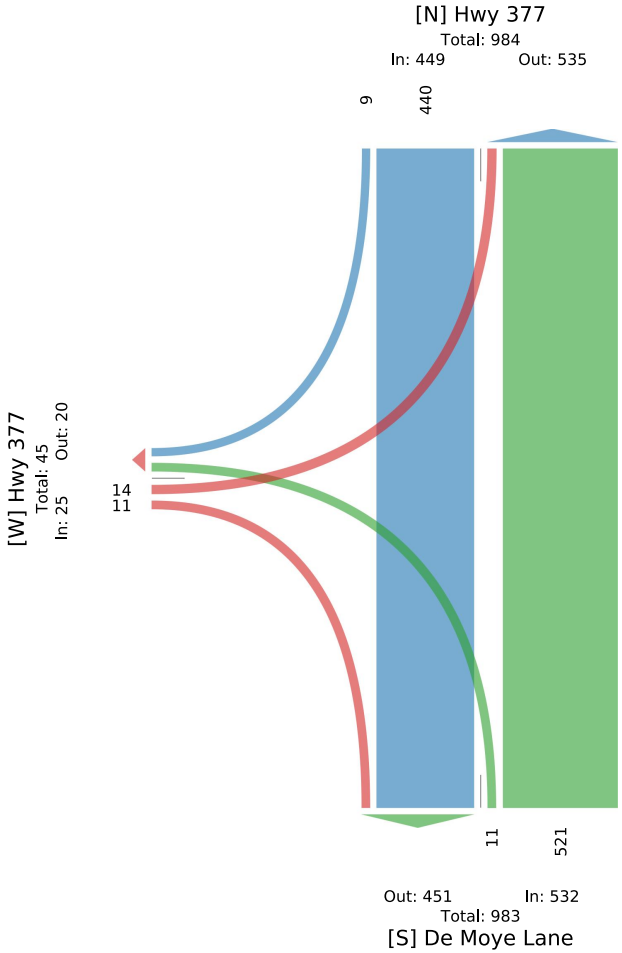
Leg / Direction	Hwy 377 Eastbound					De Moye Lane Northbound					Hwy 377 Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2022-08-24 4:45PM	3	2	0	**5**	0	4	128	0	**132**	0	98	2	0	**100**	0	**237**
5:00PM	3	2	0	**5**	0	3	127	0	**130**	0	113	3	0	**116**	0	**251**
5:15PM	2	4	0	**6**	0	3	116	0	**119**	0	123	1	0	**124**	0	**249**
5:30PM	6	3	0	**9**	0	1	150	0	**151**	0	106	3	0	**109**	0	**269**
Total	14	11	0	**25**	0	11	521	0	**532**	0	440	9	0	**449**	0	**1006**
% Approach	56.0%	44.0%	0%	–	-	2.1%	97.9%	0%	–	-	98.0%	2.0%	0%	–	-	-
% Total	1.4%	1.1%	0%	**2.5%**	-	1.1%	51.8%	0%	**52.9%**	-	43.7%	0.9%	0%	**44.6%**	-	-
PHF	0.583	0.688	-	**0.694**	-	0.688	0.868	-	**0.881**	-	0.894	0.750	-	**0.905**	-	0.935
Lights	14	11	0	**25**	**-**	10	497	0	**507**	**-**	429	9	0	**438**	**-**	970
% Lights	100%	100%	0%	**100%**	-	90.9%	95.4%	0%	**95.3%**	-	97.5%	100%	0%	**97.6%**	-	96.4%
Articulated Trucks	0	0	0	**0**	**-**	0	2	0	**2**	**-**	2	0	0	**2**	**-**	4
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0.4%	0%	**0.4%**	-	0.5%	0%	0%	**0.4%**	-	0.4%
Buses and Single-Unit Trucks	0	0	0	**0**	**-**	1	22	0	**23**	**-**	9	0	0	**9**	**-**	32
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	-	9.1%	4.2%	0%	**4.3%**	-	2.0%	0%	0%	**2.0%**	-	3.2%
Pedestrians	**-**	**-**	**-**	**-**	0	**-**	**-**	**-**	**-**	0	**-**	**-**	**-**	**-**	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. Hwy 377 at De Moye Lane - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978841, Location: 33.303608, -96.979867

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



4. Hwy 377 at Blackjack Road - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978842, Location: 33.311427, -96.975261

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

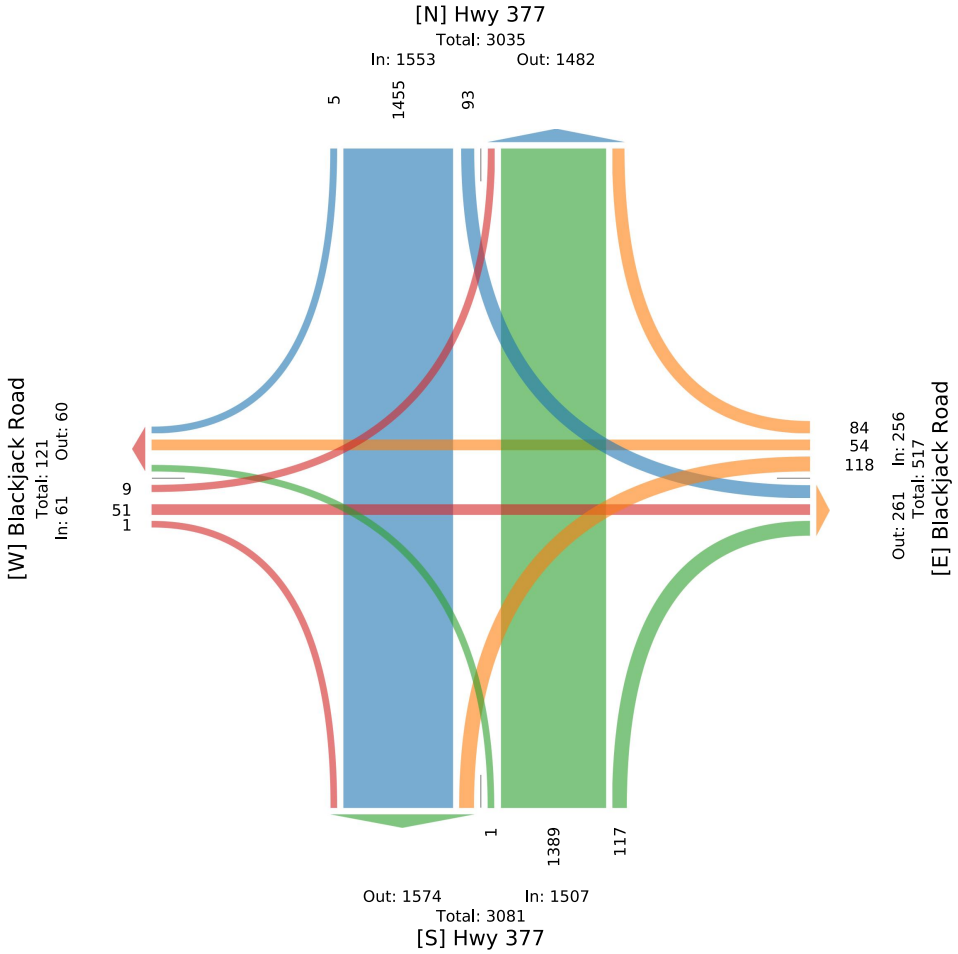
Leg / Direction	Blackjack Road Eastbound						Blackjack Road Westbound						Hwy 377 Northbound						Hwy 377 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-24 6:30AM	0	2	0	0	2	0	6	1	3	0	10	0	0	31	5	0	36	0	4	79	0	0	83	0	131
6:45AM	0	3	0	0	3	0	6	2	3	0	11	0	0	45	5	0	50	0	4	90	0	0	94	0	158
Hourly Total	0	5	0	0	5	0	12	3	6	0	21	0	0	76	10	0	86	0	8	169	0	0	177	0	289
7:00AM	0	2	0	0	2	0	7	2	3	0	12	0	0	70	6	0	76	0	6	73	0	0	79	0	169
7:15AM	0	1	0	0	1	0	9	6	3	0	18	0	0	70	8	0	78	0	5	89	0	0	94	0	191
7:30AM	3	3	0	0	6	0	8	3	9	0	20	0	1	72	15	0	88	0	12	102	0	0	114	0	228
7:45AM	1	9	0	0	10	0	7	9	4	0	20	0	0	82	13	0	95	0	9	111	0	0	120	0	245
Hourly Total	4	15	0	0	19	0	31	20	19	0	70	0	1	294	42	0	337	0	32	375	0	0	407	0	833
8:00AM	0	5	0	0	5	0	3	2	3	0	8	0	0	61	7	0	68	0	8	114	1	0	123	0	204
8:15AM	0	3	0	0	3	0	4	3	4	0	11	0	0	76	5	0	81	0	3	83	1	0	87	0	182
Hourly Total	0	8	0	0	8	0	7	5	7	0	19	0	0	137	12	0	149	0	11	197	2	0	210	0	386
4:30PM	0	1	0	0	1	0	12	9	15	0	36	0	0	109	4	0	113	0	6	70	0	0	76	0	226
4:45PM	0	3	1	0	4	0	5	2	3	0	10	0	0	112	9	0	121	0	4	82	0	0	86	0	221
Hourly Total	0	4	1	0	5	0	17	11	18	0	46	0	0	221	13	0	234	0	10	152	0	0	162	0	447
5:00PM	3	2	0	0	5	0	7	2	4	0	13	0	0	114	6	0	120	0	3	105	1	0	109	0	247
5:15PM	0	4	0	0	4	0	10	3	7	0	20	0	0	105	7	0	112	0	4	103	0	0	107	0	243
5:30PM	1	4	0	0	5	0	5	3	3	0	11	0	0	121	11	0	132	0	9	98	0	0	107	0	255
5:45PM	0	4	0	0	4	0	8	3	4	0	15	0	0	109	7	0	116	0	6	78	0	0	84	0	219
Hourly Total	4	14	0	0	18	0	30	11	18	0	59	0	0	449	31	0	480	0	22	384	1	0	407	0	964
6:00PM	1	2	0	0	3	0	11	3	8	0	22	0	0	104	5	0	109	0	8	92	2	0	102	0	236
6:15PM	0	3	0	0	3	0	10	1	8	0	19	0	0	108	4	0	112	0	2	86	0	0	88	0	222
Hourly Total	1	5	0	0	6	0	21	4	16	0	41	0	0	212	9	0	221	0	10	178	2	0	190	0	458
Total	9	51	1	0	61	0	118	54	84	0	256	0	1	1389	117	0	1507	0	93	1455	5	0	1553	0	3377
% Approach	14.8%	83.6%	1.6%	0%	-	-	46.1%	21.1%	32.8%	0%	-	-	0.1%	92.2%	7.8%	0%	-	-	6.0%	93.7%	0.3%	0%	-	-	-
% Total	0.3%	1.5%	0%	0%	1.8%	-	3.5%	1.6%	2.5%	0%	7.6%	-	0%	41.1%	3.5%	0%	44.6%	-	2.8%	43.1%	0.1%	0%	46.0%	-	-
Lights	9	51	1	0	61	-	112	54	83	0	249	-	1	1347	113	0	1461	-	91	1400	5	0	1496	-	3267
% Lights	100%	100%	100%	0%	100%	-	94.9%	100%	98.8%	0%	97.3%	-	100%	97.0%	96.6%	0%	96.9%	-	97.8%	96.2%	100%	0%	96.3%	-	96.7%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	8	1	0	9	-	0	16	0	0	16	-	25
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.6%	0.9%	0%	0.6%	-	0%	1.1%	0%	0%	1.0%	-	0.7%
Buses and Single-Unit Trucks	0	0	0	0	0	-	6	0	1	0	7	-	0	34	3	0	37	-	2	39	0	0	41	-	85
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-	5.1%	0%	1.2%	0%	2.7%	-	0%	2.4%	2.6%	0%	2.5%	-	2.2%	2.7%	0%	0%	2.6%	-	2.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. Hwy 377 at Blackjack Road - TMC

Wed Aug 24, 2022
Full Length (6:30 AM-8:30 AM, 4:30 PM-6:30 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978842, Location: 33.311427, -96.975261

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



4. Hwy 377 at Blackjack Road - TMC

Wed Aug 24, 2022
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978842, Location: 33.311427, -96.975261

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

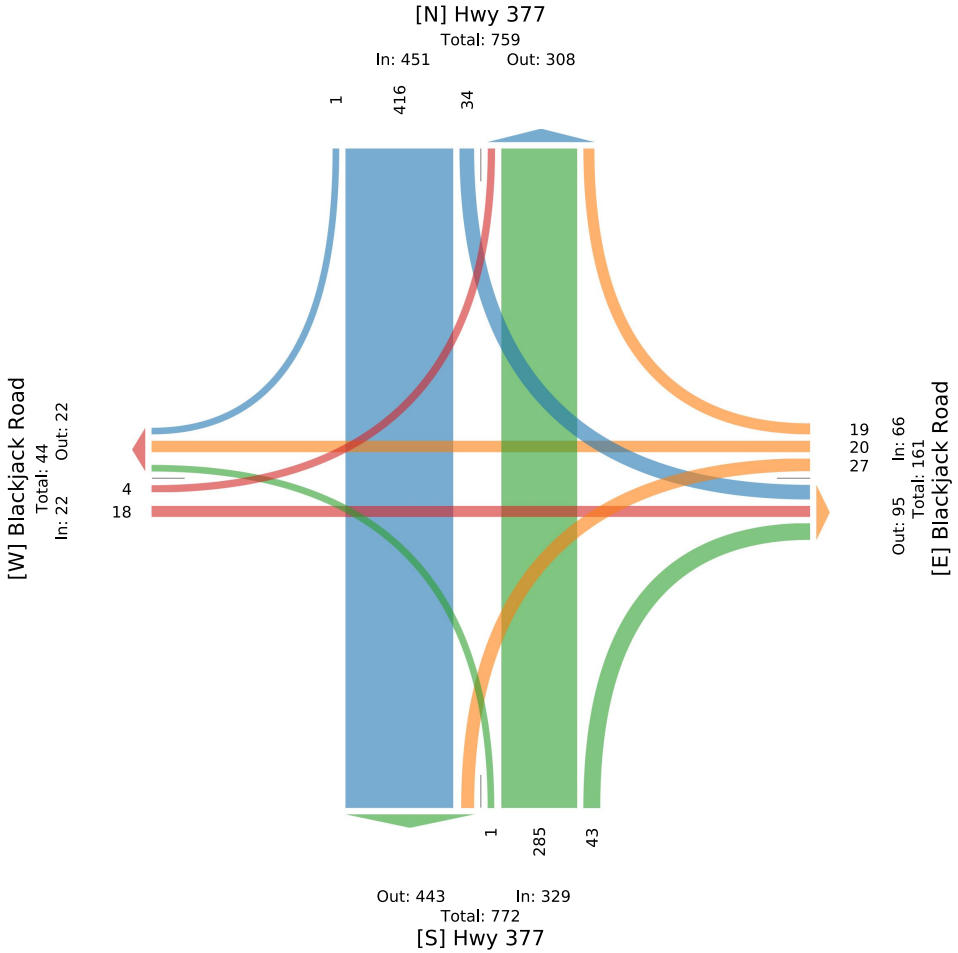
Leg / Direction	Blackjack Road Eastbound						Blackjack Road Westbound						Hwy 377 Northbound						Hwy 377 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-24 7:15AM	0	1	0	0	**1**	0	9	6	3	0	**18**	0	0	70	8	0	**78**	0	5	89	0	0	**94**	0	**191**
7:30AM	3	3	0	0	**6**	0	8	3	9	0	**20**	0	1	72	15	0	**88**	0	12	102	0	0	**114**	0	**228**
7:45AM	1	9	0	0	**10**	0	7	9	4	0	**20**	0	0	82	13	0	**95**	0	9	111	0	0	**120**	0	**245**
8:00AM	0	5	0	0	**5**	0	3	2	3	0	**8**	0	0	61	7	0	**68**	0	8	114	1	0	**123**	0	**204**
Total	4	18	0	0	**22**	0	27	20	19	0	**66**	0	1	285	43	0	**329**	0	34	416	1	0	**451**	0	**868**
% Approach	18.2%	81.8%	0%	0%	**–**	-	40.9%	30.3%	28.8%	0%	**-**	-	0.3%	86.6%	13.1%	0%	**–**	-	7.5%	92.2%	0.2%	0%	**–**	-	-
% Total	0.5%	2.1%	0%	0%	**2.5%**	-	3.1%	2.3%	2.2%	0%	**7.6%**	-	0.1%	32.8%	5.0%	0%	**37.9%**	-	3.9%	47.9%	0.1%	0%	**52.0%**	-	-
PHF	0.333	0.500	-	-	**0.550**	-	0.750	0.556	0.528	-	**0.825**	-	0.250	0.869	0.717	-	**0.866**	-	0.708	0.912	0.250	-	**0.917**	-	0.886
Lights	4	18	0	0	**22**	-	25	20	19	0	**64**	-	1	270	43	0	**314**	-	34	392	1	0	**427**	-	827
% Lights	100%	100%	0%	0%	**100%**	-	92.6%	100%	100%	0%	**97.0%**	-	100%	94.7%	100%	0%	**95.4%**	-	100%	94.2%	100%	0%	**94.7%**	-	95.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	0	7	0	0	**7**	-	12
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.8%	0%	0%	**1.5%**	-	0%	1.7%	0%	0%	**1.6%**	-	1.4%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	2	0	0	0	**2**	-	0	10	0	0	**10**	-	0	17	0	0	**17**	-	29
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	7.4%	0%	0%	0%	**3.0%**	-	0%	3.5%	0%	0%	**3.0%**	-	0%	4.1%	0%	0%	**3.8%**	-	3.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. Hwy 377 at Blackjack Road - TMC

Wed Aug 24, 2022
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978842, Location: 33.311427, -96.975261

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



4. Hwy 377 at Blackjack Road - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978842, Location: 33.311427, -96.975261

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

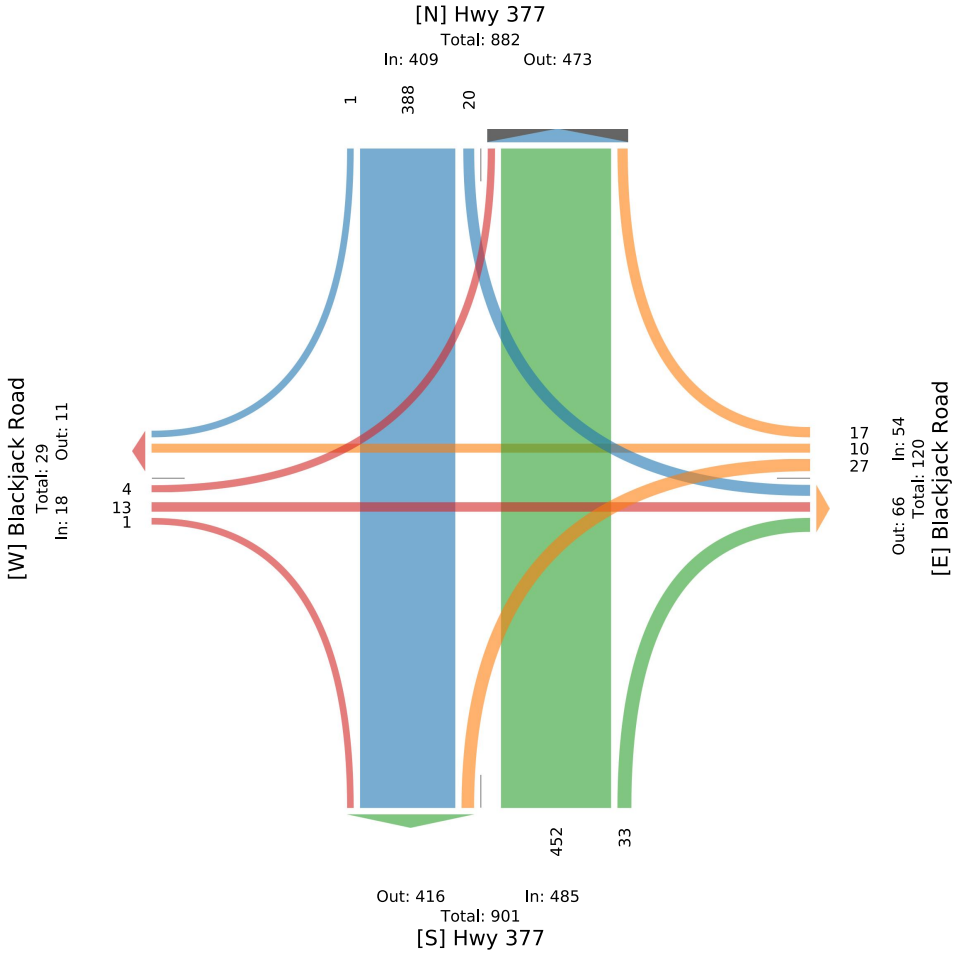
Leg / Direction	Blackjack Road Eastbound						Blackjack Road Westbound						Hwy 377 Northbound						Hwy 377 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2022-08-24 4:45PM	0	3	1	0	**4**	0	5	2	3	0	**10**	0	0	112	9	0	**121**	0	4	82	0	0	**86**	0	**221**
5:00PM	3	2	0	0	**5**	0	7	2	4	0	**13**	0	0	114	6	0	**120**	0	3	105	1	0	**109**	0	**247**
5:15PM	0	4	0	0	**4**	0	10	3	7	0	**20**	0	0	105	7	0	**112**	0	4	103	0	0	**107**	0	**243**
5:30PM	1	4	0	0	**5**	0	5	3	3	0	**11**	0	0	121	11	0	**132**	0	9	98	0	0	**107**	0	**255**
Total	4	13	1	0	**18**	0	27	10	17	0	**54**	0	0	452	33	0	**485**	0	20	388	1	0	**409**	0	**966**
% Approach	22.2%	72.2%	5.6%	0%	**–**	-	50.0%	18.5%	31.5%	0%	**–**	-	0%	93.2%	6.8%	0%	**–**	-	4.9%	94.9%	0.2%	0%	**-**	-	-
% Total	0.4%	1.3%	0.1%	0%	**1.9%**	-	2.8%	1.0%	1.8%	0%	**5.6%**	-	0%	46.8%	3.4%	0%	**50.2%**	-	2.1%	40.2%	0.1%	0%	**42.3%**	-	-
PHF	0.333	0.813	0.250	-	**0.900**	-	0.675	0.833	0.607	-	**0.675**	-	-	0.934	0.750	-	**0.919**	-	0.556	0.924	0.250	-	**0.938**	-	0.947
Lights	4	13	1	0	**18**	-	26	10	17	0	**53**	-	0	445	33	0	**478**	-	20	376	1	0	**397**	-	946
% Lights	100%	100%	100%	0%	**100%**	-	96.3%	100%	100%	0%	**98.1%**	-	0%	98.5%	100%	0%	**98.6%**	-	100%	96.9%	100%	0%	**97.1%**	-	97.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	2	0	0	**2**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0.5%	0%	0%	**0.5%**	-	0.4%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	5	0	0	**5**	-	0	10	0	0	**10**	-	16
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	3.7%	0%	0%	0%	**1.9%**	-	0%	1.1%	0%	0%	**1.0%**	-	0%	2.6%	0%	0%	**2.4%**	-	1.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. Hwy 377 at Blackjack Road - TMC

Wed Aug 24, 2022
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 978842, Location: 33.311427, -96.975261

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

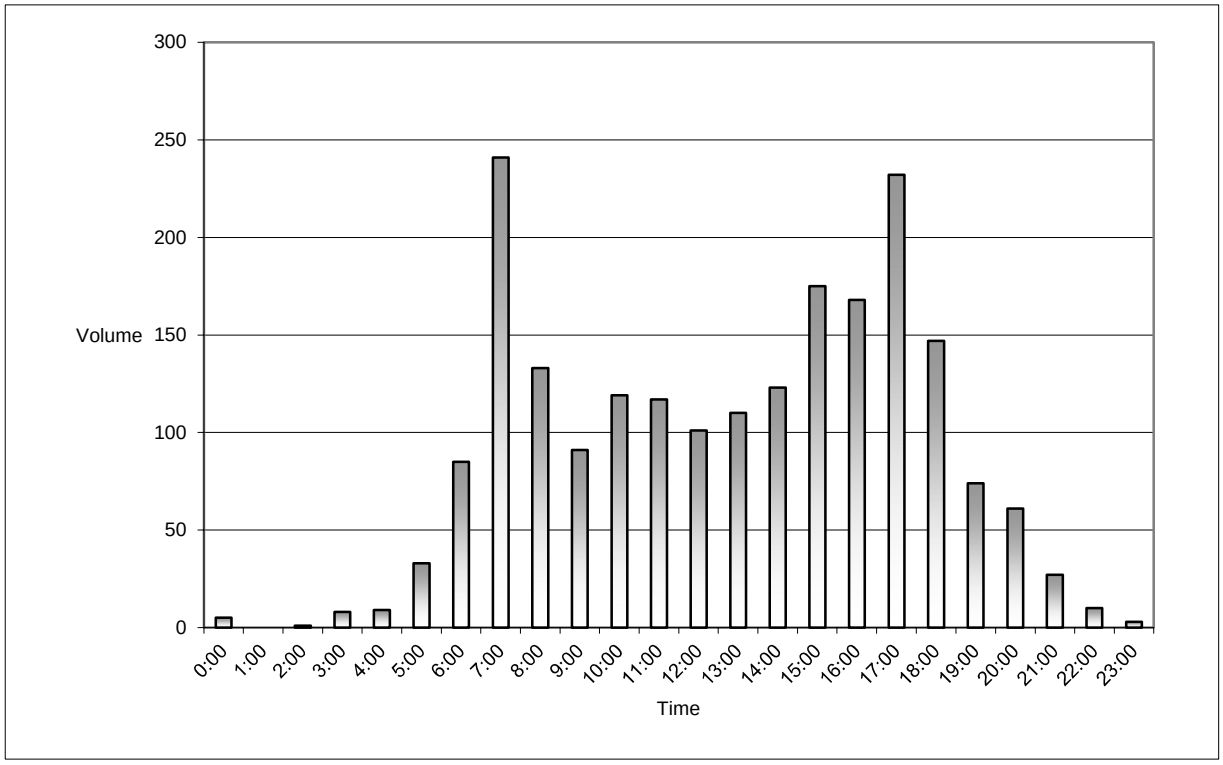


EB Spring Hill Road East of Highway 377

Date Began:
8/24/2022

TIME	0:00	0:15	0:30	0:45	Total
0:00	0	0	1	4	5
1:00	0	0	0	0	0
2:00	0	1	0	0	1
3:00	6	1	0	1	8
4:00	0	0	1	8	9
5:00	4	0	9	20	33
6:00	14	29	22	20	85
7:00	38	52	69	82	241
8:00	33	32	33	35	133
9:00	20	23	20	28	91
10:00	20	26	36	37	119
11:00	28	22	31	36	117
12:00	9	41	24	27	101
13:00	28	30	20	32	110
14:00	35	20	34	34	123
15:00	38	43	48	46	175
16:00	42	36	40	50	168
17:00	65	50	62	55	232
18:00	42	32	42	31	147
19:00	22	26	19	7	74
20:00	23	17	13	8	61
21:00	11	4	8	4	27
22:00	2	4	2	2	10
23:00	1	1	0	1	3
				TOTAL:	2073

The A.M. peak hour from 7:00 to 7:59 is 241
The P.M. peak hour from 17:00 to 17:59 is 232

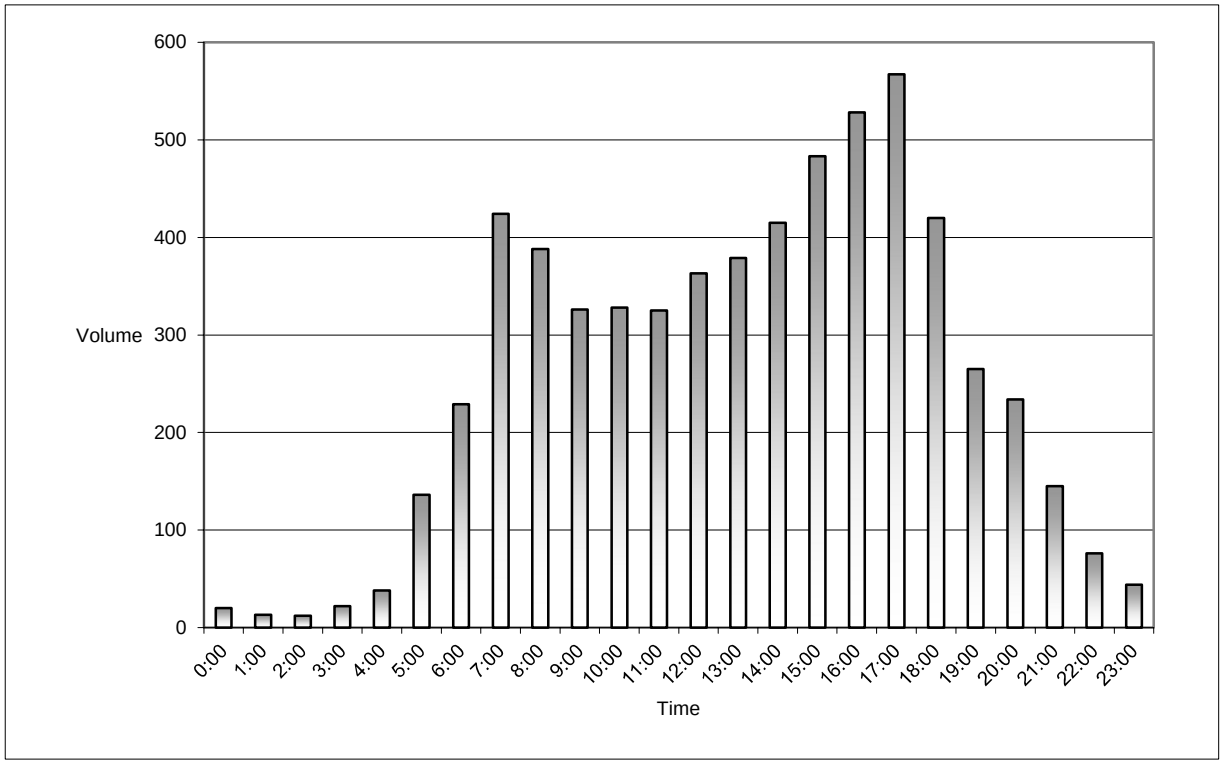


NB Highway 377 North of Spring Hill Road

Date Began:
8/24/2022

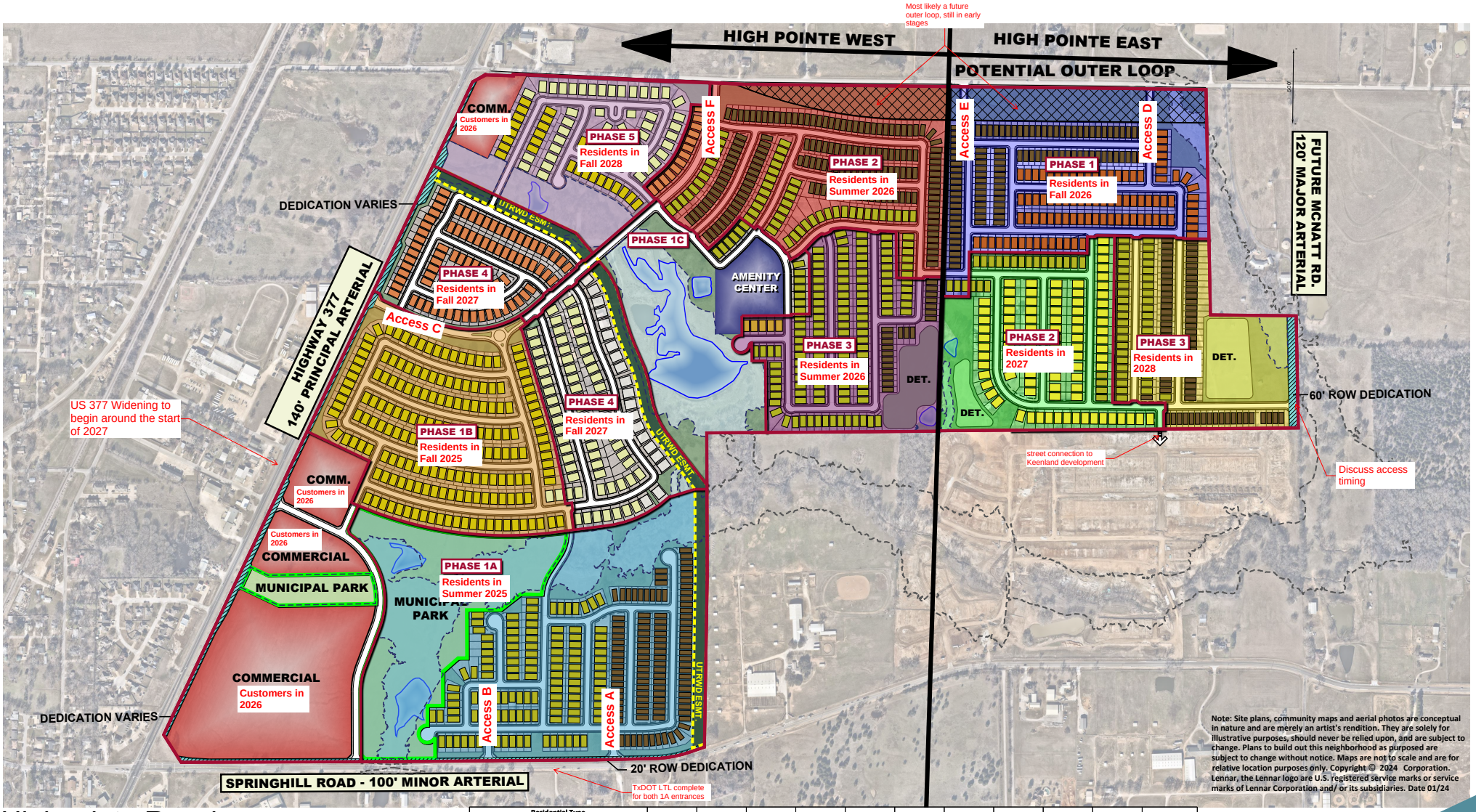
TIME	0:00	0:15	0:30	0:45	Total
0:00	6	4	6	4	20
1:00	5	1	5	2	13
2:00	3	6	1	2	12
3:00	10	4	2	6	22
4:00	6	4	12	16	38
5:00	24	28	36	48	136
6:00	54	57	52	66	229
7:00	88	102	117	117	424
8:00	90	92	97	109	388
9:00	69	92	79	86	326
10:00	72	90	62	104	328
11:00	78	73	84	90	325
12:00	80	96	93	94	363
13:00	83	84	102	110	379
14:00	96	101	110	108	415
15:00	112	125	134	112	483
16:00	128	142	119	139	528
17:00	146	112	159	150	567
18:00	118	131	87	84	420
19:00	74	64	62	65	265
20:00	68	65	48	53	234
21:00	36	34	40	35	145
22:00	26	20	16	14	76
23:00	10	19	10	5	44
				TOTAL:	6180

The A.M. peak hour from 7:15 to 8:14 is 426
The P.M. peak hour from 17:00 to 17:59 is 567



Kimley»Horn

HIGH POINTE RANCH PHASING PLAN



Note: Site plans, community maps and aerial photos are conceptual in nature and are merely an artist's rendition. They are solely for illustrative purposes, should never be relied upon, and are subject to change. Plans to build out this neighborhood as purposed are subject to change without notice. Maps are not to scale and are for relative location purposes only. Copyright © 2024 Corporation. Lennar, the Lennar logo are U.S. registered service marks or service marks of Lennar Corporation and/ or its subsidiaries. Date 01/24

Highpointe Ranch
Phasing Plan

Aubrey Texas
June 2024

Land Use Acreage Summary

Residential Lots / Residential Rights of Way	287.2	62.3%
Commercial	39.5	8.6%
Right of Way Dedication	9.5	2.0%
Open Space / Floodplain / Detention	81.8	17.9%
Municipal Park	29.9	6.5%
Amenity Center	4.6	0.8%
MTRWD Easement	8.5	1.8%
Total	460.8	100.0%

Potential Outer Loop (Overlay)

Residential Type				Phase 1 A West	Phase 1 B West	Phase 1 C West	Phase 2 West	Phase 3 West	Phase 4 West	Phase 5 West	Phase 1 East	Phase 2 East	Phase 3 East	Total Lots
	Name	Pad Size	Lot Size											
	Cottage	30'x75'	40'x115'	106	-	-	149	21	-	-	98	-	73	447
	Cottage	30'x75'	50'x120'	-	-	-	-	-	-	-	91	-	-	91
	Watermill	35'x75'	50'x120'	119	-	13	57	119	-	-	3	22	44	377
	Watermill	35'x75'	55'x130'	-	-	-	-	5	-	-	-	-	-	5
	Watermill	35'x75'	60'x130'	-	-	-	-	-	-	-	-	92	-	92
	Classic	40'x75'	50'x120'	-	-	-	13	-	86	-	-	-	-	99
	Classic	40'x75'	55'x130'	-	182		-	-	-	28	-	-	-	210
	Classic	40'x75'	65'x130'	-	2		-	-	66	43	-	-	-	111
	Classic	40'x75'	75'x130'	-	-	-	-	-	20	-	-	-	-	20
Total Lots				225	184	13	219	145	172	71	192	114	117	1452

GRAPHIC SCALE IN FEET
0 150 300 600
1"=300' @ 22x34

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034
972-335-3580
State of Texas Registration No. F-928

NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND HAS BEEN PRODUCED WITHOUT THE BENEFIT OF A SURVEY OR CONTACT WITH THE CITY, COUNTY, ETC.

DWG NAME
LAST SAVED
K:\FRI_CIVIL\063451861-HIGH POINTE RANCH\CADD\EXHIBITS\PLANSHEETS\PHASING PLAN 20240517.DWG
6/18/2024 1:11 PM

Kimley»Horn

US 377 IMPROVEMENTS MEMO

Kimley»Horn

Technical Memorandum

To: City of Aubrey

From: Nathan New, P.E.
Jaric Jones, AICP
Kimley-Horn & Associates Inc.

Date: February 13, 2024

RE: Traffic Study – US 377 Improvements
High Pointe Ranch
Aubrey, Texas

STUDY PURPOSE

Kimley-Horn and Associates, Inc. (KH) was retained last year to complete a Traffic Impact Analysis (TIA) for the proposed High Pointe Ranch on US 377 in Aubrey, Texas. The original TIA was completed and submitted to the City and TxDOT on July 12, 2023. The proposed residential development is being planned northeast of US 377 and Spring Hill Road. The study intersections and development area included in the original TIA are shown in **Figure 1**.

The purpose of this memorandum is to formally request the delay of Phase 1B mitigations from the original High Pointe Ranch TIA on US 377 until the roadway is expanded by TxDOT. Based on information from TxDOT, the construction for US 377 is planned to start in 2026. Based on the development construction schedule, homes are not anticipated to be constructed until Spring of 2025, with residents moving in during the Fall of 2025 and Spring of 2026, coinciding with the planned construction of TxDOT improvements along US 377 in 2026.

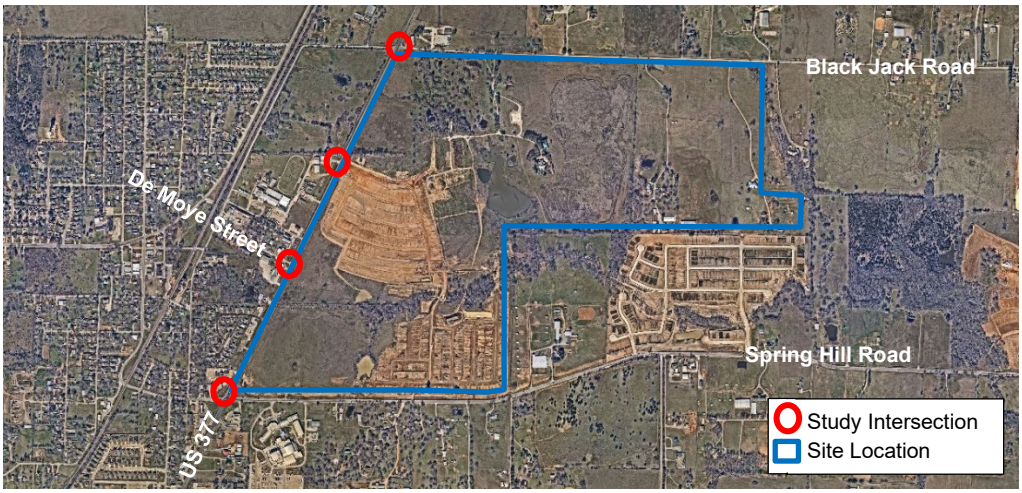


Figure 1. TIA Study Area

PHASE 1 PLANNED DEVELOPMENT UPDATES

The development, as proposed, includes 1,450 single-family residential homes to be built in six phases. While the total number of lots remains the same as what was submitted in the original TIA, the phasing order and number of houses constructed in each phase has changed slightly.

Since this memo is focused on mitigation requirements through Phase 1B, the emphasis of the content is centered around Phase 1A and Phase 1B. There will be an updated TIA submitted at a later date to document the phase changes and other updates to the original TIA. When comparing the original TIA to the current plan through Phase 1B, there is very little change.

The most recent unit count for Phase 1A & Phase 1B is as follows:

- Phase 1A: 225 single-family residential homes (same as original TIA)
- Phase 1B: 184 single-family residential homes (analyzed at 205 in original TIA)

The following sections of this document summarize what was presented in the original TIA but focus on Phase 1. For more information, please refer to the original TIA that was submitted on July 12, 2023.

ROADWAY CONDITIONS

US 377 is a two-lane undivided road and connects north to Pilot Point and south to University Drive (US 380). The posted speed limit is 55 MPH. 24-hour machine counts were collected near the site on US 377 in 2022. Volumes from 2022 were grown by three (3) percent for one year to reflect the updated 2023 existing year. The 24-hour count showed the daily volume on US 377 as 12,426 vehicles per day (vpd). When the 2022 24-hour count is grown by three (3) percent to reflect the 2023 existing year, the daily volume on US 377 is 12,799 vpd. Peak hour turning movement counts were collected at the study intersections along US 377 during the AM and PM peak hours, and the existing traffic volumes are reflected in **Figure 2**. US 377 has a TxDOT roadway functional classification as a Principal Arterial, and US 377 continues north/south through the area.

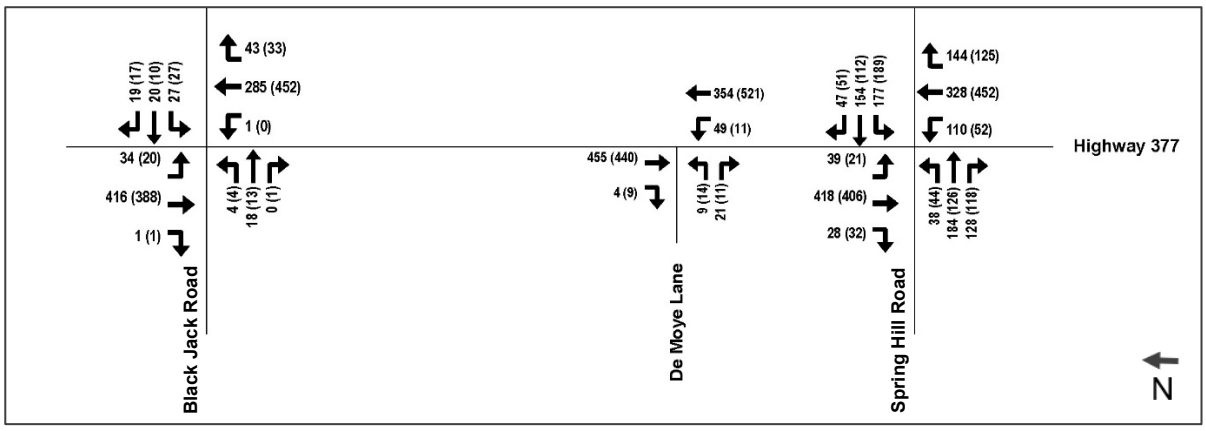


Figure 2. Existing Traffic Volumes

TRIP GENERATION

Trip generation from the original TIA proposed development were analyzed based on number of dwelling units formulae from *ITE Trip Generation, 11th Edition*. The proposed site plan for the development is attached at the end of this report. **Table 1** shows the resulting trip generation for Phase 1A and Phase 1B.

Table 1. Trip Generation Analysis

Land Uses	Amount	Units	ITE Code	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Single Family Detached Housing (Phase 1A)	225	DU	210	2,128	41	115	156	134	79	213
Single Family Detached Housing (Phase 1B)	205	DU	210	1,953	37	106	143	123	72	195

Trip Generation rates based on *ITE's Trip Generation Manual*, 11th Edition.

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of the site-generated traffic volumes in to and out of the site driveways and onto the street system was based on the area street system characteristics, existing traffic patterns, and the locations of the proposed driveway access to/from the site. Based on existing counts, during the Phase 1B opening, 25% of the site traffic was assumed to/from the north and 45% to/from the south on US 377 and 15% to/from the west and 15% to/from the east on Spring Hill Road.

Figure 3 shows the resulting inbound and outbound assignments of the site traffic along US 377. It is expected that some traffic will access the site via the driveways on Spring Hill Road, and the roadway and associated intersections are not included in this memo.

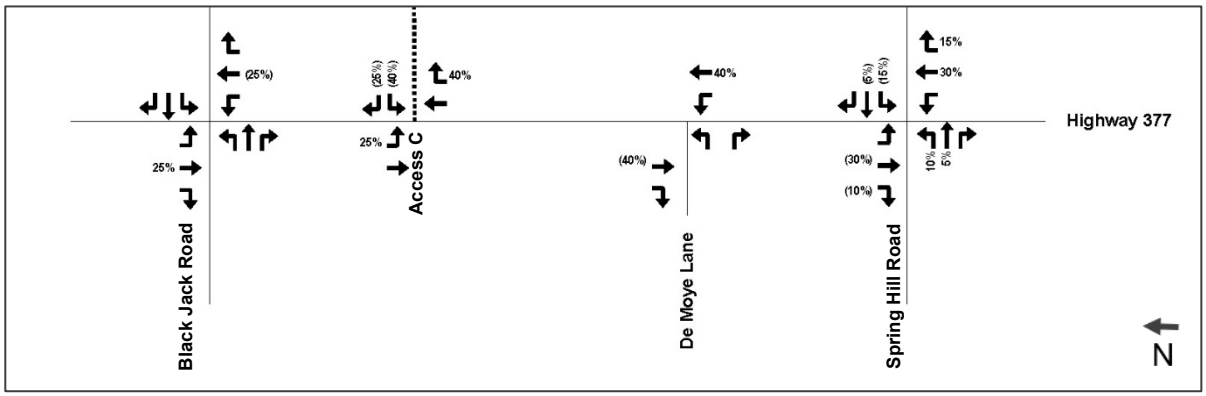


Figure 3. Trip Distribution and Traffic Assignment

TRAFFIC VOLUMES

The resulting site weekday AM and PM peak hour turning movements in **Figure 4** are calculated by multiplying the new external trip generation by the respective traffic assignment percentages. These traffic volumes also included in the existing traffic on US 377 to reflect the existing plus site traffic volumes reflected in **Figure 5**.

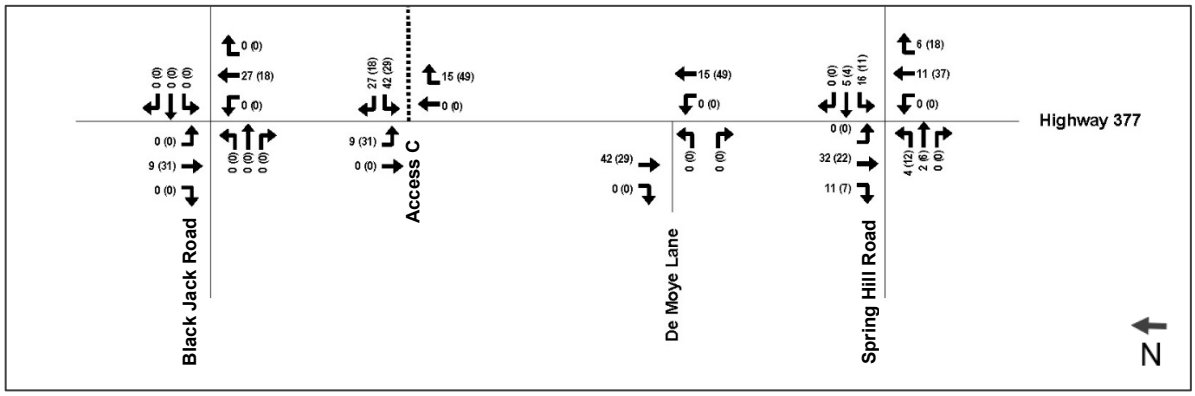


Figure 4. Site-Generated Traffic Volumes

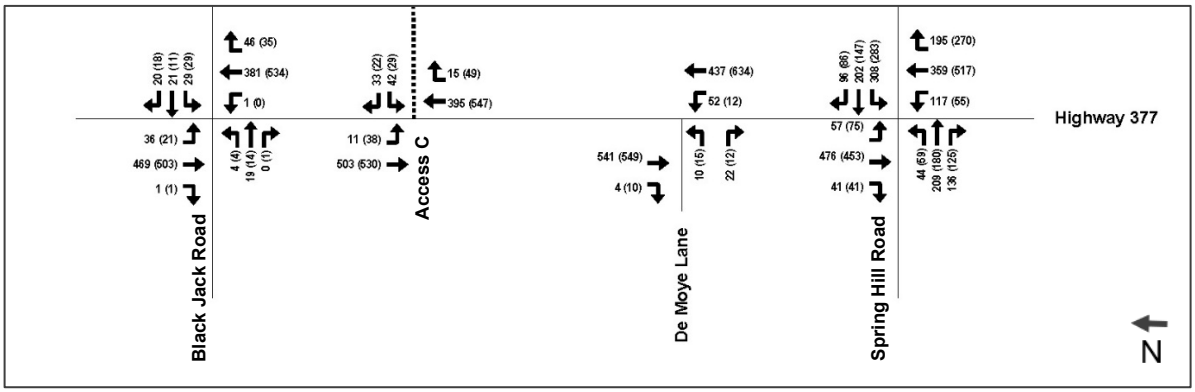


Figure 5. Total Traffic Volumes

LEFT-TURN LANE ANALYSIS

The site driveway along US 377 was evaluated for a left-turn lane in the original TIA. The criteria for left-turn lanes under the guidelines of TxDOT is based on major road and left-turn volume. Volumes for the three scenarios were analyzed to determine when left-turn lane thresholds would be met at Access C for Phase 1B. Based on the projected volumes at Phase 1B buildout, Access C will meet left-turn lane thresholds. **Table 3** below shows the volumes during the applicable scenario years when the driveway meets the left-turn lane threshold.

Table 3. Original TIA Left-Turn Lane Analysis

Site Criteria	Highway 377 at Access C	
	AM Peak	PM Peak
Left-Turn Lane Peak Hour Volume	11	38
TxDOT's Threshold for Major Road Peak Hour Volume (veh/hr/ln)	100	< 50
Major Road Peak Hour Volume (veh/hr/ln)	465	585
Left Turn Threshold Met?	*Yes*	*Yes*
Left-Turn Lane Recommended?	**Yes**	

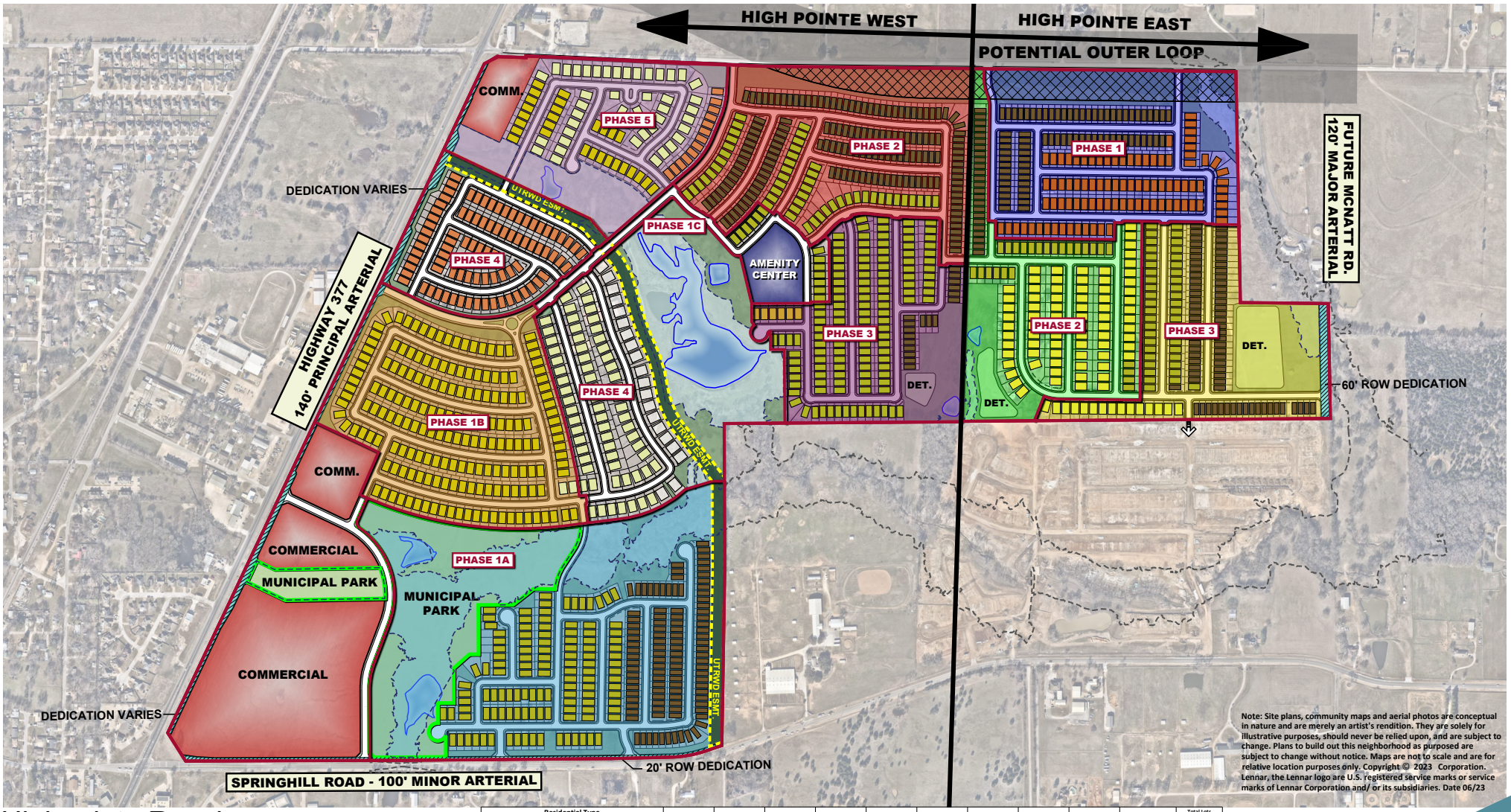
CONCLUSION

Based on the results of the left-turn lane analysis, adding a left-turn deceleration lane on US 377 to Access C is justified to address Phase 1B build-out turning movements. Since the original TIA, more information has been obtained from TxDOT regarding the timing of the US 377 expansion. Based on recent discussions, the expansion will coincide with the opening of Phase 1B. Due to this overlap, it is recommended that the construction of the turn lane be delayed until the TxDOT project has been completed or the left turn lane be incorporated into the current TxDOT design.

While the total number of lots remains the same, the phasing order and number of houses constructed in each phase have changed since the original TIA was submitted. Phase 1A and Phase 1B are under construction, and an updated TIA will be resubmitted to reflect the changes in future phasing.

Attachments:

1. Updated Site Plan



Note: Site plans, community maps and aerial photos are conceptual in nature and are merely an artist's rendition. They are solely for illustrative purposes, should never be relied upon, and are subject to change. Plans to build out this neighborhood as purposed are subject to change without notice. Maps are not to scale and are for relative location purposes only. Copyright © 2023 Corporation. Lennar, the Lennar logo are U.S. registered service marks or service marks of Lennar Corporation and/ or its subsidiaries. Date 06/23

Highpointe Ranch

Phasing Plan

Aubrey Texas
October 2023

Land Use Acreage Summary

Residential Lots / Residential Rights of Way	287.2	62.3%
Commercial	39.5	8.6%
Right-of-Way Dedication	9.5	2.0%
Open Space / Floodplain / Detention	82.7	17.9%
Municipal Park	29.9	6.5%
Amenity Center	3.7	0.8%
MTRWD Easement	8.5	1.8%
Total	460.8	100.0%

Potential Outer Loop Overlay

Residential Type				Phase 1 A West	Phase 1 B West	Phase 1 C West	Phase 2 West	Phase 3 West	Phase 4 West	Phase 5 West	Phase 1 East	Phase 2 East	Phase 3 East	Total Lots
	Name	Pad Size	Lot Size											
	Cottage	30'x75'	40'x115'	106	-	-	149	18	-	-	74	24	73	444
	Cottage	30'x75'	50'x120'	-	-	-	-	-	-	-	91	-	-	91
	Watermill	35'x75'	50'x120'	119	-	13	51	125	-	-	-	25	44	377
	Watermill	35'x75'	55'x130'	-	-	-	-	6	-	-	-	-	-	6
	Watermill	35'x75'	60'x130'	-	-	-	-	-	-	-	-	77	15	92
	Classic	40'x75'	50'x120'	-	-	-	-	-	86	13	-	-	-	99
	Classic	40'x75'	55'x130'	-	182		-	-	-	28	-	-	-	210
	Classic	40'x75'	65'x130'	-	2		-	-	66	43	-	-	-	111
	Classic	40'x75'	75'x130'	-	-	-	-	-	20	-	-	-	-	20
Total Lots				225	184	13	200	149	172	84	165	126	132	1450

GRAPHIC SCALE IN FEET
0 150 300 600
1"=300' @ 22x34

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034
972-335-3580
State of Texas Registration No. F-928

NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND HAS BEEN PRODUCED WITHOUT THE BENEFIT OF A SURVEY OR CONTACT WITH THE CITY, COUNTY, ETC.

DWG NAME
LAST SAVED
K:\FRI_CIVIL\063451861-HIGH POINTE RANCH\CADD\EXHIBITS\PLANSHEETS\PHASING PLAN 20231011.DWG
10/13/2023 9:58 AM

RESIDENTIAL AND RETAIL TRIP DISTRIBUTION

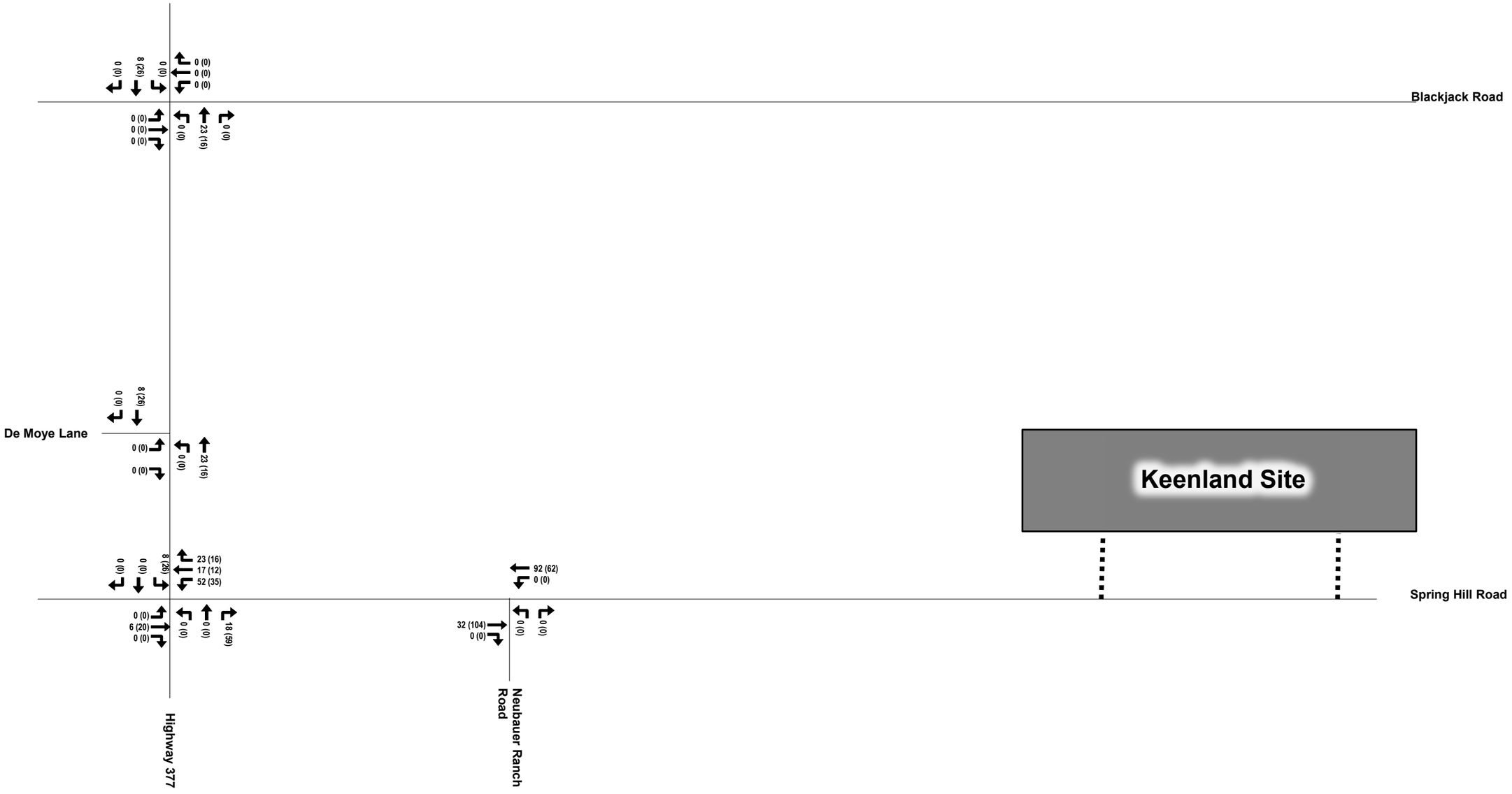


EXHIBIT A1

Site-Generated Traffic Volumes: Keenland Background Site

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

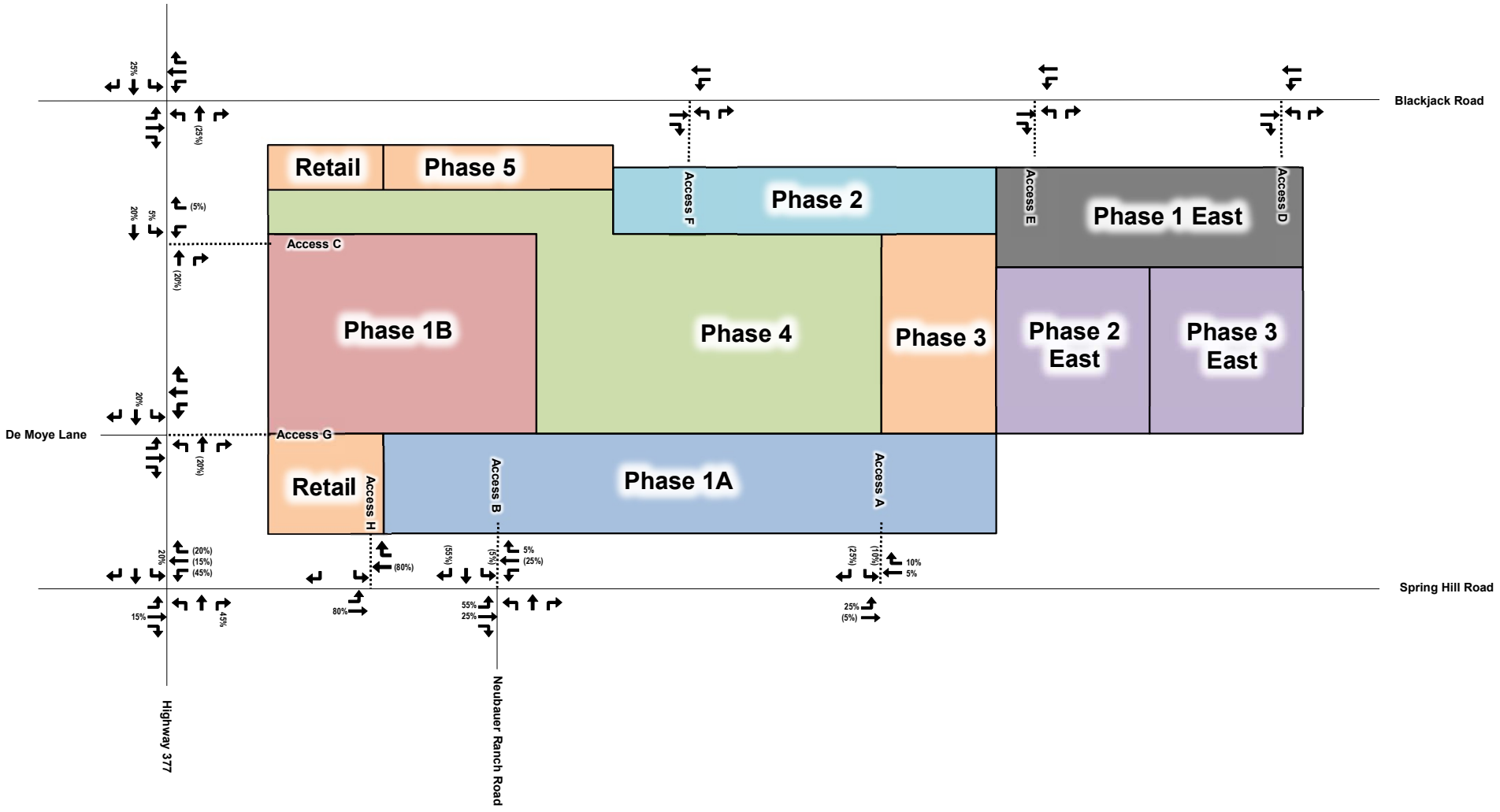


EXHIBIT A2

Trip Distribution and Traffic Assignment: Phase 1A

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

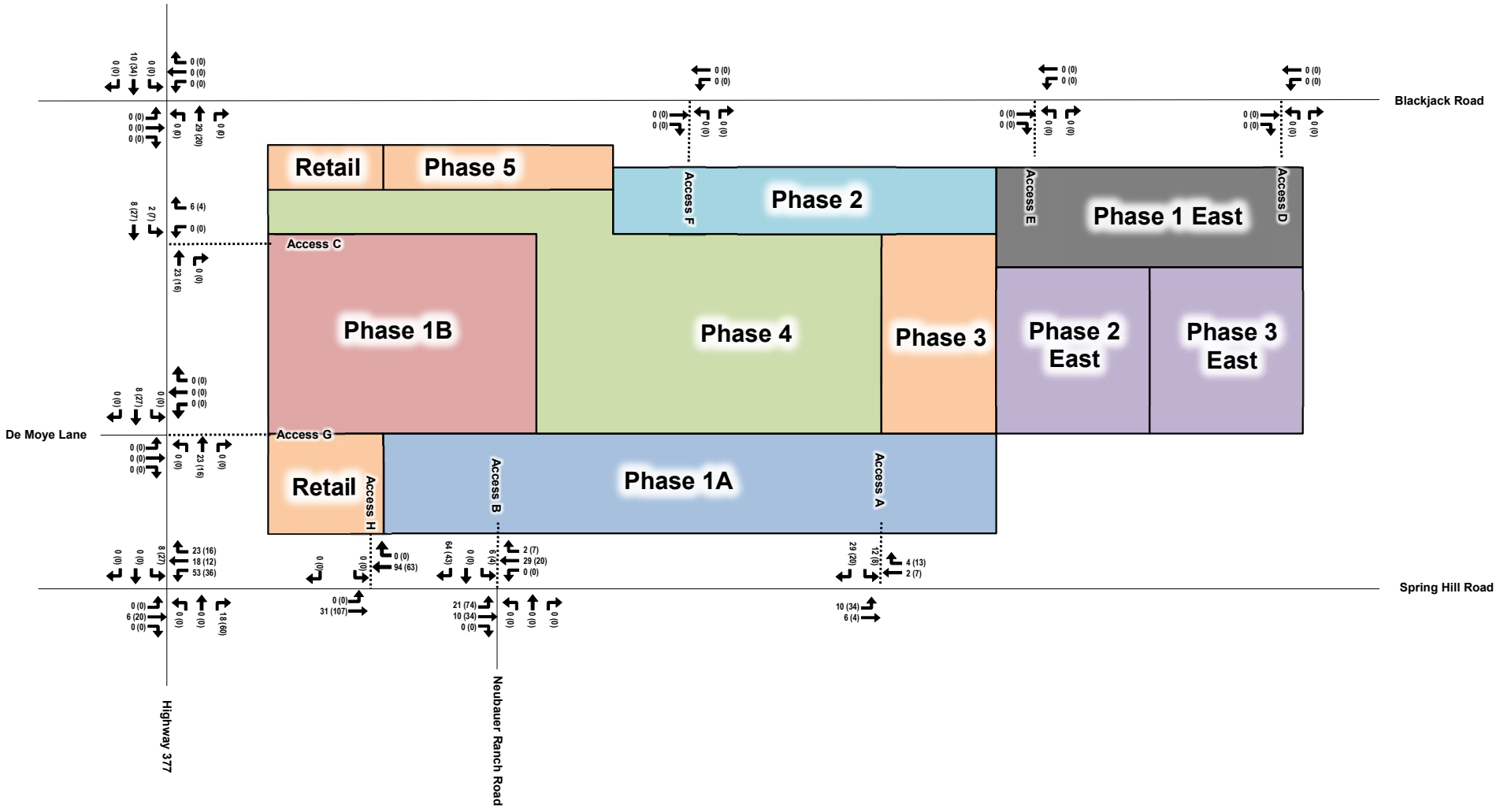


EXHIBIT A3

Site-Generated Traffic Volumes: Phase 1A

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North
Not To Scale

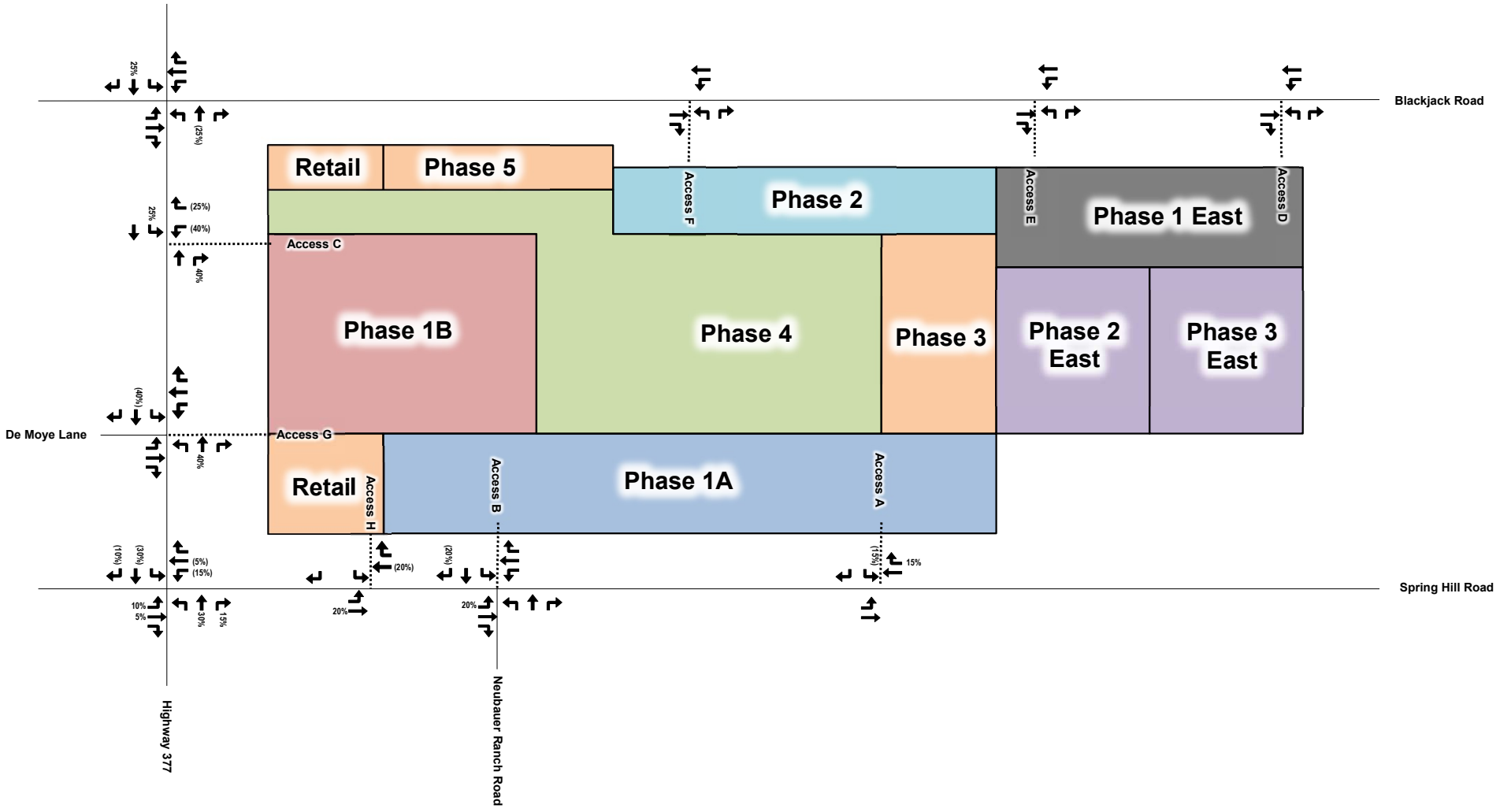


EXHIBIT A4

Trip Distribution and Traffic Assignment: Phase 1B

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North
Not To Scale

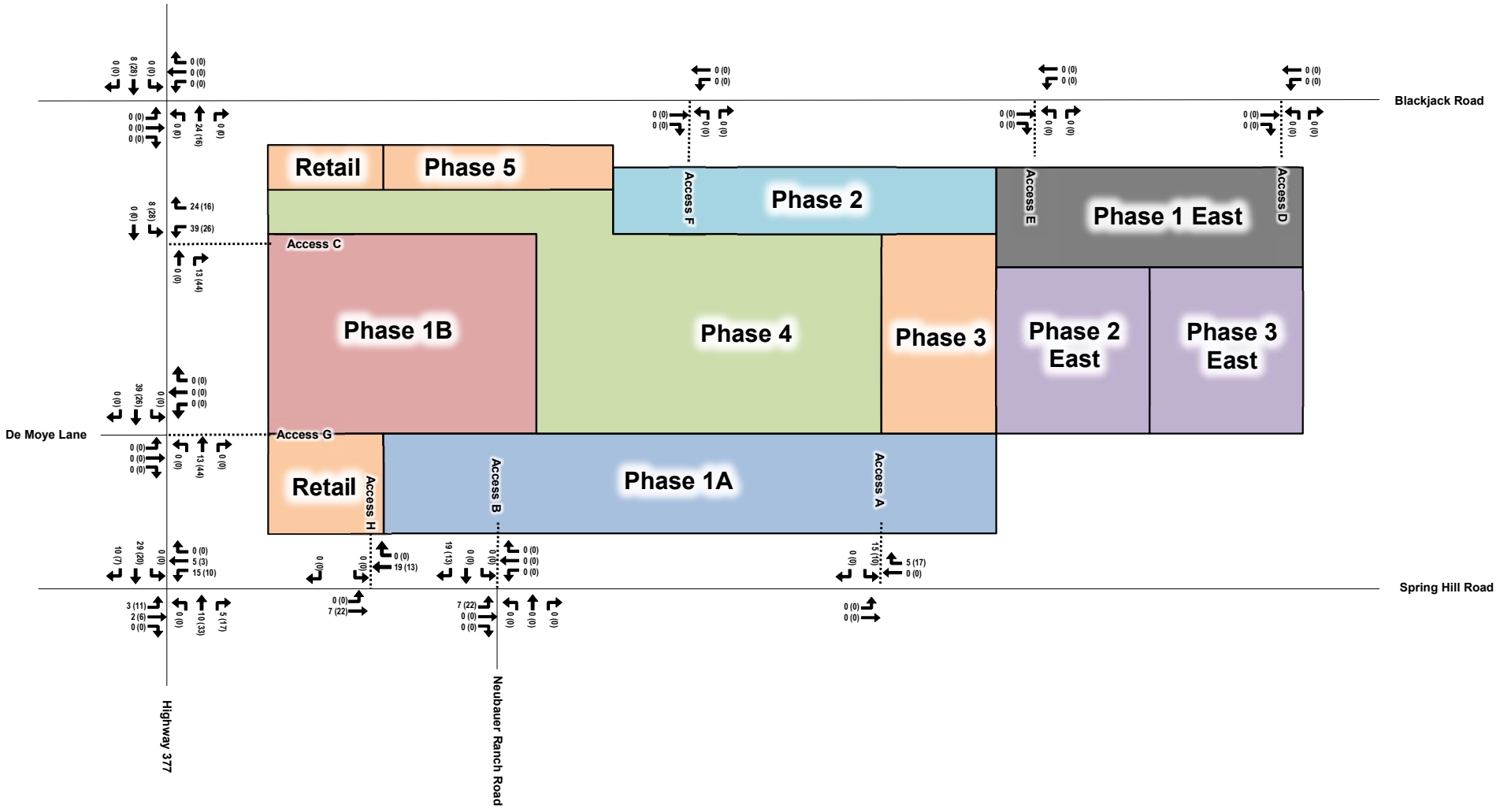


EXHIBIT A5

Site-Generated Traffic Volumes: Phase 1B

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

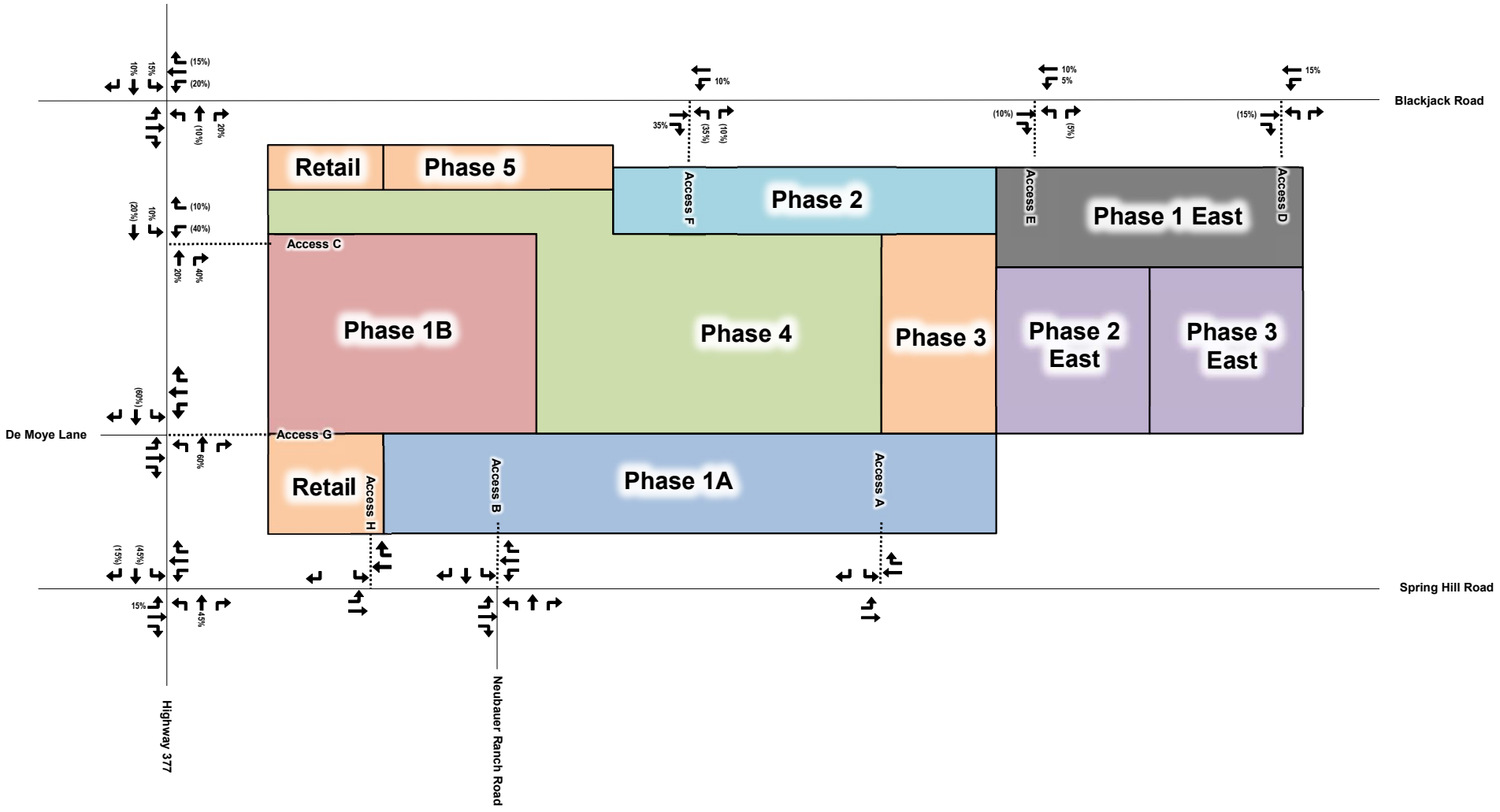


EXHIBIT A6

Trip Distribution and Traffic Assignment: Phase 2 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North

Not To Scale

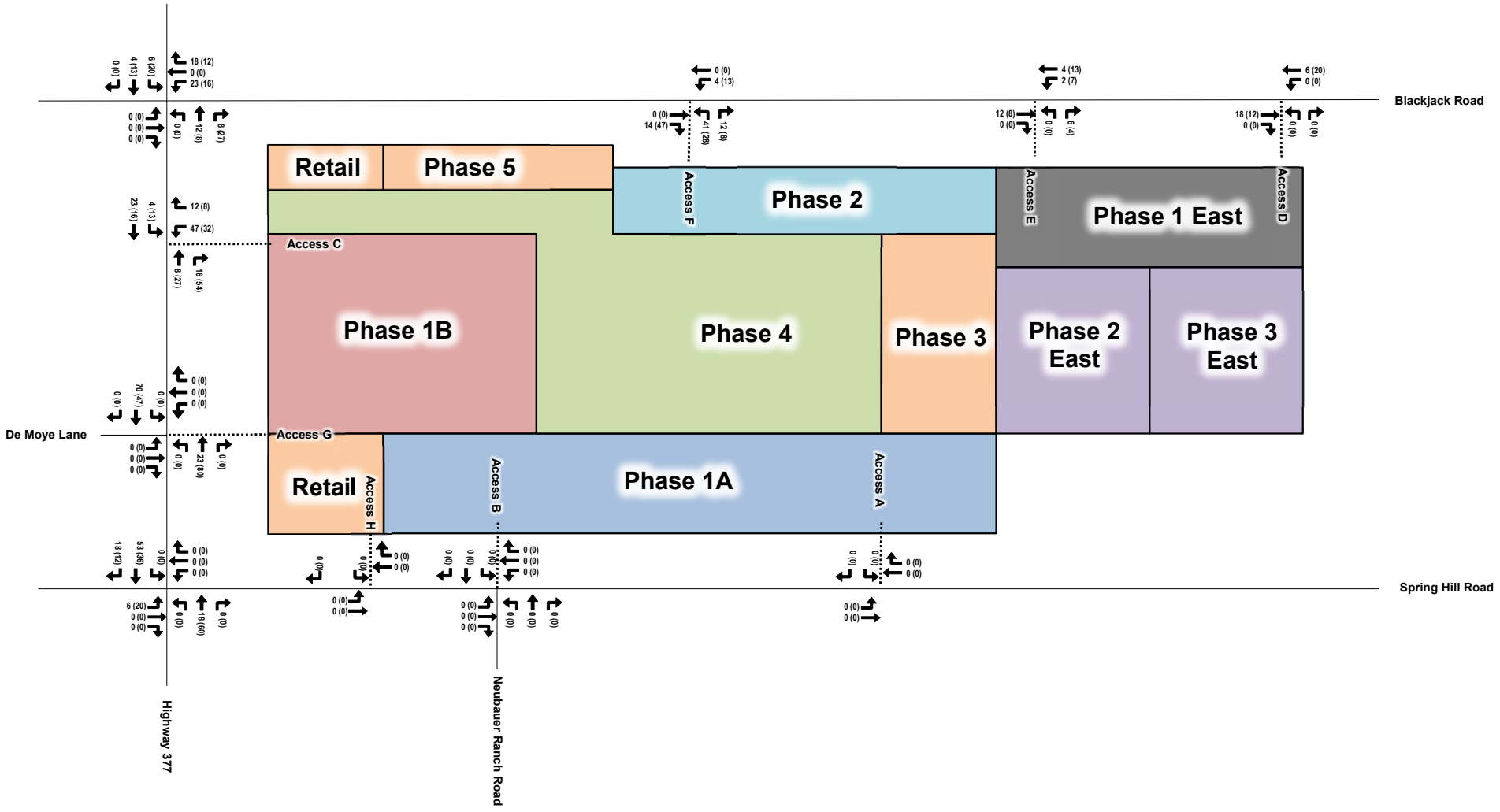


EXHIBIT A7

Site-Generated Traffic Volumes: Phase 2 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

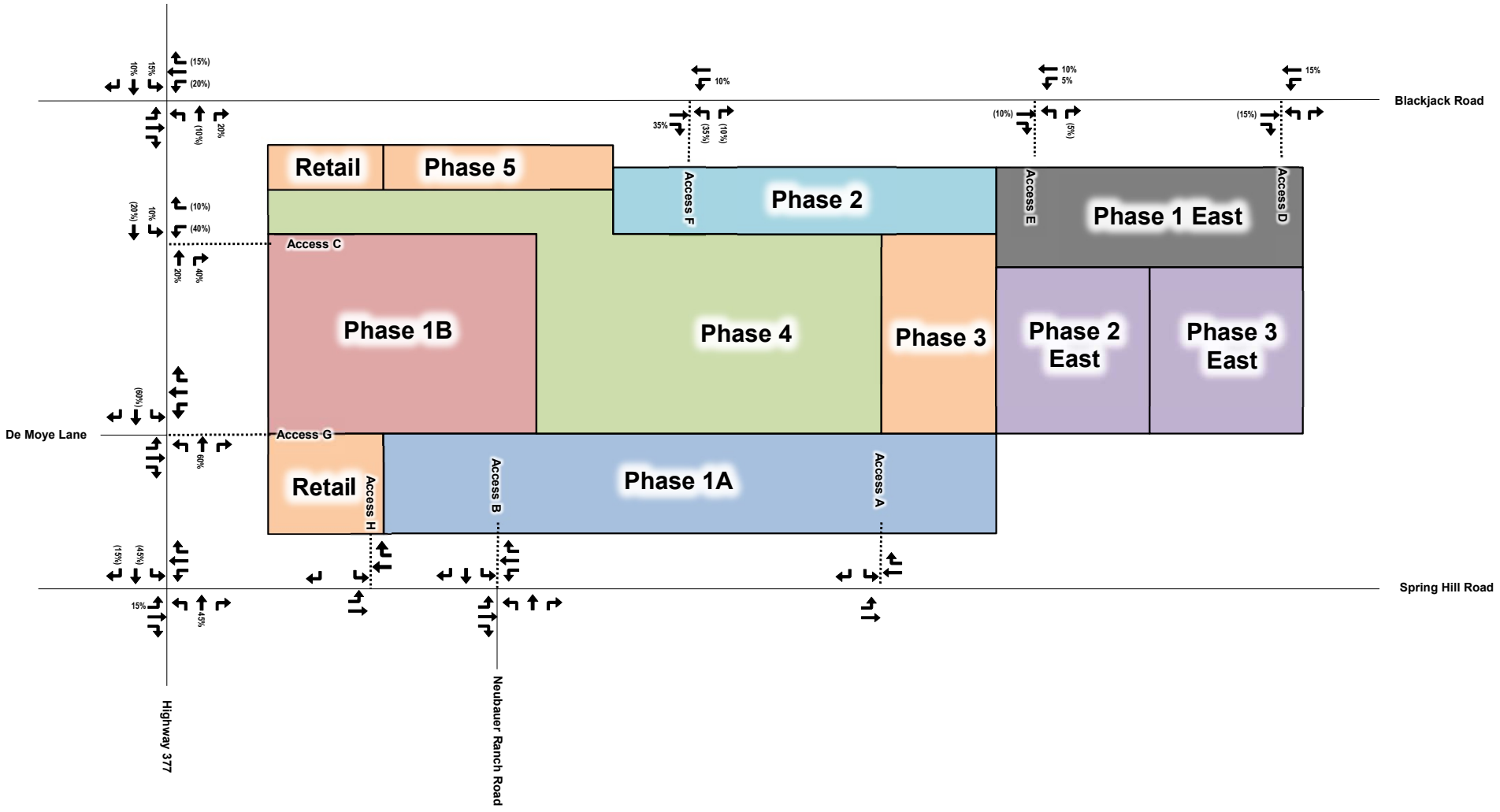


EXHIBIT A8

Trip Distribution and Traffic Assignment: Phase 3 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North

Not To Scale

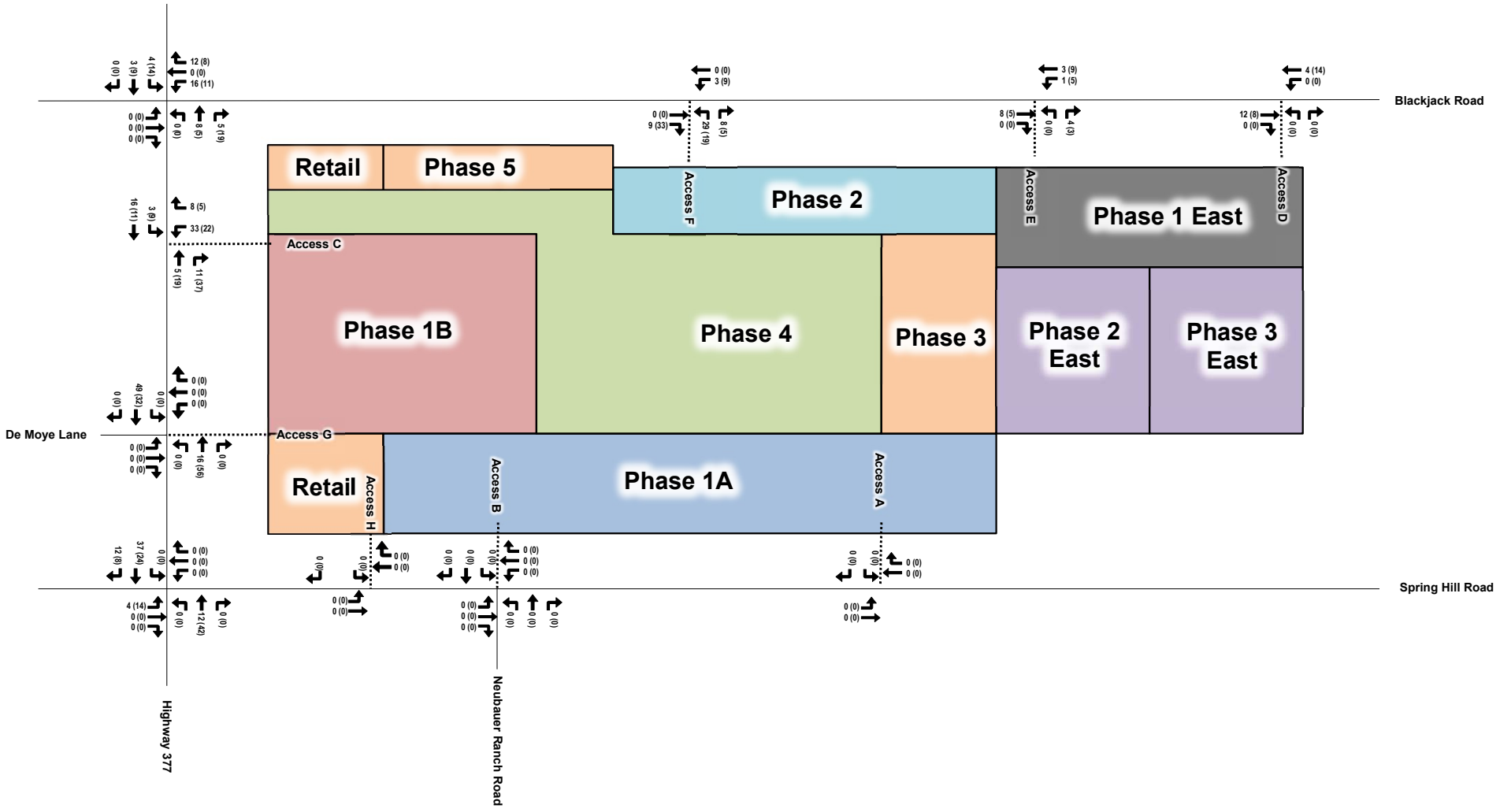


EXHIBIT A9

Site-Generated Traffic Volumes: Phase 3 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

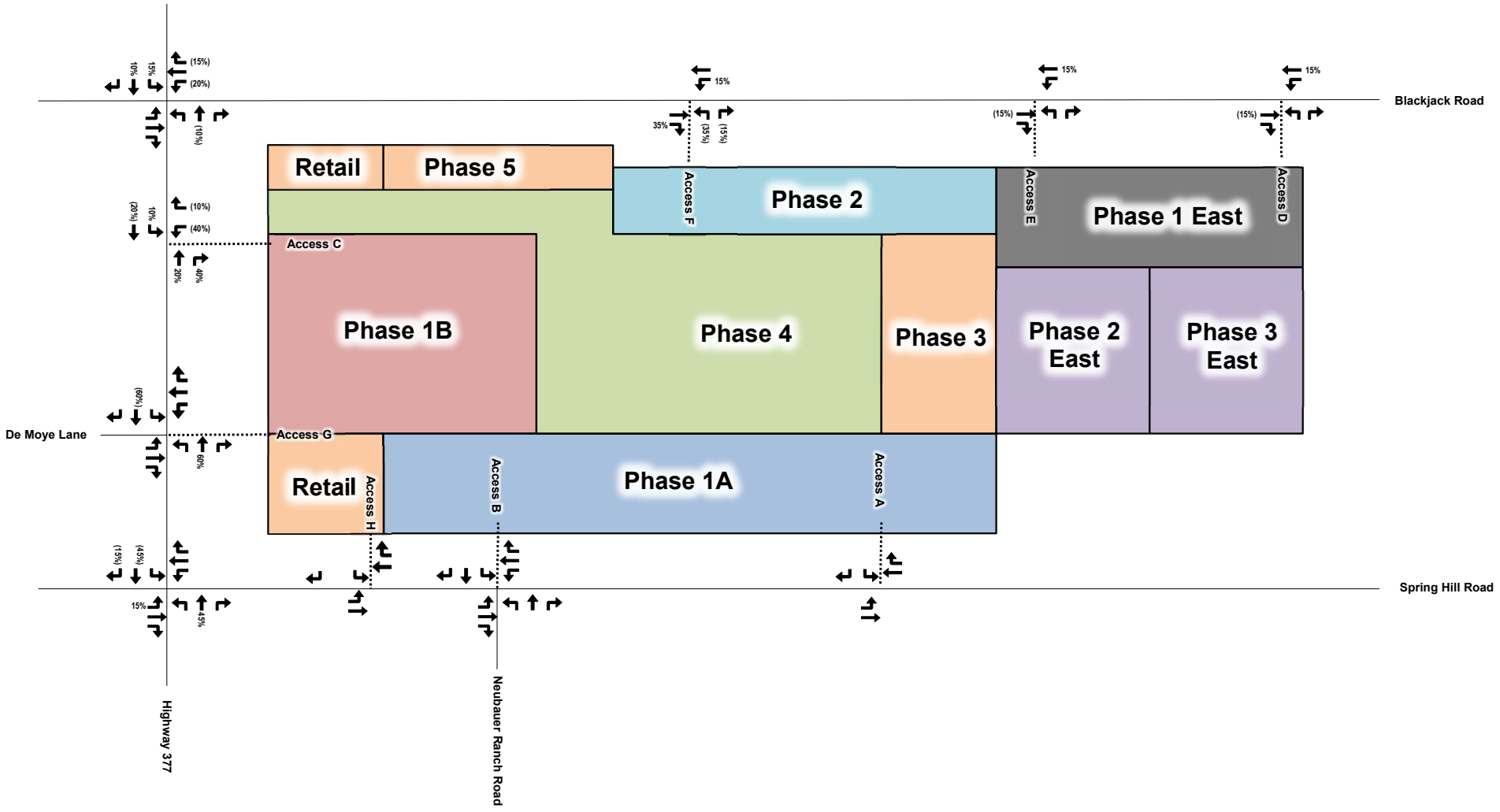


EXHIBIT A10

Trip Distribution and Traffic Assignment: Phase 4 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North

Not To Scale

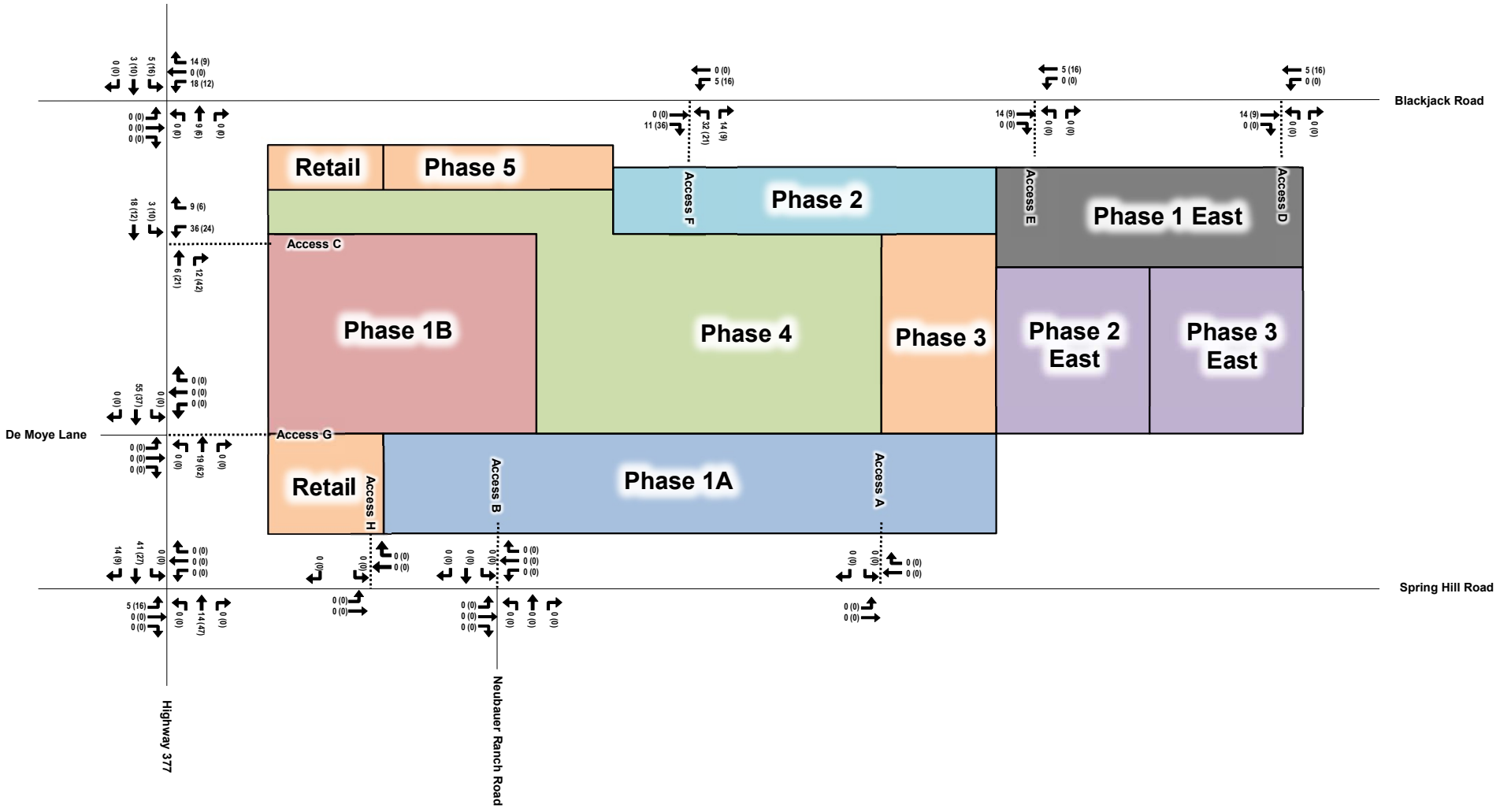


EXHIBIT A11

Site-Generated Traffic Volumes: Phase 4 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

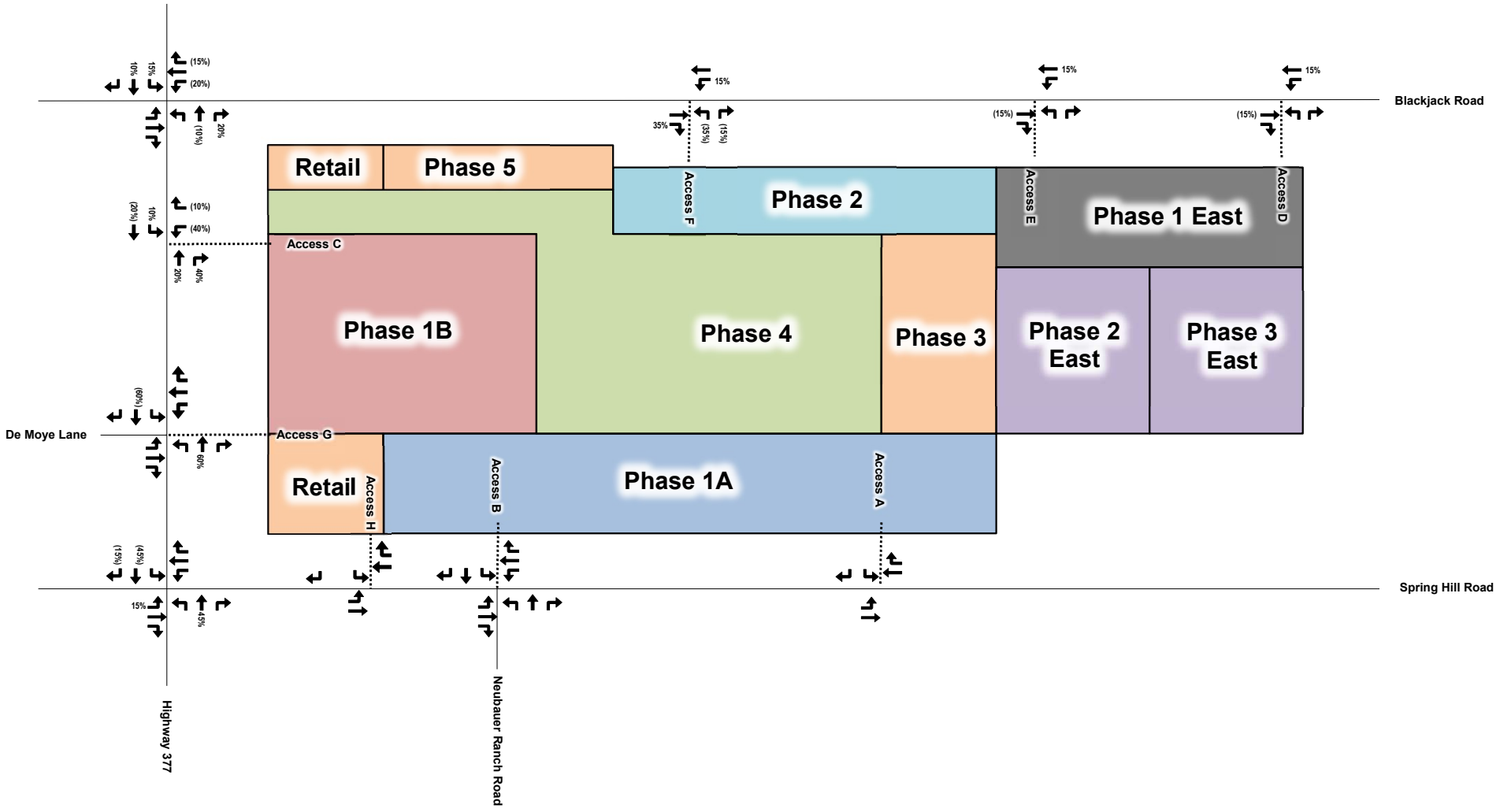


EXHIBIT A12

Trip Distribution and Traffic Assignment: Phase 5 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North

Not To Scale

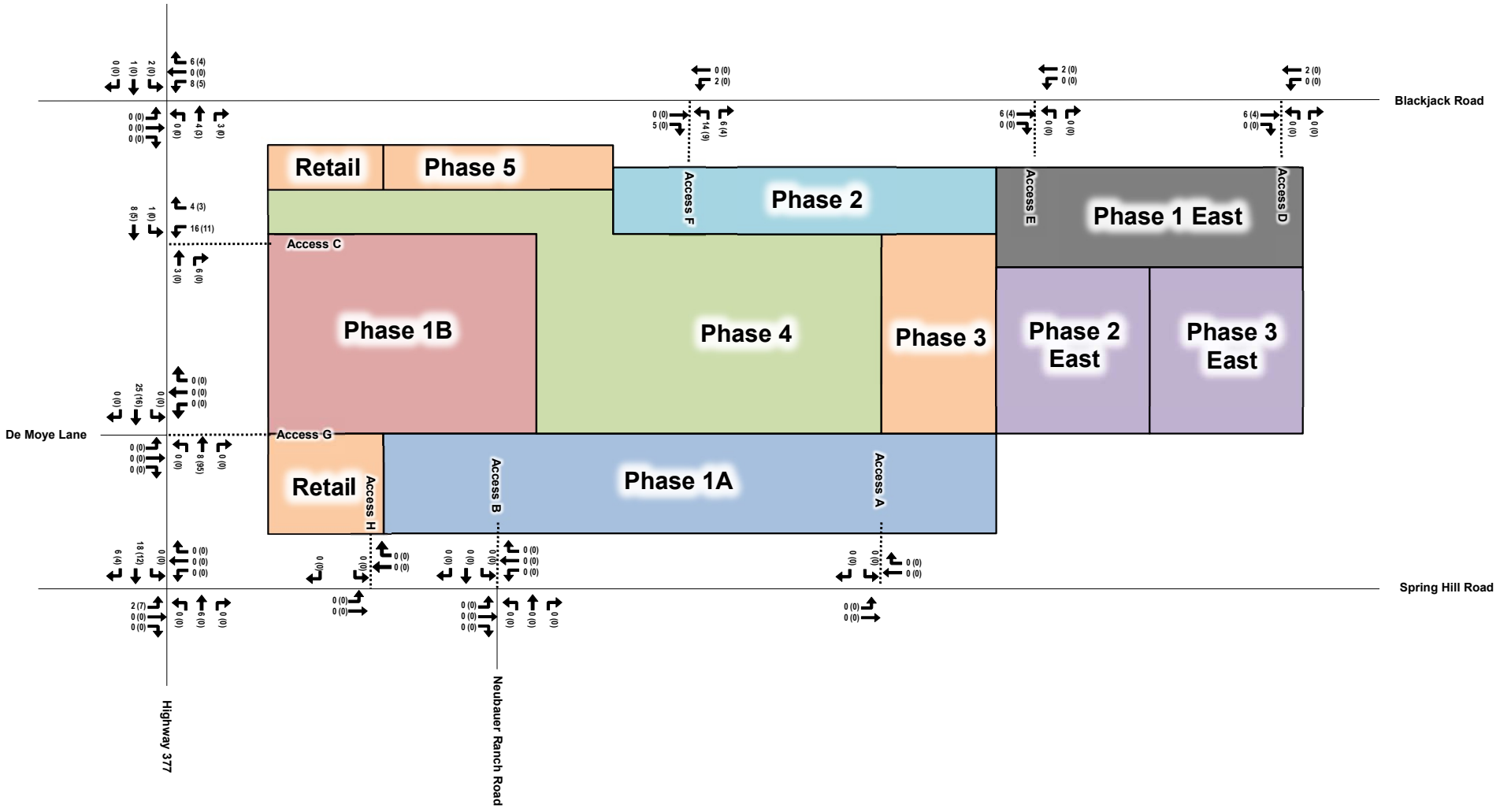


EXHIBIT A13

Site-Generated Traffic Volumes: Phase 5 West

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

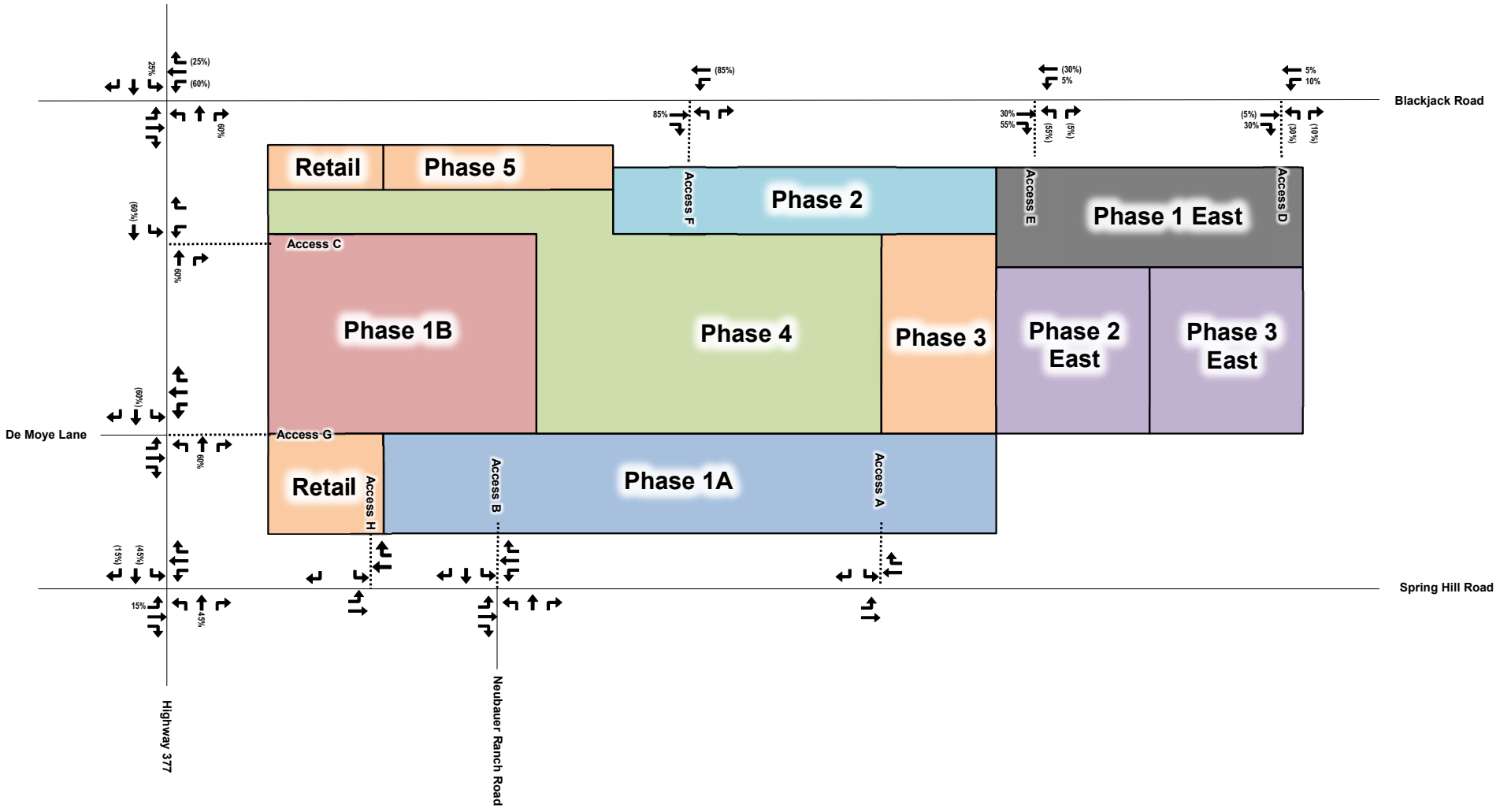


EXHIBIT A14

Trip Distribution and Traffic Assignment: Phase 1 East

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North

Not To Scale

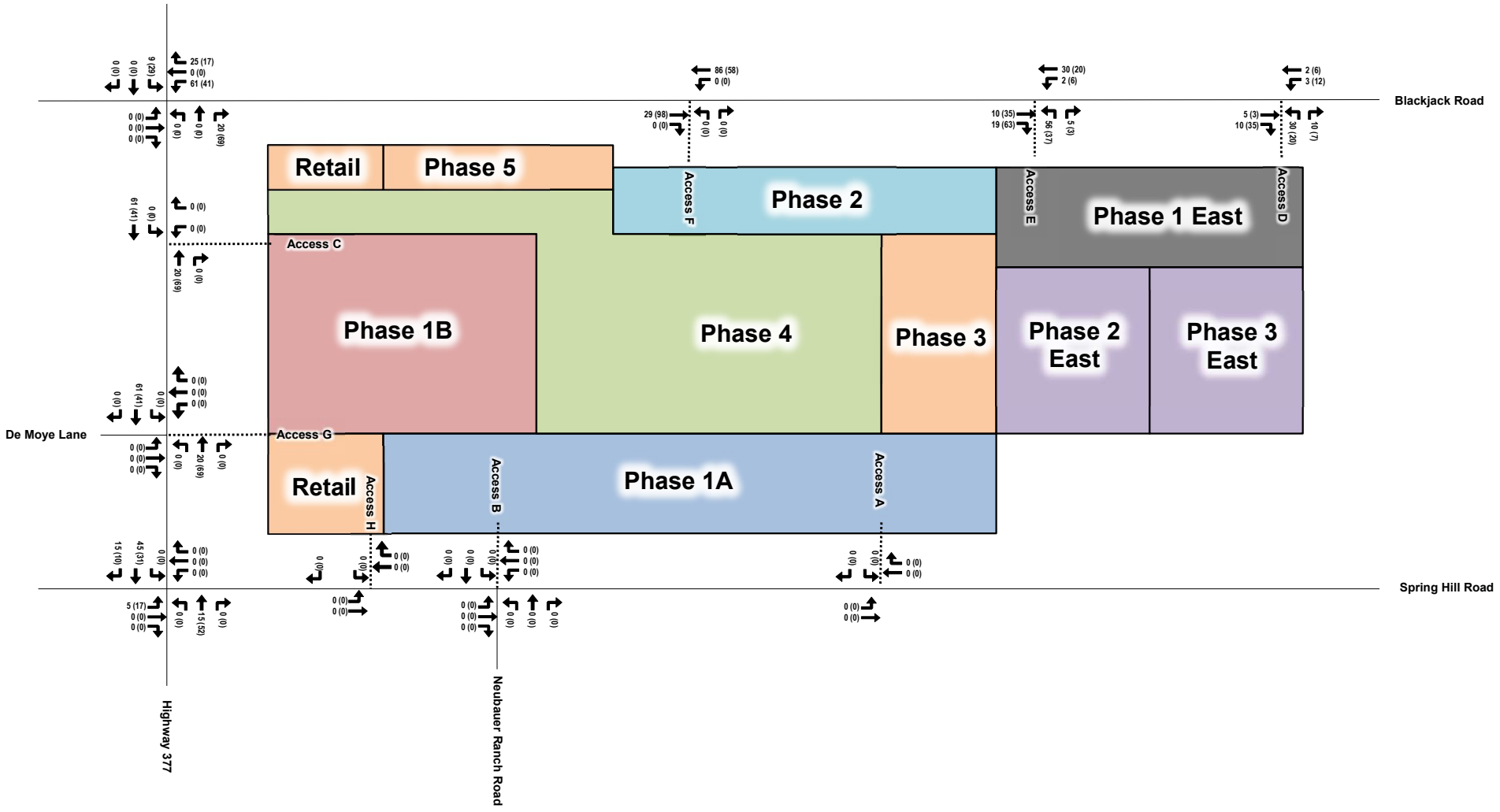


EXHIBIT A15

Site-Generated Traffic Volumes: Phase 1 East

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

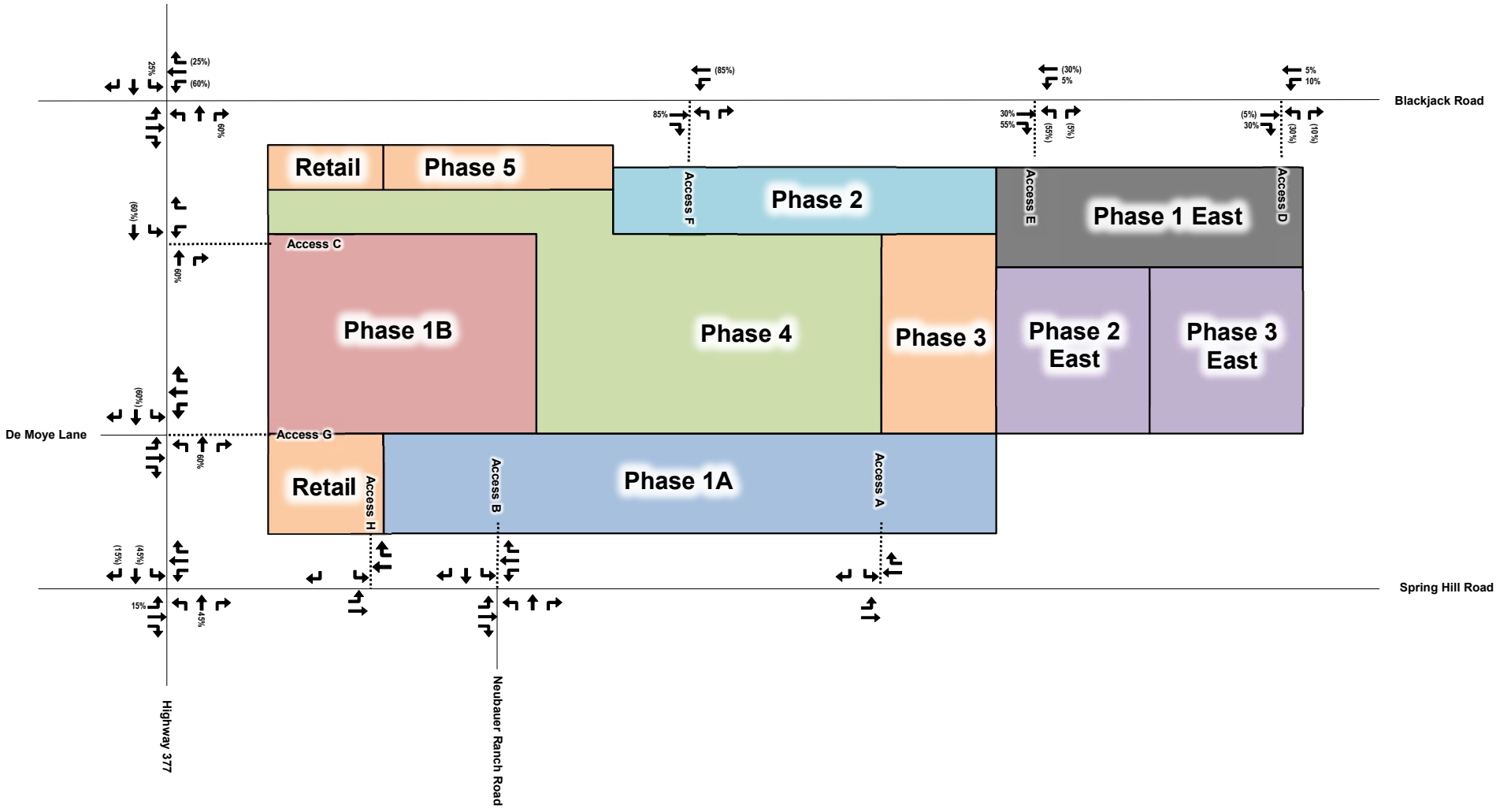


EXHIBIT A16

Trip Distribution and Traffic Assignment: Phase 2 East

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North
Not To Scale

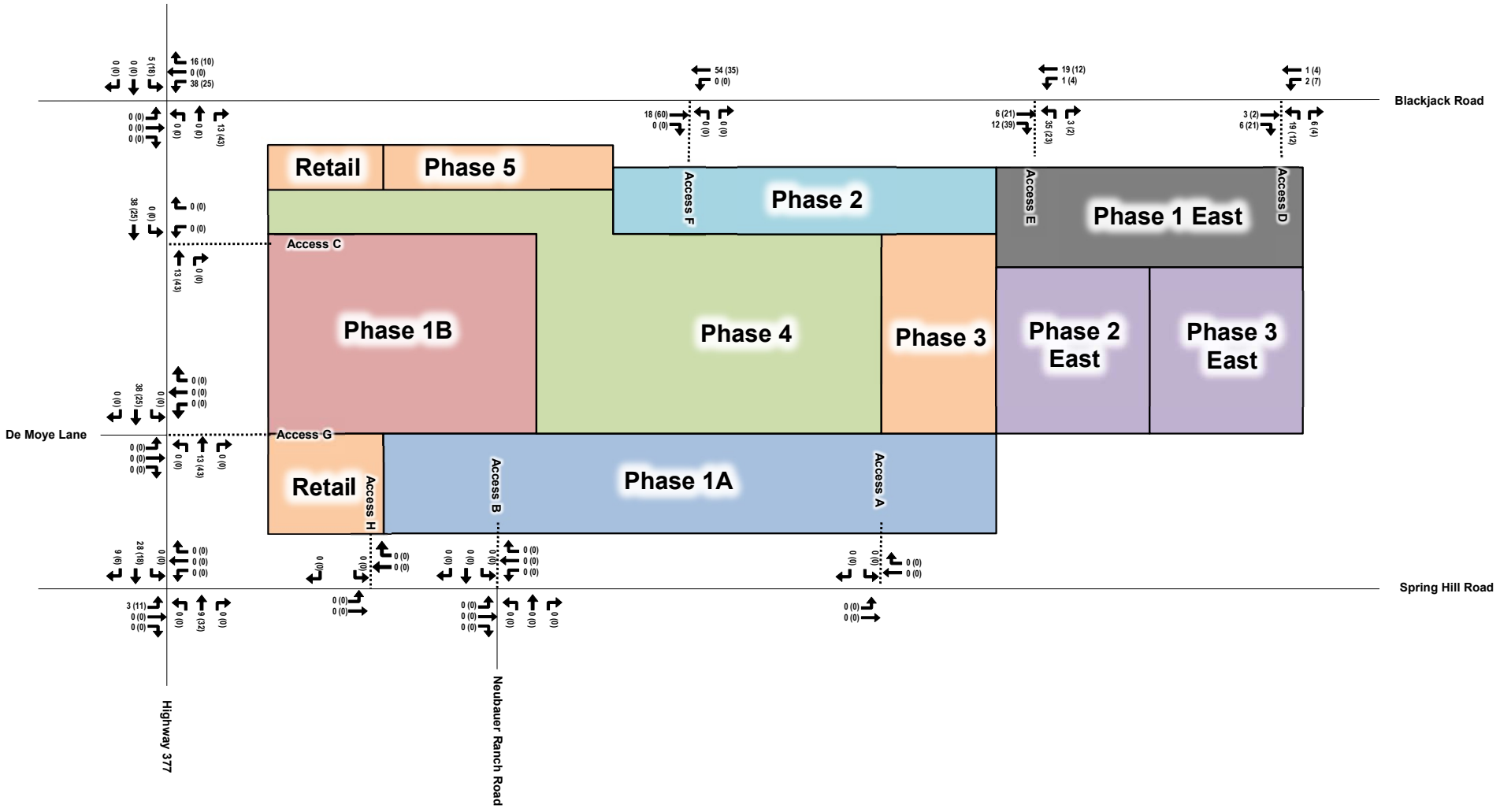


EXHIBIT A17

Site-Generated Traffic Volumes: Phase 2 East

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

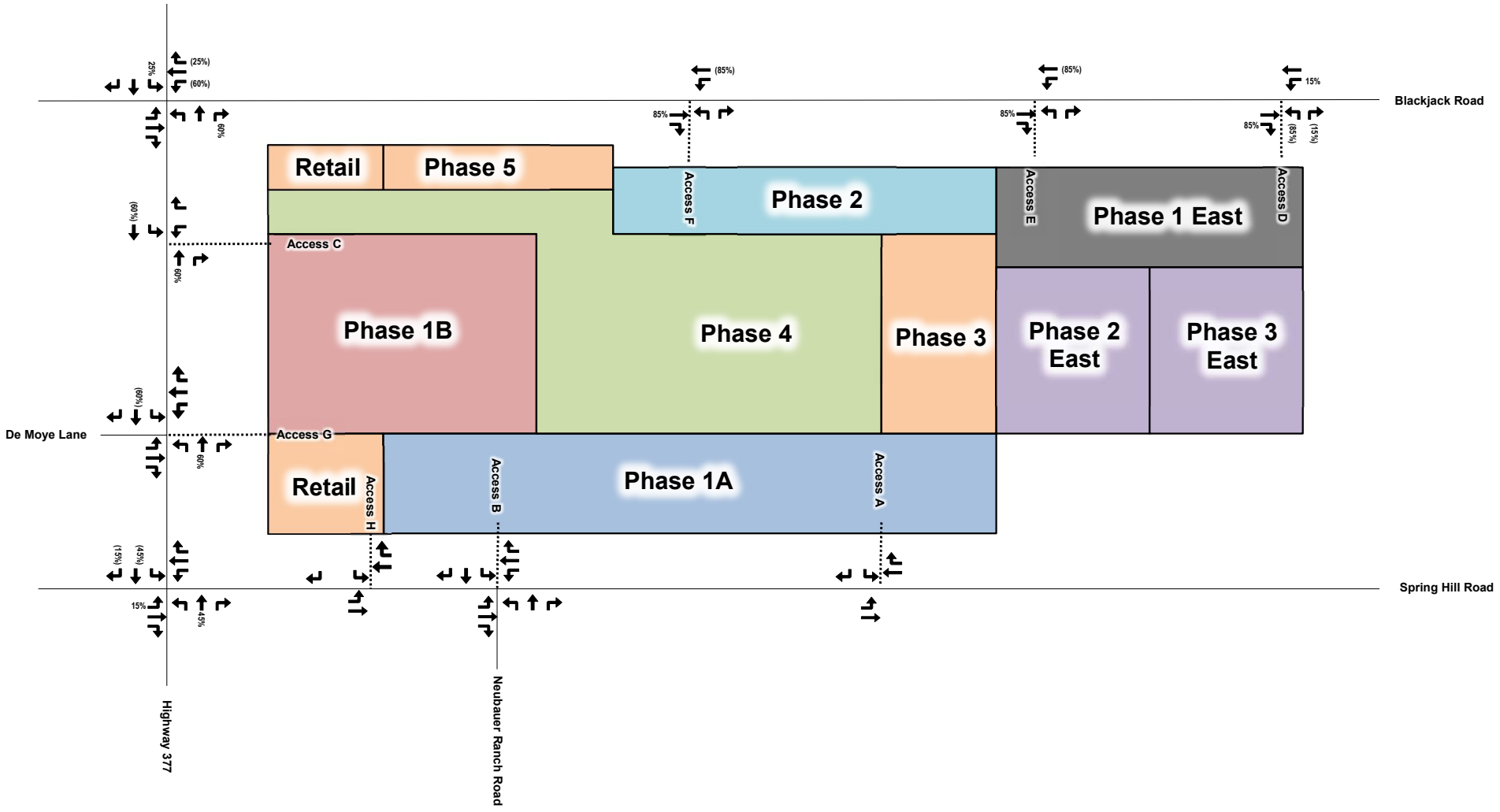


EXHIBIT A18

Trip Distribution and Traffic Assignment: Phase 3 East

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North
Not To Scale

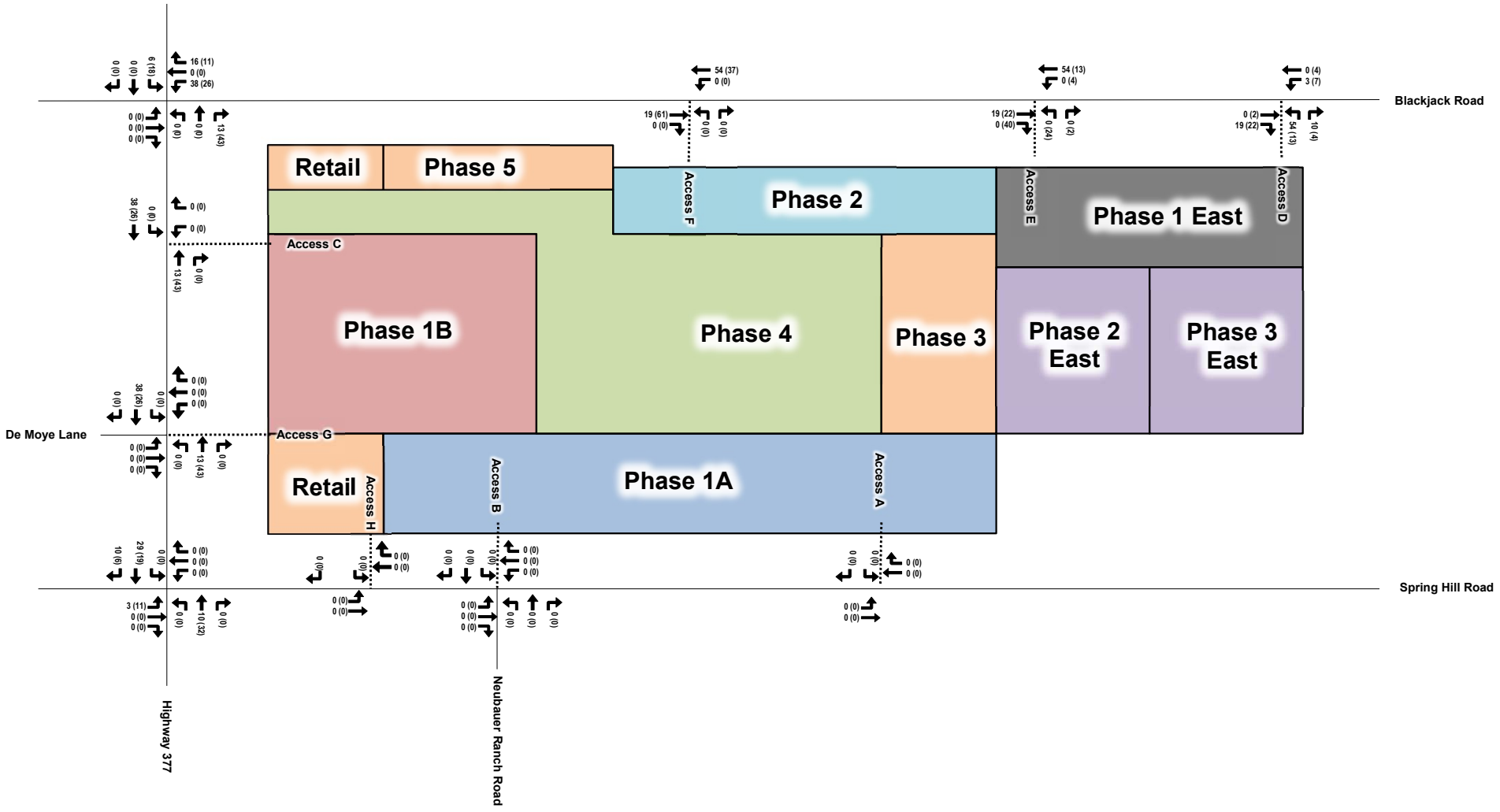


EXHIBIT A19

Site-Generated Traffic Volumes: Phase 3 East

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

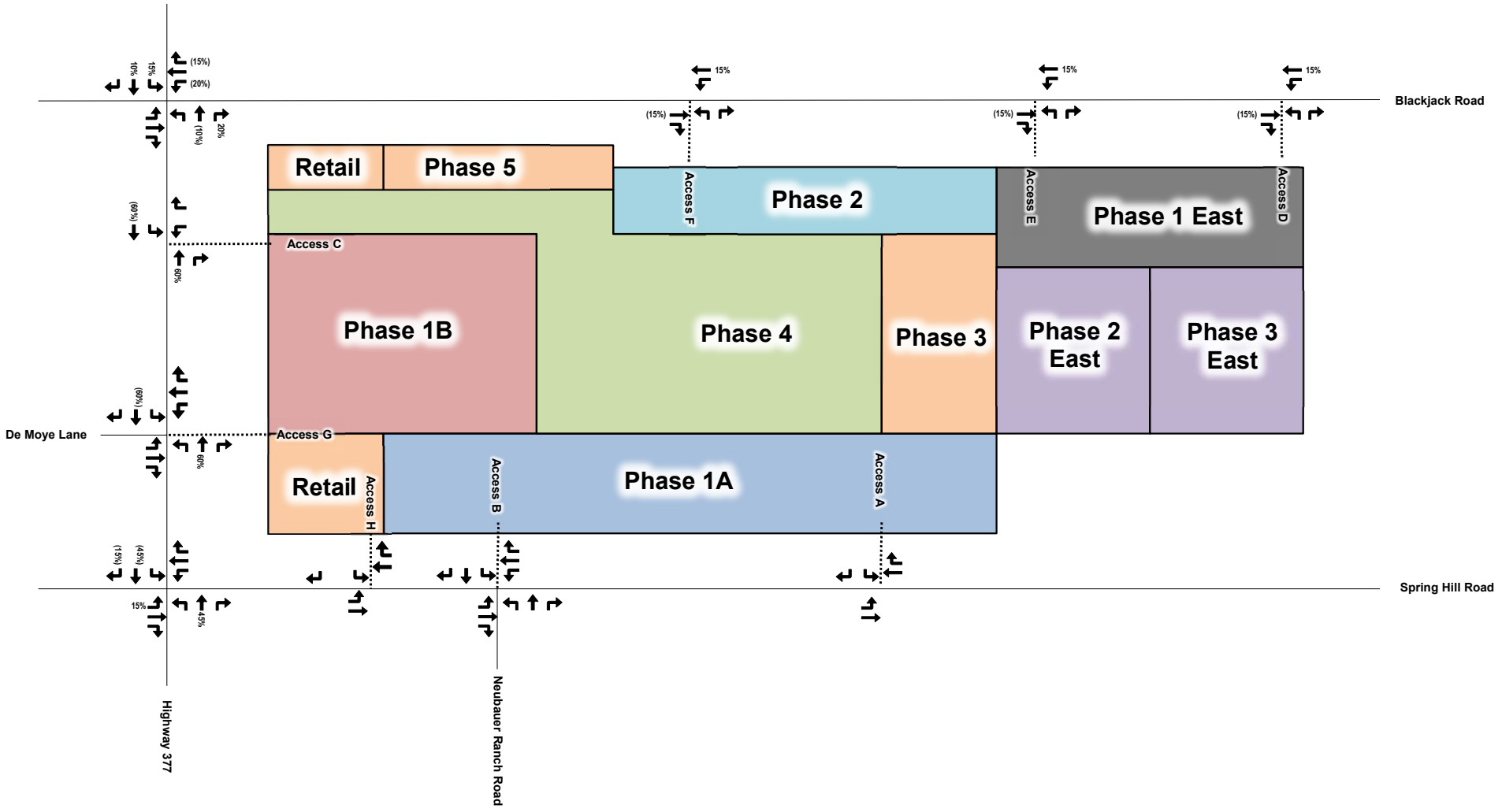


EXHIBIT A20

Trip Distribution and Traffic Assignment: NW Retail

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North
Not To Scale

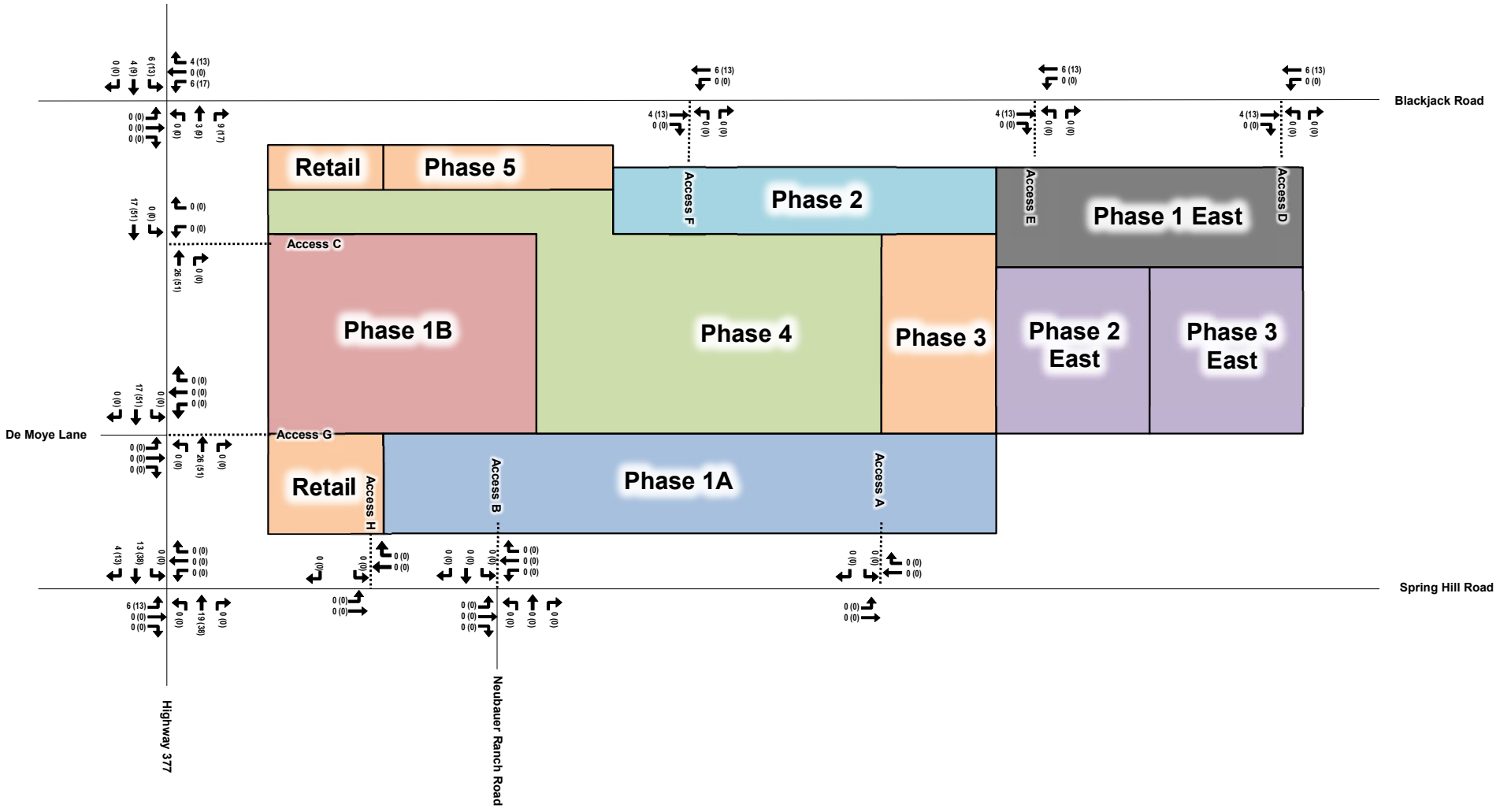


EXHIBIT A21

Site-Generated Traffic Volumes: NW Retail

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

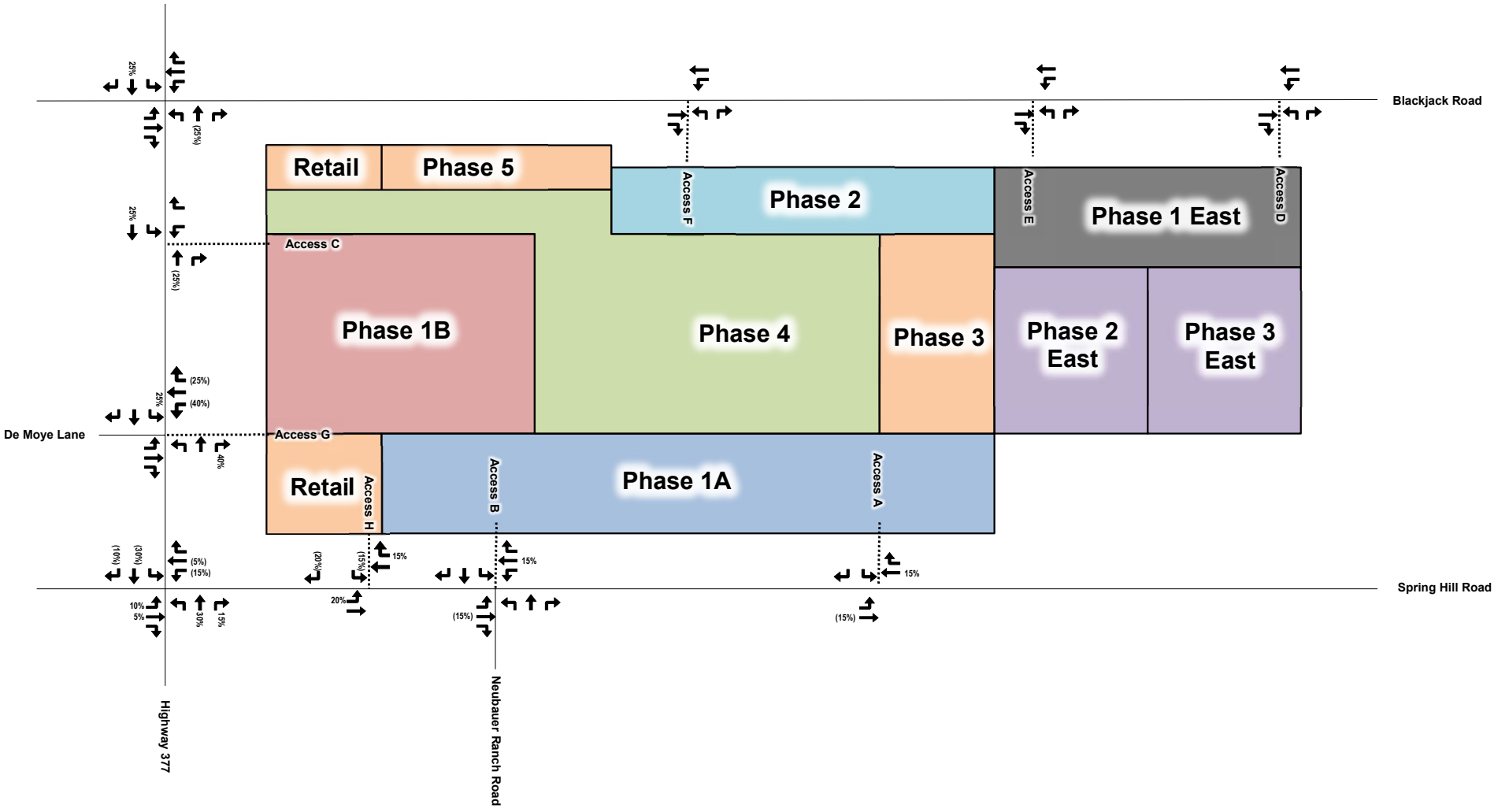


EXHIBIT A22

Trip Distribution and Traffic Assignment: SW Retail

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X% (Y%)
X% = Percentage of Inbound Site-Generated Traffic
(Y%) = Percentage of Outbound Site-Generated Traffic

North
Not To Scale

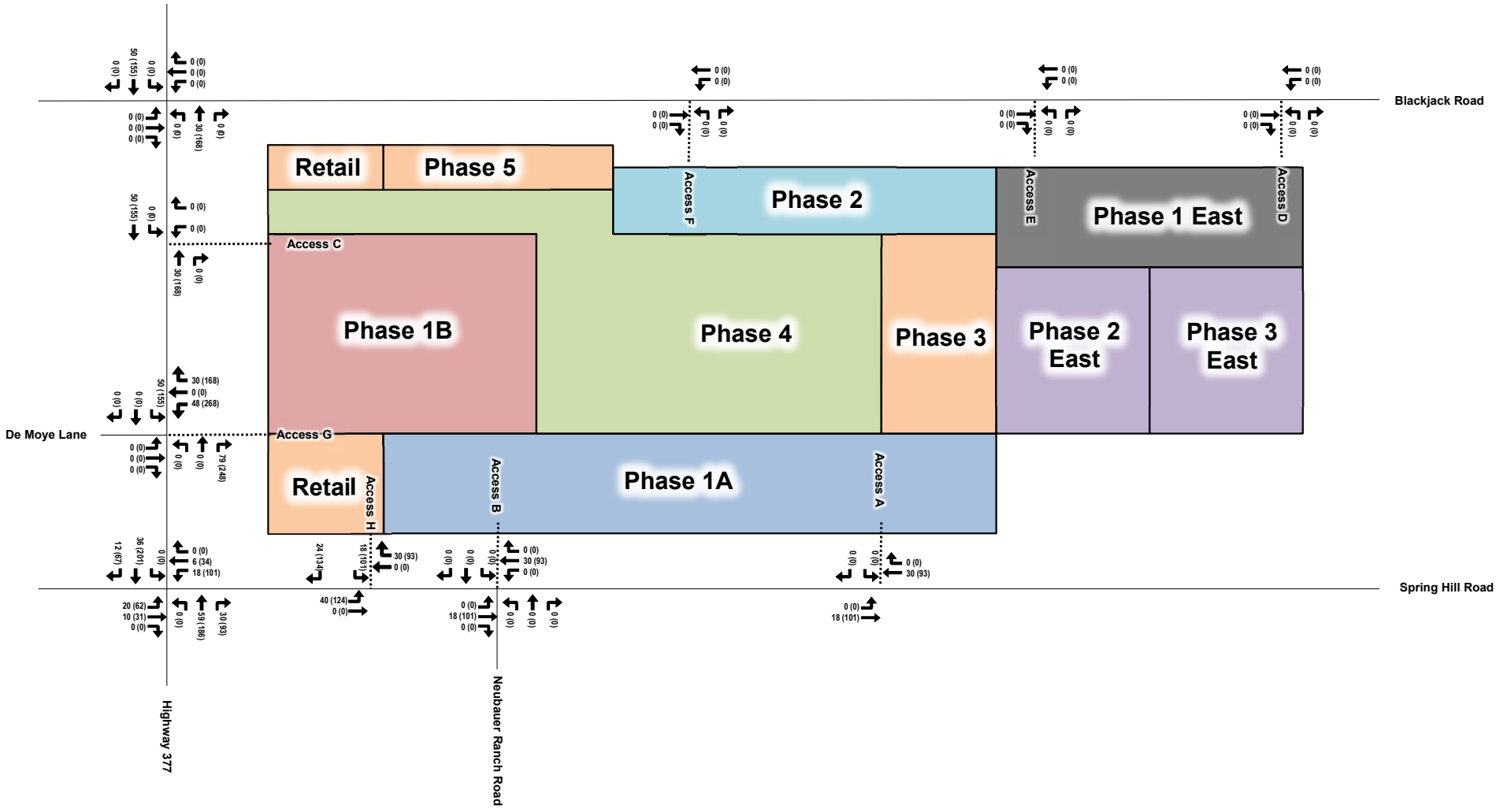


EXHIBIT A23

Site-Generated Traffic Volumes: SW Retail

High Pointe Ranch - Aubrey, Texas

Kimley»Horn

LEGEND:
X (Y)
X = Weekday AM Peak Hour Turning Movements
Y = Weekday PM Peak Hour Turning Movements
Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.

North

Not To Scale

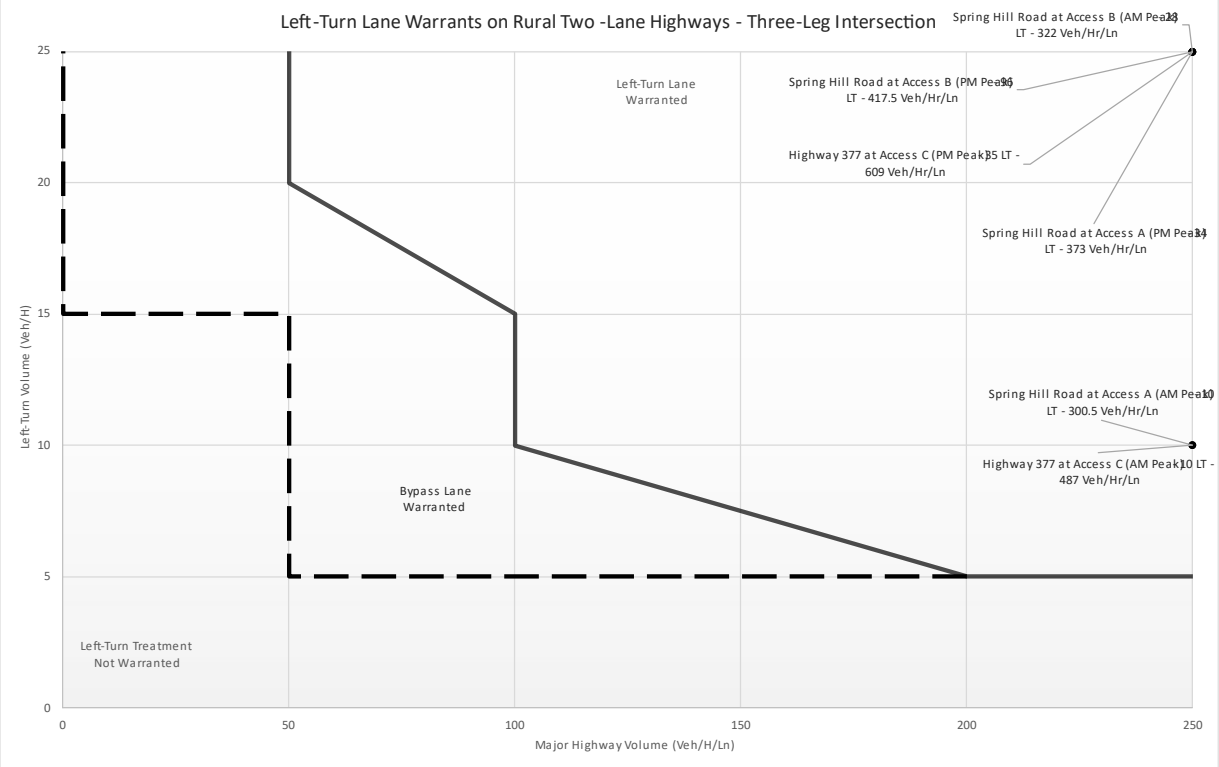
Kimley»Horn

LEFT-TURN LANE ANALYSIS WORKSHEETS

Kimley»Horn

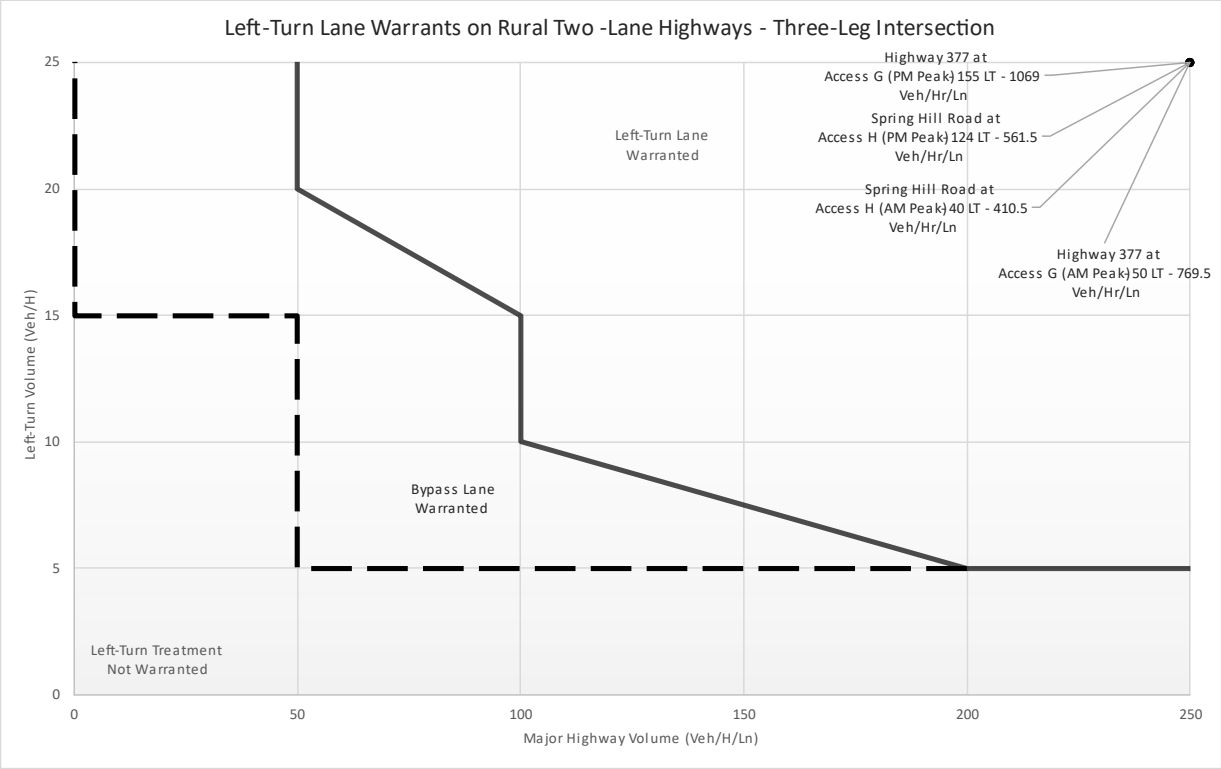
2025 Buildout Left-Turn Lane Analysis

Site Criteria	Spring Hill Road at Access A		Spring Hill Road at Access B		Highway 377 at Access C	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Major-Road Peak-Hour Volume	601	746	644	835	974	1218
Major-Road Veh/Hr/Ln	301	373	322	418	487	609
LT Volume	10	34	28	96	10	35
Three Leg Intersection?	Yes	Yes	No	No	Yes	Yes
Bypass Exceeded?	Yes	Yes	Yes	Yes	Yes	Yes
LT Exceeded?	Yes	Yes	Yes	Yes	Yes	Yes



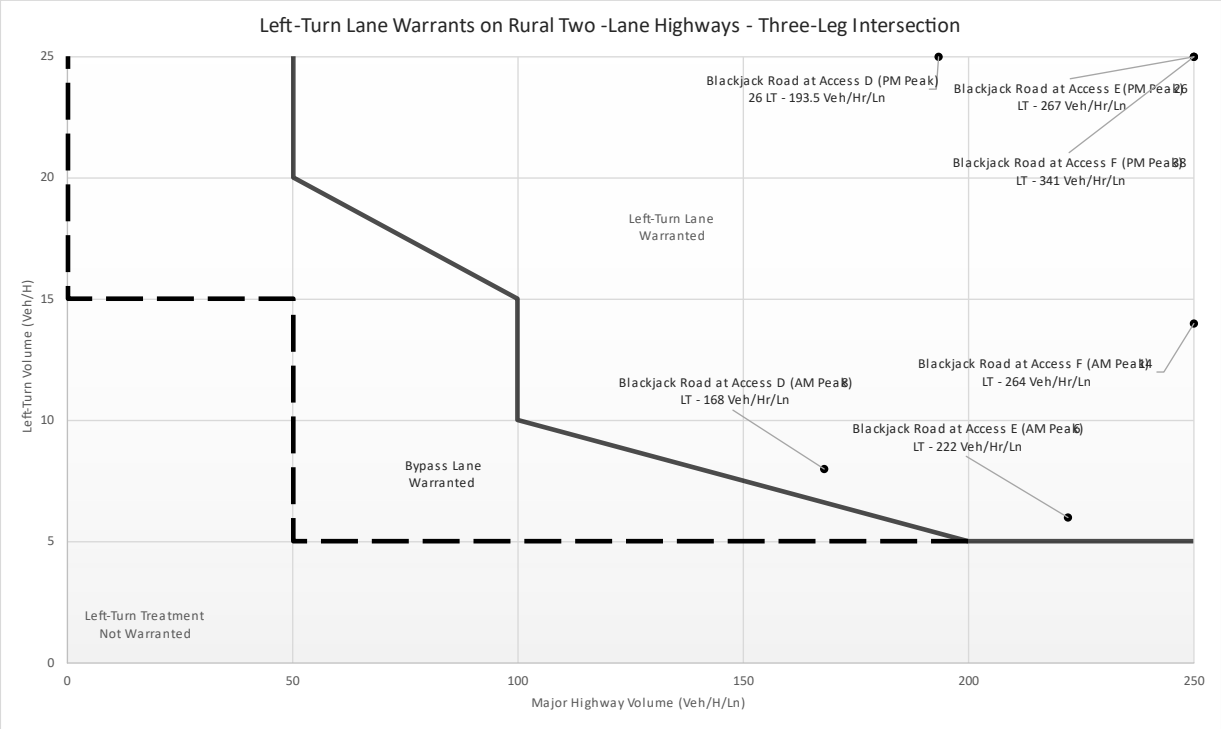
2026 Buildout Left-Turn Lane Analysis

Site Criteria	Highway 377 at Access G		Spring Hill Road at Access H	
	AM Peak	PM Peak	AM Peak	PM Peak
Major-Road Peak-Hour Volume	1539	2138	821	1123
Major-Road Veh/Hr/Ln	770	1069	411	562
LT Volume	50	155	40	124
Three Leg Intersection?	No	No	Yes	Yes
LT Exceeded?	Yes	Yes	Yes	Yes



2028 Buildout Left-Turn Lane Analysis

Site Criteria	Blackjack Road at Access D		Blackjack Road at Access E		Blackjack Road at Access F	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Major-Road Peak-Hour Volume	336	387	444	534	528	682
Major-Road Veh/Hr/Ln	168	194	222	267	264	341
LT Volume	8	26	6	26	14	38
Three Leg Intersection?	Yes	Yes	Yes	Yes	Yes	Yes
Bypass Exceeded?	Yes	Yes	Yes	Yes	Yes	Yes
LT Exceeded?	Yes	Yes	Yes	Yes	Yes	Yes



TRAFFIC SIGNAL WARRANT ANALYSIS
US 377 AT BLACKJACK ROAD

US 377 at Blackjack Road

Signal Warrant Volumes
Buildout (2028)

Scenario:	Buildout	Major:	US 377	Minor:	Blackjack Road	N	ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
Existing Year:	2022	Direction:	NB SB	Direction	EB WB	Y	85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):
Study Year:	2028	# of Lanes:	4	# of Lanes:	3		
Growth %	3%						
City:	Aubrey						

Input

	Eastbound					Westbound					Northbound					Southbound				
Hour Start	Existing Volumes	2028 Grown Volumes	Background Site Traffic	Site Traffic	**Total Eastbound Volumes**	Existing Volumes	2028 Grown Volumes	Background Site Traffic	Site Traffic	**Total Westbound Volumes**	Existing Volumes	2028 Grown Volumes	Background Site Traffic	Site Traffic	**Total Northbound Volumes**	Existing Volumes	2028 Grown Volumes	Background Site Traffic	Site Traffic	**Total Southbound Volumes**
6:00 - 7:00 AM	4	5	0	0	**5**	26	31	0	84	**115**	229	273	0	63	**336**	403	481	0	34	**515**
7:00 - 8:00 AM	9	11	0	0	**11**	53	63	0	147	**211**	424	506	23	122	**651**	476	568	8	75	**651**
8:00 - 9:00 AM	7	8	0	0	**8**	42	50	0	133	**184**	388	463	0	135	**598**	436	521	0	105	**626**
9:00 - 10:00 AM	6	7	0	0	**7**	31	37	0	98	**135**	326	389	0	139	**528**	354	423	0	138	**561**
10:00 - 11:00 AM	7	8	0	0	**8**	39	47	0	97	**144**	328	392	0	184	**576**	379	453	0	186	**638**
11:00 - 12:00 PM	7	8	0	0	**8**	42	50	0	90	**140**	325	388	0	227	**615**	413	493	0	225	**718**
12:00 - 1:00 PM	11	13	0	0	**13**	60	72	0	98	**170**	363	433	0	261	**695**	398	475	0	249	**725**
1:00 - 2:00 PM	7	8	0	0	**8**	39	47	0	105	**151**	379	453	0	271	**724**	390	466	0	239	**704**
2:00 - 3:00 PM	8	10	0	0	**10**	45	54	0	104	**158**	415	496	0	273	**768**	362	432	0	234	**666**
3:00 - 4:00 PM	8	10	0	0	**10**	48	57	0	109	**167**	483	577	0	288	**865**	339	405	0	259	**664**
4:00 - 5:00 PM	11	13	0	0	**13**	60	72	0	127	**199**	528	630	0	319	**949**	431	515	0	290	**805**
5:00 - 6:00 PM	11	13	0	0	**13**	62	74	0	126	**200**	567	677	16	316	**1009**	466	556	26	287	**870**
6:00 - 7:00 PM	8	10	0	0	**10**	44	53	0	106	**158**	420	502	0	274	**776**	376	449	0	251	**700**
7:00 - 8:00 PM	4	5	0	0	**5**	24	29	0	84	**113**	265	316	0	227	**543**	282	337	0	203	**540**
8:00 - 9:00 PM	3	4	0	0	**4**	16	19	0	68	**87**	234	279	0	209	**488**	246	294	0	164	**458**
9:00 - 10:00 PM	2	2	0	0	**2**	9	11	0	52	**62**	145	173	0	153	**327**	118	141	0	98	**239**

Hourly variation from ITE *Trip Generation, 11th Edition*

Code	210			822			820		
Land Use	Single-Family Detached Housing			Strip Retail Plaza			Shopping Center (>150k)		
Time	Total	Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting
6:00 - 7:00 AM	3.7%	1.6%	5.8%	0.5%	0.5%	0.5%	0.7%	0.9%	0.5%
7:00 - 8:00 AM	6.5%	3.1%	10.0%	2.2%	2.2%	2.2%	1.6%	1.9%	1.2%
8:00 - 9:00 AM	6.2%	3.8%	8.5%	4.5%	4.5%	4.5%	2.4%	2.9%	1.8%
9:00 - 10:00 AM	4.6%	3.3%	5.8%	5.8%	5.8%	5.8%	4.0%	4.9%	3.2%
10:00 - 11:00 AM	4.9%	4.2%	5.6%	6.5%	6.5%	6.5%	6.1%	7.0%	5.3%
11:00 - 12:00 PM	5.3%	5.4%	5.1%	6.3%	6.3%	6.3%	7.9%	8.5%	7.3%
12:00 - 1:00 PM	5.7%	5.7%	5.7%	6.1%	6.1%	6.1%	9.2%	9.6%	8.9%
1:00 - 2:00 PM	6.1%	6.1%	6.0%	6.9%	6.9%	6.9%	8.8%	8.7%	9.0%
2:00 - 3:00 PM	6.6%	7.1%	6.1%	6.1%	6.1%	6.1%	8.2%	7.8%	8.6%
3:00 - 4:00 PM	7.5%	8.7%	6.2%	7.4%	7.4%	7.4%	8.3%	8.1%	8.5%
4:00 - 5:00 PM	8.9%	10.5%	7.4%	8.0%	8.0%	8.0%	8.7%	8.6%	8.7%
5:00 - 6:00 PM	8.7%	10.0%	7.3%	8.0%	8.0%	8.0%	8.8%	8.7%	8.9%
6:00 - 7:00 PM	7.2%	8.5%	5.9%	8.0%	8.0%	8.0%	7.7%	7.7%	7.8%
7:00 - 8:00 PM	5.1%	6.1%	4.2%	8.5%	8.5%	8.5%	6.8%	6.5%	7.0%
8:00 - 9:00 PM	4.6%	6.1%	3.1%	8.5%	8.5%	8.5%	5.3%	4.3%	6.3%
9:00 - 10:00 PM	3.3%	4.4%	2.3%	6.7%	6.7%	6.7%	3.3%	1.9%	4.6%

Site Generated Traffic

				Eastbound				Westbound				Northbound				Southbound			
New Land Use?	Input	Land-Use	Daily Trips	Entering	Exiting	Entering Trips	Exiting Trips	Entering	Exiting	Entering Trips	Exiting Trips	Entering	Exiting	Entering Trips	Exiting Trips	Entering	Exiting	Entering Trips	Exiting Trips
1	210	Single-Family Detached Housing	2128			0	0			0	0		25%	0	266	25%		266	0
1	210	Single-Family Detached Housing	1768			0	0			0	0		25%	0	221	25%		221	0
1	210	Single-Family Detached Housing	2128			0	0		35%	0	372	20%	10%	213	106	25%		266	0
1	210	Single-Family Detached Housing	1483			0	0		35%	0	260	20%	10%	148	74	25%		185	0
1	210	Single-Family Detached Housing	1839			0	0		85%	0	782	60%		552	0	25%		230	0
2	822	Strip Retail Plaza	1634			0	0		35%	0	286	20%	10%	163	82	25%		204	0
3	820	Shopping Center (>150k)	14088			0	0			0	0		25%	0	1761	25%		1761	0
						0	0			0	0			0	0			0	0

Background Traffic

				Eastbound				Westbound				Northbound				Southbound			
New Land Use?	Input	Land-Use	Daily Trips	Entering	Exiting	Entering Trips	Exiting Trips	Entering	Exiting	Entering Trips	Exiting Trips	Entering	Exiting	Entering Trips	Exiting Trips	Entering	Exiting	Entering Trips	Exiting Trips
						0	0			0	0			0	0			0	0
						0	0			0	0			0	0			0	0
						0	0			0	0			0	0			0	0
						0	0			0	0			0	0			0	0
						0	0			0	0			0	0			0	0
						0	0			0	0			0	0			0	0
						0	0			0	0			0	0			0	0
						0	0			0	0			0	0			0	0

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET:	US 377	NB	SB	# OF APPROACH LANES:	4
MINOR STREET:	Blackjack Road	EB	WB	# OF APPROACH LANES:	3
CITY, STATE:	Aubrey, TX				
COMMENTS:	Buildout (2028)				

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	US 377			Blackjack Road		
	NB Approach	SB Approach	Total	EB Approach	WB Approach	Minor Street Heavy Leg
6:00 - 7:00 AM	336	515	851	5	115	115
7:00 - 8:00 AM	651	651	1302	11	211	211
8:00 - 9:00 AM	598	626	1224	8	184	184
9:00 - 10:00 AM	528	561	1089	7	135	135
10:00 - 11:00 AM	576	638	1214	8	144	144
11:00 - 12:00 PM	615	718	1333	8	140	140
12:00 - 1:00 PM	695	725	1420	13	170	170
1:00 - 2:00 PM	724	704	1428	8	151	151
2:00 - 3:00 PM	768	666	1434	10	158	158
3:00 - 4:00 PM	865	664	1529	10	167	167
4:00 - 5:00 PM	949	805	1754	13	199	199
5:00 - 6:00 PM	1009	870	1879	13	200	200
6:00 - 7:00 PM	776	700	1476	10	158	158
7:00 - 8:00 PM	543	540	1083	5	113	113
8:00 - 9:00 PM	488	458	946	4	87	87
9:00 - 10:00 PM	327	239	566	2	62	62

Warrant	Description	Warrant Met?
1	Eight-Hour Volume	WARRANT MET
2	Four-Hour Volume	WARRANT MET
3	Peak Hour Volume	WARRANT MET
4	Pedestrian Volume	N/A
5	School Crossing	N/A
6	Coordinated Signal System	N/A
7	Crash Experience	N/A
8	Roadway Network	N/A
9	Intersection Near a Grade Crossing	N/A

11/21/24

Kimley-Horn and Associates, Inc.

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET: **US 377** NB SB # OF APPROACH LANES: **4**

MINOR STREET: **Blackjack Road** EB WB # OF APPROACH LANES: **3**

CITY, STATE: **Aubrey, TX**

COMMENTS: Buildout (2028)

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): **N**

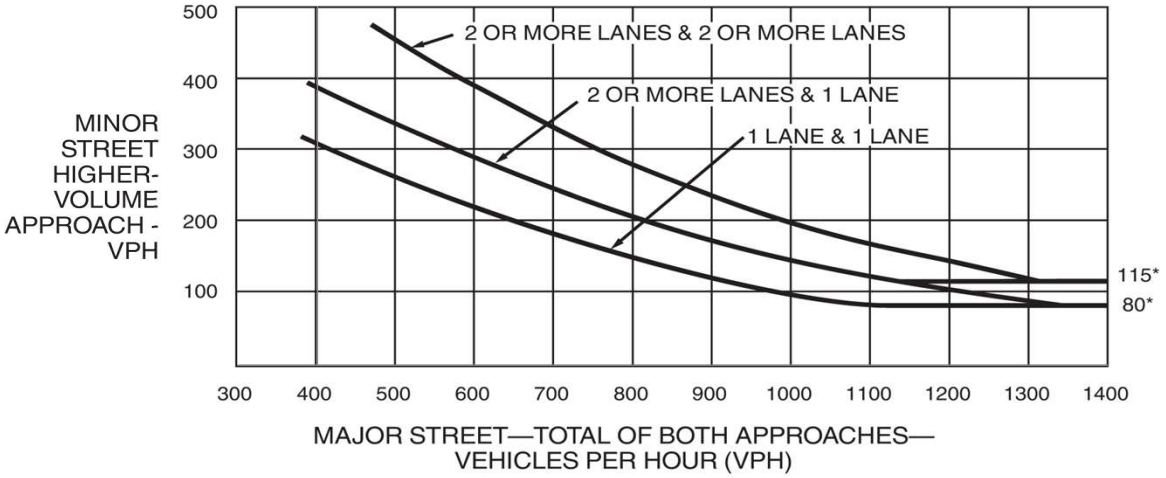
85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): **Y**

			MAJOR ST	MINOR ST	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2	WARRANT 3
			TWO-WAY TRAFFIC	TRAFFIC HEAVY LEG	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	Four-Hour	Peak Hour
THRESHOLD VALUES					**420**	**140**		**630**	**70**		**336**	**112**		**504**	**56**			
06:00 AM	TO	07:00 AM	851	115	Y			Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	
07:00 AM	TO	08:00 AM	1,302	211	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
08:00 AM	TO	09:00 AM	1,224	184	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
09:00 AM	TO	10:00 AM	1,089	135	Y			Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
10:00 AM	TO	11:00 AM	1,214	144	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
11:00 AM	TO	12:00 PM	1,333	140	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
12:00 PM	TO	01:00 PM	1,420	170	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
01:00 PM	TO	02:00 PM	1,428	151	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
02:00 PM	TO	03:00 PM	1,434	158	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
03:00 PM	TO	04:00 PM	1,529	167	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
04:00 PM	TO	05:00 PM	1,754	199	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
05:00 PM	TO	06:00 PM	1,879	200	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
06:00 PM	TO	07:00 PM	1,476	158	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	**Y**
07:00 PM	TO	08:00 PM	1,083	113	Y			Y	Y	**Y**	Y	Y	**Y**	Y	Y	**Y**	**Y**	
08:00 PM	TO	09:00 PM	946	87	Y			Y	Y	**Y**	Y			Y	Y	**Y**	**Y**	
09:00 PM	TO	10:00 PM	566	62	Y						Y			Y	Y	**Y**		
			20,528	2,394	16	11	**11**	15	15	**15**	16	14	**14**	16	16	**16**	**15**	**12**
					8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
					SATISFIED			**SATISFIED**			**SATISFIED**						**SATISFIED**	**SATISFIED**

11/21/24

Kimley-Horn and Associates, Inc.

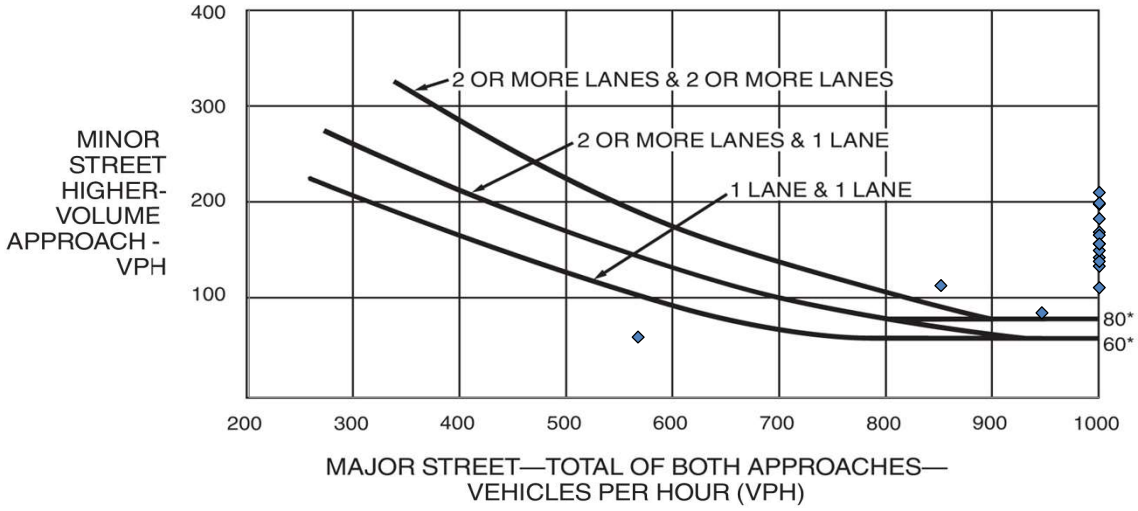
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

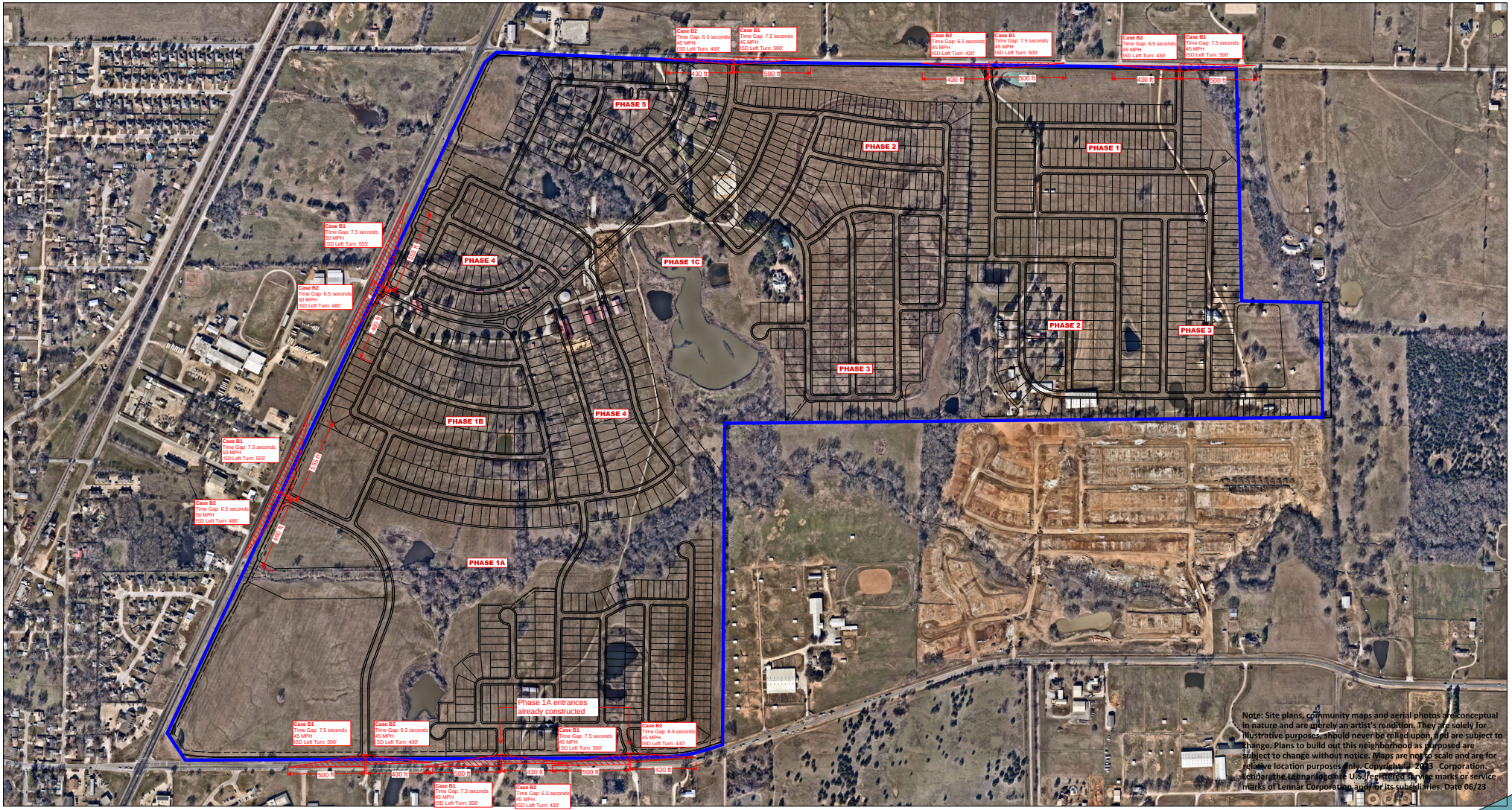
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

SIGHT DISTANCE EXHIBIT



Note: Site plans, community maps and aerial photos are conceptual in nature and are merely an artist's rendition. They are solely for illustrative purposes, should never be relied upon, and are subject to change. Plans to build out this neighborhood as proposed are subject to change without notice. Maps are not to scale and are for relative location purposes only. Copyright © 2023 Corporation. Lennar, the Lennar logo are U.S. registered service marks or service marks of Lennar Corporation and/or its subsidiaries. Date 06/23

HIGHPOINTE RANCH

SIGHT DISTANCE EXHIBIT

GRAPHIC SCALE IN FEET
0 150 300 600
1"=300' @ 22x34

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034
972-335-3580
State of Texas Registration No. F-928

DWG NAME: I:\FRISCO\063451001\HIGH POINTE RANCH\CADD\SHEETS\SIGHT SHEETS\20241107 PHASE MAP OPT 1.DWG
LAST SAVED: 11/7/2024 4:07 PM

Kimley»Horn

Synchro™ Output – 2022 Existing Traffic

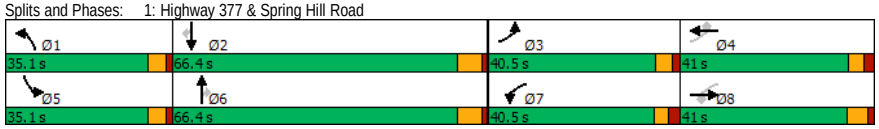
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	184	128	177	154	47	110	328	144	39	418	28
Future Volume (vph)	38	184	128	177	154	47	110	328	144	39	418	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.594			0.484			0.950			0.950		
Satd. Flow (perm)	1106	1863	1583	902	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	43	209	145	201	175	53	125	373	164	44	475	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	209	145	201	175	53	125	373	164	44	475	32
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	32.0	17.7	17.7	30.1	26.2	26.2	12.3	38.4	38.4	8.3	30.7	30.7
Actuated g/C Ratio	0.33	0.18	0.18	0.31	0.27	0.27	0.13	0.39	0.39	0.09	0.32	0.32
v/c Ratio	0.10	0.62	0.41	0.52	0.35	0.11	0.56	0.51	0.24	0.29	0.81	0.06
Control Delay	24.2	49.0	23.0	29.7	35.3	2.9	55.8	27.1	12.9	56.9	43.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	49.0	23.0	29.7	35.3	2.9	55.8	27.1	12.9	56.9	43.8	0.2
LOS	C	D	C	C	D	A	E	C	B	E	D	A
Approach Delay		36.8			28.7			29.0			42.3	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	16	113	31	82	87	0	70	169	32	25	251	0
Queue Length 95th (ft)	51	258	111	191	192	11	174	332	94	80	497	0
Internal Link Dist (ft)		671			2257			1260			1908	
Turn Bay Length (ft)	80		80	130		130	215		115	140		140
Base Capacity (vph)	733	724	666	723	746	684	590	1244	1083	590	1242	1082
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.29	0.22	0.28	0.23	0.08	0.21	0.30	0.15	0.07	0.38	0.03

Intersection Summary

Area Type: Other
Cycle Length: 183
Actuated Cycle Length: 97.4
Natural Cycle: 100
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 34.1 — Intersection LOS: C
Intersection Capacity Utilization 66.8% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	174	2	0	224	5	1
Future Volume (vph)	174	2	0	224	5	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.998				0.981	
Flt Protected					0.959	
Satd. Flow (prot)	1859	0	0	1863	1752	0
Flt Permitted					0.959	
Satd. Flow (perm)	1859	0	0	1863	1752	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	2337			1187	1301	
Travel Time (s)	35.4			14.7	35.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	223	3	0	287	6	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	226	0	0	287	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	2	0	224	5	1
Future Vol, veh/h	174	2	0	224	5	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	223	3	0	287	6	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	226	0	512	225
Stage 1	-	-	-	-	225	-
Stage 2	-	-	-	-	287	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1342	-	522	814
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1342	-	522	814
Mov Cap-2 Maneuver	-	-	-	-	522	-
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	762	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	555	-	-	1342	-
HCM Lane V/C Ratio	0.014	-	-	-	-
HCM Control Delay (s)	11.6	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	9	21	49	354	455	4
Future Volume (vph)	9	21	49	354	455	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.905				0.999	
Flt Protected	0.986			0.994		
Satd. Flow (prot)	1662	0	0	1852	1861	0
Flt Permitted	0.986			0.994		
Satd. Flow (perm)	1662	0	0	1852	1861	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	10	24	56	407	523	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	0	0	463	528	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	21	49	354	455	4
Future Vol, veh/h	9	21	49	354	455	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	24	56	407	523	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1045	526	528	0	-	0
Stage 1	526	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	253	552	1039	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	597	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	235	552	1039	-	-	-
Mov Cap-2 Maneuver	235	-	-	-	-	-
Stage 1	551	-	-	-	-	-
Stage 2	597	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15	1.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1039	-	393	-	-
HCM Lane V/C Ratio	0.054	-	0.088	-	-
HCM Control Delay (s)	8.7	0	15	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	18	0	27	20	19	1	285	43	34	416	1
Future Volume (vph)	4	18	0	27	20	19	1	285	43	34	416	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.961			0.982				
Flt Protected		0.992			0.980						0.996	
Satd. Flow (prot)	0	1848	0	0	1754	0	0	1829	0	0	1855	0
Flt Permitted		0.992			0.980						0.996	
Satd. Flow (perm)	0	1848	0	0	1754	0	0	1829	0	0	1855	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	4	20	0	30	22	21	1	320	48	38	467	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	73	0	0	369	0	0	506	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	58.8%	ICU Level of Service B	
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	18	0	27	20	19	1	285	43	34	416	1
Future Vol, veh/h	4	18	0	27	20	19	1	285	43	34	416	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	20	0	30	22	21	1	320	48	38	467	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	912	914	468	900	890	344	468	0	0	368	0	0
Stage 1	544	544	-	346	346	-	-	-	-	-	-	-
Stage 2	368	370	-	554	544	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	255	273	595	259	282	699	1094	-	-	1191	-	-
Stage 1	523	519	-	670	635	-	-	-	-	-	-	-
Stage 2	652	620	-	517	519	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	224	261	595	236	270	699	1094	-	-	1191	-	-
Mov Cap-2 Maneuver	224	261	-	236	270	-	-	-	-	-	-	-
Stage 1	522	497	-	669	634	-	-	-	-	-	-	-
Stage 2	609	619	-	475	497	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	20.5	0	0.6
HCM LOS	C	C		

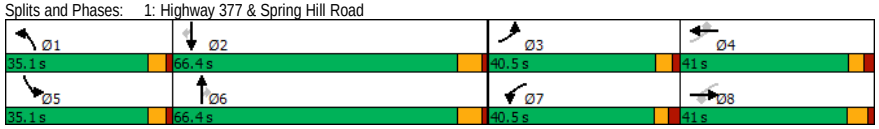
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1094	-	-	253	306	1191	-	-
HCM Lane V/C Ratio	0.001	-	-	0.098	0.242	0.032	-	-
HCM Control Delay (s)	8.3	0	-	20.8	20.5	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.9	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	126	118	189	112	51	52	452	125	21	406	32
Future Volume (vph)	44	126	118	189	112	51	52	452	125	21	406	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.678			0.669			0.950			0.950		
Satd. Flow (perm)	1263	1863	1583	1246	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	48	138	130	208	123	56	57	497	137	23	446	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	138	130	208	123	56	57	497	137	23	446	35
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	25.6	12.2	12.2	23.5	20.0	20.0	8.5	30.0	30.0	7.7	24.0	24.0
Actuated g/C Ratio	0.34	0.16	0.16	0.31	0.26	0.26	0.11	0.39	0.39	0.10	0.31	0.31
v/c Ratio	0.10	0.46	0.39	0.46	0.25	0.12	0.29	0.68	0.20	0.13	0.76	0.06
Control Delay	19.2	39.4	16.7	23.2	30.0	3.5	42.8	26.4	9.8	42.9	34.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.2	39.4	16.7	23.2	30.0	3.5	42.8	26.4	9.8	42.9	34.7	0.2
LOS	B	D	B	C	C	A	D	C	A	D	C	A
Approach Delay		27.0			22.5			24.4			32.7	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	14	59	14	67	49	0	25	158	14	10	186	0
Queue Length 95th (ft)	46	148	74	159	117	16	79	403	65	42	372	0
Internal Link Dist (ft)		671			2257			1260			1908	
Turn Bay Length (ft)	80		80	130		130	215		115	140		140
Base Capacity (vph)	903	932	840	901	940	840	759	1470	1266	759	1470	1266
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.15	0.15	0.23	0.13	0.07	0.08	0.34	0.11	0.03	0.30	0.03

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 76.4			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 26.7		Intersection LOS: C	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	233	7	1	213	2	1
Future Volume (vph)	233	7	1	213	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.996				0.955	
Flt Protected					0.968	
Satd. Flow (prot)	1855	0	0	1863	1722	0
Flt Permitted					0.968	
Satd. Flow (perm)	1855	0	0	1863	1722	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	2337			1187	1301	
Travel Time (s)	35.4			14.7	35.5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	284	9	1	260	2	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	293	0	0	261	3	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	233	7	1	213	2	1
Future Vol, veh/h	233	7	1	213	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	284	9	1	260	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	293	0	551	289
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	262	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1269	-	495	750
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	782	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1269	-	495	750
Mov Cap-2 Maneuver	-	-	-	-	495	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	781	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	558	-	-	1269	-
HCM Lane V/C Ratio	0.007	-	-	0.001	-
HCM Control Delay (s)	11.5	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	14	11	11	521	440	9
Future Volume (vph)	14	11	11	521	440	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.940				0.997	
Flt Protected	0.973			0.999		
Satd. Flow (prot)	1704	0	0	1861	1857	0
Flt Permitted	0.973			0.999		
Satd. Flow (perm)	1704	0	0	1861	1857	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	15	12	12	554	468	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	27	0	0	566	478	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	11	11	521	440	9
Future Vol, veh/h	14	11	11	521	440	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	12	12	554	468	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1051	473	478	0	-	0
Stage 1	473	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	251	591	1084	-	-	-
Stage 1	627	-	-	-	-	-
Stage 2	561	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	247	591	1084	-	-	-
Mov Cap-2 Maneuver	247	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	561	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1084	-	332	-	-
HCM Lane V/C Ratio	0.011	-	0.08	-	-
HCM Control Delay (s)	8.4	0	16.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	13	1	27	10	17	0	452	33	20	388	1
Future Volume (vph)	4	13	1	27	10	17	0	452	33	20	388	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.957			0.991				
Flt Protected		0.990			0.976						0.998	
Satd. Flow (prot)	0	1831	0	0	1740	0	0	1846	0	0	1859	0
Flt Permitted		0.990			0.976						0.998	
Satd. Flow (perm)	0	1831	0	0	1740	0	0	1846	0	0	1859	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	4	14	1	28	11	18	0	476	35	21	408	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	19	0	0	57	0	0	511	0	0	430	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	13	1	27	10	17	0	452	33	20	388	1
Future Vol, veh/h	4	13	1	27	10	17	0	452	33	20	388	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	14	1	28	11	18	0	476	35	21	408	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	959	962	409	952	945	494	409	0	0	511	0	0
Stage 1	451	451	-	494	494	-	-	-	-	-	-	-
Stage 2	508	511	-	458	451	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	237	256	642	239	262	575	1150	-	-	1054	-	-
Stage 1	588	571	-	557	546	-	-	-	-	-	-	-
Stage 2	547	537	-	583	571	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	218	249	642	224	255	575	1150	-	-	1054	-	-
Mov Cap-2 Maneuver	218	249	-	224	255	-	-	-	-	-	-	-
Stage 1	588	556	-	557	546	-	-	-	-	-	-	-
Stage 2	520	537	-	553	556	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.6	20.8	0	0.4
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1150	-	-	250	285	1054	-	-
HCM Lane V/C Ratio	-	-	-	0.076	0.199	0.02	-	-
HCM Control Delay (s)	0	-	-	20.6	20.8	8.5	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.7	0.1	-	-

Synchro™ Output - 2025 Background Traffic

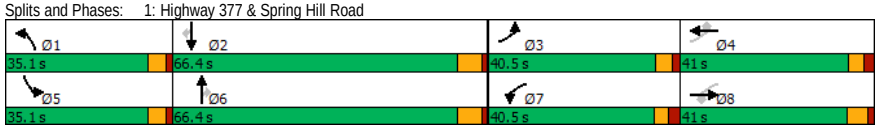
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	214	144	252	191	76	124	370	180	52	472	32
Future Volume (vph)	43	214	144	252	191	76	124	370	180	52	472	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.521			0.371			0.950			0.950		
Satd. Flow (perm)	970	1863	1583	691	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	49	243	164	286	217	86	141	420	205	59	536	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	243	164	286	217	86	141	420	205	59	536	36
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	43.2	22.5	22.5	41.2	37.2	37.2	14.7	50.5	50.5	9.3	41.2	41.2
Actuated g/C Ratio	0.36	0.19	0.19	0.34	0.31	0.31	0.12	0.42	0.42	0.08	0.34	0.34
v/c Ratio	0.12	0.71	0.46	0.72	0.38	0.16	0.66	0.54	0.29	0.43	0.85	0.06
Control Delay	27.6	62.6	30.2	40.5	39.0	9.0	72.5	33.0	17.7	74.5	53.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	62.6	30.2	40.5	39.0	9.0	72.5	33.0	17.7	74.5	53.2	0.2
LOS	C	E	C	D	D	A	E	C	B	E	D	A
Approach Delay		47.2			35.3			36.2			52.2	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	23	175	54	159	136	2	104	245	61	44	373	0
Queue Length 95th (ft)	62	350	152	301	259	42	227	465	154	117	699	0
Internal Link Dist (ft)		671			2257			1260			1908	
Turn Bay Length (ft)	80		80	130		130	215		115	140		140
Base Capacity (vph)	648	583	553	619	660	614	475	1024	906	475	1001	888
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.42	0.30	0.46	0.33	0.14	0.30	0.41	0.23	0.12	0.54	0.04

Intersection Summary

Area Type: Other
Cycle Length: 183
Actuated Cycle Length: 121.6
Natural Cycle: 100
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 42.2 Intersection LOS: D
Intersection Capacity Utilization 76.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	228	2	0	345	6	1
Future Volume (vph)	228	2	0	345	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.985	
Flt Protected					0.957	
Satd. Flow (prot)	1861	0	0	1863	1756	0
Flt Permitted					0.957	
Satd. Flow (perm)	1861	0	0	1863	1756	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	2337			1187	1301	
Travel Time (s)	35.4			14.7	35.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	292	3	0	442	8	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	295	0	0	442	9	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	228	2	0	345	6	1
Future Vol, veh/h	228	2	0	345	6	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	292	3	0	442	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	295	0	736	294
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	442	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1266	-	386	745
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1266	-	386	745
Mov Cap-2 Maneuver	-	-	-	-	386	-
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	415	-	-	1266	-
HCM Lane V/C Ratio	0.022	-	-	-	-
HCM Control Delay (s)	13.9	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	24	55	422	521	5
Future Volume (vph)	10	24	55	422	521	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.903				0.999	
Flt Protected	0.986			0.994		
Satd. Flow (prot)	1659	0	0	1852	1861	0
Flt Permitted	0.986			0.994		
Satd. Flow (perm)	1659	0	0	1852	1861	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	11	28	63	485	599	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	548	605	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	24	55	422	521	5
Future Vol, veh/h	10	24	55	422	521	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	28	63	485	599	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1213	602	605	0	-	0
Stage 1	602	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	201	500	973	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	183	500	973	-	-	-
Mov Cap-2 Maneuver	183	-	-	-	-	-
Stage 1	498	-	-	-	-	-
Stage 2	542	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	973	-	331	-	-
HCM Lane V/C Ratio	0.065	-	0.118	-	-
HCM Control Delay (s)	9	0	17.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	20	0	30	23	21	1	345	49	38	477	1
Future Volume (vph)	5	20	0	30	23	21	1	345	49	38	477	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.961			0.983				
Flt Protected		0.989			0.980						0.996	
Satd. Flow (prot)	0	1842	0	0	1754	0	0	1831	0	0	1855	0
Flt Permitted		0.989			0.980						0.996	
Satd. Flow (perm)	0	1842	0	0	1754	0	0	1831	0	0	1855	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	22	0	34	26	24	1	388	55	43	536	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	28	0	0	84	0	0	444	0	0	580	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	5	20	0	30	23	21	1	345	49	38	477	1
Future Vol, veh/h	5	20	0	30	23	21	1	345	49	38	477	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	22	0	34	26	24	1	388	55	43	536	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1066	1068	537	1052	1041	416	537	0	0	443	0	0
Stage 1	623	623	-	418	418	-	-	-	-	-	-	-
Stage 2	443	445	-	634	623	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	200	222	544	204	230	637	1031	-	-	1117	-	-
Stage 1	474	478	-	612	591	-	-	-	-	-	-	-
Stage 2	594	575	-	467	478	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	168	210	544	180	217	637	1031	-	-	1117	-	-
Mov Cap-2 Maneuver	168	210	-	180	217	-	-	-	-	-	-	-
Stage 1	474	452	-	611	590	-	-	-	-	-	-	-
Stage 2	546	574	-	419	452	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.9	27.5	0	0.6
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1031	-	-	200	242	1117	-	-
HCM Lane V/C Ratio	0.001	-	-	0.14	0.344	0.038	-	-
HCM Control Delay (s)	8.5	0	-	25.9	27.5	8.4	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	1.5	0.1	-	-

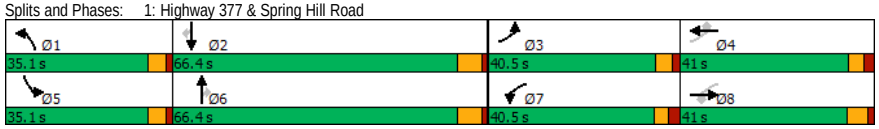
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	162	133	248	138	74	59	510	200	50	458	36
Future Volume (vph)	50	162	133	248	138	74	59	510	200	50	458	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.637			0.536			0.950			0.950		
Satd. Flow (perm)	1187	1863	1583	998	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	55	178	146	273	152	81	65	560	220	55	503	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	178	146	273	152	81	65	560	220	55	503	40
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	34.5	16.4	16.4	32.2	28.7	28.7	9.4	38.4	38.4	8.9	37.9	37.9
Actuated g/C Ratio	0.34	0.16	0.16	0.32	0.29	0.29	0.09	0.38	0.38	0.09	0.38	0.38
v/c Ratio	0.12	0.58	0.44	0.62	0.28	0.16	0.39	0.78	0.34	0.35	0.71	0.06
Control Delay	24.6	52.8	26.1	32.5	35.3	8.1	59.6	38.1	16.9	59.5	35.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	52.8	26.1	32.5	35.3	8.1	59.6	38.1	16.9	59.5	35.1	0.2
LOS	C	D	C	C	D	A	E	D	B	E	D	A
Approach Delay		38.4			29.4			34.2			35.0	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	23	107	35	128	80	0	41	311	59	34	271	0
Queue Length 95th (ft)	62	237	121	262	172	39	110	591	151	97	519	1
Internal Link Dist (ft)		671			2257			1260			1908	
Turn Bay Length (ft)	80		80	130		130	215		115	140		140
Base Capacity (vph)	753	727	669	741	752	688	592	1202	1050	592	1202	1050
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.24	0.22	0.37	0.20	0.12	0.11	0.47	0.21	0.09	0.42	0.04

Intersection Summary

Area Type: Other
Cycle Length: 183
Actuated Cycle Length: 100.1
Natural Cycle: 100
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 34.1 Intersection LOS: C
Intersection Capacity Utilization 74.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	367	8	1	302	2	1
Future Volume (vph)	367	8	1	302	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.955	
Flt Protected					0.968	
Satd. Flow (prot)	1857	0	0	1863	1722	0
Flt Permitted					0.968	
Satd. Flow (perm)	1857	0	0	1863	1722	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	2337			1187	1301	
Travel Time (s)	35.4			14.7	35.5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	448	10	1	368	2	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	458	0	0	369	3	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	367	8	1	302	2	1
Future Vol, veh/h	367	8	1	302	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	448	10	1	368	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	458	0	823	453
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	370	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1103	-	343	607
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	699	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1103	-	343	607
Mov Cap-2 Maneuver	-	-	-	-	343	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	698	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	401	-	-	1103	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	14.1	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	16	12	12	604	523	10
Future Volume (vph)	16	12	12	604	523	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.941				0.997	
Flt Protected	0.972			0.999		
Satd. Flow (prot)	1704	0	0	1861	1857	0
Flt Permitted	0.972			0.999		
Satd. Flow (perm)	1704	0	0	1861	1857	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	17	13	13	643	556	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	656	567	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	12	12	604	523	10
Future Vol, veh/h	16	12	12	604	523	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	13	13	643	556	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1231	562	567	0	-	0
Stage 1	562	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	196	526	1005	-	-	-
Stage 1	571	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	192	526	1005	-	-	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	560	-	-	-	-	-
Stage 2	509	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.4	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1005	-	264	-	-
HCM Lane V/C Ratio	0.013	-	0.113	-	-
HCM Control Delay (s)	8.6	0	20.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	15	1	30	11	19	0	526	37	23	464	1
Future Volume (vph)	5	15	1	30	11	19	0	526	37	23	464	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.958			0.991				
Flt Protected		0.989			0.976						0.998	
Satd. Flow (prot)	0	1831	0	0	1742	0	0	1846	0	0	1859	0
Flt Permitted		0.989			0.976						0.998	
Satd. Flow (perm)	0	1831	0	0	1742	0	0	1846	0	0	1859	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	16	1	32	12	20	0	554	39	24	488	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	64	0	0	593	0	0	513	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	56.4%	ICU Level of Service B	
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	15	1	30	11	19	0	526	37	23	464	1
Future Vol, veh/h	5	15	1	30	11	19	0	526	37	23	464	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	16	1	32	12	20	0	554	39	24	488	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1127	1130	489	1119	1111	574	489	0	0	593	0	0
Stage 1	537	537	-	574	574	-	-	-	-	-	-	-
Stage 2	590	593	-	545	537	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	182	204	579	184	209	518	1074	-	-	983	-	-
Stage 1	528	523	-	504	503	-	-	-	-	-	-	-
Stage 2	494	493	-	523	523	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	163	197	579	168	202	518	1074	-	-	983	-	-
Mov Cap-2 Maneuver	163	197	-	168	202	-	-	-	-	-	-	-
Stage 1	528	505	-	504	503	-	-	-	-	-	-	-
Stage 2	464	493	-	489	505	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.1	27.5	0	0.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1074	-	-	193	222	983	-	-
HCM Lane V/C Ratio	-	-	-	0.115	0.284	0.025	-	-
HCM Control Delay (s)	0	-	-	26.1	27.5	8.8	0	-
HCM Lane LOS	A	-	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	1.1	0.1	-	-

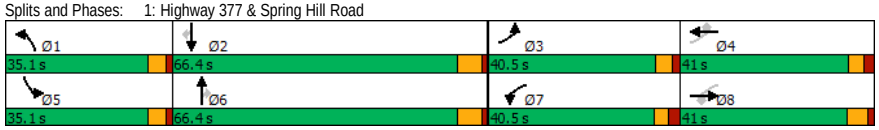
Synchro™ Output - 2025 Background Plus 2025 Scenario Site Traffic

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	215	140	314	208	97	120	369	198	59	486	41
Future Volume (vph)	45	215	140	314	208	97	120	369	198	59	486	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.502			0.340			0.950			0.950		
Satd. Flow (perm)	935	1863	1583	633	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			83			88			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	51	244	159	357	236	110	136	419	225	67	552	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	244	159	357	236	110	136	419	225	67	552	47
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	49.9	23.4	23.4	48.0	44.0	44.0	14.8	54.1	54.1	9.9	45.3	45.3
Actuated g/C Ratio	0.38	0.18	0.18	0.36	0.33	0.33	0.11	0.41	0.41	0.07	0.34	0.34
v/c Ratio	0.13	0.74	0.46	0.82	0.38	0.19	0.69	0.55	0.32	0.51	0.87	0.08
Control Delay	27.9	70.0	31.7	47.1	39.2	13.0	80.7	36.5	19.8	82.4	57.7	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.9	70.0	31.7	47.1	39.2	13.0	80.7	36.5	19.8	82.4	57.7	1.3
LOS	C	E	C	D	D	B	F	D	B	F	E	A
Approach Delay		51.8			39.1			39.4			56.2	
Approach LOS		D			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 132.3			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 45.8		Intersection LOS: D	
Intersection Capacity Utilization 80.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	232	2	0	366	2	5	0	1	6	0	83
Future Volume (vph)	28	232	2	0	366	2	5	0	1	6	0	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.999			0.981			0.874	
Flt Protected	0.950							0.959			0.997	
Satd. Flow (prot)	1770	1859	0	0	1861	0	0	1752	0	0	1623	0
Flt Permitted	0.950							0.959			0.997	
Satd. Flow (perm)	1770	1859	0	0	1861	0	0	1752	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		2337			1187			1301			713	
Travel Time (s)		35.4			14.7			35.5			16.2	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	36	297	3	0	469	3	6	0	1	8	0	106
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	300	0	0	472	0	0	7	0	0	114	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	232	2	0	366	2	5	0	1	6	0	83
Future Vol, veh/h	28	232	2	0	366	2	5	0	1	6	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	297	3	0	469	3	6	0	1	8	0	106

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	472	0	0	300	0	0	895	843	299	842	843	471
Stage 1	-	-	-	-	-	-	371	371	-	471	471	-
Stage 2	-	-	-	-	-	-	524	472	-	371	372	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1090	-	-	1261	-	-	261	300	741	284	300	593
Stage 1	-	-	-	-	-	-	649	620	-	573	560	-
Stage 2	-	-	-	-	-	-	537	559	-	649	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1090	-	-	1261	-	-	209	290	741	276	290	593
Mov Cap-2 Maneuver	-	-	-	-	-	-	209	290	-	276	290	-
Stage 1	-	-	-	-	-	-	628	600	-	554	560	-
Stage 2	-	-	-	-	-	-	441	559	-	626	599	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	20.7	13.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	237	1090	-	-	1261	-	-	550
HCM Lane V/C Ratio	0.032	0.033	-	-	-	-	-	0.207
HCM Control Delay (s)	20.7	8.4	-	-	0	-	-	13.3
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.8

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	23	54	446	553	4
Future Volume (vph)	10	23	54	446	553	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.905				0.999	
Flt Protected	0.985			0.995		
Satd. Flow (prot)	1660	0	0	1853	1861	0
Flt Permitted	0.985			0.995		
Satd. Flow (perm)	1660	0	0	1853	1861	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	11	26	62	513	636	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	37	0	0	575	641	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	54	446	553	4
Future Vol, veh/h	10	23	54	446	553	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	26	62	513	636	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1276	639	641	0	-	0
Stage 1	639	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	184	476	943	-	-	-
Stage 1	526	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	167	476	943	-	-	-
Mov Cap-2 Maneuver	167	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	527	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	943	-	305	-	-
HCM Lane V/C Ratio	0.066	-	0.124	-	-
HCM Control Delay (s)	9.1	0	18.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	20	0	30	22	21	1	388	47	37	481	1
Future Volume (vph)	4	20	0	30	22	21	1	388	47	37	481	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.961			0.985				
Flt Protected		0.992			0.980						0.996	
Satd. Flow (prot)	0	1848	0	0	1754	0	0	1835	0	0	1855	0
Flt Permitted		0.992			0.980						0.996	
Satd. Flow (perm)	0	1848	0	0	1754	0	0	1835	0	0	1855	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	4	22	0	34	25	24	1	436	53	42	540	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	83	0	0	490	0	0	583	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.3%		ICU Level of Service C	
Analysis Period (min) 15			

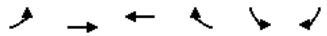
Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	20	0	30	22	21	1	388	47	37	481	1
Future Vol, veh/h	4	20	0	30	22	21	1	388	47	37	481	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	22	0	34	25	24	1	436	53	42	540	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1114	1116	541	1101	1090	463	541	0	0	489	0	0
Stage 1	625	625	-	465	465	-	-	-	-	-	-	-
Stage 2	489	491	-	636	625	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	185	208	541	189	215	599	1028	-	-	1074	-	-
Stage 1	473	477	-	578	563	-	-	-	-	-	-	-
Stage 2	561	548	-	466	477	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	154	196	541	165	203	599	1028	-	-	1074	-	-
Mov Cap-2 Maneuver	154	196	-	165	203	-	-	-	-	-	-	-
Stage 1	473	450	-	577	562	-	-	-	-	-	-	-
Stage 2	515	547	-	418	450	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.5	30.1	0	0.6
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	187	224	1074	-	-
HCM Lane V/C Ratio	0.001	-	-	0.144	0.366	0.039	-	-
HCM Control Delay (s)	8.5	0	-	27.5	30.1	8.5	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	1.6	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	229	339	9	27	29
Future Volume (vph)	10	229	339	9	27	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.930	
Flt Protected	0.950				0.976	
Satd. Flow (prot)	1770	1863	1857	0	1691	0
Flt Permitted	0.950				0.976	
Satd. Flow (perm)	1770	1863	1857	0	1691	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	15	342	506	13	40	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	342	519	0	83	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	229	339	9	27	29
Future Vol, veh/h	10	229	339	9	27	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	342	506	13	40	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	519	0	-	0	885	513
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	372	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1047	-	-	-	315	561
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	697	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1047	-	-	-	311	561
Mov Cap-2 Maneuver	-	-	-	-	311	-
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1047	-	-	-	404
HCM Lane V/C Ratio	0.014	-	-	-	0.207
HCM Control Delay (s)	8.5	-	-	-	16.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.8

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	39	30	406	13	10	518
Future Volume (vph)	39	30	406	13	10	518
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		250	515	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.996			
Flt Protected	0.950					0.999
Satd. Flow (prot)	1770	1583	1855	0	0	1861
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1770	1583	1855	0	0	1861
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	58	45	606	19	15	773
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	45	625	0	0	788
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	39	30	406	13	10	518
Future Vol, veh/h	39	30	406	13	10	518
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	45	606	19	15	773

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1419	616	0	0	625	0
Stage 1	616	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	151	491	-	-	956	-
Stage 1	539	-	-	-	-	-
Stage 2	441	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	147	491	-	-	956	-
Mov Cap-2 Maneuver	147	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	429	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	147	491	956	-
HCM Lane V/C Ratio	-	-	0.396	0.091	0.016	-
HCM Control Delay (s)	-	-	44.7	13.1	8.8	0
HCM Lane LOS	-	-	E	B	A	A
HCM 95th %tile Q(veh)	-	-	1.7	0.3	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	104	0	0	72	0	0
Future Volume (vph)	104	0	0	72	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	155	0	0	107	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	155	0	0	107	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	8.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	104	0	0	72	0	0
Future Vol, veh/h	104	0	0	72	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	155	0	0	107	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	155	0	262	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	107	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1425	-	727	891
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	917	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1425	-	727	891
Mov Cap-2 Maneuver	-	-	-	-	727	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	917	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1425	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	104	0	0	72	0	0
Future Volume (vph)	104	0	0	72	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	155	0	0	107	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	155	0	0	107	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	8.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	104	0	0	72	0	0
Future Vol, veh/h	104	0	0	72	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	155	0	0	107	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	155	0	262	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	107	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1425	-	727	891
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	917	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1425	-	727	891
Mov Cap-2 Maneuver	-	-	-	-	727	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	917	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1425	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	104	0	0	72	0	0
Future Volume (vph)	104	0	0	72	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	155	0	0	107	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	155	0	0	107	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	8.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	104	0	0	72	0	0
Future Vol, veh/h	104	0	0	72	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	155	0	0	107	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	155	0	262	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	107	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1425	-	727	891
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	917	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	1425	-	727	891
Mov Cap-2 Maneuver	-	-	-	-	727	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	917	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

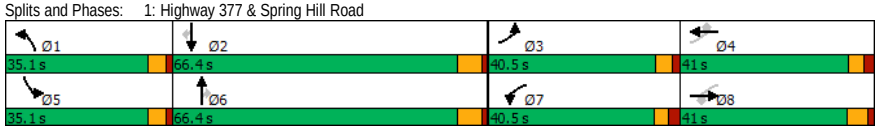
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1425	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	184	129	288	149	88	57	527	273	76	464	42
Future Volume (vph)	59	184	129	288	149	88	57	527	273	76	464	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.599			0.428			0.950			0.950		
Satd. Flow (perm)	1116	1863	1583	797	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			89			85			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	65	202	142	316	164	97	63	579	300	84	510	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	202	142	316	164	97	63	579	300	84	510	46
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	41.0	19.0	19.0	39.2	34.9	34.9	9.2	45.2	45.2	10.5	50.1	50.1
Actuated g/C Ratio	0.35	0.16	0.16	0.33	0.29	0.29	0.08	0.38	0.38	0.09	0.42	0.42
v/c Ratio	0.15	0.68	0.44	0.74	0.30	0.18	0.46	0.82	0.46	0.54	0.65	0.06
Control Delay	26.9	62.9	27.6	40.7	37.4	9.7	71.9	45.5	23.4	72.0	35.3	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.9	62.9	27.6	40.7	37.4	9.7	71.9	45.5	23.4	72.0	35.3	1.0
LOS	C	E	C	D	D	A	E	D	C	E	D	A
Approach Delay		44.9			34.6			40.2			37.7	
Approach LOS		D			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 118.7			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 39.1		Intersection LOS: D	
Intersection Capacity Utilization 78.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	393	8	1	315	7	2	0	1	4	0	56
Future Volume (vph)	96	393	8	1	315	7	2	0	1	4	0	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.997			0.955			0.874	
Flt Protected	0.950							0.968			0.997	
Satd. Flow (prot)	1770	1857	0	0	1857	0	0	1722	0	0	1623	0
Flt Permitted	0.950							0.968			0.997	
Satd. Flow (perm)	1770	1857	0	0	1857	0	0	1722	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		2337			1187			1301			713	
Travel Time (s)		35.4			14.7			35.5			16.2	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	117	479	10	1	384	9	2	0	1	5	0	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	489	0	0	394	0	0	3	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	393	8	1	315	7	2	0	1	4	0	56
Future Vol, veh/h	96	393	8	1	315	7	2	0	1	4	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	479	10	1	384	9	2	0	1	5	0	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	393	0	0	489	0	0	1143	1113	484	1110	1114	389
Stage 1	-	-	-	-	-	-	718	718	-	391	391	-
Stage 2	-	-	-	-	-	-	425	395	-	719	723	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1166	-	-	1074	-	-	177	208	583	187	208	659
Stage 1	-	-	-	-	-	-	420	433	-	633	607	-
Stage 2	-	-	-	-	-	-	607	605	-	420	431	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1166	-	-	1074	-	-	146	187	583	172	187	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	187	-	172	187	-
Stage 1	-	-	-	-	-	-	378	390	-	570	606	-
Stage 2	-	-	-	-	-	-	544	604	-	377	388	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	23.8	12.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	195	1166	-	-	1074	-	-	554
HCM Lane V/C Ratio	0.019	0.1	-	-	0.001	-	-	0.132
HCM Control Delay (s)	23.8	8.4	-	-	8.4	0	-	12.5
HCM Lane LOS	C	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.3	-	-	0	-	-	0.5

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	15	12	12	646	560	10
Future Volume (vph)	15	12	12	646	560	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.939				0.998	
Flt Protected	0.973			0.999		
Satd. Flow (prot)	1702	0	0	1861	1859	0
Flt Permitted	0.973			0.999		
Satd. Flow (perm)	1702	0	0	1861	1859	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	16	13	13	687	596	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	0	700	607	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	12	12	646	560	10
Future Vol, veh/h	15	12	12	646	560	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	13	13	687	596	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1315	602	607	0	-	0
Stage 1	602	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	174	500	971	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	170	500	971	-	-	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	486	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.9	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	971	-	241	-	-
HCM Lane V/C Ratio	0.013	-	0.119	-	-
HCM Control Delay (s)	8.8	0	21.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	14	1	30	11	19	0	546	36	22	512	1
Future Volume (vph)	4	14	1	30	11	19	0	546	36	22	512	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.958			0.992				
Flt Protected		0.990			0.976						0.998	
Satd. Flow (prot)	0	1831	0	0	1742	0	0	1848	0	0	1859	0
Flt Permitted		0.990			0.976						0.998	
Satd. Flow (perm)	0	1831	0	0	1742	0	0	1848	0	0	1859	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	4	15	1	32	12	20	0	575	38	23	539	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	0	0	64	0	0	613	0	0	563	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.6%		ICU Level of Service B	
Analysis Period (min) 15			

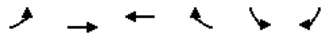
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	14	1	30	11	19	0	546	36	22	512	1
Future Vol, veh/h	4	14	1	30	11	19	0	546	36	22	512	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	15	1	32	12	20	0	575	38	23	539	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1196	1199	540	1188	1180	594	540	0	0	613	0	0
Stage 1	586	586	-	594	594	-	-	-	-	-	-	-
Stage 2	610	613	-	594	586	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	163	185	542	165	190	505	1028	-	-	966	-	-
Stage 1	496	497	-	491	493	-	-	-	-	-	-	-
Stage 2	482	483	-	491	497	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	145	179	542	150	184	505	1028	-	-	966	-	-
Mov Cap-2 Maneuver	145	179	-	150	184	-	-	-	-	-	-	-
Stage 1	496	480	-	491	493	-	-	-	-	-	-	-
Stage 2	452	483	-	459	480	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.9	30.7	0	0.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	177	202	966	-	-
HCM Lane V/C Ratio	-	-	-	0.113	0.313	0.024	-	-
HCM Control Delay (s)	0	-	-	27.9	30.7	8.8	0	-
HCM Lane LOS	A	-	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	1.3	0.1	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	34	364	303	30	18	20
Future Volume (vph)	34	364	303	30	18	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.988		0.928	
Flt Protected	0.950				0.977	
Satd. Flow (prot)	1770	1863	1840	0	1689	0
Flt Permitted	0.950				0.977	
Satd. Flow (perm)	1770	1863	1840	0	1689	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	40	428	356	35	21	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	428	391	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	364	303	30	18	20
Future Vol, veh/h	34	364	303	30	18	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	428	356	35	21	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	391	0	-	0	882	374
Stage 1	-	-	-	-	374	-
Stage 2	-	-	-	-	508	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1168	-	-	-	317	672
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	604	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1168	-	-	-	306	672
Mov Cap-2 Maneuver	-	-	-	-	306	-
Stage 1	-	-	-	-	672	-
Stage 2	-	-	-	-	604	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1168	-	-	-	429
HCM Lane V/C Ratio	0.034	-	-	-	0.104
HCM Control Delay (s)	8.2	-	-	-	14.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	26	20	562	44	35	544
Future Volume (vph)	26	20	562	44	35	544
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		250	515	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.990			
Flt Protected	0.950					0.997
Satd. Flow (prot)	1770	1583	1844	0	0	1857
Flt Permitted	0.950					0.997
Satd. Flow (perm)	1770	1583	1844	0	0	1857
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	31	24	661	52	41	640
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	24	713	0	0	681
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	20	562	44	35	544
Future Vol, veh/h	26	20	562	44	35	544
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	24	661	52	41	640

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1409	687	0	0	713	0
Stage 1	687	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	153	447	-	-	887	-
Stage 1	499	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	142	447	-	-	887	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	446	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.9	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	142	447	887	-
HCM Lane V/C Ratio	-	-	0.215	0.053	0.046	-
HCM Control Delay (s)	-	-	37.2	13.5	9.3	0
HCM Lane LOS	-	-	E	B	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.2	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	72	0	0	59	0	0
Future Volume (vph)	72	0	0	59	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	85	0	0	69	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	0	0	69	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	7.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	72	0	0	59	0	0
Future Vol, veh/h	72	0	0	59	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	0	0	69	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	85	0	154	85
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1512	-	838	974
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1512	-	838	974
Mov Cap-2 Maneuver	-	-	-	-	838	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	954	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1512	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	72	0	0	59	0	0
Future Volume (vph)	72	0	0	59	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	85	0	0	69	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	0	0	69	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	7.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	72	0	0	59	0	0
Future Vol, veh/h	72	0	0	59	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	0	0	69	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	85	0	154	85
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1512	-	838	974
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1512	-	838	974
Mov Cap-2 Maneuver	-	-	-	-	838	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	954	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1512	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	72	0	0	59	0	0
Future Volume (vph)	72	0	0	59	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	85	0	0	69	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	0	0	69	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	7.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	72	0	0	59	0	0
Future Vol, veh/h	72	0	0	59	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	85	0	0	69	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	85	0	154	85
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1512	-	838	974
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	954	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1512	-	838	974
Mov Cap-2 Maneuver	-	-	-	-	838	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	954	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1512	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Synchro™ Output - 2026 Background Traffic

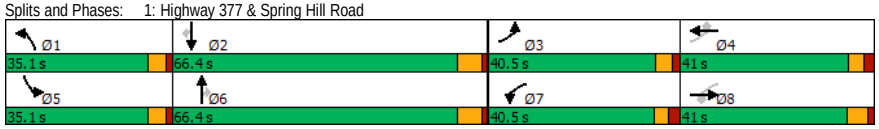
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	222	150	260	198	78	129	385	187	54	491	33
Future Volume (vph)	45	222	150	260	198	78	129	385	187	54	491	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.505			0.339			0.950			0.950		
Satd. Flow (perm)	941	1863	1583	631	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	51	252	170	295	225	89	147	438	213	61	558	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	252	170	295	225	89	147	438	213	61	558	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	45.7	23.6	23.6	43.7	39.7	39.7	15.5	55.2	55.2	9.5	45.3	45.3
Actuated g/C Ratio	0.35	0.18	0.18	0.34	0.31	0.31	0.12	0.43	0.43	0.07	0.35	0.35
v/c Ratio	0.13	0.74	0.48	0.76	0.39	0.16	0.69	0.55	0.29	0.47	0.85	0.06
Control Delay	29.0	67.4	32.4	44.5	40.7	9.8	77.0	33.8	18.4	79.5	54.4	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	67.4	32.4	44.5	40.7	9.8	77.0	33.8	18.4	79.5	54.4	0.2
LOS	C	E	C	D	D	A	E	C	B	E	D	A
Approach Delay		50.7			38.0			37.7			53.6	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	27	201	63	181	153	4	120	275	69	50	422	0
Queue Length 95th (ft)	64	368	162	313	271	45	238	497	164	120	#778	0
Internal Link Dist (ft)		671			2257			1260			1908	
Turn Bay Length (ft)	80		80	130		130	215		115	140		140
Base Capacity (vph)	620	545	522	583	633	593	444	972	865	444	935	835
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.46	0.33	0.51	0.36	0.15	0.33	0.45	0.25	0.14	0.60	0.05

Intersection Summary

Area Type: Other
Cycle Length: 183
Actuated Cycle Length: 128.8
Natural Cycle: 100
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 44.3 Intersection LOS: D
Intersection Capacity Utilization 78.2% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	236	2	0	355	6	1
Future Volume (vph)	236	2	0	355	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.985	
Flt Protected					0.957	
Satd. Flow (prot)	1861	0	0	1863	1756	0
Flt Permitted					0.957	
Satd. Flow (perm)	1861	0	0	1863	1756	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	2337			1187	1301	
Travel Time (s)	35.4			14.7	35.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	303	3	0	455	8	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	306	0	0	455	9	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	236	2	0	355	6	1
Future Vol, veh/h	236	2	0	355	6	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	303	3	0	455	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	306	0	760	305
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	455	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1255	-	374	735
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	639	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1255	-	374	735
Mov Cap-2 Maneuver	-	-	-	-	374	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	639	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	402	-	-	1255	-
HCM Lane V/C Ratio	0.022	-	-	-	-
HCM Control Delay (s)	14.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	11	25	58	439	543	5
Future Volume (vph)	11	25	58	439	543	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.907				0.999	
Flt Protected	0.985			0.994		
Satd. Flow (prot)	1664	0	0	1852	1861	0
Flt Permitted	0.985			0.994		
Satd. Flow (perm)	1664	0	0	1852	1861	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	13	29	67	505	624	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	42	0	0	572	630	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	25	58	439	543	5
Future Vol, veh/h	11	25	58	439	543	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	29	67	505	624	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1266	627	630	0	-	0
Stage 1	627	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	187	484	952	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	169	484	952	-	-	-
Mov Cap-2 Maneuver	169	-	-	-	-	-
Stage 1	480	-	-	-	-	-
Stage 2	526	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	1.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	952	-	308	-	-
HCM Lane V/C Ratio	0.07	-	0.134	-	-
HCM Control Delay (s)	9.1	0	18.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	21	0	32	23	22	1	358	51	40	497	1
Future Volume (vph)	5	21	0	32	23	22	1	358	51	40	497	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.961			0.983				
Flt Protected		0.990			0.980						0.996	
Satd. Flow (prot)	0	1844	0	0	1754	0	0	1831	0	0	1855	0
Flt Permitted		0.990			0.980						0.996	
Satd. Flow (perm)	0	1844	0	0	1754	0	0	1831	0	0	1855	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	24	0	36	26	25	1	402	57	45	558	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	0	0	87	0	0	460	0	0	604	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	21	0	32	23	22	1	358	51	40	497	1
Future Vol, veh/h	5	21	0	32	23	22	1	358	51	40	497	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	24	0	36	26	25	1	402	57	45	558	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1107	1110	559	1094	1082	431	559	0	0	459	0	0
Stage 1	649	649	-	433	433	-	-	-	-	-	-	-
Stage 2	458	461	-	661	649	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	188	209	529	191	217	624	1012	-	-	1102	-	-
Stage 1	458	466	-	601	582	-	-	-	-	-	-	-
Stage 2	583	565	-	452	466	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	156	196	529	166	204	624	1012	-	-	1102	-	-
Mov Cap-2 Maneuver	156	196	-	166	204	-	-	-	-	-	-	-
Stage 1	458	439	-	600	581	-	-	-	-	-	-	-
Stage 2	534	564	-	402	439	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.8	30.5	0	0.6
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1012	-	-	187	226	1102	-	-
HCM Lane V/C Ratio	0.001	-	-	0.156	0.383	0.041	-	-
HCM Control Delay (s)	8.6	0	-	27.8	30.5	8.4	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	1.7	0.1	-	-

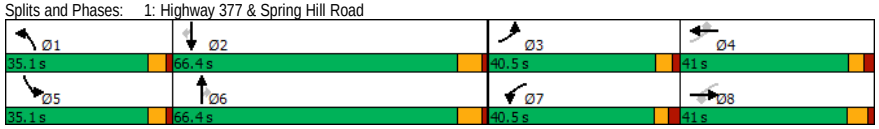
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	168	139	257	144	76	61	531	206	51	477	38
Future Volume (vph)	52	168	139	257	144	76	61	531	206	51	477	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.619			0.499			0.950			0.950		
Satd. Flow (perm)	1153	1863	1583	930	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			2337			1340			1988	
Travel Time (s)		17.1			35.4			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	57	185	153	282	158	84	67	584	226	56	524	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	185	153	282	158	84	67	584	226	56	524	42
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	36.3	17.1	17.1	34.2	30.5	30.5	9.4	43.3	43.3	8.9	42.7	42.7
Actuated g/C Ratio	0.34	0.16	0.16	0.32	0.29	0.29	0.09	0.41	0.41	0.08	0.40	0.40
v/c Ratio	0.13	0.62	0.47	0.66	0.30	0.16	0.43	0.77	0.33	0.38	0.70	0.06
Control Delay	25.9	56.6	28.4	35.4	36.7	8.7	64.1	38.1	17.1	63.6	35.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	56.6	28.4	35.4	36.7	8.7	64.1	38.1	17.1	63.6	35.2	0.4
LOS	C	E	C	D	D	A	E	D	B	E	D	A
Approach Delay		41.3			31.5			34.7			35.4	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	25	121	43	145	90	1	45	343	64	38	298	0
Queue Length 95th (ft)	65	251	132	275	181	42	115	641	160	101	562	3
Internal Link Dist (ft)		671			2257			1260			1908	
Turn Bay Length (ft)	80		80	130		130	215		115	140		140
Base Capacity (vph)	707	670	623	692	699	646	546	1148	1006	546	1148	1006
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.28	0.25	0.41	0.23	0.13	0.12	0.51	0.22	0.10	0.46	0.04

Intersection Summary

Area Type: Other
Cycle Length: 183
Actuated Cycle Length: 106.7
Natural Cycle: 100
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 35.3 Intersection LOS: D
Intersection Capacity Utilization 76.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	378	8	1	312	2	1
Future Volume (vph)	378	8	1	312	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.955	
Flt Protected					0.968	
Satd. Flow (prot)	1857	0	0	1863	1722	0
Flt Permitted					0.968	
Satd. Flow (perm)	1857	0	0	1863	1722	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	2337			1187	1301	
Travel Time (s)	35.4			14.7	35.5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	461	10	1	380	2	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	471	0	0	381	3	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	378	8	1	312	2	1
Future Vol, veh/h	378	8	1	312	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	461	10	1	380	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	471	0	848	466
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	382	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1091	-	332	597
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1091	-	332	597
Mov Cap-2 Maneuver	-	-	-	-	332	-
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	689	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	390	-	-	1091	-
HCM Lane V/C Ratio	0.009	-	-	0.001	-
HCM Control Delay (s)	14.3	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	16	13	13	628	543	11
Future Volume (vph)	16	13	13	628	543	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.939				0.997	
Flt Protected	0.973			0.999		
Satd. Flow (prot)	1702	0	0	1861	1857	0
Flt Permitted	0.973			0.999		
Satd. Flow (perm)	1702	0	0	1861	1857	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	17	14	14	668	578	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	0	0	682	590	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	13	13	628	543	11
Future Vol, veh/h	16	13	13	628	543	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	14	14	668	578	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1280	584	590	0	-	0
Stage 1	584	-	-	-	-	-
Stage 2	696	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	183	512	985	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	179	512	985	-	-	-
Mov Cap-2 Maneuver	179	-	-	-	-	-
Stage 1	544	-	-	-	-	-
Stage 2	495	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.2	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	985	-	253	-	-
HCM Lane V/C Ratio	0.014	-	0.122	-	-
HCM Control Delay (s)	8.7	0	21.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	15	1	32	12	20	0	547	39	23	482	1
Future Volume (vph)	5	15	1	32	12	20	0	547	39	23	482	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.958			0.991				
Flt Protected		0.989			0.976						0.998	
Satd. Flow (prot)	0	1831	0	0	1742	0	0	1846	0	0	1859	0
Flt Permitted		0.989			0.976						0.998	
Satd. Flow (perm)	0	1831	0	0	1742	0	0	1846	0	0	1859	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	16	1	34	13	21	0	576	41	24	507	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	68	0	0	617	0	0	532	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	57.8%	ICU Level of Service B	
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	15	1	32	12	20	0	547	39	23	482	1
Future Vol, veh/h	5	15	1	32	12	20	0	547	39	23	482	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	16	1	34	13	21	0	576	41	24	507	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1170	1173	508	1161	1153	597	508	0	0	617	0	0
Stage 1	556	556	-	597	597	-	-	-	-	-	-	-
Stage 2	614	617	-	564	556	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	170	192	565	172	197	503	1057	-	-	963	-	-
Stage 1	515	513	-	490	491	-	-	-	-	-	-	-
Stage 2	479	481	-	510	513	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	150	185	565	156	190	503	1057	-	-	963	-	-
Mov Cap-2 Maneuver	150	185	-	156	190	-	-	-	-	-	-	-
Stage 1	515	495	-	490	491	-	-	-	-	-	-	-
Stage 2	447	481	-	476	495	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.6	30.4	0	0.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1057	-	-	181	208	963	-	-
HCM Lane V/C Ratio	-	-	-	0.122	0.324	0.025	-	-
HCM Control Delay (s)	0	-	-	27.6	30.4	8.8	0	-
HCM Lane LOS	A	-	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	1.3	0.1	-	-

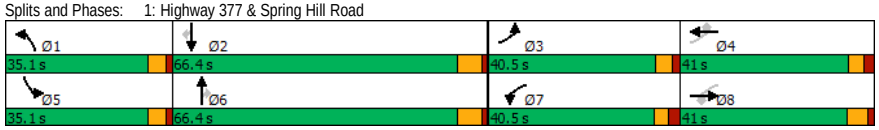
Synchro™ Output - 2026 Background Plus 2026 Scenario Site Traffic

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	240	150	346	227	101	129	518	240	62	704	104
Future Volume (vph)	89	240	150	346	227	101	129	518	240	62	704	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.447			0.209			0.950			0.950		
Satd. Flow (perm)	833	1863	1583	389	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			1186			1340			1988	
Travel Time (s)		17.1			18.0			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	101	273	170	393	258	115	147	589	273	70	800	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	273	170	393	258	115	147	589	273	70	800	118
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	25.4	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	Min	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	59.4	27.2	27.2	59.2	49.6	49.6	16.9	67.2	67.2	10.3	60.6	60.6
Actuated g/C Ratio	0.37	0.17	0.17	0.37	0.31	0.31	0.11	0.42	0.42	0.06	0.38	0.38
v/c Ratio	0.28	0.86	0.50	0.94	0.44	0.21	0.79	0.75	0.38	0.61	1.13	0.18
Control Delay	32.0	90.2	36.0	74.0	47.1	14.6	98.9	48.5	25.3	98.5	120.0	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	90.2	36.0	74.0	47.1	14.6	98.9	48.5	25.3	98.5	120.0	14.5
LOS	C	F	D	E	D	B	F	D	C	F	F	B
Approach Delay		62.5			56.0			49.6			105.9	
Approach LOS		E			E			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 159.4			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 70.0		Intersection LOS: E	
Intersection Capacity Utilization 95.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	264	2	0	414	2	6	0	1	6	0	83
Future Volume (vph)	28	264	2	0	414	2	6	0	1	6	0	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999			0.999			0.985			0.874	
Flt Protected	0.950							0.957			0.997	
Satd. Flow (prot)	1770	1861	0	0	1861	0	0	1756	0	0	1623	0
Flt Permitted	0.950							0.957			0.997	
Satd. Flow (perm)	1770	1861	0	0	1861	0	0	1756	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		1151			1187			1301			713	
Travel Time (s)		17.4			14.7			35.5			16.2	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	36	338	3	0	531	3	8	0	1	8	0	106
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	341	0	0	534	0	0	9	0	0	114	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	264	2	0	414	2	6	0	1	6	0	83
Future Vol, veh/h	28	264	2	0	414	2	6	0	1	6	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	338	3	0	531	3	8	0	1	8	0	106

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	534	0	0	341	0	0	998	946	340	945	946	533
Stage 1	-	-	-	-	-	-	412	412	-	533	533	-
Stage 2	-	-	-	-	-	-	586	534	-	412	413	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1034	-	-	1218	-	-	223	262	702	242	262	547
Stage 1	-	-	-	-	-	-	617	594	-	531	525	-
Stage 2	-	-	-	-	-	-	496	524	-	617	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1034	-	-	1218	-	-	175	253	702	235	253	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	175	253	-	235	253	-
Stage 1	-	-	-	-	-	-	595	573	-	512	525	-
Stage 2	-	-	-	-	-	-	400	524	-	594	573	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	24.2	14.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	196	1034	-	-	1218	-	-	502
HCM Lane V/C Ratio	0.046	0.035	-	-	-	-	-	0.227
HCM Control Delay (s)	24.2	8.6	-	-	0	-	-	14.3
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	0	25	48	0	30	58	560	79	50	787	5
Future Volume (vph)	11	0	25	48	0	30	58	560	79	50	787	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		505	505		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.907				0.850			0.850		0.999	
Flt Protected		0.985			0.950			0.995			0.997	
Satd. Flow (prot)	0	1664	0	0	1770	1583	0	1853	1583	0	1855	0
Flt Permitted		0.985			0.950			0.995			0.997	
Satd. Flow (perm)	0	1664	0	0	1770	1583	0	1853	1583	0	1855	0
Link Speed (mph)		20			30			55			55	
Link Distance (ft)		1128			791			1988			1399	
Travel Time (s)		38.5			18.0			24.6			17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	13	0	29	55	0	34	67	644	91	57	905	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	42	0	0	55	34	0	711	91	0	968	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	12.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	25	48	0	30	58	560	79	50	787	5
Future Vol, veh/h	11	0	25	48	0	30	58	560	79	50	787	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	505	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	29	55	0	34	67	644	91	57	905	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1863	1891	908	1815	1803	644	911	0	0	735	0	0
Stage 1	1022	1022	-	778	778	-	-	-	-	-	-	-
Stage 2	841	869	-	1037	1025	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	56	70	334	60	79	473	748	-	-	870	-	-
Stage 1	285	313	-	389	407	-	-	-	-	-	-	-
Stage 2	359	369	-	279	312	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	41	51	334	~ 44	58	473	748	-	-	870	-	-
Mov Cap-2 Maneuver	41	51	-	~ 44	58	-	-	-	-	-	-	-
Stage 1	241	271	-	329	344	-	-	-	-	-	-	-
Stage 2	282	312	-	221	271	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	60	230.5	0.9	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	748	-	-	105	44	473	870	-	-
HCM Lane V/C Ratio	0.089	-	-	0.394	1.254	0.073	0.066	-	-
HCM Control Delay (s)	10.3	0	-	60$	366.3	13.2	9.4	0	-
HCM Lane LOS	B	A	-	F	F	B	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.6	5.3	0.2	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	21	0	138	23	81	1	464	93	65	576	1
Future Volume (vph)	5	21	0	138	23	81	1	464	93	65	576	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.955			0.978				
Flt Protected		0.990			0.972						0.995	
Satd. Flow (prot)	0	1844	0	0	1729	0	0	1822	0	0	1853	0
Flt Permitted		0.990			0.972						0.995	
Satd. Flow (perm)	0	1844	0	0	1729	0	0	1822	0	0	1853	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	24	0	155	26	91	1	521	104	73	647	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	30	0	0	272	0	0	626	0	0	721	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 94.6%		ICU Level of Service F	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	90.8

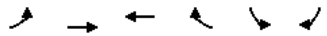
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	21	0	138	23	81	1	464	93	65	576	1
Future Vol, veh/h	5	21	0	138	23	81	1	464	93	65	576	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	24	0	155	26	91	1	521	104	73	647	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1428	1421	648	1381	1369	573	648	0	0	625	0	0
Stage 1	794	794	-	575	575	-	-	-	-	-	-	-
Stage 2	634	627	-	806	794	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	113	136	470	~ 121	146	519	938	-	-	956	-	-
Stage 1	381	400	-	503	503	-	-	-	-	-	-	-
Stage 2	467	476	-	376	400	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	72	120	470	~ 94	128	519	938	-	-	956	-	-
Mov Cap-2 Maneuver	72	120	-	~ 94	128	-	-	-	-	-	-	-
Stage 1	380	352	-	502	502	-	-	-	-	-	-	-
Stage 2	365	475	-	309	352	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	51.4	$ 543	0	0.9
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	938	-	-	106	134	956	-	-
HCM Lane V/C Ratio	0.001	-	-	0.276	2.029	0.076	-	-
HCM Control Delay (s)	8.8	0	-	51.4	$ 543	9.1	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	21.9	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	262	387	9	27	29
Future Volume (vph)	10	262	387	9	27	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.930	
Flt Protected	0.950				0.976	
Satd. Flow (prot)	1770	1863	1857	0	1691	0
Flt Permitted	0.950				0.976	
Satd. Flow (perm)	1770	1863	1857	0	1691	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	15	391	578	13	40	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	391	591	0	83	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	262	387	9	27	29
Future Vol, veh/h	10	262	387	9	27	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	391	578	13	40	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	591	0	-	0	1006	585
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	421	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	985	-	-	-	267	511
Stage 1	-	-	-	-	557	-
Stage 2	-	-	-	-	662	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	985	-	-	-	263	511
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	549	-
Stage 2	-	-	-	-	662	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	985	-	-	-	351
HCM Lane V/C Ratio	0.015	-	-	-	0.238
HCM Control Delay (s)	8.7	-	-	-	18.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.9

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	119	50	522	40	17	722
Future Volume (vph)	119	50	522	40	17	722
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		505	505	
Storage Lanes	1	1		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950					0.999
Satd. Flow (prot)	1770	1583	1863	1583	0	1861
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1770	1583	1863	1583	0	1861
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	178	75	779	60	25	1078
Shared Lane Traffic (%)						
Lane Group Flow (vph)	178	75	779	60	0	1103
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.9%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	68.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	119	50	522	40	17	722
Future Vol, veh/h	119	50	522	40	17	722
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	505	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	178	75	779	60	25	1078

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1907	779	0	0	839	0
Stage 1	779	-	-	-	-	-
Stage 2	1128	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 75	396	-	-	796	-
Stage 1	452	-	-	-	-	-
Stage 2	309	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 69	396	-	-	796	-
Mov Cap-2 Maneuver	~ 69	-	-	-	-	-
Stage 1	452	-	-	-	-	-
Stage 2	285	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 598	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	69	396	796	-
HCM Lane V/C Ratio	-	-	2.574	0.188	0.032	-
HCM Control Delay (s)	-	-	$ 842.5	16.2	9.7	0
HCM Lane LOS	-	-	F	C	A	A
HCM 95th %tile Q(veh)	-	-	17.4	0.7	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	151	10	3	96	30	10
Future Volume (vph)	151	10	3	96	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992				0.966	
Flt Protected				0.999	0.964	
Satd. Flow (prot)	1848	0	0	1861	1735	0
Flt Permitted				0.999	0.964	
Satd. Flow (perm)	1848	0	0	1861	1735	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	225	15	4	143	45	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	240	0	0	147	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	151	10	3	96	30	10
Future Vol, veh/h	151	10	3	96	30	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	225	15	4	143	45	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	240	0	384	233
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	151	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1327	-	619	806
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	877	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1327	-	617	806
Mov Cap-2 Maneuver	-	-	-	-	617	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	874	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	655	-	-	1327	-
HCM Lane V/C Ratio	0.091	-	-	0.003	-
HCM Control Delay (s)	11	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	146	19	5	121	56	15
Future Volume (vph)	146	19	5	121	56	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985				0.972	
Flt Protected				0.998	0.962	
Satd. Flow (prot)	1835	0	0	1859	1742	0
Flt Permitted				0.998	0.962	
Satd. Flow (perm)	1835	0	0	1859	1742	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	218	28	7	181	84	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	246	0	0	188	106	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	146	19	5	121	56	15
Future Vol, veh/h	146	19	5	121	56	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	218	28	7	181	84	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	246	0	427	232
Stage 1	-	-	-	-	232	-
Stage 2	-	-	-	-	195	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1320	-	584	807
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	838	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1320	-	580	807
Mov Cap-2 Maneuver	-	-	-	-	580	-
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	833	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	617	-	-	1320	-
HCM Lane V/C Ratio	0.172	-	-	0.006	-
HCM Control Delay (s)	12	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	145	23	7	170	70	20
Future Volume (vph)	145	23	7	170	70	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982				0.970	
Flt Protected				0.998	0.963	
Satd. Flow (prot)	1829	0	0	1859	1740	0
Flt Permitted				0.998	0.963	
Satd. Flow (perm)	1829	0	0	1859	1740	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	216	34	10	254	104	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	250	0	0	264	134	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	26.4%	ICU Level of Service	A
Analysis Period (min)	15		

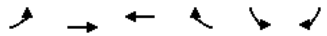
Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	145	23	7	170	70	20
Future Vol, veh/h	145	23	7	170	70	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	216	34	10	254	104	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	250	0	507	233
Stage 1	-	-	-	-	233	-
Stage 2	-	-	-	-	274	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1316	-	525	806
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	772	-
Platoon blocked, %	-	-				
Mov Cap-1 Maneuver	-	-	1316	-	520	806
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	765	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	565	-	-	1316	-
HCM Lane V/C Ratio	0.238	-	-	0.008	-
HCM Control Delay (s)	13.3	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	277	474	30	18	24
Future Volume (vph)	40	277	474	30	18	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265			265	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Link Speed (mph)		45	45		30	
Link Distance (ft)		1186	1151		625	
Travel Time (s)		18.0	17.4		14.2	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	60	413	707	45	27	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	413	707	45	27	36
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	277	474	30	18	24
Future Vol, veh/h	40	277	474	30	18	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	265	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	413	707	45	27	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	752	0	-	0	1240	707
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	533	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	858	-	-	-	193	435
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	858	-	-	-	179	435
Mov Cap-2 Maneuver	-	-	-	-	179	-
Stage 1	-	-	-	-	455	-
Stage 2	-	-	-	-	588	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	20.3
HCM LOS			C

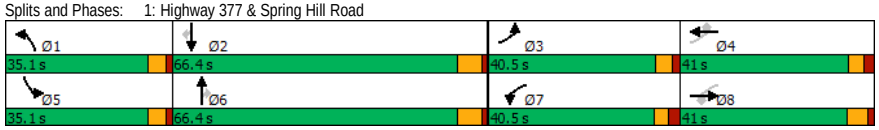
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	858	-	-	-	179	435
HCM Lane V/C Ratio	0.07	-	-	-	0.15	0.082
HCM Control Delay (s)	9.5	-	-	-	28.6	14
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	225	139	404	193	92	61	942	376	78	827	155
Future Volume (vph)	189	225	139	404	193	92	61	942	376	78	827	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		80	130		130	215		115	140		140
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	60			110			100			110		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.502			0.249			0.950			0.950		
Satd. Flow (perm)	935	1863	1583	464	1863	1583	1770	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83			83			81			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			1186			1340			1988	
Travel Time (s)		17.1			18.0			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	208	247	153	444	212	101	67	1035	413	86	909	170
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	247	153	444	212	101	67	1035	413	86	909	170
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes				
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	25.4	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.0	6.0	5.5	5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	Min	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)	60.6	24.7	24.7	60.4	45.0	45.0	9.8	60.2	60.2	11.2	61.7	61.7
Actuated g/C Ratio	0.39	0.16	0.16	0.39	0.29	0.29	0.06	0.39	0.39	0.07	0.40	0.40
v/c Ratio	0.46	0.83	0.47	0.93	0.39	0.19	0.60	1.42	0.62	0.67	1.22	0.25
Control Delay	32.6	85.8	31.9	65.2	47.4	12.9	94.1	234.6	36.1	95.9	151.4	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.6	85.8	31.9	65.2	47.4	12.9	94.1	234.6	36.1	95.9	151.4	18.0
LOS	C	F	C	E	D	B	F	F	D	F	F	B
Approach Delay		54.0			53.2			174.3			127.9	
Approach LOS		D			D			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 154.4			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.42			
Intersection Signal Delay: 120.2		Intersection LOS: F	
Intersection Capacity Utilization 108.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	513	8	1	425	7	2	0	1	4	0	56
Future Volume (vph)	96	513	8	1	425	7	2	0	1	4	0	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.998			0.955			0.874	
Flt Protected	0.950							0.968			0.997	
Satd. Flow (prot)	1770	1859	0	0	1859	0	0	1722	0	0	1623	0
Flt Permitted	0.950							0.968			0.997	
Satd. Flow (perm)	1770	1859	0	0	1859	0	0	1722	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		1151			1187			1301			713	
Travel Time (s)		17.4			14.7			35.5			16.2	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	117	626	10	1	518	9	2	0	1	5	0	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	636	0	0	528	0	0	3	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 64.0%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	513	8	1	425	7	2	0	1	4	0	56
Future Vol, veh/h	96	513	8	1	425	7	2	0	1	4	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	626	10	1	518	9	2	0	1	5	0	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	527	0	0	636	0	0	1424	1394	631	1391	1395	523
Stage 1	-	-	-	-	-	-	865	865	-	525	525	-
Stage 2	-	-	-	-	-	-	559	529	-	866	870	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1040	-	-	947	-	-	113	141	481	120	141	554
Stage 1	-	-	-	-	-	-	348	371	-	536	529	-
Stage 2	-	-	-	-	-	-	513	527	-	348	369	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1040	-	-	947	-	-	91	125	481	109	125	554
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	125	-	109	125	-
Stage 1	-	-	-	-	-	-	309	329	-	476	528	-
Stage 2	-	-	-	-	-	-	449	526	-	308	328	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0	34.7	14.9
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	125	1040	-	-	947	-	-	435
HCM Lane V/C Ratio	0.029	0.113	-	-	0.001	-	-	0.168
HCM Control Delay (s)	34.7	8.9	-	-	8.8	0	-	14.9
HCM Lane LOS	D	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0	-	-	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	0	13	268	0	168	13	944	248	155	767	11
Future Volume (vph)	16	0	13	268	0	168	13	944	248	155	767	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		505	505		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939				0.850			0.850		0.998	
Flt Protected		0.973			0.950			0.999			0.992	
Satd. Flow (prot)	0	1702	0	0	1770	1583	0	1861	1583	0	1844	0
Flt Permitted		0.973			0.950			0.999			0.992	
Satd. Flow (perm)	0	1702	0	0	1770	1583	0	1861	1583	0	1844	0
Link Speed (mph)		20			30			55			55	
Link Distance (ft)		1128			791			1988			1399	
Travel Time (s)		38.5			18.0			24.6			17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	17	0	14	285	0	179	14	1004	264	165	816	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	0	0	285	179	0	1018	264	0	993	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	60		60	15		60	60		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 131.5%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	799.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	13	268	0	168	13	944	248	155	767	11
Future Vol, veh/h	16	0	13	268	0	168	13	944	248	155	767	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	505	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	14	285	0	179	14	1004	264	165	816	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2406	2448	822	2191	2190	1004	828	0	0	1268	0	0
Stage 1	1152	1152	-	1032	1032	-	-	-	-	-	-	-
Stage 2	1254	1296	-	1159	1158	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	23	31	374	~ 33	45	294	803	-	-	548	-	-
Stage 1	241	272	-	~ 281	310	-	-	-	-	-	-	-
Stage 2	211	232	-	~ 238	270	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 5	13	374	~ 17	19	294	803	-	-	548	-	-
Mov Cap-2 Maneuver	~ 5	13	-	~ 17	19	-	-	-	-	-	-	-
Stage 1	225	120	-	~ 263	290	-	-	-	-	-	-	-
Stage 2	77	217	-	~ 101	119	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 1908.1	$ 4643.2	0.1	2.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	803	-	-	9	17	294	548	-	-
HCM Lane V/C Ratio	0.017	-	-	3.428	16.771	0.608	0.301	-	-
HCM Control Delay (s)	9.6	0	$ 1908.1	$ 7532.2	34.5	14.4	0	-	
HCM Lane LOS	A	A	-	F	F	D	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	5	36.4	3.7	1.3	-	-

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	15	1	117	12	70	0	773	171	99	730	1
Future Volume (vph)	5	15	1	117	12	70	0	773	171	99	730	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.952			0.976				
Flt Protected		0.989			0.972						0.994	
Satd. Flow (prot)	0	1831	0	0	1724	0	0	1818	0	0	1852	0
Flt Permitted		0.989			0.972						0.994	
Satd. Flow (perm)	0	1831	0	0	1724	0	0	1818	0	0	1852	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	16	1	123	13	74	0	814	180	104	768	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	210	0	0	994	0	0	873	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 123.1%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	175.1

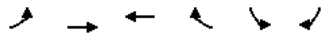
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	15	1	117	12	70	0	773	171	99	730	1
Future Vol, veh/h	5	15	1	117	12	70	0	773	171	99	730	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	16	1	123	13	74	0	814	180	104	768	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1925	1971	769	1889	1881	904	769	0	0	994	0	0
Stage 1	977	977	-	904	904	-	-	-	-	-	-	-
Stage 2	948	994	-	985	977	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	50	62	401	~ 53	71	335	845	-	-	696	-	-
Stage 1	302	329	-	331	356	-	-	-	-	-	-	-
Stage 2	313	323	-	299	329	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	26	46	401	~ 31	52	335	845	-	-	696	-	-
Mov Cap-2 Maneuver	26	46	-	~ 31	52	-	-	-	-	-	-	-
Stage 1	302	243	-	331	356	-	-	-	-	-	-	-
Stage 2	235	323	-	206	243	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	174.7	$ 1730.4	0	1.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	845	-	-	40	47	696	-	-
HCM Lane V/C Ratio	-	-	-	0.553	4.457	0.15	-	-
HCM Control Delay (s)	0	-	-	174.7	$ 1730.4	11.1	0	-
HCM Lane LOS	A	-	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	2	23.6	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	34	484	413	30	18	20
Future Volume (vph)	34	484	413	30	18	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.928	
Flt Protected	0.950				0.977	
Satd. Flow (prot)	1770	1863	1846	0	1689	0
Flt Permitted	0.950				0.977	
Satd. Flow (perm)	1770	1863	1846	0	1689	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	40	569	486	35	21	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	569	521	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	484	413	30	18	20
Future Vol, veh/h	34	484	413	30	18	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	569	486	35	21	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	521	0	-	0	1153	504
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	649	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1045	-	-	-	218	568
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	520	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1045	-	-	-	210	568
Mov Cap-2 Maneuver	-	-	-	-	210	-
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	520	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1045	-	-	-	314
HCM Lane V/C Ratio	0.038	-	-	-	0.142
HCM Control Delay (s)	8.6	-	-	-	18.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	80	33	936	135	57	854
Future Volume (vph)	80	33	936	135	57	854
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		505	505	
Storage Lanes	1	1		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950					0.997
Satd. Flow (prot)	1770	1583	1863	1583	0	1857
Flt Permitted	0.950					0.997
Satd. Flow (perm)	1770	1583	1863	1583	0	1857
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	94	39	1101	159	67	1005
Shared Lane Traffic (%)						
Lane Group Flow (vph)	94	39	1101	159	0	1072
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	102.8%	ICU Level of Service	G
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	42.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	33	936	135	57	854
Future Vol, veh/h	80	33	936	135	57	854
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	505	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	94	39	1101	159	67	1005

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2240	1101	0	0	1260	0
Stage 1	1101	-	-	-	-	-
Stage 2	1139	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 46	258	-	-	552	-
Stage 1	318	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Platoon blocked, %				-		-
Mov Cap-1 Maneuver	~ 33	258	-	-	552	-
Mov Cap-2 Maneuver	~ 33	-	-	-	-	-
Stage 1	318	-	-	-	-	-
Stage 2	221	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 778.6	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	33	258	552	-
HCM Lane V/C Ratio	-	-	2.852	0.15	0.121	-
HCM Control Delay (s)	-	-	$ 1090.9	21.4	12.4	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	10.9	0.5	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	114	35	12	116	20	7
Future Volume (vph)	114	35	12	116	20	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.966	
Flt Protected				0.995	0.964	
Satd. Flow (prot)	1803	0	0	1853	1735	0
Flt Permitted				0.995	0.964	
Satd. Flow (perm)	1803	0	0	1853	1735	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	134	41	14	136	24	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	175	0	0	150	32	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	114	35	12	116	20	7
Future Vol, veh/h	114	35	12	116	20	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	41	14	136	24	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	175	0	319	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	164	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1401	-	674	891
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	865	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1401	-	667	891
Mov Cap-2 Maneuver	-	-	-	-	667	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	855	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	714	-	-	1401	-
HCM Lane V/C Ratio	0.044	-	-	0.01	-
HCM Control Delay (s)	10.3	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	139	63	18	118	37	10
Future Volume (vph)	139	63	18	118	37	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.958				0.971	
Flt Protected				0.993	0.962	
Satd. Flow (prot)	1785	0	0	1850	1740	0
Flt Permitted				0.993	0.962	
Satd. Flow (perm)	1785	0	0	1850	1740	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	164	74	21	139	44	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	238	0	0	160	56	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	31.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	139	63	18	118	37	10
Future Vol, veh/h	139	63	18	118	37	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	164	74	21	139	44	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	238	0	382	201
Stage 1	-	-	-	-	201	-
Stage 2	-	-	-	-	181	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1329	-	620	840
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	850	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1329	-	609	840
Mov Cap-2 Maneuver	-	-	-	-	609	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	836	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	647	-	-	1329	-
HCM Lane V/C Ratio	0.085	-	-	0.016	-
HCM Control Delay (s)	11.1	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	189	80	22	134	47	13
Future Volume (vph)	189	80	22	134	47	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.960				0.971	
Flt Protected				0.993	0.962	
Satd. Flow (prot)	1788	0	0	1850	1740	0
Flt Permitted				0.993	0.962	
Satd. Flow (perm)	1788	0	0	1850	1740	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	222	94	26	158	55	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	316	0	0	184	70	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

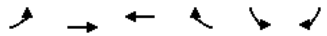
Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	189	80	22	134	47	13
Future Vol, veh/h	189	80	22	134	47	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	222	94	26	158	55	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	316	0	479	269
Stage 1	-	-	-	-	269	-
Stage 2	-	-	-	-	210	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1244	-	545	770
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	825	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1244	-	532	770
Mov Cap-2 Maneuver	-	-	-	-	532	-
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	806	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	570	-	-	1244	-
HCM Lane V/C Ratio	0.124	-	-	0.021	-
HCM Control Delay (s)	12.2	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	124	515	391	93	101	134
Future Volume (vph)	124	515	391	93	101	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265			265	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		1186	1151		625	
Travel Time (s)		27.0	26.2		14.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	146	606	460	109	119	158
Shared Lane Traffic (%)						
Lane Group Flow (vph)	146	606	460	109	119	158
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	124	515	391	93	101	134
Future Vol, veh/h	124	515	391	93	101	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	265	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	606	460	109	119	158

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	569	0	-	0	1358	460
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	898	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1003	-	-	-	164	601
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	398	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1003	-	-	-	140	601
Mov Cap-2 Maneuver	-	-	-	-	140	-
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	398	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	51.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1003	-	-	-	140	601
HCM Lane V/C Ratio	0.145	-	-	-	0.849	0.262
HCM Control Delay (s)	9.2	-	-	-	101.5	13.1
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	0.5	-	-	-	5.5	1

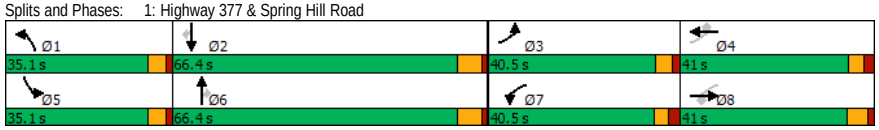
Synchro™ Output - 2028 Background Traffic

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	226	153	264	201	79	132	392	190	55	500	33
Future Volume (vph)	45	226	153	264	201	79	132	392	190	55	500	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		190	0		210	445		445	445		445
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	60			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.992			0.972		0.950			0.950		
Satd. Flow (prot)	0	3511	1583	0	3440	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.802			0.676		0.950			0.950		
Satd. Flow (perm)	0	2838	1583	0	2393	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			174			83			216			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			649			1340			1988	
Travel Time (s)		17.1			9.8			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	51	257	174	300	228	90	150	445	216	63	568	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	308	174	0	528	90	150	445	216	63	568	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)		20.9	20.9		21.2	21.2	10.1	17.8	17.8	7.7	12.2	12.2
Actuated g/C Ratio		0.34	0.34		0.35	0.35	0.16	0.29	0.29	0.13	0.20	0.20
v/c Ratio		0.32	0.27		0.64	0.15	0.51	0.30	0.35	0.28	0.56	0.10
Control Delay		16.2	4.0		21.1	5.2	32.2	19.9	5.5	31.9	25.8	1.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		16.2	4.0		21.1	5.2	32.2	19.9	5.5	31.9	25.8	1.8
LOS		B	A		C	A	C	B	A	C	C	A
Approach Delay		11.8			18.8			18.4			25.0	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 61.3			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 19.0		Intersection LOS: B	
Intersection Capacity Utilization 58.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	240	2	0	360	6	1
Future Volume (vph)	240	2	0	360	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.985	
Flt Protected					0.957	
Satd. Flow (prot)	1861	0	0	1863	1756	0
Flt Permitted					0.957	
Satd. Flow (perm)	1861	0	0	1863	1756	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	1688			1187	1301	
Travel Time (s)	25.6			14.7	35.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	308	3	0	462	8	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	0	0	462	9	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	240	2	0	360	6	1
Future Vol, veh/h	240	2	0	360	6	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	308	3	0	462	8	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	311	0	772	310
Stage 1	-	-	-	-	310	-
Stage 2	-	-	-	-	462	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1249	-	368	730
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	634	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1249	-	368	730
Mov Cap-2 Maneuver	-	-	-	-	368	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	634	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	396	-	-	1249	-
HCM Lane V/C Ratio	0.023	-	-	-	-
HCM Control Delay (s)	14.3	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	11	25	59	446	552	5
Future Volume (vph)	11	25	59	446	552	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	0.91	0.91
Frt	0.907				0.999	
Flt Protected	0.985			0.994		
Satd. Flow (prot)	1664	0	0	5055	5080	0
Flt Permitted	0.985			0.994		
Satd. Flow (perm)	1664	0	0	5055	5080	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	13	29	68	513	634	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	42	0	0	581	640	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	25	59	446	552	5
Future Vol, veh/h	11	25	59	446	552	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	29	68	513	634	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	978	320	640	0	-	0
Stage 1	637	-	-	-	-	-
Stage 2	341	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	318	577	582	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	634	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	266	577	582	-	-	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	335	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	1.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	582	-	425	-	-
HCM Lane V/C Ratio	0.117	-	0.097	-	-
HCM Control Delay (s)	12	0.5	14.4	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	22	0	32	24	23	1	364	51	41	505	1
Future Volume (vph)	5	22	0	32	24	23	1	364	51	41	505	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		170	445		0	445		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt						0.850		0.982				
Flt Protected		0.990			0.972		0.950			0.950		
Satd. Flow (prot)	0	1844	1863	0	1811	1583	1770	4994	0	1770	5085	0
Flt Permitted		0.990			0.972		0.950			0.950		
Satd. Flow (perm)	0	1844	1863	0	1811	1583	1770	4994	0	1770	5085	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	25	0	36	27	26	1	409	57	46	567	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	0	0	63	26	1	466	0	46	568	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	22	0	32	24	23	1	364	51	41	505	1
Future Vol, veh/h	5	22	0	32	24	23	1	364	51	41	505	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	170	-	-	170	445	-	-	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	25	0	36	27	26	1	409	57	46	567	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	839	1128	284	771	1100	233	568	0	0	466	0	0
Stage 1	660	660	-	440	440	-	-	-	-	-	-	-
Stage 2	179	468	-	331	660	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	317	203	608	347	211	655	629	-	-	703	-	-
Stage 1	341	458	-	481	576	-	-	-	-	-	-	-
Stage 2	740	560	-	601	458	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	259	189	608	297	197	655	629	-	-	703	-	-
Mov Cap-2 Maneuver	259	189	-	297	197	-	-	-	-	-	-	-
Stage 1	340	428	-	480	575	-	-	-	-	-	-	-
Stage 2	676	559	-	529	428	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.3	20.7	0	0.8
HCM LOS	D	C		

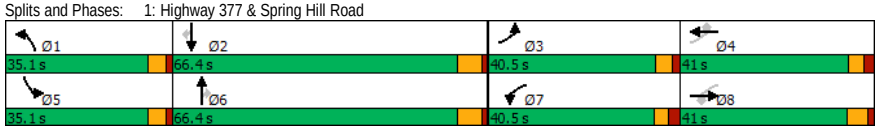
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	629	-	-	199	-	244	655	703	-	-
HCM Lane V/C Ratio	0.002	-	-	0.152	-	0.258	0.039	0.066	-	-
HCM Control Delay (s)	10.7	-	-	26.3	0	24.8	10.7	10.5	-	-
HCM Lane LOS	B	-	-	D	A	C	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	-	1	0.1	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	171	141	261	146	77	62	540	208	51	485	38
Future Volume (vph)	53	171	141	261	146	77	62	540	208	51	485	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		190	0		210	445		445	445		445
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	60			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.988			0.969		0.950			0.950		
Satd. Flow (prot)	0	3497	1583	0	3429	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.770			0.688		0.950			0.950		
Satd. Flow (perm)	0	2725	1583	0	2435	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			83			229			81
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			649			1340			1988	
Travel Time (s)		17.1			9.8			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	58	188	155	287	160	85	68	593	229	56	533	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	246	155	0	447	85	68	593	229	56	533	42
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)		15.5	15.5		15.8	15.8	7.6	13.8	13.8	7.5	11.2	11.2
Actuated g/C Ratio		0.32	0.32		0.32	0.32	0.16	0.28	0.28	0.15	0.23	0.23
v/c Ratio		0.29	0.26		0.57	0.15	0.25	0.41	0.37	0.21	0.46	0.10
Control Delay		14.5	4.2		17.9	4.7	24.2	17.5	5.5	23.9	19.4	2.5
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		14.5	4.2		17.9	4.7	24.2	17.5	5.5	23.9	19.4	2.5
LOS		B	A		B	A	C	B	A	C	B	A
Approach Delay		10.5			15.8			14.9			18.6	
Approach LOS		B			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 49			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 15.3		Intersection LOS: B	
Intersection Capacity Utilization 56.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	383	8	1	317	2	1
Future Volume (vph)	383	8	1	317	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.955	
Flt Protected					0.968	
Satd. Flow (prot)	1857	0	0	1863	1722	0
Flt Permitted					0.968	
Satd. Flow (perm)	1857	0	0	1863	1722	0
Link Speed (mph)	45			55	25	
Link Distance (ft)	1688			1187	1301	
Travel Time (s)	25.6			14.7	35.5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	467	10	1	387	2	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	477	0	0	388	3	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	383	8	1	317	2	1
Future Vol, veh/h	383	8	1	317	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	467	10	1	387	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	477	0	861	472
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1085	-	326	592
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	685	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1085	-	326	592
Mov Cap-2 Maneuver	-	-	-	-	326	-
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	684	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	383	-	-	1085	-
HCM Lane V/C Ratio	0.01	-	-	0.001	-
HCM Control Delay (s)	14.5	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	17	13	13	639	552	11
Future Volume (vph)	17	13	13	639	552	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	0.91	0.91
Frt	0.941				0.997	
Flt Protected	0.973			0.999		
Satd. Flow (prot)	1706	0	0	5080	5070	0
Flt Permitted	0.973			0.999		
Satd. Flow (perm)	1706	0	0	5080	5070	0
Link Speed (mph)	20			55	55	
Link Distance (ft)	1128			1988	1399	
Travel Time (s)	38.5			24.6	17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	18	14	14	680	587	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	0	0	694	599	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	31.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	13	13	639	552	11
Future Vol, veh/h	17	13	13	639	552	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	14	14	680	587	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	893	300	599	0	-	0
Stage 1	593	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	351	594	608	-	-	-
Stage 1	425	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	338	594	608	-	-	-
Mov Cap-2 Maneuver	338	-	-	-	-	-
Stage 1	409	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	608	-	416	-	-
HCM Lane V/C Ratio	0.023	-	0.077	-	-
HCM Control Delay (s)	11.1	0.1	14.4	-	-
HCM Lane LOS	B	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	16	1	32	12	20	0	556	39	24	490	1
Future Volume (vph)	5	16	1	32	12	20	0	556	39	24	490	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		170	445		0	445		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt			0.850			0.850		0.990				
Flt Protected		0.989			0.965					0.950		
Satd. Flow (prot)	0	1842	1583	0	1798	1583	1863	5034	0	1770	5085	0
Flt Permitted		0.989			0.965					0.950		
Satd. Flow (perm)	0	1842	1583	0	1798	1583	1863	5034	0	1770	5085	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	17	1	34	13	21	0	585	41	25	516	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	1	0	47	21	0	626	0	25	517	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	16	1	32	12	20	0	556	39	24	490	1
Future Vol, veh/h	5	16	1	32	12	20	0	556	39	24	490	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	170	-	-	170	445	-	-	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	17	1	34	13	21	0	585	41	25	516	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	808	1193	259	871	1173	313	517	0	0	626	0	0
Stage 1	567	567	-	606	606	-	-	-	-	-	-	-
Stage 2	241	626	-	265	567	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	331	186	631	304	191	583	665	-	-	591	-	-
Stage 1	395	505	-	371	485	-	-	-	-	-	-	-
Stage 2	680	475	-	658	505	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	293	178	631	273	183	583	665	-	-	591	-	-
Mov Cap-2 Maneuver	293	178	-	273	183	-	-	-	-	-	-	-
Stage 1	395	484	-	371	485	-	-	-	-	-	-	-
Stage 2	638	475	-	607	484	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25	19.7	0	0.5
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	665	-	-	196	631	241	583	591	-	-
HCM Lane V/C Ratio	-	-	-	0.113	0.002	0.192	0.036	0.043	-	-
HCM Control Delay (s)	0	-	-	25.7	10.7	23.5	11.4	11.4	-	-
HCM Lane LOS	A	-	-	D	B	C	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0.7	0.1	0.1	-	-

Synchro™ Output - 2028 Background Plus 2028 Full Buildout Scenario Site Traffic

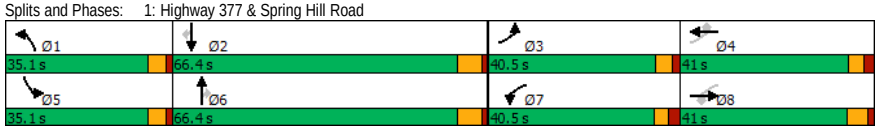
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	258	163	363	242	106	140	590	254	66	861	146
Future Volume (vph)	105	258	163	363	242	106	140	590	254	66	861	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		190	0		210	445		445	445		445
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	60			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.986			0.971		0.950			0.950		
Satd. Flow (prot)	0	3490	1583	0	3437	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.589			0.623		0.950			0.950		
Satd. Flow (perm)	0	2085	1583	0	2205	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			178			83			289			166
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			649			1340			1988	
Travel Time (s)		17.1			9.8			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	119	293	185	413	275	120	159	670	289	75	978	166
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	412	185	0	688	120	159	670	289	75	978	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)		31.7	31.7		32.0	32.0	12.2	27.6	27.6	8.4	20.7	20.7
Actuated g/C Ratio		0.38	0.38		0.39	0.39	0.15	0.33	0.33	0.10	0.25	0.25
v/c Ratio		0.51	0.26		1.16dl	0.18	0.61	0.39	0.40	0.41	0.77	0.32
Control Delay		23.3	4.7		32.3	8.3	45.2	23.4	4.8	45.3	33.9	6.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		23.3	4.7		32.3	8.3	45.2	23.4	4.8	45.3	33.9	6.4
LOS		C	A		C	A	D	C	A	D	C	A
Approach Delay		17.6			28.8			21.7			30.8	
Approach LOS		B			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 82.4			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 25.5		Intersection LOS: C	
Intersection Capacity Utilization 74.0%		ICU Level of Service D	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	282	3	0	436	2	6	0	1	6	0	83
Future Volume (vph)	28	282	3	0	436	2	6	0	1	6	0	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.999			0.985			0.874	
Flt Protected	0.950							0.957			0.997	
Satd. Flow (prot)	1770	1859	0	0	1861	0	0	1756	0	0	1623	0
Flt Permitted	0.950							0.957			0.997	
Satd. Flow (perm)	1770	1859	0	0	1861	0	0	1756	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		978			1187			1301			713	
Travel Time (s)		14.8			14.7			35.5			16.2	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	36	362	4	0	559	3	8	0	1	8	0	106
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	366	0	0	562	0	0	9	0	0	114	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	282	3	0	436	2	6	0	1	6	0	83
Future Vol, veh/h	28	282	3	0	436	2	6	0	1	6	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	362	4	0	559	3	8	0	1	8	0	106

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	366	0	0	1050	998	364	998	999	561
Stage 1	-	-	-	-	-	-	436	436	-	561	561	-
Stage 2	-	-	-	-	-	-	614	562	-	437	438	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1009	-	-	1193	-	-	205	244	681	223	243	527
Stage 1	-	-	-	-	-	-	599	580	-	512	510	-
Stage 2	-	-	-	-	-	-	479	510	-	598	579	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1009	-	-	1193	-	-	159	235	681	217	234	527
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	235	-	217	234	-
Stage 1	-	-	-	-	-	-	577	559	-	494	510	-
Stage 2	-	-	-	-	-	-	382	510	-	576	558	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	26.2	14.8
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	179	1009	-	-	1193	-	-	481
HCM Lane V/C Ratio	0.05	0.036	-	-	-	-	-	0.237
HCM Control Delay (s)	26.2	8.7	-	-	0	-	-	14.8
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	0	27	48	0	30	62	648	79	50	987	5
Future Volume (vph)	11	0	27	48	0	30	62	648	79	50	987	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		505	505		0
Storage Lanes	0		0	0		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.91	0.91
Frt		0.905				0.850			0.850		0.999	
Flt Protected		0.985			0.950			0.996		0.950		
Satd. Flow (prot)	0	1660	0	0	1770	1583	0	5065	1583	1770	5080	0
Flt Permitted		0.985			0.950			0.996		0.950		
Satd. Flow (perm)	0	1660	0	0	1770	1583	0	5065	1583	1770	5080	0
Link Speed (mph)		20			30			55			55	
Link Distance (ft)		1128			830			1988			1399	
Travel Time (s)		38.5			18.9			24.6			17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	13	0	31	55	0	34	71	745	91	57	1134	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	55	34	0	816	91	57	1140	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	60		60	15		60	60		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	27	48	0	30	62	648	79	50	987	5
Future Vol, veh/h	11	0	27	48	0	30	62	648	79	50	987	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	505	505	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	31	55	0	34	71	745	91	57	1134	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1691	2229	570	1455	2141	373	1140	0	0	836	0	0
Stage 1	1251	1251	-	887	887	-	-	-	-	-	-	-
Stage 2	440	978	-	568	1254	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	98	42	398	137	48	533	335	-	-	469	-	-
Stage 1	133	242	-	238	360	-	-	-	-	-	-	-
Stage 2	518	327	-	433	242	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	22	398	79	25	533	335	-	-	469	-	-
Mov Cap-2 Maneuver	57	22	-	79	25	-	-	-	-	-	-	-
Stage 1	79	212	-	142	215	-	-	-	-	-	-	-
Stage 2	289	195	-	351	212	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.9	78.7	3	0.7
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	335	-	-	146	79	533	469	-	-
HCM Lane V/C Ratio	0.213	-	-	0.299	0.698	0.065	0.123	-	-
HCM Control Delay (s)	18.6	1.9	-	39.9	120.3	12.2	13.7	-	-
HCM Lane LOS	C	A	-	E	F	B	B	-	-
HCM 95th %tile Q(veh)	0.8	-	-	1.2	3.3	0.2	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	23	0	242	25	135	1	505	126	86	621	1
Future Volume (vph)	5	23	0	242	25	135	1	505	126	86	621	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		170	445		0	445		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt						0.850		0.970				
Flt Protected		0.991			0.957		0.950			0.950		
Satd. Flow (prot)	0	1846	1863	0	1783	1583	1770	4933	0	1770	5085	0
Flt Permitted		0.991			0.957		0.950			0.950		
Satd. Flow (perm)	0	1846	1863	0	1783	1583	1770	4933	0	1770	5085	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	26	0	272	28	152	1	567	142	97	698	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	300	152	1	709	0	97	699	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	96.1

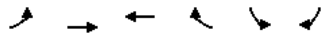
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	23	0	242	25	135	1	505	126	86	621	1
Future Vol, veh/h	5	23	0	242	25	135	1	505	126	86	621	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	170	-	-	170	445	-	-	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	26	0	272	28	152	1	567	142	97	698	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1136	1604	350	1126	1533	355	699	0	0	709	0	0
Stage 1	893	893	-	640	640	-	-	-	-	-	-	-
Stage 2	243	711	-	486	893	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	213	104	552	~ 215	115	548	545	-	-	540	-	-
Stage 1	236	358	-	352	468	-	-	-	-	-	-	-
Stage 2	678	434	-	486	358	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	85	552	~ 143	94	548	545	-	-	540	-	-
Mov Cap-2 Maneuver	103	85	-	~ 143	94	-	-	-	-	-	-	-
Stage 1	236	294	-	351	467	-	-	-	-	-	-	-
Stage 2	460	433	-	364	294	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	67.1	$ 415.8	0	1.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	545	-	-	88	-	136	548	540	-	-
HCM Lane V/C Ratio	0.002	-	-	0.358	-	2.206	0.277	0.179	-	-
HCM Control Delay (s)	11.6	-	-	67.1	0$	618.9	14.1	13.1	-	-
HCM Lane LOS	B	-	-	F	A	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.4	-	25	1.1	0.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	279	409	9	27	29
Future Volume (vph)	10	279	409	9	27	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.930	
Flt Protected	0.950				0.976	
Satd. Flow (prot)	1770	1863	1857	0	1691	0
Flt Permitted	0.950				0.976	
Satd. Flow (perm)	1770	1863	1857	0	1691	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	15	416	610	13	40	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	416	623	0	83	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	279	409	9	27	29
Future Vol, veh/h	10	279	409	9	27	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	416	610	13	40	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	623	0	-	0	1063	617
Stage 1	-	-	-	-	617	-
Stage 2	-	-	-	-	446	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	958	-	-	-	247	490
Stage 1	-	-	-	-	538	-
Stage 2	-	-	-	-	645	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	958	-	-	-	243	490
Mov Cap-2 Maneuver	-	-	-	-	243	-
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	645	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	958	-	-	-	329
HCM Lane V/C Ratio	0.016	-	-	-	0.254
HCM Control Delay (s)	8.8	-	-	-	19.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	171	63	589	58	21	869
Future Volume (vph)	171	63	589	58	21	869
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		345	415	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				100	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.91
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	5085	1583	1770	5085
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	5085	1583	1770	5085
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	255	94	879	87	31	1297
Shared Lane Traffic (%)						
Lane Group Flow (vph)	255	94	879	87	31	1297
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	31.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	171	63	589	58	21	869
Future Vol, veh/h	171	63	589	58	21	869
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	345	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	255	94	879	87	31	1297

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1460	440	0	0	966	0
Stage 1	879	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	~ 181	483	-	-	406	-
Stage 1	286	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 167	483	-	-	406	-
Mov Cap-2 Maneuver	~ 167	-	-	-	-	-
Stage 1	286	-	-	-	-	-
Stage 2	440	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	234.5	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	167	483	406	-
HCM Lane V/C Ratio	-	-	1.528	0.195	0.077	-
HCM Control Delay (s)	-	-	$ 315.6	14.2	14.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	16.7	0.7	0.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	183	35	8	110	103	26
Future Volume (vph)	183	35	8	110	103	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.973	
Flt Protected				0.997	0.962	
Satd. Flow (prot)	1863	1583	0	1857	1744	0
Flt Permitted				0.997	0.962	
Satd. Flow (perm)	1863	1583	0	1857	1744	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	273	52	12	164	154	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	273	52	0	176	193	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	26.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	35	8	110	103	26
Future Vol, veh/h	183	35	8	110	103	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	273	52	12	164	154	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	325	0	461	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	188	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1235	-	559	766
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	844	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1235	-	553	766
Mov Cap-2 Maneuver	-	-	-	-	553	-
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	835	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	586	-	-	1235	-
HCM Lane V/C Ratio	0.329	-	-	0.01	-
HCM Control Delay (s)	14.1	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	200	31	6	207	91	18
Future Volume (vph)	200	31	6	207	91	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.978	
Flt Protected				0.999	0.960	
Satd. Flow (prot)	1863	1583	0	1861	1749	0
Flt Permitted				0.999	0.960	
Satd. Flow (perm)	1863	1583	0	1861	1749	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	299	46	9	309	136	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	299	46	0	318	163	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	200	31	6	207	91	18
Future Vol, veh/h	200	31	6	207	91	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	299	46	9	309	136	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	345	0	626	299
Stage 1	-	-	-	-	299	-
Stage 2	-	-	-	-	327	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1214	-	448	741
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1214	-	444	741
Mov Cap-2 Maneuver	-	-	-	-	444	-
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	724	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	16.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	475	-	-	1214	-
HCM Lane V/C Ratio	0.342	-	-	0.007	-
HCM Control Delay (s)	16.5	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	191	39	14	284	116	40
Future Volume (vph)	191	39	14	284	116	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.965	
Flt Protected				0.998	0.964	
Satd. Flow (prot)	1863	1583	0	1859	1733	0
Flt Permitted				0.998	0.964	
Satd. Flow (perm)	1863	1583	0	1859	1733	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	285	58	21	424	173	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	285	58	0	445	233	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.9%		ICU Level of Service A	
Analysis Period (min) 15			

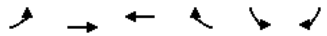
Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	191	39	14	284	116	40
Future Vol, veh/h	191	39	14	284	116	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	285	58	21	424	173	60

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	343	0	751	285
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1216	-	378	754
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	632	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1216	-	369	754
Mov Cap-2 Maneuver	-	-	-	-	369	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	617	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	23.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	425	-	-	1216	-
HCM Lane V/C Ratio	0.548	-	-	0.017	-
HCM Control Delay (s)	23.3	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	3.2	-	-	0.1	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	493	755	30	18	24
Future Volume (vph)	40	493	755	30	18	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265			265	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		710	978		621	
Travel Time (s)		16.1	22.2		14.1	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	60	736	1127	45	27	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	736	1127	45	27	36
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	493	755	30	18	24
Future Vol, veh/h	40	493	755	30	18	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	265	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	736	1127	45	27	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1172	0	-	0	1983	1127
Stage 1	-	-	-	-	1127	-
Stage 2	-	-	-	-	856	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	596	-	-	-	67	249
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	416	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	596	-	-	-	60	249
Mov Cap-2 Maneuver	-	-	-	-	60	-
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	416	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	58.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	596	-	-	-	60	249
HCM Lane V/C Ratio	0.1	-	-	-	0.448	0.144
HCM Control Delay (s)	11.7	-	-	-	106.7	21.9
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.7	0.5

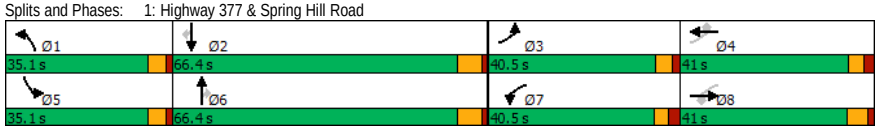
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	237	150	423	204	97	66	1098	388	80	943	183
Future Volume (vph)	238	237	150	423	204	97	66	1098	388	80	943	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		190	0		210	445		445	445		445
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	60			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.976			0.967		0.950			0.950		
Satd. Flow (prot)	0	3454	1583	0	3422	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.545			0.571		0.950			0.950		
Satd. Flow (perm)	0	1929	1583	0	2021	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126			83			426			201
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			649			1340			1988	
Travel Time (s)		17.1			9.8			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	262	260	165	465	224	107	73	1207	426	88	1036	201
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	522	165	0	689	107	73	1207	426	88	1036	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)		33.1	33.1		33.4	33.4	8.4	24.6	24.6	9.0	28.2	28.2
Actuated g/C Ratio		0.39	0.39		0.40	0.40	0.10	0.29	0.29	0.11	0.33	0.33
v/c Ratio		1.19dl	0.24		1.54dl	0.16	0.41	0.81	0.56	0.47	0.61	0.30
Control Delay		28.3	7.1		37.6	7.4	45.7	33.2	5.7	46.1	26.7	4.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		28.3	7.1		37.6	7.4	45.7	33.2	5.7	46.1	26.7	4.8
LOS		C	A		D	A	D	C	A	D	C	A
Approach Delay		23.3			33.5			26.9			24.7	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 84.5			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 26.9		Intersection LOS: C	
Intersection Capacity Utilization 83.3%		ICU Level of Service E	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	536	9	1	446	7	3	0	1	4	0	56
Future Volume (vph)	96	536	9	1	446	7	3	0	1	4	0	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.998			0.973			0.874	
Flt Protected	0.950							0.962			0.997	
Satd. Flow (prot)	1770	1859	0	0	1859	0	0	1744	0	0	1623	0
Flt Permitted	0.950							0.962			0.997	
Satd. Flow (perm)	1770	1859	0	0	1859	0	0	1744	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		978			1187			1301			713	
Travel Time (s)		14.8			14.7			35.5			16.2	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	117	654	11	1	544	9	4	0	1	5	0	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	665	0	0	554	0	0	5	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	536	9	1	446	7	3	0	1	4	0	56
Future Vol, veh/h	96	536	9	1	446	7	3	0	1	4	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	654	11	1	544	9	4	0	1	5	0	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	553	0	0	665	0	0	1479	1449	660	1445	1450	549
Stage 1	-	-	-	-	-	-	894	894	-	551	551	-
Stage 2	-	-	-	-	-	-	585	555	-	894	899	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1017	-	-	924	-	-	104	131	463	110	131	535
Stage 1	-	-	-	-	-	-	336	360	-	519	515	-
Stage 2	-	-	-	-	-	-	497	513	-	336	358	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1017	-	-	924	-	-	83	116	463	100	116	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	116	-	100	116	-
Stage 1	-	-	-	-	-	-	297	319	-	459	514	-
Stage 2	-	-	-	-	-	-	433	512	-	297	317	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	41.3	15.5
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	104	1017	-	-	924	-	-	415
HCM Lane V/C Ratio	0.047	0.115	-	-	0.001	-	-	0.176
HCM Control Delay (s)	41.3	9	-	-	8.9	0	-	15.5
HCM Lane LOS	E	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0	-	-	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	0	14	268	0	168	14	1238	248	155	914	11
Future Volume (vph)	18	0	14	268	0	168	14	1238	248	155	914	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		505	505		0
Storage Lanes	0		0	0		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.91	0.91
Frt		0.940				0.850			0.850		0.998	
Flt Protected		0.973			0.950			0.999		0.950		
Satd. Flow (prot)	0	1704	0	0	1770	1583	0	5080	1583	1770	5075	0
Flt Permitted		0.973			0.950			0.999		0.950		
Satd. Flow (perm)	0	1704	0	0	1770	1583	0	5080	1583	1770	5075	0
Link Speed (mph)		20			30			55			55	
Link Distance (ft)		1128			830			1988			1399	
Travel Time (s)		38.5			18.9			24.6			17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	0	15	285	0	179	15	1317	264	165	972	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	0	0	285	179	0	1332	264	165	984	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	894.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	0	14	268	0	168	14	1238	248	155	914	11
Future Vol, veh/h	18	0	14	268	0	168	14	1238	248	155	914	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	505	505	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	0	15	285	0	179	15	1317	264	165	972	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1865	2919	492	2066	2661	659	984	0	0	1581	0	0
Stage 1	1308	1308	-	1347	1347	-	-	-	-	-	-	-
Stage 2	557	1611	-	719	1314	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	77	15	447	~ 58	22	348	398	-	-	203	-	-
Stage 1	121	228	-	~ 114	218	-	-	-	-	-	-	-
Stage 2	440	162	-	351	226	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 9	2	447	~ 13	2	348	398	-	-	203	-	-
Mov Cap-2 Maneuver	~ 9	2	-	~ 13	2	-	-	-	-	-	-	-
Stage 1	72	43	-	~ 67	129	-	-	-	-	-	-	-
Stage 2	127	96	-	~ 64	42	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1012.7	$ 6146.1	1.7	10.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	398	-	-	16	13	348	203	-	-
HCM Lane V/C Ratio	0.037	-	-	2.128	21.931	0.514	0.812	-	-
HCM Control Delay (s)	14.4	1.9	$ 1012.5	$ 9982.7	25.8	71.4	-	-	
HCM Lane LOS	B	A	-	F	F	D	F	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.9	36.9	2.8	5.8	-	-

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	17	1	187	13	106	0	827	260	153	778	1
Future Volume (vph)	5	17	1	187	13	106	0	827	260	153	778	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		170	0		170	445		0	445		0
Storage Lanes	0		1	0		1	1		0	1		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt			0.850			0.850		0.964				
Flt Protected		0.989			0.955					0.950		
Satd. Flow (prot)	0	1842	1583	0	1779	1583	1863	4902	0	1770	5085	0
Flt Permitted		0.989			0.955					0.950		
Satd. Flow (perm)	0	1842	1583	0	1779	1583	1863	4902	0	1770	5085	0
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	18	1	197	14	112	0	871	274	161	819	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	1	0	211	112	0	1145	0	161	820	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	512.3

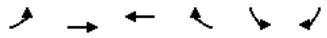
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	17	1	187	13	106	0	827	260	153	778	1
Future Vol, veh/h	5	17	1	187	13	106	0	827	260	153	778	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	170	-	-	170	445	-	-	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	18	1	197	14	112	0	871	274	161	819	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1497	2287	410	1667	2150	573	820	0	0	1145	0	0
Stage 1	1142	1142	-	1008	1008	-	-	-	-	-	-	-
Stage 2	355	1145	-	659	1142	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	129	39	505	~ 102	48	396	478	-	-	333	-	-
Stage 1	158	273	-	197	316	-	-	-	-	-	-	-
Stage 2	582	272	-	381	273	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	34	20	505	~ 16	25	396	478	-	-	333	-	-
Mov Cap-2 Maneuver	34	20	-	~ 16	25	-	-	-	-	-	-	-
Stage 1	158	141	-	197	316	-	-	-	-	-	-	-
Stage 2	400	272	-	~ 171	141	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 439.7	$ 3884.9	0	4.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	478	-	-	22	505	16	396	333	-	-
HCM Lane V/C Ratio	-	-	-	1.053	0.002	13.158	0.282	0.484	-	-
HCM Control Delay (s)	0	-	-	$ 459.1	12.1	$ 5934.6	17.6	25.5	-	-
HCM Lane LOS	A	-	-	F	B	F	C	D	-	-
HCM 95th %tile Q(veh)	0	-	-	3	0	27.2	1.1	2.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	34	507	434	30	18	20
Future Volume (vph)	34	507	434	30	18	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.928	
Flt Protected	0.950				0.977	
Satd. Flow (prot)	1770	1863	1846	0	1689	0
Flt Permitted	0.950				0.977	
Satd. Flow (perm)	1770	1863	1846	0	1689	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	40	596	511	35	21	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	596	546	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	507	434	30	18	20
Future Vol, veh/h	34	507	434	30	18	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	596	511	35	21	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	546	0	-	0	1205	529
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	676	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1023	-	-	-	203	550
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	505	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1023	-	-	-	195	550
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	505	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	19.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1023	-	-	-	295
HCM Lane V/C Ratio	0.039	-	-	-	0.152
HCM Control Delay (s)	8.7	-	-	-	19.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	115	42	1091	177	67	967
Future Volume (vph)	115	42	1091	177	67	967
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		345	415	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				100	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.91
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	5085	1583	1770	5085
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	5085	1583	1770	5085
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	135	49	1284	208	79	1138
Shared Lane Traffic (%)						
Lane Group Flow (vph)	135	49	1284	208	79	1138
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	28.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	115	42	1091	177	67	967
Future Vol, veh/h	115	42	1091	177	67	967
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	345	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	135	49	1284	208	79	1138

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1897	642	0	0	1492	0
Stage 1	1284	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	~ 106	357	-	-	225	-
Stage 1	162	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 69	357	-	-	225	-
Mov Cap-2 Maneuver	~ 69	-	-	-	-	-
Stage 1	162	-	-	-	-	-
Stage 2	297	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 427.8	0	1.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	69	357	225	-
HCM Lane V/C Ratio	-	-	1.961	0.138	0.35	-
HCM Control Delay (s)	-	-	$ 577.9	16.7	29.4	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	12.4	0.5	1.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	137	78	26	146	45	15
Future Volume (vph)	137	78	26	146	45	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.966	
Flt Protected				0.992	0.964	
Satd. Flow (prot)	1863	1583	0	1848	1735	0
Flt Permitted				0.992	0.964	
Satd. Flow (perm)	1863	1583	0	1848	1735	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	161	92	31	172	53	18
Shared Lane Traffic (%)						
Lane Group Flow (vph)	161	92	0	203	71	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	137	78	26	146	45	15
Future Vol, veh/h	137	78	26	146	45	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	161	92	31	172	53	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	253	0	395	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	234	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1312	-	610	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1312	-	594	884
Mov Cap-2 Maneuver	-	-	-	-	594	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	784	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	647	-	-	1312	-
HCM Lane V/C Ratio	0.109	-	-	0.023	-
HCM Control Delay (s)	11.2	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	201	142	26	165	84	14
Future Volume (vph)	201	142	26	165	84	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.981	
Flt Protected				0.993	0.959	
Satd. Flow (prot)	1863	1583	0	1850	1752	0
Flt Permitted				0.993	0.959	
Satd. Flow (perm)	1863	1583	0	1850	1752	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	236	167	31	194	99	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	167	0	225	115	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	201	142	26	165	84	14
Future Vol, veh/h	201	142	26	165	84	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	236	167	31	194	99	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	403	0	492	236
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1156	-	536	803
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1156	-	520	803
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	548	-	-	1156	-
HCM Lane V/C Ratio	0.21	-	-	0.026	-
HCM Control Delay (s)	13.3	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	316	116	38	212	77	26
Future Volume (vph)	316	116	38	212	77	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.966	
Flt Protected				0.992	0.964	
Satd. Flow (prot)	1863	1583	0	1848	1735	0
Flt Permitted				0.992	0.964	
Satd. Flow (perm)	1863	1583	0	1848	1735	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	372	136	45	249	91	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	372	136	0	294	122	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

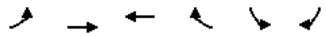
Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	316	116	38	212	77	26
Future Vol, veh/h	316	116	38	212	77	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	372	136	45	249	91	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	508	0	711	372
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	339	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1057	-	400	674
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	722	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1057	-	380	674
Mov Cap-2 Maneuver	-	-	-	-	380	-
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	687	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	427	-	-	1057	-
HCM Lane V/C Ratio	0.284	-	-	0.042	-
HCM Control Delay (s)	16.7	-	-	8.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	124	810	655	93	101	134
Future Volume (vph)	124	810	655	93	101	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265			265	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Link Speed (mph)		45	45		30	
Link Distance (ft)		710	978		621	
Travel Time (s)		10.8	14.8		14.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	146	953	771	109	119	158
Shared Lane Traffic (%)						
Lane Group Flow (vph)	146	953	771	109	119	158
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	41.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	124	810	655	93	101	134
Future Vol, veh/h	124	810	655	93	101	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	265	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	953	771	109	119	158

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	880	0	-	0	2016	771
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	1245	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	768	-	-	-	~ 64	400
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	768	-	-	-	~ 52	400
Mov Cap-2 Maneuver	-	-	-	-	~ 52	-
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	271	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	$ 336.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	768	-	-	-	52	400
HCM Lane V/C Ratio	0.19	-	-	-	2.285	0.394
HCM Control Delay (s)	10.8	-	-	-	$ 756.8	19.7
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.7	-	-	-	12.1	1.8

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon	

Synchro™ Output - 2028 Background Plus 2028 Full Buildout Scenario Site Traffic Mitigated

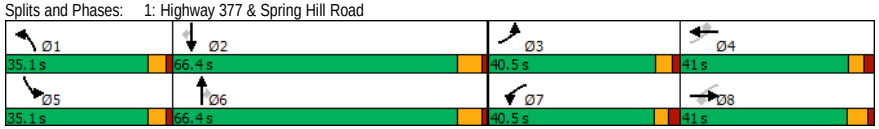
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	258	163	363	242	106	140	590	254	66	861	146
Future Volume (vph)	105	258	163	363	242	106	140	590	254	66	861	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		190	0		210	445		445	445		445
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	60			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.986			0.971		0.950			0.950		
Satd. Flow (prot)	0	3490	1583	0	3437	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.589			0.623		0.950			0.950		
Satd. Flow (perm)	0	2085	1583	0	2205	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			178			83			289			166
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			649			1340			1988	
Travel Time (s)		17.1			9.8			16.6			24.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	119	293	185	413	275	120	159	670	289	75	978	166
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	412	185	0	688	120	159	670	289	75	978	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)		31.7	31.7		32.0	32.0	12.2	27.6	27.6	8.4	20.7	20.7
Actuated g/C Ratio		0.38	0.38		0.39	0.39	0.15	0.33	0.33	0.10	0.25	0.25
v/c Ratio		0.51	0.26		1.16dl	0.18	0.61	0.39	0.40	0.41	0.77	0.32
Control Delay		23.3	4.7		32.3	8.3	45.2	23.4	4.8	45.3	33.9	6.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		23.3	4.7		32.3	8.3	45.2	23.4	4.8	45.3	33.9	6.4
LOS		C	A		C	A	D	C	A	D	C	A
Approach Delay		17.6			28.8			21.7			30.8	
Approach LOS		B			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 82.4			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 25.5		Intersection LOS: C	
Intersection Capacity Utilization 74.0%		ICU Level of Service D	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	282	3	0	436	2	6	0	1	6	0	83
Future Volume (vph)	28	282	3	0	436	2	6	0	1	6	0	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.999			0.985			0.874	
Flt Protected	0.950							0.957			0.997	
Satd. Flow (prot)	1770	1859	0	0	1861	0	0	1756	0	0	1623	0
Flt Permitted	0.950							0.957			0.997	
Satd. Flow (perm)	1770	1859	0	0	1861	0	0	1756	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		978			1187			1301			713	
Travel Time (s)		14.8			14.7			35.5			16.2	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	36	362	4	0	559	3	8	0	1	8	0	106
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	366	0	0	562	0	0	9	0	0	114	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	282	3	0	436	2	6	0	1	6	0	83
Future Vol, veh/h	28	282	3	0	436	2	6	0	1	6	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	362	4	0	559	3	8	0	1	8	0	106

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	366	0	0	1050	998	364	998	999	561
Stage 1	-	-	-	-	-	-	436	436	-	561	561	-
Stage 2	-	-	-	-	-	-	614	562	-	437	438	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1009	-	-	1193	-	-	205	244	681	223	243	527
Stage 1	-	-	-	-	-	-	599	580	-	512	510	-
Stage 2	-	-	-	-	-	-	479	510	-	598	579	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1009	-	-	1193	-	-	159	235	681	217	234	527
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	235	-	217	234	-
Stage 1	-	-	-	-	-	-	577	559	-	494	510	-
Stage 2	-	-	-	-	-	-	382	510	-	576	558	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	26.2	14.8
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	179	1009	-	-	1193	-	-	481
HCM Lane V/C Ratio	0.05	0.036	-	-	-	-	-	0.237
HCM Control Delay (s)	26.2	8.7	-	-	0	-	-	14.8
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	0	27	48	0	30	62	648	79	50	987	5
Future Volume (vph)	11	0	27	48	0	30	62	648	79	50	987	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		505	505		0
Storage Lanes	0		0	0		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.91	0.91
Frt		0.905				0.850			0.850		0.999	
Flt Protected		0.985			0.950			0.996		0.950		
Satd. Flow (prot)	0	1660	0	0	1770	1583	0	5065	1583	1770	5080	0
Flt Permitted		0.985			0.950			0.996		0.950		
Satd. Flow (perm)	0	1660	0	0	1770	1583	0	5065	1583	1770	5080	0
Link Speed (mph)		20			30			55			55	
Link Distance (ft)		1128			830			1988			1399	
Travel Time (s)		38.5			18.9			24.6			17.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	13	0	31	55	0	34	71	745	91	57	1134	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	55	34	0	816	91	57	1140	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	60		60	15		60	60		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	27	48	0	30	62	648	79	50	987	5
Future Vol, veh/h	11	0	27	48	0	30	62	648	79	50	987	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	505	505	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	31	55	0	34	71	745	91	57	1134	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1691	2229	570	1455	2141	373	1140	0	0	836	0	0
Stage 1	1251	1251	-	887	887	-	-	-	-	-	-	-
Stage 2	440	978	-	568	1254	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	98	42	398	137	48	533	335	-	-	469	-	-
Stage 1	133	242	-	238	360	-	-	-	-	-	-	-
Stage 2	518	327	-	433	242	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	22	398	79	25	533	335	-	-	469	-	-
Mov Cap-2 Maneuver	57	22	-	79	25	-	-	-	-	-	-	-
Stage 1	79	212	-	142	215	-	-	-	-	-	-	-
Stage 2	289	195	-	351	212	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	39.9	78.7	3	0.7
HCM LOS	E	F		

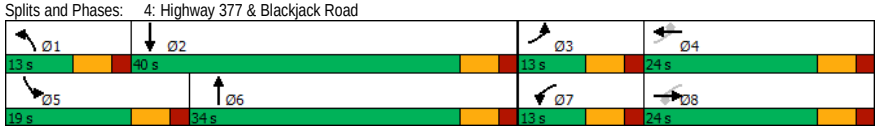
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	335	-	-	146	79	533	469	-	-
HCM Lane V/C Ratio	0.213	-	-	0.299	0.698	0.065	0.123	-	-
HCM Control Delay (s)	18.6	1.9	-	39.9	120.3	12.2	13.7	-	-
HCM Lane LOS	C	A	-	E	F	B	B	-	-
HCM 95th %tile Q(veh)	0.8	-	-	1.2	3.3	0.2	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	23	0	242	25	135	1	505	126	86	621	1
Future Volume (vph)	5	23	0	242	25	135	1	505	126	86	621	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		170	265		170	445		0	445		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt						0.850		0.970				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1863	1770	1863	1583	1770	4933	0	1770	5085	0
Flt Permitted	0.739						0.950			0.950		
Satd. Flow (perm)	1377	1863	1863	1863	1863	1583	1770	4933	0	1770	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						182		70				
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	6	26	0	272	28	152	1	567	142	97	698	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	26	0	272	28	152	1	709	0	97	699	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0		7.0	10.0	
Minimum Split (s)	13.0	24.0	24.0	13.0	24.0	24.0	13.0	24.0		13.0	24.0	
Total Split (s)	13.0	24.0	24.0	13.0	24.0	24.0	13.0	34.0		19.0	40.0	
Total Split (%)	14.4%	26.7%	26.7%	14.4%	26.7%	26.7%	14.4%	37.8%		21.1%	44.4%	
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0	18.0	7.0	28.0		13.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	11.1	8.0		10.1	10.1	10.1	7.8	14.0		9.3	23.6	
Actuated g/C Ratio	0.22	0.16		0.20	0.20	0.20	0.15	0.28		0.18	0.47	
v/c Ratio	0.02	0.09		0.76	0.08	0.33	0.00	0.50		0.30	0.30	
Control Delay	16.8	26.0		35.2	22.4	5.7	27.0	17.1		25.3	10.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	16.8	26.0		35.2	22.4	5.7	27.0	17.1		25.3	10.3	
LOS	B	C		D	C	A	C	B		C	B	
Approach Delay		24.3			24.5			17.1			12.1	
Approach LOS		C			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 50.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 53.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4: Highway 377 & Blackjack Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	279	409	9	27	29
Future Volume (vph)	10	279	409	9	27	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997		0.930	
Flt Protected	0.950				0.976	
Satd. Flow (prot)	1770	1863	1857	0	1691	0
Flt Permitted	0.950				0.976	
Satd. Flow (perm)	1770	1863	1857	0	1691	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	15	416	610	13	40	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	416	623	0	83	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	279	409	9	27	29
Future Vol, veh/h	10	279	409	9	27	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	416	610	13	40	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	623	0	-	0	1063	617
Stage 1	-	-	-	-	617	-
Stage 2	-	-	-	-	446	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	958	-	-	-	247	490
Stage 1	-	-	-	-	538	-
Stage 2	-	-	-	-	645	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	958	-	-	-	243	490
Mov Cap-2 Maneuver	-	-	-	-	243	-
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	645	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	958	-	-	-	329
HCM Lane V/C Ratio	0.016	-	-	-	0.254
HCM Control Delay (s)	8.8	-	-	-	19.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	171	63	589	58	21	869
Future Volume (vph)	171	63	589	58	21	869
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		345	415	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				100	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.91
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	5085	1583	1770	5085
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	5085	1583	1770	5085
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	255	94	879	87	31	1297
Shared Lane Traffic (%)						
Lane Group Flow (vph)	255	94	879	87	31	1297
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	31.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	171	63	589	58	21	869
Future Vol, veh/h	171	63	589	58	21	869
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	345	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	255	94	879	87	31	1297

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1460	440	0	0	966	0
Stage 1	879	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	~ 181	483	-	-	406	-
Stage 1	286	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 167	483	-	-	406	-
Mov Cap-2 Maneuver	~ 167	-	-	-	-	-
Stage 1	286	-	-	-	-	-
Stage 2	440	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	234.5	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	167	483	406	-
HCM Lane V/C Ratio	-	-	1.528	0.195	0.077	-
HCM Control Delay (s)	-	-	$ 315.6	14.2	14.6	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	16.7	0.7	0.2	-

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	183	35	8	110	103	26
Future Volume (vph)	183	35	8	110	103	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.973	
Flt Protected				0.997	0.962	
Satd. Flow (prot)	1863	1583	0	1857	1744	0
Flt Permitted				0.997	0.962	
Satd. Flow (perm)	1863	1583	0	1857	1744	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	273	52	12	164	154	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	273	52	0	176	193	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	35	8	110	103	26
Future Vol, veh/h	183	35	8	110	103	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	273	52	12	164	154	39

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	325	0	461	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	188	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1235	-	559	766
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	844	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1235	-	553	766
Mov Cap-2 Maneuver	-	-	-	-	553	-
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	835	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	586	-	-	1235	-
HCM Lane V/C Ratio	0.329	-	-	0.01	-
HCM Control Delay (s)	14.1	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	200	31	6	207	91	18
Future Volume (vph)	200	31	6	207	91	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.978	
Flt Protected				0.999	0.960	
Satd. Flow (prot)	1863	1583	0	1861	1749	0
Flt Permitted				0.999	0.960	
Satd. Flow (perm)	1863	1583	0	1861	1749	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	299	46	9	309	136	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	299	46	0	318	163	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	200	31	6	207	91	18
Future Vol, veh/h	200	31	6	207	91	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	299	46	9	309	136	27

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	345	0	626	299
Stage 1	-	-	-	-	299	-
Stage 2	-	-	-	-	327	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1214	-	448	741
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1214	-	444	741
Mov Cap-2 Maneuver	-	-	-	-	444	-
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	724	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	16.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	475	-	-	1214	-
HCM Lane V/C Ratio	0.342	-	-	0.007	-
HCM Control Delay (s)	16.5	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	191	39	14	284	116	40
Future Volume (vph)	191	39	14	284	116	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.965	
Flt Protected				0.998	0.964	
Satd. Flow (prot)	1863	1583	0	1859	1733	0
Flt Permitted				0.998	0.964	
Satd. Flow (perm)	1863	1583	0	1859	1733	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	285	58	21	424	173	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	285	58	0	445	233	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.9%		ICU Level of Service A	
Analysis Period (min) 15			

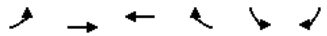
Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	191	39	14	284	116	40
Future Vol, veh/h	191	39	14	284	116	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	285	58	21	424	173	60

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	343	0	751	285
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1216	-	378	754
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	632	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1216	-	369	754
Mov Cap-2 Maneuver	-	-	-	-	369	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	617	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	23.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	425	-	-	1216	-
HCM Lane V/C Ratio	0.548	-	-	0.017	-
HCM Control Delay (s)	23.3	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	3.2	-	-	0.1	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	493	755	30	18	24
Future Volume (vph)	40	493	755	30	18	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265			265	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		710	978		621	
Travel Time (s)		16.1	22.2		14.1	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	60	736	1127	45	27	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	736	1127	45	27	36
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	60			60	60	60
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	493	755	30	18	24
Future Vol, veh/h	40	493	755	30	18	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	265	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	736	1127	45	27	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1172	0	-	0	1983	1127
Stage 1	-	-	-	-	1127	-
Stage 2	-	-	-	-	856	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	596	-	-	-	67	249
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	416	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	596	-	-	-	60	249
Mov Cap-2 Maneuver	-	-	-	-	60	-
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	416	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	58.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	596	-	-	-	60	249
HCM Lane V/C Ratio	0.1	-	-	-	0.448	0.144
HCM Control Delay (s)	11.7	-	-	-	106.7	21.9
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.3	-	-	-	1.7	0.5

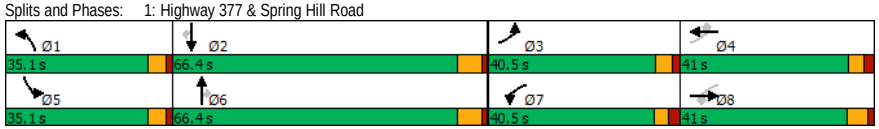
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	237	150	423	204	97	66	1098	388	80	943	183
Future Volume (vph)	238	237	150	423	204	97	66	1098	388	80	943	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		190	0		210	445		445	445		445
Storage Lanes	0		1	0		1	1		1	1		1
Taper Length (ft)	60			100			100			100		
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected		0.976			0.967		0.950			0.950		
Satd. Flow (prot)	0	3454	1583	0	3422	1583	1770	5085	1583	1770	5085	1583
Flt Permitted		0.545			0.571		0.950			0.950		
Satd. Flow (perm)	0	1929	1583	0	2021	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126			83			426			201
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		751			649			1340			1988	
Travel Time (s)		17.1			9.8			16.6			24.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	262	260	165	465	224	107	73	1207	426	88	1036	201
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	522	165	0	689	107	73	1207	426	88	1036	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4			6			2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	12.7	39.0	39.0	12.7	24.6	24.6	12.9	25.4	25.4	12.9	33.4	33.4
Total Split (s)	40.5	41.0	41.0	40.5	41.0	41.0	35.1	66.4	66.4	35.1	66.4	66.4
Total Split (%)	22.1%	22.4%	22.4%	22.1%	22.4%	22.4%	19.2%	36.3%	36.3%	19.2%	36.3%	36.3%
Maximum Green (s)	35.1	35.0	35.0	35.0	35.3	35.3	30.0	60.0	60.0	30.0	60.0	60.0
Yellow Time (s)	3.6	4.3	4.3	3.0	3.2	3.2	3.9	5.0	5.0	3.9	5.0	5.0
All-Red Time (s)	1.8	1.7	1.7	2.5	2.5	2.5	1.2	1.4	1.4	1.2	1.4	1.4
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0		5.7	5.7	5.1	6.4	6.4	5.1	6.4	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5	0.5	1.0	0.5	0.5
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)		8.0	8.0								6.0	6.0
Flash Dont Walk (s)		25.0	25.0								21.0	21.0
Pedestrian Calls (#/hr)		0	0								0	0
Act Effct Green (s)		33.1	33.1		33.4	33.4	8.4	24.6	24.6	9.0	28.2	28.2
Actuated g/C Ratio		0.39	0.39		0.40	0.40	0.10	0.29	0.29	0.11	0.33	0.33
v/c Ratio		1.19dl	0.24		1.54dl	0.16	0.41	0.81	0.56	0.47	0.61	0.30
Control Delay		28.3	7.1		37.6	7.4	45.7	33.2	5.7	46.1	26.7	4.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		28.3	7.1		37.6	7.4	45.7	33.2	5.7	46.1	26.7	4.8
LOS		C	A		D	A	D	C	A	D	C	A
Approach Delay		23.3			33.5			26.9			24.7	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 183			
Actuated Cycle Length: 84.5			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 26.9		Intersection LOS: C	
Intersection Capacity Utilization 83.3%		ICU Level of Service E	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1: Highway 377 & Spring Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	536	9	1	446	7	3	0	1	4	0	56
Future Volume (vph)	96	536	9	1	446	7	3	0	1	4	0	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.998			0.973			0.874	
Flt Protected	0.950							0.962			0.997	
Satd. Flow (prot)	1770	1859	0	0	1859	0	0	1744	0	0	1623	0
Flt Permitted	0.950							0.962			0.997	
Satd. Flow (perm)	1770	1859	0	0	1859	0	0	1744	0	0	1623	0
Link Speed (mph)		45			55			25			30	
Link Distance (ft)		978			1187			1301			713	
Travel Time (s)		14.8			14.7			35.5			16.2	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	117	654	11	1	544	9	4	0	1	5	0	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	665	0	0	554	0	0	5	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	536	9	1	446	7	3	0	1	4	0	56
Future Vol, veh/h	96	536	9	1	446	7	3	0	1	4	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	117	654	11	1	544	9	4	0	1	5	0	68

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	553	0	0	665	0	0	1479	1449	660	1445	1450	549
Stage 1	-	-	-	-	-	-	894	894	-	551	551	-
Stage 2	-	-	-	-	-	-	585	555	-	894	899	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1017	-	-	924	-	-	104	131	463	110	131	535
Stage 1	-	-	-	-	-	-	336	360	-	519	515	-
Stage 2	-	-	-	-	-	-	497	513	-	336	358	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1017	-	-	924	-	-	83	116	463	100	116	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	116	-	100	116	-
Stage 1	-	-	-	-	-	-	297	319	-	459	514	-
Stage 2	-	-	-	-	-	-	433	512	-	297	317	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	41.3	15.5
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	104	1017	-	-	924	-	-	415
HCM Lane V/C Ratio	0.047	0.115	-	-	0.001	-	-	0.176
HCM Control Delay (s)	41.3	9	-	-	8.9	0	-	15.5
HCM Lane LOS	E	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0	-	-	0.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	0	14	268	0	168	14	1238	248	155	914	11
Future Volume (vph)	18	0	14	268	0	168	14	1238	248	155	914	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		505	505		0
Storage Lanes	0		0	0		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.91	0.91
Frt		0.940				0.850			0.850		0.998	
Flt Protected		0.973			0.950			0.999		0.950		
Satd. Flow (prot)	0	1704	0	0	1770	1583	0	5080	1583	1770	5075	0
Flt Permitted		0.973			0.950			0.999		0.950		
Satd. Flow (perm)	0	1704	0	0	1770	1583	0	5080	1583	1770	5075	0
Link Speed (mph)		20			30			55			55	
Link Distance (ft)		1128			830			1988			1399	
Travel Time (s)		38.5			18.9			24.6			17.3	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	0	15	285	0	179	15	1317	264	165	972	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	0	0	285	179	0	1332	264	165	984	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	894.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	0	14	268	0	168	14	1238	248	155	914	11
Future Vol, veh/h	18	0	14	268	0	168	14	1238	248	155	914	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	505	505	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	0	15	285	0	179	15	1317	264	165	972	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1865	2919	492	2066	2661	659	984	0	0	1581	0	0
Stage 1	1308	1308	-	1347	1347	-	-	-	-	-	-	-
Stage 2	557	1611	-	719	1314	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	77	15	447	~ 58	22	348	398	-	-	203	-	-
Stage 1	121	228	-	~ 114	218	-	-	-	-	-	-	-
Stage 2	440	162	-	351	226	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 9	2	447	~ 13	2	348	398	-	-	203	-	-
Mov Cap-2 Maneuver	~ 9	2	-	~ 13	2	-	-	-	-	-	-	-
Stage 1	72	43	-	~ 67	129	-	-	-	-	-	-	-
Stage 2	127	96	-	~ 64	42	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	1012.7	$ 6146.1	1.7	10.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	398	-	-	16	13	348	203	-	-
HCM Lane V/C Ratio	0.037	-	-	2.128	21.931	0.514	0.812	-	-
HCM Control Delay (s)	14.4	1.9	$ 1012.5	$ 9982.7	25.8	71.4	-	-	
HCM Lane LOS	B	A	-	F	F	D	F	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.9	36.9	2.8	5.8	-	-

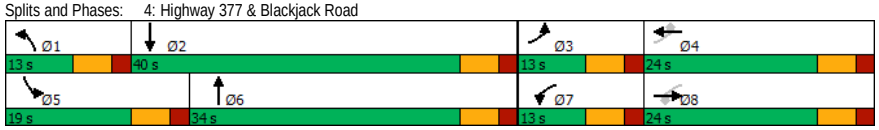
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

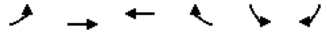
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	17	1	187	13	106	0	827	260	153	778	1
Future Volume (vph)	5	17	1	187	13	106	0	827	260	153	778	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265		170	265		170	445		0	445		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Frt			0.850			0.850		0.964				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1863	4902	0	1770	5085	0
Flt Permitted	0.748									0.950		
Satd. Flow (perm)	1393	1863	1583	1863	1863	1583	1863	4902	0	1770	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			182		91				
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		1199			1698			1758			945	
Travel Time (s)		18.2			21.0			21.8			11.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	18	1	197	14	112	0	871	274	161	819	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	18	1	197	14	112	0	1145	0	161	820	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	D.P+P	NA	Perm	D.P+P	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	4		8	8		4						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0		7.0	10.0	
Minimum Split (s)	13.0	24.0	24.0	13.0	24.0	24.0	13.0	24.0		13.0	24.0	
Total Split (s)	13.0	24.0	24.0	13.0	24.0	24.0	13.0	34.0		19.0	40.0	
Total Split (%)	14.4%	26.7%	26.7%	14.4%	26.7%	26.7%	14.4%	37.8%		21.1%	44.4%	
Maximum Green (s)	7.0	18.0	18.0	7.0	18.0	18.0	7.0	28.0		13.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	10.6	7.4	7.4	9.7	9.5	9.5		21.2		10.7	38.3	
Actuated g/C Ratio	0.17	0.12	0.12	0.16	0.15	0.15		0.34		0.17	0.61	
v/c Ratio	0.02	0.08	0.00	0.71	0.05	0.28		0.66		0.53	0.26	
Control Delay	22.2	31.9	0.0	40.2	28.2	3.1		18.8		33.5	6.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	22.2	31.9	0.0	40.2	28.2	3.1		18.8		33.5	6.3	
LOS	C	C	A	D	C	A		B		C	A	
Approach Delay		28.6			26.8			18.8			10.8	
Approach LOS		C			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 62.4			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Highway 377 & Blackjack Road





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	34	507	434	30	18	20
Future Volume (vph)	34	507	434	30	18	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.991		0.928	
Flt Protected	0.950				0.977	
Satd. Flow (prot)	1770	1863	1846	0	1689	0
Flt Permitted	0.950				0.977	
Satd. Flow (perm)	1770	1863	1846	0	1689	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1187	1044		549	
Travel Time (s)		27.0	23.7		12.5	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	40	596	511	35	21	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	596	546	0	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	507	434	30	18	20
Future Vol, veh/h	34	507	434	30	18	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	596	511	35	21	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	546	0	-	0	1205	529
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	676	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1023	-	-	-	203	550
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	505	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1023	-	-	-	195	550
Mov Cap-2 Maneuver	-	-	-	-	195	-
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	505	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	19.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1023	-	-	-	295
HCM Lane V/C Ratio	0.039	-	-	-	0.152
HCM Control Delay (s)	8.7	-	-	-	19.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	115	42	1091	177	67	967
Future Volume (vph)	115	42	1091	177	67	967
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		345	415	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				100	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.91
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1583	5085	1583	1770	5085
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1583	5085	1583	1770	5085
Link Speed (mph)	30		55			55
Link Distance (ft)	836		1399			1758
Travel Time (s)	19.0		17.3			21.8
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	135	49	1284	208	79	1138
Shared Lane Traffic (%)						
Lane Group Flow (vph)	135	49	1284	208	79	1138
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	28.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	115	42	1091	177	67	967
Future Vol, veh/h	115	42	1091	177	67	967
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	345	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	135	49	1284	208	79	1138

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1897	642	0	0	1492	0
Stage 1	1284	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	~ 106	357	-	-	225	-
Stage 1	162	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 69	357	-	-	225	-
Mov Cap-2 Maneuver	~ 69	-	-	-	-	-
Stage 1	162	-	-	-	-	-
Stage 2	297	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 427.8	0	1.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	69	357	225	-
HCM Lane V/C Ratio	-	-	1.961	0.138	0.35	-
HCM Control Delay (s)	-	-	$ 577.9	16.7	29.4	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	12.4	0.5	1.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	137	78	26	146	45	15
Future Volume (vph)	137	78	26	146	45	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.966	
Flt Protected				0.992	0.964	
Satd. Flow (prot)	1863	1583	0	1848	1735	0
Flt Permitted				0.992	0.964	
Satd. Flow (perm)	1863	1583	0	1848	1735	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1257			1497	515	
Travel Time (s)	28.6			18.6	11.7	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	161	92	31	172	53	18
Shared Lane Traffic (%)						
Lane Group Flow (vph)	161	92	0	203	71	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	137	78	26	146	45	15
Future Vol, veh/h	137	78	26	146	45	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	161	92	31	172	53	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	253	0	395	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	234	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1312	-	610	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1312	-	594	884
Mov Cap-2 Maneuver	-	-	-	-	594	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	784	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	647	-	-	1312	-
HCM Lane V/C Ratio	0.109	-	-	0.023	-
HCM Control Delay (s)	11.2	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	201	142	26	165	84	14
Future Volume (vph)	201	142	26	165	84	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.981	
Flt Protected				0.993	0.959	
Satd. Flow (prot)	1863	1583	0	1850	1752	0
Flt Permitted				0.993	0.959	
Satd. Flow (perm)	1863	1583	0	1850	1752	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1589			1257	402	
Travel Time (s)	36.1			15.6	9.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	236	167	31	194	99	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	167	0	225	115	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	201	142	26	165	84	14
Future Vol, veh/h	201	142	26	165	84	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	236	167	31	194	99	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	403	0	492	236
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1156	-	536	803
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %	-	-			-	
Mov Cap-1 Maneuver	-	-	1156	-	520	803
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	548	-	-	1156	-
HCM Lane V/C Ratio	0.21	-	-	0.026	-
HCM Control Delay (s)	13.3	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	316	116	38	212	77	26
Future Volume (vph)	316	116	38	212	77	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.966	
Flt Protected				0.992	0.964	
Satd. Flow (prot)	1863	1583	0	1848	1735	0
Flt Permitted				0.992	0.964	
Satd. Flow (perm)	1863	1583	0	1848	1735	0
Link Speed (mph)	30			55	30	
Link Distance (ft)	1698			1589	493	
Travel Time (s)	38.6			19.7	11.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	372	136	45	249	91	31
Shared Lane Traffic (%)						
Lane Group Flow (vph)	372	136	0	294	122	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

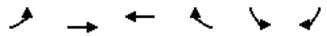
Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	316	116	38	212	77	26
Future Vol, veh/h	316	116	38	212	77	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	250	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	372	136	45	249	91	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	508	0	711	372
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	339	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1057	-	400	674
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	722	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1057	-	380	674
Mov Cap-2 Maneuver	-	-	-	-	380	-
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	687	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	427	-	-	1057	-
HCM Lane V/C Ratio	0.284	-	-	0.042	-
HCM Control Delay (s)	16.7	-	-	8.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	124	810	655	93	101	134
Future Volume (vph)	124	810	655	93	101	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265			265	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Link Speed (mph)		45	45		30	
Link Distance (ft)		710	978		621	
Travel Time (s)		10.8	14.8		14.1	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	146	953	771	109	119	158
Shared Lane Traffic (%)						
Lane Group Flow (vph)	146	953	771	109	119	158
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	41.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	124	810	655	93	101	134
Future Vol, veh/h	124	810	655	93	101	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	265	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	953	771	109	119	158

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	880	0	-	0	2016	771
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	1245	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	768	-	-	-	~ 64	400
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	768	-	-	-	~ 52	400
Mov Cap-2 Maneuver	-	-	-	-	~ 52	-
Stage 1	-	-	-	-	369	-
Stage 2	-	-	-	-	271	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	$ 336.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	768	-	-	-	52	400
HCM Lane V/C Ratio	0.19	-	-	-	2.285	0.394
HCM Control Delay (s)	10.8	-	-	-	$ 756.8	19.7
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.7	-	-	-	12.1	1.8

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon	

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

CIVIL CONSTRUCTION PLANS
PAVING, GRADING & UTILITIES
FOR
HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY, DENTON COUNTY, TEXAS

PLAN SUBMITTAL/REVIEW LOG

1ST SUBMITTAL TO CITY OF AUBREY	07/16/2024
2ND SUBMITTAL TO CITY OF AUBREY	08/27/2024
3RD SUBMITTAL TO CITY OF AUBREY	10/15/2024
4TH SUBMITTAL TO CITY OF AUBREY	11/21/2024

ENGINEER

Kimley»Horn

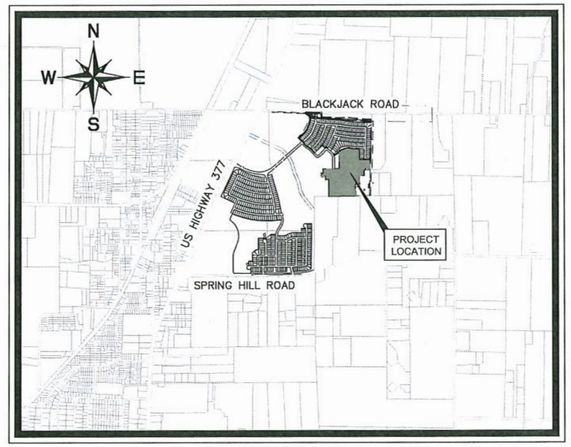
6160 WARREN PARKWAY
SUITE 210
FRISCO, TEXAS 75034
TEL: (972) 335-380
CONTACT: THOMAS L. FLETCHER, P.E.

STATE OF TEXAS
REGISTRATION NO. F-928

OWNER/DEVELOPER

LENNAR
1707 MARKETPLACE BLVD
SUITE 100
IRVING, TX 75063
TEL: (903) 821-2188
CONTACT: ANNIE HEPNER

811
Know what's **below.**
Call before you dig.



VICINITY MAP
SCALE: 1" = 2,000'

DECEMBER 2024

SHEET INDEX

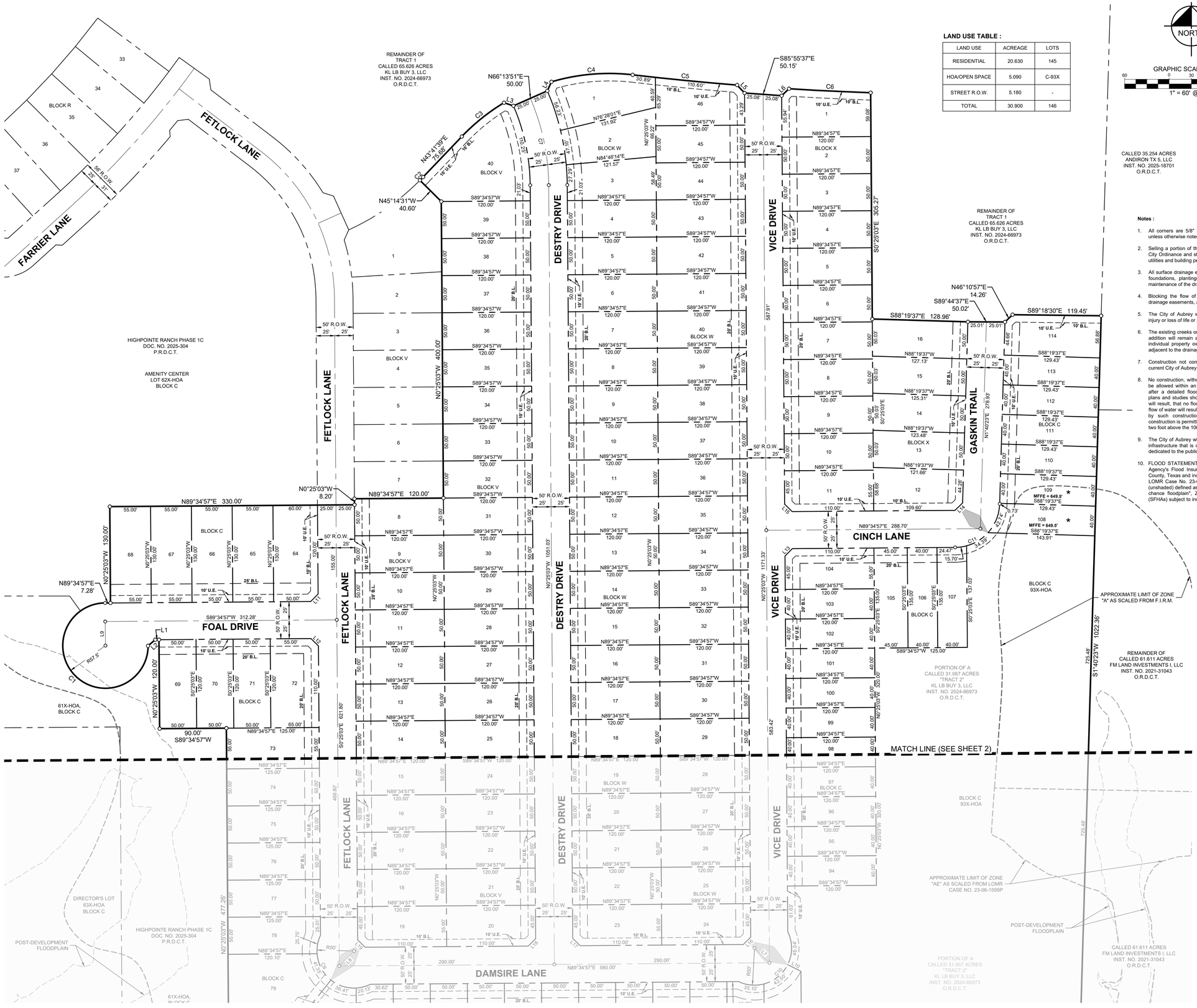
SHEET NO.	DESCRIPTION
C-01	COVER SHEET
C-02	FINAL PLAT
C-03	FINAL PLAT
C-04	FINAL PLAT
C-05	GENERAL NOTES
C-06	DEMOLITION PLAN
C-07	GRADING PLAN
C-08	GRADING PLAN
C-09	GRADING PLAN
C-10	PAVING P&P - FETLOCK LANE
C-11	PAVING P&P - FOAL DRIVE & DAMSIRE LANE
C-12	PAVING P&P - DAMSIRE LANE & DESTRY DRIVE
C-13	PAVING P&P - DESTRY DRIVE
C-14	PAVING P&P - VICE DRIVE
C-15	PAVING P&P - VICE DRIVE AND CINCH LANE
C-16	PAVING P&P - GASKIN TRAIL
C-17	EXISTING DRAINAGE AREA MAP
C-18	PROPOSED DRAINAGE AREA MAP
C-19	DRAINAGE CALCULATIONS
C-20	DRAINAGE CALCULATIONS
C-21	STORM DRAIN PLAN & PROFILE - LINE SD-AE
C-22	STORM DRAIN PLAN & PROFILE - LINE SD-AF
C-23	STORM DRAIN PLAN & PROFILE - LINE SD-AG
C-24	STORM DRAIN PLAN & PROFILE - LINE SD-AH
C-25	STORM PROFILES - LATERALS
C-26	STORM PROFILES - LATERALS
C-27	STORM PROFILES - LATERALS
C-28	WATER PLAN
C-29	SANITARY SEWER PLAN
C-30	SANITARY SEWER PROFILES - LINE SS-AD & LINE SS-AG
C-31	SANITARY SEWER PROFILES - LINE SS-AG & LINE SS-AH
C-32	SANITARY SEWER PROFILES - LINE SS-AI & LINE SS-AJ
C-33	STREET LIGHT & SIGN PLAN
C-34	SIDEWALK PLAN
C-35	SEDIMENT POND PLAN
C-36	EROSION CONTROL PLAN
C-37	EROSION CONTROL DETAILS
C-38	CONSTRUCTION DETAILS
C-39	CONSTRUCTION DETAILS
C-40	CONSTRUCTION DETAILS
C-41	CONSTRUCTION DETAILS
C-42	CONSTRUCTION DETAILS
C-43	CONSTRUCTION DETAILS
C-44	CONSTRUCTION DETAILS
C-45	CONSTRUCTION DETAILS
C-46	CONSTRUCTION DETAILS
C-47	CONSTRUCTION DETAILS

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
11/21/24

City of Aubrey
Approved for Construction
12/19/24

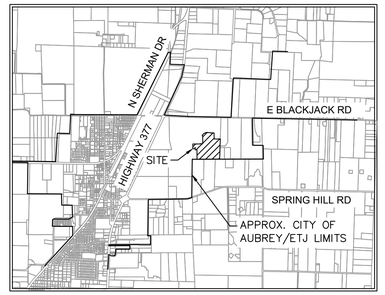
HIGHPOINTE RANCH - PHASE 3
KHA PROJECT NO. 063451880
CIVIL CONSTRUCTION PLANS

C-01



LAND USE TABLE :

LAND USE	ACREAGE	LOTS
RESIDENTIAL	20.630	145
HOA/OPEN SPACE	5.090	C-93X
STREET R.O.W.	5.180	-
TOTAL	30.900	146



VICINITY MAP

SCALE: 1" = 4,000'

Notes :

1. All corners are 5/8" iron rods set with a plastic cap stamped "KHA" unless otherwise noted.
2. Selling a portion of this addition by metes and bounds is a violation of City Ordinance and state law and is subject to fines and withholding of utilities and building permits.
3. All surface drainage easements shall be kept clear of fences, buildings, foundations, plantings and other obstructions to the operation and maintenance of the drainage facility.
4. Blocking the flow of water or constructing improvements in surface drainage easements, and filling or obstructing the floodway is prohibited.
5. The City of Aubrey will not be responsible for any damage, personal injury or loss of life or property occasioned by flooding conditions.
6. The existing creeks or drainage channels traversing along or across the addition will remain as open channels and will be maintained by the individual property owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across the lots.
7. Construction not completed within two years of approval subject to current City of Aubrey Subdivision Rules and Regulations.
8. No construction, without written approval from the City of Aubrey shall be allowed within an identified "FIRM" floodplain area, and then only after a detailed floodplain development permit including engineering plans and studies show that no rise in the Base Flood Elevation (BFE) will result, that no flooding will result, that no obstruction to the natural flow of water will result; and subject to all owners of the property affected by such construction becoming a party to the request. Where construction is permitted, all finish floor elevations shall be a minimum of two foot above the 100-year flood elevation.
9. The City of Aubrey will be responsible for the maintenance of all public infrastructure that is constructed in right-of-way or easements that are dedicated to the public or the City of Aubrey.
10. FLOOD STATEMENT: According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 48121C0265G, for Denton County, Texas and incorporated areas, dated 04/18/2011, as revised by LOMR Case No. 23-06-1599P, this property is located within Zone X (unshaded) defined as "Areas determined to be outside the 0.2% annual chance floodplain", Zone A defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (No Base Flood Elevations determined)", and Zone AE defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (No Base Flood Elevations determined)". If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This flood statement shall not create liability on the part of the surveyor. Minimum finished floor elevations are at least 2 feet above the 100 year flood plain.
11. Water service to be provided by the City of Aubrey.
12. Sanitary Sewer to be provided by the City of Aubrey.
13. The City of Aubrey shall not be responsible for the maintenance of any private facilities, including but not limited to, HOA or High Pointe Ranch Municipal Utility District No. 1 open space lots, private parks, amenity center(s), development signage and entry features. Maintenance of these facilities shall be the responsibility of either the HOA or High Pointe Ranch Municipal Utility District No. 1, and the HOA and High Pointe Ranch Municipal Utility District No. 1 hold harmless the City of Aubrey, from all claims, damages and loses arising out of or resulting from performance of the obligations said HOA or High Pointe Ranch Municipal Utility District No. 1.
14. All utilities and drainage structures are located in the right-of-way except as shown.
15. All bearings shown are based on grid north of the Texas Coordinate System of 1983, North Central Zone (4202), North American Datum of 1983. All dimensions shown are ground distances. To obtain a grid distance, multiply the ground distance by the Project Combined Factor (PCF) of 0.999855348.
16. Line and Curve table located on Sheet 2.
17. Lots within proposed reclaimed flood zone are indicated on the plat with a ✱. No building permits will be issued on Lots 108 & 109, Block C until a Letter of Map Revision (LOMR) has been approved by FEMA.
18. All X lots shall be owned by HOA.

LEGEND

P.R.D.C.T.	PLAT RECORDS, DENTON COUNTY, TEXAS
R.P.R.D.C.T.	REAL PROPERTY RECORDS, DENTON COUNTY, TEXAS
O.R.D.C.T.	OFFICIAL RECORDS, DENTON COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT OF WAY
IRFC	CAPPED IRON ROD FOUND
HOA	HOMEOWNER'S ASSOCIATION
B.L.	BUILDING LINE
U.E.	UTILITY EASEMENT
S.S.E.	SANITARY SEWER EASEMENT
M.F.F.E.	MINIMUM FINISHED FLOOR ELEVATION
F.I.R.M.	FLOOD INSURANCE RATE MAP

LINE TYPE LEGEND

———	BOUNDARY LINE
– – – –	EASEMENT LINE
— — — —	MATCH LINE
— — — —	BUILDING LINE

FINAL PLAT
HIGHPOINTE RANCH PHASE 3
30.900 ACRES

BLOCK C, LOTS 64-92, 93X-HOA, AND LOTS 94-114,
BLOCK V, LOTS 8-40, BLOCK W, LOTS 1-46,
& BLOCK X, LOTS 1-16

145 RESIDENTIAL LOTS
1 HOA LOT

F. TREVINO SURVEY, ABSTRACT NO. 1243
CITY OF AUBREY, DENTON COUNTY, TEXAS

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034
Tel. No. (972) 335-3580
FIRM # 10193822
Fax No. (972) 335-3779

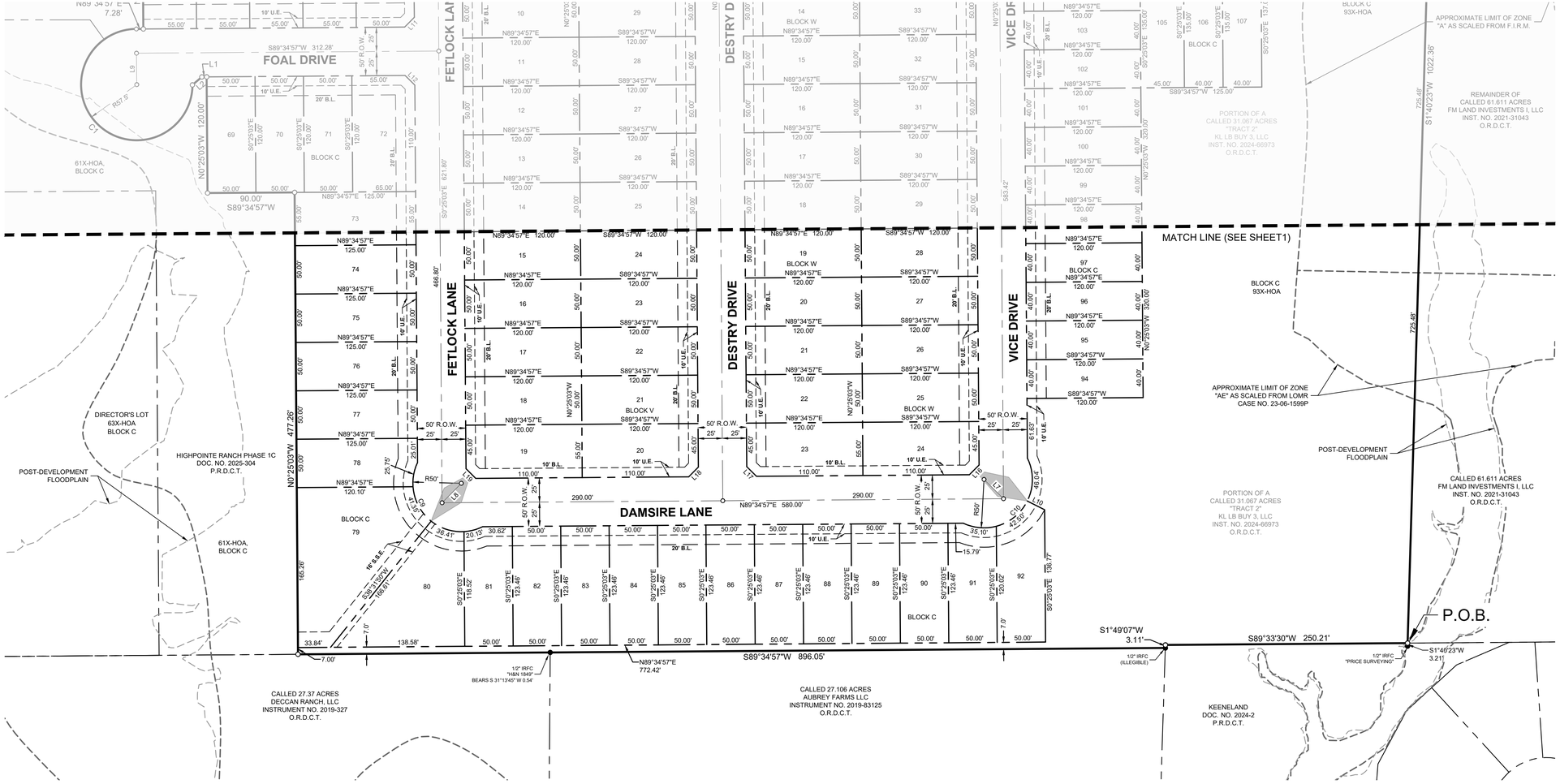
Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 60'	CDS	KHA	12/10/2025	063451861	1 OF 3

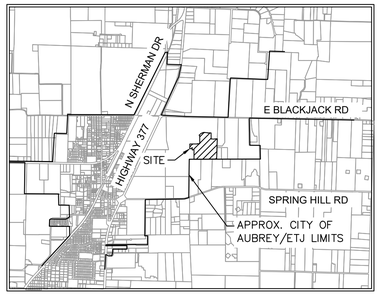
OWNER:
KL LB Buy 3, LLC c/o KL Services LLC
6900 E. Camelback Road, Suite 800
Scottsdale, AZ 85251
Phone: 786-753-8110
Contact: Nathan Holt

SURVEYOR:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Sylviana Gunawan, R.P.L.S.

APPLICANT:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Thomas L. Fletcher, P.E.

DWG NAME: K:\FRI_SURVEY\093930747-HIGH POINT RANCH - AUBREY\DWG\063451861 HIGH POINTE RANCH PHASE 3.DWG PLOTTED BY: GUNAWAN, SYLVIANA 12/10/2025 10:18 AM LAST SAVED: 12/10/2025 10:17 AM Copyright © 2025 Kimley-Horn and Associates, Inc. All rights reserved





VICINITY MAP
SCALE: 1" = 4,000'

LEGEND

P.R.D.C.T.	PLAT RECORDS, DENTON COUNTY, TEXAS
R.P.R.D.C.T.	REAL PROPERTY RECORDS, DENTON COUNTY, TEXAS
O.R.D.C.T.	OFFICIAL RECORDS, DENTON COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT OF WAY
IRFC	CAPPED IRON ROD FOUND
HOA	HOMEOWNER'S ASSOCIATION
B.L.	BUILDING LINE
U.E.	UTILITY EASEMENT
S.S.E.	SANITARY SEWER EASEMENT
M.F.F.E.	MINIMUM FINISHED FLOOR ELEVATION
F.I.R.M.	FLOOD INSURANCE RATE MAP

LINE TYPE LEGEND

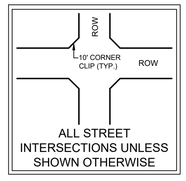
	BOUNDARY LINE
	EASEMENT LINE
	MATCH LINE
	BUILDING LINE

Notes :

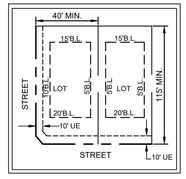
1. All corners are 5/8" iron rods set with a plastic cap stamped "KHA" unless otherwise noted.
2. Selling a portion of this addition by metes and bounds is a violation of City Ordinance and state law and is subject to fines and withholding of utilities and building permits.
3. All surface drainage easements shall be kept clear of fences, buildings, foundations, plantings and other obstructions to the operation and maintenance of the drainage facility.
4. Blocking the flow of water or constructing improvements in surface drainage easements, and filling or obstructing the floodway is prohibited.
5. The City of Aubrey will not be responsible for any damage, personal injury or loss of life or property occasioned by flooding conditions.
6. The existing creeks or drainage channels traversing along or across the addition will remain as open channels and will be maintained by the individual property owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across the lots.
7. Construction not completed within two years of approval subject to current City of Aubrey Subdivision Rules and Regulations.
8. No construction, without written approval from the City of Aubrey shall be allowed within an identified "FIRM" floodplain area, and then only after a detailed floodplain development permit including engineering plans and studies show that no rise in the Base Flood Elevation (BFE) will result, that no flooding will result, that no obstruction to the natural flow of water will result; and subject to all owners of the property affected by such construction becoming a party to the request. Where construction is permitted, all finish floor elevations shall be a minimum of two foot above the 100-year flood elevation.
9. The City of Aubrey will be responsible for the maintenance of all public infrastructure that is constructed in right-of-way or easements that are dedicated to the public or the City of Aubrey.
10. FLOOD STATEMENT: According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 48121C0265G, for Denton County, Texas and incorporated areas, dated 04/18/2011, as revised by LOMR Case No. 23-06-1599P, this property is located within Zone X (unshaded) defined as "Areas determined to be outside the 0.2% annual chance floodplain", Zone A defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (No Base Flood Elevations determined)", and Zone AE defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (Base Flood Elevations determined)"If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This flood statement shall not create liability on the part of the surveyor. Minimum finished floor elevations are at least 2 feet above the 100 year flood plain.
11. Water service to be provided by the City of Aubrey.
12. Sanitary Sewer to be provided by the City of Aubrey.
13. The City of Aubrey shall not be responsible for the maintenance of any private facilities, including but not limited to, HOA or High Pointe Ranch Municipal Utility District No. 1 open space lots, private parks, amenity center(s), development signage and entry features. Maintenance of these facilities shall be the responsibility of either the HOA or High Pointe Ranch Municipal Utility District No. 1, and the HOA and High Pointe Ranch Municipal Utility District No. 1 hold harmless the City of Aubrey, from all claims, damages and loses arising out of or resulting from performance of the obligations said HOA or High Pointe Ranch Municipal Utility District No. 1.
14. All utilities and drainage structures are located in the right-of-way except as shown.
15. All bearings shown are based on grid north of the Texas Coordinate System of 1983, North Central Zone (4202), North American Datum of 1983. All dimensions shown are ground distances. To obtain a grid distance, multiply the ground distance by the Project Combined Factor (PCF) of 0.999855348.
16. Lots within proposed reclaimed flood zone are indicated on the plat with a ✱ No building permits will be issued on Lots 108 & 109, Block C until a Letter of Map Revision (LOMR) has been approved by FEMA.
17. All X lots shall be owned by HOA.

LINE TABLE		
NO.	BEARING	LENGTH
L1	S89°34'57"W	5.00'
L2	S49°35'53"W	12.77'
L3	S71°52'44"E	13.34'
L4	N24°22'22"E	13.35'
L5	S42°57'26"E	14.74'
L6	N46°36'46"E	13.63'
L7	S45°25'03"E	28.28'
L8	S44°34'57"W	28.28'
L9	N00°25'03"W	32.50'
L10	N63°29'56"W	20.00'
L11	N44°34'57"E	14.14'
L12	S45°25'03"E	14.14'
L13	S44°34'57"W	14.14'
L14	N45°37'40"E	14.40'
L15	S45°25'03"E	14.14'
L16	N44°34'57"E	14.14'
L17	S45°25'03"E	14.14'
L18	S44°34'57"W	14.14'
L19	S45°25'03"E	14.14'

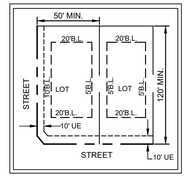
CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	269°17'43"	57.50'	270.26'	N45°03'54"W	81.82'
C2	1°03'50"	325.00'	6.03'	N44°13'34"E	6.03'
C3	15°14'14"	275.00'	73.13'	N51°18'46"E	72.92'
C4	23°03'59"	275.00'	110.71'	N85°03'48"E	109.97'
C5	2°01'20"	4009.00'	141.50'	S84°24'52"E	141.49'
C6	1°34'30"	4009.00'	110.20'	S87°12'56"E	110.20'
C7	23°00'05"	300.00'	120.43'	N11°55'06"W	119.63'
C9	141°41'02"	50.00'	123.64'	S45°25'03"E	94.46'
C10	141°41'02"	50.00'	123.64'	N44°34'57"E	94.46'
C11	87°54'34"	60.50'	92.83'	N45°37'40"E	83.98'



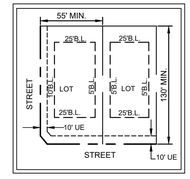
10'X10' CORNER CLIP AT STREET INTERSECTIONS
NTS



TYPICAL 40' LOT SETBACK DETAIL
NTS



TYPICAL 50' LOT SETBACK DETAIL
NTS



TYPICAL 55' LOT SETBACK DETAIL
NTS

GRAPHIC SCALE IN FEET
60 0 30 60 120
1" = 60' @ 24X36

FINAL PLAT
HIGHPOINTE RANCH PHASE 3
30.900 ACRES

BLOCK C, LOTS 64-92, 93X-HOA, AND LOTS 94-114,
BLOCK V, LOTS 8-40, BLOCK W, LOTS 1-46,
& BLOCK X, LOTS 1-16

145 RESIDENTIAL LOTS
1 HOA LOT

F. TREVINO SURVEY, ABSTRACT NO. 1243
CITY OF AUBREY, DENTON COUNTY, TEXAS

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034
Tel. No. (972) 335-3580
FIRM # 10193822
Fax No. (972) 335-3779

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 60'	CDS	KHA	12/10/2025	063451861	2 OF 3

OWNER:
KL LB Buy 3, LLC c/o KL Services LLC
6900 E. Camelback Road, Suite 800
Scottsdale, AZ 85251
Phone: 786-753-8110
Contact: Nathan Holt

SURVEYOR:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Sylviana Gunawan, R.P.L.S.

APPLICANT:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Thomas L. Fletcher, P.E.

DWG NAME: K:\FRI_SURVEY\069306747-HIGH PONT RANCH - AUBREY\DWG\063451861 HIGH POINTE RANCH PHASE 3.DWG PLOTTED BY GUNAWAN, SYLVIANA 12/10/2025 10:18 AM LAST SAVED 12/10/2025 10:17 AM Copyright © 2025 Kimley-Horn and Associates, Inc. All rights reserved

OWNER'S CERTIFICATE

STATE OF TEXAS §

COUNTY OF DENTON §

WHEREAS KL LB BUY 3, LLC, is the sole owner of a tract of land situated in the F. Trevino Survey, Abstract No. 1243, Denton County, Texas and being all of the remainder of a called 31.067-acre tract of land described in a deed to 31.067 acre tract of land described as Tract 2 in a deed to KL LB BUY 3, LLC, as recorded in Instrument Number 2024-66973, Official Records of Denton County, Texas, and being more particularly described as follows:

BEGINNING at a 5/8 inch iron rod with plastic cap stamped "KHA" set for the southeast corner of said Tract 2 on the northerly line of Keeneland, according to the plat thereof recorded in Document No. 2024-2 of the Plat Records of Denton County, Texas;

THENCE South 89°33'30" West, along the southerly line of said Tract 2 and the northerly line of said Keeneland, a distance of 250.21 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for the northwest corner of said Keeneland;

THENCE South 01°49'07" West, along the westerly line of said Keeneland and continuing along the southerly line of said Tract 2, a distance of 3.11 feet to a 1/2 inch iron rod with an illegible plastic cap found for the northeast corner of a called 27.106 acre tract of land described in a deed to Aubrey Farms LLC, as recorded in Instrument No. 2019-83125 of the Official Records of Denton County, Texas;

THENCE South 89°34'57" West, continuing along said southerly line of said Tract 2 and along the northerly line of said 27.106 acre tract, and the northerly line of a called 27.37 acre tract of land described in a deed to Deccan Ranch, LLC, as recorded in Instrument No. 2019-327 of the Official Records of Denton County, Texas, a distance of 896.05 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the southeast corner of Highpointe Ranch Phase 1C, according to the plat thereof recorded in Document No. 2025-304 of the Plat Records of Denton County, Texas;

THENCE departing the northerly line of said 27.37 acre tract and along the westerly line of said Tract 2 and the easterly line of said Highpointe Ranch, Phase 1C, the following:

North 00°25'03" West, a distance of 477.26 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°34'57" West, a distance of 90.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 120.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°34'57" West, a distance of 5.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 49°35'53" West, a distance of 12.77 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a non-tangent curve to the right with a radius of 57.50 feet, a central angle of 269°17'43", and a chord bearing and distance of North 45°03'54" West, 81.82 feet;

In a westerly direction, with said non-tangent curve to the right, an arc distance of 270.26 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 89°34'57" East, a distance of 7.28 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 130.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 89°34'57" East, a distance of 330.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 8.20 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 89°34'57" East, a distance of 120.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 400.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 45°14'31" West, a distance of 40.60 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the northwest corner of said Tract 2, common to the northeast corner of said Highpoint Ranch Phase 1C, and an ell corner of a called 65.626 acre tract of land described as Tract 1 in a deed to KL LB BUY 3, as recorded in Instrument Number 2024-66973 of the Official Records of Denton County, Texas, and at the beginning of a non-tangent curve to the left with a radius of 325.00 feet, a central angle of 01°03'50", and a chord bearing and distance of North 44°13'34" East, 6.03 feet;

THENCE along the northerly line of said Tract 2 and the southerly line of said Tract 1, the following:

In a northerly direction, with said non-tangent curve to the left, an arc distance of 6.03 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 43°41'39" East, a distance of 75.68 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a tangent curve to the right with a radius of 275.00 feet, a central angle of 15°14'14", and a chord bearing and distance of North 51°18'46" East, 72.92 feet;

In an easterly direction, with said tangent curve to the right, an arc distance of 73.13 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 71°52'44" East, a distance of 13.34 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 66°13'51" East, a distance of 50.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 24°22'22" East, a distance of 13.35 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a non-tangent curve to the right with a radius of 275.00 feet, a central angle of 23°03'59", and a chord bearing and distance of North 85°03'48" East, 109.97 feet;

In an easterly direction, with said non-tangent curve to the right, an arc distance of 110.71 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a reverse curve to the left with a radius of 4,009.00 feet, a central angle of 02°01'20", and a chord bearing and distance of South 84°24'52" East, 141.49 feet;

In an easterly direction, with said reverse curve to the left, an arc distance of 141.50 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 42°57'26" East, a distance of 14.74 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 85°55'37" East, a distance of 50.15 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 46°36'46" East, a distance of 13.63 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a non-tangent curve to the left with a radius of 4,009.00 feet, a central angle of 01°34'30", and a chord bearing and distance of South 87°12'56" East, 110.20 feet;

In an easterly direction, with said non-tangent curve to the left, an arc distance of 110.20 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the northerly northeast corner of said Tract 2, common to an ell corner of said Tract 1;

South 00°25'03" East, a distance of 305.27 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 88°19'37" East, a distance of 128.96 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°44'37" East, a distance of 50.02 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 46°10'57" East, a distance of 14.26 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°18'30" East, a distance of 119.45 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the southerly northeast corner of said Tract 2, common to the southeast corner of said Tract 1, being on the westerly line of a called 35.254 acre tract of land described in a deed to Andiron TX 5, LLC, as recorded in Instrument No. 2025-18701 of the Official Records of Denton County, Texas;

THENCE South 01°40'23" West, along the easterly line of said Tract 2, the westerly line of said 35.254 acre tract, and the westerly line of a called 61.611 acre tract of land described in a deed to FM Land Investments I, LLC, as recorded in Instrument No. 2021-31043 of the Official Records of Denton County, Texas, a distance of 1,022.36 feet to the **POINT OF BEGINNING** and containing 30.900 acres (1,346,003 square feet) of land, more or less.

OWNER'S CERTIFICATIONS

STATE OF TEXAS §

COUNTY OF DENTON §

NOW, THEREFORE KNOW ALL MEN BY THESE PRESENTS:

THAT **KL LB BUY 3, LLC,** acting herein by and through their duly authorized officers, do hereby adopt this plat designating the hereinabove described property as **HIGHPOINTE RANCH PHASE 3**, an addition to the City of Aubrey, Texas, and do hereby dedicate, in fee simple, to the public use forever, the streets and alleys shown thereon. The streets and alleys are dedicated for street purposes. The easements and public use areas, as shown, are dedicated for the public use forever, for the purposes indicated on this plat. In addition, utility easements may also be used for the mutual use and accommodation of all public utilities desiring to use or using the same unless the easement limits the use to particular utilities, said use by public utilities being subordinate to the public's and City of Aubrey's use thereof. The City of Aubrey and public utility entities shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs, or other improvements or growths which may in any way endanger or interfere with the construction, maintenance, or efficiency of their respective systems in said easements. The City of Aubrey and public utility entities shall at all times have the full right of ingress and egress to or from their respective easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining, reading meters, and adding to or removing all or parts of their respective systems without the necessity at any time of procuring permission from anyone.

Witness this _____ day of _____, _____.

BY: **KL LB BUY 3, LLC**

BY: _____

Name: _____

Title: _____

STATE OF ARIZONA §

COUNTY OF MARICOPA §

On this _____ day of _____, 20___, before me personally appeared _____ (name of signer), whom I know personally, and acknowledged that he/she executed the same.

_____
Notary Public, State of Arizona

SURVEYOR'S CERTIFICATION

KNOW ALL MEN BY THESE PRESENTS:

That I, Sylviana Gunawan, do hereby certify that a survey was made on the ground of the property described hereon under my personal supervision and the iron rods were placed in accordance with the subdivision rules and regulations of the City of Aubrey, Texas.

_____
Sylviana Gunawan
Registered Professional Land Surveyor No. 6461
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone 972-335-3580

PRELIMINARY
THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT

STATE OF TEXAS §

COUNTY OF COLLIN §

BEFORE ME, the undersigned, a Notary Public in and for The State of Texas, on this day personally appeared Sylviana Gunawan, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and considerations therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of _____, 20____.

_____
Notary Public, State of Texas

CERTIFICATE OF FINAL PLAT APPROVAL

This Final Plat was reviewed and approved by the City Council of the City of Aubrey, Texas the _____ day of _____, 20____.

_____
CHRIS RICH, MAYOR
CITY OF AUBREY, TEXAS

FINAL PLAT
HIGHPOINTE RANCH PHASE 3
30.900 ACRES

BLOCK C, LOTS 64-92, 93X-HOA, AND LOTS 94-114,
BLOCK V, LOTS 8-40, BLOCK W, LOTS 1-46,
& BLOCK X, LOTS 1-16

145 RESIDENTIAL LOTS
1 HOA LOT

F. TREVINO SURVEY, ABSTRACT NO. 1243
CITY OF AUBREY, DENTON COUNTY, TEXAS

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034
Tel. No. (972) 335-3580
FIRM # 10193822
Fax No. (972) 335-3779

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	CDS	KHA	12/10/2025	063451861	3 OF 3

OWNER:
KL LB Buy 3, LLC c/o KL Services LLC
6900 E. Camelback Road, Suite 800
Scottsdale, AZ 85251
Phone: 786-753-8110
Contact: Nathan Holt

SURVEYOR:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Sylviana Gunawan, R.P.L.S.

APPLICANT:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Thomas L. Fletcher, P.E.

DWG NAME: K:\FRI_SURVEY\063800747-HIGH POINT RANCH - AUBREY\DWG\063451861 HIGH POINTE RANCH PHASE 3.DWG PLOTTED BY: GUNAWAN, SYLVIANA 12/10/2025 10:18 AM LAST SAVED: 12/10/2025 10:17 AM Copyright © 2025 Kimley-Horn and Associates, Inc. All rights reserved

GENERAL ITEMS

1. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR SHALL BE FAMILIAR WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS, THE PLANS (INCLUDING ALL NOTES), THE CITY OF AUBREY SPECIFICATIONS AND ANY OTHER APPLICABLE STANDARDS OR SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO BE FAMILIAR WITH ALL STANDARDS AND SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL HAVE IN THEIR POSSESSION ALL NECESSARY PERMITS, PLANS, LICENSES, ETC. CONTRACTOR SHALL HAVE AT LEAST ONE SET OF APPROVED ENGINEERING PLANS AND SPECIFICATIONS ON-SITE AT ALL TIMES.
3. ALL WORK SHALL CONFORM TO THE CITY OF AUBREY DESIGN MANUALS AND STANDARDS. IN THE EVENT AN ITEM IS NOT COVERED IN THE PLANS OR THE CITY OF AUBREY DESIGN MANUALS AND STANDARDS, THE MOST CURRENT NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SHALL APPLY WITH CONCURRING NOTIFICATION TO THE CITY ENGINEER AND PROJECT ENGINEER. THE CITY ENGINEER SHALL HAVE THE FINAL DECISION ON ALL CONSTRUCTION MATERIALS, METHODS, AND PROCEDURES.
4. CONSTRUCTION INSPECTION WILL BE PERFORMED BY REPRESENTATIVES OF THE OWNER, CITY, GEOTECHNICAL ENGINEER, AND REVIEWING AUTHORITIES AND AGENCIES. UNRESTRICTED ACCESS SHALL BE PROVIDED TO THEM AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING AND SCHEDULING REQUIRED INSPECTIONS. TESTING SAMPLES SHALL BE COLLECTED AND PROCESSED BY CERTIFIED TECHNICIANS.
5. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO DEVELOPED OR UNDEVELOPED AREAS WILL BE ALLOWED. ANY DAMAGE RESULTING THEREFROM SHALL BE CONTRACTOR'S RESPONSIBILITY TO REPAIR.
6. IT WILL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO PROTECT ALL EXISTING PUBLIC AND PRIVATE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL ASSUME FULL LIABILITY TO THOSE COMPANIES FOR ANY DAMAGES CAUSED TO THEIR FACILITIES.
7. TRENCH SAFETY DESIGN WILL BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR. CONTRACTOR SHALL SUBMIT A TRENCH SAFETY DESIGN APPROVED BY A PROFESSIONAL ENGINEER TO THE CITY ENGINEERING INSPECTOR FOR REVIEW PRIOR TO THE START OF ANY UNDERGROUND UTILITY CONSTRUCTION.
8. IF ANY CONFLICT ARISES BETWEEN THESE GENERALS NOTES AND ANY OTHER NOTES FOUND IN THE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD FOR CLARIFICATION.

EROSION CONTROL & VEGETATION

1. THE CSN OR NOI SHALL BE POSTED IN A LOCATION VIEWABLE TO THE PUBLIC UNTIL CONSTRUCTION IS COMPLETE AND NOTICE OF TERMINATION (NOT) SUBMITTED. THE STORM WATER POLLUTION PREVENTION PLAN (SWP3) SHALL BE READILY AVAILABLE FOR REVIEW BY FEDERAL, STATE, OR LOCAL OFFICIALS.
2. NO SOIL DISTURBING ACTIVITIES WILL OCCUR PRIOR TO THE SWP3, ECP, AND ASSOCIATED BEST MANAGEMENT PRACTICES (BMP) BEING FULLY IMPLEMENTED.
3. THE CONTRACTOR SHALL COMPLY WITH THE CURRENT NCTCOG ISWMTM TECHNICAL MANUAL FOR CONSTRUCTION, THE TPDES GENERAL CONSTRUCTION PERMIT TXR150000 AND ANY OTHER STATE AND/OR LOCAL REGULATIONS.
4. THE CONTRACTOR SHALL EMPLOY MEASURES AS NECESSARY TO PREVENT DIRT, MUD, DEBRIS FROM BEING TRACKED OFF SITE. ANY DIRT, MUD, DEBRIS TRACKED OFFSITE SHALL BE CLEANED UP BY THE CONTRACTOR IMMEDIATELY.
5. THE SITE SHALL BE INSPECTED BY THE OPERATOR OR HIS REPRESENTATIVE WEEKLY, AND AFTER ANY MAJOR STORM. ADJUSTMENTS/REPAIRS TO THE EROSION CONTROL MEASURES WILL BE MADE AS NEEDED.
6. CONTRACTOR SHALL ESTABLISH PERENNIAL VEGETATION ON ALL OTHER DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF GRADING ACTIVITIES. AN APPROPRIATE SEED MIX SHOULD BE CONSIDERED WITH RESPECT TO THE SEASON AND THE TIMING OF FINAL ACCEPTANCE. A COOL SEASON SEED MIX SHOULD BE USED BETWEEN SEPTEMBER 15TH AND APRIL 15TH. REFER TO VEGETATIVE STABILIZATION REQUIREMENTS LISTED ON THE ECP.

TREE PRESERVATION

1. ALL PROTECTIVE MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY SITE OR GRADING WORK AND REMAIN IN PLACE UNTIL ALL EXTERIOR WORK HAS BEEN COMPLETED.
2. THE FOLLOWING ACTIVITIES SHALL BE PROHIBITED WITHIN THE LIMITS OF THE PRIMARY ROOT ZONE: MATERIAL STORAGE, EQUIPMENT CLEANING/LIQUID DISPOSAL, TREE ATTACHMENTS OF SIGNS OR WIRES, AND CONSTRUCTION EQUIPMENT/VEHICULAR TRAFFIC IS PROHIBITED.
3. UNLESS SPECIFICALLY ALLOWED, NO GRADE CHANGES GREATER THAN 6" SHALL BE ALLOWED WITHIN THE LIMITS OF THE PRIMARY ROOT ZONE OF ANY PROTECTED TREE UNLESS THE CITY ARBORIST APPROVES ADEQUATE CONSTRUCTION METHODS.

TRAFFIC CONTROL

1. WHEN THE NORMAL FUNCTION OF THE ROADWAY IS SUSPENDED THROUGH CLOSURE OF ANY PORTION OF THE RIGHT-OF-WAY, TEMPORARY CONSTRUCTION WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE INSTALLED TO EFFECTIVELY GUIDE THE MOTORING PUBLIC THROUGH THE AREA. CONSIDERATION FOR ROAD USER SAFETY, WORKER SAFETY, AND THE EFFICIENCY OF ROAD USER FLOW SHALL BE AN INTEGRAL ELEMENT OF EVERY TRAFFIC CONTROL ZONE. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST T.M.U.T.C.D. AND N.C.H.R.P. 350.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES ON AN AROUND-THE-CLOCK BASIS, WHETHER OR NOT WORK IS ACTIVE. ANY DEFICIENCIES SHALL BE CORRECTED BY THE CONTRACTOR IMMEDIATELY, REGARDLESS OF TIME OF DAY.
3. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME AT THE END OF THE WORKDAY, TEMPORARY TRAFFIC CONTROL DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
4. ACCESS MUST BE MAINTAINED TO ALL DRIVES AND SIDE STREETS OR AS INDICATED IN THE TRAFFIC CONTROL PLAN.

FIRE DEPARTMENT

1. FIRE APPARATUS ACCESS ROADS AND WATER SUPPLY FOR FIRE PROTECTION SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO AND DURING CONSTRUCTION
2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT FIRE APPARATUS ACCESS ROADS ARE MAINTAINED, UNOBSTRUCTED AND PASSABLE TO EMERGENCY EQUIPMENT AT ALL TIMES. THIS IS TO ENSURE THE SAFETY OF THE CONSTRUCTION WORKERS.
3. SHOP DRAWINGS FOR FIRE PROTECTION SYSTEMS (FIRE SPRINKLERS, STANDPIPES, AND WALL HYDRANTS) SHALL BE A DEFERRED SUBMITTAL FOR A SEPARATE PERMIT TO THE CITY OF AUBREY FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. FIRE PROTECTION PLAN WILL NEED TO BE SUBMITTED TO REED ENGINEERING.
4. SHOP DRAWINGS FOR FIRE ALARM SYSTEMS SHALL BE A DEFERRED SUBMITTAL FOR A SEPARATE PERMIT TO AUBREY FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. FIRE ALARM PLAN WILL NEED TO BE SUBMITTED TO REED ENGINEERING.
5. INSPECTIONS/ACCEPTANCE TESTS WILL BE CONDUCTED ON ALL FIRE PROTECTION/ALARM SYSTEMS.
6. EMERGENCY RESPONDER RADIO COVERAGE IN BUILDINGS SHALL HAVE APPROVED RADIO COVERAGE FOR EMERGENCY RESPONDERS WITHIN THE BUILDING BASED UPON THE EXISTING COVERAGE LEVELS OF THE PUBLIC SAFETY COMMUNICATION SYSTEMS OF THE JURISDICTION AT THE EXTERIOR OF THE BUILDING.
7. KNOX BOX IS REQUIRED.
8. OPTICOM'S AND KS2 SWITCHES WILL BE REQUIRED AT ANY GATES CROSSING THE FIRE LANE.
9. FDC CONNECTION WILL BE 5" STORZ
10. ALL FIRE LANES WILL BE DESIGNED AND INSPECTED IN ACCORDANCE WITH THE CITIES ORDINANCE AMENDING SECTION 503.2.3.

WATER

1. EACH METER BOX SHALL BE LOCATED ADJACENT TO THE CURB AND INSTALLED AFTER STREET PAVEMENT HAS BEEN COMPLETED AND CURBS BACKFILLED.
2. ALL WATER SERVICES SHALL BE LOCATED AS SHOWN ON THE PLANS. SINGLE SERVICES SHALL BE PLACED NO MORE THAN 2' INSIDE THE SERVICE LOT AT THE LOT LINE.
3. EACH INDIVIDUAL SERVICE LOCATION SHALL BE SAWCUT INTO THE FACE OF THE CURB WITH A 4-INCH HIGH "I" BY THE CONTRACTOR. IF NO CURB EXISTS, A SIMILAR MARK SHALL BE PLACED IN THE PAVEMENT NEAR THE EDGE OF THE ROADWAY.
4. ALL WATER SERVICE LINES SHALL BE EMBEDDED WITH 6 IN. SAND BELOW AND AROUND THE PIPE AND 1 FT. OF SAND OVER THE TOP OF THE PIPE; FROM THE WATER MAIN TO THE METER. WATER SERVICE LINES WITHIN CITY ROADWAY RIGHT-OF-WAY SHALL BE COMPACTED TO A MINIMUM OF THE 95% STANDARD PROCTOR DENSITY WITH A +/- 3% WET OF OPTIMUM MOISTURE CONTENT.
5. ALL 6-INCH, 8-INCH AND 12-INCH WATER MAINS SHALL BE AWWA C900 PVC PIPE OR POLY WRAPPED DUCTILE IRON.
6. MINIMUM COVER SHALL BE 4 FEET FOR 8-INCH LINES, 5 FEET FOR 12-INCH TO 16-INCH LINES, AND 6 FEET FOR 20-INCH AND LARGER LINES. ADDITIONAL COVER MAY BE REQUIRED IN UN-PAVED OR UN-DEVELOPED AREAS.
7. WATER MAINS IN THE RIGHT-OF-WAY NEAR STORM INLETS SHALL BE CONSTRUCTED WITH A MINIMUM CLEARANCE OF 12 INCHES BEHIND THE INLET BY PULLING THE PIPE USING LONGITUDINAL BENDING IN ACCORDANCE TO 80% OF THE PIPE MANUFACTURERS' REQUIREMENTS.
8. STANDARD EMBEDMENT SHALL BE NCTCOG CLASS "C-1" FOR ALL WATER LINES.
9. ALL BLOW-OFF (FLUSH) VALVES SHALL BE TWO (2) INCH AND SHALL BE PROVIDED IN ACCORDANCE WITH NCTCOG STANDARDS.
10. BOLTS AND NUTS FOR MECHANICAL JOINTS WILL BE OF A HIGH-STRENGTH LOW-ALLOY CORROSION RESISTANT STEEL CONFORMING TO ASTM A325 (TYPE 3).
11. ALL WATER LINE FITTINGS SHALL BE DUCTILE IRON. ALL 8"-12" VALVES SHALL BE AWWA APPROVED RESILIENT WEDGE GATE VALVES.
12. IN ADDITION TO THRUST BLOCKING, ALL FITTINGS MUST BE RESTRAINED.
13. INSTALL 2' X 2' X 4" THICK, CONCRETE PAD AROUND ALL WATER VALVES OUTSIDE OF CONCRETE PAVEMENT.
14. VALVE EXTENSIONS SHALL BE PROVIDED ON ALL VALVES WITH OPERATING NUTS GREATER THAN 5' BELOW FINISHED GROUND OR PAVING GRADE.
15. ALL VALVES SHALL BE MARKED WITH A "V" BY SAWCUT ON THE CURB OR PAVEMENT. THE "V" SHALL POINT TO THE LOCATION OF THE VALVE AS FOLLOWS: IF THE VALVE IS IN THE PAVING, THE "V" SHALL BE MARKED UP UPRIGHT; IF THE VALVE IS OUTSIDE THE PAVING, THE "V" SHALL BE MARKED UPSIDE DOWN.
16. NRS RESILIENT-SEATED GATE VALVES SHALL CONFORM TO AWWA C509 OR AWWA C515. RUBBER-SEATED BUTTERFLY VALVES SHALL CONFORM TO AWWA C504. ALL VALVES SHALL HAVE A 2 IN. SQUARE OPERATING NUT AND OPEN TO THE LEFT. ALL VALVES SHALL BE MUELLER, M&H, CLOW OR AMERICAN FLOW CONTROL.
17. FIRE HYDRANTS SHALL BE PLACED 3 TO 8 FEET FROM BACK OF CURB UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS REQUIRED TO CLEAR SIDEWALKS. FIRE HYDRANTS SHALL NOT BE LOCATED WITHIN A SIDEWALK.
18. FIRE HYDRANTS SHALL BE THREE WAY BREAKAWAY TYPE NO LESS THAN 5-1/4 INCHES IN SIZE AND MUST CONFORM TO AWWA SPECIFICATIONS C-502. THEY SHALL BE MUELLER "SUPER CENTURION250", CLOW "MEDALLION", AMERICAN FLOW CONTROL WB67100 'WATEROUS PACER", M&H "RELLANT129" WITH ALL BRONZE TO BRONZE MOVING PARTS. TWO 2-1/2-INCH NST HOSE CONNECTIONS ARE REQUIRED. THE 4 INCH DIAMETER STEAMER CONNECTION SHALL BE 4.800 PITCH WITH 4 THREADS PER INCH. THE OPERATING NUT SHALL BE 1-1/2-INCH P TO F PENTAGON NUT, OPEN LEFT. MECHANICAL JOINT CONNECTION IS REQUIRED. THE STEAMER NOZZLE SHALL FACE THE FIRE LANE, ADJACENT ROADWAY OR AS DIRECTED BY THE FIRE DEPARTMENT.

STORM SEWER

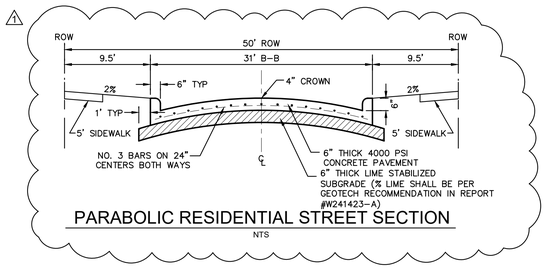
1. WHEN THERE IS LESS THAN TWO FEET OF CLEARANCE BETWEEN A WATER/SEWER LINE AND A STORM SEWER, THE CONTRACTOR SHALL INSTALL CONCRETE ENCASEMENT AROUND THE SANITARY SEWER OR WATER LINES AT THE STORM SEWER CROSSING. THE ENCASEMENT SHALL BE A MINIMUM OF 10 L.F. AND 6" THICK CENTERED AT THE CROSSING.
2. MANHOLE LIDS ON STORM SEWER INLETS SHALL BE CENTERED OVER THE OUTGOING STORM LATERAL.
3. ALL BENDS AND WYES FOR PIPES LESS THAN 42" DIAMETER MUST BE FACTORY MANUFACTURED BENDS AND WYES.
4. STRUCTURAL CONCRETE USED FOR STORMWATER STRUCTURES SHALL BE IN COMPLIANCE WITH THE LATEST VERSION OF THE NCTCOG STANDARDS AND SPECIFICATIONS.
5. PRIOR TO FINAL ACCEPTANCE, ALL STORM SEWERS SHALL BE CLEARED OF ANY SEDIMENT AND DEBRIS.
6. STANDARD EMBEDMENT SHALL BE NCTCOG CLASS "B" FOR ALL PUBLIC STORM LINES.

SANITARY SEWER

1. UNLESS OTHERWISE NOTED ON THE PLANS, ALL SANITARY SEWER PIPE SHALL BE PVC ASTM DESIGNATION D3034 UP THROUGH 15" IN DIAMETER. PIPES LARGER THAN 15" IN DIAMETER SHALL BE DESIGNATED PVC ASTM F679. OTHER PIPE SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.
2. ALL RESIDENTIAL SANITARY SEWER LATERALS SHALL INCLUDE A 4" TEE WYE BEND, PIPE AND STOPPER, AND SHALL BE EXTENDED 10' BEYOND THE PROPERTY LINE ONTO PRIVATE PROPERTY. SEWER LATERALS SHALL BE LAID ON A MINIMUM SLOPE OF +2.00% FROM THE MAIN LINE TO THE STREET RIGHT-OF-WAY.
3. AFTER CURB AND PAVING HAS BEEN COMPLETED, CONTRACTOR SHALL CUT A FOUR (4) INCH HIGH "II" ON THE CURB INDICATING THE LOCATION OF THE CLEANOUT.
4. ALL SANITARY SEWERS AND LATERALS SHALL BE TESTED BY PULLING A MANDREL, AIR PRESSURE TEST, AND TELEVISION VIDEO. THE TELEVISION VIDEO SHALL BE PROVIDED TO THE CITY INSPECTOR IN A DVD FORMAT AND SHALL BE LABELED ACCORDINGLY FOR CITY RECORD.
5. ALL SANITARY SEWER MANHOLES WITHIN FLOOD PLAINS OR FLOOD PRONE AREAS REQUIRE TYPE "S" MANHOLE LIDS.
6. ALL MANHOLES SHALL BE VACUUM TESTED WHERE A 10" MERCURY VACUUM IS DEVELOPED. THE AIR VACUUM SHALL THEN BE MONITORED FOR A TEST PERIOD OF 2 MINUTES. THE ALLOWANCE DROP IN AIR VACUUM SHALL BE NO GREATER THAN 1" MERCURY OVER THE TEST PERIOD.
7. UNLESS OTHERWISE NOTED, IN OPEN SPACES, THE TOP OF THE SANITARY SEWER MANHOLE SHALL BE INSTALLED A MINIMUM OF 12 INCHES ABOVE THE SURROUNDING GROUND.
8. STRUCTURAL CONCRETE USED FOR WASTEWATER STRUCTURES SHALL BE IN COMPLIANCE WITH THE LATEST VERSION OF THE NCTCOG STANDARDS AND SPECIFICATIONS.
9. STANDARD EMBEDMENT SHALL BE NCTCOG CLASS "H" FOR ALL PUBLIC SANITARY SEWER LINES.

PAVING

1. ALL MIX DESIGNS SHALL BE SEALED BY A PROFESSIONAL ENGINEER AND SUBMITTED TO THE CITY INSPECTOR ONE WEEK BEFORE A SCHEDULED POUR. MIX DESIGNS ARE SUBJECT TO APPROVAL BY THE CITY ENGINEER.
2. ALL CONCRETE PAVING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI, UNLESS A HIGHER COMPRESSIVE STRENGTH IS SPECIFIED.
3. ALL FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN A MAXIMUM OF 6" (SIX) INCH LIFTS OR PER THE APPROVED GEOTECHNICAL ENGINEERS REPORT.
4. SUBGRADE SHALL EXTEND 12" MINIMUM BEHIND THE CURB, BE A MINIMUM OF 6" THICK AND SHALL BE LIME OR CEMENT STABILIZED AS RECOMMENDED IN THE GEOTECHNICAL REPORT NO. #W241423.
5. A MINIMUM OF FOUR (4) TEST CYLINDERS ARE REQUIRED FOR BREAKS AT 7 DAYS, 2 AT 28 DAYS, AND THE LAST CYLINDER BEING AN EXTRA.
6. ALL CITY STREETS ARE REQUIRED TO BE PAVED WITH THE USE OF AN APPROVED SLIP FORM PAVING MACHINE WITH MECHANICAL VIBRATION. HAND POURS ARE ONLY ALLOWED AT INTERSECTION RETURNS OR OTHER NON-STANDARD AREAS SUCH AS PARALLEL PARKING SPACES. HAND POURS SHALL BE VIBRATED BY AN APPROVED HAND VIBRATOR.
7. CONSTRUCTION JOINTS, COLD JOINTS AND CURB RETURNS SHALL HAVE FABRIC INSTALLED TO ALLOW FOR EXPANSION.
8. SAWED JOINTS SHALL BE EVERY 15 FEET FOR 6" THICK CONCRETE AND EVERY 20 FEET FOR 8" THICK CONCRETE; AND SHALL BE CONSTRUCTED WITHIN THE FIRST 12 HOURS OF CONCRETE PLACEMENT.
9. EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM EVERY 600 FEET.
11. ALL BARRIER FREE RAMPS SHALL COMPLY WITH THE CURRENT TDLR, ADA AND TXDOT REGULATIONS.
12. ALL SIDEWALKS SHALL BE CONSTRUCTED PER THE LATEST VERSION OF THE NCTCOG STANDARDS AND SPECIFICATIONS.
13. THE PROJECT GEOTECHNICAL REPORT WAS PREPARED BY ALPHA TESTING, REPORT NO. W241423-A, DATED AUGUST 16, 2024. THE PAVEMENT RECOMMENDATION REPORT WAS PREPARED BY ALPHA TESTING, REPORT NO. W241423-A, DATED AUGUST 16, 2024.



PARABOLIC RESIDENTIAL STREET SECTION

NTS

No.	REVISIONS	DATE	BY
1	SIDEWALK CHANGES	01/22/2025	BBA

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
2/27/2025

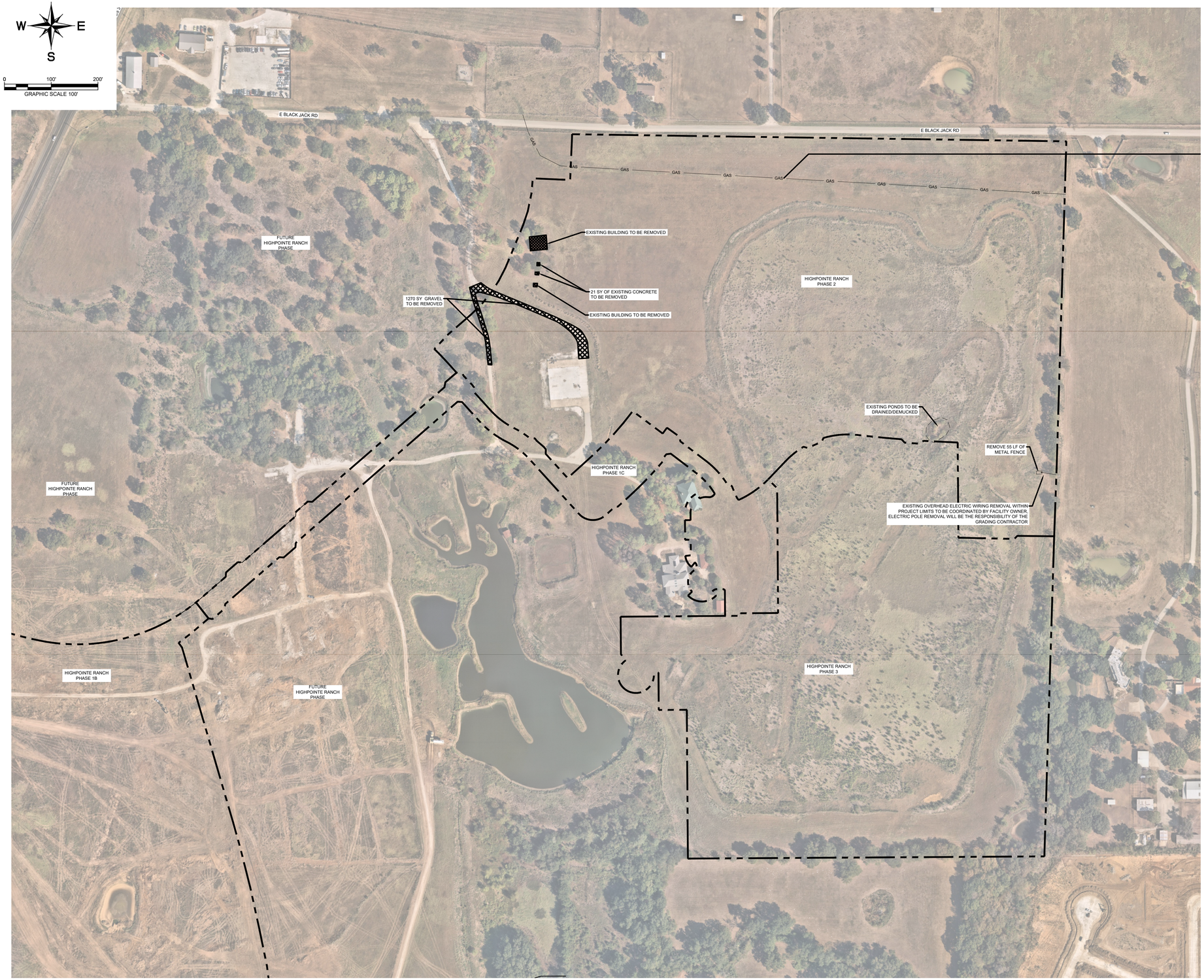
KHA PROJECT 063451880
DATE OCTOBER 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

GENERAL NOTES

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-05

Plotted By: Alexander, Brett Date: February 10, 2025 01:52:10pm File Path: K:\FBL_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-General Notes.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- PROPERTY LINE
- EXISTING FENCE
- EXISTING OVERHEAD ELECTRIC
- EXISTING POND
- DEMOLITION AREAS

DEMOLITION NOTES

1. ALL CONSTRUCTION AND DEMOLITION SHALL BE PER CITY, COUNTY AND STATE STANDARDS AND REGULATIONS.
2. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS NECESSARY FOR DEMOLITION ACTIVITIES.
3. CONTRACTOR SHALL PROTECT ALL EXISTING FACILITIES AND IMPROVEMENTS NOTED TO REMAIN THROUGHOUT DEMOLITION AND CONSTRUCTION. ANY DAMAGE TO EXISTING FACILITIES TO BE REPAIRED AND/OR REPLACED BY CONTRACTOR AT HIS SOLE EXPENSE.
4. CONTRACTOR SHALL DISPOSE OF ALL DEMOLITION MATERIAL OFF-SITE AT A LEGAL DUMP SITE. CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FOR DISPOSAL.
5. CONTRACTOR SHALL COORDINATE DEMOLITION ACTIVITIES WITH OWNERS.
6. CONTRACTOR SHALL CONTROL DUST ON-SITE.
7. CONTRACTOR TO COORDINATE ALL UTILITY REMOVALS/CAPPING WITH UTILITY COMPANIES.
8. ALL EROSION CONTROL DEVICES TO BE IN PLACE PRIOR TO DEMOLITION. (REFER TO SHEETS C-51 AND C-52).
9. REFER TO EROSION CONTROL PLAN ON SHEETS C-51 AND C-52 FOR TREES TO REMAIN AND LOCATIONS FOR TREE PROTECTIVE FENCING.
10. EXISTING PONDS TO BE DRAINED, DEMUCKED AND FILLED IN PER RECOMMENDATION IN GEOTECHNICAL REPORT FOR THE PROJECT.

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

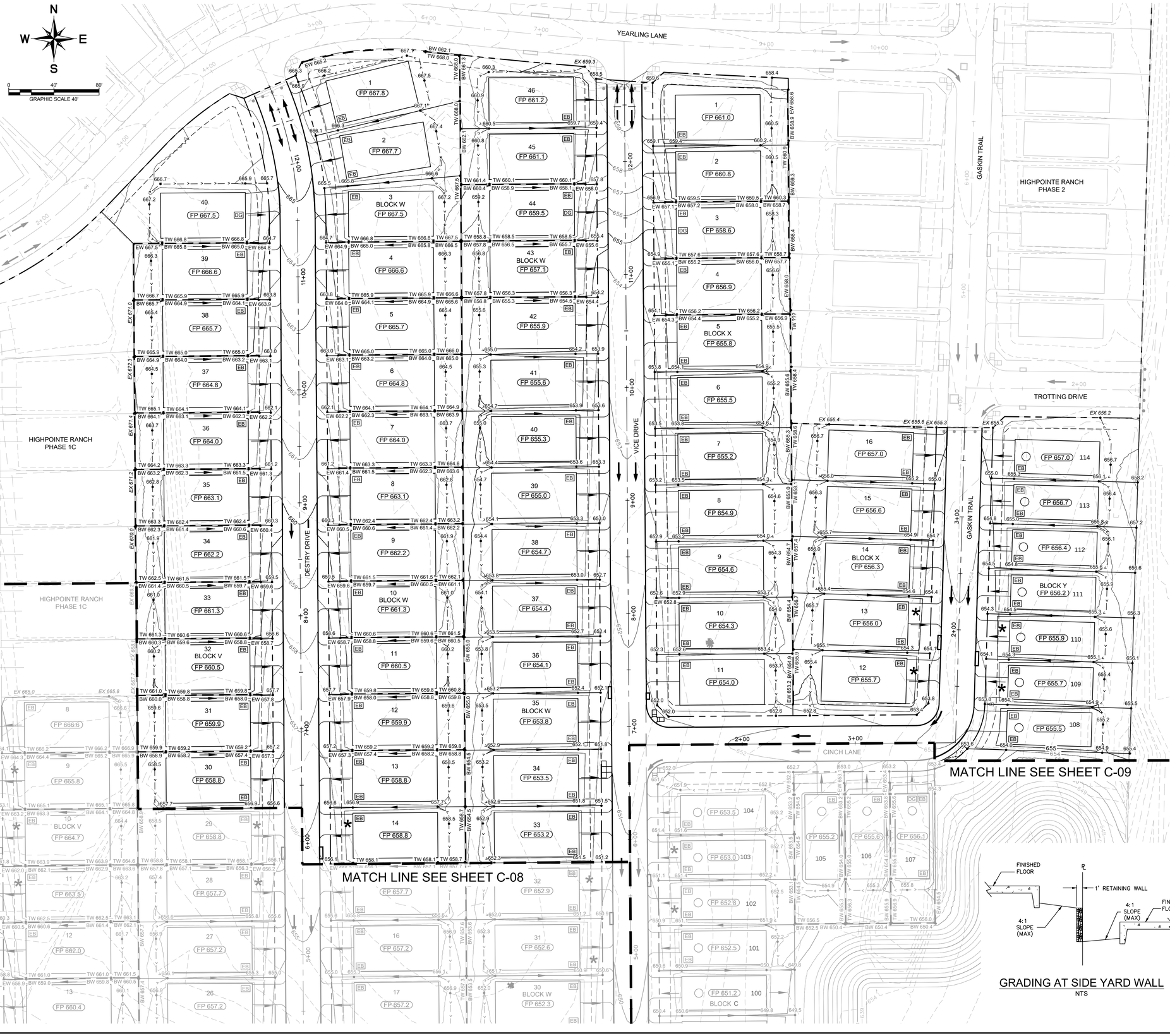
KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

DEMOLITION PLAN

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-06

Plotted By:Goetzen, Johnston Date:August 26, 2024 04:04:33pm File Path:K:\FRI_Civil\063451961-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Demolition Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

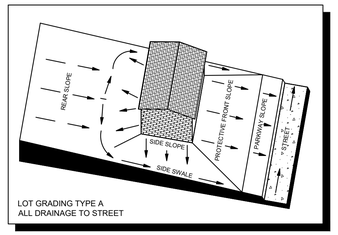


LEGEND

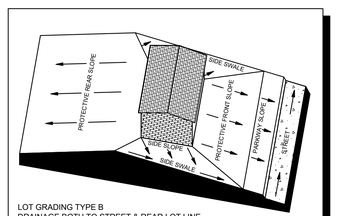
	PROPERTY LINE
FP 675.00	PROPOSED FINISHED PAD ELEVATION
55.5 •	PROPOSED SPOT ELEVATION
EX 55.5 •	EXISTING SPOT ELEVATION
TW 55.5 •	PROPOSED TOP OF WALL ELEVATION
BW 55.5 •	PROPOSED BOTTOM OF WALL ELEVATION
EW 55.5 •	PROPOSED END WALL ELEVATION
	PROPOSED REAR YARD SWALE
	LOT DRAINAGE FLOW DIRECTION
	STREET DRAINAGE FLOW DIRECTION
	EXISTING DRAINAGE FLOW DIRECTION
	PROPOSED RETAINING WALL
	EXPOSED FACE OF RETAINING WALL
*	INDICATES SIDE OF LOT WHERE DRIVEWAY MUST BE LOCATED DUE TO GRADE DIFFERENTIAL OR CONFLICT
EB	EXPOSED BEAM REQUIRED
DG	DROP GARAGE REQUIRED
555	PROPOSED CONTOUR
555	EXISTING CONTOUR

GRADING GENERAL NOTES

1. CONTRACTOR SHALL CUT 5' BEHIND BACK OF CURB TO SUBGRADE ELEVATION.
2. PROPOSED PRIVATE RETAINING WALLS LOCATED ON PRIVATE LOTS TO BE MAINTAINED BY THE PROPERTY OWNER.
3. GLOBAL STABILITY AND STRUCTURAL DESIGN OF RETAINING WALLS PROVIDED BY OTHERS. REFER TO LANDSCAPE/HARDSCAPE PLANS. STRUCTURAL DESIGN TO ACCOUNT FOR LOCATIONS WHERE SCREENING WALLS ARE LOCATED ON TOP OF RETAINING WALLS.
4. THE END ELEVATION CALLS FOR RETAINING WALLS DEPICT GROUND ELEVATION. TOP OF WALL ELEVATIONS ARE TYPICALLY 0.5' ABOVE GROUND.
5. ALL PERIMETER SLOPES TO NATURAL GROUND ARE TO BE 4:1 MAX, UNLESS OTHERWISE NOTED.
6. THE MAXIMUM SLOPE OF ANY GRADING PROPOSED IN THIS PLAN SET SHALL BE 4:1
7. ALL SIDEWALKS SHALL MAINTAIN A MAXIMUM 2% CROSS SLOPE.
8. PROPOSED CONTOURS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO USE SPOT ELEVATIONS FOR GRADING CONSTRUCTION.
9. CONTRACTOR TO GRADE FROM PROPOSED PAVEMENT HEADERS TO EXISTING GROUND AT 4:1 UNLESS OTHERWISE NOTED.

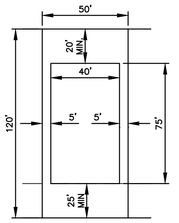


LOT GRADING TYPE A
ALL DRAINAGE TO STREET

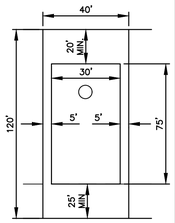


LOT GRADING TYPE B
DRAINAGE BOTH TO STREET & REAR LOT LINE

GRADING AT SIDE YARD WALL
NTS



TYPICAL LOT DIMENSION DETAIL
NTS



TYPICAL LOT DIMENSION DETAIL
NTS

No.	REVISIONS	DATE	BY
1	LOTS NEEDING DROP GARAGES UPDATED	03/13/25	AA

Kimley»Horn

© 2024 KIMLEY-HORN AND ASSOCIATES, INC.

6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
3/13/2025

KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

GRADING PLAN

HIGHPOINTE RANCH PHASE 3

CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-07

Plotted By: Aceves, Ana Date: March 13, 2025 05:33:39pm File Path: K:\FRI_Civil\063451880-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Grading Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

HIGHPOINTE RANCH
FUTURE AMENITY CENTER

HIGHPOINTE RANCH
PHASE 1C

FETLOCK LANE

FOAL DRIVE

DESTRY DRIVE

DAMSIRE LANE

MATCH LINE SEE SHEET C-07

MATCH LINE SEE SHEET C-09

POST-PROJECT 100 YR
FEMA FLOODPLAIN

PRE-PROJECT 100 YR
FEMA FLOODPLAIN

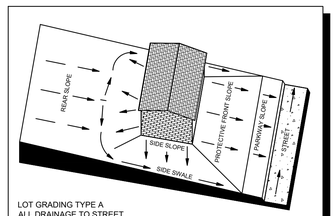
GRADING GENERAL NOTES

1. CONTRACTOR SHALL CUT 5' BEHIND BACK OF CURB TO SUBGRADE ELEVATION.
2. PROPOSED PRIVATE RETAINING WALLS LOCATED ON PRIVATE LOTS TO BE MAINTAINED BY THE PROPERTY OWNER.
3. GLOBAL STABILITY AND STRUCTURAL DESIGN OF RETAINING WALLS PROVIDED BY OTHERS. REFER TO LANDSCAPE/HARDSCAPE PLANS. STRUCTURAL DESIGN TO ACCOUNT FOR LOCATIONS WHERE SCREENING WALLS ARE LOCATED ON TOP OF RETAINING WALLS.
4. THE END ELEVATION CALLS FOR RETAINING WALLS DEPICT GROUND ELEVATION. TOP OF WALL ELEVATIONS ARE TYPICALLY 0.5' ABOVE GROUND.
5. ALL PERIMETER SLOPES TO NATURAL GROUND ARE TO BE 4:1 MAX, UNLESS OTHERWISE NOTED.
6. THE MAXIMUM SLOPE OF ANY GRADING PROPOSED IN THIS PLAN SET SHALL BE 4:1
7. ALL SIDEWALKS SHALL MAINTAIN A MAXIMUM 2% CROSS SLOPE.
8. PROPOSED CONTOURS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO USE SPOT ELEVATIONS FOR GRADING CONSTRUCTION.
9. CONTRACTOR TO GRADE FROM PROPOSED PAVEMENT HEADERS TO EXISTING GROUND AT 4:1 UNLESS OTHERWISE NOTED.

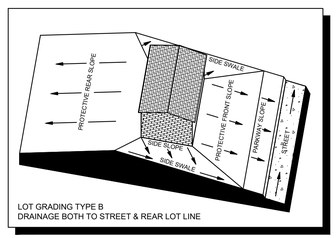
LEGEND

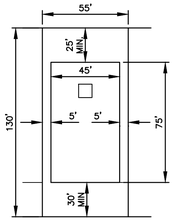
- PROPERTY LINE
- FP 675.00 — PROPOSED FINISHED PAD ELEVATION
- 55.5 • — PROPOSED SPOT ELEVATION
- EX 55.5 • — EXISTING SPOT ELEVATION
- TW 55.5 • — PROPOSED TOP OF WALL ELEVATION
- BW 55.5 • — PROPOSED BOTTOM OF WALL ELEVATION
- EW 55.5 • — PROPOSED END WALL ELEVATION
- PROPOSED REAR YARD SWALE
- LOT DRAINAGE FLOW DIRECTION
- STREET DRAINAGE FLOW DIRECTION
- EXISTING DRAINAGE FLOW DIRECTION
- PROPOSED RETAINING WALL
- EXPOSED FACE OF RETAINING WALL
- * — INDICATES SIDE OF LOT WHERE DRIVEWAY MUST BE LOCATED DUE TO GRADE DIFFERENTIAL OR CONFLICT
- EB — EXPOSED BEAM REQUIRED
- DG — DROP GARAGE REQUIRED
- 555 — PROPOSED CONTOUR
- 555 — EXISTING CONTOUR

LOT GRADING TYPE A
ALL DRAINAGE TO STREET

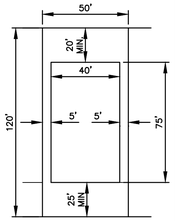


LOT GRADING TYPE B
DRAINAGE BOTH TO STREET & REAR LOT LINE

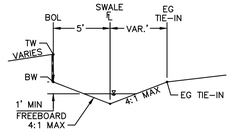




TYPICAL LOT
DIMENSION DETAIL
NTS



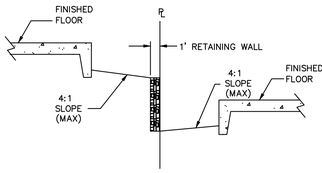
TYPICAL LOT
DIMENSION DETAIL
NTS



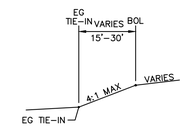
CROSS SECTION A-A
NTS

Q_{CAP} = 23.2 CFS
S = 1.09%
n (GRASS LINED) = 0.030

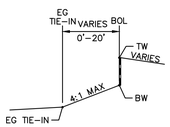
Q_{100} = 1.51 CFS
V_{100} = 0.33 FPS
NORMAL DEPTH = 1.07



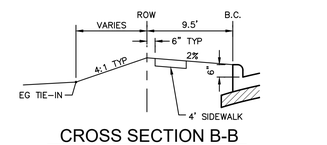
GRADING AT SIDE YARD WALL
NTS



CROSS SECTION C-C
NTS



CROSS SECTION D-D
NTS



CROSS SECTION B-B
NTS

No.	REVISIONS	DATE	BY
1	LOTS NEEDING DROP GARAGES UPDATED	03/13/25	AA
2	REVISED FF AND ROW ELEVATIONS	6/13/25	

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER

KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

GRADING PLAN

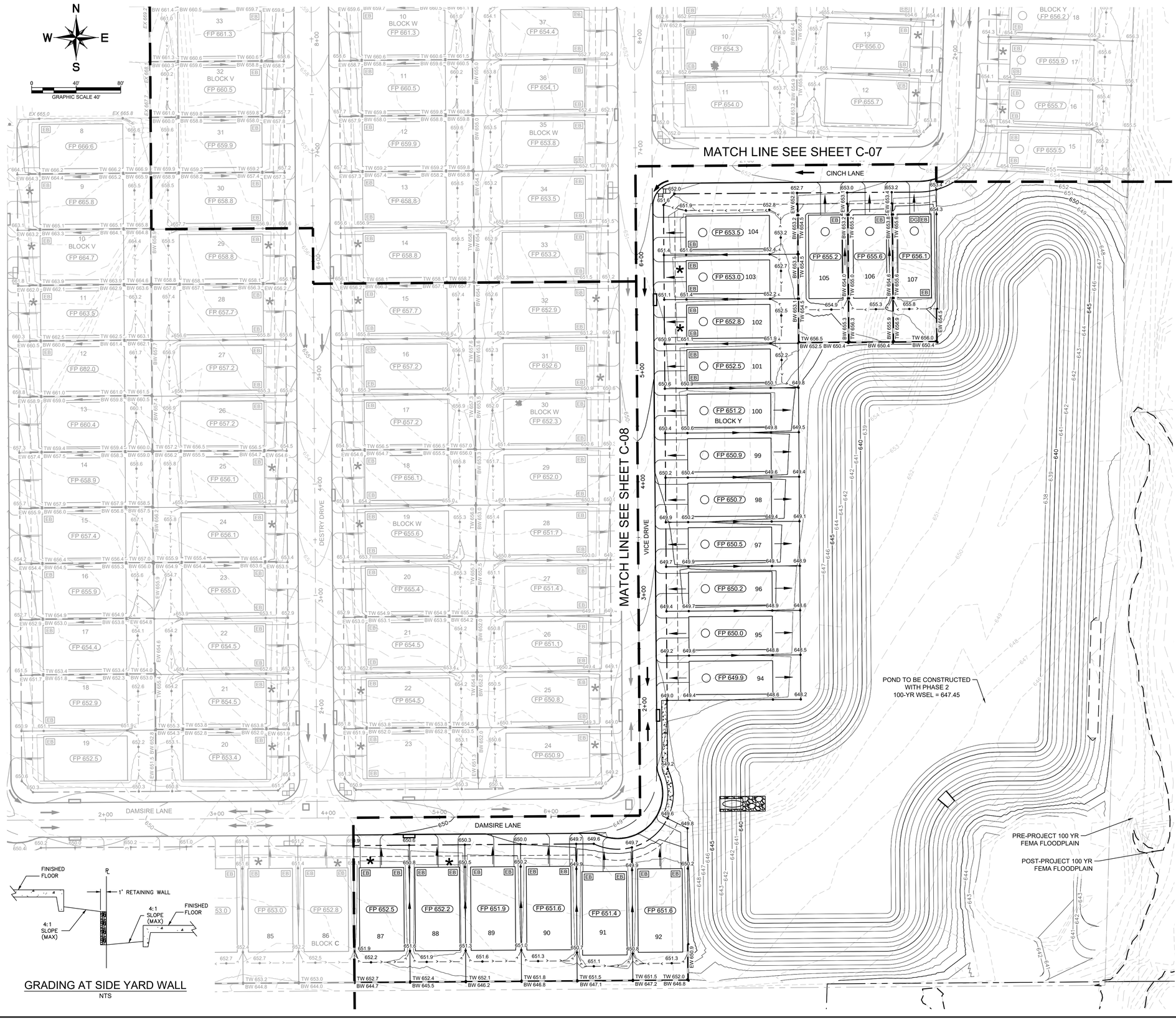
HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-08

Plotted By: Lax, Garrett Date: June 18, 2025 05:28:37pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Grading Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By: Aceves, Ana Date: March 13, 2025 05:34:40pm File Path: K:\FRI_Civil\063451881-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Grading Plan.dwg



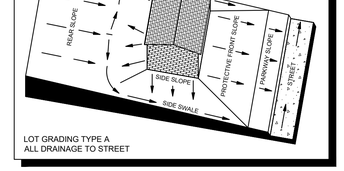
GRADING AT SIDE YARD WALL
NTS

LEGEND

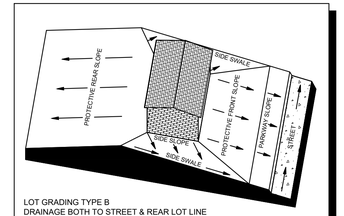
- PROPERTY LINE
- FP 675.00 — PROPOSED FINISHED PAD ELEVATION
- 55.5 • — PROPOSED SPOT ELEVATION
- EX 55.5 • — EXISTING SPOT ELEVATION
- TW 55.5 • — PROPOSED TOP OF WALL ELEVATION
- BW 55.5 • — PROPOSED BOTTOM OF WALL ELEVATION
- EW 55.5 • — PROPOSED END WALL ELEVATION
- PROPOSED REAR YARD SWALE
- LOT DRAINAGE FLOW DIRECTION
- STREET DRAINAGE FLOW DIRECTION
- EXISTING DRAINAGE FLOW DIRECTION
- PROPOSED RETAINING WALL
- EXPOSED FACE OF RETAINING WALL
- * — INDICATES SIDE OF LOT WHERE DRIVEWAY MUST BE LOCATED DUE TO GRADE DIFFERENTIAL OR CONFLICT
- EB — EXPOSED BEAM REQUIRED
- DG — DROP GARAGE REQUIRED
- 555 — PROPOSED CONTOUR
- 555 — EXISTING CONTOUR

GRADING GENERAL NOTES

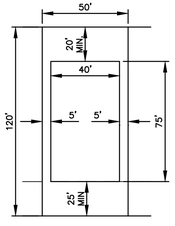
1. CONTRACTOR SHALL CUT 5' BEHIND BACK OF CURB TO SUBGRADE ELEVATION.
2. PROPOSED PRIVATE RETAINING WALLS LOCATED ON PRIVATE LOTS TO BE MAINTAINED BY THE PROPERTY OWNER.
3. GLOBAL STABILITY AND STRUCTURAL DESIGN OF RETAINING WALLS PROVIDED BY OTHERS. REFER TO LANDSCAPE/HARDSCAPE PLANS. STRUCTURAL DESIGN TO ACCOUNT FOR LOCATIONS WHERE SCREENING WALLS ARE LOCATED ON TOP OF RETAINING WALLS.
4. THE END ELEVATION CALLS FOR RETAINING WALLS DEPICT GROUND ELEVATION. TOP OF WALL ELEVATIONS ARE TYPICALLY 0.5' ABOVE GROUND.
5. ALL PERIMETER SLOPES TO NATURAL GROUND ARE TO BE 4:1 MAX, UNLESS OTHERWISE NOTED.
6. THE MAXIMUM SLOPE OF ANY GRADING PROPOSED IN THIS PLAN SET SHALL BE 4:1
7. ALL SIDEWALKS SHALL MAINTAIN A MAXIMUM 2% CROSS SLOPE.
8. PROPOSED CONTOURS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO USE SPOT ELEVATIONS FOR GRADING CONSTRUCTION.
9. CONTRACTOR TO GRADE FROM PROPOSED PAVEMENT HEADERS TO EXISTING GROUND AT 4:1 UNLESS OTHERWISE NOTED.



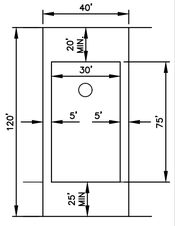
LOT GRADING TYPE A
ALL DRAINAGE TO STREET



LOT GRADING TYPE B
DRAINAGE BOTH TO STREET & REAR LOT LINE



TYPICAL LOT DIMENSION DETAIL
NTS



TYPICAL LOT DIMENSION DETAIL
NTS

No.	REVISIONS	DATE	BY
1	LOTS NEEDING DROP GARAGES UPDATED	03/13/25	AA

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
3/13/2025

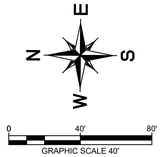
KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

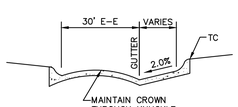
GRADING PLAN

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

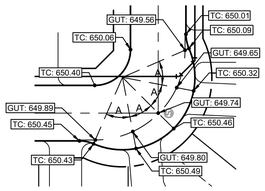
SHEET NUMBER
C-09

Plotted By:Goertzen, Johnathan Date:August 26, 2024 05:19:20pm File Path:K:\FTI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Paving P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

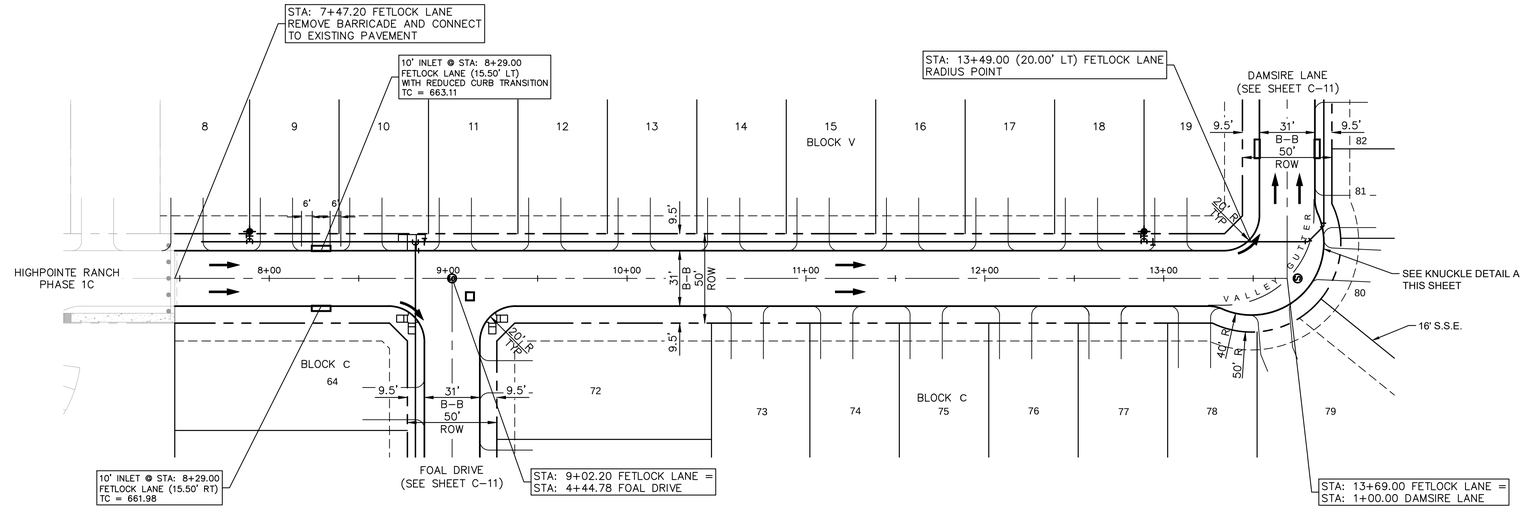




KNUCKLE SECTION
NTS



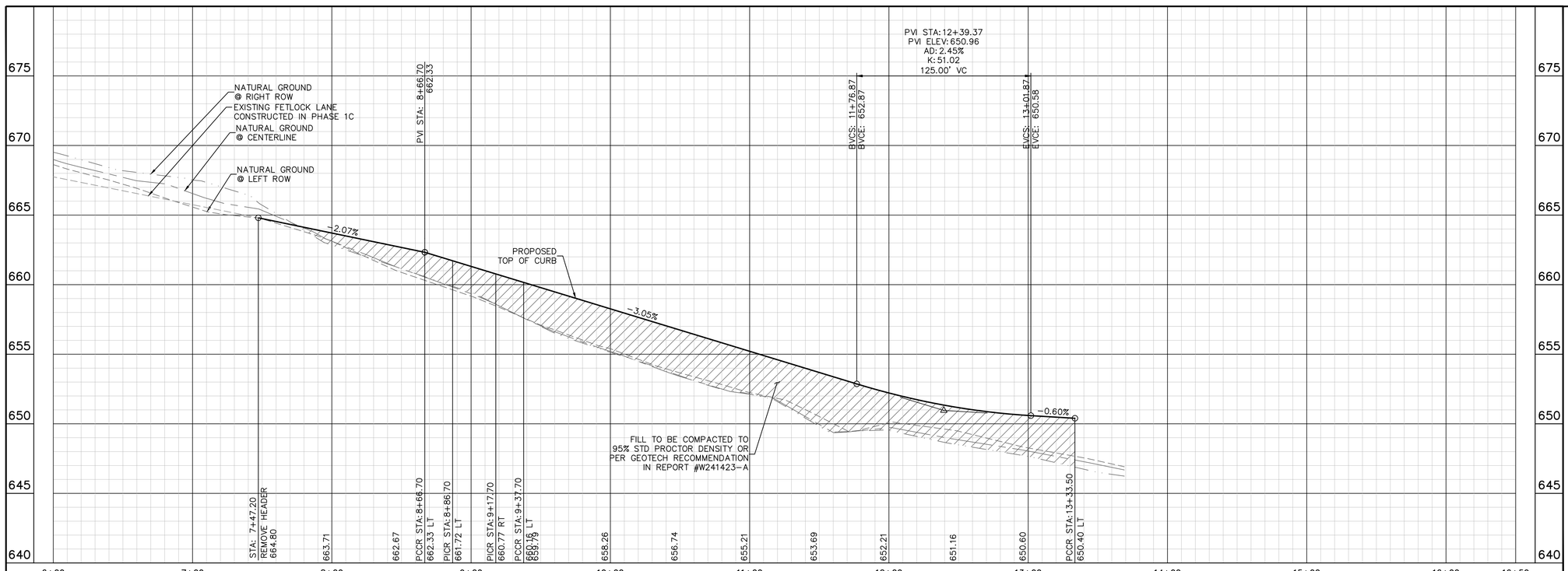
KNUCKLE DETAIL A
SCALE: 1" = 40'
∠A=34°0'0"



LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

FETLOCK LANE



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

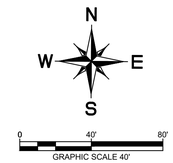
STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

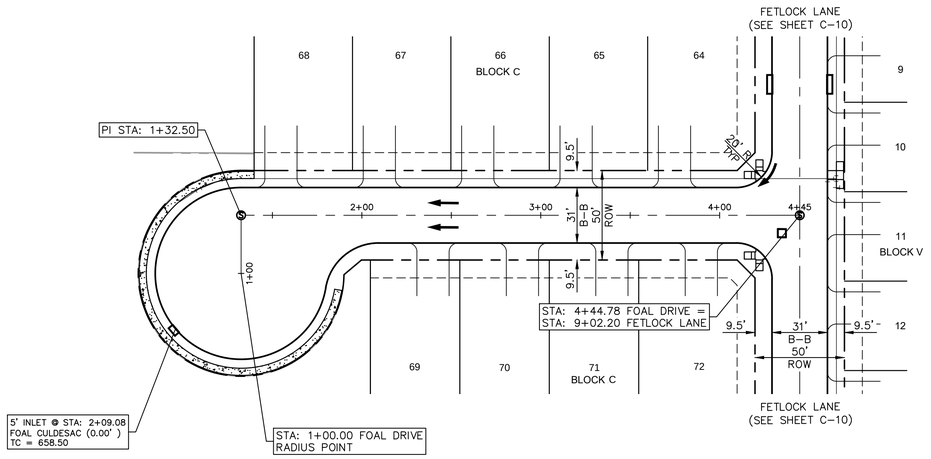
KHA PROJECT: 063451880
DATE: AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

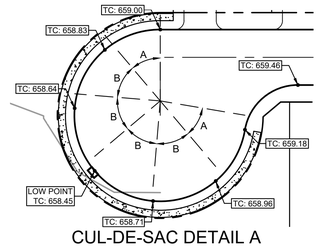
PAVING P&P - FETLOCK LANE

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-10





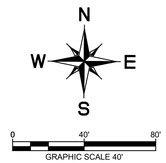


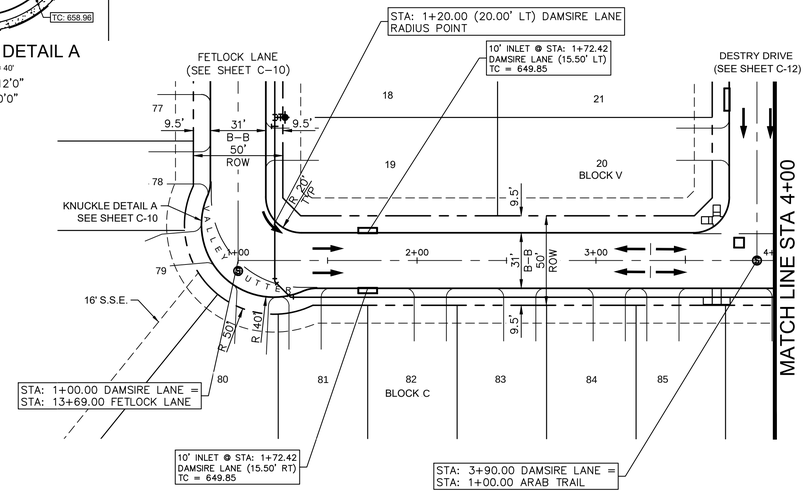
CUL-DE-SAC DETAIL A

SCALE: 1" = 40'

∠A=40°12'0"

∠B=45°0'0"

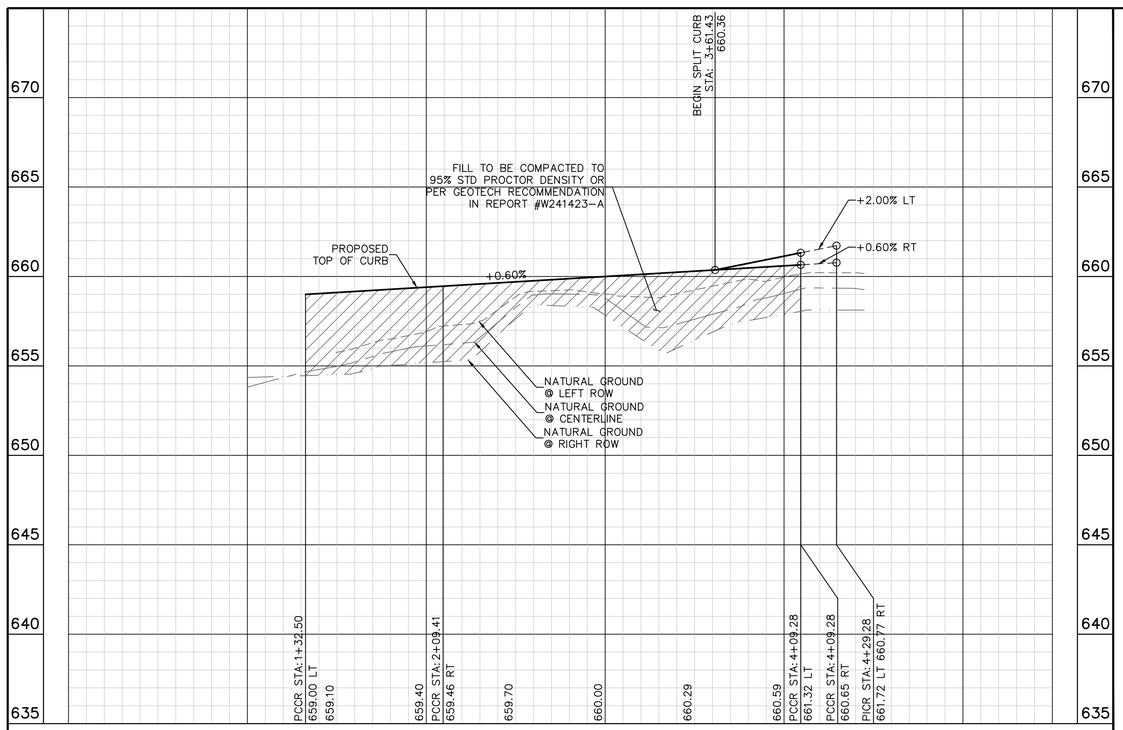




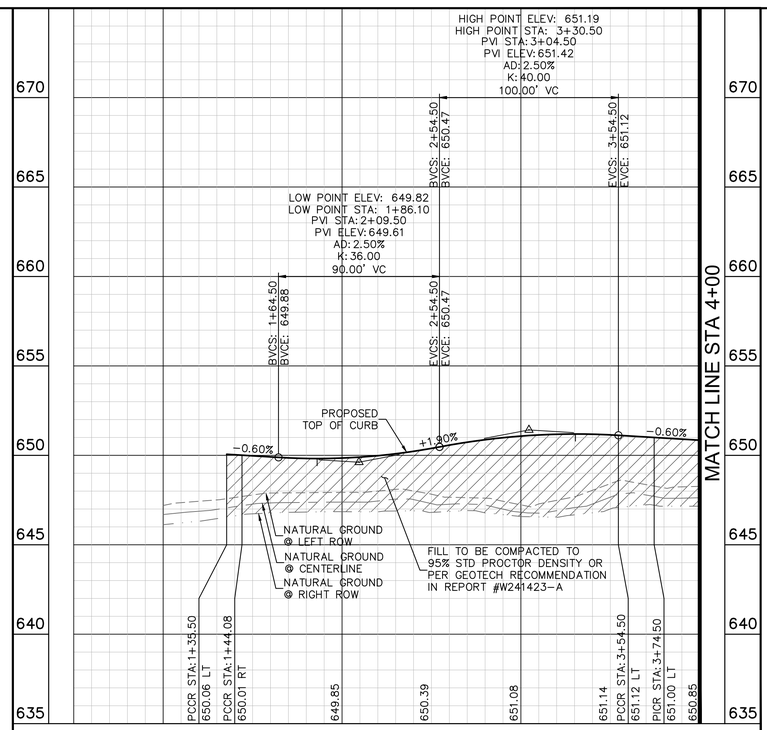
LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

FOAL DRIVE



DAMSIRE LANE



PROFILE SCALE

1" = 40' HORIZONTAL

1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

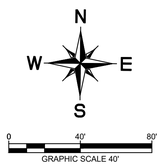
KHA PROJECT	
063451880	
DATE	
AUGUST 2024	
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

PAVING P&P - FOAL DRIVE & DAMSIRE LANE

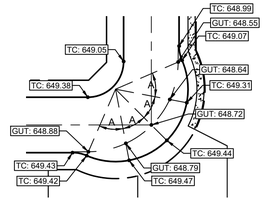
SHEET NUMBER
C-11

Plotted By:Goertzen, Johnathan Date: August 26, 2024 05:19:34pm File Path:K:\FTW_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Paving P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



KNUCKLE SECTION

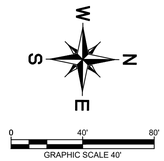
NTS

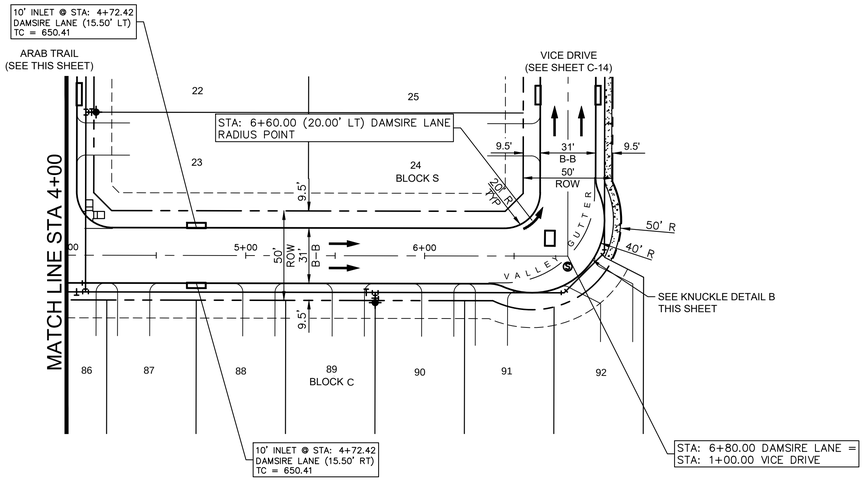


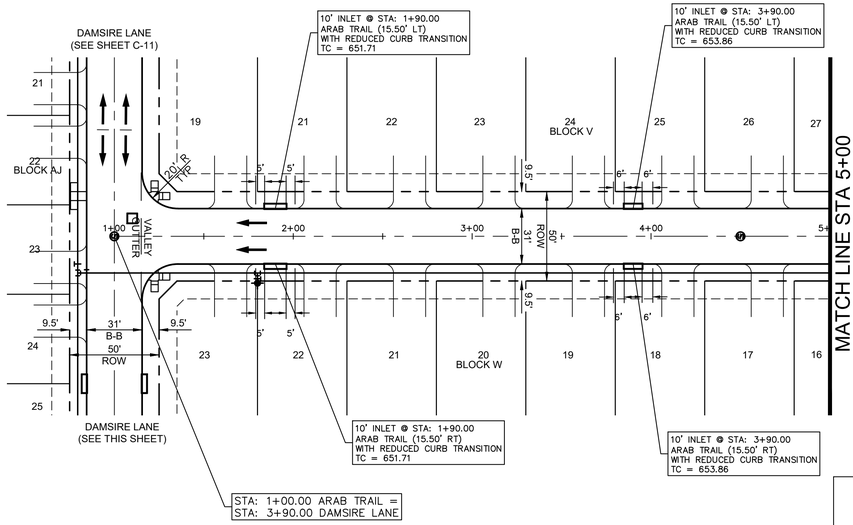
KNUCKLE DETAIL B

SCALE: 1" = 40'

∠A=34°0'0"



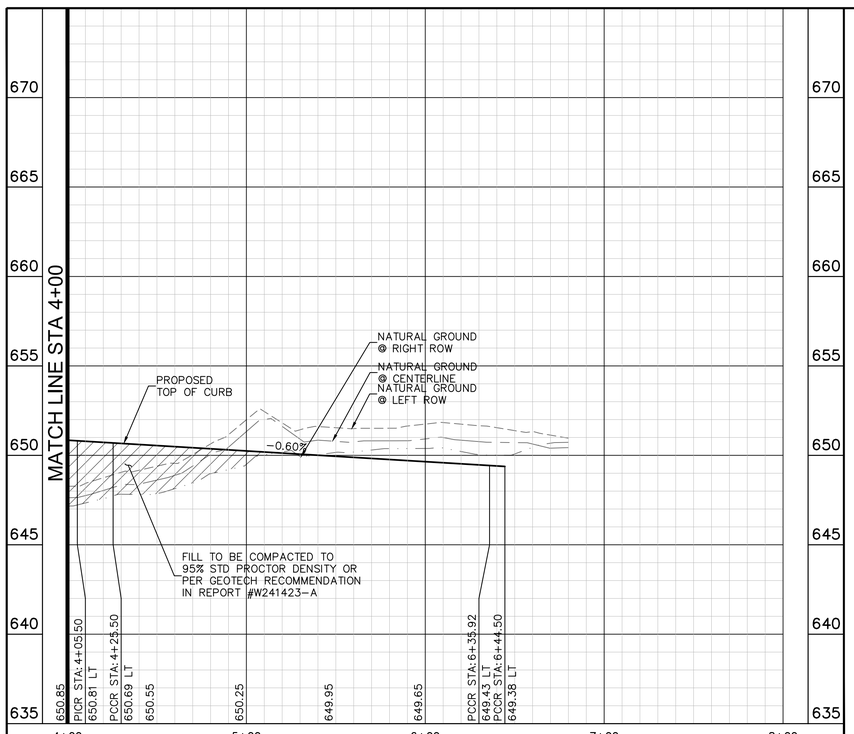




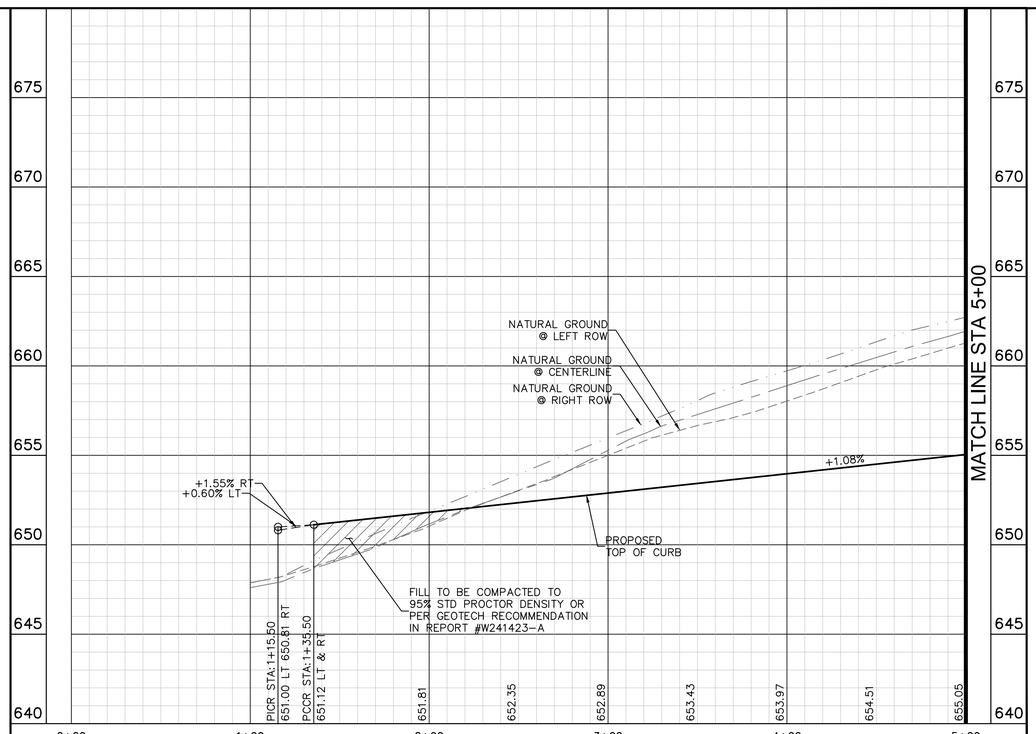
LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

DAMSIRE LANE



DESTRY DRIVE



PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT:	063451880
DATE:	AUGUST 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

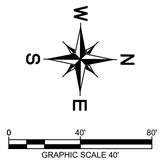
PAVING P&P - DAMSIRE LANE & DESTRY DRIVE

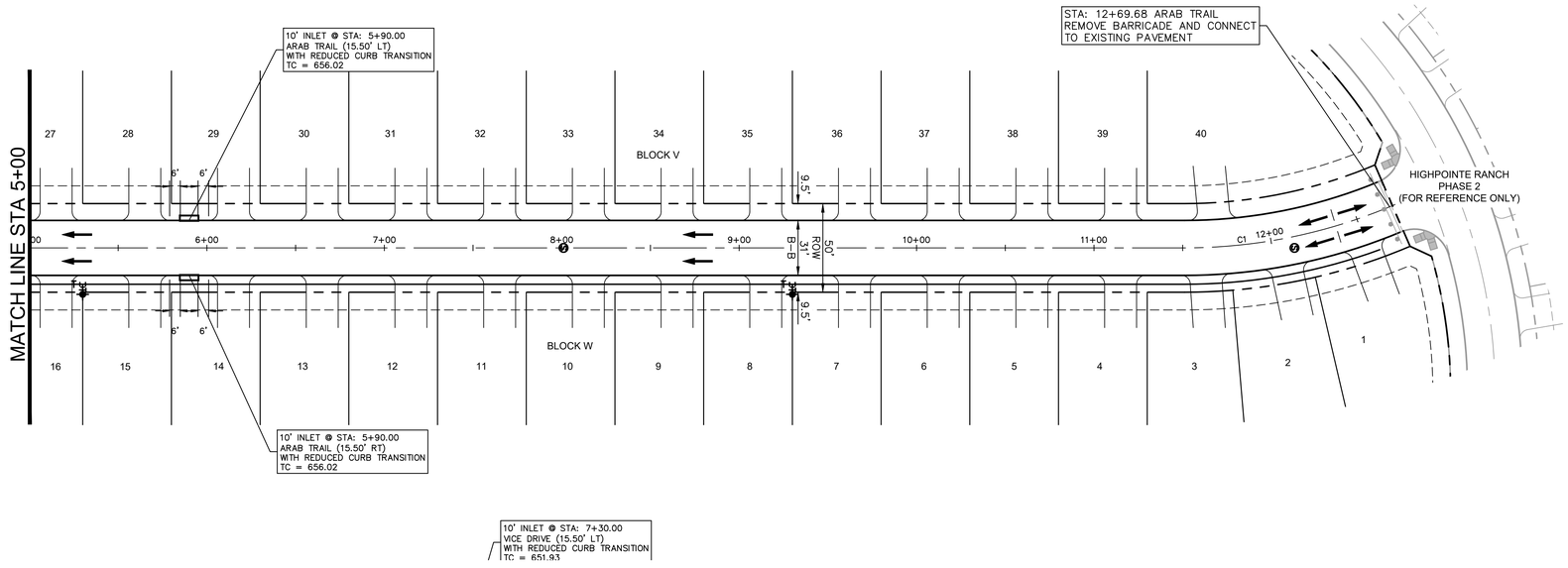
HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-12

Plotted By:Goertzen, Johnathan Date:August 26, 2024 05:19:47pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Paving P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By: Goertzen, Johnathon Date: August 26, 2024 05:19:54pm File Path: K:\FBL_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Paving P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



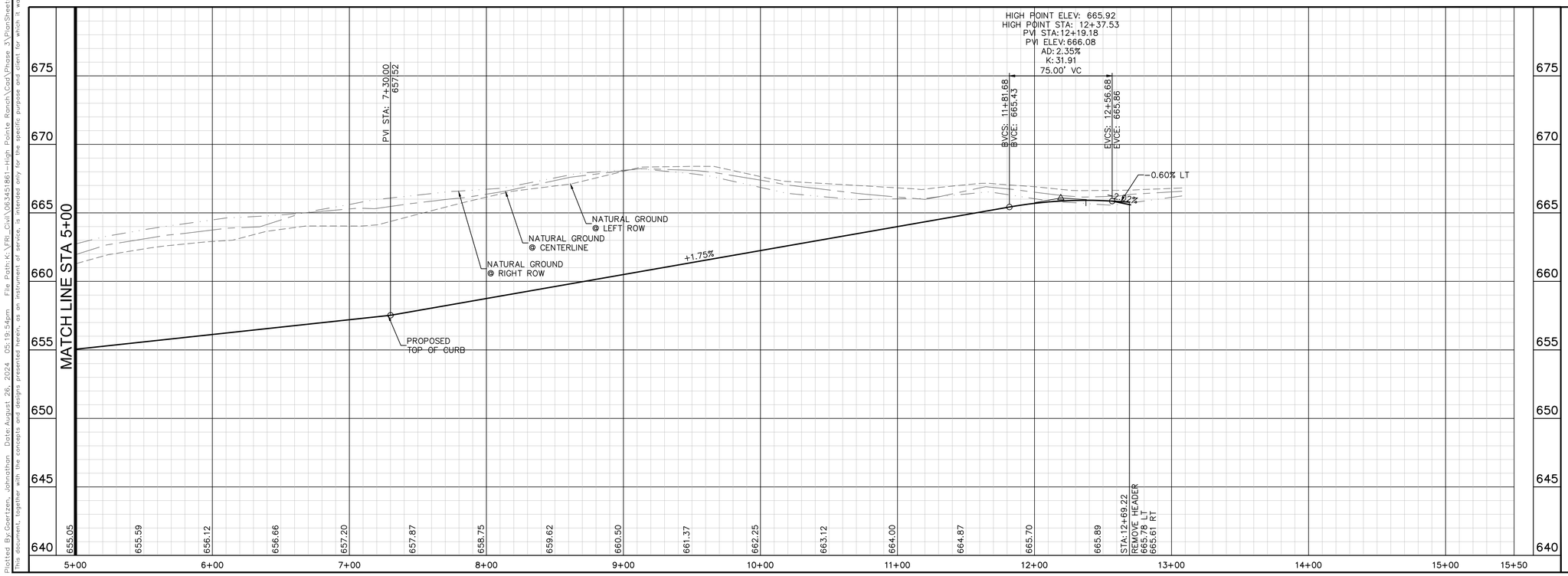


CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	300.00'	122.27'	N12°05'36"W	121.42'	23°21'06"	62.00'

LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

DESTRY DRIVE



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

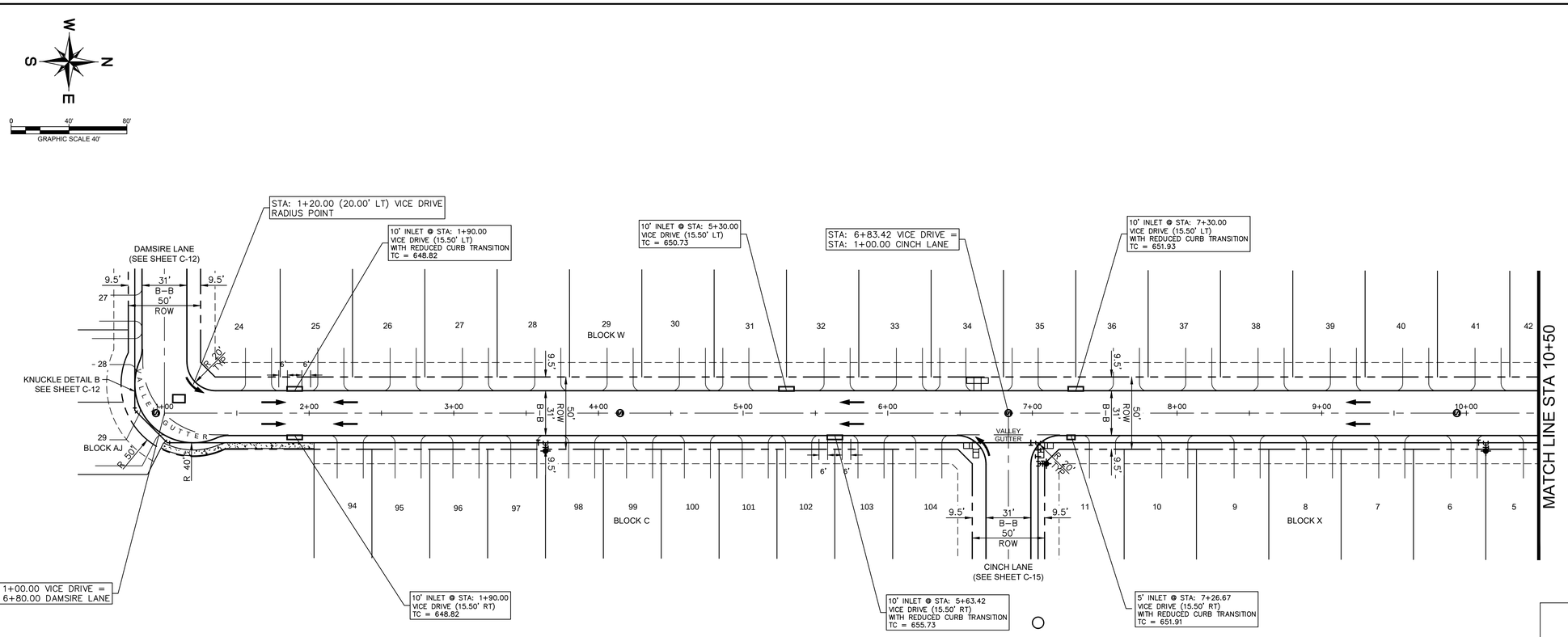
STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT 063451880
DATE AUGUST 2024
SCALE AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

PAVING P&P - DESTRY DRIVE

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

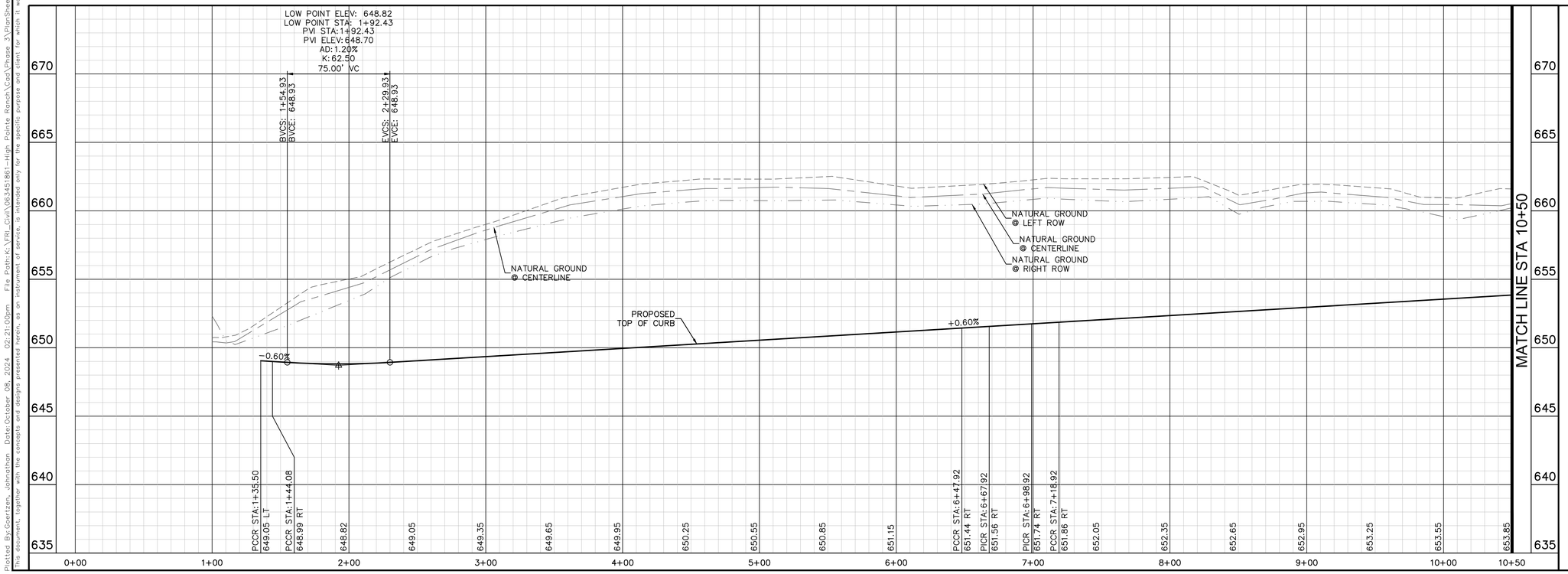
SHEET NUMBER
C-13



LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

VICE DRIVE



PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

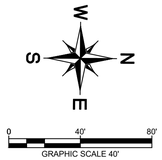
KHA PROJECT 063451880
DATE OCTOBER 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

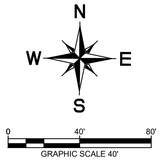
PAVING P&P - VICE DRIVE

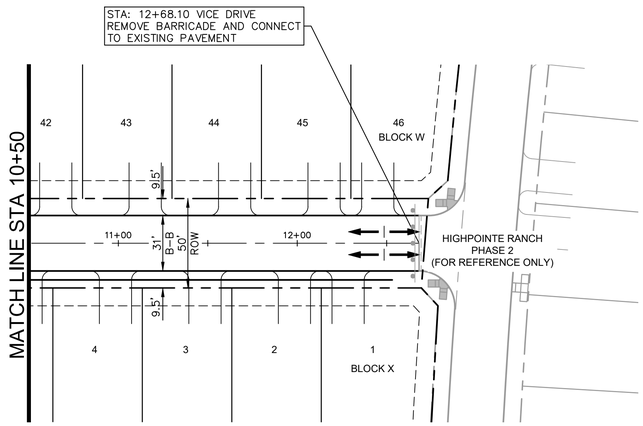
HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

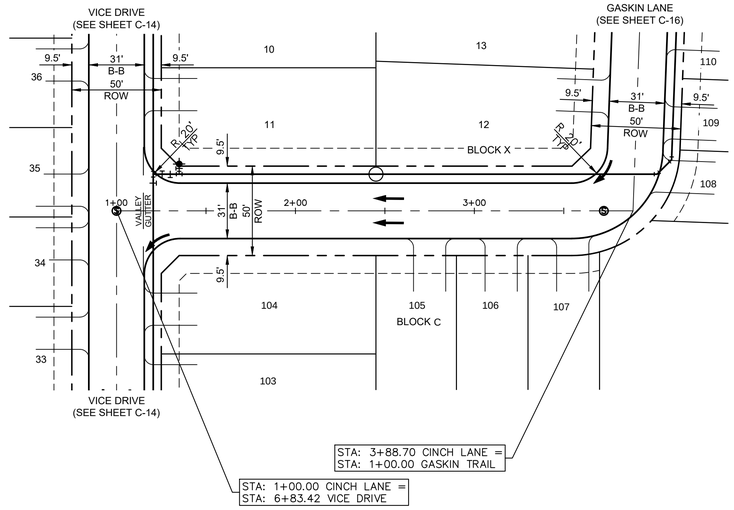
SHEET NUMBER
C-14

Plotted By:Goertzen, Johnathon Date:October 08, 2024 02:21:02pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Paving P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





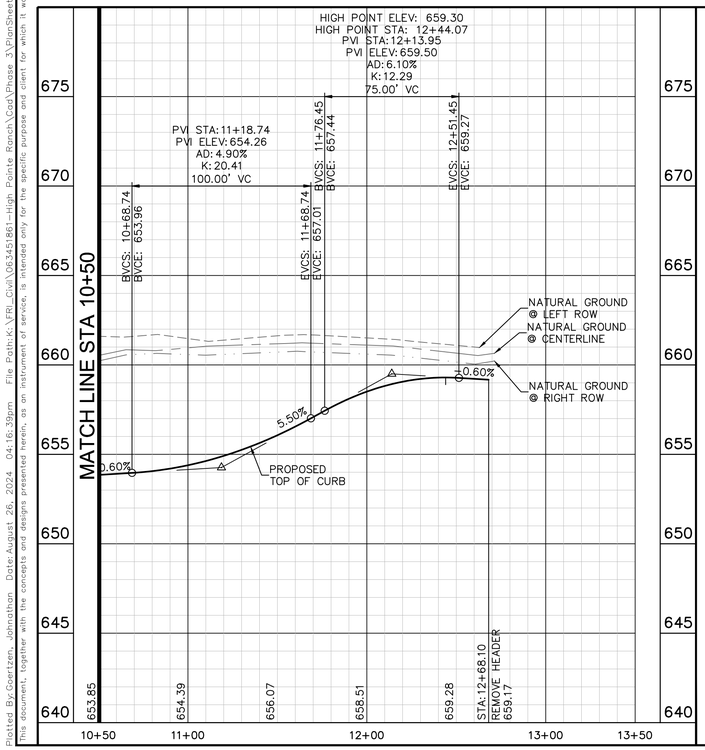




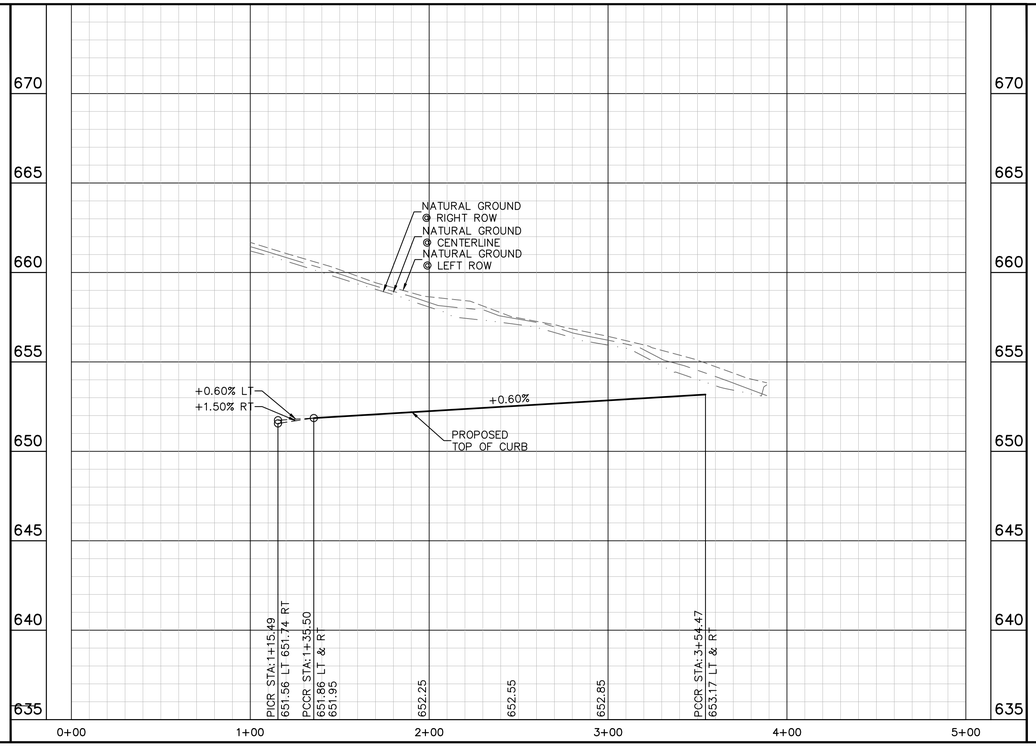
LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

VICE DRIVE



CINCH LANE



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

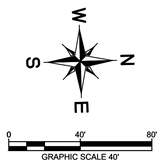
KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

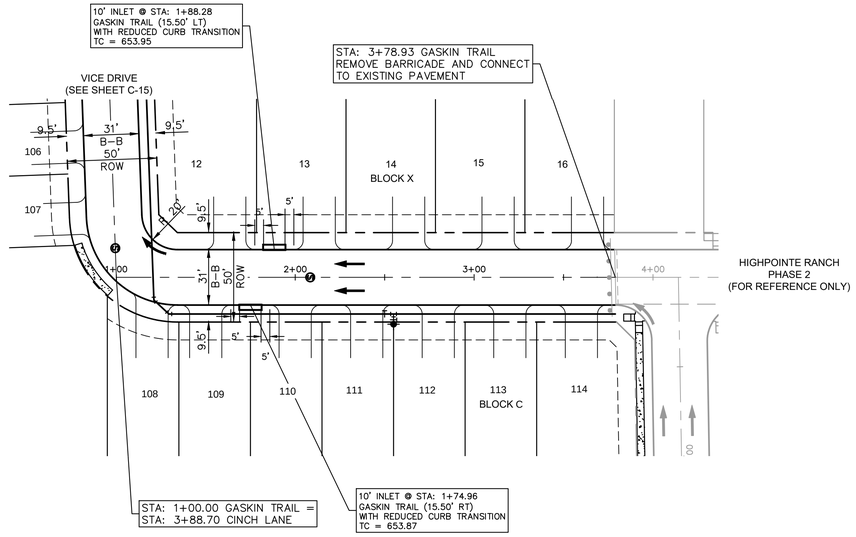
PAVING P&P - VICE DRIVE AND CINCH LANE

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-15

Plotted By: Geertzen, Johnathon Date: August 26, 2024 04:16:39pm File Path: K:\FBL_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Paving P&P2.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

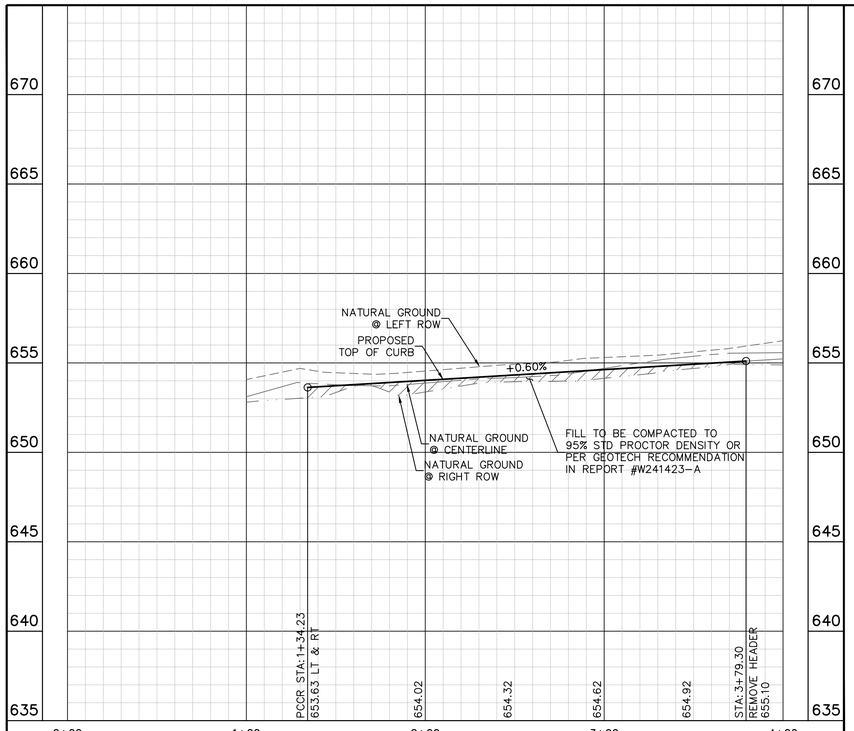




LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

GASKIN TRAIL



THIS SPACE INTENTIONALLY LEFT BLANK

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

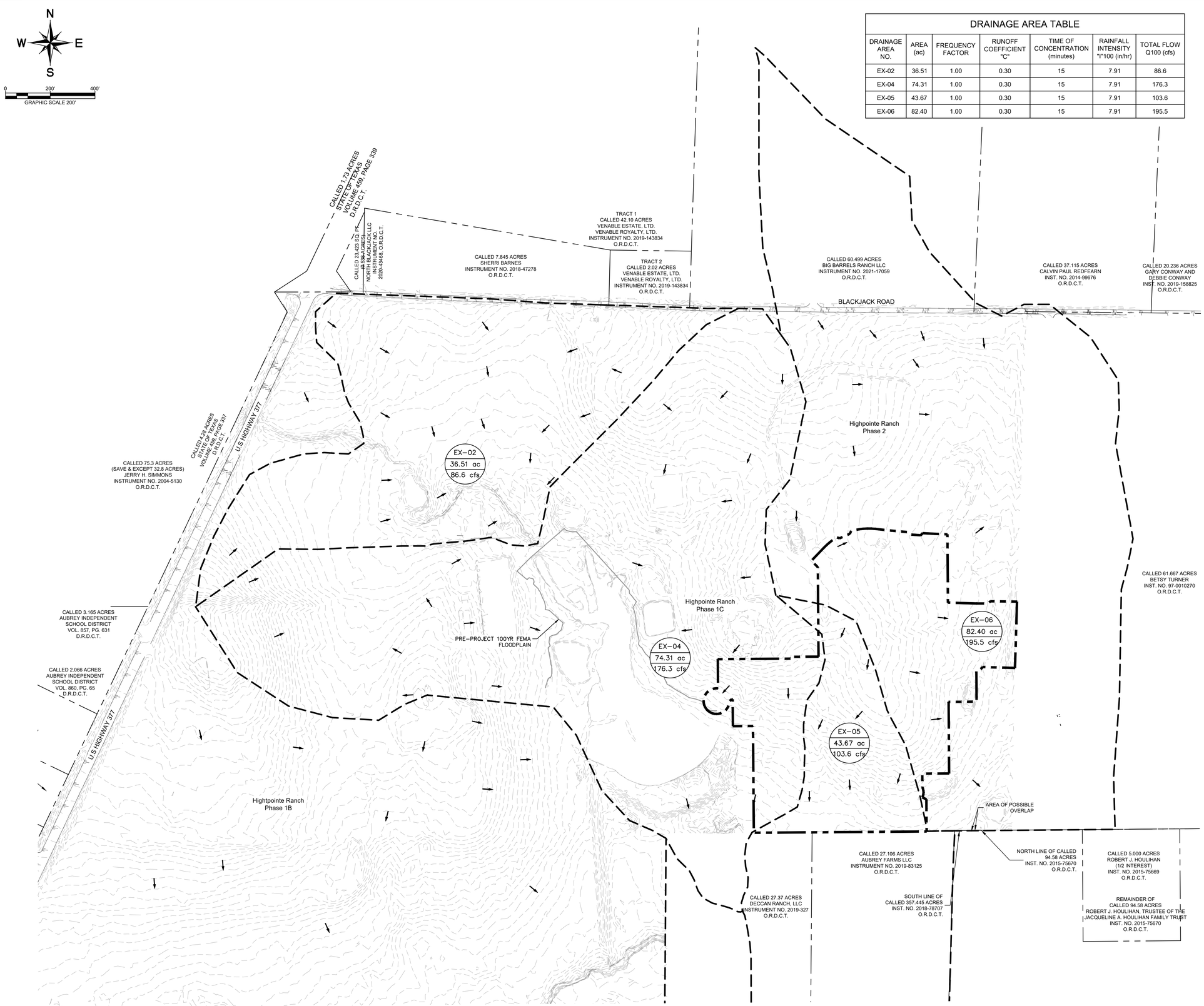
KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

PAVING P&P - GASKIN TRAIL

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-16

Plotted By:Goertzen, Johnathan Date:August 26, 2024 04:16:47pm File Path:K:\FTW_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Paving P&P2.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



DRAINAGE AREA TABLE

DRAINAGE AREA NO.	AREA (ac)	FREQUENCY FACTOR	RUNOFF COEFFICIENT "C"	TIME OF CONCENTRATION (minutes)	RAINFALL INTENSITY "I"100 (in/hr)	TOTAL FLOW Q100 (cfs)
EX-02	36.51	1.00	0.30	15	7.91	86.6
EX-04	74.31	1.00	0.30	15	7.91	176.3
EX-05	43.67	1.00	0.30	15	7.91	103.6
EX-06	82.40	1.00	0.30	15	7.91	195.5

LEGEND

- X-1 / 9.9 ac / 5.5 cfs — AREA DESIGNATOR, AREA IN ACRES, Q100 FLOW IN CFS
- A-1 — INLET NUMBER
- PROPERTY LINE
- PROPOSED STORM DRAIN LINE
- EXISTING STORM DRAIN LINE
- PROPOSED DRAINAGE DIVIDE
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN HEADWALL
- PROPOSED FLOW DIRECTION
- 555 — PROPOSED CONTOUR
- 555 — EXISTING CONTOUR

DRAINAGE DESIGN CRITERIA

Q100 = C*I*A

Q = FLOW IN CUBIC FEET PER SECOND (CFS)

C = RUNOFF COEFFICIENT = 0.50 (RESIDENTIAL)
0.30 (EXISTING)

I = INTENSITY (TIME OF CONCENTRATION = TC)

TC OF 15 MINUTES (RESIDENTIAL) = 7.91 IN/HR

A = DRAINAGE AREA IN ACRES

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	AA
CHECKED BY:	KPB

EXISTING DRAINAGE AREA MAP

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-17

Plotted By:Gaertzen, Johnathan Date:October 08, 2024 11:46:42am File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Existing Drainage Area Map.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

DRAINAGE GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. SEE STORM DRAIN PLAN & PROFILE SHEETS FOR DETAILED INFORMATION ON STORM DRAIN LINES.
3. ALL STORM DRAIN LINES SHALL BE RCP, CLASS III UNLESS OTHERWISE NOTED.

DRAINAGE DESIGN CRITERIA

Q100 = C*I*A

Q = FLOW IN CUBIC FEET PER SECOND (CFS)

C = RUNOFF COEFFICIENT = 0.50(RESIDENTIAL)
0.30 (EXISTING)

I = INTENSITY (TIME OF CONCENTRATION = TC)

TC OF 15 MINUTES (COMMERCIAL) = 7.91 IN/HR

A = DRAINAGE AREA IN ACRES

LEGEND

- X-1 / 9.9 ac / 5.5 cfs — AREA DESIGNATOR, AREA IN ACRES, Q100 FLOW IN CFS
- A-1 — INLET NUMBER
- PROPERTY LINE
- PROPOSED STORM DRAIN LINE
- EXISTING STORM DRAIN LINE
- PROPOSED DRAINAGE DIVIDE
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN HEADWALL
- EXISTING FLOW DIRECTION
- 555 — PROPOSED CONTOUR
- 555 — EXISTING CONTOUR

DRAINAGE AREA TABLE

DRAINAGE AREA NO.	AREA (ac)	FREQUENCY FACTOR	RUNOFF COEFFICIENT "C"	TIME OF CONCENTRATION (minutes)	RAINFALL INTENSITY "I"100 (in/hr)	TOTAL FLOW Q100 (cfs)
AB8	1.13	1.00	0.50	15.0	7.91	4.5
AB9	1.20	1.00	0.50	15.0	7.91	4.8
AE0	1.88	1.00	0.50	15.0	7.91	7.4
AE1	1.71	1.00	0.50	15.0	7.91	6.8
AE2	1.30	1.00	0.50	15.0	7.91	5.1
AE3	0.66	1.00	0.50	15.0	7.91	2.6
AE4	1.47	1.00	0.50	15.0	7.91	5.8
AE5	1.39	1.00	0.50	15.0	7.91	5.5
AF0	2.07	1.00	0.50	15.0	7.91	8.2
AF1	2.23	1.00	0.50	15.0	7.91	8.8
AF2	0.67	1.00	0.50	15.0	7.91	2.6
AF3	0.67	1.00	0.50	15.0	7.91	2.6
AF4	0.67	1.00	0.50	15.0	7.91	2.6
AF5	0.67	1.00	0.50	15.0	7.91	2.6
AG0	1.92	1.00	0.50	15.0	7.91	7.6
AG1	2.36	1.00	0.50	15.0	7.91	9.3
AG2	0.47	1.00	0.50	15.0	7.91	1.9
AG3	0.50	1.00	0.50	15.0	7.91	2.0
AH0	0.74	1.00	0.50	15.0	7.91	2.9
AH1	1.16	1.00	0.50	15.0	7.91	4.6
AH2	1.85	1.00	0.50	15.0	7.91	7.3

!!WARNING!!

EXISTING UTILITIES IN THE AREA. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES WITH THE PROVIDER PRIOR TO START OF CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WHERE NECESSARY AND PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN). IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT THEIR OWN EXPENSE.

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS — KYLE P. BROCKMAN — 131422 — LICENSED PROFESSIONAL ENGINEER — 10/15/24

No.	REVISIONS	DATE	BY

KHA PROJECT 063451880 | DATE AUGUST 2024 | SCALE AS SHOWN | DESIGNED BY: JRG | DRAWN BY: AA | CHECKED BY: KPB

PROPOSED DRAINAGE AREA MAP

HIGHPOINTE RANCH PHASE 3

CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-18

Plotted By: Goertzen, Johnathon Date: August 26, 2024 04:24:50pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Proposed Drainage Area Maps.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

100-Year Street Capacity & Inlet Design Calculations

Project: Highpointe Ranch Phase 2
Location: City of Aubrey, Denton County, Texas
Date: 8/12/2024

Inlet						Drainage Areas							Sag Inlet Percentage of Flow from:		Sag Inlet Split 100-year Runoff (cfs) from:		"Sx" Street Longitudinal Slope (%)					Right-of-Way Capacity (cfs)			100-year Depth of Flow (ft)		100-year Spread of Flow "T" (ft)												
Inlet No.	Storm Drain Line	Station	Street	Inlet Type	Inlet Condition (Sag or On-Grade)	Area No.	Areas (acres)	Runoff "c"	Conc. Time (min.)	100-year Intensity (in/hr)	100-year Runoff (cfs)	100-year Crown Overflow (cfs)	100-year Carryover Flow (cfs)	100-year Total Gutter Q (cfs)	Lower Station	Higher Station	Lower Station	Higher Station	On-Grade/Lower Station for Sag	Higher Station for Sag	Street Section (Type)	Roadway Cross Slope "Sx" (%)	Manning's Coefficient for Pavement "n"	Street Capacity (cfs)	On-Grade/Lower Station for Sag	Higher Station for Sag	On-Grade/Lower Station for Sag	Higher Station for Sag	On-Grade/Lower Station for Sag	Higher Station for Sag	Gutter Cross Slope "Sw" (%)	Width of Depressed Gutter "W"	100-year Ratio of Flow "E0"	Gutter Depression Depth "a" (ft)	Equivalent Cross Slope "Se" (%)	100-year Required Length "L"	Length Provided "L" (ft)	Inlet Efficiency "E"	100-year Inlet Capacity (cfs)	100-year Carryover Flow "Q" (cfs)	Target Inlet No.	Comments
1	2	3	4	5	6	7	8	9	10	11	12	13a	13b	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
AB8	SD-AB	1+88.28	Gaskin Trail	Curb	On-Grade	AB8	1.13	0.50	15.0	7.91	4.47	0.00	0.00	4.47	N/A	N/A	N/A	N/A	0.60%	N/A	Residential	2.22%	0.015	13.30	24.51	N/A	0.37	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	11.25	12	1.00	4.47	0.00	N/A	
AB9	SD-AB	1+74.96	Gaskin Trail	Curb	On-Grade	AB9	1.20	0.50	15.0	7.91	4.75	0.00	0.00	4.75	N/A	N/A	N/A	N/A	0.60%	N/A	Residential	2.22%	0.015	13.30	24.51	N/A	0.37	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	11.54	12	1.00	4.75	0.00	N/A	
AE0	SD-AE	5+63.42	Vice Drive	Curb	On-Grade	AE0	1.88	0.50	15.0	7.91	7.44	0.00	0.00	7.44	N/A	N/A	N/A	N/A	0.60%	N/A	Residential	2.22%	0.015	13.30	24.51	N/A	0.42	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	13.93	10	0.90	6.68	0.76	AE3	
AE1	SD-AE	5+63.42	Vice Drive	Curb	On-Grade	AE0	1.71	0.50	15.0	7.91	6.76	0.00	0.00	6.76	N/A	N/A	N/A	N/A	0.60%	N/A	Residential	2.22%	0.015	13.30	24.51	N/A	0.41	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	13.39	5	0.57	3.85	2.91	AE2	
AE2	SD-AE	5+30.00	Vice Drive	Curb	On-Grade	AE1	1.30	0.50	15.0	7.91	5.14	0.00	2.91	8.05	N/A	N/A	N/A	N/A	0.60%	N/A	Residential	2.22%	0.015	13.30	24.51	N/A	0.43	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	14.40	10	0.88	7.10	0.95	AE5	
AE3	SD-AE	1+90.00	Vice Drive	Curb	On-Grade	AE2	0.66	0.50	15.0	7.91	2.61	0.00	0.76	3.37	N/A	N/A	N/A	N/A	0.60%	0.60%	Residential	2.22%	0.015	13.30	24.51	N/A	0.34	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	9.99	10	1.00	3.37	0.00	AE4	
AE4	SD-AE	1+90.00	Vice Drive	Curb	Sag	AE3	1.47	0.50	15.0	7.91	5.81	0.00	0.00	5.81	30%	70%	1.74	4.07	0.60%	0.60%	Residential	2.86%	0.015	13.30	24.51	17.33	0.31	0.36	10.70	15.00	25.00%	1.33	N/A	0.33	N/A	2.81	10	1.00	5.81	0.00	N/A	
AE5	SD-AE	1+90.00	Vice Drive	Curb	Sag	AE2	1.39	0.50	15.0	7.91	5.50	0.00	0.95	6.45	18%	82%	1.16	5.29	0.60%	0.60%	Residential	3.15%	0.015	13.30	24.51	17.33	0.27	0.38	8.70	15.00	25.00%	1.33	N/A	0.33	N/A	3.29	10	1.00	6.45	0.00	N/A	
AF0	SD-AF	5+90.00	Arab Trail	Curb	On-Grade	AF0	2.07	0.50	15.0	7.91	8.19	0.00	0.00	8.19	N/A	N/A	N/A	N/A	1.08%	N/A	Residential	2.22%	0.015	17.85	32.89	N/A	0.40	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	17.31	10	0.79	6.46	1.73	AF2	
AF1	SD-AF	5+90.00	Arab Trail	Curb	On-Grade	AF1	2.23	0.50	15.0	7.91	8.82	0.00	0.00	8.82	N/A	N/A	N/A	N/A	1.08%	N/A	Residential	2.22%	0.015	17.85	32.89	N/A	0.40	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	17.85	10	0.77	6.81	2.01	AF3	
AF2	SD-AF	3+90.00	Arab Trail	Curb	On-Grade	AF2	0.67	0.50	15.0	7.91	2.65	0.00	1.73	4.38	N/A	N/A	N/A	N/A	1.08%	N/A	Residential	2.22%	0.015	17.85	32.89	N/A	0.34	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	13.31	10	0.92	4.02	0.36	AF4	
AF3	SD-AF	3+90.00	Arab Trail	Curb	On-Grade	AF3	0.67	0.50	15.0	7.91	2.65	0.00	2.01	4.66	N/A	N/A	N/A	N/A	1.08%	N/A	Residential	2.22%	0.015	17.85	32.89	N/A	0.35	N/A	15.00	N/A	25.00%	1.33	0.36	0.33	11.13%	13.66	10	0.91	4.23	0.43	AF5	
AF4	SD-AF	1+90.00	Arab Trail	Curb	On-Grade	AF4	0.67	0.50	15.0	7.91	2.65	0.00	0.36	3.01	N/A	N/A	N/A	N/A	1.08%	N/A	Residential	2.61%	0.015	17.85	32.89	N/A	0.32	N/A	12.40	N/A	25.00%	1.33	0.41	0.33	12.95%	10.38	12	1.00	3.01	0.00	N/A	
AF5	SD-AF	1+90.00	Arab Trail	Curb	On-Grade	AF5	0.67	0.50	15.0	7.91	2.65	0.00	0.43	3.08	N/A	N/A	N/A	N/A	1.08%	N/A	Residential	2.58%	0.015	17.85	32.89	N/A	0.32	N/A	12.59	N/A	25.00%	1.33	0.41	0.33	12.80%	10.55	12	1.00	3.08	0.00	N/A	
AG0	SD-AG	1+72.42	Damsire Lane	Curb	Sag	AG0	1.92	0.50	15.0	7.91	7.59	0.00	0.00	7.59	78%	22%	5.92	1.67	0.60%	1.90%	Residential	2.22%	0.015	16.74	24.51	30.84	0.39	0.26	15.00	7.87	25.00%	1.33	N/A	0.33	N/A	3.99	10	1.00	7.59	0.00	N/A	
AG1	SD-AG	1+72.42	Damsire Lane	Curb	Sag	AG1	2.36	0.50	15.0	7.91	9.33	0.00	0.85	10.18	89%	11%	9.06	1.12	0.60%	1.90%	Residential	2.22%	0.015	16.74	24.51	30.84	0.44	0.23	15.00	6.58	25.00%	1.33	N/A	0.33	N/A	5.69	10	1.00	10.18	0.00	N/A	
AG2	SD-AG	4+72.42	Damsire Lane	Curb	On-Grade	AG2	0.47	0.50	15.0	7.91	1.86	0.00	0.00	1.86	N/A	N/A	N/A	N/A	0.60%	N/A	Residential	2.80%	0.015	13.30	24.51	N/A	0.31	N/A	11.09	N/A	25.00%	1.33	0.45	0.33	14.14%	6.74	10	1.00	1.86	0.00	N/A	
AG3	SD-AG	4+72.42	Damsire Lane	Curb	On-Grade	AG3	0.50	0.50	15.0	7.91	1.98	0.00	0.00	1.98	N/A	N/A	N/A	N/A	0.60%	N/A	Residential	2.74%	0.015	13.30	24.51	N/A	0.31	N/A	11.50	N/A	25.00%	1.33	0.44	0.33	13.75%	7.04	10	1.00	1.98	0.00	N/A	
AH0	SD-AH	8+29.00	Fetlock Lane	Curb	On-Grade	AH0	0.74	0.50	15.0	7.91	2.93	0.00	0.00	2.93	N/A	N/A	N/A	N/A	3.05%	N/A	Residential	3.08%	0.015	30.00	55.26	N/A	0.28	N/A	9.19	N/A	25.00%	1.33	0.53	0.33	16.29%	12.21	10	0.95	2.80	0.13	AH2	
AH1	SD-AH	8+29.00	Fetlock Lane	Curb	On-Grade	AH1	1.16	0.50	15.0	7.91	4.59	0.00	0.00	4.59	N/A	N/A	N/A	N/A	3.05%	N/A	Residential	2.71%	0.015	30.00	2.42	N/A	0.32	N/A	11.69	N/A	25.00%	1.33	0.43	0.33	13.57%	16.45	10	0.81	3.74	0.85	AG1	
AH2	SD-AH	2+09.08	Foal Culdesac	Curb	Sag	AH2	1.85	0.50	15.0	7.91	7.32	0.00	0.13	7.45	62%	38%	4.62	2.83	0.41%	0.61%	Residential	2.22%	0.015	11.00	0.45	0.39	0.39	0.33	15.00	14.57	25.00%	1.33	N/A	0.33	N/A	3.45	5	1.00	7.45	0.00	N/A	

Storm Drain Calculations

From	To	Pipe Length	Drainage Area			Runoff "c"	Incr. cA	Total cA	Time of Concentration			100-year Intensity	100-year Runoff	Inlet Carryover (To Inlet)	Inlet Carryover "q" (From Inlet)	Q Pipe	Pipe Size Diameter	Box Size			n	Sf	HGL		Head Loss Calculations							Design HGL	T/C or Ground Elev.	
			Incremental		Total				Inlet	Travel	Total							No. Barrels	Width	Height			U/S	D/S	V1 (in)	V2 (out)	$V1^2/2G$	$V2^2/2G$	Kj	$KjV1^2/2G$	Hk			
		ft	No.	Area acres	acres				min	min	min	in/hr	cfs	cfs	cfs	cfs	in		ft	ft		ft/ft	ft	ft	ft/s	ft/s	ft	ft		ft		ft	ft	Comments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18a	19	20	21	22	23	24	25	26	27	28	29	30	31	32	35	36
LATERAL AB-8																																		
1+07.78	1+00.00	7.78	AB-8	1.13	1.13	0.50	0.57	0.57	15.0	0.1	15.1	7.91	4.47	0.00	0.00	4.47	18	1	0	0	0.013	0.0018	650.92	650.91	-	2.53	-	0.10	1.25	0.00	0.12	651.05	653.95	
1+00.00																							649.99		2.53	7.89	0.10	0.97	0.50	0.05	0.92	650.91	653.60	
LATERAL AB-9																																		
1+36.06	1+00.00	36.06	AB-9	1.20	1.20	0.50	0.60	0.60	15.0	0.2	15.2	7.91	4.75	0.00	0.00	4.75	18	1	0	0	0.013	0.0020	650.36	650.28	-	2.69	-	0.11	1.25	0.00	0.14	650.50	653.87	
1+00.00																							649.31		2.69	8.14	0.11	1.03	0.50	0.06	0.97	650.28	653.40	

Storm Drain Calculations

From	To	Pipe Length	Drainage Area			Runoff "c"	Incr. cA	Total cA	Time of Concentration			100-year Intensity	100-year Runoff	Inlet Carryover (To Inlet)	Inlet Carryover "q" (From Inlet)	Q Pipe	Pipe Size Diameter	Box Size			n	Sf	HGL		Head Loss Calculations							Design HGL	T/C or Ground Elev.	
			Incremental		Total				Inlet	Travel	Total							No. Barrels	Width	Height			U/S	D/S	V1 (in)	V2 (out)	$V1^2/2G$	$V2^2/2G$	Kj	$KjV1^2/2G$	Hk			
		ft	No.	Area acres	acres				min	min	min	in/hr	cfs	cfs	cfs	cfs	in		ft	ft		ft/ft	ft	ft	ft/s	ft/s	ft	ft		ft		ft	ft	Comments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18a	19	20	21	22	23	24	25	26	27	28	29	30	31	32	35	36
LINE SD-AE																																		
7+22.28	7+14.50	7.78	AE-0	1.88	1.88	0.50	0.94	0.94	15.0	0.0	15.0	7.91	7.44	0.00	0.76	6.68	21	1	0	0	0.013	0.0018	650.10	650.09	-	2.78	-	0.12	1.25	0.00	0.15	650.25	651.93	
7+14.50	6+91.17	23.33	BEND	0.00	1.88	0.50	0.00	0.94	15.0	0.1	15.1	7.91	7.44	0.00	0.00	6.68	21	1	0	0	0.013	0.0018	649.99	649.94	2.78	2.78	0.12	0.12	0.35	0.04	0.10	650.09	651.58	
6+91.17	5+27.92	163.25	AE-1	1.71	3.59	0.50	0.86	1.80	15.1	0.6	15.7	7.91	14.20	0.00	2.91	10.53	21	1	0	0	0.013	0.0044	649.71	648.99	2.78	4.38	0.12	0.30	0.50	0.06	0.24	649.94	651.44	
5+27.92	5+14.50	13.42	AE-2	1.30	4.89	0.50	0.65	2.45	15.7	0.0	15.7	7.91	19.34	2.91	0.95	17.63	21	1	0	0	0.013	0.0124	648.30	648.13	4.38	7.33	0.30	0.83	0.50	0.15	0.69	648.99	650.46	
5+14.50	1+74.50	340.00	AE-3	0.66	5.55	0.50	0.33	2.78	15.7	1.9	17.6	7.91	21.96	0.76	0.00	21.01	36	1	0	0	0.013	0.0010	648.03	647.70	7.33	2.97	0.83	0.14	0.50	0.42	0.10	648.13	650.38	
1+74.50	1+54.50	20.00	AE-4	1.47	7.02	0.50	0.74	3.51	17.6	0.1	17.7	7.50	26.31	0.00	0.00	25.36	36	1	0	0	0.013	0.0014	647.56	647.54	2.97	3.59	0.14	0.20	0.50	0.07	0.13	647.70	648.50	
1+54.50	1+00.00	54.50	AE-5	1.39	8.41	0.50	0.70	4.21	17.7	0.3	18.0	7.50	31.52	0.95	0.00	31.52	42	1	0	0	0.013	0.0010	647.44	647.38	3.59	3.28	0.20	0.17	0.50	0.10	0.10	647.54	648.56	
1+00.00																							647.27		3.28	3.16	0.17	0.15	0.25	0.04	0.11	647.38	649.04	
LATERAL AE-1																																		
1+36.06	1+00.00	36.06	AE-1	1.71	1.71	0.50	0.86	0.86	15.0	0.3	15.3	7.91	6.76	0.00	2.91	3.85	18	1	0	0	0.013	0.0013	650.02	649.97	-	2.18	-	0.07	1.25	0.00	0.10	650.12	651.91	
1+00.00																							649.71		2.18	4.38	0.07	0.30	0.50	0.04	0.26	649.97	651.44	
LATERAL AE-2																																		
1+36.06	1+00.00	36.06	AE-2	1.30	1.30	0.50	0.65	0.65	15.0	0.1	15.1	7.91	5.14	2.91	0.95	7.10	18	1	0	0	0.013	0.0046	649.17	649.01	-	4.02	-	0.25	1.25	0.00	0.31	649.49	650.93	
1+00.00																							648.30		4.02	7.33	0.25	0.83	0.50	0.13	0.71	649.01	650.46	
LATERAL AE-3																																		
1+07.78	1+00.00	7.78	AE-3	0.66	0.66	0.50	0.33	0.33	15.0	0.1	15.1	7.91	2.61	0.76	0.00	3.37	18	1	0	0	0.013	0.0010	648.15	648.14	-	1.91	-	0.06	1.25	0.00	0.10	648.25	650.73	
1+00.00																							648.03		1.91	2.97	0.06	0.14	0.50	0.03	0.11	648.14	650.38	
LATERAL AE-4																																		
1+07.78	1+00.00	7.78	AE-4	1.47	1.47	0.50	0.74	0.74	15.0	0.0	15.0	7.91	5.82	0.00	0.00	5.82	18	1	0	0	0.013	0.0031	647.70	647.68	-	3.29	-	0.17	1.25	0.00	0.21	647.91	648.82	
1+00.00																							647.56		3.29	3.59	0.17	0.20	0.50	0.08	0.12	647.68	648.50	
LATERAL AE-5																																		
1+36.06	1+00.00	36.06	AE-5	1.39	1.39	0.50	0.70	0.70	15.0	0.2	15.2	7.91	5.50	0.95	0.00	6.45	18	1	0	0	0.013	0.0038	647.67	647.54	-	3.65	-	0.21	1.25	0.00	0.26	647.93	648.82	
1+00.00																							647.44		3.65	3.28	0.21	0.17	0.50	0.10	0.10	647.54	648.56	

Plotted By:Goertzen, Johnathan Date:August 26, 2024 04:25:25pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Drainage Calculation.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT 063451880
DATE AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

DRAINAGE CALCULATIONS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-19

Storm Drain Calculations

From	To	Pipe Length	Drainage Area			Runoff "c"	Incr. cA	Total cA	Time of Concentration			100-year Intensity	100-year Runoff	Inlet Carryover (To Inlet)	Inlet Carryover "q" (From Inlet)	Q Pipe	Pipe Size Diameter	Box Size			n	Sf	HGL		Head Loss Calculations							Design HGL	T/C or Ground Elev.	
			Incremental No.	Incremental Area	Total				Inlet	Travel	Total							No. Barrels	Width	Height			U/S	D/S	V1 (in)	V2 (out)	$V1^2/2G$	$V2^2/2G$	Kj	$KjV1^2/2G$	Hk			
		ft		acres	acres				min	min	min	in/hr	cfs	cfs	cfs	cfs	in		ft	ft		ft/ft	ft	ft	ft/s	ft/s	ft	ft		ft		ft	ft	Comments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18a	19	20	21	22	23	24	25	26	27	28	29	30	31	32	35	36
LINE SD-AF																																		
5+82.28	5+74.50	7.78	AF-0	2.07	2.07	0.50	1.04	1.04	15.0	0.0	15.0	7.91	8.19	0.00	0.00	8.19	18	1	0	0	0.013	0.0061	654.96	654.91	-	4.63	-	0.33	1.25	0.00	0.42	655.38	656.02	
5+74.50	5+54.50	20.00	BEND	0.00	2.07	0.50	0.00	1.04	15.0	0.1	15.1	7.91	8.19	0.00	0.00	8.19	18	1	0	0	0.013	0.0061	654.79	654.67	4.63	4.63	0.33	0.33	0.35	0.12	0.12	654.91	655.64	
5+54.50	3+74.50	180.00	AF-1	2.23	4.30	0.50	1.12	2.15	15.1	0.4	15.5	7.91	17.01	0.95	0.00	17.96	21	1	0	0	0.013	0.0128	653.97	651.66	4.63	7.47	0.33	0.87	0.50	0.17	0.70	654.67	655.42	
3+74.50	3+54.50	20.00	AF-2	0.67	4.97	0.50	0.34	2.49	15.5	0.0	15.5	7.91	19.66	0.00	1.73	18.88	21	1	0	0	0.013	0.0142	651.14	650.85	7.47	7.85	0.87	0.96	0.50	0.43	0.52	651.66	653.48	
3+54.50	1+74.50	180.00	AF-3	0.67	5.64	0.50	0.34	2.82	15.5	0.5	16.0	7.91	22.31	0.00	2.01	19.52	24	1	0	0	0.013	0.0074	650.73	649.39	7.85	6.21	0.96	0.60	0.50	0.48	0.12	650.85	653.27	
1+74.50	1+54.50	20.00	AF-4	0.67	6.31	0.50	0.34	3.16	16.0	0.0	16.0	7.70	24.28	1.73	0.36	22.86	24	1	0	0	0.013	0.0102	648.87	648.66	6.21	7.28	0.60	0.82	0.50	0.30	0.52	649.39	651.33	
1+54.50	1+00.00	54.50	AF-5	0.67	6.98	0.50	0.34	3.49	16.0	0.1	16.1	7.70	26.86	2.01	0.43	27.02	27	1	0	0	0.013	0.0076	648.36	647.94	7.28	6.80	0.82	0.72	0.50	0.41	0.31	648.66	651.11	
1+00.00																							647.84		6.80	2.66	0.72	0.11	0.25	0.18	0.10	647.94	650.65	
LATERAL AF-1																																		
1+36.06	1+00.00	36.06	AF-1	2.23	2.23	0.50	1.12	1.12	15.0	0.1	15.1	7.91	8.82	0.95	0.00	9.77	18	1	0	0	0.013	0.0087	654.91	654.60	-	5.53	-	0.47	1.25	0.00	0.59	655.51	656.02	
1+00.00																							653.97		5.53	7.47	0.47	0.87	0.50	0.24	0.63	654.60	655.42	
LATERAL AF-2																																		
1+07.78	1+00.00	7.78	AF-2	0.67	0.67	0.50	0.34	0.34	15.0	0.2	15.2	7.91	2.65	0.00	1.73	0.92	18	1	0	0	0.013	0.0001	652.09	652.09	-	0.52	-	0.00	1.25	0.00	0.10	652.19	653.86	
1+00.00																							651.14		0.52	7.85	0.00	0.96	0.50	0.00	0.95	652.09	653.48	
LATERAL AF-3																																		
1+36.06	1+00.00	36.06	AF-3	0.67	0.67	0.50	0.34	0.34	15.0	1.7	16.7	7.91	2.65	0.00	2.01	0.64	18	1	0	0	0.013	0.0000	651.33	651.33	-	0.36	-	0.00	1.25	0.00	0.10	651.43	653.86	
1+00.00																							650.73		0.36	6.21	0.00	0.60	0.50	0.00	0.60	651.33	653.27	
LATERAL AF-4																																		
1+07.78	1+00.00	7.78	AF-4	0.67	0.67	0.50	0.34	0.34	15.0	0.1	15.1	7.91	2.65	1.73	0.36	4.02	18	1	0	0	0.013	0.0015	649.66	649.65	-	2.28	-	0.08	1.25	0.00	0.10	649.76	651.71	
1+00.00																							648.87		2.28	7.28	0.08	0.82	0.50	0.04	0.78	649.65	651.33	
LATERAL AF-5																																		
1+36.06	1+00.00	36.06	AF-5	0.67	0.67	0.50	0.34	0.34	15.0	0.3	15.3	7.91	2.65	2.01	0.43	4.23	18	1	0	0	0.013	0.0016	649.09	649.03	-	2.39	-	0.09	1.25	0.00	0.11	649.20	651.71	
1+00.00																							648.36		2.39	6.80	0.09	0.72	0.50	0.04	0.67	649.03	651.11	

Storm Drain Calculations

From	To	Pipe Length	Drainage Area			Runoff "c"	Incr. cA	Total cA	Time of Concentration			100-year Intensity	100-year Runoff	Inlet Carryover (To Inlet)	Inlet Carryover "q" (From Inlet)	Q Pipe	Pipe Size Diameter	Box Size			n	Sf	HGL		Head Loss Calculations							Design HGL	T/C or Ground Elev.	
			Incremental No.	Incremental Area	Total				Inlet	Travel	Total							No. Barrels	Width	Height			U/S	D/S	V1 (in)	V2 (out)	$V1^2/2G$	$V2^2/2G$	Kj	$KjV1^2/2G$	Hk			
		ft		acres	acres				min	min	min	in/hr	cfs	cfs	cfs	cfs	in		ft	ft		ft/ft	ft	ft	ft/s	ft/s	ft	ft		ft		ft	ft	Comments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18a	19	20	21	22	23	24	25	26	27	28	29	30	31	32	35	36
LINE SD-AG																																		
7+02.28	6+94.50	7.78	AG-0	1.92	1.92	0.50	0.96	0.96	15.0	0.0	15.0	7.91	7.60	0.36	0.00	7.96	18	1	0	0	0.013	0.0057	648.46	648.41	-	4.50	-	0.31	1.25	0.00	0.39	648.85	649.85	
6+94.50	6+74.50	20.00	BEND	0.00	1.92	0.50	0.00	0.96	15.0	0.1	15.1	7.91	7.60	0.00	0.00	7.96	21	1	0	0	0.013	0.0025	648.31	648.26	4.50	3.31	0.31	0.17	0.35	0.11	0.10	648.41	649.51	
6+74.50	4+92.42	182.08	AG-1	2.63	4.55	0.50	1.32	2.28	15.1	1.1	16.2	7.91	18.00	0.43	0.00	18.79	36	1	0	0	0.013	0.0008	648.16	648.02	3.31	2.66	0.17	0.11	0.50	0.08	0.10	648.26	649.52	
4+92.42	3+94.50	97.92	SD-AF	6.98	11.53	0.50	3.49	5.77	16.2	0.5	16.7	7.70	44.37	0.00	0.00	45.16	48	1	0	0	0.013	0.0010	647.84	647.75	2.66	3.59	0.11	0.20	0.25	0.03	0.17	648.02	650.65	
3+94.50	3+74.50	20.00	AG-2	0.47	12.00	0.50	0.24	6.00	16.7	0.1	16.8	7.70	46.18	0.00	0.00	46.97	54	1	0	0	0.013	0.0006	647.65	647.64	3.59	2.95	0.20	0.14	0.35	0.07	0.10	647.75	650.06	
3+74.50	2+02.42	172.08	AG-3	0.63	12.63	0.50	0.32	6.32	16.8	0.9	17.7	7.70	48.61	0.85	0.00	50.25	54	1	0	0	0.013	0.0007	647.53	647.42	2.95	3.16	0.14	0.15	0.35	0.05	0.11	647.64	649.94	
2+02.42	1+00.00	102.42	SD-AE	8.41	21.04	0.50	4.21	10.52	17.7	0.5	18.2	7.50	78.85	0.00	0.00	80.49	0	1	6	4	0.013	0.0007	647.27	647.20	3.16	3.45	0.15	0.19	0.25	0.04	0.15	647.42	649.04	
LATERAL AG-1																																		
1+36.06	1+00.00	36.06	AG-1	2.63	2.63	0.50	1.32	1.32	15.0	0.1	15.1	7.91	10.40	0.43	0.00	10.83	21	1	0	0	0.013	0.0047	648.43	648.26	-	4.50	-	0.32	1.25	0.00	0.39	648.82	649.85	
1+00.00																							648.16		4.50	2.66	0.32	0.11	0.50	0.16	0.10	648.26	649.52	
LATERAL AG-2																																		
1+07.78	1+00.00	7.78	AG-2	0.47	0.47	0.50	0.24	0.24	15.0	0.1	15.1	7.91	1.86	0.00	0.00	1.86	18	1	0	0	0.013	0.0003	647.78	647.77	-	1.05	-	0.02	1.25	0.00	0.10	647.88	650.41	
1+00.00																							647.65		1.05	2.95	0.02	0.14	0.50	0.01	0.13	647.77	650.06	
LATERAL AG-3																																		
1+36.06	1+00.00	36.06	AG-3	0.63	0.63	0.50	0.32	0.32	15.0	0.3	15.3	7.91	2.49	0.85	0.00	3.34	18	1	0	0	0.013	0.0010	647.69	647.66	-	1.89	-	0.06	1.25	0.00	0.10	647.79	650.41	
1+00.00																							647.53		1.89	3.16	0.06	0.15	0.50	0.03	0.13	647.66	649.94	

Storm Drain Calculations

From	To	Pipe Length	Drainage Area			Runoff "c"	Incr. cA	Total cA	Time of Concentration			100-year Intensity	100-year Runoff	Inlet Carryover (To Inlet)	Inlet Carryover "q" (From Inlet)	Q Pipe	Pipe Size Diameter	Box Size			n	Sf	HGL		Head Loss Calculations							Design HGL	T/C or Ground Elev.	
			Incremental No.	Incremental Area	Total				Inlet	Travel	Total							No. Barrels	Width	Height			U/S	D/S	V1 (in)	V2 (out)	$V1^2/2G$	$V2^2/2G$	Kj	$KjV1^2/2G$	Hk			
		ft		acres	acres				min	min	min	in/hr	cfs	cfs	cfs	cfs	in		ft	ft		ft/ft	ft	ft	ft/s	ft/s	ft	ft		ft		ft	ft	Comments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	18a	19	20	21	22	23	24	25	26	27	28	29	30	31	32	35	36
LINE SD-AH																																		
5+90.54	5+82.76	7.78	AH-0	0.74	0.74	0.50	0.37	0.37	15.0	0.0	15.0	7.91	2.93	0.00	0.00	2.93	18	1	0	0	0.013	0.0008	658.58	658.57	-	6.58	-	0.67	1.25	0.00	0.84	659.42	663.11	
5+82.76	5+62.76	20.00	BEND	0.00	0.74	0.50	0.00	0.37	15.0	0.1	15.1	7.91	2.93	0.00	0.00	2.93	18	1	0	0	0.013	0.0008	658.34	658.32	6.58	6.58	0.67	0.67	0.35	0.24	0.24	658.57	662.67	
5+62.76	5+05.06	57.70	AH-1	1.16	1.90	0.50	0.58	0.95	15.1	0.2	15.3	7.91	7.52	0.00	0.00	7.52	18	1	0	0	0.013	0.0051	658.22	657.93	6.58	4.25	0.67	0.28	0.50	0.34	0.10	658.32	662.26	
5+05.06	2+01.62	303.44	JB	0.00	1.90	0.50	0.00	0.95	15.3	1.2	16.5	7.91	7.52	0.00	0.00	7.52	18	1	0	0	0.013	0.0051	657.67	656.12	4.25	4.25	0.28	0.28	0.90	0.25	0.25	657.93	660.62	
2+01.62	1+23.70	77.92	BEND	0.00	1.90	0.50	0.00	0.95	16.5	0.3	16.8	7.91	7.52	0.00	0.00	7.52	18	1	0	0	0.013	0.0051	655.77	655.37	4.25	4.25	0.28	0.28	1.25	0.35	0.35	656.12	658.65	
1+23.70	1+00.00	23.70	AH-2	2.02	3.92	0.50	1.01	1.96	16.8	0.1	16.9	7.70	15.09	0.00	0.13	14.96	21	1	0	0	0.013	0.0089	654.91	654.70	4.25	6.22	0.28	0.60	0.50	0.14	0.46	655.37	656.79	
LATERAL AH-1																																		
1+36.06	1+00.00	36.06	AH-1	1.16	1.16	0.50	0.58	0.58	15.0	0.2	15.2	7.91	4.59	0.00	0.00	4.59	18	1	0	0	0.013	0.0019	658.52	658.45	-	2.60	-	0.10	1.25	0.00	0.13	658.65	663.11	
1+00.00																							658.22		2.60	4.25	0.10	0.28	0.50	0.05	0.23	658.45	662.26	
LATERAL AH-2																																		
1+17.68	1+00.00	17.68	AH-2	2.02	2.02	0.50	1.01	1.01	15.0	0.1	15.1	7.91	7.99	0.00	0.13	7.86	18	1	0	0	0.013	0.0056	655.46	655.36	-	4.45	-	0.31	1.25	0.00	0.38	655.84	658.45	
1+00.00																							654.91		4.45	6.22	0.31	0.60	0.50	0.15	0.45	655.36	656.79	

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT 063451880
DATE AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

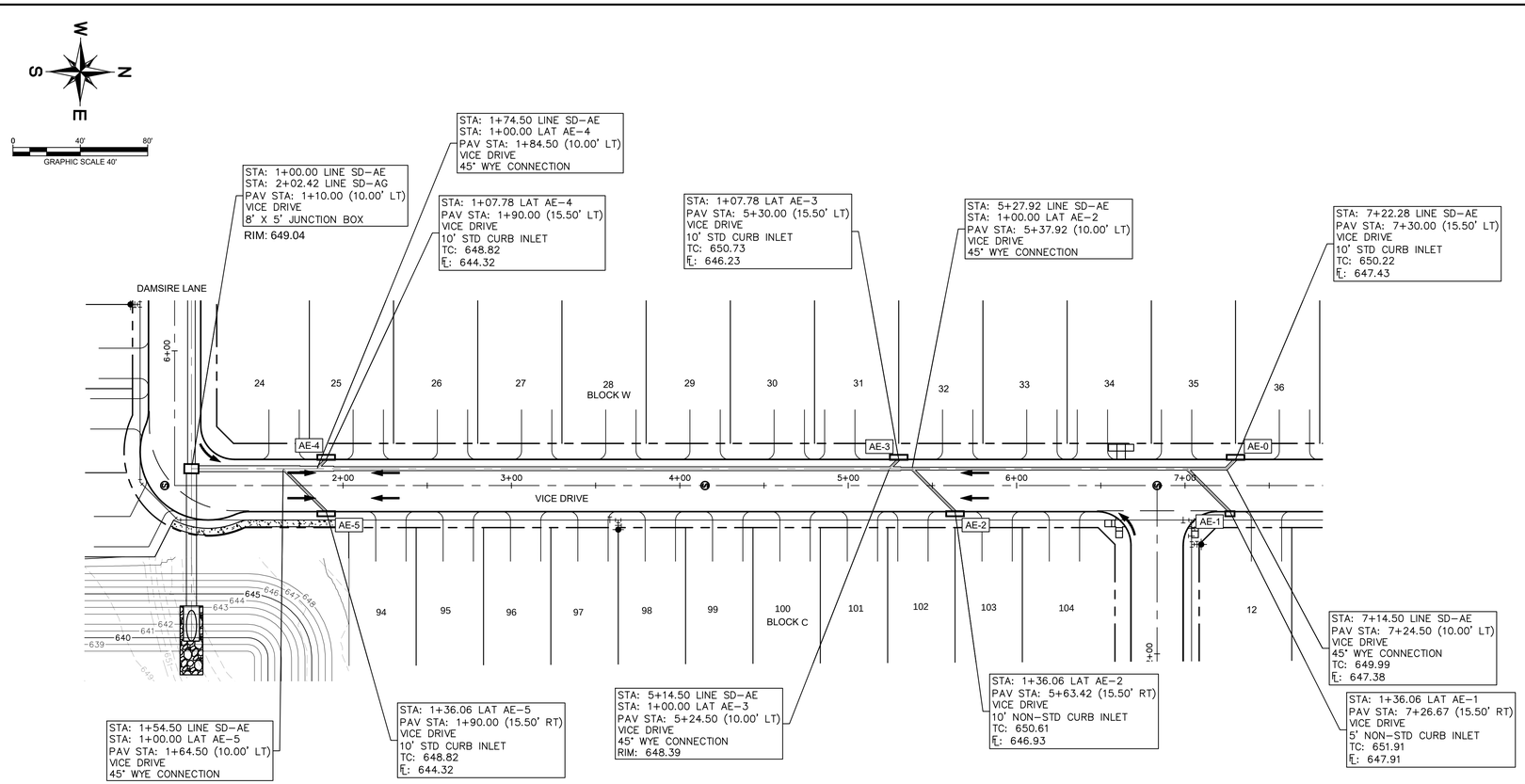
DRAINAGE CALCULATIONS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

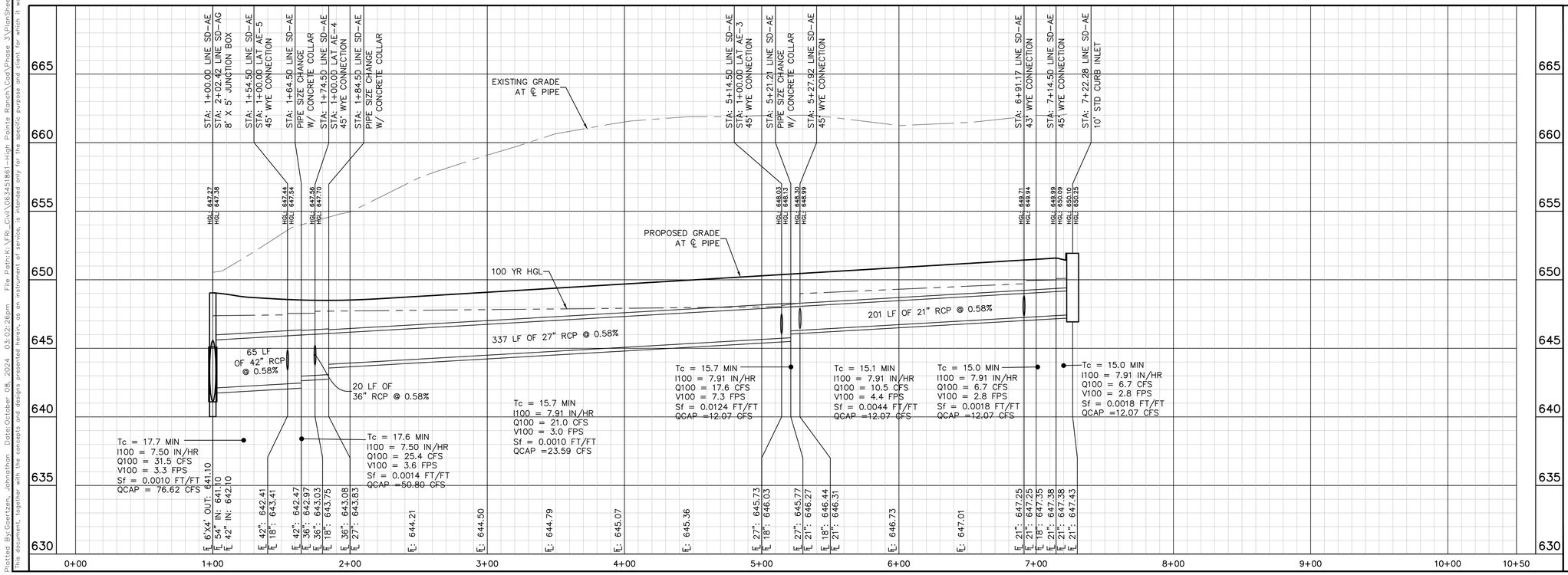
SHEET NUMBER
C-20

Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:25:31pm File Path:K:\FTI-Civ\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Drainage Calculation.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Goertzen, Johnathon Date:October 08, 2024 03:02:26pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Storm P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LINE SD-AE



LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV. **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV. **667.55**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

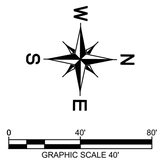
KHA PROJECT 063451880
DATE OCTOBER 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

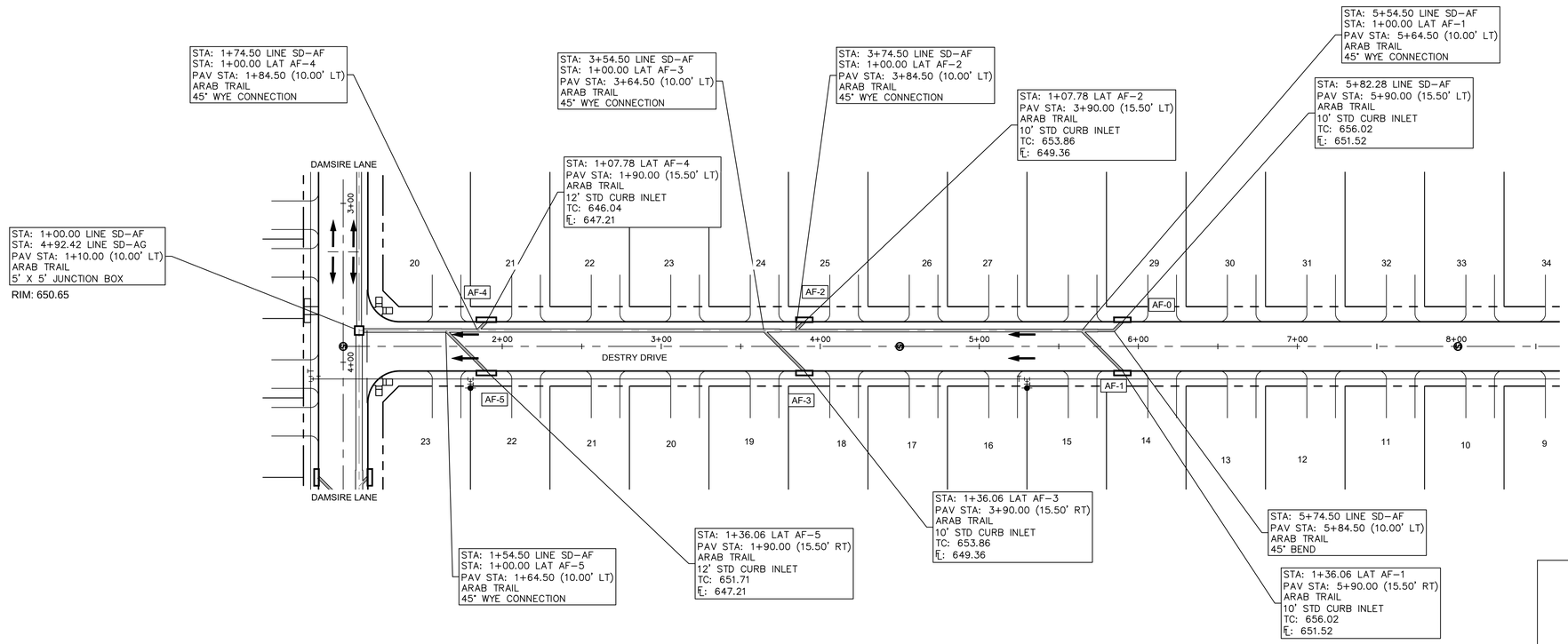
STORM DRAIN PLAN & PROFILE - LINE SD-AE

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-21

Plotted By:Goertzen, Johnathon Date:October 08, 2024 13:02:32pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Storm P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

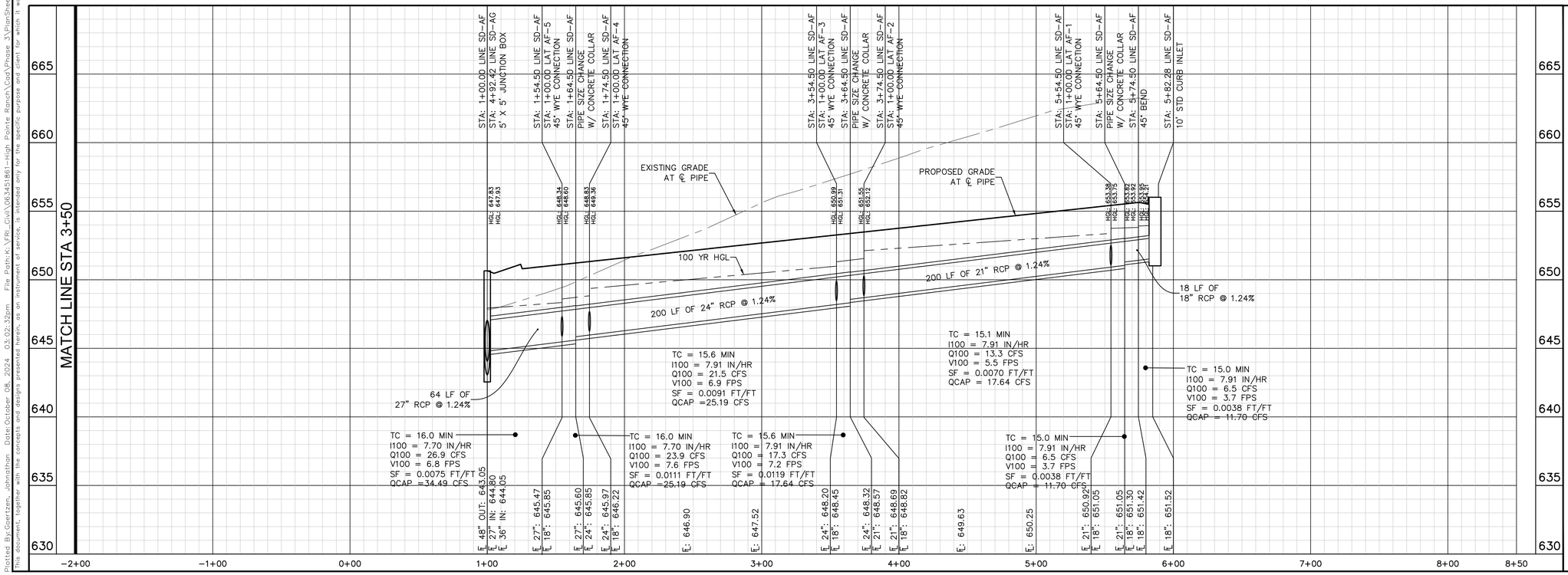




LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

LINE SD-AF



PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV. **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV. **667.55**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

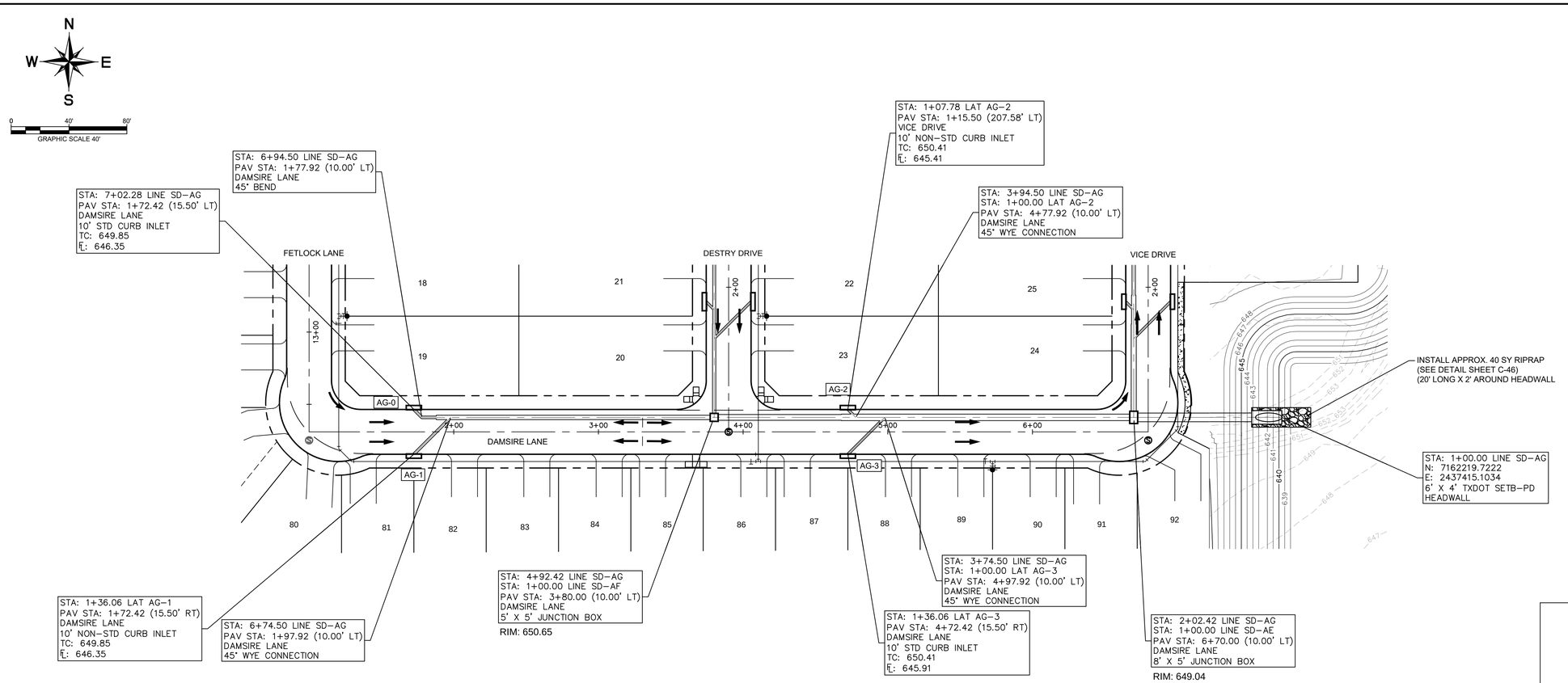
KHA PROJECT 063451880
DATE OCTOBER 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

STORM DRAIN PLAN & PROFILE - LINE SD-AF

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-22

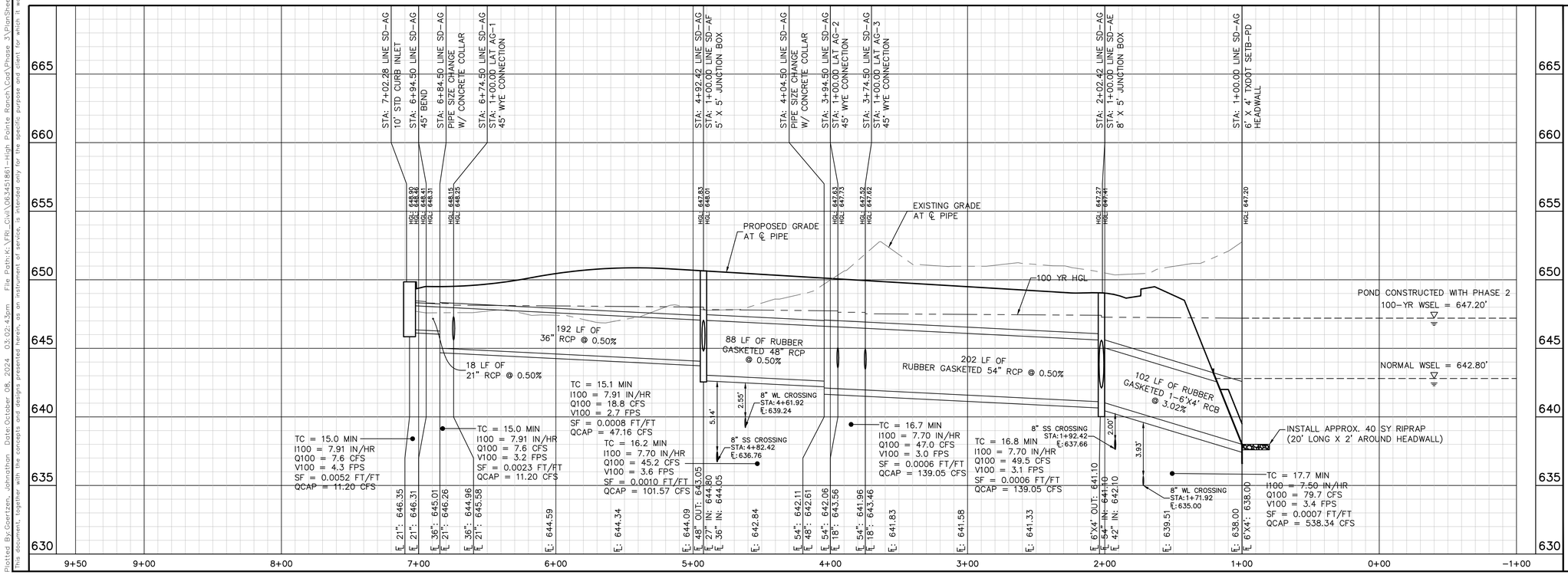
Posted By:Goertzen, Johnathon Date:October 08, 2024 13:02:43pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Storm P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

LINE SD-AG



PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

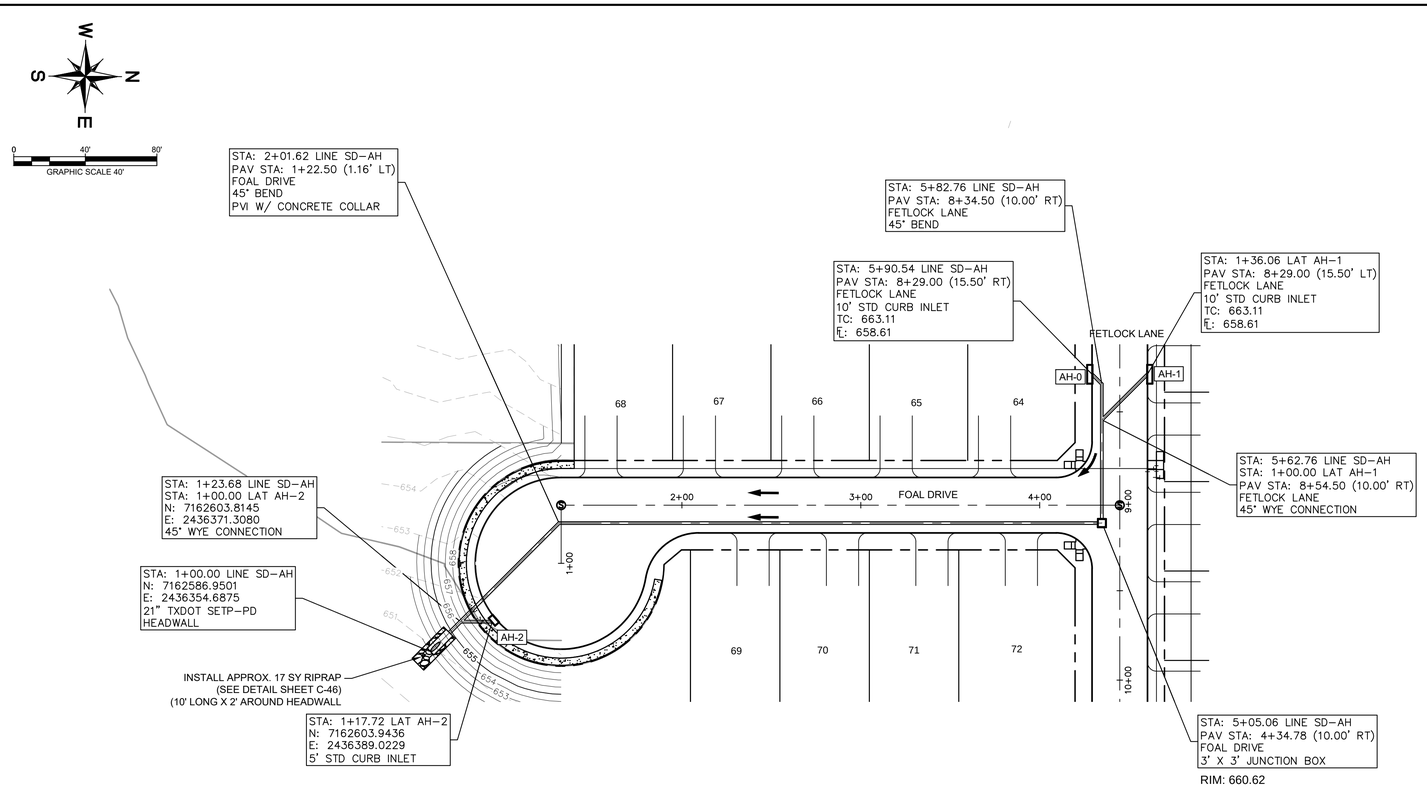
KHA PROJECT 063451880
DATE OCTOBER 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

STORM DRAIN PLAN & PROFILE - LINE SD-AG

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-23

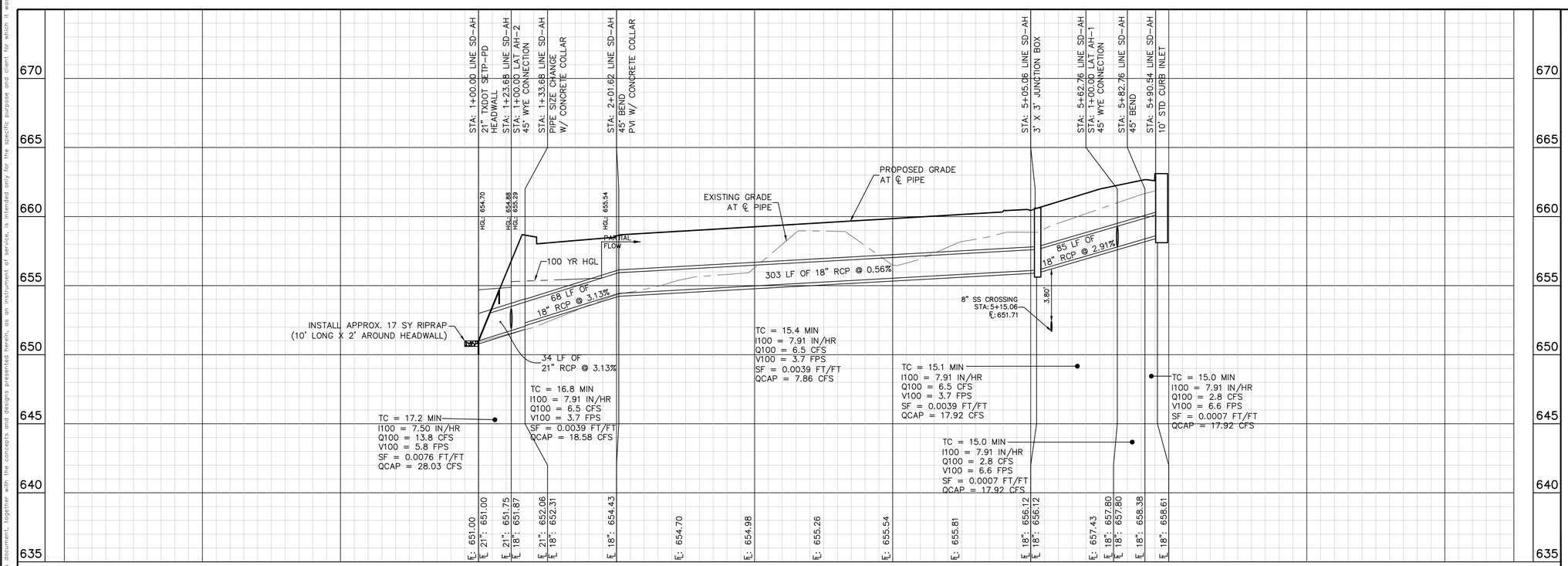
Plotted By:Gaertzen, Johnathan Date:October 08, 2024 03:02:54pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Storm P&P.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

LINE SD-AH



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	AA
CHECKED BY:	KPB

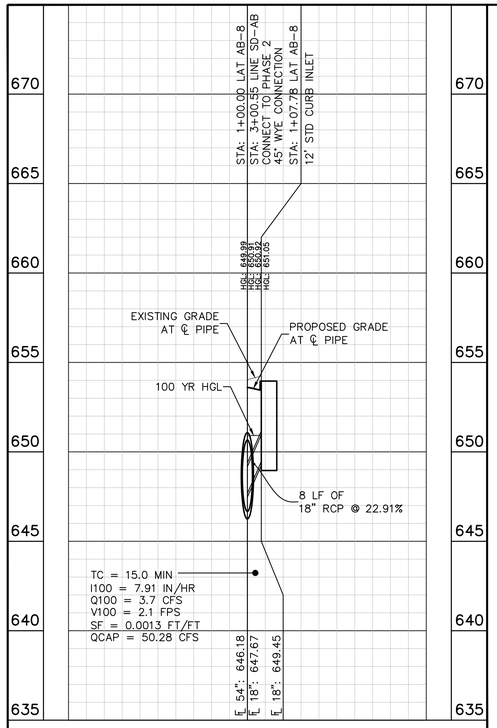
STORM DRAIN PLAN & PROFILE - LINE SD-AH

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

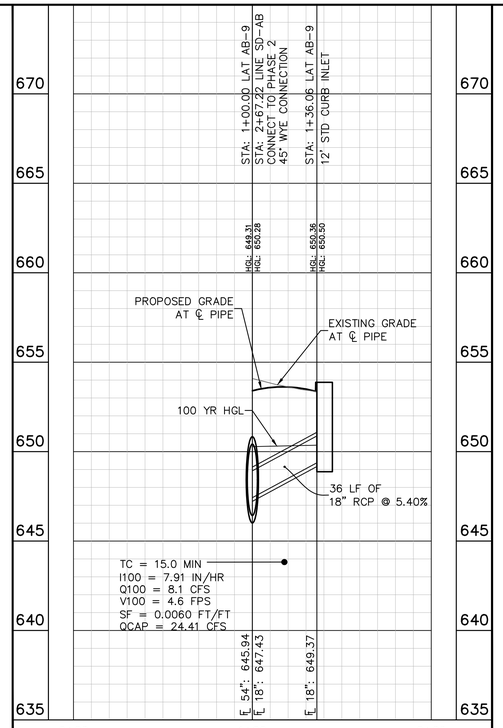
SHEET NUMBER
C-24

Plotted By: Goetzen, Johnathon Date: August 26, 2024 04:33:35pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Storm Laterals.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

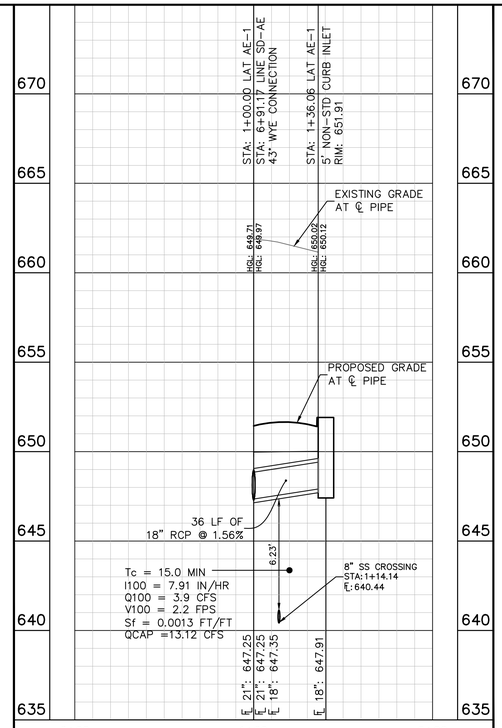
LAT AB–8



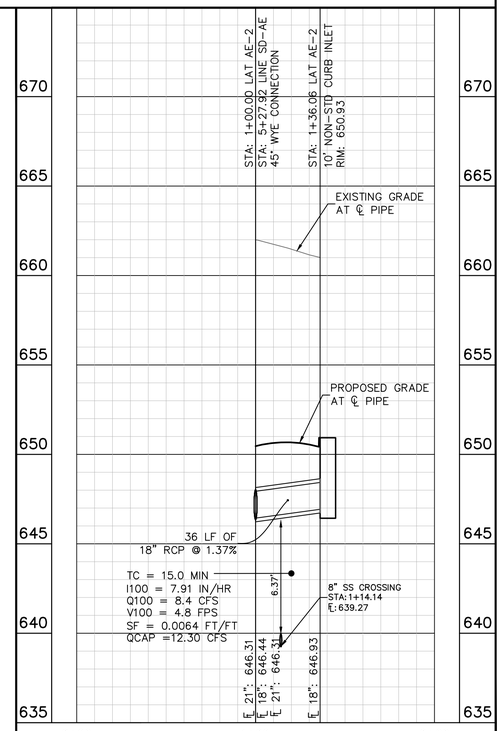
LAT AB–9



LAT AE–1

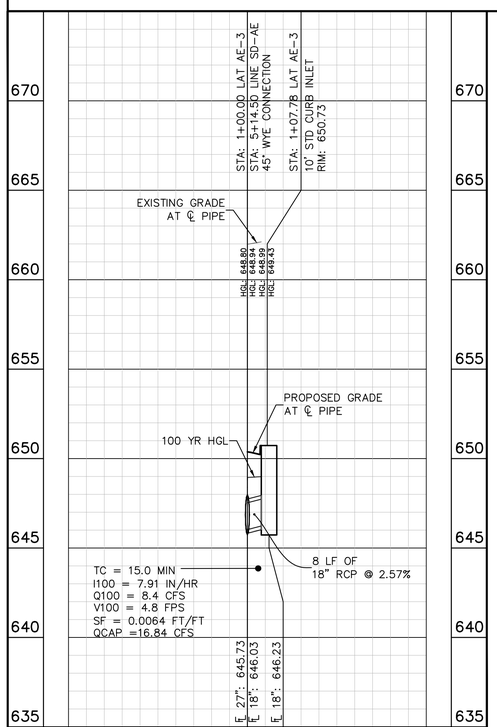


LAT AE–2

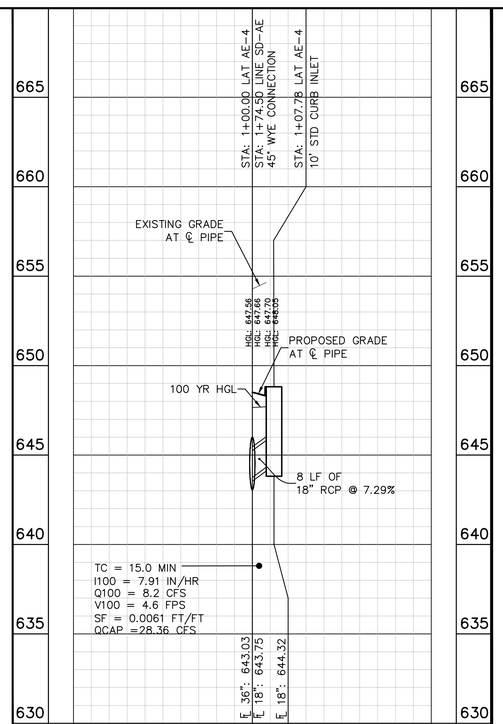


PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

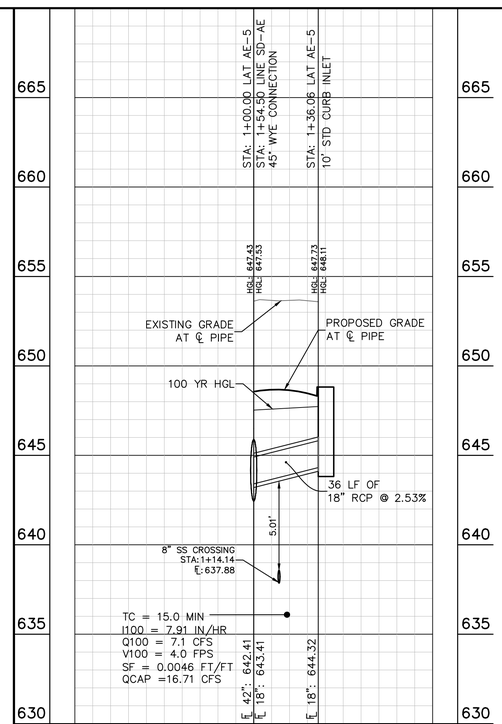
LAT AE–3



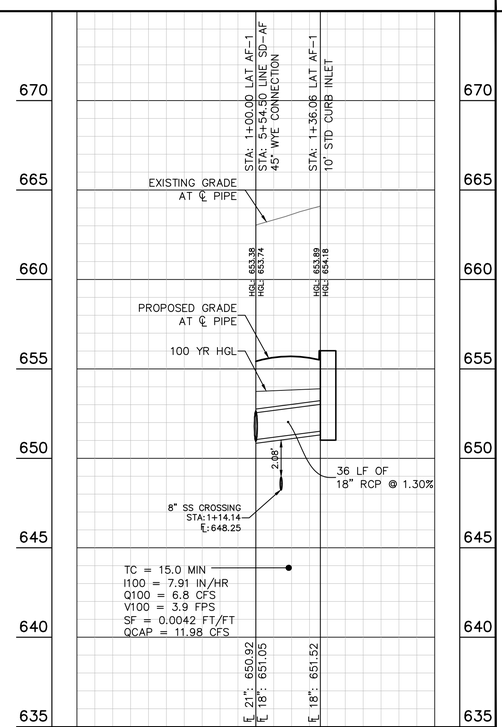
LAT AE–4



LAT AE–5



LAT AF–1



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	AA
CHECKED BY:	KPB

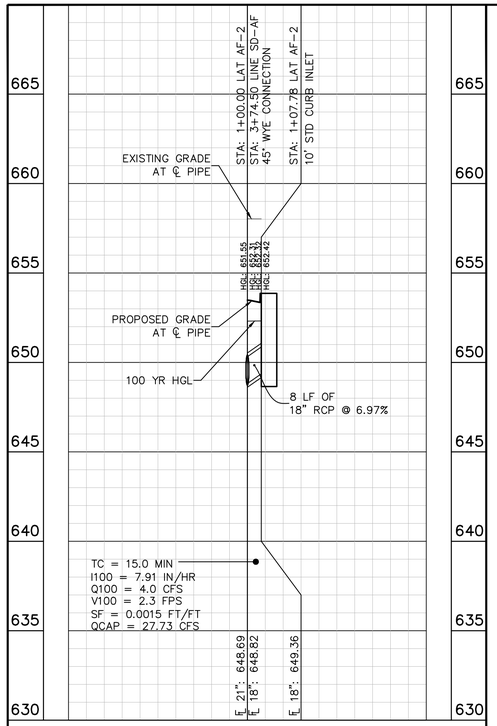
STORM PROFILES - LATERALS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

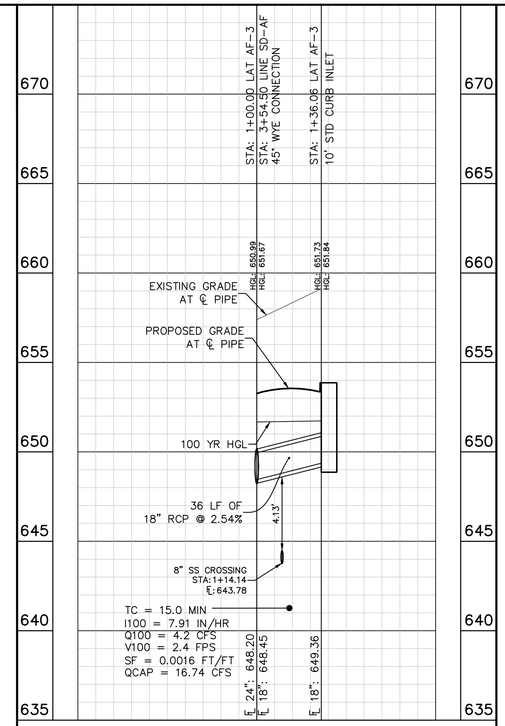
SHEET NUMBER
C-25

Plotted By: Goetzen, Johnathon Date: August 26, 2024 04:33:50pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Storm Laterals.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

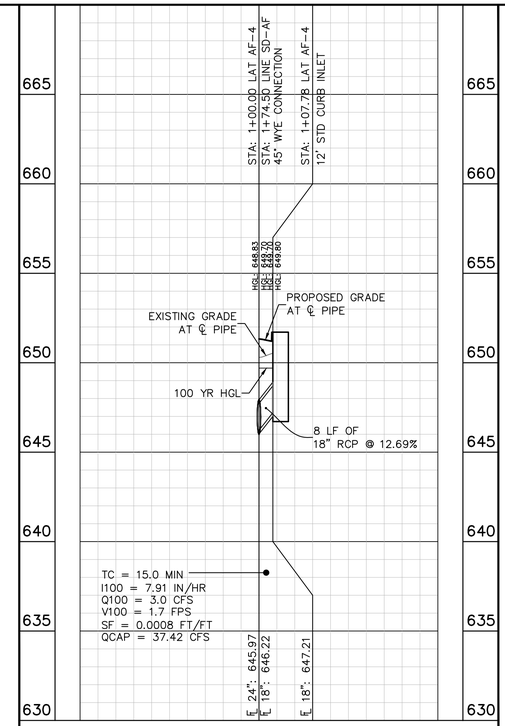
LAT AF–2



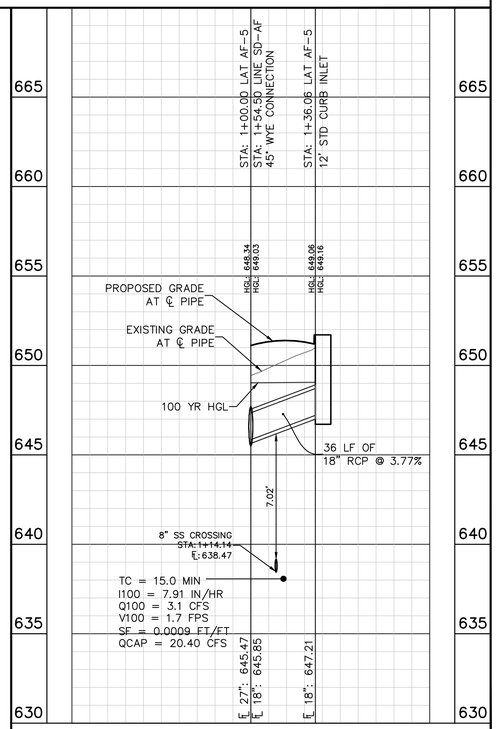
LAT AF–3



LAT AF–4

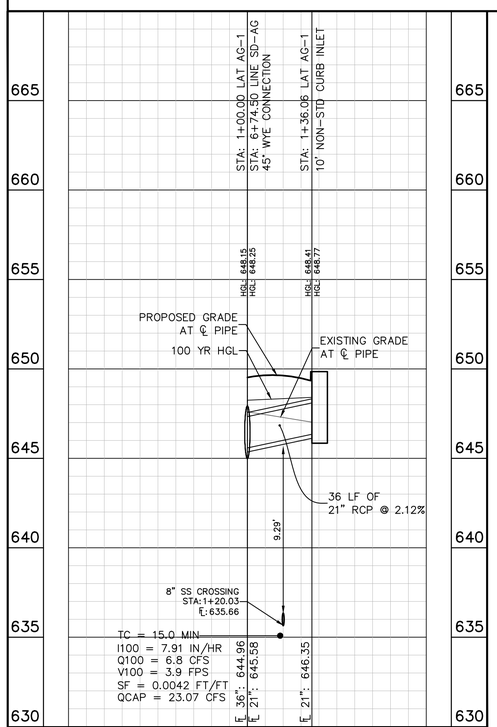


LAT AF–5

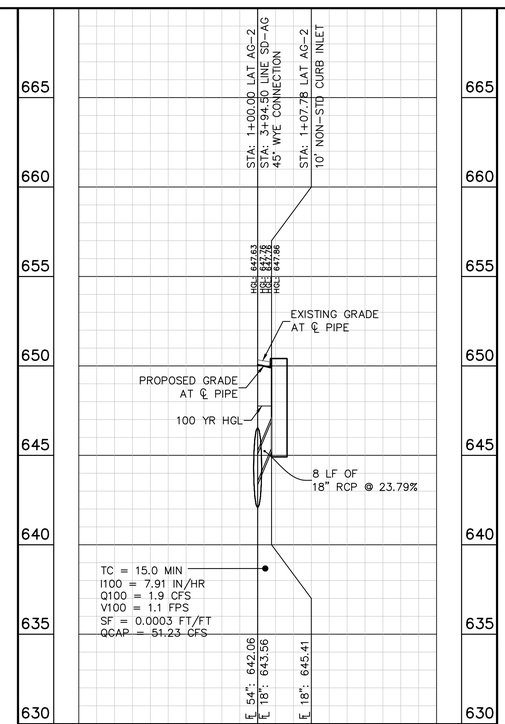


PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

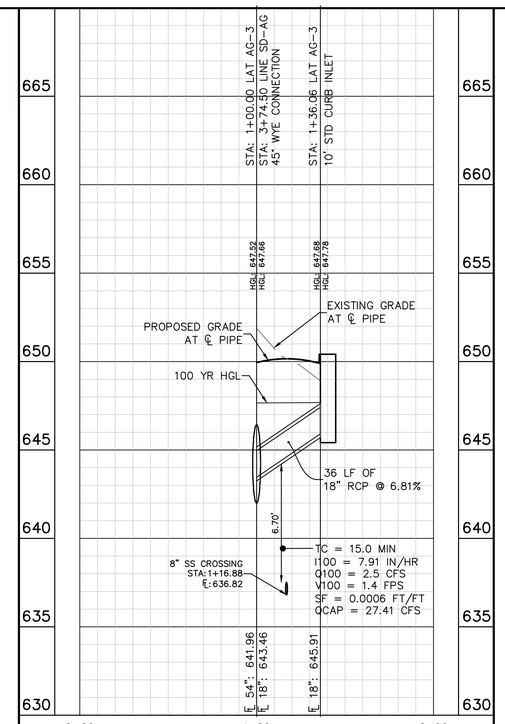
LAT AG–1



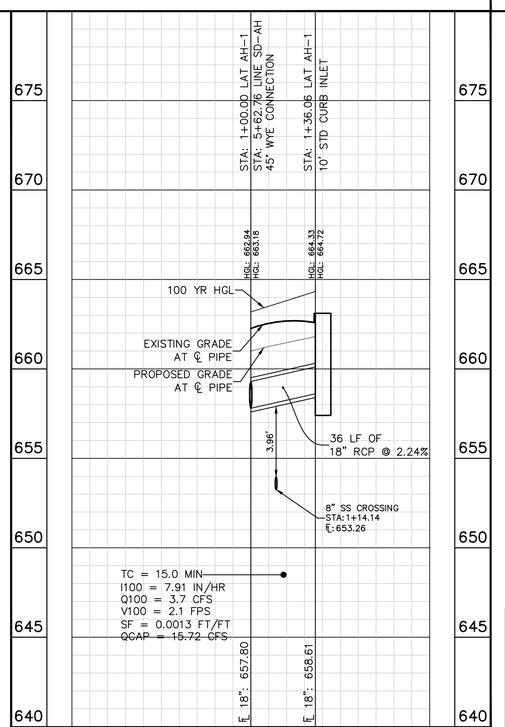
LAT AG–2



LAT AG–3



LAT AH–1



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

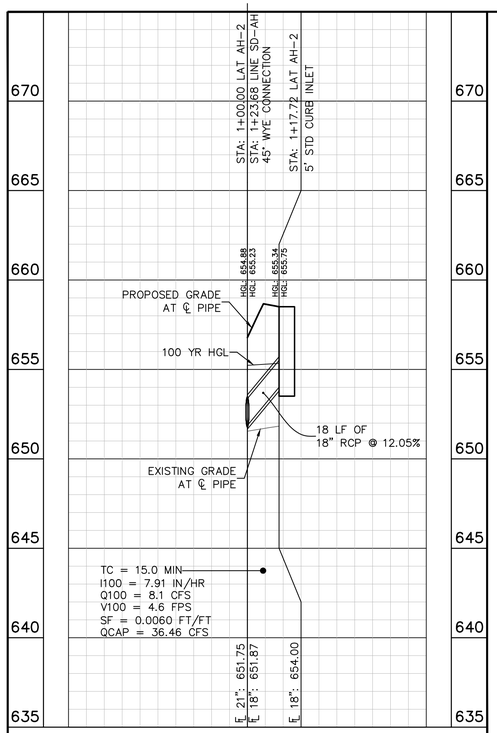
KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE	AS SHOWN
DESIGNED BY	JRG
DRAWN BY	AA
CHECKED BY	KPB

STORM PROFILES - LATERALS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-26

LAT AH–2



THIS SPACE INTENTIONALLY LEFT BLANK

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

THIS SPACE INTENTIONALLY LEFT BLANK

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

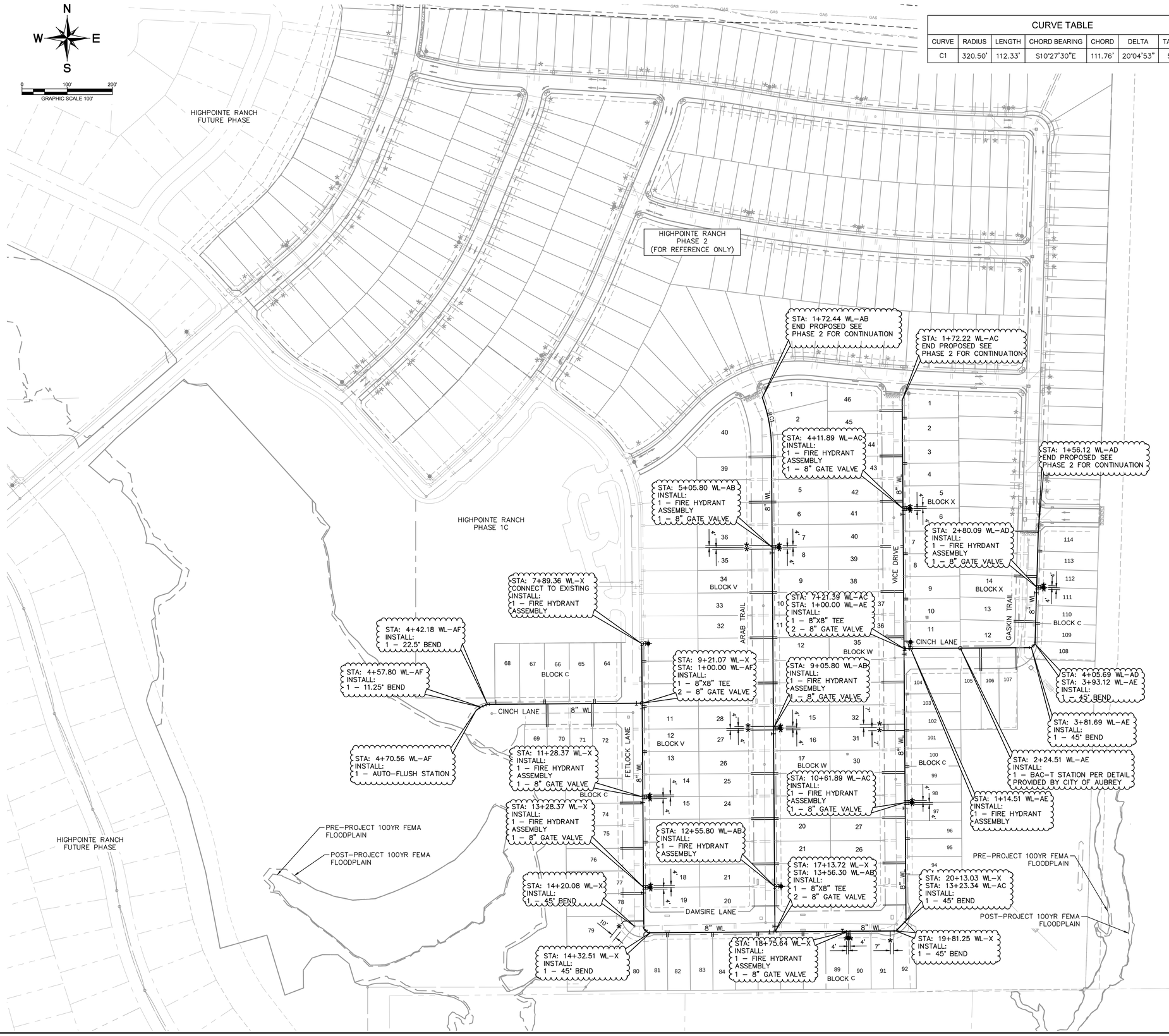
KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	AA
CHECKED BY:	KPB

STORM PROFILES - LATERALS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-27

Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:33:54pm File Path:K:\FRI_Civil\063451961-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Storm Laterals.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	320.50'	112.33'	S10°27'30"E	111.76'	20°04'53"	56.75'

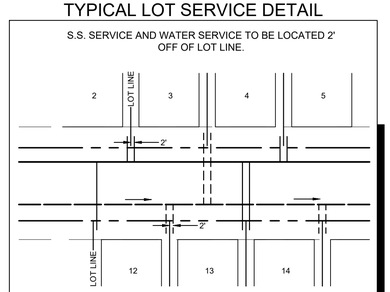
UTILITY LEGEND

- PROPERTY LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER CLEANOUT
- SANITARY SEWER FLOW DIRECTION
- PROPOSED FIRE HYDRANT
- PROPOSED TAPPING SLEEVE & VALVE
- IRRIGATION SLEEVE
- OHP — EXISTING OVERHEAD POWER LINE
- W — EXISTING WATER LINE
- SS — EXISTING SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- EXISTING POWER POLE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING SANITARY SEWER MANHOLE

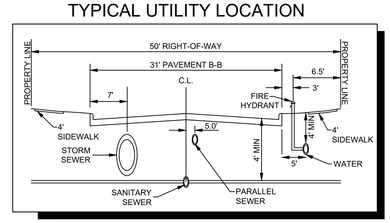
WATER GENERAL NOTES

1. FIRE HYDRANTS, VALVES, FITTINGS, ETC. SHOWN AS A GRAPHICAL REPRESENTATION ONLY. CONTRACTOR TO LOCATE AND CONSTRUCT THESE IMPROVEMENTS BASED ON THE CURRENT CITY/JURISDICTIONAL DESIGN STANDARDS AND DETAILS. CONTRACTOR TO NOTIFY ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED PRIOR TO BEGINNING CONSTRUCTION.
2. WATER AND SANITARY SEWER SEPARATION (VERTICAL AND HORIZONTAL) SHALL BE MAINTAINED IN ACCORDANCE WITH TCEQ REQUIREMENTS.
3. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
4. ADJUSTED SERVICES DUE TO CONFLICTS (I.E. MANHOLES, INLETS, TRENCH CONFLICTS OR NON-STANDARD PLACEMENT) = ★
5. FIRE HYDRANT ASSEMBLY INCLUDES ALL FITTINGS, TEES AND VALVES.
6. HYDRANT BARRELS SHALL HAVE REFLECTIVE SILVER COATING WITH PRIMER ON BONNETS AND CAPS AS SPECIFIED BY CITY OF AUBREY
7. ALL WATERLINES SHALL BE 8" AWWA C900 PVC DR-14 PIPE UNLESS OTHERWISE NOTED.
8. ALL WATER SERVICES ARE 1" POLY WITH TRACE WIRE OTHERWISE NOTED. ALL LONG SIDE WATER SERVICES SHALL BE ENCASED.
9. ALL WATERLINE CURVES ARE CONCENTRIC AND PARALLEL TO THE STREET CENTERLINES UNLESS OTHERWISE NOTED.
10. ALL GATE VALVES AND WATER METERS SHALL BE PLACED CLEAR OF BARRIER-FREE RAMPS.
11. METER BOX ASSEMBLY SHALL BE DFW37A-13-1SF SML AUBREY
12. CONTRACTOR MUST NOTIFY THE CITY OF AUBREY AT 940-440-9343 A MINIMUM OF 48 HOURS IN ADVANCE TO ANY TAPS MADE TO EXISTING WATERLINES.
13. CONTRACTOR TO REFERENCE DETAIL SHEET C-62 FOR WATER LINE ALIGNMENT AT INLET LOCATIONS AND UTILITY CROSSINGS.

TYPICAL LOT SERVICE DETAIL



TYPICAL UTILITY LOCATION



No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
137422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

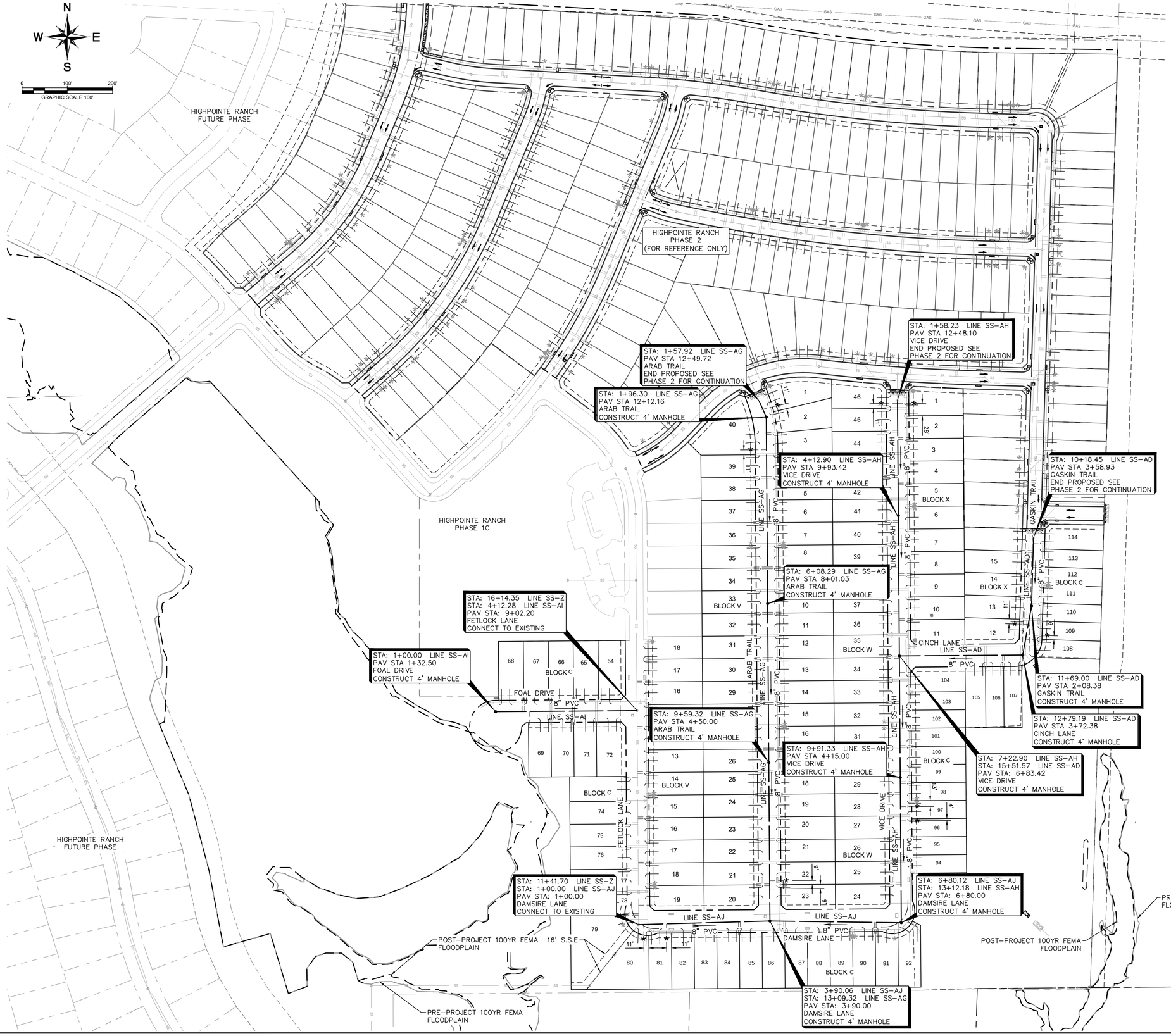
KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

WATER PLAN

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-28

Plotted By:Goertzen, Johnathon Date:October 15, 2024 04:13:45pm File Path:K:\FBL_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Water Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



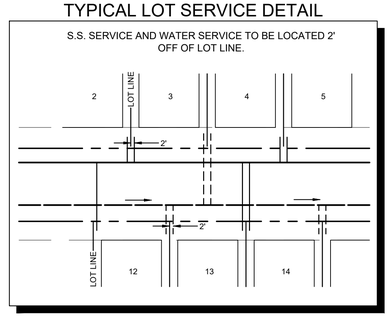
UTILITY LEGEND

- PROPERTY LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER CLEANOUT
- SANITARY SEWER FLOW DIRECTION
- PROPOSED FIRE HYDRANT
- PROPOSED TAPPING SLEEVE & VALVE
- IRRIGATION SLEEVE
- EXISTING OVERHEAD POWER LINE
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- EXISTING POWER POLE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING SANITARY SEWER MANHOLE

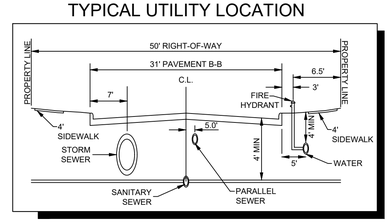
SEWER GENERAL NOTES

1. WATER AND SANITARY SEWER SEPARATION (VERTICAL AND HORIZONTAL) SHALL BE MAINTAINED IN ACCORDANCE WITH TCEQ REQUIREMENTS.
2. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. ALL SANITARY SEWER LINES ARE 8" UNLESS OTHERWISE NOTED.
4. SANITARY SEWER CLEAN-OUTS SHALL BE PLACED AT THE PROPERTY / ROW LINE OR SLIGHTLY BEHIND THE PROPERTY / ROW LINE.
5. ADJUSTED SERVICES DUE TO CONFLICTS (I.E. MANHOLES, INLETS, TRENCH CONFLICTS OR NON-STANDARD PLACEMENT) =
6. ALL 8" - 15" DIAMETER SANITARY SEWER LINES LESS THAN 15' DEEP SHALL BE SDR-35
7. ALL 8" - 15" DIAMETER SANITARY SEWER LINES 15' OR DEEPER SHALL BE SDR-26

TYPICAL LOT SERVICE DETAIL



TYPICAL UTILITY LOCATION



No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT 063451880
DATE OCTOBER 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

SANITARY SEWER PLAN

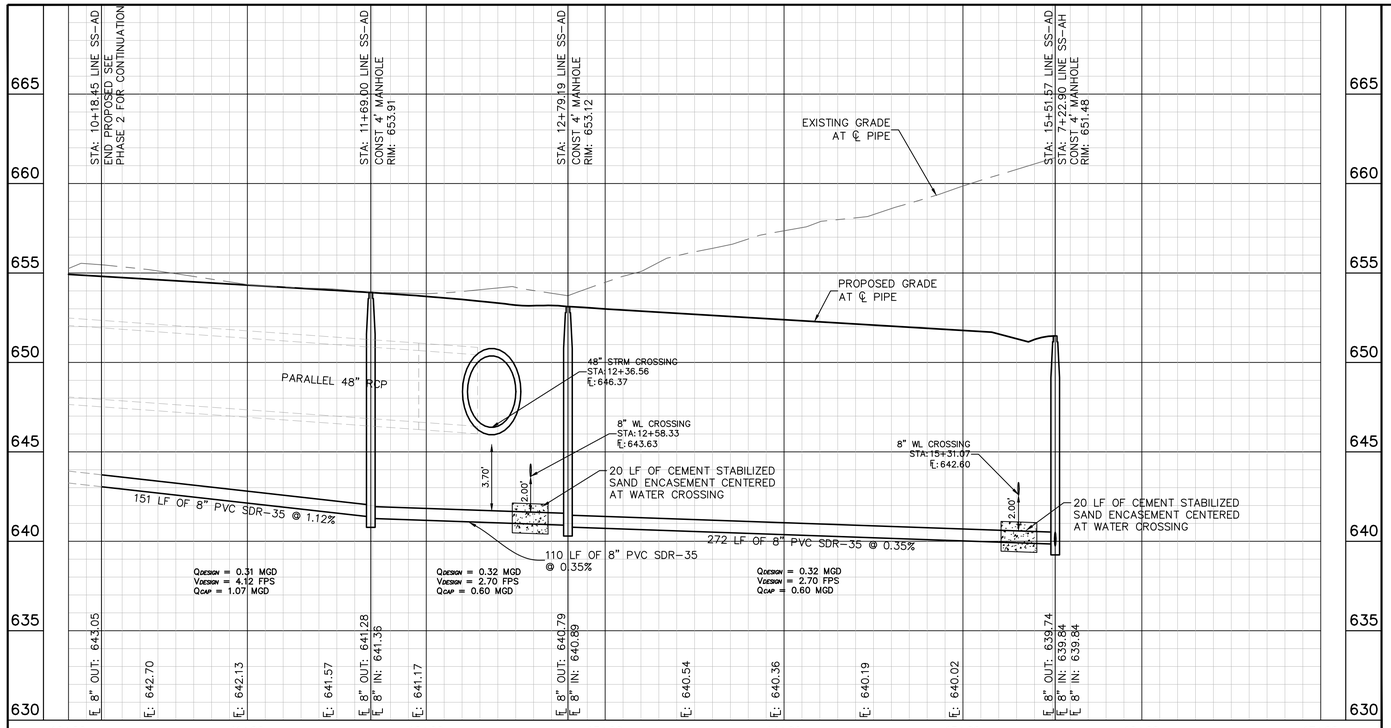
HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-29

Plotted By:Coertzen, Johnathan Date:October 15, 2024 04:23:58pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Sanitary Sewer Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Goertzen, Johnathan Date:October 08, 2024 12:57:48pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Sewer Profiles.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

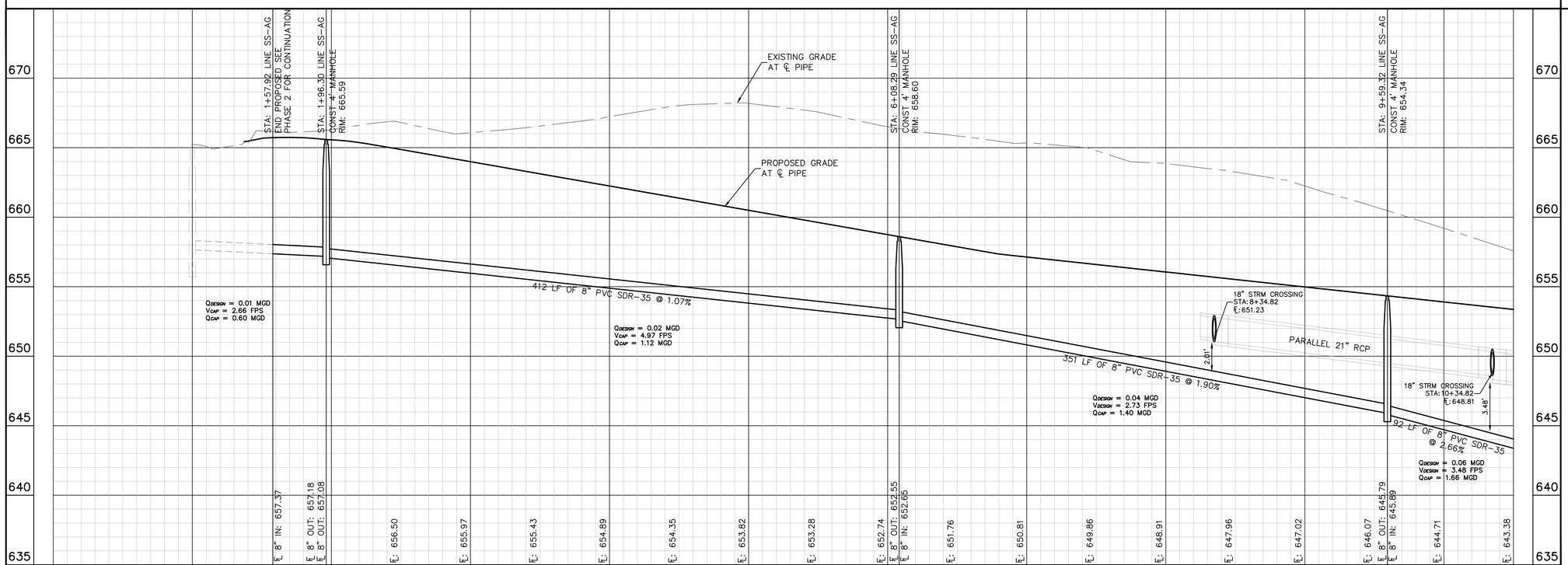
LINE SS-AD



THIS SPACE LEFT
INTENTIONALLY BLANK

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

LINE SS-AG



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

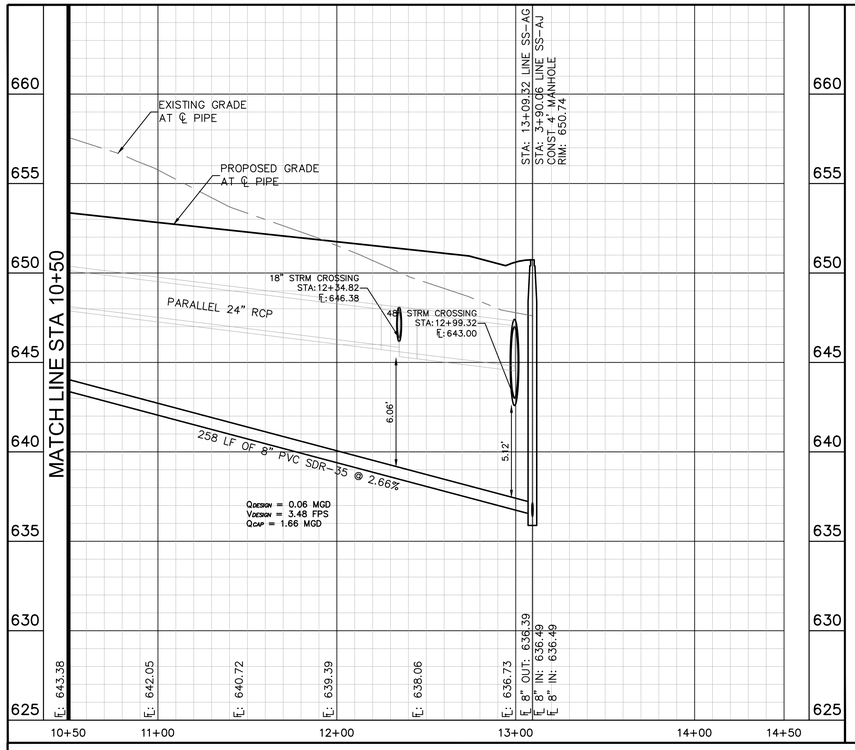
SANITARY SEWER PROFILES - LINE SS-AD & LINE SS-AG

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

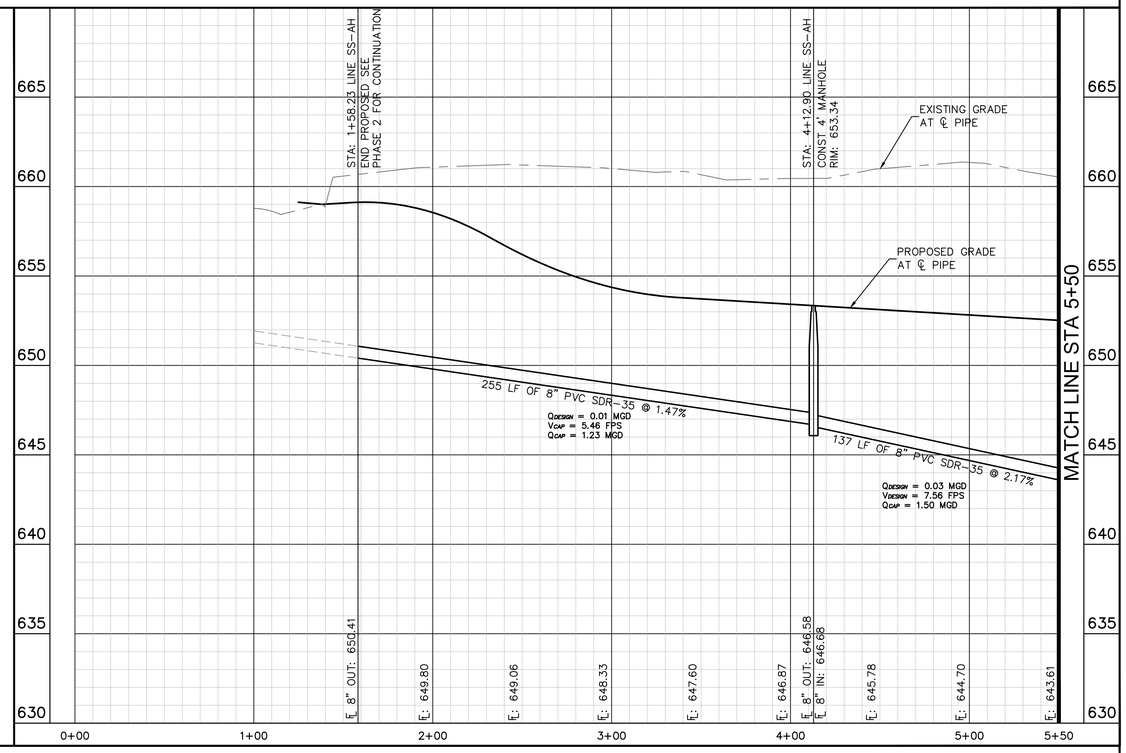
SHEET NUMBER
C-30

Plotted By: Goertzen, Johnathan Date: October 08, 2024 12:37:53pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Sewer Profiles.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

LINE SS–AG

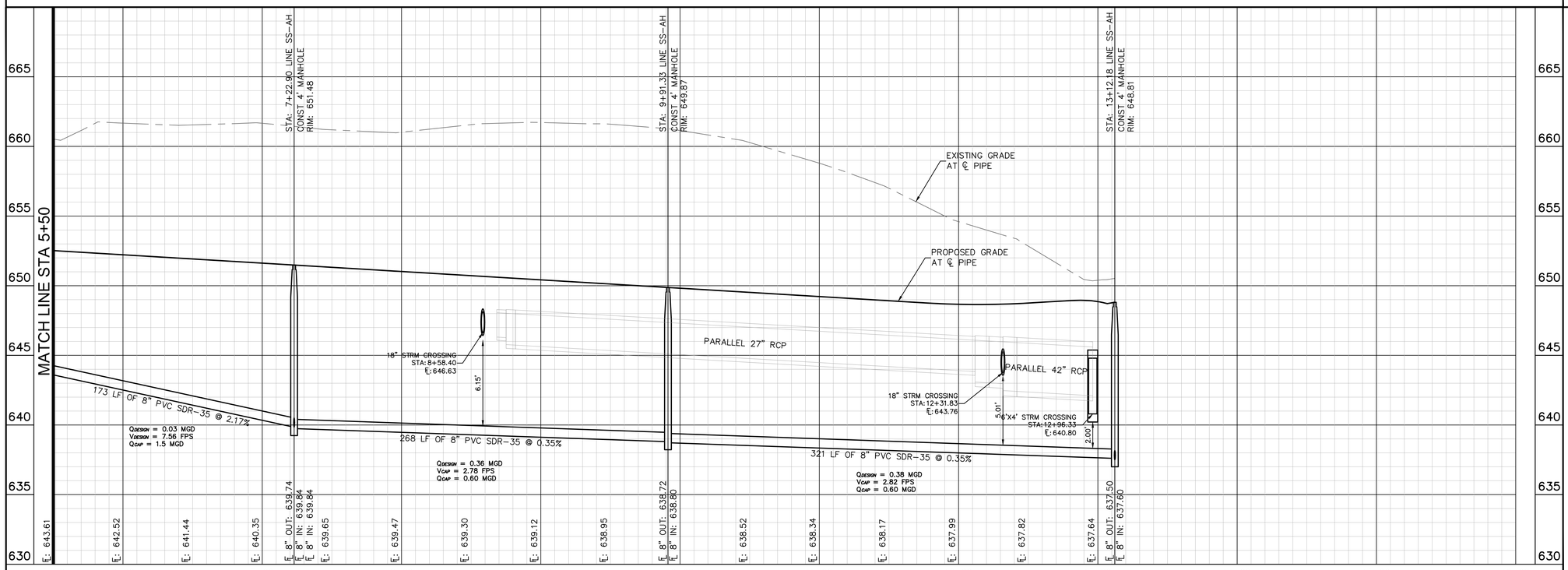


LINE SS–AH



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

LINE SS–AH



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

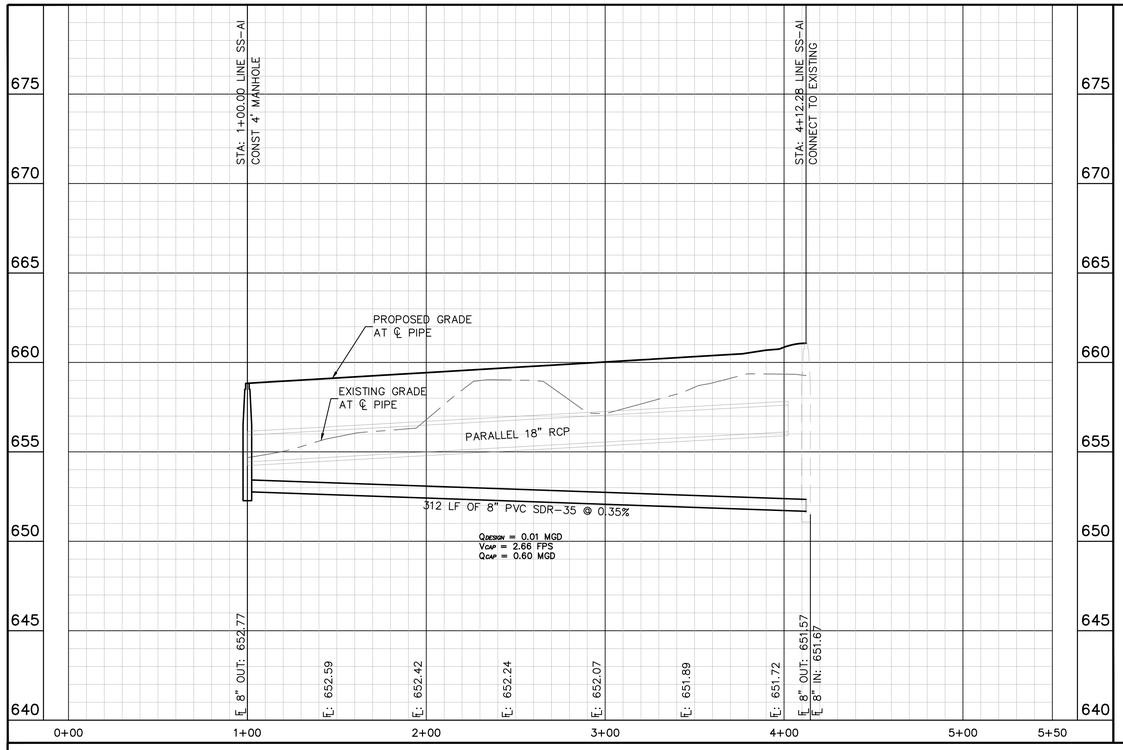
KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

SANITARY SEWER PROFILES - LINE SS-AG & LINE SS-AH

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-31

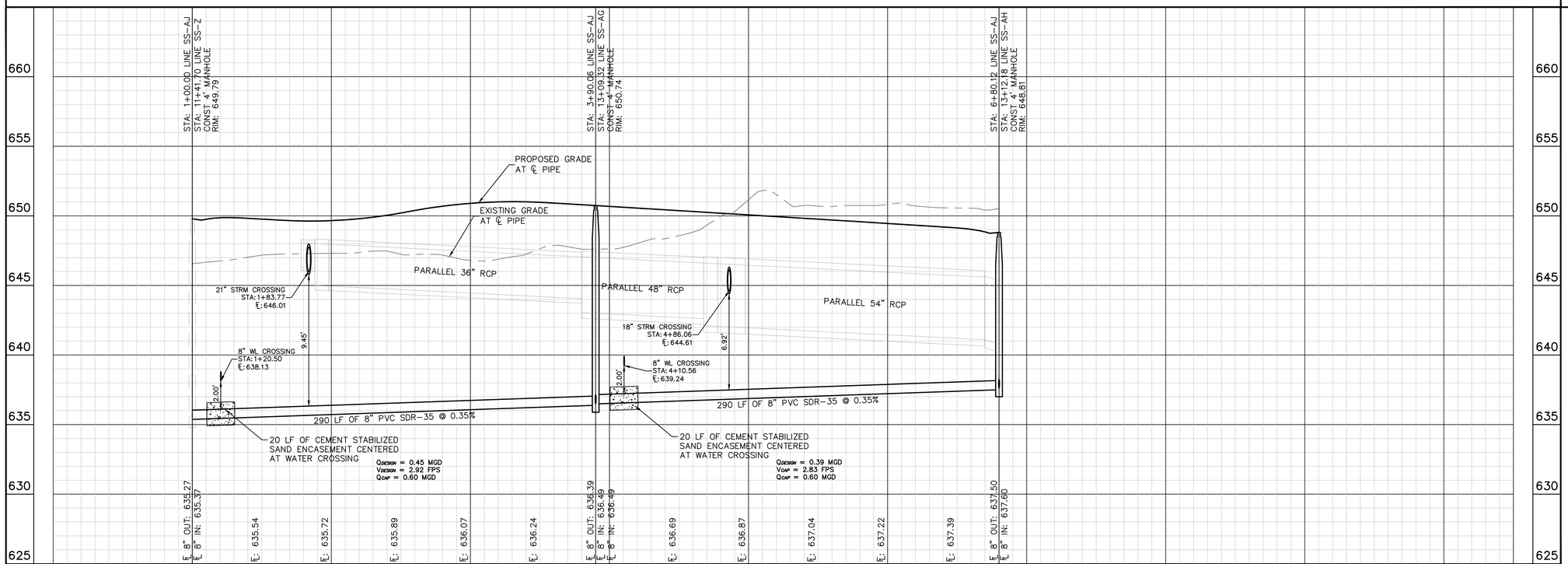
LINE SS–AI



THIS SPACE LEFT
INTENTIONALLY BLANK

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

LINE SS–AJ



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

BM #5002
BM FLUSH WITH NATURAL GROUND, 3.0' EAST OF CONCRETE WALK, 3.8' SOUTH OF BACK OF CURB TO NORTH, 4.5' NORTH OF BACK OF CURB TO SOUTH.
ELEV: **676.28'**

BM #40
BOX CUT SET ON A WING WALL ON THE SOUTH SIDE OF SPRING HILLS ROAD (F.M. 428) ±1593.00' EAST OF THE INTERSECTION OF U.S. HIGHWAY 377 AND SPRING HILL ROAD (F.M. 428).
ELEV: **667.55'**

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2024 KIMLEY–HORN AND ASSOCIATES, INC.

6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972–335–3580
WWW.KIMLEY–HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F–928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

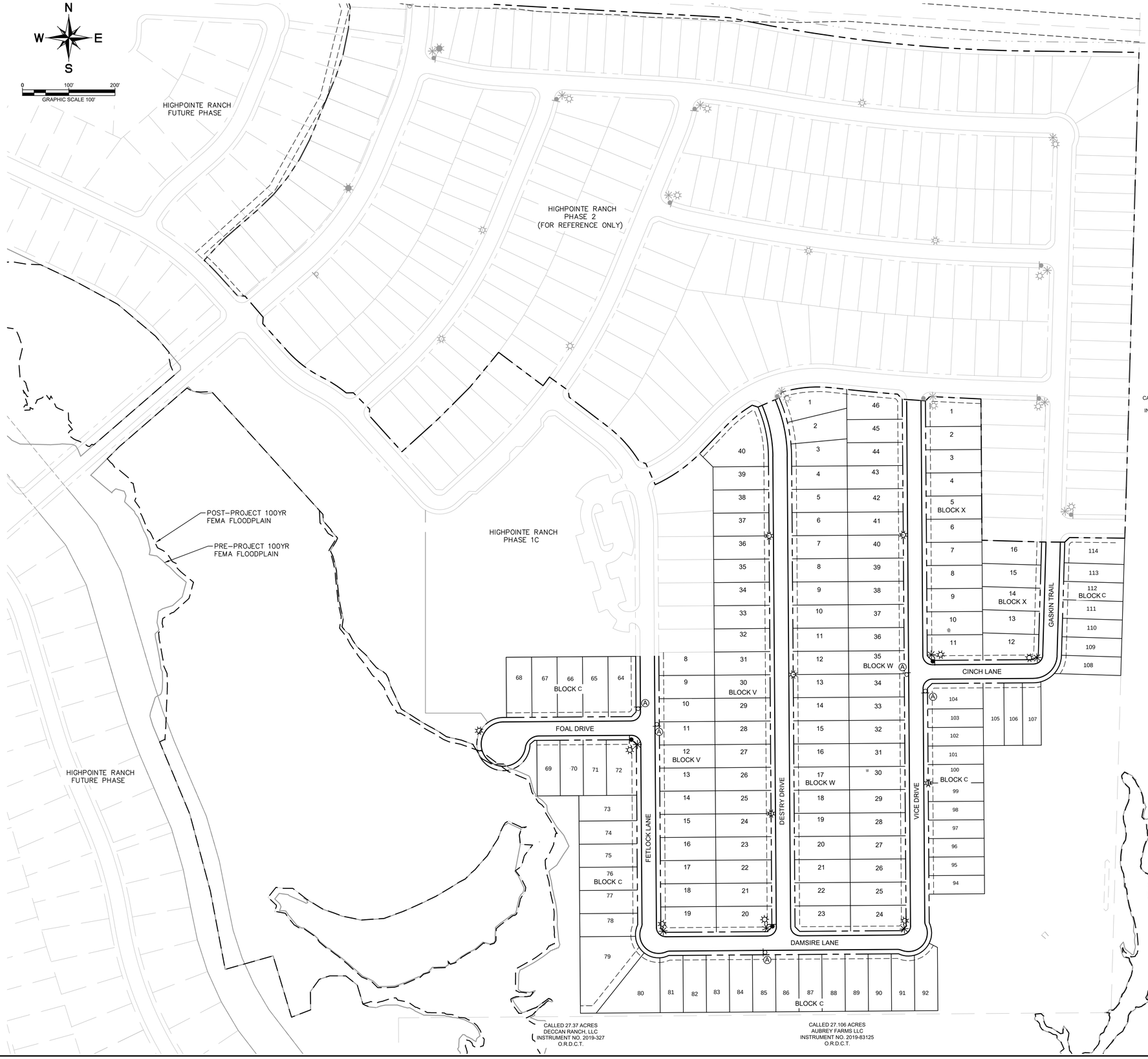
KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE	AS SHOWN
DESIGNED BY	JRG
DRAWN BY	JRG
CHECKED BY	KPB

SANITARY SEWER PROFILES - LINE SS-AI & LINE SS-AJ

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-32

Plotted By: Goertzen, Johnathan Date: October 08, 2024 12:37:57pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Sewer Profiles.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

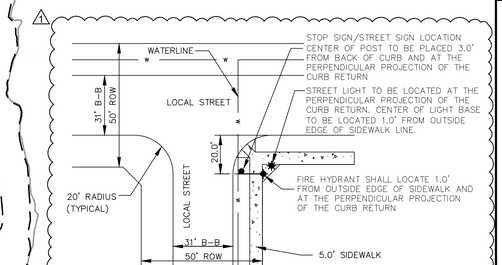
- STREET LIGHT LOCATION 14' (COLLECTOR & ARTERIAL STREETS)
- STREET LIGHT LOCATION 12' (STANDARD RESIDENTIAL STREETS)
- STREET NAME SIGN LOCATION
- STOP SIGN LOCATION (30" UNLESS OTHERWISE NOTED)
- MISCELLANEOUS TRAFFIC SIGN LOCATION (SEE SIGN KEY)
- EXISTING STREET LIGHT LOCATION 14' (COLLECTOR & ARTERIAL STREETS)
- EXISTING STREET LIGHT LOCATION 12' (STANDARD RESIDENTIAL STREETS)
- EXISTING STREET NAME SIGN LOCATION
- EXISTING STOP SIGN LOCATION (30" UNLESS OTHERWISE NOTED)
- EXISTING MISCELLANEOUS TRAFFIC SIGN LOCATION (SEE SIGN KEY)

NOTES

1. ALL STREET SIGNAGE AND PAVEMENT MARKINGS TO BE INSTALLED PER TEXAS MUTCD SPECIFICATIONS.
2. ALL STREET LIGHTS SHALL BE IN ACCORDANCE WITH CITY STANDARDS.
3. SIGN PLACEMENT AS REPRESENTATION ONLY, SEE CITY OF AUBREY DETAILS FOR EXACT LOCATION

TRAFFIC SIGN KEY

Ⓐ = W11-2 (36"x36") W13-1P (24"x12")



1 STREET LIGHT & STOP SIGN LOCATION (LOCAL RESIDENTIAL) NTS

No.	REVISIONS	DATE	BY
1	SIDEWALK LOCATION & SIZE CHANGE	02/10/2025	BBA

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
2/27/2025

KHA PROJECT 063451880
DATE OCTOBER 2024
SCALE AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

STREET LIGHT & SIGN PLAN

HIGHPOINTE RANCH PHASE 3

CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-33

Plotted By: Alexander, Brett Date: February 10, 2025 02:17:41pm File Path: K:\FBL_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Street Light and Sign Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By: Alexander, Brett Date: February 27, 2025 01:50:00pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Sidewalk Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

N
W E
S

0 100' 200'
GRAPHIC SCALE 100'

HIGHPOINTE RANCH
FUTURE PHASE

HIGHPOINTE RANCH
PHASE 2
(FOR REFERENCE ONLY)

HIGHPOINTE RANCH
PHASE 1C

HIGHPOINTE RANCH
FUTURE PHASE

POST-PROJECT 100YR
FEMA FLOODPLAIN

PRE-PROJECT 100YR
FEMA FLOODPLAIN

INSTALL 80 LF 24" SOLID
WHITE CROSSWALK LINE
(PM (4)-22)

INSTALL 80 LF 24" SOLID
WHITE CROSSWALK LINE
(PM (4)-22)

INSTALL 80 LF 24" SOLID
WHITE CROSSWALK LINE
(PM (4)-22)

1 260 LF 5' SIDEWALK

1 33 LF 5' SIDEWALK

1 107 LF 5' SIDEWALK

BLOCK C: 64, 65, 66, 67, 68

BLOCK V: 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46

BLOCK W: 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35

BLOCK X: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

BLOCK C: 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114

BLOCK C: 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92

CALLED 27.37 ACRES
DECCAN RANCH, LLC
INSTRUMENT NO. 2019-327
O.R.D.C.T.

CALLED 27.106 ACRES
AUBREY FARMS LLC
INSTRUMENT NO. 2019-83125
O.R.D.C.T.

LEGEND

- BARRIER FREE RAMP TO BE BUILT BY HOMEBUILDER (LAYDOWN CURB)
- BARRIER FREE RAMP TO BE BUILT BY DEVELOPER
- SIDEWALK SHOWN TO BE BUILT BY DEVELOPER

TRAFFIC SIGN KEY

Ⓐ = W11-2
(36"x36")
W13-1P
(24"x12")

No.	REVISIONS	DATE	BY
1	SIDEWALK LOCATION & SIZE CHANGE	02/10/2025	BBA

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

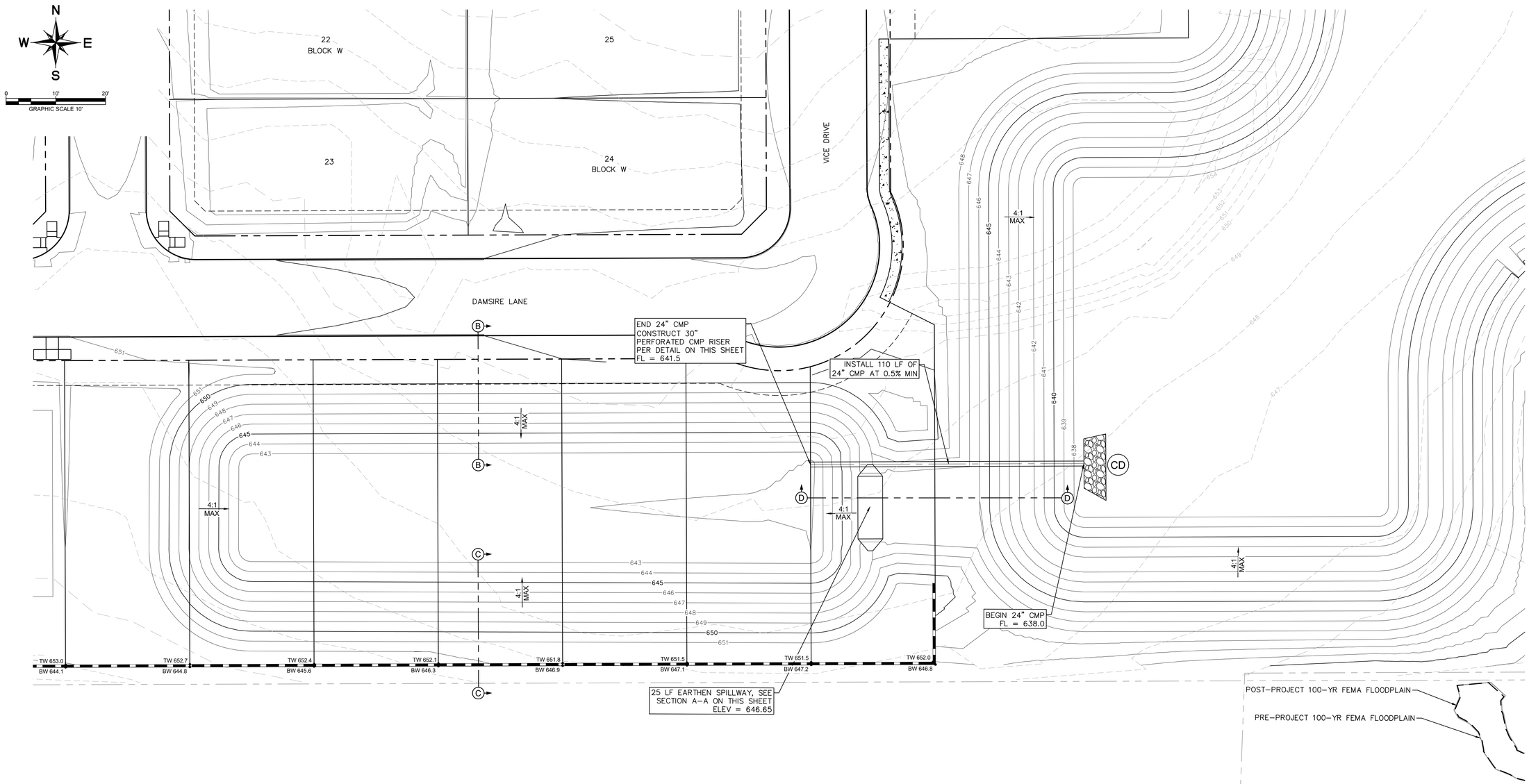
STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
2/27/2025

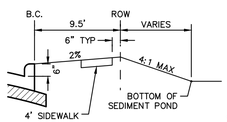
KHA PROJECT	063451880
DATE	OCTOBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

SIDEWALK PLAN

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

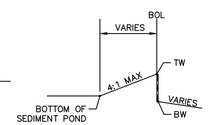
SHEET NUMBER
C-34





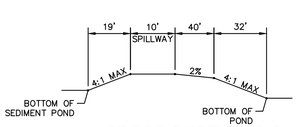
CROSS SECTION B-B

NTS



CROSS SECTION C-C

NTS

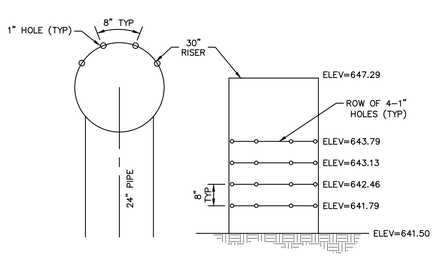


CROSS SECTION D-D

NTS

Elevation Storage Table		
Elevation	Volume	
	CY	Ac-ft
641.5	0.00	0.00
642.0	4.00	0.00
643.0	164.00	0.10
644.0	588.00	0.36
645.0	1098.00	0.68
646.0	1696.00	1.05
647.0	2387.00	1.48
648.0	3174.00	1.97

THE CMP AND SEDIMENT BASIN OUTFALL STRUCTURE IS TO BE REMOVED ONCE LESS THAN 10 ACRES OF DISTURBED AREA IS SURFACE FLOWING TO THE SEDIMENT POND. CONTRACTOR TO COORDINATE WITH ENGINEER ON THE TIMING OF THE REMOVAL OF THE SEDIMENT BASIN OUTFALL STRUCTURE. CONTRACTOR TO CLEAN SEDIMENT BASIN OF ALL ACCUMULATED SEDIMENT PRIOR TO BACKFILLING. CONTRACTOR TO BACKFILL AND GRADE TO FINAL ELEVATIONS AS SHOWN IN THE GRADING PLAN SHEETS



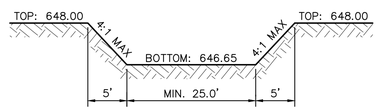
PERFORATED CMP RISER DETAIL

NTS

NOTE: RISER SHALL BE PERFORATED WITH 4 ROWS OF 4-1" HOLES SPACED AT 8" HORIZONTALLY AND 8" VERTICALLY.

SEDIMENT BASIN
OUTFALL CONDITIONS

Q_25YR TOTAL	=	61.12 CFS
Q_25YR RISER	=	2.34 CFS
Q_25YR SPILLWAY	=	58.77 CFS
25 YEAR WSE	=	647.50



SECTION A-A (EARTHEN SPILLWAY)

NTS

EROSION CONTROL LEGEND

CD — ROCK CHECK DAM

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

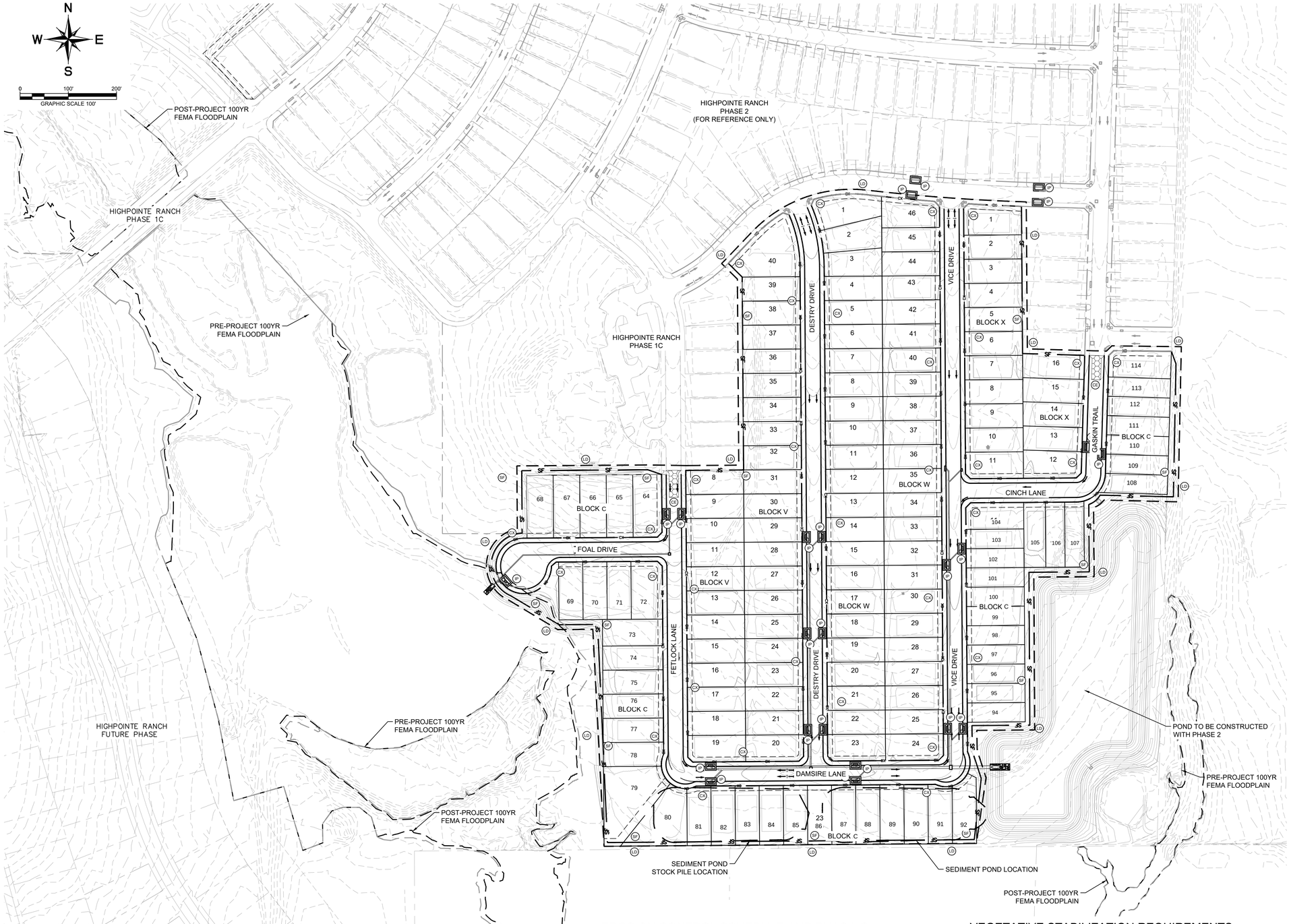
KHA PROJECT
063451880
DATE
AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

SEDIMENT POND PLAN

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-35

Plotted By:Coertzen, Johnathan Date:August 26, 2024 04:54:14pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Sediment Pond.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



EROSION CONTROL LEGEND

- 632 — PROPOSED CONTOUR
- 632 — EXISTING CONTOUR
- HIGH POINT
- SWALE
- (CX) CX CURLEX
- (SF) SF SILT FENCE
- (LD) LIMITS OF DISTURBANCE
- (CE) CONSTRUCTION ENTRANCE/EXIT
- (IP) INLET PROTECTION
- (CD) ROCK CHECK DAM

STANDARD EROSION CONTROL GENERAL NOTES

1. PHASE A EROSION CONTROL DEVICES SHOWN ON THIS PLAN SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBING ACTIVITIES ON THE PROJECT.
2. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THIS PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY ENGINEERING DIVISION.
3. IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT, THE EROSION CONTROL PLAN WILL BE REQUIRED TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.
4. WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN STONES OR MUD IS BEING TRACKED ONTO A PUBLIC ROADWAY THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASHDOWN OPERATION SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BMP TO CONTROL OFF SITE SEDIMENTATION. PERIODIC RE-GRADING OR THE ADDITION OF NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFICIENCY OF THE INSTALLATION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTAL OF N.O.I., N.O.T. AND ANY ADDITIONAL INFORMATION REQUIRED BY THE TCEQ CONTRACTOR SHALL COMPLY WITH ALL TCEQ STORMWATER POLLUTION PREVENTION REQUIREMENTS.

SITE MAP GENERAL NOTES

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR SELECTION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.
2. CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.
3. DRAINAGE PATTERNS ARE SHOWN ON THIS PLAN BY PROPOSED AND EXISTING CONTOURS, FLOW ARROWS AND/OR SLOPES.
4. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCES SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
5. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
6. SANITARY SEWER EFFLUENT IS DISPOSED OF VIA AN ONSITE SEWER SYSTEM CONNECTED TO A MUNICIPAL SEWER SYSTEM.

BMP MAINTENANCE SCHEDULE

TEMPORARY STONE CONSTRUCTION ENTRANCE/EXIT:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE FACILITY IS FUNCTIONING PROPERLY. AGGREGATE PAD SHALL BE WASHED DOWN OR REPLACED WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN THE STONES OR MUD IS BEING TRACKED ONTO THE PUBLIC ROADWAY. RUNOFF FROM WASHDOWN OPERATION SHALL BE FILTERED THROUGH ANOTHER B.M.P. PRIOR TO DRAINING OFF-SITE.

SILT FENCE:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS. SEDIMENT SHALL BE REMOVED FROM BEHIND THE FENCE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-THIRD THE HEIGHT OF THE FENCE ABOVE GRADE. FENCE SHALL BE INSPECTED FOR GAPS AT BASE. INSPECT SUPPORTING POSTS AND FILTER FABRIC. REPLACE IF REQUIRED.

STONE OVERFLOW STRUCTURE:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO ENSURE THAT THE FACILITY IS FUNCTIONING PROPERLY. SEDIMENT SHALL BE REMOVED FROM THE STORAGE AREA WHEN SEDIMENT DEPTH HAS BUILT UP TO ONE-HALF THE HEIGHT OF THE STONE OUTLET. REPAIR DISLODGED OR MISSING STONE RIP-RAP AND REPAIR ANY DOWNSTREAM EROSION.

ROCK CHECK DAM:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER ALL RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY. REMOVE SEDIMENT FROM THE STORAGE AREA UPSTREAM OF THE DAM WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-HALF OF THE DAM HEIGHT. REPAIR DAMAGE TO THE CHANNEL IN THE VICINITY OF THE CHECK DAMS IMMEDIATELY TO PREVENT ADDITIONAL DAMAGE. REPLACE MISSING OR DISLODGED ROCK AS NEEDED TO MAINTAIN THE DESIGN HEIGHT AND CROSS SECTION OF THE CHECK DAM.

CURB INLET/GRATE INLET/WYE INLET:

INSPECTIONS SHALL BE MADE WEEKLY AND AFTER ALL RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY. REMOVE SEDIMENT FROM THE STORAGE AREA SURROUNDING THE INLET/GRATE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-HALF OF THE PROTECTION HEIGHT. DEVICE SHALL BE INSPECTED FOR GAPS AT BASE, AND SHALL BE REPLACED AS NEEDED.

SEQUENCE OF CONSTRUCTION

NOTE: THE SEQUENCE OF CONSTRUCTION SHOWN IS A GENERAL OVERVIEW AND IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS INCLUDED IN THESE PLANS. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND ALL OTHER APPLICABLE LAWS.

EROSION CONTROL SCHEDULE AND PHASING

THE PROJECT SHALL GENERALLY CONFORM TO THE FOLLOWING:

PHASE A - GRADING
1. CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE, SILT FENCE, DIKE, AND TREE PROTECTION FENCE ACCORDING TO THE APPROXIMATE LOCATION AND SHOWN ON GRADING AND EROSION CONTROL PLAN NOTES AND DETAIL SHEET.
2. BEGIN CLEARING AND GRADING OF SITE.
3. SEED AND REVEGETATE SLOPES WHERE SHOWN.

PHASE B - UTILITIES
1. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE.
2. INSTALL STORM DRAINS, SANITARY SEWER, AND WATER AS SPECIFIED ON PLAN SHEETS.

PHASE C - PAVING
1. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE. REMOVE AS NEEDED TO PAVE.
2. STABILIZE SUBGRADE.
3. PAVE STREETS AND SIDEWALKS AS SPECIFIED ON PLAN SHEETS.
4. RE-INSTALL ANY STORM WATER POLLUTION PREVENTION MEASURES REMOVED FOR PAVING OPERATIONS.

PHASE D - LANDSCAPING AND SOIL STABILIZATION.
1. REVEGETATE LOT AND PARKWAYS
2. LANDSCAPE CONTRACTOR SHALL REVEGETATE ALL AREAS RESERVED FOR LANDSCAPE VEGETATIVE COVERS.
3. REMOVE EROSION CONTROL DEVICES WHEN MINIMUM 70% GROUND COVER IS ESTABLISHED. VEGETATION MUST BE ESTABLISHED BEFORE STRUCTURAL CONTROLS REMOVED.

VEGETATIVE STABILIZATION REQUIREMENTS

TEMPORARY SEEDING

ALL DISTURBED AREAS WHICH WILL BE LEFT DORMANT FOR GREATER THAN 14 DAYS SHALL BE SEEDED WITH FAST- GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING OPERATIONS. SELECTION OF THE SEED WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED (SEE DESCRIPTIONS IN TABLE 2). REFERENCE LANDSCAPE PLAN FOR PERMANENT STABILIZATION REQUIREMENTS. ALL TEMPORARY SEEDING MATERIALS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO APPLICATION.

TABLE 2
VEGETATION TABLE*

TEMPORARY SEEDING

SPECIES	PLANTING RATE	PLANTING-DATES
CRIMSON CLOVER	7#/ACRE	8/15 - 11/30
MILLET, FOXTAIL	30#/ACRE	5/1 - 8/31
RYEGRASS, ANNUAL	30#/ACRE	8/15 - 9/30
SPRANGLETOP, GREEN	2.5#/ACRE	2/1 - 5/1
TALL FESCUE	7#-10#/1000 SF	9/1 - 10/15

*USE ONLY USDA CERTIFIED SEED.

SURFACE PREPARATION FOR TEMPORARY SEEDING

1. INSTALL EROSION STRUCTURES SUCH AS DIKES, DIVERSIONS, ETC. PRIOR TO SEEDING.
2. FURROW SLOPES STEEPER THAN 3:1 ON THE CONTOUR LINE BEFORE SEEDING.
3. ENSURE SEED BED IS PULVERIZED, LOOSE, AND UNIFORM.

APPLICATION

1. WHEN HYDROMULCHING IS USED, DO NOT MIX SEED AND FERTILIZER MORE THAN 30 MINUTES PRIOR TO APPLICATION.
2. APPLY SEED EVENLY USING PROPER EQUIPMENT AND WATER TO AID VEGETATION GROWTH.
3. EROSION CONTROL NETTING SHALL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT AGAINST EROSION. MULCH (STRAW OR FIBER) SHALL BE USED ON RELATIVELY FLAT SLOPES.

811 Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

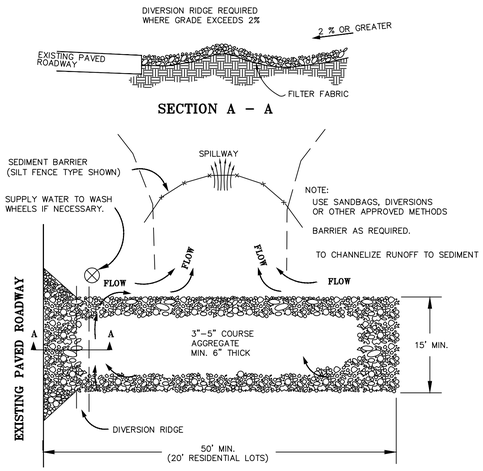
KHA PROJECT 063451880
DATE AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: JRG
CHECKED BY: KPB

HIGHPOINTE RANCH PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

EROSION CONTROL PLAN

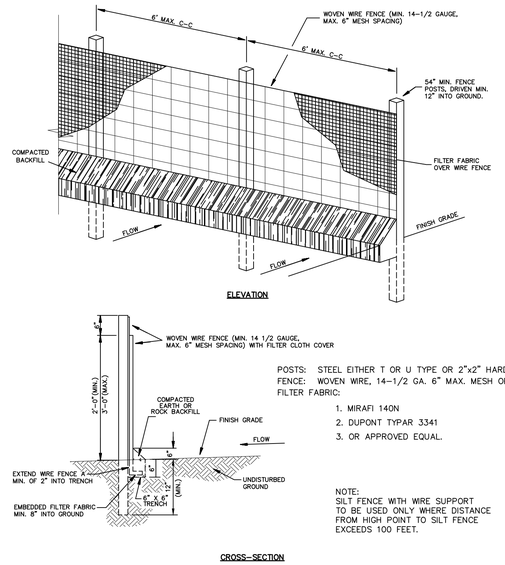
SHEET NUMBER
C-36

Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:57:36pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Erosion Control Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



CE TEMPORARY STONE CONSTRUCTION ENTRANCE / EXIT

N.T.S.



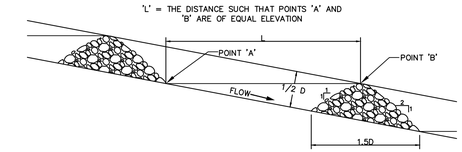
POSTS: STEEL EITHER T OR U TYPE OR 2"x2" HARDWOOD
FENCE: WOVEN WIRE, 14–1/2 GA. 6" MAX. MESH OPENING
FILTER FABRIC:

1. MIRAFI 140N
2. DUPONT TYPAR 3341
3. OR APPROVED EQUAL.

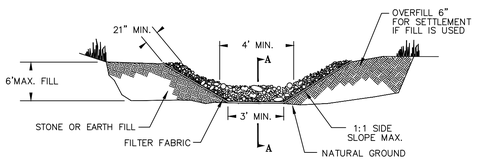
NOTE:
SILT FENCE WITH WIRE SUPPORT
TO BE USED ONLY WHERE DISTANCE
FROM HIGH POINT TO SILT FENCE
EXCEEDS 100 FEET.

SF SEDIMENTATION/SILT FENCE WITH WIRE SUPPORT

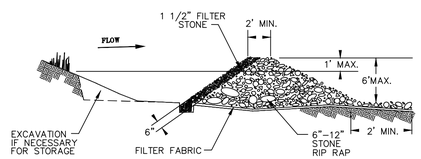
N.T.S.



SECTION A - A AND SPACING BETWEEN CHECK DAMS



VIEW LOOKING UPSTREAM

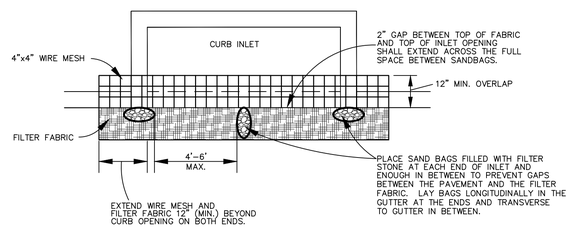


SECTION

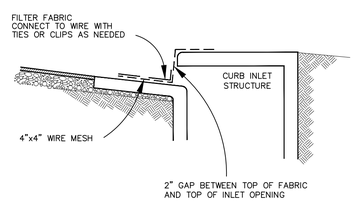
RC ROCK CHECK DAM

N.T.S.

NOTE:
VERTICAL PANEL BARRICADES
TO BE PLACED WHEN LOCATED
ON AN ACTIVE STREET.



INLET PLAN VIEW



INLET SECTION

IP CURB INLET PROTECTION

N.T.S.

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY–HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972–335–3580
WWW.KIMLEY–HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F–928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED
PROFESSIONAL ENGINEER
10/15/24

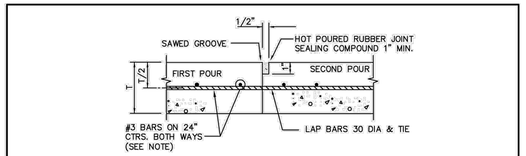
KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	JRG
CHECKED BY:	KPB

EROSION CONTROL DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

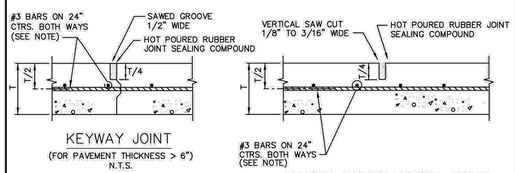
SHEET NUMBER
C-37

Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:57:38pm File Path:K:\FRI_Civil\063451961-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Erosion Control Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

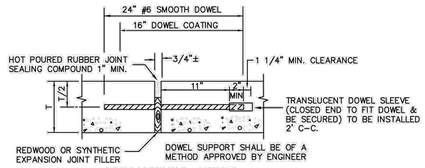


CONSTRUCTION JOINT

N.T.S.



NOTE:
ALTERNATE REINFORCEMENT
#4 BARS ON 30" CTRS.
BOTH WAYS.

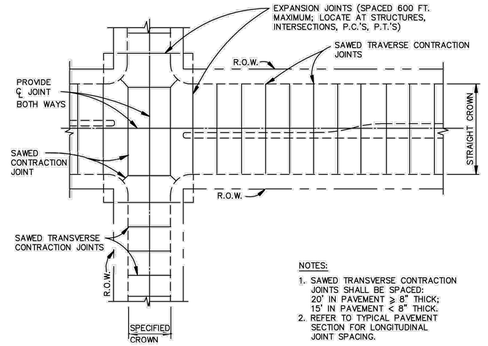


EXPANSION JOINT

(SPACED 600 FT. MAXIMUM; LOCATE AT STRUCTURES AND AT INTERSECTION P.C.'S & P.T.'S)

N.T.S.

REINFORCED CONCRETE PAVEMENT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 303.5.4.	
JOINTS		DATE: OCT. '04	STANDARD DRAWING NO.: 2050

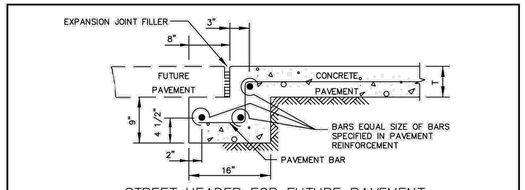


NOTES:
1. SAWED TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED: 20' IN PAVEMENT ≥ 8" THICK; 15' IN PAVEMENT < 8" THICK.
2. REFER TO TYPICAL PAVEMENT SECTION FOR LONGITUDINAL JOINT SPACING.

SPACING DIAGRAM FOR TRANSVERSE JOINTS

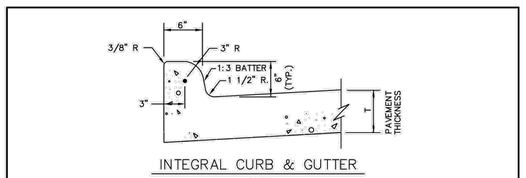
N.T.S.

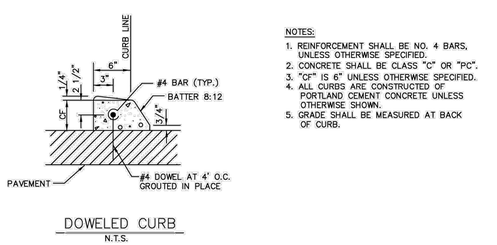
REINFORCED CONCRETE PAVEMENT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 303.5.4.	
TRANSVERSE JOINT SPACING		DATE: OCT. '04	STANDARD DRAWING NO.: 2060



NOTES:
1. PAVEMENT BARS TO BE BENT DOWN INTO HEADER.
2. HEADER AND PAVEMENT TO BE MONOLITHIC.

REINFORCED CONCRETE PAVEMENT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 305.4	
STREET HEADERS		DATE: OCT. '04	STANDARD DRAWING NO.: 2070





NOTES:
1. REINFORCEMENT SHALL BE NO. 4 BARS, UNLESS OTHERWISE SPECIFIED.
2. CONCRETE SHALL BE CLASS "C" OR "PC".
3. "CF" IS 6" UNLESS OTHERWISE SPECIFIED.
4. ALL CURBS ARE CONSTRUCTED OF PORTLAND CEMENT CONCRETE UNLESS OTHERWISE SHOWN.
5. GRADE SHALL BE MEASURED AT BACK OF CURB.

CONCRETE CURB & GUTTER	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 305.1	
INTEGRAL, SEPARATE, & DOWELED		DATE: OCT. '04	STANDARD DRAWING NO.: 2120

NOTE: THE PAVING RECOMMENDATION REPORT DONE BY ALPHA TESTING, REPORT #W241423-A WILL TAKE PRECEDENCE OVER ANY CONFLICTING INFORMATION ON THESE STANDARD DETAILS.
CITY OF AUBREY REQUIRES CLASS P1 FOR MACHINE PAVING (4000 PSI) FOR RESIDENTIAL CONCRETE ROADS

THIS SPACE INTENTIONALLY LEFT BLANK

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

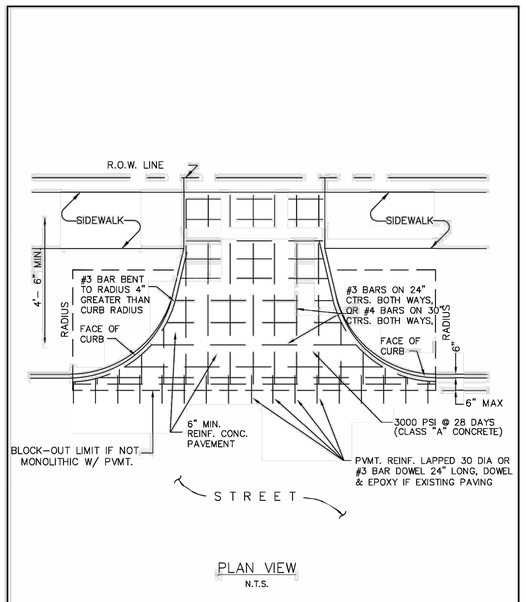
KHA PROJECT 063451880
DATE: AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

CONSTRUCTION DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-38

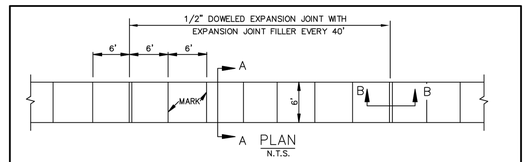
Plotted By: Goertzen, Johnathon Date: August 26, 2024 04:58:45pm File Path: K:\FRI_Civil\063451961-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

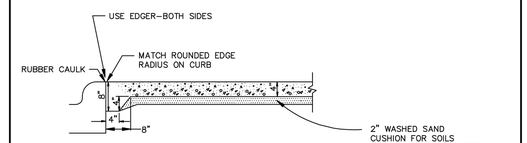


PLAN VIEW
N.T.S.

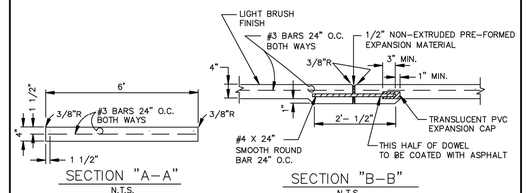
DRIVEWAY APPROACH	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 305.2*
RADIUS RETURN TYPE		DATE OCT. '04 / STANDARD DRAWING NO. 2155

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*





JOINT LUG DETAIL FOR MEDIAN PAVEMENT OR SIDEWALK ADJACENT TO CURB
N.T.S.



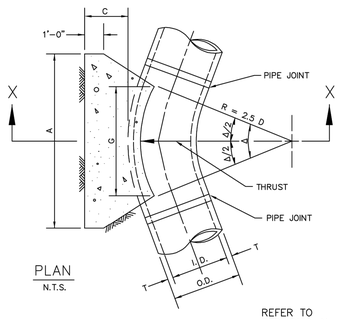
NOTE:
1. REFER TO STANDARD SPECIFICATION ITEM 305.2 FOR ALTERNATE REINFORCEMENT.
2. CROSS SLOPE OF SIDEWALK SHALL BE ± 1/4" PER FT. MIN. TO ± 3/8" PER FT. MAX.
3. OTHER THAN 6'-0" SIDEWALK WIDTH MAY BE SPECIFIED BY OWNER.
4. SIDEWALK SHALL BE CLASS "A" CONCRETE UNLESS OTHERWISE SPECIFIED BY OWNER.
5. ALL HONEYCOMB IN BACK OF CURB TO BE TROWEL-PLASTERED BEFORE POURING SIDEWALK.
6. LUG MAY BE FORMED BY SHAPING SUBGRADE TO APPROXIMATE DIMENSIONS SHOWN.

REINFORCED CONCRETE SIDEWALKS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 305.2
JOINTS AND SPACING		DATE OCT. '04 / STANDARD DRAWING NO. 2170

GENERAL NOTES:

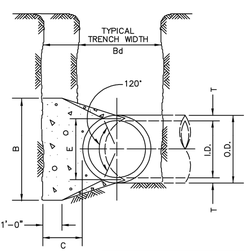
1. REINFORCED CONCRETE PAVEMENT:
   A. ALL CURBS SHALL BE PLACED INTEGRAL WITH PAVEMENT UNLESS OTHERWISE APPROVED BY THE OWNER.
   B. CURBS SHALL MEET THE SAME COMPRESSIVE STRENGTH AS SPECIFIED FOR THE PAVEMENT.
   C. BAR LAPS SHALL BE 30 DIAMETERS.
   D. REINFORCING BARS SHALL BE SUPPORTED BY CHAIRS OR OTHER DEVICES APPROVED BY THE OWNER.
2. SUBGRADE: (UNLESS OTHERWISE SPECIFIED BY OWNER)
   A. SUBGRADE UNDER ALL PAVEMENTS SHALL BE STABILIZED TO A MINIMUM DEPTH OF 6" WITH HYDRATED LIME OR CEMENT WHEN THE P.I. OF THE INPLACE MATERIAL IS GREATER THAN 15. LABORATORY TESTS MUST BE PERFORMED TO DETERMINE THE AMOUNT OF LIME OR CEMENT REQUIRED TO LOWER THE P.I. TO 15 OR BELOW. SATURATION P.I. (with > 12.4) WILL BE THE LIMIT WHEN A SOIL'S P.I. CANNOT BE BROUGHT TO 15 OR LOWER.
   B. WHERE THE INPLACE MATERIAL HAS A P.I. OF LESS THAN 15, THE SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND RECOMPACTED.
3. IF THE ROADWAY IS A DESIGNATED BIKE ROUTE OR BIKE USAGE IS ANTICIPATED, REFER TO NCTCOG'S REGIONAL BICYCLE AND PEDESTRIAN FACILITIES DESIGN MANUAL FOR DESIGN GUIDANCE.

PAVEMENT SYSTEMS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 302,303
GENERAL NOTES		DATE OCT. '04 / STANDARD DRAWING NO. 2190



PLAN
N.T.S.

REFER TO STD. DWG. No. 4040 FOR GENERAL NOTES.



SECTION X-X
N.T.S.

HORIZONTAL THRUST BLOCK	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.4
AT PIPE BEND		DATE OCT. '04 / STANDARD DRAWING NO. 4010A

I.D. (IN.)	T (IN.)	Δ = 11.25° C (FT.)	Δ ≥ 22.50° C (FT.)	E (FT.)
4,6,8	0.4	1.5	1.5	0.9
10,12	0.5	1.5	1.5	1.2
16,18	0.6	1.5	1.5	1.6
20	0.7	1.5	1.5	1.8
24	0.9	1.5	1.5	2.1
30	2.9	1.5	1.9	2.6
36	4.5	1.5	2.3	3.3
42	5.0	1.8	2.6	3.8
48	5.5	2.0	3.0	4.3
54	6.0	2.3	3.4	4.8
60	6.5	2.5	3.8	5.3
66	6.8	2.8	4.1	5.7
72	7.5	3.0	4.5	6.3
78	7.5	3.3	4.9	6.7
84	8.0	3.5	5.3	7.2
90	8.5	3.8	5.6	7.7
96	9.0	4.0	6.0	8.2

	Δ = 11.25°								Δ = 22.50°							
			EARTH			ROCK					EARTH			ROCK		
I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)	I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	0.4	1.0	1.0	1.5	0.1	1.0	1.0	0.1	4,6,8	0.8	2.0	1.5	1.5	0.1	1.0	1.0	0.1
10,12	0.6	2.2	1.5	1.5	0.1	1.0	1.5	0.1	10,12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1
16,18	0.8	5.0	2.0	2.5	0.3	1.5	2.0	0.2	16,18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3
20	0.9	6.2	2.0	3.5	0.4	1.5	3.0	0.3	20	1.8	12.3	3.5	3.5	0.7	2.0	3.0	0.4
24	1.1	8.9	3.0	3.5	0.5	1.5	3.0	0.3	24	2.2	17.7	4.0	4.5	1.0	3.0	3.5	0.5
30	1.4	10.4	3.0	3.5	0.6	2.0	3.5	0.4	30	2.7	20.7	5.0	4.5	1.5	3.0	4.0	0.6
36	1.7	15.0	3.5	4.5	0.9	2.0	4.0	0.5	36	3.3	29.8	5.5	5.5	2.3	4.0	4.0	1.3
42	1.9	20.4	4.5	5.0	1.5	2.5	5.0	0.8	42	3.8	40.5	7.0	6.0	3.9	4.5	5.0	2.1
48	2.2	26.6	4.5	6.0	2.0	2.5	6.0	1.1	48	4.4	52.9	8.0	7.0	5.7	4.5	6.0	2.8
54	2.5	33.7	6.0	6.0	3.0	3.0	6.0	1.4	54	4.9	67.0	9.0	8.0	8.0	6.0	6.0	4.1
60	2.7	41.6	6.0	7.0	3.8	3.0	7.0	1.8	60	5.5	82.7	9.5	9.0	10.6	6.0	7.0	5.3
66	3.0	50.3	6.5	8.0	5.1	3.5	8.0	2.7	66	6.0	100.1	10.5	10.0	14.1	6.5	8.0	7.2
72	3.3	59.9	7.5	8.0	6.3	4.0	8.0	3.3	72	6.6	119.1	11.0	11.0	17.6	7.5	8.0	9.1
78	3.6	70.2	8.0	9.0	8.1	4.0	9.0	3.9	78	7.1	139.8	12.0	12.0	22.5	8.0	9.0	11.7
84	3.8	81.5	8.5	10.0	10.3	4.5	10.0	5.3	84	7.6	162.1	13.0	12.5	27.2	8.5	10.0	14.8
90	4.1	93.5	9.5	10.0	12.2	5.0	10.0	6.3	90	8.2	186.1	14.0	13.5	33.7	9.5	10.0	17.7
96	4.4	106.4	10.0	11.0	15.0	5.0	11.0	7.4	96	8.7	211.7	15.0	14.5	41.2	10.0	11.0	21.8

TABLES OF DIMENSIONS AND QUANTITIES

HORIZONTAL THRUST BLOCK	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.4
AT PIPE BEND		DATE OCT. '04 / STANDARD DRAWING NO. 4010B

	Δ = 30°								Δ = 45°							
			EARTH			ROCK					EARTH			ROCK		
I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)	I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	1.0	2.6	2.0	1.5	0.2	1.0	1.5	0.1	4,6,8	1.8	3.9	2.0	2.0	0.2	1.5	1.5	0.1
10,12	1.5	5.9	2.5	2.5	0.3	2.0	1.5	0.2	10,12	2.2	8.7	3.5	2.5	0.5	2.0	2.5	0.3
16,18	2.2	13.2	3.5	4.0	0.8	2.5	3.0	0.4	16,18	3.2	19.5	4.5	4.5	1.2	3.0	3.5	0.6
20	2.4	16.3	4.5	4.0	1.0	3.0	3.0	0.5	20	3.6	24.1	5.5	4.5	1.5	3.5	3.5	0.7
24	2.9	23.4	6.0	4.0	1.4	3.5	3.5	0.7	24	4.3	34.6	8.0	4.5	2.3	4.5	4.0	1.1
30	3.6	27.5	6.5	5.0	1.9	3.5	4.0	0.9	30	5.4	40.6	8.5	5.0	3.2	5.5	4.0	1.6
36	4.4	39.5	7.0	6.0	3.4	4.5	4.5	1.6	36	6.5	58.5	10.0	6.0	5.3	6.5	4.5	2.6
42	5.1	53.8	8.0	7.0	5.1	5.5	5.0	2.5	42	7.5	79.6	11.5	7.0	8.1	8.0	6.0	4.2
48	5.8	70.3	9.0	8.0	7.4	6.0	6.0	3.7	48	8.6	104.0	13.0	8.0	11.9	9.0	6.0	6.3
54	6.5	89.0	10.0	9.0	10.3	7.0	6.5	5.3	54	9.7	131.8	15.0	9.0	17.1	10.5	6.5	8.9
60	7.3	110.0	11.0	10.0	13.9	7.5	7.5	7.3	60	10.7	162.4	16.5	10.0	23.1	11.0	7.5	12.0
66	8.0	132.9	12.5	11.0	18.9	8.5	8.0	9.6	66	11.8	196.8	18.0	11.0	30.1	12.0	8.5	16.2
72	8.7	158.2	13.5	12.0	24.0	9.0	9.0	12.3	72	12.9	233.9	19.5	12.0	38.6	14.0	8.5	20.7
78	9.4	185.6	14.5	13.0	30.0	10.0	9.5	15.6	78	13.9	274.5	21.5	13.0	49.8	14.5	9.5	25.9
84	10.1	215.3	15.5	14.0	37.1	10.5	10.5	19.5	84	15.0	318.4	23.0	14.0	61.2	15.5	10.5	32.6
90	10.9	247.1	16.5	15.0	45.0	11.5	11.0	23.9	90	16.1	365.5	24.5	15.0	74.5	17.5	10.5	39.6
96	11.6	281.2	18.0	16.0	55.5	12.5	11.5	28.9	96	17.1	415.6	26.0	16.0	89.5	18.5	11.5	48.5

	Δ = 67.80°								Δ = 90°							
			EARTH			ROCK					EARTH			ROCK		
I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)	I.D. (IN.)	G (FT.)	THRUST (TONS)	A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	2.1	5.6	3.0	2.0	0.3	2.0	1.5	0.2	4,6,8	2.7	7.1	3.0	1.5	0.4	2.0	2.0	0.2
10,12	3.1	12.6	5.5	2.5	0.8	3.5	2.0	0.4	10,12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0.5
16,18	4.7	28.3	7.5	4.0	1.9	5.5	3.0	0.9	16,18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1.0
20	5.2	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.6	44.4	10.0	4.5	3.1	6.0	4.0	1.5
24	6.2	50.3	11.5	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	5.0	8.0	4.0	2.1
30	7.8	58.9	12.0	5.0	4.8	7.5	4.0	2.2	30	9.9	75.0	15.0	5.0	6.7	10.0	4.0	3.3
36	9.4	84.9	14.5	6.0	8.2	9.5	4.5	3.8	36	11.9	108.0	18.0	6.0	11.4	12.0	4.5	5.3
42	10.9	115.5	17.0	7.0	12.8	11.0	5.5	6.3	42	13.9	147.0	21.0	7.0	17.8	14.0	5.5	8.7
48	12.5	150.9	19.0	8.0	18.4	13.0	6.0	9.2	48	15.9	192.0	24.0	8.0	26.2	16.0	6.0	12.4
54	14.0	191.0	21.5	9.0	26.0	15.0	6.5	12.9	54	17.9	243.0	27.0	9.0	36.9	18.0	7.0	18.1
60	15.6	235.8	24.0	10.0	35.6	16.0	7.5	17.6	60	19.9	299.8	30.0	10.0	50.3	20.0	7.5	24.0
66	17.1	285.3	26.0	11.0	46.0	18.0	8.0	23.0	66	21.8	362.8	33.0	11.0	66.2	22.0	8.5	32.5
72	18.7	339.5	28.5	12.0	57.8	19.0	9.0	28.4	72	23.8	431.8	36.0	12.0	85.6	24.0	9.0	41.0
78	20.2	398.5	31.0	13.0	75.7	21.0	9.5	37.4	78	25.7	506.7	39.0	13.0	108.2	26.0	10.0	53.2
84	21.8	462.1	33.5	14.0	94.7	22.0	10.5	46.5	84	27.7	587.7	42.0	14.0	134.4	28.0	10.5	64.8
90	23.3	530.5	35.5	15.0	114.4	24.5	11.0	58.2	90	29.0	674.6	48.0	15.0	164.9	30.0	11.5	81.2
96	24.9	603.6	38.0	16.0	138.9	25.5	12.0	70.0	96	31.6	767.5	48.0	16.0	199.0	32.0	12.0	96.1

TABLES OF DIMENSIONS AND QUANTITIES

HORIZONTAL THRUST BLOCK	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.4
AT PIPE BEND		DATE OCT. '04 / STANDARD DRAWING NO. 4010C

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

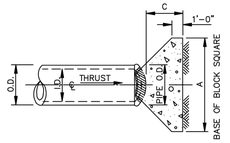
KHA PROJECT 063451880
DATE AUGUST 2024
SCALE AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

CONSTRUCTION DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-39

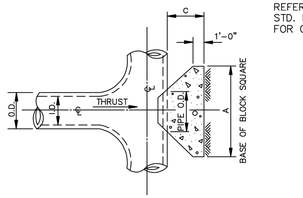
Plotted By: Goertzen, Johnathon Date: August 26, 2024 04:58:52pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



PLAN OF PLUG THRUST BLOCK

N.T.S.

REFER TO
STD. DWG. No. 4040
FOR GENERAL NOTES.



PLAN OF TEE THRUST BLOCK

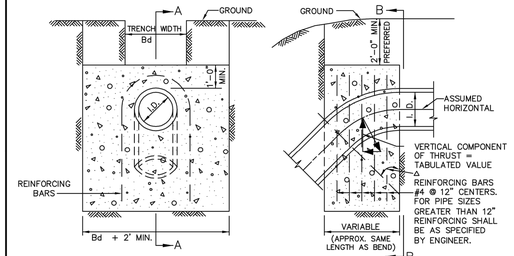
N.T.S.

I.D. (IN.)	THRUST (TONS)	C (FT.)	EARTH A (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK VOL. (C.Y.)
4,6,8	5.1	1.5	2.5	0.3	2.0	0.2
10,12	11.3	1.5	3.5	0.6	2.5	0.3
16,18	25.5	2.0	5.5	1.6	4.0	0.9
20	31.5	2.0	6.0	1.9	4.0	0.9
24	45.2	2.5	7.0	3.1	5.0	1.7
30	53.0	3.0	7.5	4.1	5.5	2.4
36	76.3	4.0	9.0	7.3	6.5	4.2
42	104.0	4.5	10.5	11.0	7.5	6.2
48	136.0	5.0	12.0	15.6	8.5	8.7
54	172.0	5.5	13.5	21.4	9.5	11.9
60	212.0	6.0	15.0	28.4	10.5	15.7
66	257.0	6.5	16.5	36.8	11.5	20.5
72	305.0	7.5	17.5	47.2	12.5	27.2
78	358.0	8.0	19.0	58.9	13.5	33.7
84	416.0	8.5	20.5	72.3	14.5	41.2
90	477.0	9.0	22.0	87.7	15.5	49.7
96	543.0	9.5	23.5	104.8	16.5	61.0

HORIZONTAL THRUST BLOCK
AT TEES AND PLUGS

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 502.4
DATE: OCT. '04
STANDARD DRAWING NO.: 4020



ELEVATION "B–B"
N.T.S.

SECTION "A–A"
N.T.S.

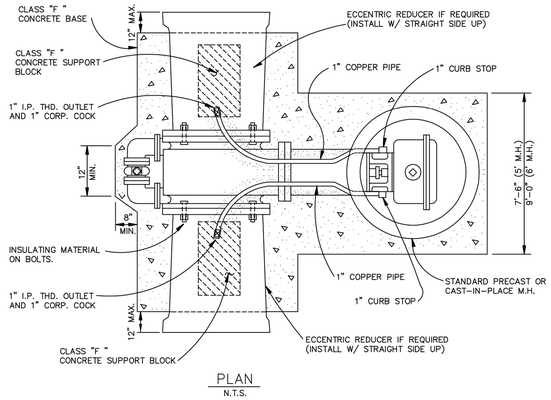
REFER TO
STD. DWG. No. 4040
FOR GENERAL NOTES.

Δ — I.D. (IN.)	11.25° THRUST (TONS)	11.25° VOL. (C.Y.)	22.50° THRUST (TONS)	22.50° VOL. (C.Y.)	30° THRUST (TONS)	30° VOL. (C.Y.)	45° THRUST (TONS)	45° VOL. (C.Y.)	67.50° THRUST (TONS)	67.50° VOL. (C.Y.)	90° THRUST (TONS)	90° VOL. (C.Y.)	— Δ I.D. (IN.)
4,6,8	1.0	0.5	2.0	1.0	2.5	1.3	3.6	1.8	4.6	2.3	5.0	2.5	4,6,8
10,12	2.2	1.1	4.3	2.2	5.7	2.8	8.0	4.0	10.5	5.2	11.3	5.7	10,12
16,18	5.0	2.5	9.7	4.9	12.7	6.4	18.0	9.0	23.5	11.8	25.5	12.7	16,18
20	6.1	3.1	12.0	6.0	15.7	7.9	22.2	11.1	29.2	14.5	31.4	15.7	20
24	8.2	4.4	17.3	8.7	22.6	11.3	32.0	16.0	41.8	20.9	45.2	22.6	24
30	10.5	5.2	20.3	10.1	26.5	13.3	37.5	18.8	49.0	24.5	53.1	26.5	30
36	14.9	7.5	29.2	14.6	38.2	19.1	54.0	27.0	70.5	35.3	76.4	38.2	36
42	20.3	10.1	39.8	19.9	52.0	26.0	73.5	36.7	96.0	48.0	104.0	52.0	42
48	26.5	13.2	51.9	26.0	67.9	33.9	96.0	48.0	126.0	62.7	136.0	67.9	48
54	33.5	16.8	65.7	32.9	85.9	42.9	122.0	60.7	159.0	79.4	172.0	85.9	54
60	41.4	20.7	81.2	40.6	106.0	53.0	150.0	75.0	196.0	98.0	212.0	106.0	60
66	50.1	25.0	98.2	49.1	128.0	64.2	182.0	90.7	237.0	119.0	257.0	128.0	66
72	59.6	29.8	117.0	58.4	153.0	76.3	216.0	108.0	282.0	141.0	305.0	153.0	72
78	69.9	35.0	137.0	68.6	179.0	90.0	254.0	127.0	331.0	166.0	358.0	179.0	78
84	81.1	40.5	159.0	79.5	208.0	104.0	294.0	147.0	384.0	192.0	416.0	208.0	84
90	93.1	46.5	183.0	91.3	239.0	119.0	337.0	169.0	441.0	221.0	477.0	239.0	90
96	106.0	53.0	208.0	104.0	272.0	136.0	384.0	192.0	502.0	251.0	543.0	272.0	96

VERTICAL THRUST BLOCK
AT PIPE BEND

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 502.4
DATE: OCT. '04
STANDARD DRAWING NO.: 4030



PLAN
N.T.S.

STANDARD DRAWING NO. 4060A

VAULT CONSTRUCTION
HORIZONTAL GATE VALVE ≥ 16"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 702.5.8.8*
DATE: OCT. '04
STANDARD DRAWING NO.: 4060A

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*

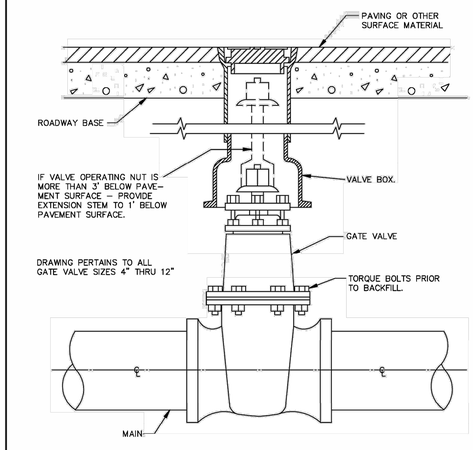
GENERAL NOTES FOR ALL THRUST BLOCKS:

1. CONCRETE FOR BLOCKING SHALL BE CLASS "B".
2. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 PSI FOR DUCTILE IRON, P.V.C., AND 150 PSI FOR CONCRETE PIPE.
3. VOLUMES OF THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. THE CORRESPONDING WEIGHT OF THE CONCRETE (CLASS "B") IS EQUAL TO OR GREATER THAN THE VERTICAL COMPONENT OF THE THRUST ON THE VERTICAL BEND.
4. WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
5. POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.
6. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
7. THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND 2000 LBS./S.F. IN ROCK.
8. USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND, TEE, OR PLUG TO PREVENT THE CONCRETE FROM STICKING TO IT.
9. CONCRETE SHALL NOT EXTEND BEYOND JOINTS.

THRUST BLOCK
GENERAL NOTES

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 502.4
DATE: OCT. '04
STANDARD DRAWING NO.: 4040



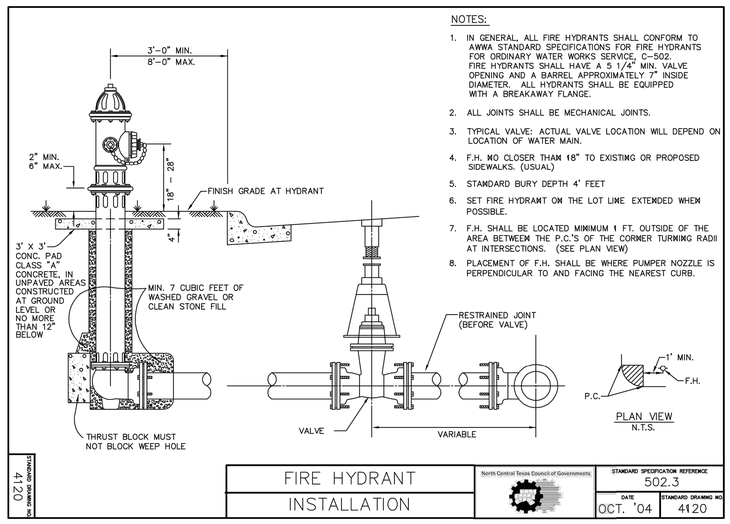
GATE VALVE BOX AND
EXTENSION STEM
N.T.S.

GATE VALVE 4" TO 12"
BOX & EXTENSION STEM

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 502.6.6*
DATE: OCT. '04
STANDARD DRAWING NO.: 4050

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*



PLAN VIEW
N.T.S.

STANDARD DRAWING NO. 4120

FIRE HYDRANT
INSTALLATION

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 502.3
DATE: OCT. '04
STANDARD DRAWING NO.: 4120

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

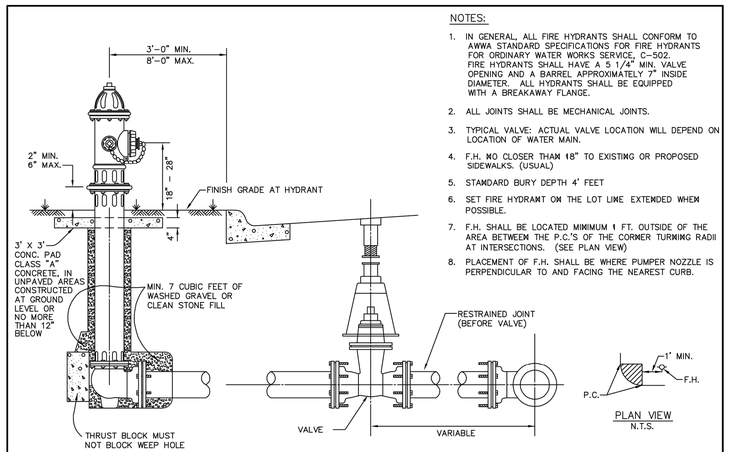
KHA PROJECT 063451880
DATE AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

CONSTRUCTION DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-40

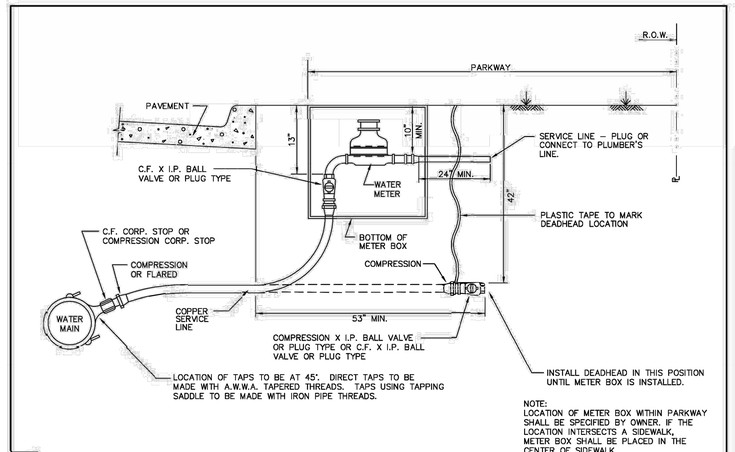
Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:59:02pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES:

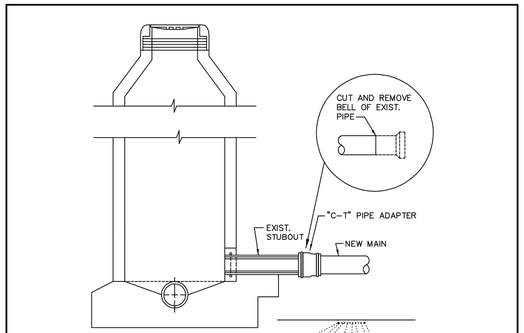
1. IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502. FIRE HYDRANTS SHALL HAVE A 5 1/4" MIN. VALVE OPENING AND A BARREL APPROXIMATELY 7" INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE.
2. ALL JOINTS SHALL BE MECHANICAL JOINTS.
3. TYPICAL VALVE: ACTUAL VALVE LOCATION WILL DEPEND ON LOCATION OF WATER MAIN.
4. F.H. NO CLOSER THAM 18" TO EXISTING OR PROPOSED SIDEWALKS. (USUAL)
5. STANDARD BURY DEPTH 4' FEET
6. SET FIRE HYDRANT ON THE LOT LINE EXTENDED WHEM POSSIBLE.
7. F.H. SHALL BE LOCATED MINIMUM 1 FT. OUTSIDE OF THE AREA BETWEEN THE P.C.'S OF THE CORNER TURNING RADII AT INTERSECTIONS. (SEE PLAN VIEW)
8. PLACEMENT OF F.H. SHALL BE WHERE PUMPER NOZZLE IS PERPENDICULAR TO AND FACING THE NEAREST CURB.

4.20 CITY STANDARD DRAWINGS	FIRE HYDRANT INSTALLATION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.3	DATE OCT. '04	STANDARD DRAWING NO. 4120



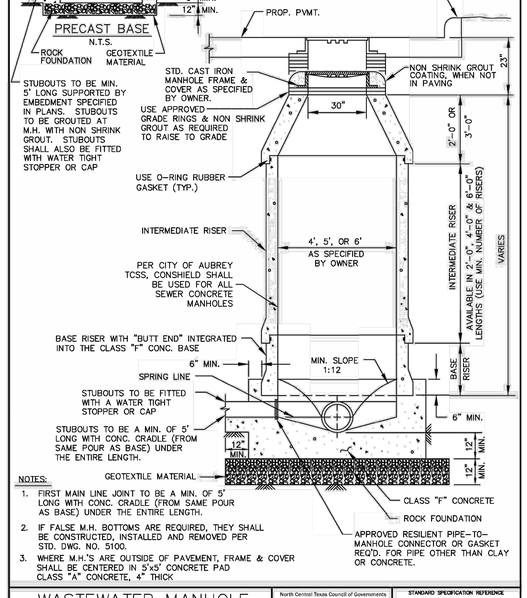
4.30 CITY STANDARD DRAWINGS	WATER SERVICE INSTALLATION 3/4" OR 1" LINE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.10.3*	DATE OCT. '04	STANDARD DRAWING NO. 4130

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*



NOTE:
THIS DETAIL FOR USE ONLY WHEN NEW MAIN WILL NOT MATE WITH EXISTING MAIN JOINT DUE TO DIFFERENT DIMENSIONS OR MATERIALS AND A MANHOLE IS NOT REQUIRED.

WASTEWATER MAIN TIE-IN AT CLEANOUT OR M.H. STUBOUT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.10	DATE OCT. '04	STANDARD DRAWING NO. 5010

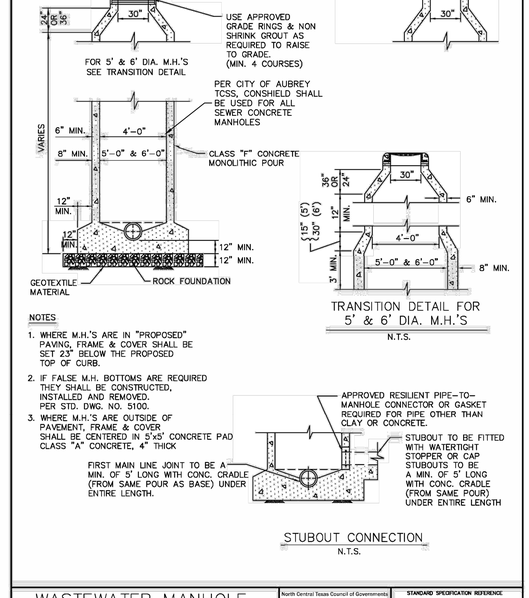


NOTES:

1. FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER THE ENTIRE LENGTH.
2. IF FALSE M.H. BOTTOMS ARE REQUIRED, THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED PER STD. DWG. NO. 5100.
3. WHERE M.H.'S ARE OUTSIDE OF PAVEMENT, FRAME & COVER SHALL BE CENTERED IN 5'x5' CONCRETE PAD CLASS "A" CONCRETE, 4" THICK

WASTEWATER MANHOLE PRECAST	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.1.4.12*	DATE OCT. '04	STANDARD DRAWING NO. 5020

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*

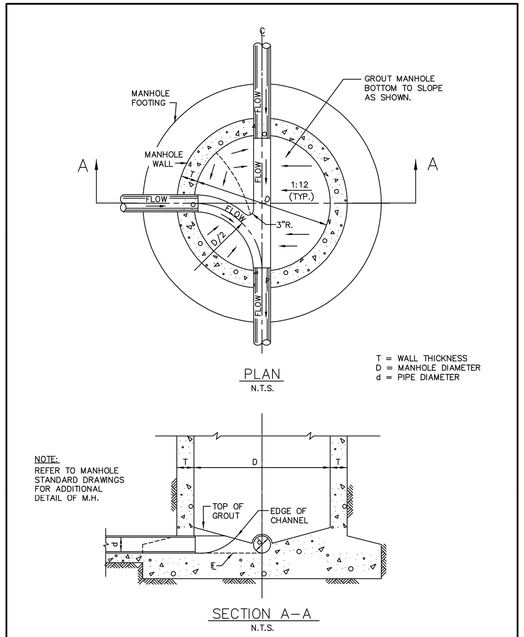


NOTES

1. WHERE M.H.'S ARE IN "PROPOSED" PAVING, FRAME & COVER SHALL BE SET 23" BELOW THE PROPOSED TOP OF CURB.
2. IF FALSE M.H. BOTTOMS ARE REQUIRED THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED. PER STD. DWG. NO. 5100.
3. WHERE M.H.'S ARE OUTSIDE OF PAVEMENT, FRAME & COVER SHALL BE CENTERED IN 5'x5' CONCRETE PAD CLASS "A" CONCRETE, 4" THICK

WASTEWATER MANHOLE CAST-IN-PLACE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.1.4.1.1*	DATE OCT. '04	STANDARD DRAWING NO. 5030

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*



NOTE:
REFER TO MANHOLE STANDARD DRAWINGS FOR ADDITIONAL DETAIL OF M.H.

WASTEWATER MANHOLE LINE INTERSECTION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.1	DATE OCT. '04	STANDARD DRAWING NO. 5090

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT 063451880	DATE AUGUST 2024	SCALE: AS SHOWN	DESIGNED BY: JRG	DRAWN BY: AA	CHECKED BY: KPB

CONSTRUCTION DETAILS

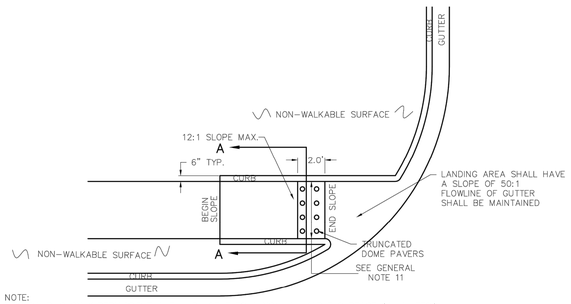
HIGHPOINTE RANCH PHASE 3

CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-41

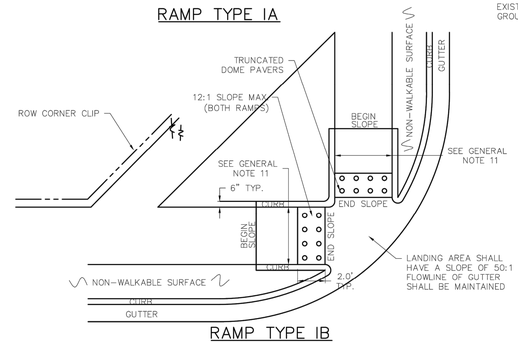
Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:59:09pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:59:19pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

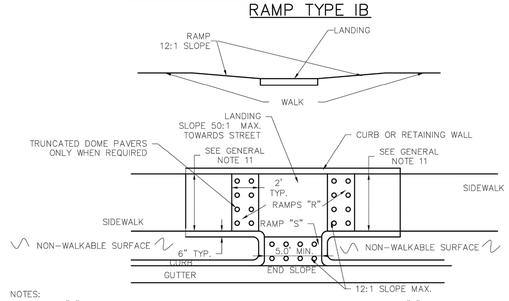


NOTE:
THIS RAMP IS ONLY PERMISSIBLE WHEN ADJACENT TO A NON-WALKABLE SURFACE (WALL, ETC.) THAT PROHIBITS THE CONCURRENT (2ND) RAMP/SIDEWALK OF RAMP TYPE 1B

RAMP TYPE IA

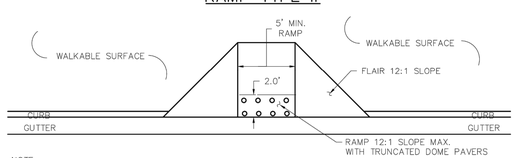


RAMP TYPE IB



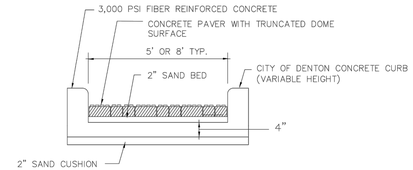
NOTES:
A. IF RAMP "S" IS LESS THAN 2 FT., THEN NO TRUNCATED DOME SURFACE FOR RAMP "S" AND 2 FT. TRUNCATED DOME SURFACE IS REQUIRED ON EACH RAMP "R" AND "R"+"S"=6 FT. WHEN CURB HEIGHT IS 6 IN. IF CURB IS OTHER THAN 6 IN., USE 12(H):1(V) RATIO TO DETERMINE MINIMUM RAMP LENGTH.
B. IF RAMP "S" IS 2 FT. OR GREATER BUT LESS THAN 6 FT., INSTALL TRUNCATED DOMES ONLY ON RAMP "S" AND "S"+"R"=6 FT. WHEN CURB HEIGHT IS 6 IN. IF CURB HEIGHT IS OTHER THAN 6 IN., USE 12(H):1(V) RATIO TO DETERMINE RAMP LENGTH.
C. IF LENGTH OF RAMP "S" IS 6 FT. OR GREATER AND CURB HEIGHT IS 6 IN., THEN USE FULL, STANDARD "S" RAMP WITH TRUNCATED DOME PAVERS IN LIEU OF LANDING AND WITH NO "R" RAMPS. IF CURB HEIGHT IS OTHER THAN 6 IN., USE 12(H):1(V) RATIO TO DETERMINE RAMP LENGTH AND THE NEED FOR "R" RAMPS AND A LANDING.

RAMP TYPE II

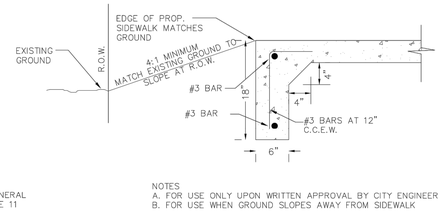


NOTE:
THIS RAMP MAY BE USED AS AN ALTERNATE TO A TYPE II ONLY WHEN THE WALKABLE/PAVED SURFACES ARE ADJACENT TO THE CURB.

RAMP TYPE III

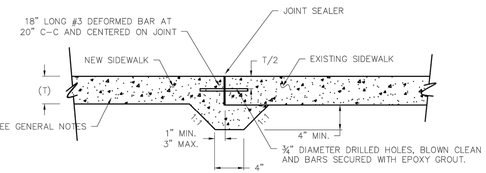


RAMP – SECTION A–A



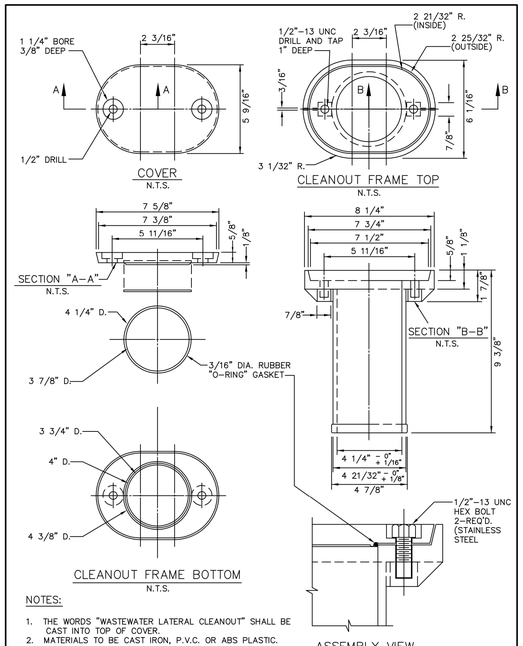
NOTES
A. FOR USE ONLY UPON WRITTEN APPROVAL BY CITY ENGINEER
B. FOR USE WHEN GROUND SLOPES AWAY FROM SIDEWALK

TURNED DOWN FOOTING AT EDGE OF PROPOSED SIDEWALK



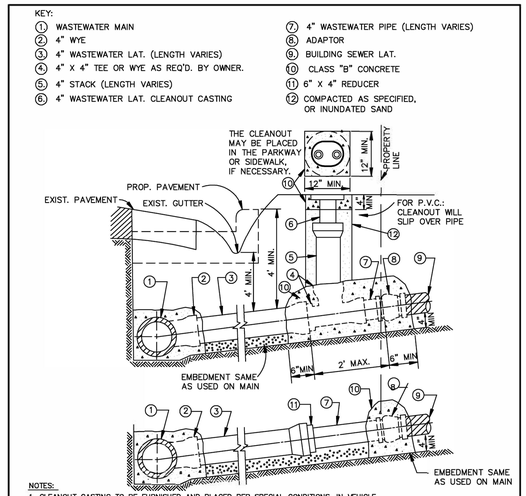
NOTE:
CURB AND SIDEWALK REPAIRS TO MADE FROM EXISTING JOINT, UNLESS DIRECTED OTHERWISE FROM CITY ENGINEER.

NEW TO EXISTING SIDEWALK CONNECTION



NOTES:
1. THE WORDS "WASTEWATER LATERAL CLEANOUT" SHALL BE CAST INTO TOP OF COVER.
2. MATERIALS TO BE CAST IRON, P.V.C. OR ABS PLASTIC.

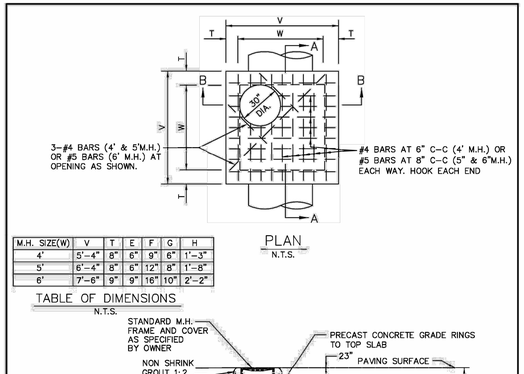
WASTEWATER LATERAL	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.10	
CLEANOUT FRAME & COVER		DATE OCT. '04	STANDARD DRAWING NO. 5140



NOTES:
1. CLEANOUT CASTING TO BE FURNISHED AND PLACED PER SPECIAL CONDITIONS. IN VEHICLE TRAFFIC AREAS AND FOR COMMERCIAL MAINLINE LATERALS, WASTEWATER CLEANOUT SHALL BE OF CAST IRON.
2. SLOPE OF LATERAL TO BE 2% MIN., UNLESS INSTRUCTED OTHERWISE BY OWNER.
3. THE WASTEWATER LATERAL SHALL BE CONNECTED TO BUILDING LATERAL AND CONSTRUCTED IN SUCH MANNER AS TO CLEAR EXISTING UTILITES AND PROPOSED FACILITIES SUCH AS STORM SEWER MAINS, PAVING, SIDEWALKS, RETAINING WALLS, ETC. VERTICAL BENDS (22.5° MAX.) MAY BE USED IF APPROVED BY OWNER.
4. THE MAINLINE LATERAL CONNECTION TO THE PRIVATE BUILDING LATERAL SHALL BE AS CLOSE TO THE PROPERTY LINE AS POSSIBLE.
5. INSTALL 4" STOPPER OR CAP AT PROPERTY LINE IF BUILDING LATERAL DOES NOT EXIST.
6. SUBSTITUTE 4" FOR 6" FITTINGS IF PLANS OR SPEC. COND. CALL FOR 4" LATERALS.
7. THE CLEANOUT STACK & CASTING MAY BE PLACED IN THE PARKWAY, VEHICLE TRAFFIC AREAS, OR SIDEWALK, IF NECESSARY.
8. FOR 6" SERVICES OR LARGER, INSTALL A MANHOLE.

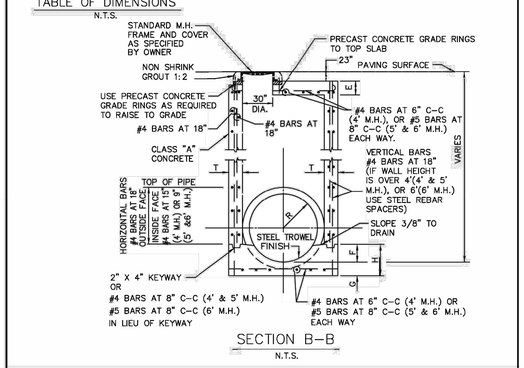
WASTEWATER LATERALS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.10.4.2*	
WITH & WITHOUT CLEANOUT		DATE OCT. '04	STANDARD DRAWING NO. 5120

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*



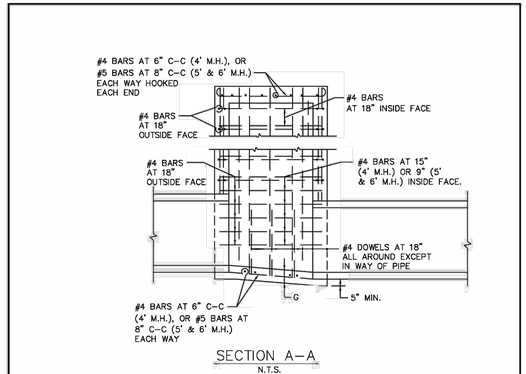
M.H. SIZE(W)	V	T	E	F	G	H
4'	5'–4"	8"	6"	9"	6"	1'–3"
5'	6'–4"	8"	6"	12"	8"	1'–8"
6'	7'–6"	9"	9"	16"	10"	2'–2"

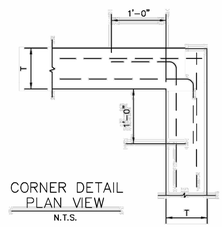
TABLE OF DIMENSIONS
N.T.S.



STORM WATER MANHOLE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.14.1*	
4', 5', OR 6' SQUARE		DATE OCT. '04	STANDARD DRAWING NO. 6010A

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*





NOTES:
1. SLOPE INVERT OF MANHOLE AS INDICATED ON PLAN–PROFILE SHEET.
2. LAYERS OF REINFORCING STEEL NEAREST THE INTERIOR AND EXTERIOR SURFACE SHALL HAVE A COVER OF 2" TO THE CENTER OF BARS, UNLESS OTHERWISE NOTED.
3. CONCRETE SHALL BE CLASS "A".

STORM WATER MANHOLE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.14.1*	
4', 5', OR 6' SQUARE		DATE OCT. '04	STANDARD DRAWING NO. 6010B

*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. *Public Works Construction Standards North Central Texas, Fifth Edition.*

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

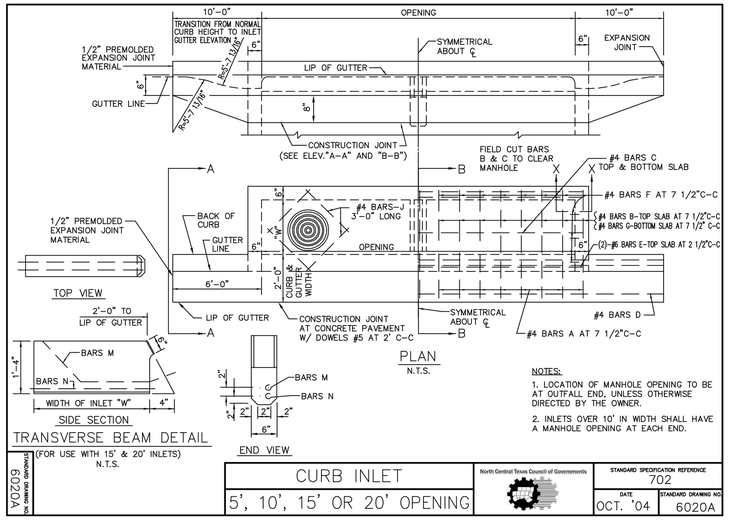
KHA PROJECT 063451880
DATE AUGUST 2024
SCALE: AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

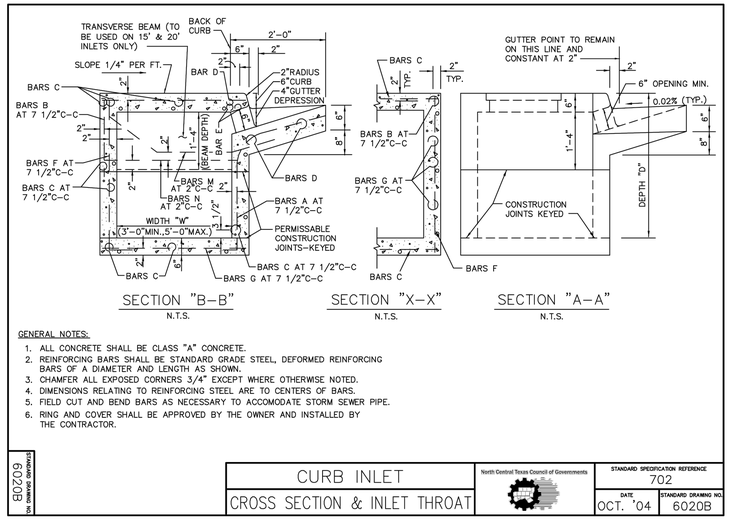
CONSTRUCTION DETAILS

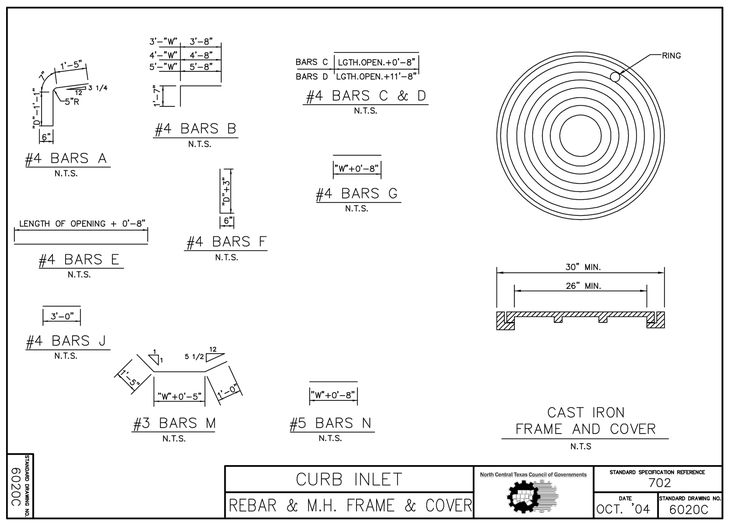
HIGHPOINTE RANCH PHASE 3

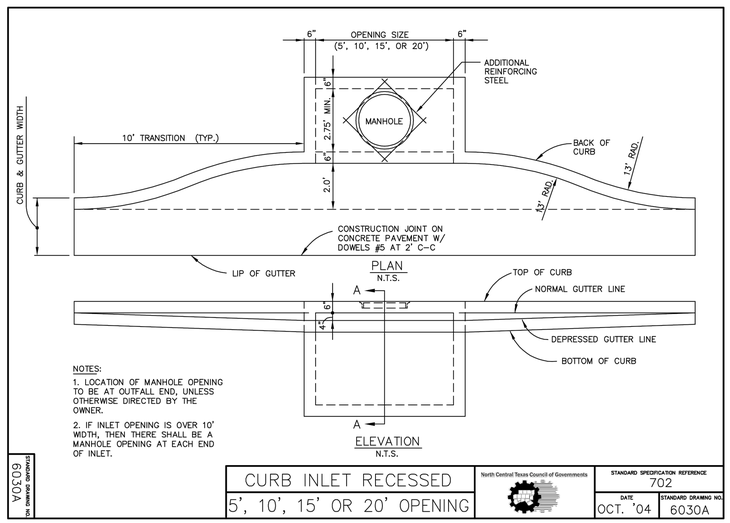
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-42









No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	AA
CHECKED BY:	KPB

CONSTRUCTION DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-43

Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:59:24pm File Path:K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

DEPTH "D"	5'–0" OPENING						10'–0" OPENING						15'–0" OPENING						20'–0" OPENING					
	WIDTH 3'–0"		WIDTH 4'–0"		WIDTH 5'–0"		WIDTH 3'–0"		WIDTH 4'–0"		WIDTH 5'–0"		WIDTH 3'–0"		WIDTH 4'–0"		WIDTH 5'–0"		WIDTH 3'–0"		WIDTH 4'–0"		WIDTH 5'–0"	
	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.	CONC C.Y.	STEEL LBS.
3'–6"	2.62	306	2.95	332	3.28	373	4.12	479	4.64	521	5.20	564	5.69	667	6.40	721	7.10	775	7.20	846	8.11	909	9.03	976
3'–9"	2.70	309	3.04	341	3.39	373	4.25	494	4.78	536	5.34	579	5.87	687	6.58	741	7.30	796	7.42	874	8.34	937	9.27	1010
4'–0"	2.78	328	3.14	364	3.49	399	4.38	518	4.92	565	5.49	610	6.05	718	6.77	776	7.49	835	7.64	909	8.58	976	9.51	1046
4'–3"	2.87	334	3.23	370	3.59	406	4.51	526	5.06	573	5.64	619	6.22	729	6.95	787	7.69	847	7.87	922	8.81	990	9.75	1061
4'–6"	2.95	356	3.32	394	3.69	431	4.64	558	5.20	607	5.79	656	6.40	770	7.14	830	7.88	891	8.09	973	9.04	1043	9.99	1115
4'–9"	3.03	361	3.41	410	3.79	438	4.77	566	5.34	616	5.94	665	6.57	780	7.32	841	8.07	903	8.31	986	9.27	1056	10.23	1129
5'–0"	3.12	367	3.51	416	3.90	445	4.90	574	5.47	624	6.09	674	6.75	791	7.51	853	8.27	915	8.53	999	9.50	1070	10.47	1144
5'–3"	3.20	383	3.60	424	4.00	465	5.03	600	5.61	652	6.23	704	6.93	827	7.69	890	8.46	955	8.76	1044	9.73	1118	10.71	1194
5'–6"	3.28	389	3.69	430	4.10	472	5.16	608	5.75	661	6.38	713	7.11	837	7.88	901	8.66	967	8.98	1057	9.97	1131	10.95	1208
5'–9"	3.37	405	3.78	451	4.20	495	5.29	635	5.89	690	6.53	744	7.28	874	8.07	940	8.85	1007	9.20	1102	10.20	1178	11.19	1258
6'–0"	3.45	415	3.88	460	4.30	504	5.42	646	6.03	702	6.68	757	7.45	888	8.25	954	9.05	1022	9.42	1119	10.43	1196	11.43	1276
6'–3"	3.53	425	3.97	470	4.41	515	5.55	661	6.17	718	6.83	773	7.63	908	8.44	975	9.24	1044	9.64	1147	10.66	1223	11.67	1305
6'–6"	3.62	437	4.06	486	4.51	532	5.68	681	6.31	739	6.97	797	7.81	935	8.62	1005	9.43	1057	9.87	1178	10.89	1258	11.92	1340
6'–9"	3.70	441	4.15	490	4.61	537	5.81	688	6.45	747	7.12	806	7.98	945	8.81	1015	9.63	1066	10.09	1191	11.12	1272	12.15	1355
7'–0"	3.78	460	4.25	510	4.71	560	5.94	716	6.59	777	7.27	837	8.16	981	8.99	1053	9.82	1126	10.31	1237	11.35	1319	12.40	1404
7'–3"	3.86	465	4.34	516	4.81	567	6.07	724	6.72	785	7.42	846	8.33	992	9.18	1065	10.02	1138	10.53	1249	11.59	1333	12.64	1418
7'–6"	3.95	477	4.43	529	4.91	570	6.20	742	6.86	804	7.57	866	8.51	1016	9.36	1089	10.21	1163	10.75	1290	11.82	1365	12.88	1451
7'–9"	4.03	491	4.53	544	5.02	597	6.33	762	7.00	826	7.71	890	8.67	1040	9.55	1116	10.41	1193	10.98	1313	12.05	1399	13.12	1498
8'–0"	4.12	496	4.62	550	5.12	604	6.46	770	7.14	834	7.86	899	8.86	1051	9.73	1129	10.60	1205	11.20	1325	12.28	1412	13.36	1510
8'–3"	4.20	504	4.71	559	5.22	613	6.59	784	7.28	849	8.01	915	9.04	1069	9.92	1149	10.80	1228	11.42	1353	12.51	1440	13.60	1529
8'–6"	4.28	519	4.80	576	5.32	632	6.71	804	7.42	871	8.16	938	9.21	1107	10.10	1176	10.99	1257	11.64	1385	12.74	1474	13.84	1565
8'–9"	4.37	528	4.90	586	5.42	643	6.84	819	7.56	886	8.31	954	9.39	1119	10.29	1199	11.18	1280	11.87	1410	12.97	1500	14.08	1592
9'–0"	4.45	541	4.99	605	5.53	664	6.97	842	7.70	912	8.46	982	9.56	1148	10.47	1231	11.38	1313	12.09	1447	13.21	1539	14.32	1631
9'–3"	4.53	554	5.08	614	5.63	674	7.10	858	7.84	929	8.60	999	9.74	1169	10.66	1252	11.57	1335	12.31	1474	13.44	1563	14.56	1660
9'–6"	4.62	568	5.17	630	5.73	692	7.23	878	7.97	950	8.75	1022	9.92	1195	10.84	1280	11.77	1365	12.53	1505	13.67	1600	14.80	1696
10'–0"	4.78	582	5.36	645	5.93	708	7.49	900	8.11	974	9.05	1048	10.27	1227	11.21	1312	12.16	1399	12.98	1546	14.13	1642	15.29	1739

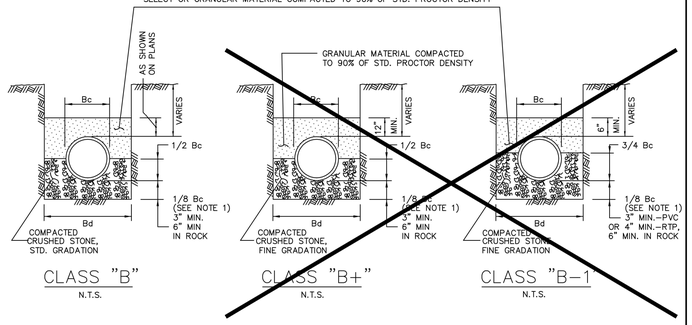
NOTE:
FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLES ARE IN INCREMENTS OF 3 INCHES BUT ANY DEPTHS OTHER THAN THOSE SHOWN ABOVE MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS FALLING WITHIN THE LIMITS OF THE TABLE MAY BE FOUND BY INTERPOLATION.

STANDARD DRAWING NO. 6020E

CURB INLET
SUMMARY OF QUANTITIES

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702
DATE OCT. '04
STANDARD DRAWING NO. 6020E



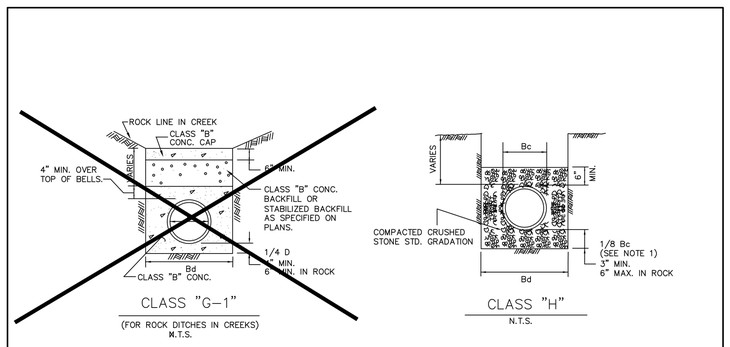
NOTES:
1. FOR MAINS 42" DIAMETER AND LARGER LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH

STANDARD DRAWING NO. 3020

EMBEDMENT
CLASS "B", "B+", & "B-1"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5
DATE OCT. '04
STANDARD DRAWING NO. 3020



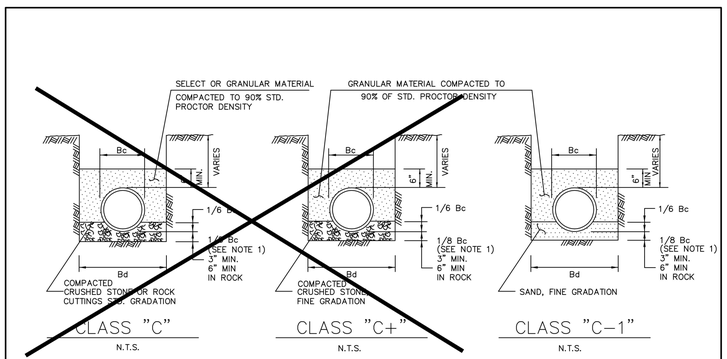
NOTES:
1. FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bd = TRENCH WIDTH
3. Bc = OUTSIDE DIAMETER OF PIPE
4. D = INSIDE DIAMETER OF PIPE

STANDARD DRAWING NO. 3060

EMBEDMENT
CLASS "G-1" & "H"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5
DATE OCT. '04
STANDARD DRAWING NO. 3060



NOTES:
1. FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH

STANDARD DRAWING NO. 3040

EMBEDMENT
CLASS "C", "C+", & "C-1"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5
DATE OCT. '04
STANDARD DRAWING NO. 3040

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2024 KIMLEY-HORN AND ASSOCIATES, INC.

6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

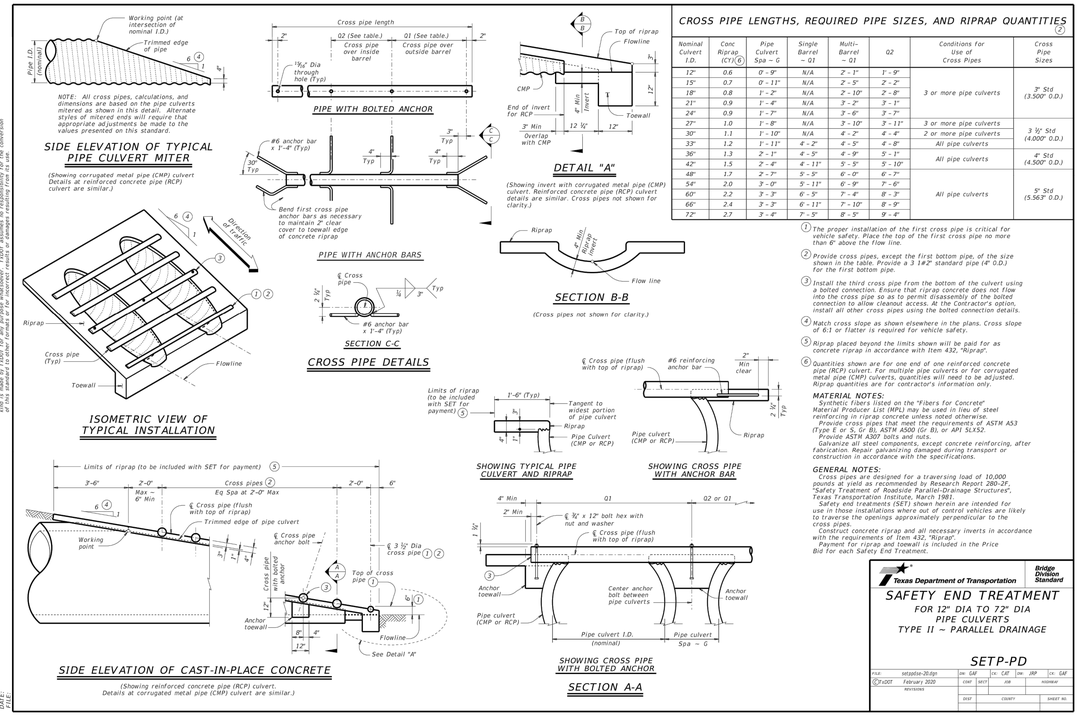
KHA PROJECT 063451880
DATE AUGUST 2024
SCALE AS SHOWN
DESIGNED BY: JRG
DRAWN BY: AA
CHECKED BY: KPB

CONSTRUCTION DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-44

Plotted By: Goertzen, Johnathon Date: August 26, 2024 04:59:23pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



CROSS PIPE LENGTHS, REQUIRED PIPE SIZES, AND RIPRAP QUANTITIES (2)

Nominal Culvert I.D.	Conc Riprap (CY) (6)	Pipe Culvert Spa – G	Single Barrel – Q1	Multi-Barrel – Q1	Q2	Conditions for Use of Cross Pipes	Cross Pipe Sizes
12"	0.6	0'-9"	N/A	2'-1"	1'-9"	3 or more pipe culverts	3" Std (3.500" O.D.)
15"	0.7	0'-11"	N/A	2'-5"	2'-2"		
18"	0.8	1'-2"	N/A	2'-10"	2'-8"		
21"	0.9	1'-4"	N/A	3'-2"	3'-1"		
24"	0.9	1'-7"	N/A	3'-6"	3'-7"		
27"	1.0	1'-8"	N/A	3'-10"	3'-11"	3 or more pipe culverts	3 1/2" Std (4.000" O.D.)
30"	1.1	1'-10"	N/A	4'-2"	4'-4"	2 or more pipe culverts	
33"	1.2	1'-11"	4'-2"	4'-5"	4'-8"	All pipe culverts	
36"	1.3	2'-1"	4'-5"	4'-9"	5'-1"	All pipe culverts	4" Std (4.500" O.D.)
42"	1.5	2'-4"	4'-11"	5'-5"	5'-10"		
48"	1.7	2'-7"	5'-5"	5'-11"	6'-7"	All pipe culverts	5" Std (5.563" O.D.)
54"	2.0	3'-0"	5'-11"	6'-9"	7'-6"		
60"	2.2	3'-3"	6'-5"	7'-4"	8'-3"		
66"	2.4	3'-3"	6'-11"	7'-10"	8'-9"		
72"	2.7	3'-4"	7'-5"	8'-5"	9'-4"		

(1) The proper installation of the first cross pipe is critical for vehicle safety. Place the top of the first cross pipe no more than 6" above the flow line.

(2) Provide cross pipes, except the first bottom pipe, of the size shown in the table. Provide a 3 1#2" standard pipe (4" O.D.) for the first bottom pipe.

(3) Install the third cross pipe from the bottom of the culvert using a bolted connection. Ensure that riprap concrete does not flow into the cross pipe so as to permit disassembly of the bolted connection to allow cleanout access. At the Contractor's option, install all other cross pipes using the bolted connection details.

(4) Match cross slope as shown elsewhere in the plans. Cross slope of 6:1 or flatter is required for vehicle safety.

(5) Riprap placed beyond the limits shown will be paid for as concrete riprap in accordance with Item 432, "Riprap".

(6) Quantities shown are for one end of one reinforced concrete pipe (RCP) culvert. For multiple pipe culverts or for corrugated metal pipe (CMP) culverts, quantities will need to be adjusted. Riprap quantities are for contractor's information only.

MATERIAL NOTES:

Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (NPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.

Provide cross pipes that meet the requirements of ASTM A53 (Type E or S, Gr B), ASTM A500 (Gr B), or API 5L|X52.

Provide ASTM A307 bolts.

Galvanize all steel components, except concrete reinforcing, after fabrication. Repair galvanizing damaged during transport or construction in accordance with the specifications.

GENERAL NOTES:

Cross pipes are designed for a traversing load of 10,000 pounds at yield as recommended by Research Report 280-2F, "Safety Treatment of Roadside Parallel-Drainage Structures", Texas Transportation Institute, March 1981.

Safety end treatments (SET) shown herein are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the cross pipes.

Construct concrete riprap and all necessary inverts in accordance with the requirements of Item 432, "Riprap".

Payment for riprap and toewall is included in the Price Bid for each Safety End Treatment.

Texas Department of Transportation — Bridge Division Standard

SAFETY END TREATMENT
FOR 12" DIA TO 72" DIA PIPE CULVERTS
TYPE II ~ PARALLEL DRAINAGE

SETP-PD

FILE:	setpdpa-20.dgn	DN: GAF	CK: CAT	DW: JRP	CK: GAF
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY		SHEET NO.

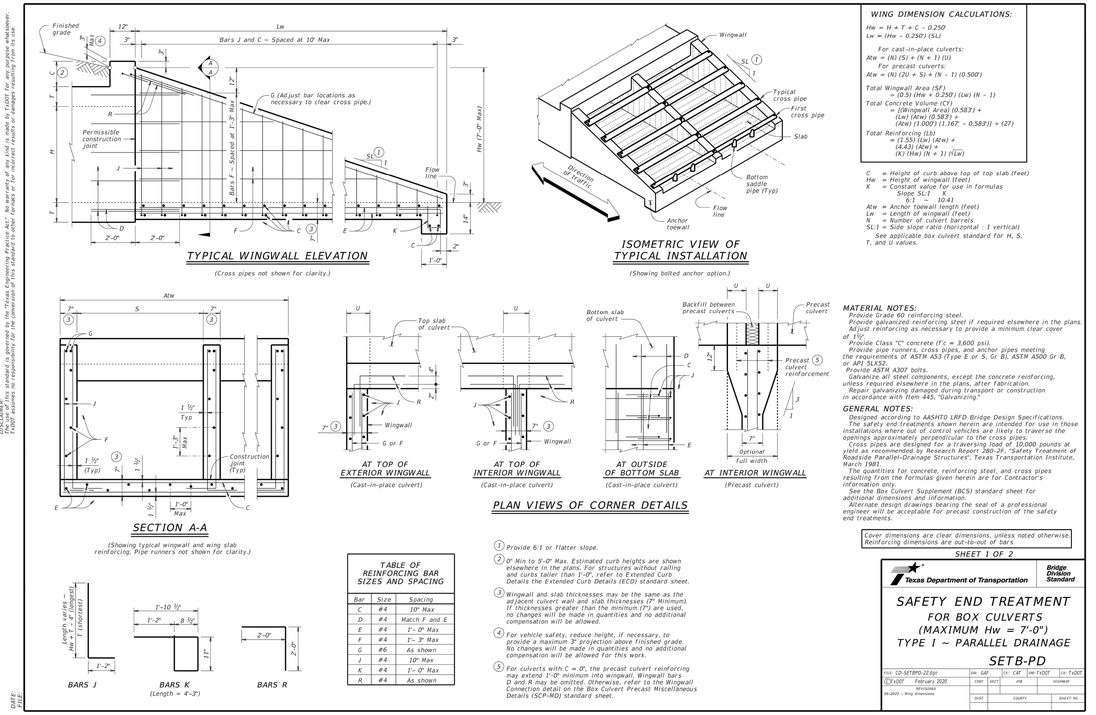


TABLE OF REINFORCING BAR SIZES AND SPACING

Bar	Size	Spacing
C	#4	10" Max
D	#4	Match F and E
E	#4	1'- 0" Max
F	#4	1'- 3" Max
G	#6	As shown
J	#4	10" Max
K	#4	1'- 0" Max
R	#4	As shown

WING DIMENSION CALCULATIONS:

Hw = H + T + C – 0.250'
Lw = (Hw – 0.250') (SL)

For cast-in-place culverts:
Atw = (N) (S) + (N + 1) (U)
For precast culverts:
Atw = (N) (2U + S) + (N – 1) (0.500')

Total Wingwall Area (SF)
= 10.5) (Hw + 0.250) (Lw) (N – 1)
Total Concrete Volume (CY)
= [(Wingwall Area) (0.583') + (Lw) (Atw) (0.583') + (Atw) (1.000') (1.167' – 0.583')] ÷ (27)
Total Reinforcing (Lb)
= (1.55) (Lw) (Atw) + (4.43) (Atw) + (K) (Hw) (N + 1) (1Lb)

C = Height of curb above top of top slab (feet)
Hw = Height of wingwall (feet)
K = Constant value for use in formulas

Slope SL:1	K
6:1 ~	10.41

Atw = Anchor toewall length (feet)
Lw = Length of wingwall (feet)
N = Number of culvert barrels
SL:1 = Side slope ratio (horizontal : 1 vertical)
See applicable box culvert standard for H, S, T, and U values.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel.

Provide galvanized reinforcing steel if required elsewhere in the plans. Adjust reinforcing as necessary to provide a minimum clear cover of 1½".

Provide Class "C" concrete (f'c = 3,600 psi).

Provide pipe runners, cross pipes, and anchor pipes meeting the requirements of ASTM A53 (Type E or S, Gr B), ASTM A500 Gr B, or API 5L|X52.

Provide ASTM A307 bolts.

Galvanize all steel components, except the concrete reinforcing, unless required elsewhere in the plans, after fabrication.

Repair galvanizing damaged during transport or construction in accordance with Item 445, "Galvanizing."

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.

The safety end treatments shown herein are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the cross pipes.

Cross pipes are designed for a traversing load of 10,000 pounds at yield as recommended by Research Report 280-2F, "Safety Treatment of Roadside Parallel-Drainage Structures", Texas Transportation Institute, March 1981.

The quantities for concrete, reinforcing steel, and cross pipes reflected in the formulas given herein are for Contractor's information only.

See the Box Culvert Supplement (BCS) standard sheet for additional dimensions and information.

Alternate design drawings bearing the seal of a professional engineer will be acceptable for precast construction of the safety end treatments.

Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.

(1) Provide 6:1 or flatter slope.

(2) 0' Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures without railing and curbs taller than 1'-0", refer to Extended Curb Details the Extended Curb Details (ECD) standard sheet.

(3) Wingwall and slab thicknesses may be the same as the adjacent culvert wall and slab thicknesses (7" Minimum). If thicknesses greater than the minimum (7") are used, no changes will be made in quantities and no additional compensation will be allowed.

(4) For vehicle safety, reduce height, if necessary, to provide a maximum 3" projection above finished grade. No changes will be made in quantities and no additional compensation will be allowed for this work.

(5) For culverts with C = 0", the precast culvert reinforcing may extend 1'-0" minimum into wingwall. Wingwall bars D and R may be omitted. Otherwise, refer to the Wingwall Connection detail on the Box Culvert Precast Miscellaneous Details (SCP-MD) standard sheet.

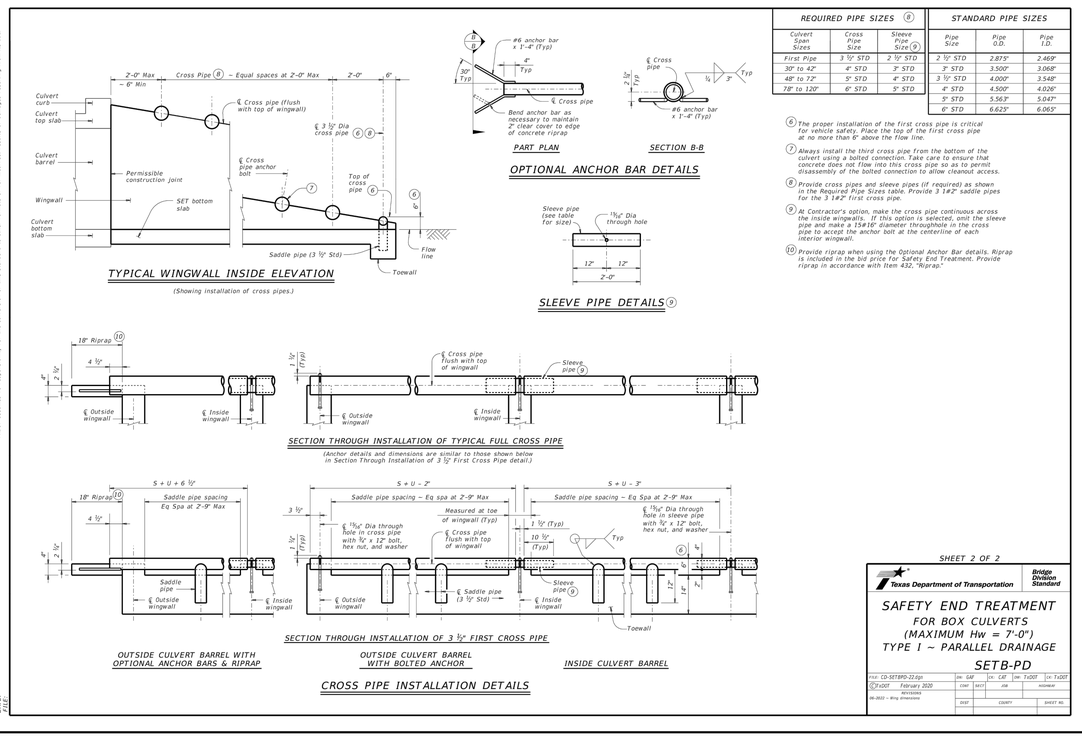
SHEET 1 OF 2

Texas Department of Transportation — Bridge Division Standard

SAFETY END TREATMENT
FOR BOX CULVERTS
(MAXIMUM Hw = 7'-0")
TYPE I ~ PARALLEL DRAINAGE

SETB-PD

FILE:	CD-SETBPD-22.dgn	DN: GAF	CK: CAT	DW: TxDOT	CK: TxDOT
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY		SHEET NO.
06-2022 – Wing dimensions					



REQUIRED PIPE SIZES (8)

Culvert Span Sizes	Cross Pipe Size	Sleeve Pipe Size (9)
First Pipe	3 1/2" STD	2 1/2" STD
30" to 42"	4" STD	3" STD
48" to 72"	5" STD	4" STD
78" to 120"	6" STD	5" STD

STANDARD PIPE SIZES

Pipe Size	Pipe O.D.	Pipe I.D.
2 1/2" STD	2.875"	2.469"
3" STD	3.500"	3.068"
3 1/2" STD	4.000"	3.548"
4" STD	4.500"	4.026"
5" STD	5.563"	5.047"
6" STD	6.625"	6.065"

(6) The proper installation of the first cross pipe is critical for vehicle safety. Place the top of the first cross pipe at no more than 6" above the flow line.

(7) Always install the third cross pipe from the bottom of the culvert using a bolted connection. Take care to ensure that concrete does not flow into this cross pipe so as to permit disassembly of the bolted connection to allow cleanout access.

(8) Provide cross pipes and sleeve pipes (if required) as shown in the Required Pipe Sizes table. Provide 3 1#2" saddle pipes for the 3 1#2" first cross pipe.

(9) At Contractor's option, make the cross pipe continuous across the inside wingwalls. If this option is selected, omit the sleeve pipe and make a 15#16" diameter throughhole in the cross pipe to accept the anchor bolt at the centerline of each interior wingwall.

(10) Provide riprap when using the Optional Anchor Bar details. Riprap is included in the bid price for Safety End Treatment. Provide riprap in accordance with Item 432, "Riprap."

SHEET 2 OF 2

Texas Department of Transportation — Bridge Division Standard

SAFETY END TREATMENT
FOR BOX CULVERTS
(MAXIMUM Hw = 7'-0")
TYPE I ~ PARALLEL DRAINAGE

SETB-PD

FILE:	CD-SETBPD-22.dgn	DN: GAF	CK: CAT	DW: TxDOT	CK: TxDOT
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY		SHEET NO.
06-2022 – Wing dimensions					

THIS SPACE INTENTIONALLY LEFT BLANK

Kimley»Horn
© 2024 KIMLEY–HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972–335–3580
WWW.KIMLEY–HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F–928

No.	REVISIONS	DATE	BY

STATE OF TEXAS — KYLE P. BROCKMAN — 131422 — LICENSED PROFESSIONAL ENGINEER
10/15/24

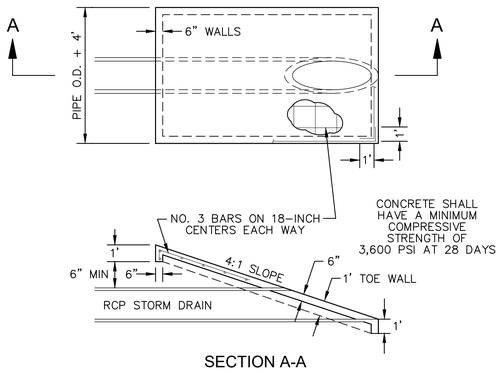
KHA PROJECT	063451880
DATE	AUGUST 2024
SCALE	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	SRL
CHECKED BY:	KPB

CONSTRUCTION DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

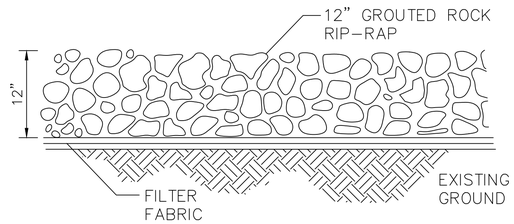
SHEET NUMBER
C-45

Plotted By: Goetzen, Johnathon Date: August 26, 2024 04:59:34pm File Path: K:\FRI_Civil\063451861-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



SLOPED END HEADWALL DETAIL

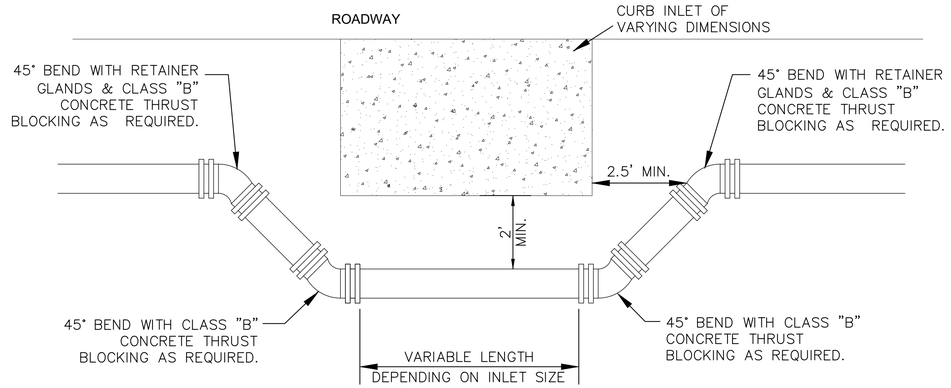
NTS



RIP-RAP SECTION DETAIL

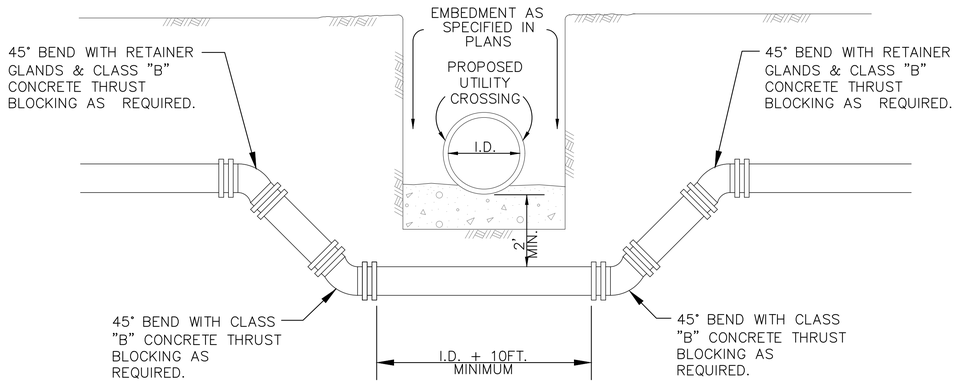
NTS

NOTE: ROCK RIP-RAP TO BE A MINIMUM DIAMETER OF 6 INCHES, BUT NOT TO EXCEED 18 INCHES.



WATER LINE ALIGNMENT AROUND CURB INLET

NTS



WATER LINE CROSSING UNDER DETAIL

NTS

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

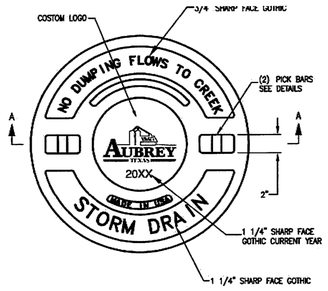
KHA PROJECT 063451880	
DATE	AUGUST 2024
SCALE:	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	AA
CHECKED BY:	KPB

CONSTRUCTION DETAILS

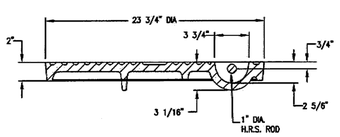
HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-46

Plotted By:Goertzen, Johnathon Date:August 26, 2024 04:59:37pm File Path:K:\FBL_Civil\063451861-High Pointe Ranch\Cad\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



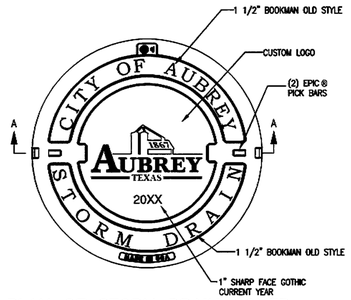
PLAN OF COVER



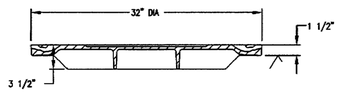
SECTION A–A OF COVER

STORM DRAIN INLET COVER

BASS & HAYS, COVER PART# 30024C82LID,
FRAME PART# 28024R RING
(MH–COV4)



PLAN OF STORM DRAIN COVER

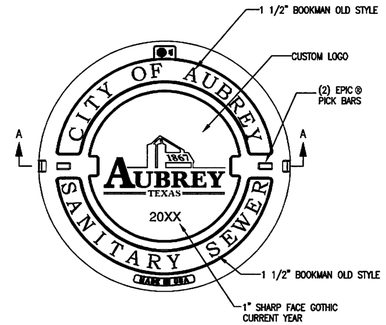


SECTION A–A OF COVER

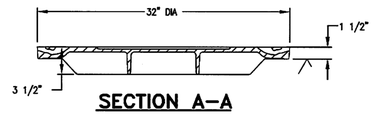
STORM DRAIN INLET COVER

BASS & HAYS COVER, PART# VRM30–LID98
FRAME, PART# VRM30 RING

(MH–COV5)



PLAN OF COVER



SECTION A–A

SANITARY SEWER COVER

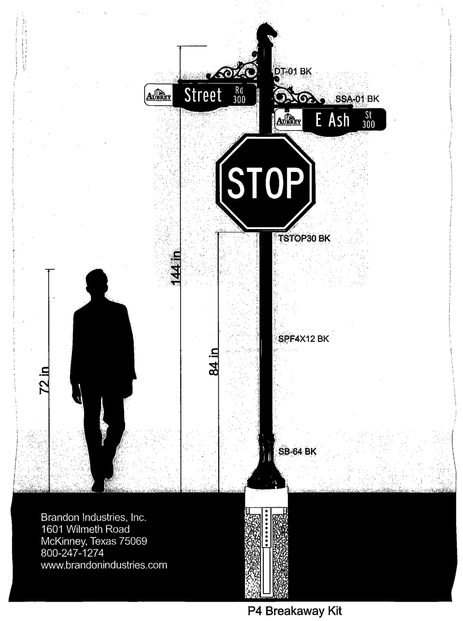
BASS & HAYS COVER, PART# VRM30–LID97
FRAME, PART# VRM30 RING

(MH–COV6)

Order # nnnnnn 02/29/2024
Customer ID - KEENLAND
Salesperson - TRAVIS

BRANDON INDUSTRIES

Substrate: .080 Aluminum
Vinyl Type: High Intensity White



P4 Breakaway Kit

Customer Approval Date

PLEASE NOTE: ALL COLORS SHOWN ARE APPROXIMATIONS AND MAY NOT BE REPRESENTATIVE OF FINISHED PRODUCTI

IMPORTANT: For your protection and ours, Brandon Industries, Inc. never begins a sign job before receiving written customer approval. Please check this proof carefully and mark any changes or corrections. Please provide your name (signature) on the approval form and return to Brandon Industries, Inc. as soon as possible. Forms received without a signature will result in production delays until an official signed approval is submitted. PRODUCTION DOES NOT BEGIN UNTIL PROOF IS SIGNED AND RETURNED. We regret any undetected errors that may occur through production, but cannot be held responsible for errors if the signs are manufactured per customer's "Approval".

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
KYLE P. BROCKMAN
131422
LICENSED PROFESSIONAL ENGINEER
10/15/24

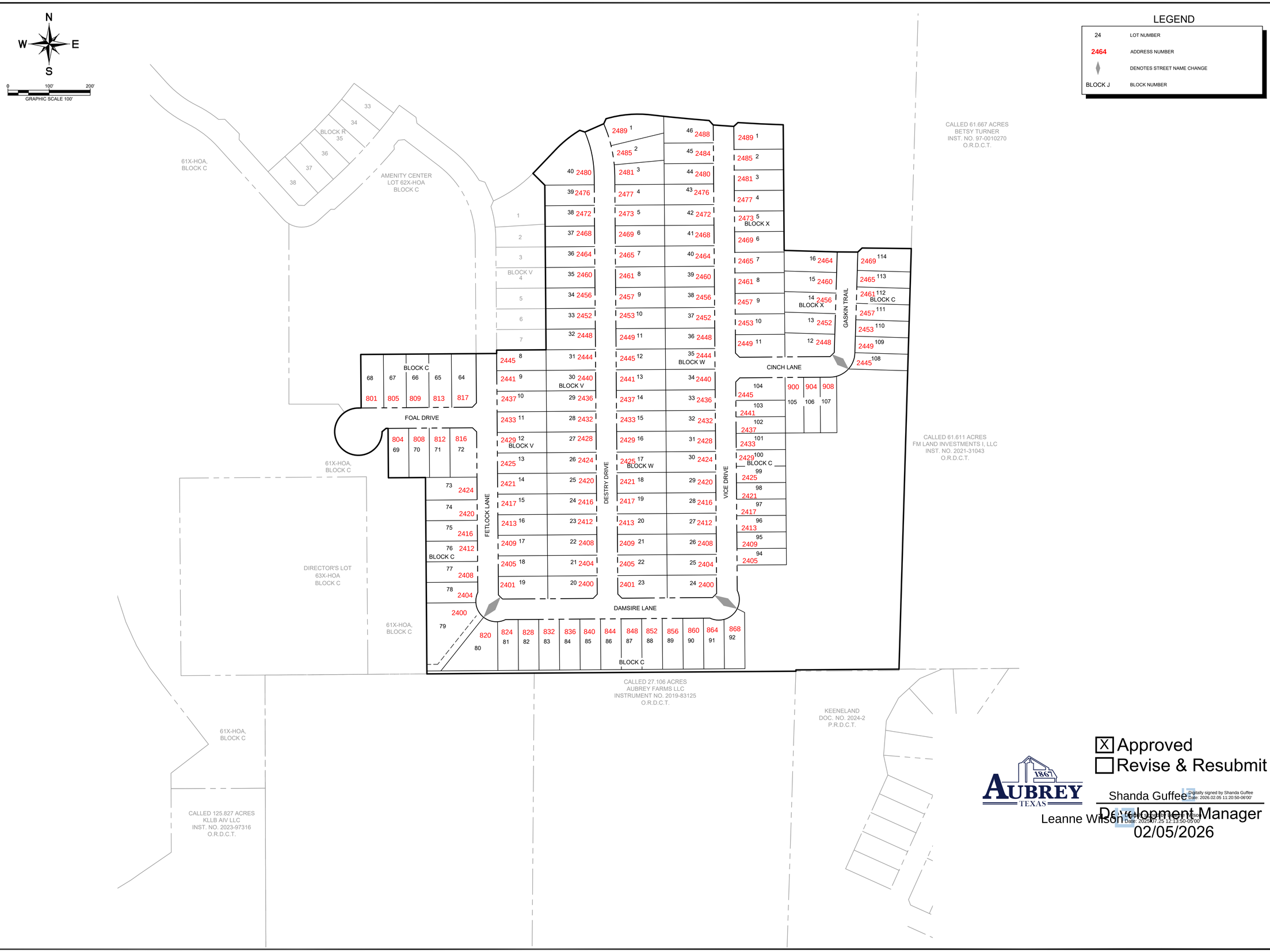
KHA PROJECT 063451880	
DATE	AUGUST 2024
SCALE	AS SHOWN
DESIGNED BY:	JRG
DRAWN BY:	AA
CHECKED BY:	KPB

CONSTRUCTION DETAILS

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

SHEET NUMBER
C-47

Plotted By: Goertzen, Johnathon Date: August 26, 2024 04:59:37pm File Path: K:\FRI_Civil\063451961-High Pointe Ranch\Civil\Phase 3\PlanSheets\C-Construction Details.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



X Approved
☐ Revise & Resubmit

Shanda Guffee
Digitally signed by Shanda Guffee
Date: 2026.02.05 11:20:50-06'00'
Development Manager
Leanne Wilson
Digitally signed by Leanne Wilson
Date: 2026.02.05 12:14:50-06'00'
02/05/2026

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.

6160 WARREN PARKWAY, SUITE 210, FRISCO, TX 75034
PHONE: 972-335-3580
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

KHA PROJECT	063451861
DATE	DECEMBER 2024
SCALE:	AS SHOWN
DESIGNED BY:	DKT
DRAWN BY:	GJL
CHECKED BY:	KPB

HIGHPOINTE RANCH
PHASE 3
CITY OF AUBREY
DENTON COUNTY, TEXAS

ADDRESS MAP

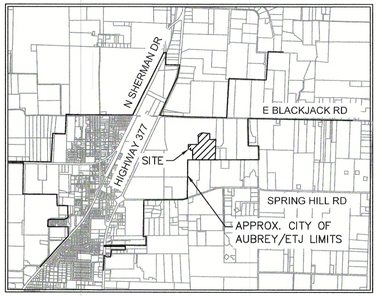
SHEET NUMBER
EX-3

Plotted By: Lox, Garrett Date: December 03, 2024 04:30:33pm File Path: \\kimley-horn.com\CN_LUB\FRI_Civil\063451861-High Pointe Ranch\Submittals\Address Maps\CAD Address Map\High Pointe Ranch PH3 Address Map.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

LAND USE TABLE :

LAND USE	ACREAGE	LOTS
RESIDENTIAL	20.630	145
HOA/OPEN SPACE	5.090	C-93X
STREET R.O.W.	5.180	-
TOTAL	30.900	146

CALLED 35.254 ACRES
ANDIRON TX 5, LLC
INST. NO. 2025-18701
O.R.D.C.T.



VICINITY MAP
SCALE: 1" = 4,000'

Notes :

1. All corners to be set where applicable after construction. Corners will be monumented with a 5/8 inch iron rod with red plastic cap stamped "KHA", unless otherwise noted.
2. Selling a portion of this addition by metes and bounds is a violation of City Ordinance and state law and is subject to fines and withholding of utilities and building permits.
3. All surface drainage easements shall be kept clear of fences, buildings, foundations, plantings and other obstructions to the operation and maintenance of the drainage facility.
4. Blocking the flow of water or constructing improvements in surface drainage easements, and filling or obstructing the floodway is prohibited.
5. The City of Aubrey will not be responsible for any damage, personal injury or loss of life or property occasioned by flooding conditions.
6. The existing creeks or drainage channels traversing along or across the addition will remain as open channels and will be maintained by the individual property owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across the lots.
7. Construction not completed within two years of approval subject to current City of Aubrey Subdivision Rules and Regulations.
8. No construction, without written approval from the City of Aubrey shall be allowed within an identified "FIRM" floodplain area, and then only after a detailed floodplain development permit including engineering plans and studies show that no rise in the Base Flood Elevation (BFE) will result, that no flooding will result, that no obstruction to the natural flow of water will result; and subject to all owners of the property affected by such construction becoming a party to the request. Where construction is permitted, all finish floor elevations shall be a minimum of two foot above the 100-year flood elevation.
9. The City of Aubrey will be responsible for the maintenance of all public infrastructure that is constructed in right-of-way or easements that are dedicated to the public or the City of Aubrey.
10. FLOOD STATEMENT: According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 48121C0265G, for Denton County, Texas and incorporated areas, dated 04/18/2011, as revised by LOMR Case No. 23-06-1599P, this property is located within Zone X (unshaded) defined as "Areas determined to be outside the 0.2% annual chance floodplain", Zone A defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (No Base Flood Elevations determined)", and Zone AE defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (Base Flood Elevations determined)".If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This flood statement shall not create liability on the part of the surveyor. Minimum finished floor elevations are at least 2 feet above the 100 year flood plain.
11. Water service to be provided by the City of Aubrey.
12. Sanitary Sewer to be provided by the City of Aubrey.
13. The City of Aubrey shall not be responsible for the maintenance of any private facilities, including but not limited to, HOA or High Pointe Ranch Municipal Utility District No. 1 open space lots, private parks, amenity center(s), development signage and entry features. Maintenance of these facilities shall be the responsibility of either the HOA or High Pointe Ranch Municipal Utility District No. 1, and the HOA and High Pointe Ranch Municipal Utility District No. 1 hold harmless the City of Aubrey, from all claims, damages and loses arising out of or resulting from performance of the obligations said HOA or High Pointe Ranch Municipal Utility District No. 1.
14. All utilities and drainage structures are located in the right-of-way except as shown.
15. All bearings shown are based on grid north of the Texas Coordinate System of 1983, North Central Zone (4202), North American Datum of 1983. All dimensions shown are ground distances. To obtain a grid distance, multiply the ground distance by the Project Combined Factor (PCF) of 0.999855348.
16. Line and Curve table located on Sheet 2.
17. Lots within proposed reclaimed flood zone are indicated on the plat with a ✱. No building permits will be issued on Lots 108 & 109, Block C until a Letter of Map Revision (LOMR) has been approved by FEMA.
18. All X lots shall be owned by HOA.

LEGEND

P.R.D.C.T.	PLAT RECORDS, DENTON COUNTY, TEXAS
R.P.R.D.C.T.	REAL PROPERTY RECORDS, DENTON COUNTY, TEXAS
O.R.D.C.T.	OFFICIAL RECORDS, DENTON COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT OF WAY
IRFC	CAPPED IRON ROD FOUND
HOA	HOMEOWNER'S ASSOCIATION
B.L.	BUILDING LINE
U.E.	UTILITY EASEMENT
S.S.E.	SANITARY SEWER EASEMENT
M.F.F.E.	MINIMUM FINISHED FLOOR ELEVATION
F.I.R.M.	FLOOD INSURANCE RATE MAP

LINE TYPE LEGEND

	BOUNDARY LINE
	EASEMENT LINE
	MATCH LINE
	BUILDING LINE

FINAL PLAT
HIGHPOINTE RANCH PHASE 3
30.900 ACRES

BLOCK C, LOTS 64-92, 93X-HOA, AND LOTS 94-114,
BLOCK V, LOTS 8-40, BLOCK W, LOTS 1-46,
& BLOCK X, LOTS 1-16

145 RESIDENTIAL LOTS
1 HOA LOT

F. TREVINO SURVEY, ABSTRACT NO. 1243
CITY OF AUBREY, DENTON COUNTY, TEXAS

Kimley»Horn
6160 Warren Parkway, Suite 210 · Tel. No. (972) 335-3580
Frisco, Texas 75034 FIRM # 10193822 · Fax No. (972) 335-3779

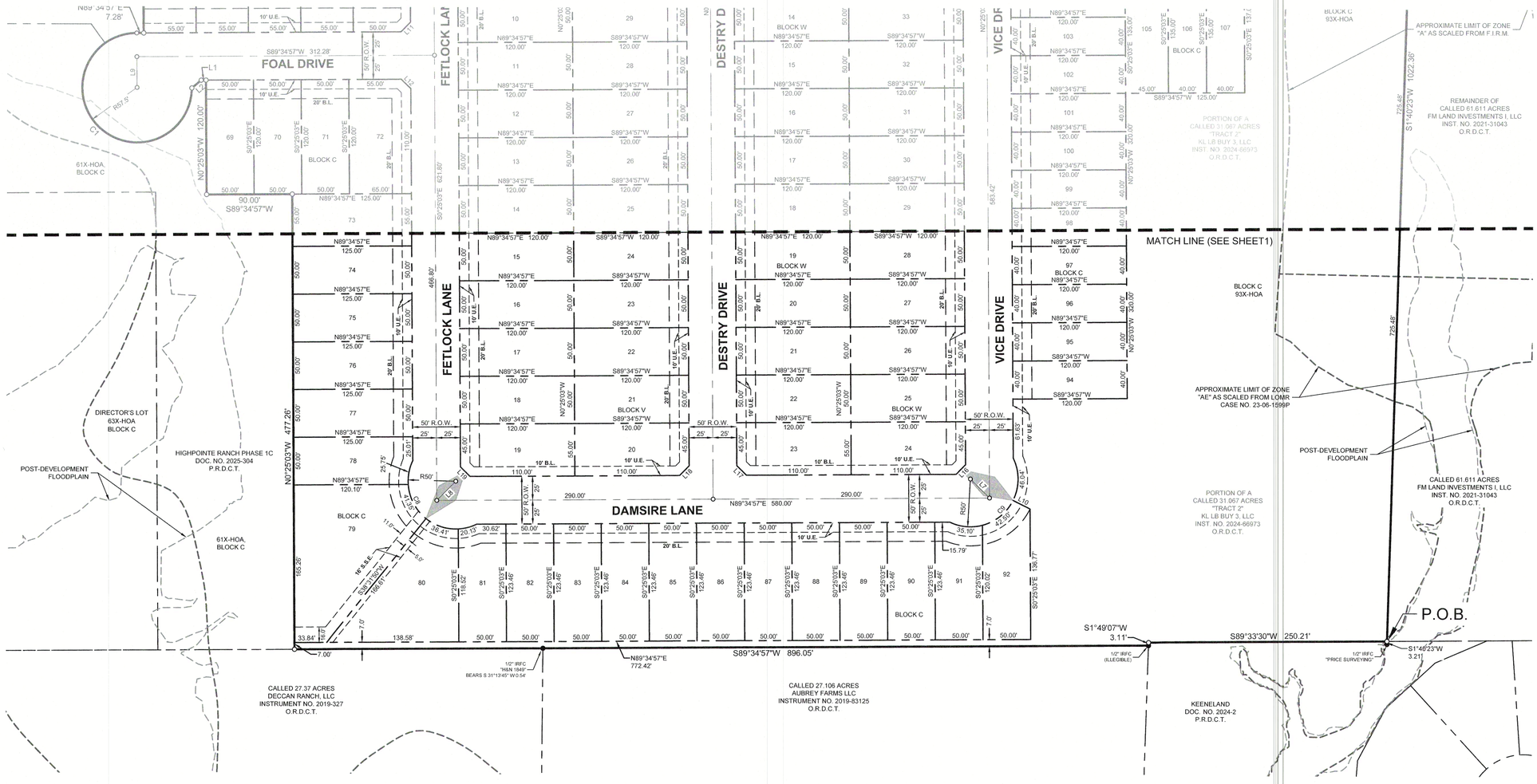
Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 60'	CDS	KHA	03/31/2026	063451861	1 OF 3

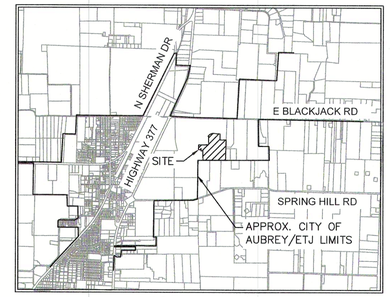
OWNER:
KL LB Buy 3, LLC c/o KL Services LLC
6900 E. Camelback Road, Suite 800
Scottsdale, AZ 85251
Phone: 786-753-8110
Contact: Nathan Holt

SURVEYOR:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Sylviana Gunawan, R.P.L.S.

APPLICANT:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Thomas L. Fletcher, P.E.

DWG NAME: K:\FRI_SURVEY\063500147-HIGH POINT RANCH - AUBREY\DWG\063451861 HIGH POINTE RANCH PHASE 3.DWG PLOTTED BY GUNAWAN, SYLVIANA 3/31/2026 2:49 PM LAST SAVED 3/31/2026 2:49 PM
© 2026 Kimley-Horn and Associates, Inc. All rights reserved





VICINITY MAP
SCALE: 1" = 4,000'

LEGEND

P.R.D.C.T.	PLAT RECORDS, DENTON COUNTY, TEXAS
R.P.R.D.C.T.	REAL PROPERTY RECORDS, DENTON COUNTY, TEXAS
O.R.D.C.T.	OFFICIAL RECORDS, DENTON COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT OF WAY
IRFC	CAPPED IRON ROD FOUND
HOA	HOMEOWNER'S ASSOCIATION
B.L.	BUILDING LINE
U.E.	UTILITY EASEMENT
S.S.E.	SANITARY SEWER EASEMENT
M.F.F.E.	MINIMUM FINISHED FLOOR ELEVATION
F.I.R.M.	FLOOD INSURANCE RATE MAP

LINE TYPE LEGEND

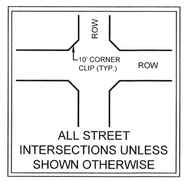
	BOUNDARY LINE
	EASEMENT LINE
	MATCH LINE
	BUILDING LINE

Notes :

1. All corners to be set where applicable after construction. Corners will be monumented with a 5/8 inch iron rod with red plastic cap stamped "KHA", unless otherwise noted.
2. Selling a portion of this addition by metes and bounds is a violation of City Ordinance and state law and is subject to fines and withholding of utilities and building permits.
3. All surface drainage easements shall be kept clear of fences, buildings, foundations, plantings and other obstructions to the operation and maintenance of the drainage facility.
4. Blocking the flow of water or constructing improvements in surface drainage easements, and filling or obstructing the floodway is prohibited.
5. The City of Aubrey will not be responsible for any damage, personal injury or loss of life or property occasioned by flooding conditions.
6. The existing creeks or drainage channels traversing along or across the addition will remain as open channels and will be maintained by the individual property owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across the lots.
7. Construction not completed within two years of approval subject to current City of Aubrey Subdivision Rules and Regulations.
8. No construction, without written approval from the City of Aubrey shall be allowed within an identified "FIRM" floodplain area, and then only after a detailed floodplain development permit including engineering plans and studies show that no rise in the Base Flood Elevation (BFE) will result, that no flooding will result, that no obstruction to the natural flow of water will result; and subject to all owners of the property affected by such construction becoming a party to the request. Where construction is permitted, all finish floor elevations shall be a minimum of two foot above the 100-year flood elevation.
9. The City of Aubrey will be responsible for the maintenance of all public infrastructure that is constructed in right-of-way or easements that are dedicated to the public or the City of Aubrey.
10. FLOOD STATEMENT: According to Federal Emergency Management Agency's Flood Insurance Rate Map No. 48121C0205G, for Denton County, Texas and incorporated areas, dated 04/18/2011, as revised by LOMR Case No. 23-06-1599P, this property is located within Zone X (unshaded) defined as "Areas determined to be outside the 0.2% annual chance floodplain", Zone A defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (No Base Flood Elevations determined)", and Zone AE defined as "Special flood hazard areas (SFHAs) subject to inundation by the 1% annual chance flood (Base Flood Elevations determined)"If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This flood statement shall not create liability on the part of the surveyor. Minimum finished floor elevations are at least 2 feet above the 100 year flood plain.
11. Water service to be provided by the City of Aubrey.
12. Sanitary Sewer to be provided by the City of Aubrey.
13. The City of Aubrey shall not be responsible for the maintenance of any private facilities, including but not limited to, HOA or High Pointe Ranch Municipal Utility District No. 1 open space lots, private parks, amenity center(s), development signage and entry features. Maintenance of these facilities shall be the responsibility of either the HOA or High Pointe Ranch Municipal Utility District No. 1, and the HOA and High Pointe Ranch Municipal Utility District No. 1 hold harmless the City of Aubrey, from all claims, damages and loses arising out of or resulting from performance of the obligations said HOA or High Pointe Ranch Municipal Utility District No. 1.
14. All utilities and drainage structures are located in the right-of-way except as shown.
15. All bearings shown are based on grid north of the Texas Coordinate System of 1983, North Central Zone (4202), North American Datum of 1983. All dimensions shown are ground distances. To obtain a grid distance, multiply the ground distance by the Project Combined Factor (PCF) of 0.999855348.
16. Lots within proposed reclaimed flood zone are indicated on the plat with a ✱. No building permits will be issued on Lots 108 & 109, Block C until a Letter of Map Revision (LOMR) has been approved by FEMA.
17. All X lots shall be owned by HOA.

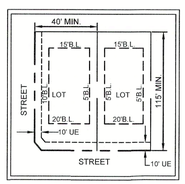
LINE TABLE		
NO.	BEARING	LENGTH
L1	S89°34'57"W	5.00'
L2	S49°35'53"W	12.77'
L3	S71°52'44"E	13.34'
L4	N24°22'22"E	13.35'
L5	S42°57'26"E	14.74'
L6	N46°36'46"E	13.63'
L7	S45°25'03"E	28.28'
L8	S44°34'57"W	28.28'
L9	N00°25'03"W	32.50'
L10	N53°29'56"W	20.00'
L11	N44°34'57"E	14.14'
L12	S45°25'03"E	14.14'
L13	S44°34'57"W	14.14'
L14	N45°37'40"E	14.40'
L15	S45°25'03"E	14.14'
L16	N44°34'57"E	14.14'
L17	S45°25'03"E	14.14'
L18	S44°34'57"W	14.14'
L19	S45°25'03"E	14.14'

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	269°17'43"	57.50'	270.26'	N45°03'54"W	81.82'
C2	1°03'50"	325.00'	6.03'	N44°13'34"E	6.03'
C3	15°14'14"	275.00'	73.13'	N51°18'46"E	72.92'
C4	23°03'59"	275.00'	110.71'	N85°03'48"E	109.97'
C5	2°01'20"	4009.00'	141.50'	S84°24'52"E	141.49'
C6	1°34'30"	4009.00'	110.20'	S87°11'56"E	110.20'
C7	23°00'05"	300.00'	120.43'	N11°55'06"W	119.63'
C8	141°41'02"	50.00'	123.64'	S45°25'03"E	94.46'
C9	141°41'02"	50.00'	123.64'	N44°34'57"E	94.46'
C10	87°54'34"	60.50'	92.83'	N45°37'40"E	83.98'

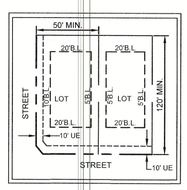


ALL STREET INTERSECTIONS UNLESS SHOWN OTHERWISE

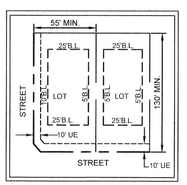
10'X10' CORNER CLIP AT STREET INTERSECTIONS
NTS



TYPICAL 40' LOT SETBACK DETAIL
NTS



TYPICAL 50' LOT SETBACK DETAIL
NTS



TYPICAL 55' LOT SETBACK DETAIL
NTS

GRAPHIC SCALE IN FEET
60 0 30 60 120
1" = 60' @ 24X36

FINAL PLAT

HIGHPOINTE RANCH PHASE 3

30.900 ACRES

BLOCK C, LOTS 64-92, 93X-HOA, AND LOTS 94-114,
BLOCK V, LOTS 8-40, BLOCK W, LOTS 1-46,
& BLOCK X, LOTS 1-16

145 RESIDENTIAL LOTS
1 HOA LOT

F. TREVINO SURVEY, ABSTRACT NO. 1243
CITY OF AUBREY, DENTON COUNTY, TEXAS

Kimley»Horn
6160 Warren Parkway, Suite 210 Tel. No. (972) 335-3580
Frisco, Texas 75034 FIRM # 10193822 Fax No. (972) 335-3779

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 60'	CDS	KHA	03/31/2026	063451861	2 OF 3

OWNER:
KL LB Buy 3, LLC c/o KL Services LLC
6900 E. Camelback Road, Suite 800
Scottsdale, AZ 85251
Phone: 786-753-8110
Contact: Nathan Holt

SURVEYOR:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Sylviana Gunawan, R.P.L.S.

APPLICANT:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Thomas L. Fletcher, P.E.

Copyright © 2026 Kimley-Horn and Associates, Inc. All rights reserved

3/31/2026 2:49 PM GUNAWAN, SYLVIANA 3/31/2026 2:51 PM LAST SAVED
DWG NAME: K:\PRJ_SURVEY\063500747-HIGH POINT RANCH - AUBREY\DWG\063451861 HIGH POINTE RANCH PHASE 3.DWG PLOTTED BY

OWNER'S CERTIFICATE

STATE OF TEXAS §

COUNTY OF DENTON §

WHEREAS KL LB BUY 3, LLC, is the sole owner of a tract of land situated in the F. Trevino Survey, Abstract No. 1243, Denton County, Texas and being all of the remainder of a called 31.067-acre tract of land described as Tract 2 in a deed to KL LB BUY 3, LLC, as recorded in Instrument Number 2024-66973, Official Records of Denton County, Texas, and being more particularly described as follows:

BEGINNING at a 5/8 inch iron rod with plastic cap stamped "KHA" set for the southeast corner of said Tract 2 on the northerly line of Keeneland, according to the plat thereof recorded in Document No. 2024-2 of the Plat Records of Denton County, Texas;

THENCE South 89°33'30" West, along the southerly line of said Tract 2 and the northerly line of said Keeneland, a distance of 250.21 feet to a 5/8 inch iron rod with plastic cap stamped "KHA" set for the northwest corner of said Keeneland;

THENCE South 01°49'07" West, along the westerly line of said Keeneland and continuing along the southerly line of said Tract 2, a distance of 3.11 feet to a 1/2 inch iron rod with an illegible plastic cap found for the northeast corner of a called 27.106 acre tract of land described in a deed to Aubrey Farms LLC, as recorded in Instrument No. 2019-83125 of the Official Records of Denton County, Texas;

THENCE South 89°34'57" West, continuing along said southerly line of said Tract 2 and along the northerly line of said 27.106 acre tract, and the northerly line of a called 27.37 acre tract of land described in a deed to Deccan Ranch, LLC, as recorded in Instrument No. 2019-327 of the Official Records of Denton County, Texas, a distance of 896.05 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the southeast corner of Highpointe Ranch Phase 1C, according to the plat thereof recorded in Document No. 2025-304 of the Plat Records of Denton County, Texas;

THENCE departing the northerly line of said 27.37 acre tract and along the westerly line of said Tract 2 and the easterly line of said Highpointe Ranch, Phase 1C, the following:

North 00°25'03" West, a distance of 477.26 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°34'57" West, a distance of 90.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 120.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°34'57" West, a distance of 5.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 49°35'53" West, a distance of 12.77 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a non-tangent curve to the right with a radius of 57.50 feet, a central angle of 269°17'43", and a chord bearing and distance of North 45°03'54" West, 81.82 feet;

In a westerly direction, with said non-tangent curve to the right, an arc distance of 270.26 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 89°34'57" East, a distance of 7.28 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 130.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 89°34'57" East, a distance of 330.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 8.20 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 89°34'57" East, a distance of 120.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 400.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 89°34'57" East, a distance of 120.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 00°25'03" West, a distance of 400.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 45°14'31" West, a distance of 40.60 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the northwest corner of said Tract 2, common to the northeast corner of said Highpoint Ranch Phase 1C, and an ell corner of a called 65.626 acre tract of land described as Tract 1 in a deed to KL LB BUY 3, as recorded in Instrument Number 2024-66973 of the Official Records of Denton County, Texas, same being on the southerly line of Highpointe Ranch Phase 2, according to the plat thereof recorded in Document No. 2025-460 of the Plat Records of Denton County, Texas, and at the beginning of a non-tangent curve to the left with a radius of 325.00 feet, a central angle of 01°03'50", and a chord bearing and distance of North 44°13'34" East, 6.03 feet;

THENCE along the northerly line of said Tract 2 and the southerly and westerly lines of said Highpointe Ranch Phase 2, the following:

In a northerly direction, with said non-tangent curve to the left, an arc distance of 6.03 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 43°41'39" East, a distance of 75.68 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a tangent curve to the right with a radius of 275.00 feet, a central angle of 15°14'14", and a chord bearing and distance of North 51°18'46" East, 72.92 feet;

In an easterly direction, with said tangent curve to the right, an arc distance of 73.13 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 71°52'44" East, a distance of 13.34 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 66°13'51" East, a distance of 50.00 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 24°22'22" East, a distance of 13.35 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a non-tangent curve to the right with a radius of 275.00 feet, a central angle of 23°03'59", and a chord bearing and distance of North 85°03'48" East, 109.97 feet;

In an easterly direction, with said non-tangent curve to the right, an arc distance of 110.71 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a reverse curve to the left with a radius of 4,009.00 feet, a central angle of 02°01'20", and a chord bearing and distance of South 84°24'52" East, 141.49 feet;

In an easterly direction, with said reverse curve to the left, an arc distance of 141.50 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 42°57'26" East, a distance of 14.74 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 85°55'37" East, a distance of 50.15 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 46°36'46" East, a distance of 13.63 feet to a 5/8" iron rod with plastic cap stamped "KHA" set at the beginning of a non-tangent curve to the left with a radius of 4,009.00 feet, a central angle of 01°34'30", and a chord bearing and distance of South 87°12'56" East, 110.20 feet;

In an easterly direction, with said non-tangent curve to the left, an arc distance of 110.20 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the northerly northeast corner of said Tract 2, common to an ell corner of said Highpointe Ranch Phase 2;

South 00°25'03" East, a distance of 305.27 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 88°19'37" East, a distance of 128.96 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°44'37" East, a distance of 50.02 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

North 46°10'57" East, a distance of 14.26 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for corner;

South 89°18'30" East, a distance of 119.45 feet to a 5/8" iron rod with plastic cap stamped "KHA" set for the southerly northeast corner of said Tract 2, common to the southeast corner of said Highpointe Ranch Phase 2, being on the westerly line of a called 35.254 acre tract of land described in a deed to Andiron TX 5, LLC, as recorded in Instrument No. 2025-18701 of the Official Records of Denton County, Texas;

THENCE South 01°40'23" West, along the easterly line of said Tract 2, the westerly line of said 35.254 acre tract, and the westerly line of a called 61.611 acre tract of land described in a deed to FM Land Investments I, LLC, as recorded in Instrument No. 2021-31043 of the Official Records of Denton County, Texas, a distance of 1,022.36 feet to the **POINT OF BEGINNING** and containing 30.900 acres (1,346,003 square feet) of land, more or less.

OWNER'S CERTIFICATIONS

STATE OF TEXAS §

COUNTY OF DENTON §

NOW, THEREFORE KNOW ALL MEN BY THESE PRESENTS:

THAT **KL LB BUY 3, LLC,** acting herein by and through their duly authorized officers, do hereby adopt this plat designating the hereinabove described property as **HIGHPOINTE RANCH PHASE 3**, an addition to the City of Aubrey, Texas, and do hereby dedicate, in fee simple, to the public use forever, the streets and alleys shown thereon. The streets and alleys are dedicated for street purposes. The easements and public use areas, as shown, are dedicated for the public use forever, for the purposes indicated on this plat. In addition, utility easements may also be used for the mutual use and accommodation of all public utilities desiring to use or using the same unless the easement limits the use to particular utilities, said use by public utilities being subordinate to the public's and City of Aubrey's use thereof. The City of Aubrey and public utility entities shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs, or other improvements or growths which may in any way endanger or interfere with the construction, maintenance, or efficiency of their respective systems in said easements. The City of Aubrey and public utility entities shall at all times have the full right of ingress and egress to or from their respective easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining, reading meters, and adding to or removing all or parts of their respective systems without the necessity at any time of procuring permission from anyone.

Witness this _____ day of _____, 2026.

BY: **KL LB BUY 3, LLC**, a Delaware limited liability company

BY: _____
Name: Edward "Ed" Hadley
Title: Authorized Signatory

STATE OF ARIZONA §

COUNTY OF MARICOPA §

On this _____ day of _____, 2026, before me personally appeared _____ (name of signer), whom I know personally, and acknowledged that he/she executed the same.

_____
Notary Public, State of Arizona

SURVEYOR'S CERTIFICATION

KNOW ALL MEN BY THESE PRESENTS:

That I, Sylviana Gunawan, do hereby certify that a survey was made on the ground of the property described hereon under my personal supervision and the iron rods were placed in accordance with the subdivision rules and regulations of the City of Aubrey, Texas.

_____
Sylviana Gunawan
Registered Professional Land Surveyor No. 6461
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone 972-335-3580

STATE OF TEXAS
REGISTERED
SYLVIANA GUNAWAN
6461
PROFESSIONAL
LAND SURVEYOR

STATE OF TEXAS §

COUNTY OF COLLIN §

BEFORE ME, the undersigned, a Notary Public in and for The State of Texas, on this day personally appeared Sylviana Gunawan, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and considerations therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31ST day of March, 2026.

_____
Notary Public, State of Texas

ELIZABETH M. HOLLIS
Notary Public, State of Texas
Comm. Expires 11-10-2029
Notary ID 133441587

CERTIFICATE OF FINAL PLAT APPROVAL

This Final Plat was reviewed and approved by the City Council of the City of Aubrey, Texas the _____ day of _____, 2026.

_____
CHRIS RICH, MAYOR
CITY OF AUBREY, TEXAS

FINAL PLAT

HIGHPOINTE RANCH PHASE 3

30.900 ACRES

BLOCK C, LOTS 64-92, 93X-HOA, AND LOTS 94-114,
BLOCK V, LOTS 8-40, BLOCK W, LOTS 1-46,
& BLOCK X, LOTS 1-16

145 RESIDENTIAL LOTS
1 HOA LOT

F. TREVINO SURVEY, ABSTRACT NO. 1243
CITY OF AUBREY, DENTON COUNTY, TEXAS

Kimley»Horn
6160 Warren Parkway, Suite 210
Frisco, Texas 75034 FIRM # 10193822
Tel. No. (972) 335-3580
Fax No. (972) 335-3779

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	CDS	KHA	03/31/2026	063451861	3 OF 3

OWNER:
KL LB Buy 3, LLC c/o KL Services LLC
6900 E. Camelback Road, Suite 800
Scottsdale, AZ 85251
Phone: 786-753-8110
Contact: Nathan Holt

SURVEYOR:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Sylviana Gunawan, R.P.L.S.

APPLICANT:
Kimley-Horn and Associates, Inc.
6160 Warren Pkwy., Suite 210
Frisco, Texas 75034
Phone: 972-335-3580
Contact : Thomas L. Fletcher, P.E.

3/31/2026 2:49 PM Copyright © 2026 Kimley-Horn and Associates, Inc. All rights reserved

DWG NAME: K:\FRI_SURVEY\063451861-HIGH POINT RANCH - AUBREY\DWG\063451861 HIGH POINTE RANCH PHASE 3.DWG PLOTTED BY GUNAWAN, SYLVIANA 3/31/2026 2:51 PM LAST SAVED

Kimley»Horn

April 2, 2026

Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1231 Greenway Drive, Suite 800
Irving, TX 75038

Re: ***Letter of Substantial Completion***
Highpointe Ranch Phase 3 Clearing & Grading

Ms. Hepner:

Kimley-Horn has reviewed the construction of the subject project performed by De Leon Excavating. As of April 2, 2026, Clearing & Grading for Highpointe Ranch Phase 3 construction was deemed substantially complete. A copy of the latest pay application is provided showing substantial completion of Phase 3 items.

Please feel free to contact me should you have any questions.

Sincerely,

High Pointe Ranch Municipal Utility District No. 1
By: Kimley-Horn & Associates, Inc.

Kyle Brockman, P.E.
Project Manager

Kimley»Horn

April 2, 2026

Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1231 Greenway Drive, Suite 800
Irving, TX 75038

Re: ***Letter of Substantial Completion***
Highpointe Ranch Phase 3 Paving

Ms. Hepner:

Kimley-Horn has reviewed the construction of the subject project performed by Gilco Contracting, Inc. As of April 2, 2026, Paving for Highpointe Ranch Phase 3 construction was deemed substantially complete. A copy of the latest pay application is provided showing substantial completion of Phase 3 items.

Please feel free to contact me should you have any questions.

Sincerely,

High Pointe Ranch Municipal Utility District No. 1
By: Kimley-Horn & Associates, Inc.

Kyle Brockman, P.E.
Project Manager

April 2, 2026

Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1231 Greenway Drive, Suite 800
Irving, TX 75038

Re: ***Letter of Substantial Completion***
Highpointe Ranch Phase 3 Utilities

Ms. Hepner:

Kimley-Horn has reviewed the construction of the subject project performed by Interstate Pipeline Utility Construction, LLC. As of April 2, 2026, Utilities for Highpointe Ranch Phase 3 construction was deemed substantially complete. A copy of the latest pay application is provided showing substantial completion of Phase 3 items.

Please feel free to contact me should you have any questions.

Sincerely,

High Pointe Ranch Municipal Utility District No. 1
By: Kimley-Horn & Associates, Inc.

Kyle Brockman, P.E.
Project Manager

October 7, 2025

Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

RE: **Highpointe Ranch Phase 3 Paving Package**

Pay Estimate No: 2

Dear Board,

The attached Pay Estimate #2 was received from Gilco Contracting, Inc. as it relates to the construction of the Highpointe Ranch Phase 3 Paving Package.

Based upon site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation and projected completion as of 9/30/2025, Kimley-Horn is in agreement with the amount of work illustrated on the attached estimate which indicates a total balance due in the amount of:

$ 662,603.40

Please let us know if you have any questions or need further assistance in processing this estimate.

Sincerely,

Aubrey M. Brockman, PE
TBPE Registration No. F-928

Attachments

cc: Gilco Contracting, Inc.
Lennar Homes

Kimley»Horn

PROGRESS ESTIMATE

Progress Period: September 1, 2025 TO September 30, 2025

Pay Estimate No: 2
Project Name: Highpointe Ranch Phase 3 Paving Package
Project Number: 063451879
Contract Date: 6/2/2025

OWNER
Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

CONTRACTOR
Gilco Contracting, Inc.
6331 Southwest Blvd.
Benbrook, TX 76132

Original Contract Amount:	$	916,343.80
Change Orders: (see attached summary)		*$0.00*
Revised Contract Amount:	$	916,343.80
Amount Placed to Date:	$	857,082.80
Less 10% Retainage:	$	85,708.28
Total Earned Less Retainage:	$	771,374.52

Previous Payments:

Progress Estimate #	Invoice Date	Total Invoice Amount
1	8/31/2025	**$ 108,771.12**
		$ -
		$ -
		$ -
		$ 108,771.12

Balance to finish:	$	59,261.00
Amount Due This Period:	**$**	**662,603.40**

High Pointe Ranch Phase 3 Paving	
Original Contract Time to SubCom (Days):	35
Original Contract Time to Final Completion (Days)	35
Approved Time Extensions:	0
Approved Change Order Days:	0
Revised Contract Time:	35
Days Remaining:	35
Notice to Proceed:	8/4/2025
Construction Start (+ 7 days):	8/11/2025
Original Substantial Completion:	9/15/2025
Revised Substantial Completion:	9/15/2025
Final Completion Date:	10/13/2025

ENGINEER'S RECOMMENDATION STATEMENT

I, Aubrey M. Brockman, PE, engineer of record with Kimley-Horn & Associates, Inc., based on my knowledge, information and belief, recommend approval of this draw request. Recommendation is based on site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation. In my opinion, Contractor's work has progressed to the point indicated, subject to any qualifications stated in the recommendation. In the case of unit price work, the recommendation of payment includes determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests. This recommendation is not a representation that my observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work, or involved detailed inspections.

Recommended for Approval:

10/7/2025
Aubrey M. Brockman, PE Date
Kimley-Horn and Associates, Inc.
TBPE Registration No. F-928

1698

OFFICE PHONE
(817) 735-1600

GILCO CONTRACTING, INC.
6331 SOUTHWEST BLVD
BENBROOK, TEXAS 76132

FAX NUMBER
(817) 735-1613

LENNAR HOMES OF TEXAS LAND & CONST, LTD.
1707 N. MARKET PLACE BLVD., SUITE 100
IRVING, TEXAS 75063

ATTN: Aaron Woods
Supply Pro

ESTIMATE NUMBER: TWO

DATE: 9/30/2025

PROJECT: HIGHPOINTE RANCH PHASE 3

GILCO'S JOB NUMBER: 1698

PAY PERIOD FROM: SEPTEMBER 1, 2025 TO SEPTEMBER 30, 2025

INVOICE NO: 1698-002

ITEM NO	DESCRIPTION	CONTRACT QUANTITY	UNIT	UNIT PRICE	CONTRACT PRICE	QTY TO DATE	AMOUNT TO DATE	QTY THIS ESTIMATE	TOTAL THIS EST	% COMP.
	PAVING IMPROVEMENTS									
1	6" THICK CONCRETE PAVEMENT	15,840	SY	$46.40	$734,976.00	15,840	$734,976.00	15,840	$734,976.00	100.00%
2	6" LIME SUBGRADE	16,824	SY	$3.20	$53,836.80	16,824	$53,836.80			100.00%
3	LIME MATERIAL @ 27 #/SY	227	TON	$310.00	$70,370.00	167	$51,770.00			73.57%
4	REMOVE TYPE III BARRICADE	4	EA	$500.00	$2,000.00	4	$2,000.00			100.00%
5	24" SOLID WHITE CROSSWALK LINE (TXDOT PM(4)-22)	240	LF	$18.90	$4,536.00					
6	TYPE W1 1-2 & W13-1P SIGN	5.0	EA	$1,840.00	$9,200.00					
7	STREET NAME SIGN (2 BLADES PER) WITH POST	3	EA	$1,575.00	$4,725.00					
8	COMBINATION STOP SIGN AND STREET SIGN (2 BLADES PER) WITH POST	3	EA	$2,100.00	$6,300.00					
9	5' WIDE, (4" THICK) CONCRETE SIDEWALK	400	LF	$39.75	$15,900.00					
10	TRAFFIC CONTROL	1	LS	$2,500.000	$2,500.00	1.00	$2,500.00	0.50	$1,250.00	100.00%
	BONDS									
1	PAYMENT, PERFORMANCE AND MAINTENANCE BOND	1	LS	$12,000.00	$12,000.00	1	$12,000.00			100.00%
	TOTAL AMOUNT				**$916,343.80**		**$857,082.80**		**$736,226.00**	

ORIGINAL CONTRACT AMOUNT:	**$916,343.80**	
TOTAL CONTRACT AMOUNT:	$916,343.80	
TOTAL AMOUNT TO DATE:	$857,082.80	
10.00% RETAINAGE:	$85,708.28	
SUB TOTAL:	$771,374.52	
TOTAL THIS ESTIMATE:	$736,226.00	**GROSS AMOUNT**
10.00% RETAINAGE:	$73,622.60	
SUBTOTAL THIS ESTIMATE:	$662,603.40	
PREVIOUS ESTIMATE:	$108,771.12	
PAYMENT AMOUNT:	$662,603.40	

November 11, 2025

Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

RE: **Highpointe Ranch Phase 2 & 3 Clearing & Grading Package**

Pay Estimate No: 6

Dear Board,

The attached Pay Estimate #6 was received from De Leon Excavating as it relates to the construction of the Highpointe Ranch Phase 2 & 3 Clearing & Grading Package.

Based upon site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation and projected completion as of 10/5/2025, Kimley-Horn is in agreement with the amount of work illustrated on the attached estimate which indicates a total balance due in the amount of:

$ 67,950.00

Please let us know if you have any questions or need further assistance in processing this estimate.

Sincerely,

Aubrey M. Brockman, PE
TBPE Registration No. F-928

Attachments

cc: De Leon Excavating
Lennar Homes

Kimley»Horn

PROGRESS ESTIMATE

Progress Period: December 21, 2024 TO October 5, 2025

Pay Estimate No: 6
Project Name: Highpointe Ranch Phase 2 & 3 Clearing & Grading Package
Project Number: 063451879
HW Contract Number:
Contract Date: 6/26/2024

OWNER
Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

CONTRACTOR
De Leon Excavating
13475 Reeder Road Ste 100
Forney, TX 75126

Original Contract Amount:	$	1,744,286.00
Change Orders: (see attached summary)		*-$330,997.50*
Revised Contract Amount:	$	1,413,288.50
Amount Placed to Date:	$	1,278,488.50
Less 10% Retainage:	$	127,848.85
Total Earned Less Retainage:	$	1,150,639.65

Previous Payments:

Progress Estimate #	Invoice Date	Total Invoice Amount
	7/31/2024	$ **201,542.40**
	8/30/2024	$ **482,317.20**
	9/30/2024	$ **370,210.05**
	11/30/2024	$ **6,750.00**
	12/19/2024	$ **21,870.00**
		$ **1,082,689.65**

Balance to finish:	$	134,800.00
Amount Due This Period:	**$**	**67,950.00**

High Pointe Ranch Phase 1A & 1B Clearing and Grading	
Original Contract Time to SubCom (Days):	100
Original Contract Time to Final Completion (Days)	10
Approved Time Extensions:	0
Approved Change Order Days:	0
Revised Contract Time:	100
Days Remaining:	-366
Notice to Proceed:	6/26/2024
Construction Start (+ 7 days):	7/3/2024
Original Substantial Completion:	10/11/2024
Revised Substantial Completion:	10/11/2024
Final Completion Date:	10/14/2024

ENGINEER'S RECOMMENDATION STATEMENT

I, Aubrey M. Brockman, PE, engineer of record with Kimley-Horn & Associates, Inc., based on my knowledge, information and belief, recommend approval of this draw request. Recommendation is based on site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation. In my opinion, Contractor's work has progressed to the point indicated, subject to any qualifications stated in the recommendation. In the case of unit price work, the recommendation of payment includes determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests. This recommendation is not a representation that my observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work, or involved detailed inspections.

Recommended for Approval:

11/11/2025
Aubrey M. Brockman, PE Date
Kimley-Horn and Associates, Inc.
TBPE Registration No. F-928

APPLICATION AND CERTIFICATE FOR PAYMENT

AIA DOCUMENT G702

☐ OWNER ☐ ARCHITECT ☐ CONTRACTOR

TO:
Lennar Homes
1707 Market Place Blvd Suite 100
Irving, TX 75063

FROM:
De Leon Fence & Construction Services
13475 Reeder Road Ste 100
Forney, TX 75126

PROJECT:
Highpointe Ranch Phase 2 & 3

Aubrey, TX

aaron.woods@lennar.com
Kyle.Brockman@kimley-horn.com

INVOICE #: INV25366

PERIOD TO: 10/5/2025

PROJECT #: D24170

APPLICATION #: 6

Distribution to:
☐ OWNER
☐ ARCHITECT
☐ CONTRACTOR

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for Payment, as shown below, in connection with the Contract.
Continuation Sheet, AIA Document G703, is attached.

1	**ORIGINAL CONTRACT SUM**	$1,744,286.00
2	**Net Change by Change Orders or Additional Work**	$ (330,997.50)
3	**CONTRACT SUM TO DATE (Line 1+2)**	$1,413,288.50
4	**TOTAL COMPLETED & STORED TO DATE** (Column G on G703)	$1,278,519.00
5	**RETAINAGE: 10 % of Completed Work**	$127,851.90
	a. ____% of Completed Work $ ____ (Columns D + E on G703)	
	b. ____% of Stored Material $ ____ (Column F on G703)	
	Total Retainage (Line 5a = 5b)	$127,851.90
6	**TOTAL EARNED LESS RETAINAGE** (Line 4 less Line 5 Total)	$1,150,667.10
7	**LESS PREVIOUS CERTIFICATES FOR PMT**	$1,082,717.10
8	**CURRENT PAYMENT DUE**	$67,950.00
9	**BALANCE TO FINISH, PLUS RETAINAGE** (Line 3 Less Line 6)	$262,621.40

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months	$31,800.00	-$438,297.50
Total approved this month	$75,500.00	$0.00
TOTALS	$107,300.00	-$438,297.50
Net Changes By Change Order	-$330,997.50	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

BY: Paul Deg Deeb Date: 10/3/2025

State of: Texas
County of: Kaufman
Subscribed and sworn to before me this 3rd day of October, 2025.

Notary Public:
My Commission Expires:

Alan Armando Salazar Santibanez
My Commission Expires
7/13/2026
Notary ID 133857423

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to the Owner that to the best of the Architect's knowledge,information,and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents,and the Contractor the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED . . . . . $_____

(attach explanation if amount certified differs from the amount applied for. Initial all figures on this Application and on the Continuation Sheet that are changed to conform to the amount certified.)

ARCHITECT:

BY:_____ DATE:_____

This Certificate is not negotiable. THE AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

Application No: 6
Application Date: 10/3/2025
To: 10/5/2025

Contract: Highpointe Ranch Phase 2 & 3

Invoice #: INV25366

ITEM	DESCRIPTION	UNIT	QTY	UNIT PRICE	CONTRACT AMOUNT	APP #1	APP #2	APP #3	APP #4	APP #5	QTY THIS EST	QTY TO DATE	COST TO DATE	PREVIOUS COST	COST THIS ESTIMATE	%
1	Clearing and Grubbing (1)	AC	80.00	$ 2,000.00	$ 160,000.00	80.00						80.00	$ 160,000.00	$ 160,000.00	$ -	100%
2	On-Site Excavation for Phase 2 & 3 grading(2)	CY	96,000.000	$ 2.25	$ 216,000.00	19,200.00	48,000.00	28,800.00				96,000.00	$ 216,000.00	$ 216,000.00	$ -	100%
3	On-site Excavation for Stockpile Location #1(3)	CY	75,000.00	$ 2.25	$ 168,750.00		37,500.00	37,500.00				75,000.00	$ 168,750.00	$ 168,750.00	$ -	100%
4	On-site Excavation for Stockpile Location #2(3)	CY	55,000.00	$ 3.00	$ 165,000.00		27,500.00	27,500.00				55,000.00	$ 165,000.00	$ 165,000.00	$ -	100%
5	On-site Excavation for Stockpile Location #3(3)	CY	40,000.00	$ 3.00	$ 120,000.00		20,000.00	20,000.00				40,000.00	$ 120,000.00	$ 120,000.00	$ -	100%
6	On-site Excavation for Stockpile Location #4(3)	CY	15,000.00	$ 3.00	$ 45,000.00		7,500.00	7,500.00				15,000.00	$ 45,000.00	$ 45,000.00	$ -	100%
7	Rough Lot Grading	EA	362.00	$ 250.00	$ 90,500.00		150.00	212.00				362.00	$ 90,500.00	$ 90,500.00	$ -	100%
8	Final Lot Grading	EA	362.00	$ 250.00	$ 90,500.00							0.00	$ -	$ -	$ -	0%
9	Excavation of Sediment Ponds	CY	6,700.00	$ 3.00	$ 20,100.00		6,700.00					6,700.00	$ 20,100.00	$ 20,100.00	$ -	100%
10	Perforated CMP Riser Structure - sediment pond (temporary outfall)	EA	2.00	$ 13,475.00	$ 26,950.00			2.00				2.00	$ 26,950.00	$ 26,950.00	$ -	100%
11	24" CMP Outfall Pipe - sediment pond	LF	270.00	$ 55.00	$ 14,850.00			270.00				270.00	$ 14,850.00	$ 14,850.00	$ -	100%
12	Remove Perforated CMP Riser Structure - sediment pond	EA	2.00	$ 5,000.00	$ 10,000.00							0.00	$ -	$ -	$ -	0%
13	Remove 24" CMP Outfall Pipe - sediment pond	LF	270.00	$ 65.00	$ 17,550.00							0.00	$ -	$ -	$ -	0%
14	Backfill Sediment Pond from stockpile	CY	6,700.00	$ 2.50	$ 16,750.00							0.00	$ -	$ -	$ -	0%
15	Moisture Conditioning for 30'x75' Pads, 4' - Zone 2 (4)	LOT	67.875	$ 1,100.00	$ 74,662.50		37.00	30.875				67.88	$ 74,668.00	$ 74,662.50	$ -	100%
16	Moisture Conditioning for 30'x75' Pads, 6' - Zone 3 (4)	LOT	22.625	$ 1,700.00	$ 38,462.50		22.625					22.63	$ 38,471.00	$ 38,462.50	$ -	100%
17	Moisture Conditioning for 30'x75' Pads, 8' - Zone 4 (4)	LOT	22.625	$ 2,000.00	$ 45,250.00		22.625					22.63	$ 45,260.00	$ 45,250.00	$ -	100%
18	Moisture Conditioning for 30'x75' Pads, 10' - Zone 5 (4)	LOT	22.625	$ 2,400.00	$ 54,300.00		22.625					22.63	$ 54,312.00	$ 54,300.00	$ -	100%
19	Moisture Conditioning for 40'x75' Pads, 4' - Zone 2 (4)	LOT	67.875	$ 1,200.00	$ 81,450.00		27.025417	40.849583				67.88	$ 81,456.00	$ 81,450.00	$ -	100%
20	Moisture Conditioning for 40'x75' Pads, 6' - Zone 3 (4)	LOT	22.625	$ 1,800.00	$ 40,725.00		22.625					22.63	$ 40,734.00	$ 40,725.00	$ -	100%
21	Moisture Conditioning for 40'x75' Pads, 8' - Zone 4 (4)	LOT	22.625	$ 2,100.00	$ 47,512.50		22.625					22.63	$ 47,523.00	$ 47,512.50	$ -	100%
22	Moisture Conditioning for 40'x75' Pads, 10' - Zone 5 (4)	LOT	22.625	$ 2,500.00	$ 56,562.50		22.625					22.63	$ 56,575.00	$ 56,562.50	$ -	100%
23	6 Mil Poly Liner	LOT	271.5	$ 350.00	$ 95,025.00		199.70	71.80				271.50	$ 95,025.00	$ 95,025.00	$ -	100%
24	Rock Check Dam	EA	2.0	$ 1,200.00	$ 2,400.00			2.00				2.00	$ 2,400.00	$ 2,400.00	$ -	100%
25	Demolition	LS	1.0	$ 25,000.00	$ 25,000.00		1.00					1.00	$ 25,000.00	$ 25,000.00	$ -	100%
26	Power Pole Removal (5)	EA	1.0	$ 250.00	$ 250.00		1.00					1.00	$ 250.00	$ 250.00	$ -	100%
27	Payment and Performance Bonds	LS	1.0	$ 20,736.00	$ 20,736.00	1.00						1.00	$ 20,736.00	$ 20,736.00	$ -	100%
PH2 CO#1 P24385 - 1	Moisture Conditioning for 30'x75' Pads, 6' - Zone 3 (4)	LOT	-22.600	$ 1,700.00	$ (38,420.00)		-22.60					-22.60	$ (38,420.00)	$ (38,420.00)	$ -	100%
PH2 CO#1 P24385 - 2	Moisture Conditioning for 30'x75' Pads, 8' - Zone 4 (4)	LOT	-22.600	$ 2,000.00	$ (45,200.00)		-22.60					-22.60	$ (45,200.00)	$ (45,200.00)	$ -	100%
PH2 CO#1 P24385 - 3	Moisture Conditioning for 30'x75' Pads, 10' - Zone 5 (4	LOT	-22.600	$ 2,400.00	$ (54,240.00)		-22.60					-22.60	$ (54,240.00)	$ (54,240.00)	$ -	100%
PH2 CO#1 P24385 - 4	Moisture Conditioning for 40'x75' Pads, 6' - Zone 3 (4)	LOT	-22.625	$ 1,800.00	$ (40,725.00)		-22.625					-22.63	$ (40,734.00)	$ (40,725.00)	$ -	100%
PH2 CO#1 P24385 - 5	Moisture Conditioning for 40'x75' Pads, 8' - Zone 4 (4)	LOT	-22.625	$ 2,100.00	$ (47,512.50)		-22.625					-22.63	$ (47,523.00)	$ (47,512.50)	$ -	100%
PH2 CO#1 P24385 - 6	Moisture Conditioning for 40'x75' Pads, 10' - Zone 5 (4)	LOT	-22.625	$ 2,500.00	$ (56,562.50)		-22.625					-22.63	$ (56,575.00)	$ (56,562.50)	$ -	100%
PH2 CO#1 P24385 - 7	6 Mil Poly Liner	LOT	-207.5	$ 350.00	$ (72,625.00)		-135.70	-71.80				-207.50	$ (72,625.00)	$ (72,625.00)	$ -	100%
PH2 CO#1 P24385 - 8	Moisture Conditioning for 30'x75' Pads, 4' - Zone 2 (4)	LOT	-30.875	$ 1,100.00	$ (33,962.50)			-30.875				-30.88	$ (33,968.00)	$ (33,962.50)	$ -	100%
PH2 CO#1 P24385 - 9	Moisture Conditioning for 40'x75' Pads, 4' - Zone 2 (4)	LOT	-40.875	$ 1,200.00	$ (49,050.00)			-40.875				-40.88	$ (49,056.00)	$ (49,050.00)	$ -	100%
PH2 CO#2 P24471 - 1	Clear & Grade for Well Access	LS	1.0	$ 7,500.00	$ 7,500.00				1.00			1.00	$ 7,500.00	$ 7,500.00	$ -	100%
PH2 CO#3 P24509 - 1	Clearing & Grubbing	AC	0.3	$ 1,000.00	$ 300.00					0.30		0.30	$ 300.00	$ 300.00	$ -	100%
PH2 CO#3 P24509 - 2	Excavation on Interim Pond	CY	8,000.0	$ 3.00	$ 24,000.00					8,000.00		8,000.00	$ 24,000.00	$ 24,000.00	$ -	100%
PH2 CO#4 P25394 - 1	Grade Berms by Entrance	LS	1.0	$ 2,500.00	$ 2,500.00						1.00	1.00	$ 2,500.00	$ -	$ 2,500.00	100%
PH3 CO#1 P25404 -1	Mobilization	LS	1.0	$ 3,000.00	$ 3,000.00						1.00	1.00	$ 3,000.00	$ -	$ 3,000.00	100%
PH3 CO#1 P25404 -2	Haul off trash	Loads	50.0	$ 1,200.00	$ 60,000.00						50.00	50.00	$ 60,000.00	$ -	$ 60,000.00	100%
PH3 CO#1 P25404 -3	Load trash	LS	1.0	$ 10,000.00	$ 10,000.00						1.00	1.00	$ 10,000.00	$ -	$ 10,000.00	100%
	TOTAL EARTHWORK				$ 1,413,288.50								$1,278,519.00	$1,202,988.50	$ 75,500.00	90%

CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT

Project: Highpointe Ranch Ph 2 & 3

Job No.: D24170

Invoice No.: INV25366

On receipt by the signer of this document of a check from **Lennar Homes** maker of check) in the sum of **$67,950.00** payable to **De Leon Fence & Construction Services, LLC dba De Leon Excavating** (payee or payees of check) and when the check has been properly endorsed and has been paid by the bank on which it is drawn, this document becomes effective to release any mechanic's lien right, any right arising from a payment bond that complies with a state or federal statute, any common law payment bond right, any claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the signer's position that the signer has on the property **Lennar Homes** (owner) located at **Aubrey, TX** (job location) to the following extent: **Earthwork** (job description).

This release covers a progress payment for all labor, services, equipment, or materials furnished to the property or to **Lennar Homes** (person with whom signer contracted) as indicated in the attached statement(s) or progress payment request(s), except for unpaid retention, pending modifications and changes, or other items furnished.
Before any recipient of this document relies on this document, the recipient should verify evidence of payment to the signer. The signer warrants that the signer has already paid or will use the funds received from this progress payment to promptly pay in full all of the signer's laborers, subcontractors, materialmen, and suppliers for all work, materials, equipment, or services provided for or to the above referenced project in regard to the attached statement(s) or progress payment request(s).

Date: 10/03/2025
De Leon Fence & Construction Services, LLC (dba De Leon Excavating) (Company name)
Dba De Leon Excavating

By: _____ (Signature)

Name: Saul Diaz De Leon
Title: Managing Member

STATE OF TEXAS §
§
COUNTY OF KAUFMAN §

This instrument was acknowledged before me on the 3rd day of October 2025, by **Saul Diaz De Leon,** the **Managing Member** of **De Leon Fence & Construction Services, LLC dba De Leon Excavating,** on behalf of said company.

Alan Armando Salazar Santibanez
My Commission Expires
7/13/2026
Notary ID133857423

Notary Public, State of Texas

De Leon Excavating
13475 Reeder Rd Ste 100
Forney, TX 75126 USA
(214) 994-2646
Saul@DeLeonExcavating.com
https://www.deleonexcavating.com/

INVOICE

BILL TO
Lennar
1231 Greenway Drive
Suite 800
Irving, TX 75038

INVOICE	INV25366
DATE	10/03/2025
TERMS	Net 30
DUE DATE	11/02/2025

JOB NAME
Highpointe Ranch Ph 2 & 3

DATE		DESCRIPTION	QTY	RATE	AMOUNT
	Grade	LS	1	2,500.00	2,500.00
	Mobilization	LS	1	3,000.00	3,000.00
	Trash Haul Off	Loads	50	1,200.00	60,000.00
	Loading	LS	1	10,000.00	10,000.00
	Retainage	10%	1	-7,550.00	-7,550.00

SUBTOTAL	67,950.00
TAX	0.00
TOTAL	67,950.00
BALANCE DUE	**$67,950.00**

Pay invoice

January 26, 2026

Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

RE: **Highpointe Ranch Phase 2 & 3 Utilities Package**

Pay Estimate No: 10

Dear Board,

The attached Pay Estimate #10 was received from Interstate Pipeline Utility Construction, LLC as it relates to the construction of the Highpointe Ranch Phase 2 & 3 Utilities Package.

Based upon site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation and projected completion as of 1/25/2026, Kimley-Horn is in agreement with the amount of work illustrated on the attached estimate which indicates a total balance due in the amount of:

$ 15,281.10

Please let us know if you have any questions or need further assistance in processing this estimate.

Sincerely,

Kyle Brockman, PE
TBPE Registration No. F-928

Attachments

cc: Interstate Pipeline Utility Construction, LLC
Lennar Homes

Kimley»Horn

PROGRESS ESTIMATE

Progress Period: November 1, 2025 TO January 25, 2026

Pay Estimate No: 10
Project Name: Highpointe Ranch Phase 2 & 3 Utilities Package
Project Number: 063451879
Contract Date: 11/25/2024

OWNER
Lennar Homes
On behalf of High Pointe Ranch Municipal Utility District No. 1
1707 Market Place Blvd., Suite 100, Irving, TX 75063

CONTRACTOR
Interstate Pipeline Utility Construction, LLC
PO Box 152957
Dallas, TX 75315

Original Contract Amount:	$	3,771,523.00
Change Orders: (see attached summary)		*$111,777.79*
Revised Contract Amount:	$	3,883,300.79
Amount Placed to Date:	$	3,902,980.79
Less 10% Retainage (PHASE 2 ONLY):	$	-
Less 10% Retainage (PHASE 3 ONLY):	$	137,771.08
Total Earned Less Retainage:	$	3,765,209.71

High Pointe Ranch Phase 2 & 3 Utilities	
Original Contract Time to SubCom (Days):	160
Original Contract Time to Final Completion (Days)	10
Approved Time Extensions:	0
Approved Change Order Days:	0
Revised Contract Time:	160
Days Remaining:	-77
Notice to Proceed:	6/2/2025
Construction Start (+ 7 days):	6/9/2025
Original Substantial Completion:	11/16/2025
Revised Substantial Completion:	11/16/2025
Final Completion Date:	11/19/2025

Previous Payments:

Progress Estimate #	Invoice Date	Total Invoice Amount
1	2/25/2025	**$ 607,448.25**
2	3/25/2025	**$ 830,511.00**
3	4/25/2025	**$ 727,795.80**
4	5/25/2025	**$ 148,015.13**
5	6/25/2025	**$ 799,259.63**
6	7/25/2025	**$ 66,381.38**
	OVERPAYMENT	**$ 22,740.00**
7	8/25/2025	**$ 190,112.21**
8	10/25/2025	**$ 105,138.22**
9	10/31/2025	**$ 252,527.00**
		$ 3,749,928.62

Balance to finish: $ (19,680.00)

Amount Due This Period (Phase 2 Retainage): $ 15,281.10

ENGINEER'S RECOMMENDATION STATEMENT

I, Kyle Brockman, PE, engineer of record with Kimley-Horn & Associates, Inc., based on my knowledge, information and belief, recommend approval of this draw request. Recommendation is based on site observations, correspondence with contractors and construction manager, and review of applications for payment and accompanying supporting documentation. In my opinion, Contractor's work has progressed to the point indicated, subject to any qualifications stated in the recommendation. In the case of unit price work, the recommendation of payment includes determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests. This recommendation is not a representation that my observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work, or involved detailed inspections.

Recommended for Approval:

1/26/2026

Kyle Brockman, PE Date
Kimley-Horn and Associates, Inc.
TBPE Registration No. F-928

FACSIMILE of AIA FORM G702

TO:	Lennar Homes 1707 MARKET PLACE BLVD STE 100 IRVING, TX 75063	PROJECT:	Highpointe Ranch Phase 2 and 3	APPLICATION #:	10	DISTRIBUTION TO: Owner
		OWNER:	High Pointe Ranch Municipal Utility District No. 1	PERIOD TO:	1/25/2026	Engineer
ATTN:				CIVIL ENGINEER:	Kimley Horn	

CONTRACTOR'S DRAW REQUEST

CHANGE ORDER SUMMARY

Change Orders approved by Owner as of 1/25/2026	ADDITIONS	DEDUCTIONS
CHANGE ORDER #1	$4,880.00	
CHANGE ORDER #1 (continued)	$29,055.50	
CHANGE ORDER #3	$33,630.00	($22,764.50)
CHANGE ORDER #2	$5,650.00	($741.00)
CHANGE ORDER #4	$62,067.79	
Change Orders	**$135,283.29**	**($23,505.50)**

Application is made for Draw, as shown below in connection with the Contract Document(s) and Agreement(s)
Continuation Sheet Per Form G703, is attached.

1.	SCHEDULED CONTRACT VALUE	$3,771,523.00
2.	CHANGE ORDERS	$111,777.79
3.	REVISED CONTRACT AMOUNT	$3,883,300.79
4.	TOTAL COMPLETED TO DATE	$3,902,980.79
5.	RETAINAGE	$137,771.08
6.	TOTAL LESS RETAINAGE	$3,765,209.72
7.	PREVIOUS DRAW REQUESTS	$3,749,928.62
8.	STORED MATERIALS	$0.00
9.	DRAW REQUEST ADJUSTMENT (IF REQ.)*	$0.00
10.	**CURRENT DRAW DUE FROM OWNER**	**$15,281.10**
11.	BALANCE TO FINISH INCLUDING RETAINAGE	$118,091.08

PAYEE
Interstate Pipeline Utility Construction, LLC

By: _____ Date: 1/26/2026
Jason J. Daniels, President
PO BOX 152957
DALLAS, TX 75315
(214) 296-9744 p/f

*Draw Request Adjustment was required for the following reasons: _____

PROJECT: **Highpointe Ranch Phase 2 and 3** DRAW # **10**

ITEM NO.	DESCRIPTION OF WORK	QUANTITY BID	UNIT PRICE	SCHEDULED VALUE	WORK COMPLETED PREVIOUS APPLICATIONS	WORK COMPLETED THIS APPLICATION	TOTAL COMPLETED TO DATE	% COMPLETED	BALANCE TO FINISH	RETAINAGE
101	8" PVC Waterline (including blocking, fitting	4,235.00	$52.25	$221,278.75	$221,278.75	$0.00	$221,278.75	100%	$0.00	$0.00
102	12" PVC Waterline (including blocking, fittin	2,589.00	$76.00	$196,764.00	$196,764.00	$0.00	$196,764.00	100%	$0.00	$0.00
103	8" Gate Valve & Box (including blocking)	15.00	$2,150.00	$32,250.00	$32,250.00	$0.00	$32,250.00	100%	$0.00	$0.00
104	12" Gate Valve & Box (including blocking)	13.00	$3,840.00	$49,920.00	$49,920.00	$0.00	$49,920.00	100%	$0.00	$0.00
105	8" X 12" Reducer	2.00	$927.00	$1,854.00	$1,854.00	$0.00	$1,854.00	100%	$0.00	$0.00
106	Bac-T Sampling Station (per City of Aubrey	1.00	$3,430.00	$3,430.00	$3,430.00	$0.00	$3,430.00	100%	$0.00	$0.00
107	12" Plug	2.00	$864.00	$1,728.00	$1,728.00	$0.00	$1,728.00	100%	$0.00	$0.00
108	Fire Hydrant Assembly (including lead, tee,	18.00	$6,330.00	$113,940.00	$113,940.00	$0.00	$113,940.00	100%	$0.00	$0.00
109	Air Release Valve	1.00	$27,190.00	$27,190.00	$27,190.00	$0.00	$27,190.00	100%	$0.00	$0.00
110	1" Single Water Service	218.00	$895.00	$195,110.00	$195,110.00	$0.00	$195,110.00	100%	$0.00	$0.00
111	Remove 8" Plug & Connect to Existing Wat	4.00	$1,290.00	$5,160.00	$5,160.00	$0.00	$5,160.00	100%	$0.00	$0.00
112	Trench Safety	6,824.00	$0.25	$1,706.00	$1,706.00	$0.00	$1,706.00	100%	$0.00	$0.00
113	Pressure Test and Chlorination	6,824.00	$0.75	$5,118.00	$5,118.00	$0.00	$5,118.00	100%	$0.00	$0.00
	SUBTOTAL - PH 2 WATER			**$855,448.75**	**$855,448.75**	**$0.00**	**$855,448.75**	**100%**	**$0.00**	**$0.00**
201	8" SDR 35 PVC Sewer Line	5,743.00	$44.75	$256,999.25	$256,999.25	$0.00	$256,999.25	100%	$0.00	$0.00
202	10" SDR 35 PVC Sewer Line	895.00	$52.50	$46,987.50	$46,987.50	$0.00	$46,987.50	100%	$0.00	$0.00
203	4' Diameter Manhole	22.00	$7,300.00	$160,600.00	$160,600.00	$0.00	$160,600.00	100%	$0.00	$0.00
204	4' Diameter Drop Manhole	4.00	$6,330.00	$25,320.00	$25,320.00	$0.00	$25,320.00	100%	$0.00	$0.00
205	4" Sanitary Sewer Service	219.00	$741.00	$162,279.00	$161,538.00	$0.00	$161,538.00	100%	$0.00	$0.00
206	Cement Stabilized Backfill	160.00	$86.00	$13,760.00	$13,760.00	$0.00	$13,760.00	100%	$0.00	$0.00
207	Remove 8" Plug & Connect to Existing Sew	2.00	$2,210.00	$4,420.00	$4,420.00	$0.00	$4,420.00	100%	$0.00	$0.00
208	Remove 10" Plug & Connect to Existing Se	1.00	$2,575.00	$2,575.00	$2,575.00	$0.00	$2,575.00	100%	$0.00	$0.00
209	Trench Safety	6,638.00	$1.50	$9,957.00	$9,957.00	$0.00	$9,957.00	100%	$0.00	$0.00
210	Sewer Line T.V. and Testing	6,638.00	$4.00	$26,552.00	$26,552.00	$0.00	$26,552.00	100%	$0.00	$0.00
211	Sewer Manhole Vacuum Testing	26.00	$625.00	$16,250.00	$16,250.00	$0.00	$16,250.00	100%	$0.00	$0.00
	SUBTOTAL - PH 2 WASTEWATER			**$725,699.75**	**$724,958.75**	**$0.00**	**$724,958.75**	**100%**	**$0.00**	**$0.00**
301	18" Class III RCP	1,392.00	$55.00	$76,560.00	$76,560.00	$0.00	$76,560.00	100%	$0.00	$0.00
302	21" Class III RCP	539.00	$61.00	$32,879.00	$32,879.00	$0.00	$32,879.00	100%	$0.00	$0.00
303	24" Class III RCP	493.00	$79.00	$38,947.00	$38,947.00	$0.00	$38,947.00	100%	$0.00	$0.00
304	27" Class III RCP	207.00	$91.00	$18,837.00	$18,837.00	$0.00	$18,837.00	100%	$0.00	$0.00
305	30" Class III RCP	75.00	$106.00	$7,950.00	$7,950.00	$0.00	$7,950.00	100%	$0.00	$0.00
306	36" Class III RCP	265.00	$137.00	$36,305.00	$36,305.00	$0.00	$36,305.00	100%	$0.00	$0.00
307	42" Class III RCP	191.00	$182.00	$34,762.00	$34,762.00	$0.00	$34,762.00	100%	$0.00	$0.00
308	48" Class III RCP	195.00	$222.00	$43,290.00	$43,290.00	$0.00	$43,290.00	100%	$0.00	$0.00
309	48" Class IV RCP	337.00	$311.00	$104,807.00	$104,807.00	$0.00	$104,807.00	100%	$0.00	$0.00
310	5'x3' Class III RCB	40.00	$332.00	$13,280.00	$13,280.00	$0.00	$13,280.00	200%	($13,280.00)	$0.00
311	5' Std Curb Inlet	2.00	$4,975.00	$9,950.00	$9,950.00	$0.00	$9,950.00	100%	$0.00	$0.00
312	10' Std Curb Inlet	15.00	$6,340.00	$95,100.00	$95,100.00	$0.00	$95,100.00	100%	$0.00	$0.00
313	12' Std Curb Inlet	11.00	$8,450.00	$92,950.00	$92,950.00	$0.00	$92,950.00	100%	$0.00	$0.00
314	15' Std Curb Inlet	2.00	$8,450.00	$16,900.00	$16,900.00	$0.00	$16,900.00	100%	$0.00	$0.00
315	4'X4' Junction Box	3.00	$4,200.00	$12,600.00	$12,600.00	$0.00	$12,600.00	100%	$0.00	$0.00
316	5'X5' Junction Box	1.00	$5,540.00	$5,540.00	$5,540.00	$0.00	$5,540.00	100%	$0.00	$0.00
317	6'X6' Junction Box	2.00	$8,740.00	$17,480.00	$17,480.00	$0.00	$17,480.00	100%	$0.00	$0.00
318	4'x6' Junction Box w/ Manhole Top & Slope	1.00	$9,460.00	$9,460.00	$9,460.00	$0.00	$9,460.00	200%	($9,460.00)	$0.00
319	Sloped End Headwall	1.00	$12,220.00	$12,220.00	$12,220.00	$0.00	$12,220.00	100%	$0.00	$0.00
320	Stone Riprap - Grouted	149.00	$113.00	$16,837.00	$16,837.00	$0.00	$16,837.00	100%	$0.00	$0.00
321	Connect to Existing 24" RCP	1.00	$651.00	$651.00	$651.00	$0.00	$651.00	100%	$0.00	$0.00
322	Connect to Existing 30" RCP	1.00	$968.00	$968.00	$968.00	$0.00	$968.00	100%	$0.00	$0.00
323	Connect to Existing 36" RCP	1.00	$1,185.00	$1,185.00	$1,185.00	$0.00	$1,185.00	100%	$0.00	$0.00

324	Remove 4'x'4 Wye Inlet	3.00	$450.00	$1,350.00	$1,350.00	$0.00	$1,350.00	100%	$0.00	$0.00
325	Trench Safety	3,694.00	$0.25	$923.50	$923.50	$0.00	$923.50	100%	$0.00	$0.00
326	Storm Sewer T.V.	3,694.00	$3.25	$12,005.50	$11,982.75	$0.00	$11,982.75	100%	$0.00	$0.00
	SUBTOTAL - PH 2 STORM DRAINAGE			**$713,737.00**	**$713,714.25**	**$0.00**	**$713,714.25**	**100%**	**($22,740.00)**	**$0.00**
101	8" PVC Waterline (including blocking, fitting	4,472.00	$55.25	$247,078.00	$247,078.00	$0.00	$247,078.00	100%	$0.00	$24,707.80
102	8" Gate Valve & Box (including blocking)	14.00	$2,130.00	$29,820.00	$29,820.00	$0.00	$29,820.00	100%	$0.00	$2,982.00
103	Fire Hydrant Assembly (including lead, tee,	11.00	$5,850.00	$64,350.00	$64,350.00	$0.00	$64,350.00	100%	$0.00	$6,435.00
104	BAC-T Station	1.00	$3,430.00	$3,430.00	$3,430.00	$0.00	$3,430.00	100%	$0.00	$343.00
105	1" Single Water Service	146.00	$924.00	$134,904.00	$134,904.00	$0.00	$134,904.00	100%	$0.00	$13,490.40
106	Auto-Flush Station	1.00	$7,100.00	$7,100.00	$7,100.00	$0.00	$7,100.00	100%	$0.00	$710.00
107	Remove 8" Plug & Connect to Existing Wat	1.00	$1,290.00	$1,290.00	$1,290.00	$0.00	$1,290.00	100%	$0.00	$129.00
108	Trench Safety	4,472.00	$0.25	$1,118.00	$1,118.00	$0.00	$1,118.00	100%	$0.00	$111.80
109	Pressure Test and Chlorination	4,472.00	$0.75	$3,354.00	$3,354.00	$0.00	$3,354.00	100%	$0.00	$335.40
	SUBTOTAL - PH 3 WATER			**$492,444.00**	**$492,444.00**	**$0.00**	**$492,444.00**	**100%**	**$0.00**	**$49,244.40**
201	8" SDR 35 PVC Sewer Line	3,731.00	$45.00	$167,895.00	$167,895.00	$0.00	$167,895.00	100%	$0.00	$16,789.50
202	4' Diameter Manhole	11.00	$7,730.00	$85,030.00	$85,030.00	$0.00	$85,030.00	100%	$0.00	$8,503.00
203	4" Sanitary Sewer Service	145.00	$712.00	$103,240.00	$103,240.00	$0.00	$103,240.00	100%	$0.00	$10,324.00
204	Cement Stabilized Backfill	80.00	$89.00	$7,120.00	$7,120.00	$0.00	$7,120.00	100%	$0.00	$712.00
205	Core & Connect to Existing Manhole	2.00	$1,700.00	$3,400.00	$3,400.00	$0.00	$3,400.00	100%	$0.00	$340.00
206	Trench Safety	3,731.00	$1.25	$4,663.75	$4,663.75	$0.00	$4,663.75	100%	$0.00	$466.38
207	Sewer Line T.V. and Testing	3,731.00	$4.25	$15,856.75	$15,856.75	$0.00	$15,856.75	100%	$0.00	$1,585.68
208	Sewer Manhole Vacuum Testing	11.00	$649.00	$7,139.00	$0.00	$7,139.00	$7,139.00	100%	$0.00	$713.90
	SUBTOTAL - PH 3 WASTEWATER			**$394,344.50**	**$387,205.50**	**$7,139.00**	**$394,344.50**	**100%**	**$0.00**	**$39,434.45**
301	18" Class III RCP	864.00	$55.00	$47,520.00	$47,520.00	$0.00	$47,520.00	100%	$0.00	$4,752.00
302	21" Class III RCP	489.00	$61.00	$29,829.00	$29,829.00	$0.00	$29,829.00	100%	$0.00	$2,982.90
303	24" Class III RCP	200.00	$72.00	$14,400.00	$14,400.00	$0.00	$14,400.00	100%	$0.00	$1,440.00
304	27" Class III RCP	401.00	$93.00	$37,293.00	$37,293.00	$0.00	$37,293.00	100%	$0.00	$3,729.30
305	36" Class III RCP	212.00	$138.00	$29,256.00	$29,256.00	$0.00	$29,256.00	100%	$0.00	$2,925.60
306	42" Class III RCP	65.00	$194.00	$12,610.00	$12,610.00	$0.00	$12,610.00	100%	$0.00	$1,261.00
307	48" Rubber Gasketed Class III RCP	88.00	$252.00	$22,176.00	$22,176.00	$0.00	$22,176.00	100%	$0.00	$2,217.60
308	54" Rubber Gasketed Class III RCP	202.00	$285.00	$57,570.00	$57,570.00	$0.00	$57,570.00	100%	$0.00	$5,757.00
309	6'X4' Rubber gasketed Class III RCP	103.00	$481.00	$49,543.00	$49,543.00	$0.00	$49,543.00	100%	$0.00	$4,954.30
310	5' Non-STD Curb Inlet	1.00	$5,915.00	$5,915.00	$5,915.00	$0.00	$5,915.00	100%	$0.00	$591.50
311	10' Non-STD Curb Inlet	3.00	$7,290.00	$21,870.00	$21,870.00	$0.00	$21,870.00	100%	$0.00	$2,187.00
312	5' STD Curb Inlet	1.00	$4,980.00	$4,980.00	$4,980.00	$0.00	$4,980.00	100%	$0.00	$498.00
313	10' Std Curb Inlet	12.00	$6,340.00	$76,080.00	$76,080.00	$0.00	$76,080.00	100%	$0.00	$7,608.00
314	12' Std Curb Inlet	4.00	$8,450.00	$33,800.00	$33,800.00	$0.00	$33,800.00	100%	$0.00	$3,380.00
315	3'X3' Junction Box	1.00	$2,810.00	$2,810.00	$2,810.00	$0.00	$2,810.00	100%	$0.00	$281.00
316	5'X5' Junction Box	1.00	$6,140.00	$6,140.00	$6,140.00	$0.00	$6,140.00	100%	$0.00	$614.00
317	8'X5' Junction Box	1.00	$8,315.00	$8,315.00	$8,315.00	$0.00	$8,315.00	100%	$0.00	$831.50
318	6'X4' TXDOT SETB-PD	1.00	$13,310.00	$13,310.00	$13,310.00	$0.00	$13,310.00	100%	$0.00	$1,331.00
319	21" TxDOT SETP-PD	1.00	$3,060.00	$3,060.00	$0.00	$0.00	$0.00	0%	$3,060.00	$0.00
320	Stone Riprap - Grouted	57.00	$123.00	$7,011.00	$7,011.00	$0.00	$7,011.00	100%	$0.00	$701.10
321	Trench Safety	2,624.00	$0.25	$656.00	$654.25	$0.00	$654.25	100%	$0.00	$65.43
322	Storm Sewer T.V.	2,624.00	$3.75	$9,840.00	$0.00	$9,840.00	$9,840.00	100%	$0.00	$984.00
	SUBTOTAL - PH 3 STORM DRAINAGE			**$493,984.00**	**$481,082.25**	**$9,840.00**	**$490,922.25**	**99%**	**$3,060.00**	**$49,092.23**
401	Payment, Performance, and Maintenance E	1.00	$54,350.00	$54,350.00	$54,350.00	$0.00	$54,350.00	100%	$0.00	$0.00
402	Payment, Performance, and Maintenance E	1.00	$41,515.00	$41,515.00	$41,515.00	$0.00	$41,515.00	100%	$0.00	$0.00
	SUBTOTAL - BONDS			**$95,865.00**	**$95,865.00**	**$0.00**	**$95,865.00**	**100%**	**$0.00**	**$0.00**
501	CHANGE ORDER #1			$4,880.00	$4,880.00	$0.00	$4,880.00			$0.00
502	CHANGE ORDER #1 (continued)			$29,055.50	$29,055.50	$0.00	$29,055.50			$0.00
503	CHANGE ORDER #3			$10,865.50	$33,630.00	$0.00	$33,630.00			$0.00
504	CHANGE ORDER #2			$4,909.00	$5,650.00	$0.00	$5,650.00			$0.00

505	CHANGE ORDER #4			$62,067.79	$62,067.79	$0.00	$62,067.79			$0.00
506				$0.00	$0.00	$0.00	$0.00			$0.00
507				$0.00	$0.00	$0.00	$0.00			$0.00
508				$0.00	$0.00	$0.00	$0.00			$0.00
	SUBTOTAL - CHANGE ORDER COSTS			**$111,777.79**	**$135,283.29**	**$0.00**	**$135,283.29**			**$0.00**
	TOTAL - BUDGETED COSTS			**$3,883,300.79**	**$3,886,001.79**	**$16,979.00**	**$3,902,980.79**	**101%**	**($19,680.00)**	**$137,771.08**

PROJECT: **Highpointe Ranch Phase 2 and 3** FOREMAN: DATE:

ITEM NO.	DESCRIPTION OF WORK	QUANTITY BID	C.O. QUANTITY REDUCTION (IF ANY REQ.)	WORK COMPLETED			BALANCE TO FINISH
				PREVIOUS APPLICATIONS	THIS APPLICATION		
					WORK IN PLACE	STORED MATERIALS	
101	8" PVC Waterline (including blocking, fitting	4,235.00		4,235.00			0.00
102	12" PVC Waterline (including blocking, fittin	2,589.00		2,589.00			0.00
103	8" Gate Valve & Box (including blocking)	15.00		15.00			0.00
104	12" Gate Valve & Box (including blocking)	13.00		13.00			0.00
105	8" X 12" Reducer	2.00		2.00			0.00
106	Bac-T Sampling Station (per City of Aubrey	1.00		1.00			0.00
107	12" Plug	2.00		2.00			0.00
108	Fire Hydrant Assembly (including lead, tee,	18.00		18.00			0.00
109	Air Release Valve	1.00		1.00			0.00
110	1" Single Water Service	218.00		218.00			0.00
111	Remove 8" Plug & Connect to Existing Wat	4.00		4.00			0.00
112	Trench Safety	6,824.00		6,824.00			0.00
113	Pressure Test and Chlorination	6,824.00		6,824.00			0.00
	PH 2 WATER ITEMS						
201	8" SDR 35 PVC Sewer Line	5,743.00		5,743.00			0.00
202	10" SDR 35 PVC Sewer Line	895.00		895.00			0.00
203	4' Diameter Manhole	22.00		22.00			0.00
204	4' Diameter Drop Manhole	4.00		4.00			0.00
205	4" Sanitary Sewer Service	219.00	(1.00)	218.00			0.00
206	Cement Stabilized Backfill	160.00		160.00			0.00
207	Remove 8" Plug & Connect to Existing Sew	2.00		2.00			0.00
208	Remove 10" Plug & Connect to Existing Se	1.00		1.00			0.00
209	Trench Safety	6,638.00		6,638.00			0.00
210	Sewer Line T.V. and Testing	6,638.00		6,638.00			0.00
211	Sewer Manhole Vacuum Testing	26.00		26.00			0.00
	PH 2 SANITARY SEWER ITEMS						
301	18" Class III RCP	1,392.00		1,392.00			0.00
302	21" Class III RCP	539.00		539.00			0.00
303	24" Class III RCP	493.00		493.00			0.00
304	27" Class III RCP	207.00		207.00			0.00
305	30" Class III RCP	75.00		75.00			0.00
306	36" Class III RCP	265.00		265.00			0.00
307	42" Class III RCP	191.00		191.00			0.00
308	48" Class III RCP	195.00		195.00			0.00
309	48" Class IV RCP	337.00		337.00			0.00
310	5'x3' Class III RCB	40.00	(40.00)	40.00			(40.00)
311	5' Std Curb Inlet	2.00		2.00			0.00
312	10' Std Curb Inlet	15.00		15.00			0.00
313	12' Std Curb Inlet	11.00		11.00			0.00
314	15' Std Curb Inlet	2.00		2.00			0.00
315	4'X4' Junction Box	3.00		3.00			0.00
316	5'X5' Junction Box	1.00		1.00			0.00
317	6'X6' Junction Box	2.00		2.00			0.00
318	4'x6' Junction Box w/ Manhole Top & Slope	1.00	(1.00)	1.00			(1.00)
319	Sloped End Headwall	1.00		1.00			0.00
320	Stone Riprap - Grouted	149.00		149.00			0.00
321	Connect to Existing 24" RCP	1.00		1.00			0.00
322	Connect to Existing 30" RCP	1.00		1.00			0.00
323	Connect to Existing 36" RCP	1.00		1.00			0.00

324	Remove 4'x'4 Wye Inlet	3.00		3.00			0.00
325	Trench Safety	3,694.00		3,694.00			0.00
326	Storm Sewer T.V.	3,694.00	(7.00)	3,687.00			0.00
	PH 2 STORM SEWER ITEMS						
101	8" PVC Waterline (including blocking, fitting	4,472.00		4,472.00			0.00
102	8" Gate Valve & Box (including blocking)	14.00		14.00			0.00
103	Fire Hydrant Assembly (including lead, tee,	11.00		11.00			0.00
104	BAC-T Station	1.00		1.00			0.00
105	1" Single Water Service	146.00		146.00			0.00
106	Auto-Flush Station	1.00		1.00			0.00
107	Remove 8" Plug & Connect to Existing Wat	1.00		1.00			0.00
108	Trench Safety	4,472.00		4,472.00			0.00
109	Pressure Test and Chlorination	4,472.00		4,472.00			0.00
	PH 3 WATER ITEMS						
201	8" SDR 35 PVC Sewer Line	3,731.00		3,731.00			0.00
202	4' Diameter Manhole	11.00		11.00			0.00
203	4" Sanitary Sewer Service	145.00		145.00			0.00
204	Cement Stabilized Backfill	80.00		80.00			0.00
205	Core & Connect to Existing Manhole	2.00		2.00			0.00
206	Trench Safety	3,731.00		3,731.00			0.00
207	Sewer Line T.V. and Testing	3,731.00		3,731.00			0.00
208	Sewer Manhole Vacuum Testing	11.00		0.00	11.00		0.00
	PH 3 SANITARY SEWER ITEMS						
301	18" Class III RCP	864.00		864.00			0.00
302	21" Class III RCP	489.00		489.00			0.00
303	24" Class III RCP	200.00		200.00			0.00
304	27" Class III RCP	401.00		401.00			0.00
305	36" Class III RCP	212.00		212.00			0.00
306	42" Class III RCP	65.00		65.00			0.00
307	48" Rubber Gasketed Class III RCP	88.00		88.00			0.00
308	54" Rubber Gasketed Class III RCP	202.00		202.00			0.00
309	6'X4' Rubber gasketed Class III RCP	103.00		103.00			0.00
310	5' Non-STD Curb Inlet	1.00		1.00			0.00
311	10' Non-STD Curb Inlet	3.00		3.00			0.00
312	5' STD Curb Inlet	1.00		1.00			0.00
313	10' Std Curb Inlet	12.00		12.00			0.00
314	12' Std Curb Inlet	4.00		4.00			0.00
315	3'X3' Junction Box	1.00		1.00			0.00
316	5'X5' Junction Box	1.00		1.00			0.00
317	8'X5' Junction Box	1.00		1.00			0.00
318	6'X4' TXDOT SETB-PD	1.00		1.00			0.00
319	21" TxDOT SETP-PD	1.00		0.00			1.00
320	Stone Riprap - Grouted	57.00		57.00			0.00
321	Trench Safety	2,624.00	(7.00)	2,617.00			0.00
322	Storm Sewer T.V.	2,624.00		0.00	2,624.00		0.00
	PH 3 STORM SEWER ITEMS						
301	Payment, Performance, and Maintenance E	1.00		1.00			0.00
302	Payment, Performance, and Maintenance E	1.00		1.00			0.00
	BOND ITEMS						
501				0.00			0.00
502				0.00			0.00
503				0.00			0.00
504				0.00			0.00

505				0.00			0.00
506				0.00			0.00
507				0.00			0.00
508				0.00			0.00
	CHANGE ORDER ITEMS						

TEXAS CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT

Project: Highpointe Ranch Phase 2 and 3
Job No.: 24-083

On receipt by the signer of this document of a check from _Lennar Homes of Texas Land and Construction, Ltd. [maker of check] in the sum of $15,281.10 payable to Interstate Pipeline Utility Construction, LLC [payee or payees of check] and when the check has been properly endorsed and has been paid by the bank on which it is drawn or electronic payment deposited into payee's account, this document becomes effective to release any mechanic's lien right, any right arising from a payment bond that complies with a state or federal statute, any common law payment bond right, any claim for payment, and any rights under any similar ordinance, rule, or statute related to claim or payment rights for persons in the signer's position that the signer has on the property of _ Lennar Homes of Texas Land and Construction, Ltd. [owner] located at Aubrey, TX_ [location] to the following extent: _water, wastewater and storm drainage improvements [job description].

This release covers a progress payment for all labor, services, equipment, or materials furnished to the property or to High Pointe Ranch Municipal Utility District No. 1 [person with whom signer contracted] as indicated in the attached statement(s) or progress payment request(s), except for unpaid retention, pending modifications and changes, or other items furnished.

Before any recipient of this document relies on this document, the recipient should verify evidence of payment to the signer.

The signer warrants that the signer has already paid or will use the funds received from this progress payment to promptly pay in full all of the signer's laborers, subcontractors, materialmen, and suppliers for all work, materials, equipment, or services provided for or to the above referenced project in regard to the attached statement(s) or progress payment request(s).

Date 1/26/2026

Interstate Pipeline Utility Construction, LLC

By _____ [Signature]

Jason Daniels, President [Title]

STATE OF TEXAS §
§
COUNTY OF DALLAS §

Before me, the undersigned Notary Public in and for the State of Texas, on this day personally appeared **Jason Daniels**, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that s/he executed such instrument for the purposes therein expressed, and in the capacity therein stated as the act and deed of such business entity.

_____
Name:
Notary Public, State of Texas
My commission expires: 5/8/2026

KATHLEEN ANNE DONAHUE
Notary Public, State of Texas
Comm. Expires 05-08-2026
Notary ID 10290589

AFFIDAVIT

STATE OF TEXAS

COUNTY OF TARRANT

Before me, the undersigned authority, a notary public in the state and county aforesaid, on this day personally appeared Rob Taylor, Accounts Receivable of Gilco Contracting, Inc., known to me to be a credible person, who being by me duly sworn, upon his oath deposed and said,

That all persons, firms, associations, corporations, or other organizations furnishing labor and/or materials have been paid in full.

That the wage scale established by the City Council in the City of Aubrey has been paid in full.

That there are no claims pending for personal injury and/or property damages.

On Contract described as.

Paving Improvements to serve:

Highpointe Ranch Phase 3

BY Rob Taylor

Subscribed and sworn before me on this 4th of March, 2026.

KASSANDRA CANALES
Notary Public, State of Texas
Comm. Expires 01-23-2027
Notary ID 134158873

Notary Public
Tarrant County, TX

BIRKHOFF, HENDRICKS & CARTER, L.L.P.
PROFESSIONAL ENGINEERS

11910 Greenville Ave., Suite 600 Dallas, Texas 75243 Phone (214) 361-7900 www.bhcllp.com

CRAIG M. KERKHOFF, P.E.
GARY C. HENDRICKS, P.E., R.P.L.S.
JOE R. CARTER, P.E.
ANDREW MATA, JR., P.E.

DEREK B. CHANEY, P.E., R.P.L.S.
JUSTIN R. IVY, P.E.
COOPER E. REINBOLD, P.E.
CHASE CRAWFORD, R.P.L.S.

April 16, 2026

Mr. Jereme Boyle
Public Works Manager
City of Aubrey, TX
107 S. Main Street
Aubrey, TX 76227

Re: High Pointe Ranch Phase 3 Addition

Mr. Boyle:

The City has reported that all punch list items have been addressed for the High Pointe Ranch Phase 3 Addition. Based on the information available to us, and in accordance with the City of Aubrey, City Code of Ordinances Chapter 10, Article 6, Section 8, the City Engineer accepts the High Pointe Ranch Phase 3 Addition onsite public improvements on behalf of the City of Aubrey. The public improvements include:

1. Onsite concrete streets and storm drainage
2. Onsite water and wastewater utilities
3. Onsite street lights and signs

We are available to discuss this development further at your convenience.

Sincerely,

Cooper Reinbold, P.E.

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on a Preliminary Plat for Solid Rock, consisting of three (3) lots (Lots 1 and 2, Block A, and Lot 1, Block B), being approximately 10.407 acres out of the James Bridges Jr. Survey, Abstract No. 36, generally located west of Silverado Parkway, south of Frontier Parkway, and north of FM 2931 and Liberty Road, within the City of Aubrey ETJ, Denton County, Texas. (Cre8stone DFW LLC)

Staff Contact
Muzaib Riaz, Sr. Planner
mriaz@aubreytx.gov
940-440-9343

Summary
Owner: Cre8stone DFW LLC
Engineer: ANA Consultants, LLC
Surveyor: Texas Heritage Surveying, LLC

Application Date: January 14, 2026
Location: Property is generally located west of Silverado Parkway, south of Frontier Parkway and north of FM 2931 and Liberty Road within the City of Aubrey Extraterritorial Jurisdiction (ETJ).
Future Land Use Designation: Rural Life
Zoning: N/A

The applicant submitted a preliminary plat to create three lots out of five tracts to construct two one-story metal buildings and a fire lane on proposed Lot 1, Block A, and associated utility extensions and drainage improvements to serve the proposed development.

Access to the proposed lots will be from the existing private road — Maverick Lane, with an existing 15-foot ingress and egress easement.

Water and sewer service will be provided by Mustang Special Utility District (MSUD). The applicant has proposed an 8-inch water line extending from existing Silverado West Phase 2 subdivision, located north of Aspen Trail. A 6-inch sewer line is proposed from the existing 15-inch sewer line located west of the pump station on Lot 58, Block A, Silverado West Phase 1. On-site and off-site utility easements are proposed for the proposed water and sewer lines.

Electric will be provided by Denton County Electric Cooperative, Inc. (CoServ Electric). Service will be extended from the north via a 10-foot electric easement across Lot 1, Block A of Sand Dollar Addition that the applicant is currently in the process of acquiring.

Denton County Development Services has reviewed the preliminary plat and has no outstanding comments.

The preliminary plat was reviewed to evaluate compliance with the City of Aubrey Subdivision Ordinance and the Preliminary Plat Checklist. The plat is in general conformance with the subdivision ordinance and checklist, and is recommended for approval.

Recommendation:

The City Engineer and City Planner have reviewed the Preliminary Plat and recommend it for approval.

Planning and Zoning Commission Action
The Planning and Zoning Commission unanimously voted (4-0) to recommend approval of the Preliminary Plat at their April 9, 2026 meeting.

The City Council may:

1. Approve the Preliminary Plat as presented;
2. Approve the Preliminary Plat with conditions; or
3. Deny the Preliminary Plat.

Attachments

1. Location Map
2. Preliminary Plat
3. Engineer's Utility Summary Letter

Financial Summary
N/A

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve, approve with conditions, or deny) the preliminary plat.

Solid Rock

Legend

Lakes and Streams

Lakes

Streams

0 500 1000 ft

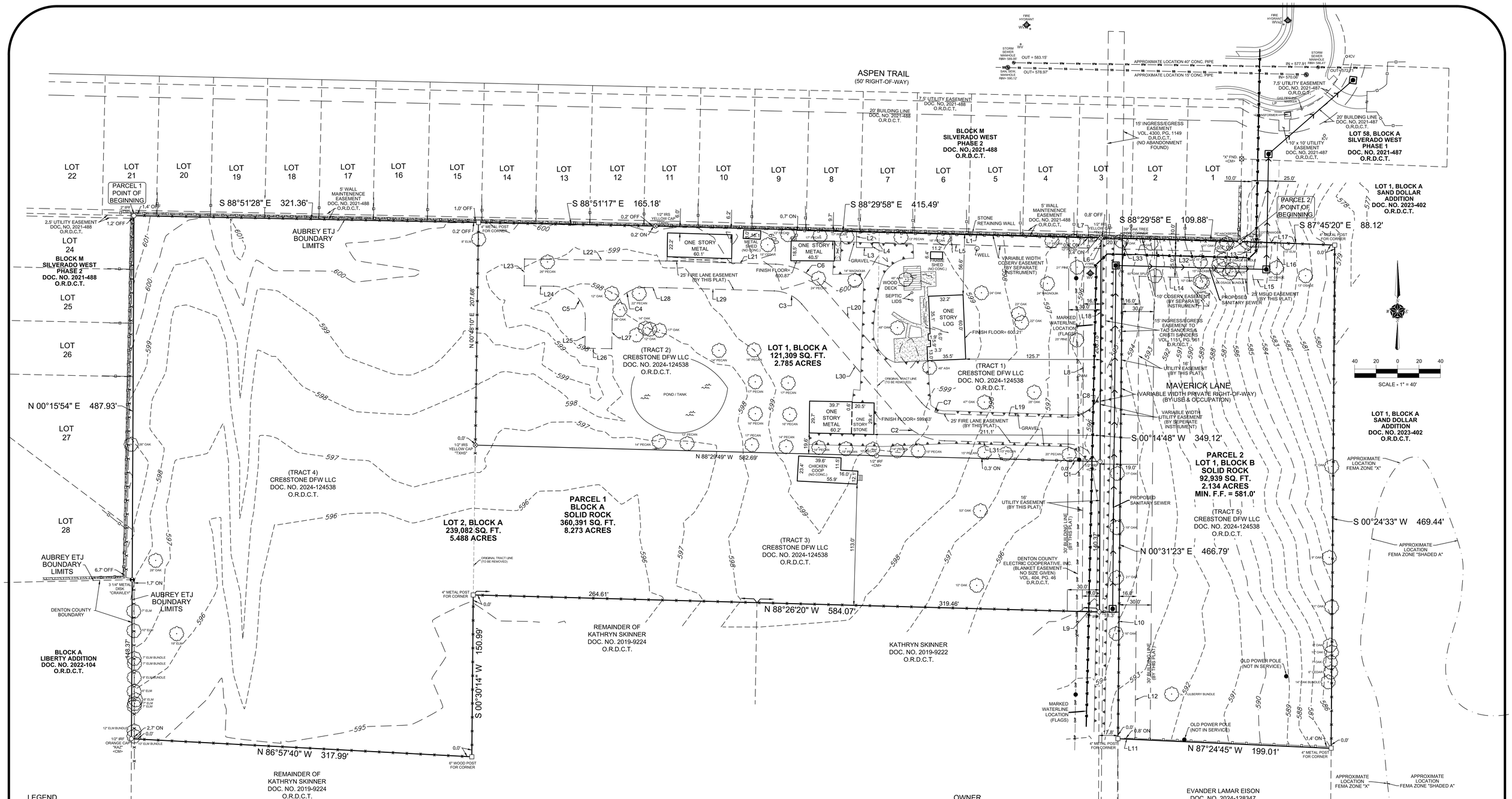
https://www.dentoncounty.gov/1147/Geographic-Information-Systems-GIS

3/26/2026 5:00:46 PM

Notes:

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

Denton County does not guarantee the correctness or accuracy of any features on this product and assumes no responsibility in connection therewith. This product may be revised at any time without notification to any user.



LEGEND

O.R.D.C.T.	OFFICIAL RECORDS, DENTON COUNTY, TEXAS
D.R.D.C.T.	DEED RECORDS, DENTON COUNTY, TEXAS
P.R.D.C .T.	PLAT RECORDS, DENTON COUNTY, TEXAS
DOC. NO.	DOCUMENT NUMBER
VOL., PG.	VOLUME, PAGE
SQ. FT.	SQUARE FEET
IRF ○	IRON ROD FOUND
IPF ○	IRON PIPE FOUND
IRS ⊗	1/2 INCH IRON ROD SET WITH YELLOW PLASTIC CAP STAMPED "TXHS"
<CM>	CONTROL MONUMENT
□	FENCE POST FOR CORNER
○	POINT ON EASEMENT LINE FOR BEARING CHANGE

EASEMENT LINE
BUILDING LINE
BOUNDARY LINE
OLD TRACT LINE
OVERHEAD POWER LINE — OHP —
GRAVEL
WOOD FENCE — □ —
PIPE RAIL FENCE — /// —
BARBED WIRE FENCE — X —
SANITARY SEWER — SS —
STORM SEWER — STM —
WATERLINE — W — W —
TOPO LINE — 500 —
FEMA FLOOD ZONE
SEWER FLOW LINE

PARCEL LINE TABLE			PARCEL LINE TABLE			PARCEL LINE TABLE		
LINE #	LENGTH	DIRECTION	LINE #	LENGTH	DIRECTION	LINE #	LENGTH	DIRECTION
L1	228.02'	N88°29'57"W	L12	432.09'	S0°31'23"W	L23	25.00'	N0°48'10"E
L2	15.00'	S0°42'02"W	L13	10.00'	S1°06'41"W	L24	27.50'	N89°11'50"W
L3	15.00'	S88°29'56"E	L14	93.37'	N88°29'56"W	L25	27.50'	N0°48'10"E
L4	5.00'	N0°42'02"E	L15	34.91'	N87°45'08"W	L26	25.00'	N89°11'50"W
L5	213.09'	N88°29'56"W	L16	35.00'	S1°06'41"W	L27	27.50'	S0°48'10"W
L6	10.00'	N0°14'48"E	L17	35.01'	S87°45'39"E	L28	20.42'	S89°11'50"E
L7	16.00'	S88°29'58"E	L18	208.75'	S0°14'48"W	L29	100.42'	N88°19'41"W
L8	349.10'	N0°14'48"E	L19	113.89'	S88°29'53"E	L30	142.73'	N40°34'44"W
L9	16.00'	N88°26'20"W	L20	142.73'	S40°34'44"E	L31	115.76'	N88°29'53"W
L10	446.79'	S0°31'23"W	L21	102.53'	S88°20'14"E	L32	109.71'	S88°29'56"E
L11	16.00'	N87°24'45"W	L22	131.79'	S89°11'50"E	L33	10.00'	N0°31'23"E

PARCEL CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	CHORD
C1	46.47'	30.00'	88°44'41"	N44° 07' 32"W 41.96'
C2	46.00'	55.00'	47°55'09"	S64° 32' 19"E 44.67'
C3	29.17'	35.00'	47°44'56"	N64° 27' 13"W 28.33'
C4	47.12'	30.00'	90°00'00"	S45° 48' 10"W 42.43'
C5	47.12'	30.00'	90°00'00"	N44° 11' 50"W 42.43'
C6	49.39'	60.00'	47°09'40"	N64° 09' 34"W 48.00'
C7	25.09'	30.00'	47°55'09"	S64° 32' 19"E 24.37'
C8	47.78'	30.00'	91°15'19"	N45° 52' 28"E 42.89'

OWNER
CRE8STONE DFW LLC
4644 VENETO DRIVE
FRISCO, TX 75033-7135
ATTN: DONNA PILANT
214-497-3132
DONNA@CRE8STONE.COM

SURVEYOR
TEXAS HERITAGE SURVEYING, LLC
10610 Metric Drive, Suite 124, Dallas, TX 75243
Office 214-340-9700 Fax 214-340-9710
txheritage.com
Firm #10169300

LAND USE TABLE
3 residential lots

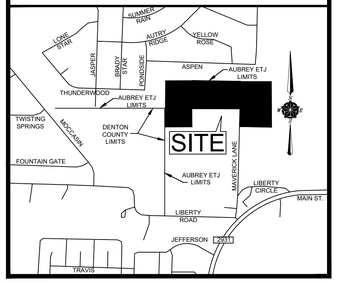
PRELIMINARY PLAT

SOLID ROCK
LOTS 1 & 2, BLOCK A & LOT 1, BLOCK B

10.407 ACRES OUT OF THE JAMES BRIDGES JR. SURVEY, ABSTRACT NO. 36
CITY OF AUBREY ETJ, DENTON COUNTY, TEXAS

DATE: 01/14/2026 / JOB # 2500983-4 / SCALE= 1" = 40' / DRAWN: KO

VICINITY MAP (NOT TO SCALE)



OWNERS CERTIFICATE:

PARCEL 1

BEING a tract of land situated in the James Bridges Jr. Survey, Abstract No. 36, City of Aubrey ETJ, Denton County, Texas, and being Tracts 1, 2, 3 and 4 of that land described in Warranty Deed with Vendor's Lien to Cre8stone DFW LLC as recorded in Document Number 2024-124538, Official Records, Denton County, Texas, and being of said Cre8stone tracts, same being more particularly described by metes and bounds as follows;

BEGINNING at a 2 inch iron pipe found for the northwest corner of Lot 24, Block M, Silverado West Phase 2, an addition to the City of Aubrey ETJ, Denton County, Texas, according to the plat thereof recorded in Document Number 2021-488, Official Records, Denton County, Texas, same being the northwest corner of Tract 4 of said Cre8stone DFW LLC tracts, same also lying in the south line of Lot 21, Block M of said Silverado West Phase 2;

THENCE South 88 degrees 51 minutes 28 seconds East, along the south line of said Block M, a distance of 321.36 feet to a 4 inch metal fence post for the northeast corner of said Tract 4 and lying in the south line of Lot 15, Block M of said Silverado West Phase 2;

THENCE South 88 degrees 51 minutes 17 seconds East, continuing along the south line of said Block M, a distance of 165.18 feet to a 1/2 inch iron rod set with yellow plastic cap stamped "TXHS" for angle point in the south line of Lot 11, Block M of said Silverado West Phase 2;

THENCE South 88 degrees 29 minutes 58 seconds East, continuing along the south line of said Block M, a distance of 415.49 feet to a 1/2 inch iron rod set with yellow plastic cap stamped "TXHS" in the south line of Lot 3, Block M of said Silverado West Phase 2, same being the northwest corner of Maverick Lane (variable width right-of-way)(no record found);

THENCE South 00 degrees 14 minutes 48 seconds West, along the west line of said Maverick Lane, passing a 1/2 inch iron rod found for the northeast corner of said Tract 3, and continuing for a total distance of 349.12 to a 1/2 inch iron rod found for the northeast corner of that tract of land described in General Warranty Deed to Kathryn Skinner as recorded in Document Number 2019-9222, Official Records, Denton County, Texas;

THENCE North 88 degrees 26 minutes 20 seconds West, along the north line of said Skinner tract, passing the northwest corner of said Skinner tract at a distance of 319.46 feet, same being the northeast corner of the remainder of that tract of land described in General Warranty Deed to Kathryn Skinner as recorded in Document Number 2019-9224, Official Records, Denton County, Texas, and continuing for a total distance of 584.07 feet to a 4 inch metal fence post for an ell corner and being the northmost northwest corner of said Skinner remainder tract;

THENCE South 00 degrees 30 minutes 14 seconds West, along the northmost west line of said Skinner remainder tract, a distance of 150.99 feet to a 6 inch wood fence post for an ell corner;

THENCE North 86 degrees 57 minutes 40 seconds West, along the westmost north line of said Skinner remainder tract, a distance of 317.99 feet to a 1/2 inch iron rod found with orange plastic cap stamped "KAZ" for the northwest corner of said Skinner remainder tract, same lying in the east line of Block A, Liberty Addition, an addition to Denton County, Texas, recorded in Document Number 2022-104, Official Records, Denton County, Texas;

THENCE North 00 degrees 15 minutes 54 seconds East, along the east line of said Block A, passing a 3 1/4 metal disk stamped "CRAWLEY" for the northeast corner of said Block A, same being the southwest corner of Lot 28, Block M of said Silverado West Phase 2, and continuing for a total distance of 487.93 feet to the POINT OF BEGINNING and containing 360,391 square feet or 8.273 acres of land more or less.

OWNERS CERTIFICATE:

PARCEL 2

BEING a tract of land situated in the James Bridges Jr. Survey, Abstract No. 36, City of Aubrey ETJ, Denton County, Texas, and being Tract 5 of that land described in Warranty Deed with Vendor's Lien to Cre8stone DFW LLC as recorded in Document Number 2024-124538, Official Records, Denton County, Texas, and being of said Cre8stone tracts, same being more particularly described by metes and bounds as follows;

BEGINNING at a 1/2 inch iron rod found for the southeast corner of Lot 1, Block M, Silverado West Phase 2, an addition to the City of Aubrey ETJ, Denton County, Texas, according to the plat thereof recorded in Document Number 2021-488, Official Records, Denton County, Texas, same being the northmost southwest corner of ot 1, Block A, Sand Dollar Addition, an addition to the City of Aubrey ETJ, Denton County, Texas, according to the plat thereof recorded in Document Number 2023-402, Official Records, Denton County, Texas;

THENCE South 87 degrees 45 minutes 20 seconds East, along the northmost south line of said Lot 1, Block A, a distance of 88.12 feet to a 4 inch metal fence post for an ell corner of said Lot 1, Block A;

THENCE South 00 degrees 24 minutes 33 seconds West, along the west line of said Lot 1, Block A, a distance of 469.44 feet to a 4 inch metal fence post for the northeast corner of that tract of land described in Warranty Deed with Vendor's Lien to Evander Lamar Eison as recorded in Document Number 2024-128347, Official Records, Denton County, Texas;

THENCE North 87 degrees 24 minutes 45 seconds West, along the north line of said Eison tract, a distance of 199.01 feet to a 4 inch metal fence post for the northwest corner said Eison tract, same lying in the east line of Maverick Lane (variable width right-of-way)(no record found);

THENCE North 00 degrees 31 minutes 23 seconds East, along the east line of said Maverick Lane, a distance of 466.79 feet to a 39 inch oak tree for the northeast corner of said Maverick Lane, same lying in the south line of Lot 3, Block M of said Silverado West Phase 2;

THENCE South 88 degrees 29 minutes 58 seconds East, along the south line of said Block M, a distance of 109.88 feet to the POINT OF BEGINNING and containing 92,939 square feet or 2.134 acres of land more or less.

OWNER'S DEDICATION:

THAT Cre8stone DFW LLC, acting herein by and through its duly authorized officers, does hereby adopt this plat designating the hereinabove described property as **SOLID ROCK**, an addition to the City of Aubrey, Texas, ETJ, Denton County, Texas and does hereby dedicate, in fee simple, to the public use forever, the streets and alleys shown thereon. The streets and alleys are dedicated for street purposes. The easements and public use areas, as shown, are dedicated for the public use forever, for the purposes indicated on this plat. In addition, utility easements may also be used for the mutual use and accommodation of all public utilities desiring to use or using the same unless the easement limits the use to particular utilities, said use by public utilities being subordinate to the public's and City of Aubrey's use thereof. The City of Aubrey and public utility entities shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs, or other improvements or growths which may in any way endanger or interfere with the construction, maintenance, or efficiency of their respective systems in said easements. The City of Aubrey and public utility entities shall at all times have the full right of ingress and egress to or from their respective easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining, reading meters, and adding to or removing all or parts of their respective systems without the necessity at any time of procuring permission from anyone.

That the undersigned does hereby covenant and agree that he (they) shall construct upon the fire lane easements, as dedicated and shown hereon, a hard surface and that he (they) shall maintain the same in a state of good repair at all times and keep the same free and clear of any structures, fences, trees, shrubs, or other improvements or obstruction, including but not limited to the parking of motor vehicles, trailers, boats, or other impediments to the access of fire apparatus. The maintenance of paving on the fire lane easements is the responsibility of the owner, and the owner shall post and maintain appropriate signs in conspicuous places along such fire lanes, stating "Fire Lane, No Parking." The police or his duly authorized representative is hereby authorized to cause such fire lanes and utility easements to be maintained free and unobstructed at all times for Fire Department and emergency use.

_____
Cre8stone DFW LLC
DONNA PILANT- OWNER

STATE OF TEXAS
COUNTY OF COLLIN

BEFORE me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared DONNA PILANT, known to me to be the person or persons whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same in the capacity herein stated and the act and deed of said company.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2026.

Notary Public in and for Collin County

My commission expires:_____

SURVEYOR'S STATEMENT

STATE OF TEXAS

I, J.R. JANUARY, a Registered Professional Land Surveyor, do hereby certify that I prepared this plat from an actual survey of the land and that the corner monuments shown thereon as set were properly placed under my personal supervision in accordance with the Development Ordinance of the City of Aubrey, Texas.

Dated this the _____ day of _____, 2026.

Preliminary, this document shall not be recorded for any purposes and shall not be used or viewed or relied upon as a final survey document. (04/08/2026)

_____
J.R. JANUARY
Texas Registered Professional Land Surveyor No. 5382

STATE OF TEXAS
COUNTY OF DALLAS

BEFORE me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared J.R. JANUARY, known to me to be the person or persons whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same in the capacity herein stated and the act and deed of said company.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2026.

Notary Public in and for _____County

My commission expires:_____

GENERAL NOTES:

1) The purpose of this plat is to create three lots out of five tracts.

2) Bearings and Coordinates are based upon the Texas State Plane Coordinate System, North Central Zone 4202, North American Datum of 1983, (2011) (Surface).

3) Subject property is located within an area having a Zone Designation "X" by the Secretary of Housing and Urban Development, on Flood Insurance Rate Map No. 48121C0265G, with a date of identification of 05/15/2025, for Community Number 480774, in Denton County (unincorporated), State of Texas, which is the current Flood Insurance Rate Map for the community in which said property is situated.

4) City of Aubrey Benchmarks used:
BM found flush with natural ground, 35' east of centerline of Main Street, 30' south of centerline of Elm Street, 8' north of northwest corner of Townhall asphalt parking lot. N- 7,160,724.91 E- 2,430,986.95 Elev.= 688.29'

BM found flush with natural ground, 3' east of concrete walk, 38' south of back of curb to north, 4.5' north of back of curb to south.
N- 7,155,634.66 E- 2,429,694.62 Elev.= 676.28'

5) The maintenance of paving, gradings and drainage improvements and/or easements shown on the plat are the responsibility of the individual property owners and does not constitute acceptance of the same for maintenance purposes by Denton County.

6) Note: selling a portion of this addition by metes and bounds is a violation of state law and is subject to fines and withholding of city utilities and building permits.

7) Structures on subject property to remain.

CERTIFICATE OF PRELIMINARY PLAT APPROVAL

This Preliminary Plat was reviewed and approved by the City Council of the City of Aubrey, Texas, the

_____ day of _____, 2026

_____
Chris Rich
City of Aubrey, Texas

OWNER
CRE8STONE DFW LLC
4644 VENETO DRIVE
FRISCO, TX 75033-7135
ATTN: DONNA PILANT
214-497-3132
DONNA@CRE8STONE.COM

SURVEYOR
TEXAS HERITAGE SURVEYING, LLC
10610 Metric Drive, Suite 124, Dallas, TX 75243
Office 214-340-9700 Fax 214-340-9710
txheritage.com
Firm #10169300

LAND USE TABLE
3 residential lots

PRELIMINARY PLAT
SOLID ROCK
LOTS 1 & 2, BLOCK A &
LOT 1, BLOCK B
10.407 ACRES OUT OF THE
JAMES BRIDGES JR. SURVEY,
ABSTRACT NO. 36
CITY OF AUBREY ETJ, DENTON COUNTY, TEXAS

DATE: 02/04/2026 / JOB # 2500983-4 / SCALE= 1" = 40' / DRAWN: KO

5000 Thompson Terrace
Colleyville, TX 76034
(817) 335-9900
Fax (817) 335-9955
TBPE Firm # 20

Mrs. Shanda Guffee
107 S. Main Street
Aubrey, TX, 76227

March 30, 2026

Re: 2823 Maveric (Solid Rock Preliminary and Final Plat)

Dear Mrs. Guffee,

This letter provides a summary of how the subject property will be served by various utilities.

1. Water and Sewer Service
Water and Sewer services will be provided by Mustang Special Utility District as follows:

a. **Water Line**
An 8-inch water line will be extended from the existing Silverado West Phase 2 subdivision, located north of Aspen Trail. The line will run south through Mustang Lot 58, Block A (Silverado West Phase 1), then continue across Lot 1, Block A of Sand Dollar Addition via a 20-foot utility easement currently being acquired by the owner. From there, it will extend west along the north property line of Lot 1 Block B to the west side of Maverick Lane within a variable-width utility easement dedicated by this plat and then continue south to the end of Lot 2, where it will connect to an existing 3-inch water line in Maverick Lane.

b. **Sewer Line**
A 6-inch sewer line will be constructed from the existing 15-inch sewer line located west of the pump station. The line will run south across Mustang Lot 58, Block A (Silverado West Phase 1), then across Lot 1, Block A of Sand Dollar Addition via a 20-foot utility easement currently being acquired. It will then extend west along the north property line of Lot 1 Block B to the east side of Maverick Lane within a variable-width utility easement dedicated by this plat and continue south to the end of Lot 1 Block B.

c. Drainage: The drainage calculations indicate that the runoff from typical rainfall events will flow into surrounding properties at the same rate or lower than before the development therefore no additional infrastructure is needed.

2. Electric Service
Electric service will be provided by Denton County Electric Cooperative, Inc. (d/b/a CoServ Electric). Service will be extended from the north via a 10-foot electric easement across Lot 1, Block A of Sand Dollar Addition and then to the west along the North property line of Lot 1 Block B and Lot 1 Block A within a variable width CoServ easement dedicated by a separate instrument, The offsite easement was previously granted but has expired, and the owner is currently in the process of reacquiring it.

Please feel free to contact me if you have any questions or require additional information.

Sincerely,

Osama F Nashed, P.E.,
ANA Consultants, LLC
TBPE Firm registration # 20

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on Ordinance 946-26 amending Chapter 3 “Building Regulations”, Article 3.04.062 “Nuisances on Exterior of Property”, adopting a new Section 3.04.062 (i) “Exterior Property Maintenance”, adopting a new Article 3.04.070 “Fence Maintenance”, and amending Article 3.10 “Streets and Sidewalks” by adopting a new Article 3.10.001 “Encroachment on Public Property”; providing a penalty of a fine for violations; and providing an effective date.

Staff Contact
Richard Brooks, Police Chief
rbrooks@aubreytx.gov
940-365-2601

Summary
This ordinance amends Chapter 3 of the City of Aubrey Code of Ordinances to strengthen the City’s ability to enforce property maintenance and address ongoing health and safety concerns observed by Code Compliance.
The proposed changes establish clear, enforceable standards for:

- Exterior property maintenance, including requirements for grass, weeds, trees, and general yard conditions
- Fence maintenance, creating standards to address dilapidated or unsafe fencing
- Encroachment on public property, defining prohibited items and structures within rights-of-way, easements, and other public areas

The ordinance also updates notice procedures, allowing service by first-class mail in addition to certified mail to improve efficiency in enforcement.
These amendments are intended to:

- Improve neighborhood appearance and property values
- Enhance public health and safety
- Provide clearer expectations for property owners and occupants
- Support more consistent and effective code enforcement

Violations are subject to fines of up to $2,000 per day, and the City may abate violations and recover associated costs if compliance is not achieved.

Financial Summary
None

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve, deny or table) the ordinance

CITY OF AUBREY, TEXAS
ORDINANCE NO. 946-26

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS, AMENDING CHAPTER 3, "BUILDING REGULATIONS", OF THE CITY'S CODE OF ORDINANCES BY AMENDING ARTICLE 3.04 "PROPERTY MAINTENANCE", DIVISION 1 "GENERALLY", SECTION 3.04.007 "NOTICES, ORDERS AND ABATEMENT PROCEDURES" RELATED TO METHOD OF SERVICE; AMENDING DIVISION 2, "DEFINITIONS AND RULES OF CONSTRUCTION", SECTION 3.04.042, "DEFINITIONS"; AMENDING DIVISION 3, "GENERAL REGULATIONS" TO AMEND SECTION 3.04.062 TO ADOPT A NEW SUBPARAGRAPH (i) "EXTERIOR PROPERTY MAINTENANCE"; ADOPTING NEW SECTION 3.04.070 "FENCE MAINTENANCE"; AMENDING ARTICLE 3.10 "STREETS AND SIDEWALKS" BY ADOPTING A NEW SECTION 3.10.001 "ENCROACHMENT ON PUBLIC PROPERTY"; PROVIDING FOR THE INCORPORATION OF PREMISES; PROVIDING FOR AMENDMENTS; PROVIDING A MAXIMUM PENALTY OF TWO THOUSAND DOLLARS ($2,000.00) FOR EACH OFFENSE AND A SEPARATE OFFENSE SHALL BE DEEMED COMMITTED UPON EACH DAY OR PART OF A DAY DURING ON OR WHICH A VIOLATION OCCURS OR CONTINUES; PROVIDING A SAVINGS AND CUMULATIVE REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR CODIFICATION; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, The City of Aubrey ("City"), is a home-rule City acting under its Charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, the City Council of the City of Aubrey ("City Council") adopted Chapter 3 of its Code of Ordinances, which governs buildings and building regulations in the City; and

WHEREAS, the City recognizes that the international codes form an essential regulatory framework to establish standards for the construction of buildings; and

WHEREAS, the City Council finds that the proper maintenance of exterior areas of buildings is necessary to preserve the public health, safety, and welfare of the community; and

WHEREAS, inadequately maintained exterior building areas may contribute to unsafe conditions, property deterioration, nuisance conditions, and a decline in neighborhood aesthetics and property values; and

WHEREAS, the City Council desires to establish clear, enforceable standards for the maintenance, repair, and appearance of exterior building areas in order to promote community appearance, protect property values, and prevent blight; and

WHEREAS, the City Council further finds that establishing minimum maintenance requirements for exterior areas will assist property owners in understanding their responsibilities and will support consistent code enforcement; and

WHEREAS, the City Council desires to amend the City's current regulations to further protect and promote the health, safety and general welfare of its residents, property owners, and visitors in the City of Aubrey.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS:

Section 1.
Findings Incorporated.

The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

Section 2.
Amendment.

2.1 Chapter 3 "Building Regulations", Article 3.04 "Property Maintenance Code", Division 1, "Generally", Section 3.04.007 "Notices, Orders, and Abatement Procedures," Subsection (c) "Method of Service, subparagraph (2) is hereby amended to be and read as follows in its entirety with all other provisions of Section 3.04.007 not herein expressly amended to remain in full force and effect:

"Article 3.04 PROPERTY MAINTENANCE CODE

Division 1 **Generally**
…

§ 3.04.007 **Notices, orders and abatement procedures.**

…

(c) Method of service**.** Such notice shall be deemed to be properly served if a copy thereof is given:

. . .

(2) By certified mail, return receipt requested and/or by First Class U.S. mail to the Owner at the address of the Property that is the subject of the notice, at the address of the Owner as listed in the Denton County Appraisal District records, or at the address of the owner provided in utility records of the City."

2.2 Chapter 3 “Building Regulations”, Division 2, “Definitions and Rules of Construction”, Section 3.04.042, “Definitions” of the Code of Ordinances of the City of Aubrey is hereby amended to adopt new definitions to be incorporated in alphabetical order and to amend existing definitions, each as set forth below, and all other definitions in Section 3.04.042 not expressly amended hereby shall remain in full force and effect without amendment:

“**Article 3.04 PROPERTY MAINTENANCE CODE**

Division 2. **Definitions and Rules of Construction**

…

§ 3.04.042 **Definitions**.
…

Exterior Property Area(s).
Open space on the property and on adjoining property under the care, custody or control of the Owner, Occupant, or Tenant of such property.
….

Noxious Weeds.
Any plant designated by a Federal, State, or County government as injurious to public health, including but not limited to poison ivy, poison oak, poison sumac.
…

Occupant.
Any Person who occupies, utilizes, or has care, custody or control of a structure or premises, with or without permission of the Owner.
…

Owner.
Any Person, agent, representative, operator, corporation, partnership, or other entity having a legal or equitable interest in the property, or whose name is identified in the official records of the state, county, or municipality as holding title to or an interest in the property, including without limitation the Owner’s representative or agent, an Occupant, Tenant, or a Person who has care, custody or control of the property, the guardian of the estate of any such Owner, and the executor or administrator of the estate of such Owner.
…

Person.
An individual, corporation, partnership, sole proprietorship, or any other entity.
...

Tenant.
Any Person authorized by written or oral lease or agreement to occupy a dwelling or

premises with primary or shared care, custody or control of the property."

2.3 Chapter 3 "Building Regulations", Division 3, "General Requirements", Article 3.04 "Property Maintenance Code", Section 3.04.062 "Nuisances on Exterior Property Areas" of the Code of Ordinances of the City is hereby amended to adopt a new subsection (i) "Exterior Property Maintenance" to be and read in its entirety as follows, and all other sections and subsections of Section 3.04.062 not expressly amended hereby shall remain in full force and effect without amendment:

"**Article 3.04 Property Maintenance Code**

…

§ 3.04.062 **Nuisances on exterior property areas.**

…

(i) Exterior Property Maintenance. It shall be unlawful to knowingly, intentionally, or recklessly violate one or more of the following requirements:

(1) All Exterior Property Areas shall be maintained in a safe, sanitary and healthy manner, and shall be free from all hazards, including without limitation holes, excavations, sharp protrusions and other objects or conditions that post a potential risk of personal injury or property damage. It shall be unlawful and a violation of this section for an Owner, to cause, suffer, allow, or maintain one or more of the following conditions on Exterior Property Areas:

(A) Noxious weeds.

(B) Dead or dying trees. All dead or dying trees shall be removed.

(C) Damaged trees. All damaged trees shall be trimmed to eliminate health or safety concerns.

(D) Diseased or insect-infested trees, shrubs or other vegetation. All such trees, shrubs and vegetation shall be removed.

(E) Exterior Property Areas and landscaping materials, including grass, shall be maintained in a healthy, neat, and orderly condition, free from trash, weeds and debris, and in such condition as to eliminate safety hazards.

(F) Trees, shrubs and all other vegetation shall be maintained to allow a vertical clearance of at least seven (7) feet above sidewalk pavement and fourteen (14) feet above street pavement.

(G) Trees, shrubs, boulders or other objects located along alleys or rights-of-way shall be maintained one (1) foot back from the paved

or unpaved edge of the alley or right-of-way so as to allow a vertical clearance of at least fourteen (14) feet.

(H) Turf grasses and groundcover that are located adjacent to alleys and rights-of-way shall be maintained even with the paved or unpaved surface at the edge of the alley or right-of-way.

(I) Gravel, pavers, bricks, concrete or asphalt that are located adjacent to the alley or right-of-way shall be maintained level with the paved or unpaved alley surface or right-of-way surface, unless such items are otherwise prohibited.

(2) Conditions described in subsection 3.04.062(i)(1) of this section shall constitute public health and safety hazards and constitute a nuisance.

(3) Abatement of public health and safety hazards. Upon failure to comply with the notice of violation, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut or trim trees, shrubs, ground cover and all other vegetation thereon, and the costs incurred for such work shall be paid by the Owner of the property. The charges to be collected by the City under this section shall include, in addition to the costs and expenses of cutting, trimming or remediating a condition upon a tract of land, the sum of one hundred and fifty dollars ($150.00) per lot or tract of land, which sum is assessed to cover administrative costs of the City associated with enforcement and abatement of the provisions of this Section."

2.4 Chapter 3 "Building Regulations", Division 3, "General Requirements" Article 3.04 "Property Maintenance Code" of the Code of Ordinances of the City is hereby amended to adopt a new Section 3.04.070 "Fence Maintenance" to be and read in its entirety as follows and all other sections and subsections of Article 3.04 not expressly amended hereby shall remain in full force and effect without amendment:

"Article 3.04 Property Maintenance Code

…

§ 3.04.070 **Fence maintenance.**

(a) All fences shall be constructed and maintained in compliance with the requirements of this Section at all times.

(b) Notwithstanding any other requirement of this Article, failure to comply with any one or more of the following maintenance standards shall be unlawful and shall be a violation of this section:

(1) Fences shall not be more than ten (10) degrees out of vertical alignment with its base;

(2) Fences shall be maintained free of broken, loose, damaged, removed, or missing components. Fences having a combined total area of twenty (20) square feet or more of broken, loose, damaged, removed or missing components shall be replaced or repaired as soon as reasonably practical in a workmanlike manner. Fences shall be repaired with materials of comparable composition to the existing fence. As utilized in this section “comparable composition” means materials having similar color, size, shape, and quality as original fences for which the replacement or repair is being made;

(3) Any opening greater than four (4) inches in diameter in a fence enclosing a swimming pool or spa shall be covered/closed at all times. During times when repair or replacement work is being conducted on a swimming pool or spa or on an enclosure fence, this requirement shall not apply; however, alternative safety measures shall be utilized when repair or replacement work is not actively occurring;

(4) Pool fence enclosures shall comply with Chapter 7557 of the Texas Health and Safety Code, as amended;

(5) Fences shall be reconstructed, replaced, or repaired only with products manufactured or designed for use as fencing materials. The chief building official or his designee may require the applicant to provide the manufacturer's standards to establish the manufacturer's intended use of a proposed fencing material;

(6) Fencing material shall not be located within a street, sidewalk, alley, or right-of-way;

(7) An exterior support shall not be used for vertical alignment of fences;

(8) Fence sections, pickets, and rails shall be securely attached to vertical fence posts by nails, screws, bolts, rivets, or manufacturer-supplied fasteners; and

(9) Nails, screws, bolts, rivets and other fasteners used in fences must be installed or reasonably maintained so as not cause a hazard.

(c) If any such opening as described in subsection (b)(3) is not securely covered or a swimming pool enclosure or fence is damaged, deteriorated, substandard, dilapidated, or otherwise in a state that poses a hazard to the public health, safety and

welfare, the City may repair, replace, secure or otherwise remedy the enclosure or fence in accordance with Texas Local Government Code § 214.101, as amended.

(d) Nothing herein shall be construed to prohibit the complete removal of fences, except fences enclosing a swimming pool or spa as to comply with all other local, state, and federal laws."

2.5 Chapter 3 "Building Regulations," Article 3.10 "Street and Sidewalks", Division 1 "Generally", is hereby amended to adopt a new Section 3.10.001 "Encroachment of Public Property" to be and read as follows in its entirety with all other provisions of Article 3.10 not herein expressly amended to remain in full force and effect:

"Article 3.10 Street and Sidewalks

Division 1 **Generally**

§ 3.10.001 **Encroachment of Public Property.**

(a) Offense. It shall be unlawful and a violation of this section for any Person to place, cause, suffer or allow the placement of any item, structure, or a portion thereof, in a manner that encroaches on any portion of public property.

(1) For purposes of this section, public property includes, but is not limited to, publicly owned, maintained or controlled property, including without limitation, facilities, streets, roads, alleys, sidewalks, parkway areas, rights-of-way, and easements.

(2) Items and structures prohibited from encroaching on any portion of public property under this section include, but are not limited to, lumber, vehicles, trailers, boxes, firewood, posts, fences, shipping containers, and storage containers.

(b) Affirmative defenses. It shall be an affirmative defense to prosecution under this section if a defendant proves by a preponderance of the evidence that:

(1) The item or structure was placed in a manner and location that complied with a valid, city-issued permit or written agreement, or

(2) The placement of the item or structure is expressly authorized by and in compliance with a city ordinance.

(c) Application. The prohibition under this section shall not apply to:

(1) An item placed by or required by the City of Aubrey and in compliance with all other local, state, and federal laws, including, but not limited to, trees, shrubs, landscaping, solid waste and recycling containers issued by the City of Aubrey, bike racks placed in the right-of-way by the City of Aubrey, bike racks placed in the right-of-way by a developer as required by the City of Aubrey, and mailboxes; or

(2) A lawfully parked motor vehicle in compliance with all local, state, and federal laws.

(d) The parkway area is that area lying between the outer boundary of the right-of-way of any public street and/or alley and the curb line of the street and/or alley; or if there is no curb line, the paved portion of the street and/or alley.

(e) Enforcement.

(1) The city manager or designee shall be authorized to enforce this section.

(2) If conduct prohibited under this section is also an offense under the Texas Penal Code, Texas Transportation Code, Texas Health and Safety Code, or any other state law, the violation shall be enforced under the applicable state law.

(3) If conduct is prohibited under this section and another city ordinance, it may be enforced and prosecuted under either this section or another applicable city ordinance."

Section 3.
Penalty.

Any person, firm, partnership, or corporation found violating any provision of this Ordinance, upon conviction, shall be deemed guilty of a misdemeanor and shall be fined a sum not to exceed two thousand dollars ($2,000.00) for each offense, and a separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.

Section 4.
Cumulative Repealer/Savings.

This Ordinance shall be cumulative of all other ordinances of the City and shall not repeal any of the provisions of those ordinances except in those instances where the provisions of those ordinances are in direct conflict with the provisions of this Ordinance. Provided; however, that the repeal of such ordinances or parts of such ordinances, and the amendments and changes made by this Ordinance, shall not affect any right, property or claim which was or is vested in the City, or any act done, or right accruing or accrued, or established, or any suit, action or proceeding had or commenced before the time when this Ordinance shall take effect; nor shall said repeals, amendments or changes affect any offense committed, or any penalty or forfeiture incurred, or any suit or prosecution pending at the time when this Ordinance shall take effect under any of the ordinances or sections thereof so repealed, amended or changed; and to that extent and for that purpose the provisions of such ordinances or parts of such ordinances shall be deemed to remain and continue in full force and effect.

Section 5.
Severability.

Should any section, subsection, sentence, clause, or phrase of this Ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. The City of Aubrey hereby declares that it would have passed this Ordinance, and each section, subsection, clause, or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

Section 6.
Codification.

The City Secretary is hereby directed to authenticate this Ordinance by seal and signature and properly codifying this Ordinance and providing a printed copy for public review as required by Section 3.16 of the Aubrey Home Rule Charter.

Section 7.
Effective Date.

This Ordinance shall become effective from and after its date of adoption and publication as provided by law, and it is so ordained.

PASSED AND APPROVED by the City Council of the City of Aubrey, Texas, this the _____ day of April, 2026.

_____
CHRIS RICH, MAYOR

ATTEST:

_____
JENNY HICKS
CITY SECRETARY

APPROVED AS TO FORM:

_____
PATRICIA A. ADAMS
CITY ATTORNEY

3.04.062 (i) Exterior Property Maintenance

All exterior property areas shall be maintained in a safe and healthy manner.

(1) It is an offense for an owner, owner's representative, occupant or person with care, custody or control of property to fail to maintain the exterior property as follows:

(A) All noxious weeds shall be prohibited.
(B) Dead or dying trees that adversely affect public health and safety shall be removed.
(C) Damaged trees that adversely affect public health and safety shall be trimmed to eliminate public health or safety concerns.
(D) Diseased or insect-infested trees, shrubs or other vegetation that adversely affect public health and safety shall be removed.
(E) Exterior property areas and landscaping shall be maintained to minimize property damage and eliminate public safety hazards.
(F) Trees, shrubs and all other vegetation shall be maintained to allow a vertical clearance of at least seven (7) feet above sidewalk pavement and fourteen (14) feet above street pavement.
(G) Trees, shrubs, boulders or other objects located along paved alleys shall be maintained one (1) foot back from the paved alley edge and so as to allow a vertical clearance of at least fourteen (14) feet.
(H) Turf grasses and groundcover that are located adjacent to alleys shall be maintained even with the paved edge.
(I) Gravel, pavers, bricks, concrete or asphalt that are located adjacent to the alley shall be maintained level with the paved alley surface, unless otherwise prohibited.

(2) Conditions described in subsection 3.04.062(i)(1) of this section constitute public health and safety hazards.

(3) Abatement of public health and safety hazards

(A) Upon failure to comply with the notice of violation, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut or trim trees, shrubs, ground cover and all other vegetation thereon, and the costs incurred for such work shall be paid by the owner or agent responsible for the property. The charges to be collected by the city under this section shall include, in addition to the costs and expenses of cutting, trimming or correcting a condition upon a tract of land, the sum of one hundred and fifty dollars ($150.00) per lot or tract of land, which sum is hereby found to be the cost to the City of administering the terms of this section.

3.04.070 – Fence Maintenance.

(a) All fences constructed under the provisions of this article shall be maintained so as to comply with the requirements of this article at all times.

(b) Notwithstanding any other requirement of this article, it shall be an offense to fail to comply with any of the following maintenance standards:

(1) Fences shall not be more than ten (10) degrees out of vertical alignment with its base;
(2) All parts of fences which are broken, loose, damaged, removed, or missing, having a combined total area of twenty (20) square feet or more of said fences, shall be replaced or repaired as soon as reasonably practical in a workmanlike manner and with materials of comparable composition. Comparable composition means materials having similar color, size, shape, and quality as original fences for which the replacement or repair is being made;
(3) Any opening greater than four (4) inches in diameter in fences enclosing swimming pools or spas shall be covered at all times during which repair or replacement work is not actively being conducted;
(4) Fences shall be reconstructed, replaced, or repaired only with products manufactured or designed for use as fencing materials. The chief building official or his designee may require the applicant to provide the manufacturer's standards to establish the manufacturer's intended use of a proposed fencing material;
(5) Fencing material shall not be located within a street, sidewalk, or alley right-of-way;
(6) An exterior support shall not be used for vertical alignment of fences;
(7) Fence sections, pickets, and rails shall be securely attached to vertical fence posts by nails, screws, bolts, rivets, or manufacturer-supplied fasteners; and
(8) Nails, screws, bolts, rivets and other fasteners used in fences must be installed or reasonably maintained as to not cause a hazard.

(c) If any such opening as described in subsection (b)(3) is not securely covered, the code official may secure the opening in accordance with V.T.C.A. Local Government Code, § 214.101, as amended.

(d) Nothing herein shall be construed to prohibit the complete removal of fences, except fences enclosing a swimming pool or spa as to comply with all other local, state, and federal laws.

(Change to existing ordinance highlighted below)

Notices, orders and abatement procedures. 3.04.007

(a) Notice to person responsible. Except in cases where the code official determines that a violation of this code arises under division 8 of this article (dangerous structures), section 3.04.063 (junked vehicles) or section 3.04.064 (swimming pool enclosures), a code official that determines that there has been a violation of this code or has grounds to believe that a violation has occurred shall give notice, in the manner prescribed in subsections (b) and (c) of this section, to the person responsible for the violation and other persons, if any, as specified in this code. In cases involving dangerous structures, the notice shall be served and be in the form prescribed by the provisions of division 8 of this article.

(b) Form. The notice prescribed in subsection (a) of this section shall be in accordance with all of the following:

(1) Be in writing.

(2) Include a description of the real estate sufficient for identification.

(3) Include a statement of the violation or violations and why the notice is being issued.

(4) Include a correction order allowing a reasonable time to make the repairs and improvements required to bring the dwelling unit or structure into compliance with the provisions of this code.

(5) Inform the property owner of the right to appeal.

(6) Include a statement of the city's right to file a lien in accordance with section 3.04.006.

(7) Include a statement that, if the owner commits another violation of the same kind or nature that poses a danger to the public health and safety on or before the first anniversary of the date of the notice, the city without further notice may correct the violation at the owner's expense and assess the expense against the property.

(c) Method of service. Such notice shall be deemed to be properly served if a copy thereof is given:

(1) Personally to the owner in writing;

(2) By mail, to the owner at the owner's address as recorded in the appraisal district records of the appraisal district in which the property is located; or

(3) If personal service cannot be obtained:

(A) By publication at least once in a newspaper of general circulation in the city;
(B) By posting the notice on or near the front door of each building on the property to which the violation relates; or
(C) By posting the notice on a placard attached to a stake driven into the ground on the property to which the violation relates.

(Ordinance Possibly Under Streets and Sidewalks) Encroachment of public property

(a) *Offense.* It shall be unlawful for any person to place or allow the placement of any item that encroaches on any portion of public property.

(1) For purposes of this section, public property includes, but is not limited to, public facilities, streets, roads, alleys, sidewalks, parkway areas, rights-of-way, and easements.

(2) Items prohibited from encroaching on any portion of public property under this section include, but are not limited to, lumber, vehicles, trailers, boxes, firewood, posts, fences, shipping containers, and storage containers.

(b) *Affirmative defenses.* It shall be an affirmative defense to prosecution under this section if a defendant proves by a preponderance of the evidence that:

(1) The item was placed in a manner and location that complied with a valid, city-issued permit, or

(2) The placement of the item is expressly authorized by and in compliance with a city ordinance.

(c) *Application.* The prohibition under this section shall not apply to:

(1) An item placed by or required by the City of Aubrey and in compliance with all other local, state, and federal laws, including, but not limited to, trees, shrubs, landscaping, solid waste and recycling containers issued by the City of Aubrey, bike racks placed in the right-of-way by the City of Aubrey, bike racks placed in the right-of-way by a developer as required by the City of Aubrey, and mailboxes; or

(2) A lawfully parked motor vehicle in compliance with all local, state, and federal laws.

(d) The parkway area is that area lying between the outer boundary of the right-of-way of any public street and/or alley and the curb line of the street and/or alley; or if there is no curb line, the paved portion of the street and/or alley.

(e) *Enforcement.*

(1) The city manager or designee shall be authorized to enforce this section.

(2) If conduct prohibited under this section is also an offense under the Texas Penal Code, Texas Transportation Code, Texas Health and Safety Code, or any other state law, the violation shall be enforced under the applicable state law.

(3) If conduct is prohibited under this section and another city ordinance, it may be enforced and prosecuted under either this section or another applicable city ordinance.

(f) *Penalty.* Any violation of the provisions or terms of this article by any person, firm, corporation or association shall be a class C misdemeanor offense and shall be subject to a fine in accordance with subsection 1.01.009 of the City Code of Ordinances for each offense. Every day a violation continues shall constitute a separate offense.

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on a Resolution nominating a candidate for the DENCO Area 9-1-1 District Board of Managers.

Staff Contact
Eric Schlotter, Fire Chief
eschlotter@aubreytx.gov
940-365-9785

Summary
The Denco Area 9-1-1 District is accepting nominations for one of the two Board of Managers positions appointed by participating municipalities within the district. In June, you will have the opportunity to vote for one of the nominees.

Financial Summary
N/A

Staff Recommended Action
Approve

Staff Recommended Motion
N/A

Denco Area 9-1-1 District

1075 Princeton Street • Lewisville, Texas 75067
Phone: 972-221-0911 • Fax 972-420-0709 • Denco911.gov

TO: Denco Area 9-1-1 District Participating Municipal Jurisdictions

FROM: Gregory S. Ballentine, Executive Director

DATE: April 1, 2026

RE: Nomination for the Denco Area 9-1-1 District Board of Managers

Chapter 772, Texas Health and Safety Code, provides for the Denco Area 9-1-1 District Board of Managers to have "two members appointed jointly by all the participating municipalities located in whole or part of the district." The enclosed resolution describes the appointment process of a municipal representative.

Each year on September 30th, the term of one of the two members appointed by participating municipalities expires.

Denco requests the following actions by the governing bodies of each of the 32 municipalities in the district:

1. **Immediate Action (Nominate):** If your city/town would like to nominate a candidate to represent the municipalities on the Denco Board of Managers, please send a letter of nomination, by way of council action, and résumé of the candidate to the Denco Area 9-1-1 District office. Nominees are historically current or former elected officials in the district; however, there are no official prerequisites. **For a nomination to be considered, written notification of council action must reach the Denco Area 9-1-1 District by 5:00 p.m. May 29, 2026**. No nominations shall be considered after that time.
2. **Future Action (Vote):** On June 1, 2026, Denco staff will send the slate of nominees to each city/town for consideration, requesting the city/town council vote by resolution for one of the nominees. **Written notice of the council's selection must reach the Denco Area 9-1-1 District by 5:00 p.m. on July 31, 2026.** No votes will be accepted after that time. However, if a nominating municipality does not thereafter formally vote, its nomination will automatically count as a vote for its nominee.
3. **Process Closure (Results):** The candidate with the most votes will be the municipalities' representative to the Denco Area 9-1-1 District Board of Managers for the two-year term beginning October 1, 2026.

Please send a copy of your council's official action and candidate résumé to the **Denco Area 9-1-1 District, 1075 Princeton Street, Lewisville, TX 75067** or to Melinda Camp at melinda.camp@denco911.gov. Denco staff will acknowledge receipt and sufficiency of the submitted documents. **If that acknowledgement is not received within one (1) business day, or you have any other questions, please contact Ms. Camp at 972-221-0911**. As a courtesy, Denco will provide notification of your council's action to the nominee.

Thank you for your support of the Denco Area 9-1-1 District.

Enclosure

CITY OF AUBREY, TEXAS

RESOLUTION NO 1039-26

A RESOLUTION NOMINATING ONE CANDIDATE TO A SLATE OF NOMINEES FOR THE BOARD OF MANAGERS OF THE DENCO AREA 9-1-1 DISTRICT.

WHEREAS, Section 772, Health and Safety Code, provides that two voting members of the Board of Managers of an Emergency Communications District shall be appointed jointly by all cities and towns lying wholly or partly within the District;

NOW THEREFORE BE IT RESOLVED BY THE COUNCIL OF THE OF AUBREY, TEXAS:

Section 1

The City of Aubrey hereby nominates _____ as a candidate for appointment to the Board of Managers of the Denco Area 9-1-1 District.

Section 2

That this resolution shall become effective immediately upon its passage and approval.

PASSED AND APPROVED by the City Council of the City of Aubrey this 23rd day of April, 2026.

APPROVED:

_____
Chris Rich, Mayor

ATTEST:

_____
Jenny Hicks, City Secretary

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on an Ordinance amending Chapter 1, "General Provisions", Article 10, "Parks and Recreation", Division 3, "Park and Community Center Rules" Section 1.10.073, "Prohibitions and Standards of Conduct", Subsections 19 and 26 regulating park hours and other standards; providing a penalty, and providing for publication and an effective date.

Staff Contact
Kurt Karnowski, Public Works Manager
kkarnowski@aubreytx.gov
940-440-9343

Summary
This ordinance amends Chapter 1, Article 10 of the Code of Ordinances related to Parks and Recreation, specifically updating provisions within the “Prohibitions and Standards of Conduct” for City parks and community center facilities.The proposed amendments focus on two key areas intended to improve public safety, enhance park usability, and protect the quality of life for residents:

Park Hours: Establishes that City parks are closed from **dusk to dawn**, with an exception allowing access during City-sponsored or City-authorized events. This change is intended to reduce late-night disturbances, improve safety, and minimize impacts to nearby neighborhoods.

Tobacco and Nicotine Use: Prohibits smoking and the use of tobacco or nicotine products, including electronic cigarettes, in City parks except in designated areas. This provision is designed to promote a healthier environment, improve air quality, and reduce litter within public spaces.

These updates reflect the City’s ongoing efforts to maintain safe, family-friendly parks while balancing community use and neighborhood impacts. The ordinance also includes standard enforcement provisions, with violations classified as a Class C misdemeanor, subject to a fine as allowed by law.Approval of this ordinance will modernize park regulations, support public health and safety objectives, and ensure that City parks continue to serve as high-quality community amenities for residents and visitors.

Financial Summary
No Financial Impact

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve, deny, table) the ordinance

CITY OF AUBREY, TEXAS
ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS, AMENDING CHAPTER 1 "GENERAL PROVISIONS"; ARTICLE 10, "PARKS AND RECREATION"; DIVISION 3 "PARK AND COMMUNITY CENTER RULES," OF THE CODE OF ORDINANCES BY AMENDING SUBSECTION (19) AND SUBSECTION (26) OF SECTION 1.10.073, "PROHIBITIONS AND STANDARDS OF CONDUCT"; PROVIDING FOR THE INCORPORATION OF PREMISES; PROVIDING AMENDMENTS; PROVIDING FOR A CUMULATIVE REPEALER/SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR CODIFICATION; PROVIDING THAT A VIOLATION OF THIS ORDINANCE IS A CLASS C MISDEMEANOR AND UPON CONVICTION A PERSON OR ENTITY SHALL BE SUBJECT TO A FINE NOT TO EXCEED THE SUM OF $2,000.00 AS ALLOWED BY LAW, AND EACH DAY OR PART THEREOF THAT A VIOLATION OF THIS ORDINANCE OCCURS OR CONTINUES SHALL CONSTITUTE A SEPARATE OFFENSE; PROVIDING FOR PUBLICATION AND AN EFFECTIVE DATE.

WHEREAS, the City of Aubrey is a home rule municipality located in Denton County, created in accordance with the provisions of the Texas Local Government Code and operating pursuant to its Home Rule Charter, Texas Constitution and the laws of the State of Texas; and

WHEREAS, the City owns and maintains parks, recreational areas, and open spaces that promote the public health and welfare, and it is reasonable and necessary for the City to establish operational guidelines and standards of conduct for park use so that the parks may be enjoyed by residents, provide community gathering places and enhance quality of life; and

WHEREAS, establishing hours for use and enjoyment of parks is necessary to promote public safety, to minimize late night noise and disturbances to nearly residents, and to mitigate light pollution; and

WHEREAS, regulating the use of tobacco and other nicotine products in City parks by limiting use of such products to specified areas preserves air quality for all persons utilizing parks and reduces litter and other negative environmental impacts; and

WHEREAS, the City Council has determined that the amendment to park hours and the limitation on smoking and use of tobacco and nicotine products serves the best interest of the City of Aubrey and will promote the health, safety, and welfare of the citizens of the City of Aubrey and the general public;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS:

Section 1.
Findings Incorporated

The recitals set forth above are the legislative findings of the City Council and are incorporated into the body of this Ordinance as if fully set forth herein.

Section 2.
Amendments

Chapter 1 "General Provisions"; Article 10, "Parks and Recreation," Division 3, "Park and Community Center Rules", Section 1.10.073, "Prohibitions and Standards of Conduct", Subsection 19 and Subsection 26 are hereby amended to be and read in their entirety as follows, and all other sections and subsections of Section 1.10.073 not expressly amended hereby shall remain in full force and effect:

Article 10, Parks and Recreation

…

Division 3 Park and Community Center Rules

…

§ 1.10.073. Prohibitions and Standards of Conduct.

(a) Prohibitions. Except in accordance with a special event or other permit issued by the city, it shall be unlawful for any person to engage in any one or more of the following acts or to cause such acts to occur in a city park:

…

"(19) To enter, remain, or stay in any city park between the hours of dusk and dawn, except that it shall not be unlawful to enter, remain, or stay in a city park between the hours of dusk and dawn to attend a City sponsored or City authorized public event during the event and until its conclusion by City."

…

"(26) To smoke or use tobacco or nicotine products, tobacco or nicotine delivery systems, including electronic cigarettes and similar products, and/or any other tobacco or nicotine derived products in a city park except in areas designated by the City for such smoking and/or use."

…

Section 3.
Cumulative Repealer/Savings

This Ordinance shall be cumulative of all other Ordinances and shall not repeal any of the provisions of such Ordinances except for those instances where there are direct conflicts with the provisions of this Ordinance. Ordinances or parts thereof in force at the time this Ordinance shall take effect and that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with this Ordinance. Provided however, that any complaint, action, claim, or lawsuit, which has been initiated or has arisen under or pursuant to such Ordinance on the date of adoption of this Ordinance shall continue to be governed by the provisions of that Ordinance and for that purpose the Ordinance shall remain in full force and effect.

Section 4.
Severability

Should any section, subsection, sentence, clause, or phrase of this Ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. The City of Aubrey hereby declares that it would have passed this Ordinance, and each section, subsection, clause, or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

Section 5.
Penalty Clause

Any person, firm, corporation or business entity violating this Ordinance shall upon conviction be deemed guilty of a misdemeanor, and upon such conviction thereof shall be subject to a fine not to exceed the sum of $2,000.00 as allowed by law. Each day or part thereof that a violation of this Ordinance occurs or continues shall constitute a separate offense. The penal provisions imposed under this Ordinance shall be cumulative and shall not preclude the City from filing suit in law or in equity for enforcement of this Ordinance.

Section 6.
Codification

The City Secretary is hereby directed to authenticate this Ordinance by seal and signature and to properly codify this Ordinance as required by Section 3.16 of the Aubrey Home Rule Charter

Section 7.
Publication/Effective Date

This Ordinance shall become effective after its publication pursuant to Section 3.14 of the City of Aubrey Home Rule Charter and state law; such publication shall be in the form of the caption hereof, which states in summary the purpose of this Ordinance and the penalty for violation hereof.

PASSED AND APPROVED by the City Council of the City of Aubrey, Texas this the ____ day of April 2026.

APPROVED:

_____
Chris Rich, Mayor

ATTEST:

_____
Jenny Hicks, City Secretary

APPROVED AS TO FORM:

_____
Patricia A. Adams, City Attorney

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on the final acceptance of Winn Ridge First Responders Park Public Improvements and authorize the final payment in the amount of $62,318.92 to Perfect Finish Landscaping.

Staff Contact
Kurt Karnowski, Public Works Manager
kkarnowski@aubreytx.gov
940-440-9343

Summary
Winn Ridge First Responders Park completed improvements including:

- Installation of new sidewalks
- Installation of playground equipment and fall surfacing
- Installation of dog park and artifical turf
- Installation of fencing
- Installation of new landscaping
- Installation of irrigation

The total cost of improvements is $1,246,378.29.

A final walk was conducted on April 7, 2026 and all public improvement punch list items were completed successfully.

The contractor has provided 2-yr Maintenance Bonds and the Contractors Affidavit of Final Payment and Release. As-built files have been received, and the city engineer has provided a letter of recommendation for acceptance.

Financial Summary

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve, deny, table) acceptance of the Winn Ridge First Responders Park.

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on an agreement with Fransen Pittman for Construction Manager At-Risk services and General Construction on the Aubrey MDD Development Project at 204-208 S. Main Street, and authorize the City Manager to sign necessary documents.

Staff Contact
Christine Gossett, MDD Executive Director
cgossett@aubreytx.gov
940-440-9343

Summary
In August 2025, Aubrey MDD acquired two commercial properties at 204-208 S. Main Street in downtown. The two buildings are one of Aubrey's original commercial structures in downtown. The buildings are zoned General Retail and were built in 1890. They were formerly family-owned businesses and most recently, prior to closing 3 years ago, the building housed a restaurant and office space.

The MDD had the building assessed and it was determined that multiple repairs and improvements are needed to prepare the two buildings for new tenant(s) and meet current code requirements. Repairs are needed on the front and back facade masonry, windows, doors, and some interior walls. There are plumbing, electrical and mechanical systems and other items that will also need repairs, improvement, and/or replacement by either the MDD or a future tenant before a business can occupy the space(s).

In October, the Board voted to engage the architectural and engineering firm, Parkhill, for services as the building owner representative. The project will address existing building deficiencies and bring the property to a dark-shell condition, preparing the space for future tenant improvements. In December 2026, Parkhill began working with the MDD staff on recommendations for construction and preparation of the RFP/RFQ for CMAR general construction bid. Parkhill will continue to represent the MDD on the project once the general construction firm is selected and approved.

On February 20, 2026, the MDD posted an RFQ/RFP and received 3 bids by March 20, 2026. The staff and Parkhill reviewed the bids and is recommending Fransen & Pittman be awarded the contract. The Aubrey MDD Board will meet on April 16, 2026, to review the CMAR General Construction bid proposal from Fransen Pittman and will consider awarding them the contract for the MDD project at 204-208 S. Main Street.

Pending the final decision of the MDD Board on April 16, 20026, the City Council will consider approval of the MDD's recommendation and authorize the City Manager to sign the contract. The estimated project costs for proposed repairs with costs ranging from $80,000.00 to $350,000.00 for the scope of work necessary to improve the building.

Financial Summary

The Gross Maximum Price for the CMAR Contract will be set and approved by the Aubrey Municipal Development District and may require a budget amendment.

Staff Recommended Action
Approve

Staff Recommended Motion

Motion to (approve/deny/table) the contract at the Gross Maximum Price recommended by the MDD.

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on approving Ordinance 951-26 amending the Fiscal Year 2025-2026 budget.**

****Taxpayer Impact Statement**
Property Tax Due on Median Valued Homestead
2024 Rate vs 2025 Adopted Rate vs 2025 No New Revenue Rate

	Rate per $100 of Value	Median Valued Homestead Property	Tax Due
2024 Adopted Rate	0.464000	$339,000	$1,573
2025 Adopted Rate (Effective October 1, 2026)	0.450000	$339,000	$1,526
2025 No New Revenue Rate	0.450674	$339,000	$1,528

Staff Contact
Mike English, Finance Director
menglish@aubreytx.gov
940-440-9343

Summary
The proposed budget amendment will have no net financial impact on the General Fund budget surplus adopted in the original budget in August 2025 (i.e., zero net financial impact on the original budget). However, we are proposing moving line item expenses to better align with actual and expected spending. Regarding the Enterprise fund, the budget amendment proposes a slight increase in the surplus compared to the original budget. This slight improvement results from a small increase to Interest Income partially offset by an increase in expense. Expenses are expected to be slightly higher than budgeted due to higher activity and volume compared to original assumptions.

Additionally, the MDD board approved additional spending for scope of work required on the 204-208 S. Main St. project (former Mom's building) in the amount of $215,000.

Financial Summary
The net financial impact of the proposed budget amendment on the General fund is zero. The net financial impact on the Enterprise fund is an $86,000 improvement to the surplus.

Staff Recommended Action
Approve

Staff Recommended Motion
I move to approve the Ordinace amending the Fiscal Year 2026 budget.

CITY OF AUBREY, TEXAS

ORDINANCE NO. 951-26

AN ORDINANCE OF THE CITY OF AUBREY, TEXAS AMENDING ORDINANCE NO. 925-25, ADOPTING THE 2025 - 2026 FISCAL YEAR BUDGET TO BALANCE REVENUE SURPLUS, EXPENSE SURPLUS AND SHORTFALL; PROVIDING FOR THE INCORPORATION OF PREMISES; PROVIDING FOR THE AMENDMENT OF THE 2025-2026 FISCAL YEAR BUDGET IN ACCORDANCE WITH EXHIBIT "A" HERETO; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Aubrey, Texas, ("City"), is a home rule municipality created in accordance with the provisions of Chapter 6 of the Texas Local Government Code and operating pursuant to the enabling legislation of the State of Texas; and

WHEREAS, the City Council adopted Ordinance No. 925-25 adopting the 2025-2026 Fiscal Year Budget of the City of Aubrey, Texas (the "2025-2026 Budget") and the City has been making expenditures and operating under the 2025-2026 Budget as required by law; and

WHEREAS, City Staff has submitted an amendment to the 2025-2026 Budget set forth in Exhibit "A" "FY 2026 Budget Amendment", a copy of which is attached hereto and incorporated herein; and

WHEREAS, the City Council has reviewed the proposed FY 2026 Budget Amendment and has determined that the proposed amendment is necessary and appropriate in order to accurately reflect revenue surplus, expense surplus, shortfalls and expenditures and should therefore be adopted;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS:

SECTION 1. That all of the above premises are found to be true and correct and are incorporated into the body of this Ordinance as if copied in their entirety.

SECTION 2. That the 2025-2026 Budget adopted by Ordinance No. 925-25 is hereby amended as set forth more specifically in **Exhibit "A"** hereto, and all line items, expenditures and revenues not expressly amended as set forth in Exhibit "A" shall remain in full force and effect without amendment.

SECTION 3. That this Ordinance shall become effective on and after its passage and adoption in accordance with state law and Charter.

PASSED AND ADOPTED this 23rd day of April, 2026.

_____

CHRIS RICH
MAYOR

ATTEST:

_____

JENNY HICKS
CITY SECRETARY

APPROVED AS TO FORM:

_____

PATRICIA A. ADAMS
CITY ATTORNEY

Exhibit “A”
FY 2026 Budget Amendment

Exhibit A

City of Aubrey
Budget Amendment
Fiscal Year Ending September 30, 2026
As of April 23, 2026

Account Number	Description	Current Budget	Change	Amended Budget
1015102015101	Salaries - Police Dept	3,580,132	$ (177,331)	$ 3,402,801
1015102015105	Overtime - Police Dept	136,885	39,928	176,813
1015102015106	Longevity - Police Dept	5,200	(700)	4,500
1015102015108	Medicare Tax - Police Dept	53,972	3,598	57,570
1015102015109	Group Insurance - Police Dept	496,546	(68,497)	428,049
1015102035051	Printing - Police Dept	5,000	(3,000)	2,000
1015102035081	Uniforms - Police Dept	54,812	5,188	60,000
1015102035090	Postage - Police Dept	3,000	(500)	2,500
1015102045120	Bldg Maint - Police Dept	32,000	33,000	65,000
1015102055617	Utilities Gas - Police Dept	500	(500)	-
1015102055618	Telephone - Police Dept	35,665	888	36,553
1015102055619	Water/Sewer - Police Dept	6,600	(4,918)	1,682
1015102065240	Background Check - Police Dept	2,800	5,840	8,640
1015102075280	Maintenance Contracts - Police Dept	132,318	25,266	157,584
1015102075665	Technology - Police Dept	31,618	1,125	32,743
1015102085072	Promo Supplies - Police Dept	15,440	(316)	15,124
1015102085688	Code Compliance - Police Dept	31,651	(30,652)	999
1015102095131	Meetings - Police Dept	2,160	7,340	9,500
1015102095133	Marketing - Police Dept	-	507	507
1015103015101	Salaries - Fire Dept	5,584,846	(17,540)	5,567,306
1015103015105	Overtime - Fire Dept	500,000	250,000	750,000
1015103015106	Longevity - Fire Dept	11,650	(800)	10,850
1015103015107	Retirement TMRS - Fire Dept	943,128	(44,407)	898,721
1015103015108	Medicare Tax - Fire Dept	88,399	3,202	91,601
1015103015109	Group Insurance - Fire Dept	736,411	-	736,411
1015103035050	Office Supplies - Fire Dept	10,800	-	10,800
1015103035080	Gas & Oil - Fire Dept	137,250	(37,250)	100,000
1015103035090	Postage - Fire Dept	200	313	513
1015103055616	Electricity - Fire Dept	30,000	46,966	76,966
1015103055619	Water/Sewer - Fire Dept	9,000	16,738	25,738
1015103055620	Cable TV - Fire Dept	-	819	819
1015103075260	Dues & Memberships - Fire Dept	12,400	463	12,863
101-5-104-01-5101	Salaries - Engineering Dept	304,292	(142,534)	161,758
101-5-104-01-5107	Retirement - TMRS - Engr Dept	48,899	(21,218)	27,681
101-5-104-01-5108	Medicare - Engr Dept	4,583	(1,586)	2,997
101-5-104-01-5109	Group Health Ins Engr Dept	47,510	(15,957)	31,553
101-5-104-01-5110	Workers Comp TML - Engr Dept	5,750	(1,000)	4,750
101-5-104-01-5621	Training - Engr Dept	-	4,000	4,000
101-5-104-03-5050	Office Supplies - Engr Dept	-	10,000	10,000
101-5-104-03-5080	Gas & oil - Engr Dept	-	9,500	9,500
101-5-104-03-5081	Uniforms - Engr Dept	-	1,500	1,500
101-5-104-03-5630	Tools - Engr Dept	-	500	500
101-5-104-04-5122	Vehicle maintenance - Engr Dept	-	10,000	10,000
101-5-104-06-5620	Legal and Professional - Engr Dept	-	15,000	15,000
101-5-104-07-5260	Dues and Memberships - Engr Dept	-	500	500
101-5-104-07-5665	Technology - Engr Dept	-	8,000	8,000
101-5-104-09-5131	Meetings - Engr Dept	-	250	250
101-5-105-01-5105	Overtime - Streets	-	15,000	15,000
101-5-105-01-5106	Longevity - Streets	200	(100)	100
101-5-105-01-5107	Retirement - TMRS - Streets	23,824	(1,880)	21,944
101-5-105-01-5110	Workers Comp TML - Streets	1,000	5,521	6,521
101-5-105-01-5121	Travel & Training - Streets	-	1,500	1,500
101-5-105-03-5050	Office Supplies - Streets	2,000	(1,600)	400
101-5-105-03-5080	Gas & Oil - Streets	8,251	4,400	12,651
101-5-105-03-5081	Uniforms - Streets	2,500	1,000	3,500
101-5-105-03-5607	Rock, Sand and Gravel - Streets	25,000	(17,981)	7,019
101-5-105-03-5608	Chemicals Purchased - Streets	4,000	(4,000)	-

Exhibit A

City of Aubrey
Budget Amendment
Fiscal Year Ending September 30, 2026
As of April 23, 2026

Account Number	Description	Current Budget	Change	Amended Budget
101-5-105-03-5630	Tools - Streets	5,000	7,603	12,603
101-5-105-04-5121	Equipment Maintenance - Streets	10,000	5,000	15,000
101-5-105-04-5122	Vehicle Maintenance - Streets	12,000	(7,000)	5,000
101-5-105-04-5609	Street Signs - Streets	40,000	10,000	50,000
101-5-105-04-5629	Street maintenance - Streets	20,000	(10,000)	10,000
101-5-105-05-5616	Utilities - Electricity - Streets	49,270	22,596	71,866
101-5-107-01-5101	Salaries - Development Services	707,622	(34,750)	672,872
101-5-107-01-5105	Overtime - Development Services	11,000	(3,000)	8,000
101-5-107-01-5106	Longevity - Development Services	900	(50)	850
101-5-107-01-5107	Retirement - TMRS - Development Services	111,310	(22,797)	88,513
101-5-107-01-5109	Group Health Insurance - Development Services	106,898	(8,400)	98,498
101-5-107-01-5621	Travel/Training - Development Services	10,000	4,000	14,000
101-5-107-03-5050	Office Supplies - Development Services	7,000	1,750	8,750
101-5-107-03-5080	Gas & Oil - Development Services	3,000	3,500	6,500
101-5-107-03-5081	Uniforms - Development Services	600	1,200	1,800
101-5-107-03-5090	Postage - Development Services	1,500	(1,000)	500
101-5-107-03-5150	Printing - Development Services	1,500	(1,500)	-
101-5-107-06-5620	Legal and Professional - Development Services	125,000	(10,000)	115,000
101-5-107-06-5764	Planners - Development Services	125,000	(75,000)	50,000
101-5-107-07-5220	Advertising & Notices - Development Services	1,000	5,113	6,113
101-5-107-07-5260	Dues and Memberships - Development Services	2,160	4,683	6,843
101-5-107-07-5665	Technology - Development Services	41,500	5,000	46,500
101-5-110-01-5101	Salaries - Parks & Rec	321,800	(57,408)	264,392
101-5-110-01-5105	Overtime - Parks & Rec	26,000	4,000	30,000
101-5-110-01-5106	Longevity - Parks & Rec	1,150	(1,000)	150
101-5-110-01-5107	Retirement - TMRS - Parks & Rec	51,435	(13,164)	38,271
101-5-110-01-5108	Payroll Tax Expense (medicare) - Parks & Rec	4,821	(552)	4,269
101-5-110-01-5110	Workers Comp TML - Parks & Rec	5,225	1,529	6,754
101-5-110-01-5121	Travel & Training - Parks & Rec	3,000	1,000	4,000
101-5-110-03-5050	Office Supplies - Parks & Rec	1,000	500	1,500
101-5-110-03-5080	Gas & Oil - Parks & Rec	3,400	2,500	5,900
101-5-110-03-5081	Uniforms - Parks & Rec	1,300	1,000	2,300
101-5-110-03-5630	Small Tools - Parks & Rec	3,000	(500)	2,500
101-5-110-04-5121	Equipment Maintenance - Parks & Rec	8,000	1,000	9,000
101-5-110-04-5122	Vehicle Maintenance - Parks & Rec	2,000	4,000	6,000
101-5-110-04-5630	Park Maintenance - Parks & Rec	30,000	(20,712)	9,288
101-5-110-05-5616	Utilities - Electricity - Parks & Rec	6,500	4,700	11,200
101-5-110-05-5619	Utilities - Water/Sewer - Parks & Rec	6,000	9,372	15,372
101-5-110-06-5685	STORAGE BUILDING - Parks & Rec	4,120	(4,120)	-
101-5-110-07-5665	Technology - Parks & Rec	4,000	1,000	5,000
101-5-110-09-5131	City Events - Parks & Rec	160,000	(75,000)	85,000
101-5-115-01-5101	Salaries - Fleet Dept	42,000	236,516	278,516
101-5-115-01-5105	Overtime - Fleet Dept	2,500	7,000	9,500
101-5-115-01-5106	Longevity - Fleet Dept	-	1,200	1,200
101-5-115-01-5107	Retirement - TMRS - Fleet Dept	6,884	30,714	37,598
101-5-115-01-5108	Payroll Tax Expense (medicare) - Fleet Dept	645	55	700
101-5-115-01-5109	Group Health Insurance - Fleet Dept	11,878	29,239	41,117
101-5-115-01-5110	Workers Comp - TML - Fleet Dept	400	447	847
101-5-115-03-5050	Office Supplies - Fleet Dept	200	800	1,000
101-5-115-03-5080	Gas & Oil - Fleet Dept	1,000	700	1,700
101-5-115-03-5081	Uniforms - Fleet Dept	250	1,000	1,250
101-5-115-03-5122	Vehicle Maintenance - Fleet Dept	2,500	2,500	5,000
101-5-115-03-5630	Tools - Fleet Dept	500	1,000	1,500
101-5-115-09-5131	Meetings - Fleet Dept	75	150	225
201-5-201-01-5101	Salaries - Water Dept	322,042	84,445	406,487
201-5-201-01-5105	Overtime - Water Dept	20,000	10,000	30,000
201-5-201-01-5106	Longevity - Water Dept	550	(50)	500

Exhibit A

City of Aubrey
Budget Amendment
Fiscal Year Ending September 30, 2026
As of April 23, 2026

Account Number	Description	Current Budget	Change	Amended Budget
201-5-201-01-5107	TMRS Contribution - Water Dept	51,286	5,522	56,808
201-5-201-01-5108	Payroll Tax Expense (medicare) - Water Dept	4,958	1,378	6,336
201-5-201-01-5109	Group Health Insurance - Water Dept	71,266	6,079	77,345
201-5-201-01-5110	Workmens Comp TML - Water Dept	12,600	2,840	15,440
201-5-201-01-5621	Travel/Training - Water Dept	4,750	4,000	8,750
201-5-201-03-5080	Gas & Oil - Water Dept	25,000	5,000	30,000
201-5-201-03-5090	Postage - Water Dept	12,000	4,000	16,000
201-5-201-03-5150	Printing - Water Dept	5,000	1,161	6,161
201-5-201-03-5608	Rock, Sand & Gravel - Water Dept	7,000	3,000	10,000
201-5-201-03-5630	Tools - Water Dept	6,000	3,000	9,000
201-5-201-03-5903	Parts and Fittings - Water Dept	30,000	(18,048)	11,952
201-5-201-03-5904	Chlorine - Water Dept	15,000	5,000	20,000
201-5-201-03-5905	Meters - Water Dept	140,000	100,000	240,000
201-5-201-04-5120	Building Maintenance - Water Dept	15,000	(1,431)	13,569
201-5-201-04-5121	Equipment Maintenance - Water Dept	45,000	(27,415)	17,585
201-5-201-04-5122	Vehicle Maintenance - Water Dept	8,000	2,000	10,000
201-5-201-04-5902	Water System Maintenance - Water Dept	270,000	(40,000)	230,000
201-5-201-05-5616	Utilities - Electricity - Water Dept	135,000	25,000	160,000
201-5-201-05-5617	Utilities - Gas - Water Dept	4,000	5,700	9,700
201-5-201-05-5618	Utilities - Telephone - Water Dept	7,000	(2,276)	4,724
201-5-201-05-5619	Utilities - Water/Sewer - Water Dept	1,200	(1,200)	-
201-5-201-06-5620	Legal & Professional - Water Dept	35,000	15,000	50,000
201-5-201-06-5766	Consultant - engineering - Water Dept	60,000	(59,582)	418
201-5-201-07-5220	Advertising & Notices - Water Dept	750	750	1,500
201-5-201-07-5261	Permits-TCEQ - Water Dept	6,100	700	6,800
201-5-201-07-5262	UTRW membership - Water Dept	3,100	300	3,400
201-5-201-07-5280	Maintenance contract - tanks - Water Dept	-	3,000	3,000
201-5-201-07-5624	Equipment Rental - Water Dept	6,000	(6,000)	-
201-5-201-07-5665	Technology - Water Dept	8,250	8,000	16,250
201-5-201-07-5666	Bank fees - Water Dept	9,000	(6,650)	2,350
201-5-201-07-5901	Lab Fees - Water Dept	20,000	(15,078)	4,922
201-5-201-07-5906	Groundwater Pumpage Fee - Water Dept	15,000	(2,164)	12,836
201-5-201-07-5931	Franchise Fees 8% - Water Dept	75,000	(4,757)	70,243
202-5-202-01-5101	Salaries - Wastewater Dept	479,000	(43,014)	435,986
202-5-202-01-5105	Overtime - Wastewater Dept	30,000	8,345	38,345
202-5-202-01-5106	Longevity - Wastewater Dept	1,550	(1,200)	350
202-5-202-01-5107	Retirement - TMRS - Wastewater Dept	76,429	(14,720)	61,709
202-5-202-01-5108	Payroll Tax Expense (medicare) - Wastewater Dept	7,403	(520)	6,883
202-5-202-01-5109	Group Health Insurance - Wastewater Dept	83,143	(18,585)	64,558
202-5-202-01-5110	Workers Comp TML - Wastewater Dept	10,549	1,596	12,145
202-5-202-03-5607	Rock, Sand & Gravel - Wastewater Dept	12,000	3,000	15,000
202-5-202-03-5608	Chemicals Purchased - Wastewater Dept	10,000	3,000	13,000
202-5-202-03-5630	Tools - Wastewater Dept	6,000	4,000	10,000
202-5-202-03-5903	Parts and Fittings - Wastewater Dept	3,000	(2,700)	300
202-5-202-03-5904	Chlorine - Wastewater Dept	16,000	5,000	21,000
202-5-202-04-5120	Building Maintenance - Wastewater Dept	5,000	7,650	12,650
202-5-202-04-5121	Equipment Maintenance - Wastewater Dept	35,000	10,000	45,000
202-5-202-05-5616	Utilities - Electricity - Wastewater Dept	55,500	10,000	65,500
202-5-202-05-5618	Utilities - Telephone - Wastewater Dept	9,250	(4,183)	5,067
202-5-202-05-5619	Utilities - Water/Sewer - Wastewater Dept	100,000	15,000	115,000
202-5-202-06-5620	Legal & Professional - Wastewater Dept	6,000	60,000	66,000
202-5-202-06-5766	Consultant - engineering - Wastewater Dept	30,000	(30,000)	-
202-5-202-07-5190	Insurance - TML - Wastewater Dept	15,000	543	15,543
202-5-202-07-5624	Equipment Rental - Wastewater Dept	15,000	2,000	17,000
202-5-202-07-5901	Lab Fees - Wastewater Dept	15,000	3,000	18,000
202-4-000-09-4500	Interest Income - Wastewater Dept	(680,222)	(300,000)	(980,222)
203-5-203-01-5101	Salaries	-	33,186	33,186

Exhibit A

City of Aubrey
Budget Amendment
Fiscal Year Ending September 30, 2026
As of April 23, 2026

Account Number	Description	Current Budget	Change	Amended Budget
203-5-203-01-5105	Overtime	-	5,000	5,000
203-5-203-01-5107	Retirement - TMRS	-	4,964	4,964
203-5-203-01-5108	Payroll Tax Expense (medicare)	-	554	554
203-5-203-01-5109	Group Health Insurance	-	500	500
203-5-203-01-5110	Workers Comp TML	-	1,000	1,000
203-5-203-01-5621	Travel/training	-	2,500	2,500
203-5-203-03-5050	Office Supplies	-	600	600
203-5-203-03-5080	Gas & Oil	-	5,200	5,200
203-5-203-03-5081	Uniforms	-	400	400
203-5-203-03-5090	Postage	-	500	500
203-5-203-03-5150	Printing	-	1,200	1,200
203-5-203-04-5122	Vehicle Maintenance	-	1,000	1,000
203-5-203-05-5616	Utilities - Electricity	-	600	600
203-5-203-05-5619	Utilities - Water/Sewer	-	300	300
203-5-203-06-5620	Legal & Professional	-	10,000	10,000
203-5-203-06-5766	Consultant - engineering	-	5,000	5,000
203-5-203-07-5190	Insurance - TML	-	500	500
203-5-203-07-5220	Advertising and Notices	-	5,000	5,000
203-5-203-07-5260	Dues & Memberships	-	250	250
203-5-203-07-5665	Technology	-	3,000	3,000
203-5-203-09-5131	City Events	-	2,500	2,500
203-5-203-09-5133	Meetings	-	250	250
		$ 17,063,489	$ (86,563)	$ 16,976,926

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on Ordinance 952-26, amending Chapter 12, “Traffic and Vehicles”, Section 12.03, “Operation of Vehicles” to establish prima facie maximum Speed Limits on identified portions of FM 1385 within City limits; providing for a fine amount not to exceed $200 for each violation; and providing an effective date.

Staff Contact
Charles Kreidler, City Manager
kreidler@aubreytx.gov
940-440-9343

Summary
This ordinance amends Chapter 12 of the City of Aubrey Code of Ordinances to establish revised prima facie maximum speed limits on designated portions of FM 1385 within the City limits.

FM 1385 has experienced significant increases in traffic volume due to rapid residential and commercial growth in the surrounding area. What was once a rural roadway now functions as a major arterial corridor serving multiple high-growth communities. This transition has resulted in increased congestion, a higher frequency of traffic conflicts, and ongoing safety concerns for motorists.

The City has received consistent feedback from residents regarding speeding, unsafe driving conditions, and difficulty accessing adjacent neighborhoods. Additionally, available crash data and field observations indicate a pattern of incidents that support the need for enhanced safety measures along the corridor.

A traffic study was conducted and reviewed by TxDOT, which supports a reduced speed limit of 45 miles per hour in the areas within the City of Aubrey. This recommendation provides the technical basis for the proposed ordinance.

This effort has been coordinated regionally and is supported by the City of Celina, the City of Pilot Point, and the Town of Prosper. Each of these communities is evaluating similar ordinances to establish consistent speed limits along FM 1385, recognizing that the corridor functions as a shared regional roadway.

While the ultimate solution to the challenges on FM 1385 is the planned expansion and reconstruction of the roadway by TxDOT, the timeline for those improvements remains outside the City’s control. As a result, the City is pursuing interim measures that can be implemented locally to improve safety conditions.

Lowering the speed limit is a practical and immediate step to help reduce vehicle speeds, improve driver reaction time, and mitigate the severity of crashes. Although this action alone will not resolve all traffic-related issues on FM 1385, it represents a reasonable and proactive effort to enhance safety for residents and the traveling public until long-term infrastructure improvements are completed.

Violations of the revised speed limits will be subject to a fine not to exceed $200 per offense.

Financial Summary
No Financial Impact. TxDot will install signs.

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (approve, deny or table) the ordinance reducing the speed limit on FM 1385 to 45 MPH

CITY OF AUBREY
ORDINANCE NUMBER 952-26

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING SECTION 12.03.053 ("SPEED LIMIT ON RESIDENTIAL STREETS") OF DIVISION 2 ("SPEED LIMITS") OF ARTICLE 12.03 ("OPERATION OF VEHICLES") OF CHAPTER 12 ("TRAFFIC AND VEHICLES"), BY AMENDING SUBSECTION (E) OF SECTION 12.03.053 TO ADOPT PARAGRAPH 6 ESTABLISHING A PRIMA FACIE MAXIMUM SPEED LIMIT ON IDENTIFIED PORTIONS OF THE WEST SIDE OF FM 1385 WITHIN THE CORPORATE LIMITS OF THE CITY OF AUBREY; PROVIDING FOR THE INCORPORATION OF PREMISES; PROVIDING AMENDMENTS; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY OF A FINE NOT TO EXCEED $200.00 FOR VIOLATIONS; AND PROVIDING FOR PUBLICATION AND AN EFFECTIVE DATE.

WHEREAS, Section 545.352 of the Texas Transportation Code provides default prima facie maximum speed limits for roadways in the State of Texas and provides a process by which speed limits can be altered by local governments when certain statutory conditions are met; and

WHEREAS, FM 1385 has experienced significant increases in traffic volume due to rapid residential and commercial growth in the surrounding area, and now functions as a major arterial corridor serving multiple high-growth communities; and

WHEREAS, the increased traffic on FM 1385 has resulted in increased congestion, a higher frequency of traffic conflicts, and ongoing safety concerns for motorists; and

WHEREAS, the effort to reduce speed on FM 1385 has been coordinated regionally and is supported by the City of Celina, the City of Pilot Point, and the Town of Prosper, and each of these communities is evaluating similar ordinances to establish consistent speed limits along FM 1385, recognizing that the corridor functions as a shared regional roadway; and

WHEREAS, the West side of FM 1385 located between its intersection with FM 428 North to its intersection with Frontier Parkway is located within the corporate limits of the City of Aubrey, Texas, as depicted in Exhibit A hereto (the "FM 1385 – Aubrey"); and

WHEREAS, a traffic study conducted and reviewed by TxDOT supports a reduced speed limit from 55 miles per hour to 45 miles per hour on FM 1385 – Aubrey; and

WHEREAS, the City Council of the City of Aubrey finds and determines that the prima facie maximum speed limit described herein on FM 1385 from its intersection with FM 428 North to its intersection with Frontier Parkway should be established at forty-five (45) miles per hour; and

WHEREAS, the City Council of the City of Aubrey, Texas hereby finds it necessary and proper and in the best interests of the citizens of Aubrey to reduce the existing speed limit on FM 1385 - Aubrey (**Exhibit A**), as specified in this Ordinance.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUBREY, TEXAS:

SECTION 1
INCORPORATION OF PREMISES

The premises set forth above are the legislative findings of the City Council of the City of Aubrey and serve as the basis for and are incorporated into this Ordinance as if written word for word.

SECTION 2
AMENDMENTS TO CODE

The Code Of Ordinances, of the City Of Aubrey, Texas, is hereby amended by amending Section 12.03.053 ("Speed Limit On Residential Streets") of Division 2 ("Speed Limits") of Article 12.03 ("Operation Of Vehicles") of Chapter 12 ("Traffic And Vehicles"), by amending Subsection (e) of Section 12.03.053 to adopt a new paragraph (6) of Section 12.03.053(e) which shall be and read in its entirety as follows and all other paragraphs and subsections of Section 12.03.053 not expressly amended hereby shall remain in full force and effect without amendment:

"**CHAPTER 12**
TRAFFIC AND VEHICLES

. . .

ARTICLE 12.03 OPERATION OF VEHICLES

. . .

Division 2. Speed Limits

. . .

Sec. 12.03.053 Speed limit on residential streets.

…

(e) The speed limits set forth in this Division shall not apply to the following designated portion(s) of the following roads, streets, and highways, and

notwithstanding any provision to the contrary in this division, the speed limits set forth herein are hereby established as the maximum speed limit. No person may drive or operate a motor vehicle in excess of the speed limits set forth herein and any speed in excess of the stated limits is prima facie evidence that the speed is not reasonable and prudent under the conditions and circumstances then existing, having regard to the actual and potential hazards, and is unlawful:

	Location	**Speed Limit**
"(6)	The West side of FM 1385 located within the corporate limits of the City from its intersection with FM 428 North to its intersection with Frontier Parkway	45 MPH "

SECTION 3
CUMULATIVE REPEALER/SAVINGS

This Ordinance shall be cumulative of all other Ordinances and shall not repeal any of the provisions of such Ordinances except for those instances where there are direct conflicts with the provisions of this Ordinance. Ordinances or parts thereof in force at the time this Ordinance shall take effect and that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with this Ordinance. Provided however, that any complaint, action, claim, or lawsuit, which has been initiated or has arisen under or pursuant to such Ordinance on the date of adoption of this Ordinance shall continue to be governed by the provisions of that Ordinance and for that purpose the Ordinance shall remain in full force and effect.

SECTION 4
SEVERABILITY

If any section, subsection, clause, phrase or provision of this Ordinance, or any application thereof to any person or circumstance, shall to any extent be held by a court of competent jurisdiction to be invalid, void or unconstitutional, the remaining sections, subsections, clauses, phrases and provisions of this Ordinance, or any application thereof to any person or circumstance, shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

SECTION 5
PENALTY

That any person, firm, or corporation violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Aubrey, as heretofore amended, and upon conviction shall be punished by a fine not to exceed the sum of Two Hundred ($200.00) Dollars for each offense.

SECTION 6
PUBLICATION AND EFFECTIVE DATE

That this ordinance shall become effective after its publication and authentication pursuant to State law, Section 3.14 and Section 3.16 of the City of Aubrey Home Rule Charter; such publication shall be in the form of the caption hereof, which states in summary the purpose of this Ordinance and the penalty for violation hereof.

PASSED AND APPROVED by the City Council of the City of Aubrey, Texas on this the 23rd day of April 2026.

APPROVED:

_____
Chris Rich, Mayor

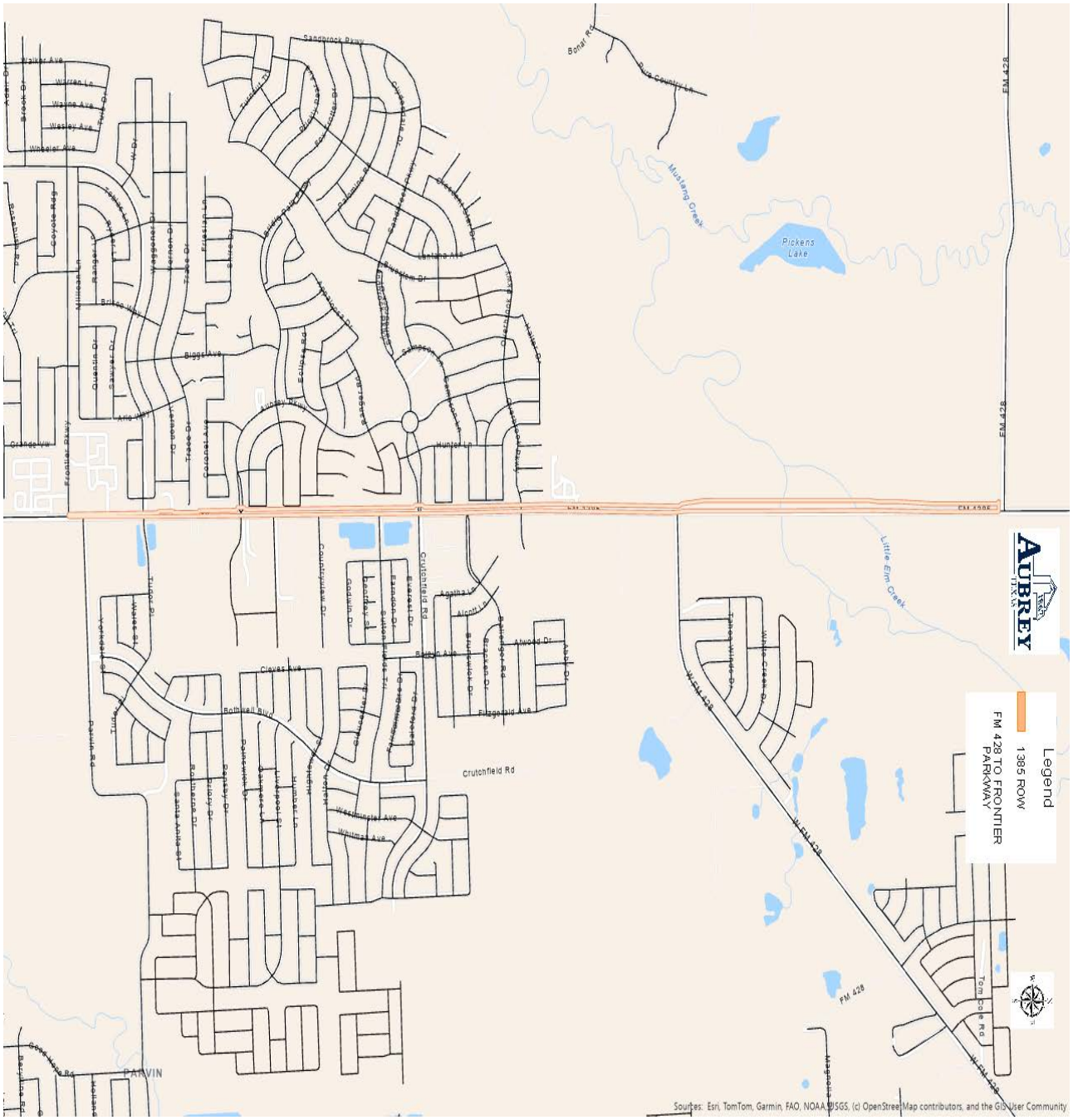
ATTEST:

_____
Jenny Hicks, City Secretary

APPROVED AD TO FORM:

_____
Patricia A. Adams, City Attorney

EXHIBIT "A"
FM-1385 – Aubrey (Depiction)



City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on a Resolution establishing an approximate population of the City and the ETJ of the City and certifying and attesting to the combined population exceeds the population threshold required by Texas Transportation Code Section 644.101 for eligibility and participation in the Commercial Vehicle Enforcement program operated by the Texas Department of Public Safety; and providing an effective date.

Staff Contact
Charles Kreidler, City Manager
kreidler@aubreytx.gov
940-440-9343

Summary

This resolution establishes and certifies the estimated population of the City of Aubrey and its extraterritorial jurisdiction (ETJ) for the purpose of meeting eligibility requirements under the Texas Transportation Code for participation in the Commercial Vehicle Enforcement Program administered by the Texas Department of Public Safety.

Based on a review of current development activity, annexations, and residential growth within both the City limits and ETJ, staff has utilized data from the North Central Texas Council of Governments (NCTCOG), along with City records, to develop a population estimate. Using the NCTCOG household multiplier of 2.831, the combined population of the City and ETJ is estimated at **39,488**.

This certification is necessary to demonstrate compliance with Texas Transportation Code Section 644.101, which requires a minimum population threshold of 25,000 within a municipality located in a county with a population exceeding 500,000. By formally adopting this resolution, the City will confirm that it meets the statutory requirements, allowing Aubrey police officers to participate in and benefit from the State's Commercial Vehicle Enforcement Program.

Participation in this program enhances the City's ability to enforce commercial vehicle regulations, improve roadway safety, and support public safety operations as the community continues to grow.

Approval of this resolution formally documents the City's population for regulatory purposes and ensures eligibility for continued participation in state-supported enforcement initiatives.

Financial Summary

Staff Recommended Action
Approve

Staff Recommended Motion
Motion to (Approve, Deny, Table) the resolution

City of Aubrey and ETJ Population Estimate (2026)

Based on NCTCOG Household Multiplier (2.831)

Area	Estimated Homes	Population
Aubrey City Limits	—	10,491 (NCTCOG Estimate)
Denton County (ETJ)	2,500	7,078
Subdivisions		
Silverado (ETJ)	3,861	10,931
Sandbrock (ETJ)	1,914	5,419
Aspen Meadows (ETJ)	312	883
Saratoga (ETJ)	20	57
Belmont (ETJ)	50	142
Arrowbrooke (ETJ)	1,585	4,487
Total Estimated Population	—	39,488

Key Assumptions & Methodology

- Population estimates are based on building permit data reported to the **North Central Texas Council of Governments (NCTCOG)**.
- The **household size multiplier of 2.831** is applied to single-family units and is **derived directly from NCTCOG regional demographic modeling**.
- This multiplier reflects average household size across applicable counties and is standard for regional population estimation.

City Council Meeting
Staff Report
April 23, 2026

Agenda Item
Consideration and action on approving a mural concept that will be located at 200 W Sycamore and authorize City Manager to execute necessary documents.

Staff Contact
Kacey Hagen, Assistant to the City Manager
khagen@aubreytx.gov
940-440-9343

Summary

Staff is seeking approval to install a mural on the south side of Fire Station 1, located at 200 W Sycamore. In support of this effort, three quotes were obtained, and two design concepts were received and reviewed. Colcerex Trading Company submitted a quote of $8,370, Courtney Clarke submitted a quote of $34,800, and Odessa Helm provided a quote totaling $21,600.

Financial Summary
Up to $34,800

Staff Recommended Action

Staff Recommended Motion
Motion to(Approve/Approve w/Amendments/Table) the mural concept in an amount not to exceed $_____