



City of Killeen

Agenda

City Council

Tuesday, December 13, 2022

5:00 PM

City Hall
Council Chambers
101 N. College Street
Killeen, Texas 76541

Call to Order and Roll Call

___ Debbie Nash-King, Mayor	___ Nina Cobb
___ Riakos Adams	___ Jessica Gonzalez
___ Ramon Alvarez	___ Jose Segarra
___ Michael Boyd	___ Ken Wilkerson

Invocation

Pledge of Allegiance

Approval of Agenda

Presentations

1. [PR-22-009](#) Killeen Star Award
2. [PR-22-010](#) Presentation - Bell County Child Safety Check

Citizen Comments

This section allows members of the public to address the Council regarding any item(s), other than a public hearing item, on the agenda for Council's consideration. Each person shall sign up in advance, may speak only one time, and such address shall be limited to four (4) minutes. A majority of the City Council is required for any time extensions. The Mayor and Councilmembers shall have one (1) minute to respond to citizen comments with a statement or explanation without engaging in dialogue.

Consent Agenda

3. [MN-22-032](#) Consider Minutes of Special City Council Meeting of November 22, 2022.
4. [RS-22-176](#) Consider a memorandum/resolution authorizing the conveyance of property located at 507 N. Gray Street by donation deed to Bell County.
Attachments: [Agreement](#)
[Deed](#)
[Parking Area Agreement](#)
[Presentation](#)

5. [RS-22-177](#) Consider a memorandum/resolution to approve eligible applicants and allocate funding for the American Rescue Plan Act - Small Business Relief Grant.
Attachments: [Presentation](#)
6. [RS-22-178](#) Consider a memorandum/resolution declaring vacancies on various citizen appointed boards and commissions and appointing members to fill the un-expired terms.
Attachments: [Presentation](#)
7. [RS-22-179](#) Consider a memorandum/resolution to create a Downtown Advisory Committee to support the downtown revitalization efforts.
Attachments: [Presentation](#)
8. [RS-22-181](#) Consider a memorandum/resolution to declare the public purpose and approve the grant funding allocations for ten nonprofit organizations with funding from the American Rescue Plan Act and the Public Facility Corporation.
Attachments: [Presentation](#)
9. [OR-22-023](#) Consider an ordinance amending the Code of Ordinances Chapter 28, Section 28-245, Speed Limits on Certain Roads, to change the speed limit on Rosewood Drive.
Attachments: [Ordinance](#)
[Count Summary](#)
[Speed Study](#)
[Traffic Signal Warrant Report](#)
[Presentation](#)

Public Hearings

10. [PH-22-085](#) HOLD a public hearing and consider an ordinance for a City initiated request (Case #Z22-48) to rezone part of Lot 5 and Lot 6, Block 2, Julius Alexander Industrial Subdivision, from "R-1" (Single-Family Residential District) to "R-3A" (Multifamily Apartment Residential District). The properties are locally addressed as 2607 and 2703 Atkinson Avenue, Killeen, Texas.
Attachments: [Exhibit](#)
[Maps](#)
[Site Photos](#)
[Response](#)
[Minutes](#)
[Ordinance](#)
[Considerations](#)

[Presentation](#)

11. [PH-22-086](#) HOLD a public hearing and consider an ordinance requested by Quintero Engineering, LLC on behalf of BCMB Properties, LLC (Case #Z22-50) to rezone Lot 4, Block 2, Stefek Trust Addition Phase Four from “B-5” (Business District) to “B-C-1” (General Business and Alcohol Sales District). The property is locally addressed as 601 Stefek Drive, Killeen, Texas.
- Attachments:** [Exhibit](#)
[Maps](#)
[Site Photos](#)
[Response](#)
[Minutes](#)
[Ordinance](#)
[Considerations](#)
[Presentation](#)
12. [PH-22-087](#) HOLD a public hearing and consider an ordinance requested by Mike Russell, on behalf of ATMOS Energy Corporation (Case #Z22-51) to rezone Lot 1, Block 1, and (Southwest Triangle) Fairway Park 2nd Unit from “R-2” (Two-Family Residential District) to “R-2” (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility. The property is locally addressed as 1701 Fairview Drive, Killeen, Texas.
- Attachments:** [Exhibit](#)
[Maps](#)
[Site Photos](#)
[Site Plan](#)
[Response](#)
[Minutes](#)
[Ordinance](#)
[Considerations](#)
[Presentation](#)
13. [PH-22-088](#) HOLD a public hearing and consider an ordinance amending the Code of Ordinances Chapter 31, Sec. 31-903, Garages, providing for amendments to the standards regarding protruding garage doors. (Requires three-fourths ($\frac{3}{4}$) majority vote.)
- Attachments:** [Minutes](#)
[Ordinance](#)
[Presentation](#)
14. [PH-22-089](#) HOLD a public hearing and consider an ordinance amending the FY 2023 Annual Budget of the City of Killeen to adjust revenue and expenditure

accounts in multiple funds.

Attachments: [Ordinance](#)
[Presentation](#)

15. [PH-22-090](#) HOLD a public hearing and consider amendments to the Tax Increment Reinvestment Zone Number Two (TIRZ #2) ordinance by amending the project and financing plan, expanding the TIRZ #2 boundary, and extending the duration of the TIRZ #2.

Attachments: [Ordinance](#)
[Presentation](#)

Resolutions

16. [RS-22-180](#) Consider a memorandum/resolution authorizing a professional services agreement for the schematic design of the Rancier Avenue Replacement and Streetscaping Improvements Project with BGE Inc. in the amount of \$813,453.73.

Attachments: [Proposal](#)
[Agreement](#)
[Certificate of Interested Parties](#)
[Presentation](#)

Discussion Items

17. [DS-22-147](#) Discuss Warming Center Procedures

Attachments: [Warming Center Policy](#)
[Presentation](#)

18. [DS-22-148](#) Conduct Annual Evaluation of the City Manager

Adjournment

I certify that the above notice of meeting was posted on the Internet and on the bulletin boards at Killeen City Hall and at the Killeen Police Department on or before 5:00 p.m. on December 9, 2022.

Laura J. Calcote, City Secretary

The public is hereby informed that notices for City of Killeen meetings will no longer distinguish between matters to be discussed in open or closed session of a meeting. This practice is in accordance with rulings by the Texas Attorney General that, under the Texas Open Meetings Act, the City Council may convene a closed session to discuss

any matter listed on the agenda, without prior or further notice, if the matter is one that the Open Meetings Act allows to be discussed in a closed session.

This meeting is being conducted in accordance with the Texas Open Meetings Law [V.T.C.A., Government Code, § 551.001 et seq.]. This meeting is being conducted in accordance with the Americans with Disabilities Act [42 USC 12101 (1991)]. The facility is wheelchair accessible and handicap parking is available. Requests for sign interpretive services are available upon requests received at least 48 hours prior to the meeting. To make arrangements for those services, please call 254-501-7700, City Manager's Office, or TDD 1-800-734-2989.

Notice of Meetings

The Mayor and/or City Council have been invited to attend and/or participate in the following meetings/conferences/events. Although a quorum of the members of the City Council may or may not be available to attend this meeting, this notice is being posted to meet the requirements of the Texas Open Meetings Act and subsequent opinions of the Texas Attorney General's Office. No official action will be taken by Council.

- *2022 Holiday Bazaar, December 18, 2022, 10:00 a.m., Killeen Civic and Conference Center*
- *Killeen Fire Department Christmas Party - December 19, 2022, 5:30 p.m., Courtyard Marriott*
- *Public Policy Luncheon, January 26, 2023, 11:30 a.m., TAMU-CT*

Dedicated Service -- Every Day, for Everyone!



City of Killeen

Staff Report

File Number: PR-22-009

Killeen Star Award Presentation



City of Killeen

Staff Report

File Number: PR-22-010

Presentation - Bell County Child Safety Check



City of Killeen

Staff Report

File Number: MN-22-032

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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Consider Minutes of Special City Council Meeting of November 22, 2022.

City of Killeen
Special City Council Meeting
Killeen City Hall
November 22, 2022 at 5:00 p.m.

Presiding: Mayor Debbie Nash-King

Attending: Mayor Protem Ken Wilkerson, Councilmembers Jessica Gonzalez, Riakos Adams, Jose Segarra (attended via Zoom), Nina Cobb, and Ramon Alvarez

Absent: Michael Boyd

Also attending were City Manager Kent Cagle, City Attorney Holli Clements, Interim City Secretary Judy Paradice, Deputy City Secretary Beatrice Canseco, and Sergeant-at-Arms Officer Demontigny.

Approval of Agenda

Motion was made by Mayor Protem Wilkerson to approve the agenda. Motion was seconded by Councilmember Alvarez. The motion carried 5-0, Councilmember Segarra was unable to vote due to technical difficulties with Zoom.

Citizen Comments

The following citizens spoke on RS-22-165:

Richard Johnson
Bruce Thomas
John Miller
Michael Fornino
Jonathan Okray
Jack Ralston
Chris Bray
Bill Paquette
Joshua Plowick
Bobby Whitson

Ordinances/Resolutions

OR-22-021 Consider an ordinance canvassing the returns of the November 8, 2022 Special Election.

The Deputy City Secretary read the caption of the ordinance:

**AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF KILLEEN, TEXAS,
CANVASSING RETURNS AND DECLARING THE RESULTS OF A SPECIAL
ELECTION HELD NOVEMBER 8, 2022 FOR A PROPOSITION TO ELIMINATE
ENFORCEMENT OF LOW-LEVEL MARIJUANA OFFENSES IN THE CITY OF
KILLEEN.**

Mayor Protem Wilkerson read the ordinance that certified the election results, stating the number of votes for and against Proposition A.

Motion was made by Mayor Protem Wilkerson to approve OR-22-021. Motion was seconded by Councilmember Adams. Motion carried unanimously.

RS-22-165 Consider options regarding Proposition A and the initiative ordinance to eliminate low level marijuana enforcement, and discuss any Councilmember concerns about Proposition A.

Staff Comments: Holli Clements, City Attorney
Ms. Clements provided options about Proposition A. In addition, Police Chief, Chuck Kimble was available for questions.

Motion of direction was made by Mayor Protem Wilkerson to return in three months to discuss options about Proposition A. Motion was seconded by Councilmember Gonzalez.

Councilmember Gonzalez made an amendment to the motion to return on December 6, 2022 for discussion. Councilmember Adams seconded the amendment. The amendment to the motion carried unanimously.

Councilmember Segarra made an amendment to the amendment to remove section 22-83 from Proposition A. Councilmember Alvarez seconded the amendment. Councilmember Alvarez rescinded his second. Councilmember Segarra rescinded his amendment to the amendment.

Councilmember Alvarez made an amendment to the amendment to impose a moratorium of the ordinance until December 6, 2022. Councilmember Segarra seconded the amendment. The amendment to the motion carried 5-1 with Mayor Protem Wilkerson in opposition.

The amended motion of direction to impose a moratorium of the ordinance until December 6, 2022 to discuss the options for Proposition A carried unanimously.

Adjournment

With no further business, upon motion being made by Councilmember Adams, seconded by Councilmember Alvarez, and unanimously approved, the meeting was adjourned at 6:38 p.m.



City of Killeen

Staff Report

File Number: RS-22-176

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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Consider a memorandum/resolution authorizing the conveyance of property located at 507 N. Gray Street by donation deed to Bell County.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Edwin Revell, Executive Director of Development Services

SUBJECT: Donation Deed to Bell County for property located at 507 N. Gray Street

BACKGROUND AND FINDINGS:

The former First National Bank Texas relocated its bank facilities to its new location at 901 E. CTE, which officially opened on March 16, 2022, and allowed the property located at 507 N. Gray Street to be redeveloped.

On September 13, 2022, the City's acceptance of the donation of the property from the First National Bank Texas was approved along with the City's acceptance of a bid from AAR, Inc. to remove asbestos containing materials and to demolish all buildings located on the property.

The asbestos abatement work is now complete, and the demolition work remains on schedule to be completed no later than December 31, 2022. We are now seeking Council authorization to execute a donation deed pursuant to the commitment in the Interlocal Agreement with Bell County to donate the property located at 507 N Gray Street to Bell County to allow for the construction of the proposed Bell County annex facility.

Additionally, the County believes it will need off-site parking for the facility. Since the two off-site parking lots are to be retained by the City, staff is currently working on an agreement to address the parking concerns.

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THE ALTERNATIVES CONSIDERED:

1. Do not authorize donation deed to Bell County for property located at 507 N Gray Street to allow for the construction of the proposed Bell County annex facility.
2. Authorize conveyance of property located at 507 N Gray St by donation deed to Bell County to allow for the construction of the proposed Bell County annex facility.

Which alternative is recommended? Why?

Staff recommends that City Council authorize the conveyance of property located at 507 N Gray St by donation deed to Bell County to allow for the construction of the proposed Bell County annex facility and to fulfill the City's obligations under the related Interlocal Agreement.

CONFORMITY TO CITY POLICY:

Yes. The city has a commitment to bring in new development in the North Killeen and downtown areas.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

N/A

Is this a one-time or recurring expenditure?

N/A

Is this expenditure budgeted?

N/A

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

N/A

RECOMMENDATION:

Staff recommends that City Council authorize the conveyance of property located at 507 N Gray St by donation deed to Bell County to allow for the construction of the proposed Bell County annex facility and authorize the City Manager or designee to execute any deeds, contracts, or other documents to accomplish the same.

DEPARTMENTAL CLEARANCES:

Development Services
Legal

ATTACHED SUPPORTING DOCUMENTS:

Donation Deed
Interlocal Agreement

State of Texas §

County of Bell §

Interlocal Agreement

This Interlocal Agreement is made and entered into by and among the City of Killeen ('City') and Bell County ('County'), collectively, 'the Parties'.

Recitals

WHEREAS, the Texas Government Code, Title 7, Chapter 791 provides for interlocal cooperation Contracts, or interlocal agreements, among political subdivisions of the State of Texas; and

WHEREAS, the Texas Government Code, Title 7, Chapter 791, states that its purpose is to increase the efficiency and effectiveness of local governments by authorizing them to contract with each other; and

WHEREAS, the Texas Government Code, Title 7, Chapter 791 further allows for interlocal agreements for 'governmental functions', as defined by Chapter 791, Texas Government Code; and

WHEREAS, the Texas Government Code, Title 7, Chapter 791 allows counties, municipalities and other political subdivisions of the State of Texas to enter into interlocal agreements under the terms and conditions set forth in Texas Government Code, Title 7, Chapter 791; and

WHEREAS, City is a home rule city under the laws of the State of Texas and, accordingly, has authority to enter into an interlocal agreement; and

WHEREAS, the County is a political subdivision of the State of Texas and, accordingly, has authority to enter into an interlocal agreement; and

WHEREAS, the County has indicated a need to relocate the Bell County Killeen Annex, currently located on Priest Drive in Killeen; and

WHEREAS, First National Bank of Texas has indicated it is amenable to transfer ownership of the property and all buildings ('Property') located at 507 North Gray, Killeen, Texas, to the County for the purposes of locating the Bell County Killeen Annex; and

WHEREAS, the City is supportive of this location for the Bell County Killeen Annex and has an interest in revitalizing its downtown area and seeks to keep and attract entities to locate in that area; and

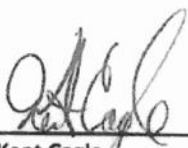
NOW, THEREFORE, in consideration of the mutual promises, obligations, and benefits to derived by the Parties pursuant to this interlocal agreement, the Parties hereby agree that:

1. The City agrees, subject to paragraph 4.c, to acquire the Property, demolish the structures and clear the Property and to convey the Property as 'shovel ready' at no cost to the County. City further agrees that such actions shall occur on or before December 31, 2022.

2. The County agrees to:
 - a. Subject to paragraph 1 and paragraph 4.d, construct a new building(s) on the Property with square footage of at least thirty thousand (30,000) square feet, with the new building(s) substantially complete within thirty-six (36) months of receipt of the Property.
3. Each party paying for the performance of governmental functions or services must make those payments from current revenues available to the paying party.
4. Each party acknowledges that:
 - a. The County has allocated \$10,000,000 for the design and construction of the new Killeen Annex.
 - b. The City has allocated \$300,000 for the demolition of the existing structures on the site.
 - c. The City has the right to terminate this agreement at any time prior to performing the commitments set forth in the agreement.
 - d. The County has the right to terminate this agreement prior to the City's performance under this agreement. However, once the City has performed, the County shall commit to constructing or investing the lesser of : 1) the construction of at least 30,000 square feet of building(s) or 2) investing \$10,000,000 for a building(s) on the Property.
5. This interlocal agreement becomes effective on the date the last signature is affixed and remains in effect the obligations of the Parties are complete, unless terminated earlier by mutual written consent of the parties.


IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed, effective on this the July day of 26, 2022.

City of Killeen


Kent Cagle

City Manager

Bell County


David A. Blackburn

County Judge

After Recording Return To:

Bell County
Attn.: County Judge
P.O. Box 768
Belton, TX 76513

DONATION DEED

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

DATE: _____, 2022

GRANTOR: City of Killeen, a municipal corporation

GRANTOR'S MAILING ADDRESS: P.O. Box 1329, Killeen, TX 76540-1329

GRANTEE: Bell County, Texas

GRANTEE'S MAILING ADDRESS: P.O. Box 768, Belton, TX 76513

CONSIDERATION: Grantor's intention to make a donation and Grantee's intention to accept a donation as a political subdivision exclusively for public purposes that benefit the public interest

PROPERTY:

All of Block Two (2), of the ORIGINAL TOWN OF KILLEEN, Bell County, Texas, including those tracts described in:

Deed recorded at Volume 661, Page 71, Real Property Records of Bell County, Texas;

Deed recorded at Volume 700, Page 104, Real Property Records of Bell County, Texas;

Deed recorded at Volume 724, Page 280, Real Property Records of Bell County, Texas;

Deed recorded at Volume 724, Page 281, Real Property Records of Bell County, Texas;

Deed recorded at Volume 950, Page 518, Real Property Records of Bell County, Texas;

Deed recorded at Volume 961, Page 321, Real Property Records of Bell County, Texas;

Warranty Deed recorded at Volume 978, Page 176, Real Property Records of Bell County, Texas;

Warranty Deed recorded at Volume 1037, Page 646, Real Property Records of Bell County, Texas;

Warranty Deed recorded at Volume 1473, Page 271, Real Property Records of Bell County, Texas; and

Alley described in instrument recorded at Volume 1312, Page 543, Real Property Records of Bell County, Texas.

RESERVATIONS FROM AND EXCEPTIONS TO CONVEYANCE AND WARRANTY:

This conveyance is made and accepted subject to the following matters, if any, but only to the extent same are in effect at this time, relating to the Property: validly existing easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded and validly existing restrictions, reservations, covenants, conditions, oil and gas leases, mineral interests, and water interests outstanding in persons other than Grantor, and other instruments, other than conveyances of the surface fee estate, that affect the Property; validly existing rights of adjoining owners in any walls and fences situated on a common boundary; any discrepancies, conflicts, or shortages in area or boundary lines; any encroachments or overlapping of improvements; all rights, obligations, and other matters arising from and existing by reason of any Water Control Improvement District or other governmental district.

Grantor, with full intention of conveying the Property as a donation exclusively for public purposes and without any consideration in exchange, has GIVEN, GRANTED, and CONVEYED, and by these presents does GIVE, GRANT and CONVEY the Property to Grantee, together with all and singular the rights and appurtenances thereto in any wise belonging, TO HAVE AND HOLD IT to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever, without express or implied warranty. Notwithstanding the foregoing, this deed is made with full substitution and subrogation of Grantee in and to all covenants and warranties by others heretofore given or made in respect of the Property or any part thereof.

THE PROPERTY IS CONVEYED "AS IS," "WITH ALL FAULTS," AND IN ITS PRESENT CONDITION. GRANTOR DISCLAIMS ALL WARRANTIES AND REPRESENTATIONS EXCEPTING ONLY THOSE CONTAINED HEREIN.

When the context requires, singular nouns and pronouns include the plural.

City of Killeen

By: _____
Kent Cagle, City Manager

STATE OF TEXAS

COUNTY OF BELL

This instrument was acknowledged before me on _____, 2022, by Kent Cagle,
City Manager of the City of Killeen, on behalf of the City of Killeen.

Notary Public, State of Texas

Certificate of Acceptance

Bell County, as the Grantee in the foregoing instrument, hereby accepts the foregoing donation and consents to the form and contents of this instrument.

Bell County

by: _____
David Blackburn, County Judge

STATE OF TEXAS

COUNTY OF BELL

This instrument was acknowledged before me on _____, 20____, by David Blackburn, Bell County Judge, on behalf of Bell County.

Notary Public, State of Texas

State of Texas §
 §
County of Bell §

PARKING AREA LICENSE AGREEMENT

This Parking Area License Agreement (“Agreement”) is entered into between the CITY OF KILLEEN, a Texas home-rule city and municipal corporation (“Licensor”), and BELL COUNTY, a political subdivision of the State of Texas (“Licensee”); collectively referred to as “the Parties”.

RECITALS

WHEREAS, pursuant to the deed, dated September 14, 2022, Licensor owns the parking lots referred to as Part of Lot 2, Block 1, of the Original Addition to the Town of Killeen, locally addressed as 511 North Fourth Street (“Tract 1”), and Lot 1, Block 6, of the Original Addition to the Town of Killeen, locally addressed as 414 North Fourth Street (“Tract 3”), collectively referred to as “the Licensed Area”, and as described in Exhibit A; and

WHEREAS, pursuant to the deed, dated December xx, 2022, Licensor has conveyed to Licensee all lots contained within Block 2, of the Original Town of Killeen, locally addressed as 507 North Gray Street, so that Licensee may construct a building for the Bell County Annex (“Annex”); and

WHEREAS, Licensee requires the use of the parking spaces located within the Licensed Area for normal Annex operation and has requested from Licensor, and Licensor has agreed to grant Licensee, a license to use the Licensed Area for vehicular ingress, egress, and parking upon the terms and conditions set forth herein; and

WHEREAS, the Parties desire to enter an agreement regarding the terms and conditions for shared use of the Licensed Area; and

NOW THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

AGREEMENT

Article I. License

Subject to the terms and conditions set forth herein, Licensor hereby grants to Licensee and Licensee’s employees, agents, and invitees (“Licensed Parties”) a revocable license (“License”) solely for the non-exclusive use of the Licensed Area for vehicular ingress, egress, and parking between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, excluding official Bell County holidays.

Article II. Term

This Agreement becomes effective on the date the final required signature is affixed and shall remain in effect for two-years. Upon expiration, the license shall automatically renew for successive two-year terms unless either party gives written notice to the other at least six months prior to the expiration of any term of the party's intent not to renew.

In the event that Licensor terminates the license, the Licensor shall identify and provide Licensee with alternate sufficient parking. The location of the alternate parking will require consent of both parties which shall not be unreasonably withheld.

Article III. Licensee's Obligations

Licensee acknowledges that any building construction in Downtown Killeen shall be in accordance with the City of Killeen's 2022 Comprehensive Plan ("Plan"). Licensee agrees to build the Annex in compliance with the Full-Block Redevelopment Site Proposals for a Large Tenant Building located within the Downtown Reinvestment section of the Plan; attached here as Exhibit B.

Article IV. Maintenance

Licensor shall, at its sole cost and expense, maintain the Licensed Area (including, but not limited to, pothole repairs, asphalt sealing, restriping, lighting repairs, etc.). Licensee shall, at its sole cost and expense, repair and maintain any improvements made by Licensee to the Licensed Area. Licensee shall, at its sole cost and expense, repair any damage to the Property caused by Licensee throughout the term of this Agreement. If Licensee shall fail to repair such damage within sixty (60) days after written demand from Licensor, then Licensor shall have the right to do so at Licensee's expense.

Article V. Real Property Interest

Licensee hereby acknowledges and agrees that the License granted hereunder does not confer upon Licensee any right, title, or interest in or to the Licensed Area or Property, as tenants or otherwise, and Licensee hereby expressly disclaims any such right, title, or interest in the Licensed Area and the Property.

Article VI. Indemnification

To the extent allowed by law, Licensee agrees to indemnify, defend, and hold harmless Licensor from and against any and all claims, causes of action, losses or damages whatsoever based upon or arising out of personal injury, death, or property damage sustained or caused by Licensee and its Licensed Parties while using the Licensed Area. This indemnity is intended to indemnify Licensor against such injury, death, or damage even if caused by a premises defect caused by or allowed to exist by or through Licensor's own negligence.

Article VII. Entire Agreement

This agreement contains the complete and entire agreement between the Parties respecting the matters addressed herein. There is no other collateral oral or written agreement among the Parties that in any manner related to the subject matter of this Agreement.

Article VIII. Severability

The provisions of this Agreement are severable and, in the event that any portion of this Agreement is found to be invalid or unconstitutional for any reason, the remainder of this Agreement will not be affected, and this Agreement will be construed as if it had never contained such invalid or unconstitutional provision.

Article IX. Law and Venue

This Agreement shall be subject to and governed by the laws of the State of Texas. The Parties agree that for venue purposes, any and all lawsuits, disputes, or causes of action shall be in Bell County, Texas.

LICENSOR

City of Killeen, Texas

BY: _____
Kent Cagle, City Manager

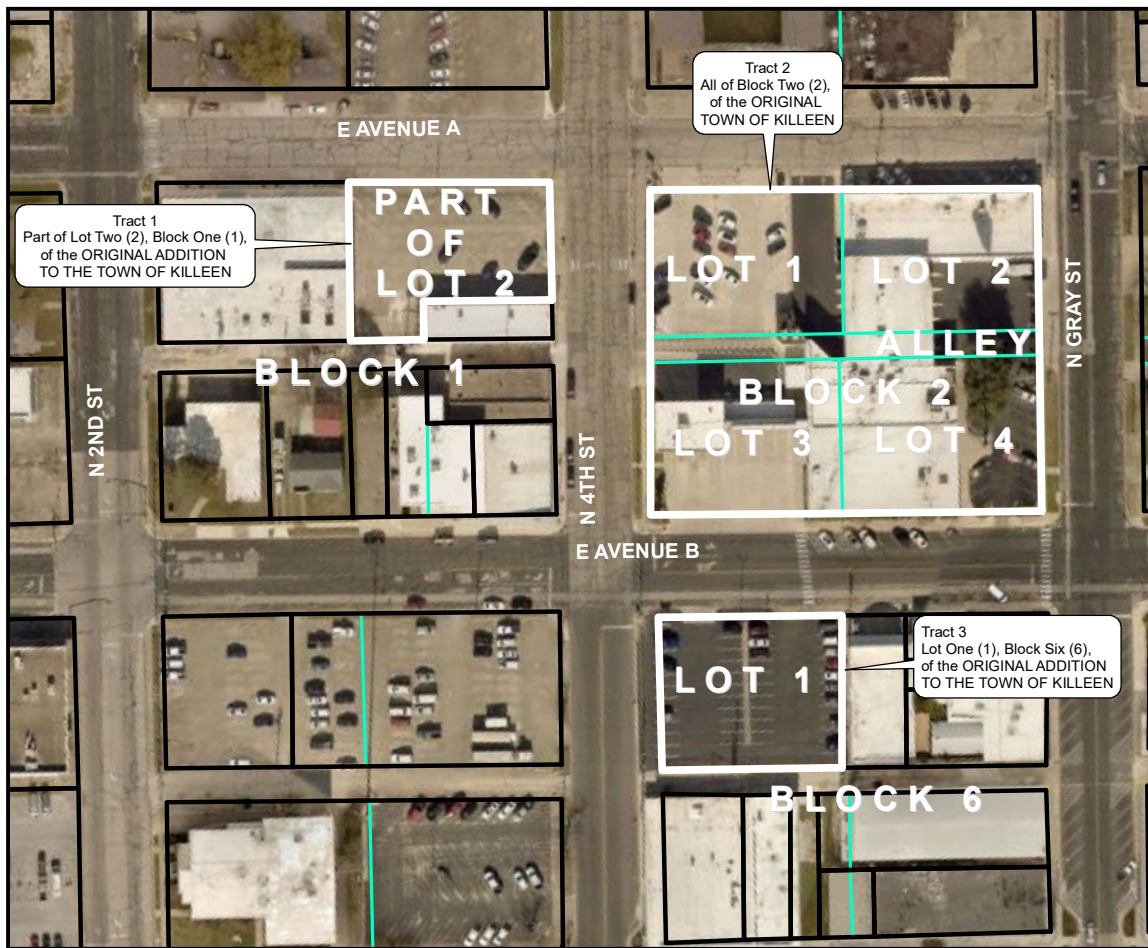
Date: _____

LICENSEE

Bell County, Texas

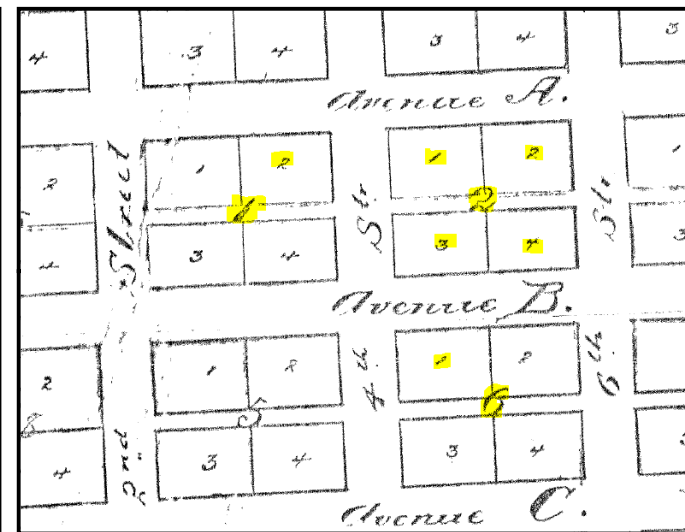
BY: _____
David Blackburn, County Judge

Date: _____



Map Exhibit
1 inch = 150 feet

KILLEEN ORIGINAL TOWN



KILLEEN ORIGINAL TOWN

Tract 1:

Part of Lot Two (2), Block One (1), of the ORIGINAL ADDITION TO THE TOWN OF KILLEEN, Bell County, Texas, and being more fully described by field notes in that instrument recorded at Volume 900, Page 92, Real Property Records of Bell County, Texas, such description being incorporated by reference as if set forth at length herein

Tract 2:

All of Block Two (2), of the ORIGINAL TOWN OF KILLEEN, Bell County, Texas

Tract 3:

Lot One (1), Block Six (6), of the ORIGINAL ADDITION TO THE TOWN OF KILLEEN, Bell County, Texas, being the same tract described in Warranty Deed recorded at Volume 1082, Page 210, Real Property Records of Bell County, Texas

Legend



Full Block Redevelopment

Large Tenant Building

Given the high level of vacancy in downtown blocks, its reasonable to assume that full-block redevelopment opportunities could arise. When that happens it is important to consider the urban form of the development and to ensure that redevelopment contributes both to the fiscal resiliency of the city as well as creating a comfortable space for people to inhabit.

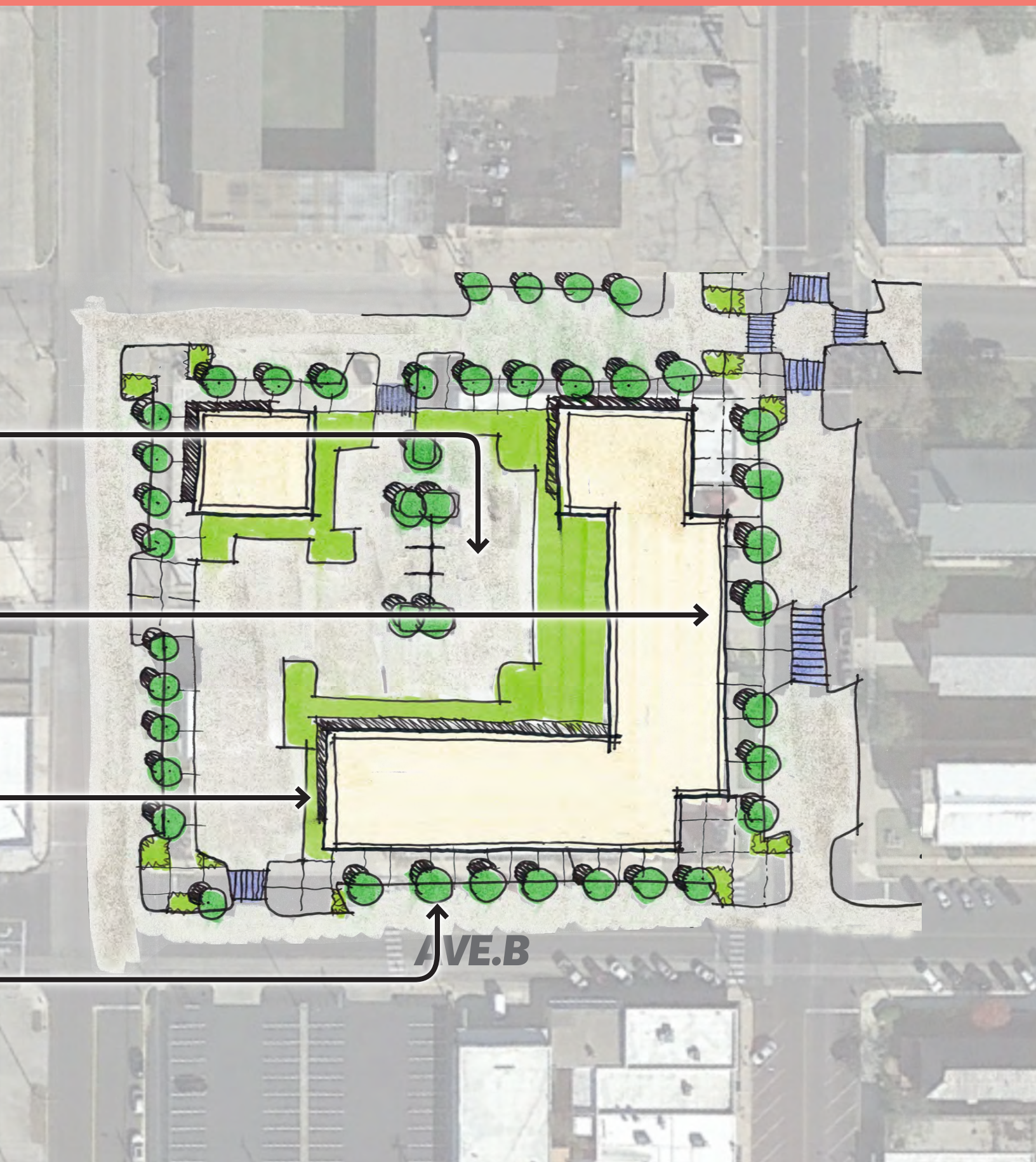
Any large tenant will have a requirements for how they design their space, but these items below can be applied to any design, and help the overall project still fit the nature, and feel of the future, friendly, and welcoming Downtown Killeen

CENTRALIZED PARKING Automobiles while a necessary part of the urban landscape should not create a buffer between a building and the streets that surround it. Pulling the parking to the center, or behind the building can reduce its negative effects to the pedestrian environment.

URBAN FORM A building that is scaled to pedestrians, and comes up to the public realm, in this case the sidewalk helps it to blend and fit with the aesthetic of Downtown.

ARCHITECTURE Building architectures should fit the vernacular and style of surrounding buildings.

SIDEWALK IMPROVEMENTS Sidewalks should be improved to make pedestrians feel as comfortable in their space as possible. Widening where possible and including trees along the street for shade and protection are important.



A stylized graphic in the background featuring a five-pointed star at the top right, with a curved swoosh line extending from the bottom left towards the star. Two overlapping trapezoidal shapes are positioned behind the swoosh.

CONVEY DONATION DEED FOR 507 N. GRAY STREET TO BELL COUNTY

RS-22-176

December 6, 2022

Background

2

- ❑ First National Bank Texas has relocated to their new location at 901 E. CTE, which officially opened on March 16, 2022 and allowed the property located at 507 N. Gray Street to be redeveloped.
- ❑ On September 13, 2022, the asbestos removal/demolition bid of \$618,700.00 was awarded to AAR, INC. The contractor's timeline is to have the work substantially completed by December 12, 2022, and fully completed by December 31, 2022.

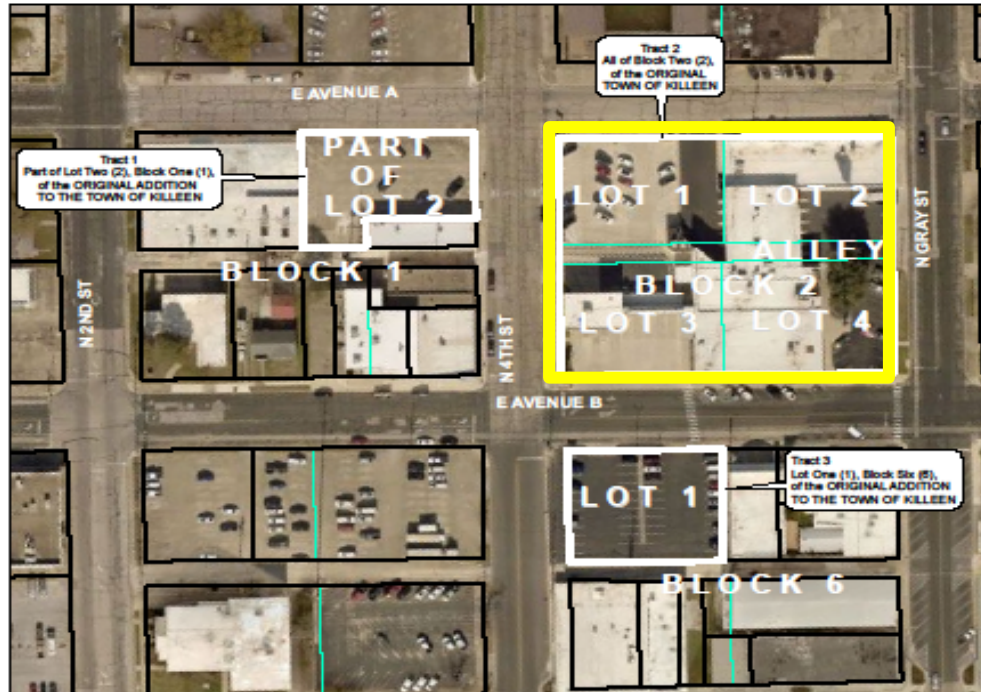
Background

2

- ❑ On September 14, 2022, the First National Bank Texas donated the bank property (Tracts 1, 2, and 3) to the City of Killeen.
- ❑ The intent is to donate Tract 2 to Bell County for the construction of the proposed annex facility.
- ❑ The City will maintain ownership of Tract 1 and 3. Bell County will request parking use agreement.

Aerial View - First National Bank Texas

4



N
Map Exhibit
1 inch = 150 feet

KILLEEN ORIGINAL TOWN



KILLEEN ORIGINAL TOWN

Tract 1:

Part of Lot Two (2), Block One (1), of the ORIGINAL ADDITION TO THE TOWN OF KILLEEN, Bell County, Texas, and being more fully described by field notes in that instrument recorded at Volume 900, Page 92, Real Property Records of Bell County, Texas, such description being incorporated by reference as if set forth at length herein

Tract 2:

All of Block Two (2), of the ORIGINAL TOWN OF KILLEEN, Bell County, Texas

Tract 3:

Lot One (1), Block Six (6), of the ORIGINAL ADDITION TO THE TOWN OF KILLEEN, Bell County, Texas, being the same tract described in Warranty Deed recorded at Volume 1082, Page 210, Real Property Records of Bell County, Texas

Legend

Parcels
Lot Lines

Alternatives

6

- ❑ Do not authorize the donation deed to Bell County for property located at 507 N. Gray Street to allow for the construction of proposed Bell County annex facility.
- ❑ Authorize conveyance of the property located at 507 N. Gray Street by donation deed to Bell County to allow for the construction of proposed Bell County annex facility.

Staff Recommendation

7

- Staff recommends that the City Council authorize conveyance of the property located at 507 N. Gray Street by donation deed to Bell County to allow for the construction of proposed Bell County annex facility.



City of Killeen

Staff Report

File Number: RS-22-177

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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Consider a memorandum/resolution to approve eligible applicants and allocate funding for the American Rescue Plan Act - Small Business Relief Grant.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Leslie Hinkle, Executive Director Community Development

SUBJECT: American Rescue Plan Act - Small Business Relief Grants

BACKGROUND AND FINDINGS:

The City Council allocated American Rescue Plan Act (ARPA) funds to assist businesses that sustained a net loss in revenue due to the COVID pandemic. A business relief grant application was developed for businesses to apply for the grant that would grant assistance up to \$10,000 per applicant and not exceed the losses reported from federal income tax filings between 2019 and 2020.

Applications were received from February 1, 2022 to April 13, 2022. Eighty-nine applications were received. City Staff reviewed all the applications, verified submitted tax returns for tax years 2019 and 2020 for revenue losses and verified the eligibility for the grant. Twenty-one business applications met all the requirements, sustained revenue losses and are recommended for funding.

Business Name / Business Type	Amount Eligible
1. Henderson Food Service LLC/ restaurant	\$10,000
2. Totally 4 Kids/childcare services	\$10,000
3. LUTUM LLC/construction company	\$10,000
4. MARQUEZ MEXICO LINDO/restaurant	\$10,000
5. V.A salon LLC, DBA Rose Nails/nail salon	\$10,000
6. Lil's Touch of Class Beauty Salon/hair salon	\$10,000
7. JUDY'S PERSONAL TOUCH/hair salon	\$10,000
8. WAN KIM 49 LLC/billiards, game room	\$10,000
9. PRESSED BEAUTY BAR/hair salon	\$10,000
10. NJ SPA LLC./nail salon	\$10,000
11. ISLAND SPICE RESTAURANT/restaurant	\$10,000
12. AN TRONG CORPORATION, DBA Ann's Nails/nail salon	\$10,000
13. PHOENIX AWAKENING MASSAGE LLC./massage training school	\$10,000
14. Faye Carol Thomas, DBA Gift City/gift shop	\$10,000
15. Southwest Coaches Inc. DBA Arrow Trailways of Texas/ bus service	\$10,000
16. Divine Hair Design Salon & Boutique	\$3,849
17. Sopheak LAK, DBA Wally's Donuts/restaurant	\$794
18. SOLAR NAILS/nail salon	\$328
19. LVL99 LLC/auto repair	\$10,000
20. FCO Construction Services LLC/construction company	\$10,000
21. TopKoat Nail Salon/nail salon	\$2,254

Total Business Relief: \$177,225

THE ALTERNATIVES CONSIDERED:

1. Do not authorize City Staff to issue grant payments to twenty-one applicants for small business assistance.
2. Authorize City Staff to issue grant payments to some of the applicants and/or change the amounts authorized.
3. Authorize City Staff to issue grant payments to twenty-one applicants for small business assistance.

Which alternative is recommended? Why?

Alternative 3 is recommended.

CONFORMITY TO CITY POLICY:

This item conforms to all applicable City Policies.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

The total expenditure in FY 2023 is \$177,225. \$1,000,000 of American Rescue Plan Act Funds were budgeted for this program, as well as the North Killeen Downtown Small Business Grant. \$965,812 was spent on the North Killeen Downtown Small Business Grant. A corresponding budget amendment will appropriate the additional \$143,037 needed to fund the difference.

Is this a one-time or recurring expenditure?

One-time

Is this expenditure budgeted?

Yes, upon approval of the corresponding budget amendment.

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

Yes, upon approval of the corresponding budget amendment.

RECOMMENDATION:

Staff recommends that the City Council authorize City Staff to issue the grant payments to the

twenty-one applicants for small business assistance at the recommended amounts.

DEPARTMENTAL CLEARANCES:

Finance

Legal

ATTACHED SUPPORTING DOCUMENTS:

N/A



BUSINESS RELIEF GRANTS

RS-22-177

December 13, 2022

Background

2

- City Council approved American Rescue Plan Act (ARPA) funds for the Business Relief Grant Program to assist businesses that sustained a net loss due to Covid pandemic
 - ▣ Application process was open for submissions February 1 - April 13, 2022
 - ▣ Eighty-nine applications were received for the Business Relief for businesses fiscally impacted by the Covid pandemic
 - After City Staff review, and verification of eligibility and submitted tax returns, twenty-one businesses were recommended for funding totaling \$177,225

Grant Eligibility Requirements

3

- ❑ Be in operation prior to March 2020 and remain in operation
- ❑ Operate in retail store front location in corporate city limits of Killeen, Texas
- ❑ Have 50 or fewer employees
- ❑ Not be limited to patrons over the age 18
- ❑ Experienced a loss of business income due to COVID-19 equal or greater than the amount of assistance being requested
- ❑ Have not received prior relief funding to cover the loss of income for the same time period
- ❑ Not be owned by a City of Killeen employee, Councilmember, or related to any Killeen official (within the first degree of consanguinity)

Eligible Applicants

4

Business Name	Eligible Amount
Henderson Food Service LLC	\$ 10,000
Totally 4 Kids	\$ 10,000
Lutum LLC/Construction Company	\$ 10,000
Marquez Mexico Lindo	\$ 10,000
V.A salon LLC	\$ 10,000
Lil's Touch of Class Beauty Salon	\$ 10,000
Judy's Personal Touch	\$ 10,000
Wan Kim 49 LLC/Billiards	\$ 10,000
Pressed Beauty Bar	\$ 10,000
NJ Spa LLC	\$ 10,000
Island Spice Restaurant	\$ 10,000

Business Name	Eligible Amount
An Trong Corporations dba An Nails	\$ 10,000
Phoenix Awakening Massage LLC	\$ 10,000
Faye Carol Thomas dba Gift City	\$ 10,000
Southwestern Coaches Inc	\$ 10,000
Divine Hair Design Salon and Boutique	\$ 3,849
Sopheak Lak dba Wally's Donuts	\$ 794
Solar Nails	\$ 328
LVL99 LLC dba Automotive Part Sales	\$ 10,000
FCO Construction Services LLC	\$ 10,000
Top Koat Nail Salon	\$ 2,254
Total Business Relief:	\$ 177,225

Total Business Relief: \$177,225

Alternatives Considered

5

- ❑ Do not authorize City Staff to issue grant payments to twenty-one applicants for small business assistance
- ❑ Authorize City Staff to issue grant payments to some of the applicants and/or change the amounts authorized
- ❑ Authorize City Staff to issue grant payments to twenty-one applicants for small business assistance
 - ▣ Staff will prepare and execute grant agreements for each recommended business

Recommendation

6

- ❑ Approve the business relief funding requests for the twenty-one recommended applicants and authorize city manager or his designee to execute the grant agreements.



City of Killeen

Staff Report

File Number: RS-22-178

2	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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Consider a memorandum/resolution declaring vacancies on various citizen appointed boards and commissions and appointing members to fill the un-expired terms.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Holli Clements, City Attorney

SUBJECT: Appointing Citizen Members to Various Boards and Commissions

BACKGROUND AND FINDINGS:

The Mayor and City Council make annual appointments to the various boards, commissions, and committees each year and throughout the year as vacancies occur.

Section 2-118 of the Code of Ordinances states that persons appointed to city boards, commissions or committees can be effective members only if they attend the group's meetings regularly. In case of excessive absences, a board, commission, or committee member can be removed from office. Missing three (3) consecutive meetings or more than twenty-five (25) percent of meetings in a twelve-month period where the board meets more than four times per year shall constitute excessive absences. The city manager has been notified by the chairperson the Senior Citizen Advisory Board that a member has missed more than three (3) consecutive meetings as defined by the code. The member with the attendance infractions is identified in the chart below in the status column as "Attendance."

At the September 13, 2022 Regular City Council Meeting, four members of the Animal Advisory Committee resigned. The members who have resigned are identified in the chart below in the status column as "Resigned."

In the past couple of months, a newly appointed board/commission member of the Recreation Services Advisory Board has resigned from their seat due to a meeting time conflict. The member who has resigned is identified in the chart below in the status column as "Resigned."

The Planning and Zoning representative on the Board of Adjustment-Zoning had an expired term and was not reappointed. The Planning and Zoning Commission has selected a new representative for appointment.

In order to declare vacancies and make appointments to fill the unexpired terms of the vacancies, City Council action is required.

THE ALTERNATIVES CONSIDERED:

No other alternatives were considered.

Which alternative is recommended? Why?

N/A

CONFORMITY TO CITY POLICY:

Making these appointments conforms to relevant city ordinances and policies.

***Requested Reappointment**

Animal Advisory Committee (Sub-Comm: R. Adams, K. Wilkerson)

Current Member	Status	New Member	Comments	Termed?	RR*
Vacant	Resigned	Monique Stone	Animal Welfare	No	N/A

Board of Adjustment - Zoning (Sub-committee R. Alvarez, M. Boyd)

Current Member	Status	New Member	Comments	Termed?	RR*
Kirk Latham	Term Expired	Ricky Wilson	P&Z Rep	No	N/A

Recreation Services Advisory Board (Sub-committee: All Council)

Current Member	Status	New Member	Comments	Termed?	RR*
Kristin Wright	Resigned	Delsina West	District 4 Rep	No	N/A

Senior Citizen Advisory Board (Sub-committee: N. Cobb, J. Gonzalez.)

Current Member	Status	New Member	Comments	Termed?	RR*
Bill Barker	Attendance	Betty Kimbrough	Citizen Rep	No	N/A

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

There is no current or future expenditure with these appointments.

Is this a one-time or recurring expenditure?

N/A

Is this expenditure budgeted?

N/A

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

N/A

RECOMMENDATION:

Staff recommends the City Council declare vacancies on various citizen appointed boards and commissions and appoint citizen members to fill the identified unexpired terms.

DEPARTMENTAL CLEARANCES:

City Attorney

ATTACHED SUPPORTING DOCUMENTS:

N/A



APPOINT CITIZENS TO BOARDS AND COMMISSIONS

RS-22-178

December 13, 2022

Boards and Commissions

2

- The Mayor and City Council make annual appointments to various boards, commissions and committee each year and throughout the year as vacancies occur
- The table shows members that have resigned, have attendance issues or their term expired.

Boards & Commissions

3

Animal Advisory Committee (Sub-Comm: R. Adams, K. Wilkerson)

Current Member	Status	New Member	Comments	Termed?	Requested Reappointment
Vacant	Resigned	Monique Stone	Animal Welfare	No	N/A

Board of Adjustment – Zoning (Sub-Comm: R. Alvarez, M. Boyd)

Current Member	Status	New Member	Comments	Termed?	Requested Reappointment
Kurt Latham	Term Expired	Ricky Wilson	P&Z Rep	No	N/A

Boards & Commissions (cont.)

4

Recreation Services Advisory Board (Sub-Comm: All Council)

Current Member	Status	New Member	Comments	Termed?	Requested Reappointment
Kristin Wright	Resigned	Delsina West	District 4 Rep	No	N/A

Senior Citizen Advisory Board (Sub-Comm: N. Cobb, J. Gonzalez)

Current Member	Status	New Member	Comments	Termed?	Requested Reappointment
Bill Barker	Attendance	Betty Kimbrough	Citizen Rep	No	N/A

Recommendation

5

- ❑ Staff recommends that the City Council declare vacancies on various citizen appointed boards and commissions and appoint citizen members to fill the identified unexpired terms.



City of Killeen

Staff Report

File Number: RS-22-179

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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Consider a memorandum/resolution to create a Downtown Advisory Committee to support the downtown revitalization efforts.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Edwin Revell, Executive Director of Development Services

SUBJECT: Creation of Downtown Advisory Committee

BACKGROUND AND FINDINGS:

At the November 1, 2022, workshop, City Council issued a motion of direction for the creation of a Downtown Advisory Committee. The committee's purpose will be to participate in the revitalization efforts by engaging stakeholders and advocating for downtown Killeen. This committee will also assist the Downtown Revitalization Director in developing programs, promoting city and private events, and other activities encouraging historic preservation and economic development.

City Staff proposes an eleven (11) member committee that meets on a quarterly basis consisting of four (4) citizen representatives that are a City of Killeen community member-business leader and one (1) representative from the following entities:

- a. Killeen Arts Commission
- b. Heritage Preservation Board
- c. Fort Hood
- d. Downtown Merchants Association
- e. Hispanic-American Chamber of Commerce
- f. Innovation Black Chamber of Commerce
- g. Greater Killeen Chamber of Commerce

THE ALTERNATIVES CONSIDERED:

1. Do not create the Downtown Advisory Committee.
2. Create the Downtown Advisory Committee with changes to the purpose and/or makeup of the committee.
3. Create the Downtown Advisory Committee as stated.

Alternative 3 is recommended.

Which alternative is recommended? Why?

Based on the City Council's motion of direction, it is recommended that the City Council create the Downtown Advisory Committee.

CONFORMITY TO CITY POLICY:

The creation of the committee conforms to the Governing Standards and Expectations.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

There is no financial impact associated with this action.

Is this a one-time or recurring expenditure?

N/A

Is this expenditure budgeted?

N/A

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

N/A

RECOMMENDATION:

City Council approve creation of an eleven (11) member Downtown Advisory Committee.

DEPARTMENTAL CLEARANCES:

This item has been reviewed by Development Services and Legal Staff.

ATTACHED SUPPORTING DOCUMENTS:

N/A



DOWNTOWN ADVISORY COMMITTEE

RS-22-179

December 6, 2022

Background

2

- At the November 1, 2022, workshop, City Council approved a motion of direction for the creation of a Downtown Advisory Committee.
- The Committee's purpose will be to participate in the revitalization efforts by engaging stakeholders and advocating for downtown Killeen.
- This committee will also assist the Downtown Revitalization Director in developing programs, promoting city and private events, and other activities encouraging historic preservation and economic development.

Members

3

- Staff recommends an eleven (11) member Committee that meets on a quarterly basis consisting of four (4) downtown business owners/residents and one (1) representative from the following entities:
 - ▣ Killeen Arts Commission
 - ▣ Heritage Preservation Board
 - ▣ Fort Hood
 - ▣ Downtown Merchants' Association
 - ▣ Hispanic-American Chamber of Commerce
 - ▣ Innovation Black Chamber of Commerce
 - ▣ Greater Killeen Chamber of Commerce

Alternatives

4

- Do not create the Downtown Advisory Committee.
- Create the Downtown Advisory Committee with changes to the purpose and/or makeup of the committee.
- Create the Downtown Advisory Committee as presented.

Recommendation

5

- Staff recommends that City Council approve the creation of an eleven (11) member Downtown Advisory Committee as presented.



City of Killeen

Staff Report

File Number: RS-22-181

Consider a memorandum/resolution to declare the public purpose and approve the grant funding allocations for ten nonprofit organizations with funding from the American Rescue Plan Act and the Public Facility Corporation.

DATE: December 13, 2022

TO: Kent Cagle, City Manager

FROM: Leslie Hinkle, Executive Director of Community Development

SUBJECT: Nonprofit Organization Grant Allocations

BACKGROUND AND FINDINGS:

The City of Killeen has been allocated \$29,117,907 in American Rescue Plan Act (ARPA) Funds. The City Council allocated \$150,000 of these funds to nonprofits. Additionally, City Council acting as the Public Facility Corporation (PFC) directed the \$350,000 restructuring fee received from the North Killeen Apartments Project to the City of Killeen be used for nonprofit youth organizations.

At the April 12, 2022, Regular City Council Meeting, City Council approved a nonprofit application process for grant funding for nonprofit and nonprofit youth organizations. The application process opened to the public for submission on April 13, 2022, and closed May 12, 2022. City Council established the following criteria:

1. Must serve a public purpose by identifiable secondary benefit to the public agency
2. Services directed at low to moderate income residents, residents disproportionately impacted, or located in a Qualified Census Tract
3. Use must directly address a negative impact of the pandemic
4. Use must be proportional to amount of impact

City Council awarded nine grants of \$10,000 each at the June 28, 2022 Regular City Council meeting and eleven grants of \$10,000 each at the July 26, 2022 Regular City Council meeting, leaving a remaining balance of \$150,000 for nonprofit youth organizations. City Council awarded six grants of \$10,000 each at the August 9, 2022 Regular City Council meeting, leaving a remaining balance of \$90,000 for nonprofit organization grants.

The application process was reopened June 24, 2022 for six months, closing November 24, 2022.

Seventeen applications were received for consideration. The ten organizations New Jerusalem Holy Christian Church Outreach Ministries, The Cairo Brown Foundation, Trinity Sports Organization, Aware Central Texas, Bring Everyone in the Zone Inc., Blessings on the Block Community Outreach, Inc., The Village United, Inc., The Zamore Foundation, The Jaybird Learning Academy, Inc., and Hip-Nique/Soul Collective serve a public purpose by providing educational, health care, and social services to our residents that would not otherwise be available.

THE ALTERNATIVES CONSIDERED:

1. Do not approve the funding for ten nonprofit organizations.
2. Amend the selected organizations.
3. Approve the funding, declare the public purpose and authorize staff to execute the agreements for the ten nonprofit organizations.

Which alternative is recommended? Why?

Alternative 3 is recommended. The ten organizations submitted the required documentation and met the criteria set forth by City Council.

CONFORMITY TO CITY POLICY:

This item conforms to all applicable Federal and state Laws and City Policies.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

\$90,000 from ARPA funding and \$10,000 from PFC funding.

Is this a one-time or recurring expenditure?

One-time

Is this expenditure budgeted?

Yes, in the General Fund Non-Departmental account 010-9501-491.50-86, project codes ARPA33 and PFCNRP.

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

Yes

RECOMMENDATION:

Staff recommends that City Council declare the public purpose as stated above and approve the grant funding requests for ten nonprofit organizations in an amount not to exceed \$10,000 for each organization and authorize staff to execute the agreements.

DEPARTMENTAL CLEARANCES:

Finance

Legal

ATTACHED SUPPORTING DOCUMENTS:

NA



NONPROFIT GRANT PROGRAMS

RS-22-181

December 13, 2022

Background

2

- City Council allocated \$150,000 for nonprofits from American Rescue Plan Act (ARPA) funds and \$350,000 from Public Facility Corporation (PFC) funds
 - ▣ Original application process was open for submissions April 13 – May 12
 - ▣ Six nonprofit organizations were approved for funding and nine nonprofit youth organization were approved for funding
- On May 24, 2022, City Council reopened the application process for the nonprofit organizations for six months, closing November 24
- On June 22, 2022 City Council reopened the application process for the nonprofit youth organizations for one month, closing July 21
 - ▣ Eleven nonprofit youth organizations were approved for funding

Background

3

- ❑ On December 6, 2022, ten nonprofit applications were selected for funding
 - ▣ Nine will be funded with the remaining ARPA nonprofit funding in the amount of \$90,000
 - ▣ One will be funded with \$10,000 from the PFC nonprofit funding
- ❑ In accordance with state law, City Council must declare a public purpose for the expenditure of funds
- ❑ ARPA funds should
 - ▣ Provide services to low to moderate income residents, residents disproportionately impacted, or located in a Qualified Census Tract
 - ▣ Directly address a negative impact of the pandemic
 - ▣ Be proportional to amount of impact

Selected Applicants

4

1. New Jerusalem Holy Christian Church Outreach Ministries
2. The Cairo Brown Foundation
3. Trinity Sports Organization
4. Aware Central Texas
5. Bring Everyone in the Zone Inc.
6. Blessings on the Block Community Outreach, Inc.
7. The Village United, Inc.
8. The Zamore Foundation
9. The Jaybird Learning Academy, Inc.
10. Hip-Nique/Soul Collective

Alternatives Considered

5

- ❑ Do not approve the funding for the ten nonprofit organizations
- ❑ Amend the selected organizations
- ❑ Approve the funding for the ten nonprofit organizations, declare the public purpose and authorize staff to execute grant agreements for each organization

Recommendation

6

- ❑ Approve the grant funding request for ten nonprofit organizations, declare the public purpose and authorize staff to execute grant agreements for each selected nonprofit



City of Killeen

Staff Report

File Number: OR-22-023

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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Consider an ordinance amending the Code of Ordinances Chapter 28, Section 28-245, Speed Limits on Certain Roads, to change the speed limit on Rosewood Drive.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Edwin Revell, Executive Director of Development Services

SUBJECT: Consider an Ordinance Amending Section 28-245 to change the Speed Limit on Rosewood Drive

BACKGROUND AND FINDINGS:

In 2020, the City contracted with Kimley Horn to perform a speed study along Rosewood Drive between Stagecoach Road and East Central Texas Expressway. In December 2021 the City Council directed staff to perform an additional speed analysis for the entire corridor of Rosewood Drive. City staff collected speed and traffic count data along Rosewood Drive from January 10th to January 12th, 2022. On January 18, 2022, the results of the speed study were presented to the City Council. The results showed that the average speeds that were collected were 39 mph for Rosewood Drive north of Stagecoach Road, and 41 mph for the section south of Stagecoach. The 85th percentile speeds were between 43 and 44 mph. The presentation also included accident data along Rosewood which showed accidents to be concentrated near the intersections of Fawn Drive and Aspen Drive. During the City Council meeting, staff were directed to perform warrant studies for the two intersections.

In review of the speed study report dated March 13, 2020, and data collected in January of 2022, the 85 percentile speeds were near and above 45 mph. TXDOT recommends that 85th percentile operating speed limit be used to establish speed limits on the roadways. Currently Rosewood Drive has a posted speed limit of 35 mph which is below the observed and recorded 85th percentile.

In review of the warrant study for the intersections of Aspen Drive and Fawn Drive, the intersections warrant signal improvements only for 45 mph. At 35 mph both intersections do not meet warrants. With the speed limit raised to meet the 85th percentile of 45 mph, the City can address and plan improvements for the intersections that can best address the safety of the roadway and address the current trend for accidents. It is important to note that when a signal meets traffic signal warrants, a traffic signal may be installed; it is not required.

The proposed ordinance would increase the speed limit on Rosewood Drive and also includes minor revisions to address typographical issues.

THE ALTERNATIVES CONSIDERED:

1. Choose not to adopt the ordinance raising the posted speed limit along Rosewood to 45 mph.

2. Adopt the Ordinance with amendments; or
3. Adopt the Ordinance as presented to raise the posted speed limit to 45 mph.

Which alternative is recommended? Why?

Staff recommends the City Council adopt the Ordinance as presented to raise the posted speed limit along Rosewood Drive to 45 mph. The proposed speed limit of 45 mph matches the observed 85th percentile in two separate studies. Standard practices and recommendations by TXDOT recommend that posted speed limits be established based on the 85th percentile speed as determined through studies.

CONFORMITY TO CITY POLICY:

The item complies with all federal, state and local regulations

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

N/A

Is this a one-time or recurring expenditure?

N/A

Is this expenditure budgeted?

N/A

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

N/A

RECOMMENDATION:

Staff recommends the City Council adopt the Ordinance as presented to raise the posted speed limit along Rosewood Drive to 45 mph.

DEPARTMENTAL CLEARANCES:

Development Services
Finance
City Attorney

ATTACHED SUPPORTING DOCUMENTS:

Ordinance

Count Summary

Speed Study

Traffic Signal Warrant Report

ORDINANCE_____

AN ORDINANCE AMENDING CHAPTER 28, TRAFFIC, ARTICLE IX, MISCELLANEOUS RULES OF THE CITY OF KILLEEN CODE OF ORDINANCES TO AMEND THE SCHEDULE OF SPEED LIMITS ON CERTAIN ROADS; PROVIDING A REPEALER CLAUSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION AND EFFECTIVE DATE.

WHEREAS, the City of Killeen, Texas 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, Section 545.356 of the Texas Transportation Code authorizes the City of Killeen to alter by ordinance prima facie speed limits from the results of an engineering and traffic investigation; and

WHEREAS, the City Council of the City of Killeen is concerned with the public's safety and welfare and the protection of the lives of children; and

WHEREAS, the city performed a speed study for Rosewood Drive and warrant studies for the intersections of Rosewood at Fawn Drive and Rosewood at Aspen Drive; and

WHEREAS, the speed study demonstrates that the current 35 mph speed limit posting for Rosewood Drive is below the recognized 85th percentile speed; and

WHEREAS, the City Council of the City of Killeen deems it necessary to establish prima facie speed limit along Rosewood Drive to conform with the 85th percentile speed for favorable conditions;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KILLEEN, TEXAS:

SECTION I. That Chapter 28, Traffic, Article IX., Miscellaneous Rules of the City of Killeen Code of Ordinances is hereby amended to read as follows:

Sec. 28-245. Speed limits on certain roads.

The state traffic laws regulating the speed of vehicles shall be applicable upon all streets within this city except as this section, as authorized by state law, hereby declares and determines upon the basis of an engineering and traffic investigation that certain speed regulations shall be applicable upon specified streets or in certain areas, in which event it shall be unlawful for any person to drive a vehicle at a speed in excess of any speed so declared in this section when signs are in place giving notice thereof. The maximum speed limit shall be set forth upon those streets or portions thereof as follows:

- (a) The reasonable and safe prima facie maximum speed limit shall be 20 miles per hour along the following streets:

20 MPH		
Street	Begin	End
Lake Inks Avenue	Rancier Ave. (FM 439)	Branch Drive
Lake Inks Circle	Branch Drive	End
Branch Drive	Rancier Ave. (FM 439)	Lake Road
Brushy Creek Drive	Montague County Drive	Briar Patch Lane
Briar Patch Lane	Brushy Creek Drive	Bunny Trail
Lakeshore Drive	Entire Roadway	Entire Roadway
Lakeview Loop	Entire Roadway	Entire Roadway

- (b) The reasonable and safe prima facie maximum speed limit shall be 35 miles per hour along the following streets:

35 MPH		
Street	Begin	End
Bunny Trail	Clear Creek Road (SH 201)	Stan Schlueter Loop (FM 3470)
Elms Road	Fort Hood Street (SH 195)	Clear Creek Road (SH 201)
Stagecoach Road	City Limits	East Trimmier Road
Florence Road	Elms Road	Jasper Drive
Rosewood Drive	Central Texas Expressway	End
Turkey Trot Road	Stagecoach Road	Trimmier Road
West Central Texas Expressway	400' west of Athens Street	475' west of Dubroc Drive
East Central Texas Expressway	Western City Limits	475' west of Gateway Boulevard
Clear Creek Road (SH 201)	Northern City Limits	500' south of Watercrest Road

- (c) The reasonable and safe prima facie maximum speed limit shall be 40 miles per hour along the following streets:

40 MPH		
Street	Begin	End
Cunningham Road	Stagecoach Road	Stan Schlueter Loop (FM 3470)
Elms Road	Stan Schlueter Loop (FM 3470)	Fort Hood Street (SH 195)
Robinett Road	Stan Schlueter Loop (FM 3470)	Edgefield Street
Stagecoach Road	East Trimmier Road	Fort Hood Street (SH 195)
Trimmier Road	Kelly Lane	Bacon Ranch Road
WS Young Drive	Stagecoach Road	350' north of Lowes Boulevard
Old 440 Road	450' N north of Ginger Road	Stan Schlueter Loop (FM 3470)
38th Street	Veterans Memorial Boulevard	Rancier Avenue (FM 439)
Stan Schlueter Loop (FM 3470)	FM 2410	1,100' east of Elms Road
Veterans Memorial Boulevard	Western City Limits	350' west of WS Young Drive
Fort Hood Street (SH 195)	East Central Texas Expressway	225' south of Stephen Street
Featherline Road	Chaparral Road	Stagecoach Road

- (d) The reasonable and safe prima facie maximum speed limit shall be 45 miles per hour along the following streets:

45 MPH		
Street	Begin	End
Roy Reynolds Drive	Veterans Memorial Boulevard (Bus. US 190)	Rancier Avenue (FM 439)
Trimmier Road	Chaparral Road	Kelly Lane
Twin Creek Drive	Veterans Memorial Boulevard (Bus. US 190)	Rancier Avenue (FM 439)
Watercrest Road	Clear Creek Road (SH 201)	Willow Springs Road
Onion Road	Stagecoach Road	Stan Schlueter Loop (FM 3470)
Stan Schlueter Loop (FM 3470)	600' west of Old Florence Road	300' west of Saddle Ridge Drive
Fort Hood Street (SH 195)	225' south of Stephen Street	150' south of Industrial Boulevard
East Central Texas Expressway	475' west of Gateway Boulevard	Eastern City Limits
Veterans Memorial Boulevard	350' west of WS Young Drive	200' east of Rio Boulevard
West Central Texas Expressway	Eastern City Limits	400' west of Athens Street
West Central Texas Expressway	475' west of Dubroc <u>Drive</u>	Western City Limits
East Trimmier Road	Stagecoach Road	City Limits
Rosewood Drive	Central Texas Expressway	End

- (e) The reasonable and safe prima facie maximum speed limit shall be 50 miles per hour along the following streets:

50 MPH		
Street	Begin	End

Fort Hood Street (SH 195)	150' south of Industrial Boulevard	350' north of Leifester Circle
Veterans Memorial Boulevard	200' east of Rio Boulevard	Eastern City Limits
Clear Creek Road (SH 201)	500' south of Watercrest <u>Road</u>	600' south of Stan Schlueter Loop

- (f) The reasonable and safe prima facie maximum speed limit shall be 55 miles per hour along the following streets:

55 MPH		
Street	Begin	End
Stan Schlueter Loop (FM 3470)	1,100' east of Elms Road	600' west of Old Florence Road
Stan Schlueter Loop (FM 3470)	300' west of Saddle Ridge Drive	Clear Creek Road (SH 201)
Fort Hood Street (SH 195)	350' north of Leifester Circle	600' south of Stan Schlueter Loop (FM 3470)
Clear Creek Road (SH 201)	600' S <u>s</u> outh of Stan Schlueter Loop	100' south of Prewitt Ranch Road

- (g) The reasonable and safe prima facie maximum speed limit shall be 60 miles per hour along the following streets:

60 MPH		
Street	Begin	End
IH-14/US 190	Killeen/Harker Heights City Limits	Western City Limits
Fort Hood Street (SH 195)	600' south of Stan Schlueter Loop (FM 3470)	2000' south of Clear Creek Road (SH 201)
Clear Creek Road (SH 201)	100' S <u>s</u> outh of Prewitt Ranch Road	SH 195

- (h) The reasonable and safe prima facie maximum speed limit shall be 70 miles per hour along the following streets:

70 MPH		
Street	Begin	End
Fort Hood Street (SH 195)	2000' south of Clear Creek Road (SH 201)	City Limits

SECTION II: That all ordinances or resolutions or parts of ordinances or resolutions in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

SECTION III: That should any section or part of any section or paragraph of this

ordinance be declared invalid or unconstitutional for any reason, it shall not invalidate or impair the validity, force or effect of any other section or sections or part of a section or paragraph of this ordinance.

SECTION IV: That the Code of Ordinances of the City of Killeen, Texas, as amended, shall remain in full force and effect, save and except as amended by this ordinance.

SECTION V: That this ordinance shall be effective after its passage and publication according to law.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this XX day of MONTH 2022, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, Section 551.001, *et seq.*

APPROVED:

Debbie Nash-King, MAYOR

ATTEST:

Laura Calcote, CITY SECRETARY

APPROVED AS TO FORM:

Holli C. Clements, CITY ATTORNEY

Location:Rosewood Drive

Address:Rosewood Drive

Speed Limit:From schedule 35 mph

Date/Time

Report Period:2022-01-10 to 2022-01-12

North of Stagecoach											
SouthBound		0-29	30-35	36-39	40-49	50+	Total Vehicle	Vehicles traveling over 35 MPH	Percentage over 35 MPH	Average Speed (mph)	
1/10/2022		121	635	1839	2158	141	4894	4138	85%	39	
1/11/2022		281	794	1943	1765	63	4846	3771	78%	38	
1/12/2022		101	710	2000	2145	107	5063	4252	84%	39	
		503	2139	5782	6068	311	Totals	14803	12161	82%	39
North Bound		0-29	30-35	36-39	40-49	50+	Total Vehicle	Vehicles traveling over 35 MPH	Percentage over 35 MPH	Average Speed (mph)	
1/10/2022		131	972	2214	2456	147	5920	4817	81%	39	
1/11/2022		137	1049	2182	2149	167	5684	4498	79%	39	
1/12/2022		78	941	2266	2449	150	5884	4865	83%	39	
		346	2962	6662	7054	464	Totals	17488	14180	81%	39
Total for North of Stagecoach		849	5101		13122	775	32291	26341	82%	39	
South of Stagecoach											
SouthBound		0-29	30-35	36-39	40-49	50+	Total Vehicle	Vehicles traveling over 35 MPH	Percentage over 35 MPH	Average Speed (mph)	
1/10/2022		136	241	634	1080	150	2241	1864	83%		
1/11/2022		169	428	584	1155	174	2510	1913	76%		
1/12/2022		148	258	732	1263	188	2589	2183	84%		
		453	927	1950	3498	512	Totals	7340	5960	81%	40
North Bound		0-29	30-35	36-39	40-49	50+	Total Vehicle	Vehicles traveling over 35 MPH	Percentage over 35 MPH	Average Speed (mph)	
1/10/2022		42	285	397	890	130	1744	1417	81%		
1/11/2022		51	431	706	1068	87	2343	1861	79%		
1/12/2022		32	370	801	1797	202	3202	2800	87%		
		125	1086	1904	3755	419	Totals	7289	6078	82%	41
Total for South of Stagecoach		578	2013		7253	931	14629	12038	82%	41	

T E C H N I C A L M E M O R A N D U M

DATE: March 13, 2020

TO: Mr. MD M. Hossain

FROM: R. Jake Gutekunst, P.E.

JOB NUMBER: 064405305

RE: Killeen On-Call
Work Order 5
Speed Zone Study – Rosewood Drive from E Central Texas Expressway to Stagecoach Road

Background

This report documents the results of a speed zone study conducted for Rosewood Drive, a roadway owned and maintained by the City of Killeen, Texas. This report contains recommendations related to speed limits on Rosewood Drive between E Central Texas Expressway and Stagecoach Road, based on engineering analysis performed per applicable provisions of the Texas Transportation Code and guidelines set forth by the Texas Department of Transportation (TxDOT).

BASIC SPEED LAW

Transportation Code, Chapter 545, Subchapter H, "Speed Restrictions," contains the statutes governing speeds on roadways in the state of Texas. The following sections pertain to speed zoning by municipalities:

- Section 545.351, Maximum Speed Requirements
- Section 545.356, Authority of Municipality to Alter Speed Limits

The basic speed law is founded on the belief that the majority of motorists are willing to modify their driving behavior properly, as long as they are aware of the conditions around them. Speed zone regulations are based on Section 545.351, which states: "An operator may not drive at a speed greater than is reasonable or prudent under the circumstances ... then existing."

The part of the Texas Transportation Code that relates directly to Municipality authority is Section 545.356, which is provided below:

Chapter 545, Operation and Movement of Vehicles

Sec. 545.356. AUTHORITY OF MUNICIPALITY TO ALTER SPEED LIMITS. (a) The governing body of a municipality, for a highway or part of a highway in the municipality, including a highway of the state highway system, has the same authority to alter by ordinance prima facie speed limits from the results of an engineering and traffic investigation as the Texas Transportation Commission on an officially designated or marked highway of the state highway system. The governing body of a municipality may not modify the rule established by Section 545.351(a) or establish a speed limit of more than 75 miles per hour.

(b) The governing body of a municipality, for a highway or part of a highway in the municipality, including a highway of the state highway system, has the same authority to alter prima facie speed limits from the results of an engineering and traffic investigation as the commission for an officially designated or marked highway of the state highway system, when the highway or part of the highway is under repair, construction, or maintenance. A municipality may not modify the rule established by Section 545.351(a) or establish a speed limit of more than 75 miles per hour.

(b-1) Except as provided by Subsection (b-3), the governing body of a municipality, for a highway or a part of a highway in the municipality that is not an officially designated or marked highway or road of the state highway system, may declare a lower speed limit of not less than 25 miles per hour, if the governing body determines that the prima facie speed limit on the highway is unreasonable or unsafe.

(b-2) Subsection (b-1) applies only to a two-lane, undivided highway or part of a highway.

(b-3) The governing body of a municipality with a population of 2,000 or less, for a highway or a part of a highway in the municipality that is a one-lane highway used for two-way access and that is not an officially designated or marked highway or road of the state highway system, may declare a lower speed limit of not less than 10 miles per hour, if the governing body determines that the prima facie speed limit on the highway is unreasonable

or unsafe.

(c) A *prima facie* speed limit that is altered by the governing body of a municipality under Subsection (b), (b-1), or (b-3) is effective when the governing body erects signs giving notice of the new limit and at all times or at other times as determined.

(d) The governing body of a municipality that declares a lower speed limit on a highway or part of a highway under Subsection (b-1) or (b-3), not later than February 1 of each year, shall publish on its Internet website and submit to the department a report that compares for each of the two previous calendar years:

(1) the number of traffic citations issued by peace officers of the municipality and the alleged speed of the vehicles, for speed limit violations on the highway or part of the highway;

(2) the number of warning citations issued by peace officers of the municipality on the highway or part of the highway; and

(3) the number of vehicular accidents that resulted in injury or death and were attributable to speed limit violations on the highway or part of the highway.

LOCAL AUTHORITY

The altering of the general statewide maximum speed limits to fit existing traffic and physical conditions of the highway constitutes the basic principle of speed zoning. Cities have the authority to establish a *prima facie* maximum speed limit of 75 miles per hour.

County commissioner courts and governing bodies of incorporated cities, towns, and villages may alter maximum *prima facie* speed limits on roadways under their jurisdiction in accordance with the provision of the Transportation Code, Chapter 545, Subchapter H, Sections 545.355 and 545.356 respectively.

A city that increases the *prima facie* speed limit on a city road or highway is required to conduct an engineering and traffic investigation. However, for a highway or a part of a highway in the municipality that is not an officially designated or marked highway or road of the state highway system, the municipality may declare a lower speed limit of not less than 25 miles per hour, if the governing body determines that the *prima facie* speed limit on the road or highway is unreasonable or unsafe.

PRIMA FACIE CONCEPT

In Texas, all speed limits are considered “*prima facie*” limits. *Prima facie* limits are those limits that, “on the face of it,” are reasonable and prudent under normal conditions. To exceed a *prima facie* speed limit does not automatically constitute an infraction of the law, as reasonable and prudent driving behavior is, at times, possible at speeds in excess of the posted limit. However, the burden of proof of reasonable and prudent conduct under the existing conditions rests with the driver. To afford a driver this opportunity to exceed a *prima facie* speed limit recognizes the fact that any posted speed limit cannot adequately reflect the many different road conditions confronting the driver on the same highways at different times.

VALUE OF SPEED ZONING

Although comparative “before-and-after” studies indicate that speed limit signs actually have very little influence on the driver’s choice of speed, speed zoning is necessary and does serve a worthwhile purpose. Realistic speed zoning will serve to protect the public and to regulate the unreasonable behavior of an individual. Having recognized that normally careful and competent actions of a reasonable person should be considered legal, the Texas Legislature has passed legislation concerning speed zoning in order to assure this protection.

If a speed zone is determined by the actions of the majority of drivers on a highway, then it is hoped that speed zoning will facilitate the orderly movement of traffic by increasing driver awareness of a reasonable and prudent speed. Properly applied speed zoning can:

- help drivers adjust their speed to the conditions
- make enforcement easier by furnishing police officers with a reasonable indication of what is excessive speed
- result in more motorists driving within the same speed range at each of the locations along the highway
- reduce the frequency and severity of crashes when accompanied by enforcement.

GUIDELINES FOR SELECTING SPEED LIMITS

TxDOT recommends in its Procedures for Establishing Speed Zones manual that all authorized entities using these procedures should observe the following guidelines when selecting speed limits:

- Speed limits on all roadways should be set based on spot speed studies and the 85th percentile operating speed. Legal minimum and maximum speeds should establish the boundaries of the speed limits. If an existing roadway section's posted speed limit is to be raised, the roadway's roadside features should be examined to determine if modifications may be necessary to maintain roadside safety.
- It is appropriate for posted speed limits to be based on the 85th percentile speed, even for those sections of roadway that have an inferred design speed lower than the 85th percentile speed. Posting a roadway's speed limit based on its 85th percentile speed is considered good and typical engineering practice. This practice remains valid, even where the inferred design speed is lower than the resulting posted speed limit. In such situations, the posted speed limit would not be considered excessive or unsafe.
- Arbitrarily setting lower speed limits at point locations due to a perceived shorter than desirable stopping sight distance is neither effective nor good engineering practice.
- If a section of roadway has (or is expected to have) a posted speed in excess of the roadway's inferred design speed and a safety concern exists at the location, then appropriate warning or informational signs should be installed to warn or inform drivers of the condition. Slightly shorter than desirable stopping sight distances do not present an unsafe operating condition, because of the conservative assumptions made in establishing desirable stopping sight distances. It is important to remember that any sign is a roadside object and that it should be installed only when its need is clearly demonstrated.
- New or reconstructed roadways (and roadway sections) should be designed to accommodate operating speeds consistent with the roadway's highest anticipated posted speed limit based on the roadway's initial or ultimate function.

DESIGN AND PHYSICAL FACTORS OF THE ROADWAY

Because so many variables affect the safe operating speed of vehicles, it is not practical to consider each individually. These factors should be considered as a whole and weighed accordingly. They include:

- horizontal and vertical curves
- hidden driveways and other roadside developments
- high driveway density

- rural residential or developed areas
- lack of striped, improved shoulders.

Speed restrictions (if any) imposed by some curves can be calculated easily and checked by the use of the ball bank indicator; likewise, the restriction imposed by obstructions to sight distance can be calculated.

The effects of such factors as lane width, condition of surface, type and width of shoulders, frequency of intersections, and roadside development are not so easily measured. As a general rule, especially on tangents, these factors will be measured on the basis of prevailing speeds as determined by speed checks.

Regulatory and Advisory Speeds

When an engineering and traffic investigation shows that the statutory speed limits are no longer applicable for the existing conditions, the *prima facie* maximum speed limits should be altered accordingly with a speed zone. The types of speed zones are as follows:

- regulatory
- construction
- school
- private road.

This study does not address construction, school, or private road speed limits. During field observations on March 5, 2020, it was noted that chevron alignment signs (TMUTCD W1-8 signs) were installed on a curve in Rosewood Drive just south of Aspen Drive, but no advisory speed signs accompanied these signs. If implementation occurs of an increased speed limit as a result of this study, it is recommended that additional analysis be performed to assess the need for advisory speeds around the curve south of Aspen Drive and north of Glennwood Drive per the applicable provisions of the TMUTCD Section 2C.08 for advisory speed plaques.

REGULATORY SPEEDS

Regulatory speed zones should be applied only to those locations and sections of highways which are not dealt with adequately by the general statewide speed limits, and they should be indicators of the speed limitations imposed by physical and traffic conditions at such locations. Speed limits are determined by specific roadway and traffic conditions. Speed limits should not be lowered to the extent necessary for a driver to avoid a collision with a

pedestrian or other motorist who is entering or crossing the highway in violation of an existing traffic regulation.

Roadway safety is an important consideration in establishing speed limits. The following factors affect roadway safety and, therefore, should be considered when establishing speed limits:

- horizontal and vertical curves
- hidden driveways and other roadside developments
- high driveway density
- crash history along the location
- rural residential or developed areas
- lack of striped, improved shoulders.

Regulatory Speed Zones

A regulatory speed zone is the application, by city ordinance, of posted legal speed limits to sections of roadway where the numerical values of these special speed limits have been determined through engineering investigations of traffic and physical conditions.

Speed Zone Studies

This section includes a description of how to conduct an engineering and traffic investigation as the basis for establishing a regulatory speed zone along a roadway. This investigation is commonly called a “speed zone study.”

Sound and generally accepted engineering practices are an integral part of such speed zone studies

DETERMINING THE 85TH PERCENTILE SPEED

The maximum speed limits posted as the result of a study should be based primarily on the 85th percentile speed, when adequate speed samples can be secured. The 85th percentile speed is a value that is used by many states and cities for establishing regulatory speed zones.

THEORY

Use of the 85th percentile speed concept is based on the theory that:

- the large majority of drivers:

- are reasonable and prudent
- do not want to have a crash
- desire to reach their destination in the shortest possible time
- a speed at or below which 85 percent of people drive at any given location under good weather and visibility conditions may be considered as the maximum safe speed for that location.

STATISTICAL RATIONALE

The results of numerous and extensive “before-and-after” studies substantiate the general propriety and value of the 85th percentile criterion.

Statistical techniques show that a normal probability distribution will occur when a random sample of traffic is measured. From the resulting frequency distribution curves, one finds that a certain percentage of drivers drive too fast for the existing conditions and a certain percentage of drivers travel at an unreasonably slow speed compared to the trend of traffic.

Most cumulative speed distribution curves “break” at approximately 15 percent and 85 percent of the total number of observations. Consequently, the motorists observed in the lower 15 percent are considered to be traveling unreasonably slow and those observed above the 85th percentile value are assumed to be exceeding a safe and reasonable speed. Because of the steep slope of the distribution curve below the 85th percentile value, it can readily be seen that posting a speed below the critical value would penalize a large percentage of reasonable drivers.

Experience proves these findings valid and shows that the 85th percentile speed is the one characteristic of traffic speeds that most closely conforms to a speed limit which is considered safe and reasonable.

SPEED CHECKS FOR EXISTING HIGHWAYS

Speed measurements were collected using tube counters to collect speed and volume data at three locations, as shown on the map. The speed data collected is provided in the *Appendix*. Analysis of this data provides the 85th percentile speeds and 10 mile per hour pace. Speed checks are of prime importance, because they:

- represent the consensus of drivers as to the safe speed at a given location
- provide the basic data on which the regulatory speed zone is based.

In Figure 1, the three segment count locations for Rosewood Drive between E Central Texas Expressway to Stagecoach Road are provided for the extents of the study.

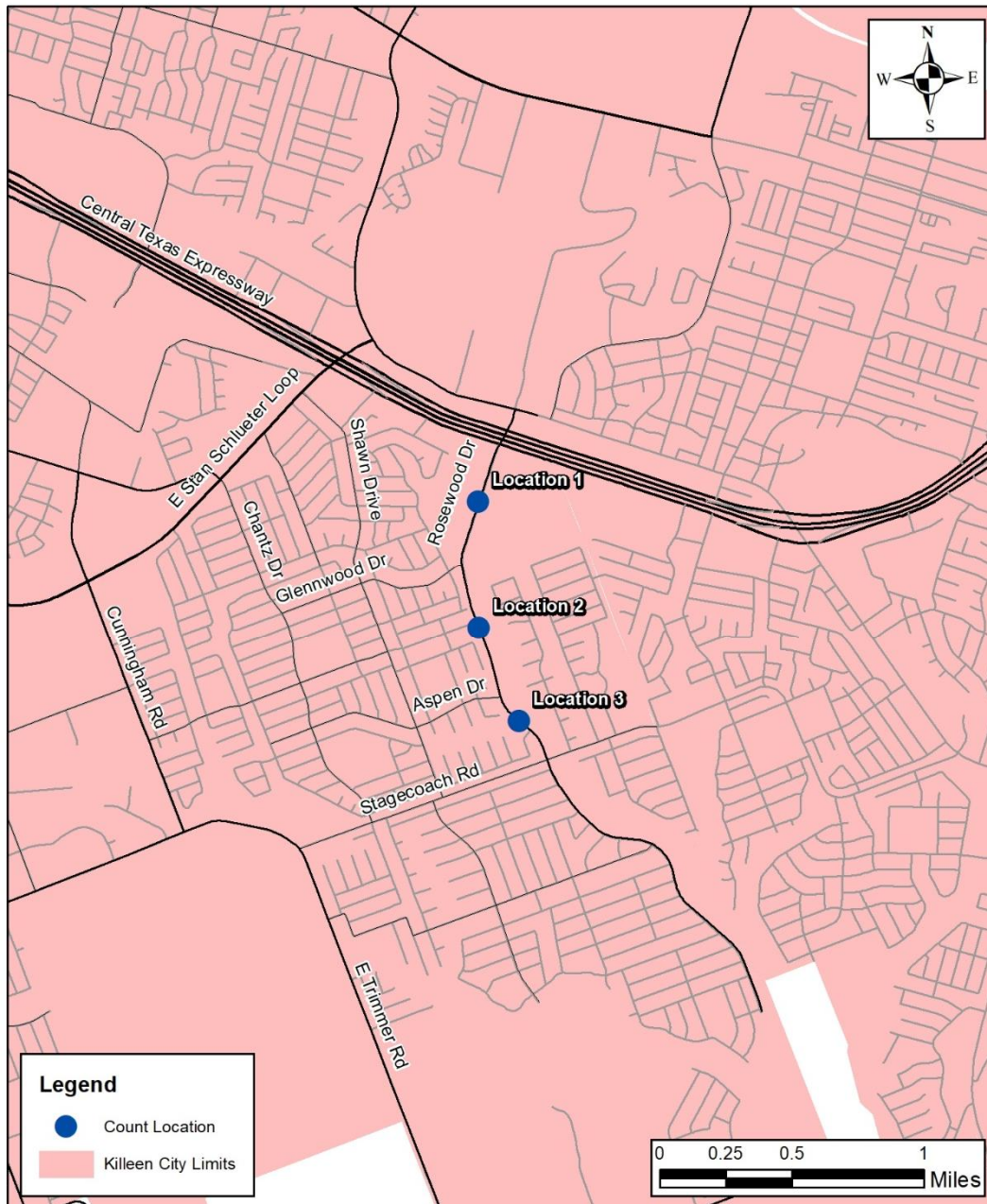


Figure 1: Rosewood Drive Count Locations

VARIATION FROM 85TH PERCENTILE

The posted speed selected is the nearest value ending in 5 or 0. The final speed limit may be lowered or raised by as much as 5 miles per hour from the 85th percentile speed determined by the study, based on the professional judgement of the supervising engineer. Only under special conditions would the zone speed vary further from the 85th percentile.

Additional Roadway Factors. The posted speed limit may be reduced below the 85th percentile speed, based on sound and generally accepted engineering judgement that includes consideration of the following factors:

- narrow roadway pavement widths (20 feet or less, for example)
- horizontal and vertical curves (possible limited sight distance)
- hidden driveways and other developments (possible limited sight distance)
- high driveway density (the higher the number of driveways, the higher the potential for encountering entering and turning vehicles)
- crash history along the location
- rural residential or developed areas (higher potential for pedestrian and bicycle traffic)
- lack of striped, improved shoulders (constricted lateral movement).

The final decision on the amount of variation from the 85th percentile speed for a specific roadway should be based on the engineering judgement of the supervising engineer.

Recommendations

In order to be consistent in weighing additional roadway factors, mile per hour (mph) reduction values to the 85th percentile speed were assigned to each condition. For alignments with curves or alignment changes along a segment, a reduction of 1 mph was assigned, and an additional 2 mph reduction was assigned in scenarios with severe and frequent alignment changes. Hidden driveways and high driveway densities were given a reduction of 1 mph. From this value, engineering judgment was exercised to determine a recommended speed in 5 mph increments. In cases where speed changes would be too frequent between segments of the same road, a uniform speed limit was assigned for safe operation of a vehicle.

The speed study results, additional factors regarding the roadway, and recommended speed limits are provided in the table below:

Roadway	Location	85 Percentile Speed (mph)	10 mph Pace	Roadway Characteristics			Recommended Speed (mph)
				Alignment	Hidden Driveways	High Driveway Density	
Rosewood Drive	1: E Central Texas to Glennwood	47	36-45				45
Rosewood Drive	2: Glennwood to Aspen	49	36-45				45
Rosewood Drive	3: Aspen to Stagecoach	43	31-40	X			45

The existing posted speed limit on Rosewood Drive is 35 mph along the entire length of the studied section. This report recommends changing the speed limit for the entire length of the studied section of Rosewood Drive. The recommended speed for Segment 1 of Rosewood Lane (from E Central Texas Expressway to Glennwood Drive) is 45 mph. This segment has no features which should be considered for speed reduction; it has mostly vacant land on both sides, is a mostly straight segment with a 4-lane divided roadway and low driveway density, including no driveways on the east side due to the presence of a creek. Thus, a recommended speed of 45 mph, which is within 5 mph of the 85th percentile speed, is sufficient. Segment 2 (from Glennwood Drive to Aspen Drive) has many features in common with Segment 1, including few, gradual curves, well-developed 5-lane roadway, and few driveways, with none on the east side. As such, reduction in speed limit is not necessary on Segment 2, and a recommended speed of 45 mph, which is within 5 mph of the 85th percentile speed, is sufficient. Segment 3 (from

Aspen Drive to Stagecoach Road) has two horizontal curves within its boundaries. It otherwise is in good condition as a speed zone, with a well-developed 5-lane roadway and no eastern driveways. A reduction of 1 mph should be applied to its 85th percentile speed to accommodate the horizontal curvature. However, by use of engineering judgement and to maintain consistent speeds on this relatively short study area, 45 mph is again the recommended speed for this segment, which is within 5 mph of the 85th percentile speed. It is recommended to add advisory speed limit signs along the curve marked with directional chevron signs south of Aspen Drive, which should be posted at 40 mph advisory speed to represent closer to the observed 85th percentile speed and noticeable drop in speeds by drivers in this section.

In addition to the recommendations related to speed limits, it is recommended that evaluation of pedestrian volumes using the crosswalk to the north of the intersection of Rosewood Drive and Glennwood Drive be evaluated for adequate gaps in traffic for the pedestrian demand at this location. If an increase in posted speed is implemented, additional measures may need to be installed to enhance pedestrian safety at this location. Potential measures for improved safety include extension of the existing median for a pedestrian refuge island, addition of Rectangular Rapid Flashing Beacons, a Pedestrian Hybrid Beacon, or other measures to increase the visibility of this pedestrian crossing to motorists.

Appendix

Direction
Northbound & Southbound

Date
3/3/2020-3/6/2020
Time

	Speed Ranges (MPH)														Total
	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	
8:00	2	1	1	0	63	265	244	72	9	2	1	1	0	0	661
9:00	2	1	0	2	44	235	252	112	24	4	1	0	0	0	677
10:00	0	0	0	3	62	224	253	126	39	11	1	0	1	0	692
11:00	2	0	0	1	51	271	296	131	30	7	1	1	0	0	720
12:00	0	3	0	1	73	282	264	116	28	4	1	0	0	0	791
13:00	0	0	0	2	73	306	317	118	24	5	0	0	0	0	772
14:00	1	0	0	0	81	328	418	179	47	11	2	1	0	0	845
15:00	0	0	0	0	79	418	566	253	60	7	3	0	0	0	1068
16:00	0	1	1	6	85	492	569	263	61	9	0	1	1	0	1386
17:00	0	0	0	2	50	404	453	190	48	5	0	0	0	0	1489
18:00	0	0	0	6	63	279	277	129	32	3	1	0	0	0	1152
19:00	0	0	0	2	39	186	228	120	27	7	0	0	0	0	790
20:00	0	0	0	0	27	166	140	76	27	6	1	0	0	0	609
21:00	0	0	0	1	13	75	71	34	6	3	1	0	0	0	443
22:00	0	0	0	1	16	75	65	29	9	0	1	0	3	0	204
23:00	0	0	0	0	12	32	32	14	7	2	0	0	0	0	181
0:00	0	0	0	1	4	24	21	7	4	0	0	0	0	0	99
1:00	0	0	0	1	3	12	8	3	4	0	0	0	0	0	62
2:00	0	0	0	1	7	19	12	1	2	0	0	0	0	0	34
3:00	0	0	0	0	21	48	40	15	3	1	1	0	0	0	42
4:00	0	0	0	2	38	164	120	32	5	0	0	0	0	0	129
5:00	0	3	19	51	151	312	224	52	5	3	0	0	0	0	361
6:00	3	14	23	73	247	605	292	86	10	2	0	0	0	0	820
7:00	0	0	0	19	141	478	349	96	11	3	0	0	0	0	1355
8:00	0	0	0	2	69	224	264	80	16	3	1	0	0	0	1100
9:00	0	1	0	1	47	218	240	99	21	1	0	0	0	0	659
10:00	0	3	3	4	298	282	106	26	6	0	0	0	0	0	629
11:00	0	2	2	1	44	259	314	124	39	2	1	0	0	0	728
12:00	1	1	0	2	36	252	334	114	37	2	1	0	0	0	788
13:00	2	4	0	2	55	305	334	139	28	4	0	1	0	0	780
14:00	0	0	0	4	69	381	455	174	46	4	0	0	0	0	874
15:00	2	2	0	19	149	552	483	147	25	4	0	1	0	0	1133
16:00	0	0	0	8	132	574	574	200	26	7	1	0	0	0	1384
17:00	0	0	0	6	89	444	383	122	23	3	1	0	0	0	1522
18:00	0	0	0	4	77	297	273	100	18	3	0	0	0	0	1071
19:00	0	0	0	4	82	240	187	68	17	4	0	0	0	0	772
20:00	0	0	0	4	45	152	133	49	12	4	1	0	0	0	602
21:00	0	0	0	3	26	90	87	30	9	0	1	0	0	0	400
22:00	0	0	0	0	19	34	66	25	13	1	0	0	0	0	246
23:00	0	0	0	0	10	35	24	16	1	1	0	0	0	0	158
0:00	0	0	0	0	5	20	19	10	2	1	0	0	0	0	87
1:00	0	0	0	0	5	10	18	5	1	0	0	1	0	0	58
2:00	0	0	0	0	5	25	21	9	4	0	0	0	0	0	39
3:00	0	0	0	0	9	36	35	22	7	3	0	0	0	0	67
4:00	0	0	0	0	29	151	160	59	14	0	0	0	0	0	110
5:00	0	0	0	2	63	311	393	120	33	8	3	1	0	0	413
6:00	0	0	0	0	68	494	583	215	48	11	2	0	1	0	934
7:00	2	0	0	2	63	375	399	138	29	5	1	1	0	0	1422
8:00	1	0	0	0	36	237	234	106	23	8	0	0	1	0	1015
9:00	0	0	0	0	40	220	208	106	29	2	0	0	2	0	646
10:00	0	0	0	2	63	230	268	118	32	3	1	1	0	0	607
11:00	2	1	1	4	51	252	306	124	38	7	1	0	0	0	718
12:00	0	0	0	3	56	265	316	135	27	6	2	0	0	0	787
13:00	2	3	9	8	71	267	354	131	31	4	0	1	0	0	810
14:00	1	1	3	2	71	351	427	194	39	6	1	0	0	0	881
15:00	0	0	0	3	59	424	562	250	57	22	0	1	1	0	1096
16:00	0	0	0	2	53	390	582	296	80	14	2	1	0	0	1379
17:00	1	0	1	1	70	410	479	207	62	10	0	0	0	0	1420
18:00	0	0	3	5	64	333	348	155	27	4	2	1	0	0	1241
19:00	0	0	0	2	36	219	290	101	37	7	0	0	1	0	942
20:00	0	2	0	2	43	142	153	86	20	7	0	0	0	0	693
21:00	0	0	0	0	32	85	103	51	13	5	1	0	0	0	455
22:00	0	0	0	0	15	77	85	40	18	3	0	0	0	0	290
23:00	0	0	0	0	14	36	38	20	7	1	0	0	0	0	246
0:00	0	0	0	0	8	15	37	17	2	0	0	0	1	0	117
1:00	0	0	0	3	4	17	21	12	6	2	0	0	0	0	80
2:00	0	0	0	0	4	14	33	9	2	1	0	0	1	0	66
3:00	0	0	0	1	13	33	41	26	10	2	0	0	0	0	63
4:00	0	0	0	1	16	138	154	56	15	4	1	0	0	0	126
5:00	0	0	0	2	53	279	364	136	43	9	1	0	0	0	385
6:00	0	0	0	3	78	431	588	239	66	8	1	1	1	0	889
7:00	0	0	1	4	88	336	378	135	40	2	1	2	0	0	1417
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	987
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	24	44	69	289	3755	16855	18200	7296	1771	317	51	18	15	0	48704
Percent	0.0%	0.1%	0.1%	0.6%	7.7%	34.6%	37.4%	15.0%	3.6%	0.7%	0.1%	0.0%	0.0%	0.0%	

15th Percentile: 36 MPH
50th Percentile: 41 MPH
85th Percentile: 47 MPH
95th Percentile: 50 MPH

10 MPH Pace Speed: 36 - 45 MPH
Number in Pace: 35055
Percent in Pace: 72.0%
Number of Vehicles > 45 MPH: 9468
Percent of Vehicles > 45 MPH: 19.4%
Mean Speed (Average): 42 MPH

Direction
Northbound & Southbound

Date
3/3/2020-3/6/2020
Time

	Speed Ranges (MPH)														Total
	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	
8:00	1	0	0	3	33	189	226	136	24	4	0	1	1	0	618
9:00	1	0	0	1	29	184	302	147	34	8	2	0	0	0	708
10:00	0	0	0	1	27	176	283	162	46	8	2	0	0	0	705
11:00	0	0	0	1	32	200	286	175	44	14	1	0	1	0	754
12:00	0	0	0	1	28	238	339	173	48	14	2	1	1	0	845
13:00	0	0	0	0	38	238	341	147	47	8	2	0	0	0	821
14:00	0	0	0	0	40	257	356	174	47	6	0	0	0	0	880
15:00	1	0	1	0	48	265	440	263	58	15	0	0	1	0	1092
16:00	0	0	0	0	36	346	603	333	104	17	5	0	0	0	1444
17:00	7	9	3	4	33	349	636	346	78	14	1	0	0	0	1480
18:00	0	0	0	1	31	300	523	243	52	11	1	0	0	0	1162
19:00	0	0	0	0	42	236	291	158	41	5	1	0	0	0	775
20:00	0	0	0	0	21	155	238	114	41	6	1	1	0	0	577
21:00	0	0	0	0	21	117	167	84	19	10	0	0	1	0	420
22:00	0	0	0	0	5	43	81	43	11	3	0	0	2	0	188
23:00	0	0	0	2	14	32	62	28	8	1	0	0	2	0	109
0:00	0	0	0	0	9	33	33	13	7	0	0	0	0	0	95
1:00	0	0	0	1	5	12	18	9	3	0	0	0	0	0	48
2:00	0	0	0	1	0	2	12	9	0	6	2	1	1	0	48
3:00	0	0	0	0	2	24	11	2	1	1	0	0	0	0	34
4:00	0	0	0	0	4	54	43	21	7	1	0	0	0	0	41
5:00	0	0	0	1	10	119	152	50	13	1	0	0	0	0	130
6:00	0	0	0	21	109	284	272	76	13	1	0	0	0	0	346
7:00	0	0	1	7	108	515	497	161	23	8	0	0	0	0	776
8:00	1	0	1	2	42	301	452	206	49	5	0	1	0	0	1320
9:00	0	0	0	4	37	196	301	113	19	1	0	0	0	0	1060
10:00	0	0	0	2	31	195	257	112	24	10	1	0	0	0	671
11:00	0	0	2	1	35	208	299	139	31	9	0	0	0	0	632
12:00	0	0	0	3	35	222	324	158	46	6	3	2	0	0	724
13:00	0	0	0	6	31	207	324	155	38	10	3	1	0	0	799
14:00	0	0	0	2	36	226	343	164	60	6	0	0	0	0	775
15:00	0	0	0	0	40	334	431	215	60	11	1	0	0	0	837
16:00	0	0	0	1	74	474	530	183	29	6	0	0	0	0	1092
17:00	0	0	0	1	60	411	622	248	50	8	2	0	0	0	1297
18:00	0	0	0	3	43	289	450	181	39	8	3	0	0	0	1402
19:00	0	0	0	2	33	211	276	140	33	0	0	0	0	0	1016
20:00	0	0	0	6	36	184	277	88	18	2	1	0	0	0	693
21:00	0	0	0	1	25	126	131	56	11	7	1	0	0	0	552
22:00	0	0	0	1	23	74	75	40	8	1	0	0	0	0	358
23:00	0	0	0	1	11	40	57	22	5	2	0	0	0	0	222
0:00	0	0	0	0	7	26	26	13	2	2	0	0	0	0	144
1:00	0	0	0	1	3	14	20	7	6	0	0	0	0	0	76
2:00	0	0	0	1	13	16	7	0	0	0	0	0	0	0	51
3:00	0	0	0	0	4	23	21	6	3	2	1	0	0	0	40
4:00	0	0	0	2	3	28	34	20	6	0	1	0	0	0	60
5:00	0	0	0	0	10	98	195	72	16	2	1	0	0	0	94
6:00	0	1	0	0	23	225	373	189	51	11	3	3	0	0	394
7:00	0	0	0	1	24	284	611	360	83	21	1	0	1	0	879
8:00	1	0	0	4	27	258	509	234	62	9	3	0	0	0	1386
9:00	0	0	0	2	22	191	297	178	48	10	2	0	0	0	1107
10:00	0	0	0	1	27	213	248	150	44	8	4	0	1	0	750
11:00	0	0	0	1	18	211	293	202	42	12	1	1	0	0	696
12:00	0	1	1	3	29	201	366	200	59	15	1	0	1	0	781
13:00	0	0	0	0	38	199	369	206	60	21	2	0	0	0	877
14:00	1	0	0	4	38	219	363	223	54	12	2	1	0	0	895
15:00	0	0	0	1	26	261	469	325	78	12	0	0	0	0	917
16:00	0	0	0	0	22	321	592	403	110	21	0	0	0	0	1172
17:00	0	0	1	2	22	319	616	362	119	21	3	0	1	0	1469
18:00	0	0	0	2	28	280	536	280	81	22	3	0	1	0	1466
19:00	0	0	1	4	31	230	390	199	30	8	3	1	0	0	1233
20:00	0	0	0	2	22	163	271	143	36	7	2	0	1	0	897
21:00	0	0	0	1	18	124	165	88	36	3	1	0	1	0	647
22:00	0	0	0	0	22	78	97	50	14	5	1	0	0	0	437
23:00	0	0	0	1	7	33	85	49	14	3	0	0	0	0	267
0:00	0	0	0	0	7	37	48	17	9	1	0	2	0	0	212
1:00	0	0	0	0	1	18	26	16	2	1	1	0	0	0	121
2:00	0	0	0	1	4	12	16	17	3	3	0	0	0	0	65
3:00	0	0	0	0	4	10	20	12	4	2	0	0	0	0	56
4:00	0	0	0	0	8	38	38	16	6	2	0	0	0	0	52
5:00	0	0	0	0	10	89	152	77	25	4	1	0	0	0	108
6:00	3	2	1	0	21	203	387	157	40	13	2	0	1	0	358
7:00	0	0	0	2	32	310	609	322	100	22	3	2	0	0	830
8:00	0	1	0	3	31	244	405	253	83	10	2	0	0	0	1402
9:00	0	0	0	1	4	1	0	0	0	0	0	0	0	0	1032
Total	16	14	13	122	1913	13076	19981	10131	2616	539	79	18	17	0	48535
Percent	0.0%	0.0%	0.0%	0.3%	3.9%	26.9%	41.2%	20.9%	5.4%	1.1%	0.2%	0.0%	0.0%	0.0%	

15th Percentile: 37 MPH
50th Percentile: 43 MPH
85th Percentile: 49 MPH
95th Percentile: 52 MPH

10 MPH Pace Speed: 36 - 45 MPH
Number in Pace: 33057
Percent in Pace: 68.1%
Number of Vehicles > 45 MPH: 13400
Percent of Vehicles > 45 MPH: 27.6%
Mean Speed (Average): 43 MPH

Direction
Northbound & Southbound

Date
3/3/2020-3/6/2020
Time

3/3/2020-3/6/2020 Time	Speed Ranges (MPH)															Total
	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999		
8:00	5	5	11	29	106	163	51	8	2	0	0	0	0	0	380	
9:00	1	0	0	15	154	293	115	19	3	0	0	0	0	0	600	
10:00	0	0	0	9	125	311	140	14	1	1	0	0	0	0	602	
11:00	0	0	0	15	124	324	135	23	3	0	0	0	0	0	624	
12:00	0	0	0	9	164	348	163	16	0	1	0	0	0	0	701	
13:00	0	0	1	14	182	342	128	10	6	2	0	0	0	0	685	
14:00	0	1	1	17	215	332	137	13	0	0	0	0	0	0	716	
15:00	0	0	1	38	229	448	189	28	2	0	0	0	0	0	935	
16:00	0	0	1	25	261	649	277	51	2	0	0	0	0	0	1266	
17:00	0	0	3	24	262	677	260	46	3	0	0	0	0	0	1275	
18:00	1	0	1	18	181	532	209	29	4	0	0	0	0	0	975	
19:00	0	0	2	17	170	298	136	16	1	0	0	0	0	0	640	
20:00	1	0	0	13	135	237	93	13	1	0	0	0	0	0	493	
21:00	0	0	0	11	84	185	58	10	0	0	1	0	0	0	348	
22:00	0	0	0	3	34	69	42	4	1	0	1	1	0	0	155	
23:00	0	0	0	6	30	68	21	4	0	0	1	1	0	0	131	
0:00	0	0	0	4	17	28	16	2	0	0	0	0	0	0	67	
1:00	0	0	1	2	9	23	6	2	0	0	0	0	0	0	43	
2:00	0	0	0	1	8	9	7	2	1	0	0	0	0	0	28	
3:00	0	0	0	3	10	18	3	1	0	0	0	0	0	0	35	
4:00	0	0	0	2	38	59	13	1	0	0	0	0	0	0	113	
5:00	0	0	0	5	97	163	41	4	0	0	0	0	0	0	310	
6:00	0	1	15	67	213	262	57	4	1	0	0	0	0	0	620	
7:00	0	2	14	120	422	445	140	19	2	0	0	0	0	0	1164	
8:00	0	0	2	15	218	475	192	29	3	0	0	0	0	0	934	
9:00	0	0	0	16	159	275	91	7	1	0	0	0	0	0	549	
10:00	0	0	1	12	138	285	96	11	1	0	0	0	0	0	544	
11:00	0	0	6	7	155	312	136	23	1	2	0	0	0	0	642	
12:00	0	0	2	9	158	337	140	18	3	1	0	0	0	0	668	
13:00	0	0	1	11	144	330	137	15	3	0	0	0	0	0	641	
14:00	0	0	0	22	173	336	143	24	2	0	0	0	0	0	700	
15:00	0	0	2	26	245	453	164	24	5	0	0	0	0	0	919	
16:00	2	0	0	35	299	556	204	15	1	0	0	0	0	0	1112	
17:00	0	0	2	35	299	588	231	37	1	0	1	0	0	0	1194	
18:00	0	0	0	19	199	431	171	33	2	1	0	0	0	0	856	
19:00	0	0	0	14	286	512	115	11	1	0	0	0	0	0	579	
20:00	0	0	2	25	150	183	84	13	2	0	0	0	0	0	459	
21:00	0	0	1	16	80	139	46	12	0	0	0	0	0	0	294	
22:00	0	0	1	10	42	82	32	10	0	0	0	0	0	0	177	
23:00	0	0	1	5	26	54	26	7	0	0	0	0	0	0	119	
0:00	0	0	0	4	15	14	14	2	0	0	0	0	0	0	49	
1:00	0	0	0	2	13	15	9	4	0	0	0	0	0	0	43	
2:00	0	0	0	0	9	17	5	0	1	0	0	0	0	0	32	
3:00	0	0	0	0	12	26	6	3	1	0	0	0	0	0	48	
4:00	0	0	1	15	44	19	5	0	0	0	0	0	0	0	84	
5:00	0	0	0	2	63	187	69	11	0	1	0	0	0	0	333	
6:00	0	0	0	10	138	351	169	32	5	1	0	0	0	0	706	
7:00	0	0	0	37	261	579	309	46	6	0	0	0	0	0	1238	
8:00	0	0	0	6	158	524	244	31	1	0	0	0	0	0	964	
9:00	0	0	0	16	153	323	153	21	3	0	0	0	0	0	669	
10:00	1	0	1	24	163	294	101	9	0	0	0	0	0	0	593	
11:00	0	0	0	12	154	361	114	16	2	0	0	0	0	0	659	
12:00	0	0	1	10	176	355	158	31	1	0	1	0	0	0	733	
13:00	0	0	2	17	159	371	167	26	3	0	0	0	0	0	745	
14:00	3	2	7	29	157	351	190	20	2	0	0	0	0	0	761	
15:00	0	0	0	28	213	520	194	22	7	0	0	0	0	0	984	
16:00	0	0	0	20	198	583	378	65	3	2	0	0	0	0	1249	
17:00	0	1	1	12	169	691	359	59	5	0	0	0	0	0	1297	
18:00	0	0	1	17	182	516	271	41	4	1	0	0	0	0	1033	
19:00	1	0	2	15	177	406	138	29	3	0	0	0	0	0	777	
20:00	0	0	0	15	119	273	122	12	4	0	1	0	0	0	546	
21:00	0	0	2	11	94	159	74	12	2	0	0	0	0	0	354	
22:00	0	0	0	7	50	101	38	9	1	0	0	0	0	0	206	
23:00	0	0	0	5	27	65	40	11	4	0	1	0	0	0	181	
0:00	0	0	0	4	22	42	19	3	1	0	0	0	0	0	91	
1:00	0	0	0	2	6	21	19	4	0	0	0	0	0	0	52	
2:00	0	0	1	2	12	21	12	1	1	0	0	0	0	0	50	
3:00	0	0	0	0	8	22	11	1	1	0	0	0	0	0	43	
4:00	0	0	2	5	17	46	21	0	1	0	0	0	0	0	92	
5:00	0	0	1	2	59	168	77	6	0	0	0	0	0	0	313	
6:00	0	1	19	114	318	518	158	18	6	0	0	0	0	0	664	
7:00	0	0	1	47	280	570	271	48	8	0	1	0	0	0	1226	
8:00	1	0	2	14	169	426	213	40	0	0	0	0	0	0	865	
9:00	0	0	0	1	4	1	0	0	0	0	0	0	0	0	6	
Total	16	14	97	1140	9511	20166	8587	1266	133	14	7	2	0	0	40953	
Percent	0.0%	0.0%	0.2%	2.8%	23.2%	49.2%	21.0%	3.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%		

15th Percentile: 32 MPH
50th Percentile: 38 MPH
85th Percentile: 43 MPH
95th Percentile: 45 MPH

10 MPH Pace Speed: 31 - 40 MPH
Number in Pace: 28753
Percent in Pace: 72.5%
Number of Vehicles > 40 MPH: 10009
Percent of Vehicles > 40 MPH: 24.4%
Mean Speed (Average): 38 MPH

City of Killeen

Traffic Signal Warrant Analysis

Rosewood Drive & Fawn Drive
and
Rosewood Drive & Aspen Drive

November 3, 2022

Prepared For:

City of Killeen

101 N College Street
Killeen, Texas 76541
(254) 616-3179
Contact: Andrew Zagars, P.E.



Prepared By:

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KHA #064405314

City of Killeen

Rosewood Drive & Fawn Drive
Rosewood Drive & Aspen Drive



November 3, 2022

Prepared By:

Kimley»Horn

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EXECUTIVE SUMMARY

The objective of this analysis is to determine whether a traffic signal is warranted at either the unsignalized intersection of Rosewood Drive & Fawn Drive or the unsignalized intersection of Rosewood Drive & Aspen Drive.

The methodology used for the traffic signal warrant analysis is based on the procedure in the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and is summarized below:

- Turning movement counts were collected both intersections in 15-minute increments for twelve hours on Wednesday August 31, 2022. Tube counts were collected along Rosewood Drive, Fawn Drive, and Aspen Drive for twenty-four hours on the same day. Hourly volumes were analyzed for each warrant volume criteria to determine if a minimum volume was met.
- A site visit was conducted to determine existing traffic controls, posted speed limits, lane widths, lane assignments, pedestrian facilities, and existing utilities.
- Crash data were analyzed, and crash diagrams were developed to determine if significant volumes of collisions occurred which would otherwise be preventable by the presence of a traffic signal.
- This study assumes the speed limit along Rosewood Drive will be raised to 45mph per City staff.

Table 1 below summarizes results of the traffic warrant analysis for the study intersection.

Table 1: Summary of Traffic Signal Warrant Analysis

Warrant Number	Warrant Description	Rosewood Drive & Fawn Drive	Rosewood Drive & Aspen Drive
Warrant 1	Eight-Hour Vehicular Volume	No	No
Warrant 2	Four-Hour Vehicular Volume	Yes	No
Warrant 3	Peak-Hour Vehicular Volume	Yes (Warrant B)	Yes (Warrant B)
Warrant 4	Pedestrian Volume	No	No
Warrant 5	School Crossing	No	No
Warrant 6	Coordinated Signal System	No	No
Warrant 7	Crash Experience	No	No
Warrant 8	Roadway Network	No	No
Warrant 9	Intersection Near a Railroad Grade Crossing	No	No

Based on the criteria, a traffic signal is recommended at both the intersection of Rosewood Drive & Fawn Drive and at the intersection of Rosewood Drive & Aspen Drive.

INTRODUCTION

PURPOSE

Kimley-Horn and Associates, Inc. was retained to conduct an analysis is to determine whether a traffic signal is warranted at either the unsignalized intersection of Rosewood Drive & Fawn Drive, and the unsignalized intersection of Rosewood Drive & Aspen Drive. These intersections are located in the City of Killeen, Bell County, Texas.

EXISTING CONDITIONS

SITE LOCATION

The intersections of Rosewood Drive & Fawn Drive and of Rosewood Drive & Aspen Drive are located in Bell County within the city limits of Killeen. **Figure 1** shows the site location and indicates the locations of existing signalized intersection within one mile of the study intersections along Rosewood Drive.

STUDY ROADWAYS

The major study area roadways are described below.

Rosewood Drive - is currently a five-lane undivided roadway, with two lanes in each direction of travel and a two-way left turn lane. The roadway is classified by the City of Killeen as a minor arterial. There is a posted speed limit of 35 mph in the northbound and southbound directions in the analysis vicinity. The City is taking ordinance forward to increase the speed limit to 45 mph. With this ordinance going forward, this study assumes a speed limit of 45 mph for Rosewood Drive. There is a 5-foot sidewalk on the westside of the roadway and no bike lanes in the study vicinity.

Fawn Drive - is currently a two-lane undivided roadway, with one lane in each direction of travel. The roadway is classified by the City of Killeen as a local street. There is a posted speed limit of 30 mph in the eastbound and westbound directions. There are 5-foot sidewalks on both sides of the street and no bike lanes in the study vicinity.

Aspen Drive - is currently a two-lane undivided roadway, with one lane in each direction of travel. The roadway is classified by City of Killeen as collector. There is a posted speed limit of 30 mph in the eastbound and westbound directions There are 5-foot sidewalks on both sides of the street and no bike lanes in the study vicinity.

INTERSECTION CONDITIONS

The intersection of Rosewood Drive & Fawn Drive is currently a three-leg intersection with the major road, Rosewood Drive, running in the north-south direction and the minor road, Aspen Drive, running in the east-west direction. The minor approach is stop-controlled while the two major approaches are free. In both the northbound and southbound direction, there is a two-way left-turn lane at the intersection. **Figure 2** is an aerial view of the intersection showing existing geometry, lane assignments, and traffic control.

The intersection of Rosewood Drive & Aspen Drive is currently a three-leg intersection with the major road, Rosewood Drive, running in the north-south direction and the minor road, Aspen Drive, running in the east-west direction. The minor approach is stop-controlled while the two major approaches are free. In both the northbound and southbound direction, there is a two-way left-turn lane at the intersection. **Figure 3** is an aerial view of the intersection showing existing geometry, lane assignments, and traffic control.

A site visit was conducted to determine posted speed limits, lane widths, pedestrian facilities, and utilities. In addition, photographs of each intersection approach were taken for verification of field data. Photos of each approach leg are provided in **Appendix C**. There are no existing school zone related speed reductions along any study roadways.

Figure 1: Site Location and Signalized Intersections

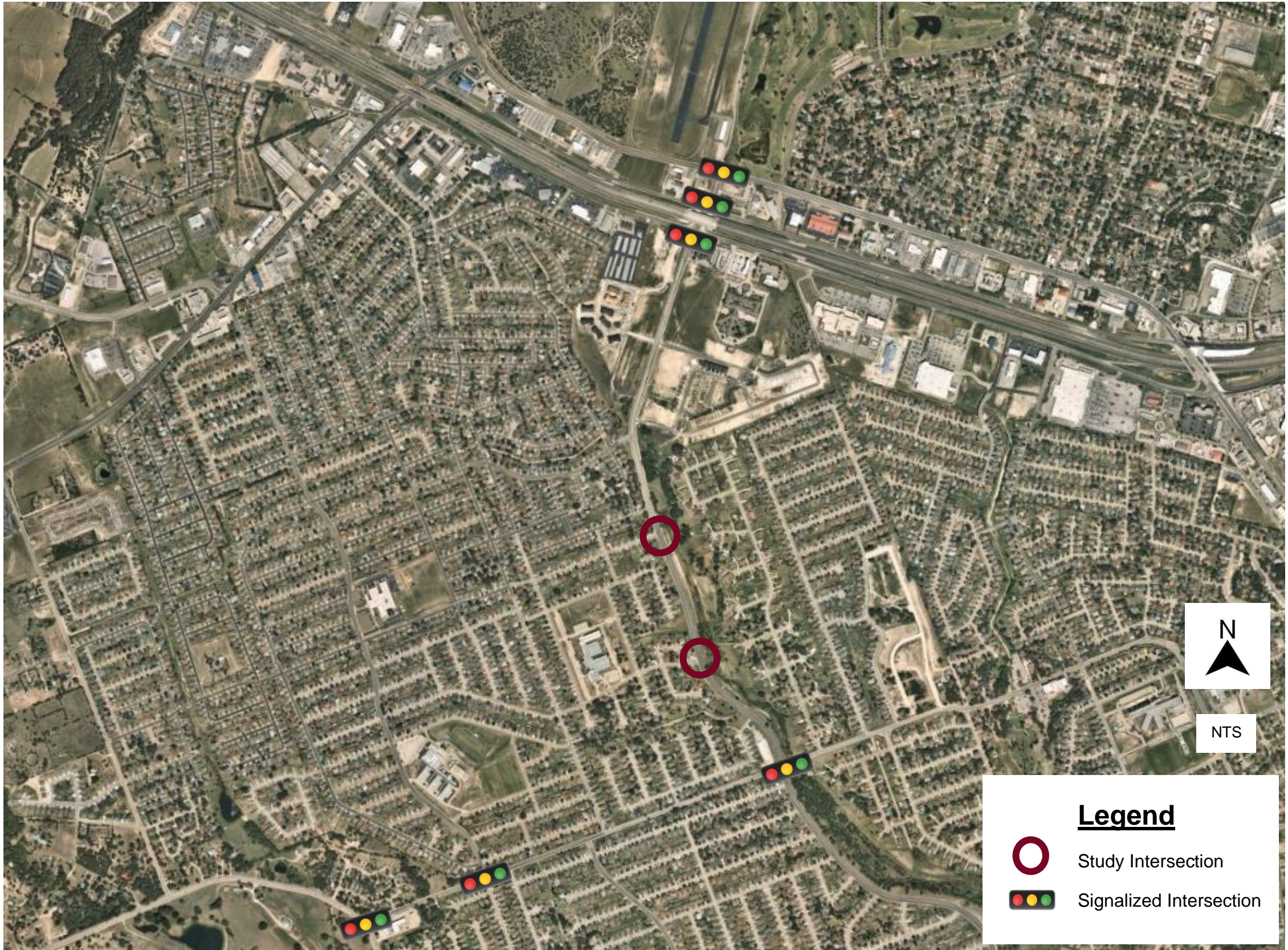


Figure 2: Rosewood Drive & Fawn Drive Lane Assignments and Stop-Control



Figure 3: Rosewood Drive & Aspen Drive Lane Assignments and Stop-Control



TRAFFIC VOLUMES

Existing turning movement counts were collected at three intersections during twelve (12) hours from 6:30 am to 6:30 pm on Wednesday, August 31, 2022. Existing tube counts were collected along Rosewood Drive, Fawn Drive, and Aspen Drive during twenty-four (24) hours from 12:00 am to 11:59 pm on the same date. Traffic count data is included in **Appendix B**.

1. Rosewood Drive & Fawn Drive
 - AM Peak Hour: 7:00 AM – 8:00 AM
 - PM Peak Hour: 5:00 PM – 6:00 PM
2. Rosewood Drive & Aspen Drive
 - AM Peak Hour: 7:00 AM – 8:00 AM
 - PM Peak Hour: 5:00 PM – 6:00 PM

TRAFFIC SIGNAL WARRANT ANALYSIS – ROSEWOOD DRIVE & FAWN DRIVE

This study documents the results of a traffic signal warrant analysis for the intersection of Rosewood Drive & Fawn Drive in the City of Killeen in Bell County, Texas.

ASSUMPTIONS

Several assumptions were made to analyze the data collected at each study intersection.

- Fawn Drive is treated as an eastbound-westbound roadway and Rosewood Drive is treated as a northbound-southbound roadway.
- The peak hour was determined to be the hour with the greatest vehicular volume. The AM peak and overall intersection peak was determined to be 7:00-8:00 AM, while the PM peak was determined to be 5:00-6:00 PM.
- For warrant analysis at the study intersection, the higher of the two minor street approach volumes was used.

STUDY PROCEDURE AND ANALYSIS RESULTS

The *Texas Manual of Uniform Traffic Control Devices* (Texas MUTCD, 2011 Edition) defines nine (9) warrants, or justifying set of conditions, at least one of which should be fully satisfied before signalization is considered as an option for traffic control. Factors included in the evaluation of these warrants include vehicle and pedestrian traffic volumes, the number of traffic lanes, the prevailing traffic speeds, traffic crash history, and measured delay for minor street traffic. The individual warrants are listed below, followed by a short description and analysis of each.

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour Vehicular Volume
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network
- Warrant 9, Intersection Near a Railroad Grade Crossing

WARRANT 1 – EIGHT HOUR VEHICULAR VOLUME

As the title implies, this criterion is applied to the eight highest demand hours of the day for the major and minor street. At least eight hours of the day must exceed the thresholds required in order to warrant a traffic signal using Warrant 1.

Two criteria are checked. Condition A is based on minimum vehicular volumes. Condition B is based on interruption of continuous traffic. For both conditions, there are several reduction factors that may be taken if Condition A or Condition B is not satisfied. The combination of Conditions A & B is intended for application after trial of other alternatives that could cause less delay and inconvenience of traffic has failed to solve the traffic problems. The warrant is satisfied if both Conditions A and B are met with an 80% reduction. If the 85th percentile speed on the major street is greater than 40 mph, or if the intersection lies within the built-up area of an isolated community having a population less than 10,000, the criteria can be reduced by 70% of the original values for Condition A and Condition B or for the combination of Conditions A and B (resulting in 56% of the original value of Condition A and Condition B for the combined case).

Table 2 and **Table 3**, as well as **Figure 4**, **Figure 5**, and **Figure 6** show the warrant criteria and traffic counts as they apply to that criteria.

Table 2: Warrant 1 – Eight Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

^a Basic minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

***Source: 2011 TMUTCD Table 4C-1*

Table 3: Warrant 1 – Eight Hour Vehicular Volume Worksheet

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 1: Eight-Hour Vehicular Volume

Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St?
1	: No. of Lanes on Minor St?
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: if answer 4 is Yes, then what is the population of the isolated community?
NO	: Have other remedial measures been tried?

USE 70% WARRANTS 1A AND 1B. DO NOT USE COMBINATION OF A & B

	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?	Combination Major A	Combination Minor A	Combination Major B	Combination Minor B	Warrant Condition A&B met?
Time	N-S	E-W	70%	70%		70%	70%		56%	56%	56%	56%	
00:01 - 01:00	43	4	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
01:00 - 02:00	48	1	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
02:00 - 03:00	32	2	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
03:00 - 04:00	50	3	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
04:00 - 05:00	114	10	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
05:00 - 06:00	358	25	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
06:00 - 07:00	835	72	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
07:00 - 08:00	1336	106	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
08:00 - 09:00	975	72	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
09:00 - 10:00	778	55	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
10:00 - 11:00	766	38	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
11:00 - 12:00	796	51	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
12:00 - 13:00	914	48	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
13:00 - 14:00	876	42	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
14:00 - 15:00	950	35	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
15:00 - 16:00	1220	107	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
16:00 - 17:00	1435	57	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
17:00 - 18:00	1578	64	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
18:00 - 19:00	1200	50	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
19:00 - 20:00	878	43	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
20:00 - 21:00	774	30	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
21:00 - 22:00	415	17	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
22:00 - 23:00	245	9	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
23:00 - 24:00	142	8	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A

Number of Hours that met the Warrant 1A =	2
Number of Hours that met the Warrant 1B =	7
Number of Hours that met the Combination Warrant 1A & 1B =	0

A. Is the Minimum Vehicular Volume Warrant Met? (Condition A)	NO
B. Is the Interruption of Continuous Traffic Met? (Condition B)	NO
C. Combination of Warrants A and B Criteria Met?	N/A

Figure 4: Warrant 1A

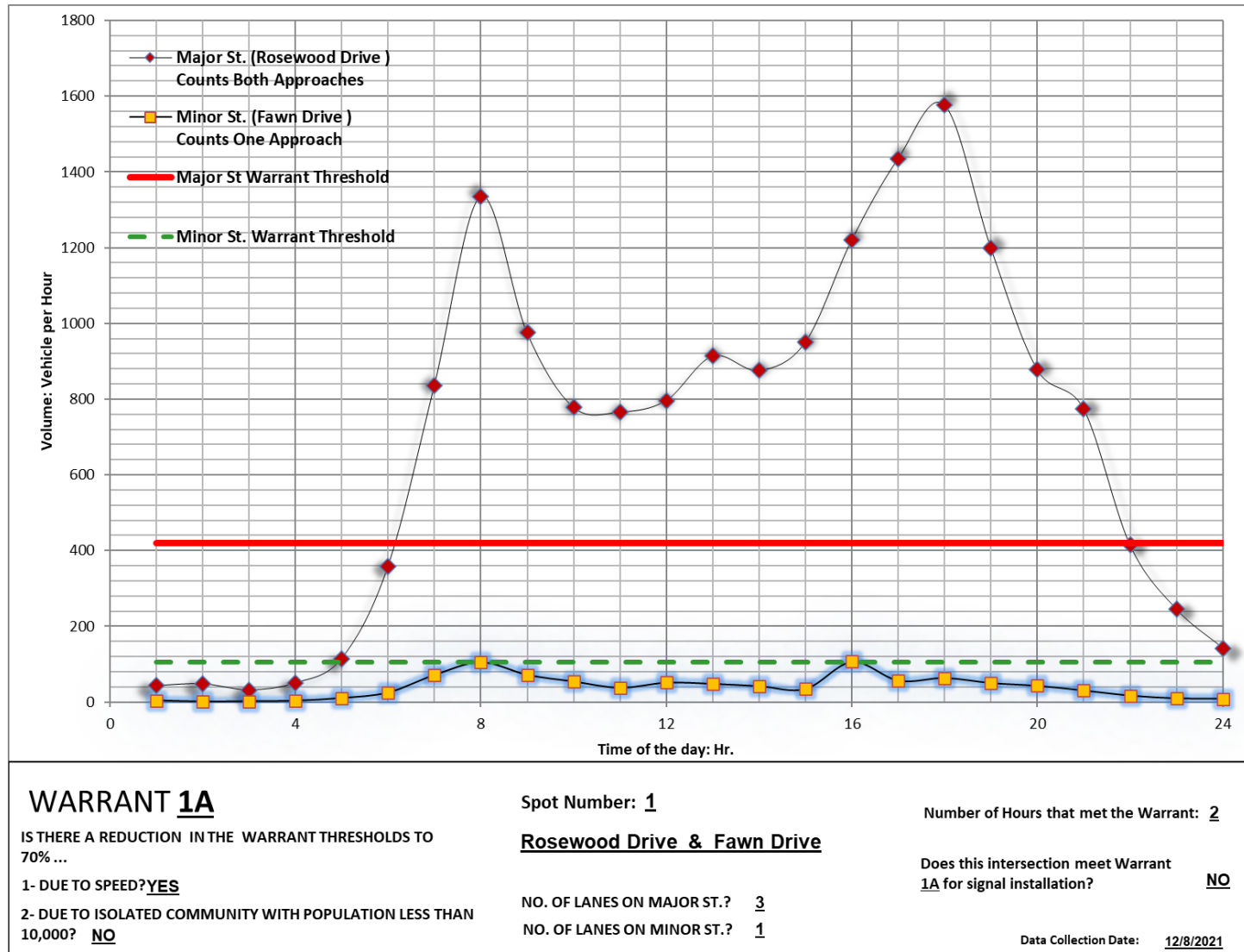


Figure 5: Warrant 1B

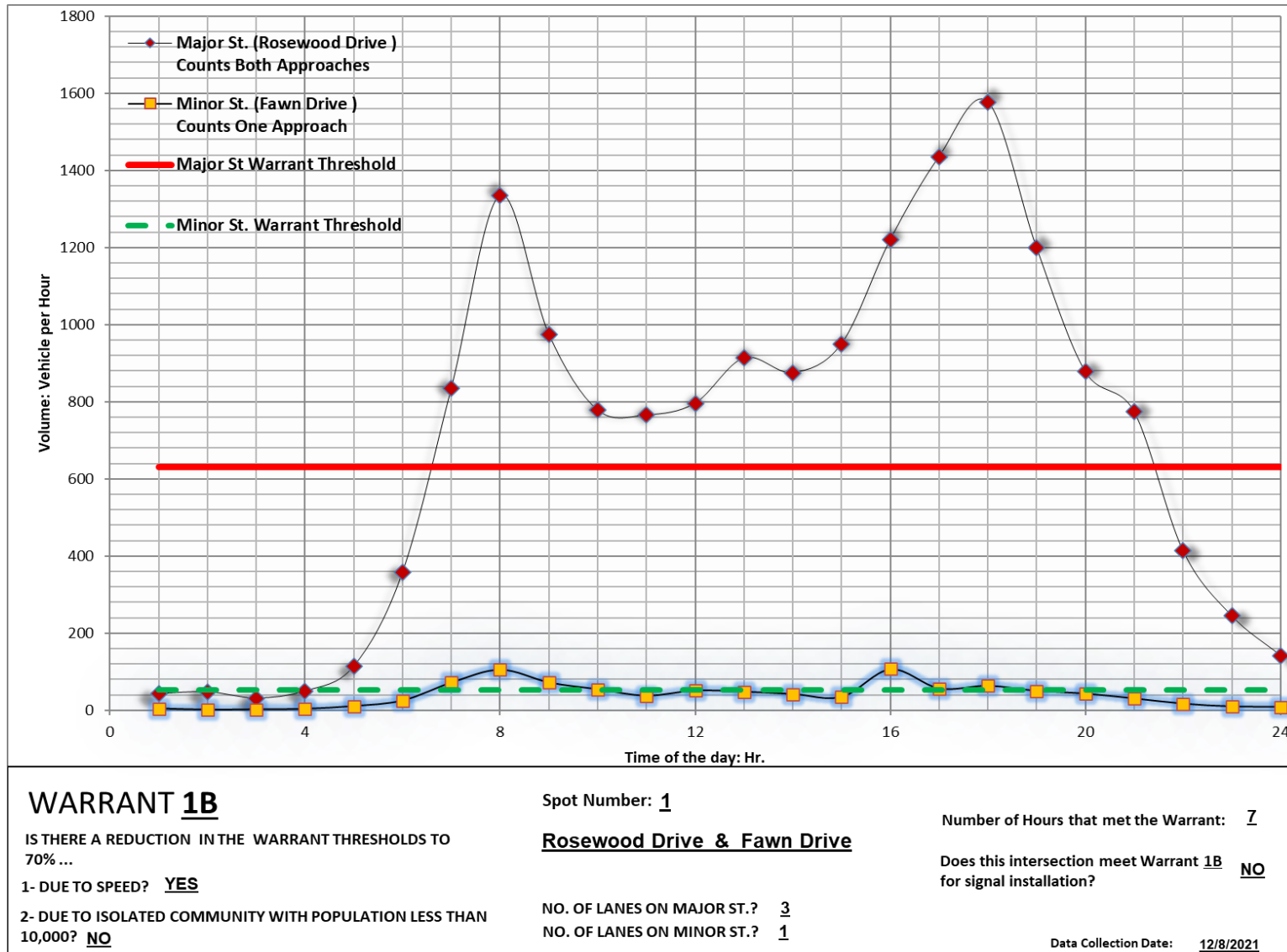
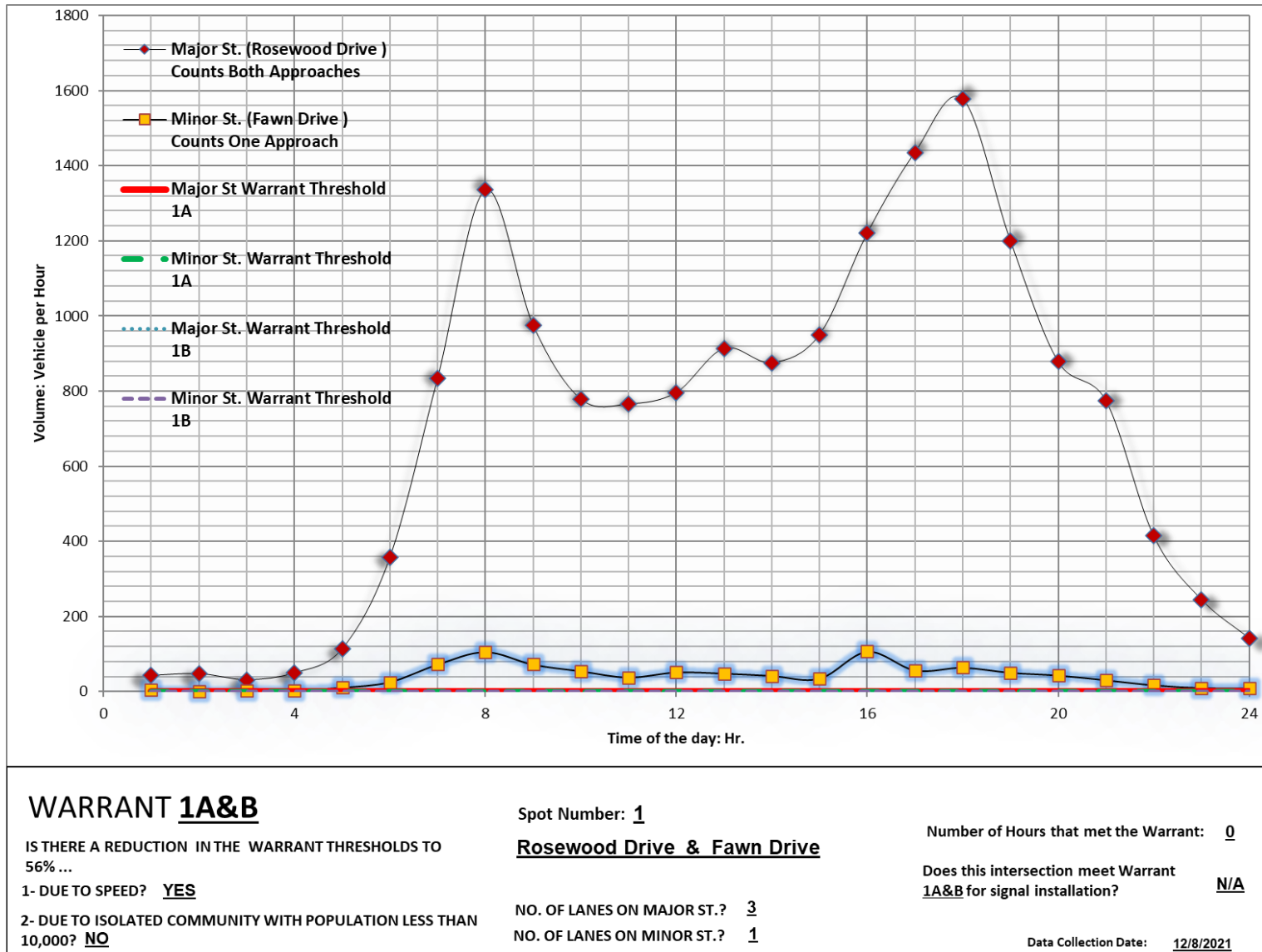


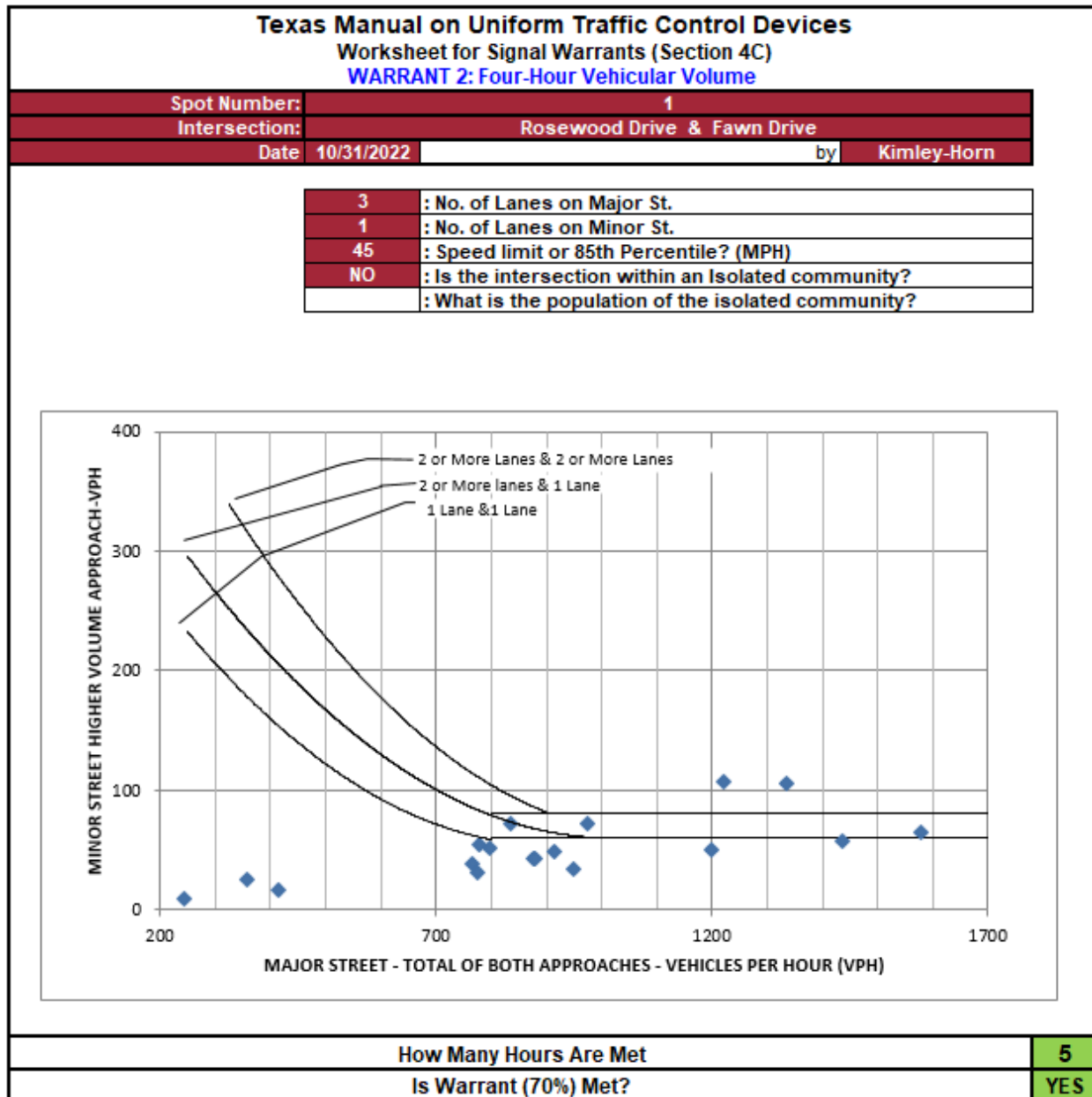
Figure 6: Warrant 1A&B



WARRANT 2 – FOUR HOUR VEHICULAR VOLUME

This warrant is similar to the eight-hour warrant and is based on traffic volumes during the highest four hours of the day. Traffic volumes are plotted on a graph to determine if they fall above the warrant curves. The reduction criteria are similar. If one of the two conditions apply, then a second graph with lower curves is used. **Figure 7** shows the data applied to Warrant 2. The traffic signal does meet the requirements of Warrant 2.

Figure 7: Warrant 2 (70%) - Four Hour Vehicular Volume



WARRANT 3 – PEAK HOUR VOLUME

This warrant is intended for use at a location where traffic conditions create undue delay to the side street for one or more hours during the day. Total stopped time delay for the side street must be documented to use this warrant. Reduction criteria and graphs similar to those in Warrant 2 are applied. Total stop time delays for the side street were determined using the Synchro™ simulation model. The Synchro™ report is provided in **Appendix D**, and **Figure 8** shows the application of data to Warrant 3 for the study intersection and the intersection does not satisfy Warrant 3A.

As **Figure 8** shows, the intersection satisfied Warrant 3B where there was at one hour when the minor street volume exceeded the threshold to meet the signal warrant criteria.

Figure 8: Warrant 3A (70%) - Peak Hour Volume

Texas Manual on Uniform Traffic Control Devices Worksheet for Signal Warrants (Section 4C) WARRANT 3 A: Peak-Hour Vehicular Volume			
Spot Number:	1		
Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn
NOT MET	49.7	: Total Stop Time Delay (hrs)	
	1	: Minor Street Approach Lanes	
	3	: Total Approaches	
	64	: Minor Approach Volume	
	1642	: Total Entering Volume	
	17:00 - 18:00	: Peak Hour	
Is Warrant 3 A Met?			NO

Figure 9: Warrant 3B (70%) - Peak Hour Volume

Texas Manual on Uniform Traffic Control Devices Worksheet for Signal Warrants (Section 4C) WARRANT 3 B(70%): Peak-Hour Vehicular Volume			
Spot Number:	1		
Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St.
1	: No. of Lanes on Minor St.
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: What is the population of the isolated community?

How Many Hours Are Met	2
Is Warrant (70%) Met?	YES

WARRANT 4 – PEDESTRIAN VOLUME

This warrant is intended when heavy traffic on the major street causes pedestrians to experience excessive delay in crossing the major street. Based on guidelines in TMUTCD Section 4C.05.04 - this warrant is not intended to be applied at locations where the distance to the nearest traffic control signal or Stop sign controlling the street that pedestrians desire to cross is less than 300', unless the proposed traffic control signal will not restrict the progressive movement of traffic. Based on pedestrian volumes collected during an 8-hour period, it was determined that pedestrian volumes across the major street did not meet minimum volume requirements of 75 pedestrians an hour at this intersection. Peak-hour pedestrian volumes are shown in **Appendix B**.

WARRANT 5 – SCHOOL CROSSING

This warrant is used where the fact that school children cross the major street is the principal reason to consider installing a signal. A minimum of 20 school children (elementary through high school) must cross during the highest hour and a study must show that the number of adequate gaps in the vehicle stream does not exist. Before installing a signal under this warrant, other remedial measures must be considered (i.e. warning signs and flashers, school speed zones, crossing guards, grade separation, etc.). No schools are located at the intersection. Therefore, the intersection does not meet Warrant 5.

WARRANT 6 – COORDINATED SIGNAL SYSTEM

If vehicle platoons in a coordinated system tend to “spread out” and need to be regrouped, this warrant may be considered. However, this warrant should not be applied where the resultant spacing of traffic control signals will be less than 1,000'. This intersection is not part of a coordinated signal system, therefore, Warrant 6 does not apply.

WARRANT 7 – CRASH EXPERIENCE

Warrant 7 requires that five or more reported crashes, correctible by a traffic signal, to have occurred in the last 12 months to satisfy Condition B of the warrant. There are minimum volume requirements for vehicles or pedestrians as well under Condition A of Warrant 7. Accident data was collected for the study intersection (within a 150' radius) from the TxDOT Crash Records Information System. This data was analyzed, and a crash diagram was developed for the study intersection. The collision types and their rate of occurrence within one year are listed in **Table 4**.

Table 4: Collision Types 2019-2022

Collision Type	2019	2020	2021	2022
One Motor Vehicle – Going Straight			1	
Same Direction – Both Going Straight – Sideswipe	1			
Angle – One Straight-One Left Turn	1		1	
Angle – Both Going Straight				1
Total Collisions Reported	2	0	2	1

The highlighted cells above indicate crashes that may be avoided by a traffic signal. In 2019, 2021 and 2022 each, there was one crash that may be potentially preventable with a traffic signal. Moreover, as summarized in **Table 5**, the side street traffic volume did not meet the minimum threshold as stated in Texas MUTCD 2011 Edition for Warrant 7 Conditions A or B to warrant a traffic signal. Therefore, the study intersection does not meet Warrant 7.

Table 5: Warrant 7 – Crash Experience

Texas Manual on Uniform Traffic Control Devices Worksheet for Signal Warrants (Section 4C) WARRANT 7: Crash Experience								
Spot Number:	1							
Intersection:	Rosewood Drive & Fawn Drive							
Date	10/31/2022	by	Kimley-Horn					
	3	: No. of Lanes on Major St?						
	1	: No. of Lanes on Minor St?						
	NO	: Has adequate trial of remedial measure with adequate enforcement been tried?						
	NO	: Are there 5 or more Crashes Susceptible to Correction by Signalization in a 12 Month Period?						
	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?
Time	N-S	E-W						
00:00 - 01:00	43	4	336	84	NO	504	42	NO
01:00 - 02:00	48	1	336	84	NO	504	42	NO
02:00 - 03:00	32	2	336	84	NO	504	42	NO
03:00 - 04:00	50	3	336	84	NO	504	42	NO
04:00 - 05:00	114	10	336	84	NO	504	42	NO
05:00 - 06:00	358	25	336	84	NO	504	42	NO
06:00 - 07:00	835	72	336	84	NO	504	42	YES
07:00 - 08:00	1336	106	336	84	YES	504	42	YES
08:00 - 09:00	975	72	336	84	NO	504	42	YES
09:00 - 10:00	778	55	336	84	NO	504	42	YES
10:00 - 11:00	766	38	336	84	NO	504	42	NO
11:00 - 12:00	796	51	336	84	NO	504	42	YES
12:00 - 13:00	914	48	336	84	NO	504	42	YES
13:00 - 14:00	876	42	336	84	NO	504	42	NO
14:00 - 15:00	950	35	336	84	NO	504	42	NO
15:00 - 16:00	1220	107	336	84	YES	504	42	YES
16:00 - 17:00	1435	57	336	84	NO	504	42	YES
17:00 - 18:00	1578	64	336	84	NO	504	42	YES
18:00 - 19:00	1200	50	336	84	NO	504	42	YES
19:00 - 20:00	878	43	336	84	NO	504	42	YES
20:00 - 21:00	774	30	336	84	NO	504	42	NO
21:00 - 22:00	415	17	336	84	NO	504	42	NO
22:00 - 23:00	245	9	336	84	NO	504	42	NO
23:00 - 24:00	142	8	336	84	NO	504	42	NO
Is there a reduction in the warrant thresholds to 56% = NO								
Number of Hours that met the warrant 7A = 2								
Number of Hours that met the warrant 7B = 11								
A. Is the Minimum Vehicular Volume Warrant Met Based on Crash Patterns? (Condition A)								NO
B. Is the Interruption of Continuous Traffic Met Based on Crash Patterns? (Condition B)								NO

WARRANT 8 – ROADWAY NETWORK

This warrant is used to encourage concentration and organization of traffic flow on a roadway network. It must be used on a principal through street and meet minimum volume requirements. Certain criteria must also be met for a roadway to be considered a major route. This intersection does not meet the criteria for Warrant 8.

WARRANT 9 – INTERSECTION NEAR A GRADE CROSSING

If an intersection is less than 140 feet from an at grade railroad crossing, and certain minimum traffic volumes are present, a signal with track preemption is required, only after other alternatives have been considered. Warrant 9 does not apply at the study intersection because there is no at grade railroad crossing near this location.

TRAFFIC SIGNAL WARRANT ANALYSIS SUMMARY

The following summarizes the results of the existing conditions analysis. The summaries of results are listed in **Table 6**.

Table 6: Summary of Warrants

Summary of Warrants			
Intersection:	1		
Major Street:	Rosewood Drive	Minor Street:	Fawn Drive
Intersection:	Rosewood Drive & Fawn Drive		
City/Twp:	Austin ETJ		
Date Performed:	10/31/2022	Performed By:	Kimley-Horn
Date Volumes Collected:	12/8/2021		
Warrant		Condition	Is Warrant Met
WARRANT 1: Eight-Hour Vehicular Volume			NO
		Condition A	NO
		Condition B	NO
		Condition A&B	N/A
WARRANT 2: Four-Hour Vehicular Volume		(70%)	YES
WARRANT 3: Peak-Hour Vehicular Volume		(70%)	YES
		Condition A	NO
		Condition B	YES
WARRANT 4: Pedestrian Volume		(70%)	NO
		Four Hour	NO
		Peak Hour	NO
WARRANT 5: School Crossing			N/A
WARRANT 6: Coordinated Signal System			NO
WARRANT 7: Crash Experience			NO
		Condition A	NO
		Condition B	NO
WARRANT 8: Roadway Network			NO
WARRANT 9: Intersection Near a Grade Crossing			NO
Issue to Be Addressed by Signalization:			
Reduce stop delay at intersection during peak weekday hours and mitigate safety issues correctible by a traffic signal.			

TRAFFIC SIGNAL WARRANT ANALYSIS – ROSEWOOD DRIVE & ASPEN DRIVE

This study documents the results of a traffic signal warrant analysis for the intersection of Rosewood Drive & Aspen Drive in the City of Killeen in Bell County, Texas.

ASSUMPTIONS

Several assumptions were made to analyze the data collected at each study intersection.

- Aspen Drive is treated as an eastbound-westbound roadway and Rosewood Drive is treated as a northbound-southbound roadway.
- The peak hour was determined to be the hour with the greatest vehicular volume. The AM peak was determined to be 7:00-8:00 AM, while the PM peak and overall intersection peak was determined to be 5:00-6:00 PM.
- For warrant analysis at the study intersection, the higher of the two minor street approach volumes was used.

STUDY PROCEDURE AND ANALYSIS RESULTS

The *Texas Manual of Uniform Traffic Control Devices* (Texas MUTCD, 2011 Edition) defines nine (9) warrants, or justifying set of conditions, at least one of which should be fully satisfied before signalization is considered as an option for traffic control. Factors included in the evaluation of these warrants include vehicle and pedestrian traffic volumes, the number of traffic lanes, the prevailing traffic speeds, traffic crash history, and measured delay for minor street traffic. The individual warrants are listed below, followed by a short description and analysis of each.

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour Vehicular Volume
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network
- Warrant 9, Intersection Near a Railroad Grade Crossing

WARRANT 1 – EIGHT HOUR VEHICULAR VOLUME

As the title implies, this criterion is applied to the eight highest demand hours of the day for the major and minor street. At least eight hours of the day must exceed the thresholds required in order to warrant a traffic signal using Warrant 1.

Two criteria are checked. Condition A is based on minimum vehicular volumes. Condition B is based on interruption of continuous traffic. For both conditions, there are several reduction factors that may be taken if Condition A or Condition B is not satisfied. The combination of Conditions A & B is intended for application after trial of other alternatives that could cause less delay and inconvenience of traffic has failed to solve the traffic problems. The warrant is satisfied if both Conditions A and B are met with an 80% reduction. If the 85th percentile speed on the major street is greater than 40 mph, or if the intersection lies within the built-up area of an isolated community having a population less than 10,000, the criteria can be reduced by 70% of the original values for Condition A and Condition B or for the combination of Conditions A and B (resulting in 56% of the original value of Condition A and Condition B for the combined case).

Table 7 and **Table 8**, as well as **Figure 10**, **Figure 11**, and **Figure 12**, show the warrant criteria and traffic counts as they apply to that criteria.

Table 7: Warrant 1 – Eight Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

^a Basic minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

***Source: 2011 TMUTCD Table 4C-1*

Table 8: Warrant 1 – Eight Hour Vehicular Volume Worksheet

Texas Manual on Uniform Traffic Control Devices Worksheet for Signal Warrants (Section 4C) WARRANT 1: Eight-Hour Vehicular Volume													
Intersection:		Rosewood Drive & Aspen Drive											
Date:	10/10/2022	by	Kimley-Horn										
3	: No. of Lanes on Major St?												
1	: No. of Lanes on Minor St?												
45	: Speed limit or 85th Percentile? (MPH)												
NO	: Is the intersection within an Isolated community?												
	: If answer 4 is Yes, then what is the population of the isolated community?												
NO	: Have other remedial measures been tried?												
USE 70% WARRANTS 1A AND 1B. DO NOT USE COMBINATION OF A & B													
Time	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?	Combination Major A	Combination Minor A	Combination Major B	Combination Minor B	Warrant Condition A&B met?
00:01 - 01:00	40	1	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
01:00 - 02:00	38	2	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
02:00 - 03:00	28	0	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
03:00 - 04:00	44	6	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
04:00 - 05:00	109	11	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
05:00 - 06:00	347	28	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
06:00 - 07:00	789	54	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
07:00 - 08:00	1319	164	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
08:00 - 09:00	953	53	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
09:00 - 10:00	739	36	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
10:00 - 11:00	728	47	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
11:00 - 12:00	736	31	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
12:00 - 13:00	849	39	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
13:00 - 14:00	837	48	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
14:00 - 15:00	919	44	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
15:00 - 16:00	1120	118	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
16:00 - 17:00	1348	56	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
17:00 - 18:00	1482	53	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
18:00 - 19:00	1123	44	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
19:00 - 20:00	817	23	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
20:00 - 21:00	699	24	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
21:00 - 22:00	373	11	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
22:00 - 23:00	212	8	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
23:00 - 24:00	124	9	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
Number of Hours that met the Warrant 1A =										2			
Number of Hours that met the Warrant 1B =										6			
Number of Hours that met the Combination Warrant 1A & 1B =										0			
A. Is the Minimum Vehicular Volume Warrant Met? (Condition A)													NO
B. Is the Interruption of Continuous Traffic Met? (Condition B)													NO
C. Combination of Warrants A and B Criteria Met?													N/A

Figure 10: Warrant 1A

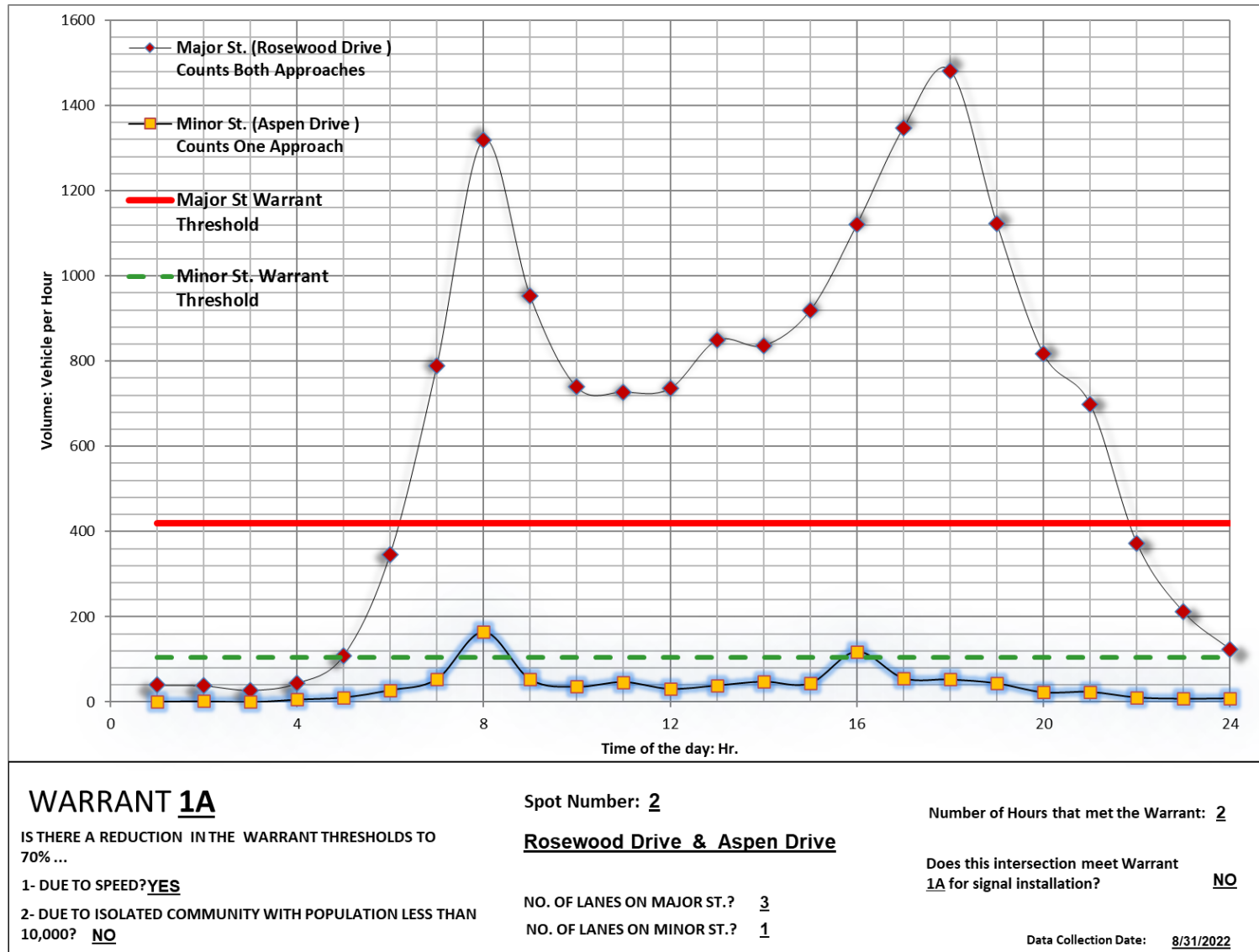


Figure 11: Warrant 1B

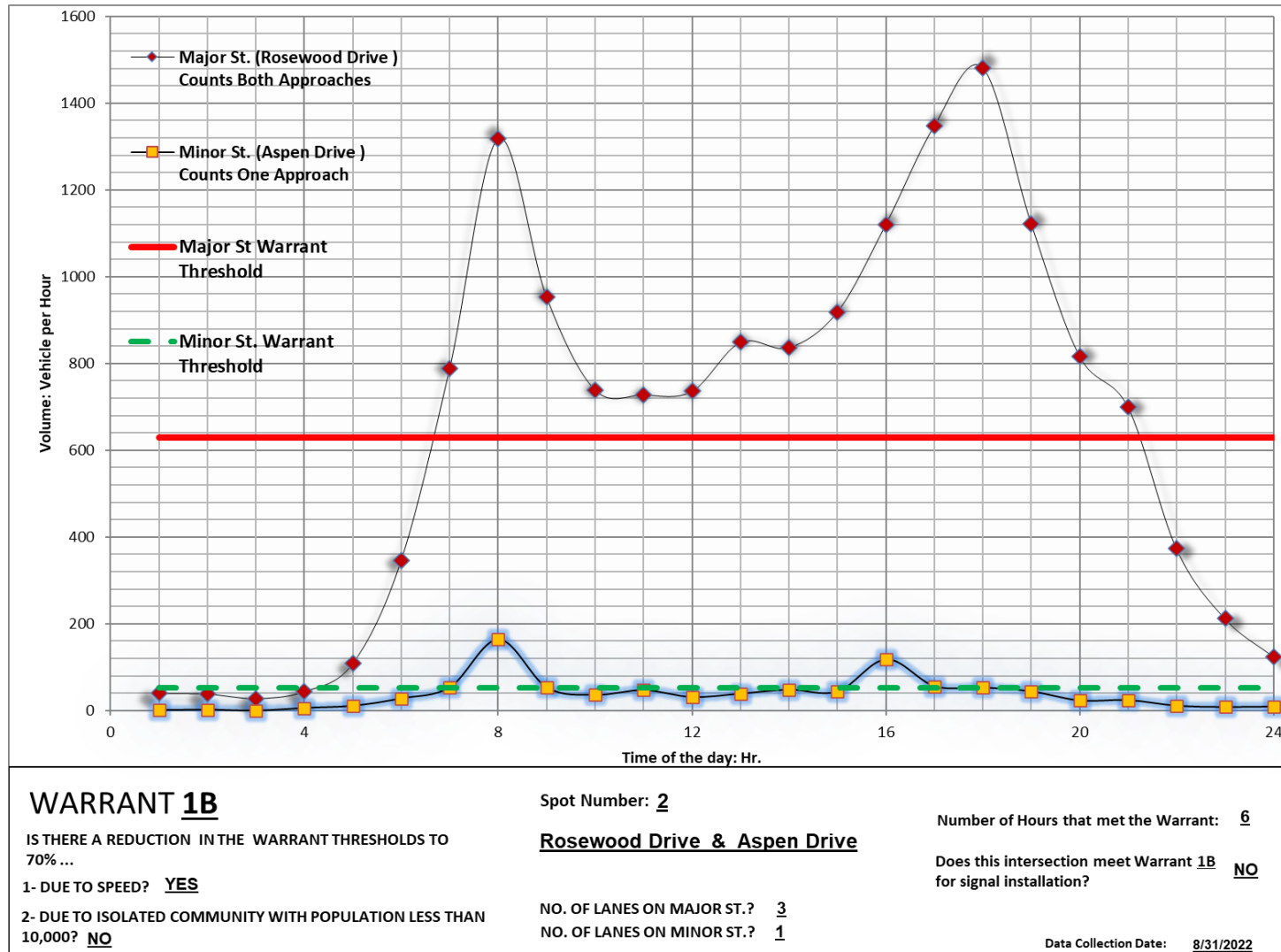
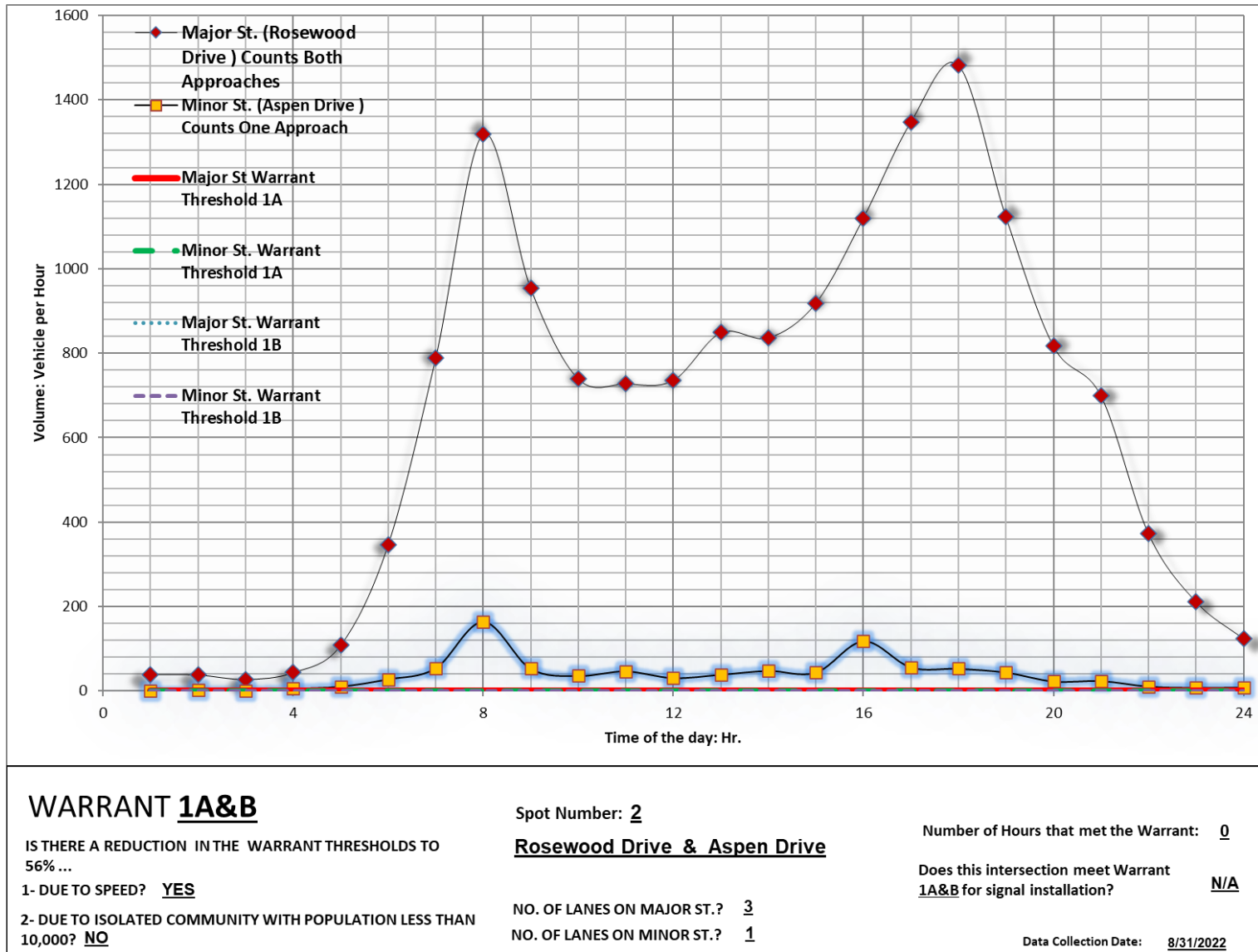


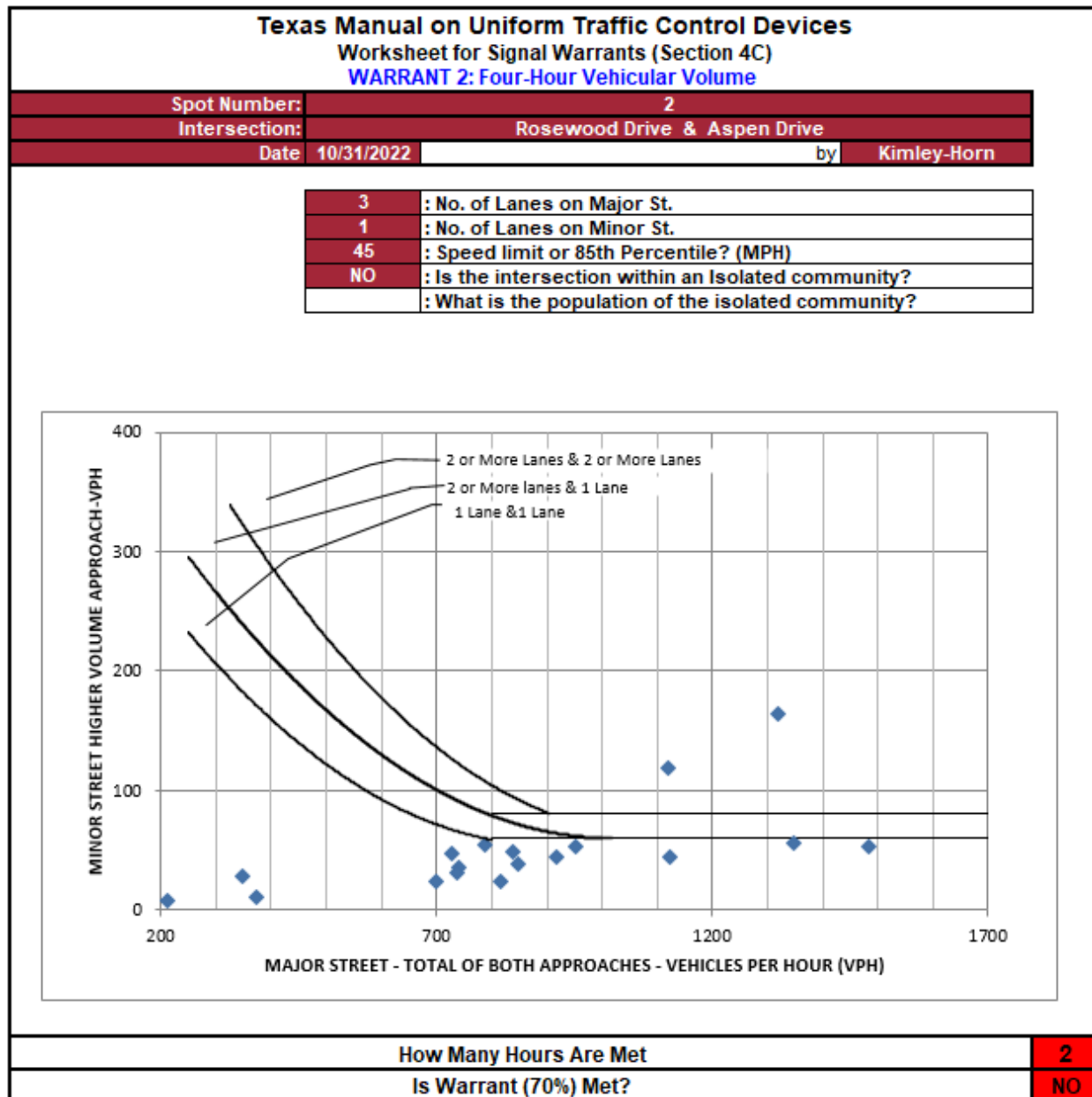
Figure 12: Warrant 1A&B



WARRANT 2 – FOUR HOUR VEHICULAR VOLUME

This warrant is similar to the eight-hour warrant and is based on traffic volumes during the highest four hours of the day. Traffic volumes are plotted on a graph to determine if they fall above the warrant curves. The reduction criteria are similar. If one of the two conditions apply, then a second graph with lower curves is used. **Figure 13** shows the data applied to Warrant 2.

Figure 13: Warrant 2 (70%) - Four Hour Vehicular Volume



WARRANT 3 – PEAK HOUR VOLUME

This warrant is intended for use at a location where traffic conditions create undue delay to the side street for one or more hours during the day. Total stopped time delay for the side street must be documented to use this warrant. Reduction criteria and graphs similar to those in Warrant 2 are applied. Total stop time delays for the side street were determined using the Synchro™ simulation model. The Synchro™ report is provided in **Appendix D**, and **Figure 14** shows the application of data to Warrant 3 for the study intersection and the intersection does not satisfy Warrant 3A.

As **Figure 14** shows, the intersection satisfied Warrant 3B where there was at one hour when the minor street volume exceeded the threshold to meet the signal warrant criteria.

Figure 14: Warrant 3A (70%) - Peak Hour Volume

Texas Manual on Uniform Traffic Control Devices Worksheet for Signal Warrants (Section 4C) WARRANT 3 A: Peak-Hour Vehicular Volume			
Spot Number:	2		
Intersection:	Rosewood Drive & Aspen Drive		
Date	10/10/2022	by	Kimley-Horn
NOT MET	31.2	: Total Stop Time Delay (hrs)	
	1	: Minor Street Approach Lanes	
	3	: Total Approaches	
	53	: Minor Approach Volume	
	1535	: Total Entering Volume	
	17:00 - 18:00	: Peak Hour	
Is Warrant 3 A Met?			NO

Figure 15: Warrant 3B (70%) - Peak Hour Volume

Texas Manual on Uniform Traffic Control Devices Worksheet for Signal Warrants (Section 4C) WARRANT 3 B(70%): Peak-Hour Vehicular Volume			
Spot Number:	2		
Intersection:	Rosewood Drive & Aspen Drive		
Date	10/10/2022	by	Kimley-Horn

3	: No. of Lanes on Major St.
1	: No. of Lanes on Minor St.
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an isolated community?
	: What is the population of the isolated community?

How Many Hours Are Met	2
Is Warrant (70%) Met?	YES

WARRANT 4 – PEDESTRIAN VOLUME

This warrant is intended when heavy traffic on the major street causes pedestrians to experience excessive delay in crossing the major street. Based on guidelines in TMUTCD Section 4C.05.04 - this warrant is not intended to be applied at locations where the distance to the nearest traffic control signal or Stop sign controlling the street that pedestrians desire to cross is less than 300', unless the proposed traffic control signal will not restrict the progressive movement of traffic. Based on pedestrian volumes collected during an 8-hour period, it was determined that pedestrian volumes across the major street did not meet minimum volume requirements of 75 pedestrians an hour at this intersection. Peak-hour pedestrian volumes are shown in **Appendix B**.

WARRANT 5 – SCHOOL CROSSING

This warrant is used where the fact that school children cross the major street is the principal reason to consider installing a signal. A minimum of 20 school children (elementary through high school) must cross during the highest hour and a study must show that the number of adequate gaps in the vehicle stream does not exist. Before installing a signal under this warrant, other remedial measures must be considered (i.e. warning signs and flashers, school speed zones, crossing guards, grade separation, etc.). No schools are located at the intersection. Therefore, the intersection does not meet Warrant 5.

WARRANT 6 – COORDINATED SIGNAL SYSTEM

If vehicle platoons in a coordinated system tend to “spread out” and need to be regrouped, this warrant may be considered. However, this warrant should not be applied where the resultant spacing of traffic control signals will be less than 1,000'. This intersection is not part of a coordinated signal system, therefore, Warrant 6 does not apply.

WARRANT 7 – CRASH EXPERIENCE

Warrant 7 requires that five or more reported crashes, correctible by a traffic signal, to have occurred in the last 12 months to satisfy Condition B of the warrant. There are minimum volume requirements for vehicles or pedestrians as well under Condition A of Warrant 7. Accident data was collected for the study intersection (within a 150' radius) from the TxDOT Crash Records Information System. This data was analyzed, and a crash diagram was developed for the study intersection. The collision types and their rate of occurrence within one year are listed in **Table 9**.

Table 9: Collision Types 2019-2022

Collision Type	2019	2020	2021	2022
One Motor Vehicle – Going Straight		1		
One Motor Vehicle – Turning Right				
Same Direction – Both Going Straight Rear-End			1	1
Same Direction – One Straight One Stopped	1	1		
Angle – One Right One Stopped		1		
Angle – One Straight-One Left Turn		2		
Angle – Both Going Straight	1		1	
Total Collisions Reported	2	5	2	1

The highlighted cells above indicate crashes that may be avoided by a traffic signal. In 2020 there were three crashes that may be potentially preventable with a traffic signal, while in 2019 as in 2021 each, there was one crash that may be potentially preventable with a traffic signal. Moreover, as summarized in **Table 10**, the side street traffic volume did not meet the minimum threshold as stated in Texas MUTCD 2011 Edition for Warrant 7 Conditions A or B to warrant a traffic signal. Therefore, the study intersection does meet Warrant 7.

Table 10: Warrant 7 – Crash Experience

Texas Manual on Uniform Traffic Control Devices Worksheet for Signal Warrants (Section 4C) WARRANT 7: Crash Experience								
Spot Number:	2							
Intersection:	Rosewood Drive & Aspen Drive							
Date	10/10/2022	by	Kimley-Horn					
	3	: No. of Lanes on Major St?						
	1	: No. of Lanes on Minor St?						
	NO	: Has adequate trial of remedial measure with adequate enforcement been tried?						
	NO	: Are there 5 or more Crashes Susceptible to Correction by Signalization in a 12 Month Period?						
Time	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?
00:00 - 01:00	40	1	336	84	NO	504	42	NO
01:00 - 02:00	38	2	336	84	NO	504	42	NO
02:00 - 03:00	28	0	336	84	NO	504	42	NO
03:00 - 04:00	44	6	336	84	NO	504	42	NO
04:00 - 05:00	109	11	336	84	NO	504	42	NO
05:00 - 06:00	347	28	336	84	NO	504	42	NO
06:00 - 07:00	789	54	336	84	NO	504	42	YES
07:00 - 08:00	1319	164	336	84	YES	504	42	YES
08:00 - 09:00	953	53	336	84	NO	504	42	YES
09:00 - 10:00	739	36	336	84	NO	504	42	NO
10:00 - 11:00	728	47	336	84	NO	504	42	YES
11:00 - 12:00	736	31	336	84	NO	504	42	NO
12:00 - 13:00	849	39	336	84	NO	504	42	NO
13:00 - 14:00	837	48	336	84	NO	504	42	YES
14:00 - 15:00	919	44	336	84	NO	504	42	YES
15:00 - 16:00	1120	118	336	84	YES	504	42	YES
16:00 - 17:00	1348	56	336	84	NO	504	42	YES
17:00 - 18:00	1482	53	336	84	NO	504	42	YES
18:00 - 19:00	1123	44	336	84	NO	504	42	YES
19:00 - 20:00	817	23	336	84	NO	504	42	NO
20:00 - 21:00	699	24	336	84	NO	504	42	NO
21:00 - 22:00	373	11	336	84	NO	504	42	NO
22:00 - 23:00	212	8	336	84	NO	504	42	NO
23:00 - 24:00	124	9	336	84	NO	504	42	NO
Is there a reduction in the warrant thresholds to 56% = NO								
Number of Hours that met the warrant 7A = 2								
Number of Hours that met the warrant 7B = 10								
A. Is the Minimum Vehicular Volume Warrant Met Based on Crash Patterns? (Condition A)								NO
B. Is the Interruption of Continuous Traffic Met Based on Crash Patterns? (Condition B)								NO

WARRANT 8 – ROADWAY NETWORK

This warrant is used to encourage concentration and organization of traffic flow on a roadway network. It must be used on a principal through street and meet minimum volume requirements. Certain criteria must also be met for a roadway to be considered a major route. This intersection does not meet the criteria for Warrant 8.

WARRANT 9 – INTERSECTION NEAR A GRADE CROSSING

If an intersection is less than 140 feet from an at grade railroad crossing, and certain minimum traffic volumes are present, a signal with track preemption is required, only after other alternatives have been considered. Warrant 9 does not apply at the study intersection because there is no at grade railroad crossing near this location.

TRAFFIC SIGNAL WARRANT ANALYSIS SUMMARY

The following summarizes the results of the existing conditions analysis. The summaries of results are listed in **Table 11**.

Table 11: Summary of Warrants

Summary of Warrants		
Intersection:	2	
Major Street:	Rosewood Drive	Minor Street: Aspen Drive
Intersection:	Rosewood Drive & Aspen Drive	
City/Twp:	Austin ETJ	
Date Performed:	10/10/2022	Performed By: Kimley-Horn
Date Volumes Collected:	8/31/2022	
Warrant	Condition	Is Warrant Met
WARRANT 1: Eight-Hour Vehicular Volume		NO
	Condition A	NO
	Condition B	NO
	Condition A&B	N/A
WARRANT 2: Four-Hour Vehicular Volume	(70%)	NO
WARRANT 3: Peak-Hour Vehicular Volume	(70%)	YES
	Condition A	NO
	Condition B	YES
WARRANT 4: Pedestrian Volume	(70%)	NO
	Four Hour	NO
	Peak Hour	NO
WARRANT 5: School Crossing		N/A
WARRANT 6: Coordinated Signal System		NO
WARRANT 7: Crash Experience		NO
	Condition A	NO
	Condition B	NO
WARRANT 8: Roadway Network		NO
WARRANT 9: Intersection Near a Grade Crossing		NO
Issue to Be Addressed by Signalization:		
Reduce stop delay at intersection during peak weekday hours and mitigate safety issues correctible by a traffic signal.		

CONCLUSION AND RECOMMENDATIONS

The 2011 Edition of the TMUTCD contains nine warrants for traffic signals. The intersection analyzed currently meets the following warrants as shown in **Table 12**.

Table 12: Summary of Traffic Signal Warrant Analysis

Warrant Number	Warrant Description	Intersection	
		Rosewood Drive & Fawn Drive	Rosewood Drive & Aspen Drive
Warrant 1	Eight-Hour Vehicular Volume	No	No
Warrant 2	Four-Hour Vehicular Volume	Yes	No
Warrant 3	Peak-Hour Vehicular Volume	Yes (Warrant B)	Yes (Warrant B)
Warrant 4	Pedestrian Volume	No	No
Warrant 5	School Crossing	No	No
Warrant 6	Coordinated Signal System	No	No
Warrant 7	Crash Experience	No	No
Warrant 8	Roadway Network	No	No
Warrant 9	Intersection Near a Railroad Grade Crossing	No	No

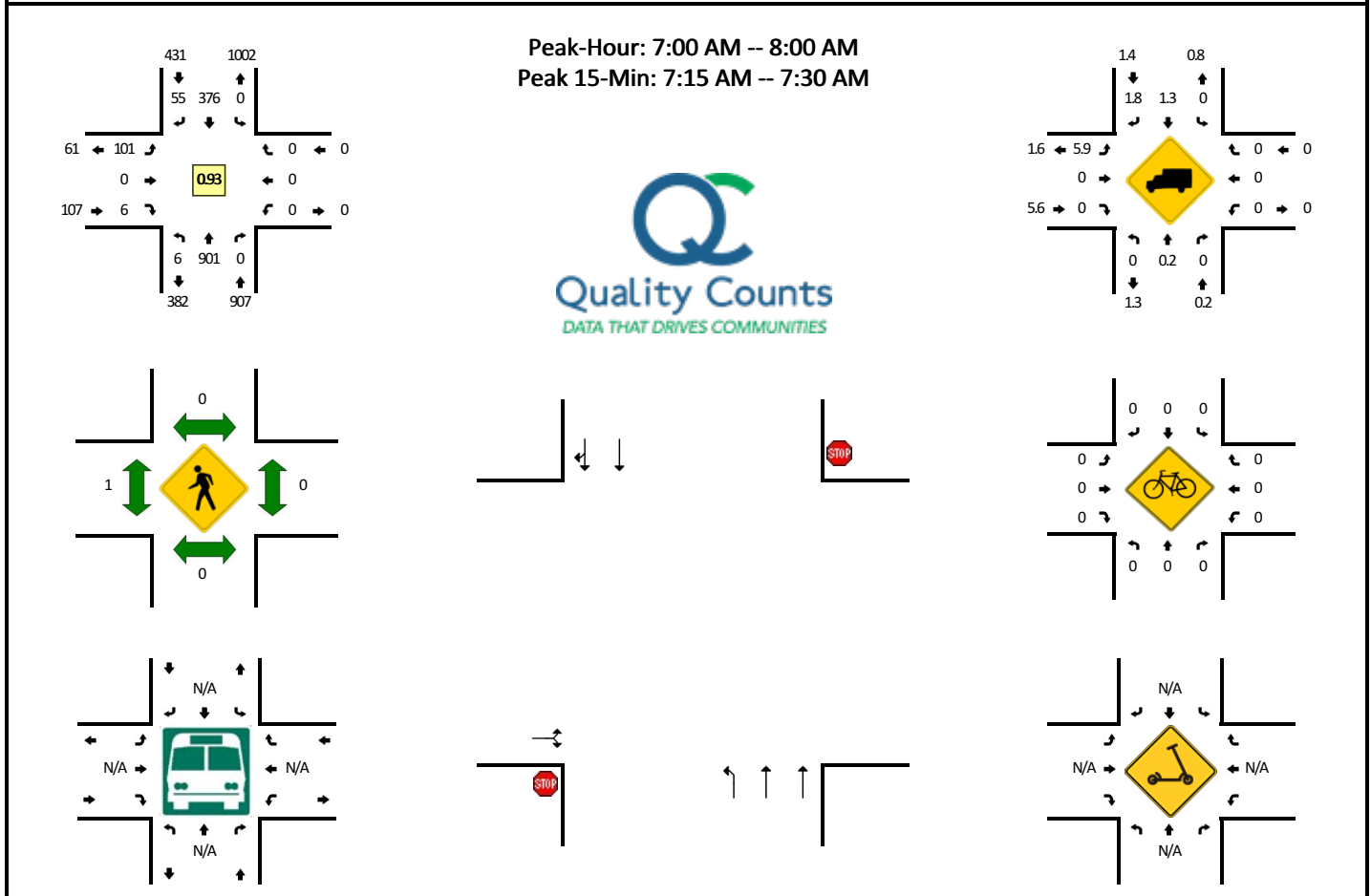
Based on the criteria, Kimley-Horn recommends a traffic signal at the intersections of Rosewood Drive & Fawn Drive and Rosewood Drive & Aspen Drive.

Appendix

Appendix A: 2022 Existing Traffic Counts

LOCATION: Rosewood Dr -- Fawn Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913130
DATE: Wed, Aug 31 2022

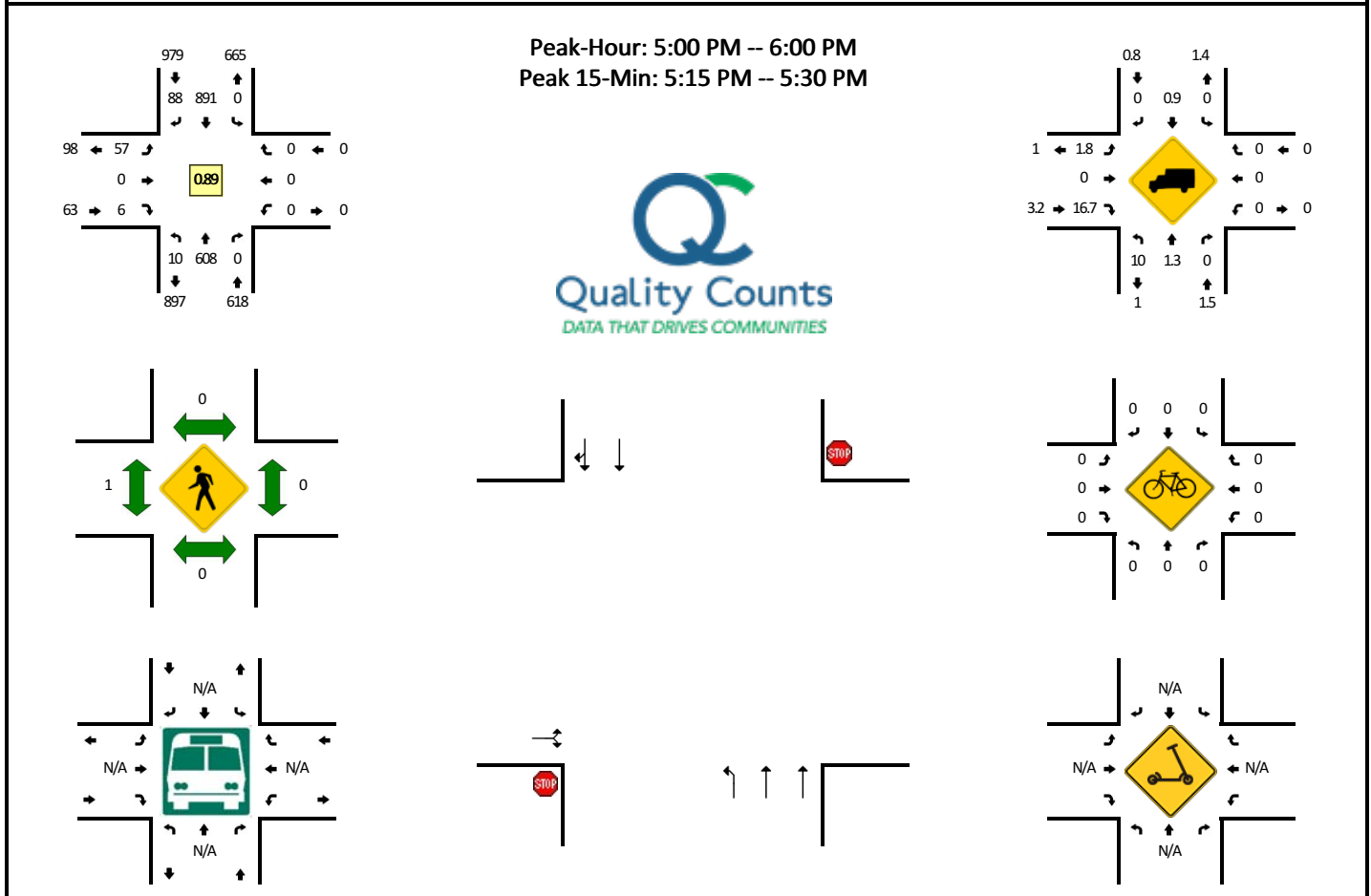


15-Min Count Period Beginning At	Rosewood Dr (Northbound)				Rosewood Dr (Southbound)				Fawn Dr (Eastbound)				Fawn Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	232	0	0	0	84	18	0	33	0	2	0	0	0	0	0	369	
7:15 AM	4	258	0	0	0	74	19	0	32	0	2	0	0	0	0	0	389	
7:30 AM	1	220	0	0	0	99	11	0	17	0	0	0	0	0	0	0	348	
7:45 AM	1	191	0	0	0	119	7	0	19	0	2	0	0	0	0	0	339	1445
8:00 AM	3	137	0	0	0	80	8	0	19	0	3	0	0	0	0	0	250	1326
8:15 AM	0	169	0	0	0	75	5	0	17	0	3	0	0	0	0	0	269	1206
8:30 AM	0	197	0	0	0	66	4	0	15	0	0	0	0	0	0	0	282	1140
8:45 AM	1	188	0	0	0	58	6	0	12	0	0	0	0	0	0	0	265	1066
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	1032	0	0	0	296	76	0	128	0	8	0	0	0	0	0	1556	
Heavy Trucks	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

LOCATION: Rosewood Dr -- Fawn Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913131
DATE: Wed, Aug 31 2022

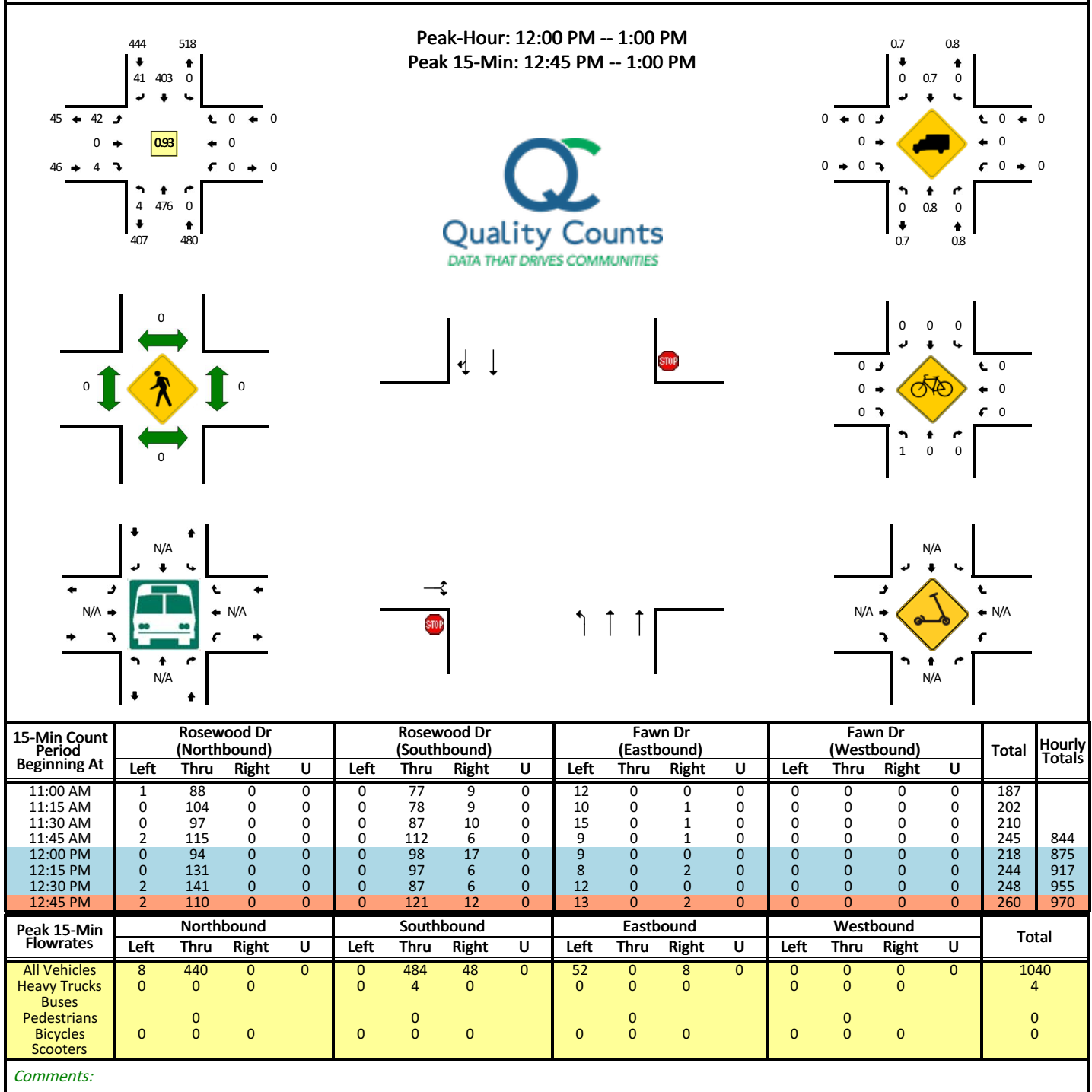


15-Min Count Period Beginning At	Rosewood Dr (Northbound)				Rosewood Dr (Southbound)				Fawn Dr (Eastbound)				Fawn Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	132	0	0	0	189	17	0	7	0	3	0	0	0	0	0	350	
4:15 PM	1	138	0	0	0	216	25	0	11	0	1	0	0	0	0	0	392	
4:30 PM	2	146	0	0	0	216	10	0	15	0	1	0	0	0	0	0	390	
4:45 PM	4	107	0	0	0	239	16	0	17	0	0	0	0	0	0	0	383	1515
5:00 PM	3	140	0	0	0	227	20	0	8	0	1	0	0	0	0	0	399	1564
5:15 PM	4	167	0	0	0	247	28	0	19	0	2	0	0	0	0	0	467	1639
5:30 PM	1	146	0	0	0	217	21	0	19	0	2	0	0	0	0	0	406	1655
5:45 PM	2	155	0	0	0	200	19	0	11	0	1	0	0	0	0	0	388	1660
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	668	0	0	0	988	112	0	76	0	8	0	0	0	0	0	1868	
Heavy Trucks	0	4	0	0	0	16	0	0	0	0	0	0	0	0	0	0	20	
Buses																		
Pedestrians	0	0			0	0			0	0			0	0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

LOCATION: Rosewood Dr -- Fawn Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913132
DATE: Wed, Aug 31 2022

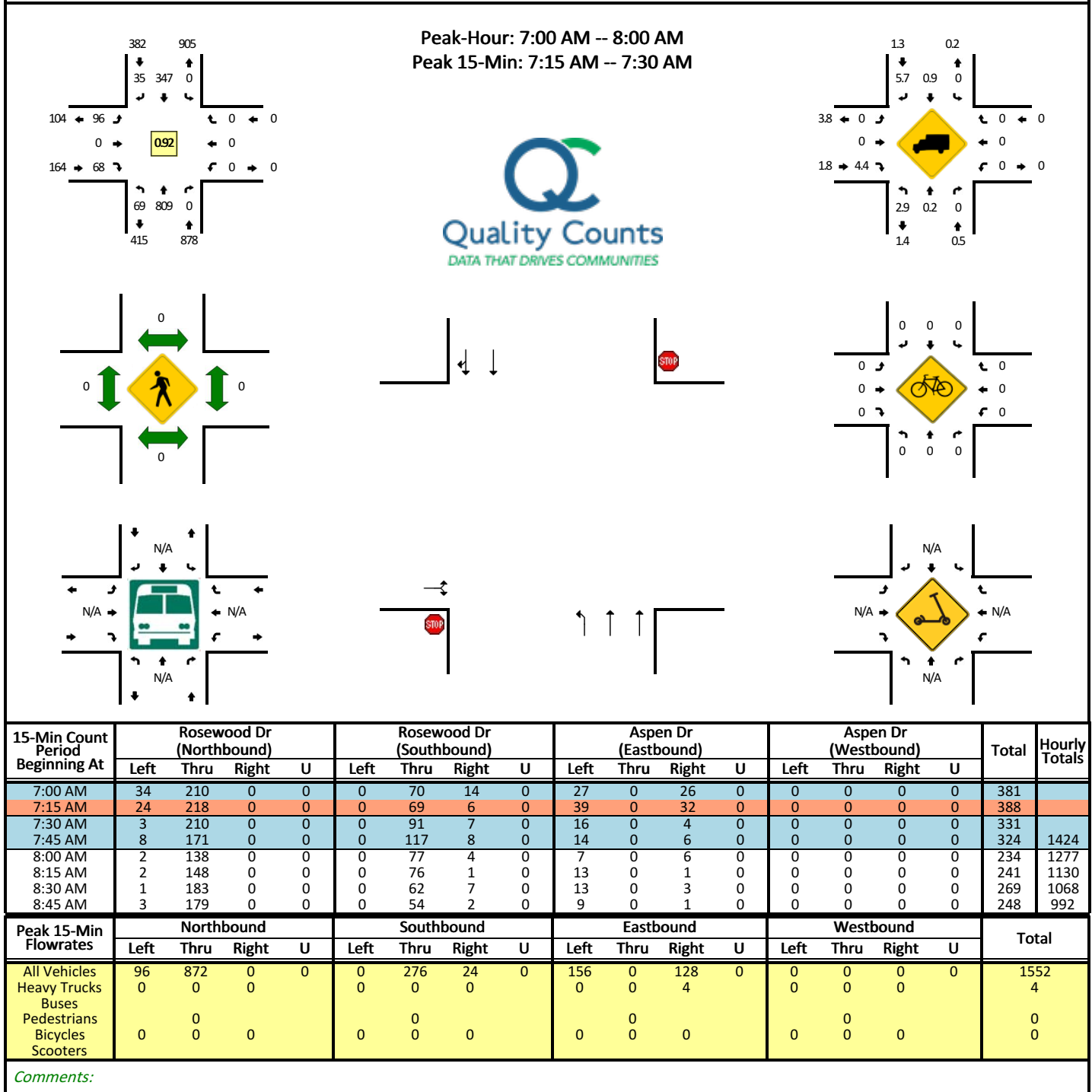


Report generated on 9/14/2022 11:26 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

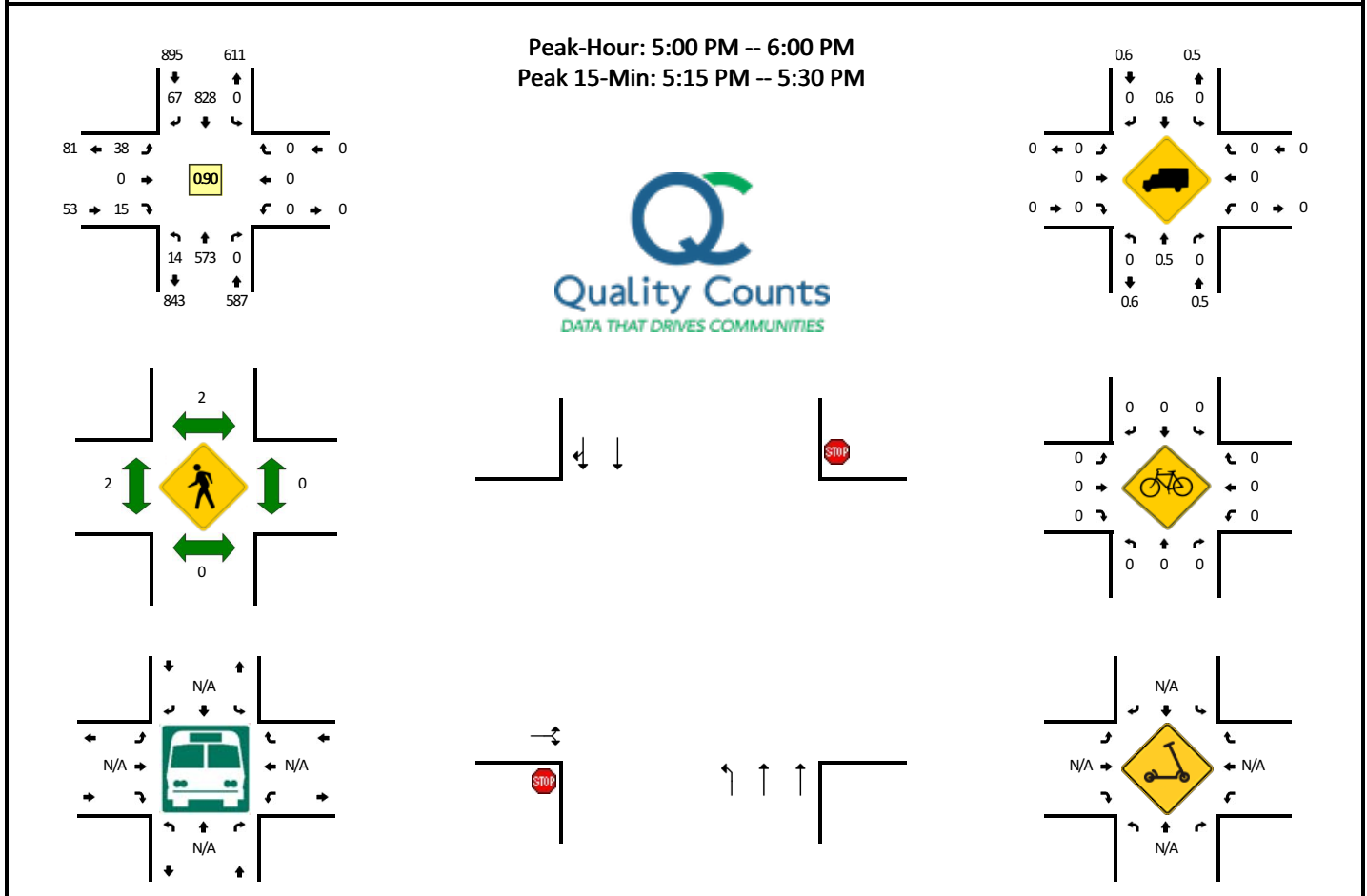
LOCATION: Rosewood Dr -- Aspen Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913133
DATE: Wed, Aug 31 2022



LOCATION: Rosewood Dr -- Aspen Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913134
DATE: Wed, Aug 31 2022

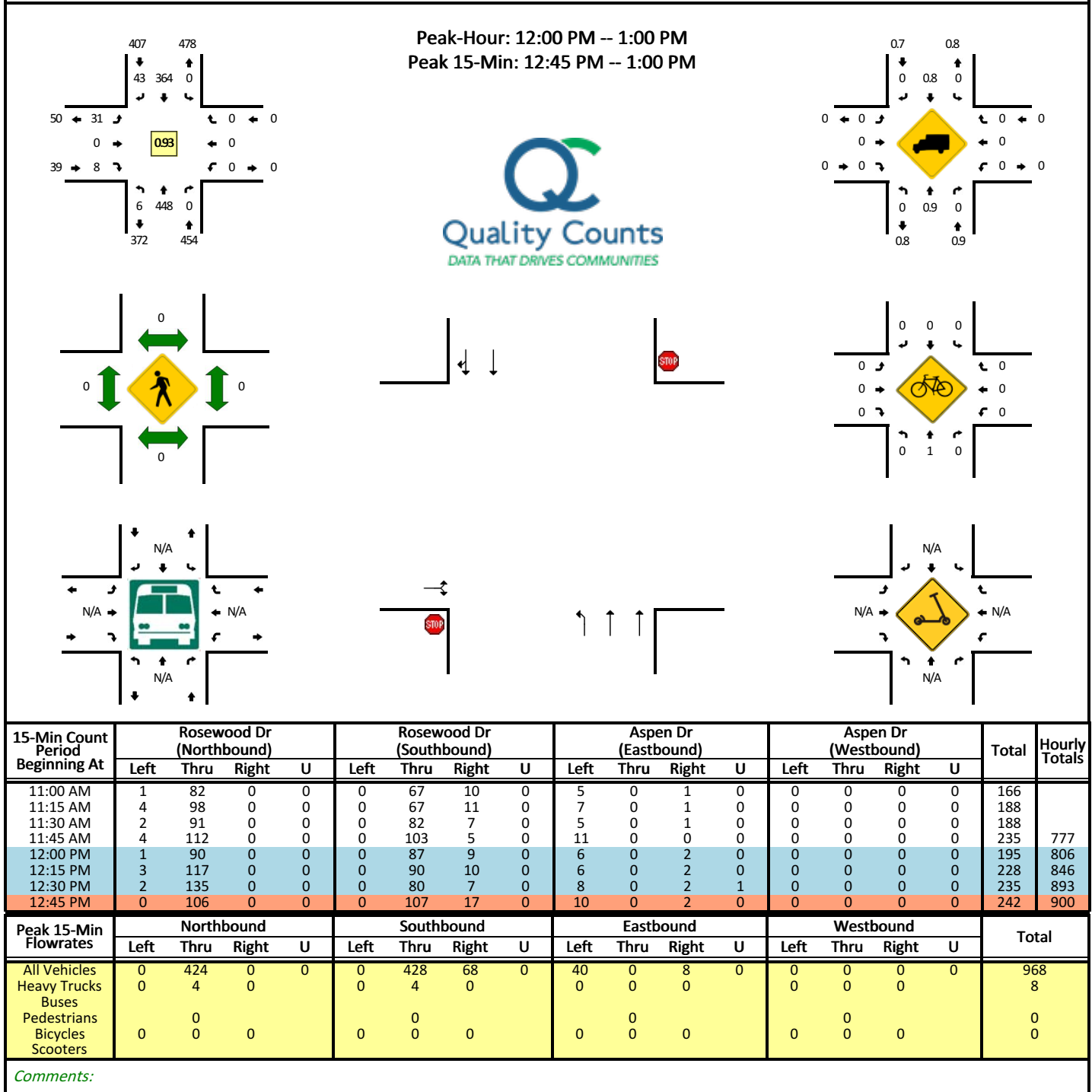


15-Min Count Period Beginning At	Rosewood Dr (Northbound)				Rosewood Dr (Southbound)				Aspen Dr (Eastbound)				Aspen Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	113	0	0	0	181	15	0	16	0	1	0	0	0	0	0	329	
4:15 PM	3	126	0	0	0	203	15	0	13	0	1	0	0	0	0	0	361	
4:30 PM	7	133	0	0	0	202	14	0	12	0	0	0	0	0	0	0	368	
4:45 PM	3	102	0	0	0	215	17	0	8	0	5	0	0	0	0	0	350	1408
5:00 PM	1	135	0	0	0	212	17	0	11	0	4	0	0	0	0	0	380	1459
5:15 PM	4	159	0	0	0	230	20	0	11	0	2	0	0	0	0	0	426	1524
5:30 PM	5	137	0	0	0	202	15	0	7	0	6	0	0	0	0	0	372	1528
5:45 PM	4	142	0	0	0	184	15	0	9	0	3	0	0	0	0	0	357	1535
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	636	0	0	0	920	80	0	44	0	8	0	0	0	0	0	1704	
Heavy Trucks	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	12	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

LOCATION: Rosewood Dr -- Aspen Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913135
DATE: Wed, Aug 31 2022

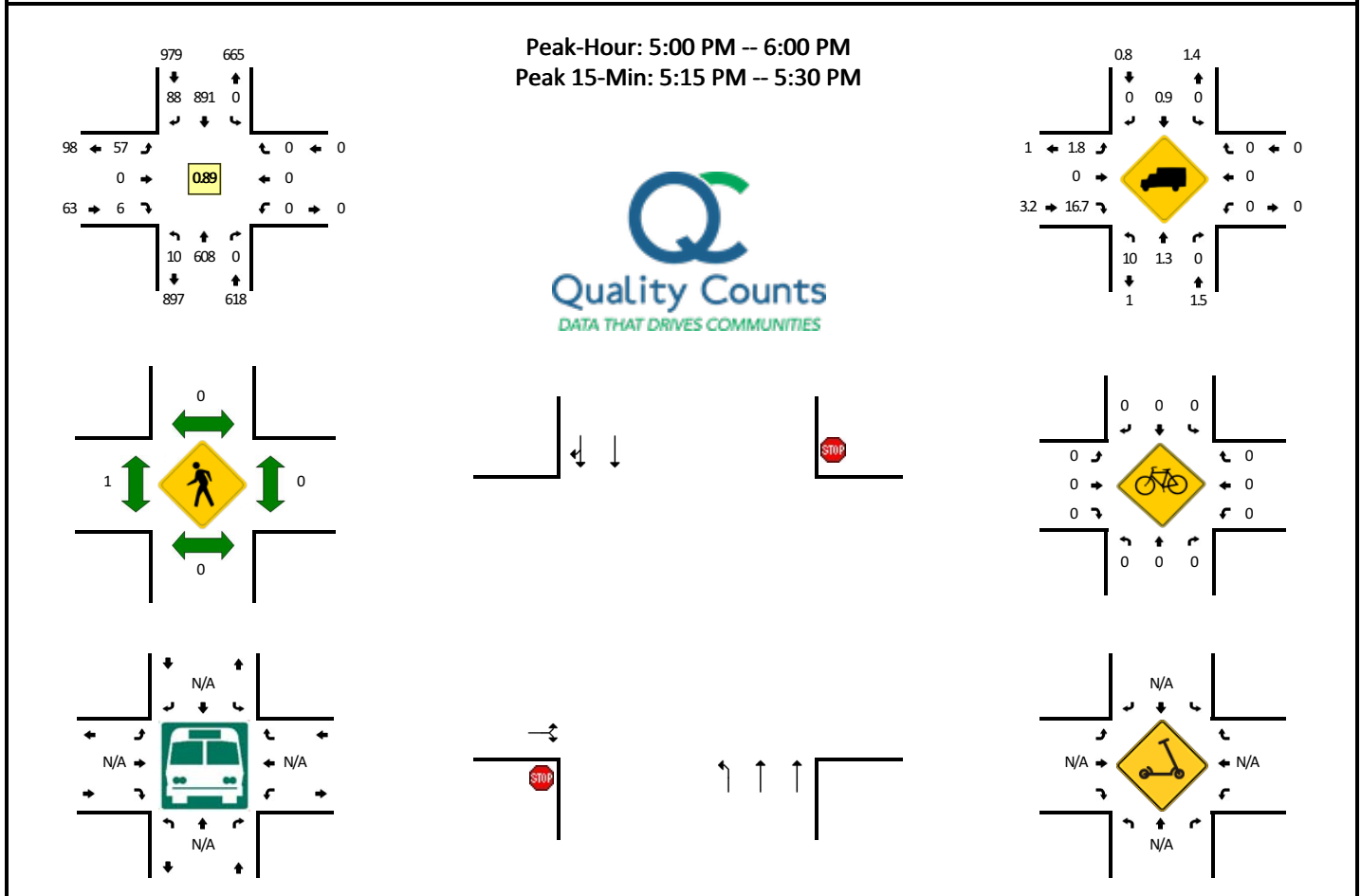


Report generated on 9/14/2022 11:26 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

LOCATION: Rosewood Dr -- Fawn Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913109
DATE: Wed, Aug 31 2022



15-Min Count Period Beginning At	Rosewood Dr (Northbound)				Rosewood Dr (Southbound)				Fawn Dr (Eastbound)				Fawn Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	0	166	0	0	0	64	10	0	21	0	0	0	0	0	0	0	261	
6:45 AM	7	184	0	0	0	91	14	0	22	0	1	0	0	0	0	0	319	
7:00 AM	0	232	0	0	0	84	18	0	33	0	2	0	0	0	0	0	369	
7:15 AM	4	258	0	0	0	74	19	0	32	0	2	0	0	0	0	0	389	1338
7:30 AM	1	220	0	0	0	99	11	0	17	0	0	0	0	0	0	0	348	1425
7:45 AM	1	191	0	0	0	119	7	0	19	0	2	0	0	0	0	0	339	1445
8:00 AM	3	137	0	0	0	80	8	0	19	0	3	0	0	0	0	0	250	1326
8:15 AM	0	169	0	0	0	75	5	0	17	0	3	0	0	0	0	0	269	1206
8:30 AM	0	197	0	0	0	66	4	0	15	0	0	0	0	0	0	0	282	1140
8:45 AM	1	188	0	0	0	58	6	0	12	0	0	0	0	0	0	0	265	1066
9:00 AM	1	139	0	0	0	76	3	0	11	0	0	0	0	0	0	0	230	1046
9:15 AM	0	120	0	0	0	51	4	0	16	0	0	0	0	0	0	0	191	968
9:30 AM	1	119	0	0	0	64	7	0	13	0	1	0	0	0	0	0	205	891
9:45 AM	2	121	0	0	0	70	8	0	11	0	0	0	0	0	0	0	212	838
10:00 AM	2	118	0	0	0	77	5	0	7	0	1	0	0	0	0	0	210	818
10:15 AM	1	85	0	0	0	87	11	0	9	0	1	0	0	0	0	0	194	821
10:30 AM	0	118	0	0	0	80	4	0	9	0	1	0	0	0	0	0	212	828
10:45 AM	1	107	0	0	0	78	8	0	8	0	0	0	0	0	0	0	202	818
11:00 AM	1	88	0	0	0	77	9	0	12	0	0	0	0	0	0	0	187	795
11:15 AM	0	104	0	0	0	78	9	0	10	0	1	0	0	0	0	0	202	803
11:30 AM	0	97	0	0	0	87	10	0	15	0	1	0	0	0	0	0	210	801
11:45 AM	2	115	0	0	0	112	6	0	9	0	1	0	0	0	0	0	245	844
12:00 PM	0	94	0	0	0	98	17	0	9	0	0	0	0	0	0	0	218	875
12:15 PM	0	131	0	0	0	97	6	0	8	0	2	0	0	0	0	0	244	917
12:30 PM	2	141	0	0	0	87	6	0	12	0	0	0	0	0	0	0	248	955
12:45 PM	2	110	0	0	0	121	12	0	13	0	2	0	0	0	0	0	260	970
1:00 PM	1	121	0	0	0	114	7	0	6	0	1	0	0	0	0	0	250	1002
1:15 PM	3	100	0	0	0	108	10	0	13	0	0	0	0	0	0	0	234	992
1:30 PM	1	105	0	0	0	95	8	0	8	0	1	0	0	0	0	0	218	962
1:45 PM	1	106	0	0	0	112	9	0	10	0	1	0	0	0	0	0	239	941
2:00 PM	1	94	0	0	0	107	7	0	7	0	1	0	0	0	0	0	217	908
2:15 PM	3	103	0	0	0	115	15	0	9	0	0	0	0	0	0	0	245	919
2:30 PM	4	103	0	0	0	149	12	0	4	0	0	0	0	0	0	0	272	973
2:45 PM	1	120	0	0	0	138	16	0	6	0	6	0	0	0	0	0	287	1021
3:00 PM	3	137	0	0	0	143	29	0	27	0	10	0	0	0	0	0	349	1153
3:15 PM	2	139	0	0	0	131	19	0	21	0	1	0	0	0	0	0	313	1221
3:30 PM	0	135	0	0	0	164	15	0	25	0	4	0	0	0	0	0	343	1292
3:45 PM	2	113	0	0	0	157	23	0	19	0	1	0	0	0	0	0	315	1320
4:00 PM	2	132	0	0	0	189	17	0	7	0	3	0	0	0	0	0	350	1321

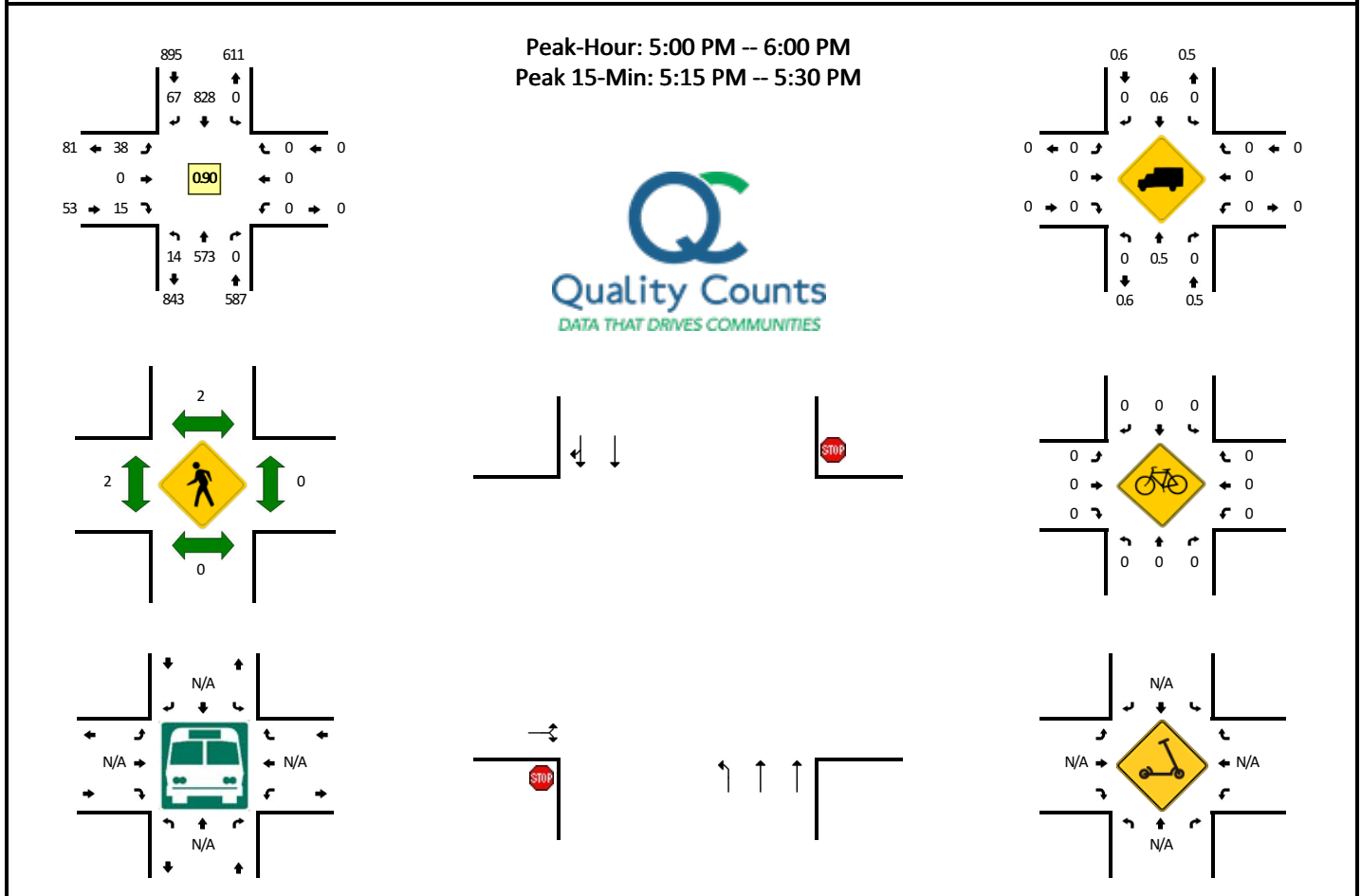
15-Min Count Period Beginning At	Rosewood Dr (Northbound)				Rosewood Dr (Southbound)				Fawn Dr (Eastbound)				Fawn Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:15 PM	1	138	0	0	0	216	25	0	11	0	1	0	0	0	0	0	392	1400
4:30 PM	2	146	0	0	0	216	10	0	15	0	1	0	0	0	0	0	390	1447
4:45 PM	4	107	0	0	0	239	16	0	17	0	0	0	0	0	0	0	383	1515
5:00 PM	3	140	0	0	0	227	20	0	8	0	1	0	0	0	0	0	399	1564
5:15 PM	4	167	0	0	0	247	28	0	19	0	2	0	0	0	0	0	467	1639
5:30 PM	1	146	0	0	0	217	21	0	19	0	2	0	0	0	0	0	406	1655
5:45 PM	2	155	0	0	0	200	19	0	11	0	1	0	0	0	0	0	388	1660
6:00 PM	0	132	0	0	0	165	18	0	18	0	0	0	0	0	0	0	333	1594
6:15 PM	2	156	0	0	0	152	17	0	9	0	1	0	0	0	0	0	337	1464
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	668	0	0	0	988	112	0	76	0	8	0	0	0	0	0	1868	
Heavy Trucks	0	4	0		0	16	0		0	0	0		0	0	0		20	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		
<i>Comments:</i>																		

Report generated on 9/14/2022 11:30 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

LOCATION: Rosewood Dr -- Aspen Dr
CITY/STATE: Killeen, TX

QC JOB #: 15913110
DATE: Wed, Aug 31 2022



15-Min Count Period Beginning At	Rosewood Dr (Northbound)				Rosewood Dr (Southbound)				Aspen Dr (Eastbound)				Aspen Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:30 AM	8	153	0	0	0	56	10	0	11	0	6	0	0	0	0	0	244	
6:45 AM	25	190	0	0	0	68	26	0	12	0	0	0	0	0	0	0	321	
7:00 AM	34	210	0	0	0	70	14	0	27	0	26	0	0	0	0	0	381	
7:15 AM	24	218	0	0	0	69	6	0	39	0	32	0	0	0	0	0	388	1334
7:30 AM	3	210	0	0	0	91	7	0	16	0	4	0	0	0	0	0	331	1421
7:45 AM	8	171	0	0	0	117	8	0	14	0	6	0	0	0	0	0	324	1424
8:00 AM	2	138	0	0	0	77	4	0	7	0	6	0	0	0	0	0	234	1277
8:15 AM	2	148	0	0	0	76	1	0	13	0	1	0	0	0	0	0	241	1130
8:30 AM	1	183	0	0	0	62	7	0	13	0	3	0	0	0	0	0	269	1068
8:45 AM	3	179	0	0	0	54	2	0	9	0	1	0	0	0	0	0	248	992
9:00 AM	1	127	0	0	0	73	5	0	10	0	1	0	0	0	0	0	217	975
9:15 AM	3	117	0	0	0	45	5	0	8	0	0	0	0	0	0	0	178	912
9:30 AM	3	106	0	0	0	61	4	0	4	0	0	0	0	0	0	0	178	821
9:45 AM	2	116	0	0	0	66	4	0	10	0	3	0	0	0	0	0	201	774
10:00 AM	1	107	0	0	0	68	9	0	12	0	2	0	0	0	0	0	199	756
10:15 AM	2	79	0	0	0	78	8	0	9	0	2	0	0	0	0	0	178	756
10:30 AM	2	111	0	0	0	76	5	0	9	0	1	0	0	0	0	0	204	782
10:45 AM	1	103	0	0	0	72	8	0	7	0	4	1	0	0	0	0	196	777
11:00 AM	1	82	0	0	0	67	10	0	5	0	1	0	0	0	0	0	166	744
11:15 AM	4	98	0	0	0	67	11	0	7	0	1	0	0	0	0	0	188	754
11:30 AM	2	91	0	0	0	82	7	0	5	0	1	0	0	0	0	0	188	738
11:45 AM	4	112	0	0	0	103	5	0	11	0	0	0	0	0	0	0	235	777
12:00 PM	1	90	0	0	0	87	9	0	6	0	2	0	0	0	0	0	195	806
12:15 PM	3	117	0	0	0	90	10	0	6	0	2	0	0	0	0	0	228	846
12:30 PM	2	135	0	0	0	80	7	0	8	0	2	1	0	0	0	0	235	893
12:45 PM	0	106	0	0	0	107	17	0	10	0	2	0	0	0	0	0	242	900
1:00 PM	4	114	0	0	0	103	10	0	10	0	4	0	0	0	0	0	245	950
1:15 PM	3	84	0	0	0	100	10	0	12	0	2	0	0	0	0	0	211	933
1:30 PM	3	102	0	0	0	87	7	0	5	0	0	0	0	0	0	0	204	902
1:45 PM	5	96	0	0	0	101	9	0	11	0	4	0	0	0	0	0	226	886
2:00 PM	2	86	0	0	0	95	13	0	10	0	2	0	0	0	0	0	208	849
2:15 PM	2	97	0	0	0	103	13	0	10	0	2	0	0	0	0	0	227	865
2:30 PM	11	101	0	0	0	137	12	0	10	0	0	0	0	0	0	0	271	932
2:45 PM	10	114	0	0	0	123	18	0	5	0	5	0	0	0	0	0	275	981
3:00 PM	4	115	0	0	0	137	19	0	26	0	38	0	0	0	0	0	339	1112
3:15 PM	1	128	0	0	0	122	10	0	12	0	4	0	0	0	0	0	277	1162
3:30 PM	5	121	0	0	0	148	19	0	10	0	4	0	0	0	0	0	307	1198
3:45 PM	3	101	0	0	0	145	6	0	17	0	7	0	0	0	0	0	279	1202
4:00 PM	3	113	0	0	0	181	15	0	16	0	1	0	0	0	0	0	329	1192

15-Min Count Period Beginning At	Rosewood Dr (Northbound)				Rosewood Dr (Southbound)				Aspen Dr (Eastbound)				Aspen Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:15 PM	3	126	0	0	0	203	15	0	13	0	1	0	0	0	0	0	361	1276
4:30 PM	7	133	0	0	0	202	14	0	12	0	0	0	0	0	0	0	368	1337
4:45 PM	3	102	0	0	0	215	17	0	8	0	5	0	0	0	0	0	350	1408
5:00 PM	1	135	0	0	0	212	17	0	11	0	4	0	0	0	0	0	380	1459
5:15 PM	4	159	0	0	0	230	20	0	11	0	2	0	0	0	0	0	426	1524
5:30 PM	5	137	0	0	0	202	15	0	7	0	6	0	0	0	0	0	372	1528
5:45 PM	4	142	0	0	0	184	15	0	9	0	3	0	0	0	0	0	357	1535
6:00 PM	4	125	0	0	0	152	14	0	8	0	2	0	0	0	0	0	305	1460
6:15 PM	3	148	0	0	0	133	16	0	11	0	3	0	0	0	0	0	314	1348
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	636	0	0	0	920	80	0	44	0	8	0	0	0	0	0	1704	
Heavy Trucks	0	0	0		0	12	0		0	0	0		0	0	0		12	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		
<i>Comments:</i>																		

Report generated on 9/14/2022 11:30 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix B: Photo Log

Rosewood Drive & Fawn Drive – Eastbound Approach













Rosewood Drive & Fawn Drive – Southbound Approach



Appendix C: Synchro Reports






Lanes, Volumes, Timings
1: Rosewood Drive & Fawn Drive

Rosewood Drive Signal Warrant
2022 Existing AM

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	101	6	6	901	376	55
Future Volume (vph)	101	6	6	901	376	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt	0.992				0.981	
Flt Protected	0.955		0.950			
Satd. Flow (prot)	1765	0	1770	3539	3472	0
Flt Permitted	0.955		0.950			
Satd. Flow (perm)	1765	0	1770	3539	3472	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	863			1592	448	
Travel Time (s)	19.6			31.0	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	7	7	979	409	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	7	979	469	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)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	37.5%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
1: Rosewood Drive & Fawn Drive

Rosewood Drive Signal Warrant
2022 Existing AM

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	101	6	6	901	376	55
Future Vol, veh/h	101	6	6	901	376	55
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	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	7	7	979	409	60











Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	943	235	469
Stage 1	439	-	-
Stage 2	504	-	-
Critical Hdwy	6.84	6.94	4.14
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	261	767	1089
Stage 1	617	-	-
Stage 2	572	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	259	767	1089
Mov Cap-2 Maneuver	259	-	-
Stage 1	613	-	-
Stage 2	572	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.2	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1089	-	269	-	-
HCM Lane V/C Ratio	0.006	-	0.432	-	-
HCM Control Delay (s)	8.3	-	28.2	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0	-	2.1	-	-






Lanes, Volumes, Timings
2: Rosewood Drive & Aspen Drive

Rosewood Drive Signal Warrant
2022 Existing AM

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	96	68	69	809	347	35
Future Volume (vph)	96	68	69	809	347	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt	0.944				0.986	
Flt Protected	0.972		0.950			
Satd. Flow (prot)	1709	0	1770	3539	3490	0
Flt Permitted	0.972		0.950			
Satd. Flow (perm)	1709	0	1770	3539	3490	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	1027			649	1592	
Travel Time (s)	23.3			12.6	31.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	104	74	75	879	377	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	178	0	75	879	415	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)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	38.5%			ICU Level of Service A		
Analysis Period (min)	15					











HCM 6th TWSC
2: Rosewood Drive & Aspen Drive

Rosewood Drive Signal Warrant
2022 Existing AM

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	96	68	69	809	347	35
Future Vol, veh/h	96	68	69	809	347	35
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	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	74	75	879	377	38
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	986	208	415	0	-	0
Stage 1	396	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	245	798	1140	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	229	798	1140	-	-	-
Mov Cap-2 Maneuver	229	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	28.7	0.7		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1140	-	325	-	-	
HCM Lane V/C Ratio	0.066	-	0.548	-	-	
HCM Control Delay (s)	8.4	-	28.7	-	-	
HCM Lane LOS	A	-	D	-	-	
HCM 95th %tile Q(veh)	0.2	-	3.1	-	-	






Lanes, Volumes, Timings
1: Rosewood Drive & Fawn Drive

Rosewood Drive Signal Warrant
2022 Existing PM

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	57	6	10	608	891	88
Future Volume (vph)	57	6	10	608	891	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt	0.986				0.986	
Flt Protected	0.957		0.950			
Satd. Flow (prot)	1758	0	1770	3539	3490	0
Flt Permitted	0.957		0.950			
Satd. Flow (perm)	1758	0	1770	3539	3490	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	863			1592	448	
Travel Time (s)	19.6			31.0	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	62	7	11	661	968	96
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	0	11	661	1064	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)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	37.6%			ICU Level of Service A		
Analysis Period (min)	15					











HCM 6th TWSC
1: Rosewood Drive & Fawn Drive

Rosewood Drive Signal Warrant
2022 Existing PM

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	57	6	10	608	891	88
Future Vol, veh/h	57	6	10	608	891	88
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	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	7	11	661	968	96
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1369	532	1064	0	-	0
Stage 1	1016	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	138	492	651	-	-	-
Stage 1	310	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	136	492	651	-	-	-
Mov Cap-2 Maneuver	136	-	-	-	-	-
Stage 1	305	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	49.7	0.2		0		
HCM LOS	E					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	651	-	146	-	-	
HCM Lane V/C Ratio	0.017	-	0.469	-	-	
HCM Control Delay (s)	10.6	-	49.7	-	-	
HCM Lane LOS	B	-	E	-	-	
HCM 95th %tile Q(veh)	0.1	-	2.2	-	-	






Lanes, Volumes, Timings
2: Rosewood Drive & Aspen Drive

Rosewood Drive Signal Warrant
2022 Existing PM

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	38	15	14	573	828	67
Future Volume (vph)	38	15	14	573	828	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	200			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt	0.962				0.989	
Flt Protected	0.965		0.950			
Satd. Flow (prot)	1729	0	1770	3539	3500	0
Flt Permitted	0.965		0.950			
Satd. Flow (perm)	1729	0	1770	3539	3500	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	1027			649	1592	
Travel Time (s)	23.3			12.6	31.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	16	15	623	900	73
Shared Lane Traffic (%)						
Lane Group Flow (vph)	57	0	15	623	973	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)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	35.0%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
2: Rosewood Drive & Aspen Drive

Rosewood Drive Signal Warrant
2022 Existing PM

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	15	14	573	828	67
Future Vol, veh/h	38	15	14	573	828	67
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	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	16	15	623	900	73
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1279	487	973	0	-	0
Stage 1	937	-	-	-	-	-
Stage 2	342	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	158	526	704	-	-	-
Stage 1	342	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	155	526	704	-	-	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	335	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	31.2	0.2		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	704	-	194	-	-	
HCM Lane V/C Ratio	0.022	-	0.297	-	-	
HCM Control Delay (s)	10.2	-	31.2	-	-	
HCM Lane LOS	B	-	D	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.2	-	-	

Appendix D: Signal Warrants

Summary of Warrants

Intersection:	1		
Major Street:	Rosewood Drive	Minor Street:	Fawn Drive
Intersection:	Rosewood Drive & Fawn Drive		
City/Twp:	Austin ETJ		
Date Performed:	10/31/2022	Performed By:	Kimley-Horn
Date Volumes Collected:	12/8/2021		

Warrant	Condition	Is Warrant Met
WARRANT 1: Eight-Hour Vehicular Volume		NO
	Condition A	NO
	Condition B	NO
	Condition A&B	N/A
WARRANT 2: Four-Hour Vehicular Volume	(70%)	YES
WARRANT 3: Peak-Hour Vehicular Volume	(70%)	YES
	Condition A	NO
	Condition B	YES
WARRANT 4: Pedestrian Volume	(70%)	NO
	Four Hour	NO
	Peak Hour	NO
WARRANT 5: School Crossing		N/A
WARRANT 6: Coordinated Signal System		NO
WARRANT 7: Crash Experience		NO
	Condition A	NO
	Condition B	NO
WARRANT 8: Roadway Network		NO
WARRANT 9: Intersection Near a Grade Crossing		NO

Issue to Be Addressed by Signalization:
Reduce stop delay at intersection during peak weekday hours and mitigate safety issues correctible by a traffic signal.

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 1: Eight-Hour Vehicular Volume

Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St?
1	: No. of Lanes on Minor St?
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: if answer 4 is Yes, then what is the population of the isolated community?
NO	: Have other remedial measures been tried?

USE 70% WARRANTS 1A AND 1B. DO NOT USE COMBINATION OF A & B

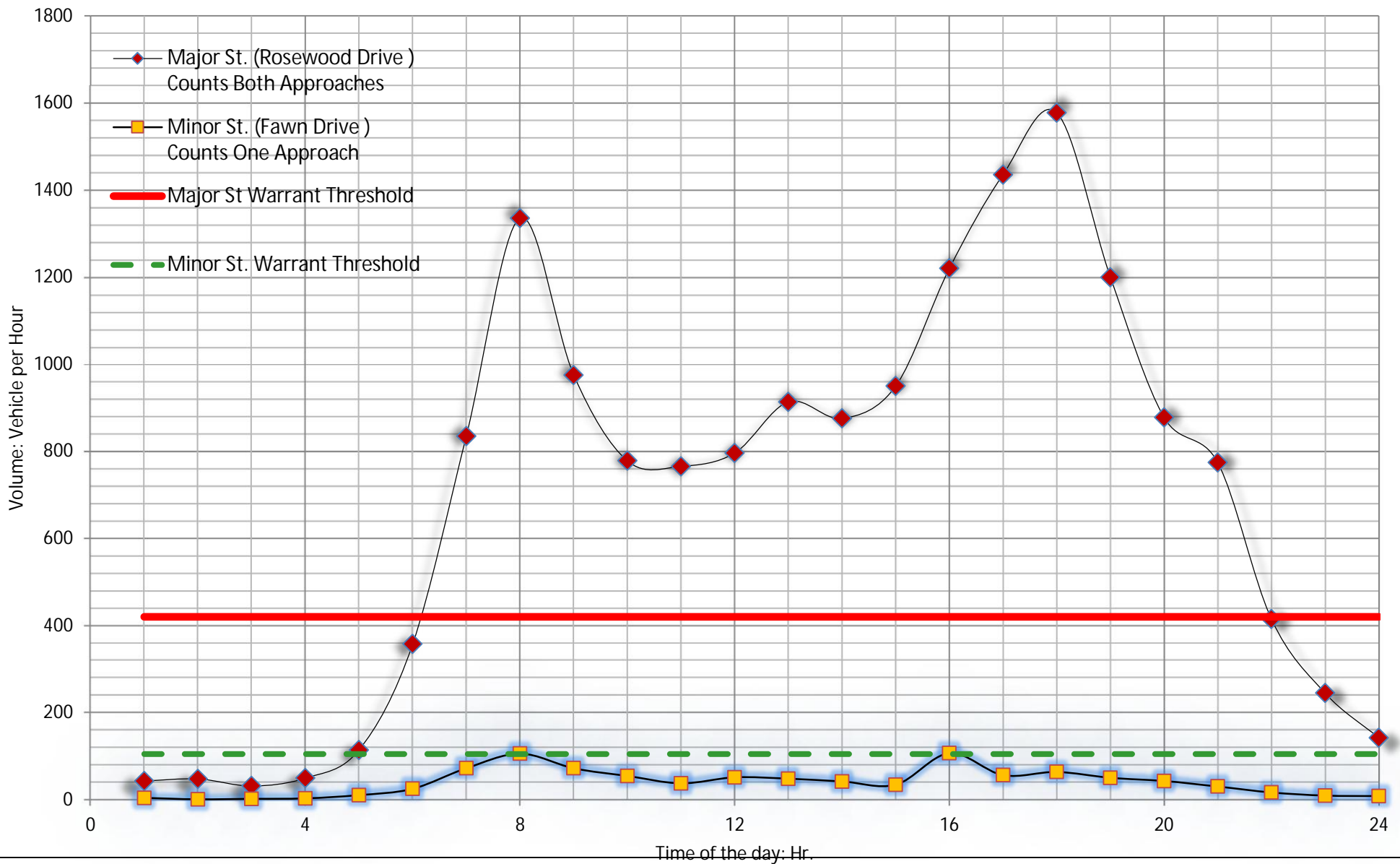
	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?	Combination Major A	Combination Minor A	Combination Major B	Combination Minor B	Warrant Condition A&B met?
Time	N-S	E-W	70%	70%		70%	70%		56%	56%	56%	56%	
00:01 - 01:00	43	4	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
01:00 - 02:00	48	1	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
02:00 - 03:00	32	2	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
03:00 - 04:00	50	3	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
04:00 - 05:00	114	10	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
05:00 - 06:00	358	25	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
06:00 - 07:00	835	72	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
07:00 - 08:00	1336	106	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
08:00 - 09:00	975	72	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
09:00 - 10:00	778	55	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
10:00 - 11:00	766	38	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
11:00 - 12:00	796	51	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
12:00 - 13:00	914	48	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
13:00 - 14:00	876	42	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
14:00 - 15:00	950	35	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
15:00 - 16:00	1220	107	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
16:00 - 17:00	1435	57	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
17:00 - 18:00	1578	64	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
18:00 - 19:00	1200	50	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
19:00 - 20:00	878	43	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
20:00 - 21:00	774	30	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
21:00 - 22:00	415	17	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
22:00 - 23:00	245	9	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
23:00 - 24:00	142	8	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A

Number of Hours that met the Warrant 1A = **2**

Number of Hours that met the Warrant 1B = **7**

Number of Hours that met the Combination Warrant 1A & 1B = **0**

A. Is the Minimum Vehicular Volume Warrant Met? (Condition A)	NO
B. Is the Interruption of Continuous Traffic Met? (Condition B)	NO
C. Combination of Warrants A and B Criteria Met?	N/A



WARRANT 1A

IS THERE A REDUCTION IN THE WARRANT THRESHOLDS TO 70%
...

1- DUE TO SPEED? **YES**

2- DUE TO ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000? **NO**

Spot Number: **1**

Rosewood Drive & Fawn Drive

NO. OF LANES ON MAJOR ST.?

NO. OF LANES ON MINOR ST.?

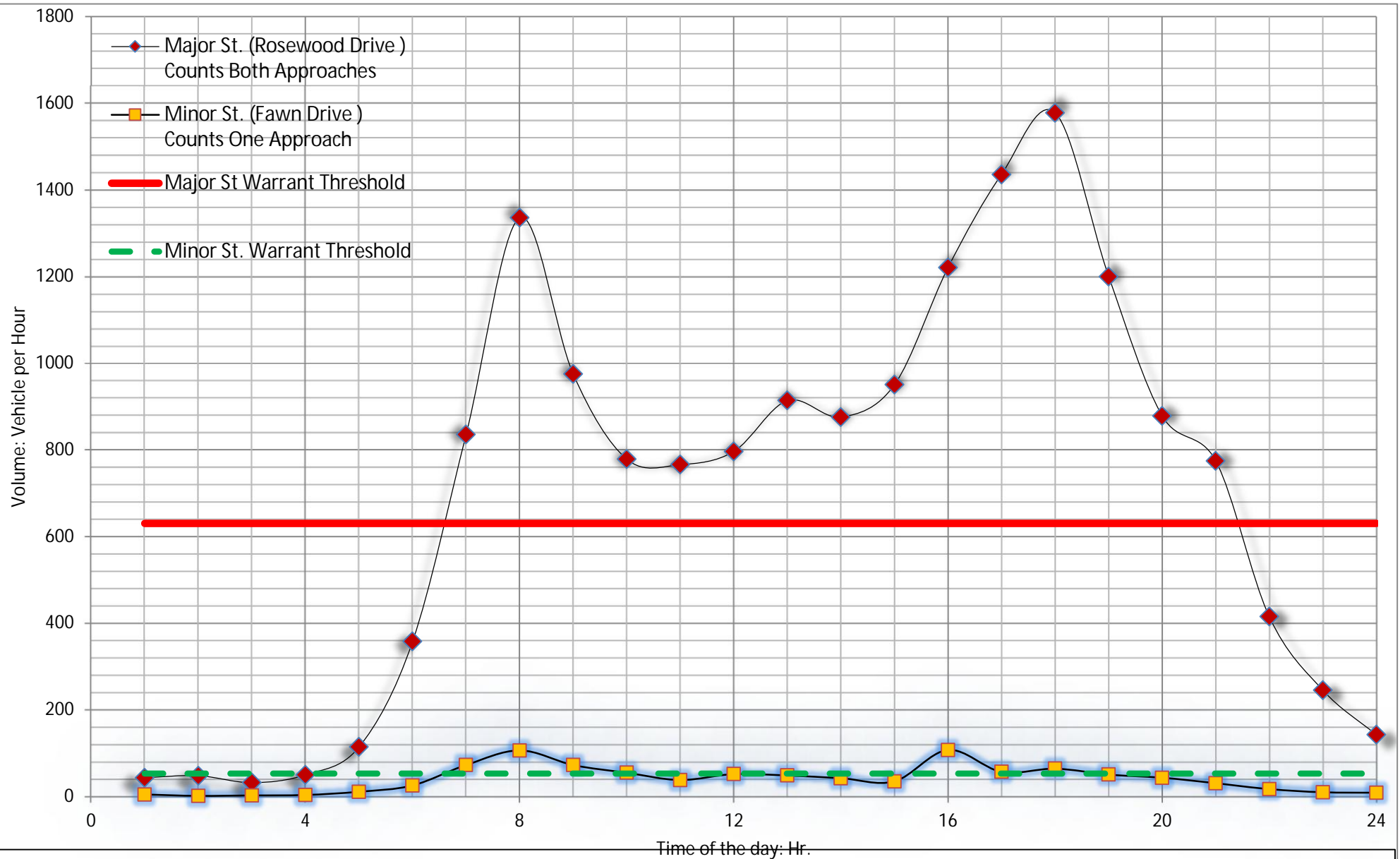
3
1

Number of Hours that met the Warrant: **2**

Does this intersection meet Warrant 1A for signal installation?

NO

Data Collection Date: **12/8/2021**



WARRANT 1B

IS THERE A REDUCTION IN THE WARRANT THRESHOLDS TO 70%
...

1- DUE TO SPEED? **YES**

2- DUE TO ISOLATED COMMUNITY WITH POPULATION LESS THAN
10,000? **NO**

Spot
Number: **1**

Rosewood Drive & Fawn Drive

NO. OF LANES ON MAJOR
ST.? **3**
NO. OF LANES ON MINOR
ST.? **1**

Number of Hours that met the Warrant: **7**

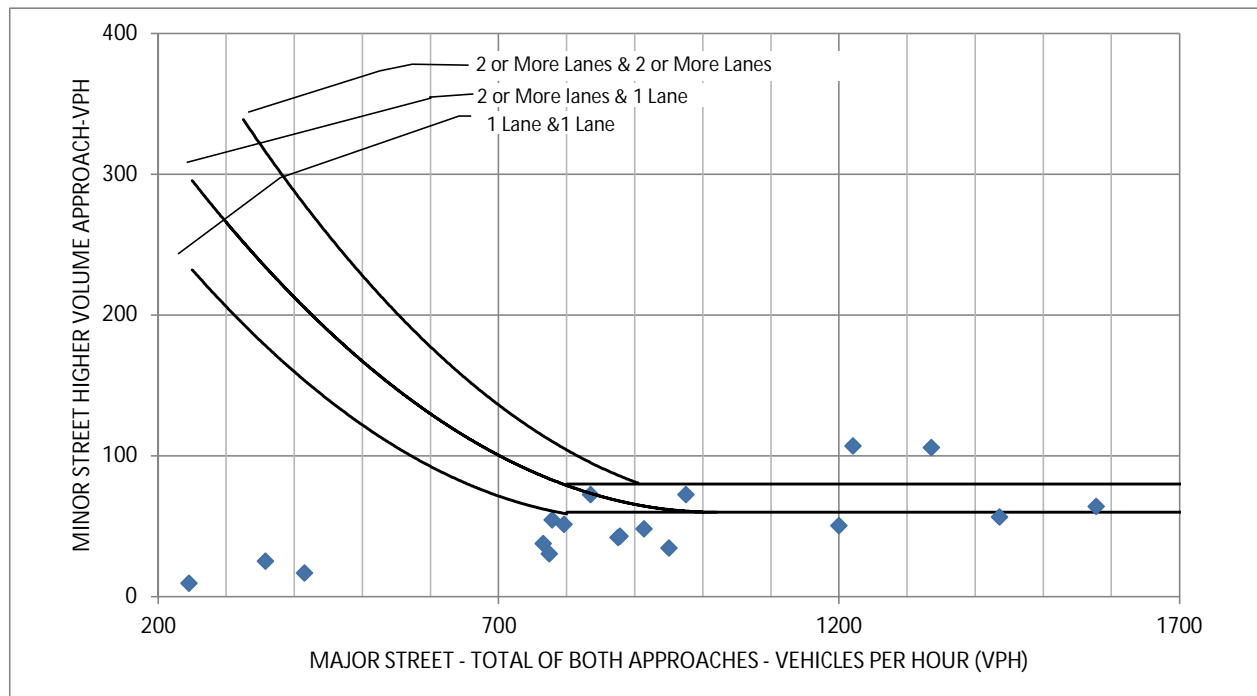
Does this intersection meet Warrant 1B
for signal installation? **NO**

Data Collection Date: **12/8/2021**

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 2: Four-Hour Vehicular Volume

Spot Number:	1		
Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St.
1	: No. of Lanes on Minor St.
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: What is the population of the isolated community?



How Many Hours Are Met	5
Is Warrant (70%) Met?	YES

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 3 A: Peak-Hour Vehicular Volume

Spot Number:	1		
Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn

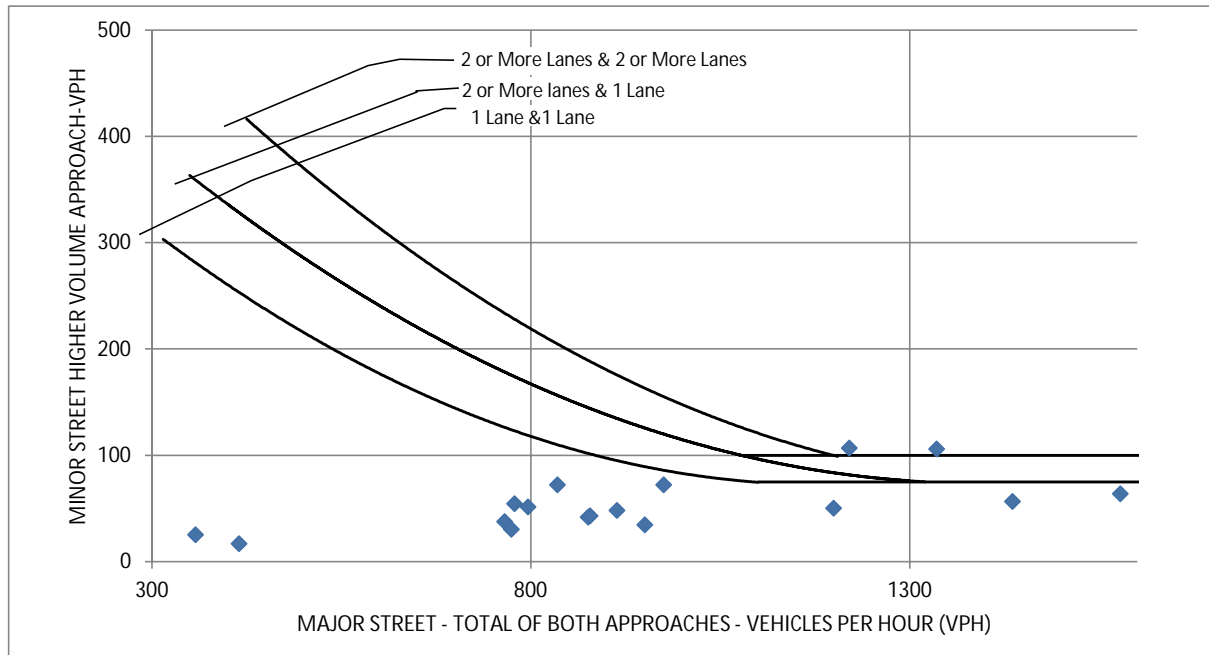
NOT MET	49.7	: Total Stop Time Delay (hrs)
	1	: Minor Street Approach Lanes
	3	: Total Approaches
	64	: Minor Approach Volume
	1642	: Total Entering Volume
	17:00 - 18:00	: Peak Hour

Is Warrant 3 A Met?	NO
---------------------	----

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 3 B(70%): Peak-Hour Vehicular Volume

Spot Number:	1		
Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St.
1	: No. of Lanes on Minor St.
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: What is the population of the isolated community?



How Many Hours Are Met	2
Is Warrant (70%) Met?	YES

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 7: Crash Experience

Spot Number:	1		
Intersection:	Rosewood Drive & Fawn Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St?
1	: No. of Lanes on Minor St?
NO	: Has adequate trial of remedial measure with adequate enforcement been tried?
NO	: Are there 5 or more Crashes Susceptable to Correction by Signalization in a 12 Month Period?

	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?
Time	N-S	E-W						
00:00 - 01:00	43	4	336	84	NO	504	42	NO
01:00 - 02:00	48	1	336	84	NO	504	42	NO
02:00 - 03:00	32	2	336	84	NO	504	42	NO
03:00 - 04:00	50	3	336	84	NO	504	42	NO
04:00 - 05:00	114	10	336	84	NO	504	42	NO
05:00 - 06:00	358	25	336	84	NO	504	42	NO
06:00 - 07:00	835	72	336	84	NO	504	42	YES
07:00 - 08:00	1336	106	336	84	YES	504	42	YES
08:00 - 09:00	975	72	336	84	NO	504	42	YES
09:00 - 10:00	778	55	336	84	NO	504	42	YES
10:00 - 11:00	766	38	336	84	NO	504	42	NO
11:00 - 12:00	796	51	336	84	NO	504	42	YES
12:00 - 13:00	914	48	336	84	NO	504	42	YES
13:00 - 14:00	876	42	336	84	NO	504	42	NO
14:00 - 15:00	950	35	336	84	NO	504	42	NO
15:00 - 16:00	1220	107	336	84	YES	504	42	YES
16:00 - 17:00	1435	57	336	84	NO	504	42	YES
17:00 - 18:00	1578	64	336	84	NO	504	42	YES
18:00 - 19:00	1200	50	336	84	NO	504	42	YES
19:00 - 20:00	878	43	336	84	NO	504	42	YES
20:00 - 21:00	774	30	336	84	NO	504	42	NO
21:00 - 22:00	415	17	336	84	NO	504	42	NO
22:00 - 23:00	245	9	336	84	NO	504	42	NO
23:00 - 24:00	142	8	336	84	NO	504	42	NO

Is there a reduction in the warrant thresholds to 56% = **NO**
 Number of Hours that met the warrant 7A = **2**
 Number of Hours that met the warrant 7B = **11**

A. Is the Minimum Vehicular Volume Warrant Met Based on Crash Patterns? (Condition A)

NO

B. Is the Interruption of Continuous Traffic Met Based on Crash Patterns? (Condition B)

NO

Summary of Warrants

Intersection:	2		
Major Street:	Rosewood Drive	Minor Street:	Aspen Drive
Intersection:	Rosewood Drive & Aspen Drive		
City/Twp:	Austin ETJ		
Date Performed:	10/31/2022	Performed By:	Kimley-Horn
Date Volumes Collected:	8/31/2022		

Warrant	Condition	Is Warrant Met
WARRANT 1: Eight-Hour Vehicular Volume		NO
	Condition A	NO
	Condition B	NO
	Condition A&B	N/A
WARRANT 2: Four-Hour Vehicular Volume	(70%)	NO
WARRANT 3: Peak-Hour Vehicular Volume	(70%)	YES
	Condition A	NO
	Condition B	YES
WARRANT 4: Pedestrian Volume	(70%)	NO
	Four Hour	NO
	Peak Hour	NO
WARRANT 5: School Crossing		N/A
WARRANT 6: Coordinated Signal System		NO
WARRANT 7: Crash Experience		NO
	Condition A	NO
	Condition B	NO
WARRANT 8: Roadway Network		NO
WARRANT 9: Intersection Near a Grade Crossing		NO

Issue to Be Addressed by Signalization:
Reduce stop delay at intersection during peak weekday hours and mitigate safety issues correctible by a traffic signal.

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 1: Eight-Hour Vehicular Volume

Intersection:	Rosewood Drive & Aspen Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St?
1	: No. of Lanes on Minor St?
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: if answer 4 is Yes, then what is the population of the isolated community?
NO	: Have other remedial measures been tried?

USE 70% WARRANTS 1A AND 1B. DO NOT USE COMBINATION OF A & B

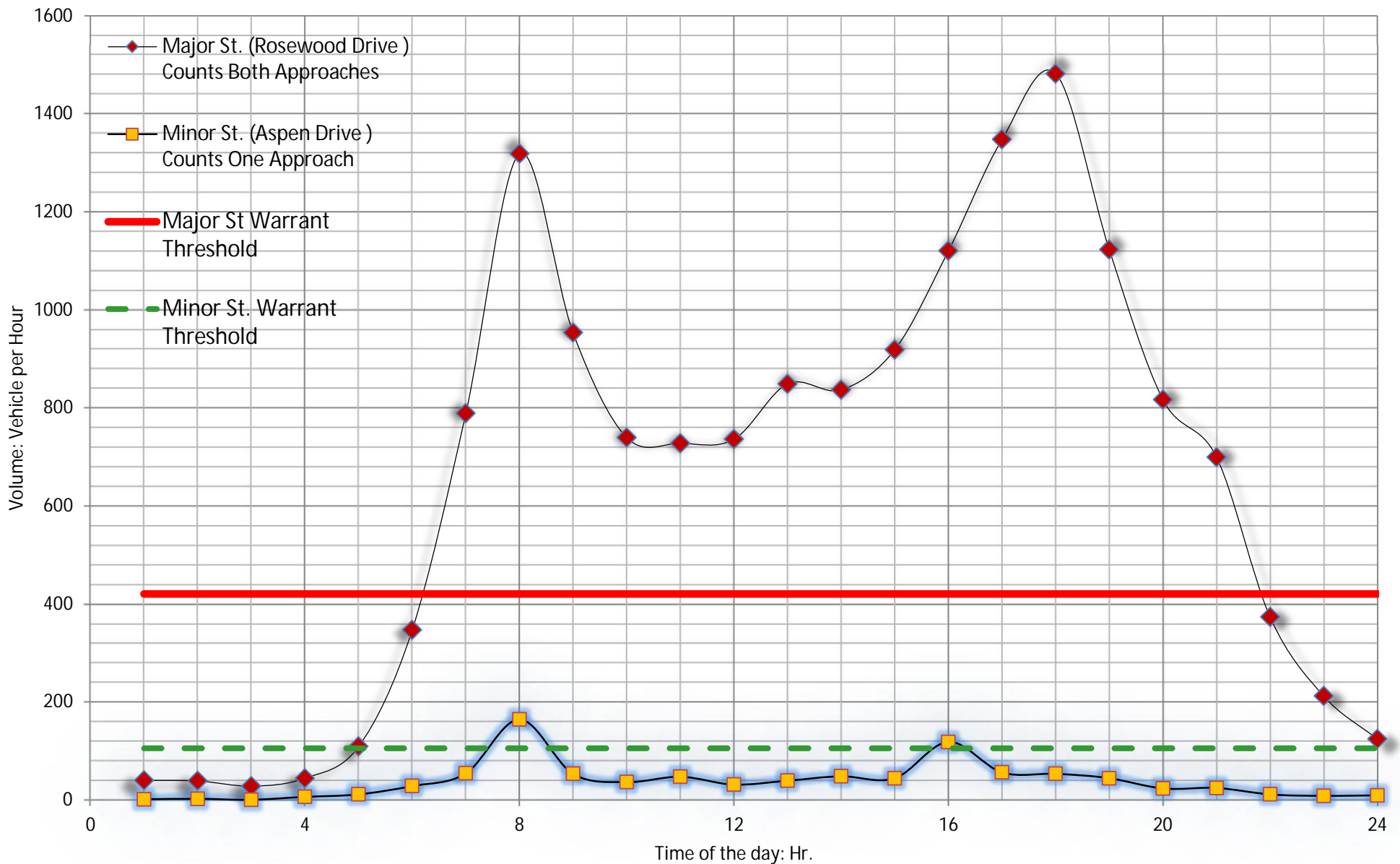
	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?	Combination Major A	Combination Minor A	Combination Major B	Combination Minor B	Warrant Condition A&B met?
Time	N-S	E-W	70%	70%		70%	70%		56%	56%	56%	56%	
00:01 - 01:00	40	1	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
01:00 - 02:00	38	2	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
02:00 - 03:00	28	0	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
03:00 - 04:00	44	6	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
04:00 - 05:00	109	11	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
05:00 - 06:00	347	28	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
06:00 - 07:00	789	54	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
07:00 - 08:00	1319	164	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
08:00 - 09:00	953	53	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
09:00 - 10:00	739	36	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
10:00 - 11:00	728	47	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
11:00 - 12:00	736	31	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
12:00 - 13:00	849	39	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
13:00 - 14:00	837	48	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
14:00 - 15:00	919	44	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
15:00 - 16:00	1120	118	420	105	YES	630	53	YES	N/A	N/A	N/A	N/A	N/A
16:00 - 17:00	1348	56	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
17:00 - 18:00	1482	53	420	105	NO	630	53	YES	N/A	N/A	N/A	N/A	N/A
18:00 - 19:00	1123	44	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
19:00 - 20:00	817	23	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
20:00 - 21:00	699	24	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
21:00 - 22:00	373	11	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
22:00 - 23:00	212	8	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A
23:00 - 24:00	124	9	420	105	NO	630	53	NO	N/A	N/A	N/A	N/A	N/A

Number of Hours that met the Warrant 1A = **2**

Number of Hours that met the Warrant 1B = **6**

Number of Hours that met the Combination Warrant 1A & 1B = **0**

A. Is the Minimum Vehicular Volume Warrant Met? (Condition A)	NO
B. Is the Interruption of Continuous Traffic Met? (Condition B)	NO
C. Combination of Warrants A and B Criteria Met?	N/A



WARRANT 1A

IS THERE A REDUCTION IN THE WARRANT THRESHOLDS TO 70% ...

1- DUE TO SPEED? **YES**

2- DUE TO ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000? **NO**

Spot Number: **2**

Rosewood Drive & Aspen Drive

NO. OF LANES ON MAJOR ST.? **3**

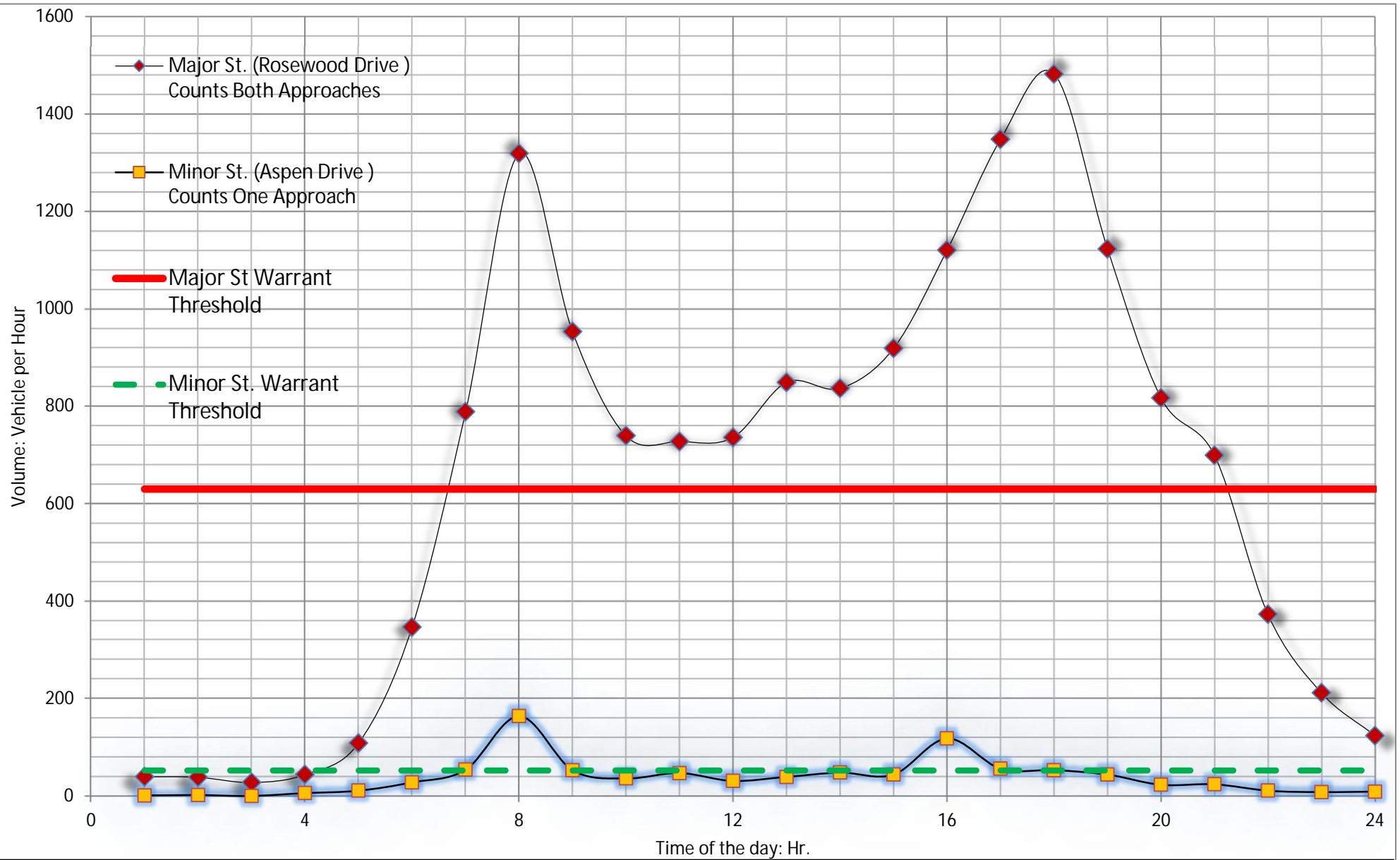
NO. OF LANES ON MINOR ST.? **1**

Number of Hours that met the Warrant: **2**

Does this intersection meet Warrant 1A for signal installation?

NO

Data Collection Date: **8/31/2022**



WARRANT 1B

IS THERE A REDUCTION IN THE WARRANT THRESHOLDS TO 70% ...

1- DUE TO SPEED? YES

2- DUE TO ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000? NO

Spot Number: 2

Rosewood Drive & Aspen Drive

NO. OF LANES ON MAJOR ST.? 3

NO. OF LANES ON MINOR ST.? 1

Number of Hours that met the Warrant: 6

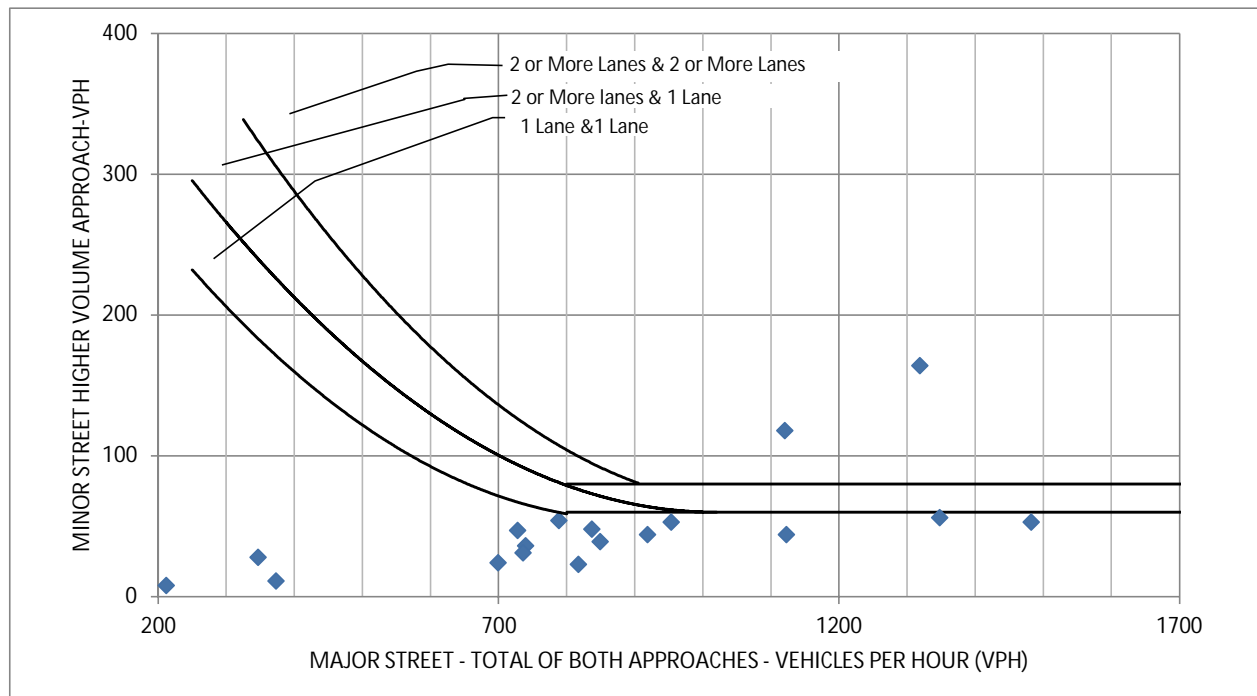
Does this intersection meet Warrant 1B for signal installation? NO

Data Collection Date: 8/31/2022 171

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 2: Four-Hour Vehicular Volume

Spot Number:	2		
Intersection:	Rosewood Drive & Aspen Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St.
1	: No. of Lanes on Minor St.
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: What is the population of the isolated community?



How Many Hours Are Met	2
Is Warrant (70%) Met?	NO

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 3 A: Peak-Hour Vehicular Volume

Spot Number:	2		
Intersection:	Rosewood Drive & Aspen Drive		
Date	10/31/2022	by	Kimley-Horn

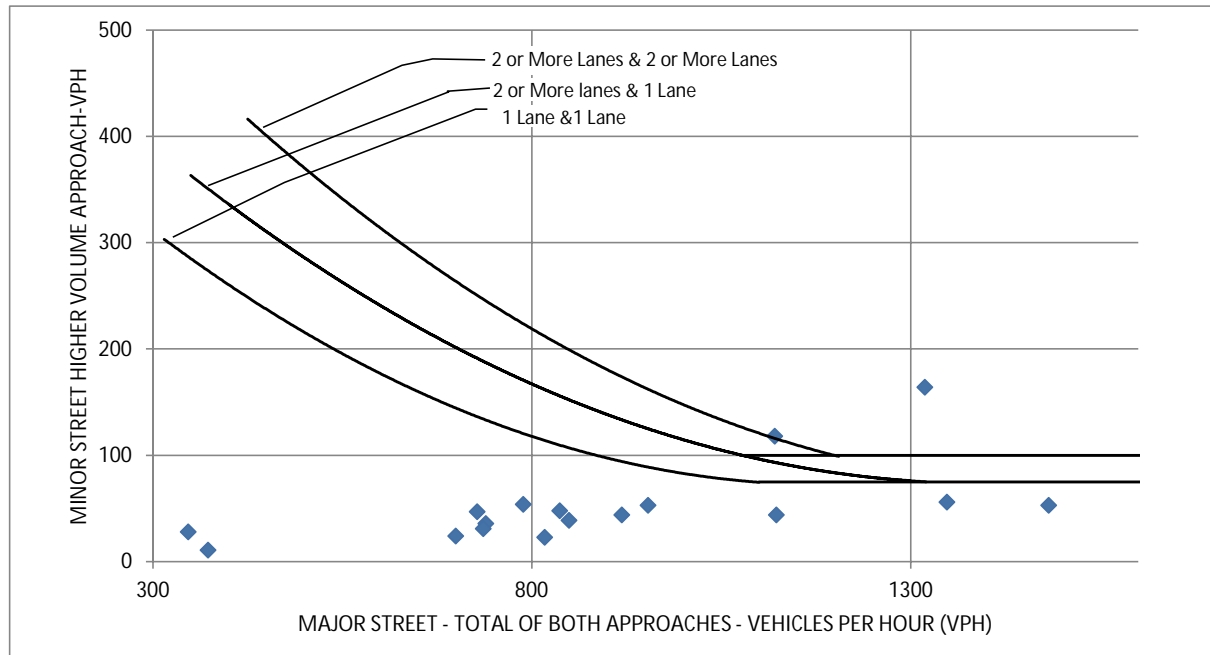
NOT MET	31.2	: Total Stop Time Delay (hrs)
	1	: Minor Street Approach Lanes
	3	: Total Approaches
	53	: Minor Approach Volume
	1535	: Total Entering Volume
	17:00 - 18:00	: Peak Hour

Is Warrant 3 A Met?	NO
---------------------	----

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 3 B(70%): Peak-Hour Vehicular Volume

Spot Number:	2		
Intersection:	Rosewood Drive & Aspen Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St.
1	: No. of Lanes on Minor St.
45	: Speed limit or 85th Percentile? (MPH)
NO	: Is the intersection within an Isolated community?
	: What is the population of the isolated community?



How Many Hours Are Met	2
Is Warrant (70%) Met?	YES

Texas Manual on Uniform Traffic Control Devices
Worksheet for Signal Warrants (Section 4C)
WARRANT 7: Crash Experience

Spot Number:	2		
Intersection:	Rosewood Drive & Aspen Drive		
Date	10/31/2022	by	Kimley-Horn

3	: No. of Lanes on Major St?
1	: No. of Lanes on Minor St?
NO	: Has adequate trial of remedial measure with adequate enforcement been tried?
NO	: Are there 5 or more Crashes Susceptible to Correction by Signalization in a 12 Month Period?

	Major Volume (Both Apr.)	Minor Volume (One Apr.)	Condition A Major Volume	Condition A Minor Volume	Warrant Condition A Met?	Condition B Major Volume	Condition B Minor Volume	Warrant Condition B Met?
Time	N-S	E-W						
00:00 - 01:00	40	1	336	84	NO	504	42	NO
01:00 - 02:00	38	2	336	84	NO	504	42	NO
02:00 - 03:00	28	0	336	84	NO	504	42	NO
03:00 - 04:00	44	6	336	84	NO	504	42	NO
04:00 - 05:00	109	11	336	84	NO	504	42	NO
05:00 - 06:00	347	28	336	84	NO	504	42	NO
06:00 - 07:00	789	54	336	84	NO	504	42	YES
07:00 - 08:00	1319	164	336	84	YES	504	42	YES
08:00 - 09:00	953	53	336	84	NO	504	42	YES
09:00 - 10:00	739	36	336	84	NO	504	42	NO
10:00 - 11:00	728	47	336	84	NO	504	42	YES
11:00 - 12:00	736	31	336	84	NO	504	42	NO
12:00 - 13:00	849	39	336	84	NO	504	42	NO
13:00 - 14:00	837	48	336	84	NO	504	42	YES
14:00 - 15:00	919	44	336	84	NO	504	42	YES
15:00 - 16:00	1120	118	336	84	YES	504	42	YES
16:00 - 17:00	1348	56	336	84	NO	504	42	YES
17:00 - 18:00	1482	53	336	84	NO	504	42	YES
18:00 - 19:00	1123	44	336	84	NO	504	42	YES
19:00 - 20:00	817	23	336	84	NO	504	42	NO
20:00 - 21:00	699	24	336	84	NO	504	42	NO
21:00 - 22:00	373	11	336	84	NO	504	42	NO
22:00 - 23:00	212	8	336	84	NO	504	42	NO
23:00 - 24:00	124	9	336	84	NO	504	42	NO

Is there a reduction in the warrant thresholds to 56% = **NO**
 Number of Hours that met the warrant 7A = **2**
 Number of Hours that met the warrant 7B = **10**

A. Is the Minimum Vehicular Volume Warrant Met Based on Crash Patterns? (Condition A)

NO

B. Is the Interruption of Continuous Traffic Met Based on Crash Patterns? (Condition B)

NO



ROSEWOOD DRIVE TRAFFIC ANALYSIS AND SPEED LIMIT ORDINANCE

OR-22-023

December 6, 2022

176

Background

2

- City Staff performed speed and traffic analysis on Rosewood Drive from January 10th to January 12th. Data from northbound and southbound lanes was collected from the following locations.
 - ▣ South of Stagecoach – Rosewood Drive and Siltstone Loop (south)
 - ▣ North of Stagecoach – Rosewood Drive and Parkwood Drive

Background (Cont.)

3

- ❑ On January 18th, 2022 Council directed staff to perform warrant studies for the intersections of Rosewood at Fawn Drive, and Rosewood at Aspen Drive.
- ❑ Current posted speed limit for Rosewood Drive is 35 MPH.
- ❑ 85th Percentile: The speed at or below which 85% of the vehicles are traveling in non-heavy traffic conditions.
 - ▣ Used to determine the posted speed limit
 - ▣ Affects how defensible enforcement is

<u>Total Vehicle Count</u> 32291	<u>Average Speed</u> 39 MPH
<u>Miles Per Hour (MPH) Vehicle Count</u>	
<u>0-29 MPH</u> 849	<u>30-39 MPH</u> 17545
<u>40-49 MPH</u> 13122	<u>50+ MPH</u> 775
<u>Vehicles traveling over 35 MPH</u> 24917	<u>Percentage over 35 MPH</u> 77%

4

Speed Study Results

Rosewood Drive North of Stagecoach

<u>Total Vehicle Count</u> 14629	<u>Average Speed</u> 41 MPH
<u>Miles Per Hour (MPH) Vehicle Count</u>	
<u>0-29 MPH</u> 578	<u>30-39 MPH</u> 5867
<u>40-49 MPH</u> 7253	<u>50+ MPH</u> 931
<u>Vehicles traveling over 35 MPH</u> 12281	<u>Percentage over 35 MPH</u> 84%

6

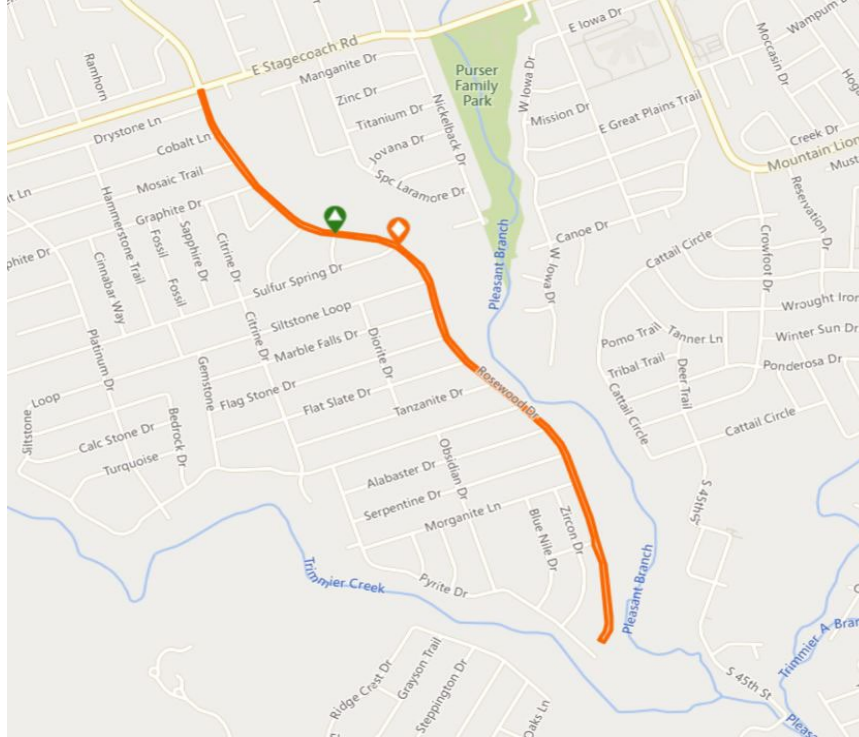
Speed Study Results

Rosewood Drive South of Stagecoach

Accident Information
1/1/2019 – 12/31/2021
Total Accidents - 2

Speed Factor Involved
1

All Other Factors
1



7

Accident Data

Rosewood Drive North of Stagecoach

Summary

8

- ❑ Analysis concluded that the 85th percentile for Rosewood Drive is 44-45 MPH.
- ❑ Majority of the accidents have occurred at locations that do not have a median at or near Fawn Drive and Aspen Drive
- ❑ Warrant Study for the intersections of Fawn Drive and Aspen Drive warrant signals with a 45mph posted speed limit.
- ❑ Council has authority to approve raising speed limit by Ordinance

Alternatives Considered

9

The City Council has three (3) alternatives. The Council may:

- ❑ Choose not to adopt the ordinance;
- ❑ Adopt the ordinance with amendments; or
- ❑ Adopt the ordinance as presented

Recommendation

10

- Staff recommends that the City Council approve and adopt the ordinance to modify Chapter 28, Section 28-245, Speed limits on certain roads, changing the posted speed limit along Rosewood Drive to 45 mph.



City of Killeen

Staff Report

File Number: PH-22-085

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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HOLD a public hearing and consider an ordinance for a City initiated request (**Case #Z22-48**) to rezone part of Lot 5 and Lot 6, Block 2, Julius Alexander Industrial Subdivision, from "R-1" (Single-Family Residential District) to "R-3A" (Multifamily Apartment Residential District). The properties are locally addressed as 2607 and 2703 Atkinson Avenue, Killeen, Texas.

DATE: December 6, 2022.

TO: Kent Cagle, City Manager.

FROM: Edwin Revell, Executive Director of Development Services.

SUBJECT: ZONING CASE #22-48: "R-1" (SINGLE-FAMILY RESIDENTIAL DISTRICT)
TO "R-3A" (MULTIFAMILY APARTMENT RESIDENTIAL DISTRICT)

BACKGROUND AND FINDINGS:

Property Information:

Property Owner: City of Killeen

Current Zoning: "R-1" (Single-Family Residential District)

Proposed Zoning: "R-3A" (Multifamily Apartment Residential District)

Current FLUM Designation: 'Campus' (C)

Summary of Request:

This is a City initiated request to rezone part of Lot 5 and Lot 6, Block 2, Julius Alexander Industrial Subdivision, from "R-1" (Single Family Residential District) to "R-3A" (Multifamily Apartment Residential District).

If approved, the property is intended to be developed as the Homeless to Housed Project, in partnership with Habitat for Humanity. The proposed use will provide transitional housing for individuals and families currently experiencing homelessness, as well as supportive assistance to successfully transition from homelessness to permanent housing.

Killeen Code of Ordinances Chapter 31 Compliance:

Killeen Code of Ordinances Sec. 31-256.1 allows transitional housing. Transitional housing shall mean a facility providing temporary housing with supportive services to individuals and families experiencing homelessness with the goal of interim stability and support to successfully move to more permanent housing.

Zoning/Plat Case History:

The property was rezoned from "M-1" (Manufacturing District) to "R-1" (Single-Family Residential District) on June 22, 1993 via Ordinance No. 93-42. The property was platted as Julius Alexander

Industrial Subdivision, Block 2, Lots 5 and 6 on January 19, 1977.

Character of the Area:

North: Killeen Cemetery zoned "R-1" (Single-Family Residential District)

South: Existing commercial and manufacturing businesses zoned "M-1" (Manufacturing District)

East: Vacant residential property zoned "R-1" (Single-Family Residential District)

West: Existing philanthropic institution and multifamily apartments and vacant residential property zoned "R-1" (Single-Family Residential District) and "M-1" (Manufacturing District)

Future Land Use Map Analysis:

This property is located within the 'Neighborhood Infill' area on the Growth Sector Map and is designated as 'Campus' (C) on the Future Land Use Map (FLUM) of the 2022 Comprehensive Plan.

The request to amend the FLUM from 'Regional Commercial' (RC) to 'Campus' (C) was approved by City Council on November 8, 2022.

The 'Campus' (C) place type includes institutional, religious, and educational uses and is characterized by the amenities and offerings associated with these types of development which can serve as regional destinations. While these areas are typically utilized for religious, office, or educational uses, residential uses may be intermingled to serve the needs of those utilizing those aforementioned uses. This place type encourages regional commercial development and residential uses such as apartments.

This 'Neighborhood Infill' growth sector includes already developed areas with access to city services and infrastructure but have vacant, underutilized, or poorly developed properties.

The request supports or furthers the following 2022 Comprehensive Plan recommendations:

- NH7 - Focus on delivering housing for those in need
- DT2 - improve safety and wayfinding in Downtown

This request aligns with the Comprehensive Plan recommendation (NH7.3) to identify sites that could be potential locations for micro-housing for persons experiencing homelessness.

Neighborhood Analysis:

This property is located within Killeen Development Zone #2 (Exhibit A). The current land use mix (Exhibit B) within this area comprises approximately 5% non-residential uses and 95% residential uses. The zoning districts within the area includes approximately 33% non-residential zoning districts and 67% residential zoning districts; this number excludes special districts such as conditional or special use permits and planned unit developments. 'Campus' place type promotes a use mix of up to 100% non-residential and 25% residential uses.

Water, Sewer and Drainage Services:

Provider: West Bell County WSC

Within Service Area: Yes

Feasibility Study or Service Commitment: Water, sanitary sewer, and drainage utility service is located within the City of Killeen municipal utility service area and available to the subject tract.

Transportation and Thoroughfare Plan:

Ingress and egress to the property is from Atkinson Avenue, which is classified as a 60' wide Local Street on the City of Killeen Thoroughfare Plan. Staff estimates that there will be 397 trips per day with 397 peak hour trips generated and has determined that a Traffic Impact Analysis is not required for the proposed land use.

Environmental Assessment:

The property is within a FEMA regulatory Special Flood Hazard Area (SFHA). This a riverine habitat on the property as identified on the National Wetlands Inventory.

Public Notification:

Staff notified twenty-seven (27) surrounding property owners regarding this request. Of those property owners notified, fifteen (15) reside outside of the 200-foot notification boundary required by the State, but within the 400-foot notification boundary required by Council; and eight (8) reside outside of Killeen.

As of the date of this staff report, staff has received one (1) written response in support of this request.

Staff Findings:

Staff finds that the request is consistent with the policies and principles of the 2022 Comprehensive Plan as indicated in the Comprehensive Plan Analysis. In addition, the request directly aligns with the Comprehensive Plan recommendations NH7 and DT2.

THE ALTERNATIVES CONSIDERED:

The City Council may:

- Recommend disapproval of the applicant's request;
- Recommend approval of a more restrictive zoning district; or
- Recommend approval of the applicant's request as presented.

Which alternative is recommended? Why?

Staff recommends approval of the applicant's request for "R-3A" (Multifamily Apartment Residential District).

CONFORMITY TO CITY POLICY:

This zoning request conforms to the City's policy and procedures, as detailed in Chapter 31 of the Killeen Code of Ordinances.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

This zoning request does not involve the expenditure of City funds.

Is this a one-time or recurring expenditure?

This is not applicable.

Is this expenditure budgeted?

This is not applicable.

If not, where will the money come from?

This is not applicable.

Is there a sufficient amount in the budgeted line-item for this expenditure?

This is not applicable.

RECOMMENDATION:

At their regular meeting on November 7, 2022, the Planning and Zoning Commission recommended approval of the applicant's request by a vote of 6 to 0.

DEPARTMENTAL CLEARANCES:

This item has been reviewed by the Planning and Legal staff.

ATTACHED SUPPORTING DOCUMENTS:

Exhibit
Maps
Site Photos
Response
Minutes
Ordinance
Considerations

Exhibits

Case #Z22-48: "R-1" to "R-3A"

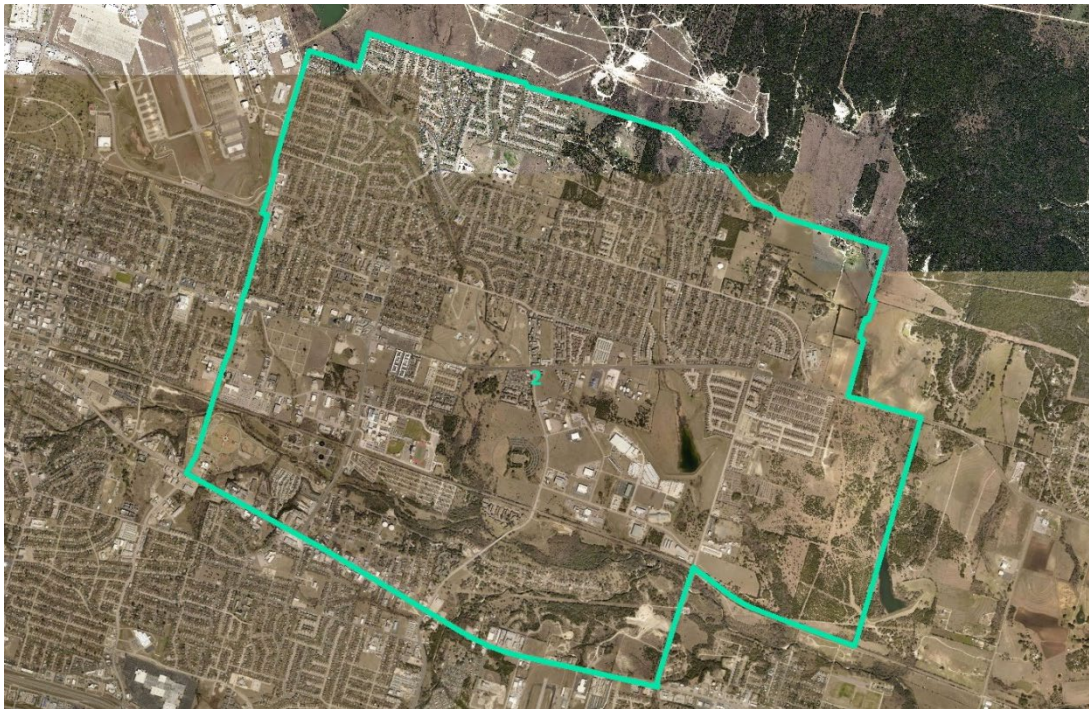


Exhibit A. Killeen Development Zone #2 boundary map.

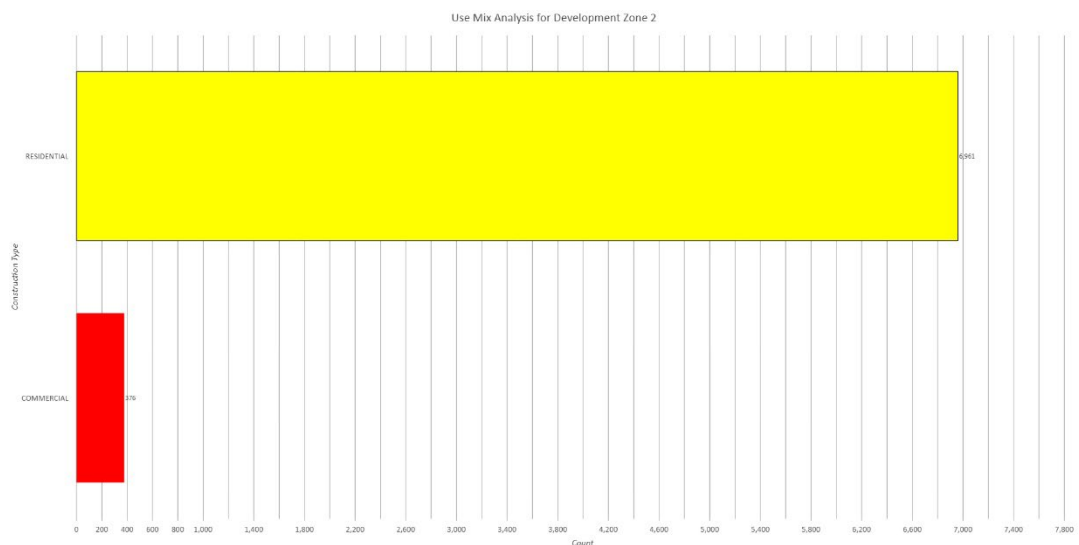
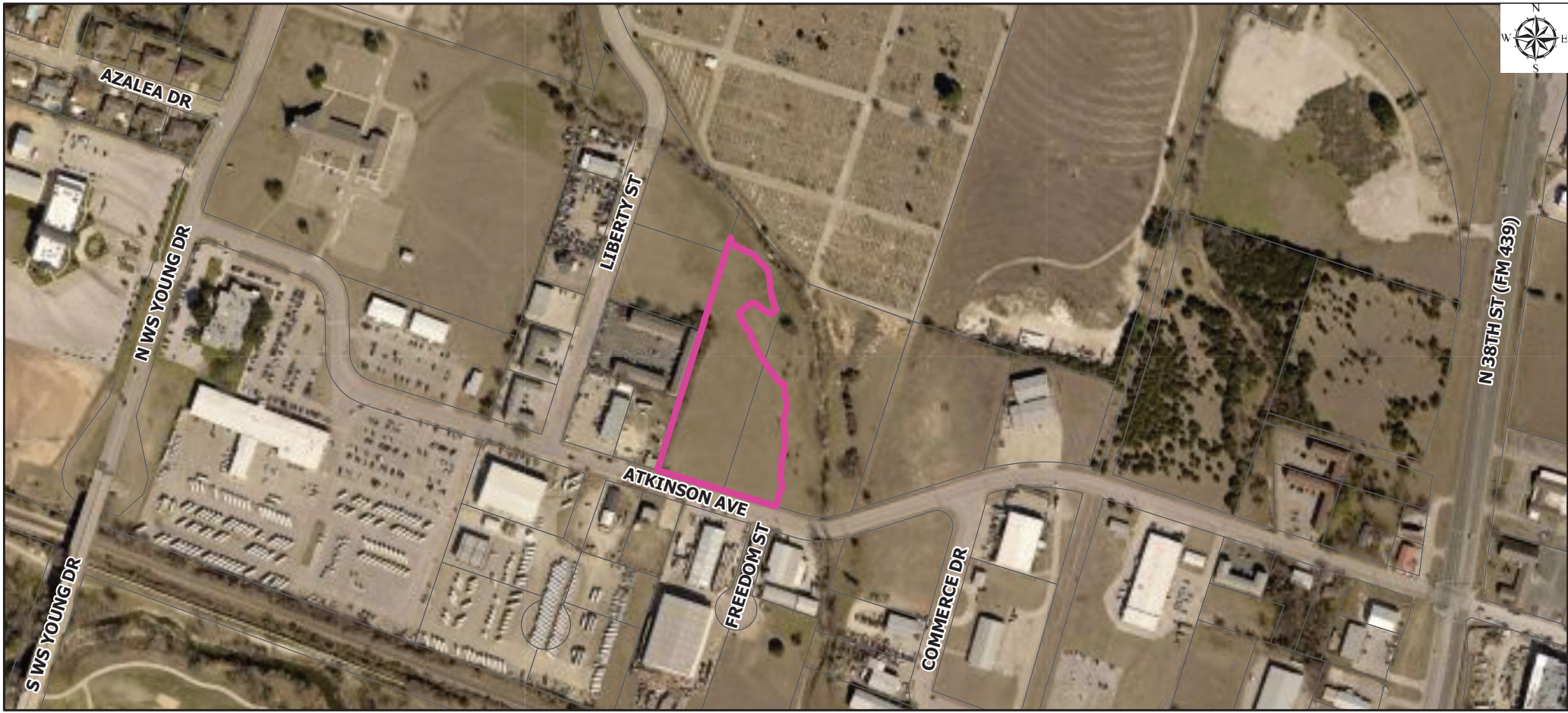


Exhibit B. Use Mix for Killeen Development Zone #2.



AERIAL MAP

Council District: 1

0 150 300 Feet

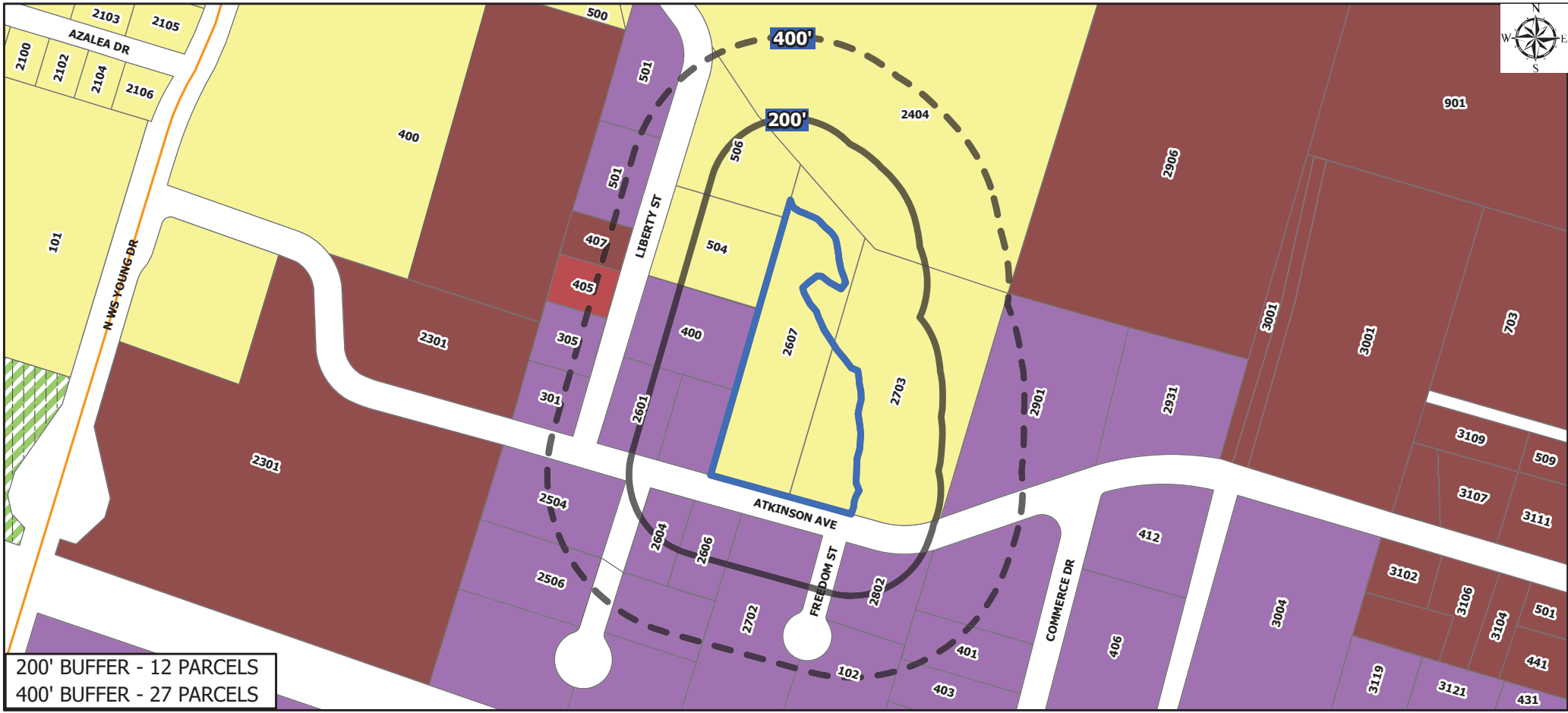
Subject Property Legal Description: JULIUS ALEXANDER INDUSTRIAL SUBDIVISION, BLOCK 002, PART OF LOT 0005 AND 0006

Zoning Case 2022-48

R-1 TO R-3A

Legend

- Citylimits
- Zoning Case



NOTIFICATION MAP
Council District: 1
0 150 300
Feet
Subject Property Legal Description: JULIUS ALEXANDER INDUSTRIAL SUBDIVISION, BLOCK 002, PART OF LOT 0005 AND 0006

Zoning Case 2022-48

R-1 TO R-3A

Legend

CurrentZoning	B-5	PUD
B-4	M-1	R-1

SITE PHOTOS

Case #Z22-48: "R-1" to "R-3A"



View of the subject property looking north:



View from the property looking west:



SITE PHOTOS

Case #Z22-48: "R-1" to "R-3A"

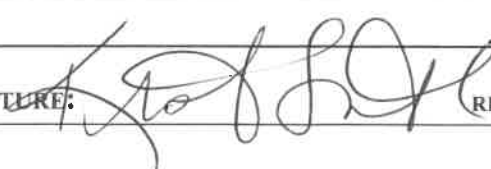


View from the property looking east:



View of the surrounding property to the south:



YOUR NAME:	Kristin Smith	PHONE NUMBER:	254-392-2037
CURRENT ADDRESS:	2601 Atkinson Ave, Killeen, TX 76541		
ADDRESS OF PROPERTY OWNED:			
COMMENTS:	Support		
RECEIVED			
NOV 07 2022			
PLANNING			
SIGNATURE:			
		REQUEST: "R-1" to "R-3A" SPO #Z22-48/	24, 25

P.O. BOX 1329, KILLEEN, TEXAS 76540-1329, 254-501-7631, FAX 254-501-7628
 WWW.KILLEENTEXAS.GOV

**MINUTES
PLANNING AND ZONING COMMISSION MEETING
NOVEMBER 7, 2022**

**CASE #Z22-48
“R-1” to “R-3A”**

HOLD a public hearing and consider a City initiated request (**Case #Z22-48**) to rezone part of Lot 5 and Lot 6, Block 2, Julius Alexander Industrial Subdivision from “R-1” (Single Family Residential District) to “R-3A” (Multifamily Apartment Residential District). The properties are locally addressed as 2607 and 2703 Atkinson Avenue, Killeen, Texas.

Ms. Larsen stated that this request is to rezone the property from “R-1” to “R-3A”. If approved, the property is intended to be developed as the Homeless to Housed Project in partnership with Habitat for Humanity. The proposed use will provide transitional housing for individuals and families currently experiencing homelessness, as well as supportive assistance to successfully transition from homelessness to permanent housing.

Ms. Larsen also stated that the request to amend the FLUM from ‘Regional Commercial’ (RC) to ‘Campus’ (C) is scheduled for City Council consideration on November 8, 2022.

Staff notified twenty-seven (27) surrounding property owners regarding this request. Of those notified, fifteen (15) reside outside of the 200-foot notification boundary required by the State, and within the 400-foot notification boundary required by Council; and eight (8) property owners reside outside of Killeen. To date, staff has received one (1) written response in support of this request.

Mr. Brian Hawkins with Cove House was present to represent the request.

Chairman Minor opened the public hearing.

With no one wishing to speak, the public hearing was closed.

Commissioner Ploeckelmann moved to recommend approval of the applicant’s request for “R-3A” (Multifamily Apartment Residential District). Commissioner Marquez seconded, and the motion passed by a vote of 6 to 0.

ORDINANCE _____

AN ORDINANCE AMENDING THE ZONING ORDINANCE OF THE CITY OF KILLEEN BY CHANGING THE ZONING OF PART OF LOT 5 AND LOT 6, BLOCK 2, JULIUS ALEXANDER INDUSTRIAL SUBDIVISION, FROM “R-1” (SINGLE-FAMILY RESIDENTIAL DISTRICT) TO “R-3” (MULTIFAMILY APARTMENT RESIDENTIAL DISTRICT), PROVIDING A SAVINGS CLAUSE; PROVIDING FOR THE REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, a City initiated request, has presented to the City of Killeen, a request for amendment of the zoning ordinance of the City of Killeen by changing the classification of part of Lot 5 and Lot 6, Block 2, Julius Alexander Industrial Subdivision, from “R-1” (Single Family Residential District) to “R-3A” (Multifamily Apartment Residential District), said request having been duly recommended for approval of the “R-3A” (Multifamily Apartment Residential District) by the Planning and Zoning Commission of the City of Killeen on the 7th day of November 2022, and due notice of the filing of said request and the date of hearing thereon was given as required by law, and hearing on said request was set for 5:00 p.m. on the 13th day of December 2022, at the City Hall, City of Killeen;

WHEREAS the City Council at said hearing duly considered said request, the action of the Planning and Zoning Commission and the evidence in support thereof, and the City Council being of the majority opinion that the applicant’s zoning request should be approved as recommended by the Planning and Zoning Commission;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

SECTION I. That the zoning classification of part of Lot 5 and Lot 6, Block 2, Julius Alexander Industrial Subdivision, from “R-1” (Single Family Residential District) to “R-3A” (Multifamily Apartment Residential District), said request having been duly recommended for

approval of the “R-3A” (Multifamily Apartment Residential District), for the property locally addressed as 2607 and 2703 Atkinson Avenue, Killeen Texas.

SECTION II. That should any section or part of this ordinance be declared unconstitutional or invalid for any reason, it shall not invalidate or impair the validity, force, or effect of any other section or parts of this ordinance.

SECTION III. That all ordinances and resolutions, or parts thereof, in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

SECTION IV. That this ordinance shall take effect immediately upon passage of the ordinance.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this 13th day of December 2022, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, §551.001 et seq.

APPROVED:

Debbie Nash-King, MAYOR

ATTEST:

Laura J. Calcote, CITY SECRETARY

APPROVED AS TO FORM

Holli C. Clements, CITY ATTORNEY
Case #22-48
Ord. #22-____

CONSIDERATIONS

Texas Supreme Court in *Pharr v. Tippitt*, 616 S. W 2nd 173 (Tex 1981) established general guidelines which the Planning and Zoning Commission and City Council should take into consideration when making their respective recommendation and decision on a zoning request.

A. General Factors to Consider:

Is the request in accordance with the comprehensive plan?

Is the request designed to lessen congestion in the streets; secure safety from fire, panic or other dangers; promote health and the general welfare; provide adequate light and air; prevent the overcrowding of land; avoid undue concentration of population; or facilitate the adequate provision of transportation, water, sewers, schools, parks and other public requirements?

What if any, is the nature and degree of an adverse impact upon neighboring lands?

The suitability or unsuitability of the tract for use as presently zoned.

Whether the amendment bears a substantial relationship to the public health, safety, morals or general welfare or protects and preserves historical and cultural places and areas.

Whether there is a substantial public need or purpose for the new zoning.

Whether there have been substantially changed conditions in the neighborhood.

Is the new zoning substantially inconsistent with the zoning of neighboring lands? (Whether the new zoning is more or less restrictive.)

The size of the tract in relation to the affected neighboring lands – is the tract a small tract or isolated tract asking for preferential treatment that differs from that accorded similar surrounding land without first proving changes in conditions?

Any other factors which will substantially affect the health, safety, morals or general welfare.

B. Conditional Use Permit (if applicable)

Whether the use is in harmonious with and adaptable to buildings, structures and use of abutting property and other property in the vicinity of the premises under construction.

C. Conditions to Consider

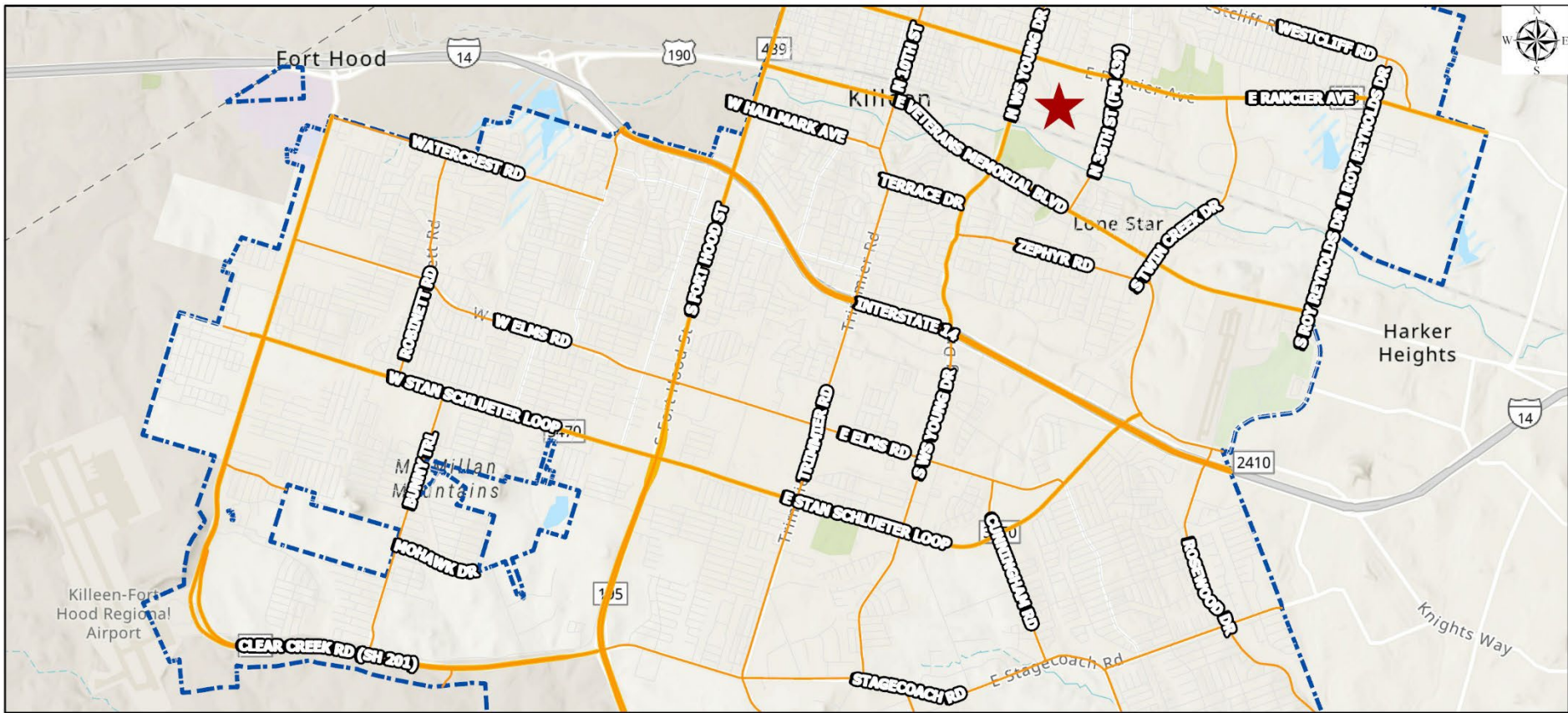
1. Occupation shall be conducted only by members of family living in home.
2. No outside storage or display
3. Cannot change the outside appearance of the dwelling so that it is altered from its residential character.
4. Cannot allow the performance of the business activity to be visible from the street.
5. Cannot use any window display to advertise or call attention to the business.
6. Cannot have any signs
7. No off-street parking or on-street parking of more than two (2) vehicles at any one time for business related customer parking.
8. No retail sales.
9. Length of Permit.



CASE #Z22-48:
“R-1” TO “R-3A”

Case #Z22-48: “R-1” to “R-3A”

- ❑ **HOLD** a public hearing and consider a City initiated request (**Case #Z22-48**) to rezone part of Lot 5 and Lot 6, Block 2, Julius Alexander Industrial Subdivision, from “R-1” (Single Family Residential District) to “R-3A” (Multifamily Apartment Residential District).
- ❑ The properties are locally addressed as 2607 and 2703 Atkinson Avenue, Killeen, Texas.



LOCATION MAP
Council District: 1



Subject Property Legal Description: JULIUS ALEXANDER INDUSTRIAL SUBDIVISION, BLOCK 002, PART OF LOT 0005 AND 0006

Zoning Case 2022-48

R-1 TO R-3A

Legend

— Major Roads

City Limits

★ Zoning Case Location



AERIAL MAP

Council District: 1

0 150 300

Feet

Zoning Case 2022-48

R-1 TO R-3A

Subject Property Legal Description: JULIUS ALEXANDER INDUSTRIAL SUBDIVISION, BLOCK 002, PART OF LOT 0005 AND 0006

Legend

 Citylimits

 Zoning Case

205

Case #Z22-48: “R-1” to “R-3A”

5

- If approved, the property is intended to be developed as the Homeless to Housed Project, in partnership with Habitat for Humanity. The proposed use will provide transitional housing for individuals and families currently experiencing homelessness, as well as supportive assistance to successfully transition from homelessness to permanent housing.



ZONING MAP
Council District: 1



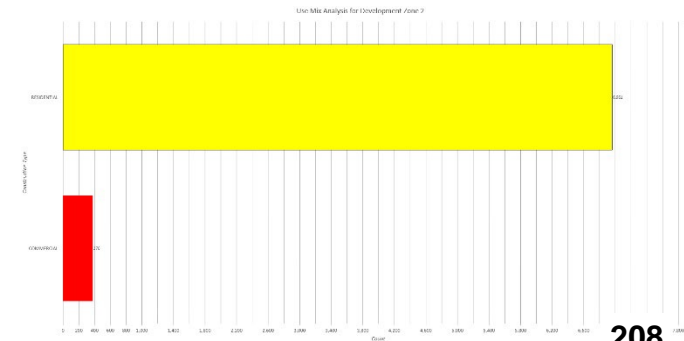
Subject Property Legal Description: JULIUS ALEXANDER INDUSTRIAL SUBDIVISION, BLOCK 002, PART OF LOT 0005 AND 0006

Zoning Case 2022-48 R-1 TO R-3A

Comprehensive Plan Analysis

7

- 'Neighborhood Infill' Growth Sector
- Killeen Development Zone #2
- Approximately 5% non-residential and 95% residential uses of current land use mix.
- Approximately 33% non-residential zoning districts and 67% residential zoning districts
- 'Campus' place type promotes a use mix of up to 100% non-residential and 25% residential uses.



Comprehensive Plan Analysis

8

- The request is consistent with recently approved FLUM designation of 'Campus' (C).
- The request supports or furthers the implementation of the following Comprehensive Plan recommendations:
 - ▣ **NH7** – Focus on delivering housing for those in need
 - ▣ **DT2** – Improve safety and wayfinding in Downtown

*Neighborhoods (NH) and Downtown (DT) Recommendations

Comprehensive Plan Analysis

9

- This request aligns with Comprehensive Plan recommendation (NH7.3) to identify sites that could be potential locations for micro-housing for persons experiencing homelessness.

Case #Z22-48: “R-1” to “R-3A”

10

View of the subject property looking north:



Case #Z22-48: “R-1” to “R-3A”

11

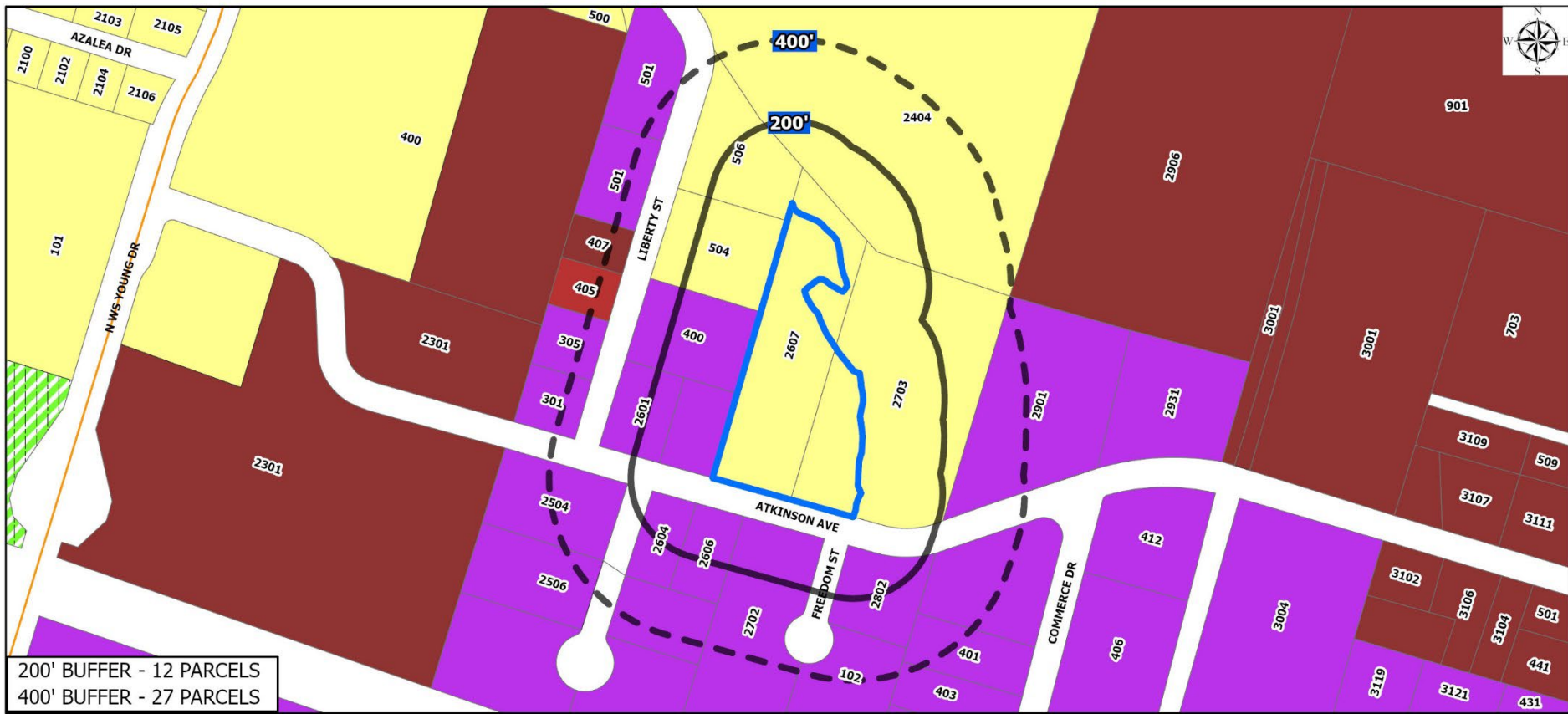
View from the property looking east:



Public Notification

12

- Staff notified twenty-seven (27) surrounding property owners regarding this request.
- Of those notified, fifteen (15) reside outside of the 200-foot notification boundary required by the State, and within the 400-foot notification boundary required by Council; and eight (8) property owners reside outside of Killeen.
- To date, staff has received one (1) written response in support regarding this request.



200' BUFFER - 12 PARCELS

400' BUFFER - 27 PARCELS

NOTIFICATION MAP

Council District: 1

0 150 300
 Feet

Subject Property Legal Description: JULIUS ALEXANDER INDUSTRIAL SUBDIVISION, BLOCK 002, PART OF LOT 0005 AND 0006

Zoning Case 2022-48

R-1 TO R-3A

Legend

CurrentZoning

 B-5

 PUD

 B-4

■ M-1

 R-1

214

Alternatives

14

- ❑ The City Council has three (3) alternatives. The Council may:
 - ❑ Disapprove the applicant's request;
 - ❑ Approve a more restrictive zoning district than requested; or
 - ❑ Approve the applicant's request as presented.

Staff Recommendation

15

- Staff finds that the request is consistent with the policies and principles of the 2022 Comprehensive Plan as indicated in the Comprehensive Plan Analysis. In addition, the request directly aligns with the Comprehensive Plan recommendations NH7 and DT2.
- Staff recommends approval of the applicant's request for "R-3A" (Multifamily Apartment Residential District).

Commission Recommendation

16

- At their regular meeting on November 7, 2022, the Planning and Zoning Commission recommended approval of the applicant's request by a vote of 6 to 0.



City of Killeen

Staff Report

File Number: PH-22-086

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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HOLD a public hearing and consider an ordinance requested by Quintero Engineering, LLC on behalf of BCMB Properties, LLC (**Case #222-50**) to rezone Lot 4, Block 2, Stefek Trust Addition Phase Four from "B-5" (Business District) to "B-C-1" (General Business and Alcohol Sales District). The property is locally addressed as 601 Stefek Drive, Killeen, Texas.

DATE: December 6, 2022.

TO: Kent Cagle, City Manager.

FROM: Edwin Revell, Executive Director of Development Services.

SUBJECT: ZONING CASE #22-50: "B-5" (BUSINESS DISTRICT) TO "B-C-1" (GENERAL BUSINESS AND ALCOHOL SALES DISTRICT)

BACKGROUND AND FINDINGS:

Property Information:

Property Owner: BCMB Properties, LLC

Agent: Quintero Engineering, LLC

Current Zoning: "B-5" (Business District)

Proposed Zoning: "B-C-1" (General Business and Alcohol Sales District)

Current FLUM Designation: 'Regional Commercial' (RC)

Summary of Request:

Quintero Engineering, LLC, on behalf of BCMB Properties, LLC, has submitted a request to rezone Lot 4, Block 2, Stefek Trust Addition Phase Four, from "B-5" (Business District) to "B-C-1" (General Business and Alcohol Sales District). If approved, the applicant intends to develop a sports bar on the property.

Killeen Code of Ordinances Chapter 31 Compliance:

The proposed use falls under Killeen Code of Ordinances Sec. 31-351, which allows business establishments dispensing alcoholic beverages under the Texas Alcoholic Beverage Code, in accordance with permits issued and the rules and regulations promulgated by the Texas Alcoholic Beverage Commission.

Staff notes that the subject property is located within a designated Adult Oriented Business (AOB) area. Therefore, Adult Oriented Businesses (AOBs) are permitted by-right in this location. Examples of AOBs permitted in this location include adult cabarets, adult encounter parlors, and adult lounges, as defined in Killeen Code of Ordinances Sec. 31-551(1).

Zoning/Plat Case History:

The property was rezoned from "R-1" (Single-Family Residential District) to "B-5" (Business District) on September 23, 2014 via Ordinance No. 14-069. The property was platted as Stefek Trust Addition Phase Four, Block 2, Lot 4 on February 16, 2016.

Character of the Area:

North: Vacant commercial property zoned "B-5" (Business District)

South: Existing two-family homes zoned "R-2" (Two-Family Residential District)

East: Vacant commercial property zoned "B-5" (Business District)

West: Vacant commercial property zoned "B-5" (Business District)

Future Land Use Map Analysis:

This property is located within the 'Neighborhood Infill' area on the Growth Sector Map and is designated as 'Regional Commercial' (RC) on the Future Land Use Map (FLUM) of the 2022 Comprehensive Plan.

The 'Regional Commercial' (RC) place type include places that are auto-oriented, located near high-traffic intersections, such as regional businesses like retail, restaurants, gas stations, grocery stores, etc. This place type encourages most commercial developments and mixed-use such as many others.

This 'Neighborhood Infill' growth sector includes already developed areas with access to city services and infrastructure but have vacant, underutilized, or poorly developed properties.

The request supports or furthers the following 2022 Comprehensive Plan recommendations:

- LU1 - Use place types and complete neighborhoods as building blocks
- NH4 - Build complete neighborhoods

This request may provide more entertainment options and may contribute to the sense of place, connectedness, and quality of life for residents. In addition, the Comprehensive Plan highlights the need for third places for gathering such as bars or places where people can interact.

Neighborhood Analysis:

This property is located within Killeen Development Zone #6 (Exhibit A). The current land use mix (Exhibit B) within this area comprises approximately 7% non-residential uses and 93% residential uses. The zoning districts within the area includes approximately 10% agricultural, 33% non-residential zoning districts and 57% residential zoning districts; this number excludes special districts such as conditional or special use permits and planned unit developments. 'Regional Commercial' promotes a use mix of up to 100% non-residential and 50% residential uses.

Water, Sewer and Drainage Services:

Provider: West Bell County WSC

Within Service Area: Yes

Feasibility Study or Service Commitment: Water, sanitary sewer, and drainage utility service is located within the City of Killeen municipal utility service area and available to the subject tract.

Transportation and Thoroughfare Plan:

Ingress and egress to the property is from Stefek Dr which is classified as a 60' wide local street on the City of Killeen adopted Thoroughfare Plan. Staff estimates that there will be 795 trips per day with 80 peak hour trips generated and has determined that a Traffic Impact Analysis is not required for the proposed land use.

Environmental Assessment:

The property is not within any FEMA regulatory Special Flood Hazard Area (SFHA). There are no other known wetland areas on or adjacent to the property as identified on the National Wetlands Inventory.

Public Notification:

Staff notified forty-eight (48) surrounding property owners regarding this request. Of those property owners notified, thirty-two (32) reside outside of the 200-foot notification boundary required by the State, but within the 400-foot notification boundary required by Council; and sixteen (16) reside outside of Killeen.

As of the date of this staff report, staff has received nine (9) written responses from a single property owner in support of this request.

Staff Findings:

Please see the Future Land Use and Neighborhood Analysis section.

THE ALTERNATIVES CONSIDERED:

The City Council may:

- Disapprove the applicant's request; or
- Approve the applicant's request as presented.

Which alternative is recommended? Why?

Staff recommends approval of the applicant's request for "B-C-1" (General Business and Alcohol Sales District).

Staff finds that the request is consistent with the policies and principles of the 2022 Comprehensive Plan as indicated in the Comprehensive Plan Analysis.

CONFORMITY TO CITY POLICY:

This zoning request conforms to the City's policy and procedures, as detailed in Chapter 31 of the Killeen Code of Ordinances.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

This zoning request does not involve the expenditure of City funds.

Is this a one-time or recurring expenditure?

This is not applicable.

Is this expenditure budgeted?

This is not applicable.

If not, where will the money come from?

This is not applicable.

Is there a sufficient amount in the budgeted line-item for this expenditure?

This is not applicable.

RECOMMENDATION:

At their regular meeting on November 7, 2022, the Planning and Zoning Commission recommended approval of the applicant's request by a vote of 5 to 1. Commissioner Sabree voted in opposition due to personal reasons.

DEPARTMENTAL CLEARANCES:

This item has been reviewed by the Planning and Legal staff.

ATTACHED SUPPORTING DOCUMENTS:

Exhibit
Maps
Site Photos
Responses
Minutes
Ordinance
Considerations

Exhibits

Case #Z22-50: "B-5" to "B-C-1"



Exhibit A. Killeen Development Zone #6 boundary map.

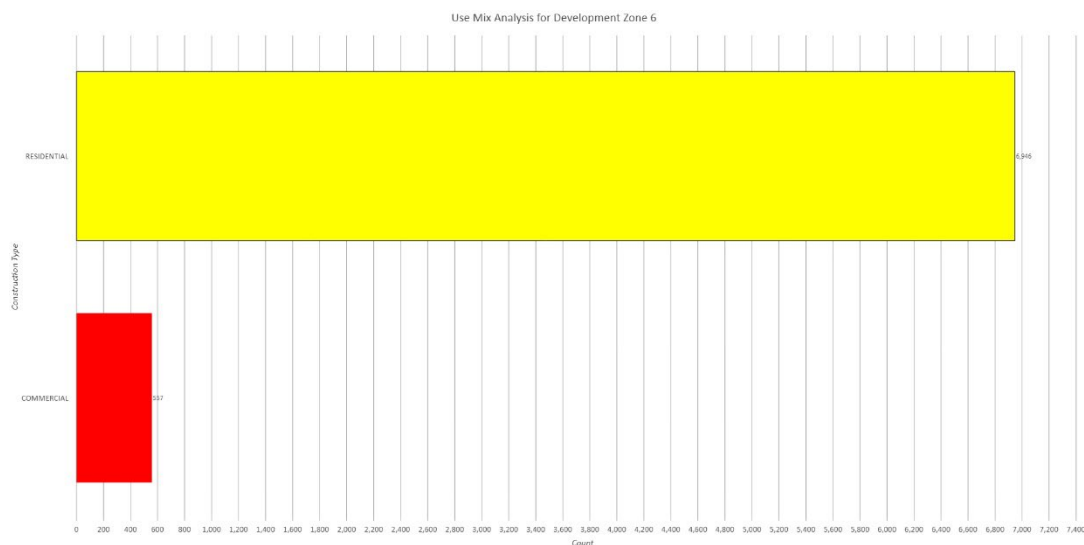


Exhibit B. Use Mix for Killeen Development Zone #6.



AERIAL MAP

Council District: 3

0 100 200
Feet

Zoning Case 2022-50

B-5 TO B-C-1

Subject Property Legal Description: STEFEK TRUST ADDITION PHASE FOUR, BLOCK 002, LOT 0004, 1.357AC

Legend

 Citylimits

 Zoning Case

SITE PHOTOS

Case #Z22-50: "B-5" to "B-C-1"



View of the subject property looking north:



View of the surrounding property to the west:



SITE PHOTOS

Case #Z22-50: "B-5" to "B-C-1"




View of the surrounding property to the east:




View of the surrounding property to the south (across Stefek Dr):



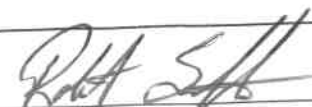
-----CUT HERE-----

YOUR NAME:	ROBERT STEFER PMS RMB	PHONE NUMBER:	254-521-3398
CURRENT ADDRESS:	3800 S WS YOUNG DR STE 102		
ADDRESS OF PROPERTY OWNED:	STEFER DRIVE		
COMMENTS:	ASKING TO PASS		
	RECEIVED		
	NOV 07 2022		
	PLANNING		
SIGNATURE:			REQUEST: "B-5" to "B-C-1" SPO #Z22-50/ 20


-----CUT HERE-----

YOUR NAME:	ROBERT STEFER PMS RMB	PHONE NUMBER:	254-521-3398
CURRENT ADDRESS:	3800 S WS YOUNG DR STE 102		
ADDRESS OF PROPERTY OWNED:	STEFER DR		
COMMENTS:	ASKING FOR COUNCIL TO PASS		
	RECEIVED		
	NOV 07 2022		
	PLANNING		
SIGNATURE:			REQUEST: "B-5" to "B-C-1" SPO #Z22-50/ 19


-----CUT HERE-----

YOUR NAME:	ROBERT STEFER	PHONE NUMBER:	
CURRENT ADDRESS:	3800 S WS YOUNG DR SUITE 102		
ADDRESS OF PROPERTY OWNED:	STEFER DRIVE		
COMMENTS:	THE CITY PUT THE AOB ZONING / B-5 ALCOHOL CAN BE SERVED ON THE PROPERTY AS IT IS WITH A BUDB		
	RECEIVED		
	NOV 07 2022		
	PLANNING		
SIGNATURE:			REQUEST: "B-5" to "B-C-1" SPO #Z22-50/ 21

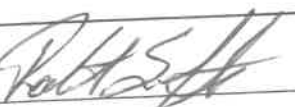
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YOUR NAME:	ROBERT STEFEK PRES BOMB	PHONE NUMBER:	254-501-3398
CURRENT ADDRESS:	3800 S WS YOUNG DR STE 10A		
ADDRESS OF PROPERTY OWNED:	STEFEK DRIVE		
COMMENTS:	THE CITY PUT THE AOB ZONING/B-5 ALCOHOL CAN BE SERVED ON THE PROPERTY AS IS WITH A BYOB ASKING FOR COUNCIL TO PASS		
		RECEIVED	
		NOV 07 2022	
		PLANNING	
SIGNATURE:		REQUEST: "B-5" to "B-C-1"	SPO #Z22-50/ 24


CUT HERE

YOUR NAME:	ROBERT STEFEK PRES BOMB	PHONE NUMBER:	254-501-3398
CURRENT ADDRESS:	3800 S. WS YOUNG DR SUITE 102		
ADDRESS OF PROPERTY OWNED:	STEFEK DRIVE		
COMMENTS:	THE CITY PUT THE AOB ZONING/B-5 ALCOHOL CAN BE SERVED ON THE PROPERTY AS IS WITH A BYOB ASKING FOR COUNCIL TO PASS		
		RECEIVED	
		NOV 07 2022	
		PLANNING	
SIGNATURE:		REQUEST: "B-5" to "B-C-1"	SPO #Z22-50/ 17


CUT HERE

YOUR NAME:	ROBERT STEFEK PRES BOMB	PHONE NUMBER:	254-501-3398
CURRENT ADDRESS:	3800 S WS YOUNG DR STE 102		
ADDRESS OF PROPERTY OWNED:	STEFEK DR		
COMMENTS:	ASK TO PASS		
		RECEIVED	
		NOV 07 2022	
		PLANNING	
SIGNATURE:		REQUEST: "B-5" to "B-C-1"	SPO #Z22-50/ 26


-----CUT HERE-----

YOUR NAME:	ROBERT STEFEK PRES BUMB	PHONE NUMBER:	254-501-3398
CURRENT ADDRESS:	3800 S. WS YOUNG DR STE 102		
ADDRESS OF PROPERTY OWNED:	STEFEK DR		
COMMENTS:	ASK TO PASS		
	RECEIVED		
	NOV 07 2022		
	PLANNING		
SIGNATURE:			
	REQUEST: "B-5" to "B-C-1"	SPO #Z22-50/	15

-----CUT HERE-----

YOUR NAME:	ROBERT STEFEK	PHONE NUMBER:	254-501-3398
CURRENT ADDRESS:	3800 S WS YOUNG DR STE 102		
ADDRESS OF PROPERTY OWNED:	STEFEK DR		
COMMENTS:	ASK TO PASS		
	RECEIVED		
	NOV 07 2022		
	PLANNING		
SIGNATURE:			
	REQUEST: "B-5" to "B-C-1"	SPO #Z22-50/	16

-----CUT HERE-----

YOUR NAME:	ROBERT STEFEK PRES BUMB	PHONE NUMBER:	254-501-3398
CURRENT ADDRESS:	3800 S WS YOUNG DR STE 102		
ADDRESS OF PROPERTY OWNED:	STEFEK DRIVE		
COMMENTS:	ASK TO PASS		
	RECEIVED		
	NOV 07 2022		
	PLANNING		
SIGNATURE:			
	REQUEST: "B-5" to "B-C-1"	SPO #Z22-50/	14

**MINUTES
PLANNING AND ZONING COMMISSION MEETING
NOVEMBER 7, 2022**

**CASE #Z22-50
“B-5” to “B-C-1”**

HOLD a public hearing and consider a request submitted by Quintero Engineering, LLC on behalf of BCMB Properties, LLC (**Case #Z22-50**) to rezone Lot 4, Block 2, Stefek Trust Addition Phase Four from “B-5” (Business District) to “B-C-1” (General Business and Alcohol Sales District). The property is locally addressed as 601 Stefek Drive, Killeen, Texas.

Ms. Larsen stated that if approved, the applicant intends to develop a sports bar on the property. She also informed the commission that this property is located within a designated Adult Oriented Business (AOB) area, which allows Adult Oriented Businesses (AOBs) by-right in this location. Examples of AOBs permitted in this area include adult cabarets, adult encounter parlors, and adult lounges, as defined in Killeen Code of Ordinances Sec. 31-551(1).

Staff notified forty-eight (48) surrounding property owners regarding this request. Of those notified, thirty-two (32) reside outside of the 200-foot notification boundary required by the State, and within the 400-foot notification boundary required by Council; and sixteen (16) property owners reside outside of Killeen. To date, staff has received nine (9) written responses from a single property owner in support of this request.

Mr. Gorge Meza was present to represent the request.

Chairman Minor opened the public hearing.

With no one wishing to speak, the public hearing was closed.

Commissioner Ploeckelmann moved to recommend approval of the applicant’s request. Vice Chair Gukeisen seconded, and the motion passed by a vote of 5 to 1. Commissioner Sabree voted in opposition due to personal reasons.

ORDINANCE _____

AN ORDINANCE AMENDING THE ZONING ORDINANCE OF THE CITY OF KILLEEN BY CHANGING THE ZONING OF APPROXIMATELY LOT 4, BLOCK 2, STEFEK TRUST ADDITION, FROM “B-5” (BUSINESS DISTRICT) TO “B-C-1” (GENERAL BUSINESS AND ALCOHOL SALES DISTRICT), PROVIDING A SAVINGS CLAUSE; PROVIDING FOR THE REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Quintero Engineering, LLC, on behalf of BCMB Properties, LLC, has presented to the City of Killeen, a request for amendment of the zoning ordinance of the City of Killeen by changing the classification of Lot 4, Block 2, Stefek Trust Addition Phase Four, from “B-5” (Business District) to “B-C-1” (General Business and Alcohol Sales District), said request having been duly recommended for approval of the “B-C-1” (General Business and Alcohol Sales District) by the Planning and Zoning Commission of the City of Killeen on the 7th day of November 2022, and due notice of the filing of said request and the date of hearing thereon was given as required by law, and hearing on said request was set for 5:00 p.m. on the 13th day of December 2022, at the City Hall, City of Killeen;

WHEREAS the City Council at said hearing duly considered said request, the action of the Planning and Zoning Commission and the evidence in support thereof, and the City Council being of the majority opinion that the applicant’s zoning request should be approved as recommended by the Planning and Zoning Commission;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

SECTION I. That the zoning classification of Lot 4, Block 2, Stefek Trust Addition Phase Four, from “B-5” (Business District) to “B-C-1” (General Business and Alcohol Sales District), said request having been duly recommended for approval of the “B-C-1” (General Business and Alcohol Sales District), for the property locally addressed as 601 Stefek Drive, Killeen Texas.

SECTION II. That should any section or part of this ordinance be declared unconstitutional or invalid for any reason, it shall not invalidate or impair the validity, force, or effect of any other section or parts of this ordinance.

SECTION III. That all ordinances and resolutions, or parts thereof, in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

SECTION IV. That this ordinance shall take effect immediately upon passage of the ordinance.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this 13th day of December 2022, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, §551.001 et seq.

APPROVED:

Debbie Nash-King, MAYOR

ATTEST:

Laura J. Calcote, CITY SECRETARY

APPROVED AS TO FORM

Holli C. Clements, CITY ATTORNEY
Case #22-50
Ord. #22-____

CONSIDERATIONS

Texas Supreme Court in *Pharr v. Tippitt*, 616 S. W 2nd 173 (Tex 1981) established general guidelines which the Planning and Zoning Commission and City Council should take into consideration when making their respective recommendation and decision on a zoning request.

A. General Factors to Consider:

Is the request in accordance with the comprehensive plan?

Is the request designed to lessen congestion in the streets; secure safety from fire, panic or other dangers; promote health and the general welfare; provide adequate light and air; prevent the overcrowding of land; avoid undue concentration of population; or facilitate the adequate provision of transportation, water, sewers, schools, parks and other public requirements?

What if any, is the nature and degree of an adverse impact upon neighboring lands?

The suitability or unsuitability of the tract for use as presently zoned.

Whether the amendment bears a substantial relationship to the public health, safety, morals or general welfare or protects and preserves historical and cultural places and areas.

Whether there is a substantial public need or purpose for the new zoning.

Whether there have been substantially changed conditions in the neighborhood.

Is the new zoning substantially inconsistent with the zoning of neighboring lands? (Whether the new zoning is more or less restrictive.)

The size of the tract in relation to the affected neighboring lands – is the tract a small tract or isolated tract asking for preferential treatment that differs from that accorded similar surrounding land without first proving changes in conditions?

Any other factors which will substantially affect the health, safety, morals or general welfare.

B. Conditional Use Permit (if applicable)

Whether the use is in harmonious with and adaptable to buildings, structures and use of abutting property and other property in the vicinity of the premises under construction.

C. Conditions to Consider

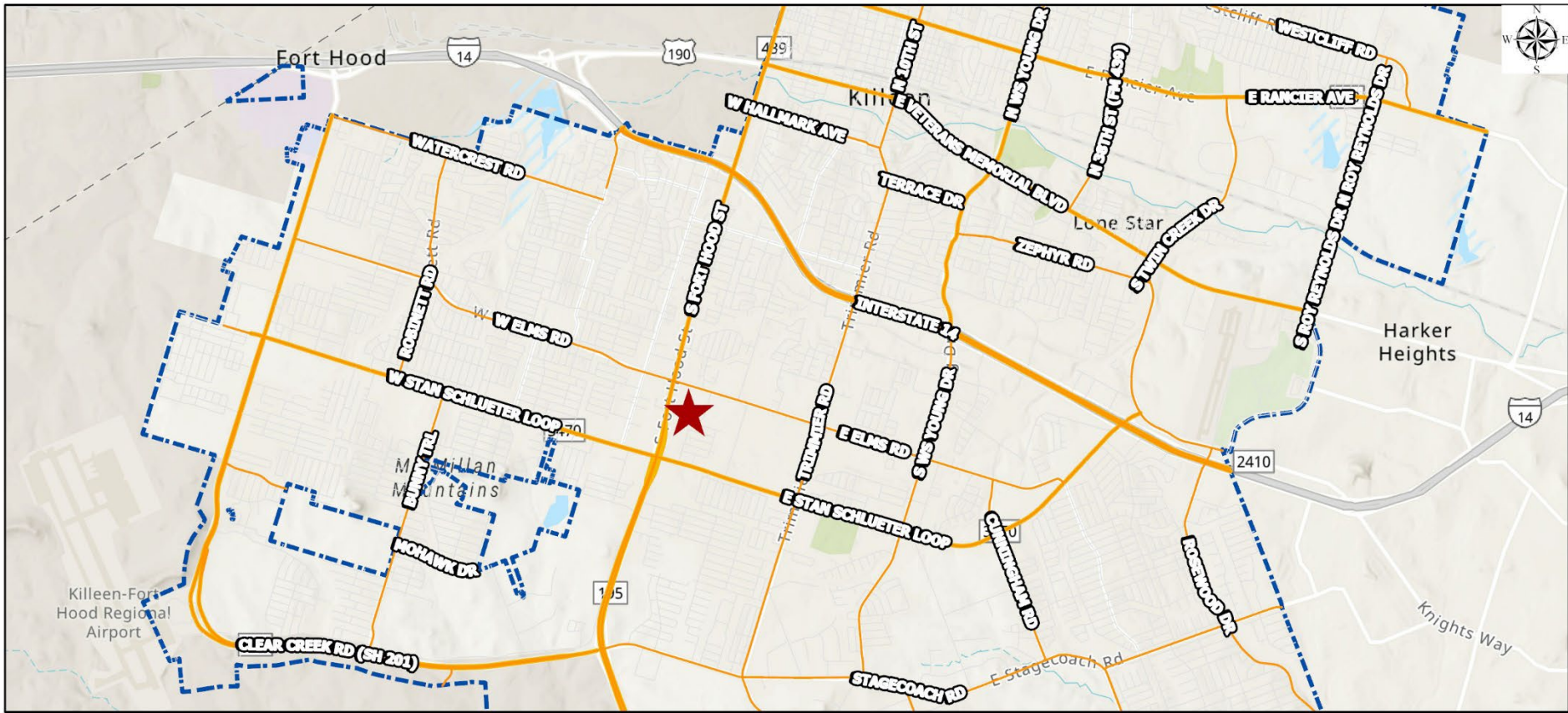
1. Occupation shall be conducted only by members of family living in home.
2. No outside storage or display
3. Cannot change the outside appearance of the dwelling so that it is altered from its residential character.
4. Cannot allow the performance of the business activity to be visible from the street.
5. Cannot use any window display to advertise or call attention to the business.
6. Cannot have any signs
7. No off-street parking or on-street parking of more than two (2) vehicles at any one time for business related customer parking.
8. No retail sales.
9. Length of Permit.



CASE #Z22-50:
“B-5” TO “B-C-1”

Case #Z22-50: “B-5” to “B-C-1”

- ❑ **HOLD** a public hearing and consider an ordinance requested by Quintero Engineering, LLC on behalf of BCMB Properties, LLC (**Case #Z22-50**) to rezone Lot 4, Block 2, Stefek Trust Addition Phase Four from “B-5” (Business District) to “B-C-1” (General Business and Alcohol Sales District).
- ❑ The property is locally addressed as 601 Stefek Drive, Killeen, Texas.



LOCATION MAP
Council District: 3



Subject Property Legal Description: STEFEK TRUST ADDITION PHASE FOUR, BLOCK 002, LOT 0004, 1.357AC

Zoning Case 2022-50

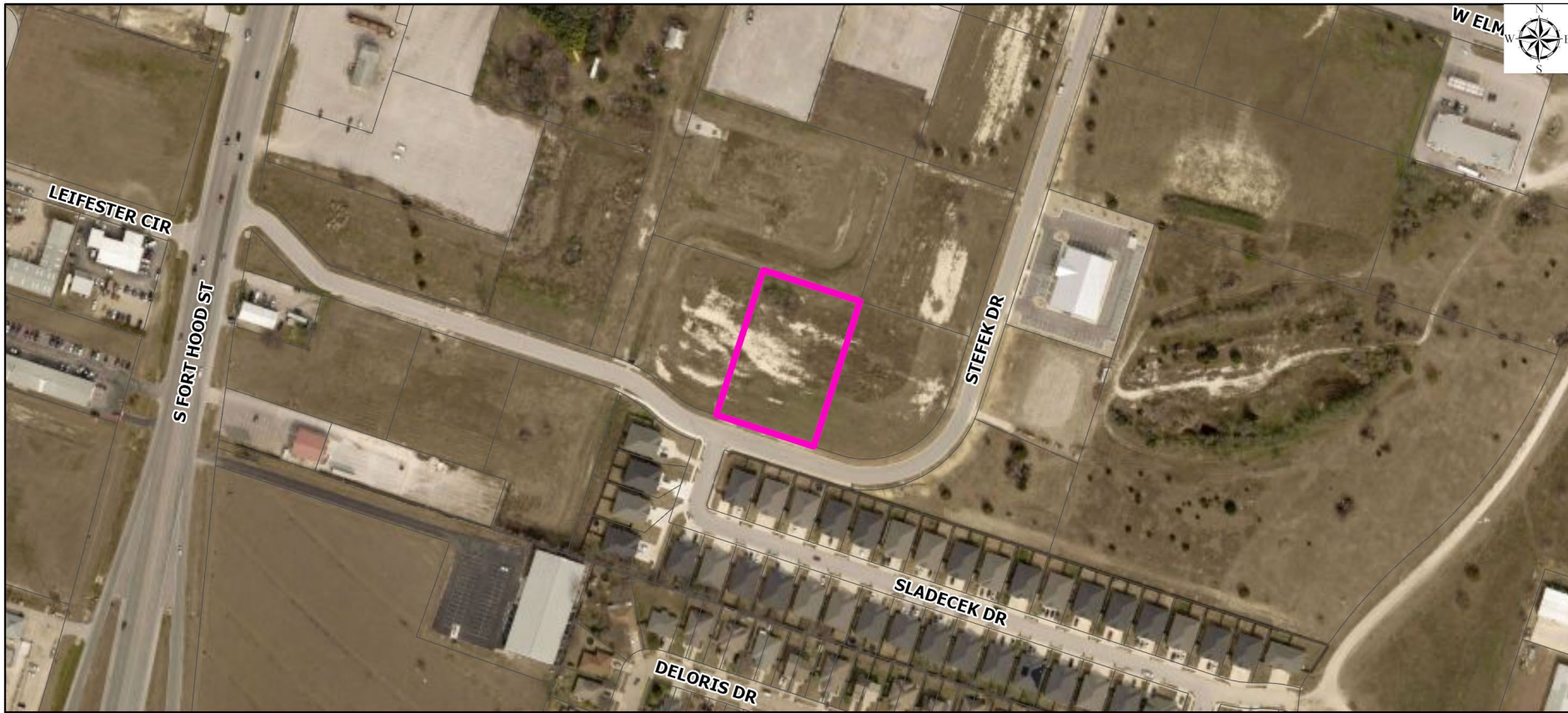
B-5 TO B-C-1

Legend

— Major Roads

City Limits

★ Zoning Case Location



AERIAL MAP

Council District: 3

0 100 200
Feet

Subject Property Legal Description: STEFEK TRUST ADDITION PHASE FOUR, BLOCK 002, LOT 0004, 1.357AC

Zoning Case 2022-50

B-5 TO B-C-1

Legend

 Citylimits

 Zoning Case

239

Case #Z22-50: “B-5” to “B-C-1”

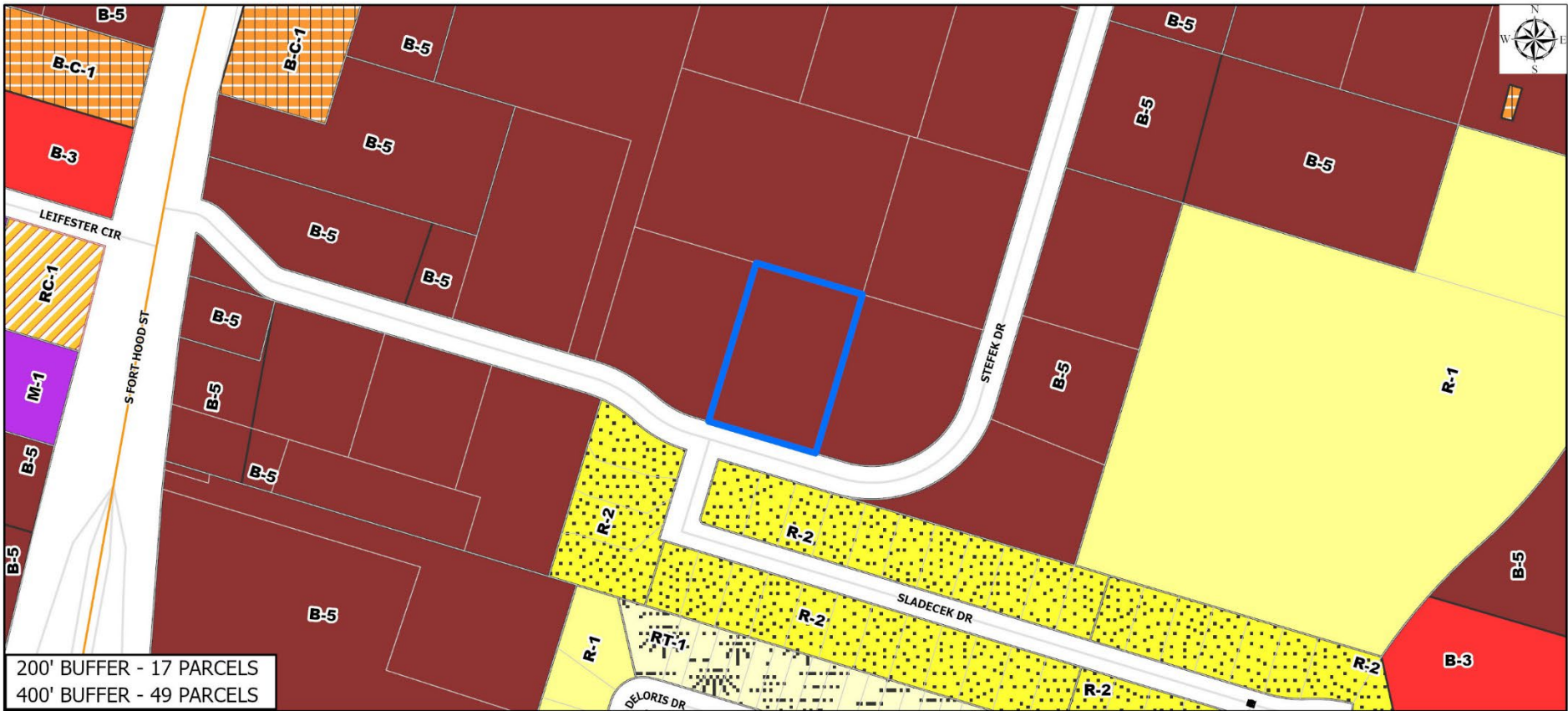
5

- If approved, the applicant intends to develop a sports bar on the property.

Chapter 31 Compliance

6

- ❑ Located within a designated Adult Oriented Business (AOB) area which allows Adult Oriented Businesses (AOBs) by-right in this location.
- ❑ Examples of AOBs permitted in this area include adult cabarets, adult encounter parlors, and adult lounges, as defined in Killeen Code of Ordinances Sec. 31-551(1).



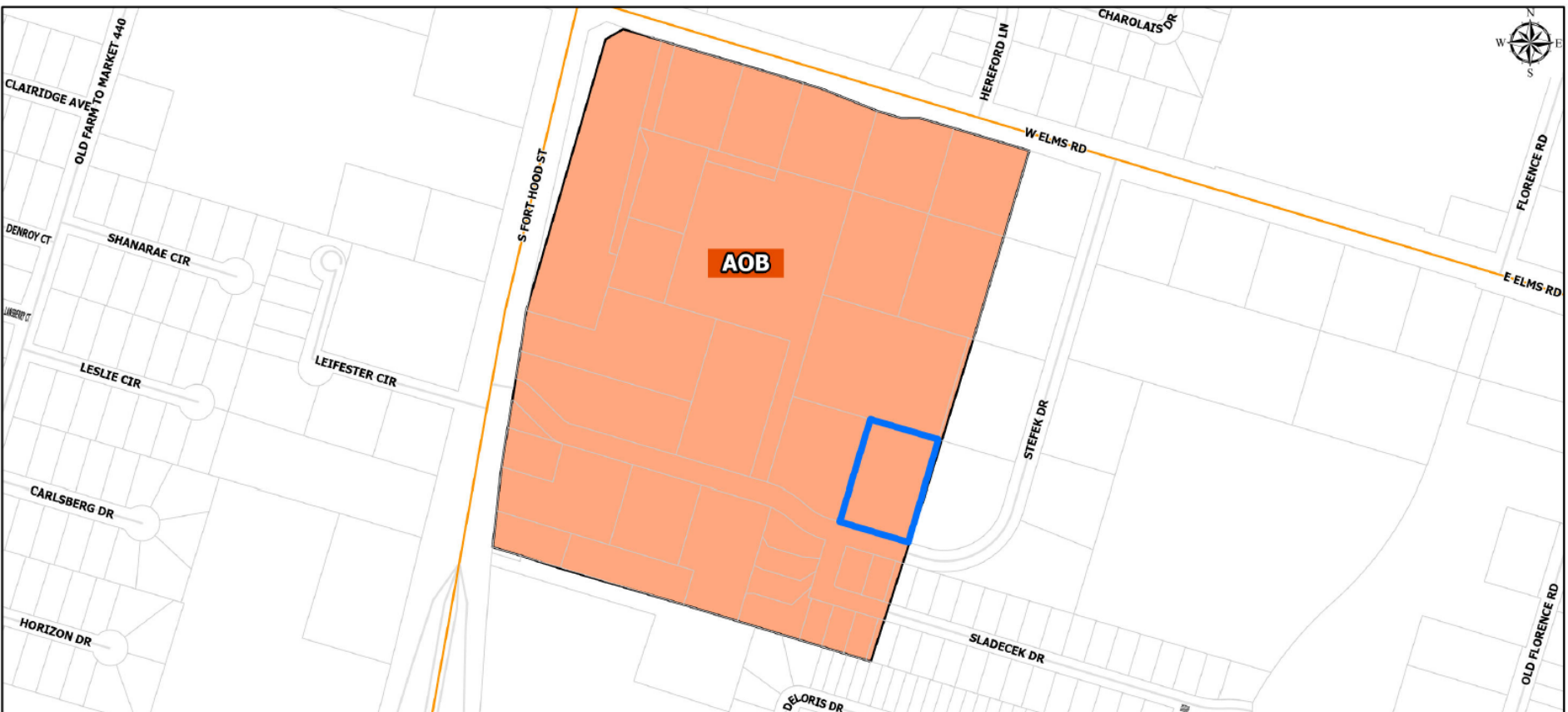
ZONING MAP
Council District: 3

0 100 200
Feet

Subject Property Legal Description: STEFEK TRUST ADDITION PHASE FOUR, BLOCK 002, LOT 0004, 1.357AC

Zoning Case 2022-50

B-5 TO B-C-1



AOB MAP
Council District: 3
0 150 300
Feet
Subject Property Legal Description: STEFEK TRUST ADDITION PHASE FOUR, BLOCK 002, LOT 0004, 1.357AC

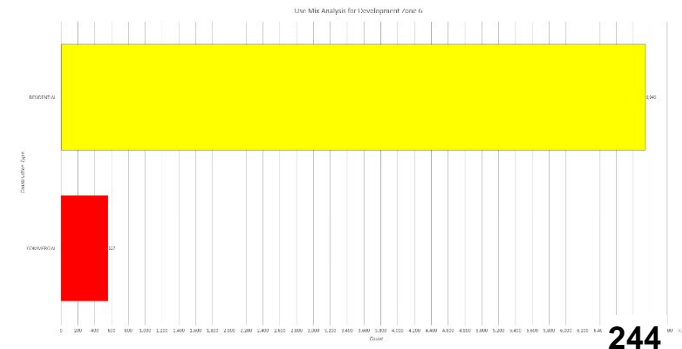
Zoning Case 2022-50

B-5 TO B-C-1

Comprehensive Plan Analysis

9

- 'Neighborhood Infill' Growth Sector
- Killeen Development Zone #6
- Approximately 7% non-residential and 93% residential uses of current land use mix.
- Approximately 10% agricultural, 33% non-residential zoning districts and 57% residential zoning districts
- 'Regional Commercial' promotes a use mix of up to 100% non-residential and 50% residential uses.



Comprehensive Plan Analysis

10

- The request is consistent with the 'Regional Commercial' designation of the Future Land Use Map (FLUM).
- The request supports or furthers the implementation of the following Comprehensive Plan recommendations:
 - ▣ **LU1** – Use place types and complete neighborhoods as building blocks
 - ▣ **NH4** – Build complete neighborhoods

*Land Use & Growth Management (LU) and Neighborhoods (NH)
Recommendations

Comprehensive Plan Analysis

11

- This request may provide more entertainment options and may contribute to the sense of place, connectedness, and quality of life for residents. In addition, the Comprehensive Plan highlights the need for third places for gathering such as bars or places where people can interact.

Case #Z22-50: “B-5” to “B-C-1”

12

View of the subject property looking north:



Case #Z22-50: “B-5” to “B-C-1”

13

View of the surrounding property to the east:



Case #Z22-50: “B-5” to “B-C-1”

14

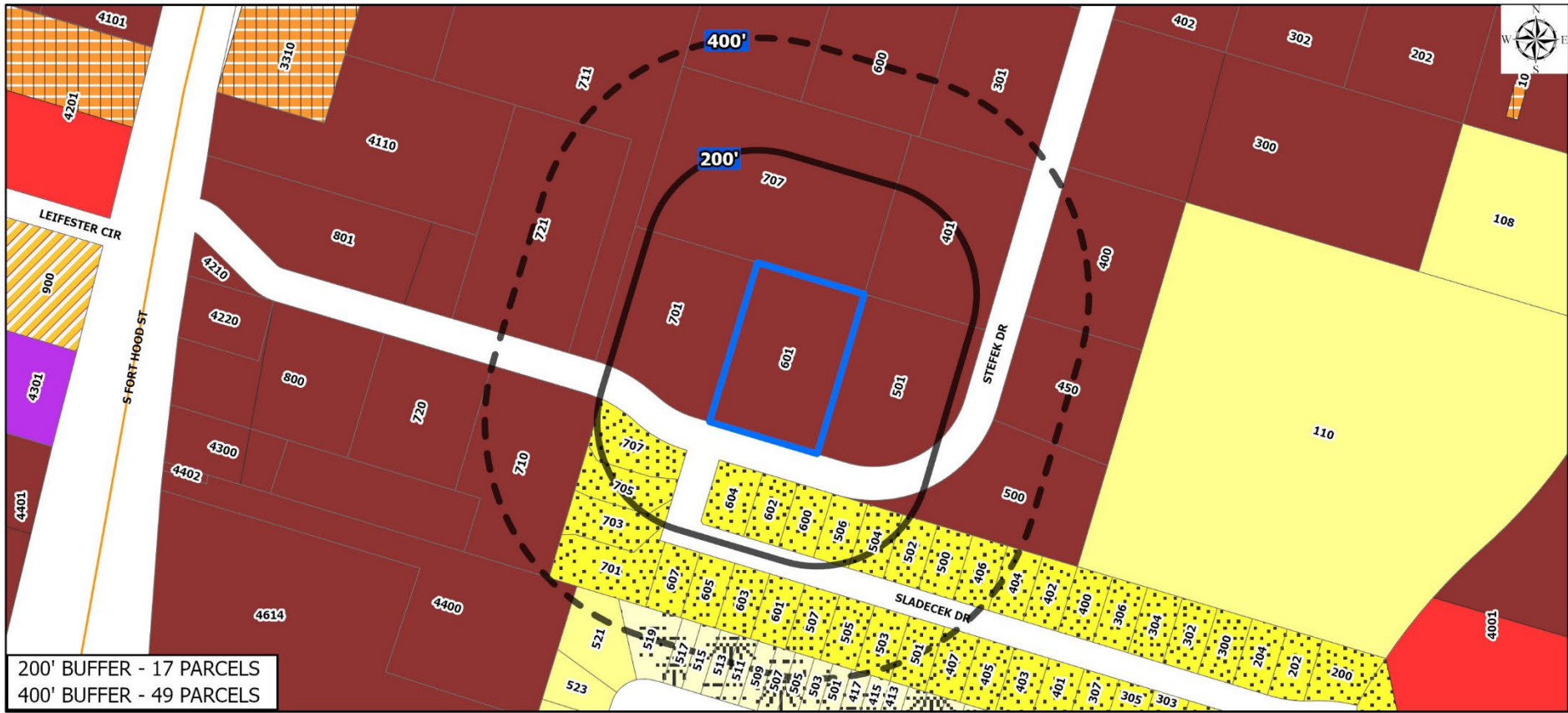
View of the surrounding property to the south:



Public Notification

15

- Staff notified forty-eight (48) surrounding property owners regarding this request.
- Of those notified, thirty-two (32) reside outside of the 200-foot notification boundary required by the State, and within the 400-foot notification boundary required by Council; and sixteen (16) property owners reside outside of Killeen.
- To date, staff has received nine (9) written responses from one (1) property owner in support of this request.



NOTIFICATION MAP

Council District: 3

0 100 200
Feet

Subject Property Legal Description: STEFEK TRUST ADDITION PHASE FOUR, BLOCK 002, LOT 0004, 1.357AC

Zoning Case 2022-50 B-5 TO B-C-1

Legend

Current Zoning

B-3

B-5

RC-1

B-C-1

M-1

R-1

R-2

RT-1

Alternatives

17

- ❑ The City Council has two (2) alternatives. The Council may:
 - ❑ Disapprove the applicant's request; or
 - ❑ Approve the applicant's request as presented.

Staff Recommendation

18

- Staff finds that the request is consistent with the policies and principles of the 2022 Comprehensive Plan as indicated in the Comprehensive Plan Analysis.
- Staff recommends approval of the applicant's request for "B-C-1" (General Business and Alcohol Sales District).

Commission Recommendation

19

- At their regular meeting on November 7, 2022, the Planning and Zoning Commission recommended approval of the applicant's request by a vote of 5 to 1 with Commissioner Sabree in opposition due to personal reasons.



City of Killeen

Staff Report

File Number: PH-22-087

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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HOLD a public hearing and consider an ordinance requested by Mike Russell, on behalf of ATMOS Energy Corporation (**Case #222-51**) to rezone Lot 1, Block 1, and (Southwest Triangle) Fairway Park 2nd Unit from "R-2" (Two-Family Residential District) to "R-2" (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility. The property is locally addressed as 1701 Fairview Drive, Killeen, Texas.

DATE: December 6, 2022.

TO: Kent Cagle, City Manager.

FROM: Edwin Revell, Executive Director of Development Services.

SUBJECT: ZONING CASE #22-51: "R-2" (TWO-FAMILY RESIDENTIAL DISTRICT) TO "R-2" (TWO-FAMILY RESIDENTIAL DISTRICT) WITH A CONDITIONAL USE PERMIT (CUP)

BACKGROUND AND FINDINGS:

Property Information:

Property Owner: ATMOS Energy Corporation

Agent: Mike Russell

Current Zoning: "R-2" (Two-Family Residential District)

Proposed Zoning: "R-2" (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility

Current FLUM Designation: 'Neighborhood Commercial' (NC)

Summary of Request:

Mike Russell, on behalf of ATMOS Energy Corporation, has submitted a request to rezone Lot 1, Block 1, and (Southwest Triangle) Fairway Park 2nd Unit from "R-2" (Two-Family Residential District) to "R-2" (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility. If approved, the applicant intends to develop an above ground pipeline station facility and expand the existing ATMOS Energy facility located to the south.

Killeen Code of Ordinances Chapter 31 Compliance:

Conditional Use Permits (CUPs) are subject to Killeen Code of Ordinances Sec. 31-456. Per Sec. 31-456(c)(3), regardless of whether such conditions have been recommended by the planning and zoning commission, the city council may establish such conditions of approval as are reasonably necessary to ensure compatibility with surrounding uses and to preserve the public health, safety, and welfare.

Zoning/Plat Case History:

The property is currently zoned as "R-2" (Two-Family Residential District). However, staff was unable to determine the date of rezoning. The property was platted as Fairway Park 2nd Unit, Block 1, Lot Pt 1, and SW triangle.

Character of the Area:

North: Existing two-family homes zoned "R-2" (Two-Family Residential District)

South: Existing two-family homes zoned "R-2" (Two-Family Residential District)

East: Existing two-family homes zoned "R-2" (Two-Family Residential District)

West: Outside the city limits (Fort Hood)

Future Land Use Map Analysis:

This property is located within 'Infill & Enhance' area on the Growth Sector Map and designated as 'Traditional Neighborhood' on the Future Land Use Map (FLUM) of the 2022 Comprehensive Plan.

The 'Traditional Neighborhood' place type recreates the pre-suburban development patterns with smaller lots and setbacks, diverse housing typologies, and a mix of uses which include residential uses such as townhouses and small plex (2-6 units), non-residential uses such as small-scale and neighborhood scale commercial development, and mixed-use such as live-work or few overs.

'Infill & Enhance' area include places with existing developments and full services where additional population, higher intensities in development types and uses is desired. Downtown and its adjacent neighborhoods would benefit from infill and redevelopment.

The request is consistent with the following Big Ideas of the 2022 Comprehensive Plan:

- Resource stewardship and fiscally responsible growth ensure a more prosperous community for the long haul

The applicant intends to demolish the existing residential home and expand the existing above ground pipeline station facilities located on the southern portion of the property. In addition, the applicant has proposed to screen the facility with a masonry wall, and provide landscaping (trees and shrubs) along the frontage, as shown on the site plan exhibit, in order to protect the character of the area.

The Comprehensive Plan calls for managing development of land and capital investments (such as streets, utilities, and drainage) to ensure a more prosperous community for the long haul and similar to the need for these common resident services listed here, staff finds the request is necessary to keep up with demands for natural gas utility in the area.

Neighborhood Analysis:

This property is located within Killeen Development Zone #1 (Exhibit A) and the North Killeen Revitalization Area. The current land use mix (Exhibit B) within this area comprises approximately 16% non-residential uses and 84% residential uses. The zoning districts within the area includes approximately 30% non-residential zoning districts and 70% residential zoning districts; this number excludes special districts such as conditional or special use permits and planned unit developments. The 'Traditional Neighborhood' place type promotes up to 50% non-residential uses and 80%

residential uses.

Water, Sewer and Drainage Services:

Provider: City of Killeen

Within Service Area: Yes

Feasibility Study or Service Commitment: Water, sanitary sewer, and drainage utility service is located within the City of Killeen municipal utility service area and available to the subject tract.

Transportation and Thoroughfare Plan:

Ingress and egress to the property is from Fairview Drive, which is classified as a Local Street on the City of Killeen Thoroughfare Plan. Staff estimates that there will be no trips generated on a daily basis and has determined that a Traffic Impact Analysis is not required for the proposed land use.

Environmental Assessment:

The property is not within any FEMA regulatory Special Flood Hazard Area (SFHA). The property is adjacent to riverine habitat as identified on the National Wetlands Inventory.

Public Notification:

Staff notified thirty-four (34) surrounding property owners regarding this request. Of those property owners notified, sixteen (16) reside outside of the 200-foot notification boundary required by the State, but within the 400-foot notification boundary required by Council; and sixteen (16) reside outside of Killeen.

As of the date of this staff report, staff has received one (1) written response in support of this request.

Staff Findings:

Please see the Future Land Use and Neighborhood Analysis section.

THE ALTERNATIVES CONSIDERED:

The City Council may:

- Disapprove the applicant's CUP request;
- Approve the CUP with conditions; or
- Approve the applicant's CUP request as presented.

Which alternative is recommended? Why?

Staff recommends approval of the "R-2" (Two-Family Residential District) with a CUP (Conditional Use Permit) for an above ground pipeline station facility.

Staff finds the request consistent with the Big Ideas of the 2022 Comprehensive Plan as indicated in the Comprehensive Plan Analysis. Additionally, staff finds the request is a necessary infrastructure

improvement project.

CONFORMITY TO CITY POLICY:

This zoning request conforms to the City's policy and procedures, as detailed in Chapter 31 of the Killeen Code of Ordinances.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

This zoning request does not involve the expenditure of City funds.

Is this a one-time or recurring expenditure?

This is not applicable.

Is this expenditure budgeted?

This is not applicable.

If not, where will the money come from?

This is not applicable.

Is there a sufficient amount in the budgeted line-item for this expenditure?

This is not applicable.

RECOMMENDATION:

At their regular meeting on November 7, 2022, the Planning and Zoning Commission recommended approval of the applicant's request by a vote of 6 to 0.

DEPARTMENTAL CLEARANCES:

This item has been reviewed by the Planning and Legal staff.

ATTACHED SUPPORTING DOCUMENTS:

Exhibit
Maps
Site Photos
Site Plan
Response
Minutes
Ordinance
Considerations

Exhibits

Case #Z22-51: "R-2" to "R-2" w/ CUP

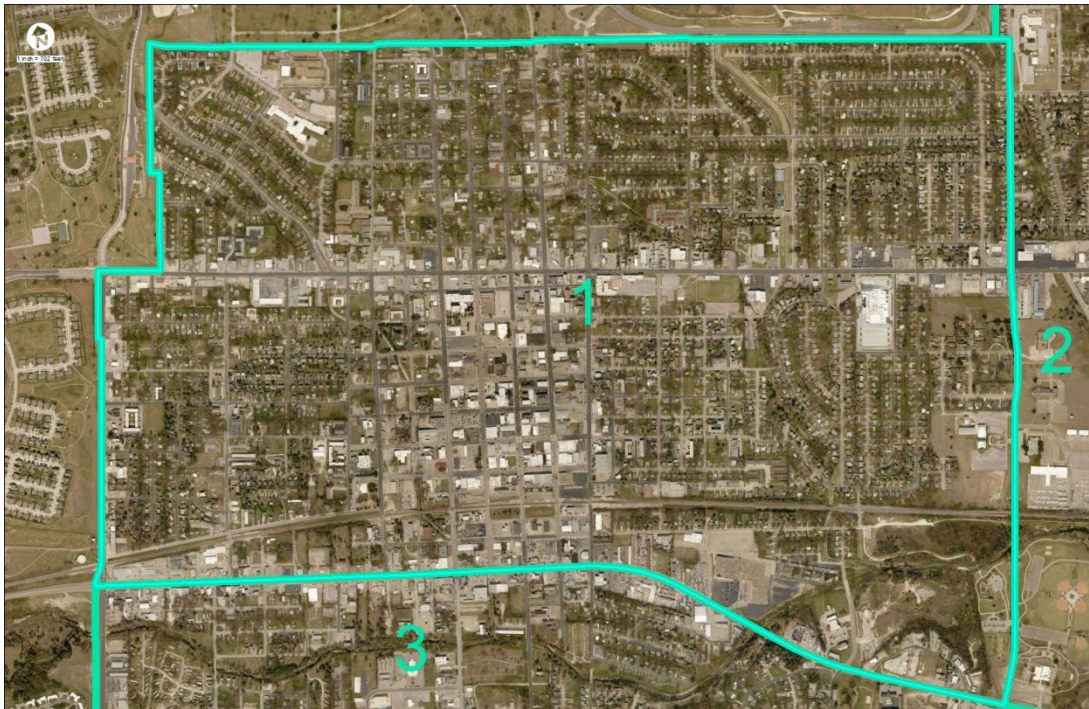


Exhibit A. Killeen Development Zone #1 boundary map.

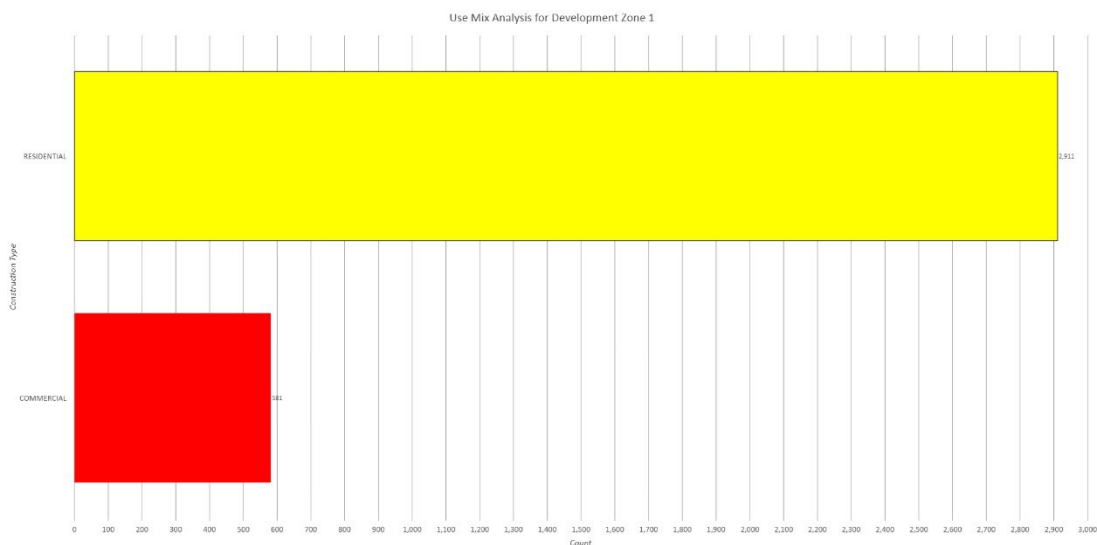
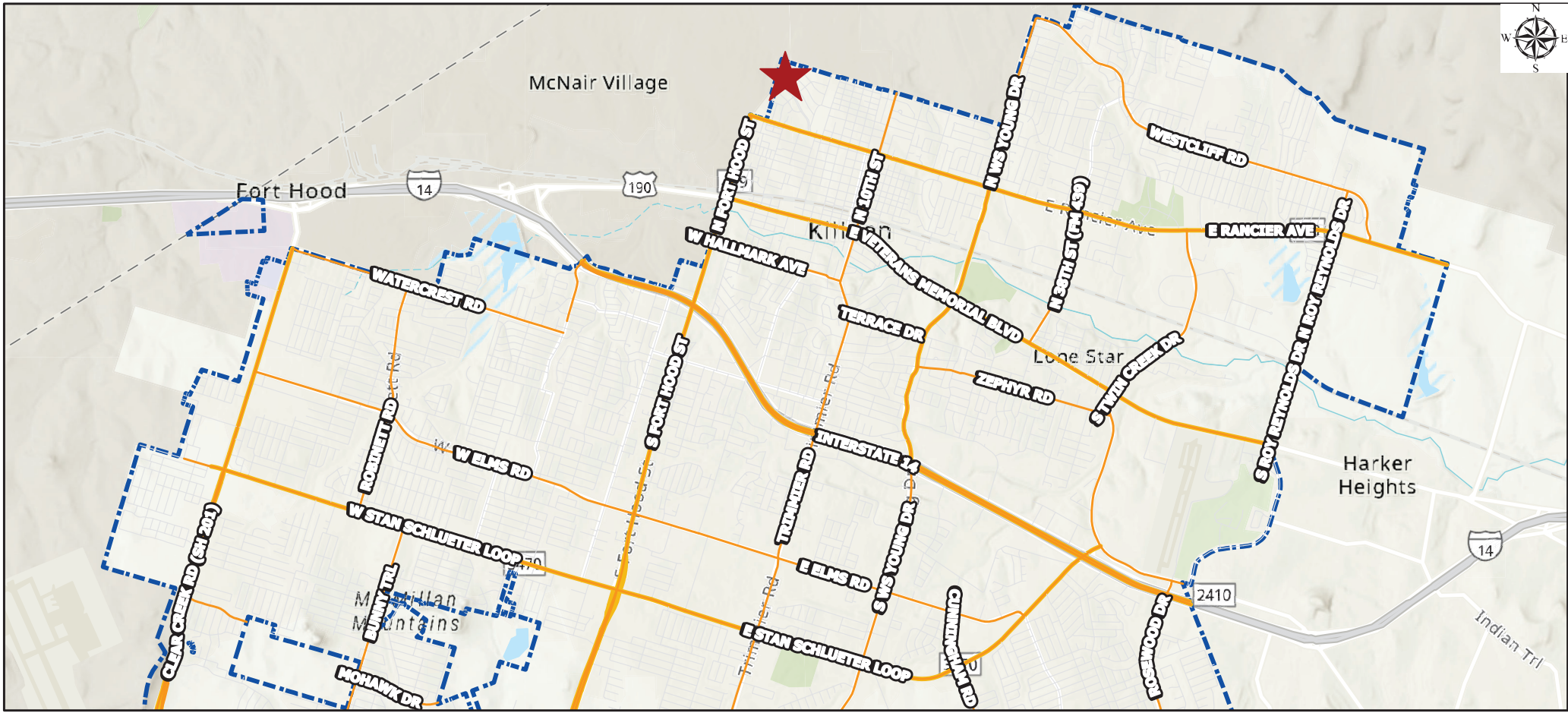


Exhibit B. Use Mix for Killeen Development Zone #1.



LOCATION MAP

Council District: 1

0 1 2 Miles

Subject Property Legal Description: FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (1, LESS SW TRI) AND FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (SW TRI OF 1; 87.74' X 52.25' X 81.77'), ACRES 0.05

Zoning Case 2022-51

R-2 TO R-2 W/ CUP

Legend

- Major Roads
- City Limits
- Zoning Case Location



AERIAL MAP

Council District: 1

0 100 200
Feet

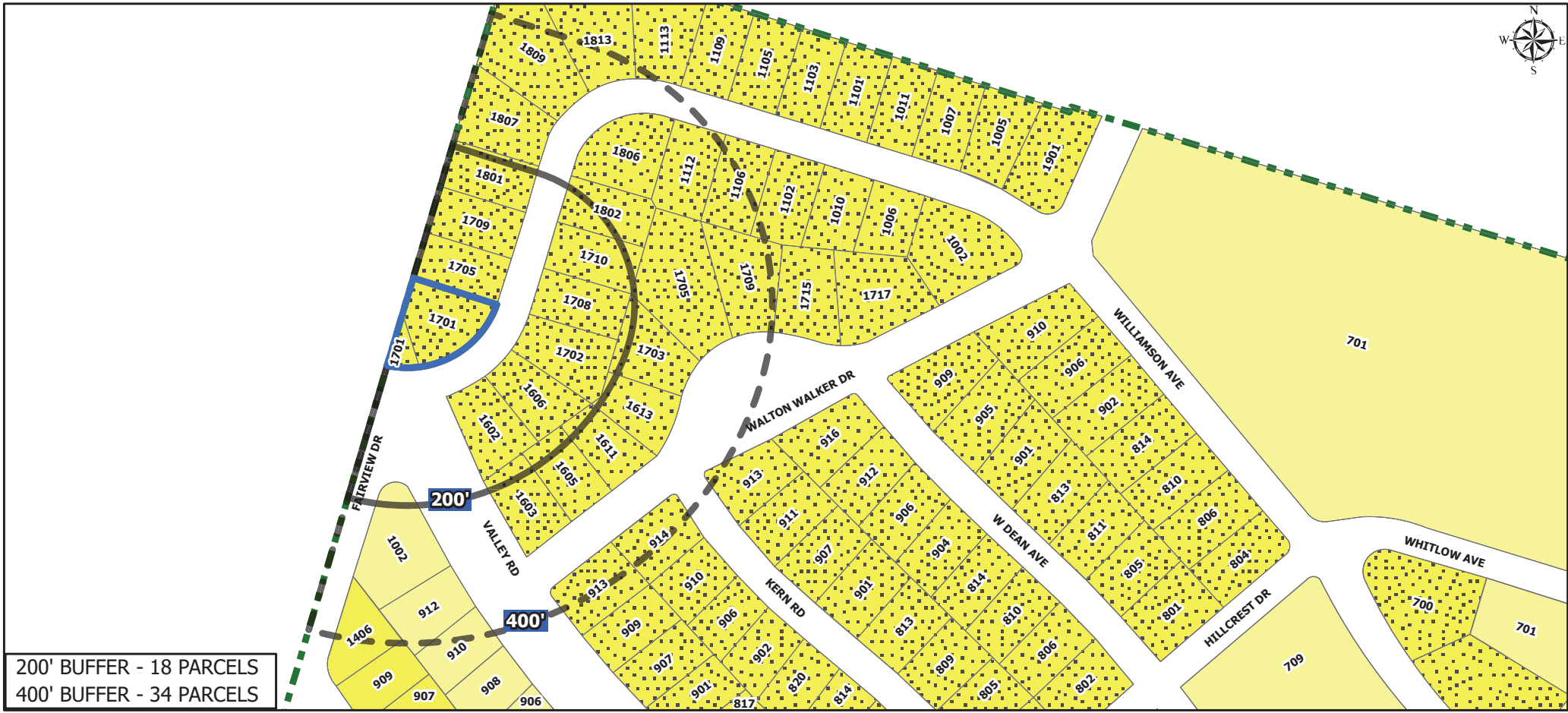
Subject Property Legal Description: FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (1, LESS SW TRI) AND FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (SW TRI OF 1; 87.74' X 52.25' X 81.77'), ACRES 0.05

Zoning Case 2022-51

R-2 TO R-2 W/ CUP

Legend

- Citylimits
- Zoning Case



NOTIFICATION MAP
Council District: 1

0 100 200
Feet

Subject Property Legal Description: FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (1, LESS SW TRI) AND FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (SW TRI OF 1; 87.74' X 52.25' X 81.77'), ACRES 0.05

Zoning Case 2022-51

R-2 TO R-2 W/ CUP

Legend

Current Zoning	R-2
R-1	R-3

SITE PHOTOS

Case #Z22-51: "R-2" to "R-2" w/ CUP



View of the subject property looking west:



SITE PHOTOS

Case #Z22-51: "R-2" to "R-2" w/ CUP



View of the surrounding property to the east:



View of the surrounding property to the north:



CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	130.00'	151.37'	142.97'	N 51°55'25" E	66°42'56"
C2	130.00'	51.82'	51.48'	S 83°23'58" E	22°50'18"

UTILITY EASEMENTS NOTE AS PER FAIRWAY PARK 2ND EXTENSION
RECORDED IN CABINET A, SLIDE 122-A. ARE AS INDICATED BELOW:

UTILITY EASEMENTS ARE
8' WIDE AT THE REAR OF LOTS
5' WIDE AT THE SIDE OF LOTS
UNLESS OTHERWISE INDICATED

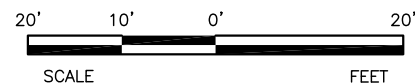
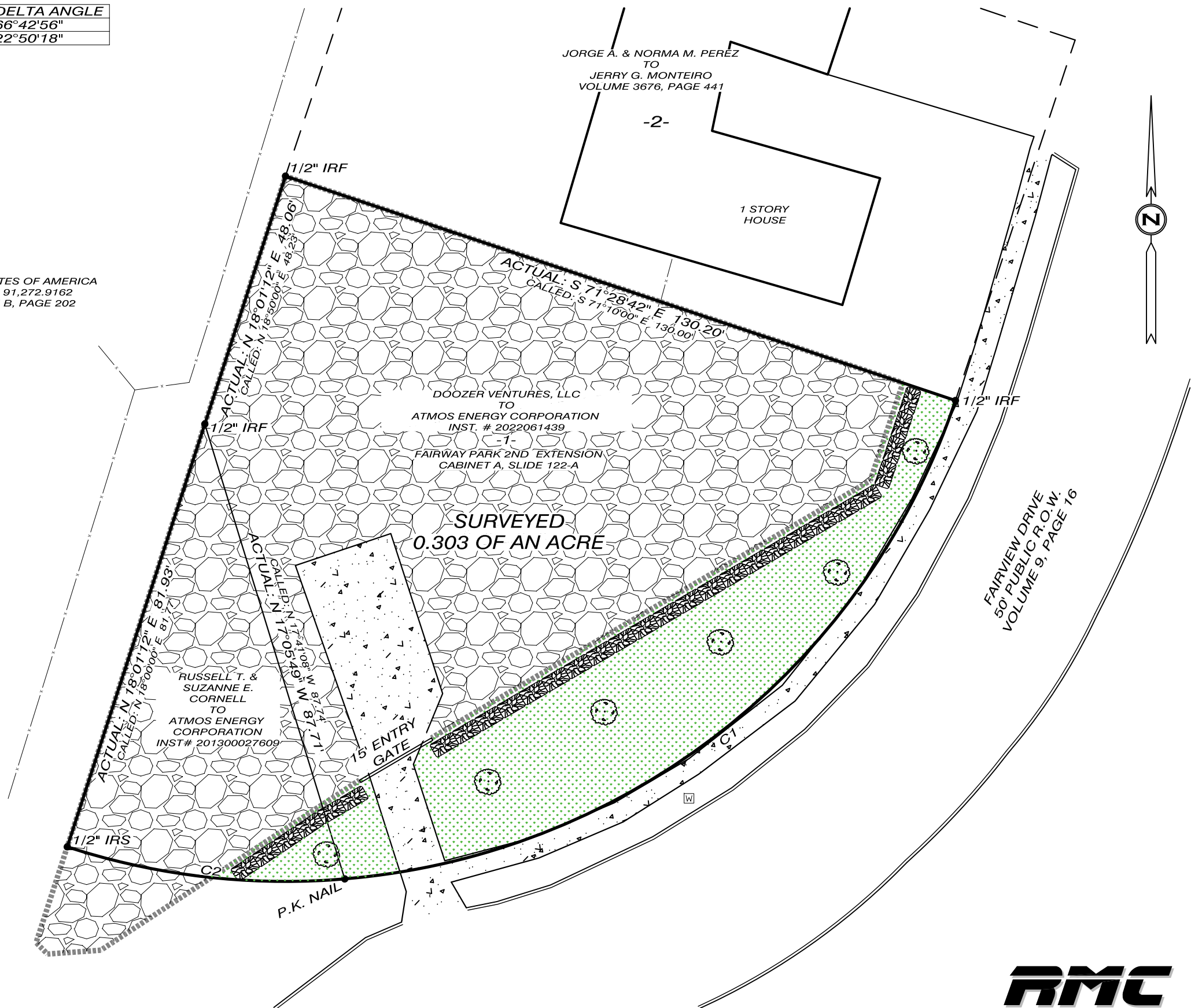
EXAMPLE OF FENCE AND GATE STYLE



UNITED STATES OF AMERICA
CALLED 91,272.9162
VOLUME B, PAGE 202

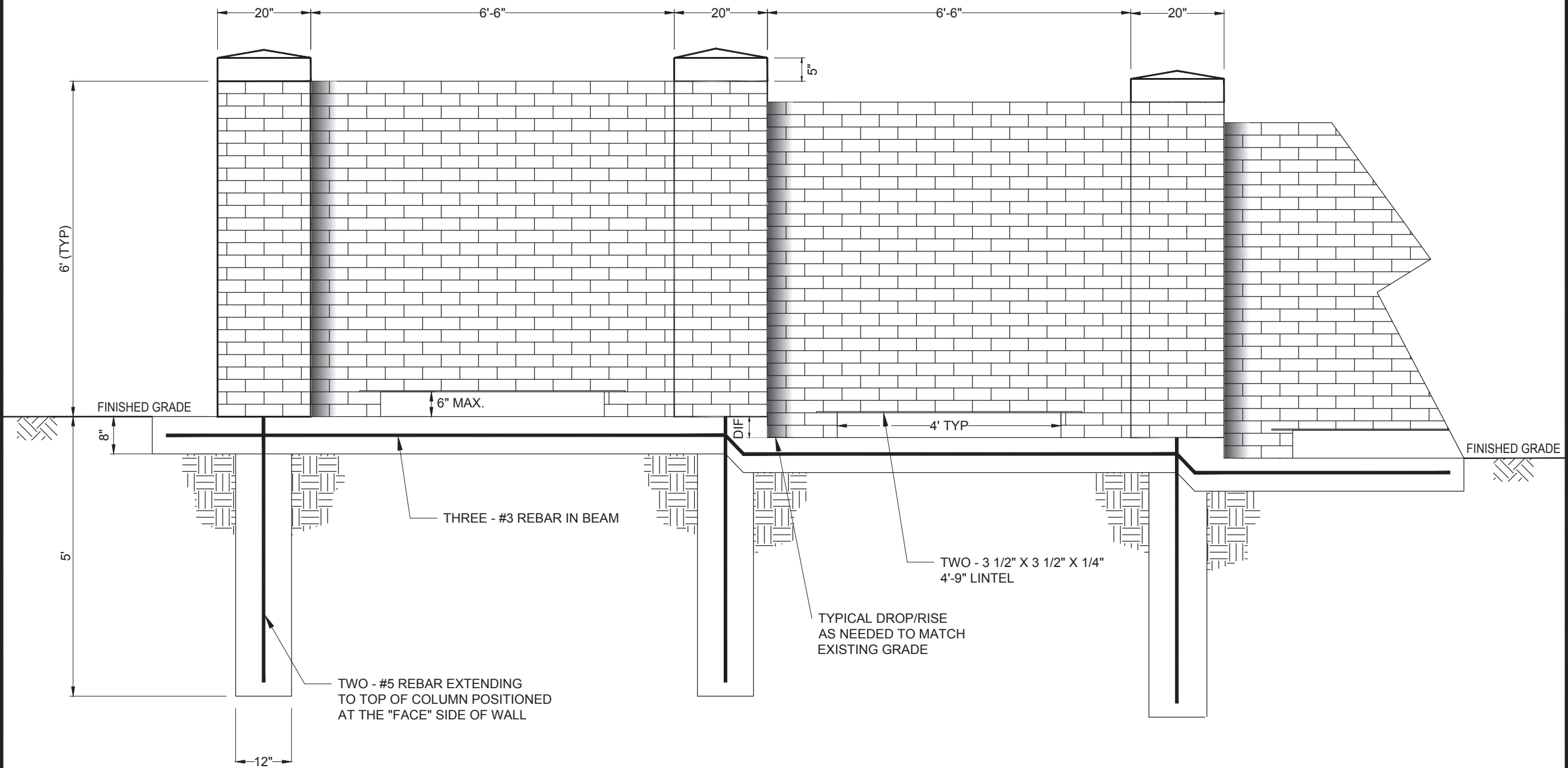
LEGEND	DESCRIPTION	SPACING	# OF
	1 1/2" DBH SHADE TREE	25'	6
	3 GALLON SHRUB	2.5'	58
	BERMUDA GRASS	NA	2,877 SQ. FT.
	GRAVEL	NA	9,808 SQ. FT.

LEGEND	
	WATER METER
	PROP. STONE WALL
	TRACT LINES
	SUBJECT TRACT LINES
	CONCRETE CURB
	CONCRETE AREA




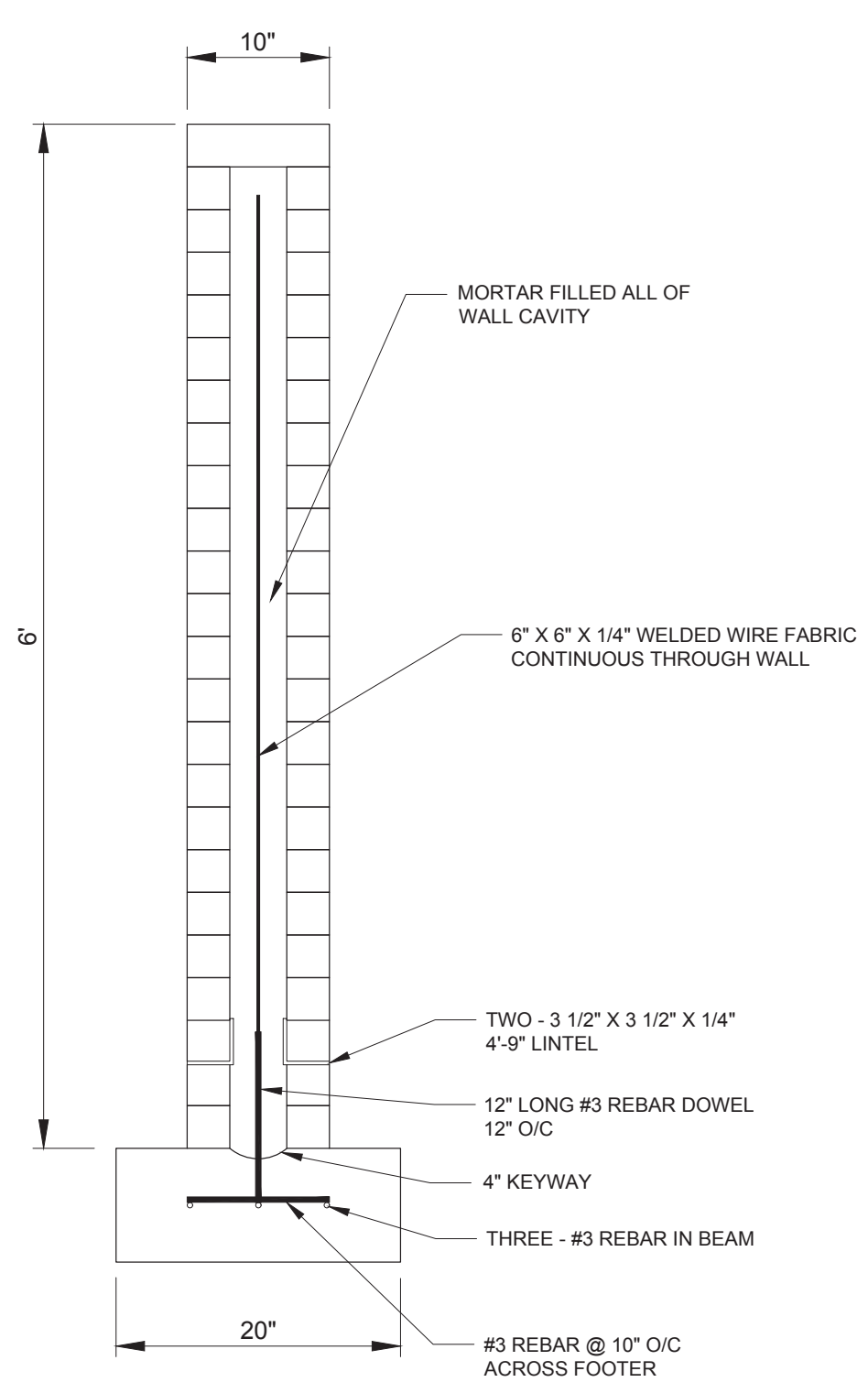
RMC
SURVEYING

13621 HWY. 110 S
TYLER, TX. 75707
(903) 939-8860
FIRM ID 10122800

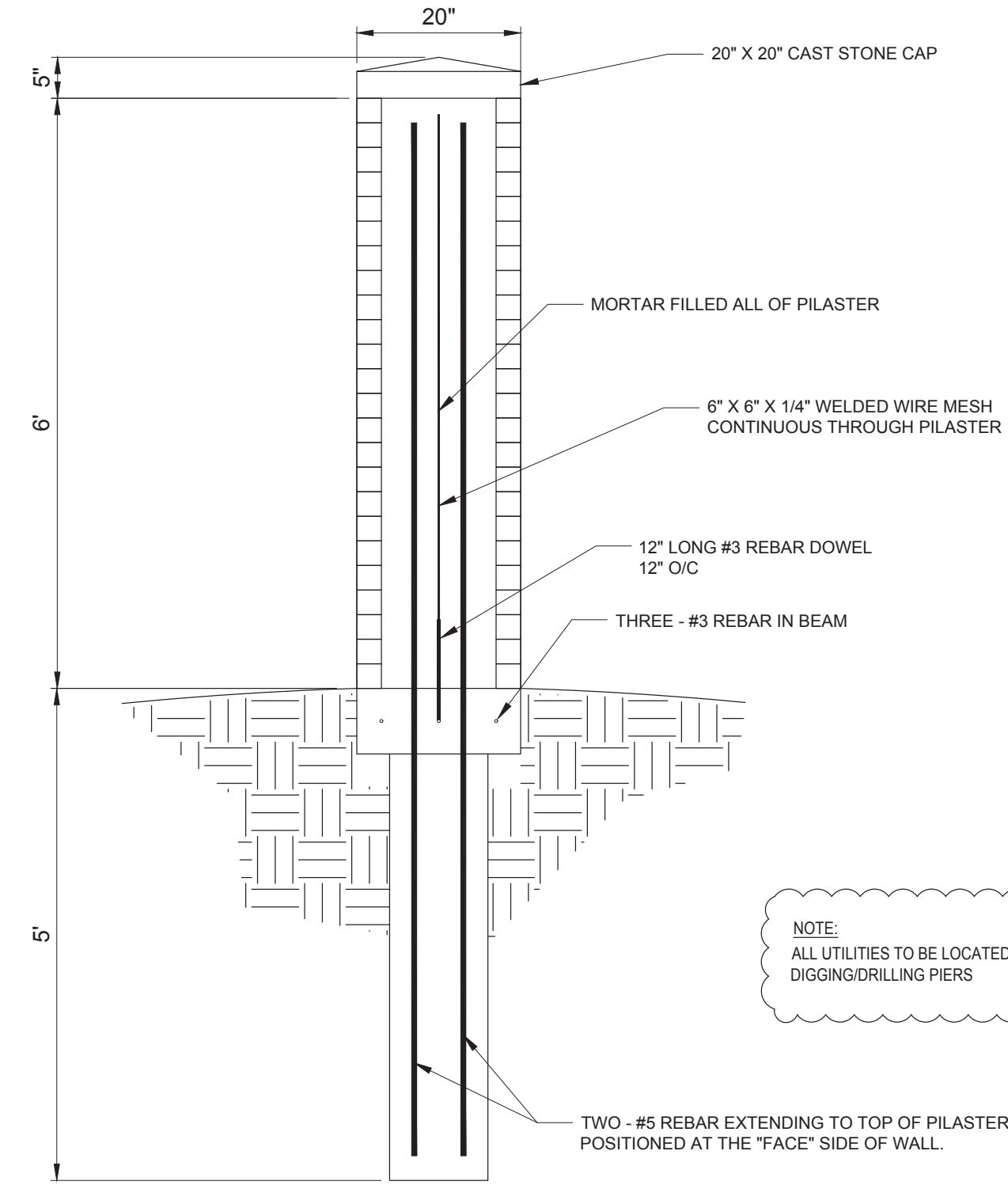


ELEVATION
SCALE 3/4"=1' 0"

-	-	-	-	-	-	--/--	DESIGNED BY: P. TUCKER		7/1/17	WALL DROP PANEL OR MASONRY TYPICAL ELEVATION		
-	-	-	-	-	-	--/--	DRAWN BY: R. CURLEE		7/5/17			
-	-	-	-	-	-	--/--	CHECKED BY: P. TUCKER		7/5/17			
-	-	-	-	-	-	--/--	APPROVED			ENGINEERING GUIDELINE		
-	-	-	-	-	-	--/--						
-	-	-	-	-	-	--/--	APPROVED BY:		ENGR.			
-	-	-	-	-	-	--/--	APPROVED BY:		MEAS.		A.I.N.	
REF. DWG.	TITLE	REV. BY:	APR. BY:	REVISION DESCRIPTION	REPLACES DRAWING	DATE	APPROVED BY: P. TUCKER		STDS.	7/5/17	DWG. NO. STD. 11-104-00	SHT. -02



SECTION A
SCALE 1-1/2"=1'-0"



SECTION B
SCALE 1"=1'-0"

NOTE:
ALL UTILITIES TO BE LOCATED PRIOR TO
DIGGING/DRILLING PIERS

-	-	-	-	-	-	--/--/--	DESIGNED BY: P. TUCKER		7/1/17	WALL DROP PANEL OR MASONRY SECTIONS			
-	-	-	-	-	-	--/--/--	DRAWN BY: R. CURLEE		7/5/17				
-	-	-	-	-	-	--/--/--	CHECKED BY: P. TUCKER		7/5/17				
-	-	-	-	-	-	--/--/--	APPROVED			ENGINEERING GUIDELINE			
-	-	-	-	-	-	--/--/--							
-	-	-	-	-	-	--/--/--	APPROVED BY:		ENGR.				
-	-	-	-	-	-	--/--/--	APPROVED BY:		MEAS.		A.I.N.	DSWR#:	
REF. DWG.	TITLE	REV. BY:	APR. BY:	REVISION DESCRIPTION		REPLACES DRAWING	DATE	APPROVED BY: P. TUCKER		STDS.	7/5/17	DWG. NO. STD. 11-104-00	SHT. -03



Notes:

1. CONSTRUCTION SHALL MEET OR EXCEED LOCAL ORDINANCES
2. EXECUTION

2.1. SITE EXAMINATION

2.1.1. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT PROPERTY LINES AND OTHER BOUNDARIES OF WORK ARE CLEARLY ESTABLISHED PRIOR TO THE BEGINNING OF WORK.

2.1.2. A FULL SURVEY OF PROPOSED WALL INCLUDING EXISTING PIPELINE AND FACILITIES WILL BE PROVIDED BY ATMOS OR THE GENERAL CONTRACTOR.

2.1.3. CONTRACTOR WILL NOT BEGIN WORK UNTIL NOTIFIED BY EITHER ATMOS OR THE GENERAL CONTRACTOR THAT CONSTRUCTION CAN COMMENCE.

2.1.4. ALL UTILITIES TO BE LOCATED PRIOR TO DIGGING/DRILLING PIERS.
3. CENTER PIPE BETWEEN PIERS
4. ALL PIPE SHALL BE LOCATED AND EXPOSED PRIOR TO PIER CONSTRUCTION
5. F'C = 3500 PSI @ 28 DAYS
6. REBAR = A615, GR. 60
7. STRUCTURAL STEEL TO BE GR. 50
8. PROPER SOIL COMPACTION ASSUMED UNDER FOOTER
9. PIERS TO BE POURED NEAT AGAINST SHAFT EXCAVATION
10. MORTAR TO BE 1800 PSI (MIN.) @ 28 DAYS
11. POUR PIERS AND FOOTER MONOLITHICALLY
12. #3 DOWELS FROM THE FOOTER TO LAP 6 x 6-1/4" WWF IN WALL CORE
13. 6 x 6-1/4" WWF TO BE CONT. THRU PILASTER
14. LAP SPLICES -

14.1 REBAR - 36 DIA'S

14.2 WWF - 1-1/2 SQUARES
15. GATE'S LOCATIONS WILL MOST LIKELY BE DETERMINED BY CITY/ORDINANCES
16. CONTRACTOR TO FIELD VERIFY DIMENSIONS

-	-	-	-	-	-	--/--/--	DESIGNED BY: P. TUCKER	7/1/17	WALL DROP PANEL OR MASONRY NOTES	
-	-	-	-	-	-	--/--/--	DRAWN BY: R. CURLEE	7/5/17		
-	-	-	-	-	-	--/--/--	CHECKED BY: P. TUCKER	7/5/17		
-	-	-	-	-	-	--/--/--	APPROVED		ENGINEERING GUIDELINE	
-	-	-	-	-	-	--/--/--				
-	-	-	-	-	-	--/--/--	APPROVED BY:	ENGR.		
-	-	-	-	-	-	--/--/--	APPROVED BY:	MEAS.		
REF. DWG.	TITLE	REV. BY:	APR. BY:	REVISION DESCRIPTION	REPLACES DRAWING	DATE	APPROVED BY: P. TUCKER	STDS.	7/5/17	DWG. NO. STD. 11-104-00 SHT. -04



CUT HERE	
YOUR NAME: Kristin Smith	PHONE NUMBER: 254-392-2037
CURRENT ADDRESS: 2601 Atkinson Ave, Killeen, TX 76543	
ADDRESS OF PROPERTY OWNED: " "	
COMMENTS: Approved	
RECEIVED	
NOV 07 2022	
PLANNING	
SIGNATURE: Kristin Smith	REQUEST: "R-2" to "R-2" w/CUP SPO #Z22-51/ 17

P.O. BOX 1329, KILLEEN, TEXAS 76540-1329, 254-501-7631, FAX 254-501-7628
 WWW.KILLEENTEXAS.GOV

**MINUTES
PLANNING AND ZONING COMMISSION MEETING
NOVEMBER 7, 2022**

**CASE #Z22-51
“R-2” to “R-2” with CUP**

HOLD a public hearing and consider a request submitted by Mike Russell on behalf of ATMOS Energy Corporation (**Case #Z22-51**) to rezone Lot 1, Block 1, and (Southwest Triangle) Fairway Park 2nd Unit from “R-2” (Two-Family Residential District) to “R-2” (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility. The property is locally addressed as 1701 Fairview Drive, Killeen, Texas.

Ms. Larsen stated that, if approved, the applicant intends to develop an above ground pipeline station facility and expand the existing ATMOS Energy facility located to the south. She stated that Conditional Use Permits (CUPs) are subject to Killeen Code of Ordinances Sec. 31-456. Ms. Larsen also stated that the applicant intends to demolish the existing residential home and expand the existing above ground pipeline station facilities located on the southern portion of the property. The applicant has proposed to screen the facility with a masonry wall and provide landscaping (trees and shrubs) along the frontage, as shown on the site plan exhibit in order to protect the residential character of the area.

Staff finds that the request is necessary to keep up with demands for natural gas utility in the area.

Staff notified thirty-four (34) surrounding property owners regarding this request. Of those notified, sixteen (16) reside outside of the 200-foot notification boundary required by the State, and within the 400-foot notification boundary required by Council; and sixteen (16) property owners reside outside of Killeen. To date, staff has received one (1) written responses in support of this request.

Ms. Tiffany Dygent, Ms. Natalie Quinn, Mr. Rusty Fischer and Mr. Mike Russell were present to represent the request.

Chairman Minor asked what the size of the pipeline is in this location. Ms. Dygent stated that there is currently a 10-inch pipeline, which will be replaced with a 20-inch pipeline.

Chairman Minor opened the public hearing.

With no one wishing to speak, the public hearing was closed.

Vice Chair Gukeisen moved to recommend approval of the applicant’s request. Commissioner Marquez seconded, and the motion passed by a vote of 6 to 0.

ORDINANCE _____

AN ORDINANCE AMENDING THE ZONING ORDINANCE OF THE CITY OF KILLEEN BY CHANGING THE ZONING OF APPROXIMATELY LOT 1, BLOCK 1, AND (SOUTHWEST TRIANGLE), FAIRWAY PARK 2ND UNIT, FROM “R-2” (TWO-FAMILY RESIDENTIAL DISTRICT) TO “R-2” (TWO-FAMILY RESIDENTIAL DISTRICT) WITH A CONDITIONAL USE PERMIT FOR AN ABOVE GROUND PIPELINE STATION FACILITY, PROVIDING A SAVINGS CLAUSE; PROVIDING FOR THE REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Mike Russell, on behalf of ATMOS Energy Corporation, has presented to the City of Killeen, a request for amendment of the zoning ordinance of the City of Killeen by changing the classification of Lot 1, Block 1, and (Southwest Triangle), Fairway Park 2nd Unit, from “R-2” (Two-Family Residential District) to “R-2” (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility, said request having been duly recommended for approval of the “R-2” (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility by the Planning and Zoning Commission of the City of Killeen on the 7th day of November 2022, and due notice of the filing of said request and the date of hearing thereon was given as required by law, and hearing on said request was set for 5:00 p.m. on the 13th day of December 2022, at the City Hall, City of Killeen;

WHEREAS the City Council at said hearing duly considered said request, the action of the Planning and Zoning Commission and the evidence in support thereof, and the City Council being of the majority opinion that the applicant’s zoning request should be approved as recommended by the Planning and Zoning Commission;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

SECTION I. That the zoning classification of Lot 1, Block 1, and (Southwest Triangle), Fairway Park 2nd Unit, from “R-2” (Two-Family Residential District) to “R-2”

(Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility, said request having been duly recommended for approval of the “R-2” (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility as requested by the applicant, for the property locally addressed as 1701 Fairview Drive, Killeen Texas.

SECTION II. That should any section or part of this ordinance be declared unconstitutional or invalid for any reason, it shall not invalidate or impair the validity, force, or effect of any other section or parts of this ordinance.

SECTION III. That all ordinances and resolutions, or parts thereof, in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

SECTION IV. That this ordinance shall take effect immediately upon passage of the ordinance.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this 13th day of December 2022, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, §551.001 et seq.

APPROVED:

Debbie Nash-King, MAYOR

ATTEST:

Laura J. Calcote, CITY SECRETARY

APPROVED AS TO FORM

Holli C. Clements, CITY ATTORNEY
Case #22-51
Ord. #22-____

CONSIDERATIONS

Texas Supreme Court in *Pharr v. Tippitt*, 616 S. W 2nd 173 (Tex 1981) established general guidelines which the Planning and Zoning Commission and City Council should take into consideration when making their respective recommendation and decision on a zoning request.

A. General Factors to Consider:

Is the request in accordance with the comprehensive plan?

Is the request designed to lessen congestion in the streets; secure safety from fire, panic or other dangers; promote health and the general welfare; provide adequate light and air; prevent the overcrowding of land; avoid undue concentration of population; or facilitate the adequate provision of transportation, water, sewers, schools, parks and other public requirements?

What if any, is the nature and degree of an adverse impact upon neighboring lands?

The suitability or unsuitability of the tract for use as presently zoned.

Whether the amendment bears a substantial relationship to the public health, safety, morals or general welfare or protects and preserves historical and cultural places and areas.

Whether there is a substantial public need or purpose for the new zoning.

Whether there have been substantially changed conditions in the neighborhood.

Is the new zoning substantially inconsistent with the zoning of neighboring lands? (Whether the new zoning is more or less restrictive.)

The size of the tract in relation to the affected neighboring lands – is the tract a small tract or isolated tract asking for preferential treatment that differs from that accorded similar surrounding land without first proving changes in conditions?

Any other factors which will substantially affect the health, safety, morals or general welfare.

B. Conditional Use Permit (if applicable)

Whether the use is in harmonious with and adaptable to buildings, structures and use of abutting property and other property in the vicinity of the premises under construction.

C. Conditions to Consider

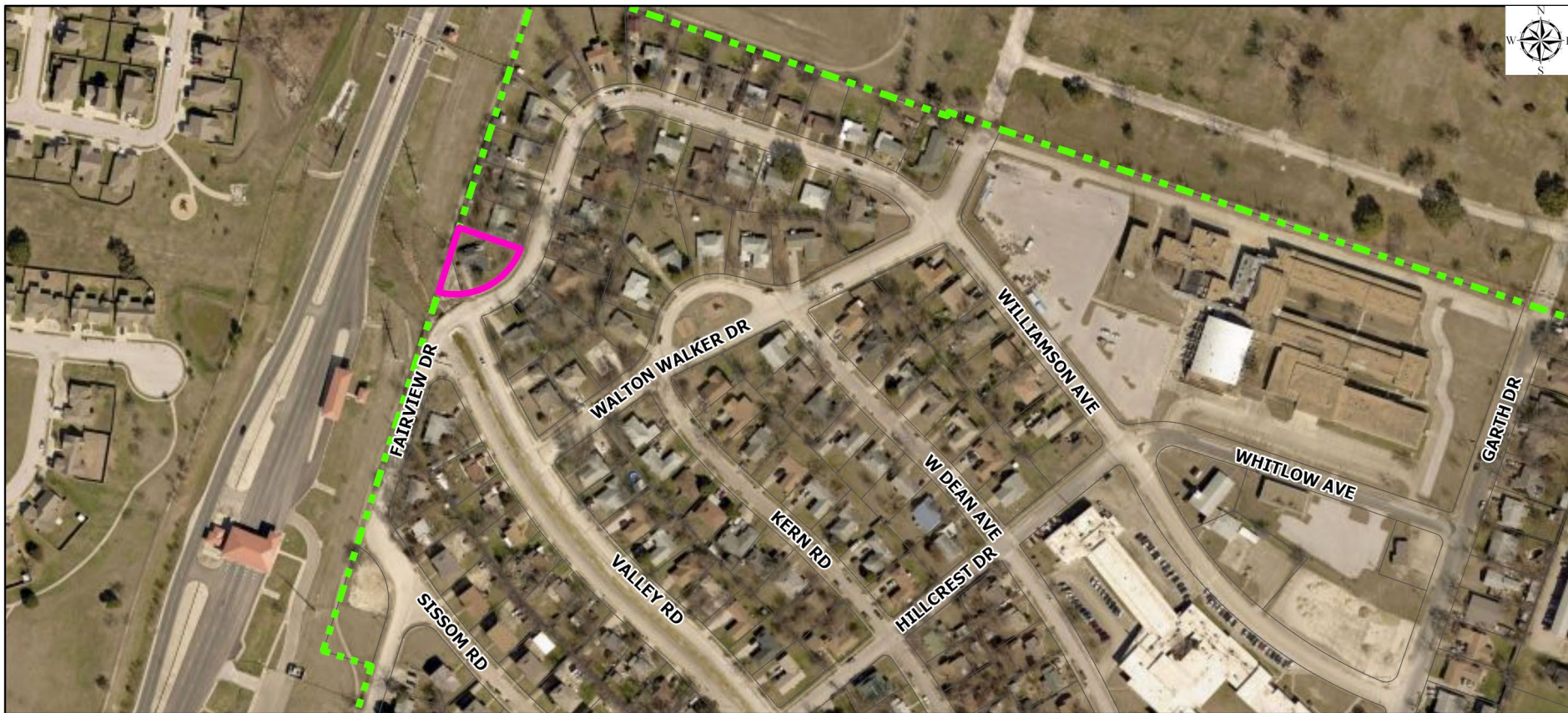
1. Occupation shall be conducted only by members of family living in home.
2. No outside storage or display
3. Cannot change the outside appearance of the dwelling so that it is altered from its residential character.
4. Cannot allow the performance of the business activity to be visible from the street.
5. Cannot use any window display to advertise or call attention to the business.
6. Cannot have any signs
7. No off-street parking or on-street parking of more than two (2) vehicles at any one time for business related customer parking.
8. No retail sales.
9. Length of Permit.

A stylized graphic in light gray showing a rocket launch. A curved line representing the rocket's path starts from the bottom left and curves upwards to the right, ending in a five-pointed star. Two trapezoidal shapes, representing the rocket's body and fins, are positioned along the path.

CASE #Z22-51:
“R-2” TO “R-2” W/ CUP

Case #Z22-51: “R-2” to “R-2” w/ CUP

- ❑ **HOLD** a public hearing and consider an ordinance requested by Mike Russell, on behalf of ATMOS Energy Corporation (**Case #Z22-51**) to rezone Lot 1, Block 1, and (Southwest Triangle) Fairway Park 2nd Unit from “R-2” (Two-Family Residential District) to “R-2” (Two-Family Residential District) with a Conditional Use Permit (CUP) for an above ground pipeline station facility.
- ❑ Locally addressed as 1701 Fairview Drive, Killeen, Texas.



AERIAL MAP

Council District: 1

0 100 200

Feet

Zoning Case 2022-51

R-2 TO R-2 W/ CUP

Legend

 Citylimits

 Zoning Case

Subject Property Legal Description: FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (1, LESS SW

TRI) AND FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (SW TRI OF 1; 87.74' X 52.25' X 81.77'), ACRES 0.05

Case #Z22-51: “R-2” to “R-2” w/ CUP

5

- If approved, the applicant intends to develop an above ground pipeline station facility and expand the existing ATMOS Energy facility located to the south.

Case #Z22-51: “R-2” to “R-2” w/ CUP

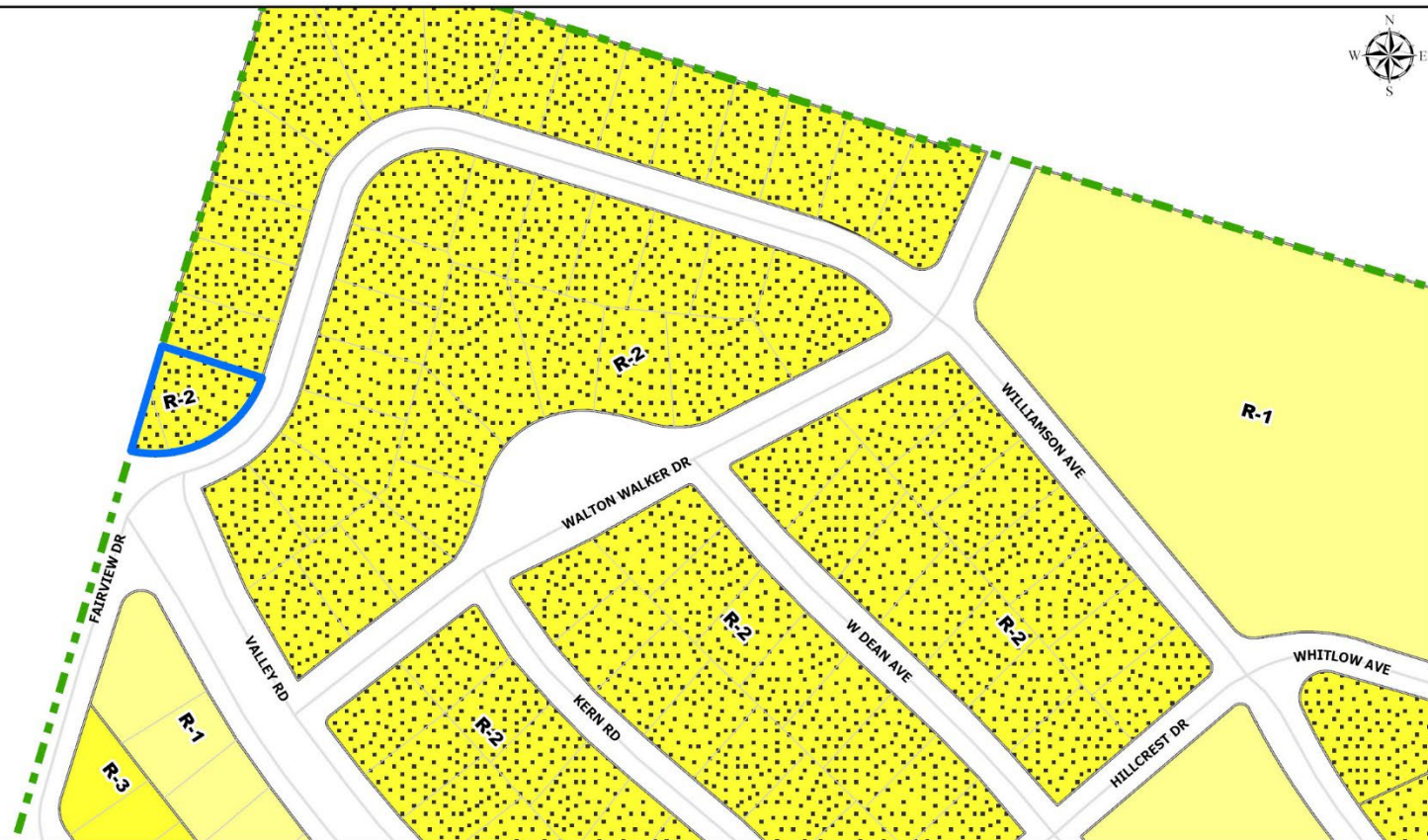
6

- “Utility Substations” are not a permitted use in the “R-2” (Two-Family Residential) zoning district.
- The purpose of the Conditional Use Permit (CUP) is to allow the proposed ATMOS facility in this location without having to change the underlying zoning to “B-2” (Local Retail District).
- The CUP also allows the Council to attach conditions to the site regarding landscaping, screening, etc.

Chapter 31 Compliance

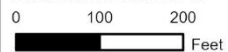
7

- Conditional Use Permits (CUPs) are subject to Killeen Code of Ordinances Sec. 31-456.
- Per Sec. 31-456(c)(3), regardless of whether such conditions have been recommended by the planning and zoning commission, the city council may establish such conditions of approval as are reasonably necessary to ensure compatibility with surrounding uses and to preserve the public health, safety and welfare.



ZONING MAP

Council District: 1



Zoning Case 2022-51

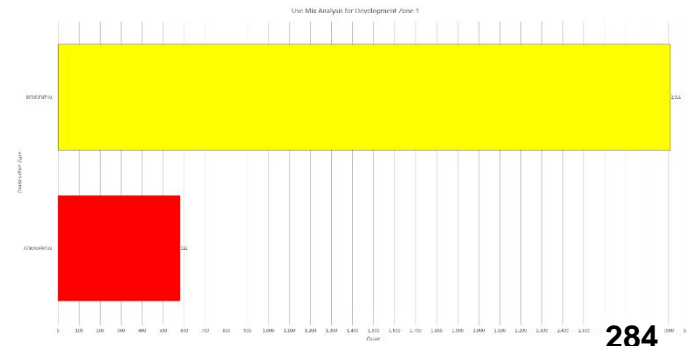
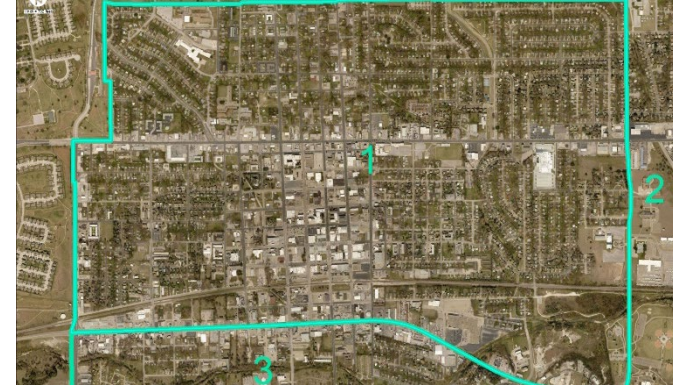
R-2 TO R-2 W/ CUP

Subject Property Legal Description: FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (1, LESS SW TRI) AND FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (SW TRI OF 1; 87.74' X 52.25' X 81.77'), ACRES 0.05

Comprehensive Plan Analysis

9

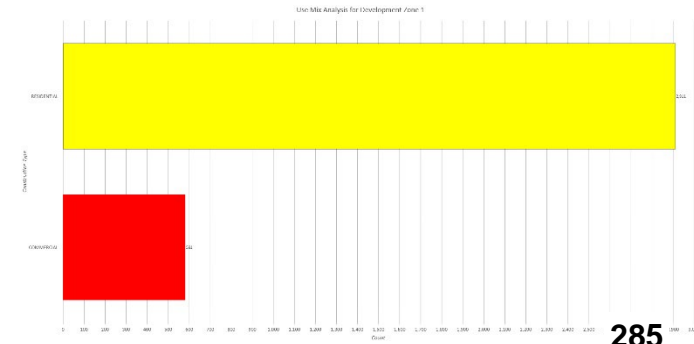
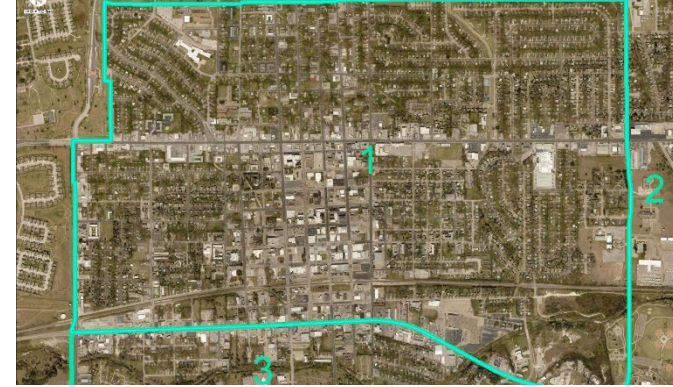
- ❑ 'Infill & Enhance' Growth Sector
- ❑ North Killeen Revitalization Area
- ❑ Killeen Development Zone #1
- ❑ Approximately 16% non-residential and 84% residential uses of current land use mix
- ❑ Approximately 30% non-residential zoning districts and 70% residential zoning districts



Comprehensive Plan Analysis

10

- 'Traditional Neighborhood' promotes a use mix of up to 50% non-residential and 80% residential uses



Comprehensive Plan Analysis

11

- The request is consistent with the 'Traditional Neighborhood' designation of the Future Land Use Map (FLUM).
- The request is consistent with the following Big Ideas of the 2022 Comprehensive Plan:
 - ▣ Resource stewardship and fiscally responsible growth ensure a more prosperous community for the long haul

Case #Z22-51: “R-2” to “R-2” w/ CUP

12

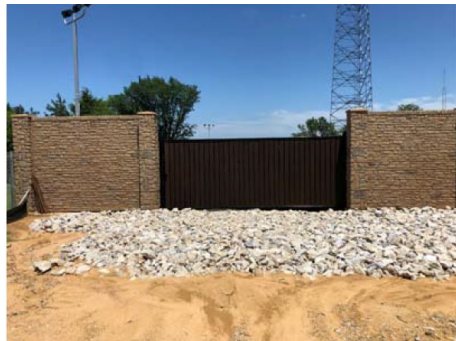
- ❑ The applicant intends to demolish the existing residential home and expand the existing above ground pipeline station facilities located on the southern portion of the property.
- ❑ The applicant has also proposed to screen the facility with a 5-foot masonry wall and provide landscaping (trees and shrubs) along the frontage in order to protect the character of the area.
- ❑ Staff finds that the request is necessary to keep up with demands for natural gas utility in the area.

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	130.00'	151.37'	142.97'	N 51°55'25" E	66°42'56"
C2	130.00'	51.82'	51.48'	S 83°23'56" E	22°50'18"

UTILITY EASEMENTS NOTE AS PER FAIRWAY PARK 2ND EXTENSION
RECORDED IN CABINET A, SLIDE 122-A. ARE AS INDICATED BELOW:

UTILITY EASEMENTS ARE
8' WIDE AT THE REAR OF LOTS
8' WIDE AT THE SIDE OF LOTS
UNLESS OTHERWISE INDICATED

EXAMPLE OF FENCE AND GATE STYLE



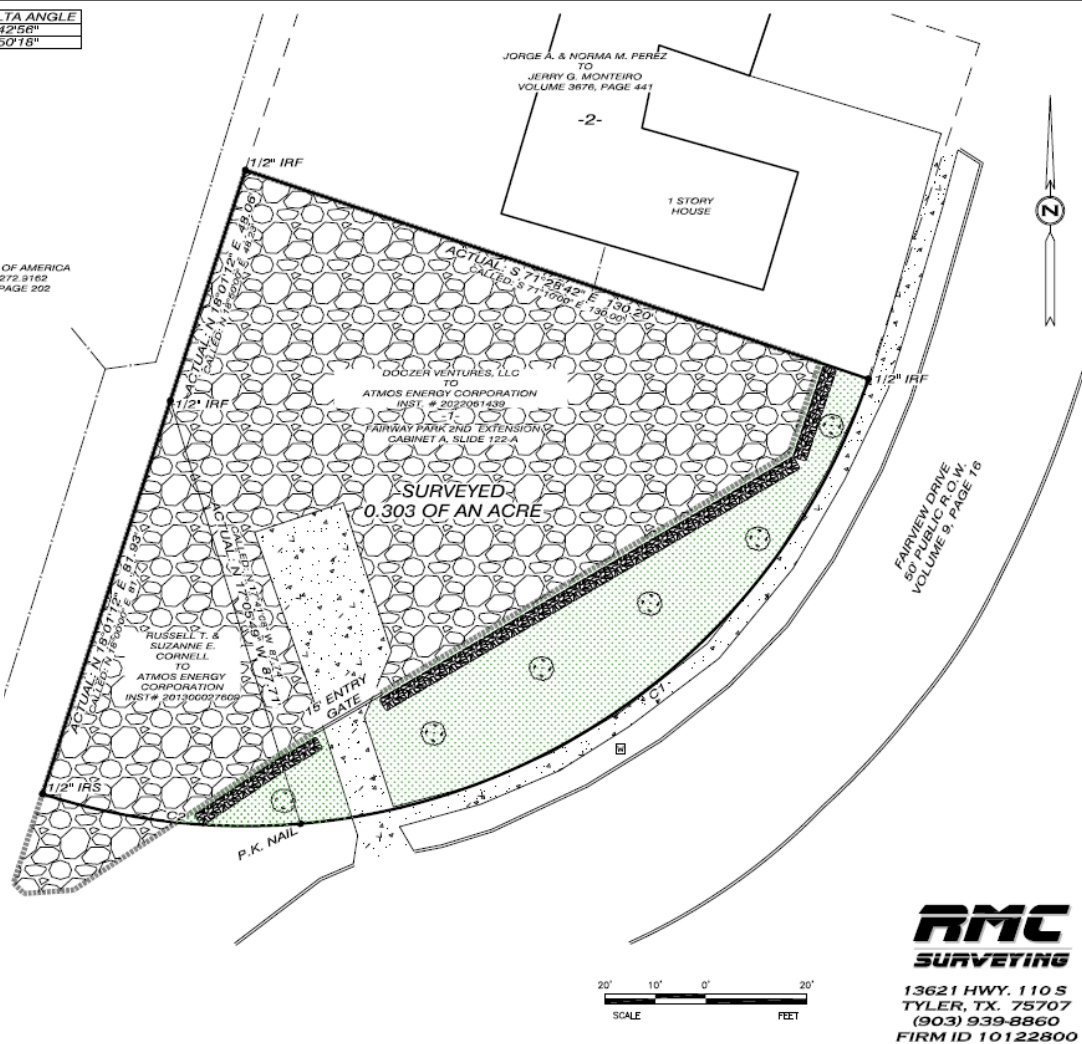
UNITED STATES OF AMERICA
CALLED 91,272,3162
VOLUME B, PAGE 202

LEGEND

	DESCRIPTION	SPACING	# OF
	1 1/2" DBH SHADE TREE	25'	6
	3 GALLON SHRUB	2.5'	58
	BERMUDA GRASS	NA	2,877 SQ. FT.
	GRAVEL	NA	9,808 SQ. FT.

LEGEND

	WATER METER
	PROP. STONE WALL
	TRACT LINES
	SUBJECT TRACT LINES
	CONCRETE CURB
	CONCRETE AREA



14



Case #Z22-51: “R-2” to “R-2” w/ CUP

15

View of the subject property looking west:



Case #Z22-51: “R-2” to “R-2” w/ CUP

16

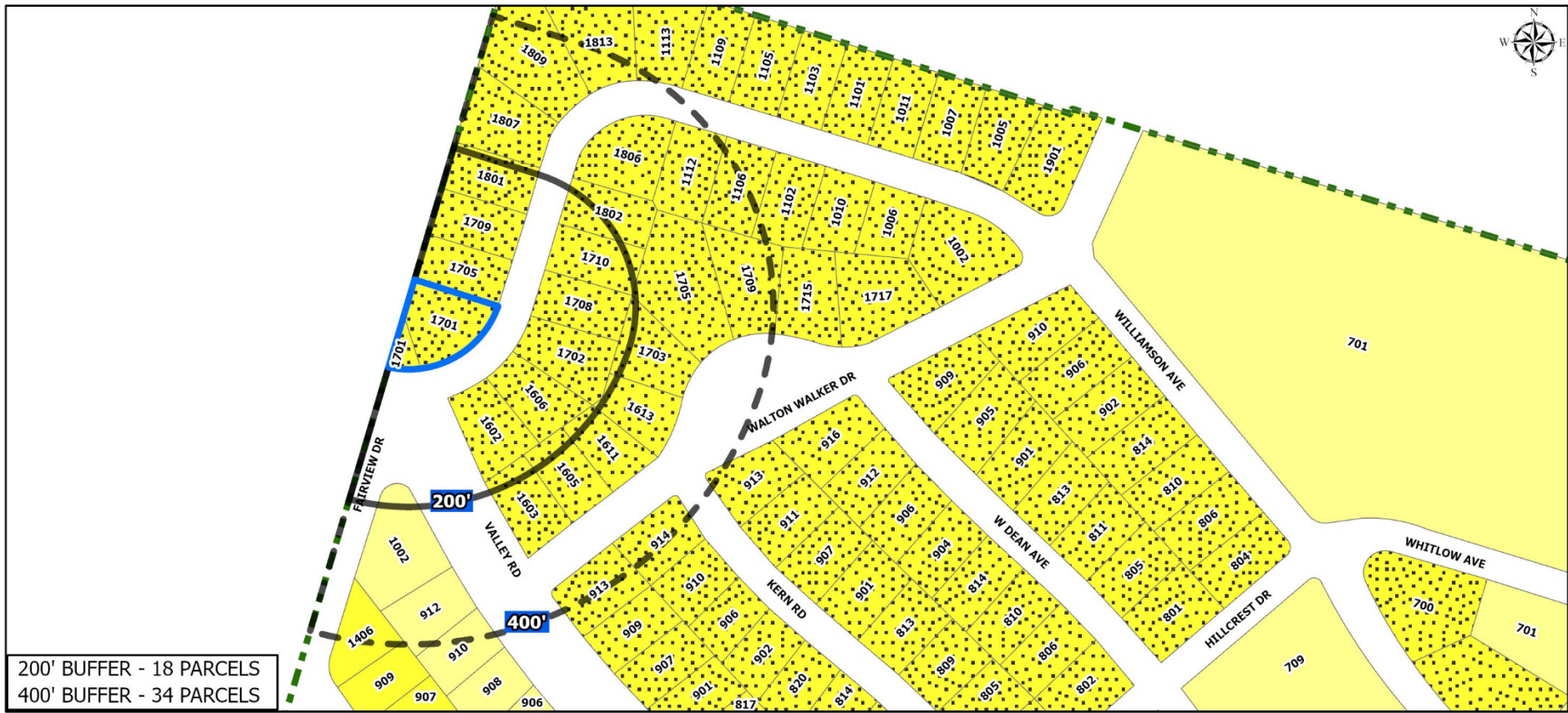
View of the subject property looking west:



Public Notification

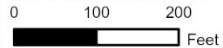
17

- Staff notified thirty-four (34) surrounding property owners regarding this request.
- Of those notified, sixteen (16) reside outside of the 200-foot notification boundary required by the State, and within the 400-foot notification boundary required by Council; and sixteen (16) property owners reside outside of Killeen.
- To date, staff has received one (1) written response in support regarding this request.



NOTIFICATION MAP

Council District: 1



Subject Property Legal Description: FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (1, LESS SW

TRI) AND FAIRWAY PARK 2ND UNIT, BLOCK 001, LOT PT 1, (SW TRI OF 1; 87.74' X 52.25' X 81.77'), ACRES 0.05

Zoning Case 2022-51

R-2 TO R-2 W/ CUP

Legend	Current Zoning	R-2
		R-1
		R-3

Alternatives

19

- The City Council has three (3) alternatives. The Council may:
 - Disapprove the applicant's CUP request;
 - Approve the applicant's CUP request with conditions; or
 - Approve the applicant's CUP request as presented.

Staff Recommendation

20

- Staff finds the request consistent with the Big Ideas of the 2022 Comprehensive Plan as indicated in the Comprehensive Plan Analysis. Additionally, staff finds the request is a necessary infrastructure improvement project.
- Staff recommends approval of the “R-2” (Two-Family Residential District) with a CUP (Conditional Use Permit) for an above ground pipeline station facility.

Commission Recommendation

21

- At their regular meeting on November 7, 2022, the Planning and Zoning Commission recommended approval of the applicant's request by a vote of 6 to 0.



City of Killeen

Staff Report

File Number: PH-22-088

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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HOLD a public hearing and consider an ordinance amending the Code of Ordinances Chapter 31, Sec. 31-903, Garages, providing for amendments to the standards regarding protruding garage doors. (Requires three-fourths ($\frac{3}{4}$) majority vote.)

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Edwin Revell, Executive Director of Development Services

SUBJECT: ORDINANCE AMENDING SEC. 31-903 - GARAGES.

BACKGROUND AND FINDINGS:

On April 19, 2022, City Council provided a Motion of Direction to change the draft language in Sec. 31-903 to make both subsection (a) and subsection (b) required. On April 26, 2022, the City Council adopted Architectural and Site Design Standards. As adopted, Sec. 31-903(b) effectively prohibits protruding garages, or "snout houses".

On October 18, 2022, the City Council provided a Motion of Direction to amend Sec. 31-903 to require either subsection (a) or (b) to be met.

On November 7, 2022, the Planning and Zoning Commission reviewed the proposed amendment and recommended disapproval by a vote of 6 to 0. In accordance with Killeen Code of Ordinance Sec. 31-39(e), a three-fourths ($\frac{3}{4}$) majority vote of the City Council is required to overrule a recommendation of the Planning and Zoning Commission.

THE ALTERNATIVES CONSIDERED:

The City Council has two (2) alternatives:

- ☐ Approve the ordinance as presented to change "and" to "or" and allow snout houses; or
- ☐ Do not approve the ordinance and leave the current standard prohibiting snout houses in place.

Which alternative is recommended? Why?

Staff does not recommend changes to Sec. 31-903 at this time. Staff finds that the proposed ordinance is inconsistent with the policies and principles in the adopted Comprehensive Plan.

CONFORMITY TO CITY POLICY:

Staff finds that the proposed ordinance is inconsistent with the following policies and recommendation of the Comprehensive Plan:

Big Idea # 5 - Neighborhoods, not subdivisions, make great places for everyone, which states: "Streets and public spaces should be designed to prioritize walkability and human interaction over

automobiles.”

NH5. Update design standards to enhance the quality of buildings, infrastructure, and neighborhoods, which recommends that the City “overhaul design and construction standards with a new focus on quality and appearance of residential and commercial buildings.”

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

This is not applicable

Is this a one-time or recurring expenditure?

This is not applicable

Is this expenditure budgeted?

This is not applicable

If not, where will the money come from?

This is not applicable

Is there a sufficient amount in the budgeted line-item for this expenditure?

This is not applicable

RECOMMENDATION:

At their Regular Meeting on November 7, 2022, the Planning and Zoning Commission recommended disapproval of the proposed ordinance by a vote of 6 to 0.

DEPARTMENTAL CLEARANCES:

This item has been reviewed by the Planning and Legal staff

ATTACHED SUPPORTING DOCUMENTS:

Minutes
Ordinance

**MINUTES
PLANNING AND ZONING COMMISSION MEETING
NOVEMBER 7, 2022**

CHAPTER 31, SEC. 31-903 AMENDMENTS

HOLD a public hearing and consider an ordinance amending Sec. 31-903 of the Killeen Code of Ordinances, providing for amendments to the standards regarding protruding garage doors.

Ms. Wallis Meshier stated that this item was placed on the agenda base on a motion of direction made by the City Council on October 18, 2022 to amend Sec. 31-903 to require either subsection (a) or (b) to be met. She stated that the proposed amendment is to change “and” to “or” in Sec. 31-903.

Ms. Meshier gave a presentation that showed different houses in Killeen that meet the standards that are currently in place. She also stated that Frisco, Round Rock, Leander, Buda and Lockhart all have similar provisions that limit houses with protruding garage doors. The Comprehensive Plan states that we should be designing neighborhoods, not subdivisions. She also stated that staff does not recommend changes to Sec. 31-903 at this time.

Chairman Minor stated that, as was discussed during the workshop, he agrees with Vice Chair Gukeisen that this ordinance needs time to work its way through. He also stated that the builders need more time to update their plans.

Chairman Minor opened the public hearing.

With no one wishing to speak, the public hearing was closed.

Vice Chair Gukeisen moved to recommend disapproval of the proposed amendment to Sec. 31-903. Commissioner Ploeckelmann seconded, and the motion passed by a vote of 6 to 0.

AN ORDINANCE AMENDING CHAPTER 31 OF THE CODE OF ORDINANCES OF THE CITY OF KILLEEN; PROVIDING FOR AMENDMENTS TO THE CITY'S ZONING REGULATIONS; AMENDING THE STANDARDS REGARDING GARAGE DOORS; PROVIDING FOR THE REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION AND AN EFFECTIVE DATE.

WHEREAS, the City of Killeen, Texas 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;

WHEREAS, the City of Killeen has declared the application and enforcement of the City's zoning regulations to be necessary for the promotion of the public safety, health, convenience, comfort, prosperity and general welfare of the City; and,

WHEREAS, the City Council desires to amend district regulations to preserve and enhance surrounding property values; and,

WHEREAS, the City Council finds that such amendments are necessary and will provide consistent and even application of zoning regulations to all applicants;

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KILLEEN, TEXAS:

SECTION I. That Sec. 31-903 of the City of Killeen Code of Ordinances is hereby amended as follows:

Sec. 31-903. – Garages.

If a garage is provided, the following standards shall be met:

- a) A garage door facing the street shall not comprise more than fifty (50) percent of the horizontal length of the front elevation; or
- b) The exterior wall on either side of the garage door shall not protrude further than any other horizontal building plane on the front elevation.

This standard is applicable only to the width of the garage door, not the entirety of the garage.

SECTION II. That all ordinances or resolutions or parts of ordinances or resolutions in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

SECTION III. That should any section or part of any section, paragraph or clause of this ordinance be declared invalid or unconstitutional for any reason, it shall not invalidate or impair the validity, force or effect of any other section or sections or part of a section or paragraph of this ordinance.

SECTION IV. That the Code of Ordinances of the City of Killeen, Texas, as amended, shall remain in full force and effect, save and except as amended by this ordinance.

SECTION V. That this ordinance shall be effective after its passage and publication according to law.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this 13th day of December, 2022, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, §551.001 *et seq.*

APPROVED

Debbie Nash-King, MAYOR

ATTEST:

APPROVED AS TO FORM:

Laura J. Calcote, CITY SECRETARY

Holli C. Clements, CITY ATTORNEY



ORDINANCE AMENDING
SEC. 31-903 – GARAGES
(REQUIRES $\frac{3}{4}$ MAJORITY VOTE)

PH-22-088

December 6, 2022

303

Background

2

- On April 19, 2022, City Council provided a Motion of Direction to change the draft language in Sec. 31-903 to make both subsection (a) and subsection (b) required.
- On April 26, 2022, the City Council adopted Architectural and Site Design Standard. As adopted, Sec. 31-903(b) effectively prohibits protruding garages, or “snout houses”.
- On October 18, 2022, the City Council provided a Motion of Direction to amend Sec. 31-903 to require either subsection (a) or (b) to be met.

Requested Amendment

3

Killeen Code of Ordinances Sec. 31-903. – Garages.

If a garage is provided, the following standards shall be met:

- a) A garage door facing the street shall not comprise more than fifty (50) percent of the horizontal length of the front elevation; ~~and~~ or
- b) The exterior wall on either side of the garage door shall not protrude further than any other horizontal building plane on the front elevation.

This standard is applicable only to the width of the garage door, not the entirety of the garage.

Alternatives

4

- Approve the ordinance as presented to change “and” to “or” and allow snout houses; or
- Do not approve the ordinance and leave the current standard prohibiting snout houses in place.

Staff Recommendation

5

- Staff does not recommend changes to Sec. 31-903 at this time.
- This recommendation is consistent with the following elements of the Comprehensive Plan:
 - ▣ **Big Idea # 5 – Neighborhoods, not subdivisions, make great places for everyone**, which states: “Streets and public spaces should be designed to prioritize walkability and human interaction over automobiles.”

Staff Recommendation

6

- ▣ **NH5 Update design standards to enhance the quality of buildings, infrastructure, and neighborhoods, which recommends that the City “overhaul design and construction standards with a new focus on quality and appearance of residential and commercial buildings.”**

Commission Recommendation

7

- At their Regular Meeting on November 7, 2022, the Planning and Zoning Commission recommended disapproval of the proposed ordinance by a vote of 6 to 0.
- Per Killeen Code of Ordinances Sec. 31-39(e), a three-fourths ($\frac{3}{4}$) majority vote is required to overrule a recommendation of the Planning and Zoning Commission.



City of Killeen

Staff Report

File Number: PH-22-089

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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HOLD a public hearing and consider an ordinance amending the FY 2023 Annual Budget of the City of Killeen to adjust revenue and expenditure accounts in multiple funds.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Miranda Drake, Director of Budget

SUBJECT: Budget Amendment

BACKGROUND AND FINDINGS:

The following budget amendment addresses two major initiatives that includes:

1. allocating additional ARPA funding for the Small Business Relief Grants and the Central Texas Alcohol Rehabilitation Center, and
2. appropriates Tax Increment Reinvestment Zone (TIRZ) Funds for Phase I of the Rancier Avenue project.

1. In the FY 2022 Budget, \$1,000,000 of American Rescue Plan Act (ARPA) Funds were budgeted for the Small Business Relief Grants, as well as the North Killeen Downtown Small Business Grant. \$965,812 was spent on the North Killeen Downtown Small Business Grants. In addition, there were \$22,798 in change orders for the North Killeen Downtown Small Business Grants bringing the overall total to \$988,610. \$177,225 in business relief is recommended for the Small Business Relief Grants. Due to the additional funds added by City Council for the North Killeen Downtown Small Business Grants, an additional \$165,835 is needed to fund the difference. ARPA Funds are available to cover this amount.

On November 29, 2022, City Council provided a motion of direction to appropriate \$70,000 of funding for the Central Texas Alcohol Rehabilitation Center. ARPA Funds are eligible for this initiative and are available to appropriate.

Revenues will be amended as follows:

Revenues

Department of Treasury - ARPA	\$235,835
TOTAL	\$235,835

Expenditures will be amended as follows:

Expenditures

Business Assistance	\$165,835
Central Texas Alcohol Rehabilitation Center	70,000
TOTAL	\$235,835

2. On September 8, 2022, the TIRZ Board voted 5-0 to appropriate up to \$1 million in

TIRZ funding for the design of Phase I of the Rancier Avenue project. This budget amendment appropriates \$1,000,000 needed for the professional services agreement to fund the schematic design of the Rancier Avenue Replacement and Streetscaping Improvement project.

Expenditures will be amended as follows:

Expenditures

TIRZ Fund - Design/Engineering	\$1,000,000
TOTAL	\$1,000,000

THE ALTERNATIVES CONSIDERED:

Option 1 - Do not approve the ordinance amending the FY 2023 Annual Budget.

Option 2 - Approve the ordinance amending the FY 2023 Annual Budget.

Which alternative is recommended? Why?

Option 2 is recommended to approve the ordinance amending the FY 2023 Annual Budget.

CONFORMITY TO CITY POLICY:

The City's Financial Governance Policies, Section V. Budget Administration (B)(1) states that City Council may amend or change the budget by ordinance.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

This budget amendment will appropriate \$165,835 of ARPA funding for the Small Business Assistance Relief Grants, \$70,000 of ARPA funding for the Central Texas Alcohol Rehabilitation Center and appropriate \$1,000,000 of the Tax Increment Reinvestment Zone Funds as approved by the TIRZ Board to fund Phase I of the Rancier Avenue project.

Is this a one-time or recurring expenditure?

One-time

Is this expenditure budgeted?

Upon approval of the attached ordinance amending the FY 2023 Annual Budget

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

Upon approval of the attached ordinance amending the FY 2023 Annual Budget

RECOMMENDATION:

City Council approve the ordinance amending the FY 2023 Annual Budget.

DEPARTMENTAL CLEARANCES:

Legal

ATTACHED SUPPORTING DOCUMENTS:

Ordinance

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KILLEEN, TEXAS, AMENDING THE FY 2023 ANNUAL BUDGET OF THE CITY OF KILLEEN TO ADJUST REVENUE AND EXPENDITURE ACCOUNTS IN MULTIPLE FUNDS; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT WITH THIS ORDINANCE; PROVIDING A SAVINGS CLAUSE; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, a budget for operating the municipal government of the City of Killeen for the Fiscal Year October 1, 2022 to September 30, 2023, has been adopted by City Council in accordance with the City Charter; and

WHEREAS, it is the desire of the Killeen City Council to amend the FY 2023 Annual Budget; and

WHEREAS, the budget amendment requires City Council approval;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

SECTION 1. That Ordinance 22-067, adopting a budget for operating the municipal government of the City of Killeen for the Fiscal year October 1, 2022 to September 30, 2023, be amended as to the portion of said budget as follows:

Revenues:

Account Number	Description	Budget Change	Budget
010-0000-333-1004	Dept of Treasury		266,567
	American Rescue Plan Act (ARPA) Funding	235,835	
	Budget Change Sub-total	235,835	
	Account Sub-total		502,402
	REVENUE TOTAL	235,835	502,402

Expenditures:

Account Number	Description	Budget Change	Budget
010-9501-491-5086	Business Assistance		90,000
	Business Assistance Grants for Small Business Relief and North Killeen Downtown Small Business Grants	165,835	
	Central Texas Alcohol Rehabilitation Center	70,000	
	Budget Change Sub-total	235,835	
	Account Sub-total		325,835
235-8940-493-6901	Design/Engineering		
	Tax Increment Reinvestment Zone (TIRZ) Funds for Rancier Avenue Project Phase I	1,000,000	
	Budget Change Sub-total	1,000,000	
	Account Sub-total		1,000,000
	EXPENDITURES TOTAL	1,235,835	\$ 1,325,835

SECTION II: That the City Council finds that the public notice and public hearing requirements of Section 38 and 56 of the City Charter have been complied with prior to the enactment of this ordinance.

SECTION III: That should any section or part of any section or paragraph of this ordinance be declared invalid or unconstitutional for any reason, it shall not invalidate or impair the validity, force or effect of any other section or sections or part of a section or paragraph of this ordinance.

SECTION IV: That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

SECTION V: That this ordinance shall be effective after its passage and publication according to law.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this 13th day of December, 2022, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, §551.001 et seq.

APPROVED

Debbie Nash-King
Mayor

ATTEST:

APPROVED AS TO FORM:

Laura J. Calcote
City Secretary

Holli C. Clements
City Attorney



BUDGET AMENDMENT ARPA FUNDING & TIRZ FUNDS

PH-22-089

December 6, 2022

316

Budget Amendment

2

□ ARPA Funding

- North Killeen Downtown Business Grants – \$988,610
 - Grants - \$965,812
 - Change orders - \$22,798
- Business Relief - \$177,225
- Central Texas Alcohol Rehabilitation Center - \$70,000

Budget Amendment (cont'd)

3

Account Description	Adopted FY 2023 Budget	Budget Change	Amended Budget
ARPA Funding - Dept of Treasury Revenue	\$ 266,567	\$ 235,835	\$ 502,402
Total Project Revenue	\$ 266,567	\$ 235,835	\$ 502,402
Account Description	Adopted FY 2023 Budget	Budget Change	Amended Budget
Business Relief Grants	\$ -	\$ 165,835	\$ 165,835
Central Texas Alcohol Rehabilitation Center	-	70,000	70,000
Total Project Expense	\$ -	\$ 235,835	\$ 235,835
			318

ARPA Update

4

Coronavirus State and Local Fiscal Recovery Funding Amount **\$ 29,117,907**

Approved Uses	Amount Allocated	Amount Spent To Date	% Spent	Remaining Balance
<i>Hotel Occupancy Tax Fund:</i>				
Personnel	\$ 366,822.00	\$ 142,929.74	39.0%	\$ 28,751,085
Grants to the Arts	394,905.00	147,281.00	37.3%	28,356,180
Deferred Maintenance -				
KCCC HVAC Replacement	1,078,000.00	276.00	0.0%	27,278,180
KCCC Lighting Upgrades	126,680.00	-	0.0%	27,151,500
KCCC Interior Doors	80,500.00	80,300.00	99.8%	27,071,000
KCCC Camera Upgrade	24,073.00	12,613.89	52.4%	27,046,927
KCCC Replacement Tables	16,610.00	16,609.59	100.0%	27,030,317
Special Events Ctr Comm Fans	16,336.00	11,679.00	71.5%	27,013,981
KCCC Podiums	5,870.00	5,870.15	100.0%	27,008,111
KCCC Restripe Parking Lot	6,292.00	4,990.00	79.3%	27,001,819
KCCC Landscaping	20,000.00	15,194.87	76.0%	26,981,819
	2,136,088.00	437,744.24	20.5%	

319

ARPA Update (cont'd)

5

Approved Uses	Amount Allocated	Amount Spent To Date	% Spent	Remaining Balance
<i>General Fund:</i>				
Public Safety Premium Pay -				
Premium Pay PD	\$ 2,344,573.00	\$ 1,135,812.44	48.4%	\$ 24,637,246
Premium Pay FD	2,211,284.00	1,033,199.24	46.7%	22,425,962
Quarantine Expenses	-	1,075.34	--	22,425,962
<i>Recommend Use from Premium Pay Savings:</i>				
<i>SAFER Grant - Equipment & Gear (\$429,447)</i>				
Boys and Girls Club	750,000.00	250,000.00	33.3%	21,675,962
Business Assistance	1,165,835.00	552,702.05	47.4%	20,510,127
Downtown Events	200,000.00	147,498.09	73.7%	20,310,127
Mental Health Program Police & Fire -				
PD Mental Health Program	250,000.00		0.0%	20,060,127
FD Mental Health Program	250,000.00	20,409.67	8.2%	19,810,127
Hill Country Transit District (HOP) - Route Options	1,100,000.00	473,495.00	43.0%	18,710,127
Non-Profit Organization Assistance	150,000.00	60,000.00	40.0%	18,560,127
	8,421,692.00	3,674,191.83	43.6%	

ARPA Update (cont'd)

6

Approved Uses	Amount Allocated	Amount Spent To Date	% Spent	Remaining Balance
<i>Governmental CIP Fund:</i>				
Emergency Operations Center/Fire Operations	\$ 11,900,000.00	\$ -	0.0%	\$ 6,660,127
Police Range & Training Facility	250,000.00	-	0.0%	6,410,127
Hill Country Community Action (Meals-On-Wheels)	200,000.00	-	0.0%	6,210,127
Conder Park	2,000,000.00	762,215.15	38.1%	4,210,127
Long Branch Park	500,000.00	289,702.45	57.9%	3,710,127
Phyllis Park	300,000.00	141,131.14	47.0%	3,410,127
Long Branch Pool	590,000.00	-	0.0%	2,820,127
Stewart Park	600,000.00	189,410.02	31.6%	2,220,127
Gap Sidewalks	750,000.00	-	0.0%	1,470,127
Back Up Generators for Water/Sewer Pump & Lift Station	500,000.00	-	0.0%	970,127

ARPA Update (cont'd)

7

Approved Uses	Amount Allocated	Amount Spent To Date	% Spent	Remaining Balance
<i>FY 2023 Appropriations:</i>				
Youth Summer Program	\$ 216,567.00		0.0%	\$ 753,560
Traffic Monitoring Center Upgrade	132,287.00	-	0.0%	621,273
Speed Mitigation Measures throughout City	250,000.00	-	0.0%	371,273
Trail Upgrades (4 trails @ \$25K each)	100,000.00	-	0.0%	271,273
Central Texas Alcohol Rehabilitation Center	70,000.00	-	0.0%	201,273
	18,358,854.00	1,382,458.76	7.5%	
	<u>\$ 28,916,634.00</u>	<u>\$ 5,494,290.88</u>	<u>19.0%</u>	<u>\$ 201,273</u>

Budget Amendment (cont'd)

8

□ Tax Increment Reinvestment Zone (TIRZ) Fund

■ Rancier Avenue Project Phase I – \$1,000,000

- September 8, 2022 TIRZ Board Vote 5-0 to appropriate up to \$1 million in TIRZ funding for Phase I of Rancier Avenue Project

Account Description	Adopted FY 2023 Budget	Budget Change	Amended Budget
Rancier Avenue - Phase I	\$ -	\$ 1,000,000	\$ 1,000,000
Total Project Expense	\$ -	\$ 1,000,000	\$ 1,000,000

Recommendation

9

City Council approve the ordinance amending the
FY 2023 Annual Budget



City of Killeen

Staff Report

File Number: PH-22-090

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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HOLD a public hearing and consider amendments to the Tax Increment Reinvestment Zone Number Two (TIRZ #2) ordinance by amending the project and financing plan, expanding the TIRZ #2 boundary, and extending the duration of the TIRZ #2.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Edwin Revell, Executive Director of Development Services

SUBJECT: HOLD A PUBLIC HEARING AND CONSIDER AMENDMENTS TO THE TAX INCREMENT REINVESTMENT ZONE #2 (TIRZ #2) ORDINANCE

BACKGROUND AND FINDINGS:

A Tax Increment Reinvestment Zone, also known as "TIRZ", is an economic development tool authorized by Chapter 311 of the Texas Tax Code, through which governments can designate a portion of tax increment to finance improvements to promote the development of a defined area, called a "Reinvestment Zone."

Killeen's TIRZ #2 was established on November 4, 2008. Termination of the operation of the Zone will occur on December 31, 2028, unless otherwise amended.

The Project and Reinvestment Zone Financing Plan was adopted on August 25, 2009. In 2015, the boundaries of TIRZ #2 were amended to include thirty-two (32) acres on the southwest corner of Rancier Ave. and 38th Street. The Project Financing Plan was also updated to account for the boundary expansion.

In 2017, the TIRZ boundary was again amended to include Rancier Avenue from Fort Hood Street to Root Avenue (Ordinance No. 17-012). The Project Financing Plan was also amended at that time.

At this time, staff is recommending the following changes to the TIRZ ordinance:

- Amending the Project and Financing Plan.
TIRZ funds can be used to pay for any permitted "Project Cost" in the Project Plan. Staff recommends updating the list of projects as listed in the attached ordinance. The proposed project plan totals \$113,500,000, and includes the following proposed projects:

Project Estimated Cost

Streetscaping improvements in Downtown Killeen	\$14M	
Rancier Avenue replacement and streetscaping improvements		\$15M
Rancier Avenue undergrounding overhead utilities	\$9M	
Downtown land acquisition and development of park space		\$8M
Avenue D - Street and sidewalk rehabilitation	\$2.5M	
City Hall in the downtown	\$10M	

Land acquisition & development for expansion of Killeen Business Park	\$30M
Economic development and public infrastructure reimbursements	\$14M
Downtown land acquisition and redevelopment	\$8M
Administrative /Professional Services	\$3M
Total	\$113.5M

- Amending the TIRZ boundary.
Staff recommends amending the boundary of the TIRZ #2 to include approximately 332 acres on the east side of N. Roy Reynolds Drive for expansion of the Killeen Business Park.
- Extending the duration of the TIRZ.
The current TIRZ was established with a 20-year term and will expire on December 31, 2028, unless otherwise amended. Staff recommends extending the duration of the TIRZ by 20 years to expire in 2048.

THE ALTERNATIVES CONSIDERED:

The City Council has three (3) alternatives:

- Do not approve the ordinance;
- Approve the ordinance with amendments; or
- Approve the ordinance as presented.

Which alternative is recommended? Why?

Staff recommends approval of the ordinance as presented. If approved, the proposed ordinance will update the project and financing plan for the TIRZ to provide a funding mechanism for needed projects within the TIRZ Boundary including Downtown Killeen. It will also extend the duration of the TIRZ to 2048 and expand the boundary to include an additional 332 acres for expansion of the Killeen Business Park.

CONFORMITY TO CITY POLICY:

The proposed ordinance conforms to all City policy and requirements of State law.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

This is not applicable.

Is this a one-time or recurring expenditure?

This is not applicable.

Is this expenditure budgeted?

This is not applicable.

If not, where will the money come from?

This is not applicable.

Is there a sufficient amount in the budgeted line-item for this expenditure?

This is not applicable.

RECOMMENDATION:

Staff recommends approval of the ordinance as presented.

DEPARTMENTAL CLEARANCES:

This item has been reviewed by Development Services, Finance, and Legal staff.

ATTACHED SUPPORTING DOCUMENTS:

Ordinance

AN ORDINANCE AMENDING THE TAX INCREMENT REINVESTMENT ZONE NUMBER TWO PROJECT AND FINANCING PLAN, TERMINATION DATE, AND BOUNDARY; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR THE REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR PUBLICATION AND AN EFFECTIVE DATE.

WHEREAS, pursuant to Chapter 311 of the Texas Tax Code, as amended (“Act”) a city may designate a contiguous geographic area within such city as a reinvestment zone if the area satisfies the requirements of certain sections of the Act; and

WHEREAS, the Killeen City Council established the Tax Increment Reinvestment Zone Number Two (TIRZ #2) on November 4, 2008 for the purpose of dedicating the increase in tax revenue generated within the TIRZ #2 to provide funds for public infrastructure to encourage accelerated development and redevelopment in several areas of the city; and

WHEREAS, the Killeen City Council approved a project plan and reinvestment zone financing plan for the TIRZ #2 on August 25, 2009; and

WHEREAS, the Killeen City Council amended the TIRZ #2 project and financing plan and boundary on December 8, 2015; and

WHEREAS, the Killeen City Council again amended the TIRZ #2 project and financing plan and boundary on February 28, 2017; and

WHEREAS, on November 30, 2022, the TIRZ #2 Board voted unanimously to amend the TIRZ #2 boundary to include approximately 331.8913 acres east of Roy Reynolds Drive, as depicted in the attached revised boundary map described in Exhibit “A;”

WHEREAS, on November 30, 2022, the TIRZ #2 Board voted unanimously to extend the duration of the TIRZ #2 by 20 years to terminate on December 31, 2048; and

WHEREAS, on November 30, 2022, the TIRZ #2 Board voted unanimously to amend the project plan and reinvestment zone financing plan for the TIRZ #2 to include additional projects and expenditures; and

WHEREAS, the City has provided all information, made all presentations, given all notices and done all other things required by Chapter 311 Texas Tax Code or other law as a condition to the creation of the proposed zone; and

WHEREAS, the total appraised value of taxable real property in the proposed zone is approximately \$172,000,000; and

WHEREAS, the total area within the proposed zone is approximately 2,468 acres; and

WHEREAS, the total appraised value of taxable real property in the proposed zone is approximately 1.338 percent of the total appraised value of taxable real property in Killeen; and

WHEREAS, the City has provided written notice of the public hearing regarding the proposed expansion of the zone in compliance with the requirements of the Act to the governing bodies of all taxing units levying taxes on property in the proposed zone; and

WHEREAS, a notice of the December 13, 2022 public hearing regarding proposed amendments to the zone was published on Sunday, December 4, 2022 in the Killeen Daily Herald, a newspaper of general circulation in the City; and

WHEREAS, the City Council finds that the TIRZ#2 project and financing plan is feasible and that the plan, termination date, and boundary amendment should be approved;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

SECTION I. That the City, acting under the provisions of Chapter 311, Texas Tax Code, does hereby designate as a reinvestment zone and create and designate a reinvestment zone over the area depicted in the map attached hereto as Exhibit “A” and to promote the development and redevelopment of the area. The reinvestment zone shall hereafter be named for identification as Reinvestment Zone Number Two City of Killeen Texas, (“the Zone”). The City Council specifically declares that the Zone is designated pursuant to Section 311.005 (2) of the Texas Tax Code.

SECTION II. That termination of the operation of the Zone shall occur on December 31, 2048, or at an earlier time designated by subsequent ordinance or at such time subsequent to the issuance of tax increment bonds, if any, that all project costs, obligations secured with tax increment revenues, and the interest thereon have been paid in full.

SECTION III. That the TIRZ #2 Project and Financing Plan is hereby amended as follows:

**City of Killeen
Tax Increment Reinvestment Zone #2
Project and Financing Plan**

This document constitutes the Tax Increment Reinvestment Zone Project Plan for the Tax Increment Reinvestment Zone (TIRZ) #2, as required by Chapter 311 of the Texas Tax Code.

I. Project Plan

A. TIRZ Project Description

In August 2008, the City of Killeen created TIRZ #2 over approximately 2,104 acres of vacant and partially developed land on contiguous properties in the city limits of Killeen. The TIRZ #2 boundary was then amended in September of 2015 to include an additional 32 acres in the Southwest corner of Rancier Avenue and 38th Street to accommodate a proposed retail development in that area. Additional TIRZ #2 boundary amendment was made January 25, 2017 to include Rancier Avenue from Fort Hood Street to Root Avenue. The TIRZ #2 boundary was subsequently amended again in 2022 to include approximately 331.8913 acres east of Roy Reynolds Drive in anticipation of expanding the Killeen Business Park.

Development Projects and Public Infrastructure in the TIRZ

- Public Infrastructure – water lines, sanitary sewer lines, underground utilities, pedestrian improvements, and roadway improvements
- Public Roads and Highways – improvements to US190-~~&~~, FM 2410, & FM 439
- Beautification – gateway improvements, streetscape improvements, municipal furnishings, landscape improvements, open space amenities, pedestrian amenities, wayfinding & signage
- Public Safety – street lights, sidewalks
- Public Land and Buildings - park acquisition, city hall, park improvements
- Land acquisition – property for business park

Expenditures associated with the acquisition, design, construction and financing of the planned improvements and other specific project related costs will be funded by tax increment revenue derived from increases in property tax revenues throughout the duration of TIRZ#2. Development is projected to increase taxable property values in the TIRZ from its current assessed value to \$298915,838,562 million.

B. Developer and Financing Description

Downtown: The City of Killeen will be responsible for improvements in the downtown area and general vicinity and gateways utilizing funds generated by the TIRZ increment.

~~Industrial-Business~~ Park: The City of Killeen will be responsible for improvements in the ~~industrial-business~~ park utilizing funds generated by the TIRZ increment.

~~La-CaseataAnthem Park~~: The developer of the ~~La-CaseataAnthem Park~~ project is ~~First Advisors, Inc.~~ CSW Killeen, LP. They will finance and develop the mixed-use project private improvements along with the public infrastructure improvements and amenities.

The City will provide reimbursement to the developer, ~~First Advisors, Inc.~~ CSW Killeen, LP, for public improvements, subject to approval of a reimbursement contract between the City and the developer.

C. Conditions and Circumstances of the Property

1. ~~La-CaseataAnthem Park~~: There is a lack of basic infrastructure including: water, sanitary sewer, storm sewer, roads, and drainage. The development project will provide full public infrastructure and amenities to the community, including green spaces, park(s), trails, ~~and water features~~landscaping, lighting, fencing, and/or vegetative screening.
2. **Downtown Killeen**: Downtown Killeen and the general vicinity and gateways need business development and investment, pedestrian amenities, consistent urban design features, landscaping, and public spaces. TIRZ dollars will be allocated to provide these basic features for the benefit of the public and sustainability of the land uses and their respective tax values. TIRZ funding will also be utilized to attract businesses that would improve the quality of life in the area. Such businesses would include restaurants, attractions, entertainment venues, and recreational facilities. These businesses would attract Killeen citizens to spend time downtown and promote tourism, thereby creating job opportunities and economic growth.
3. **Killeen ~~Industrial-Business~~ Park**: The existing ~~Industrial-Business~~ Park lacks full development and utilities is nearing full build-out. Expansion of the Business Park is critical to attracting new industrial development to Killeen. Investment of TIRZ revenues will allow the ~~Industrial-Business~~ Park to realize its full taxable highest and best land use~~be expanded~~, thereby increasing the opportunities for job and economic growth.
4. **Rancier Avenue and 38th Street**: This area has a lack of basic infrastructure including: water, sanitary sewer, storm sewer, pedestrian and roadway infrastructure, and drainage. ~~The proposed retail~~Future retail development near this intersection will provide a significant benefit to the TIRZ and community.

4.5. Grocery Store: The establishment of a retail grocery store is a critical need in the northern part of Killeen. TIRZ dollars will be allocated to attract and incentivize a grocery store in the vicinity of the TIRZ.

5.6. Existing Uses and Conditions of Property in the Proposed TIRZ and Future Uses and Conditions of Property in the TIRZ.

- **Existing Land Uses and Conditions:**

The area of the TIRZ is approximately 2,1322,468 acres in size. The area is a mixture of vacant, developed and partially developed properties. The area includes properties that have frontages on public streets and highways. Properties in the area have various stages of utilities and infrastructure serving them.

- **Proposed Land Uses:**

Proposed land uses include: commercial, retail, offices, medical, public buildings, parks, open space, parking, and amenities such as trails and water features.

- **Maps:**

Exhibit A: Killeen TIRZ Boundary

D. Justification for TIRZ Creation

The developer of the La Caseata Anthem Park project (~~First Advisors, Inc~~ CSW Killeen, LP) believes that the demographic, market demand and overall economic conditions justify the risk for the proposed La Caseata Anthem Park development. The development of infrastructure and vertical improvements, along with the public amenities, will bring the property to its highest and best use and provide an opportunity to capture pent-up demand for the various land uses proposed.

The new development and subsequent public improvements in the TIRZ #2 will provide social, economic, and quality of life benefits to the entire community. Creation of the TIRZ will establish the funding mechanisms for public infrastructure improvements that are essential for the attraction of private investment that would otherwise not occur in the reasonably foreseeable future. If not for the creation of the TIRZ, property will not be developed, due in part to the infrastructure conditions listed above.

E. Proposed Changes of Zoning Ordinances, Master Plan of Municipality, Building Codes, and Other Municipal Ordinances.

All construction will be done in conformance with existing city ordinances, regulations and building codes, of the City of Killeen and Bell County. There are no proposed changes of any city building codes or ordinances.

~~F. List of Estimated Non-Project Costs~~

~~Costs that will be expended by the Developer, without reimbursement, are listed below.~~

Non-Reimbursable Project Costs	Estimated Costs
Miscellaneous Land Development Hard and Soft Costs and Land Acquisition	\$ 84,000,000
Total	\$ 84,000,000

~~G.F. Displacement of Residents~~

~~There will be no displacement of residents within the TIRZ.~~

II. TIRZ #2 Financing Plan

A. A Listing of the Proposed Public Works or Public Improvements in the Zone

See below and refer to the map exhibits.

B. A list describing the Estimated Project Costs of the Zone is shown below, including creation and administration costs

Public Infrastructure and Related Items	Estimated Costs
Safety and Visual Improvements in Downtown Killeen and Industrial Business Park	
Gray Street landscaping and irrigation	\$ 150,000
Avenue D landscaping and irrigation	\$ 100,000
Gray Street decorative lighting and installation	\$ 500,000
Avenue D decorative lighting and installation	\$ 300,000
Relocate above ground utilities underground Downtown	\$ 2,000,000
Streetscaping improvements in Downtown Killeen	\$ 14,000,000
Rancier Avenue landscaping and irrigation	\$ 48,000
Rancier Avenue pedestrian mobility improvements	\$ 209,000
Rancier Avenue replacement and streetscaping improvements	\$ 15,000,000
Rancier Avenue undergrounding overhead utilities	\$ 9,000,000
Public Use	
Downtown land acquisition and development of park space	\$ 28,000,000
Gray Street Street and sidewalk rehabilitation	\$ 4,000,000
Avenue D – Street and sidewalk rehabilitation	\$ 2,500,000
Widening FM 2410 and Stan Schlueter Loop Intersection	\$ 4,000,000
Construction of Rosewood Drive overpass at US 190	\$ 4,800,000
City Hall in the downtown	\$ 1510,000,000
Land acquisition and development for expansion of Killeen Business Park	\$ 30,000,000
Economic development and public infrastructure reimbursements	\$ 14,000,000

Redevelopment	
<i>Downtown land acquisition and redevelopment</i>	\$ 28,000,000
La Cascata Infrastructure Development for Commercial Development	
Water, sanitary sewer, storm sewer, internal public roads, landscaping, water features, green space, trails—commercial component only	\$ 9,000,000
Administrative /Professional Services	\$ 2003,000,000
Total	\$ 46,807,000 \$ 113,500,000

*The above costs are estimates and based on the best information available as of December ~~2016~~2022. Cost will vary and costs may be distributed between the various line items based on the discretion of the TIRZ Board of Directors and/or City of Killeen City Council.

*The above costs include land/right-of-way acquisition, design and construction costs.

C. Estimated Time When Monetary Obligations Are Incurred

Costs will be incurred beginning in ~~2010-2022~~ and are anticipated to continue ~~per the Table A: Buildout Schedule~~through the duration of the TIRZ.

D. Estimated Amount of Bonded Indebtedness

The City, upon a recommendation from the Tax Increment Reinvestment Zone Board, may issue bonds, notes, or other obligations secured by tax increment revenues, the proceeds of which could be used to pay for or reimburse developers for Project Costs, including public improvements, interest, developer costs, and costs associated with the bond issue. The City, upon a recommendation from the Tax Increment Reinvestment Zone Board, may issue one or more series of bonds or notes at the time the Zone generates sufficient tax increment revenues to pay principal and interest on such obligations. However, the City may elect to pay for Project Costs directly from tax increment proceeds as they become available, without the sale of bonds or notes.

E. Methods of Financing and Sources of Revenue

Tax increment revenues will be derived from the development of the ~~La Cascata~~Anthem Park mixed-use project, development in the Killeen ~~Industrial Business~~ Park, and increase in property values in downtown Killeen. Development is projected to increase taxable property values in the Killeen TIRZ to approximately \$~~298~~915,838,562 million during the life of the TIRZ.

~~Table A-Exhibit E~~ depicts the build-out projection and the annual captured appraised value for the mixed-use development proposed in the TIRZ; improvements in the ~~industrial-business~~ park; and improvements in the downtown area; and the projected revenue schedule for the TIRZ. ~~Table B-depicts the projected revenue schedule for the TIRZ.~~

To ensure timely construction of public improvements, both “pay-as-you-go” and/or bond financing may be utilized. Potential financing methods may include:

1. **Tax Increment Bonds or Notes:** As allowed by annual incremental increases in Zone assessed value, tax-exempt tax increment bonds or notes may be issued to fund improvements.
2. **Bond Anticipation Notes:** Notes issued in anticipation of tax increment or bond revenue may be issued to facilitate implementation of particular projects as warranted.
3. **Other Private Financing:** The project will be developed using traditional bank financing subject to future TIRZ fund reimbursement provided to the Developer.
4. **Tax Increment Contract Revenue Bonds:** The City may elect to create a Redevelopment Authority with the authority to issue all or part of the debt contemplated in the Plan. The Board may elect to enter into Development Agreements with the developer to provide for public projects in furtherance of the provisions of the Plan. In such situations, development agreements may be subject to the developer’s ability to generate sufficient increment to fund the agreement.
5. **Percentage of Increment Dedicated to the Zone:**
The percentage of tax value increment anticipated to be dedicated to the Zone follows.

Taxing Unit	Dedicated Tax Rate	% of Total Participation
City of Killeen	\$0. 74980-6233	100%
Bell County	\$0. 42120-3160	100%
Central Texas College	\$0. 13660-0960	100%
TOTAL	\$1.3076-1.0353/ \$100 valuation	100%

*The above rates are based on Property Tax Rate ~~2015-2023~~ information.

F. Tax Increment Fund

The City of Killeen will establish and maintain the Zone’s tax increment fund. The City will deposit an amount of money into the tax increment fund equal to the City’s ad valorem tax revenues collected from the taxable property in the project,

less the tax increment base revenue. The City will deposit revenues derived from all taxing jurisdictions participating in the TIRZ into the tax increment fund, in accordance with the conditions of an agreement with each jurisdiction's participation.

G. Market Feasibility Study

The market feasibility study is Exhibit D.

H. Duration of the Zone

The duration-termination of the TIRZ #2 ~~is proposed to be twenty (20) years~~ shall occur on December 31, 2048, or at an earlier time designated by subsequent ordinance, or at such time, subsequent to the issuance of any bonds, notes or other obligations that all project costs, bonds, notes or other obligations have been paid in full. Year One (1) is expected to consist of planning and pre-development activities.

I. Exhibits

Exhibit A	Killeen TIRZ #2 Boundary
Exhibit B	Current Land Use <u>Zoning</u> Map of TIRZ
Exhibit C	Future Land Use and Proposed Development Areas maps
Exhibit D	Market (Economic) Feasibility Study
<u>Exhibit E</u>	<u>Schedule of Zone Estimated Captured Appraised Value & Revenue</u>

~~H. Tables~~

Table A	Schedule of Zone Estimated Captured Appraised Value
Table B	Proposed Zone Revenue Schedule

SECTION IV. That all ordinances or resolutions or parts of ordinances or resolutions in conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict.

SECTION V. That should any section or part of any section or paragraph of this ordinance be declared invalid or unconstitutional for any reason, it shall not invalidate or impair the validity, force or effect of any other section or sections or part of a section or paragraph of this ordinance.

SECTION VI. That the Code of Ordinances of the City of Killeen, Texas, as amended, shall remain in full force and effect, save and except as amended by this ordinance.

SECTION VII. That this ordinance shall be effective after its passage and publication according to law.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this 13th day of December, 2022, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, §551.001 et seq.

APPROVED:

Debbie Nash-King, MAYOR

ATTEST:

Laura J. Calcote, CITY SECRETARY

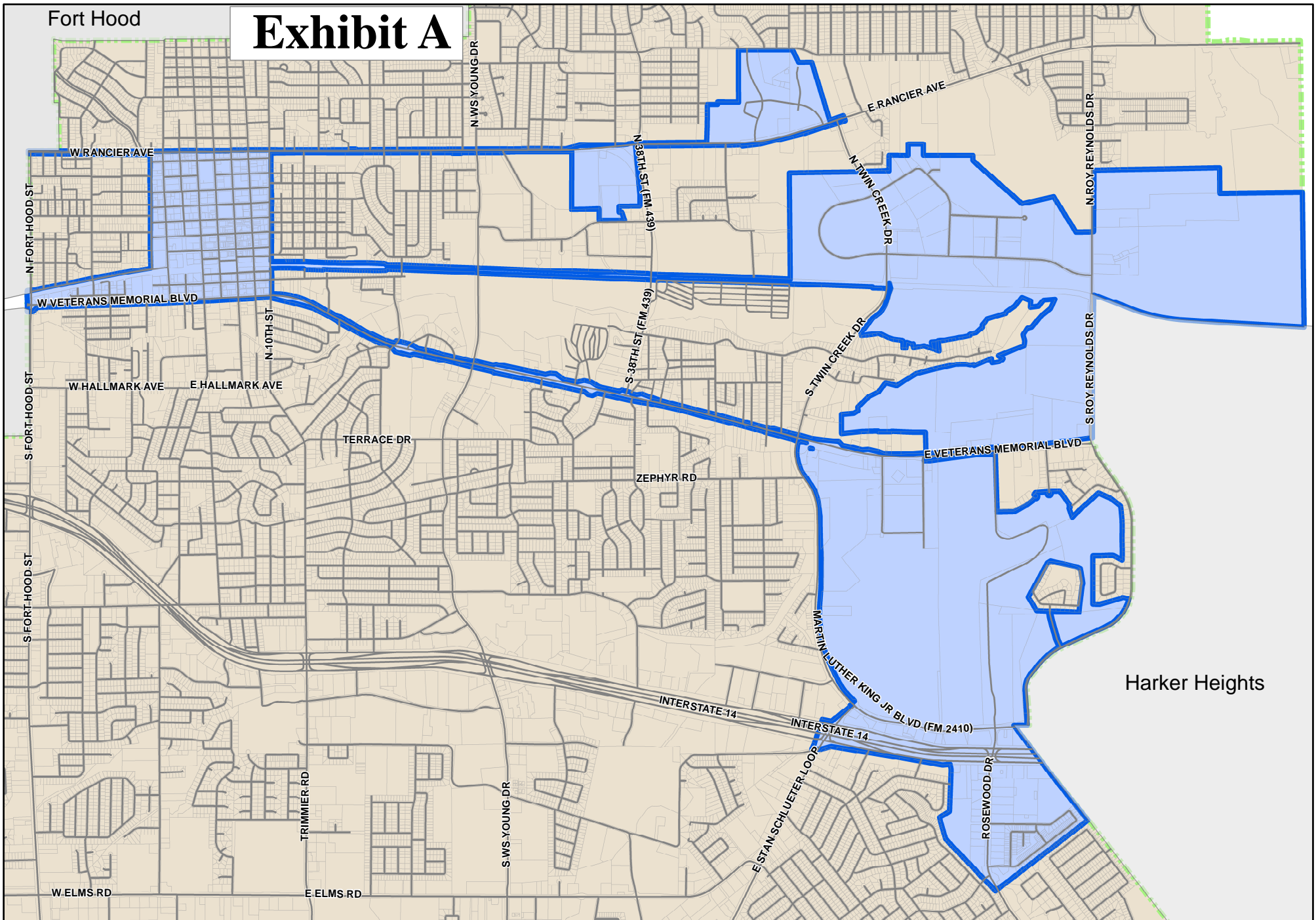
APPROVED AS TO FORM:

Holli C. Clements, CITY ATTORNEY



Ord. _____

Fort Hood

Exhibit A

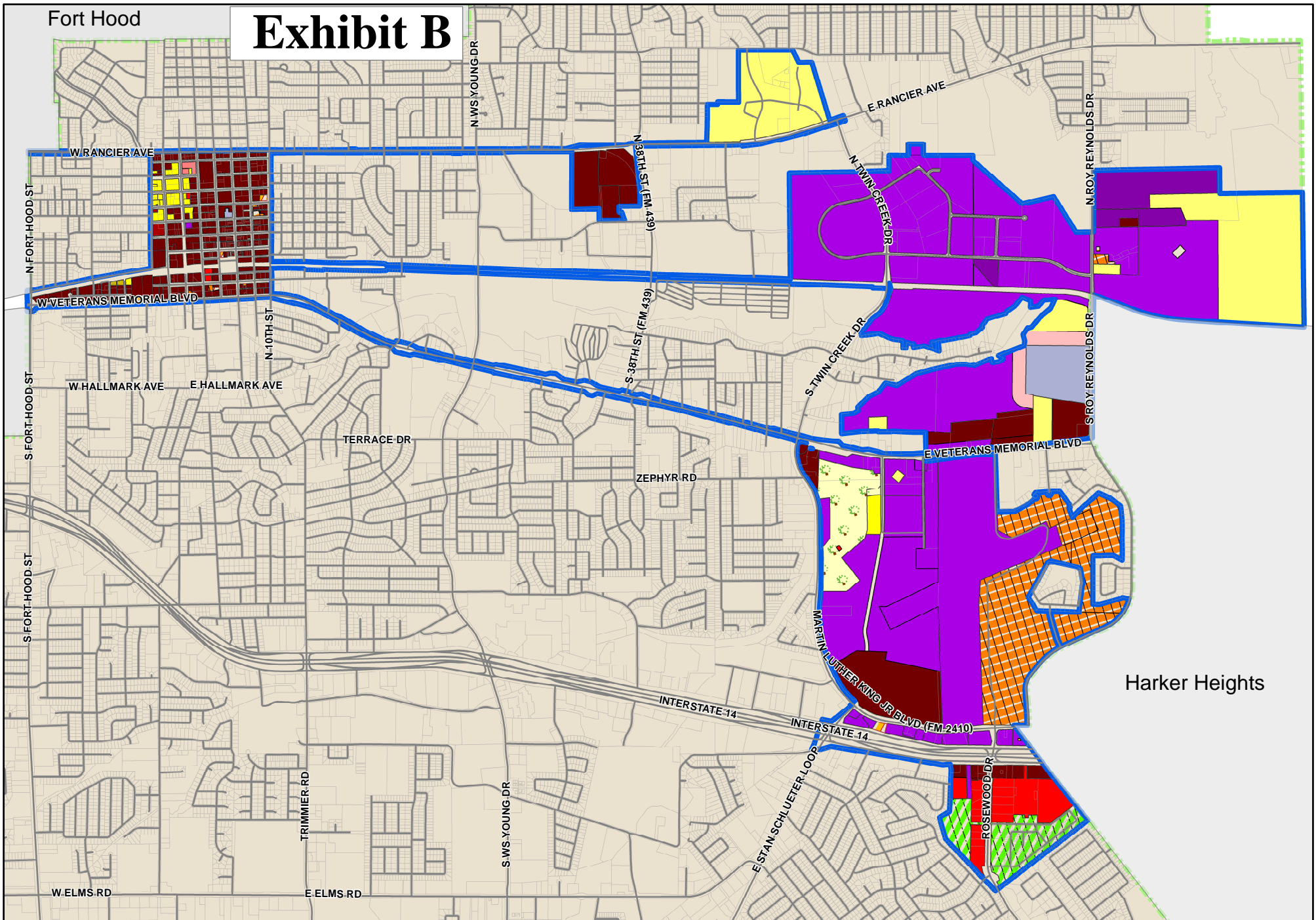


TIRZ #2 Boundary

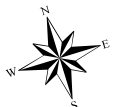
 TIRZ #2 Boundary 2471.13 Acres
 Citylimits

Fort Hood

Exhibit B



Harker Heights

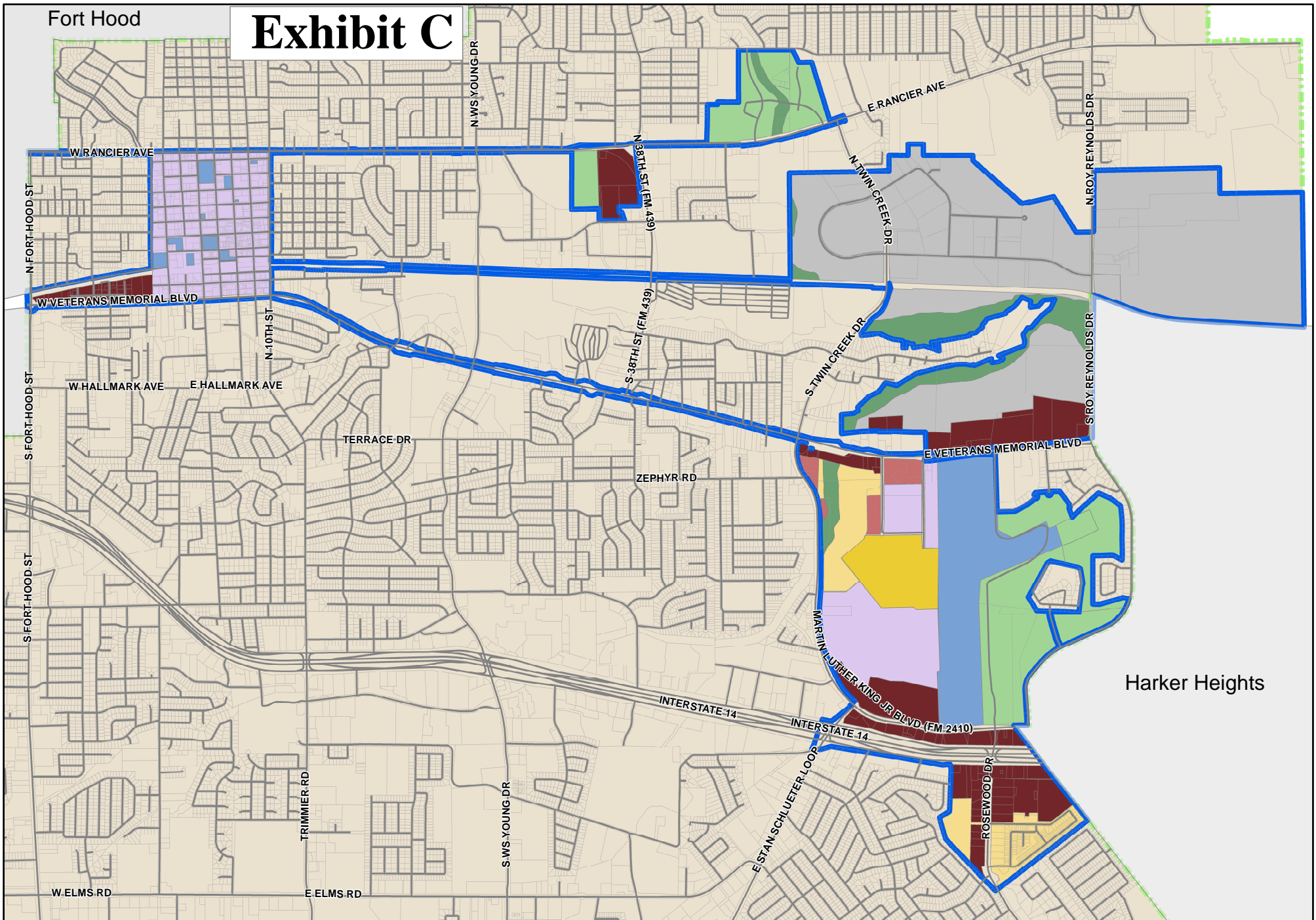


TIRZ #2 Boundary

TIRZ #2 Boundary	B-3A	B-C-1	PUD	R-3F
B-1	B-4	CUP	R-1	RMH
B-2	B-5	M-1	R-2	SUP
B-3	RC-1	M-2	R-3	Citylimits

Fort Hood

Exhibit C



Harker Heights



TIRZ #2 Boundary

- | | | |
|------------------|-------------------------|--------------------------|
| TIRZ #2 Boundary | Neighborhood Commercial | Rural Estate |
| Campus | Public Space | Traditional Neighborhood |
| Floodplain | Regional Commercial | Urban Center |
| Industrial | Residential Mix | Citylimits |

Exhibit D
 Market Feasibility Study
 City of Killeen Texas

1. Growth of the Killeen Market

a. Population

The U.S. Census Bureau's population estimate for Killeen, in the year 2020, was 153,095 on April 1, 2020. The U.S. Census Bureau estimated Killeen's population to be 156,261 on July 1, 2021. This is a 2.4% increase in the population. Per the Texas Demographics by Cubit, Killeen is the 19th most populated city in the state of Texas out of 1,805 cities. According to World Population Review, Killeen ranks 175th in the country for its population. The estimated population will be 163,003 by 2027 per Claritas, a data-driven marketing company.

b. Sales Taxes

Sales tax are a good indicator of retail vibrancy. Sales taxes retained by the City of Killeen is 1 ½ % of every dollar in sales tax revenue. The sales tax revenue increased by 17.94 percent over the past four years. Sales tax collections for recent years are listed below:

Year	City's Sales Tax Revenue
2022	\$27,907,229 as of October
2021	\$31,504,838
2020	\$26,772,341
2019	\$24,865,813
2018	\$23,661,151

c. Additional Growth Indicators

i. Policom.com

In 2022, Policom Corporation, an independent economic research firm that specializes in analyzing local and state economies, ranked the Killeen-Temple- Fort Hood Metropolitan Statistical Area (MSA) as the 140th out of 384 MSA's strongest economy in the United States. The MSA ranked 165 in 2020.

ii. Housing

According to 2022-2023 U.S. News and World Report, Killeen ranked 5th for Best Places to Live in Texas. Out of 150 metropolitan areas in the U.S., Killeen

ranked 108th Best Places to Live and #91 in Best Places to Retire.

iii. Livability

Per areavibes.com, Killeen has a livability rate of 64 out of 100. The Cost of Living (COLI) Index is 88. The State of Texas COLI is 92.

iv. Job Market

The annual Killeen unemployment rate in 2020 was 8.4% and in 2021 it was 7.0%, per the Texas Labor Market, texaslmi.com.

2. Retail Leakage

a. Trade Area

A Retail Leakage Study was conducted by The Retail Coach in 2022. The study identified the retail trade area to be approximately 301,293 persons. The trade area boundaries extend from Lampasas, which is to the west, to Temple on the east, Fort Hoods most northern section and as far south as Florence.

b. Retail Leakage

According to the analysis, Killeen is leaking approximately \$1.818 billion of retail sales to neighboring communities. Of the 52 retail sectors studied, Killeen shows only four with sales surpluses: Sporting Goods, Shoes, Hobby/Toy/Game Shops and Miscellaneous Retail Stores, such as Florist, Gifts and Pet Stores. The chart below reflects some of the retail sectors experiencing major leakages. Note: Additional details from the Leakage Study available upon request.

Retail Sector	Estimated Actual Sales	Potential Sales	Leakage
General Merchandise	\$369,726,899	\$491,249,986	(\$121,523,087)
Grocery Stores	\$127,679,985	\$521,511,612	(\$393,831,627)
Electronic and Appliance Stores	\$27,296,229	\$53,204,500	(\$25,908,271)
Food Services and Drinking Places	\$142,681,344	\$566,875,596	(\$424,194,252)
Health & Personal Care Stores	\$33,136,318	\$213,838,694	(\$180,702,376)
Gasoline Service Stations	\$97,864,529	\$332,696,584	(\$234,832,055)
Home Furniture and Furnishings	\$32,521,362	\$86,776,352	(\$54,254,990)
Motor Vehicle and Parts Dealers	\$831,614,041	\$1,039,689,087	(\$208,075,046)

3. **Retail Projections.** This is a new dataset for 2022. It shows the projected demand in from 2022 to 2027

Description	2022 Demand	2027 Demand	Growth
General Merchandise	\$302,996,400	\$335,475,306	\$32,478,906
Grocery Stores	\$330,908,195	\$369,722,276	\$38,817,080
Electronic and Appliance Stores	\$42,500,048	\$47,082,614	\$4,582,565
Food Services and Drinking Places	\$357,090,768	\$399,269,007	\$42,178,238
Health & Personal Care Stores	\$56,507,736	\$65,588,474	\$9,080,739
Gasoline Service Stations	\$235,582,109	\$280,037,252	\$44,455,143
Home Furniture and Furnishings	\$22,091,788	\$23,255,554	\$1,163,766
Motor Vehicle and Parts Dealers`	\$562,802,107	\$635,278,984	\$72,476,877

4. **2022 Estimated Demographic Data – 1 mile radius from the described sites.**

	Downtown Killeen	Killeen Business Park	Anthem Park	Rancier & 38 th Street	TIRZ	City of Killeen
Population	12,800	3,077	7,860	11,280	3,101	153,791
Average Age	27.72	34.29	34.32		33.55	32.10
Average Household Income	\$39,538	\$60,751	\$68,516	\$48,649	\$59,434	\$65,573
Households	5,676	1,289	2,904	4,854	1,344	57,508
Families Below Poverty Status	723	104	298	500	97	4,169
Employed	4,665	1,356	3,243	4,245	1,289	60,123
Unemployed	603	129	280	693	156	7,036
Occupation Classification						
<i>White Collar</i>	1,608	723	2,185	1,662	640	33,092
<i>Blue Collar</i>	1,470	297	498	1,239	272	13,418
<i>Svc & Farm</i>	1,458	395	708	1,311	382	13,698

CONCLUSION

Killeen is the largest and fastest growing city in the Killeen-Temple-Fort Hood MSA. It is the hub of economic activity in the region. The economy of the community and of the region continues to expand despite weakening of the U.S. economy. The designation of Interstate 14, the growing student population at Texas A&M University -Central Texas and the close proximity to Fort Hood, have been key factors in the economic growth of Killeen.

City of Killeen, Texas
Tax Increment Financing Zone (TIRZ) #2
Financial Forecast

Exhibit E

Fund 235

Fiscal Year	Tax Base	Estimated Growth	City of Killeen	Bell County	Central Texas College	Interest	Estimated Annual Revenue	Estimated Annual Expenditures	Cumulative Total
2021							\$ 1,744,793		
2022	\$ 36,829,202		\$ 238,532	\$ 125,498	\$ 38,099	\$ 10,232	412,361	\$ -	\$ 2,157,154
2023	57,537,155	56.23%	358,629	181,817	55,236	22,276	617,958	-	2,775,112
2024	77,675,159	35.00%	484,149	245,454	74,568	55,502	859,673	-	3,634,786
2025	104,861,465	35.00%	653,602	331,362	100,667	36,348	1,121,979	-	4,756,765
2026	131,076,831	25.00%	817,002	414,203	125,834	47,568	1,404,607	-	6,161,371
2027	163,846,039	25.00%	1,021,252	517,753	157,292	61,614	1,757,911	-	7,919,282
2028	196,615,247	20.00%	1,225,503	621,304	188,751	79,193	2,114,751	-	10,034,033
2029	235,938,296	20.00%	1,470,603	745,565	226,501	100,340	2,543,009	-	12,577,042
2030	283,125,955	20.00%	1,764,724	894,678	271,801	125,770	3,056,973	-	15,634,015
2031	339,751,147	20.00%	2,117,669	1,073,614	326,161	156,340	3,673,784	-	19,307,800
2032	390,713,819	15.00%	2,435,319	1,234,656	375,085	193,078	4,238,138	-	23,545,938
2033	449,320,891	15.00%	2,800,617	1,419,854	431,348	235,459	4,887,278	-	28,433,216
2034	494,252,980	10.00%	3,080,679	1,561,839	474,483	284,332	5,401,333	-	33,834,549
2035	524,543,754	6.13%	3,269,481	1,657,558	503,562	338,345	5,768,946	-	39,603,496
2036	554,292,899	5.67%	3,454,908	1,751,566	532,121	396,035	6,134,630	-	45,738,126
2037	583,293,608	5.23%	3,635,669	1,843,208	559,962	457,381	6,496,220	-	52,234,346
2038	611,495,377	4.83%	3,811,451	1,932,325	587,036	522,343	6,853,155	-	59,087,501
2039	639,478,473	4.58%	3,985,869	2,020,752	613,899	590,875	7,211,395	-	66,298,896
2040	668,054,762	4.47%	4,163,985	2,111,053	641,333	662,989	7,579,360	-	73,878,256
2041	696,866,562	4.31%	4,343,569	2,202,098	668,992	738,783	7,953,442	-	81,831,698
2042	726,134,958	4.20%	4,525,999	2,294,586	697,090	818,317	8,335,992	-	90,167,690
2043	755,813,617	4.09%	4,710,986	2,388,371	725,581	901,677	8,726,615	-	98,894,305
2044	785,852,821	3.97%	4,898,221	2,483,295	754,419	988,943	9,124,878	-	108,019,183
2045	816,199,544	3.86%	5,087,372	2,579,191	783,552	1,080,192	9,530,307	-	117,549,490
2046	846,797,551	3.75%	5,278,089	2,675,880	812,926	1,175,495	9,942,390	-	127,491,879
2047	877,587,524	3.64%	5,470,003	2,773,177	842,484	1,274,919	10,360,583	-	137,852,462
2048	908,507,202	3.52%	5,662,725	2,870,883	872,167	1,378,525	10,784,300	-	148,636,762
							<u>\$ 148,636,762</u>	<u>\$ -</u>	

TIRZ BOUNDARY DESCRIPTION:

Beginning at a point in the south east corner of Canyon Point II Subdivision as recorded in Cabinet C, Slide 69-A, Plat Records of Bell County, Texas.

Following the Southeast line of Canyon Point:

N 43 9 22 E Approximate Distance: 136.877

to a point in the North East corner of said subdivision.

Thence N 34 55 10 E Approximate Distance: 573.961 to a point in the north margin of SH190.

Thence S 62 56 58 E Approximate Distance: 211.19 to a southeast point in the Southern Cross Subdivision.

Thence N 69 14 34 E Approximate Distance: 515.66 to the most southeasterly point in the Southern Cross Subdivision.

Thence N 20 28 34 E Approximate Distance: 29.338 to a point in most easterly corner of said subdivision.

Travelling N 60 44 19 E Approximate Distance: 148.949 to a point in the east margin of FM 2410.

Following the east right of way margin of FM 2410:

1. N 24 50 00 W 120.24
2. N 22 03 30 W 277.43
3. N 18 26 50 W 85.52
4. N 16 31 40 W 99.90
5. N 11 20 20 W 203.56
6. N 05 24 40 W 189.60
7. N 00 25 40 W 299.78
8. N 08 24 10 E 192.26
9. N 08 43 50 E 246.03
10. N 12 37 00 E 151.50
11. N 15 39 30 E 147.05
12. N 18 19 20 E 144.76
13. N 30 19 00 E 105.91
14. N 19 17 36 E 114.41
15. N 19 22 03 E 179.90
16. N 19 14 42 E 143.64
17. N 19 27 46 W 59.95
18. N 08 16 01 W 103.07
19. N 16 20 09 E 1584.51
20. N 00 38 50 W 236.17
21. N 05 12 48 W 433.15
22. N 02 00 12 W 722.27
23. N 28 42 56 E 260.67

Thence N 47 28 3 W Approximate Distance: 162.633 to a point in the South right of way of US Bus Hwy 190.

Following the South Right of Way of US Bus Hwy 190.

1. N 58 29 26 W	645.765
2. N 58 08 37 W	1163.516
3. N 58 46 02 W	606.273
4. N 60 19 23 W	765.863
5. N 61 20 11 W	118.311
6. N 65 34 43 W	56.553
7. N 64 04 13 W	315.385
8. N 62 35 30 W	44.232
9. N 60 26 55 W	573.07
10. N 59 34 15 W	52.59
11. N 61 44 47 W	124.931
12. S 82 37 56 W	127.91
13. N 60 58 08 W	100
14. N 34 25 51 W	111.819
15. N 61 00 27 W	41.461
16. N 58 50 27 W	55.532
17. N 60 54 37 W	851.357
18. N 66 02 06 W	50.332
19. N 61 24 20 W	1058.195
20. N 40 15 27 W	56.294
21. N 60 48 43 W	397.323
22. N 59 22 59 W	86.97
23. N 59 56 56 W	565.246
24. N 61 22 52 W	729.598
25. S 89 37 33 W	83.737
26. N 59 10 00 W	338.825
27. N 27 18 30 W	85.702
28. N 36 23 31 W	68.923
29. N 47 45 00 W	1239.077
30. N 31 18 14 W	64.067
31. N 43 55 48 W	425.472
32. N 45 57 21 W	185.071
33. N 59 37 22 W	956.692
34. N 67 19 35 W	50.19
38. N 73 25 35 W	288.244
39. N 81 31 44 W	70.34
40. N 76 01 10 W	298.072
41. N 75 09 21 W	80.005
42. N 75 52 59 W	670.956
43. N 75 53 00 W	75.884
44. N 75 53 00 W	461.884
45. N 75 53 00 W	48.884
46. N 76 03 40 W	791.597
47. N 72 43 23 W	53.002
48. N 74 31 35 W	757.824
49. N 74 35 15 W	50.001
50. N 74 35 15 W	461.884
51. N 74 39 54 W	1052.403
52. S 64 17 31 W	134.882

Thence N 78 14 59 W Approximate Distance: 124.02
crossing SH 195 to a point in the west margin.

Thence N 16 37 45 E Approximate Distance: 467.307

Following the west margin of SH 195.

Thence S 80 14 17 E Approximate Distance: 120.785
crossing SH 195 to a point in the east margin.

Following the North right of way of W Ave E.

1. S 84 22 01 E 214.273
2. S 84 22 01 E 57.83
3. S 84 21 59 E 214.603
4. S 84 21 59 E 214.603
5. S 58 07 42 E 64.021
6. S 84 22 08 E 60.849
7. S 84 22 01 E 209.329
8. S 87 18 47 E 51.622
9. S 83 49 10 E 499.085
10. S 86 27 22 E 100.934
11. S 82 31 00 E 1270.046

Thence N 14 48 51 E Approximate Distance: 375.802
to a point in the west margin of Root Ave

Following the west margin of Root Ave.

1. N 16 54 05 E 30.003
2. N 16 50 48 E 363.304
3. N 23 12 52 E 48.021
4. N 16 45 41 E 316.463
5. N 14 45 41 E 57.209
6. N 17 53 43 E 186.564
7. N 12 53 38 E 50.062
8. N 16 34 37 E 231.935
9. N 20 05 59 E 66.612
10. N 16 47 11 E 149.715
11. N 03 01 21 W 26.023
12. N 13 14 27 E 56.966
13. N 22 59 44 E 119.249
14. N 16 38 55 E 462.179

Crossing the intersection of Root Ave and FM 439 to a point in the Peeler Addition on Subdivision record ed in Vol. 611 and Pg. 108

Continue following the North Margin of FM 439

(Ord.#17-12)

Beginning at a point in the northeast corner of Spofford, block 00B, lot pt. 5, (E I 00' OF N 122.8' OF 5), 765-100, CORNER BLDG, ACRES .307 as recorded in the Plat Records of Bell County, Texas.

Following the north line of Spofford Subdivision and thence following the south right of way of Rancier Ave:

N 73 56 09 W Approximate Distance: 661.92

S 15 42 47 W Approximate Distance: 4.14

N 73 26 05 W Approximate Distance: 609.38

N 72 03 24 W Approximate Distance: 58.55

N 72 03 24 W Approximate Distance: 619.18

Thence N 72 48 16 W Approximate Distance: 650.52 to
the Northwest corner of N E Puckett Addition.

block 001, lot 1, 2, (W 67' OF I & 2 & STRIP 3.5' X 29' OF 2, LESS ROW) Crossing the intersection of Root Ave and FM 439 to

Thence N 72 48 16 W Approximate Distance: 100.09 To a point on the existing Killeen city limits boundary on the west side of S. Fort Hood St.

Thence N 16 39 34 E following the existing

Killeen city limits boundary for an Approximate Distance: 64.79

Thence generally following the existing city limits boundary

S 73 14 41 E Approximate Distance: 683.28 to the Southwest corner of JR Smith 760-13

S 70 36 58 E Approximate Distance: 238.34

S 71 55 15 E Approximate Distance: 240.50

S 71 49 11 E Approximate Distance: 263.63

S 73 19 01 E Approximate Distance: 1155.85

N 16 47 12 E Approximate Distance: 9.12

S 72 50 00 E Approximate Distance: 126.24

Thence S 69 03 42 E Approximate Distance: 55.22 to a corner of the existing TIRZ Boundary

Thence S 64 47 W Approximate Distance: 84.94 following the existing TIRZ boundary to the point of beginning.

Beginning at a point in the Peeler Addition Subdivision recorded in
Vol. 611 and Pg. 108

Continue following the North Margin of FM 439

1. N 51 45 22 E 87.542
2. S 73 36 40 E 212.681
3. S 78 28 50 E 54.227
4. S 73 55 19 E 300.099
5. S 76 37 34 E 60.231
6. S 72 59 40 E 309.712
7. S 71 05 48 E 90.472
8. S 72 51 06 E 294.151
9. S 74 28 53 E 80.169
10. S 73 47 01 E 306.107
11. S 80 02 35 E 81.65
12. S 73 53 56 E 307.841
13. S 73 00 29 E 78.605
14. S 73 06 21 E 403.636
15. S 74 58 21 E 57.132
16. S 72 18 29 E 289.494
17. S 73 46 51 E 35.541
18. S 73 16 19 E 716.519
19. S 69 03 24 E 56.618
20. S 73 08 59 E 617.814
21. N 74 11 56 E 36.261
22. S 72 31 21 E 156.809
23. S 17 48 41 W 20.00
24. S 72 52 24 E 272.583
25. S 77 50 14 E 86.328
26. S 72 46 37 E 220.239
27. S 76 26 00 E 85.915
28. S 72 46 46 E 244.953
29. S 72 35 11 E 49.545
30. S 73 13 37 E 1407.095
31. S 72 55 01 E 55.133

32. S 73 51 53 E 243.984
33. S 75 12 43 E 58.105
34. S 73 03 11 E 1096.135
35. S 73 32 06 E 54.036
36. S 72 45 48 E 246.293
37. S 79 36 04 E 55.837
38. S 72 30 25 E 378.985
39. S 72 30 25 E 71.168
40. S 72 30 26 E 52.294
41. S 86 20 07 E 332.14
42. S 73 38 41 E 762.357
43. S 71 25 12 E 49.727
44. S 77 08 06 E 197.82
45. S 85 08 41 E 94.38
46. S 76 35 02 E 278.995

Thence S 73 34 40 E 1445.166 to a point
in the City of Killen Long Branch Park
Rec. Vol. 1035 Pg. 310-314

Thence N 18 3 25 E Approximate Distance: 831.752
to a point in the City of Killen Long Branch Park
Rec. Vol. 1035 Pg. 310-314

1. S 74 32 36 E 229.19
2. N 17 21 08 E 52.393

Thence S 72 42 11 E 467.168 to a Southeast point
in Memorial Addition. Cabinet C Slide 391-A

Thence N 17 1 59 E Approximate Distance: 1169.154 to a
Northeast point in said subdivision Memorial Addition.

Following the South Right of Way of Lake Road.

1. S 72 15 57 E 159.873
2. S 77 14 22 E 54.876
3. S 73 04 44 E 989.948

Thence S 9 12 31 E Approximate Distance: 308.114
to a point in the Southwest corner of Koala Park Subdivision.
Cabinet 1387 Pg. 579

Thence S 73 45 47 E Approximate Distance: 291.096 to the
most southeasterly point in said Koala Park Subdivision.

Thence S 0 14 44 E Approximate Distance: 1352.432 to a
point in the north margin of FM 439.

Thence N 88 57 46 E Approximate Distance: 315.178 to a
point in the most southwestern point of Rancier Plaza Cabinet C,
Slide 295-D.

Thence S 12 10 49 W Approximate Distance: 119.92 to a
point in the South right of way of FM 439

Following the South margin of FM 439.

- 1.S 89 10 20 W 299.999
- 2.S 89 32 13 W 638.935
- 3.N 86 24 23 W 1019.123
- 4.N 79 05 07 W 409.93
- 5.N 07 03 22 E 28.883
- 6.N 75 12 12 W 301.498
- 7.N 73 09 37 W 72.938

Revised: 03/03/2015

- 8.N 73 32 34 W 1825.877 to the NW corner of Killeen Bowlerama Addition
- 9.N 77 16 55 W 170.28

Following the West margin of N. 38th St.

1. S 11 53 53 W 476.923
2. S 11 59 36 W 628.652
3. S 16 57 01 W 222.770
4. S 73 58 21 W 466.550
5. S 16 51 10 W 132.855
6. S 73 59 52 E 61.303
7. S 02 06 47 E 190.278
8. N 72 49 19 W 564.770
9. N 15 58 44 E 253.002
10. N 75 03 19 W 303.176

Thence N 74 13 41 W Approximate Distance: 307.038 to the Southeasterly most point of Killeen Municipal Cemetery Subdivision.

Thence N 17 14 00 E Approximate Distance: 1,302.992 to the most Northeast point of Killeen Municipal Cemetery Subdivision.

Thence N 76 46 12 W 15.756 to a point in the south right of way of FM 439.
Continue following the South Margin of FM 439

1. S 16 04 07 W 7.168
2. N 72 59 51 W 1470.392
3. N 86 37 01 W 71.64
4. N 73 28 29 W 508.077
5. N 69 47 40 W 103.227
6. N 73 30 40 W 298.039
7. S 16 56 20 W 19.953
8. N 72 59 51 W 193.06
9. N 17 13 34 E 20.057
10. N 73 09 20 W 458.852
11. N 73 20 27 W 46.308
12. N 73 16 20 W 201.428
13. N 73 20 27 W 46.308
14. N 73 16 20 W 737.428
15. N 73 37 03 W 51.289
16. N 72 38 30 W 388.028
17. N 69 48 26 W 49.403
18. N 72 44 00 W 1307.867
19. N 81 10 08 W 59.966
20. N 73 19 09 W 691.731

Following the East margin of North 10th St.

1. S 17 21 04 W 429.397
2. S 13 51 22 W 47.947
3. S 17 12 11 W 172.36
4. S 05 40 38 W 45.649
5. S 17 08 03 W 297.134
6. S 07 32 27 W 54.045
7. S 18 44 58 W 250.982
8. S 10 42 49 W 55.36
9. S 17 08 03 W 169.13
10. S 17 08 03 W 50
11. S 17 08 03 W 169.945
12. S 18 21 11 W 53.913
13. S 17 02 39 W 449.781
14. S 18 11 40 W 171.742

Following the North margin of BNSF
R&R Right of Way.

1. S 72 54 20 E 695.822
2. S 74 18 18 E 50.027
3. S 70 25 45 E 452.482
4. S 73 43 16 E 50
5. S 71 45 30 E 397.132
6. S 73 22 04 E 474.575
7. S 70 45 01 E 389.02
8. S 58 25 06 E 41.513
9. S 14 02 47 W 15.762
10. S 71 12 33 E 318.517
11. S 69 26 49 E 64.694
12. S 70 54 42 E 748.469
13. S 70 54 42 E 303.025
14. S 70 54 42 E 575.976
15. S 72 28 14 E 80.599
16. S 71 02 15 E 2984.699
17. S 71 34 37 E 166.097
18. S 70 47 20 E 598.034
19. S 63 20 41 E 109.871
20. S 71 15 31 E 2222.132
21. S 70 47 37 E 50.212
22. S 70 47 37 E 787.329 to a
point in most Southwest corner of
KILLEEN BUSINESS PARK SUB-DIVISION 2
Cabinet A, Slide 70-C

Thence N 16 27 30 E Approximate Distance: 2362.95
Thence S 74 0 33 E Approximate Distance: 1494.16 to a
point in the West Right of Way of Twin Creek Drive.

Thence S 76 21 32 E Approximate Distance: 133.504 to a
point in the East Right of Way of Twin Creek Drive.

Thence S 74 41 47 E Approximate Distance: 592.203 to a
point in the said subdivision of KILLEEN BUSINESS PARK
SUB-DIVISION 2 Cabinet A, Slide 70-C.

Thence N 16 59 31 E Approximate Distance: 349.218 to a point in the said subdivision of KILLEEN BUSINESS PARK SUB-DIVISION 2 Cabinet A, Slide 70-C.

Thence S 72 24 16 E Approximate Distance: 424.706 to a point in Southwest Corner the Affiliated Addition Subdivision. Cabinet C, Slide 36-C. Continue N 16 36 55 E 251.362, S 72 59 33 E 341.091, S 16 41 23 W 251.372 to a point in Southeast Corner of said Affiliated Addition Subdivision.

Thence S 73 4 01 E 1100.818, S 16 46 16 W 119.118, S 31 48 17 E 1455.133 to the most Northeastern point in KILLEEN BUSINESS PARK PHASE II Cabinet C, Slide 116-C.

2022 Extension

Thence S 73-55-15 E 75.216 to the east right of way of North Roy Reynolds Dr.

Thence N 20-29-08 E 1372.115 following the east right of way of North Roy Reynolds Dr to the northwest corner of the Reinhardt Subdivision.

1. S 74-04-39 E 2796.726
2. S 16-27-02 W 574.169
3. S 73-48-03 E 1838.179
4. S 16-16-08 W 2999.801

Thence following the existing Killeen city limits that follows the north Right of Way of the BNSF Railroad for an approximately distance 4769.18 to the southwest corner of a 270.186 acre tract of land

Thence S 17 33 53 W Approximate Distance: 3182.956 to a point in the North margin of Bus US Hwy 190.

1. N 79 49 52 W 1250.938
2. N 75 53 48 W 841.03
3. N 86 38 07 W 120.951
4. N 77 14 15 W 394.48
5. N 84 02 28 W 109.975
6. N 76 43 40 W 403.287
7. N 76 34 12 W 523.749

Thence N 15 34 4 E Approximate Distance: 469.895 to a point in Southwest corner of a 49.79acre tract described in a deed to OHNNURI COMMUNITY CHURCH, recorded in Vol.6288 Page 275.

Thence N 71 21 10 W Approximate Distance: 754.308 to a most Northwest point in Bell Glass Addition Vol. 3879 Pg. 149.

Thence S 15 08 34 W Approximate Distance: 16.135 to a point in the Southeast corner of D. JACOB WAREHOUSE ADDITION Cabinet C, Slide 202-B.

Thence N 73 22 33 W Approximate Distance: 299.245 to a point in the Northwest corner of D. JACOB WAREHOUSE ADDITION Cabinet C, Slide 202-B.

Thence N 15 23 26 E Approximate Distance: 21.475 to a point
in Northeast corner of a 1.999AC acre tract described in a deed to
WELLS, JACK JR & AMANDA A, recorded in Inst. #200700043435

Thence N 74 14 4 W Approximate Distance: 211.184 to a
point in the Northeast corner of LAMPHERE ADDITION
Cabinet D 33A.

Thence N 75 27 32 W Approximate Distance: 219.761 to a
point in the Northwest corner of LAMPHERE ADDITION
Cabinet D 33A.

Thence N 79 2 26 W Approximate Distance: 386.267 to a point
in Northeast corner of a 2.567AC acre tract described in a deed to
LAMPHERE, GEORGE E JR ETUX HYON O, Vol. 5449 Pg. 236

Thence N 16 42 41 E Approximate Distance: 425.671 to a
point in the southwest corner of TWIN CREEK ADDITION SECTION FIVE
Cabinet D, Slide 24B

Following south line of said subdivision TWIN CREEK
ADDITION SECTION FIVE Thence S 78 12 31 E Approximate Distance:
275.337

Thence N 77 17 53 E Approximate Distance: 114.004 to a point
in the southwest corner of TWIN CREEK
ADDITION SECTION FIVE Cabinet D, Slide 24B

Thence N 9 56 36 E Approximate Distance: 85.159 to a point
in the southwest corner of TWIN CREEK
ADDITION SECTION 2 Cabinet A, Slide 92-A

Thence N 64 21 0 E Approximate Distance: 354.204 continuing to
following the south line:
1. N 81 42 17 E Approximate Distance: 215.184
2. N 55 58 21 E Approximate Distance: 268.597
3. Thence S 58 47 19 E Approximate Distance: 252.448
to a point in the southeast corner of TWIN CREEK
ADDITION SECTION 2 Cabinet A, Slide 92-A.

Thence N 75 8 51 E Approximate Distance: 507.81 to a point
in the southwest corner of TWIN CREEK
ADDITION SECTION 3 Cabinet A, Slide 334-C

Thence S 86 55 31 E Approximate Distance: 478.791
following the southeast line to a point
in the southwest corner of TWIN CREEK
ADDITION SECTION 3 Cabinet A, Slide 334-C

Following the west boundary line of a 172.93acre tract (172A-0912 J S WILDER Survey, 24 & 25)
1. S 85 08 04 E 425.654
2. S 74 06 33 E 105.976
3. S 77 19 51 E 44.505

4. S 70 41 13 E 92.727
5. S 62 12 10 E 83.761
6. S 84 16 58 E 80.444
7. S 07 24 41 W 28.021
8. N 85 03 54 E 410.218
9. S 04 43 06 W 95.545
10. S 81 36 14 E 163.83
11. N 67 00 32 E 113.318
12. N 43 14 14 W 122.866
13. N 85 37 26 E 616.626
14. N 22 42 01 E 108.079
15. N 02 00 32 E 143.056
16. N 52 20 17 E 181.64
17. S 87 39 46 E 89.051
18. N 58 19 58 E 354.039
19. N 69 03 20 E 236.212
20. N 43 27 22 E 228.528
21. N 77 26 06 W 251.645
22. S 58 24 05 W 179.246
23. N 79 42 50 W 180.679
24. N 20 17 01 E 138.235
25. N 51 31 40 W 210.846
26. S 57 05 08 W 258.496
27. S 73 42 27 W 219.246
28. S 37 35 39 W 36.412
29. N 89 51 27 W 431.996
30. S 55 37 44 W 175.317
31. S 07 37 32 W 44.301
32. S 66 51 12 W 191.941
33. N 87 03 09 W 84.967
34. S 83 39 32 W 69.079
35. S 07 31 54 W 24.187
36. N 82 18 29 W 709.729
37. S 10 59 59 W 224.623
38. N 56 15 02 W 77.348
39. N 17 43 24 E 183.501
40. N 78 01 36 W 101.328
41. S 02 07 33 W 156.202
42. N 53 49 12 W 215.389
43. N 82 48 23 W 234.896
44. N 13 19 23 E 86.842
45. N 84 26 02 W 40.112
46. N 54 53 49 W 116.765
47. S 22 39 48 W 129.026
48. N 69 09 10 W 72.112
49. N 18 24 26 E 152.764
50. N 52 20 20 W 70.803
51. N 66 38 10 W 148.93
52. N 69 26 00 W 42.379
53. N 48 50 53 W 316.635
54. N 81 19 04 W 380.171
55. N 00 15 08 E 65.765
57. N 55 47 54 E 420.121
58. N 69 17 29 E 214.98
59. N 42 03 38 E 412.928
60. N 38 38 13 E 163.659 to a

point in the South margin of BNSF
R&R Right of Way.

Thence N 70 10 34 W Approximate Distance: 198.475 crossing Twin Creek Dr to
the Northeast point of Twin Creek Addition Section 4, recorded in Cabinet A, Slide 380-B

Thence N 70 50 6 W Approximate Distance: 206.891 following the South margin of BNSF R&R Right of Way.

1. N 17 36 57 E 23.678
2. N 71 05 32 W 4780.227
3. N 71 54 44 W 255.393
4. N 70 56 12 W 2079.613
5. N 70 55 54 W 1636.744
6. N 63 05 14 W 80.909
7. N 70 46 54 W 1629.538
8. N 68 39 22 W 48.417
9. N 71 29 04 W 325.069
10. S 17 55 50 W 21.87
11. N 72 13 24 W 1310.012
12. N 70 11 08 W 51.204
13. N 64 11 29 W 51.836
14. S 23 56 24 W 22.119
15. N 70 44 51 W 391.474
16. N 45 02 35 W 56.671
17. N 72 42 47 W 711.291

Thence S 13 46 55 W Approximate Distance: 215.748 to point
in the East margin of South 10th St.

Following the east margin of South 10th St

1. S 22 0 58 W Approximate Distance: 67.926
2. S 16 50 0 W Approximate Distance: 283.269 to a point
in the north margin of BUS HWY 190.

Following the North margin of BUS HWY 190:

1. S 56 03 25 E 1271.61
2. S 47 56 49 E 69.449
3. S 44 43 25 E 175.067
4. S 56 06 18 E 101.348
5. S 46 22 03 E 1300.422
6. N 80 24 57 E 91.301
7. S 58 23 23 E 398.583
8. S 40 09 41 E 104.646
9. S 61 11 25 E 147.163
10. S 61 11 26 E 64.234
11. S 61 11 28 E 142.009
12. S 52 54 49 E 189.575
13. S 60 34 31 E 272.19
14. S 60 34 31 E 48
15. S 60 34 31 E 373.077
16. S 73 13 51 E 113.575
17. S 60 13 51 E 375.526
18. S 83 06 06 E 65.012
19. S 61 22 26 E 1123.136
20. S 86 22 50 E 113.781
21. S 67 00 49 E 123.51

22. S 38 10 33 E 217.564
 23. S 61 40 13 E 297.502
 24. S 84 59 20 E 164.023
 25. S 60 32 17 E 154.755
 26. S 42 28 13 E 204.331
 27. S 60 49 42 E 472.348
 28. N 77 22 43 E 60.838
 29. S 54 46 44 E 199.629
 30. S 23 01 05 E 31.36
 31. S 60 45 11 E 121.347
 32. S 82 09 11 E 109.492
 33. S 53 46 39 E 208.234
 34. S 47 06 10 E 28.755
 35. S 53 56 35 E 185.531
 36. S 53 02 17 E 44.333
 37. S 59 24 32 E 449.678
 39. S 59 48 28 E 47.756
 40. S 58 36 33 E 563.721
 41. S 57 52 31 E 45.305
 42. S 59 06 02 E 120.515
 43. S 58 37 49 E 48.265
 44. S 58 37 50 E 576.281
 45. S 58 37 50 E 52.155
 46. S 58 37 49 E 137.114
 47. S 58 37 49 E 50.525
 48. S 58 51 26 E 299.949
 49. S 71 49 39 E 55.302
 50. S 58 50 06 E 277.569
 51. S 58 23 26 E 43.754
 52. S 59 15 08 E 328.545
 53. S 57 52 35 E 80.168
 54. S 58 04 34 E 275.652
 55. S 66 32 31 E 606.263
 56. S 25 22 56 E 121.574
 57. S 60 36 33 E 449.479
 58. S 77 27 10 E 134.067
 59. S 60 32 48 E 222.712
 60. S 53 27 52 E 173.735
 61. N 09 41 18 E 14.741
 62. S 71 43 22 E 541.22
 63. S 77 46 44 E 363.543
 64. S 27 6 14 W 189.651 to a point in the South margin
 of BUS HWY 190.

Following the South margin of BUS HWY 190

1. S 68 45 12 E 48.501
 2. S 80 14 58 E 1170.959
 3. S 73 42 7 E 373.62 to a
 point in KISD CENTRAL RECEIVING SUBDIVISION.

Following the west line of KISD CENTRAL RECEIVING SUBDIVISION

S 15 16 22 W Approximate Distance: 1284.1 to a point

STILLFOREST SUBDIVISION 2ND EXT. Cab. C, Slide 374-D

Following the North boundary line of STILLFOREST SUBDIVISION 2ND EXT.

1. S 74 20 22 E 356.12

2. S 87 22 48 E 58.26
3. N 79 40 21 E 251.22
4. N 67 20 56 E 256.597
5. N 89 23 46 E 68.407
6. N 31 32 15 W 101.588
7. N 53 42 11 E 56.928
8. S 77 23 29 E 268.224
9. S 77 23 29 E 70
10. S 75 35 53 E 196.188
11. S 23 20 03 E 147.511
12. S 19 10 58 E 218.328
13. S 03 00 36 W 74.986
14. S 05 38 35 W 224.182 to a point in the northwest corner of the Killeen Municipal Golf Course Tract owned by the City of Killeen.

Following the boundary of the Killeen Municipal Golf Course Tract owned by the City of Killeen.

1. N 64 38 56 E 787.19
2. S 49 45 15 E 293.466
3. S 35 56 40 E 278.026
4. S 10 59 23 W 294.646
5. S 16 27 23 W 735.969
6. S 17 59 33 W 171.774
7. N 46 34 52 W 223.86
8. N 74 21 00 W 452.255
9. S 17 10 47 W 1074.962
10. S 70 36 50 E 155.53
11. S 88 44 23 E 504.527
12. N 66 59 00 E 25.991
13. S 62 33 13 E 147.123 to a point in the west margin of S Roy Reynolds Dr.

Following the west margin of S. Roy Reynolds Dr.

Thence S 42 1 21 W Approximate Distance: 351.827

Thence S 78 40 49 W Approximate Distance: 1561.05 to the east margin of Willows Way.

Thence following the east margin of Willows Way to a point in the Willows Subdivision Plat Book 945, Page 546.

1. N 07 53 57 W 180.31
2. N 02 38 03 E 510.06
3. N 11 47 18 E 112.21
4. S 68 51 09 E 623.82
5. N 24 48 57 E 571.81
6. N 40 23 37 E 65.74
7. N 06 37 46 E 355.76
8. N 52 32 55 W 353.68
9. N 65 49 33 W 370.58
10. S 47 33 00 W 920.13
11. S 11 44 51 E 339.37
12. S 68 51 09 E 285.88
13. S 14 47 18 W 112.21
14. S 02 38 03 W 510.06
15. S 07 53 57 E 215.31

Following the west margin of S. Roy Reynolds Dr.

1. S 69 32 37 W 484.52
2. S 57 57 32 W 370.758
3. S 37 33 32 W 406.544
4. S 13 30 57 W 789.844 to a point in the North margin of FM 2410.

Thence N 73 55 54 W Approximate Distance: 299.181 to a point in the North margin of FM 2410.

Thence S 19 45 34 E Approximate Distance: 113.067 to a point south margin of FM 2410.

Thence following the Existing City Limits of the City of Killeen established in Ord. 70-27.

S 21 14 23 E Approximate Distance: 467.431 crossing US HWY 190

Thence S 19 36 28 E Approximate Distance: 551.796

Following the Existing City Limits of the City of Killeen established in Ord. 72-59. Thence S 21 41 41 E

Approximate Distance: 1545.857 to a point in the Southeast corner of Rosewood Addition. Cab. C, Slide 92C

Thence S 69 43 20 W Approximate Distance: 2589.323 to a point in the east boundary of HEATHER GLEN ADDITION SECTION THREE-PHASE TWO. Cab B, Slide 180B

Thence N 26 46 8 W Approximate Distance: 1606.887 to a point in HEATHER GLEN SECTION II Cab. B, Slide 3B.

Thence N 1 31 33 E Approximate Distance: 497.007 to a point in the Morning Glen Subdivision. Cab.B, Slide 24-A

- 1.N 76 46 4 E 257.819
- 2.N 19 14 17 E 937.132
- 3.N 4 18 46 E 114.84 to a point in the South margin of US HWY 190.

Following the South margin of US HWY 190:

1. N 77 34 39 W 170.342
2. N 63 27 42 W 449.255
3. N 62 57 20 W 68.886
4. N 63 23 39 W 1140.014
5. N 63 27 13 W 58.63
6. N 64 13 46 W 800.945
7. N 87 50 20 W 205.955

Thence N 75 37 38 W Approximate Distance: 233.314
Crossing FM 3470 to the point of beginning.

Yielding a net approximate acreage of 10/2022 (2471.08) acres.

Note: “This description has been generated solely to establish the boundaries of a Tax Increment Reinvestment Zone and complies with the requirements of Texas Tax Code, Chapter 311; however, this document does not reflect the result of an on-the-ground survey and is not to be used to convey tracts of land or for any other purpose.”



AMENDMENTS TO TIRZ #2 ORDINANCE

TMP-22-652

December 6, 2022

361

Background & Purpose of TIRZ #2

2

- A Tax Increment Reinvestment Zone, also know as “TIRZ”, is an economic development tool authorized by Chapter 311 of the Texas Tax Code, through which governments can designate a portion of tax increment to finance improvements to promote the development of a defined area, called a “Reinvestment Zone.”

Background & Purpose of TIRZ #2

3

- Killeen's TIRZ #2 was established on November 4, 2008.
- Termination of the operation of the Zone will occur on December 31, 2028, unless otherwise amended.
- The Board of Directors consists of seven (7) members:
 - ▣ Positions One 1 through Four 4 are reserved for the City and appointed by the City Council;
 - ▣ Positions Five 5 and Six 6 are reserved for Bell County; and
 - ▣ Position Seven 7 is reserved for the Central Texas College District.

Background & Purpose of TIRZ #2

4

- The Project and Reinvestment Zone Financing Plan was adopted on August 25, 2009.
- In 2015, the boundaries of TIRZ #2 were amended to include thirty-two (32) acres on the southwest corner of Rancier Ave. and 38th Street. The Project Financing Plan was also updated to account for the boundary expansion.
- In 2017, the TIRZ boundary was again amended to include Rancier Avenue from Fort Hood Street to Root Avenue (Ordinance No. 17-012). The Project Financing Plan was also amended at that time.

5

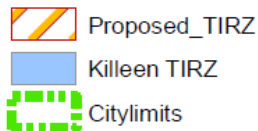


Recommended Amendments to TIRZ Ordinance

6

- Updating the Project and Financing Plan
 - TIRZ funds can be used to pay for any permitted “Project Cost” in the Project Plan. Staff recommends updating the list of projects.
- Extending the duration of the TIRZ
 - The current TIRZ was established with a 20-year term and will expire on December 31, 2028, unless otherwise amended. Staff recommends extending the duration of the TIRZ by 20 years to expire in 2048.
- Amending the TIRZ boundary
 - Staff recommends amending the boundary of the TIRZ #2 to include approximately 332 acres on the east side of N. Roy Reynolds Drive for expansion of the Killeen Business Park.

7



Financial Forecast

8

Fiscal Year	Tax Base	Estimated Growth	City of Killeen	Bell County	Central Texas College	Interest	Estimated Annual Revenue	Estimated Annual Expenditures	Cumulative Total
2021							\$ 1,744,793		
2022	\$ 36,829,202		\$ 238,532	\$ 125,498	\$ 38,099	\$ 10,232	412,361	\$ -	\$ 2,157,154
2023	57,537,155	56.23%	358,629	181,817	55,236	22,276	617,958	-	2,775,112
2024	77,675,159	35.00%	484,149	245,454	74,568	55,502	859,673	-	3,634,786
2025	104,861,465	35.00%	653,602	331,362	100,667	36,348	1,121,979	-	4,756,765
2026	131,076,831	25.00%	817,002	414,203	125,834	47,568	1,404,607	-	6,161,371
2027	163,846,039	25.00%	1,021,252	517,753	157,292	61,614	1,757,911	-	7,919,282
2028	196,615,247	20.00%	1,225,503	621,304	188,751	79,193	2,114,751	-	10,034,033
2029	235,938,296	20.00%	1,470,603	745,565	226,501	100,340	2,543,009	-	12,577,042
2030	283,125,955	20.00%	1,764,724	894,678	271,801	125,770	3,056,973	-	15,634,015
2031	339,751,147	20.00%	2,117,669	1,073,614	326,161	156,340	3,673,784	-	19,307,800
2032	390,713,819	15.00%	2,435,319	1,234,656	375,085	193,078	4,238,138	-	23,545,938
2033	449,320,891	15.00%	2,800,617	1,419,854	431,348	235,459	4,887,278	-	28,433,216
2034	494,252,980	10.00%	3,080,679	1,561,839	474,483	284,332	5,401,333	-	33,834,549
2035	524,543,754	6.13%	3,269,481	1,657,558	503,562	338,345	5,768,946	-	39,603,496
2036	554,292,899	5.67%	3,454,908	1,751,566	532,121	396,035	6,134,630	-	45,738,126
2037	583,293,608	5.23%	3,635,669	1,843,208	559,962	457,381	6,496,220	-	52,234,346
2038	611,495,377	4.83%	3,811,451	1,932,325	587,036	522,343	6,853,155	-	59,087,501
2039	639,478,473	4.58%	3,985,869	2,020,752	613,899	590,875	7,211,395	-	66,298,896
2040	668,054,762	4.47%	4,163,985	2,111,053	641,333	662,989	7,579,360	-	73,878,256
2041	696,866,562	4.31%	4,343,569	2,202,098	668,992	738,783	7,953,442	-	81,831,698
2042	726,134,958	4.20%	4,525,999	2,294,586	697,090	818,317	8,335,992	-	90,167,690
2043	755,813,617	4.09%	4,710,986	2,388,371	725,581	901,677	8,726,615	-	98,894,305
2044	785,852,821	3.97%	4,898,221	2,483,295	754,419	988,943	9,124,878	-	108,019,183
2045	816,199,544	3.86%	5,087,372	2,579,191	783,552	1,080,192	9,530,307	-	117,549,490
2046	846,797,551	3.75%	5,278,089	2,675,880	812,926	1,175,495	9,942,390	-	127,491,879
2047	877,587,524	3.64%	5,470,003	2,773,177	842,484	1,274,919	10,360,583	-	137,852,462
2048	908,507,202	3.52%	5,662,725	2,870,883	872,167	1,378,525	10,784,300	-	148,636,762
							<u>\$ 148,636,762</u>	<u>\$ -</u>	

Project Plan

9

Project	Estimated Cost
Streetscaping improvements in Downtown Killeen	\$ 14,000,000
Rancier Avenue replacement and streetscaping improvements	\$ 15,000,000
Rancier Avenue undergrounding overhead utilities	\$ 9,000,000
Downtown land acquisition and development of park space	\$ 8,000,000
Avenue D – Street and sidewalk rehabilitation	\$ 2,500,000
City Hall in the downtown	\$ 10,000,000
Land acquisition and development for expansion of Killeen Business Park	\$ 30,000,000
Economic development and public infrastructure reimbursements	\$ 14,000,000
Downtown land acquisition and redevelopment	\$ 8,000,000
Administrative /Professional Services	\$ 3,000,000
Total	\$ 113,500,000

Alternatives

10

- ❑ The City Council has three (3) alternatives. The Council may:
 - ❑ Do not approve the ordinance;
 - ❑ Approved the ordinance with amendments; or
 - ❑ Approve the ordinance as presented.

Staff Recommendation

11

- Staff recommends approval of the ordinance as presented.



City of Killeen

Staff Report

File Number: RS-22-180

1	City Council Workshop	12/06/2022	Reviewed and Referred	City Council	12/13/2022
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Consider a memorandum/resolution authorizing a professional services agreement for the schematic design of the Rancier Avenue Replacement and Streetscaping Improvements Project with BGE Inc. in the amount of \$813,453.73.

DATE: December 6, 2022

TO: Kent Cagle, City Manager

FROM: Edwin Revell, Executive Director of Development Services

SUBJECT: Authorize the execution of a Professional Services Agreement with BGE Inc. in the amount of \$813,453.73 for the Schematic Design of the Rancier Avenue Replacement and Streetscaping Improvements Project

BACKGROUND AND FINDINGS:

The FY 2023 Capital Improvement Plan includes the Rancier Avenue Replacement and Streetscaping Improvements Project as an unfunded project for design. However, the project was intended to be funded using TIRZ funding. At the September 8, 2022 TIRZ Board Meeting, the TIRZ Board voted 5-0 to program up to \$1 million TIRZ funding for the design of Phase One of the Rancier Avenue Project.

In addition to the TIRZ funding, the City applied for a KTMPO Grant in October of 2020 for funding associated to improve the sidewalks and landscaping along Rancier Avenue. The grant was selected and awarded \$3,240,000.00 in construction funding that will be available in 2024.

City staff has negotiated a professional services agreement (PSA) with BGE Inc. for the schematic design of the Rancier Avenue Replacement and Streetscaping project in the amount of \$813,453.73. The schematic design will include background research of the limits between Fort Hood Street and W.S. Young and TXDOT required studies that include Environmental review, Archaeological Studies, Historical Studies, Threatened and Endangered Species, Water Resources, and a Hazardous Materials Initial Site Assessment. The schematic design will also include public involvement through a public meeting and stakeholder meetings, topographic surveying, utility coordination, roadway design, stormwater drainage design, urban landscaping, and grant application support.

Upon completion of the schematic design, a contract amendment will be submitted for approval to proceed further with the design.

THE ALTERNATIVES CONSIDERED:

- (1) Delay the design and construction of the Rancier Avenue Replacement and Streetscaping Improvements Project.
- (2) Authorize the execution of a Professional Services Agreement with BGE Inc. in the amount

of \$813,453.73 for the Schematic Design of the Rancier Avenue Replacement and Streetscaping Improvements Project.

Which alternative is recommended? Why?

Staff recommends alternative 2, which is to authorize the City Manager to execute a Professional Services Agreement with BGE, Inc. BGE, Inc. has extensive experience required for this project that includes pavement design for roadway replacement, traffic analysis, drainage analysis, transportation planning, and urban landscaping. City staff has interviewed the consultant and determined that BGE, Inc. best meets the needs for this project. BGE, Inc. has submitted a fair and reasonable proposal for their engineering services and has a good prior project delivery history with projects similar to this one.

CONFORMITY TO CITY POLICY:

This item confirms to state and local policies.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

The fee for services is in the amount of \$813,453.73.

Is this a one-time or recurring expenditure?

This is a one-time expenditure.

Is this expenditure budgeted?

Upon approval of the budget amendment to follow, the project is being funded by the Tax Increment Reinvestment Zone Fund account 235-8940-493.69-01.

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

Yes, upon approval of the budget amendment.

RECOMMENDATION:

Staff recommends that the City Council authorize the City Manager or his designee to enter into a Professional Services Agreement with BGE, Inc. in the amount of \$813,453.73 for the design of the Rancier Avenue Replacement and Streetscaping Improvements Project, and that the City Manager, or his designee, is expressly authorized to execute any and all change orders with the amounts set

by State and Local Law.

DEPARTMENTAL CLEARANCES:

Finance

Legal

ATTACHED SUPPORTING DOCUMENTS:

Proposal

Agreement

Certificate of Interested Parties

EXHIBIT A

ENGINEERING SERVICE

ROUTE AND DESIGN STUDIES (Function Code 110)

The work to be performed by the ENGINEER under this contract consists of providing engineering services required for the schematic development for the reconstruction of Rancier Ave from S. Fort Hood Road (SH 195) to west of N 38th St. The project consists of reconstructing approximately 2.5 miles of the existing 4-lane roadway section including full depth pavement, 6-ft sidewalks, storm drain, upgrade traffic and pedestrian signals, relocation of water and dry utilities, illumination, and landscaping. This project involves surveying, utility coordination, environmental, public involvement, engineering analyses, and associated details necessary to produce a design schematic.

The ENGINEER shall perform all work and prepare all deliverables in accordance with the latest version of the City of Killeen criteria.

The ENGINEER shall perform quality control and quality assurance (QA/QC) on all deliverables associated with this project.

1. Data Collection

- A. The determination of data requirements, availability, and sources will be coordinated with the City's designated PM. Once the data needs and sources are identified, the ENGINEER will contact the appropriate agencies and organizations to obtain the data. Data collection will focus on existing publicly available information primarily for issues that could substantially influence project alternatives, including potential fatal flaws. Data to be collected will include, but not be limited to:
- B. "As-built plans", right-of-way maps, and previous corridor studies, existing channel and drainage easement data, existing traffic counts, accident data, zoning and future land use maps, available Economic Development Plans, jurisdictional boundaries, City ETJ boundaries.
- C. Existing utility information and mapping obtained from a GIS database and/or provided by the City and/or utility owners. Planned infrastructure such as transmission lines and major utilities.
- D. Readily available floodplain information and studies from the Federal Emergency Management Agency (FEMA), the Corps of ENGINEERS (USACE), local municipalities and/or other governmental agencies.
- E. Graphic files, plans, documents, and other data for existing and proposed improvements along corridor.
- F. Photographic record of notable existing features collected during field reconnaissance

from public right-of-way locations.

2. Review of Data

- A. The ENGINEER will review the data collected and organize the information into design files.

3. Complete Design Summary Form

- A. Design criteria shall be in accordance with the City of Killeen criteria.

4. Route Studies

- A. The ENGINEER, with input from the City, shall develop key issues and evaluation criteria to assist in evaluating project alternatives and typical sections, e.g., varying lane widths, on-street parking, median alternatives, driveway widths.
- B. Attend and document kickoff meeting. The meeting will provide for a brainstorming session in which decision makers, stakeholders and technical personnel may discuss and agree on roadway and drainage design parameters, engineering and environmental constraints, landscape and urban design approach, project development schedule and other identified issues.

ENVIRONMENTAL COMPLIANCE (Function Code 120)

This project is projected to be locally sponsored by the City of Killeen and is not on the TxDOT system; however, Federal Highway Administration (FHWA) funds, administered by the Killen-Temple Metropolitan Planning Organization (KT MPO), are anticipated. Therefore, the project will be subject to Texas Department of Transportation (TxDOT) review and NEPA requirements per 23 U.S.C 327 and a Memorandum of Understanding (MOU) dated December 9, 2019, and executed by FHWA and TxDOT. The project is anticipated to be environmentally cleared through TxDOT as a Categorical Exclusion (CE).

As the project is anticipated to be a locally sponsored project subject to TxDOT's environmental review procedures, an Advanced Funding Agreement (AFA) between TxDOT and the City of Killeen will be required. In addition, the project will require issuance of one or more Control-Section-Job numbers (CSJs). Following the execution of an AFA and issuance of a CSJ, environmental compliance documentation will be prepared in TxDOT's format and according to current TxDOT guidance found in TxDOT's Environmental Compliance Toolkits.

1. TxDOT Environmental Scoping

Proposed improvements to Rancier Avenue will require environmental approval. The TxDOT Waco District will be responsible for review and approval of environmental documentation. This scope of Services is based on TxDOT's current published TxDOT CE guidance in the TxDOT Environmental Toolkits. The ENGINEER will prepare TxDOT's Work Plan Development (WPD) Section I – Project Definition, WPD Section II – Work Plan Development, and supporting project area maps. These documents will be submitted to the TxDOT Waco District for review and approval.

Deliverables:

- Draft and Final WPD Section I and WPD Section II
- Draft and Final Project Area Maps

2. Archeological Studies

The ENGINEER will prepare an Archeological Background Study per the TxDOT Environmental Toolkit and submit to the TxDOT Waco District for review and approval. The Background Study shall be produced by a professional archeologist as defined in 13 TAC 26.5(52)(B). Background studies comprise a review of existing data, including – but not limited to – the Texas Archeological Sites Atlas, geologic maps, soil maps, aerial photographs, and historic maps. Based on this review, the ENGINEER will identify if there are any locations that may require field investigation to evaluate the project's effects on archeological resources. As the proposed project would occur within a highly developed urban area, a need for additional archeological investigations is not anticipated. This scope of services excludes site visits, surveys, and coordination with the Texas Historical Commission (THC).

Deliverables:

- Draft and Final Archeological Background Study

3. Historical Studies

The proposed project is within an aging part of the City of Killeen, new Right of Way (ROW) is anticipated and structures 50 years of age or older are anticipated along the project limits. It is anticipated that the THC and TxDOT will require a Historical Resource Project Coordination Request (PCR) Historical Studies Research Design, and Historic Resources Reconnaissance Survey to identify historic resources that may be impacted by the proposed project and to assess potential impacts to historic properties, if identified.

The ENGINEER will prepare a Historical Studies PCR per the TxDOT Environmental Toolkit and submit to the TxDOT Waco District for review and approval. This task includes data collection, exhibits and documentation using the TxDOT format standards.

The ENGINEER shall prepare a research design for review and comment by TxDOT-ENV. The research design shall conform to the TxDOT SOU: Non-Archeological Historic-Age Resource Research Designs Review checklist (January 2020 version).

The ENGINEER shall perform a reconnaissance survey conforming to the methodology outlined in Appendix B of the Draft CRM Guide for Accurately Identifying Non-Archeological Cultural Resources (Texas Department of Transportation, January 2020). The survey shall document each historic-age resource (defined by TxDOT as a building, structure, object, historic district or non-archeological site at least 45 years old at the time of letting) within the Study Area. The Study Area shall consist of the Area of Potential

Effects (APE) plus all parcels that are wholly or partially within the APE and those parcels where new ROW will be acquired.

The ENGINEER shall provide a report detailing the results and findings of the reconnaissance survey including effects to historic properties and the need, if any, to conduct future intensive survey efforts. The report shall have sufficient detail and clarity to provide THC with the basis for making determinations of National Register of Historic Places (NRHP) eligibility or shall have sufficient detail and clarity to make recommendations concerning the scope of the intensive survey. The report shall conform to the TxDOT Standards of Uniformity for Non-Archeological Historic-Age Resource Reconnaissance Survey Reports Review Checklist (January 2020 version).

TxDOT Waco District will be responsible for coordination with the THC per the 2013 MOU between TxDOT and the THC.

Deliverables:

- Draft and Final Historical Studies PCR
- Draft and Final Historical Studies Research Design
- Draft and Final Historical Resources Reconnaissance Survey

4. Threatened and Endangered Species

The ENGINEER shall conduct a habitat assessment and biological resources summary utilizing TxDOT's Species Analysis Summary and Species Analysis Form according to current guidance in the TxDOT Environmental Toolkits to document compliance with applicable state and federal requirements. U.S. Fish and Wildlife Service or Texas Parks and Wildlife Department coordination is not anticipated. Agency coordination for protected species is excluded from this scope of services.

Deliverables:

- Draft and Final Species Analysis Summary
- Draft and Final Species Analysis Form

5. Water Resources

Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act regulate activities with the potential to impact Navigational Waters and Waters of the U.S., including wetlands. Regulatory oversight of Section 10/Section 404 is within the purview of the U.S. Army Corps of Engineers (USACE) and impacts to USACE jurisdictional waters require USACE authorization. Based on the proposed design, it is anticipated that if jurisdictional waters are present, the project would qualify for a Nationwide Permit (NWP) #14, and impacts to jurisdictional waters would fall below the thresholds requiring USACE notification. The ENGINEER would conduct surface water analysis documenting the presence or absence of jurisdictional waters and potential

impacts to those waters by the proposed project. The ENGINEER shall document the results and compliance with the conditions of NWP 14 on a Surface Water Analysis Form and Section 404/10 Impacts Table according to current TxDOT guidance in the Environmental Compliance Toolkits. USACE coordination is excluded from this scope of services.

Deliverables:

- Draft and Final Surface Water Analysis Form
- Draft and Final Section 404/10 Impacts Table

6. Hazardous Materials

It is anticipated that the proposed project would require work outside of the existing Rancier Avenue ROW; therefore, TxDOT guidelines require preparation of a Hazardous Materials Initial Site Assessment (ISA). The ENGINEER shall perform an ISA for potential hazardous materials that may impact the proposed project according to current TxDOT guidance in the Environmental Compliance Toolkits. Should the findings of the ISA conclude that additional investigation, special considerations, or other commitments are required during future stages of project development, the ENGINEER shall review those findings and commitments with TxDOT prior to completing the hazardous materials discussion for the environmental document. Additional investigations, special considerations, or other commitments will be the responsibility of the City and are excluded from this scope of services.

Deliverables:

- Draft and Final Hazardous Materials ISA

PUBLIC INVOLVEMENT (Function Code 121)

1. TxDOT Public Involvement

The ENGINEER shall perform Public Involvement Analysis according to current guidelines in TxDOT's Environmental Compliance Toolkits and communicate the results to the TxDOT Waco District to be documented into ECOS. It is anticipated that the proposed project will require a Notice and Opportunity to Comment (NAOTC) to all affected property owners, using TxDOT's current template on the Environmental Compliance Toolkit. The ENGINEER will develop and maintain a mailing list of all affected property owners based on current Bell County Appraisal District data, prepare a NAOTC and distribute the NAOTC according to current TxDOT guidelines. The ENGINEER will provide documentation of the NAOTC and any comments received according to current TxDOT guidelines and provide documentation to the TxDOT Waco

District.

Deliverables:

- Draft and Final NAOTC Mailing List
- Draft and Final NAOTC
- Draft and Final NAOTC Documentation

2. Additional Public Involvement

At the request of the City, the ENGINEER will develop a public engagement plan and provide general public outreach and engagement throughout the project. A database will be developed which includes nearby property owners and residents, businesses, churches, educational/community organizations, elected/public officials, and any interested individuals. ENGINEER will identify and reach out to key stakeholders and community groups (HOAs, etc.) that may be interested and will collect email addresses for email updates. We will arrange and attend meetings with stakeholders and respond to questions and comments in a timely manner. Project materials such as maps and handouts will be developed and shared with stakeholders. Finally, email updates will be sent out to keep the public updated on the project progress.

- A. Public Meeting. The ENGINEER will plan, schedule, conduct and facilitate one (1) public meeting to share project information with and collect feedback from citizens and stakeholders as determined by the City and the team. The meeting will be held at a time decided by the City, and will include a virtual attendance option. Tasks may include, but not limited to: calling and/or visiting potential meeting sites; reserving meeting space; announcing the meetings by distributing meeting information and coordinating with attendees; holding and participating in meeting rehearsals; facilitating meetings; and providing a summary report of the meeting including public input received. The ENGINEER will develop meetings materials and provide Spanish translation as needed.
- B. Individual Stakeholder Meetings. The ENGINEER will organize and conduct one-on-one stakeholder meetings over a period of three-days, at a time and place determined through coordination between the ENGINEER and the City. Notices will be provided to key stakeholders identified during development of the public engagement plan, and stakeholders will be provided the opportunity to sign-up in advance for 30-minute blocks of time throughout the designated 3-day period.
- C. Online Project Information Portal. The ENGINEER will create, host and maintain an online project information portal to provide the public with project information and an opportunity to provide feedback. The online portal will contain links to a pre-recorded virtual public meeting, to run concurrently with the in-person public meeting. A public opinion survey and opportunity to comment on the virtual public meeting will be provided through the portal for a

period of time to be specified through coordination between the ENGINEER and City.

- D. Virtual Public Meeting. The ENGINEER will create a pre-recorded public meeting with project materials (e.g., fact sheets, exhibits) to be hosted on the online project portal.

Deliverables:

- Public Engagement Plan
- Develop and maintain a stakeholder database throughout the project in Excel format
- Materials development and final electronic copies (fact sheet, exhibits)
- Web content (to be shared on the City's website)
- Develop one virtual public meeting (to be hosted on the online project portal)
- Provide 4 e-mail updates (outside of meeting notices)
- Arrange and facilitate one-on-one meetings with stakeholders over a 3-day period. Document responses and communications with stakeholders.
- Logistics and planning for one public meeting (Arrange meeting location and facility preparation)
- Coordinate meeting announcements and promotion such as letters, email notices, signage, media releases, posting, etc.
- Develop meeting materials and signage
- Facilitate meetings
- Provide summary report of each meeting
- The above information/deliverables will also be utilized to support the RAISE Grant effort but no additional public involvement tasks will be performed to support the grant.

RAISE GRANT (Function Code 122)

1. RAISE Grant Application Preparation and Submission

- A. Prepare a draft of the application, review details from the application workshop and submit the final application. Submit the final application online on behalf of the City of Killeen. BGE will utilize the Detailed Instructions on "How to Apply" for RAISE Transportation Discretionary Grants found on the RAISE Website (www.transportation.gov/RAISEgrants). Applications must be submitted through Grants.gov. BGE will complete the Grants.gov registration process before submitting the Application, and this process usually takes 2 – 4 weeks to complete.
- B. Provide support to the City to collect data from public sources, and other City departments.
- C. Provide miscellaneous support needed to complete the application.
- D. Develop a benefit cost analysis of the build and no-build options.

- E. Attend up to four (4) project coordination meetings with Stakeholders and other City departments.

RIGHT OF WAY DATA / UTILITY COORDINATION (Function Code 130)

The Engineer shall perform all preliminary utility coordination including Utility Conflict Layout, and Utility Adjustment & Underground Conversion services for approximately ten (10) utilities.

1. Utility Coordination

A. Utility Conflict Layout

These services include obtaining record information on existing utilities from utility owners to identify all known existing public utilities, preparing a base map depicting the horizontal utility locations, and creating a Utility Conflict Matrix (UCM) identifying potential known conflicts based on the final schematic layout.

- a. Initiate one-call (811) and coordinate with utility companies. BGE will survey all field markings.
 - i. Quality Level D - Existing Records: Utilities are plotted from review of available existing records.
 - ii. Quality Level C - Surface Visible Feature Survey: Quality level "D" information from existing records is combined with surveyed surface-visible features (performed by surveyor). Includes Quality Level D information. If there are variances in the designated work area of Level D then a new schematic or plan layout, if needed, is required showing the limits of the proposed project and limits of the work area required for this work authorization; including highway stations, limits within existing or proposed right of way, additional areas outside the proposed right of way, and distances or areas to be included down existing intersecting roadways.

B. Utility Adjustment & Underground Conversion Coordination

Utility Adjustment & Underground Conversion Coordination shall include the following services:

- a. Organize and hold group utility coordination meeting with all utility companies.
- b. Individual progress meetings (2 with each provider) and communication and coordination with utilities.
 - i. The Utility Coordinator shall perform utility coordination and liaison activities with involved utility owners, their consultants, and the City of Killeen to achieve timely project notifications, formal coordination meetings, conflict analysis and resolution.

- ii. The Utility Coordinator shall coordinate all activities with the City of Killeen, or their designee, to facilitate the orderly progress and timely completion of the preliminary design phase. The Utility Coordinator will be responsible for the following:
 1. The Utility Coordinator shall provide initial project notification letters to all affected utility companies, owners, and other concerned parties, if needed.
 2. The Utility Coordinator shall provide the City of Killeen and all affected utility companies and owners a Utility Contact List for each project with all information such as: (a) Owner's Name; (b) Contact Person; (c) Telephone Numbers; (d) Emergency Contact Number; (e) E-mail addresses; (f) as well as all pertinent information concerning their respective affected utilities and facilities, including but not limited to: size, number of poles, material, and other information which readily identifies the utilities companies' facilities.
 3. The Utility Coordinator shall advise utility companies and owners of the general characteristics of the Project and provide an illustration of the project footprint for mark-up of the utility facility locations that occupy the project area.
 4. The Utility Coordinator shall coordinate which utilities will conflict with roadway construction, which utilities will be proposed to underground conversion and make the utility company aware of these conflicts and conversion.
 5. The Utility Coordinator will develop conceptual joint trench layouts for the existing and future utilities. These will present general location of the utility trench and conduit layouts as discussed with the utility providers.

C. Water Utility Replacement

- a. Engineer will evaluate the replacement of the existing water line from N. Park to 10th, and 18th to W.S. Young.

Deliverables:

- Scanned record information in .pdf format if received from each utility
- Surveyed visible and flagged utility locations in 2D topo files
- Utility Conflict Layout base map and Utility Conflict Matrix
- Conceptual Underground Utility plan view assignments/configuration and joint trench

PROJECT MANAGEMENT (Function Code 145)

1. Meetings

- A. Attend and document up to eight Progress Meetings at the City of Killeen office or virtual.

2. General Contract Administration

- A. Develop monthly invoices and progress reports.
- B. Subconsultant coordination.
- C. Design coordination with the City of Killeen.

FIELD SURVEYING (Function Code 150)

General

Surveys will be in accordance with the "Texas State Board of Land Surveying".

Survey field notes will be submitted if requested.

- A. The City will obtain right-of-entry agreements with property owners for the required field surveys, if necessary.
- B. The Surveyor will Contact the One-Call System in advance of performing field surveys to ensure data collection includes ties to location of marked utilities. This task does not always allow for timing of markings with the survey activities. Reasonable attempts to coordinate with utility owners will be made to achieve efficiency in data collection.

1. Topographic Surveys for Engineering Design within Apparent Right-of-Way

- A. Scope listed below will be performed within the Apparent Right-of-Way of Rancier Drive. Sufficient property records research will be performed to identify existing right-of-way of Rancier Drive and incorporate into DTM.
- B. Data for the horizontal control will be based on Texas State Plane, Central Zone, NAD 83.
- C. Vertical Data will be based upon NAVD 88 Datum.
- D. Data collection will consist of spot elevations for improvements, edge of roadway, driveways, visible or marked utilities, drainage features, centerline of roadway, and grade breaks. Individual trees will not be located as a part of this effort.
- E. Intersecting streets and driveways will be included up to the PC of the curb return, or the apparent right-of-way of Rancier Drive, whichever is more extensive.
- F. Field surveys will provide the locations of all small signs, mailboxes, and other visible surface features. Sign text, color, dimensions, and standard sign design will be provided in accordance with the TMUTCD.

- G. Except areas performed with Mobile LiDAR, survey shots will be assigned a unique point number which provides a positive identification of the point. Each point will be assigned a feature number or feature name using a standard feature table. An ASCII points file and a hard copy print out will be provided. Each line of the output data shall contain in this order: the point number, northing, easting, elevation, and the descriptive feature code.
- H. Field surveys will locate horizontally crossings of power lines, telephone/cable lines, and visible above ground utilities and utility markings.
- I. Location of existing utilities will be shown on the 2D files using field marked information designated by the utility companies and from surface evidence surveyed on the ground.
- J. Surveyed data will be provided in a Microstation .dgn (V8) compatible two dimensional base map format. The survey shot point attributes will appear on separate levels.
- K. A Digital Terrain Model (DTM) will be provided in a Microstation .dgn (V8) GEOPAK compatible three-dimensional format.

ROADWAY DESIGN CONTROLS (Function Code 160)

1. Schematic Development

Perform the following items for the project

- A. Geometric Design – Layout horizontal alignment; vertical profile; lane configuration; pavement cross slopes; sidewalks that meet acceptable design criteria and remain within the limits of the proposed ROW. The Layout must consist of a planimetric file of existing features and the proposed improvements within the existing and any proposed ROW. The Layout must also include the following features: existing and proposed ROW, existing and proposed horizontal and vertical alignment and profile grade line, sidewalks, curb & gutter, storm drain, waterline, landscaping, illumination, signals, cross culverts, lane widths, cross slopes, berms, pavement structure, corner clips, and retaining walls (if applicable). Existing major subsurface and surface utilities must be shown on the Layout. The ENGINEER, with input from the City, shall utilize a recent area project pavement design for schematic development and cost estimates.
- B. Verify ROW Needs – Analyze the cross sections associated with the desirable design criteria to analyze existing ROW. Develop an exhibit providing the ROW footprint with the desirable configuration.
- C. 3D Corridor Model and Design Cross Sections - 3D corridor model will be created using Bentley's OpenRoads and GEOPAK tools. The 3D corridor model will have enough details to verify the feasibility of the proposed design. Develop roadway cross sections associated with the proposed horizontal alignment and vertical profile in accordance with acceptable design criteria.
- D. Parking / Driveway Planning – Analyze up to 45 parcels where on-street parking is currently within the existing ROW and provide alternatives for driveway, sidewalk,

and modified parking configurations. Parking configurations may not be City code compliant. Preferred alternative to be presented in final schematic.

Deliverables:

- Design Summary Form
- Alternative Parking / Driveway Layouts (plan view only)
- Draft Schematic Roll Plot (plan and profile)
- Final Schematic Roll Plot (plan and profile)
- Cross Sections Roll Plot

DRAINAGE (Function Code 161)

1) Schematic Development

A. Data Collection Integration: Incorporate all design surveys into computer aided drafting and develop topographies and surfaces. This data shall be utilized to develop hydrology and hydraulic parameters. This shall include topographic working drawings to prepare the preliminary drainage design. BGE will attempt to obtain existing models associated with areas near (South Nolan Creek) or within the Project's limits. The City will provide BGE with all pertinent hydrologic and hydraulic models including, but not limited to, HEC-HMS, HEC-RAS, GeoPAK, and StormCAD.

B. Hydrologic and Hydraulic Analysis: Conduct a hydrologic analysis for the existing and proposed roadway section throughout the limits of the project. The analysis shall incorporate the 4% and 1% annual chance storm (25-year and 100-year) events. This analysis develops storm water flows to all cross culverts and points of analysis along the proposed design.

Based on the hydrologic analysis results, a hydraulic analysis will be conducted to preliminarily size proposed trunk lines. The hydraulic analysis will be conducted using GEOPAK or StormCAD.

C. Conceptual Design Alignment: Drawings of the conceptual storm drain system alignment will be produced using Autodesk Civil 3D or Microstation. The conceptual design will represent approximate trunk line alignment. The conceptual alignment will be incorporated into the schematic roll plot.

MISCELLANEOUS (ROADWAY) (Function Code 163)

1) Schematic Development

A. Cost Estimates – Prepare construction cost estimate at draft and final schematic

submittals.

LANDSCAPE / URBAN DESIGN (Function Code 164)

BGE will assist in the conceptual development of the project to explore Context Sensitive Design (CSD) opportunities for hardscape enhancements and landscape solutions that create a sense of place, enhance pedestrian mobility/connectivity and user safety to complement community identity and economic development of the corridor. The purpose of this scope sub-section is to describe a context-based vision for urban design enhancement of the corridor, to explore CSD improvement opportunities, evaluate potential enhancement construction costs, and to confirm a program of improvements for further design development in subsequent phases of the project based on the preferred plan developed for the Project engineering.

BGE will evaluate the urban design of an additional 3,200 LF of roadway immediately east of WS Young Drive. This segment will be evaluated and designed concurrent to the remainder of the project corridor. All urban design scope tasks shall be applied to this additional segment with the exception that one (1) Street Section Illustration will be prepared for the additional roadway segment and one additional Perspective rendering will be added, for a total not to exceed three (3) for the entire project. Client requests that this added area be considered for a lesser level of urban design enhancement than the area west of WS Young Drive.

1. **Site Visit / Inventory** - Conduct a one-day site visit to compile a photographic inventory of existing corridor conditions and surrounding community context. Compose representative photo images of key conditions on two presentation drawing sheets with bullet-form notes describing general conditions and characteristics.
2. **Issues & Opportunities Analysis** - Review the initial project plan alternatives and client provided project design criteria to identify CSD design issues and opportunities. Prepare diagrammatic corridor Partial Plan and/or Section sketches with color highlights or selective representative photo images with bullet-form notations to convey plan issues and opportunities. Improvements depicted will be prototypical and generic in nature with further definition to be performed in subsequent design phases for Project included features. Improvement concepts may include:
 - a. Sidewalk Delineations
 - b. Parkway Shoulders
 - c. Driveway Consolidations
 - d. Multi-use Paths
 - e. Crosswalk Enhancements
 - f. Enhanced Light Fixtures
 - g. Street Furnishings
 - h. Hardware Color Enhancement
 - i. Landscape Plantings
 - j. Special Paving
 - k. Enhanced ROW Retaining Walls
 - l. Enhanced ROW Fencing
 - m. Community Gateways

Note - Street concepts such as complete streets, road diets, lane width reductions, landscape medians, multi-use trail inclusions, utility relocations/undergrounding, intersection tables and/or street edge parking will be evaluated and analyzed by the civil engineering team members.

3. **Street Section Illustrations** – Prepare illustrative street cross section view graphics based on the civil engineering roadway design in Sketch-Up depicting proposed prototypical roadway conditions. This task is based on provision of up to three (3) sections for two (2) roadway alternatives.
4. **Preliminary OPCC** - Prepare an order of magnitude Opinion of Probable Construction Cost (OPCC) with ballpark pricing of proposed improvements and potential additive features at a preliminary level of definition. This effort will include a low-end and a high-end quantity approach to identify a range of costs, where appropriate. One Excel format OPCC will be provided by BGE.
5. **Preliminary Review** - Attend an in-person meeting with the client and project team to present the deliverables from tasks 1-4. Obtain client feedback on the potential improvements and incorporate minor updates in the concept sketches, supplemental images and OPCC. Note - It is suggested that deliverables from Tasks 1-5 are best suited for an initial Stakeholder meeting presentation regarding the Draft Schematic.
6. **Perspective Renderings** - Based on client feedback, prepare two (2) enlarged plan detail color renderings of selected locations or conditions within the project. Create a preliminary 3d model of two (2) selected locations or conditions for client view selections. Based on client feedback and view selections, develop two (2) rendered 'Lumion' computer model views. Note - Imagery in the views will be prototypical and generic level of definition that can be updated in latter phase design when specific component design and product selections are confirmed. Buildings along the corridor will be shown as neutral background boxes without elevational detail specific to particular locations.
7. **Final Review** - Compile deliverables applicable to the final schematic. Attend an online meeting with the client and project team to solicit feedback on the deliverables from tasks 5 and 6. Incorporate minor updates to the client-selected deliverables and graphically format the deliverables on drawing sheets. Submit to Client in digital formats. Note - It is suggested that deliverables from Tasks 6 & 7 are best suited for a final Stakeholder meeting presentation regarding the Final Schematic.
8. **Stakeholder Meeting(s)** - Participate in two (2) online prep/preview meetings and two (2) subsequent in person, one day stakeholder meetings to represent landscape architectural/urban design issues, opportunities, and illustrations.
9. **Wrap-up Meeting** - Participate in one (1) final resolution conference call to discuss and verify improvements to be included in the next phase of plan development. Update the conceptual landscape OPCC based on feedback provided by client.

Exclusions

The following tasks are not covered in this scope of work and may or may not be necessary. If deemed necessary, these tasks could be conducted under a separate or supplemental work authorization.

- A. Any tasks or services not indicated in Basic Services above.
- B. Additional meetings and/or online conference calls.
- C. Rework of previously performed tasks, in part or whole.
- D. Off-site and/or out of Right of Way improvements, including cross streets.
- E. Tree survey, verifications and/or mitigation.
- F. Production of sealed OPCC estimates.
- G. Photometric design and/or calculations.
- H. Structural Design.
- I. Historic Preservation assessments, activities or tasks.
- J. Trails (AASHTO compliant) or Trail Planning.
- K. Signage and/or Graphic Design.
- L. Public Art design and/or coordination.
- M. Tactical Urbanism mock-ups and/or strategies.
- N. Stormwater management strategies and/or design
- O. Security and/or Audio-Visual systems.
- P. Design Development and/or Construction Documents.
- Q. Funding requests and/or applications.
- R. Agency permitting activities.
- S. Independent verification of publicly available data.
- T. Drive-through or fly-through animations.
- U. Utility design (dry: communications, gas, electric; and wet: water and wastewater)
- V. TAS (Texas Accessibility Standards) assessments and design.
- W. Traffic Counts and/or Traffic Memo.
- X. Traffic Control Plans.
- Y. Drainage Report (No adverse impact analysis) (to be done in final design).
- Z. Geotechnical explorations and/or Report.
- AA. Pavement Design.
- BB. Right of Entry (ROE) coordination.
- CC. SUE Quality Level A and B.
- DD. Formal Section 10(a) Endangered Species Act (ESA) consultation, including preparation of a stand-alone Biological Assessment or completion of HCP coordination.
- EE. Presence/absence surveys for karst features or endangered species.
- FF. Work extending beyond the specified limits of the project at the time of this work order.
- GG. Noise workshops.
- HH. Archeological Survey.
- II. Public Hearing.
- JJ. Hazardous materials Phase I & Phase II ESAs.
- KK. Preparation of a USACE 404 permit

**PROJECT NAME: RANCIER AVE
FROM FORT HOOD ROAD (SH 95) TO 38th STREET**

EXHIBIT A - FEE SCHEDULE

FC	DESCRIPTION	BGE	AMA	McGray and McGray	TOTAL
FC 110	ROUTE AND DESIGN STUDIES	\$22,620.00			\$22,620.00
FC 120	ENVIRONMENTAL COMPLIANCE	\$35,095.00	\$36,728.00		\$71,823.00
FC 121	PUBLIC INVOLVEMENT	\$77,628.00			\$77,628.00
FC 121	RAISE GRANT APPLICATION SUPPORT	\$35,042.48			\$35,042.48
FC 130	RIGHT OF WAY DATA (Utility Coordination)	\$92,580.00			\$92,580.00
FC 145	PROJECT MANAGEMENT	\$46,960.00			\$46,960.00
FC 150	DESIGN SURVEY	\$99,840.00		\$51,000.00	\$150,840.00
FC 160	ROADWAY DESIGN CONTROLS	\$130,030.00			\$130,030.00
FC 161	DRAINAGE	\$69,960.00			\$69,960.00
FC 163	MISCELLANEOUS (ROADWAY)	\$18,360.00			\$18,360.00
FC 164	LANDSCAPE/URBAN DESIGN	\$90,635.00			\$90,635.00
	EXPENSES	\$5,504.75	\$1,470.50		\$6,975.25
	TOTAL	\$724,255.23	\$38,198.50	\$51,000.00	\$813,453.73

TASK DESCRIPTION	Senior Project Mgr	Project Manager	Project Engineer	QC Manager	Utility Engineer	EIT	Senior Engineer Tech	Senior CADD Op	Survey Crew	RPLS	Senior Tech	Senior ENV	ENV Scientist	Proposal/Grant Specialist I/II	Proposal / Grant Specialist III	GIS Specialist	LA/UD PIC	Senior LA / UD	LA/UD	LA Designer	Admin/ Clerical	TOTAL LABOR HRS. & COSTS	
FC 110 ROUTE AND DESIGN STUDIES																						\$22,620.00	
1. Data collection		5	8			12	8	8														\$5,595.00	
2. Review of data		5	12			12	8															\$5,515.00	
3. Complete design summary form		2	4			8																\$2,030.00	
4. Route studies	8	16	16			16																\$9,480.00	
FC 120 ENVIRONMENTAL COMPLIANCE																						\$35,095.00	
1. TxDOT CE																						\$0.00	
SCOPING DOCUMENTS																						\$0.00	
a. WPD I and WPD II		3											21									\$3,420.00	
b. Required Maps		1	3										32									\$4,995.00	
2. ARCHEOLOGICAL RESOURCES																						\$0.00	
a. Archeological Background Study		2											32									\$4,710.00	
3. HISTORIC RESOURCES																						\$0.00	
a. Historic PCR		2											40									\$5,790.00	
b. Recon Survey (AmaTerra)																						\$0.00	
4. BIOLOGICAL RESOURCES																						\$0.00	
a. Species Analysis Summary		2										4	24									\$4,510.00	
b. Species Analysis Form												2	6									\$1,250.00	
5. WATER RESOURCES																						\$0.00	
a. Surface Water Analysis Form & 404 Table		2	2										16									\$2,870.00	
6. HAZARDOUS MATERIALS ISA FORM		2										8	40									\$7,550.00	
FC 121 PUBLIC INVOLVEMENT																						\$77,628.00	
1. TxDOT PUBLIC INVOLVEMENT ANALYSIS		1	2										6									\$1,325.00	
a. NAOTC		2	2										39									\$5,975.00	
2. ADDITIONAL PUBLIC INVOLVEMENT																						\$0.00	
PUBLIC MEETING																						\$0.00	
a. In-person Public Meeting																						\$0.00	
1. Logistics		4										5	7								7	\$3,308.00	
2. Notices (letters, emai, signage)		5										13	10								9	\$5,806.00	
3. Materials (PPT, maps, exhibits, handouts)		14										20	38								1	\$12,329.00	
4. Facilitation		8										8	9								7	\$5,018.00	
5. Meeting Summary		4										8	14								12	\$5,258.00	
b. Virtual Public Meeting		4	10										52									\$9,400.00	
ONLINE PROJECT PORTAL		4										16	74								1	\$14,359.00	
INDIVIDUAL STAKEHOLDER MEETINGS		28	30										34									\$14,850.00	
FC 122 RAISE GRANT APPLICATION SUPPORT																						\$35,042.48	
1. RAISE Grant Application Preparatation and Submission																					24	\$1,656.00	
RAISE Grant Application Preparatation and Submission	8		14	4		14									24							\$9,680.00	
Data gathering/data of other departments in the City as needed	4		12			4									12						8	\$5,357.00	
Miscellaneous support needed to complete the application	8		12			8									12							\$6,205.00	
Develop Benefit Cost Analysis of the Build and No-Build Option		4	16																			\$3,340.00	
Project Coordination Meetings with Stakeholders (4 meetings)	8		6			4																\$3,260.00	
Graphics as needed (maps and insets in Application)														32		28						\$5,544.48	
FC 130 RIGHT OF WAY DATA (Utility Coordination)																						\$92,580.00	
1. Utility coordination																							
Utility Conflict Layout / Matrix		14	20		58	48																	\$20,572.00
Utility Adjustment Coordination & Underground Conversion Coordination																						\$0.00	
Coordination meeting	8	18	18		24																24	\$13,422.00	
Progress meetings	8	24	24		80	80																\$32,240.00	
Joint Utility Trench Layouts	4	12	16		54		54															\$21,406.00	
Water Utility Replacement Evaluation		4	12				16															\$4,940.00	
FC 145 PROJECT MANAGEMENT																						\$46,960.00	
Meetings	16	32	32			8																\$15,960.00	
General contract administration	8	32	30			8																\$13,840.00	
Internal Project Management and Meetings	8	32	32			32																\$17,160.00	
FC 150 DESIGN SURVEY																						\$99,840.00	
Prelim Research, Deed Plotting, Project Setup										8	160											\$23,160.00	
Establish Horizontal and vertical control									60	2	8											\$11,970.00	
One-Call locates, coordination with Mobile Mapping										3	10											\$1,935.00	
Obtain Design Survey data									255		8											\$45,705.00	
Prepare DGN and DTM										2	100											\$13,890.00	
QA/QC and Final Deliverables										8	12											\$3,180.00	
FC 160 ROADWAY DESIGN CONTROLS																						\$130,030.00	
1. Schematic Development																							
Geometric design	8	45	24	12		100	32															\$34,155.00	
ROW Evaluation	2	10	10	6		10	10															\$8,030.00	
Typical Sections	5	6	20	8		28	16															\$13,075.00	
3D Model and Design cross sections	10	20	28	20		92	92															\$39,610.00	
Parking and Driveway Planning	4	28	45			72	90															\$35,160.00	
FC 161 DRAINAGE																						\$69,960.00	
Data Collection Integration			40			100		32														\$21,780.00	
Hydrologic and Hydraulic Design	1	24	80			180																\$40,205.00	
Conceptual Design Alignment	1	4	14			22		22														\$7,975.00	
FC 163 MISCELLANEOUS (ROADWAY)																						\$18,360.00	
Cost estimates	8	16	40	4		40	8															\$18,360.00	

BGE, INC.

PROJECT NAME: RANCIER AVE

FROM FORT HOOD ROAD (SH 195) TO W S YOUNG DR

EXHIBIT D - FEE SCHEDULE

[illegible]

FUNCTION CODE	TOTAL COSTS	TOTAL DIRECT EXPENSE	TOTAL LABOR COSTS	Senior Project Manager	Project Manager	Project Engineer	QC Manger	Utility Engineer	EIT	Senior Engineer Tech	Senior CADD Operator	Survey Crew	RPLS	Senior Tech	Senior ENV	ENV Scientist			LA/UD PIC	Senior LA / UD	LA/UD	LA Designer	Admin/ Clerical	TOTAL MH BY FC
	\$724,255.23	\$5,504.75	\$718,750.48	127	480	634	54	216	898	334	62	315	23	298	84	494			28	176	63	284	93	4771
SUBTOTAL LABOR HOURS				127	480	634	54	216	898	334	62	315	23	298	84	494			28	176	63	284	93	4771
SUBTOTAL LABOR EXPENSES	\$724,255.23	\$5,504.75	\$718,750.48	2.7%	10.1%	13.3%	1.1%	4.5%	18.8%	7.0%	1.3%	6.6%	0.5%	6.2%	1.8%	10.4%			0.6%	3.7%	1.3%	6.0%	1.9%	

OTHER DIRECT EXPENSES	QUANTITY	UNIT	RATE	
Mileage	1,500	mile	\$ 0.59	\$877.50
Hotel	6	night	\$ 110.00	\$660.00
Meals	6	day	\$ 56.00	\$336.00
Photocopies B/W (8 1/2"x11")	750	each	\$ 0.10	\$75.00
Photocopies B/W (11" X 17")	900	each	\$ 0.20	\$180.00
Photocopies Color (8 1/2" X 11")	600	each	\$ 0.75	\$450.00
Photocopies Color (11" X 17")	600	each	\$ 1.25	\$750.00
Large Format Plotting	25	SF	\$ 2.25	\$56.25
Foam core exhibit boards	12	each	\$ 75.00	\$900.00
Venue Rental	1	each	\$ 250.00	\$250.00
Postage	400	each	\$ 0.55	\$220.00
Advertisements	1	each	\$ 500.00	\$500.00
Misc. (meeting supplies, signage, etc.)	1	each	\$ 250.00	\$250.00
Traffic Counts (Quality Counts)		LS	\$ 4,200.00	\$0.00
SUBTOTAL DIRECT EXPENSES				\$5,504.75

SUMMARY	
TOTAL LABOR COSTS	\$718,750.48
NON-SALARY (OTHER DIRECT EXPENSES)	\$5,504.75
GRAND TOTAL	\$724,255.23

BGE, INC.
PROJECT NAME: RANCIER AVE
FROM FORT HOOD ROAD (SH 195) TO W S YOUNG DR

EXHIBIT D - FEE SCHEDULE

TASK DESCRIPTION	Project Principle	Program Director	Architectural Historian IV	Architectural Historian III	Historian II	GIS Specialist	Production Supervisor	Technical Editor	ENV Scientist	Admin/ Clerical	TOTAL LABOR HRS. & COSTS
FC 120 ENVIRONMENTAL COMPLIANCE AND PUBLIC INVOLVEMENT											\$36,728.00
1. TxDOT CE											\$0.00
SCOPING DOCUMENTS											\$0.00
a. WPD I and WPD II											\$0.00
b. Reuired Maps											\$0.00
ARCHEOLOGICAL RESOURCES											\$0.00
a. Archeological Background Study											\$0.00
HISTORIC RESOURCES											\$0.00
a. Historic PCR											\$0.00
b. Recon Survey	2	14	6	136	100	50	22	6			\$36,728.00
BIOLOGICAL RESOURCES											\$0.00
a. Species Analysis Summary											\$0.00
b. Species Analysis Form											\$0.00
WATER RESOURCES											\$0.00
a. Surface Water Analysis Form & 404 Table											\$0.00
HAZARDOUS MATERIALS ISA FORM											\$0.00
PUBLIC INVOLVEMENT ANALYSIS											\$0.00
a. NAOTC											\$0.00
2. ADDITIONAL PUBLIC INVOLVEMENT											\$0.00
a. Public Meeting											\$0.00
1. In-person Public Meeting											\$0.00
2. Virtual Public Meeting											\$0.00
b. On-line website/portal											\$0.00
c. Meetings with Affected Property Owners											\$0.00
EPIC											\$0.00
STAGEGATE CHECKLIST											\$0.00
HOURS SUB-TOTALS	2	14	6	136	100	50	22	6	0	0	336
CONTRACT RATE PER HOUR	\$251.00	\$164.00	\$147.00	\$119.00	\$89.00	\$109.00	\$93.00	\$78.00	\$135.00	\$69.00	
TOTAL LABOR COSTS	\$502.00	\$2,296.00	\$882.00	\$16,184.00	\$8,900.00	\$5,450.00	\$2,046.00	\$468.00	\$0.00	\$0.00	\$36,728.00
SUBTOTAL											\$36,728.00

FUNCTION CODE	TOTAL COSTS	TOTAL DIRECT EXPENSE	TOTAL LABOR COSTS	Senior Project Manager	Project Manager	Project Engineer	QC Manger	EIT	Senior Engineer Tech	Senior CADD Operator	Senior ENV	ENV Scientist	Admin/ Clerical	TOTAL MH BY FC
	\$38,198.50	\$1,470.50	\$36,728.00	2	14	6	136	100	50	22	6	0	0	336
SUBTOTAL LABOR HOURS				2	14	6	136	100	50	22	6	0	0	336
SUBTOTAL LABOR EXPENSES	\$38,198.50	\$1,470.50	\$36,728.00	0.6%	4.2%	1.8%	40.5%	29.8%	14.9%	6.5%	1.8%	0.0%	0.0%	

OTHER DIRECT EXPENSES		QUANTITY	UNIT	RATE	
	Mileage	300	mile	\$ 0.59	\$175.50
	Hotel	4	night	\$ 110.00	\$440.00
	Meals	6	day	\$ 56.00	\$336.00
	Rental Car	4	day	\$ 75.00	\$300.00
	Photocopies B/W (8 1/2"x11")	340	each	\$ 0.10	\$34.00
	Photocopies B/W (11" X 17")		each	\$ 0.20	\$0.00
	Photocopies Color (8 1/2" X 11")	185	each	\$ 1.00	\$185.00
	Photocopies Color (11" X 17")		each	\$ 1.25	\$0.00
	Large Format Plotting		SF	\$ 2.25	\$0.00
	Traffic Counts (Quality Counts)		LS	\$ 4,200.00	\$0.00
SUBTOTAL DIRECT EXPENSES					\$1,470.50

SUMMARY	

BGE, INC.

PROJECT NAME: RANCIER AVE

FROM FORT HOOD ROAD (SH 195) TO W S YOUNG DR

EXHIBIT D - FEE SCHEDULE

TOTAL LABOR COSTS	\$36,728.00
NON-SALARY (OTHER DIRECT EXPENSES)	\$1,470.50
GRAND TOTAL	\$38,198.50

BGE, INC.
PROJECT NAME: RANCIER AVE
FROM FORT HOOD ROAD (SH 195) TO W S YOUNG DR

EXHIBIT D - FEE SCHEDULE

TASK DESCRIPTION	Senior Project Mgr	Project Manager	Project Engineer	QC Manager	Utility Engineer	EIT	Senior Engineer Tech	Senior CADD Op	Mobile Mapping	RPLS	Senior Tech	Admin/ Clerical	Mobile Mapping	TOTAL LABOR HRS. & COSTS
FC 150 DESIGN SURVEY														\$51,000.00
Prelim Research, Deed Plotting, Project Setup														\$0.00
Establish Horizontal and vertical control														\$0.00
One-Call locates, coordination with Mobile Mapping														\$0.00
Obtain Design Survey data														\$0.00
Mobile Mapping Effort									300					\$51,000.00
Prepare DGN and DTM														\$0.00
QA/QC and Final Deliverables														\$0.00
HOURS SUB-TOTALS	0	0	0	0	0	0	0	0	300	0	0	0	0	300
CONTRACT RATE PER HOUR	\$225.00	\$195.00	\$160.00	\$230.00	\$149.00	\$125.00	\$140.00	\$90.00	\$170	\$195	\$135	\$69.00	\$1.00	
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51,000.00
SUBTOTAL														\$51,000.00

FUNCTION CODE	TOTAL COSTS	TOTAL DIRECT EXPENSE	TOTAL LABOR COSTS	Senior Project Manager	Project Manager	Project Engineer	QC Manger	Utility Engineer	EIT	Senior Engineer Tech	Senior CADD Operator	Survey Crew	RPLS	Senior Tech	Admin/ Clerical		TOTAL MH BY FC
	\$51,000.00	\$0.00	\$51,000.00	0	0	0	0	0	0	0	0	300	0	0	0		300
SUBTOTAL LABOR HOURS				0	0	0	0	0	0	0	0	300	0	0	0		300
SUBTOTAL LABOR EXPENSES	\$51,000.00	\$0.00	\$51,000.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%		

OTHER DIRECT EXPENSES	QUANTITY	UNIT	RATE	
Mileage		mile	\$ 0.59	\$0.00
Hotel		night	\$ 110.00	\$0.00
Meals		day	\$ 56.00	\$0.00
Photocopies B/W (8 1/2"x11")		each	\$ 0.10	\$0.00
Photocopies B/W (11" X 17")		each	\$ 0.20	\$0.00
Photocopies Color (8 1/2" X 11")		each	\$ 0.75	\$0.00
Photocopies Color (11" X 17")		each	\$ 1.25	\$0.00
Large Format Plotting		SF	\$ 2.25	\$0.00
Foam core exhibit boards		each	\$ 75.00	\$0.00
Venue Rental		each	\$ 250.00	\$0.00
Postage		each	\$ 0.55	\$0.00
Advertisements		each	\$ 500.00	\$0.00
Misc. (meeting supplies, signage, etc.)		each	\$ 250.00	\$0.00
Traffic Counts (Quality Counts)		LS	\$ 4,200.00	\$0.00
SUBTOTAL DIRECT EXPENSES				\$0.00

SUMMARY	
TOTAL LABOR COSTS	\$51,000.00
NON-SALARY (OTHER DIRECT EXPENSES)	\$0.00
GRAND TOTAL	\$51,000.00

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN CONSULTING ENGINEERS COUNCIL

AMERICAN SOCIETY OF CIVIL ENGINEERS

This Agreement has been prepared for use with the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 Edition) of the Engineers Joint Contract Documents Committee. Their provisions are interrelated, and a change in one may necessitate a change in the other. For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. 1910-17) (1996 Edition). For guidance on the completion and use of this Agreement, see EJCDC Users Guide, No. 1910-50.

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STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of _____ (“Effective Date”) between the CITY OF KILLEEN (“OWNER”) and BGE, Inc. (“ENGINEER”) for providing professional engineering services related to the design and construction of the Rancier Avenue Replacement and Streetscaping Improvements (“Project”) located in the City of Killeen, Texas.

OWNER and ENGINEER in consideration of their mutual covenants as set forth herein agree as follows:

ARTICLE 1 - SERVICES OF ENGINEER

1.01 Scope

A. ENGINEER shall provide the Basic and Additional Services set forth herein and in Exhibit A.

B. Upon this Agreement becoming effective, ENGINEER is authorized to begin Basic Services as set forth in Exhibit A.

C. If authorized by OWNER, ENGINEER shall furnish Resident Project Representative(s) with duties, responsibilities, and limitations of authority as set forth in Exhibit D.

ARTICLE 2 - OWNER'S RESPONSIBILITIES

2.01 General

A. OWNER shall have the responsibilities set forth herein and in Exhibit B.

ARTICLE 3 - TIMES FOR RENDERING SERVICES

3.01 General

A. ENGINEER's services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion. Unless specific periods of time or specific dates for providing services are specified in this Agreement, ENGINEER's obligation to render services hereunder will be for a period which may reasonably be required for the completion of said services.

B. If in this Agreement specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided, and if such periods of time or dates are changed through no fault of ENGINEER, the rates and amounts of compensation provided for herein shall be subject to equitable adjustment. If OWNER has requested changes in the scope, extent, or character of the Project, the time of performance of ENGINEER's services shall be adjusted equitably.

C. For purposes of this Agreement the term "day" means a calendar day of 24 hours.

3.02 Suspension

A. If OWNER fails to give prompt written authorization to proceed with any phase of services after

completion of the immediately preceding phase, or if ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement.

B. If ENGINEER's services are delayed or suspended in whole or in part by OWNER, or if ENGINEER's services are extended by Contractor's actions or inactions for more than 90 days through no fault of ENGINEER, ENGINEER shall be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, reasonable costs incurred by ENGINEER in connection with, among other things, such delay or suspension and reactivation and the fact that the time for performance under this Agreement has been revised.

ARTICLE 4 - PAYMENTS TO ENGINEER

4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER

A. *For Basic Services.* OWNER shall pay ENGINEER for Basic Services performed or furnished under Exhibit A, Part 1, as set forth in Exhibit C.

B. *For Additional Services.* OWNER shall pay ENGINEER for Additional Services performed or furnished under Exhibit A, Part 2, as set forth in Exhibit C.

C. *For Reimbursable Expenses.* In addition to payments provided for in paragraphs 4.01.A and 4.01.B, OWNER shall pay ENGINEER for Reimbursable Expenses incurred by ENGINEER and ENGINEER's Consultants as set forth in Exhibit C.

4.02 Other Provisions Concerning Payments

A. *Preparation of Invoices.* Invoices will be prepared in accordance with ENGINEER's standard invoicing practices and will be submitted to OWNER by ENGINEER, unless otherwise agreed. The amount billed in each invoice will be calculated as set forth in Exhibit C.

B. *Payment of Invoices.* Invoices are due and payable within 30 days of receipt. If OWNER fails to make any payment due ENGINEER for services and expenses within 30 days after receipt of ENGINEER's invoice therefore, the amounts due ENGINEER will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day. In addition, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement until ENGINEER has been paid in full all amounts due for services, expenses, and other related charges. Payments will be credited first to interest and then to principal.

C. *Disputed Invoices.* In the event of a disputed or contested invoice, only that portion so contested may be withheld from payment, and the undisputed portion will be paid.

D. *Payments Upon Termination.*

1. In the event of any termination under paragraph 6.06, ENGINEER will be entitled to invoice OWNER and will be paid in accordance with Exhibit C for all services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination.

2. In the event of termination by OWNER for convenience or by ENGINEER for cause, ENGINEER, in addition to invoicing for those items identified in subparagraph 4.02.D.1, shall be entitled to invoice OWNER and shall be paid a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, such as reassignment of personnel, costs of terminating contracts with ENGINEER's Consultants, and other related close-out costs, using methods and rates for Additional Services as set forth in Exhibit C. Engineer shall not incur additional expenses after receipt of notice of termination, and shall make reasonable efforts to minimize costs.

E. *Records of ENGINEER's Costs.* Records of ENGINEER's costs pertinent to ENGINEER's compensation under this Agreement shall be kept in accordance with generally accepted accounting practices. To the extent necessary to verify ENGINEER's charges and upon OWNER's timely request, copies of such records will be made available to OWNER at cost.

F. *Legislative Actions.* In the event of legislative actions after the Effective Date of the Agreement by any level of government that impose taxes, fees, or costs on ENGINEER's services or other costs in connection with this Project or compensation therefor, such new taxes, fees, or costs shall be invoiced to and paid by OWNER as a Reimbursable Expense to which a Factor of 1.0 shall be applied. Should such taxes, fees, or costs be imposed, they shall be in addition to ENGINEER's estimated total compensation.

ARTICLE 5 - OPINIONS OF COST

5.01 Opinions of Probable Construction Cost

A. ENGINEER's opinions of probable Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent

ENGINEER's best judgment as an experienced and qualified professional generally familiar with the industry. However, since ENGINEER has no control over the cost of labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, ENGINEER cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by ENGINEER. If OWNER wishes greater assurance as to probable Construction Cost, OWNER shall employ an independent cost estimator as provided in Exhibit B.

5.02 Designing to Construction Cost Limit

~~A. If a Construction Cost limit is established between OWNER and ENGINEER, such Construction Cost limit and a statement of ENGINEER's rights and responsibilities with respect thereto will be specifically set forth in Exhibit F, "Construction Cost Limit," to this Agreement.~~

5.03 Opinions of Total Project Costs

A. ENGINEER assumes no responsibility for the accuracy of opinions of Total Project Costs.

ARTICLE 6 - GENERAL CONSIDERATIONS

6.01 Standards of Performance

A. The standard of care for all professional engineering and related services performed or furnished by ENGINEER under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

B. ENGINEER shall be responsible for the technical accuracy of its services and documents resulting therefrom, and OWNER shall not be responsible for discovering deficiencies therein. ENGINEER shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in OWNER-furnished information.

C. ENGINEER shall perform or furnish professional engineering and related services in all phases of the Project to which this Agreement applies. ENGINEER shall serve as OWNER's prime professional for the Project. ENGINEER may employ such ENGINEER's Consultants as ENGINEER deems necessary to assist in the performance or furnishing of the services. ENGINEER shall not be required to employ any ENGINEER's Consultant unacceptable to ENGINEER.

D. ENGINEER and OWNER shall comply with applicable Laws or Regulations and OWNER-mandated standards. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to OWNER's responsibilities or to ENGINEER's scope of services, times of performance, or compensation.

E. OWNER shall be responsible for, and ENGINEER may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by OWNER to ENGINEER pursuant to this Agreement. ENGINEER may use such requirements, reports, data, and information in performing or furnishing services under this Agreement.

F. OWNER shall make decisions and carry out its other responsibilities in a timely manner and shall bear all costs incident thereto so as not to delay the services of ENGINEER.

G. Prior to the commencement of the Construction Phase, OWNER shall notify ENGINEER of any variations from the language indicated in Exhibit E, "Notice of Acceptability of Work," or of any other notice or certification that ENGINEER will be requested to provide to OWNER or third parties in connection with the Project. OWNER and ENGINEER shall reach agreement on the terms of any such requested notice or certification, and OWNER shall authorize such Additional Services as are necessary to enable ENGINEER to provide the notices or certifications requested.

H. ENGINEER shall not be required to sign any documents, no matter by whom requested, that would result in the ENGINEER's having to certify, guarantee or warrant the existence of conditions whose existence the ENGINEER cannot ascertain. OWNER agrees not to make resolution of any dispute with the ENGINEER or payment of any amount due to the ENGINEER in any way contingent upon the ENGINEER's signing any such certification.

I. During the Construction Phase, ENGINEER shall not supervise, direct, or have control over Contractor's work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, for safety precautions and programs incident to the Contractor's work in progress, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work.

J. ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any

Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.

K. ENGINEER shall not be responsible for the acts or omissions of any Contractor(s), subcontractor or supplier, or of any of the Contractor's agents or employees or any other persons (except ENGINEER's own employees) at the Site or otherwise furnishing or performing any of the Contractor's work; or for any decision made on interpretations or clarifications of the Contract Documents given by OWNER without consultation and advice of ENGINEER.

L. The General Conditions for any construction contract documents prepared hereunder are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (Document No. 1910-8, 1996 Edition) unless both parties mutually agree to use other General Conditions as specifically referenced in Exhibit H.

6.02 Authorized Project Representatives

A. Contemporaneous with the execution of this Agreement, ENGINEER and OWNER shall designate specific individuals to act as ENGINEER's and OWNER's representatives with respect to the services to be performed or furnished by ENGINEER and responsibilities of OWNER under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party.

6.03 Design without Construction Phase Services

A. Should OWNER provide Construction Phase services with either OWNER's representatives or a third party, ENGINEER's Basic Services under this Agreement will be considered to be completed upon completion of the Final Design Phase or Bidding or Negotiating Phase as outlined in Exhibit A.

B. It is understood and agreed that if ENGINEER's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, and that such services will be provided by OWNER, then OWNER assumes all responsibility for interpretation of the Contract Documents and for construction observation or review and waives any claims against the ENGINEER that may be in any way connected thereto.

6.04 Use of Documents

A. All Documents are instruments of service in respect to this Project, and ENGINEER shall retain an ownership and property interest therein (including the right of reuse at

the discretion of the ENGINEER) whether or not the Project is completed.

B. Copies of OWNER-furnished data that may be relied upon by ENGINEER are limited to the printed copies (also known as hard copies) that are delivered to the ENGINEER pursuant to Exhibit B. Files in electronic media format of text, data, graphics, or of other types that are furnished by OWNER to ENGINEER are only for convenience of ENGINEER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

C. Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

D. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. ENGINEER shall not be responsible to maintain documents stored in electronic media format after acceptance by OWNER.

E. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of this Project.

F. OWNER may make and retain copies of Documents for information and reference in connection with use on the Project by OWNER. Such Documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the Project or on any other project. Any such reuse or modification without written verification or adaptation by ENGINEER, as appropriate for the specific purpose intended, will be at OWNER's sole risk and without liability or legal exposure to ENGINEER or to ENGINEER's Consultants. OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's Consultants from all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting therefrom.

G. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

H. Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

6.05 Insurance

A. ENGINEER shall procure and maintain insurance as set forth in Exhibit G, "Insurance."

B. OWNER shall procure and maintain insurance as set forth in Exhibit G, "Insurance." OWNER shall cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds on any general liability or property insurance policies carried by OWNER which are applicable to the Project.

C. OWNER shall require Contractor to purchase and maintain general liability and other insurance as specified in the Contract Documents and to cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project

D. OWNER and ENGINEER shall each deliver to the other certificates of insurance evidencing the coverages indicated in Exhibit G. Such certificates shall be furnished prior to commencement of ENGINEER's services and at renewals thereafter during the life of the Agreement.

E. All policies of property insurance shall contain provisions to the effect that ENGINEER's and ENGINEER's Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder.

F. At any time, OWNER may request that ENGINEER, at OWNER's sole expense, provide additional insurance coverage, increased limits, or revised deductibles that are more protective than those specified in Exhibit G. If so requested by OWNER, with the concurrence of ENGINEER, and if commercially available, ENGINEER shall obtain and shall require ENGINEER's Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by OWNER, and Exhibit G will be supplemented to incorporate these requirements.

6.06 Termination

A. The obligation to provide further services under this Agreement may be terminated:

1. *For cause,*

a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

b. By ENGINEER:

1) upon seven days written notice if ENGINEER believes that ENGINEER is being requested by OWNER to furnish or perform services contrary to ENGINEER's responsibilities as a licensed professional; or

2) upon seven days written notice if the ENGINEER's services for the Project are delayed or suspended for more than 90 days for reasons beyond ENGINEER's control.

3) ENGINEER shall have no liability to OWNER on account of such termination.

c. Notwithstanding the foregoing, this Agreement will not terminate as a result of such substantial failure if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. *For convenience,*

a. By OWNER effective upon the receipt of notice by ENGINEER.

B. The terminating party under paragraphs 6.06.A.1 or 6.06.A.2 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow ENGINEER to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.

6.07 Controlling Law

A. This Agreement is to be governed by the law of the State of Texas and venue shall be in Bell County.

6.08 Successors, Assigns, and Beneficiaries

A. OWNER and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and ENGINEER (and to the extent permitted by paragraph 6.08.B the assigns of OWNER and ENGINEER) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

B. Neither OWNER nor ENGINEER may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

C. Unless expressly provided otherwise in this Agreement:

1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by OWNER or ENGINEER to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.

2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of OWNER and ENGINEER and not for the benefit of any other party. The OWNER agrees that the substance of the provisions of this paragraph 6.08.C shall appear in the Contract Documents.

6.09 Hazardous Environmental Condition

A. OWNER represents to Engineer that to the best of its knowledge a Hazardous Environmental Condition does not exist.

B. OWNER has disclosed to the best of its knowledge to ENGINEER the existence of all Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Material located at or near the Site, including type, quantity and location.

C. If a Hazardous Environmental Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials.

D. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Environmental Condition. In

the event ENGINEER or any other party encounters a Hazardous Environmental Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Environmental Condition; and (ii) warrants that the Site is in full compliance with applicable Laws and Regulations.

E. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an “arranger,” “operator,” “generator,” or “transporter” of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the Site in connection with ENGINEER’s activities under this Agreement.

F. If ENGINEER’s services under this Agreement cannot be performed because of a Hazardous Environmental Condition, the existence of the condition shall justify ENGINEER’s terminating this Agreement for cause on 30 days notice.

6.10 Allocation of Risks

A. Indemnification

1. To the fullest extent permitted by law, ENGINEER shall indemnify and hold harmless OWNER, OWNER’s officers, directors, partners, and employees from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of ENGINEER or ENGINEER’s officers, directors, partners, employees, and ENGINEER’s Consultants in the performance and furnishing of ENGINEER’s services under this Agreement.

2. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, ENGINEER’s officers, directors, partners, employees, and ENGINEER’s Consultants from and against any and all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of OWNER or OWNER’s officers, directors, partners, employees, and OWNER’s consultants with respect to this Agreement or the Project.

3. In addition to the indemnity provided under paragraph 6.10.A.2 of this Agreement, and to the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER and its officers, directors, partners, employees, and ENGINEER’s Consultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from a Hazardous Environmental Condition, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph 6.10.A.4. shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual’s or entity’s own negligence or willful misconduct.

4. The indemnification provision of paragraph 6.10.A.1 is subject to and limited by the provisions agreed to by OWNER and ENGINEER in Exhibit I, “Allocation of Risks,” if any.

6.11 Notices

A. Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

6.12 Survival

A. All express representations, indemnifications, or limitations of liability included in this Agreement will survive its completion or termination for any reason.

6.13 Severability

A. Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and ENGINEER, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

6.14 Waiver

A. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it

affect the enforceability of that provision or of the remainder of this Agreement.

6.15 Headings

A. The headings used in this Agreement are for general reference only and do not have special significance.

ARTICLE 7 - DEFINITIONS

7.01 Defined Terms

A. Wherever used in this Agreement (including the Exhibits hereto) and printed with initial or all capital letters, the terms listed below have the meanings indicated, which are applicable to both the singular and plural thereof:

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Documents.

2. *Additional Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 2 of this Agreement.

3. *Agreement*--This "Standard Form of Agreement between OWNER and ENGINEER for Professional Services," including those Exhibits listed in Article 8 hereof.

4. *Application for Payment*--The form acceptable to ENGINEER which is to be used by Contractor in requesting progress or final payments for the completion of its Work and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

5. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

6. *Basic Services*--The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 1, of this Agreement.

7. *Bid*--The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

8. *Bidding Documents*--The advertisement or invitation to Bid, instructions to bidders, the Bid form and attachments, the Bid bond, if any, the proposed Contract Documents, and all Addenda, if any.

9. *Change Order*--A document recommended by ENGINEER, which is signed by Contractor and OWNER to authorize an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Construction Agreement.

10. *Construction Agreement*--The written instrument, which is evidence of the agreement, contained in the Contract Documents, between OWNER and Contractor covering the Work.

11. *Construction Contract*--The entire and integrated written agreement between the OWNER and Contractor concerning the Work.

12. *Construction Cost*--The cost to OWNER of those portions of the entire Project designed or specified by ENGINEER. Construction Cost does not include costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.

13. *Contract Documents*--Documents that establish the rights and obligations of the parties engaged in construction and include the Construction Agreement between OWNER and Contractor, Addenda (which pertain to the Contract Documents), Contractor's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the notice of award) when attached as an exhibit to the Construction Agreement, the notice to proceed, the bonds, appropriate certifications, the General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Construction Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Construction Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents.

14. *Contract Price*--The moneys payable by OWNER to Contractor for completion of the Work in accordance with the Contract Documents and as stated in the Construction Agreement.

15. *Contract Times*--The numbers of days or the dates stated in the Construction Agreement to:
(i) achieve Substantial Completion, and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.

16. *Contractor*--An individual or entity with whom OWNER enters into a Construction Agreement.

17. *Correction Period*--The time after Substantial Completion during which Contractor must correct, at no cost to OWNER, any Defective Work, normally one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee or specific provision of the Contract Documents.

18. *Defective*--An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty, or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment.

19. *Documents*--Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by ENGINEER to OWNER pursuant to this Agreement.

20. *Drawings*--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings are not Drawings as so defined.

21. *Effective Date of the Construction Agreement*--The date indicated in the Construction Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Construction Agreement is signed and delivered by the last of the two parties to sign and deliver.

22. *Effective Date of the Agreement*--The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

23. *ENGINEER's Consultants*--Individuals or entities having a contract with ENGINEER to furnish services with respect to this Project as ENGINEER's independent professional associates, consultants,

subcontractors, or vendors. The term ENGINEER includes ENGINEER's Consultants.

24. *Field Order*--A written order issued by ENGINEER which directs minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

25. *General Conditions*--That part of the Contract Documents which sets forth terms, conditions, and procedures that govern the Work to be performed or furnished by Contractor with respect to the Project.

26. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Materials in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

27. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

28. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, standards, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

29. *PCB's*--Polychlorinated biphenyls.

30. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

31. *Radioactive Materials*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

32. *Record Drawings*--The Drawings as issued for construction on which the ENGINEER, upon completion of the Work, has shown changes due to Addenda or Change Orders and other information which ENGINEER considers significant based on record documents furnished by Contractor to ENGINEER and which were annotated by Contractor to show changes made during construction.

33. *Reimbursable Expenses*--The expenses incurred directly by ENGINEER in connection with the

performing or furnishing of Basic and Additional Services for the Project for which OWNER shall pay ENGINEER as indicated in Exhibit C.

34. *Resident Project Representative*--The authorized representative of ENGINEER, if any, assigned to assist ENGINEER at the Site during the Construction Phase. The Resident Project Representative will be ENGINEER's agent or employee and under ENGINEER's supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by OWNER. The duties and responsibilities of the Resident Project Representative are as set forth in Exhibit D.

35. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

36. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to ENGINEER to illustrate some portion of the Work.

37. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for use of Contractor.

38. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

39. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

40. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements the General Conditions.

41. *Total Project Costs*--The sum of the Construction Cost, allowances for contingencies, the total costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement.

42. *Work*--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents with respect to this Project. Work includes and is the result of performing or furnishing labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and all equipment into such construction, all as required by the Contract Documents.

43. *Work Change Directive*--A written directive to Contractor issued on or after the Effective Date of the Construction Agreement and signed by OWNER upon recommendation of the ENGINEER, ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

44. *Written Amendment*--A written amendment of the Contract Documents signed by OWNER and Contractor on or after the Effective Date of the Construction Agreement and normally dealing with the non-engineering or non-technical rather than strictly construction-related aspects of the Contract Documents.

ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS

8.01 Exhibits Included

A. Exhibit A, "ENGINEER's Services," consisting of 15 pages.

B. Exhibit B, "OWNER's Responsibilities," consisting of 2 pages.

C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses," consisting of 1 page.

~~D. Exhibit D, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative," consisting of 4 pages.~~

E. Exhibit E, "Notice of Acceptability of Work," consisting of 2 pages.

~~F. Exhibit F, "Construction Cost Limit," consisting of 1 page.~~

G. Exhibit G, "Insurance," consisting of 1 page.

H. Exhibit H, "Special Provisions," consisting of 1 page.

I. Exhibit I, "DBE Goal," Consisting of 1 page.

8.02 Total Agreement

A. This Agreement (consisting of pages 1 to 12 inclusive, together with the Exhibits identified above) constitutes the entire agreement between OWNER and ENGINEER and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

By signing this contract, Engineer hereby verifies that it does not boycott Israel and will not boycott Israel during the term of this contract. Boycotting Israel is defined in Texas Government Code section 808.001 to mean refusing to deal with, terminating business activities with, or taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

OWNER: City of Killeen

By: Kent Cagle

Title: City Manager

Date Signed: _____

Address for giving notices:

P.O. Box 1329

Killeen, TX 76540-1329

Designated Representative (paragraph 6.02.A):

Edwin Revell

Title: Executive Director of Development Services

Phone Number: 254-501-7648

Facsimile Number: 254-501-7628

E-Mail Address: erevell@killeentexas.gov

ENGINEER: BGE Inc.

Brian D. Rice Type text here

By: Brian D. Rice

Title: Director

Date Signed: 11/7/22

Address for giving notices:

101 W. Louis Henna Blvd

Suite 400

Austin, Tx 78728

Designated Representative (paragraph 6.02.A):

Brian D. Rice

Title: Director

Phone Number: 512-656-4667

Facsimile Number: N / A

E-Mail Address: brice@bgeinc.com

This is **EXHIBIT A**, consisting of 10 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:

OWNER _____
ENGINEER BDP

ENGINEER's Services

See BGE, Inc. attached Exhibit A(15 pages)

Type text here

EXHIBIT A

ENGINEERING SERVICE

ROUTE AND DESIGN STUDIES (Function Code 110)

The work to be performed by the ENGINEER under this contract consists of providing engineering services required for the schematic development for the reconstruction of Rancier Ave from S. Fort Hood Road (SH 195) to west of N 38th St. The project consists of reconstructing approximately 2.5 miles of the existing 4-lane roadway section including full depth pavement, 6-ft sidewalks, storm drain, upgrade traffic and pedestrian signals, relocation of water and dry utilities, illumination, and landscaping. This project involves surveying, utility coordination, environmental, public involvement, engineering analyses, and associated details necessary to produce a design schematic.

The ENGINEER shall perform all work and prepare all deliverables in accordance with the latest version of the City of Killeen criteria.

The ENGINEER shall perform quality control and quality assurance (QA/QC) on all deliverables associated with this project.

1. Data Collection

- A. The determination of data requirements, availability, and sources will be coordinated with the City's designated PM. Once the data needs and sources are identified, the ENGINEER will contact the appropriate agencies and organizations to obtain the data. Data collection will focus on existing publicly available information primarily for issues that could substantially influence project alternatives, including potential fatal flaws. Data to be collected will include, but not be limited to:
- B. "As-built plans", right-of-way maps, and previous corridor studies, existing channel and drainage easement data, existing traffic counts, accident data, zoning and future land use maps, available Economic Development Plans, jurisdictional boundaries, City ETJ boundaries.
- C. Existing utility information and mapping obtained from a GIS database and/or provided by the City and/or utility owners. Planned infrastructure such as transmission lines and major utilities.
- D. Readily available floodplain information and studies from the Federal Emergency Management Agency (FEMA), the Corps of ENGINEERS (USACE), local municipalities and/or other governmental agencies.
- E. Graphic files, plans, documents, and other data for existing and proposed improvements along corridor.
- F. Photographic record of notable existing features collected during field reconnaissance

from public right-of-way locations.

2. Review of Data

- A. The ENGINEER will review the data collected and organize the information into design files.

3. Complete Design Summary Form

- A. Design criteria shall be in accordance with the City of Killeen criteria.

4. Route Studies

- A. The ENGINEER, with input from the City, shall develop key issues and evaluation criteria to assist in evaluating project alternatives and typical sections, e.g., varying lane widths, on-street parking, median alternatives, driveway widths.
- B. Attend and document kickoff meeting. The meeting will provide for a brainstorming session in which decision makers, stakeholders and technical personnel may discuss and agree on roadway and drainage design parameters, engineering and environmental constraints, landscape and urban design approach, project development schedule and other identified issues.

ENVIRONMENTAL COMPLIANCE (Function Code 120)

This project is projected to be locally sponsored by the City of Killeen and is not on the TxDOT system; however, Federal Highway Administration (FHWA) funds, administered by the Killen-Temple Metropolitan Planning Organization (KT MPO), are anticipated. Therefore, the project will be subject to Texas Department of Transportation (TxDOT) review and NEPA requirements per 23 U.S.C 327 and a Memorandum of Understanding (MOU) dated December 9, 2019, and executed by FHWA and TxDOT. The project is anticipated to be environmentally cleared through TxDOT as a Categorical Exclusion (CE).

As the project is anticipated to be a locally sponsored project subject to TxDOT's environmental review procedures, an Advanced Funding Agreement (AFA) between TxDOT and the City of Killeen will be required. In addition, the project will require issuance of one or more Control-Section-Job numbers (CSJs). Following the execution of an AFA and issuance of a CSJ, environmental compliance documentation will be prepared in TxDOT's format and according to current TxDOT guidance found in TxDOT's Environmental Compliance Toolkits.

1. TxDOT Environmental Scoping

Proposed improvements to Rancier Avenue will require environmental approval. The TxDOT Waco District will be responsible for review and approval of environmental documentation. This scope of Services is based on TxDOT's current published TxDOT CE guidance in the TxDOT Environmental Toolkits. The ENGINEER will prepare TxDOT's Work Plan Development (WPD) Section I – Project Definition, WPD Section II – Work Plan Development, and supporting project area maps. These documents will be submitted to the TxDOT Waco District for review and approval.

Deliverables:

- Draft and Final WPD Section I and WPD Section II
- Draft and Final Project Area Maps

2. Archeological Studies

The ENGINEER will prepare an Archeological Background Study per the TxDOT Environmental Toolkit and submit to the TxDOT Waco District for review and approval. The Background Study shall be produced by a professional archeologist as defined in 13 TAC 26.5(52)(B). Background studies comprise a review of existing data, including – but not limited to – the Texas Archeological Sites Atlas, geologic maps, soil maps, aerial photographs, and historic maps. Based on this review, the ENGINEER will identify if there are any locations that may require field investigation to evaluate the project's effects on archeological resources. As the proposed project would occur within a highly developed urban area, a need for additional archeological investigations is not anticipated. This scope of services excludes site visits, surveys, and coordination with the Texas Historical Commission (THC).

Deliverables:

- Draft and Final Archeological Background Study

3. Historical Studies

The proposed project is within an aging part of the City of Killeen, new Right of Way (ROW) is anticipated and structures 50 years of age or older are anticipated along the project limits. It is anticipated that the THC and TxDOT will require a Historical Resource Project Coordination Request (PCR) Historical Studies Research Design, and Historic Resources Reconnaissance Survey to identify historic resources that may be impacted by the proposed project and to assess potential impacts to historic properties, if identified.

The ENGINEER will prepare a Historical Studies PCR per the TxDOT Environmental Toolkit and submit to the TxDOT Waco District for review and approval. This task includes data collection, exhibits and documentation using the TxDOT format standards.

The ENGINEER shall prepare a research design for review and comment by TxDOT-ENV. The research design shall conform to the TxDOT SOU: Non-Archeological Historic-Age Resource Research Designs Review checklist (January 2020 version).

The ENGINEER shall perform a reconnaissance survey conforming to the methodology outlined in Appendix B of the Draft CRM Guide for Accurately Identifying Non-Archeological Cultural Resources (Texas Department of Transportation, January 2020). The survey shall document each historic-age resource (defined by TxDOT as a building, structure, object, historic district or non-archeological site at least 45 years old at the time of letting) within the Study Area. The Study Area shall consist of the Area of Potential

Effects (APE) plus all parcels that are wholly or partially within the APE and those parcels where new ROW will be acquired.

The ENGINEER shall provide a report detailing the results and findings of the reconnaissance survey including effects to historic properties and the need, if any, to conduct future intensive survey efforts. The report shall have sufficient detail and clarity to provide THC with the basis for making determinations of National Register of Historic Places (NRHP) eligibility or shall have sufficient detail and clarity to make recommendations concerning the scope of the intensive survey. The report shall conform to the TxDOT Standards of Uniformity for Non-Archeological Historic-Age Resource Reconnaissance Survey Reports Review Checklist (January 2020 version).

TxDOT Waco District will be responsible for coordination with the THC per the 2013 MOU between TxDOT and the THC.

Deliverables:

- Draft and Final Historical Studies PCR
- Draft and Final Historical Studies Research Design
- Draft and Final Historical Resources Reconnaissance Survey

4. Threatened and Endangered Species

The ENGINEER shall conduct a habitat assessment and biological resources summary utilizing TxDOT's Species Analysis Summary and Species Analysis Form according to current guidance in the TxDOT Environmental Toolkits to document compliance with applicable state and federal requirements. U.S. Fish and Wildlife Service or Texas Parks and Wildlife Department coordination is not anticipated. Agency coordination for protected species is excluded from this scope of services.

Deliverables:

- Draft and Final Species Analysis Summary
- Draft and Final Species Analysis Form

5. Water Resources

Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act regulate activities with the potential to impact Navigational Waters and Waters of the U.S., including wetlands. Regulatory oversight of Section 10/Section 404 is within the purview of the U.S. Army Corps of Engineers (USACE) and impacts to USACE jurisdictional waters require USACE authorization. Based on the proposed design, it is anticipated that if jurisdictional waters are present, the project would qualify for a Nationwide Permit (NWP) #14, and impacts to jurisdictional waters would fall below the thresholds requiring USACE notification. The ENGINEER would conduct surface water analysis documenting the presence or absence of jurisdictional waters and potential

impacts to those waters by the proposed project. The ENGINEER shall document the results and compliance with the conditions of NWP 14 on a Surface Water Analysis Form and Section 404/10 Impacts Table according to current TxDOT guidance in the Environmental Compliance Toolkits. USACE coordination is excluded from this scope of services.

Deliverables:

- Draft and Final Surface Water Analysis Form
- Draft and Final Section 404/10 Impacts Table

6. Hazardous Materials

It is anticipated that the proposed project would require work outside of the existing Rancier Avenue ROW; therefore, TxDOT guidelines require preparation of a Hazardous Materials Initial Site Assessment (ISA). The ENGINEER shall perform an ISA for potential hazardous materials that may impact the proposed project according to current TxDOT guidance in the Environmental Compliance Toolkits. Should the findings of the ISA conclude that additional investigation, special considerations, or other commitments are required during future stages of project development, the ENGINEER shall review those findings and commitments with TxDOT prior to completing the hazardous materials discussion for the environmental document. Additional investigations, special considerations, or other commitments will be the responsibility of the City and are excluded from this scope of services.

Deliverables:

- Draft and Final Hazardous Materials ISA

PUBLIC INVOLVEMENT (Function Code 121)

1. TxDOT Public Involvement

The ENGINEER shall perform Public Involvement Analysis according to current guidelines in TxDOT's Environmental Compliance Toolkits and communicate the results to the TxDOT Waco District to be documented into ECOS. It is anticipated that the proposed project will require a Notice and Opportunity to Comment (NAOTC) to all affected property owners, using TxDOT's current template on the Environmental Compliance Toolkit. The ENGINEER will develop and maintain a mailing list of all affected property owners based on current Bell County Appraisal District data, prepare a NAOTC and distribute the NAOTC according to current TxDOT guidelines. The ENGINEER will provide documentation of the NAOTC and any comments received according to current TxDOT guidelines and provide documentation to the TxDOT Waco

District.

Deliverables:

- Draft and Final NAOTC Mailing List
- Draft and Final NAOTC
- Draft and Final NAOTC Documentation

2. Additional Public Involvement

At the request of the City, the ENGINEER will develop a public engagement plan and provide general public outreach and engagement throughout the project. A database will be developed which includes nearby property owners and residents, businesses, churches, educational/community organizations, elected/public officials, and any interested individuals. ENGINEER will identify and reach out to key stakeholders and community groups (HOAs, etc.) that may be interested and will collect email addresses for email updates. We will arrange and attend meetings with stakeholders and respond to questions and comments in a timely manner. Project materials such as maps and handouts will be developed and shared with stakeholders. Finally, email updates will be sent out to keep the public updated on the project progress.

- A. Public Meeting. The ENGINEER will plan, schedule, conduct and facilitate one (1) public meeting to share project information with and collect feedback from citizens and stakeholders as determined by the City and the team. The meeting will be held at a time decided by the City, and will include a virtual attendance option. Tasks may include, but not limited to: calling and/or visiting potential meeting sites; reserving meeting space; announcing the meetings by distributing meeting information and coordinating with attendees; holding and participating in meeting rehearsals; facilitating meetings; and providing a summary report of the meeting including public input received. The ENGINEER will develop meetings materials and provide Spanish translation as needed.
- B. Individual Stakeholder Meetings. The ENGINEER will organize and conduct one-on-one stakeholder meetings over a period of three-days, at a time and place determined through coordination between the ENGINEER and the City. Notices will be provided to key stakeholders identified during development of the public engagement plan, and stakeholders will be provided the opportunity to sign-up in advance for 30-minute blocks of time throughout the designated 3-day period.
- C. Online Project Information Portal. The ENGINEER will create, host and maintain an online project information portal to provide the public with project information and an opportunity to provide feedback. The online portal will contain links to a pre-recorded virtual public meeting, to run concurrently with the in-person public meeting. A public opinion survey and opportunity to comment on the virtual public meeting will be provided through the portal for a

period of time to be specified through coordination between the ENGINEER and City.

- D. Virtual Public Meeting. The ENGINEER will create a pre-recorded public meeting with project materials (e.g., fact sheets, exhibits) to be hosted on the online project portal.

Deliverables:

- Public Engagement Plan
- Develop and maintain a stakeholder database throughout the project in Excel format
- Materials development and final electronic copies (fact sheet, exhibits)
- Web content (to be shared on the City's website)
- Develop one virtual public meeting (to be hosted on the online project portal)
- Provide 4 e-mail updates (outside of meeting notices)
- Arrange and facilitate one-on-one meetings with stakeholders over a 3-day period. Document responses and communications with stakeholders.
- Logistics and planning for one public meeting (Arrange meeting location and facility preparation)
- Coordinate meeting announcements and promotion such as letters, email notices, signage, media releases, posting, etc.
- Develop meeting materials and signage
- Facilitate meetings
- Provide summary report of each meeting
- The above information/deliverables will also be utilized to support the RAISE Grant effort but no additional public involvement tasks will be performed to support the grant.

RAISE GRANT (Function Code 122)

1. RAISE Grant Application Preparation and Submission

- A. Prepare a draft of the application, review details from the application workshop and submit the final application. Submit the final application online on behalf of the City of Killeen. BGE will utilize the Detailed Instructions on "How to Apply" for RAISE Transportation Discretionary Grants found on the RAISE Website (www.transportation.gov/RAISEgrants). Applications must be submitted through Grants.gov. BGE will complete the Grants.gov registration process before submitting the Application, and this process usually takes 2 – 4 weeks to complete.
- B. Provide support to the City to collect data from public sources, and other City departments.
- C. Provide miscellaneous support needed to complete the application.
- D. Develop a benefit cost analysis of the build and no-build options.

- E. Attend up to four (4) project coordination meetings with Stakeholders and other City departments.

RIGHT OF WAY DATA / UTILITY COORDINATION (Function Code 130)

The Engineer shall perform all preliminary utility coordination including Utility Conflict Layout, and Utility Adjustment & Underground Conversion services for approximately ten (10) utilities.

1. Utility Coordination

A. Utility Conflict Layout

These services include obtaining record information on existing utilities from utility owners to identify all known existing public utilities, preparing a base map depicting the horizontal utility locations, and creating a Utility Conflict Matrix (UCM) identifying potential known conflicts based on the final schematic layout.

- a. Initiate one-call (811) and coordinate with utility companies. BGE will survey all field markings.
 - i. Quality Level D - Existing Records: Utilities are plotted from review of available existing records.
 - ii. Quality Level C - Surface Visible Feature Survey: Quality level "D" information from existing records is combined with surveyed surface-visible features (performed by surveyor). Includes Quality Level D information. If there are variances in the designated work area of Level D then a new schematic or plan layout, if needed, is required showing the limits of the proposed project and limits of the work area required for this work authorization; including highway stations, limits within existing or proposed right of way, additional areas outside the proposed right of way, and distances or areas to be included down existing intersecting roadways.

B. Utility Adjustment & Underground Conversion Coordination

Utility Adjustment & Underground Conversion Coordination shall include the following services:

- a. Organize and hold group utility coordination meeting with all utility companies.
- b. Individual progress meetings (2 with each provider) and communication and coordination with utilities.
 - i. The Utility Coordinator shall perform utility coordination and liaison activities with involved utility owners, their consultants, and the City of Killeen to achieve timely project notifications, formal coordination meetings, conflict analysis and resolution.

- ii. The Utility Coordinator shall coordinate all activities with the City of Killeen, or their designee, to facilitate the orderly progress and timely completion of the preliminary design phase. The Utility Coordinator will be responsible for the following:
 1. The Utility Coordinator shall provide initial project notification letters to all affected utility companies, owners, and other concerned parties, if needed.
 2. The Utility Coordinator shall provide the City of Killeen and all affected utility companies and owners a Utility Contact List for each project with all information such as: (a) Owner's Name; (b) Contact Person; (c) Telephone Numbers; (d) Emergency Contact Number; (e) E-mail addresses; (f) as well as all pertinent information concerning their respective affected utilities and facilities, including but not limited to: size, number of poles, material, and other information which readily identifies the utilities companies' facilities.
 3. The Utility Coordinator shall advise utility companies and owners of the general characteristics of the Project and provide an illustration of the project footprint for mark-up of the utility facility locations that occupy the project area.
 4. The Utility Coordinator shall coordinate which utilities will conflict with roadway construction, which utilities will be proposed to underground conversion and make the utility company aware of these conflicts and conversion.
 5. The Utility Coordinator will develop conceptual joint trench layouts for the existing and future utilities. These will present general location of the utility trench and conduit layouts as discussed with the utility providers.

C. Water Utility Replacement

- a. Engineer will evaluate the replacement of the existing water line from N. Park to 10th, and 18th to W.S. Young.

Deliverables:

- Scanned record information in .pdf format if received from each utility
- Surveyed visible and flagged utility locations in 2D topo files
- Utility Conflict Layout base map and Utility Conflict Matrix
- Conceptual Underground Utility plan view assignments/configuration and joint trench

PROJECT MANAGEMENT (Function Code 145)

1. Meetings

- A. Attend and document up to eight Progress Meetings at the City of Killeen office or virtual.

2. General Contract Administration

- A. Develop monthly invoices and progress reports.
- B. Subconsultant coordination.
- C. Design coordination with the City of Killeen.

FIELD SURVEYING (Function Code 150)

General

Surveys will be in accordance with the "Texas State Board of Land Surveying".

Survey field notes will be submitted if requested.

- A. The City will obtain right-of-entry agreements with property owners for the required field surveys, if necessary.
- B. The Surveyor will Contact the One-Call System in advance of performing field surveys to ensure data collection includes ties to location of marked utilities. This task does not always allow for timing of markings with the survey activities. Reasonable attempts to coordinate with utility owners will be made to achieve efficiency in data collection.

1. Topographic Surveys for Engineering Design within Apparent Right-of-Way

- A. Scope listed below will be performed within the Apparent Right-of-Way of Rancier Drive. Sufficient property records research will be performed to identify existing right-of-way of Rancier Drive and incorporate into DTM.
- B. Data for the horizontal control will be based on Texas State Plane, Central Zone, NAD 83.
- C. Vertical Data will be based upon NAVD 88 Datum.
- D. Data collection will consist of spot elevations for improvements, edge of roadway, driveways, visible or marked utilities, drainage features, centerline of roadway, and grade breaks. Individual trees will not be located as a part of this effort.
- E. Intersecting streets and driveways will be included up to the PC of the curb return, or the apparent right-of-way of Rancier Drive, whichever is more extensive.
- F. Field surveys will provide the locations of all small signs, mailboxes, and other visible surface features. Sign text, color, dimensions, and standard sign design will be provided in accordance with the TMUTCD.

- G. Except areas performed with Mobile LiDAR, survey shots will be assigned a unique point number which provides a positive identification of the point. Each point will be assigned a feature number or feature name using a standard feature table. An ASCII points file and a hard copy print out will be provided. Each line of the output data shall contain in this order: the point number, northing, easting, elevation, and the descriptive feature code.
- H. Field surveys will locate horizontally crossings of power lines, telephone/cable lines, and visible above ground utilities and utility markings.
- I. Location of existing utilities will be shown on the 2D files using field marked information designated by the utility companies and from surface evidence surveyed on the ground.
- J. Surveyed data will be provided in a Microstation .dgn (V8) compatible two dimensional base map format. The survey shot point attributes will appear on separate levels.
- K. A Digital Terrain Model (DTM) will be provided in a Microstation .dgn (V8) GEOPAK compatible three-dimensional format.

ROADWAY DESIGN CONTROLS (Function Code 160)

1. Schematic Development

Perform the following items for the project

- A. Geometric Design – Layout horizontal alignment; vertical profile; lane configuration; pavement cross slopes; sidewalks that meet acceptable design criteria and remain within the limits of the proposed ROW. The Layout must consist of a planimetric file of existing features and the proposed improvements within the existing and any proposed ROW. The Layout must also include the following features: existing and proposed ROW, existing and proposed horizontal and vertical alignment and profile grade line, sidewalks, curb & gutter, storm drain, waterline, landscaping, illumination, signals, cross culverts, lane widths, cross slopes, berms, pavement structure, corner clips, and retaining walls (if applicable). Existing major subsurface and surface utilities must be shown on the Layout. The ENGINEER, with input from the City, shall utilize a recent area project pavement design for schematic development and cost estimates.
- B. Verify ROW Needs – Analyze the cross sections associated with the desirable design criteria to analyze existing ROW. Develop an exhibit providing the ROW footprint with the desirable configuration.
- C. 3D Corridor Model and Design Cross Sections - 3D corridor model will be created using Bentley's OpenRoads and GEOPAK tools. The 3D corridor model will have enough details to verify the feasibility of the proposed design. Develop roadway cross sections associated with the proposed horizontal alignment and vertical profile in accordance with acceptable design criteria.
- D. Parking / Driveway Planning – Analyze up to 45 parcels where on-street parking is currently within the existing ROW and provide alternatives for driveway, sidewalk,

and modified parking configurations. Parking configurations may not be City code compliant. Preferred alternative to be presented in final schematic.

Deliverables:

- Design Summary Form
- Alternative Parking / Driveway Layouts (plan view only)
- Draft Schematic Roll Plot (plan and profile)
- Final Schematic Roll Plot (plan and profile)
- Cross Sections Roll Plot

DRAINAGE (Function Code 161)

1) Schematic Development

A. Data Collection Integration: Incorporate all design surveys into computer aided drafting and develop topographies and surfaces. This data shall be utilized to develop hydrology and hydraulic parameters. This shall include topographic working drawings to prepare the preliminary drainage design. BGE will attempt to obtain existing models associated with areas near (South Nolan Creek) or within the Project's limits. The City will provide BGE with all pertinent hydrologic and hydraulic models including, but not limited to, HEC-HMS, HEC-RAS, GeoPAK, and StormCAD.

B. Hydrologic and Hydraulic Analysis: Conduct a hydrologic analysis for the existing and proposed roadway section throughout the limits of the project. The analysis shall incorporate the 4% and 1% annual chance storm (25-year and 100-year) events. This analysis develops storm water flows to all cross culverts and points of analysis along the proposed design.

Based on the hydrologic analysis results, a hydraulic analysis will be conducted to preliminarily size proposed trunk lines. The hydraulic analysis will be conducted using GEOPAK or StormCAD.

C. Conceptual Design Alignment: Drawings of the conceptual storm drain system alignment will be produced using Autodesk Civil 3D or Microstation. The conceptual design will represent approximate trunk line alignment. The conceptual alignment will be incorporated into the schematic roll plot.

MISCELLANEOUS (ROADWAY) (Function Code 163)

1) Schematic Development

A. Cost Estimates – Prepare construction cost estimate at draft and final schematic

submittals.

LANDSCAPE / URBAN DESIGN (Function Code 164)

BGE will assist in the conceptual development of the project to explore Context Sensitive Design (CSD) opportunities for hardscape enhancements and landscape solutions that create a sense of place, enhance pedestrian mobility/connectivity and user safety to complement community identity and economic development of the corridor. The purpose of this scope sub-section is to describe a context-based vision for urban design enhancement of the corridor, to explore CSD improvement opportunities, evaluate potential enhancement construction costs, and to confirm a program of improvements for further design development in subsequent phases of the project based on the preferred plan developed for the Project engineering.

BGE will evaluate the urban design of an additional 3,200 LF of roadway immediately east of WS Young Drive. This segment will be evaluated and designed concurrent to the remainder of the project corridor. All urban design scope tasks shall be applied to this additional segment with the exception that one (1) Street Section Illustration will be prepared for the additional roadway segment and one additional Perspective rendering will be added, for a total not to exceed three (3) for the entire project. Client requests that this added area be considered for a lesser level of urban design enhancement than the area west of WS Young Drive.

1. **Site Visit / Inventory** - Conduct a one-day site visit to compile a photographic inventory of existing corridor conditions and surrounding community context. Compose representative photo images of key conditions on two presentation drawing sheets with bullet-form notes describing general conditions and characteristics.
2. **Issues & Opportunities Analysis** - Review the initial project plan alternatives and client provided project design criteria to identify CSD design issues and opportunities. Prepare diagrammatic corridor Partial Plan and/or Section sketches with color highlights or selective representative photo images with bullet-form notations to convey plan issues and opportunities. Improvements depicted will be prototypical and generic in nature with further definition to be performed in subsequent design phases for Project included features. Improvement concepts may include:
 - a. Sidewalk Delineations
 - b. Parkway Shoulders
 - c. Driveway Consolidations
 - d. Multi-use Paths
 - e. Crosswalk Enhancements
 - f. Enhanced Light Fixtures
 - g. Street Furnishings
 - h. Hardware Color Enhancement
 - i. Landscape Plantings
 - j. Special Paving
 - k. Enhanced ROW Retaining Walls
 - l. Enhanced ROW Fencing
 - m. Community Gateways

Note - Street concepts such as complete streets, road diets, lane width reductions, landscape medians, multi-use trail inclusions, utility relocations/undergrounding, intersection tables and/or street edge parking will be evaluated and analyzed by the civil engineering team members.

3. **Street Section Illustrations** – Prepare illustrative street cross section view graphics based on the civil engineering roadway design in Sketch-Up depicting proposed prototypical roadway conditions. This task is based on provision of up to three (3) sections for two (2) roadway alternatives.
4. **Preliminary OPCC** - Prepare an order of magnitude Opinion of Probable Construction Cost (OPCC) with ballpark pricing of proposed improvements and potential additive features at a preliminary level of definition. This effort will include a low-end and a high-end quantity approach to identify a range of costs, where appropriate. One Excel format OPCC will be provided by BGE.
5. **Preliminary Review** - Attend an in-person meeting with the client and project team to present the deliverables from tasks 1-4. Obtain client feedback on the potential improvements and incorporate minor updates in the concept sketches, supplemental images and OPCC. Note - It is suggested that deliverables from Tasks 1-5 are best suited for an initial Stakeholder meeting presentation regarding the Draft Schematic.
6. **Perspective Renderings** - Based on client feedback, prepare two (2) enlarged plan detail color renderings of selected locations or conditions within the project. Create a preliminary 3d model of two (2) selected locations or conditions for client view selections. Based on client feedback and view selections, develop two (2) rendered 'Lumion' computer model views. Note - Imagery in the views will be prototypical and generic level of definition that can be updated in latter phase design when specific component design and product selections are confirmed. Buildings along the corridor will be shown as neutral background boxes without elevational detail specific to particular locations.
7. **Final Review** - Compile deliverables applicable to the final schematic. Attend an online meeting with the client and project team to solicit feedback on the deliverables from tasks 5 and 6. Incorporate minor updates to the client-selected deliverables and graphically format the deliverables on drawing sheets. Submit to Client in digital formats. Note - It is suggested that deliverables from Tasks 6 & 7 are best suited for a final Stakeholder meeting presentation regarding the Final Schematic.
8. **Stakeholder Meeting(s)** - Participate in two (2) online prep/preview meetings and two (2) subsequent in person, one day stakeholder meetings to represent landscape architectural/urban design issues, opportunities, and illustrations.
9. **Wrap-up Meeting** - Participate in one (1) final resolution conference call to discuss and verify improvements to be included in the next phase of plan development. Update the conceptual landscape OPCC based on feedback provided by client.

Exclusions

The following tasks are not covered in this scope of work and may or may not be necessary. If deemed necessary, these tasks could be conducted under a separate or supplemental work authorization.

- A. Any tasks or services not indicated in Basic Services above.
- B. Additional meetings and/or online conference calls.
- C. Rework of previously performed tasks, in part or whole.
- D. Off-site and/or out of Right of Way improvements, including cross streets.
- E. Tree survey, verifications and/or mitigation.
- F. Production of sealed OPCC estimates.
- G. Photometric design and/or calculations.
- H. Structural Design.
- I. Historic Preservation assessments, activities or tasks.
- J. Trails (AASHTO compliant) or Trail Planning.
- K. Signage and/or Graphic Design.
- L. Public Art design and/or coordination.
- M. Tactical Urbanism mock-ups and/or strategies.
- N. Stormwater management strategies and/or design
- O. Security and/or Audio-Visual systems.
- P. Design Development and/or Construction Documents.
- Q. Funding requests and/or applications.
- R. Agency permitting activities.
- S. Independent verification of publicly available data.
- T. Drive-through or fly-through animations.
- U. Utility design (dry: communications, gas, electric; and wet: water and wastewater)
- V. TAS (Texas Accessibility Standards) assessments and design.
- W. Traffic Counts and/or Traffic Memo.
- X. Traffic Control Plans.
- Y. Drainage Report (No adverse impact analysis) (to be done in final design).
- Z. Geotechnical explorations and/or Report.
- AA. Pavement Design.
- BB. Right of Entry (ROE) coordination.
- CC. SUE Quality Level A and B.
- DD. Formal Section 10(a) Endangered Species Act (ESA) consultation, including preparation of a stand-alone Biological Assessment or completion of HCP coordination.
- EE. Presence/absence surveys for karst features or endangered species.
- FF. Work extending beyond the specified limits of the project at the time of this work order.
- GG. Noise workshops.
- HH. Archeological Survey.
- II. Public Hearing.
- JJ. Hazardous materials Phase I & Phase II ESAs.
- KK. Preparation of a USACE 404 permit

This is **EXHIBIT B**, consisting of 2 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:

OWNER _____
ENGINEER BDR

OWNER's Responsibilities

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

B2.01 In addition to other responsibilities of OWNER as set forth in this Agreement, OWNER shall:

A. Provide ENGINEER with all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the Drawings and Specifications; and furnish copies of OWNER's standard forms, conditions, and related documents for ENGINEER to include in the Bidding Documents, when applicable.

B. Furnish to ENGINEER any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.

C. Following ENGINEER's assessment of initially-available Project information and data and upon ENGINEER's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable ENGINEER to complete its Basic and Additional Services. Such additional information or data would generally include the following:

1. Property descriptions.
2. Zoning, deed, and other land use restrictions.
3. Property, boundary, easement, right-of-way, and other special surveys or data, including establishing relevant reference points.
4. Explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, or hydrographic surveys, with appropriate professional interpretation thereof.
5. Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the Site, and adjacent areas.
6. Data or consultations as required for the Project but not otherwise identified in the Agreement or the Exhibits thereto.

D. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of ENGINEER's services, or any defect or nonconformance in ENGINEER's services or in the work of any Contractor.

E. Authorize ENGINEER to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as required.

F. Arrange for safe access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under the Agreement.

G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by ENGINEER (including obtaining advice of an attorney, insurance counselor, and other advisors

or consultants as OWNER deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.

H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by ENGINEER and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.

I. Provide, as required for the Project:

1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.
2. Legal services with regard to issues pertaining to the Project as OWNER requires, Contractor raises, or ENGINEER reasonably requests.
3. Such auditing services as OWNER requires to ascertain how or for what purpose Contractor has used the moneys paid.
4. Placement and payment for advertisement for Bids in appropriate publications.

J. Advise ENGINEER of the identity and scope of services of any independent consultants employed by OWNER to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructibility review.

K. Furnish to ENGINEER data as to OWNER's anticipated costs for services to be provided by others for OWNER so that ENGINEER may make the necessary calculations to develop and periodically adjust ENGINEER's opinion of Total Project Costs.

L. If OWNER designates a construction manager or an individual or entity other than, or in addition to, ENGINEER to represent OWNER at the Site, define and set forth as an attachment to this Exhibit B the duties, responsibilities, and limitations of authority of such other party and the relation thereof to the duties, responsibilities, and authority of ENGINEER.

M. If more than one prime contract is to be awarded for the Work designed or specified by ENGINEER, designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of ENGINEER as an attachment to this Exhibit B that is to be mutually agreed upon and made a part of this Agreement before such services begin.

N. Attend the pre-bid conference, bid opening, pre-construction conferences, construction progress and other job related meetings, and Substantial Completion and final payment inspections.

O. Provide the services of an independent testing laboratory to perform all inspections, tests, and approvals of Samples, materials, and equipment required by the Contract Documents, or to evaluate the performance of materials, equipment, and facilities of OWNER, prior to their incorporation into the Work with appropriate professional interpretation thereof.

P. Provide inspection or monitoring services by an individual or entity other than ENGINEER (and disclose the identity of such individual or entity to ENGINEER) as OWNER determines necessary to verify:

1. That Contractor is complying with any Laws and Regulations applicable to Contractor's performing and furnishing the Work.
2. That Contractor is taking all necessary precautions for safety of persons or property and complying with any special provisions of the Contract Documents applicable to safety.

Q. Provide ENGINEER with the findings and reports generated by the entities providing services pursuant to paragraphs B2.01.O and P.

This is **EXHIBIT C**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____

Initial:

OWNER _____

ENGINEER BDP

Payments to ENGINEER for Services and Reimbursable Expenses

Article 4 of the Agreement is amended and supplemented to include the following agreement of the parties:

ARTICLE 4 -- PAYMENTS TO THE ENGINEER

C4.01 *For Basic Services Having A Determined Scope*

A. OWNER shall pay ENGINEER for Basic Services set forth in Exhibit A, except for services of ENGINEER's Resident Project Representative ~~and Post-Construction Phase~~, services, if any, as follows:

1. Progress payments shall be based upon monthly percentage completion of the amounts of the following services below:

a. Route and Design Studies	<u>\$22,620.00</u>
b1. Environmental Compliance	<u>\$71,823.00</u>
b2. Public Involvement	<u>\$77,628.00</u>
b3. Raise Grant Support	<u>\$35,042.48</u>
b4. ROW Utility Coordination	<u>\$92,580.00</u>
c. Project Management	<u>\$46,960.00</u>
d. Design Survey	<u>\$150,840.00</u>
e. Roadway Design Controls	<u>\$130,030.00</u>
f. Drainage	<u>\$69,960.00</u>
g. Misc. Roadway Items	<u>\$18,360.00</u>
h. Landscape Urban Design	<u>\$90,635.00</u>
i. Expenses	<u>\$ 6,975.25</u>

2. ENGINEER may alter the distribution of compensation between individual phases noted

herein to be consistent with services actually rendered, but shall not exceed the total amount unless approved in writing by the OWNER.

3. The amount includes compensation for ENGINEER's services and services of ENGINEER's Consultants, if any. Appropriate amounts have been incorporated to account for labor, overhead, profit, and Reimbursable Expenses.

4. The portion of the amount billed for ENGINEER's services will be based upon ENGINEER's estimate of the proportion of the total services actually completed during the billing period.

5. If more prime contracts are awarded for work designed or specified by ENGINEER for this Project than identified in Exhibit A, the ENGINEER shall be compensated an additional amount to be negotiated; however, in no case shall the amount of compensation exceed eighteen percent (18%) of the Project's estimated construction costs for all Basic Services for each prime contract added.

This is ~~EXHIBIT D~~, consisting of 4 pages, referred to in and part of the ~~Agreement between OWNER and ENGINEER for Professional Services~~ dated _____, _____.

Initial:

OWNER _____

ENGINEER _____

Duties, Responsibilities, and Limitations of Authority of Resident Project Representative

Paragraph 1.01C of the Agreement is amended and supplemented to include the following agreement of the parties:-

~~D6.02~~ — *Resident Project Representative*

A. ~~ENGINEER shall furnish a Resident Project Representative (“RPR”), assistants, and other field staff to assist ENGINEER in observing progress and quality of the Work. The RPR, assistants, and other field staff under this Exhibit D may provide full time representation or may provide representation to a lesser degree.~~

B. ~~Through such additional observations of Contractor’s work in progress and field checks of materials and equipment by the RPR and assistants, ENGINEER shall endeavor to provide further protection for OWNER against defects and deficiencies in the Work. However, ENGINEER shall not, during such visits or as a result of such observations of Contractor’s work in progress, supervise, direct, or have control over the Contractor’s Work nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures selected by Contractor, for safety precautions and programs incident to the Contractor’s work in progress, for any failure of Contractor to comply with Laws and Regulations applicable to Contractor’s performing and furnishing the Work, or responsibility of construction for Contractor’s failure to furnish and perform the Work in accordance with the Contract Documents. In addition, the specific limitations set forth in section A.1.05 of Exhibit A of the Agreement are applicable.~~

C. ~~The duties and responsibilities of the RPR are limited to those of ENGINEER in the Agreement with the OWNER and in the Contract Documents, and are further limited and described as follows:~~

- ~~1. General: RPR is ENGINEER’s agent at the Site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR’s actions. RPR’s dealings in matters pertaining to the Contractor’s work in progress shall in general be with ENGINEER and Contractor, keeping OWNER advised as necessary. RPR’s dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with OWNER with the knowledge of and under the direction of ENGINEER.~~
- ~~2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with ENGINEER concerning acceptability.~~
- ~~3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project related meetings, and prepare and circulate copies of minutes thereof.~~
- ~~4. Liaison:~~
 - ~~a. Serve as ENGINEER’s liaison with Contractor, working principally through Contractor’s superintendent and assist in understanding the intent of the Contract Documents.~~
 - ~~b. Assist ENGINEER in serving as OWNER’s liaison with Contractor when Contractor’s operations affect OWNER’s on-Site operations.~~
 - ~~c. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.~~

- ~~5. *Interpretation of Contract Documents:* Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by ENGINEER.~~
- ~~6. *Shop Drawings and Samples:*
 - ~~a. Record date of receipt of Samples and approved Shop Drawings.~~
 - ~~b. Receive Samples which are furnished at the Site by Contractor, and notify ENGINEER of availability of Samples for examination.~~
 - ~~c. Advise ENGINEER and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by ENGINEER.~~~~
- ~~7. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to Contractor in writing decisions as issued by ENGINEER.~~
- ~~8. *Review of Work and Rejection of Defective Work:*
 - ~~a. Conduct on Site observations of Contractor's work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.~~
 - ~~b. Report to ENGINEER whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.~~~~
- ~~9. *Inspections, Tests, and System Startups:*
 - ~~a. Consult with ENGINEER in advance of scheduled major inspections, tests, and systems startups of important phases of the Work.~~
 - ~~b. Verify that tests, equipment, and systems start ups and operating and maintenance training are conducted in the presence of appropriate OWNER's personnel, and that Contractor maintains adequate records thereof.~~
 - ~~c. Observe, record, and report to ENGINEER appropriate details relative to the test procedures and systems startups.~~
 - ~~d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to ENGINEER.~~~~
- ~~10. *Records:*
 - ~~a. Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to Contractor, and other Project related documents.~~
 - ~~b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific~~~~

~~observations in more detail as in the case of observing test procedures; and send copies to ENGINEER.~~

~~c. Record names, addresses and telephone numbers of all Contractors, subcontractors, and major suppliers of materials and equipment.~~

~~d. Maintain records for use in preparing Project documentation.~~

~~e. Upon completion of the Work, furnish original set of all RPR Project documentation to ENGINEER.~~

~~11. Reports:~~

~~a. Furnish to ENGINEER periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.~~

~~b. Draft and recommend to ENGINEER proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.~~

~~c. Furnish to ENGINEER and OWNER copies of all inspection, test, and system startup reports.~~

~~d. Report immediately to ENGINEER the occurrence of any Site accidents, any Hazardous Environmental Conditions, emergencies, or acts of God endangering the Work, and property damaged by fire or other causes.~~

~~12. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.~~

~~13. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to ENGINEER for review and forwarding to OWNER prior to payment for that part of the Work.~~

~~14. Completion:~~

~~a. Before ENGINEER issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.~~

~~b. Observe whether Contractor has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public agencies having jurisdiction over the Work.~~

~~c. Participate in a final inspection in the company of ENGINEER, OWNER, and Contractor and prepare a final list of items to be completed or corrected.~~

~~d. Observe whether all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance and issuance of the Notice of Acceptability of the Work.~~

~~D. Resident Project Representative shall not:~~

~~1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or equal" items).~~

~~2. Exceed limitations of ENGINEER's authority as set forth in the Agreement or the Contract Documents.~~

- ~~3. Undertake any of the responsibilities of Contractor, subcontractors, suppliers, or Contractor's superintendent.~~
- ~~4. Advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.~~
- ~~5. Advise on, issue directions regarding, or assume control over safety precautions and programs in connection with the activities or operations of OWNER or Contractor.~~
- ~~6. Participate in specialized field or laboratory tests or inspections conducted off site by others except as specifically authorized by ENGINEER.~~
- ~~7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.~~
- ~~8. Authorize OWNER to occupy the Project in whole or in part.~~

This is **EXHIBIT E**, consisting of 2 pages, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:

OWNER _____
ENGINEER EDR

NOTICE OF ACCEPTABILITY OF WORK

PROJECT: _____

OWNER:

OWNER's Construction Contract Identification:

Type text here

EFFECTIVE DATE OF THE CONSTRUCTION AGREEMENT:

CONSTRUCTION CONTRACT DATE:

ENGINEER:

To: OWNER

And To: CONTRACTOR

The undersigned hereby gives notice to the above OWNER and CONTRACTOR that the completed Work furnished and performed by CONTRACTOR under the above Contract is acceptable, expressly subject to the provisions of the related Contract Documents and the terms and conditions set forth on the reverse side hereof.

By: _____

Title: _____

Dated: _____, _____

(Reverse side of Notice)

CONDITIONS OF NOTICE OF ACCEPTABILITY OF WORK

The Notice of Acceptability of Work ("Notice") on the front side of this sheet is expressly made subject to the following terms and conditions to which all persons who receive said Notice and rely thereon agree:

1. Said Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. Said Notice reflects and is an expression of the professional judgment of ENGINEER.
3. Said Notice is given as to the best of ENGINEER's knowledge, information, and belief as of the date hereof.
4. Said Notice is based entirely on and expressly limited by the scope of services ENGINEER has been employed by OWNER to perform or furnish during construction of the Project (including observation of the CONTRACTOR's work) under ENGINEER's Agreement with OWNER and under the Construction Contract referenced on the reverse hereof, and applies only to facts that are within ENGINEER's knowledge or could reasonably have been ascertained by ENGINEER as a result of carrying out the responsibilities specifically assigned to ENGINEER under ENGINEER's Agreement with OWNER and the Construction Contract referenced on the reverse hereof.
5. Said Notice is not a guarantee or warranty of CONTRACTOR's performance under the Construction Contract referenced on the reverse hereof nor an assumption of responsibility for any failure of CONTRACTOR to furnish and perform the Work thereunder in accordance with the Contract Documents.

This is ~~EXHIBIT F~~, consisting of 1 page, referred to in and part of the ~~Agreement between OWNER and ENGINEER for Professional Services~~ dated _____, _____.

Initial:

OWNER _____
ENGINEER _____

Construction Cost Limit

Paragraph 5.02 of the Agreement is amended and supplemented to include the following agreement of the parties:-

~~F5.02 — Designing to Construction Cost Limit~~

A. A Construction Cost limit in the amount of ~~Five Hundred Thousand Dollars (\$ 500,000.00)~~ is hereby agreed to.

B. A bidding or negotiating contingency of 15 percent will be added to any Construction Cost limit established.

C. The acceptance by OWNER at any time during Basic Services of a revised opinion of probable Construction Cost in excess of the then established Construction Cost limit will constitute a corresponding increase in the Construction Cost limit.

D. ENGINEER will be permitted to determine what types of materials, equipment and component systems, and the types and quality thereof are to be included in the Drawings and Specifications and to make reasonable adjustments in the scope, extent, and character of the Project to the extent consistent with the Project requirements and sound engineering practices to bring the Project within the Construction Cost limit.

E. If the Bidding or Negotiating Phase has not commenced within three months after completion of the Final Design Phase, or if industry wide prices are changed because of unusual or unanticipated events affecting the general level of prices or times of delivery in the construction industry, the established Construction Cost limit will not be binding on ENGINEER, and OWNER shall consent to an adjustment in such Construction Cost limit commensurate with any applicable change in the general level of prices in the construction industry between the date of completion of the Final Design Phase and the date on which proposals or Bids are sought.

F. If the lowest bona fide proposal or Bid exceeds the established Construction Cost limit, OWNER shall (1) give written approval to increase such Construction Cost limit, or (2) authorize negotiating or rebidding the Project within a reasonable time, or (3) cooperate in revising the Project's scope, extent, or character to the extent consistent with the Project's requirements and with sound engineering practices. In the case of (3), ENGINEER shall modify the Contract Documents as necessary to bring the Construction Cost within the Construction Cost Limit. In lieu of other compensation for services in making such modifications, OWNER shall pay ENGINEER's cost of such services, including the costs of the services of ENGINEER's Consultants, all overhead expenses reasonably related thereto, and Reimbursable Expenses, but without profit to ENGINEER on account of such services. The providing of such services will be the limit of ENGINEER's responsibility in this regard and, having done so, ENGINEER shall be entitled to payment for services and expenses in accordance with this Agreement and will not otherwise be liable for damages attributable to the lowest bona fide proposal or Bid exceeding the established Construction Cost limit.

This is **EXHIBIT G**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____.

Initial:

OWNER _____
ENGINEER BDR

Insurance

Paragraph 6.05 of the Agreement is amended and supplemented to include the following agreement of the parties.

G6.05 Insurance

A. The limits of liability for the insurance required by paragraph 6.05.A and 6.05.B of the Agreement are as follows:

1. By ENGINEER:

- | | |
|---|--------------|
| a. Workers' Compensation: | Statutory |
| b. Employer's Liability -- | |
| 1) Each Accident: | \$ 500,000 |
| 2) Disease, Policy Limit: | \$ 500,000 |
| 3) Disease, Each Employee: | \$ 500,000 |
| c. General Liability -- | |
| 1) Each Occurrence (Bodily Injury and Property Damage): | \$ 1,000,000 |
| 2) General Aggregate: | \$ 2,000,000 |
| d. Excess or Umbrella Liability -- | |
| 1) Each Occurrence: | \$ 4,000,000 |
| 2) General Aggregate: | \$ 4,000,000 |
| e. Automobile Liability -- | |
| 1) Bodily Injury: | |
| a) Each Accident | \$ _____ |
| 2) Property Damage: | |
| a) Each Accident | \$ _____ |

[or]

- | | |
|---|------------|
| 1) Combined Single Limit
(Bodily Injury and Property Damage):
Each Accident | \$ 500,000 |
|---|------------|

f. Other (specify): On all policies except Workers Compensation and Professional Liability - "City of Killeen is named as Additional Insured on the General Liability and Auto Liability policies."

This is **EXHIBIT H**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:

OWNER _____
ENGINEER BDR

Special Provisions

This is **EXHIBIT I**, consisting of 1 page, referred to in and part of the **Agreement between OWNER and ENGINEER for Professional Services** dated _____, _____.

Initial:

OWNER _____

ENGINEER BDR

DBE Goal

Type text here

DBE Goal 0%

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

**OFFICE USE ONLY
CERTIFICATION OF FILING****1 Name of business entity filing form, and the city, state and country of the business entity's place of business.**

BGE, Inc.
Austin, TX United States

Certificate Number:
2022-946850

Date Filed:
10/20/2022

Date Acknowledged:

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

City of Killeen

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

000000
Rancier

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Lennard, Lee	Houston, TX United States	X	
	Heisch, Rodney	Houston, TX United States	X	
	Randermann, Randy	Houston, TX United States	X	
	Dillon, William	Frisco, TX United States	X	

5 Check only if there is NO Interested Party.

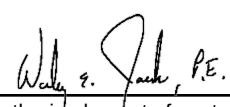
☐**6 UNSWORN DECLARATION**

My name is Wesley Jasek, and my date of birth is 09/14/1961.

My address is 101 West Louis Henna Blvd, Suite 400, Austin, TX, 78728, USA.
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Travis County, State of Texas, on the 20 day of October, 20 22.
(month) (year)



Signature of authorized agent of contracting business entity
(Declarant)



RANCIER AVENUE REPLACEMENT AND STREETSCAPING PRELIMINARY DESIGN

RS-22-180

December 6, 2022

441

Background

2

- October 2020, applied for a KTMPO Grant for Rancier
 - ▣ Awarded construction funds in the amount of \$3,240,000.00
- FY 2023 Capital Improvement Plan includes design of Rancier Avenue Replacement and Streetscaping as unfunded.
- On September 8th, 2022, TIRZ Board approved \$1M toward the Phase One Preliminary Design.

Background

3

- BGE, Inc was selected as the consultant for the Rancier Avenue Replacement and Streetscaping Project
- Proposed Contract for Phase I: Preliminary Engineering Design
\$813,453.73



4

Rancier Avenue Project Scope Limits

Ft. Hood Road (SH 195) to 38th Street

Design Scope

5

- ❑ Background research of the corridor
- ❑ Environmental, Archeological, Historical and TXDOT required studies
- ❑ Drainage Analysis
- ❑ Public Outreach
- ❑ Preliminary Roadway and Landscaping Design
- ❑ Grant Application Assistance
- ❑ Final Design contract to follow completion of Preliminary Design

Alternatives Considered

6

The City Council has two (2) alternatives. The Council may:

- Delay the preliminary design of the Rancier Avenue Replacement and Streetscaping Project
- Authorize a Professional Services Agreement with BGE Inc. for the preliminary design of the Rancier Avenue Replacement and Streetscaping Project

Recommendation

7

- Staff recommends that the City Council authorize a Professional Service Agreement with BGE, Inc. for the preliminary design of the Rancier Avenue Replacement and Streetscaping Project.



City of Killeen

Staff Report

File Number: DS-22-147

Discuss Warming Center Procedures



CITY OF KILLEEN - WARMING CENTER POLICY

**RESPONSIBLE
DEPARTMENT**

Parks & Recreation Department

**EFFECTIVE
DATE**

1/31/2020

**LAST
UPDATED**

January 2020

**EXECUTIVE
POLICY**

City Policy Warming Center

PURPOSE AND SCOPE

PURPOSE AND SCOPE. To establish guidelines and parameters related to opening and operating a warming center managed by city staff in the City of Killeen. To provide direction on managing and operating internal measures, with consideration of those in the City who may be unable to escape the cold. This policy is to minimize the risk for a variety of conditions or health risks exacerbated by exposure to low temperatures.

POLICY STATEMENTS

1. DEFINITIONS

- 1.1. Emergency Warming Center: A place for community members to get out of cold inclement weather temporarily. Sleeping is not a service of this center.
- 1.2. Emergency Shelter: A temporary place for those impacted by emergencies or disasters to sleep.
- 1.3. Annex C: Part of the City of Killeen's comprehensive emergency management plan pertaining to Mass Care and Sheltering.
- 1.4. Public Facility Code of Conduct: See Section 6.

2. GENERAL

- 2.1. The City Manager, or designee, may:
 - 2.1.1. Declare an Emergency Warming Center open when the National Weather Service forecasts a temperature or wind-chill below 32°F with or without precipitation, or when recommended by staff.
 - 2.1.2. Close an Emergency Warming Center if the temperature or wind-chill reaches 32°F or more for a sustained period, or when recommended by staff.
 - 2.1.3. Extend the hours of an Emergency Warming Center based upon the National Weather Service forecast and/or staff recommendation.
- 2.2. There is a difference in service and mission between an Emergency Warming Center and an Emergency Shelter. The City of Killeen opens and operates Emergency Shelters in adherence



to Annex C: Mass Care & Sheltering of the comprehensive emergency management plan. Emergency Shelters have sleeping areas, and are due to a large-scale emergency or disaster in the city.

- 2.3. An Emergency Warming Center can turn into an Emergency Shelter due to a large-scale emergency or disaster that happens during the same time.

3. MINIMUM SERVICES

- 3.1. At a minimum each center shall provide the following:

- 3.1.1. Seating in a warm, dry environment;
- 3.1.2. Access to restroom facilities;
- 3.1.3. Access to a water fountain.

4. KILLEEN DEPARTMENT RESPONSIBILITIES

- 4.1. City Manager's Office

- 4.1.1. Determine if an Emergency Warming Center will be opened and the duration it will remain open;
- 4.1.2. Decide which facility will act as the Emergency Warming Center;
- 4.1.3. Determine all required departmental supportive elements, to include the extent of the support.

- 4.2. Police Department

- 4.2.1. Provide a security needs assessment with the Emergency Warming Center facility manager and provide to Emergency Management Coordinator, or designee, at the beginning of the shelter opening;
- 4.2.2. Provide security as directed by the City Manager, or designee.

- 4.3. Fire Department

- 4.3.1. Provide EMS welfare check at opening of Warming Center and as needed;
- 4.3.2. Provide welfare check as directed by the City Manager, or designee.

- 4.4. Communications Department

- 4.4.1. Issue a public notice on details of an Emergency Warming Center opening;

- 4.5. Office of Homeland Security & Emergency Management;

- 4.5.1. Provide staff recommendation to City Manager on activation of the center;
- 4.5.2. Work with chosen facility representative to recommend time of the opening and resources needed;
- 4.5.3. Provide City staff & key partners timely situational briefs;
- 4.5.4. Provide coordination services of supplies and training of staff for Emergency Warming Center activations;
- 4.5.5. Coordinate with key partners for support, or provide support to key partners, for the opening of an Emergency Warming Center;



4.5.6. Coordinate and inform public safety services (Police & Fire/EMS) when an Emergency Warming Center activates.

4.5.7. Distribute messaging utilizing CodeRed.

4.6. All Other Departments

4.6.1. Provide support as directed by the City Manager, or designee.

5. FACILITY CONSIDERATIONS

5.1. The primary facility for a city operated Emergency Warming Center is the Community Center located at 2201 E Veterans Memorial Blvd.

5.2. Other facilities, including community partners (churches, non-profit community centers), can be requested by using the contact information in Annex C, Appendix 1 of the comprehensive emergency management plan.

6. TRANSPORTATION CONSIDERATIONS

6.1. Initially, police and fire will provide transportation to those requesting to be taken to the warming center during normal calls for service;

6.2. If the number to be transported exceeds police and fire resources available at the time, other options to consider are:

6.2.1. City owned vans

6.2.2. KPD/KFD buses

6.2.3. KISD buses

6.2.4. Rideshare or Taxi services

7. PUBLIC FACILITY CODE OF CONDUCT

7.1. Do NOT endanger the health and safety of other patrons or staff on the premises.

7.2. Do NOT verbally harass others to include profanity, vulgarity, obscenity or racial slurs.

7.3. Do NOT display inappropriate affection to others to include touching of any private areas and/or indecent exposure;

7.4. Do NOT use or possess illicit drugs or alcohol on the premises

7.5. Must follow posted facility rules



WARMING CENTERS

DS-22-148

December 13, 2022

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Background

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- ❑ A group was formed to draft a policy in 2019
- ❑ Neighboring cities were asked what they did
- ❑ Larger cities in Texas were asked what they did
- ❑ Considered city resources and local needs
- ❑ Responsibilities were split due to limited funding

Findings

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- ❑ No municipality provided a written policy for warming centers NOT in relation to an impending disaster
- ❑ All municipalities referred to community groups that handled seasonal warming centers or overnight warming shelters
- ❑ Many agencies activated when a certain degree or lower was forecasted for 3 or more days



Result

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- ❑ < 32° F forecasted by NWS
- ❑ Temperature or wind chill in forecast
- ❑ 5 department involvement
- ❑ Regularity in operations
 - ▣ Messaging
 - ▣ Minimum services offered
 - ▣ Expense tracking
 - ▣ Opening/closing times

CITY OF KILLEEN - WARMING CENTER POLICY

RESPONSIBLE DEPARTMENT		Parks & Recreation Department	
EFFECTIVE DATE	1/31/2020	LAST UPDATED	January 2020

EXECUTIVE POLICY	City Policy Warming Center
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PURPOSE AND SCOPE

PURPOSE AND SCOPE. To establish guidelines and parameters related to opening and operating a warming center managed by city staff in the City of Killeen. To provide direction on managing and operating internal measures, with consideration of those in the City who may be unable to escape the cold. This policy is to minimize the risk for a variety of conditions or health risks exacerbated by exposure to low temperatures.

POLICY STATEMENTS

1. DEFINITIONS

- 1.1. Emergency Warming Center: A place for community members to get out of cold inclement weather temporarily. Sleeping is not a service of this center.
- 1.2. Emergency Shelter: A temporary place for those impacted by emergencies or disasters to sleep.
- 1.3. Annex C: Part of the City of Killeen's comprehensive emergency management plan pertaining to Mass Care and Sheltering.
- 1.4. Public Facility Code of Conduct: See Section 6.

2. GENERAL

- 2.1. The City Manager, or designee, may:
 - 2.1.1. Declare an Emergency Warming Center open when the National Weather Service forecasts a temperature or wind-chill below 32°F with or without precipitation, or when recommended by staff.
 - 2.1.2. Close an Emergency Warming Center if the temperature or wind-chill reaches 32°F or more for a sustained period, or when recommended by staff.
 - 2.1.3. Extend the hours of an Emergency Warming Center based upon the National Weather Service forecast and/or staff recommendation.
- 2.2. There is a difference in service and mission between an Emergency Warming Center and an Emergency Shelter. The City of Killeen opens and operates Emergency Shelters in adherence

Summary

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- There is no municipality in the area that provides a warming center. All others are provided by outside entities/agencies.
- The emergency service of a warming center provided by the City of Killeen exceeds that of any agency that was contacted during the research phase of this policy.



City of Killeen

Staff Report

File Number: DS-22-148

Conduct Annual Evaluation of the City Manager