



**Planning & Zoning Commission and Board of  
Adjustments**

**11.**

**Meeting Date:** 07/19/2022

**Prepared by:** Kerri Turner, Administrative Assistant  
Rob Rae, Director of Development Services

Clay Mahone, Chairman

David Downtain, Vice Chairman

Shawn Davis, Commissioner

Leigh Ann Sims, Commissioner

Paul Manley, Commissioner

Glenn Whitaker, Commissioner

Bryan Blagg, Commissioner

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**Requested Action/Proposed Use:**

**2305 AND 2615 GRAYSTONE DRIVE**

The request of Lloyd Plyler Construction LLP (Owner), Terrin Bertholf, B & H Development, LLC (Prospective Buyer/Representative) and Manhard Engineering (Surveyor/Engineer) concerning the property located at 2305 and 2615 Graystone Drive, being 19.95 acres in the Samuel M. McGlothlin Survey, Abstract No. 811, as follows:

***Planning and Zoning Commission***

- A. Preliminary Plat approval Evergreen Parks Subdivision.
- B. Specific Use Permit and Site Plan approval under Ordinance No. 2280, Section 8, Subsection (5)(a) to allow Patio Homes in an R-1 (One-Family Residential) District.
- C. Zone Change approval under Ordinance No. 2280, Section 12, from a C-2 (General Commercial) District to an R-1 (One-Family Residential) District.

**Background:**

The property is located at 2305 and 2615 Graystone Drive between North Frisco Road and Village Drive.

The owner is requesting to plat the 19.95 acre property into 99 lots for residential development; a Specific Use Permit for Patio Homes with lots between 40' and 50' wide and homes that are 1200 - 2500 square feet; and a Zone Change from a C-2 (General Commercial) District to an R-1 (One-Family Residential) District.

The development will include 34,000 square feet of parks spread across three different pocket parks, a one acre wet pond with a fountain, and interconnected walking trails surrounding and connecting the parks and pond. The developer intends to plant a thick hedgerow of evergreen trees along the northern and western boundaries that serve as a natural green barrier to the railroad and surrounding properties.

The following has been approved for 2305 Graystone Drive:

- January 10, 1995 - Zone Change from R-1 (One Family Residential) District to C-2 (General

Commercial) District

- January 10, 1995 - Variance to provide 40 parking spaces in lieu of the 405 required for a golf driving range and a baseball/softball batting cage

**Adjacent Zoning:**

R-1 (One-Family Residential) District

M-1 (Light Manufacturing) District

R-2 (Multi-Family Residential) District

C-2 (General Commercial) District

**Origination:**

Lloyd Plyler Construction LLP (Owner)

Terrin Bertholf, B & H Development, LLC (Prospective Buyer/Representative)

Manhard Engineering (Surveyor/Engineer)

**Master Plan Designation:**

**Agricultural and Rural** – Typically are large parcels that are primarily used for crops or pasture land. These low density regions surrounding the City do not have significant demands on the transportation or utilities network.

and

**Suburban Residential** – Increased density and closer building setbacks separate Suburban Residential from Countryside and Estate, but more landscaping and open space distinguish Suburban Residential from Urban and Auto-Urban categories. New suburban subdivisions typically have curvilinear streets and sidewalks, as well as curb and gutter.

**Number of notices mailed:**

16

**Objections Received:**

2

**Development Review Meeting:**

Yes

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**Attachments**

Location Map

Zoning Map

Zoning Sign Photo

Zoning Sign Photo

Survey

Preliminary Plat

Site Plan

Narrative

Traffic Impact Analysis

Staff Review Letter

Staff Review Letter

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City of Sherman, Texas  
Development Services Department

**CITY OF SHERMAN**  
**(2305 & 2615 Graystone Dr)**

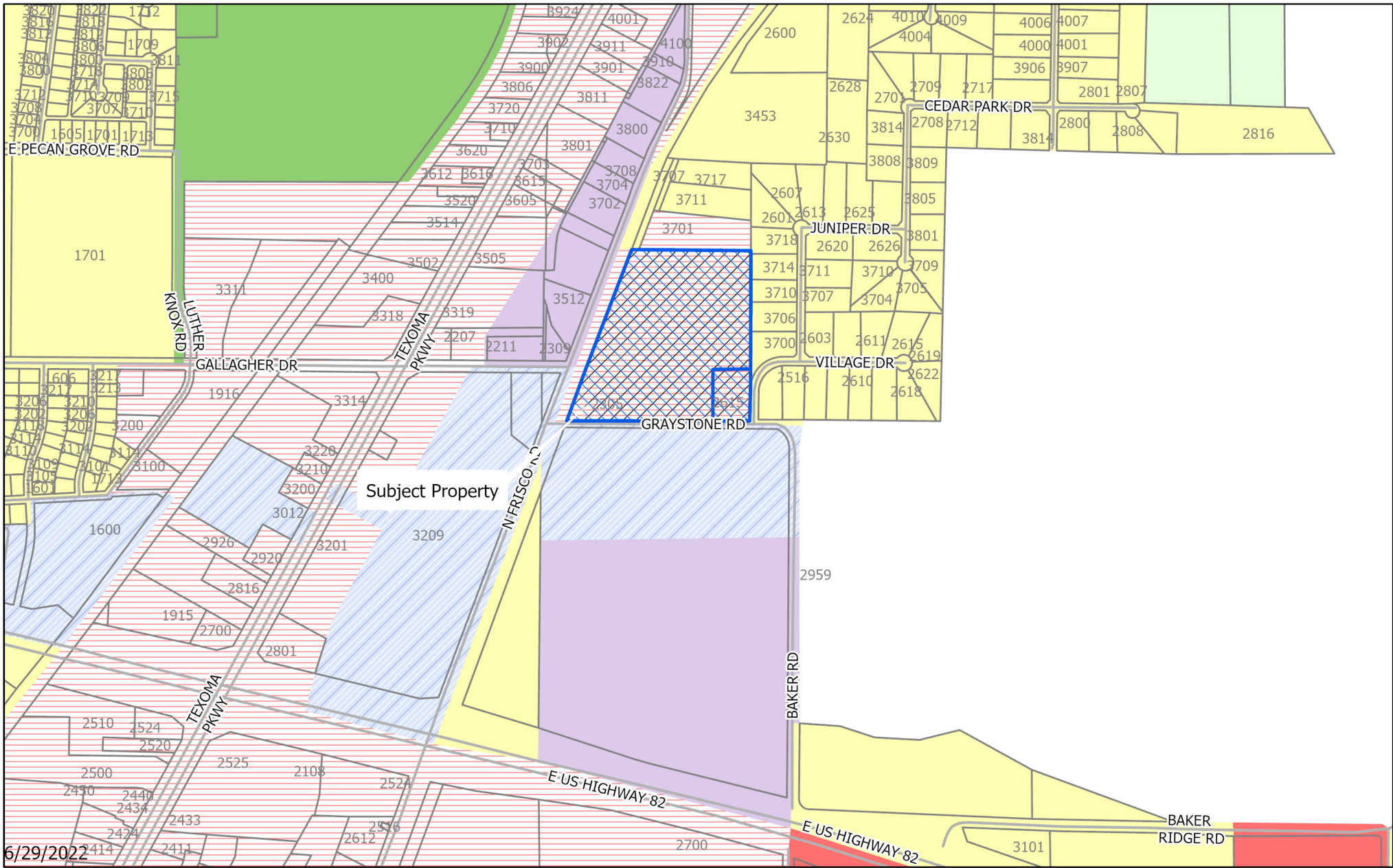


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diagram H:\ENGINEER\GIS\ArcGIS Pro Projects\Planning\Public Notification.aprx

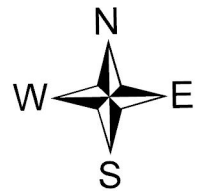


**Sherman**  
CLASSIC TOWN. BROAD HORIZON.

City of Sherman, Texas  
Development Services Department

- |                                     |   |
|-------------------------------------|---|
| BIP Blalock Industrial Park         | MH Manufacturing Housing District       |
| C-1 Retail Business District        | R-1 One Family Residential District     |
| C-2 General Commercial District     | R-2 Multi-Family Residential District   |
| CO Office District                  | R-A Single Family Agricultural District |
| Lakes                               | SF-1 Single Family Residential District |
| M-1 Light Manufacturing District    | PD Planned Development                  |
| M-1.5 Medium Manufacturing District | Subject Locations                       |
| M-2 Heavy Manufacturing District    | Parcels                                 |

## CITY OF SHERMAN Zoning Location Map (2305 & 2615 Graystone Dr)



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2305 Graystone









~ BASIS OF BEARINGS ~  
GRID NORTH, NAD 83  
TEXAS STATE PLANE  
COORDINATE SYSTEM  
NORTH CENTRAL ZONE

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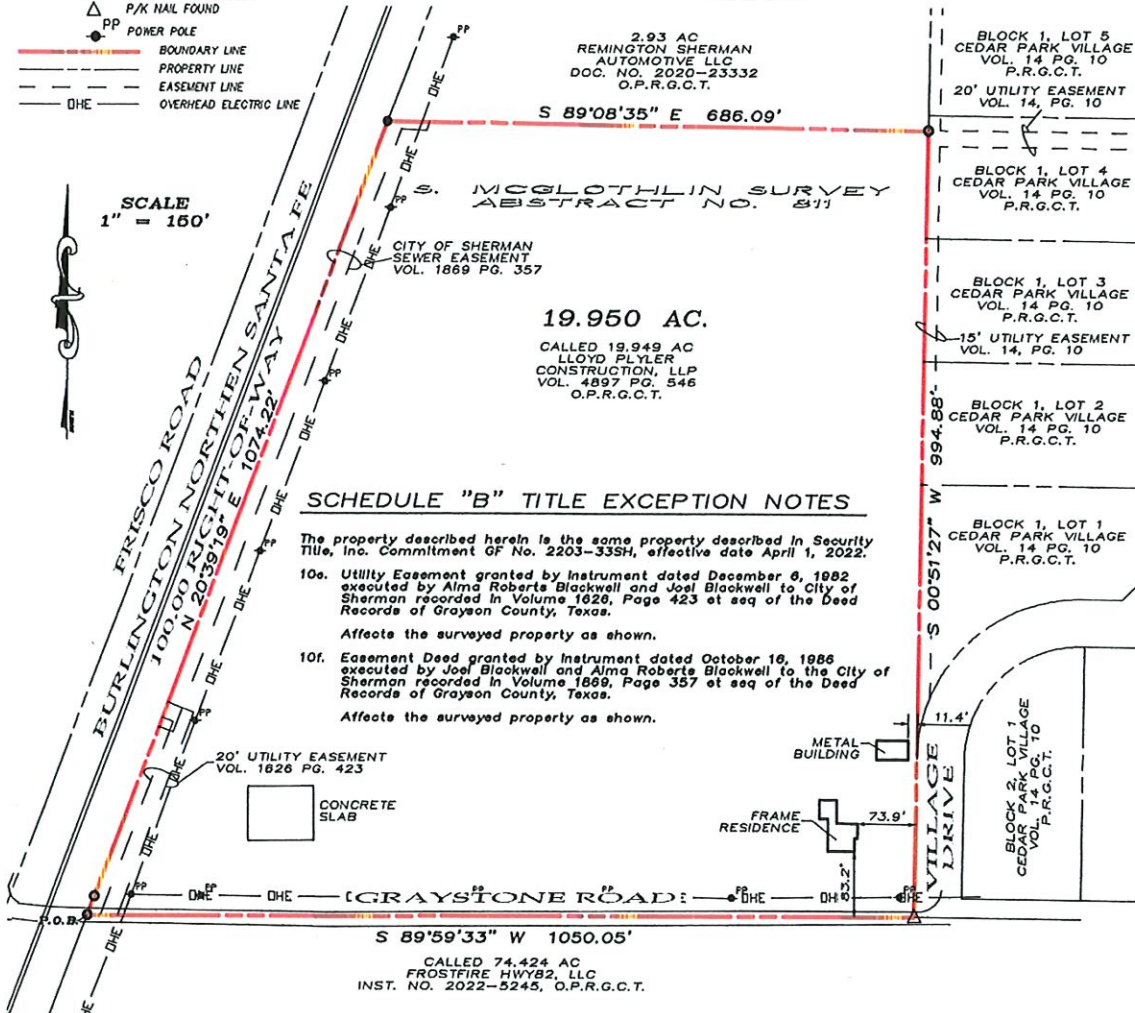
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JOB NO. 22060640  
DFT: BH

# LEGEND

- 1/2" STEEL ROD SET
- 1/2" STEEL ROD FOUND
- △ P/K NAIL FOUND
- PP POWER POLE
- BOUNDARY LINE
- PROPERTY LINE
- EASEMENT LINE
- DHE OVERHEAD ELECTRIC LINE

SCALE  
1" = 150'



## SCHEDULE "B" TITLE EXCEPTION NOTES

The property described herein is the same property described in Security Title, Inc. Commitment OF No. 2203-33SH, effective date April 1, 2022.

- 10a. Utility Easement granted by Instrument dated December 8, 1982 executed by Alma Roberts Blackwell and Joel Blackwell to City of Sherman recorded in Volume 1626, Page 423 et seq of the Deed Records of Grayson County, Texas.  
Affects the surveyed property as shown.
- 10f. Easement Deed granted by Instrument dated October 16, 1986 executed by Joel Blackwell and Alma Roberts Blackwell to the City of Sherman recorded in Volume 1689, Page 357 et seq of the Deed Records of Grayson County, Texas.  
Affects the surveyed property as shown.

## LEGAL DESCRIPTION

Situated in the County of Grayson, State of Texas, being a part of the Samuel M. McGlothlin Survey, Abstract No. 811, and being a part of the same tract of land described as 19.95 acres conveyed to Lloyd Plyler Construction LLP, by deed recorded in Volume 4897, Page 546, Official Public Records, Grayson County, Texas, and being more particularly described by metes and bounds as follows:

Beginning at a found 1/2" steel rod at the southwest corner of said 19.95 acre tract, being at the intersection of the east Right-of-Way of the Burlington Northern Santa Fe railroad and the center of Graystone Road;

Thence North 20°39'19" East, with the said East Right-of-Way of the Burlington Northern Santa Fe railroad a distance of 1074.22 feet to a set 1/2" steel rod;

Thence South 89°08'35" East with the south line of a 2.93 acre tract of land conveyed to Remington Sherman Automotive LLC. Recorded in Document Number 2020-23332 of said Official Public Records, a distance of 686.09 feet to a found 1/2" steel rod;

Thence South 00°51'27" West, with the west line of the Cedar Park Village Addition a distance of 994.88 feet to a found P/K nail in the center of said Graystone Road;

Thence South 89°59'33" West with the center of said Graystone Road a distance of 1050.05 feet to the Point of Beginning and containing 19.950 acres of land.

I, Douglas W. Underwood, Registered Professional Land Surveyor, hereby certify that a survey was made on the ground on the property legally described herein, and that the plat herewith is a true, correct and accurate representation of the property legally described hereinabove.



UNDERWOOD  
DRAFTING & SURVEYING

*Douglas W. Underwood*  
Douglas W. Underwood  
Registered Professional  
Land Surveyor No. 4709  
Firm No. 10006300  
DATE OF SURVEY: 06/06/22

ABBREVIATIONS

IRF = IRON ROD FOUND  
PKNF = "PK" NAIL FOUND IN PAVEMENT  
CM = CONTROLLING MONUMENT  
O.P.R.G.C.T. = OFFICIAL PUBLIC RECORDS, GRAYSON COUNTY, TEXAS  
B.S.L. = BUILDING SETBACK LINE

W ———— W ———— EXISTING WATER LINE  
DHE ———— DHE ———— EXISTING OVERHEAD UTILITY LINE  
- - - - - EXISTING SANITARY SEWER LINE

LINE TABLE			
LINE	BEARING	LENGTH	CHORD
L1	N45°51'27"E	14.83'	
L2	N40°44'08"W	14.83'	
L3	N56°17'34"E	15.00'	
L4	N63°54'16"E	15.00'	
L5	S38°58'10"E	15.00'	
L6	N45°51'17"E	15.00'	
L7	N44°08'33"W	15.00'	
L8	S45°51'27"W	15.00'	
L9	N44°08'33"W	15.00'	
L10	N20°49'30"E	25.23'	
L13	S89°08'33"E	17.89'	
L14	S20°49'30"W	2.98'	
L17	S00°51'27"W	26.32'	

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	16°51'47"	168.07'	49.46'
C3	13°08'23"	75.03'	17.21'
C4	90°00'00"	50.00'	78.54'
C5	19°58'03"	175.00'	60.99'
C6	5°38'14"	86.04'	8.66'
C7	23°04'11"	75.26'	30.30'
C8	13°08'23"	75.03'	17.21'
C9	13°08'23"	75.03'	17.21'
C10	20°35'21"	75.00'	26.95'
C11	27°38'25"	75.00'	36.18'
C12	18°47'10"	74.81'	24.53'
C13	21°19'33"	74.47'	27.72'
C14	9°10'42"	75.00'	12.01'
C16	9°10'42"	75.00'	12.01'
C17	19°51'53"	76.51'	26.08'
C18	5°48'44"	200.00'	20.29'
C19	70°01'57"	50.00'	61.11'
C21	32°53'39"	24.87'	14.28'
C22	22°34'29"	24.78'	9.76'
C23	109°58'03"	25.00'	47.98'
C24	25°41'56"	24.97'	11.20'
C25	14°00'09"	31.48'	7.69'
C27	17°35'36"	25.00'	7.68'
C28	24°20'21"	25.00'	10.62'
C29	31°09'11"	25.00'	13.59'
C30	27°44'46"	25.00'	12.11'
C31	28°40'30"	25.06'	12.41'
C32	14°44'08"	149.24'	38.38'
C33	5°13'55"	150.24'	13.72'

HOA LOT NOTES

- HOA LOT 1: 154,622 SQUARE FEET; NO HOMES TO BE CONSTRUCTED.
- HOA LOT 2: 5,363 SQUARE FEET; NO HOMES TO BE CONSTRUCTED.
- HOA LOT 3: 1,157 SQUARE FEET; NO HOMES TO BE CONSTRUCTED.

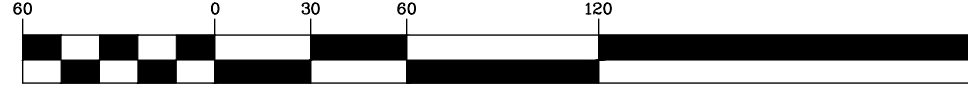
SURVEY PREPARED FOR

B&H DEVELOPMENT  
118 W. Chestnut St. Denison, TX 75021  
ATTN: TERRIN BERTHOLF

PRELIMINARY PLAT  
OF  
EVERGREEN PARKS SUBDIVISION

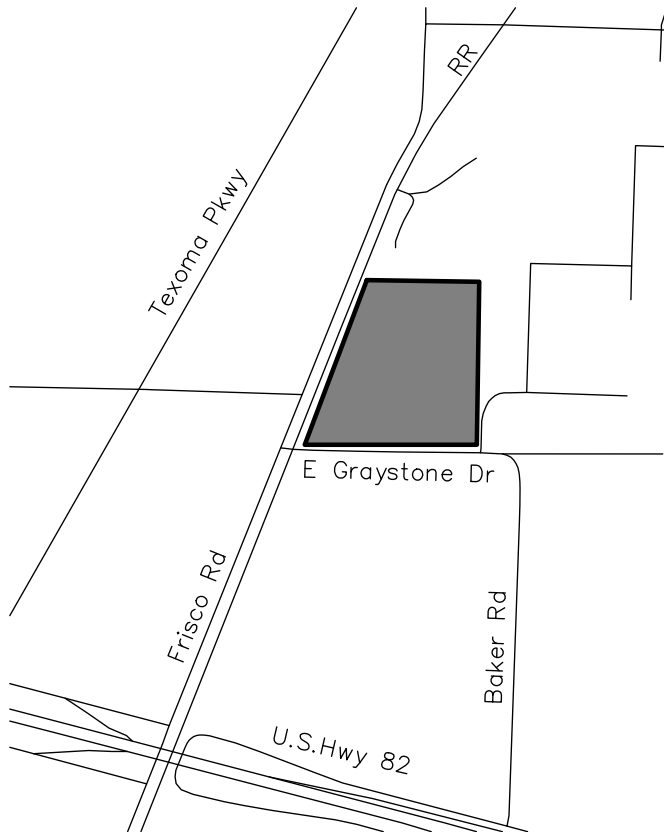
19.95 ACRES IN THE SAMUEL M. McGLOTHLIN SURVEY, ABSTRACT No. 811  
CITY OF SHERMAN, GRAYSON COUNTY, TEXAS.

GRAPHIC SCALE



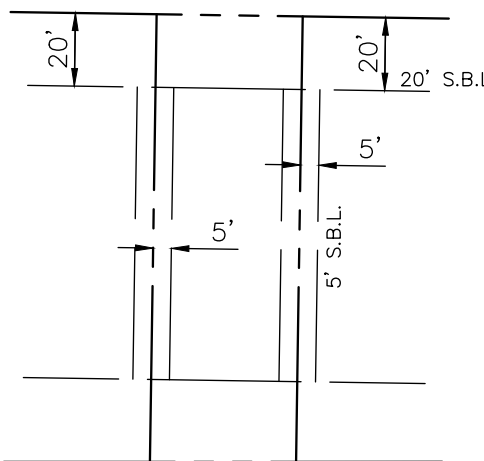
( IN FEET )  
1 inch = 60 ft.

VICINITY MAP (NTS)

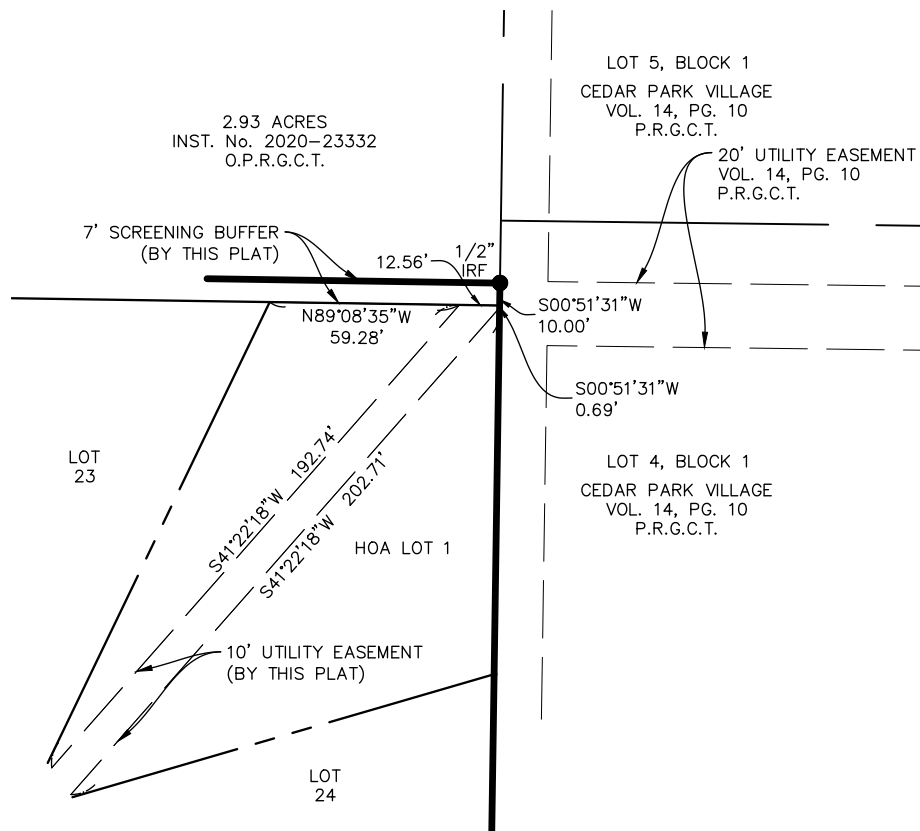


TYPICAL SETBACK DETAIL

R.O.W.



DETAIL #1 (1"=60')



PRELIMINARY PLAT  
EVERGREEN PARKS

CITY OF SHERMAN, GRAYSON COUNTY, TEXAS

PROJ. MGR.: BB  
PROJ. ASSOC.: SC  
DRAWN BY: SC  
DATE: 2022-06-22  
SHEET  
1  
PR CODE



OWNERS DEDICATION

NOW THEREFORE KNOWN ALL MEN BY THESE PRESENTS:

THAT I, B&H Development, do hereby adopt this plat designating the hereinabove property as Evergreen Parks, an addition to the City of Sherman, and do hereby dedicate to the public use forever the streets and easements shown on this plat for the mutual use and accommodation of all public and private utilities desiring to use or using same. Any public or private utility shall have the right to remove and keep removed all or part or any buildings, fences, trees, shrubs or other improvements or growths which in anyway endanger or interfere with the construction, maintenance, or efficiency of its respective systems on any of these easements strips and any public or private utility shall , at all times have a right of ingress and egress to and from and upon the said easement strips for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or part of its respective system without the permission of anyone. This plat approved subject to all ordinances, rules regulations and resolutions of the City of Sherman, Texas.

WITNESS MY HAND this \_\_\_\_\_ day of \_\_\_\_\_ , 2022.

COMPANY NAME:  
COMPANY OWNER NAME:

Before me the undersigned, a notary public in and for said County and State, on this day personally appeared \_\_\_\_\_, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_ , 2022.

Notary Public, Grayson County, Texas

LEGAL DESCRIPTION

BEING all that certain 19.95-acre tract of land situated in the Samuel M. McGlothlin Survey, Abstract No. 811, City of Sherman, Grayson County, Texas, as described in Warranty Deed to Lloyd Piyler Construction, LLP recorded in Volume 4897, Page 549, Official Public Records, Grayson County, Texas (O.P.R.G.C.T.) and being more particularly described by metes and bounds as follows:

BEGINNING at a one-half inch iron rod found for the southwest corner of said 19.95-acre tract, same being at the intersection of the east right-of-way line of a 100' Burlington Santa Fe Northern railroad right-of-way and the center of Graystone Road (right-of-way by prescription);

THENCE North 20°39'19" East, with the east right-of-way line of said Burlington Northern Santa Fe railroad and the west line of said 19.95-acre tract, a distance of 1,074.22 feet to a one-half inch iron rod found for the northwest corner of said 19.95-acre tract, same being the southwest corner of that certain called 2.93-acre tract as described in deed recorded in Instrument No. 2020-23332, O.P.R.G.C.T.;

THENCE South 89°08'35" East, with the south line of said 2.93 acre tract and the north line of said 19.95 acre tract, a distance of 686.09 feet to a one-half inch iron rod found for the northeast corner of said 19.95 acre tract, same being in the west line of Lot 4, Block I, Cedar Park Village addition, an addition to the City of Sherman, according to the plat thereof recorded in Volume 14, Page 10, Plat Records, Grayson County, Texas (P.R.G.C.T.);

THENCE South 00°51'27" West, with the west line of said Cedar Park Village addition and the east line of said 19.95-acre tract, a distance of 994.88 feet to a "PK" nail found in the center of said Graystone Road for the southeast corner of said 19.95-acre tract;

THENCE South 89°59'33" West, with the south line of said 19.95-acre tract and the center of said Graystone Road, a distance of 1,050.05 feet to the POINT OF BEGINNING, containing 19.950 acres of land.

SURVEYOR'S GENERAL NOTES

1. ACCORDING TO FEMA FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY No. 48181C0290F, REVISED 09/29/2010, THE SUBJECT TRACT SHOWN HEREON LIES WITHIN ZONE X (UNSHADED), DEFINED AS "AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN". DETERMINATION BASED ON VISUAL INSPECTION AND RELATIVE SCALING OF FIRM. NEITHER THE CITY OF SHERMAN NOR THE UNDERSIGNED SURVEYOR WILL BE RESPONSIBLE FOR ANY DAMAGE, PERSONAL INJURY, OR LOSS OF LIFE OR PROPERTY OCCASIONED BY FLOODING OR FLOODING CONDITIONS.
2. DISTANCES ARE MARKED IN FEET AND DECIMAL PLACES THEREOF. NO DIMENSION SHALL BE ASSUMED BY SCALE MEASUREMENT HEREON. DISTANCES AND/OR BEARINGS SHOWN IN PARENTHESIS (456.67') ARE RECORD OR DEED VALUES.)
3. THIS SUBDIVISION MAY BE SUBJECT TO MATTERS OF TITLE, WHICH MAY BE REVEALED BY A CURRENT TITLE REPORT. PRE-EXISTING EASEMENTS, SETBACKS AND OTHER RESTRICTIONS WHICH MAY BE FOUND IN A CURRENT TITLE REPORT, LOCAL ORDINANCES, DEEDS OR OTHER INSTRUMENTS OF RECORD MAY NOT BE SHOWN.
4. BEARINGS ARE BASED ON THE TEXAS COORDINATE SYSTEM OF 1983 (NAD83), NORTH CENTRAL ZONE (4202). COORDINATES SHOWN HEREON ARE GRID VALUES. DISTANCES SHOWN HEREON ARE SURFACE DISTANCES. THE SURFACE ADJUSTMENT FACTOR USED IS 1.00012.
5. WATER SUPPLY TO BE PROVIDED BY THE CITY OF SHERMAN, TEXAS.
6. SEWER SERVICE TO BE PROVIDED BY THE CITY OF SHERMAN, TEXAS.
7. BLOCKING THE FLOW OF WATER OR CONSTRUCTION OF IMPROVEMENTS IN DRAINAGE EASEMENTS, AND FILLING OR OBSTRUCTION OF THE FLOODWAY IS PROHIBITED.
8. ANY EXISTING CREEKS OR DRAINAGE CHANNELS TRAVERSING ALONG OR ACROSS THE ADDITION WILL REMAIN AS OPEN CHANNELS AND WILL BE MAINTAINED BY THE INDIVIDUAL OWNERS OF THE LOT OR LOTS THAT ARE TRAVERSED BY OR ADJACENT TO THE DRAINAGE COURSES ALONG OR ACROSS SAID LOTS.
9. THE CITY OF SHERMAN WILL NOT BE RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF SAID DRAINAGE WAYS OR FOR THE CONTROL OF EROSION.
10. THE OWNERS AND BUILDERS MUST COMPLY WITH ALL OTHER STATE AND FEDERAL REGULATIONS REGARDING DEVELOPMENTS OF THIS TYPE.

CERTIFICATION OF COMPLIANCE

The Undersigned, the City Clerk of the City of Sherman, hereby certifies that the foregoing, Evergreens Park, an addition to the City of Sherman, Texas, was submitted to the City Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2022, and the City Council by formal action then and there accepted the dedication streets, alleys, easements and public places, as shown and set forth in and upon said map or plat, and said City Council further authorized the Mayor to note the acceptance thereof by signing his name as herein above subscribed.

Witness my hand this \_\_\_\_\_ day of \_\_\_\_\_ , 2022.

City Clerk, City of Sherman, Texas

I, Authorized Representative for B&H Development, sole owner of Final Plat of Evergreen Parks to the City of Sherman, Texas, do hereby dedicate the streets, easements, alleys, right-of-way, parks, school sites and other public places shown hereon to the public use forever.

Authorized Representative for B&H Development:

The undersigned, the City Clerk of the City of Sherman, Texas, does hereby certify that the foregoing Final Plat of Evergreen Parks, to the City of Sherman, Texas, was submitted to the City Council of Sherman, Texas, on the \_\_\_\_\_ day of \_\_\_\_\_, 2021, and the City Council by formal action then and there accepted the dedication of streets, alleys, easements and public places, as shown and set forth in and upon said map or plat, and said City Council further authorized this Mayor to note the acceptance there of by signing his name as hereinabove subscribed.

WITNESS MY HAND THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ , 2022, BY

CITY CLERK, CITY OF SHERMAN, TEXAS

This, the Final Plat of Evergreen Parks to the City of Sherman, Texas, is hereby approved this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by the Planning and Zoning Commission of the City of Sherman, Texas.

Chairman Secretary

This, the Final Plat of Evergreen Parks to the City of Sherman, Texas, is hereby approved this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by the City Council of the City of Sherman, Texas.

Mayor, City of Sherman, TEXAS DATE

SURVEYOR'S CERTIFICATION

KNOWN ALL MEN BY THESE PRESENTS:

That I, Sean I. Compton, Registered Professional Land Surveyor, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments thereon were properly placed, under my personal supervision, in accordance with the subdivision regulations of the City of Sherman, Texas.

PRELIMINARY, THIS SURVEY SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT AND SHALL NOT BE RECORDED FOR ANY PURPOSE. DATE OF PRELIMINARY RELEASE FOR MUNICIPAL REVIEW: 2022-06-20 BY SEAN I. COMPTON, RPLS.

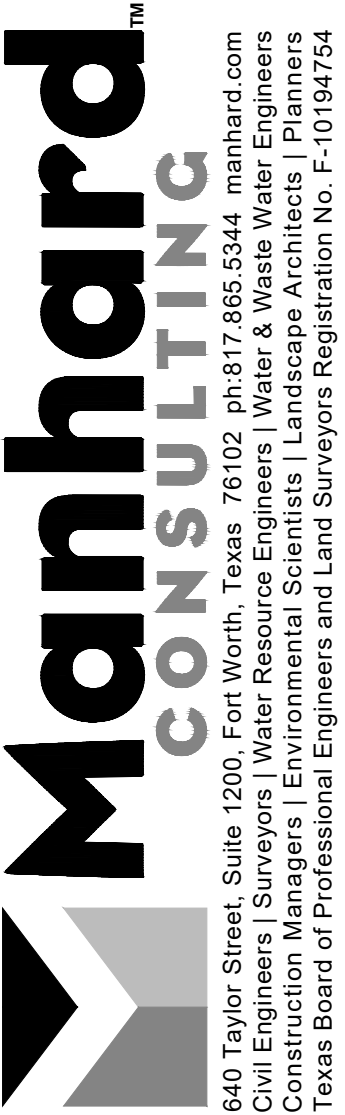
Sean I. Compton  
Registered Professional Land Surveyor  
State of Texas No. 6766

SURVEY PREPARED FOR

B&H DEVELOPMENT  
118 W. Chestnut St. Denison, TX 75021  
ATTN: TERRIN BERTHOLF

PRELIMINARY PLAT  
OF  
EVERGREEN PARKS SUBDIVISION

19.95 ACRES IN THE SAMUEL M. MCGLOTHLIN SURVEY, ABSTRACT No. 811  
CITY OF SHERMAN, GRAYSON COUNTY, TEXAS.



PRELIMINARY PLAT  
EVERGREEN PARKS

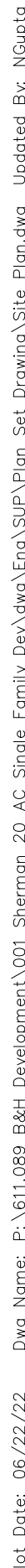
CITY OF SHERMAN, GRAYSON COUNTY, TEXAS

PROJ. MGR.: BB  
PROJ. ASSOC.: SC  
DRAWN BY: SC  
DATE: 2022-06-22  
SHEET  
2  
PR CODE

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PENDING





**ENGINEER**  
MANHARD CONSULTING  
12225 GREENVILLE AVE.  
SUITE 1000  
DALLAS, TEXAS 75243  
972.972.4250  
BRIAN BRIDGEWATER, P.E.

**PENDING**



June 23, 2022

Mr. Rob Rae,

This 19.95 acre property is currently zoned C2 for commercial use. Due to housing conditions and pricing, the location of the land, the proximity to the railroad and the land uses of the surrounding parcels, the best use of this land is to be downzoned from C2 zoning into residential use for homes with lots between 40' and 50' in width. The purpose of this Specific Use Permit (SUP) request is to allow for those lots between 40' and 50'. These smaller lot sizes will necessitate lower lot prices for homebuilders and allow for 1,200SF-2,500SF homes to be built without a compromise in quality.

As lifelong residents of Sherman, we aim to produce a quality and aesthetically pleasing development that we are proud to have in our city and proud to place our names on. This proposed development includes 99 patio homes lots with a typical dimension of 40'x120'. The development will include ~34,000 sqft of parks spread across three different pocket parks, and a 1 acre wet pond with a fountain and interconnected walking trails surrounding and connecting the parks and pond. We intend to plant a thick hedgerow of evergreen trees along the northern and western boundaries that serve as a natural green barrier to the railroad and surrounding properties.

Thank you for your help with this project.



---

Terrin Bertholf  
B&H Development  
118 W. Chestnut  
Denison, TX 75021

**TRAFFIC IMPACT ANALYSIS FOR  
GRAYSTONE DRIVE RESIDENTIAL DEVELOPMENT  
SHERMAN, TEXAS**

**Prepared for:**

B&H Development  
118 W. Chestnut  
Denison, TX 75021

**Prepared by:**



**LEE ENGINEERING**

3030 LBJ Freeway, Suite 1660

Dallas, Texas 75234

(972) 248-3006

TBPE Firm F-450



Digitally  
signed by  
Kelly D.  
Parma,  
P.E., PTOE  
Date:  
2022-06-23  
15:05:29

June 2022



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## INTRODUCTION

This traffic study was performed to analyze the potential traffic impacts of the proposed Graystone Drive single-family residential development located to the northeast of the Graystone Drive and Frisco Road intersection in Sherman, Texas. A vicinity map of the study area is shown in **Figure 1** and a site plan for the development is shown in **Figure 2**. The following elements were included in this study:

### *Data Collection*

- Collected weekday AM and PM peak hour turning movement volumes at the following three (3) existing study intersections:
  - Frisco Road and Graystone Drive
  - Village Drive and Graystone Drive
  - Sistrunk Street and Dripping Spring Road
- Studied existing roadway configurations, surrounding land areas, and sight distance at the proposed access points.
- Obtained the proposed site plan, information related to planned roadway improvements, and other relevant information.

### *Traffic Analysis*

- Assessed the general accessibility of the site.
- Estimated the number of trips that will be generated by the proposed development and other future development in the area.
- Estimated the directional distribution of traffic approaching / departing the proposed development during the AM and PM peak hours.
- Reviewed available historical and projected traffic volume data for the study area roadways.
- Determined growth rate of traffic in the area and estimated non-site traffic volumes for the study area at site build-out.
- Assigned the estimated traffic to the street network.

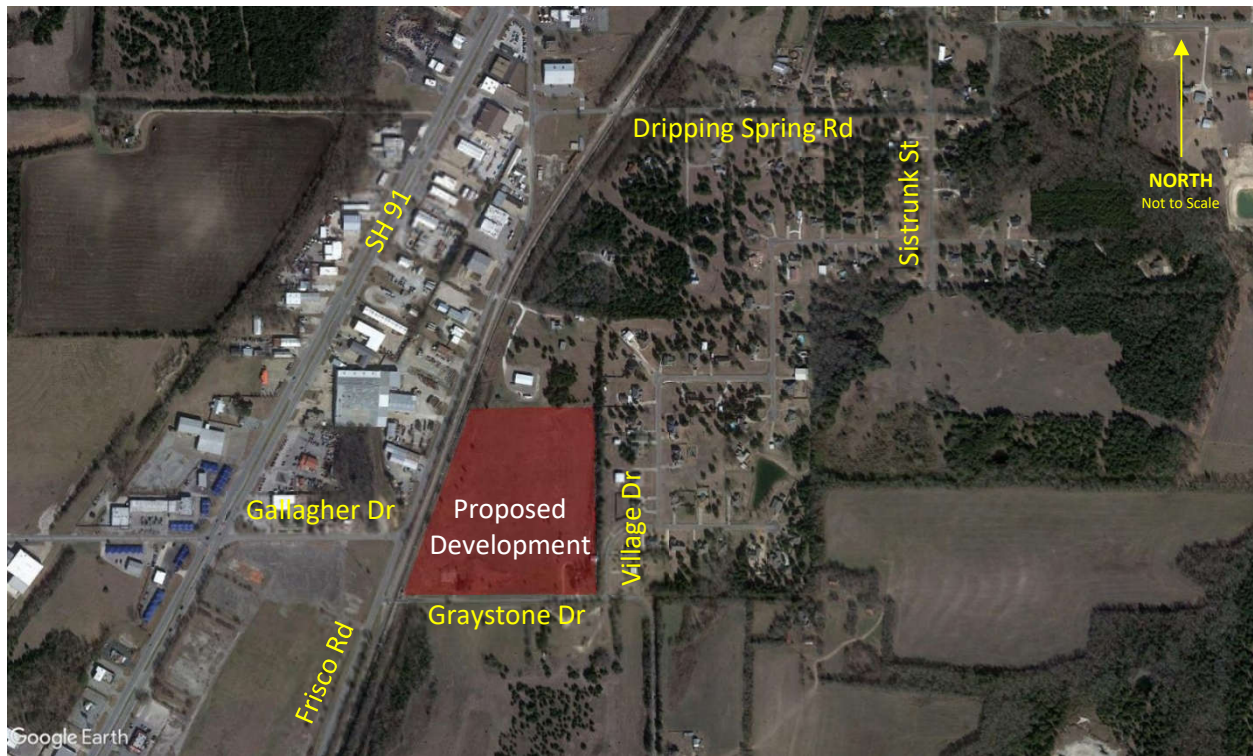
### *Recommendations*

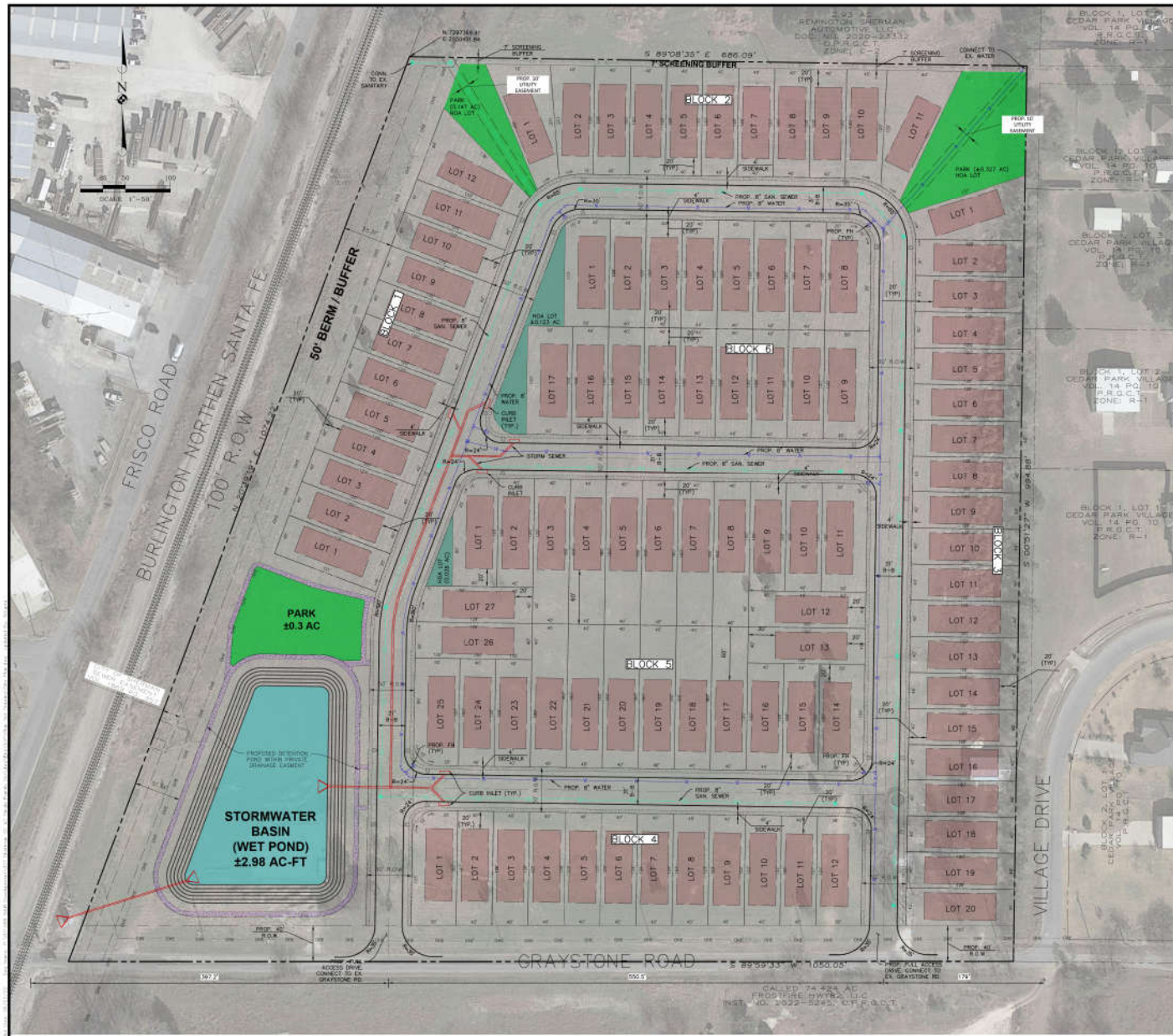
- Determined if any roadway improvements are needed to accommodate projected traffic generated by the proposed development.

### *Documentation*

- Prepared a report documenting the study procedures and results.

**Figure 1: Vicinity Map of the Study Area**





ZONING TYPE:		CURRENT: C-2 (GENERAL COMMERCIAL)	
		PROPOSED: R-1 (ONE FAMILY RESIDENTIAL)	
TOTAL PROJECT SITE		19.95 AC	
R.O.W. DEDICATION (GRAYSTONE RD.)		0.96 AC	
NET USABLE AREA		18.99 AC	
TOTAL OPEN SPACE		AC	%
USABLE OPEN SPACE		3.55	18.7
PARKS/WALKING TRAILS		2.30	12.1
STORMWATER BASIN		1.05	5.5
BUFFER ZONE/NATURAL SCREEN		1.25	6.6
SINGLE FAMILY LOTS		12.06	63.5
RIGHT OF WAY		3.38	17.8
TOTAL UNITS		99	
DENSITY		4.96 DU/AC	
TYPICAL LOT DIMENSIONS		40'x120'	
FRONT YARD SETBACK		20'	
REAR YARD SETBACK		20'	
INTERIOR SIDE SETBACK		5'	
CORNER SIDE SETBACK		15'	
LINEAR FT OF ROADWAY		2,985 LF	

UTILITY LEGEND

STD. 4" SANITARY SEWER MANHOLE	STANDARD 4" SANITARY SEWER MANHOLE
JUNCTION BOX	JUNCTION BOX
CURB INLET	CURB INLET
FIRE HYDRANT	FIRE HYDRANT
WATER FITTINGS	WATER FITTINGS
GATE VALVE	GATE VALVE
WATER LINE	WATER LINE
SANITARY SEWER LINE	SANITARY SEWER LINE
STORM LINE	STORM LINE
EXISTING OVERHEAD WIRE	EXISTING OVERHEAD WIRE
EXISTING WATER LINE	EXISTING WATER LINE
EXISTING SANITARY LINE	EXISTING SANITARY LINE
SETBACK LINE	SETBACK LINE
LOT LINE	LOT LINE
RIGHT OF WAY LINE	RIGHT OF WAY LINE
TYPICAL LOT SETBACK AREA	TYPICAL LOT SETBACK AREA
STORMWATER BASIN	STORMWATER BASIN
PARK AREAS	PARK AREAS
SIDEWALK	SIDEWALK

OWNER/DEVELOPER  
BAM DEVELOPMENT  
118 W. CHESTNUT ST.  
DENVER, TEXAS 75021  
903.771.6820  
ZACH HERTON, CPA

ENGINEER  
MANHARD CONSULTING  
12225 GREENVILLE AVE.  
SUITE 1000  
DALLAS, TEXAS 75243  
972.975.4250  
BRIAN BRIDGEWATER, P.E.

20 AC SINGLE FAMILY DEVELOPMENT  
CITY OF SHERMAN, TEXAS



DATE	DESCRIPTION
06/20/2023	FINAL SITE PLAN

PROJ. NO.: JB  
PROJ. NAME: JB  
DRAWN BY: SM  
DATE: 06/20/2023  
SHEET  
SP0.1  
811.089001.00

PENDING

## SITE ACCESSIBILITY

Site accessibility describes the ease with which vehicles can get to and from a development. A site's accessibility is affected by the geographical location of the development with respect to other activity areas, the roadway system, and physical restraints such as rivers or lakes.

The existing lane configurations for the adjacent roadways are provided in **Figure 3**. A description of the study area roadways includes:

**Graystone Drive** – Graystone Drive is adjacent to the proposed development to the south with an assumed speed limit of 30 miles per hour (mph) since a posted speed limit was not observed during the site visit. During site observations, the width of the roadway was measured 19 feet. Graystone Drive is a two-lane undivided that is classified as a Local Street in the City of Sherman Thoroughfare plan. All access points to the proposed development will be located on Graystone Drive.

**Frisco Road** – Frisco Road is parallel west of the proposed development with a posted speed limit of 35 mph. Frisco Road is a two-lane undivided roadway that is classified as a Local Street in the City of Sherman Thoroughfare plan. The roadway provides connections to major roadways in the area (SH 91 and US 82).

**Village Drive** – Village Drive is east of the proposed development with an assumed speed limit of 30 mph since a posted speed limit was not observed during the site visit. Village Drive is a two-lane undivided roadway that is classified as a Local Street in the City of Sherman Thoroughfare plan.

**Dripping Spring Road** – Dripping Spring Road is approximately ¼-mile north of the proposed development with an assumed speed limit of 30 mph, since a posted speed limit was not observed during the site visit. Dripping Spring Road is a two-lane undivided roadway that is classified as a Minor Arterial in the City of Sherman Thoroughfare Plan.

**Sistrunk Street** – Sistrunk Street is located east of the proposed development with an assumed speed limit of 30 mph since a posted speed limit was not observed during the site visit. Sistrunk Street is a two-lane undivided roadway that is classified as a Local Street in the City of Sherman Thoroughfare Plan.

Access to the proposed single-family residential development will be provided by two (2) full-access points on Graystone Drive:

- Access Point 1 will be located more than 400 feet east of Frisco Road
- Access Point 2 will be located approximately 180 feet west of Village Drive

The proposed site access point locations and lane configurations are shown in **Figure 4**.



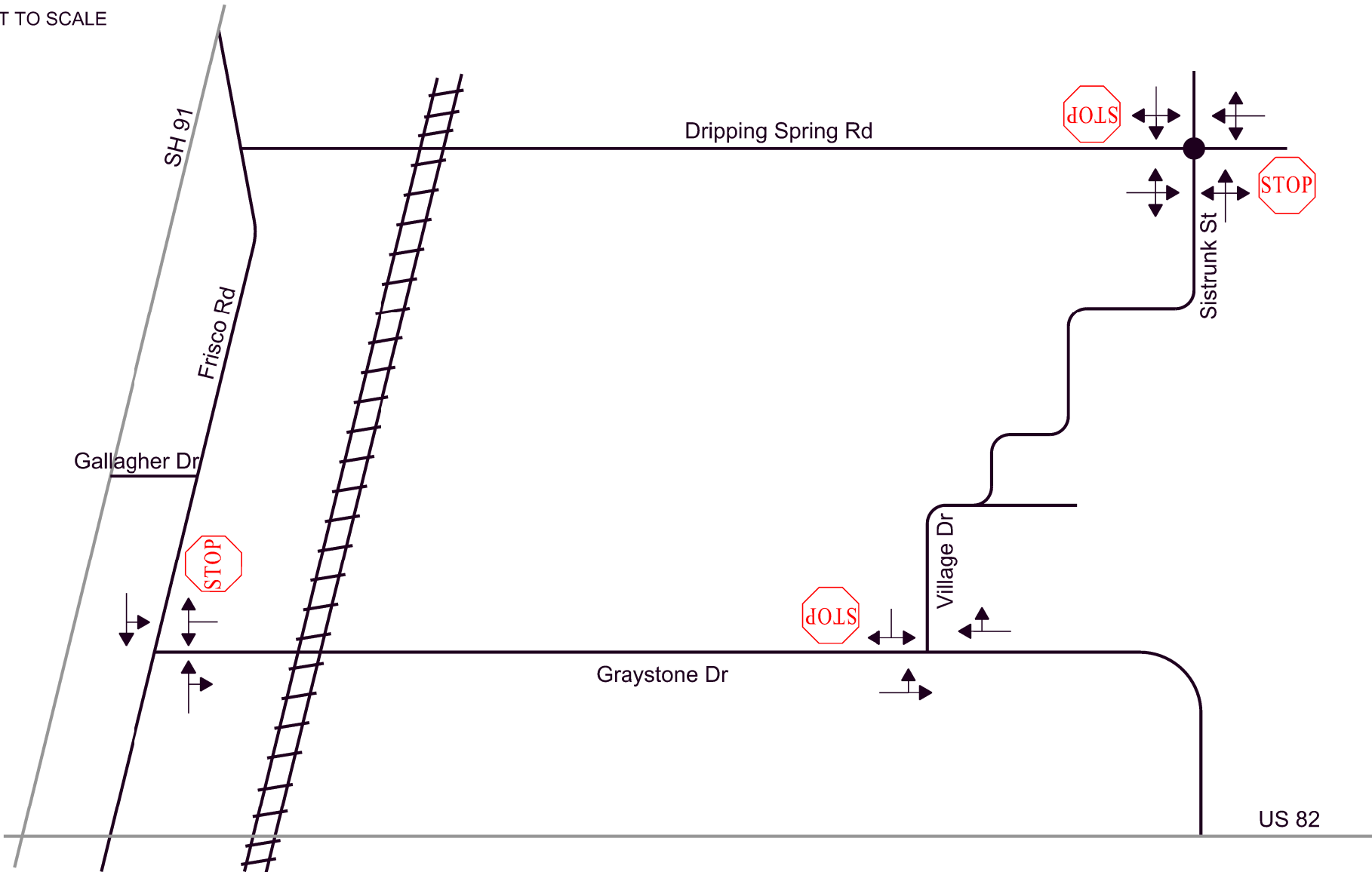


NOT TO SCALE

LEGEND



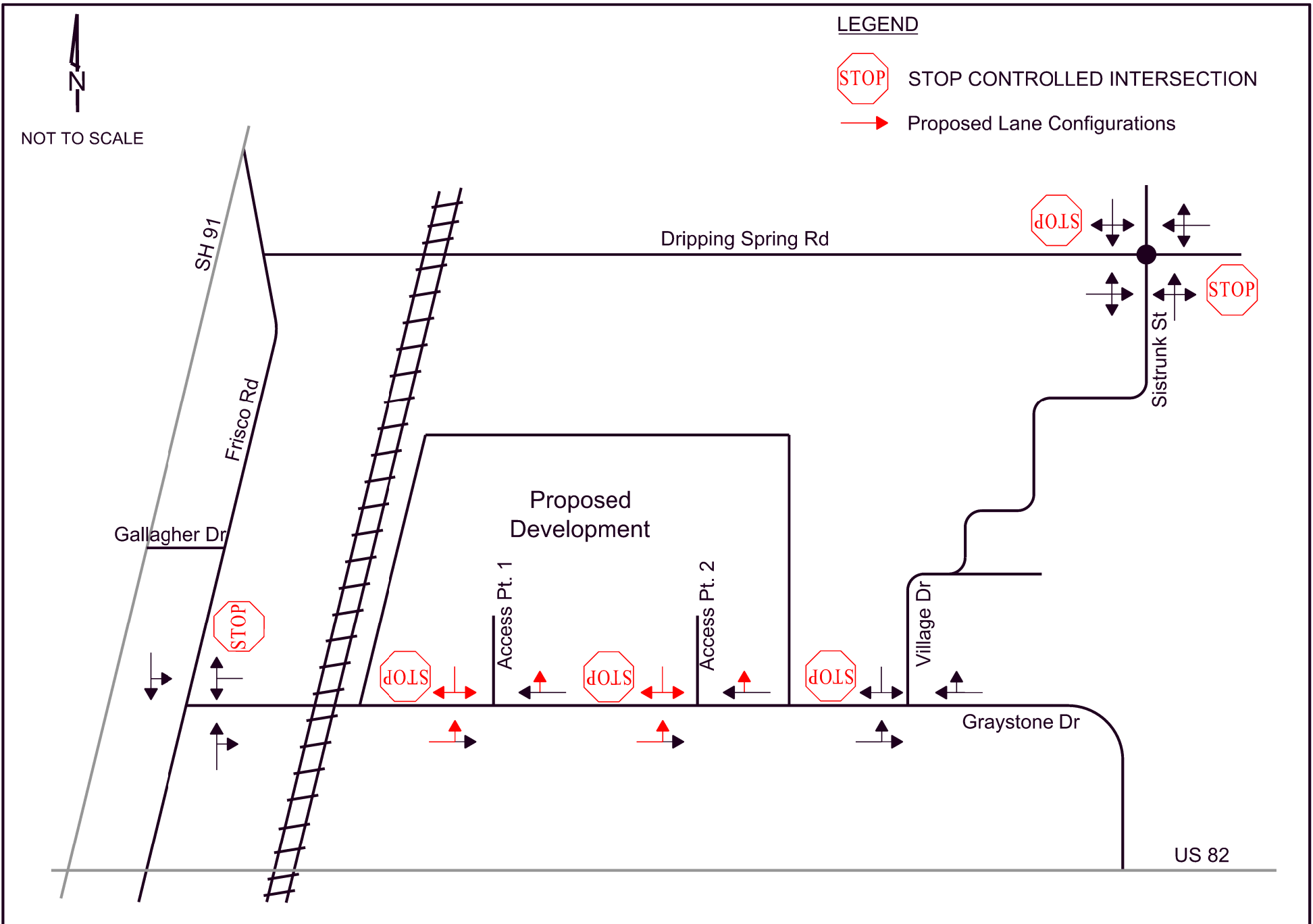
STOP CONTROLLED INTERSECTION



Existing Intersection Lane Configurations

Figure 3





## PROPOSED DEVELOPMENT

The proposed Graystone Drive single-family residential development is planned to include 99 dwelling units. Based on discussions with the developer's representative, the Build-Out Year for the proposed development is planned to occur in 2023.

The number of trips generated by the proposed development is a function of the type and quantity of land uses within the development. The number of vehicle trips generated by the proposed development was estimated based on the trip generation rates and equations provided in the publication entitled *Trip Generation Manual, 11<sup>th</sup> Edition*, by the Institute of Transportation Engineers (ITE). Estimates of the number of trips generated by the site were made for the AM and PM peak hours, as well as on a daily basis. The trip generation characteristics for the proposed Graystone Drive single-family residential development under Build-Out are shown in **Table 1**.

**Table 1: Trip Generation Characteristics for Proposed Graystone Drive Residential Development**

Land Use		Rates <sup>1</sup>								
Description	ITE Code	Average Weekday			AM Peak Hour			PM Peak Hour		
Single-Family Detached Housing	210	Ln(T) = 0.92*Ln(X) + 2.68			Ln(T) = 0.91*Ln(X) + 0.12			Ln(T) = 0.94*Ln(X) + 0.27		
Land Use		Directional Split <sup>2</sup>								
Description	ITE Code	Average Weekday			AM Peak Hour			PM Peak Hour		
Single-Family Detached Housing	210	50 / 50			26 / 74			63 / 37		
Land Use	Variable <sup>3</sup>	Average Weekday			AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out	Total	In	Out
Single-Family Detached Housing	99	1,000	500	500	74	19	55	98	62	36
TOTAL		1,000	500	500	74	19	55	98	62	36

<sup>1</sup>T = Trips Ends; X = Number of Dwelling Units

<sup>2</sup>XX / YY = % entering vehicles / % exiting vehicles

<sup>3</sup>Number of Dwelling Units



## TRAFFIC VOLUMES

### *Existing Traffic Volumes*

Existing weekday peak period turning movement counts at the three (3) existing study intersections were collected on Tuesday, May 10, 2022. **Figure 5** shows the existing traffic volumes collected for this traffic study. The raw traffic count data is provided in the Appendix.

### *Background Traffic Volumes*

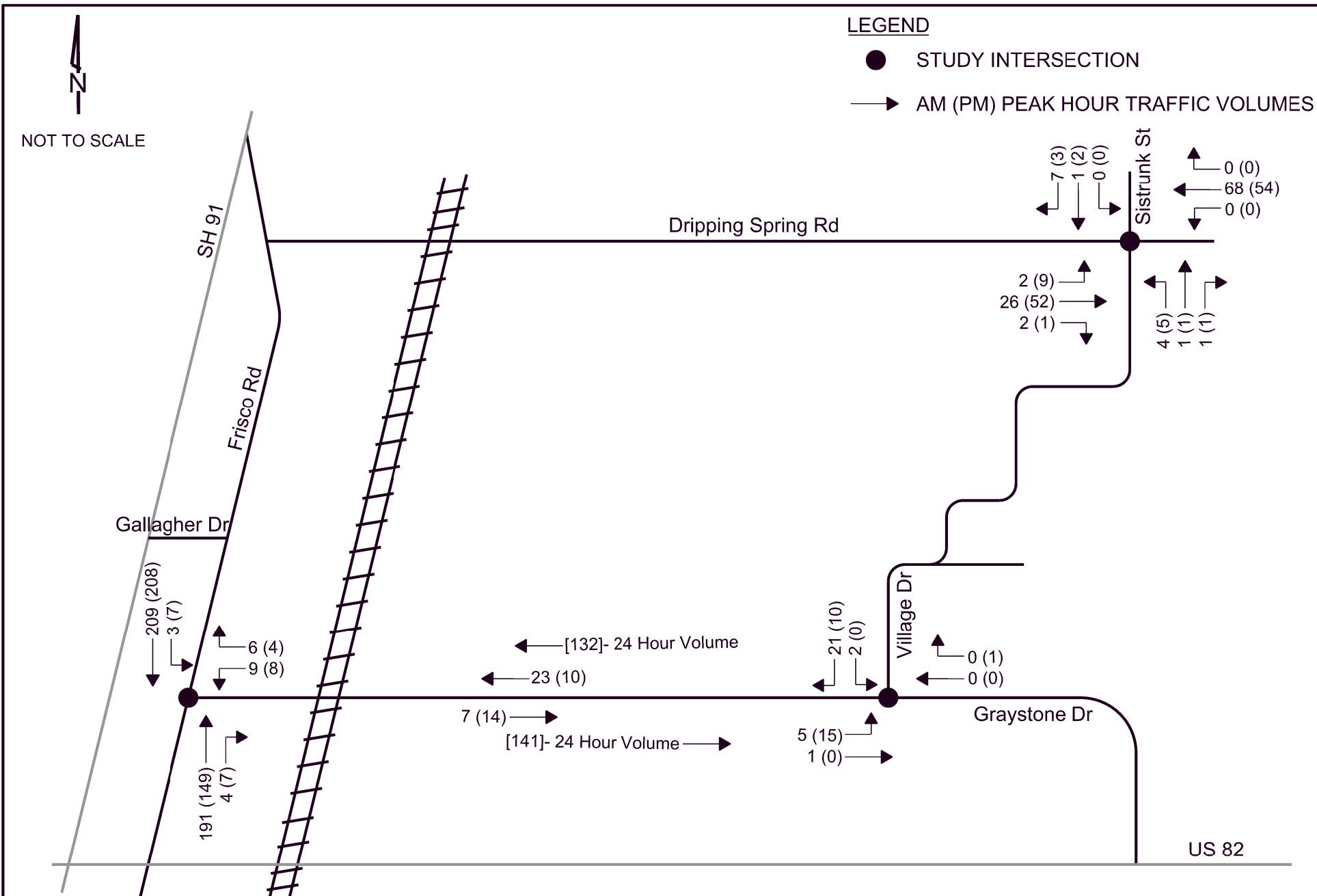
Historical 24-hour traffic volumes in the study area were obtained from traffic data provided in TxDOT's online Traffic Count Database System and are presented in **Table 2**.

**Table 2: Historical Daily Traffic Counts**

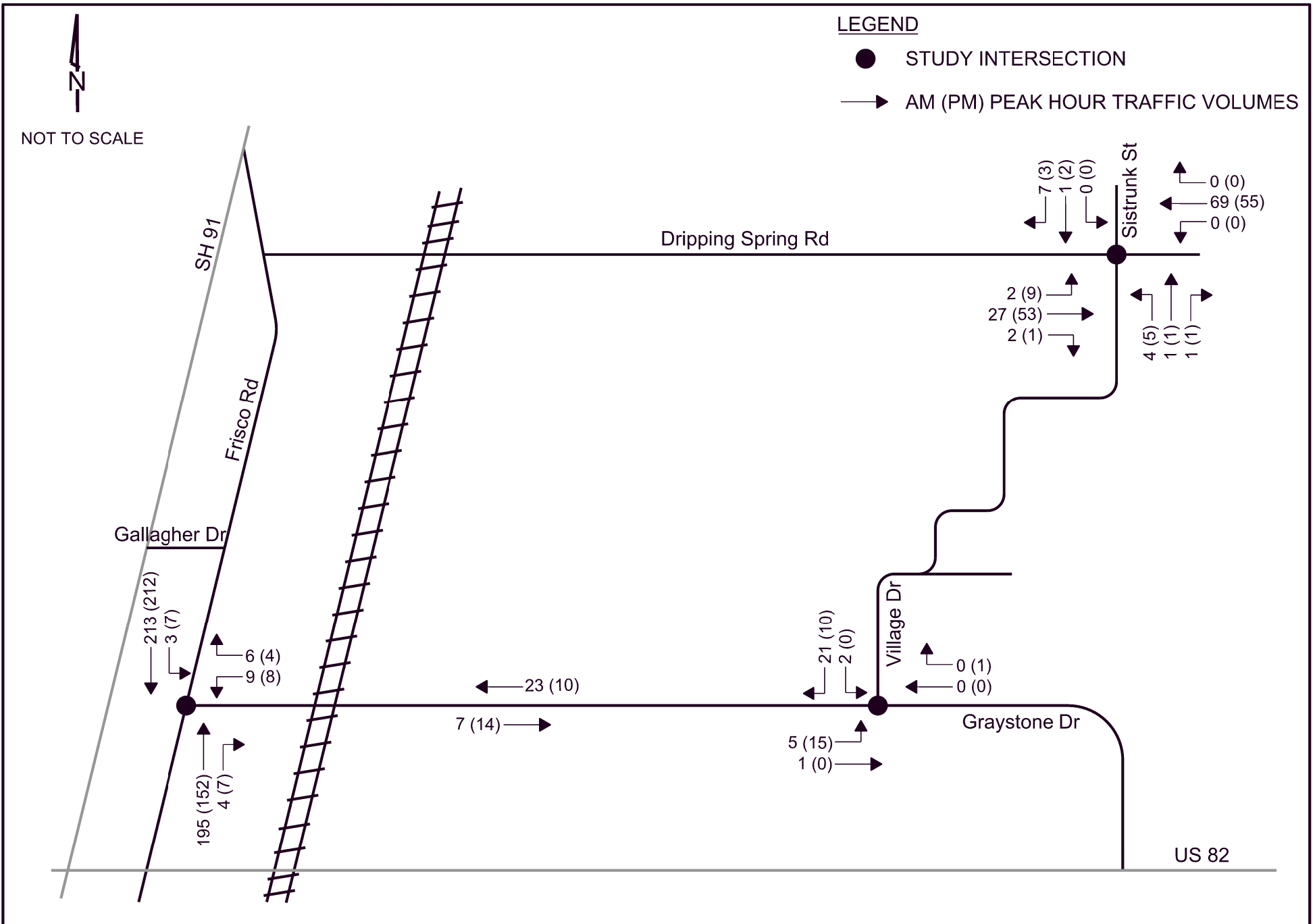
Year	Location	
	Frisco Road (S of Graystone Drive)	Graystone Drive (E of Frisco Road)
2008	3,630	380
2009	---	---
2010	---	---
2011	---	---
2012	---	---
2013	3,241	381
2014	---	---
2015	3,306	---
2016	---	---
2017	---	---
2018	3,026	322
2019	2,840	---
<b>Average Annual Growth<sup>1</sup></b>	<b>-2% / -2%</b>	<b>-2% / -3%</b>

<sup>1</sup> Annual growth rate from 2008 / 2013

The values in Table 2 show that traffic volumes on these area roadways have decreased over the past several years. However, for this traffic analysis, a conservative annual growth rate of 2% was used for determining background traffic volumes under Build-Out Year (2023) conditions. The resulting Build-Out Year (2023) Background traffic volumes are provided in **Figure 6**.



- Traffic volumes collected on Tuesday, May 10, 2022





## TRIP DISTRIBUTION AND ASSIGNMENT

### *Trip Distribution*

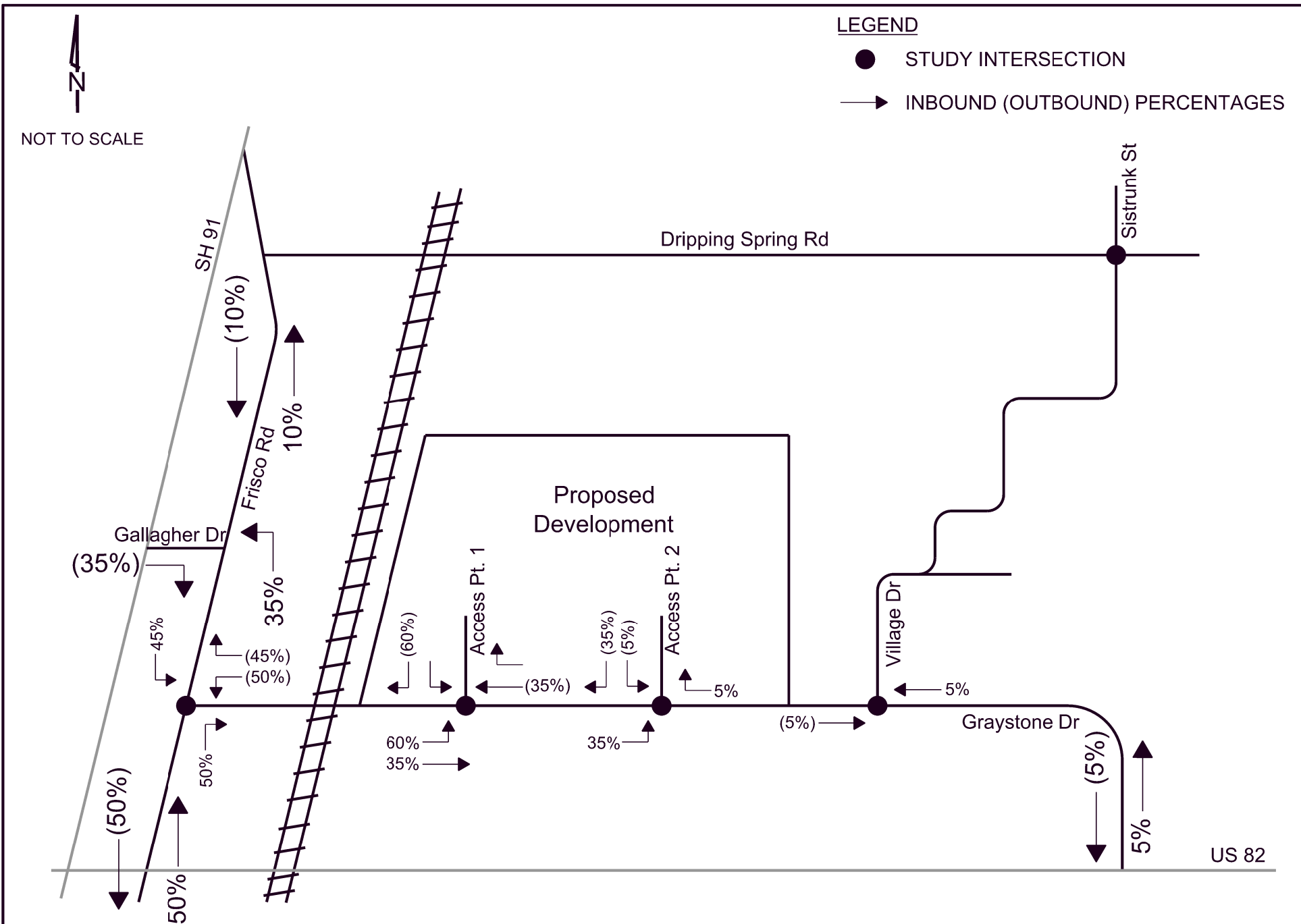
The existing traffic volumes and roadways in the area, along with the proposed site layout, were used to determine the directions from which traffic would approach and depart the proposed Graystone Drive single-family residential development. The assumed directional distribution is provided in **Figure 7**.

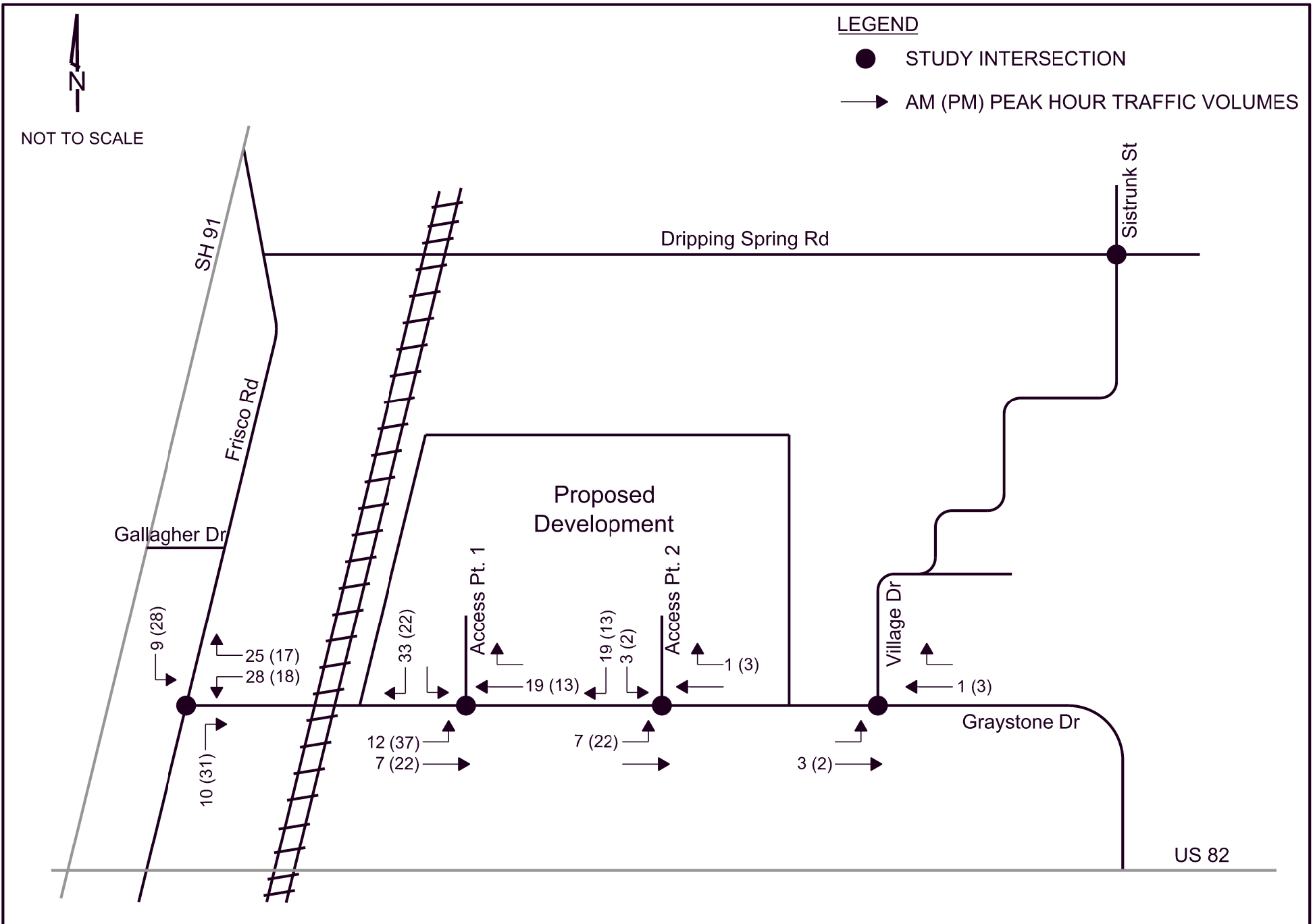
### *Site Traffic Volumes*

Traffic volumes expected to be generated by the proposed Graystone Drive single-family residential development (Table 1) were assigned to the area roadways and site access points based on the directional distribution identified in Figure 7. The estimated Graystone Drive single-family residential development site generated traffic volumes for the AM and PM peak hours are shown in **Figure 8**.

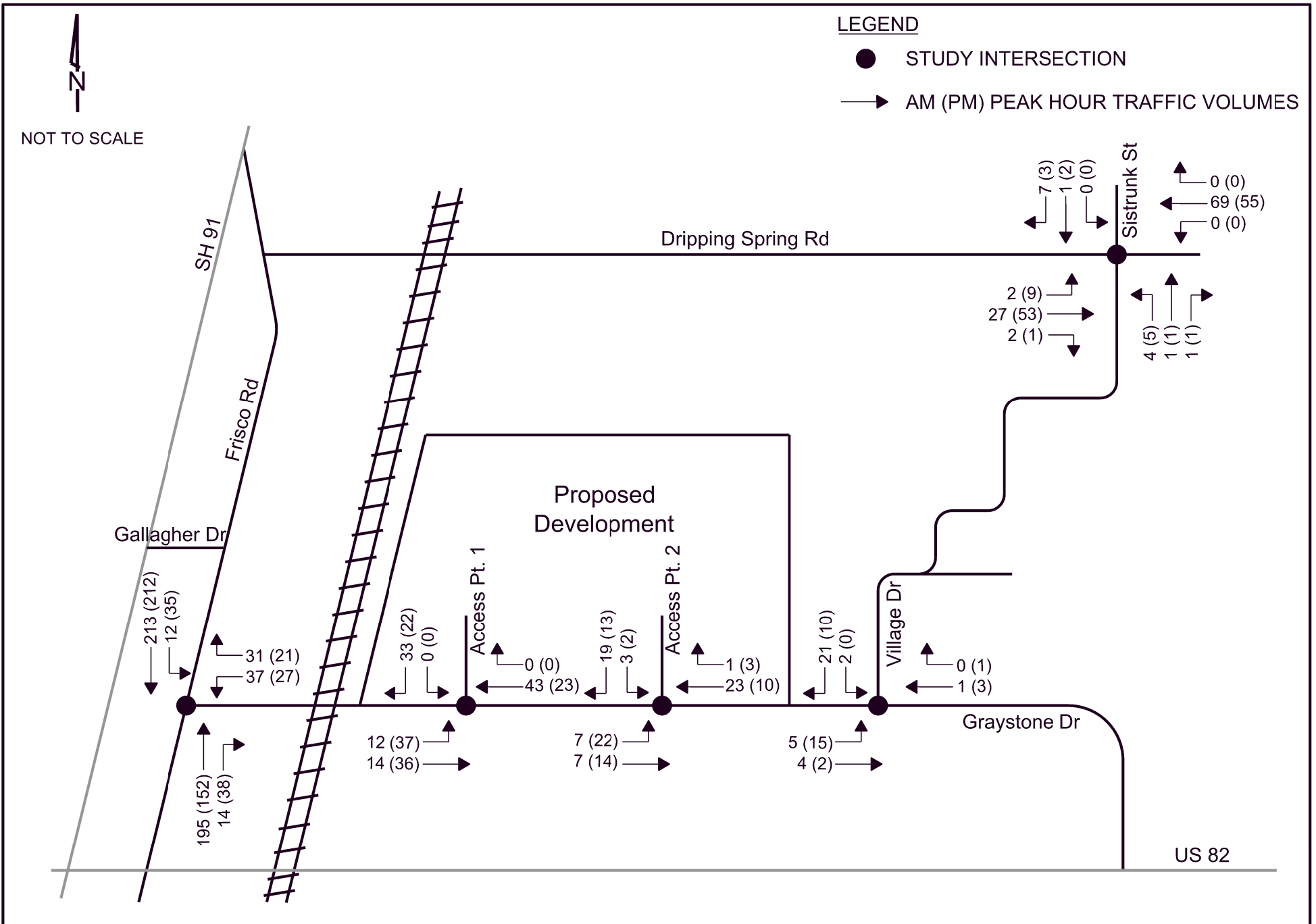
### *Total Traffic Conditions*

Total (background + site) peak hour traffic conditions at Build-Out Year (2023) of the proposed Graystone Drive single-family residential development were obtained by adding the proposed site generated traffic volumes (Figure 8) to the Build-Out Year (2023) Background traffic volumes (Figure 6) and are shown in **Figure 9**.









## INTERSECTION CAPACITY ANALYSES

The Level of Service (LOS) of an intersection is a qualitative measure of capacity and operating conditions and is directly related to vehicle delay. The LOS criteria for unsignalized intersections are shown in **Table 3**. LOS is given a letter designation from A to F, with LOS A representing very short delays and LOS F representing very long delays or over-capacity conditions. LOS D is typically considered the minimum acceptable condition.

**Table 3: Level of Service Criteria for Intersections**

Level-of-Service (LOS)	Average Delay (seconds/vehicle)
	Unsignalized
A	≤ 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	> 50.0 or Volume exceeds Capacity

SOURCE: *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*, Transportation Research Board, 2016

Capacity analyses were conducted for the study area intersections under the following analysis scenarios:

- Existing (2022) Traffic Conditions
- Build-Out Year (2023) Background Traffic Conditions
- Build-Out Year (2023) Total Traffic Conditions

The intersection capacity analyses were conducted using *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition* methodologies in the *Synchro 11* traffic analysis software package. Printouts of the Synchro analysis results are provided in the Appendix.

## Existing Traffic Conditions

The existing lane configurations shown in Figure 3 and the Existing (2022) traffic volumes shown in Figure 5 were used for the Existing (2022) analyses. **Table 4** presents the capacity analysis results for the study intersections under Existing (2022) conditions. The intersection of Village Drive and Graystone Drive is assumed to be a two-way stop controlled with southbound traffic on Village Drive required to stop (no stop sign was observed during the site visit).

**Table 4: Capacity Analysis Results – Existing (2022) Traffic Conditions**

<b>1: Frisco Road and Graystone Drive (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection <sup>1</sup>	NB	SB Left	WB	EB
Existing (2022) Conditions	AM	--	--	7.7 (A) <sup>2</sup>	11.1 (B)	--
	PM	--	--	7.6 (A)	10.8 (B)	--
<b>2: Village Drive and Graystone Drive (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection	NB	SB	WB	EB Left
Existing (2022) Conditions	AM	--	--	8.5 (A)	--	7.4 (A)
	PM	--	--	8.4 (A)	--	7.4 (A)
<b>3: Sistrunk Street and Dripping Spring Road (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection	NB	SB	WB Left	EB Left
Existing (2022) Conditions	AM	--	9.4 (A)	9.0 (A)	0.0 (A)	7.8 (A)
	PM	--	9.6 (A)	9.7 (A)	0.0 (A)	7.8 (A)

<sup>1</sup>HCM methodology does not provide intersection-wide delay/LOS for Two-Way Stop-Controlled Intersections

<sup>2</sup>Delay in seconds/vehicle (Level of Service)

The capacity analysis results for Existing (2022) traffic conditions shown in Table 4 indicate that the approaches and movements at the study intersections currently operate at an acceptable level of service (LOS D or better) during both the AM and PM peak hours.

### Build-Out Year (2023) Traffic Conditions

The existing lane configurations shown in Figure 3 and the Build-Out Year (2023) Background traffic volumes shown in Figure 6 were used for the Build-Out Year (2023) Background analyses. The proposed intersection lane configurations shown in Figure 4 and the Build-Out Year (2023) Total traffic volumes from Figure 9 were used for the Build-Out Year (2023) Total analyses. **Table 5** presents the capacity analysis results for the study intersections under Build-Out Year (2023) Background and Total conditions.

**Table 5: Capacity Analysis Results – Build-Out Year (2023) Traffic Conditions**

<b>1: Frisco Road and Graystone Drive (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection <sup>1</sup>	NB	SB Left	WB	EB
Build-Out (2023) Background	AM	--	--	7.8 (A) <sup>2</sup>	11.4 (B)	--
	PM	--	--	7.7 (A)	10.8 (B)	--
Build-Out (2023) Total	AM	--	--	7.8 (A)	12.4 (B)	--
	PM	--	--	7.8 (A)	11.7 (B)	--
<b>2: Village Drive and Graystone Drive (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection	NB	SB	WB	EB Left
Build-Out (2023) Background	AM	--	--	8.5 (A)	--	7.4 (A)
	PM	--	--	8.4 (A)	--	7.4 (A)
Build-Out (2023) Total	AM	--	--	8.5 (A)	--	7.4 (A)
	PM	--	--	8.4 (A)	--	7.4 (A)
<b>3: Sistrunk Street and Dripping Spring Road (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection	NB	SB	WB Left	EB Left
Build-Out (2023) Background	AM	--	9.5 (A)	9.0 (A)	0.0 (A)	7.9 (A)
	PM	--	9.7 (A)	9.7 (A)	0.0 (A)	7.8 (A)
Build-Out (2023) Total	AM	--	9.5 (A)	9.0 (A)	0.0 (A)	7.9 (A)
	PM	--	9.7 (A)	9.7 (A)	0.0 (A)	7.8 (A)
<b>4: Access Point 1 and Graystone Drive (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection	NB	SB	WB	EB Left
Build-Out (2023) Total	AM	--	--	8.7 (A)	--	7.3 (A)
	PM	--	--	8.5 (A)	--	7.3 (A)
<b>5: Access Point 2 and Graystone Drive (Two-Way Stop-Controlled)</b>						
Scenario	Peak Hour	Intersection	NB	SB	WB	EB Left
Build-Out (2023) Total	AM	--	--	8.6 (A)	--	7.3 (A)
	PM	--	--	8.5 (A)	--	7.3 (A)

<sup>1</sup>HCM methodology does not provide intersection-wide delay/LOS for Side-Street/Two-Way Stop-Controlled Intersections

<sup>2</sup>Delay in seconds/vehicle (Level of Service)



The analysis results for Build-Out Year (2022) Background conditions in Table 5 indicate that the approaches and movements at the study intersections are predicted to operate at an acceptable level of service (LOS C or better) during both peak hours.

With the addition of site traffic from the Graystone Drive residential development under Build-Out Year (2023) Total conditions, all approaches and movements at the study intersections are predicted to continue operating at the same, acceptable levels of service during both the AM and PM peak hours as under Build-Out Year (2023) Background conditions. The proposed development is predicted to have minimal impact to the operations at the study intersections. None of the traffic generated by the development is expected to use Village Drive or the Dripping Spring Road and Sistrunk Road intersection.

The approaches and movements at each of the Access Points on Graystone Drive are predicted to operate at LOS A during both the AM and PM peak hours.

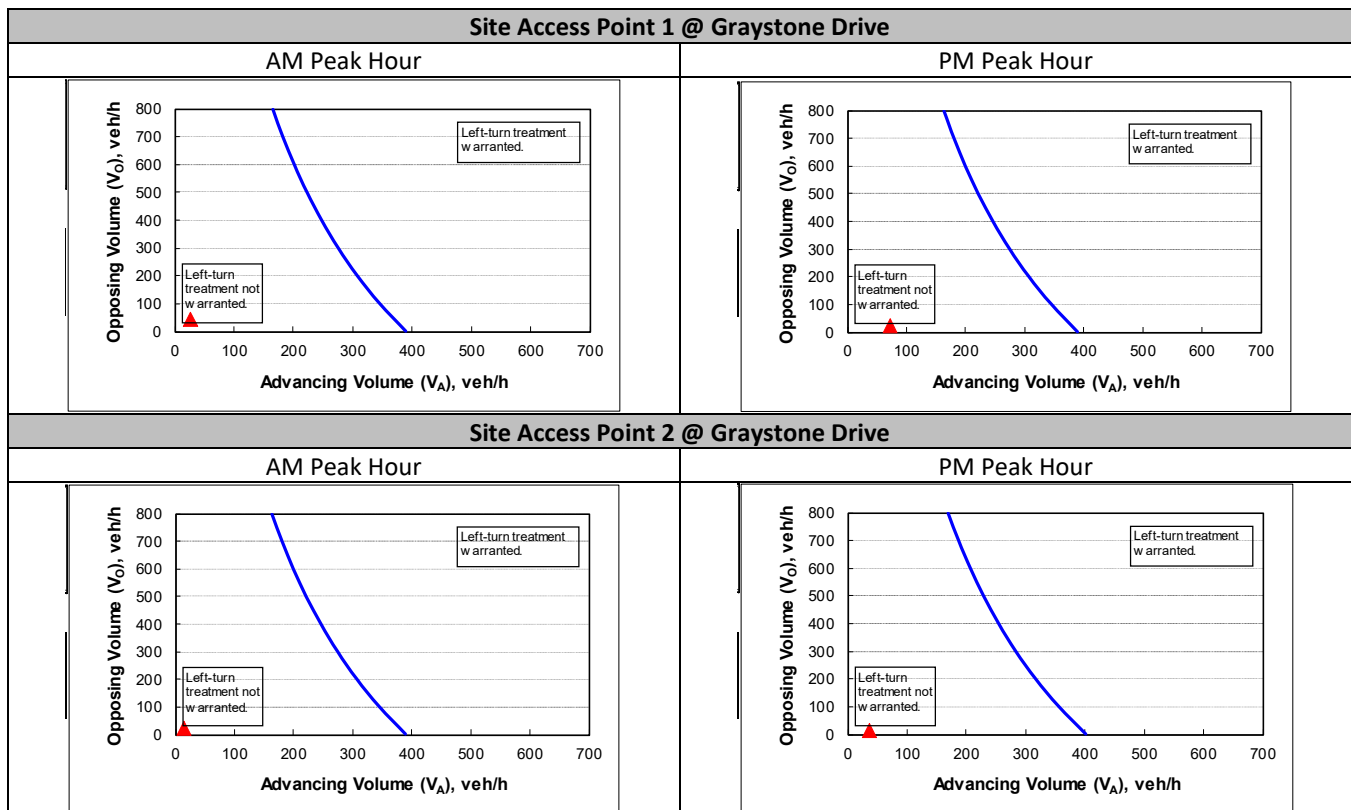
## ACCESS MANAGEMENT ANALYSES

As part of this study, access management analyses were performed to consider the need for deceleration lanes and to determine if adequate driveway spacing and intersection sight distance will be provided for the proposed site access points.

### *Left Turn Deceleration Lane Analysis*

The site access points on Graystone Drive for the proposed single-family residential development were analyzed to determine the need for eastbound left turn deceleration lanes. For this analysis, information in *NCHRP Report 457* was used to determine the need for eastbound left turn deceleration lanes. This report provides a figure with a curve to determine the need of a left turn deceleration lane based on the number of through lanes, the speed limit, the number of advancing vehicles, the number of opposing vehicles, and the proportion of advancing vehicles making a left turn. Traffic characteristics at the site access intersections with Graystone Drive were analyzed under Build-Out Year (2023) Total conditions to determine the need for eastbound left turn deceleration lanes and these results are presented in **Figure 10**. Based on the results in this figure, an eastbound left turn deceleration lane is not warranted at either site access point on Graystone Drive.

**Figure 10: Left Turn Deceleration Lane Analysis Results**



### *Right Turn Deceleration Lane Analysis*

The proposed site access points for the Graystone Drive single-family residential development were analyzed to determine the need for right turn deceleration lanes. Typically, when right turn volumes exceed 40-60 vehicles per hour, a right turn deceleration lane is warranted. With the low westbound right turn volumes (less than 5 right turning vehicles) during the peak hours at the site access points, typical right turn deceleration lane thresholds are not close to being met. Therefore, a westbound right turn deceleration lane is not recommended at either site access point on Graystone Drive.

### *Sight Distance*

As part of this traffic analysis, the available and required intersection sight distance for motorists accessing the adjacent roadway from the proposed site access points on Graystone Drive was analyzed. The sight distance required was estimated using the procedures developed by the American Association of State Highway and Transportation Officials (AASHTO) and published in the 2018 edition of *A Policy on Geometric Design of Highways and Streets*. At this location, the motorist should be able to see if and when adequate gaps exist to perform their desired maneuver. **Table 6** presents the required and assumed available sight distance for vehicles exiting at the proposed access points for the Graystone Drive single-family residential development.

**Table 6: Intersection Sight Distance Evaluation**

Major Roadway	Graystone Drive	
Posted Speed Limit	30 mph <sup>1</sup>	
Design Vehicle	Passenger Vehicle	
Minor Roadway	Access Point 1	Access Point 2
Required Intersection Sight Distance	335'	
Available Sight Distance to the Left	~375'	~390'
Available Sight Distance to the Right	~500'	360'
Available > Required (To the Left)	YES	YES
Available > Required (To the Right)	YES	YES

<sup>1</sup> There was no posted speed limit on Graystone Drive, so a speed limit of 30 mph was assumed.

Based on conditions that existed in the field when sight distance observations were performed, adequate sight distance is predicted to be provided at for both site access points.

### *Access Spacing*

In the City of Sherman's *Subdivision Ordinance* [Article 10.05, Section 12(B)(6)(e)], the minimum centerline offset of adjacent intersections is identified as:

- (1) Local–local, 150 feet
- (2) Local–collector, 150 feet
- (3) Collector–collector, 200 feet

Both Frisco Road and Village Drive are identified as Local Streets in the City of Sherman Thoroughfare Plan. Therefore, the minimum distance between the centerline of adjacent streets is 150 feet.

- Access Point 1 will be located more than 400 feet east of the intersection of Graystone Drive and Frisco Road and approximately 550 feet west of Access Point 2. Access Point 1 will meet the City's minimum access spacing requirement.
- Access Point 2 will be located approximately 550 feet east of Access Point 1 and approximately 180 feet west of Village Drive. Access Point 3 will meet the City's minimum access spacing requirement.



## CONCLUSIONS & RECOMMENDATIONS

Based on the analysis of the proposed site plan and characteristics of the proposed Graystone Drive single-family residential development, the following **conclusions** can be made:

- The proposed Graystone Drive single-family residential development is predicted to generate 1,000 trips on a daily basis with 74 trips during the AM peak hour and 98 trips during the PM peak hour.

### Intersection Capacity Analysis

- The approaches and movements at the study intersections currently operate at an acceptable LOS during the AM and PM peak hours under Existing (2022) conditions. The approaches and movements at these intersections are predicted to continue operating at similar, acceptable LOS under Build-Out Year (2023) Background and Total conditions. Traffic generated by the proposed development is predicted to have minimal impact to the intersections in the study area.

### Access Management Analysis

- The traffic volume characteristics on Graystone Drive at the proposed Access Points do not exceed thresholds provided in *NCHRP Report 457* for left turn deceleration lanes. Eastbound left turn deceleration lanes are not recommended at either of the Access Points on Graystone Drive.
- The westbound right turn traffic volumes are low (less than 5 vehicles during the PM peak hour) and as a result, westbound right turn deceleration lane lanes are not recommended at either Access Point on Graystone Drive.
- Based on observations of existing conditions in the field, adequate sight distance is predicted to be available for both Access Points on Graystone Drive.
- Both proposed Access Points will meet City of Sherman spacing requirements.

Based on the results of this study, no recommendations are identified to accommodate the proposed traffic generated by the Graystone Drive single-family residential development.

## **APPENDIX**

## **PROPOSED SITE PLAN**







## **INTERSECTION TURNING MOVMENT VOLUMES**

# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: GRAYSTONE DR  
@ FRISCO RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 1

## Turning Movement Data

Start Time	FRISCO RD Southbound					GRAYSTONE DR Westbound					FRISCO RD Northbound					Eastbound St. Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
12:00 AM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
12:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Hourly Total	0	9	0	0	9	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	14
1:00 AM	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
1:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
1:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	4
Hourly Total	1	8	0	0	9	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	14
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
2:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hourly Total	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
3:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
3:45 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
Hourly Total	0	7	0	0	7	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	16
4:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
4:30 AM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
4:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
Hourly Total	0	4	0	0	4	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	11
5:00 AM	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	11
5:15 AM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
5:30 AM	0	10	0	0	10	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	14
5:45 AM	0	8	0	0	8	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	19
Hourly Total	0	25	0	0	25	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	50
6:00 AM	0	5	0	0	5	1	0	2	0	3	0	9	1	0	10	0	0	0	0	0	18
6:15 AM	0	7	0	0	7	3	0	1	0	4	0	13	0	0	13	0	0	0	0	0	24
6:30 AM	0	12	0	0	12	1	0	0	0	1	0	19	1	0	20	0	0	0	0	0	33
6:45 AM	0	20	0	0	20	0	0	1	0	1	0	28	3	0	31	0	0	0	0	0	52
Hourly Total	0	44	0	0	44	5	0	4	0	9	0	69	5	0	74	0	0	0	0	0	127
7:00 AM	0	20	0	0	20	5	0	2	0	7	0	30	0	0	30	0	0	0	0	0	57
7:15 AM	1	48	0	0	49	3	0	2	0	5	0	52	0	0	52	0	0	0	0	0	106
7:30 AM	1	54	0	0	55	2	0	3	0	5	0	76	0	0	76	0	0	0	0	0	136
7:45 AM	1	71	0	0	72	3	0	1	0	4	0	39	1	0	40	0	0	0	0	0	116
Hourly Total	3	193	0	0	196	13	0	8	0	21	0	197	1	0	198	0	0	0	0	0	415
8:00 AM	0	36	0	0	36	1	0	0	0	1	0	24	3	0	27	0	0	0	0	0	64
8:15 AM	0	24	0	0	24	1	0	1	0	2	0	20	3	0	23	0	0	0	0	0	49
8:30 AM	2	15	0	0	17	5	0	0	0	5	0	22	1	0	23	0	0	0	0	0	45
8:45 AM	0	25	0	0	25	2	0	0	0	2	0	15	1	0	16	0	0	0	0	0	43
Hourly Total	2	100	0	0	102	9	0	1	0	10	0	81	8	0	89	0	0	0	0	0	201
9:00 AM	0	20	0	0	20	0	0	2	0	2	0	21	0	0	21	0	0	0	0	0	43
9:15 AM	0	24	0	0	24	2	0	0	0	2	0	19	2	0	21	0	0	0	0	0	47
9:30 AM	0	21	0	0	21	1	0	2	0	3	0	14	0	1	15	0	0	0	0	0	39
9:45 AM	1	29	0	0	30	1	0	1	0	2	0	31	1	0	32	0	0	0	0	0	64
Hourly Total	1	94	0	0	95	4	0	5	0	9	0	85	3	1	89	0	0	0	0	0	193
10:00 AM	0	24	0	0	24	3	0	0	0	3	0	24	1	0	25	0	0	0	0	0	52
10:15 AM	0	27	0	0	27	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	49
10:30 AM	1	28	0	0	29	1	0	1	0	2	0	18	2	0	20	0	0	0	0	0	51
10:45 AM	0	18	0	0	18	2	0	0	0	2	0	23	3	0	26	0	0	0	0	0	46
Hourly Total	1	97	0	0	98	6	0	1	0	7	0	87	6	0	93	0	0	0	0	0	198
11:00 AM	0	21	0	0	21	0	0	0	0	0	0	29	3	0	32	0	0	0	0	0	53
11:15 AM	0	27	0	0	27	2	0	1	0	3	0	16	0	0	16	0	0	0	0	0	46
11:30 AM	2	31	0	0	33	1	0	0	0	1	0	23	0	0	23	0	0	0	0	0	57
11:45 AM	0	31	0	0	31	0	0	0	0	0	0	32	1	0	33	0	0	0	0	0	64
Hourly Total	2	110	0	0	112	3	0	1	0	4	0	100	4	0	104	0	0	0	0	0	220
12:00 PM	0	26	0	0	26	0	0	1	0	1	0	34	2	0	36	0	0	0	0	0	63
12:15 PM	0	21	0	0	21	1	0	0	0	1	0	24	0	0	24	0	0	0	0	0	46

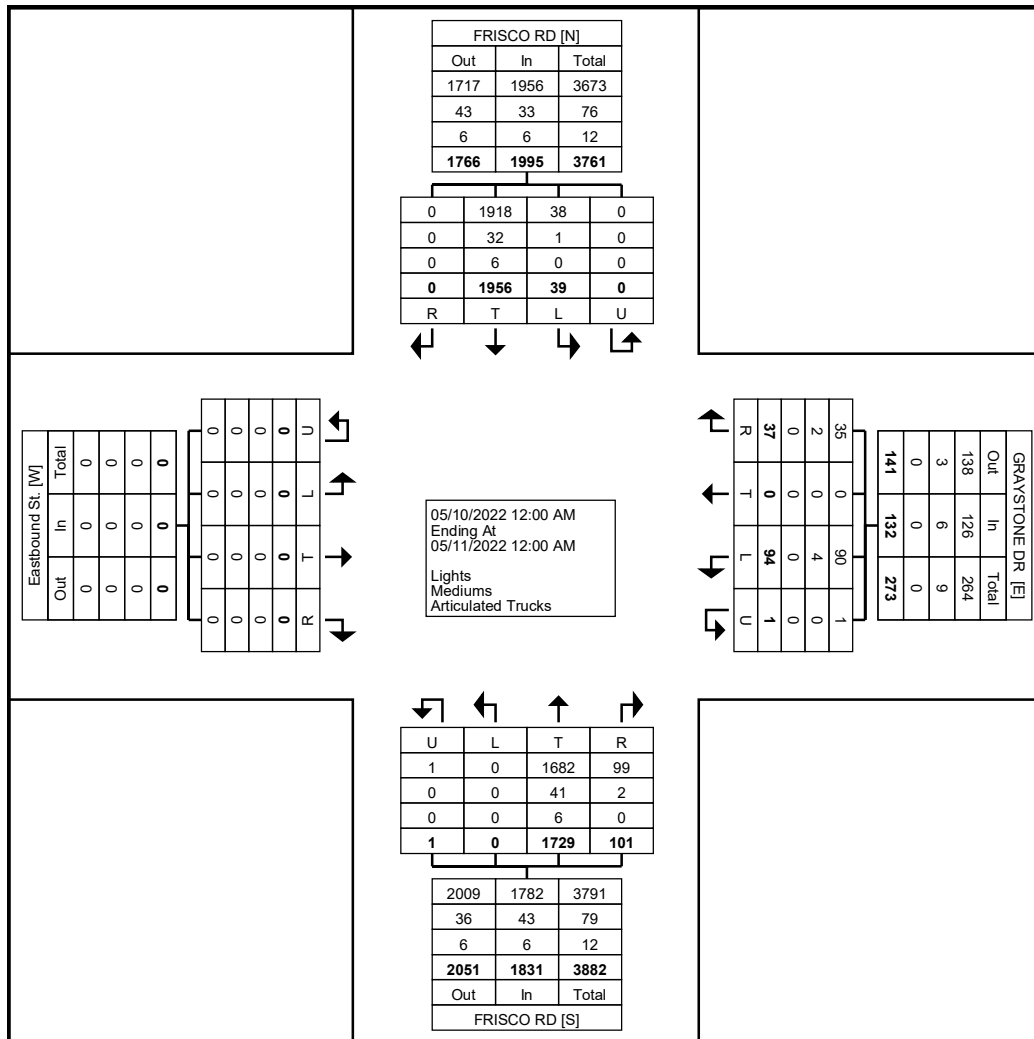
12:30 PM	0	45	0	0	45	1	0	0	0	1	0	26	1	0	27	0	0	0	0	0	73
12:45 PM	0	33	0	0	33	2	0	0	0	2	0	24	2	0	26	0	0	0	0	0	61
Hourly Total	0	125	0	0	125	4	0	1	0	5	0	108	5	0	113	0	0	0	0	0	243
1:00 PM	2	28	0	0	30	4	0	0	0	4	0	27	1	0	28	0	0	0	0	0	62
1:15 PM	0	31	0	0	31	0	0	0	1	1	0	23	3	0	26	0	0	0	0	0	58
1:30 PM	0	31	0	0	31	1	0	0	0	1	0	23	3	0	26	0	0	0	0	0	58
1:45 PM	0	25	0	0	25	0	0	1	0	1	0	25	0	0	25	0	0	0	0	0	51
Hourly Total	2	115	0	0	117	5	0	1	1	7	0	98	7	0	105	0	0	0	0	0	229
2:00 PM	2	25	0	0	27	0	0	0	0	0	0	34	4	0	38	0	0	0	0	0	65
2:15 PM	0	27	0	0	27	0	0	2	0	2	0	25	1	0	26	0	0	0	0	0	55
2:30 PM	2	49	0	0	51	2	0	0	0	2	0	27	0	0	27	0	0	0	0	0	80
2:45 PM	0	28	0	0	28	1	0	1	0	2	0	35	0	0	35	0	0	0	0	0	65
Hourly Total	4	129	0	0	133	3	0	3	0	6	0	121	5	0	126	0	0	0	0	0	265
3:00 PM	0	36	0	0	36	4	0	0	0	4	0	47	0	0	47	0	0	0	0	0	87
3:15 PM	3	56	0	0	59	1	0	2	0	3	0	47	1	0	48	0	0	0	0	0	110
3:30 PM	3	74	0	0	77	3	0	1	0	4	0	28	4	0	32	0	0	0	0	0	113
3:45 PM	1	42	0	0	43	0	0	1	0	1	0	27	2	0	29	0	0	0	0	0	73
Hourly Total	7	208	0	0	215	8	0	4	0	12	0	149	7	0	156	0	0	0	0	0	383
4:00 PM	1	41	0	0	42	4	0	0	0	4	0	33	0	0	33	0	0	0	0	0	79
4:15 PM	1	35	0	0	36	3	0	0	0	3	0	40	4	0	44	0	0	0	0	0	83
4:30 PM	0	32	0	0	32	0	0	0	0	0	0	37	4	0	41	0	0	0	0	0	73
4:45 PM	2	37	0	0	39	3	0	1	0	4	0	34	4	0	38	0	0	0	0	0	81
Hourly Total	4	145	0	0	149	10	0	1	0	11	0	144	12	0	156	0	0	0	0	0	316
5:00 PM	1	51	0	0	52	2	0	0	0	2	0	43	3	0	46	0	0	0	0	0	100
5:15 PM	0	41	0	0	41	1	0	0	0	1	0	44	4	0	48	0	0	0	0	0	90
5:30 PM	0	37	0	0	37	3	0	0	0	3	0	27	1	0	28	0	0	0	0	0	68
5:45 PM	1	37	0	0	38	2	0	0	0	2	0	26	2	0	28	0	0	0	0	0	68
Hourly Total	2	166	0	0	168	8	0	0	0	8	0	140	10	0	150	0	0	0	0	0	326
6:00 PM	2	32	0	0	34	1	0	1	0	2	0	30	4	0	34	0	0	0	0	0	70
6:15 PM	0	23	0	0	23	0	0	2	0	2	0	28	2	0	30	0	0	0	0	0	55
6:30 PM	0	24	0	0	24	5	0	0	0	5	0	13	4	0	17	0	0	0	0	0	46
6:45 PM	0	34	0	0	34	2	0	0	0	2	0	24	1	0	25	0	0	0	0	0	61
Hourly Total	2	113	0	0	115	8	0	3	0	11	0	95	11	0	106	0	0	0	0	0	232
7:00 PM	2	19	0	0	21	1	0	1	0	2	0	19	0	0	19	0	0	0	0	0	42
7:15 PM	0	19	0	0	19	1	0	0	0	1	0	12	3	0	15	0	0	0	0	0	35
7:30 PM	1	25	0	0	26	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	44
7:45 PM	0	16	0	0	16	0	0	1	0	1	0	16	2	0	18	0	0	0	0	0	35
Hourly Total	3	79	0	0	82	2	0	2	0	4	0	65	5	0	70	0	0	0	0	0	156
8:00 PM	1	25	0	0	26	1	0	0	0	1	0	17	2	0	19	0	0	0	0	0	46
8:15 PM	0	19	0	0	19	0	0	0	0	0	0	18	1	0	19	0	0	0	0	0	38
8:30 PM	0	22	0	0	22	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	28
8:45 PM	1	14	0	0	15	1	0	0	0	1	0	9	3	0	12	0	0	0	0	0	28
Hourly Total	2	80	0	0	82	2	0	0	0	2	0	49	7	0	56	0	0	0	0	0	140
9:00 PM	1	18	0	0	19	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	30
9:15 PM	0	8	0	0	8	0	0	1	0	1	0	11	1	0	12	0	0	0	0	0	21
9:30 PM	0	13	0	0	13	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	21
9:45 PM	0	10	0	0	10	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	23
Hourly Total	1	49	0	0	50	0	0	1	0	1	0	43	1	0	44	0	0	0	0	0	95
10:00 PM	0	8	0	0	8	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	24
10:15 PM	0	11	0	0	11	1	0	0	0	1	0	6	2	0	8	0	0	0	0	0	20
10:30 PM	0	6	0	0	6	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	12
10:45 PM	1	7	0	0	8	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	13
Hourly Total	1	32	0	0	33	2	0	0	0	2	0	31	3	0	34	0	0	0	0	0	69
11:00 PM	1	6	0	0	7	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	12
11:15 PM	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	11
11:30 PM	0	4	0	0	4	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	7
11:45 PM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	8
Hourly Total	1	21	0	0	22	1	0	0	0	1	0	15	0	0	15	0	0	0	0	0	38
Grand Total	39	1956	0	0	1995	94	0	37	1	132	0	1729	101	1	1831	0	0	0	0	0	3958
Approach %	2.0	98.0	0.0	0.0	-	71.2	0.0	28.0	0.8	-	0.0	94.4	5.5	0.1	-	0.0	0.0	0.0	0.0	-	-
Total %	1.0	49.4	0.0	0.0	50.4	2.4	0.0	0.9	0.0	3.3	0.0	43.7	2.6	0.0	46.3	0.0	0.0	0.0	0.0	0.0	-
Lights	38	1918	0	0	1956	90	0	35	1	126	0	1682	99	1	1782	0	0	0	0	0	3864
% Lights	97.4	98.1	-	-	98.0	95.7	-	94.6	100.0	95.5	-	97.3	98.0	100.0	97.3	-	-	-	-	-	97.6
Mediums	1	32	0	0	33	4	0	2	0	6	0	41	2	0	43	0	0	0	0	0	82
% Mediums	2.6	1.6	-	-	1.7	4.3	-	5.4	0.0	4.5	-	2.4	2.0	0.0	2.3	-	-	-	-	-	2.1
Articulated Trucks	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	12
% Articulated Trucks	0.0	0.3	-	-	0.3	0.0	-	0.0	0.0	0.0	-	0.3	0.0	0.0	0.3	-	-	-	-	-	0.3



1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: GRAYSTONE DR  
@ FRISCO RD  
Site Code:  
Start Date: 05/10/2022  
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## Turning Movement Data Plot

# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: GRAYSTONE DR  
@ FRISCO RD  
Site Code:  
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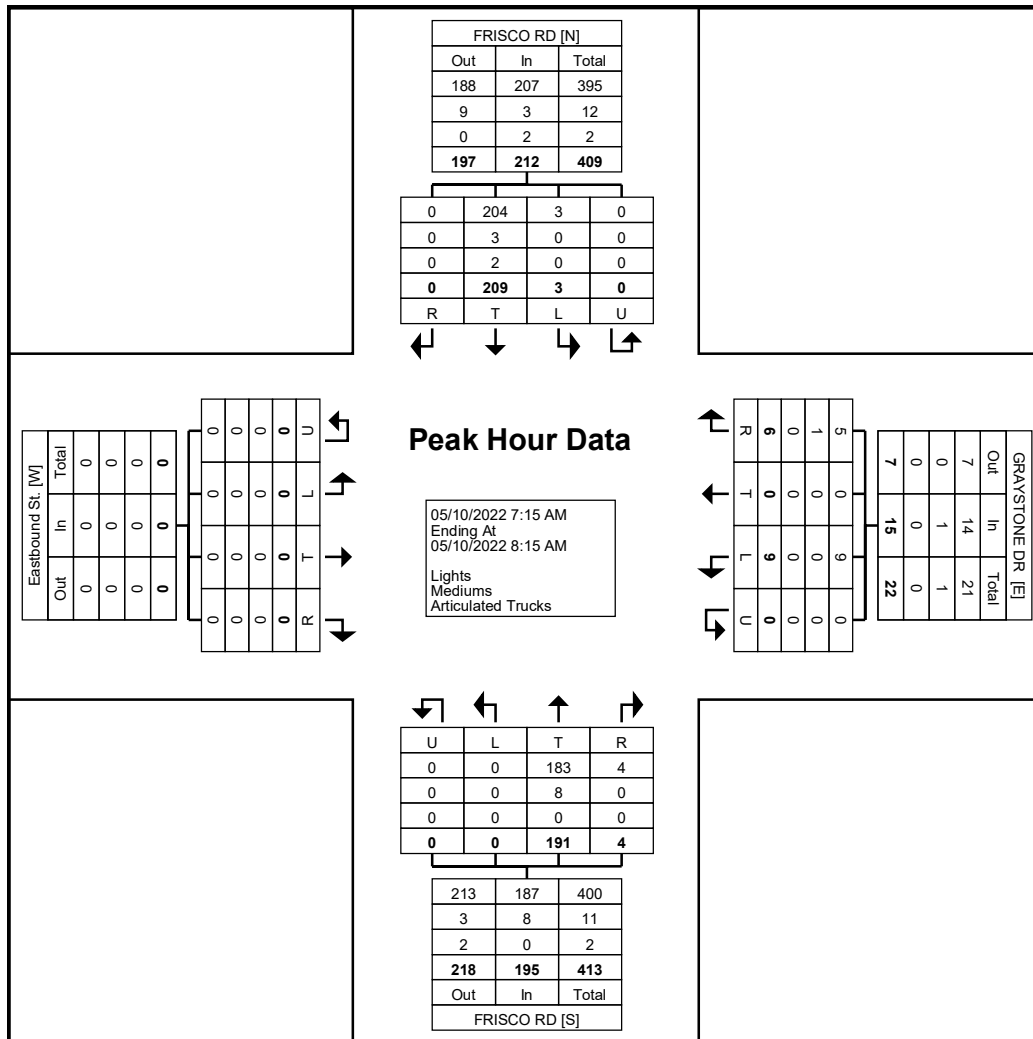
## Turning Movement Peak Hour Data (7:15 AM)

Start Time	FRISCO RD Southbound					GRAYSTONE DR Westbound					FRISCO RD Northbound					Eastbound St. Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
7:15 AM	1	48	0	0	49	3	0	2	0	5	0	52	0	0	52	0	0	0	0	0	106
7:30 AM	1	54	0	0	55	2	0	3	0	5	0	76	0	0	76	0	0	0	0	0	136
7:45 AM	1	71	0	0	72	3	0	1	0	4	0	39	1	0	40	0	0	0	0	0	116
8:00 AM	0	36	0	0	36	1	0	0	0	1	0	24	3	0	27	0	0	0	0	0	64
Total	3	209	0	0	212	9	0	6	0	15	0	191	4	0	195	0	0	0	0	0	422
Approach %	1.4	98.6	0.0	0.0	-	60.0	0.0	40.0	0.0	-	0.0	97.9	2.1	0.0	-	0.0	0.0	0.0	0.0	-	-
Total %	0.7	49.5	0.0	0.0	50.2	2.1	0.0	1.4	0.0	3.6	0.0	45.3	0.9	0.0	46.2	0.0	0.0	0.0	0.0	0.0	-
PHF	0.750	0.736	0.000	0.000	0.736	0.750	0.000	0.500	0.000	0.750	0.000	0.628	0.333	0.000	0.641	0.000	0.000	0.000	0.000	0.000	0.776
Lights	3	204	0	0	207	9	0	5	0	14	0	183	4	0	187	0	0	0	0	0	408
% Lights	100.0	97.6	-	-	97.6	100.0	-	83.3	-	93.3	-	95.8	100.0	-	95.9	-	-	-	-	-	96.7
Mediums	0	3	0	0	3	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	12
% Mediums	0.0	1.4	-	-	1.4	0.0	-	16.7	-	6.7	-	4.2	0.0	-	4.1	-	-	-	-	-	2.8
Articulated Trucks	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Articulated Trucks	0.0	1.0	-	-	0.9	0.0	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	-	-	-	0.5

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: GRAYSTONE DR  
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### Turning Movement Peak Hour Data Plot (7:15 AM)



# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: GRAYSTONE DR  
@ FRISCO RD  
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## Turning Movement Peak Hour Data (3:00 PM)

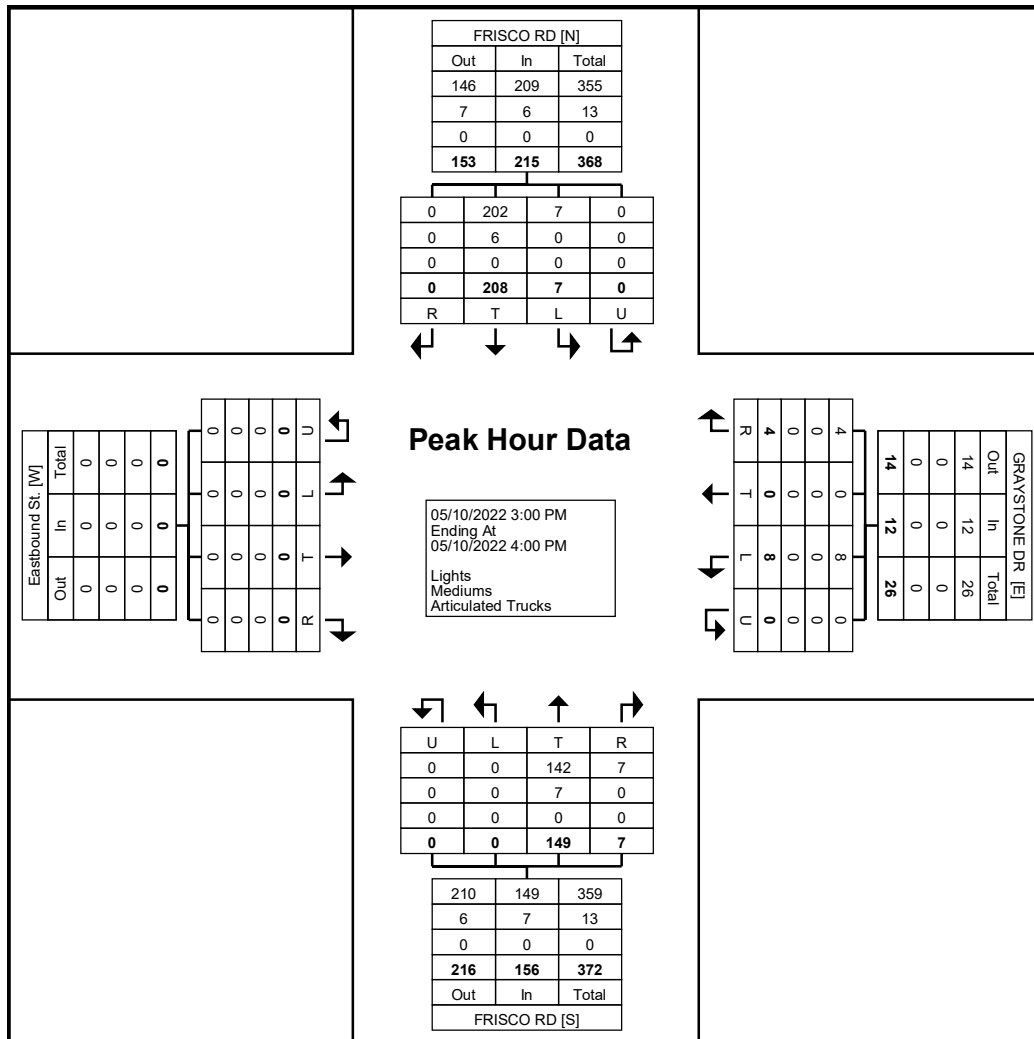
Start Time	FRISCO RD Southbound					GRAYSTONE DR Westbound					FRISCO RD Northbound					Eastbound St. Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
3:00 PM	0	36	0	0	36	4	0	0	0	4	0	47	0	0	47	0	0	0	0	0	87
3:15 PM	3	56	0	0	59	1	0	2	0	3	0	47	1	0	48	0	0	0	0	0	110
3:30 PM	3	74	0	0	77	3	0	1	0	4	0	28	4	0	32	0	0	0	0	0	113
3:45 PM	1	42	0	0	43	0	0	1	0	1	0	27	2	0	29	0	0	0	0	0	73
Total	7	208	0	0	215	8	0	4	0	12	0	149	7	0	156	0	0	0	0	0	383
Approach %	3.3	96.7	0.0	0.0	-	66.7	0.0	33.3	0.0	-	0.0	95.5	4.5	0.0	-	0.0	0.0	0.0	0.0	0.0	-
Total %	1.8	54.3	0.0	0.0	56.1	2.1	0.0	1.0	0.0	3.1	0.0	38.9	1.8	0.0	40.7	0.0	0.0	0.0	0.0	0.0	-
PHF	0.583	0.703	0.000	0.000	0.698	0.500	0.000	0.500	0.000	0.750	0.000	0.793	0.438	0.000	0.813	0.000	0.000	0.000	0.000	0.000	0.847
Lights	7	202	0	0	209	8	0	4	0	12	0	142	7	0	149	0	0	0	0	0	370
% Lights	100.0	97.1	-	-	97.2	100.0	-	100.0	-	100.0	-	95.3	100.0	-	95.5	-	-	-	-	-	96.6
Mediums	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	13
% Mediums	0.0	2.9	-	-	2.8	0.0	-	0.0	-	0.0	-	4.7	0.0	-	4.5	-	-	-	-	-	3.4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	0.0	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	-	-	-	0.0

# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: GRAYSTONE DR  
@ FRISCO RD  
Site Code:  
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Turning Movement Peak Hour Data Plot (3:00 PM)

# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: VILLAGE DR @  
GRAYSTONE RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 1

## Turning Movement Data

Start Time	VILLAGE DR Southbound					GRAYSTONE RD Westbound					Northbound St. Northbound					GRAYSTONE RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
6:45 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	5
Hourly Total	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	5
7:00 AM	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:15 AM	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	8
7:30 AM	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	7
7:45 AM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	7
Hourly Total	2	0	21	0	23	0	0	0	0	0	0	0	0	0	0	5	1	0	0	6	29
8:00 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3	0	0	0	3	5
8:15 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	4
8:30 AM	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	8
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	8	0	8	0	1	0	0	1	0	0	0	0	0	8	0	0	0	8	17
4:00 PM	0	0	4	0	4	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	6
4:15 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
4:45 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	9
Hourly Total	0	0	9	0	9	0	1	0	0	1	0	0	0	0	0	14	1	0	0	15	25
5:00 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	6
5:15 PM	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	3	0	0	0	3	6
5:30 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	5
5:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
Hourly Total	0	0	8	0	8	0	0	1	0	1	0	0	0	0	0	11	0	0	0	11	20
Grand Total	2	0	48	0	50	0	2	1	0	3	0	0	0	0	0	41	2	0	0	43	96
Approach %	4.0	0.0	96.0	0.0	-	0.0	66.7	33.3	0.0	-	0.0	0.0	0.0	0.0	-	95.3	4.7	0.0	0.0	-	-
Total %	2.1	0.0	50.0	0.0	52.1	0.0	2.1	1.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	42.7	2.1	0.0	0.0	44.8	-
Lights	2	0	42	0	44	0	2	1	0	3	0	0	0	0	0	38	2	0	0	40	87
% Lights	100.0	-	87.5	-	88.0	-	100.0	100.0	-	100.0	-	-	-	-	-	92.7	100.0	-	-	93.0	90.6
Mediums	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	9
% Mediums	0.0	-	12.5	-	12.0	-	0.0	0.0	-	0.0	-	-	-	-	-	7.3	0.0	-	-	7.0	9.4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	-	-	-	0.0	0.0	-	-	0.0	0.0

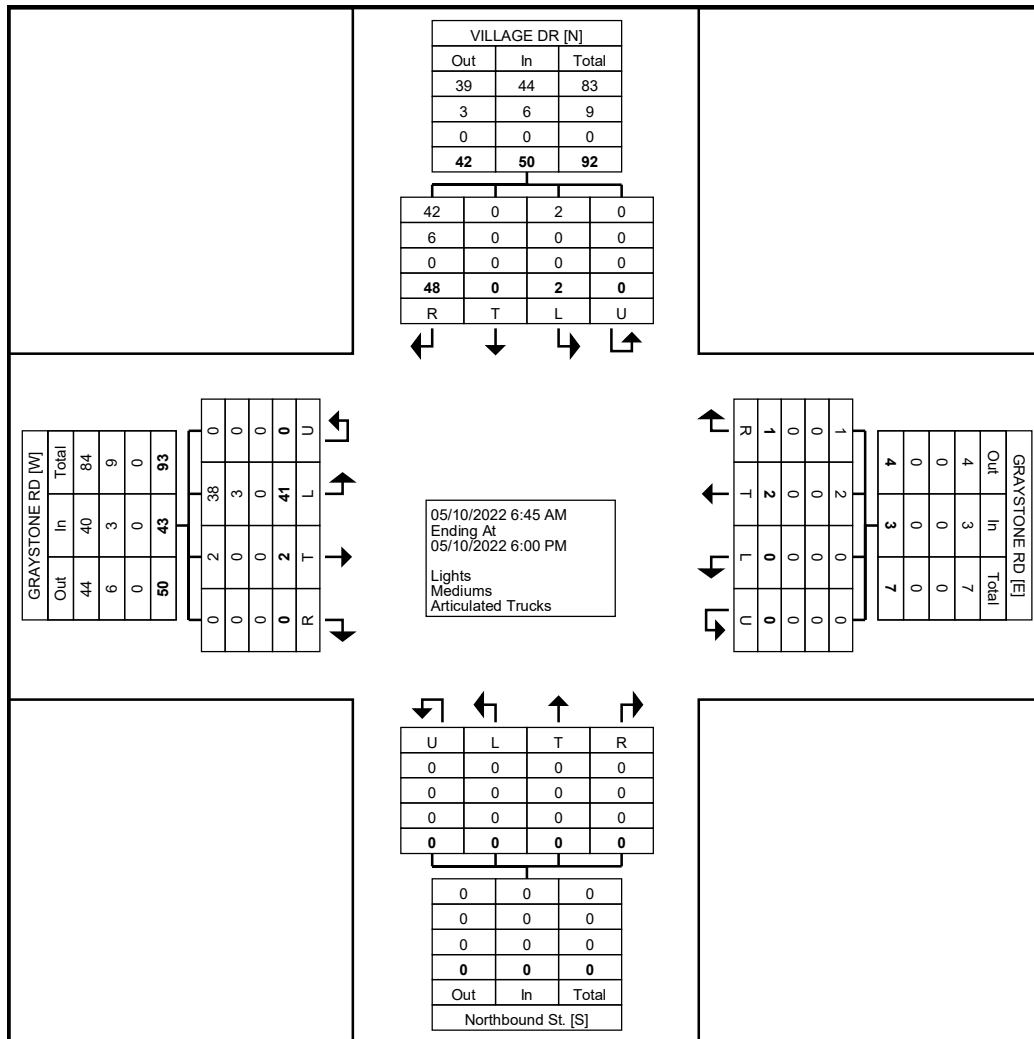


# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: VILLAGE DR @  
GRAYSTONE RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 2



Turning Movement Data Plot

# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: VILLAGE DR @  
GRAYSTONE RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 3

## Turning Movement Peak Hour Data (7:00 AM)

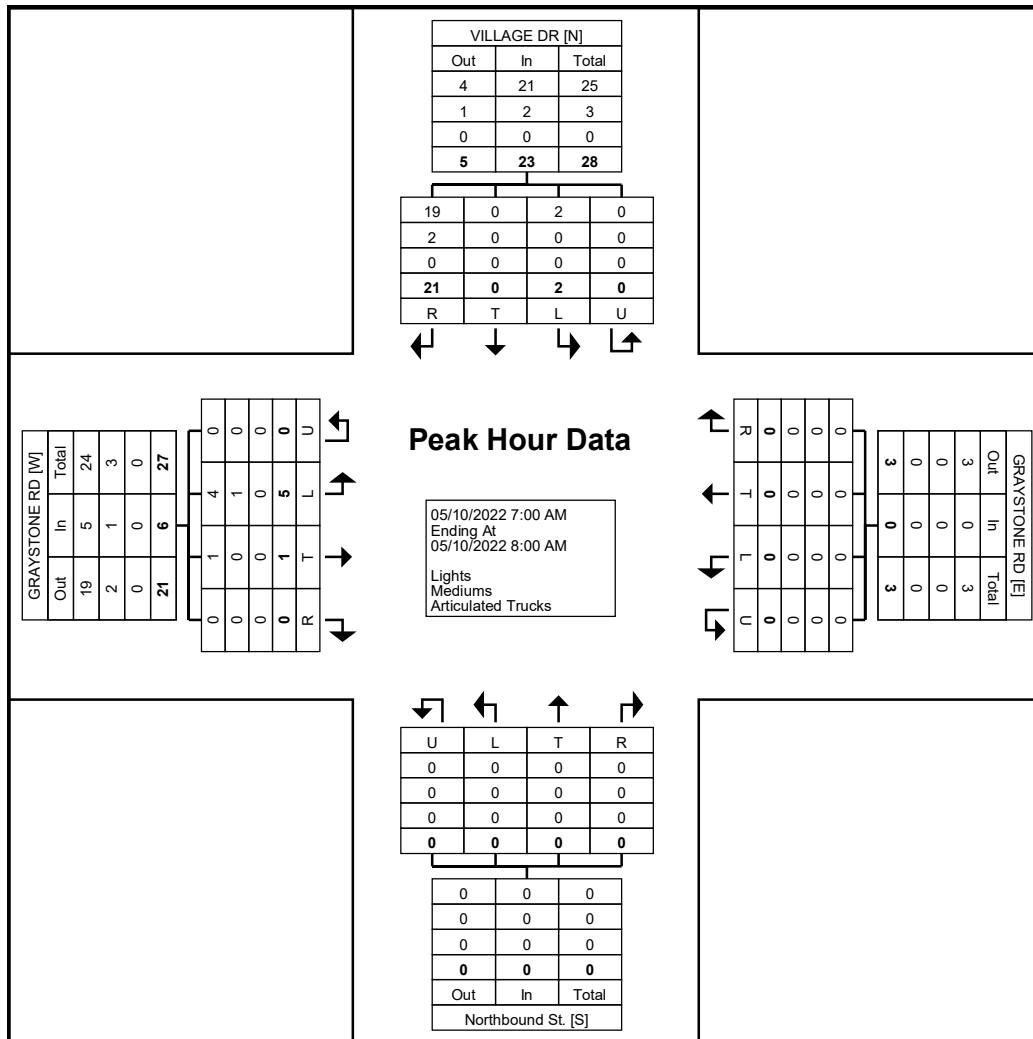
Start Time	VILLAGE DR Southbound					GRAYSTONE RD Westbound					Northbound St. Northbound					GRAYSTONE RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
7:00 AM	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:15 AM	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	8
7:30 AM	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	7
7:45 AM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	7
Total	2	0	21	0	23	0	0	0	0	0	0	0	0	0	0	5	1	0	0	6	29
Approach %	8.7	0.0	91.3	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	83.3	16.7	0.0	0.0	-	-
Total %	6.9	0.0	72.4	0.0	79.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2	3.4	0.0	0.0	20.7	-
PHF	0.500	0.000	0.750	0.000	0.821	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.250	0.000	0.000	0.500	0.906
Lights	2	0	19	0	21	0	0	0	0	0	0	0	0	0	0	4	1	0	0	5	26
% Lights	100.0	-	90.5	-	91.3	-	-	-	-	-	-	-	-	-	-	80.0	100.0	-	-	83.3	89.7
Mediums	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
% Mediums	0.0	-	9.5	-	8.7	-	-	-	-	-	-	-	-	-	-	20.0	0.0	-	-	16.7	10.3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	-	0.0	-	0.0	-	-	-	-	-	-	-	-	-	-	0.0	0.0	-	-	0.0	0.0

# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

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817.265.8968

Count Name: VILLAGE DR @  
GRAYSTONE RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 4



Turning Movement Peak Hour Data Plot (7:00 AM)



# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

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817.265.8968

Count Name: VILLAGE DR @  
GRAYSTONE RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 5

## Turning Movement Peak Hour Data (4:45 PM)

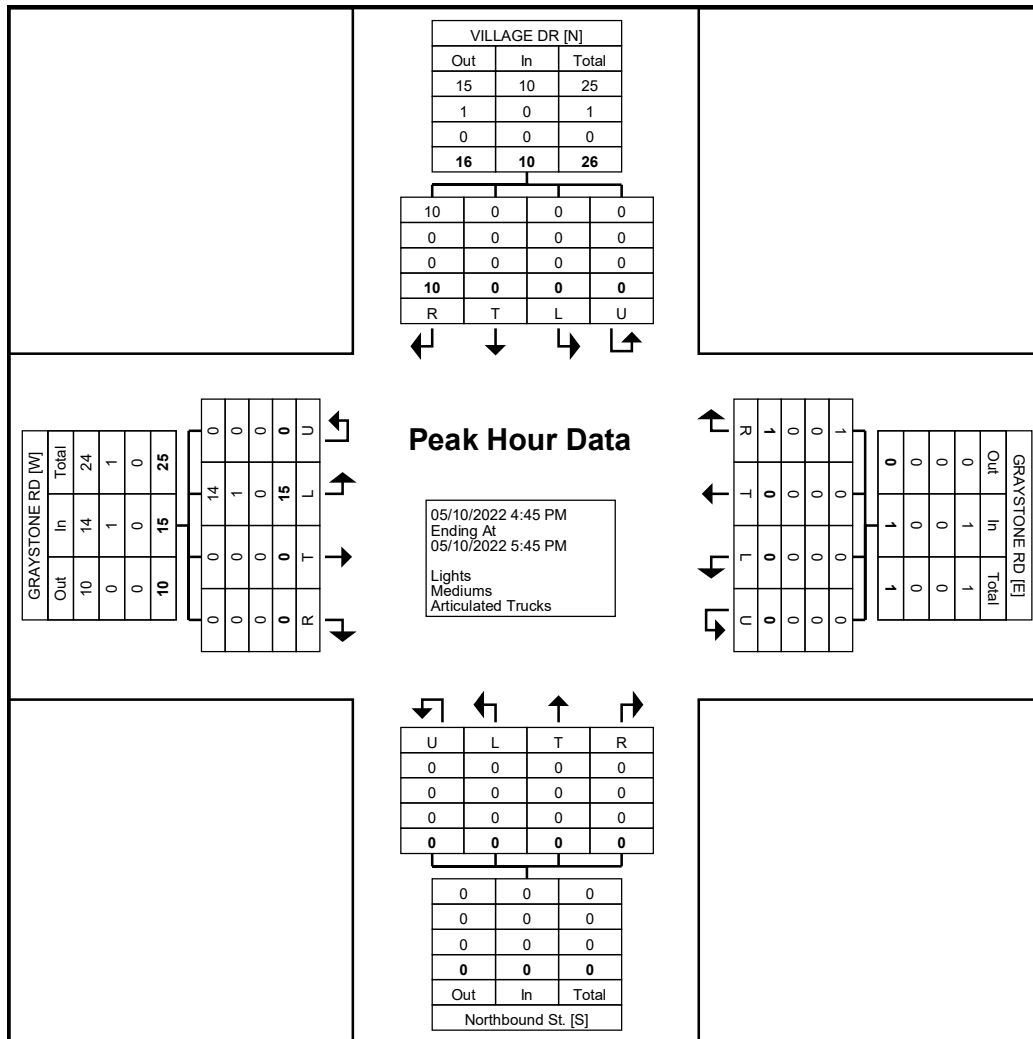
Start Time	VILLAGE DR Southbound					GRAYSTONE RD Westbound					Northbound St. Northbound					GRAYSTONE RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
4:45 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	9
5:00 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	6
5:15 PM	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	3	0	0	0	3	6
5:30 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	5
Total	0	0	10	0	10	0	0	1	0	1	0	0	0	0	0	15	0	0	0	15	26
Approach %	0.0	0.0	100.0	0.0	-	0.0	0.0	100.0	0.0	-	0.0	0.0	0.0	0.0	-	100.0	0.0	0.0	0.0	-	-
Total %	0.0	0.0	38.5	0.0	38.5	0.0	0.0	3.8	0.0	3.8	0.0	0.0	0.0	0.0	0.0	57.7	0.0	0.0	0.0	57.7	-
PHF	0.000	0.000	0.833	0.000	0.833	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.625	0.722
Lights	0	0	10	0	10	0	0	1	0	1	0	0	0	0	0	14	0	0	0	14	25
% Lights	-	-	100.0	-	100.0	-	-	100.0	-	100.0	-	-	-	-	-	93.3	-	-	-	93.3	96.2
Mediums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
% Mediums	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	-	-	-	6.7	-	-	-	6.7	3.8
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	-	-	-	0.0	-	-	-	0.0	0.0

# GRAM Traffic NTX Inc.

1120 W. Lovers Lane

Arlington, Texas, United States 76013  
817.265.8968

Count Name: VILLAGE DR @  
GRAYSTONE RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 6



Turning Movement Peak Hour Data Plot (4:45 PM)

GRAM Traffic NTX Inc.  
1120 W. Lovers Lane  
Arlington, Texas, United States 76013  
817.265.8968 isaiah@gramntx.com

Count Name: SISTRUNK ST @ DRIPPING  
SPRING RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 1

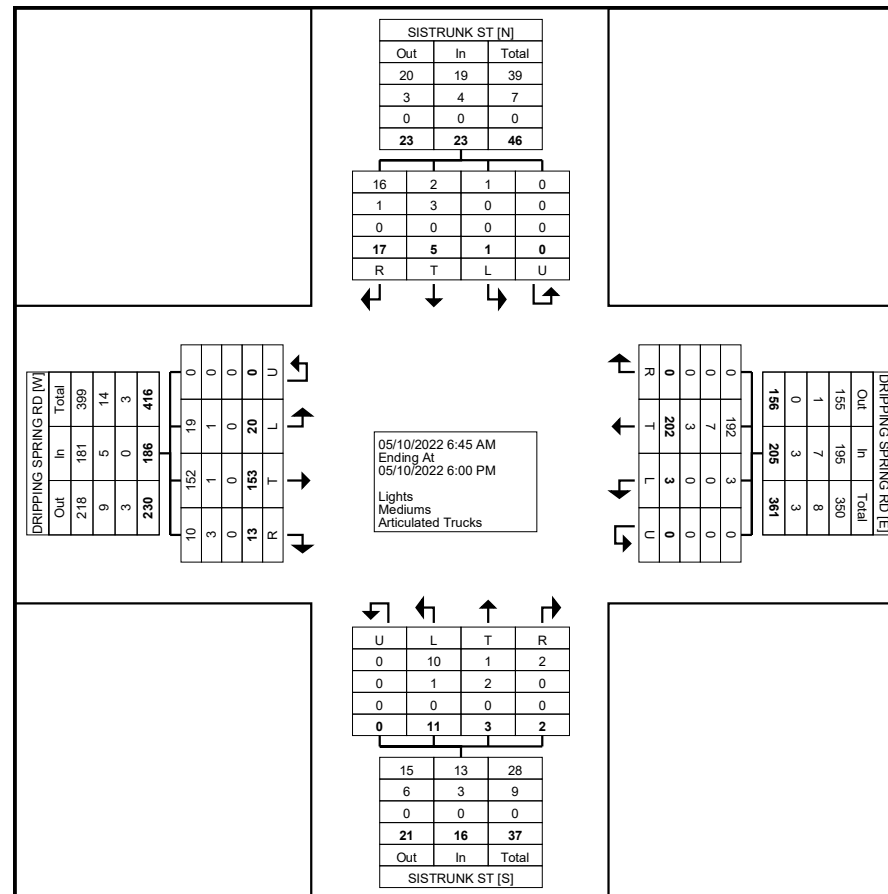
### Turning Movement Data

Start Time	SISTRUNK ST Southbound					DRIPPING SPRING RD Westbound					SISTRUNK ST Northbound					DRIPPING SPRING RD Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
6:45 AM	0	1	1	0	2	0	8	0	0	8	0	0	0	0	0	0	6	0	0	6	16
Hourly Total	0	1	1	0	2	0	8	0	0	8	0	0	0	0	0	0	6	0	0	6	16
7:00 AM	0	0	0	0	0	0	13	0	0	13	0	0	1	0	1	1	7	1	0	9	23
7:15 AM	1	0	0	0	1	0	19	0	0	19	0	0	1	0	1	0	5	1	0	6	27
7:30 AM	3	0	0	0	3	0	17	0	0	17	0	1	0	0	1	1	9	0	0	10	31
7:45 AM	3	1	0	0	4	0	19	0	0	19	1	0	2	0	3	0	5	0	0	5	31
Hourly Total	7	1	0	0	8	0	68	0	0	68	1	1	4	0	6	2	26	2	0	30	112
8:00 AM	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	6	0	0	6	21
8:15 AM	1	0	0	0	1	0	8	0	0	8	0	1	0	0	1	1	1	2	0	4	14
8:30 AM	0	0	0	0	0	0	9	0	0	9	0	0	2	0	2	1	7	2	0	10	21
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	1	0	0	0	1	0	32	0	0	32	0	1	2	0	3	2	14	4	0	20	56
4:00 PM	1	1	0	0	2	0	9	1	0	10	0	0	0	0	0	4	12	1	0	17	29
4:15 PM	3	0	0	0	3	0	10	1	0	11	0	0	0	0	0	2	15	2	0	19	33
4:30 PM	1	0	0	0	1	0	15	0	0	15	1	0	1	0	2	0	13	0	0	13	31
4:45 PM	1	2	0	0	3	0	7	0	0	7	0	0	3	0	3	1	9	4	0	14	27
Hourly Total	6	3	0	0	9	0	41	2	0	43	1	0	4	0	5	7	49	7	0	63	120
5:00 PM	0	0	0	0	0	0	14	0	0	14	0	1	1	0	2	0	12	3	0	15	31
5:15 PM	1	0	0	0	1	0	18	0	0	18	0	0	0	0	0	0	18	2	0	20	39
5:30 PM	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	15	2	0	17	28
5:45 PM	2	0	0	0	2	0	11	0	0	11	0	0	0	0	0	2	13	0	0	15	28
Hourly Total	3	0	0	0	3	0	53	1	0	54	0	1	1	0	2	2	58	7	0	67	126
Grand Total	17	5	1	0	23	0	202	3	0	205	2	3	11	0	16	13	153	20	0	186	430
Approach %	73.9	21.7	4.3	0.0	-	0.0	98.5	1.5	0.0	-	12.5	18.8	68.8	0.0	-	7.0	82.3	10.8	0.0	-	-
Total %	4.0	1.2	0.2	0.0	5.3	0.0	47.0	0.7	0.0	47.7	0.5	0.7	2.6	0.0	3.7	3.0	35.6	4.7	0.0	43.3	-
Lights	16	2	1	0	19	0	192	3	0	195	2	1	10	0	13	10	152	19	0	181	408
% Lights	94.1	40.0	100.0	-	82.6	-	95.0	100.0	-	95.1	100.0	33.3	90.9	-	81.3	76.9	99.3	95.0	-	97.3	94.9
Mediums	1	3	0	0	4	0	7	0	0	7	0	2	1	0	3	3	1	1	0	5	19
% Mediums	5.9	60.0	0.0	-	17.4	-	3.5	0.0	-	3.4	0.0	66.7	9.1	-	18.8	23.1	0.7	5.0	-	2.7	4.4
Articulated Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	1.5	0.0	-	1.5	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.7



GRAM Traffic NTX Inc.  
1120 W. Lovers Lane  
Arlington, Texas, United States 76013  
817.265.8968 isaiah@gramntx.com

Count Name: SISTRUNK ST @ DRIPPING  
SPRING RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 2



Turning Movement Data Plot

GRAM Traffic NTX Inc.  
1120 W. Lovers Lane  
Arlington, Texas, United States 76013  
817.265.8968 isaiah@gramntx.com

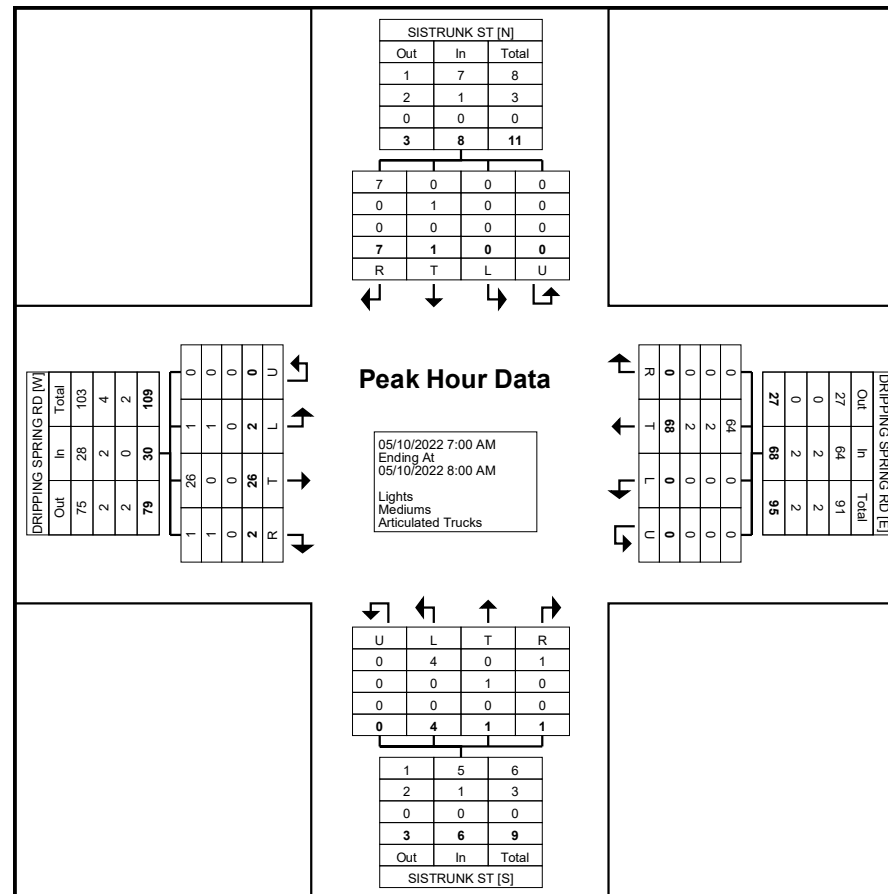
Count Name: SISTRUNK ST @ DRIPPING  
SPRING RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 3

### Turning Movement Peak Hour Data (7:00 AM)

Start Time	SISTRUNK ST Southbound					DRIPPING SPRING RD Westbound					SISTRUNK ST Northbound					DRIPPING SPRING RD Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	0	0	0	0	0	0	13	0	0	13	0	0	1	0	1	1	7	1	0	9	23
7:15 AM	1	0	0	0	1	0	19	0	0	19	0	0	1	0	1	0	5	1	0	6	27
7:30 AM	3	0	0	0	3	0	17	0	0	17	0	1	0	0	1	1	9	0	0	10	31
7:45 AM	3	1	0	0	4	0	19	0	0	19	1	0	2	0	3	0	5	0	0	5	31
Total	7	1	0	0	8	0	68	0	0	68	1	1	4	0	6	2	26	2	0	30	112
Approach %	87.5	12.5	0.0	0.0	-	0.0	100.0	0.0	0.0	-	16.7	16.7	66.7	0.0	-	6.7	86.7	6.7	0.0	-	-
Total %	6.3	0.9	0.0	0.0	7.1	0.0	60.7	0.0	0.0	60.7	0.9	0.9	3.6	0.0	5.4	1.8	23.2	1.8	0.0	26.8	-
PHF	0.583	0.250	0.000	0.000	0.500	0.000	0.895	0.000	0.000	0.895	0.250	0.250	0.500	0.000	0.500	0.500	0.722	0.500	0.000	0.750	0.903
Lights	7	0	0	0	7	0	64	0	0	64	1	0	4	0	5	1	26	1	0	28	104
% Lights	100.0	0.0	-	-	87.5	-	94.1	-	-	94.1	100.0	0.0	100.0	-	83.3	50.0	100.0	50.0	-	93.3	92.9
Mediums	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	1	0	1	0	2	6
% Mediums	0.0	100.0	-	-	12.5	-	2.9	-	-	2.9	0.0	100.0	0.0	-	16.7	50.0	0.0	50.0	-	6.7	5.4
Articulated Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Articulated Trucks	0.0	0.0	-	-	0.0	-	2.9	-	-	2.9	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	1.8

GRAM Traffic NTX Inc.  
1120 W. Lovers Lane  
Arlington, Texas, United States 76013  
817.265.8968 isaiah@gramntx.com

Count Name: SISTRUNK ST @ DRIPPING  
SPRING RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 4



Turning Movement Peak Hour Data Plot (7:00 AM)



GRAM Traffic NTX Inc.  
1120 W. Lovers Lane  
Arlington, Texas, United States 76013  
817.265.8968 isaiah@gramntx.com

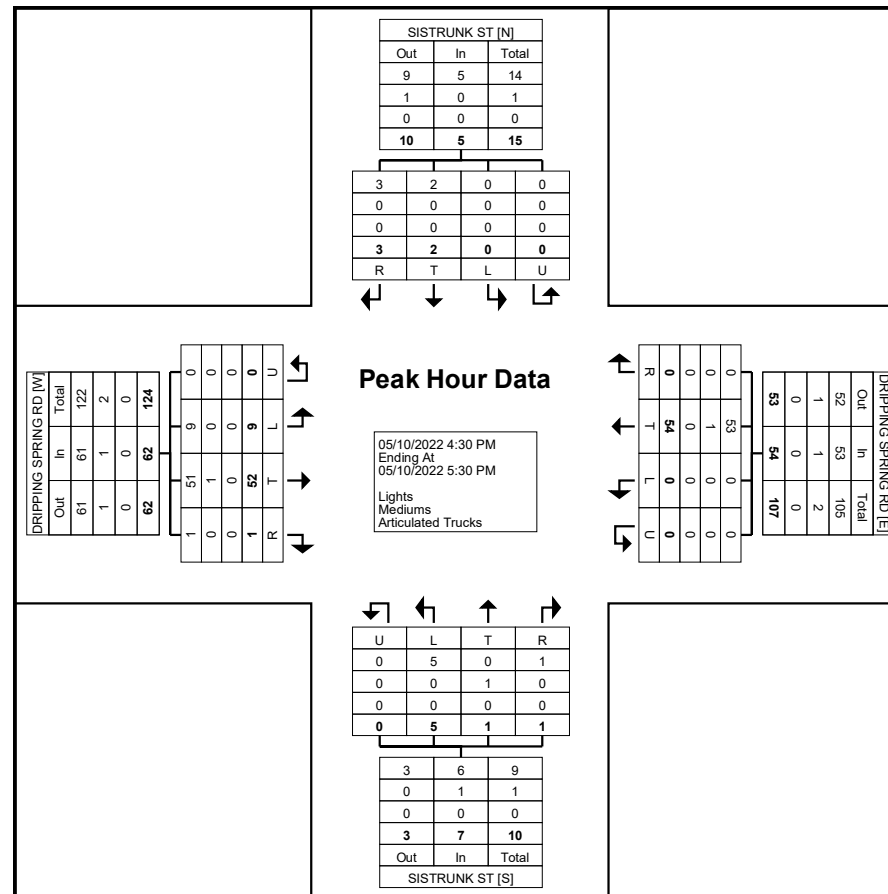
Count Name: SISTRUNK ST @ DRIPPING  
SPRING RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 5

### Turning Movement Peak Hour Data (4:30 PM)

Start Time	SISTRUNK ST Southbound					DRIPPING SPRING RD Westbound					SISTRUNK ST Northbound					DRIPPING SPRING RD Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:30 PM	1	0	0	0	1	0	15	0	0	15	1	0	1	0	2	0	13	0	0	13	31
4:45 PM	1	2	0	0	3	0	7	0	0	7	0	0	3	0	3	1	9	4	0	14	27
5:00 PM	0	0	0	0	0	0	14	0	0	14	0	1	1	0	2	0	12	3	0	15	31
5:15 PM	1	0	0	0	1	0	18	0	0	18	0	0	0	0	0	0	18	2	0	20	39
Total	3	2	0	0	5	0	54	0	0	54	1	1	5	0	7	1	52	9	0	62	128
Approach %	60.0	40.0	0.0	0.0	-	0.0	100.0	0.0	0.0	-	14.3	14.3	71.4	0.0	-	1.6	83.9	14.5	0.0	-	-
Total %	2.3	1.6	0.0	0.0	3.9	0.0	42.2	0.0	0.0	42.2	0.8	0.8	3.9	0.0	5.5	0.8	40.6	7.0	0.0	48.4	-
PHF	0.750	0.250	0.000	0.000	0.417	0.000	0.750	0.000	0.000	0.750	0.250	0.250	0.417	0.000	0.583	0.250	0.722	0.563	0.000	0.775	0.821
Lights	3	2	0	0	5	0	53	0	0	53	1	0	5	0	6	1	51	9	0	61	125
% Lights	100.0	100.0	-	-	100.0	-	98.1	-	-	98.1	100.0	0.0	100.0	-	85.7	100.0	98.1	100.0	-	98.4	97.7
Mediums	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	3
% Mediums	0.0	0.0	-	-	0.0	-	1.9	-	-	1.9	0.0	100.0	0.0	-	14.3	0.0	1.9	0.0	-	1.6	2.3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	-	-	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0




GRAM Traffic NTX Inc.  
1120 W. Lovers Lane  
Arlington, Texas, United States 76013  
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Count Name: SISTRUNK ST @ DRIPPING  
SPRING RD  
Site Code:  
Start Date: 05/10/2022  
Page No: 6



Turning Movement Peak Hour Data Plot (4:30 PM)

## **SYNCHRO PRINTOUTS**




Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	6	191	4	3	209
Future Vol, veh/h	9	6	191	4	3	209
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	78	78	78	91
Heavy Vehicles, %	2	17	4	2	2	2
Mvmt Flow	12	8	245	5	4	230

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	486	248	0	0	250
Stage 1	248	-	-	-	-
Stage 2	238	-	-	-	-
Critical Hdwy	6.42	6.37	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.453	-	-	2.218
Pot Cap-1 Maneuver	540	755	-	-	1316
Stage 1	793	-	-	-	-
Stage 2	802	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	538	755	-	-	1316
Mov Cap-2 Maneuver	538	-	-	-	-
Stage 1	793	-	-	-	-
Stage 2	800	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	608	1316
HCM Lane V/C Ratio	-	-	0.032	0.003
HCM Control Delay (s)	-	-	11.1	7.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0







Intersection						
Int Delay, s/veh	7.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1	0	0	2	21
Future Vol, veh/h	5	1	0	0	2	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	20	2	2	2	2	10
Mvmt Flow	5	1	0	0	2	23

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1	0	12
Stage 1	-	-	1
Stage 2	-	-	11
Critical Hdwy	4.3	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.38	-	3.518
Pot Cap-1 Maneuver	1511	-	1008
Stage 1	-	-	1022
Stage 2	-	-	1012
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1511	-	1005
Mov Cap-2 Maneuver	-	-	1005
Stage 1	-	-	1019
Stage 2	-	-	1012

Approach	EB	WB	SB
HCM Control Delay, s	6.2	0	8.5
HCM LOS	A		

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1511	-	-	-	1056
HCM Lane V/C Ratio	0.004	-	-	-	0.024
HCM Control Delay (s)	7.4	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1










Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	26	2	0	68	0	4	1	1	0	1	7
Future Vol, veh/h	2	26	2	0	68	0	4	1	1	0	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	50	2	50	2	6	2	2	100	2	2	100	2
Mvmt Flow	2	29	2	0	76	0	4	1	1	0	1	8
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	76	0	0	31	0	0	115	110	30	111	111	76
Stage 1	-	-	-	-	-	-	34	34	-	76	76	-
Stage 2	-	-	-	-	-	-	81	76	-	35	35	-
Critical Hdwy	4.6	-	-	4.12	-	-	7.12	7.5	6.22	7.12	7.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	6.5	-	6.12	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	6.5	-	6.12	6.5	-
Follow-up Hdwy	2.65	-	-	2.218	-	-	3.518	4.9	3.318	3.518	4.9	3.318
Pot Cap-1 Maneuver	1268	-	-	1582	-	-	862	629	1044	867	628	985
Stage 1	-	-	-	-	-	-	982	707	-	933	674	-
Stage 2	-	-	-	-	-	-	927	674	-	981	706	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1268	-	-	1582	-	-	853	628	1044	864	627	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	853	628	-	864	627	-
Stage 1	-	-	-	-	-	-	980	706	-	931	674	-
Stage 2	-	-	-	-	-	-	918	674	-	976	705	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0			9.4			9		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	829	1268	-	-	1582	-	-	919				
HCM Lane V/C Ratio	0.008	0.002	-	-	-	-	-	0.01				
HCM Control Delay (s)	9.4	7.8	0	-	0	-	-	9				
HCM Lane LOS	A	A	A	-	A	-	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0				

# HCM Unsignalized Intersection Capacity Analysis

## 1: Frisco Rd & Graystone Dr

Existing PM (2022)

06/18/2022

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	8	4	149	7	7	208
Future Volume (Veh/h)	8	4	149	7	7	208
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	9	5	175	8	8	245
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	440	179			183	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	440	179			183	
tC, single (s)	6.4	6.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.5			2.2	
p0 queue free %	98	99			99	
cM capacity (veh/h)	571	827			1392	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	14	183	253			
Volume Left	9	0	8			
Volume Right	5	8	0			
cSH	642	1700	1392			
Volume to Capacity	0.02	0.11	0.01			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.7	0.0	0.3			
Lane LOS	B		A			
Approach Delay (s)	10.7	0.0	0.3			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay		0.5				
Intersection Capacity Utilization		26.6%		ICU Level of Service		A
Analysis Period (min)		15				

# HCM Unsignalized Intersection Capacity Analysis

## 2: Graystone Dr & Village Dr

Existing PM (2022)

06/18/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (veh/h)	15	0	0	1	0	10
Future Volume (Veh/h)	15	0	0	1	0	10
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	21	0	0	1	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1				42	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1				42	0
tC, single (s)	4.3				6.4	6.3
tC, 2 stage (s)						
tF (s)	2.4				3.5	3.4
p0 queue free %	99				100	99
cM capacity (veh/h)	1511				955	1061
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	21	1	14			
Volume Left	21	0	0			
Volume Right	0	1	14			
cSH	1511	1700	1061			
Volume to Capacity	0.01	0.00	0.01			
Queue Length 95th (ft)	1	0	1			
Control Delay (s)	7.4	0.0	8.4			
Lane LOS	A		A			
Approach Delay (s)	7.4	0.0	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			7.6			
Intersection Capacity Utilization			17.5%	ICU Level of Service		A
Analysis Period (min)			15			






















# HCM Unsignalized Intersection Capacity Analysis




## 3: Sistrunk Dr & Dripping Springs Rd





Existing PM (2022)

06/18/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	52	1	0	54	0	5	1	1	0	2	3
Future Volume (Veh/h)	9	52	1	0	54	0	5	1	1	0	2	3
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	11	63	1	0	66	0	6	1	1	0	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	66			64			156	152	64	153	152	66
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	66			64			156	152	64	153	152	66
tC, single (s)	4.6			4.1			7.1	7.5	6.2	7.1	7.5	6.2
tC, 2 stage (s)												
tF (s)	2.7			2.2			3.5	4.9	3.3	3.5	4.9	3.3
p0 queue free %	99			100			99	100	100	100	100	100
cM capacity (veh/h)	1279			1538			799	588	1001	807	587	998
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	75	66	8	6								
Volume Left	11	0	6	0								
Volume Right	1	0	1	4								
cSH	1279	1538	784	809								
Volume to Capacity	0.01	0.00	0.01	0.01								
Queue Length 95th (ft)	1	0	1	1								
Control Delay (s)	1.2	0.0	9.6	9.5								
Lane LOS	A		A	A								
Approach Delay (s)	1.2	0.0	9.6	9.5								
Approach LOS			A	A								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				21.2%	ICU Level of Service				A			
Analysis Period (min)				15								

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	6	195	4	3	213
Future Vol, veh/h	9	6	195	4	3	213
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	17	4	2	2	2
Mvmt Flow	12	8	250	5	4	273
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	534	253	0	0	255	0
Stage 1	253	-	-	-	-	-
Stage 2	281	-	-	-	-	-
Critical Hdwy	6.42	6.37	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.453	-	-	2.218	-
Pot Cap-1 Maneuver	507	750	-	-	1310	-
Stage 1	789	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	505	750	-	-	1310	-
Mov Cap-2 Maneuver	505	-	-	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.4	0	0.1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	581	1310	-	
HCM Lane V/C Ratio	-	-	0.033	0.003	-	
HCM Control Delay (s)	-	-	11.4	7.8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection						
Int Delay, s/veh	7.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1	0	0	2	21
Future Vol, veh/h	5	1	0	0	2	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	20	2	2	2	2	10
Mvmt Flow	5	1	0	0	2	23
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1	0	-	0	12	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	11	-
Critical Hdwy	4.3	-	-	-	6.42	6.3
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.38	-	-	-	3.518	3.39
Pot Cap-1 Maneuver	1511	-	-	-	1008	1061
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1511	-	-	-	1005	1061
Mov Cap-2 Maneuver	-	-	-	-	1005	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1012	-
Approach	EB	WB		SB		
HCM Control Delay, s	6.2	0		8.5		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1511	-	-	-	1056	
HCM Lane V/C Ratio	0.004	-	-	-	0.024	
HCM Control Delay (s)	7.4	0	-	-	8.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	27	2	0	69	0	4	1	1	0	1	7
Future Vol, veh/h	2	27	2	0	69	0	4	1	1	0	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	50	2	50	2	6	2	2	100	2	2	100	2
Mvmt Flow	2	30	2	0	77	0	4	1	1	0	1	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	77	0	0	32	0	0	117	112	31	113	113	77
Stage 1	-	-	-	-	-	-	35	35	-	77	77	-
Stage 2	-	-	-	-	-	-	82	77	-	36	36	-
Critical Hdwy	4.6	-	-	4.12	-	-	7.12	7.5	6.22	7.12	7.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	6.5	-	6.12	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	6.5	-	6.12	6.5	-
Follow-up Hdwy	2.65	-	-	2.218	-	-	3.518	4.9	3.318	3.518	4.9	3.318
Pot Cap-1 Maneuver	1266	-	-	1580	-	-	859	627	1043	864	626	984
Stage 1	-	-	-	-	-	-	981	706	-	932	673	-
Stage 2	-	-	-	-	-	-	926	673	-	980	705	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1266	-	-	1580	-	-	850	626	1043	861	625	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	850	626	-	861	625	-
Stage 1	-	-	-	-	-	-	979	705	-	930	673	-
Stage 2	-	-	-	-	-	-	917	673	-	975	704	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	9.4	9
HCM LOS			A	A










Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	826	1266	-	-	1580	-	-	918
HCM Lane V/C Ratio	0.008	0.002	-	-	-	-	-	0.01
HCM Control Delay (s)	9.4	7.8	0	-	0	-	-	9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0



# HCM Unsignalized Intersection Capacity Analysis

## 1: Frisco Rd & Graystone Dr

Build Out Background (2023) PM  
06/18/2022

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	8	4	152	7	7	212
Future Volume (Veh/h)	8	4	152	7	7	212
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	9	5	179	8	8	249
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	448	183			187	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	448	183			187	
tC, single (s)	6.4	6.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.5			2.2	
p0 queue free %	98	99			99	
cM capacity (veh/h)	565	822			1387	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	14	187	257			
Volume Left	9	0	8			
Volume Right	5	8	0			
cSH	636	1700	1387			
Volume to Capacity	0.02	0.11	0.01			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.8	0.0	0.3			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	0.3			
Approach LOS	B					
Intersection Summary						
Average Delay		0.5				
Intersection Capacity Utilization		26.8%		ICU Level of Service		A
Analysis Period (min)		15				

## HCM Unsignalized Intersection Capacity Analysis

### 2: Graystone Dr & Village Dr

Build Out Background (2023) PM

06/18/2022



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↩	↩		↩	
Traffic Volume (veh/h)	15	0	0	1	0	10
Future Volume (Veh/h)	15	0	0	1	0	10
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	21	0	0	1	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1				42	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1				42	0
tC, single (s)	4.3				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.4				3.5	3.3
p0 queue free %	99				100	99
cM capacity (veh/h)	1511				955	1084
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	21	1	14			
Volume Left	21	0	0			
Volume Right	0	1	14			
cSH	1511	1700	1084			
Volume to Capacity	0.01	0.00	0.01			
Queue Length 95th (ft)	1	0	1			
Control Delay (s)	7.4	0.0	8.4			
Lane LOS	A		A			
Approach Delay (s)	7.4	0.0	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			7.6			
Intersection Capacity Utilization			17.5%	ICU Level of Service		A
Analysis Period (min)			15			




# HCM Unsignalized Intersection Capacity Analysis

## 3: Sistrunk Dr & Dripping Springs Rd




Build Out Background (2023) PM

06/18/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	53	1	0	55	0	5	1	1	0	2	3
Future Volume (Veh/h)	9	53	1	0	55	0	5	1	1	0	2	3
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	11	65	1	0	67	0	6	1	1	0	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	67			66			160	154	66	156	155	67
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	67			66			160	154	66	156	155	67
tC, single (s)	4.6			4.1			7.1	7.5	6.2	7.1	7.5	6.2
tC, 2 stage (s)												
tF (s)	2.7			2.2			3.5	4.9	3.3	3.5	4.9	3.3
p0 queue free %	99			100			99	100	100	100	100	100
cM capacity (veh/h)	1278			1536			796	585	998	803	585	997
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	77	67	8	6								
Volume Left	11	0	6	0								
Volume Right	1	0	1	4								
cSH	1278	1536	780	807								
Volume to Capacity	0.01	0.00	0.01	0.01								
Queue Length 95th (ft)	1	0	1	1								
Control Delay (s)	1.2	0.0	9.7	9.5								
Lane LOS	A		A	A								
Approach Delay (s)	1.2	0.0	9.7	9.5								
Approach LOS			A	A								
Intersection Summary												
Average Delay				1.4								
Intersection Capacity Utilization				21.3%	ICU Level of Service				A			
Analysis Period (min)				15								





Intersection						
Int Delay, s/veh	1.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	31	195	14	12	213
Future Vol, veh/h	37	31	195	14	12	213
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	17	4	2	2	2
Mvmt Flow	47	40	250	18	15	273
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	562	259	0	0	268	0
Stage 1	259	-	-	-	-	-
Stage 2	303	-	-	-	-	-
Critical Hdwy	6.42	6.37	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.453	-	-	2.218	-
Pot Cap-1 Maneuver	488	745	-	-	1296	-
Stage 1	784	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	481	745	-	-	1296	-
Mov Cap-2 Maneuver	481	-	-	-	-	-
Stage 1	784	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.4	0	0.4			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	574	1296	-	
HCM Lane V/C Ratio	-	-	0.152	0.012	-	
HCM Control Delay (s)	-	-	12.4	7.8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.5	0	-	



Intersection						
Int Delay, s/veh	7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	4	1	0	2	21
Future Vol, veh/h	5	4	1	0	2	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	20	2	2	2	2	2
Mvmt Flow	5	4	1	0	2	23
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1	0	-	0	15	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	14	-
Critical Hdwy	4.3	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.38	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1511	-	-	-	1004	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1511	-	-	-	1001	1084
Mov Cap-2 Maneuver	-	-	-	-	1001	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1009	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.1	0		8.4		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1511	-	-	-	1076	
HCM Lane V/C Ratio	0.004	-	-	-	0.023	
HCM Control Delay (s)	7.4	0	-	-	8.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

HCM 6th TWSC  
3: Sistrunk Dr & Dripping Springs Rd

Build Out Total (2023) AM  
06/18/2022

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	27	2	0	69	0	4	1	1	0	1	7
Future Vol, veh/h	2	27	2	0	69	0	4	1	1	0	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	50	2	50	2	6	2	2	100	2	2	100	2
Mvmt Flow	2	30	2	0	77	0	4	1	1	0	1	8




Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	77	0	0	32	0	0	117	112	31	113	113	77
Stage 1	-	-	-	-	-	-	35	35	-	77	77	-
Stage 2	-	-	-	-	-	-	82	77	-	36	36	-
Critical Hdwy	4.6	-	-	4.12	-	-	7.12	7.5	6.22	7.12	7.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	6.5	-	6.12	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	6.5	-	6.12	6.5	-
Follow-up Hdwy	2.65	-	-	2.218	-	-	3.518	4.9	3.318	3.518	4.9	3.318
Pot Cap-1 Maneuver	1266	-	-	1580	-	-	859	627	1043	864	626	984
Stage 1	-	-	-	-	-	-	981	706	-	932	673	-
Stage 2	-	-	-	-	-	-	926	673	-	980	705	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1266	-	-	1580	-	-	850	626	1043	861	625	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	850	626	-	861	625	-
Stage 1	-	-	-	-	-	-	979	705	-	930	673	-
Stage 2	-	-	-	-	-	-	917	673	-	975	704	-




  

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	9.4	9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	826	1266	-	-	1580	-	-	918
HCM Lane V/C Ratio	0.008	0.002	-	-	-	-	-	0.01
HCM Control Delay (s)	9.4	7.8	0	-	0	-	-	9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0










Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	14	43	0	0	33
Future Vol, veh/h	12	14	43	0	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	15	47	0	0	36
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	47	0	-	0	88	47
Stage 1	-	-	-	-	47	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1560	-	-	-	913	1022
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1560	-	-	-	906	1022
Mov Cap-2 Maneuver	-	-	-	-	906	-
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	981	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.4	0		8.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1560	-	-	-	1022	
HCM Lane V/C Ratio	0.008	-	-	-	0.035	
HCM Control Delay (s)	7.3	0	-	-	8.7	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	7	23	1	3	19
Future Vol, veh/h	7	7	23	1	3	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	25	1	3	21
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	26	0	-	0	50	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1588	-	-	-	959	1050
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	999	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1588	-	-	-	954	1050
Mov Cap-2 Maneuver	-	-	-	-	954	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	999	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.6	0		8.6		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1588	-	-	-	1036	
HCM Lane V/C Ratio	0.005	-	-	-	0.023	
HCM Control Delay (s)	7.3	0	-	-	8.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

# HCM Unsignalized Intersection Capacity Analysis

## 1: Frisco Rd & Graystone Dr

Build Out Total (2023) PM  
06/18/2022

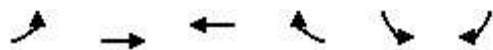
						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	27	21	152	38	35	212
Future Volume (Veh/h)	27	21	152	38	35	212
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	32	25	179	45	41	249
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	532	202			224	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	532	202			224	
tC, single (s)	6.4	6.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.5			2.2	
p0 queue free %	94	97			97	
cM capacity (veh/h)	492	803			1345	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	57	224	290			
Volume Left	32	0	41			
Volume Right	25	45	0			
cSH	593	1700	1345			
Volume to Capacity	0.10	0.13	0.03			
Queue Length 95th (ft)	8	0	2			
Control Delay (s)	11.7	0.0	1.3			
Lane LOS	B		A			
Approach Delay (s)	11.7	0.0	1.3			
Approach LOS	B					
Intersection Summary						
Average Delay		1.8				
Intersection Capacity Utilization		36.7%		ICU Level of Service		A
Analysis Period (min)		15				






## HCM Unsignalized Intersection Capacity Analysis

### 2: Graystone Dr & Village Dr

Build Out Total (2023) PM  
06/18/2022



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	15	2	3	1	0	10
Future Volume (Veh/h)	15	2	3	1	0	10
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	21	3	4	1	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	5				50	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	5				50	4
tC, single (s)	4.3				6.4	6.3
tC, 2 stage (s)						
tF (s)	2.4				3.5	3.4
p0 queue free %	99				100	99
cM capacity (veh/h)	1506				946	1056
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	24	5	14			
Volume Left	21	0	0			
Volume Right	0	1	14			
cSH	1506	1700	1056			
Volume to Capacity	0.01	0.00	0.01			
Queue Length 95th (ft)	1	0	1			
Control Delay (s)	6.5	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	6.5	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			6.4			
Intersection Capacity Utilization			17.6%	ICU Level of Service		A
Analysis Period (min)			15			

# HCM Unsignalized Intersection Capacity Analysis

## 3: Sistrunk Dr & Dripping Springs Rd

Build Out Total (2023) PM  
06/18/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	53	1	0	55	0	5	1	1	0	2	3
Future Volume (Veh/h)	9	53	1	0	55	0	5	1	1	0	2	3
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Hourly flow rate (vph)	11	65	1	0	67	0	6	1	1	0	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	67			66			160	154	66	156	155	67
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	67			66			160	154	66	156	155	67
tC, single (s)	4.6			4.1			7.1	7.5	6.2	7.1	7.5	6.2
tC, 2 stage (s)												
tF (s)	2.7			2.2			3.5	4.9	3.3	3.5	4.9	3.3
p0 queue free %	99			100			99	100	100	100	100	100
cM capacity (veh/h)	1278			1536			796	585	998	803	585	997
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	77	67	8	6								
Volume Left	11	0	6	0								
Volume Right	1	0	1	4								
cSH	1278	1536	780	807								
Volume to Capacity	0.01	0.00	0.01	0.01								
Queue Length 95th (ft)	1	0	1	1								
Control Delay (s)	1.2	0.0	9.7	9.5								
Lane LOS	A		A	A								
Approach Delay (s)	1.2	0.0	9.7	9.5								
Approach LOS			A	A								
Intersection Summary												
Average Delay			1.4									
Intersection Capacity Utilization			21.3%		ICU Level of Service				A			
Analysis Period (min)			15									

# HCM Unsignalized Intersection Capacity Analysis

Build Out Total (2023) PM

06/18/2022

## 4: Graystone Dr & Access Point 1

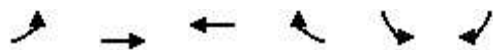


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰		↰	↰
Traffic Volume (veh/h)	37	36	23	0	0	22
Future Volume (Veh/h)	37	36	23	0	0	22
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	39	25	0	0	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	25				144	25
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	25				144	25
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				100	98
cM capacity (veh/h)	1589				827	1051
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	79	25	24			
Volume Left	40	0	0			
Volume Right	0	0	24			
cSH	1589	1700	1051			
Volume to Capacity	0.03	0.01	0.02			
Queue Length 95th (ft)	2	0	2			
Control Delay (s)	3.8	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	3.8	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			3.9			
Intersection Capacity Utilization		20.6%		ICU Level of Service		A
Analysis Period (min)		15				

# HCM Unsignalized Intersection Capacity Analysis

## 5: Graystone Dr & Access Point 2

Build Out Total (2023) PM  
06/18/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Volume (veh/h)	22	14	10	3	2	13
Future Volume (Veh/h)	22	14	10	3	2	13
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	15	11	3	2	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	14				76	12
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	14				76	12
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	99
cM capacity (veh/h)	1604				914	1068
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	39	14	16			
Volume Left	24	0	2			
Volume Right	0	3	14			
cSH	1604	1700	1046			
Volume to Capacity	0.01	0.01	0.02			
Queue Length 95th (ft)	1	0	1			
Control Delay (s)	4.5	0.0	8.5			
Lane LOS	A		A			
Approach Delay (s)	4.5	0.0	8.5			
Approach LOS			A			
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			18.6%	ICU Level of Service	A	
Analysis Period (min)			15			

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STAFF REVIEW LETTER

July 12, 2022

Lloyd Plyler Construction LLP  
PO Box 2406  
Sherman, TX 75091

Manhard Engineering  
12225 Greenville Ave, STE. 1000  
Dallas, TX 75243

Terrin Bertholf  
B & H Development LLC  
118 W. Chestnut  
Denison, TX 75021

Dear Applicants,

The request for a Specific Use Permit and Site Plan approval under Ordinance No. 2280, Section 8, Subsection (5)(a) to allow Patio Homes in an R-1 (One-Family Residential) District and a Zone Change approval under Ordinance No. 2280, Section 12, from a C-2 (General Commercial) District to an R-1 (One-Family Residential) District located at 2305 and 2615 Graystone Drive has been scheduled to be heard by the Planning and Zoning Commission on Tuesday, July 19, 2022, at 5:00 P.M., in the City Council Chambers, City Hall at 220 W. Mulberry.

City staff has reviewed your request with regards to engineering and development guidelines and finds the following items need to be addressed:

Zoning:

1. Compliance with applicable City ordinances, regulations, standards and rules and other laws, as they exist or may be amended, including but not limited to the City's General Zoning Ordinance, Ordinance No. 2280, the regulations applicable to the R-1 (One-Family Residential) District, the Patio Home Ordinance, the Fence Ordinance, the Sign Ordinance and the Residential Tree and Landscaping Ordinance. *Chapter 14, Exhibit A, Sec. 6.3; Sec. 9; Sec. 7(13) & (14) and Sec. 17)*
2. Patio home lots must have a minimum lot area of 4,000 square feet, and a minimum lot width of 40 feet on regular lots and 45 feet on corner lots. A maximum lot width is 50 feet or 55 feet for corner lots. *(Chapter 14, Exhibit A, Section 8, Subsection 9(b))*
3. Fire access, lanes and codes shall be coordinated with the Fire Marshal (903.892.7267).
4. All required off-street parking shall be on private property and shall not encroach into the right-of-way. *(Chapter 14, Exhibit A, Section 7 (13) & (14), Subsection 10(b))*
5. Parking is permitted on paved surfaces only (concrete and asphalt). *(Chapter 14, Exhibit A, Section 7, Subsection 10(h))*
6. Parking shall be provided for one space per bedroom, minimum two per unit; a parking space is considered to be 9'x20'. *(Chapter 14, Exhibit A, Section 6.3 & Section 7, Subsection 10(b))*
7. Side yard setbacks must be uniform for all homes within a given block. *(Chapter 14, Exhibit A, Section 8, Subsection 9(b))*
8. Any contiguous subdivision, including multiple phases, developed with twenty-five (25) or more lots under the Patio Home standards of this ordinance shall provide usable open space. Developments with 25 - 49 patio home lots shall provide usable open space which equals or exceeds five (5) percent of the gross platted area, excluding rights-of-way for major thoroughfares.



Developments with 50 or more patio homes shall provide usable open space which equals or exceeds ten (10) percent of the gross platted area, excluding rights-of-way for major thoroughfares. A contiguous subdivision is defined as: abutting or separated only by a local or collector street to the subdivision. Subdivisions separated by rights-of-way, drainage or utility easements in excess of sixty (60) feet in width shall not be considered as contiguous. (*Chapter 14, Exhibit A, Section 8, Subsection 9(e)*)

9. The approval of a Site Plan shall be effective for a period of two (2) years from the date of approval, at the end of which time the Site Plan shall expire unless the applicant demonstrates to the Director of Development Services that progress has been made toward completion of the project for which the Site Plan was approved.

Engineering:

10. Location of proposed drain inlets do not allow for adequate drive approach installation on Lot 6, Block 1; Lot 1, Block 4; Lot 1, Block 5; Lot 25, Block 5.
11. Graystone Drive is required to be improved by developer from a 19' wide section to a 24' wide section as a condition of this development.
12. Drive approaches and sidewalks must conform to City of Sherman standards and a permit with drawing showing dimensions is required from City of Sherman Engineering Department for review and approval prior to any work being done within public right of way. (*Code of Ordinances Chapter 3, Division 5, Sec. 3.10.154*)
13. Detention facility to be privately owned and maintained by HOA.
14. Water main must be extended in accordance with City criteria to serve proposed Lot. (*Code of Ordinances Chapter 13, Sec. 13.07.282; Chapter 10, Exhibit A, Sec. 12(G)*)
15. Sanitary Sewer main must be extended in accordance with City criteria to serve proposed Lot. Sewer capacity shall be verified for proposed use. (*Code of Ordinances Chapter 13, Sec. 13.07.282; Chapter 10, Exhibit A, Sec. 12(H)*)
16. Civil Engineering plans shall be provided to the Engineering Department for review and approval. Plat to reflect changes upon Engineering review. (*Code of Ordinances Chapter 10, Exhibit A, Sec. 15.*)
17. Three Party Agreement required for Public Infrastructure.

Any changes made to the site plan prior to the final fulfillment of the conditions of the staff review letter must be considered minor by the staff, as to not require resubmission to the Planning & Zoning Commission. It is the policy of the Planning and Zoning Commission and the Board of Adjustments not to consider a request unless the applicant or its representative attends the meeting at which the request is considered. You are hereby notified to present your case on the date and time stated above.

If additional information or clarification is needed, do not hesitate to contact Rob Rae at 903-892-7229 prior to the meeting.

Respectfully,



Rob Rae  
Acting Secretary, Planning and Zoning Commission and Board of Adjustments

CC:	Robby Hefton, City Manager	Billy Hartsfield, Fire Marshal
	Clint Philpott, Asst. City Manager	Amber Doan, Engineering Coordinator
	Wayne Lee, P.E., Director of Engineering	Christopher Armstrong, Asst. City Engineer
	Tom Pruitt, Utility Engineer	
	The Law Firm of Abernathy, Roeder, Boyd, & Hughlett, P.C., City Attorney	



## STAFF REVIEW LETTER

July 11, 2022

B&H Development  
Attn: Terrin Bertholf  
1711 N. Lockhart St.  
Sherman, TX 75092

Manhard Consulting  
Attn: Sean Compton  
640 Taylor St., Ste. 1200  
Fort Worth, TX 76102

Dear Applicants,

The request for approval of the Preliminary Plat of Evergreen Parks Subdivision has been scheduled to be heard by the Planning and Zoning Board on the day of Tuesday, July 19, 2022 at 5:00 p.m., in the City Council Chambers, City Hall at 220 W. Mulberry.

City staff has reviewed your request with regards to engineering and development guidelines and finds the following items need to be addressed:

1. The plat is dependent on the approval of the Specific Use Permit to allow patio homes.
2. Graystone Drive is required to be improved by developer from a 19' wide section to a 24' wide section as a condition of this development.
3. Drive approaches and sidewalks must conform to City of Sherman standards and a permit with drawing showing dimensions is required from City of Sherman Engineering Department for review and approval prior to any work being done within public right of way. *Code of Ordinances Chapter 3, Division 5, Sec. 3.10.154*
4. Check with United States Postal Service (972-393-6326) for establishing the method or mode of mail delivery, the type of mailbox and location of the mailbox for each street delivery address. Centralized delivery is the preferred method of mail delivery.
5. Minimum lot width for Patio Homes is 40 feet at property line. Variance required for all lots not meeting 40 feet. *Code of Ordinances Chapter 14, Sec. 8.9*
6. Dedicate a 15'x15' Right of Way corner clip on all street intersecting corner lots. *Code of Ordinances Chapter 10, Exhibit A, Secs. 5(B)(5), (10); 5(C)(1); 6(B)(7)-(8), (14)-(15); 12(B)(1)(a); 12(B)(1)(k)(1)-(3); 12(B)(5)*
7. Dedicate a 10' Utility Easement along all street frontage. *Code of Ordinances Chapter 10, Exhibit A, Sec. 12(D)*
8. Modify 10' Utility Easement on all corner lots to parallel new right of way created by corner clip.
9. Knuckles required at intersections of Roads A & D and Roads D & E. *Code of Ordinances Chapter 3.02.002(c)(37)*
10. Verify cul-de-sacs and knuckles meet standard. *Code of Ordinances Chapter 3.02.002(c)(37)*
11. Proposed street names must be approved by the City of Sherman Development Services Department prior to filing the plat. Civil plans to reflect approved street names. *Code of Ordinances Chapter 10, Exhibit A, Sec. 12(B)(1)(h)*

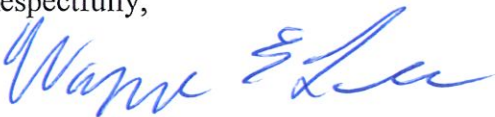


12. Dedicate a 20' Utility Easement along north property line, aligning with 20' Utility Easement filed in Volume 14, Page. 10, Plat Records, Grayson County, Texas. *Code of Ordinances Chapter 10, Exhibit A, Sec. 12(D)*
13. Lot 20, Block 3 does not meet minimum width for corner lots. Correct appropriately.
14. Lot 1, Block 5 does not have sufficient space for driveway.
15. Dedicate appropriate easement over existing Overhead Electric lines. Coordinate with electric company for preferred easement width.
16. 10' Water Easement between Lot 11, Block 2 and Lot 1, Block 3 shall extend to property line.
17. 10' Utility Easement between Lot 12, Block 1 and Lot 1, Block 2 to be a 15' Sanitary Sewer Easement.
18. All HOA lots must be assigned a Lot and Block number and be shown on plat as being privately owned and maintained.
19. Coordinate with City of Sherman Engineering Department for right-of-way dedication along Graystone Road.
20. Ownership and Maintenance information of privately owned detention facility to be shown on plat. *Code of Ordinances Chapter 10, Exhibit A, Sec. 12(I)*
21. Water main must be extended in accordance with City criteria to serve proposed development. *Code of Ordinances Chapter 13, Sec. 13.07.282; Chapter 10, Exhibit A, Sec. 12(G)*
22. Sanitary Sewer main must be extended in accordance with City criteria to serve proposed development. Sewer capacity shall be verified for proposed use. *Code of Ordinances Chapter 13, Sec. 13.07.282; Chapter 10, Exhibit A, Sec. 12(H)*
23. Civil Engineering plans shall be provided to the Engineering Department for review and approval. Plat to reflect changes upon Engineering review. *Code of Ordinances Chapter 10, Exhibit A, Sec. 12, Code of Ordinances Chapter 10, Exhibit A, Sec. 15.*
24. Three Party Agreement required for Public Infrastructure.

It is the policy of this Board not to consider a request unless the applicant or its representative attends the meeting at which the request is considered. You are hereby notified to present your case on the date and time stated above.

If additional information or clarification is needed, do not hesitate to contact Wayne Lee, at 903-892-7327 prior to the meeting.

Respectfully,



Wayne E. Lee, P.E., CFM  
Director of Engineering

cc: Robby Hefton, City Manager  
Tom Pruitt, Utility Engineer  
Clint Philpott, Assistant City Manager  
The Law Firm of Abernathy, Roeder, Boyd, & Hughlett, P.C., City Attorney

Rob Rae, Director of Development Services  
Billy Hartsfield, Fire Marshal