

# TRAFFIC IMPACT ANALYSIS

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## TCC Lake Vista

Southwest quadrant of SH 121 and Lake Vista Drive  
Lewisville, Texas

June 26, 2025



, PE 06/26/2025

Signature of Registrant

Date

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*Prepared for*  
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## Executive Summary

Halff conducted a Traffic Impact Analysis (TIA), on behalf of the Trammell Crow Company (TCC), for the proposed TCC Lake Vista warehouse development, to be located on the southwest corner of SH 121 and Lake Vista Drive in Lewisville, Texas. The development site will provide three new warehouse buildings totaling approximately 316,000 SF of overall warehouse space. Access to and from the TCC Lake Vista warehouse development site will be provided by four proposed driveways, two right-in / right-out driveways along SH 121 EBFR and two full access driveways along Lake Vista Drive.

The TIA assumed a full build out of the development in the year 2027. The proposed development is projected to generate 374 AM peak hour trips and 354 PM peak hour trips. The site contains two office buildings which are currently vacant. However, when they were fully occupied, the office buildings on the site generated significantly more peak hour and daily trips than the proposed warehouse development.

The intersection LOS analysis results indicate that the southbound through and northbound through movements at the SH 121 / Lake Vista Drive interchange are projected to operate at a LOS E in the AM peak hour and LOS F in the PM peak hour for all analysis scenarios. Since these delays occur in the 2025 Existing scenario, they are not caused by the projected traffic generated by the TCC Lake Vista warehouse development. The other approaches / movements at the study intersections and site driveways are all projected to operate at an acceptable LOS D or better for all analysis scenarios.

The proposed locations of all site driveways exceed the City of Lewisville's minimum access spacing requirements.

Based on current aerial and street-level imagery available near the proposed TCC Lake Vista warehouse development site, there appears to be adequate Intersection Sight Distance (ISD) provided at all four proposed driveways along the SH 121 EBFR and Lake Vista Drive for a vehicle to safely turn left or right onto the roadway when an acceptable gap in traffic is presented.

Based on the projected volumes associated with the two proposed full access driveways along Lake Vista Drive (DW3 and DW4), left turn deceleration lanes are not warranted at either driveway. Right turn deceleration lanes, although not warranted based on the projected right turn volumes into the driveways, are proposed along the SH 121 EB FR at driveways DW1 and DW2 and along southbound Lake Vista Drive at driveway DW3 to help facilitate truck turning movements into the driveways. Halff prepared AutoTURN exhibits showing truck turning movements at the proposed site driveways.

Based on the analyses conducted for the TIA and a review of the development plans, **the table below** provides recommendations to accommodate projected traffic, where necessary, related to the proposed TCC Lake Vista warehouse development in Lewisville, Texas.

Recommendation	Responsible Party
Install right turn deceleration lanes on the SH 121 EBFR at DW1 and DW2, and on Lake Vista Drive at DW3 as shown in <b>Exhibit 1 in Appendix A.</b>	Developer
Ensure clear sight lines are provided at the proposed site driveway approaches to the SH 121 EBFR and Lake Vista Drive when looking left and right from the site driveway approaches	Developer
Review the signal timing plans at the SH 121 / Lake Vista Drive interchange to determine if timing adjustments can be made to reduce delays for the northbound and southbound through movements.	City

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## I. INTRODUCTION

Half conducted a Traffic Impact Analysis (TIA) on behalf of the Trammell Crow Company (TCC) for the proposed TCC Lake Vista warehouse development, located in the southwest quadrant of the State Highway (SH) 121 / Lake Vista Drive intersection in Lewisville, Texas. The proposed development will replace the two (2) existing office buildings on the site with three (3) warehouse buildings.

Based on the information provided by the developer, construction of the development is anticipated to begin at the end of 2025, with an expected 18 months for construction, and be open towards the middle of 2027. For purposes of this study, 2027 was used as the Build Out year. **Figure 1** below shows the location of the proposed TCC Lake Vista warehouse development site in relation to the roadway network in the vicinity of the site. The latest site plan for the proposed TCC Lake Vista warehouse development is included in **Appendix A** as **Exhibit 1**.

**Figure 1 – Site Location Map – TCC Lake Vista Warehouse Development Site**



Aerial image reprinted with permission from Nearmap.

Image date January 15, 2025

## II. PURPOSE AND METHODOLOGY

Halff conducted the TIA for TCC to support the proposed redevelopment of the property. Standard transportation engineering practices were used in conducting the TIA. The TIA examined the projected traffic operations at two existing intersections and four proposed site driveways. The traffic operations for the overall study area were analyzed for the following three analysis scenarios listed below:

- 2025 Existing: existing conditions
- 2027 No Build: future conditions excluding the proposed TCC Lake Vista warehouse development site traffic
- 2027 Build: future conditions including proposed TCC Lake Vista warehouse development site traffic

Halff collected 24-hour weekday turning movement counts (TMCs) at the two existing study intersections on Wednesday, May 28, 2025.

The 2025 Existing AM and PM peak hour volumes were identified from the collected traffic data, and these volumes were then increased by an annual growth rate, based on historical traffic count information and future traffic projections within the study area, to estimate the 2027 No Build peak hour volumes at the study intersections.

Halff generated trips for the proposed TCC Lake Vista warehouse development based on historical trip generation data. These development trips were then distributed along the study roadway network, which includes the two existing intersections and four proposed site driveways. The distributed development trips were then added to the 2027 No Build peak hour volumes to estimate the 2027 Build peak hour volumes passing through the study roadway network.

The AM and PM peak hour operations at the study intersections were evaluated for the three analysis scenarios listed above to identify the potential impacts that the development traffic could have on the surrounding roadway network. The TIA also evaluated access spacing, intersection sight distance and the need for deceleration lanes at the proposed site driveways along the SH 121 eastbound frontage road (EBFR) and Lake Vista Drive.

Based on the analyses and evaluations conducted for the TIA and a review of the development plans, recommendations to accommodate projected traffic were developed, where necessary, related to the proposed TCC Lake Vista warehouse development in Lewisville, Texas.

## III. SITE LOCATION / STUDY AREA

The proposed TCC Lake Vista development site, covering an area of approximately 20 acres, is located in the southwest quadrant of the SH 121 / Lake Vista Drive intersection in Lewisville, Texas as shown in **Figure 1**.

For the TIA, the study area was defined to consist of the following existing intersections and their current traffic control measures:

- SH 121 WBFR at Lake Vista Drive ..... Signalized
- SH 121 EBFR at Lake Vista Drive ..... Signalized

The location of the proposed TCC Lake Vista development site and all study intersections, including the type of intersection, analyzed in the TIA are shown in **Exhibit 2** in **Appendix C**. The existing lane configurations and traffic controls for each intersection analyzed in the TIA are shown in **Exhibit 3** in **Appendix C**.

## IV. DEVELOPMENT, ZONING, AND SITE ACCESS

### A. Existing Zoning

The existing site is currently zoned as Light Industrial (LI) according to the City of Lewisville Zoning Map.

### B. Existing Development

There are two existing general office buildings on the property. Both office buildings are vacant, and the site will be cleared as part of the proposed project.

### C. Proposed Zoning

The proposed development site will undergo a zoning change to a Planned Development (PD).

### D. Proposed Development

Based on the latest information provided by the developer and presented in the site plan (**Exhibit 1 in Appendix A**), the proposed TCC Lake Vista warehouse development will provide three new warehouse buildings totaling approximately 316,000 SF of overall warehouse space. An area breakdown for each warehouse building is summarized below:

- Warehouse Building #1 .....122,836 SF (40% of the total SF)
- Warehouse Building #2 .....126,646 SF (40% of the total SF)
- Warehouse Building #3 .....66,821 SF (20% of the total SF)

Per the latest information provided by the developer, construction of the TCC Lake Vista warehouse development is anticipated to begin at the end of 2025, with an estimated construction schedule of approximately eighteen (18) months, and be open towards the middle of 2027. For purposes of this TIA, the Build Out year for the TCC Lake Vista warehouse development was assumed to occur in the year 2027.

### E. Proposed Site Access Points (Driveways)

The proposed TCC Lake Vista warehouse development site plan shows four new site driveways to provide access to the development site: two driveways along the south side of the SH 121 EBFR and two driveways along the west side of Lake Vista Drive. The driveways along the SH 121 EBFR will function as right-in / right-out driveways, while the driveways along Lake Vista Drive will be full access driveways.

The westernmost driveway along the south side of the SH 121 EBFR, designated as “DW1”, will be located approximately 1,100 feet west of Lake Vista Drive, edge-to-edge, with the driveway approach in the northbound direction. This driveway will be a proposed right-in / right-out driveway and is intended to serve both passenger vehicles and trucks.

The easternmost driveway along the south side of the SH 121 EBFR, designated as “DW2”, will be located approximately 510 feet west of Lake Vista Drive, edge-to-edge, with the driveway approach in the northbound direction. This driveway will be a proposed right-in / right-out driveway and is intended to serve both passenger vehicles and trucks.

The northernmost driveway along the west side of Lake Vista Drive, designated as “DW3”, will be located approximately 350 feet south of the SH 121 EBFR, edge-to-edge, with the driveway approach in the eastbound direction. This driveway will be a proposed full-access driveway intended to serve both passenger vehicles and trucks.

The southernmost driveway along the west side of Lake Vista Drive, designated as “DW4”, will be located approximately 750 feet south of the SH 121 EBFR, edge-to-edge, with the driveway approach in the eastbound direction. This driveway will be a proposed full-access driveway intended to serve both passenger vehicles and trucks.

It should be noted that design plans for the proposed TCC Lake Vista warehouse development are still being finalized and are subject to change. The proposed site driveway locations described above are based on the latest site plan provided by the development team.

It should be noted that the development site currently has three driveway connections to the SH 121 EBFR and two driveway connections to Lake Vista, driveways that previously served the two office buildings on the site. More information regarding the site driveways is provided in **Section XIII**.

## V. EXISTING ROADWAY CONDITIONS

The SH 121 EBFR, which runs in an east - west direction along the north side of the proposed TCC Lake Vista warehouse development site, is an existing one-way, three-lane, paved facility with a posted speed limit of 50 mph within the TIA study area. There are existing sidewalks in place along both the north and south sides of the SH 121 EBFR within the study area. The roadway is classified as a Principal Arterial Street (P4) according to the City of Lewisville Thoroughfare Plan.

The SH 121 WBFR, which runs in an east - west direction north of the proposed TCC Lake Vista warehouse development site, is an existing one-way, three-lane, paved facility with a posted speed limit of 50 mph within the TIA study area. There are existing sidewalks in place along the north side of the SH 121 WBFR within the study area. The roadway is classified as a Principal Arterial Street (P4) according to the City of Lewisville Thoroughfare Plan.

Lake Vista Drive, which runs in a north - south direction along the east side of the proposed TCC Lake Vista warehouse development site, is an existing four-lane, undivided, paved facility with a posted speed limit of 40 miles per hour (mph) within the TIA study area. There are existing sidewalks in place along both the east and west sides of Lake Vista Drive within the study area. The roadway is classified as a Collector Street (C4) according to the City of Lewisville Thoroughfare Plan.

## VI. FUTURE ROADWAY CONDITIONS

There are no known plans to improve the roadways in the study area.

## VII. EXISTING TRAFFIC VOLUMES

24-hour weekday TMCs were collected at the two existing study intersections listed in **Section III.** on Wednesday, May 28, 2025. The TMC data sheets for the two existing intersections are provided in **Appendix B.**

The AM and PM peak hour for the TCC Lake Vista warehouse development study area was determined by selecting the highest sum of the total volumes at the two existing intersections during a one-hour time frame. The overall AM and PM peak hours observed during the traffic data collection were determined to be the following one-hour time frames:

- AM Peak Hour: 7:15 – 8:15 AM
- PM Peak Hour: 5:00 – 6:00 PM

The 2025 Existing AM and PM peak hour volumes at the existing study intersections are shown in **Exhibit 4** in **Appendix C.**

## VIII. PROJECTED TRAFFIC VOLUMES

### A. No Build Volumes

To project the 2025 Existing peak hour volumes out to the study year 2027, the existing volumes were increased by an annual growth rate based on historical traffic data information recorded in TxDOT's Traffic Count Database System (TCDS). Based on the historical traffic data analyzed, the TIA study area has experienced a minimal increase in traffic demand between the years 2013 and 2023. Considering the study area has few regions available for further development growth in future years, a **two percent (2%)** annual growth rate was selected to project the existing volumes out to the study year 2027.

The resulting volumes, accounting for background growth of the existing volumes at a two percent (2%) annual growth rate, reflect the 2027 No Build peak hour volumes at the study intersections. These volumes are shown in **Exhibit 5** in **Appendix C.**

## B. Build Volumes

To estimate the 2027 Build peak hour volumes at the study intersections, the development trips for the proposed TCC Lake Vista warehouse development shown in **Exhibit 8** in **Appendix C** were added to the 2027 No Build peak hour volumes shown in **Exhibit 5**. The resulting volumes, which represent the estimated total peak hour volumes at the study intersections for the 2027 Build analysis scenario, are shown in **Exhibit 10** in **Appendix C**. Details regarding trip generation, distribution, and assignment for the TCC Lake Vista warehouse development are provided in **Sections IX., X., and XI.**

## IX. TRIP GENERATION

### A. Existing Trip Generation

Half generated trips for the development for the existing and proposed site conditions and calculated the net change in trips expected due to the proposed redevelopment plan. Although the office buildings have been vacant for several years, Half generated trips for the weekday AM and PM peak hours and the typical 24-hour weekday period to demonstrate the projected site trip generation when the office buildings were occupied. Half generated the trips using historical trip generation data published by the Institute of Transportation Engineers (ITE) in their *Trip Generation Manual, 11<sup>th</sup> Edition*. **Table 1** below shows the generated trips for existing office development, assuming full occupancy of both buildings.

**Table 1: Trip Generation – Existing Office Development**

Land Use (Density) [ITE Code]	AM Peak Hour of the Adjacent Street Traffic			PM Peak Hour of the Adjacent Street Traffic			24-Hour Weekday
	In	Out	Total	In	Out	Total	Total
General Office Building [245,904 sf*] {710}	329	45	374	60	294	354	2,666
<b>Total</b>	329	45	374	60	294	354	2,666

\* total of both general office buildings on the site

### B. Proposed Trip Generation

Trips were generated for the proposed TCC Lake Vista warehouse development site for the 2027 Build analysis scenario. As previously mentioned in **Section IV.D**, the proposed TCC Lake Vista warehouse development consists of three new buildings totaling approximately 316,000 SF of overall warehouse space. The calculated development trips are shown in **Table 2** below and are broken out into truck trips and other vehicle trips.

**Table 2: Trip Generation – Proposed TCC Lake Vista Warehouse Development**

Land Use (Density) [ITE Code]	AM Peak Hour of the Adjacent Street Traffic			PM Peak Hour of the Adjacent Street Traffic			24-Hour Weekday
	In	Out	Total	In	Out	Total	Total
Warehousing – truck trips [316,303 sf*] {150}	3	3	6	5	4	9	190
Warehousing – other vehicle trips	41	13	54	16	41	57	541
<b>Warehousing – total vehicle trips</b>	44	16	60	21	45	66	731

\* total of the three (3) proposed warehouse buildings on the site

### C. Net Change in Trip Generation

To determine the difference in trip generation expected due to the proposed redevelopment plan, the net change was calculated by subtracting the proposed trips by the existing trips. The net change calculations are shown below in **Table 3**.

**Table 3: Trip Generation – Net Change**

Scenario	AM Peak Hour of the Adjacent Street Traffic			PM Peak Hour of the Adjacent Street Traffic			24-Hour Weekday
	In	Out	Total	In	Out	Total	Total
Existing	329	45	374	60	294	354	2,666
Proposed	44	16	60	21	45	66	731
<b>Total</b>	-285	-29	-314	-39	-249	-288	-1,935

As shown in **Table 3**, the proposed redevelopment of the TCC Lake Vista site is projected to reduce the number of trips generated by the site when the office buildings were occupied by 314 in the weekday AM peak hour, 288 in the weekday PM peak hour and 1,935 over a typical 24-hour weekday period.

Because the office buildings were vacant at the time Halff collected traffic count data for the project, Halff used the trip generation numbers shown in **Table 2** for the proposed warehouse building to project future traffic volumes at the study intersections and site driveways, and did not reduce or adjust the existing volumes collected at the two study intersections. More details are provided in the following sections.

## X. TRIP DISTRIBUTION

### A. General Trip Distribution Percentages

General trip distribution percentages for the TCC Lake Vista warehouse development site were developed based on the existing volume data captured at the existing intersections described in **Section III**. The general inbound and outbound trip distribution percentages used for the TCC Lake Vista warehouse development site are summarized below:

- **Inbound / Outbound Trip Distribution Percentages (AM / PM):**
  - From the east via SH 121 ..... 59% / 59%
  - From the west via SH 121 ..... 40% / 40%
  - From the north via Lake Vista Drive ..... 1% / 1%

### B. Detailed Trip Distribution Percentages

The detailed inbound and outbound trip distribution percentages used for the AM and PM peak hours for the 2027 Build analysis scenario are shown in **Exhibits 6 and 7** in **Appendix C**.

## XI. TRIP ASSIGNMENT

The AM and PM peak hour development trips for the TCC Lake Vista warehouse development, summarized in **Table 2**, were distributed along the study roadway network using the trip distribution percentages in **Exhibits 6 and 7** in **Appendix C**. The distributed development trips for the TCC Lake Vista warehouse development are shown in **Exhibit 8** in **Appendix C**.

## XII. INTERSECTION LOS ANALYSIS

### A. Methodology and Level of Service Evaluations

Half conducted weekday AM and PM peak hour intersection level-of-service (LOS) analysis at the existing study intersections and at the proposed site driveways as described in **Section IV.E.** that will serve the proposed TCC Lake Vista warehouse development for the analysis scenarios listed below:

- 2025 Existing: Existing volumes
- 2027 No Build: 2-year background growth of existing volumes
- 2027 Build: 2027 No Build volumes plus the TCC Lake Vista warehouse development trips

Results of the intersection LOS analysis for all unsignalized intersections were generated using the standard procedures outlined in the Transportation Research Board's (TRB) *Highway Capacity Manual, 6<sup>th</sup> Edition* (HCM) using the Cubic Synchro 11 traffic analysis software package. Results for the intersection LOS analysis for signalized intersections were generated through Synchro's Percentile Delay Method to model the existing traffic signals in the TIA study area under varying traffic loads as observed in field conditions. For reference, all Synchro output report sheets are provided in **Appendix D**. It should be noted that the Synchro 11 traffic analysis software does not generate output reports based on the latest edition of the HCM (7<sup>th</sup> Edition), released in 2022. All analysis and reports under HCM methodology were conducted under the 6<sup>th</sup> Edition of the HCM.

LOS is described in terms of the average stopped delay experienced per vehicle for a particular movement, approach, or for the entire intersection during a typical morning or afternoon peak hour period on a given weekday. Separate LOS thresholds are established and outlined for signalized and unsignalized intersections in the HCM. The LOS criteria for signalized intersections are provided in **Table 4**. The LOS criteria for unsignalized intersections are provided in **Table 5**.

**Table 4: Level-of-Service Criteria for Signalized Intersections**

LOS	LOS Description	Avg. Delay (sec/veh)
A	Little to no delays experienced at the intersection and vehicle progression is exceptionally favorable. Majority of vehicles arrive during the green indication and travel through the intersection without stopping.	<10
B	Light delays are experienced at the intersection and vehicle progression is highly favorable. Most vehicles pass through the intersection, with slightly higher stopped vehicles than with LOS A.	> 10 & ≤ 20
C	Moderate delays are experienced at the intersection and vehicle progression is favorable. Individual cycle failures may begin to appear. The number of vehicles stopping is significant, although many vehicles still clear the intersection within one cycle.	> 20 & ≤ 35
D	Moderate to heavy delays are experienced at the intersection and progression is ineffective. Many vehicles stop and individual cycle failures are noticeable.	> 35 & ≤ 55
E	Heavy delays are experienced at the intersection and progression is unfavorable. Individual cycle failures are frequent.	> 55 & ≤ 80
F*	Excessive delays experienced at the intersection and vehicle progression is very poor. Most cycles fail to clear the queue.	> 80

Note: \* - LOS F is assigned to a movement with a volume-to-capacity ratio greater than 1.0, regardless of the average stopped delay

**Table 5: Level of Service Criteria for Unsignalized Intersections**

LOS	LOS Description	Avg. Delay (sec/veh)
A	Little to no delays experienced at stopped movement; free-flow conditions.	≤ 10
B	Light delays experienced at stopped movement; indicative to free-flow conditions.	> 10 & ≤ 15
C	Moderate delays experienced at stopped movement; traffic density influence on operations becomes marked.	> 15 & ≤ 25
D	Moderate to heavy delays at the stopped movement; ability to maneuver is severely restricted due to congestion.	> 25 & ≤ 35
E	Heavy delays experienced at stopped movement; operations are at or near capacity and are unstable.	> 35 & ≤ 50
F*	Excessive delays experienced at stopped movements; forced flow or breakdown characterized by queues.	> 50

Note:\* LOS F is assigned to a movement with a volume-to-capacity ratio greater than 1.0, regardless of the average stopped delay.

The 2025 Existing intersection LOS analysis was conducted using the existing lane assignments and traffic control measures for the study intersections shown in **Exhibit 3 in Appendix C** and the 2025 Existing AM and PM peak hour volumes shown in **Exhibit 4 in Appendix C**. Peak hour factor (PHF) values for each study intersection where traffic count data was collected are based on the total 1-hour entering volumes at each intersection (intersection PHF) during the AM and PM peak hours. Heavy vehicle percentages were calculated from the existing TMC volumes at the SH 121 / Lake Vista Drive interchange. For all movements with HV% of less than 5%, Halff used a default value of 5%. For movements with HV% greater than 5%, Halff used the actual HV%. Signal timing parameters for the signalized interchange are based on the existing traffic signal timing information obtained from the City of Lewisville which are included and summarized in **Appendix E**.

The 2027 No Build and Build intersection LOS analyses were conducted using the existing and proposed lane assignments and traffic control measures for the study intersections shown in **Exhibit 3 in Appendix C** and the 2027 No Build and Build AM and PM peak hour volumes shown in **Exhibits 5 and 10 in Appendix C**. Signal timing parameters for the signalized interchange remained the same as in the 2025 Existing analysis scenario. PHF and HV% values used for the existing study intersections in the 2027 No Build and Build analysis scenarios were the same as those used in the 2025 Existing analysis scenario. For the proposed site driveway intersections, a default PHF of 0.92 was used. For the proposed driveways, inbound and outbound HV% were determined by calculating the percentage of truck trips out of the total trips from the proposed site trip generation. The same calculated inbound and outbound heavy vehicle percentages were used for all proposed driveways, within their respective peak hour. HV% calculations for the proposed driveways are summarized in **Table 6** below. Detailed information about HV% distribution at the proposed driveways can be found in **Exhibit 9 of Appendix C**.

**Table 6: Proposed Trip Generation + Heavy Vehicle %**

Scenario	Weekday AM Peak Hour of the Adjacent Street Traffic			Weekday PM Peak Hour of the Adjacent Street Traffic			24-Hour Weekday
	In	Out	Total	In	Out	Total	Total
Warehousing (Truck Trips)	3	3	6	5	4	9	190
Warehousing (Other vehicle trips)	41	13	54	16	41	57	541
<b>Total Trips</b>	44	16	60	21	45	66	731
<b>Heavy Vehicle %</b>	6.82%	18.75%	-	23.81%	8.89%	-	-

The intersection LOS analysis results for all scenarios for the AM and PM peak hours are provided below in **Tables 7 - 9**. The signalized intersection analysis results represent the directional approaches and overall operations for each intersection managed by a traffic signal under its existing timing configuration. The unsignalized intersection analysis results represent the critical minor movements for each intersection classified as a TWSC intersection.

**Table 7: Intersection LOS Analysis Results – 2025 Existing AM / PM Peak Hours**

Intersection (Signalized / TWSC)	Overall / Approach / Movement	2025 Existing AM				2025 Existing PM			
		Delay	LOS	V/C	Queue	Delay	LOS	V/C	Queue
		1. SH 121 WBFR at Lake Vista Drive (Signalized)	Overall	20.0	C	0.38	323	20.7	C
NBL	0.0		A	0.00	0	2.2	A	0.01	1
NBT	12.5		B	0.04	23	7.5	A	0.21	0
SBT	79.6		E	0.29	42	81.7	F	0.44	71
SBR	3.1		A	0.25	0	4.4	A	0.34	0
WBL/T	20.5		C	0.38	323	25.7	C	0.39	310
WBR	0.8		A	0.09	5	4.0	A	0.29	59
2. SH 121 EBFR at Lake Vista Drive (Signalized)	Overall	17.8	B	0.38	163	33.7	C	0.72	521
	NBT	78.2	E	0.10	23	82.3	F	0.35	69
	NBR	1.7	A	0.15	0	25.9	C	0.72	80
	SBL	14.3	B	0.05	7	11.4	B	0.10	0
	SBT	20.4	C	0.23	51	6.9	A	0.02	0
	EBL/T	17.3	B	0.24	163	35.5	D	0.62	521
	EBR	0.0	A	0.01	0	0.0	A	0.01	0

**Table 8: Intersection LOS Analysis Results – 2027 No Build AM / PM Peak Hours**

Intersection (Signalized / TWSC)	Overall / Approach / Movement	2027 No Build				2027 No Build			
		AM				PM			
		Delay	LOS	V/C	Queue	Delay	LOS	V/C	Queue
1. SH 121 WBFR at Lake Vista Drive (Signalized)	Overall	21.2	C	0.41	347	21.5	C	0.73	300
	NBL	0.0	A	0.00	0	8.2	A	0.01	1
	NBT	10.0	B	0.04	16	12.2	B	0.21	13
	SBT	79.6	E	0.29	42	80.9	F	0.44	72
	SBR	3.3	A	0.26	0	4.8	A	0.35	0
	WBL/T	22.0	C	0.41	347	25.7	C	0.41	300
	WBR	1.0	A	0.10	8	4.0	A	0.30	62
2. SH 121 EBFR at Lake Vista Drive (Signalized)	Overall	18.4	B	0.41	174	28.2	C	0.73	448
	NBT	78.2	E	0.10	23	82.3	F	0.35	71
	NBR	1.8	A	0.15	0	25.7	C	0.73	81
	SBL	12.7	B	0.04	7	14.5	B	0.10	105
	SBT	16.5	B	0.21	45	11.3	B	0.02	27
	EBL/T	19.8	B	0.26	174	28.5	C	0.69	448
	EBR	0.0	A	0.01	0	0.0	A	0.01	0

**Table 9: Intersection LOS Analysis Results – 2027 Build AM / PM Peak Hours**

Intersection (Signalized / TWSC)	Overall / Approach / Movement	2027 Build				2027 Build			
		AM				PM			
		Delay	LOS	V/C	Queue	Delay	LOS	V/C	Queue
1. SH 121 WBFR at Lake Vista Drive (Signalized)	Overall	21.7	C	0.43	361	22.0	C	0.73	334
	NBL	7.5	A	0.00	2	1.7	A	0.02	0
	NBT	9.2	A	0.04	14	5.3	A	0.21	0
	SBT	79.7	E	0.30	43	80.9	F	0.44	72
	SBR	3.3	A	0.26	0	4.5	A	0.35	0
	WBL/T	22.6	C	0.43	361	28.4	C	0.43	334
	WBR	1.0	A	0.10	8	5.0	A	0.31	71
2. SH 121 EBFR at Lake Vista Drive (Signalized)	Overall	18.7	B	0.43	178	35.7	D	0.73	564
	NBT	79.1	E	0.13	28	83.7	F	0.40	80
	NBR	2.0	A	0.17	0	24.9	C	0.73	83
	SBL	11.6	B	0.04	6	7.4	A	0.10	0
	SBT	15.2	B	0.22	43	4.5	A	0.03	0
	EBL/T	20.9	C	0.27	178	38.4	D	0.68	564
	EBR	0.1	A	0.02	0	0.0	A	0.01	0
3. SH 121 EBFR at DW1 (TWSC)	NBR	12.1	B	0.01	0	18.4	C	0.04	3
4. SH 121 EBFR at DW2 (TWSC)	NBR	12.2	B	0.02	3	19.3	C	0.09	8
5. Lake Vista Dr at DW3 (TWSC)	NBL	0.0	A	0.00	0	0.0	A	0.00	0
	EBL	10.8	B	0.01	0	9.6	A	0.02	0
6. Lake Vista Dr at DW4 (TWSC)	NBL	0.0	A	0.00	0	0.0	A	0.00	0
	EBL	10.8	B	0.00	0	9.5	A	0.00	0

**B. Summary of Intersection LOS Analysis Results**

The intersection LOS analysis results shown in **Tables 7 - 9** indicate that the southbound through and northbound through movements at the SH 121 / Lake Vista Drive interchange currently operate at a LOS E in the AM peak hour and LOS F in the PM peak hour (2025 Existing) and are projected to continue operating at these LOS in the 2027 No Build and Build scenarios. Since these delays occur in the 2025 Existing scenario, they are not caused by the projected traffic generated by the TCC Lake Vista warehouse development. Rather, these delays can be attributed to most of the green time in the existing signal timing being allocated to the movements on the SH 121 westbound and eastbound frontage roads, which are the major movements at the interchange. All other intersection approaches / movements are projected to operate at acceptable LOS D or better in both peak hours in the 2027 Build scenario. Therefore, the proposed TCC Lake Vista warehouse development is not projected to negatively impact the surrounding roadway operations.

### C. Optimization scenario

Halff developed an optimization scenario to analyze potential changes to the SH 121 / Lake Vista Drive interchange signal timing that could reduce delays and improve LOS. The optimization scenario included decreasing the cycle length from 160 seconds to 120 seconds in both the AM and PM peak hours for the 2027 Build scenario. Detailed signal timing information for the optimization scenario can be found in **Appendix D**. The optimization scenario results for the AM and PM peak hours can be found in **Table 10** below.

**Table 10: Intersection LOS Analysis Results – 2027 Build Optimization AM / PM Peak Hours**

Intersection (Signalized / TWSC)	Overall / Approach / Movement	2027 Build Optimization				2027 Build Optimization			
		AM				PM			
		Delay	LOS	V/C	Queue	Delay	LOS	V/C	Queue
1. SH 121 WBFR at Lake Vista Drive (Signalized)	Overall	20.3	C	0.45	306	20.5	C	0.69	278
	NBL	1.0	A	0.00	1	0.4	A	0.02	0
	NBT	2.1	A	0.04	0	2.6	A	0.18	0
	SBT	57.8	E	0.24	34	58.5	E	0.37	56
	SBR	1.8	A	0.20	0	2.5	A	0.27	0
	WBL/T	22.1	C	0.45	306	28.8	C	0.52	278
	WBR	0.2	A	0.10	0	4.3	A	0.35	55
2. SH 121 EBFR at Lake Vista Drive (Signalized)	Overall	15.3	B	0.45	171	25.5	C	0.69	434
	NBT	57.4	E	0.10	22	59.8	E	0.33	63
	NBR	1.1	A	0.13	0	20.5	C	0.69	71
	SBL	3.0	A	0.04	0	3.5	A	0.12	0
	SBT	9.4	A	0.23	1	1.5	A	0.03	0
	EBL/T	18.7	B	0.28	171	27.2	C	0.60	434
	EBR	0.1	A	0.02	0	0.0	A	0.01	0
3. SH 121 EBFR at DW1 (TWSC)	NBR	12.1	B	0.01	0	18.4	C	0.04	3
4. SH 121 EBFR at DW2 (TWSC)	NBR	12.2	B	0.02	3	19.3	C	0.09	8
5. Lake Vista Dr at DW3 (TWSC)	NBL	0.0	A	0.00	0	0.0	A	0.00	0
	EBL	10.8	B	0.01	0	9.6	A	0.02	0
6. Lake Vista Dr at DW4 (TWSC)	NBL	0.0	A	0.00	0	0.0	A	0.00	0
	EBL	10.8	B	0.00	0	9.5	A	0.00	0

### D. Summary of Intersection LOS Analysis Results

As shown in **Table 10** above, with optimization of the signal timing, all movements at the SH 121 / Lake Vista Drive interchange are projected to decrease in delay in the 2027 Build scenario. Specifically, the southbound through and northbound through movements at the interchange decreased in delay and saw improvement from LOS F to LOS E in the PM peak hour.

### XIII. ACCESS SPACING EVALUATION

As mentioned, the existing site has three driveways along the SH 121 EBFR and two driveways along Lake Vista Drive. The TCC Lake Vista warehouse development plan calls for replacing the three frontage road driveways with the two driveways described above and shown on the site plan in **Appendix A**. Along Lake Vista Drive, the existing north driveway will be shifted slightly to the north, and the existing south driveway will remain in its current location, as shown on the site plan.

Access spacing for the four proposed site driveways along the SH 121 EBFR and Lake Vista Drive was evaluated based on criteria set forth by the City of Lewisville. According to Section IX.4.6 of the City of Lewisville Unified Development Code (UDC), the minimum driveway spacing on the same lot along a Frontage Road is 230 feet. The City of Lewisville also provides a minimum driveway spacing on the same lot along Principal Arterials (P4D) of 100 feet, and a minimum spacing of 75 feet along Collector Roads (C4U). While the City of Lewisville Thoroughfare Plan classifies the SH 121 EBFR as a Principal Arterial, Halff used the Frontage Road criteria for the roadway's access spacing evaluation.

**Table 11** below summarizes the access spacing measurements for the four driveways that will serve the proposed TCC Lake Vista warehouse development site based on the site plan provided in **Exhibit 1** in **Appendix A**. **Table 11**

also provides the minimum access spacing requirement for all proposed spacings provided by the City of Lewisville and whether the proposed spacing meets the guidelines. All spacings were measured between the near radius points of the adjacent driveways or intersections.

**Table 11: Access Spacing Evaluation & Results**

Access Spacing	Existing / Proposed Access Spacing	Proposed Access Spacing	City's Minimum Access Spacing	Meets City's Access Spacing?
Nearest DW to west and DW1	Proposed	~525 feet	230 feet	Yes
Between DW1 and DW2	Proposed	~510 feet	230 feet	Yes
Between DW2 and Lake Vista Drive	Proposed	~460 feet	230 feet	Yes
Between Lake Vista Drive and DW3	Proposed	~305 feet	75 feet	Yes
Between DW3 and DW4	Proposed	~350 feet	75 feet	Yes
Between DW4 and nearest DW to south	Proposed	~90 feet	75 feet	Yes

Based on the driveway spacing information provided in **Table 11**, all proposed driveway spacings exceed the City's minimum access spacing requirements.

**XIV. INTERSECTION SIGHT DISTANCE EVALUATION**

Intersection sight distance (ISD) for the four proposed site driveways along the SH 121 EBFR and Lake Vista Drive was evaluated based on criteria set forth by the American Association of State Highway and Transportation Officials (AASHTO) in their design manual, *A Policy on Geometric Design of Highways and Streets* (2018), also known as the "Green Book". AASHTO's Green Book provides ISD guidelines for vehicles turning left or right from a minor access point onto a major street, or crossing the major street, where the minor access point approach is stop-controlled at the major street. Calculations for ISD incorporate the following: the number of lanes along the major street; the median width of the major street, if present; the 85<sup>th</sup> percentile or posted speed of the major street; skew angle of the major and minor approaches, if present; and the minor access point approach grade.

For the two proposed right-in / right-out site driveways along the SH 121 EBFR, ISD guidelines for passenger vehicles, single unit trucks, and combination trucks are summarized below:

- Right turn from site driveways onto SH 121 EBFR
  - Passenger Vehicles: 480 feet
  - Single Unit Trucks: 625 feet
  - Combination Trucks: 775 feet

ISD calculations are based on the existing posted speed limit along SH 121 EBFR of 50 mph and the existing one-way, three-lane cross section at the location of the two proposed site driveways.

For the two proposed full access site driveways along Lake Vista Drive, ISD guidelines for passenger vehicles, single unit trucks, and combination trucks are summarized below:

- Left turn from site driveways onto Lake Vista Drive
  - Passenger Vehicles: 475 feet
  - Single Unit Trucks: 600 feet
  - Combination Trucks: 720 feet
- Right turn from site driveways onto Lake Vista Drive
  - Passenger Vehicles: 385 feet
  - Single Unit Trucks: 500 feet
  - Combination Trucks: 620 feet

ISD calculations are based on the existing posted speed limit along Lake Vista Drive of 40 mph and the existing four-lane undivided cross section at the location of the two proposed site driveways.

Half did not conduct field measurements for ISD at the proposed locations of the four site driveways but utilized aerial and street imagery available near the development site to estimate available sight distance along the SH 121 EBFR and Lake Vista Drive. Based on this information, there appears to be adequate ISD provided along the SH 121 EBFR and Lake Vista Drive at all site driveway locations for all vehicle types to safely turn onto the connecting roadway when an acceptable gap in traffic is presented. There are no existing major obstructions for clear sight lines at the proposed driveway approaches.

Half recommends that the civil and landscape plans for the TCC Lake Vista warehouse development consider the minimum sight distance requirements outlined above at the driveway approaches in its design, to maintain clear sight lines when looking to the left and right from the driveway approaches.

## **XV. DECELERATION LANE EVALUATION**

### **A. Left Turn Deceleration Lane Analysis**

The need for left turn deceleration lanes at the two proposed driveways along Lake Vista Drive, driveways DW3 and DW4, was evaluated based on criteria set forth by the City of Lewisville and TxDOT. Left turn deceleration lanes are not needed at the proposed site driveways along SH 121 EBFR, since driveways DW1 and DW2 are proposed as right-in / right-out driveways.

The City's UDC addresses where left deceleration lanes should be provided, and generally requires them at major intersections and at median openings along divided streets. Neither situation applies to the two proposed site driveways along Lake Vista Drive.

Table 4-17 in TxDOT's *Roadway Design Manual (RDM)* states that left turn deceleration lanes are warranted on urban and suburban arterials on a three-legged intersection if the major street volume is at least 450 vehicles/hour/lane when the left-turn lane peak hour volume is 5 vehicles per hour.

**Table 12** below summarizes the projected left turning volumes and major street volumes at DW3 and DW4 during the AM and PM peak hour, the minimum and desirable left turn and major street volume thresholds provided by TxDOT, and whether the projected turning volumes at the proposed driveways exceed the stated guidelines.

**Table 12: Left Turn Deceleration Lane Evaluation**

Left Turn Location	Projected AM / PM Peak Hour Left Turn Volume	TxDOT Minimum Turning Volume Threshold	Projected AM / PM Major Street Volume	TxDOT Minimum Major Street Volume	Meets TxDOT Minimum Threshold?	Left Turn Deceleration Lane Recommended?
DW3 from Lake Vista Drive	0 vph / 0 vph	5 vph	74 vphpl / 63 vphpl	450 vphpl	No	No
DW4 from Lake Vista Drive	0 vph / 0 vph	5 vph	73 vphpl / 61 vphpl	450 vphpl	No	No

Half assumed no vehicles would enter the TCC Lake Vista warehouse development site via northbound left turns at DW3 and DW4, because all entering traffic on Lake Vista Drive was assumed to utilize the SH 121 EBFR / Lake Vista interchange and enter the development site via southbound Lake Vista Drive. (South of the development site, Lake Vista Drive loops back to the west and intersects McArthur Boulevard just south of SH 121.) Therefore, Half does not recommend left turn deceleration lanes to be installed at the proposed DW3 and DW4 locations.

### **B. Right Turn Deceleration Lane Analysis**

The need for right turn deceleration lanes at the proposed site driveways along the SH 121 EBFR and Lake Vista Drive, driveways DW1, DW2, DW3, and DW4, was evaluated based on criteria set forth by the City of Lewisville and TxDOT.

The City’s UCD follows right turn deceleration guidelines published in Table 2-3 in TxDOT’s *Access Management Manual (AMM)*, which states that right turn deceleration lanes are warranted at driveways along roadways with a speed limit greater than 45 mph if the right turn volume into the driveway is greater than 50 vehicles per hour. Likewise, right turn deceleration lanes are warranted at driveways along roadways with a speed limit less than or equal to 45 mph if the right turn volume into the driveway is greater than 60 vehicles per hour.

**Table 13** below summarizes the projected right turning volumes at driveways DW1, DW2, DW3, and DW4 during the AM and PM peak hour, the minimum and desirable right turn volume thresholds provided by TxDOT, and whether the projected turning volumes at the driveways exceed the stated guidelines.

**Table 13: Right Turn Deceleration Lane Evaluation**

Right Turn Location	Projected AM / PM Peak Hour Right Turn Volume	TxDOT Minimum Turning Volume Threshold	Meets TxDOT Minimum Threshold?	Right Turn Deceleration Lane Recommended?
DW1 from SH 121 EBFR	8 vph / 4 vph	50 vph	No	No
DW2 from SH 121 EBFR	7 vph / 3 vph	50 vph	No	No
DW3 from Lake Vista Drive	25 vph / 12 vph	60 vph	No	No
DW4 from Lake Vista Drive	4 vph / 2 vph	60 vph	No	No

None of the projected right turn volumes meet the minimum volume threshold required for a right turn deceleration lane to be installed. However, due to the truck traffic projected at the site, right turn deceleration lanes are planned at DW1, DW2, and DW3 as shown on the site plan (**Exhibit 1**) in **Appendix A**.

Halff created AutoTURN exhibits to evaluate the travel paths required for WB-67 trucks to enter and exit the site at each driveway. The AutoTURN exhibits are provided in **Appendix F**. With right turn deceleration lanes installed at DW1, DW2, and DW3, trucks are projected to be able to make right turns into these site driveways with minimal encroachments into the adjacent through lanes along the SH 121 EBFR and Lake Vista.

**XVI. RECOMMENDATIONS**

Based on the analysis conducted for the TIA and a review of the development plans, **Table 14** below provides recommendations to accommodate projected traffic, where necessary, related to the proposed TCC Lake Vista warehouse development in Lewisville, Texas.

**Table 14: TIA Recommendations**

Recommendation	Responsible Party
Install right turn deceleration lanes on the SH 121 EBFR at DW1 and DW2, and on Lake Vista Drive at DW3, as shown in <b>Exhibit 1 in Appendix A.</b>	Developer
Ensure clear sight lines are provided at the proposed site driveway approaches to the SH 121 EBFR and Lake Vista Drive when looking left and right from the site driveway approaches	Developer
Review the signal timing plans at the SH 121 / Lake Vista Drive interchange to determine if timing adjustments can be made to reduce delays for the northbound and southbound through movements.	City

# Appendix A

## Site Plan – TCC Lake Vista Warehouse Development



# Appendix B

## Traffic Count Data

1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound						SH 121 WBFR Westbound						Lake Vista Drive Northbound						SH 121 WBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	App	Ped*		
2025-05-28 12:00AM	0	3	2	0	5	0	0	18	2	0	20	0	0	1	0	0	1	0	0	0	0	0	0	0	26
12:15AM	0	3	1	0	4	0	1	26	5	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	36
12:30AM	0	3	1	0	4	0	0	11	4	0	15	1	0	1	0	0	1	1	0	0	0	0	0	0	20
12:45AM	0	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Hourly Total	0	9	4	0	13	0	1	72	11	0	84	1	0	2	0	0	2	1	0	0	0	0	0	0	99
1:00AM	0	4	2	0	6	0	0	11	1	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	18
1:15AM	0	4	0	0	4	0	0	6	4	0	10	0	0	2	0	0	2	0	0	0	0	0	0	0	16
1:30AM	0	2	0	0	2	1	0	11	2	0	13	0	0	1	0	0	1	0	0	0	0	0	0	0	16
1:45AM	0	1	1	0	2	0	0	9	4	0	13	0	0	2	0	0	2	0	0	0	0	0	0	0	17
Hourly Total	0	11	3	0	14	1	0	37	11	0	48	0	0	5	0	0	5	0	0	0	0	0	0	0	67
2:00AM	0	0	3	0	3	0	0	9	0	0	9	0	0	2	0	0	2	0	0	0	0	0	0	0	14
2:15AM	0	1	2	0	3	0	1	8	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	12
2:30AM	0	0	1	0	1	0	0	11	0	0	11	0	0	2	0	0	2	0	0	0	0	0	0	0	14
2:45AM	0	0	1	0	1	0	0	9	3	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Hourly Total	0	1	7	0	8	0	1	37	3	0	41	0	0	4	0	0	4	0	0	0	0	0	0	0	53
3:00AM	0	0	0	0	0	0	0	14	1	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
3:15AM	0	1	1	0	2	0	0	13	3	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	18
3:30AM	0	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
3:45AM	0	0	0	0	0	0	0	10	1	0	11	0	0	3	0	0	3	0	0	0	0	0	0	0	14
Hourly Total	0	1	1	0	2	0	0	54	5	0	59	0	0	3	0	0	3	0	0	0	0	0	0	0	64
4:00AM	0	1	3	0	4	0	1	14	1	0	16	0	0	2	0	0	2	0	0	0	0	0	0	0	22
4:15AM	0	1	0	0	1	0	0	28	2	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	31
4:30AM	0	1	1	0	2	0	1	42	3	0	46	0	0	1	0	0	1	0	0	0	0	0	0	0	49
4:45AM	0	1	1	0	2	0	0	34	6	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Hourly Total	0	4	5	0	9	0	2	118	12	0	132	0	0	3	0	0	3	0	0	0	0	0	0	0	144
5:00AM	0	0	1	0	1	0	2	49	10	0	61	0	0	5	0	0	5	0	0	0	0	0	0	0	67
5:15AM	0	1	3	0	4	0	2	87	11	0	100	0	0	3	0	0	3	0	0	0	0	0	0	0	107
5:30AM	0	0	5	0	5	0	3	117	17	3	140	0	0	2	0	0	2	0	0	0	0	0	0	0	147
5:45AM	0	2	0	0	2	0	16	108	25	0	149	0	1	2	0	0	3	0	0	0	0	0	0	0	154
Hourly Total	0	3	9	0	12	0	23	361	63	3	450	0	1	12	0	0	13	0	0	0	0	0	0	0	475
6:00AM	0	5	9	0	14	0	15	89	13	0	117	0	0	6	0	0	6	0	0	0	0	0	0	0	137
6:15AM	0	1	5	0	6	0	31	148	22	4	205	0	0	1	0	0	1	0	0	0	0	0	0	0	212
6:30AM	0	10	6	0	16	0	33	150	21	1	205	0	0	9	0	0	9	0	0	0	0	0	0	0	230
6:45AM	0	6	11	0	17	0	63	181	19	3	266	0	1	9	0	0	10	0	0	0	0	0	0	0	293
Hourly Total	0	22	31	0	53	0	142	568	75	8	793	0	1	25	0	0	26	0	0	0	0	0	0	0	872
7:00AM	0	7	9	0	16	0	36	140	13	3	192	0	1	8	0	0	9	0	0	0	0	0	0	0	217
7:15AM	0	8	6	0	14	0	36	198	17	3	254	0	0	10	0	0	10	0	0	0	0	0	0	0	278
7:30AM	0	7	9	0	16	0	59	239	24	1	323	0	0	9	0	0	9	0	0	0	0	0	0	0	348
7:45AM	0	7	14	0	21	0	77	166	21	7	271	0	0	12	0	0	12	0	0	0	0	0	0	0	304
Hourly Total	0	29	38	0	67	0	208	743	75	14	1040	0	1	39	0	0	40	0	0	0	0	0	0	0	1147
8:00AM	0	12	13	0	25	0	46	192	18	4	260	0	0	11	0	0	11	0	0	0	0	0	0	0	296
8:15AM	0	11	8	0	19	0	50	144	23	9	226	0	2	9	0	0	11	0	0	0	0	0	0	0	256
8:30AM	0	6	3	0	9	0	56	190	23	4	273	0	1	13	0	0	14	0	0	0	0	0	0	0	296
8:45AM	0	15	10	0	25	0	56	175	30	6	267	0	0	17	0	0	17	0	0	0	0	0	0	0	309
Hourly Total	0	44	34	0	78	0	208	701	94	23	1026	0	3	50	0	0	53	0	0	0	0	0	0	0	1157
9:00AM	0	14	5	1	20	0	42	140	25	10	217	0	1	8	0	0	9	0	0	0	0	0	0	0	246
9:15AM	0	6	8	0	14	0	25	152	17	6	200	0	1	23	0	0	24	0	0	0	0	0	0	0	238
9:30AM	0	5	7	0	12	0	10	156	21	5	192	0	1	19	0	0	20	0	0	0	0	0	0	0	224
9:45AM	0	10	6	0	16	0	14	133	24	6	177	0	3	28	0	0	31	0	0	0	0	0	0	0	224
Hourly Total	0	35	26	1	62	0	91	581	87	27	786	0	6	78	0	0	84	0	0	0	0	0	0	0	932
10:00AM	0	4	7	0	11	0	12	128	27	12	179	0	1	29	0	0	30	0	0	0	0	0	0	0	220
10:15AM	0	8	8	0	16	0	3	138	31	26	198	0	1	38	0	0	39	0	0	0	0	0	0	0	253
10:30AM	0	14	11	0	25	0	7	143	31	22	203	0	1	27	0	0	28	0	0	0	0	0	0	0	256

Leg Direction	Lake Vista Drive Southbound						SH 121 WBFR Westbound						Lake Vista Drive Northbound						SH 121 WBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	App	Ped*		
10:45AM	0	10	13	0	23	0	8	129	32	35	204	0	0	42	0	0	42	0	0	0	0	0	269		
Hourly Total	0	36	39	0	75	0	30	538	121	95	784	0	3	136	0	0	139	0	0	0	0	0	998		
11:00AM	0	10	12	0	22	0	2	148	29	32	211	0	0	56	0	0	56	0	0	0	0	0	289		
11:15AM	0	12	7	0	19	0	12	161	38	24	235	0	1	39	0	0	40	0	0	0	0	0	294		
11:30AM	0	14	14	0	28	0	10	151	34	32	227	0	3	38	0	0	41	0	0	0	0	0	296		
11:45AM	0	12	17	0	29	0	9	164	36	31	240	0	1	51	0	0	52	0	0	0	0	0	321		
Hourly Total	0	48	50	0	98	0	33	624	137	119	913	0	5	184	0	0	189	0	0	0	0	0	1200		
12:00PM	0	10	15	0	25	0	16	148	45	38	247	0	0	66	0	0	66	0	0	0	0	0	338		
12:15PM	0	8	13	0	21	0	12	153	34	35	234	0	0	42	0	0	42	0	0	0	0	0	297		
12:30PM	0	12	12	0	24	0	20	169	43	43	275	0	1	55	0	0	56	0	0	0	0	0	355		
12:45PM	0	21	23	0	44	0	14	169	40	34	257	0	2	57	0	0	59	0	0	0	0	0	360		
Hourly Total	0	51	63	0	114	0	62	639	162	150	1013	0	3	220	0	0	223	0	0	0	0	0	1350		
1:00PM	0	9	11	0	20	0	20	159	44	38	261	0	1	55	0	0	56	0	0	0	0	0	337		
1:15PM	0	17	15	0	32	0	16	197	33	28	274	0	0	52	0	0	52	0	0	0	0	0	358		
1:30PM	0	13	16	0	29	0	14	171	33	38	256	0	2	36	0	0	38	0	0	0	0	0	323		
1:45PM	0	20	12	0	32	0	27	162	34	40	263	0	3	45	0	0	48	0	0	0	0	0	343		
Hourly Total	0	59	54	0	113	0	77	689	144	144	1054	0	6	188	0	0	194	0	0	0	0	0	1361		
2:00PM	0	10	14	0	24	0	8	150	30	27	215	0	3	52	0	0	55	0	0	0	0	0	294		
2:15PM	0	12	20	0	32	0	4	177	36	30	247	0	3	44	0	0	47	0	0	0	0	0	326		
2:30PM	0	13	14	1	28	0	9	169	44	36	258	0	0	41	0	0	41	0	0	0	0	0	327		
2:45PM	0	22	17	0	39	0	6	181	48	37	272	0	0	43	0	0	43	0	0	0	0	0	354		
Hourly Total	0	57	65	1	123	0	27	677	158	130	992	0	6	180	0	0	186	0	0	0	0	0	1301		
3:00PM	0	17	13	0	30	0	5	167	36	31	239	0	2	33	0	0	35	0	0	0	0	0	304		
3:15PM	0	12	19	0	31	0	7	206	45	37	295	0	5	50	0	0	55	0	0	0	0	0	381		
3:30PM	0	11	14	0	25	0	6	178	52	40	276	0	1	45	0	0	46	0	0	0	0	0	347		
3:45PM	0	17	16	0	33	0	5	192	34	33	264	0	1	47	0	0	48	0	0	0	0	0	345		
Hourly Total	0	57	62	0	119	0	23	743	167	141	1074	0	9	175	0	0	184	0	0	0	0	0	1377		
4:00PM	0	18	18	0	36	0	1	155	37	33	226	0	2	71	0	0	73	0	0	0	0	0	335		
4:15PM	0	12	15	0	27	2	4	195	36	31	266	0	3	42	0	0	45	0	0	0	0	0	338		
4:30PM	0	14	15	0	29	0	8	221	57	26	312	0	2	45	0	0	47	0	0	0	0	0	388		
4:45PM	0	17	15	0	32	2	8	188	66	32	294	0	0	60	0	0	60	0	0	0	0	0	386		
Hourly Total	0	61	63	0	124	4	21	759	196	122	1098	0	7	218	0	0	225	0	0	0	0	0	1447		
5:00PM	0	17	14	0	31	0	6	228	66	29	329	0	0	61	0	0	61	0	0	0	0	0	421		
5:15PM	0	18	15	0	33	0	8	229	50	31	318	0	4	74	0	0	78	0	0	0	0	0	429		
5:30PM	0	16	21	0	37	0	4	226	66	26	322	0	1	79	0	0	80	0	0	0	0	0	439		
5:45PM	0	22	16	0	38	0	9	236	72	25	342	0	1	74	0	0	75	0	0	0	0	0	455		
Hourly Total	0	73	66	0	139	0	27	919	254	111	1311	0	6	288	0	0	294	0	0	0	0	0	1744		
6:00PM	0	27	24	0	51	0	5	172	49	32	258	0	2	89	0	0	91	0	0	0	0	0	400		
6:15PM	0	18	24	0	42	0	2	240	42	35	319	0	0	66	0	0	66	0	0	0	0	0	427		
6:30PM	0	20	24	0	44	0	1	207	48	31	287	0	1	73	0	0	74	0	0	0	0	0	405		
6:45PM	0	17	27	0	44	0	6	191	59	39	295	0	1	65	0	0	66	0	0	0	0	0	405		
Hourly Total	0	82	99	0	181	0	14	810	198	137	1159	0	4	293	0	0	297	0	0	0	0	0	1637		
7:00PM	0	13	33	0	46	0	7	177	47	34	265	0	0	61	0	0	61	0	0	0	0	1	372		
7:15PM	0	14	26	0	40	0	3	170	39	33	245	0	0	63	0	0	63	0	0	0	0	0	348		
7:30PM	0	8	15	0	23	0	6	155	55	31	247	0	3	82	0	0	85	0	0	0	0	0	355		
7:45PM	0	9	16	0	25	0	2	163	30	32	227	0	8	80	0	0	88	0	0	0	0	1	340		
Hourly Total	0	44	90	0	134	0	18	665	171	130	984	0	11	286	0	0	297	0	0	0	0	2	1415		
8:00PM	0	12	17	0	29	0	2	137	37	30	206	0	2	53	0	1	56	0	0	0	0	0	291		
8:15PM	0	8	19	1	28	0	4	148	32	42	226	0	0	21	0	0	21	0	0	0	0	2	275		
8:30PM	0	11	14	0	25	0	5	174	32	31	242	0	2	13	0	0	15	0	0	0	0	0	282		
8:45PM	0	11	10	0	21	0	3	133	25	15	176	0	0	12	0	0	12	0	0	0	0	0	209		
Hourly Total	0	42	60	1	103	0	14	592	126	118	850	0	4	99	0	1	104	0	0	0	0	2	1057		
9:00PM	0	8	12	0	20	0	1	116	29	11	157	0	0	4	0	0	4	0	0	0	0	0	181		
9:15PM	0	6	4	0	10	0	2	119	22	3	146	0	0	8	0	0	8	0	0	0	0	0	164		
9:30PM	0	10	4	0	14	0	1	106	18	1	126	0	0	8	0	0	8	0	0	0	0	0	148		
9:45PM	0	8	7	0	15	0	0	76	14	1	91	0	0	4	0	0	4	0	0	0	0	0	110		
Hourly Total	0	32	27	0	59	0	4	417	83	16	520	0	0	24	0	0	24	0	0	0	0	0	603		
10:00PM	0	8	6	0	14	0	1	73	19	2	95	0	0	10	0	0	10	0	0	0	0	0	119		
10:15PM	0	5	11	0	16	0	0	70	22	3	95	0	1	6	0	0	7	0	0	0	0	0	118		
10:30PM	0	10	9	0	19	0	0	44	22	2	68	0	1	6	0	0	7	0	0	0	0	0	94		
10:45PM	0	1	4	0	5	0	0	48	16	0	64	0	1	2	0	0	3	0	0	0	0	0	72		

Leg Direction	Lake Vista Drive Southbound						SH 121 WBFR Westbound						Lake Vista Drive Northbound						SH 121 WBFR Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	App	Ped*	Int	
Hourly Total	0	24	30	0	54	0	1	235	79	7	322	0	3	24	0	0	27	0	0	0	0	0	0	403	
11:00PM	0	7	5	0	12	0	0	49	13	2	64	0	0	3	0	0	3	0	0	0	0	0	0	79	
11:15PM	0	7	4	0	11	0	1	32	4	0	37	0	0	2	0	0	2	0	0	0	0	0	0	50	
11:30PM	0	7	1	0	8	0	0	33	10	0	43	0	0	1	0	0	1	0	0	0	0	0	0	52	
11:45PM	0	3	1	0	4	0	0	31	6	0	37	0	0	2	0	0	2	0	0	0	0	0	0	43	
Hourly Total	0	24	11	0	35	0	1	145	33	2	181	0	0	8	0	0	8	0	0	0	0	0	0	224	
<b>Total</b>	0	849	937	3	1789	5	1028	11724	2465	1497	16714	1	79	2544	0	1	2624	1	0	0	0	0	4	21127	
<b>% Approach</b>	0%	47.5%	52.4%	0.2%	-	-	6.2%	70.1%	14.7%	9.0%	-	-	3.0%	97.0%	0%	0%	-	-	0%	0%	0%	-	-	-	
<b>% Total</b>	0%	4.0%	4.4%	0%	8.5%	-	4.9%	55.5%	11.7%	7.1%	79.1%	-	0.4%	12.0%	0%	0%	12.4%	-	0%	0%	0%	0%	-	-	
<b>Lights</b>	0	836	931	3	1770	-	1021	11490	2436	1486	16433	-	77	2523	0	1	2601	-	0	0	0	0	-	20804	
<b>% Lights</b>	0%	98.5%	99.4%	100%	98.9%	-	99.3%	98.0%	98.8%	99.3%	98.3%	-	97.5%	99.2%	0%	100%	99.1%	-	0%	0%	0%	-	-	98.5%	
<b>Articulated Trucks</b>	0	3	0	0	3	-	0	93	8	7	108	-	0	9	0	0	9	-	0	0	0	0	-	120	
<b>% Articulated Trucks</b>	0%	0.4%	0%	0%	0.2%	-	0%	0.8%	0.3%	0.5%	0.6%	-	0%	0.4%	0%	0%	0.3%	-	0%	0%	0%	-	-	0.6%	
<b>Buses and Single-Unit Trucks</b>	0	10	6	0	16	-	7	141	21	4	173	-	2	12	0	0	14	-	0	0	0	0	-	203	
<b>% Buses and Single-Unit Trucks</b>	0%	1.2%	0.6%	0%	0.9%	-	0.7%	1.2%	0.9%	0.3%	1.0%	-	2.5%	0.5%	0%	0%	0.5%	-	0%	0%	0%	-	-	1.0%	
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	3		
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	75.0%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	1		
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	25.0%	-	

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

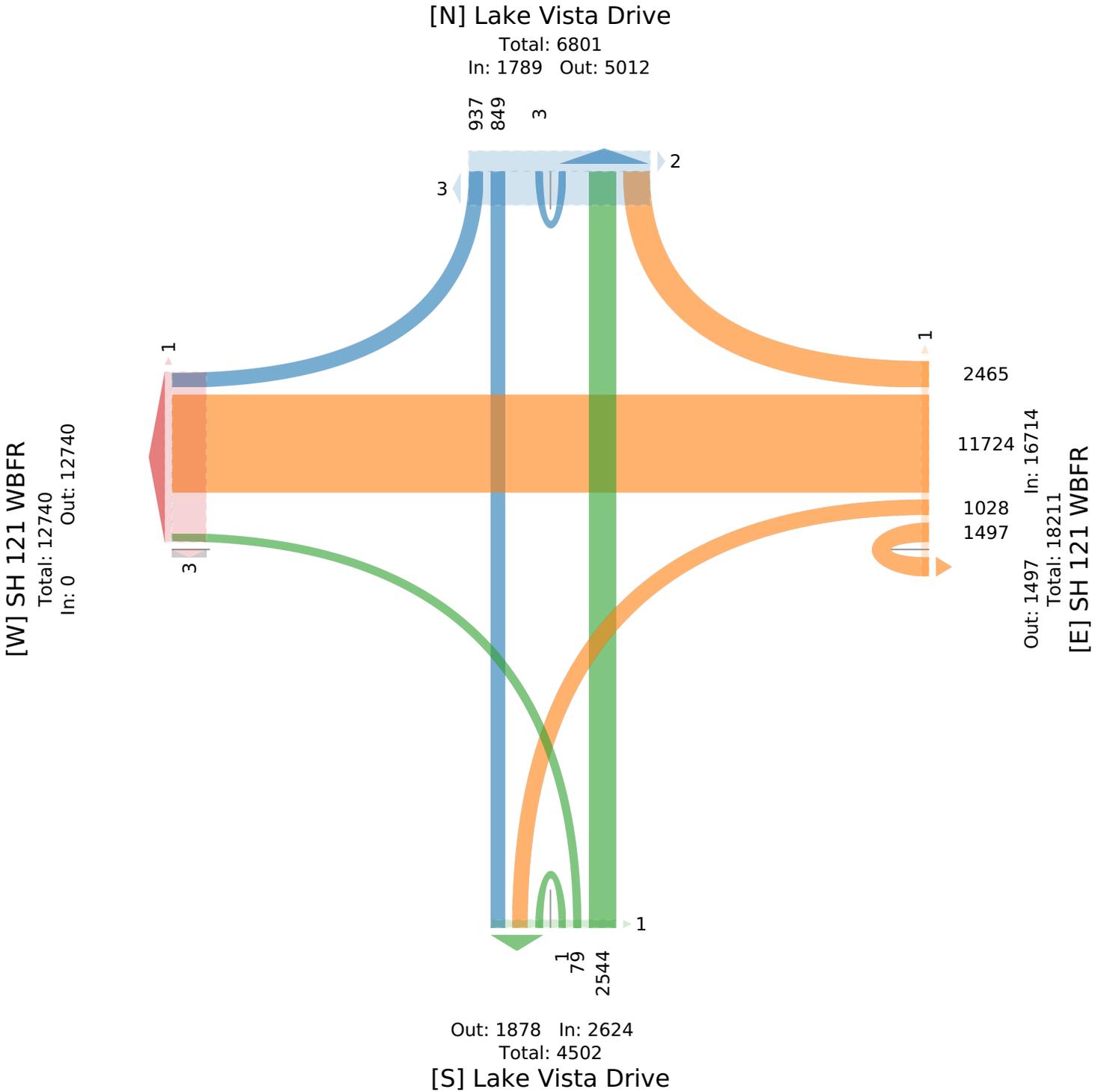
All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US



1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound						SH 121 WBFR Westbound						Lake Vista Drive Northbound						SH 121 WBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	App	Ped*		
2025-05-28 7:15AM	0	8	6	0	14	0	36	198	17	3	254	0	0	10	0	0	10	0	0	0	0	0	0	0	278
7:30AM	0	7	9	0	16	0	59	239	24	1	323	0	0	9	0	0	9	0	0	0	0	0	0	0	348
7:45AM	0	7	14	0	21	0	77	166	21	7	271	0	0	12	0	0	12	0	0	0	0	0	0	0	304
8:00AM	0	12	13	0	25	0	46	192	18	4	260	0	0	11	0	0	11	0	0	0	0	0	0	0	296
<b>Total</b>	0	34	42	0	76	0	218	795	80	15	1108	0	0	42	0	0	42	0	0	0	0	0	0	0	1226
<b>% Approach</b>	0%	44.7%	55.3%	0%	-	-	19.7%	71.8%	7.2%	1.4%	-	-	0%	100%	0%	0%	-	-	0%	0%	0%	-	-	-	-
<b>% Total</b>	0%	2.8%	3.4%	0%	6.2%	-	17.8%	64.8%	6.5%	1.2%	90.4%	-	0%	3.4%	0%	0%	3.4%	-	0%	0%	0%	0%	-	-	-
<b>PHF</b>	-	0.708	0.750	-	0.760	-	0.708	0.832	0.833	0.536	0.858	-	-	0.875	-	-	0.875	-	-	-	-	-	-	-	0.881
<b>Lights</b>	0	34	42	0	76	-	217	782	79	14	1092	-	0	42	0	0	42	-	0	0	0	0	0	-	1210
<b>% Lights</b>	0%	100%	100%	0%	100%	-	99.5%	98.4%	98.8%	93.3%	98.6%	-	0%	100%	0%	0%	100%	-	0%	0%	0%	-	-	-	98.7%
<b>Articulated Trucks</b>	0	0	0	0	0	-	0	3	0	0	3	-	0	0	0	0	0	-	0	0	0	0	0	-	3
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	-	0.2%
<b>Buses and Single-Unit Trucks</b>	0	0	0	0	0	-	1	10	1	1	13	-	0	0	0	0	0	-	0	0	0	0	0	-	13
<b>% Buses and Single-Unit Trucks</b>	0%	0%	0%	0%	0%	-	0.5%	1.3%	1.3%	6.7%	1.2%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

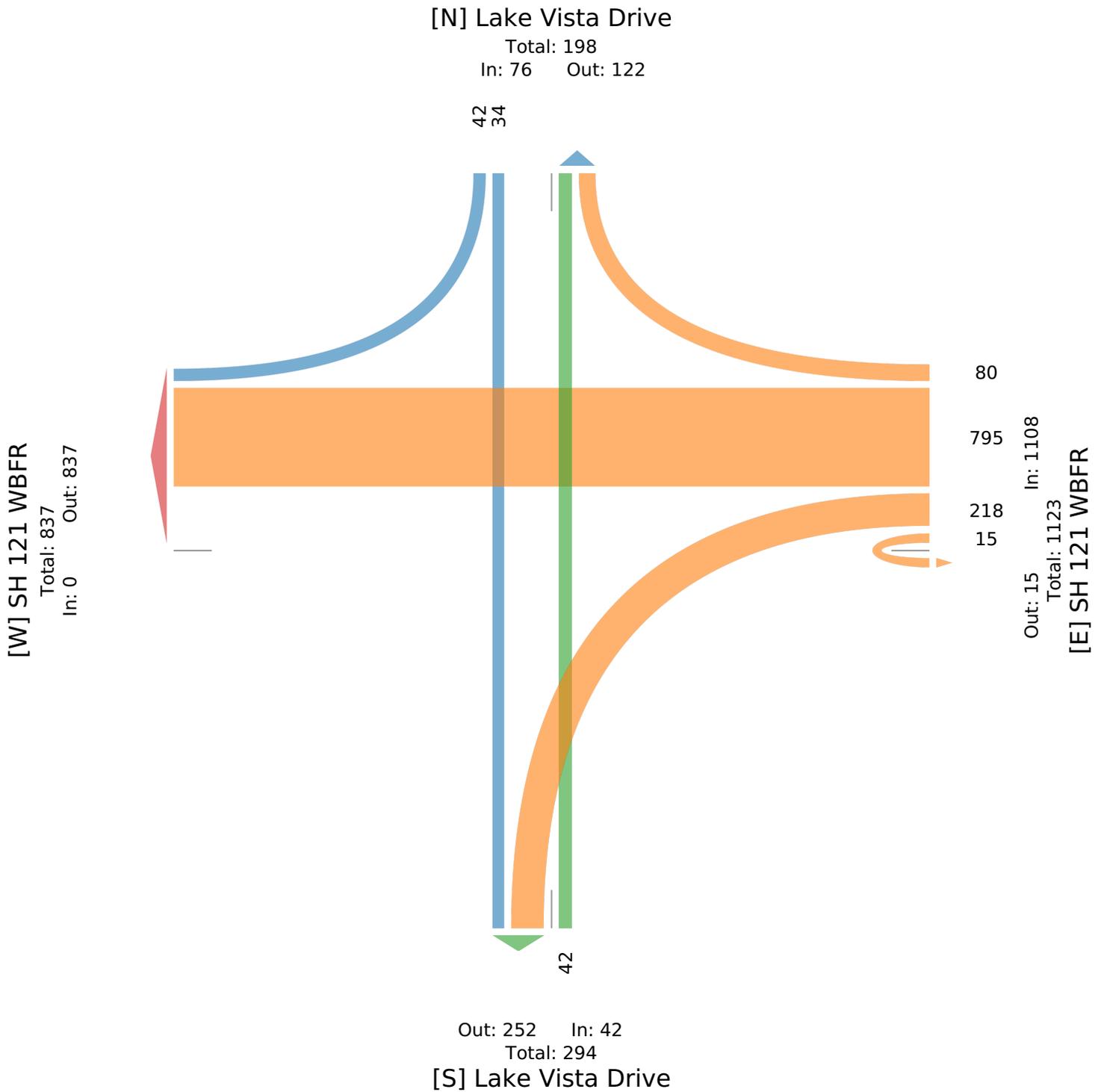
All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave.,  
Pasadena, TX, 77503, US



1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Midday Peak (12:30 PM - 1:30 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound						SH 121 WBFR Westbound						Lake Vista Drive Northbound						SH 121 WBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	App	Ped*		
2025-05-28 12:30PM	0	12	12	0	24	0	20	169	43	43	275	0	1	55	0	0	56	0	0	0	0	0	0	0	355
12:45PM	0	21	23	0	44	0	14	169	40	34	257	0	2	57	0	0	59	0	0	0	0	0	0	0	360
1:00PM	0	9	11	0	20	0	20	159	44	38	261	0	1	55	0	0	56	0	0	0	0	0	0	0	337
1:15PM	0	17	15	0	32	0	16	197	33	28	274	0	0	52	0	0	52	0	0	0	0	0	0	0	358
<b>Total</b>	0	59	61	0	120	0	70	694	160	143	1067	0	4	219	0	0	223	0	0	0	0	0	0	0	1410
<b>% Approach</b>	0%	49.2%	50.8%	0%	-	-	6.6%	65.0%	15.0%	13.4%	-	-	1.8%	98.2%	0%	0%	-	-	0%	0%	0%	-	-	-	-
<b>% Total</b>	0%	4.2%	4.3%	0%	8.5%	-	5.0%	49.2%	11.3%	10.1%	75.7%	-	0.3%	15.5%	0%	0%	15.8%	-	0%	0%	0%	0%	-	-	-
<b>PHF</b>	-	0.702	0.663	-	0.682	-	0.875	0.881	0.909	0.831	0.970	-	0.500	0.961	-	-	0.945	-	-	-	-	-	-	-	0.979
<b>Lights</b>	0	59	60	0	119	-	68	681	158	143	1050	-	4	217	0	0	221	-	0	0	0	0	-	-	1390
<b>% Lights</b>	0%	100%	98.4%	0%	99.2%	-	97.1%	98.1%	98.8%	100%	98.4%	-	100%	99.1%	0%	0%	99.1%	-	0%	0%	0%	-	-	-	98.6%
<b>Articulated Trucks</b>	0	0	0	0	0	-	0	5	0	0	5	-	0	0	0	0	0	-	0	0	0	0	-	-	5
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	-	0%	0.7%	0%	0%	0.5%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	-	0.4%
<b>Buses and Single-Unit Trucks</b>	0	0	1	0	1	-	2	8	2	0	12	-	0	2	0	0	2	-	0	0	0	0	-	-	15
<b>% Buses and Single-Unit Trucks</b>	0%	0%	1.6%	0%	0.8%	-	2.9%	1.2%	1.3%	0%	1.1%	-	0%	0.9%	0%	0%	0.9%	-	0%	0%	0%	-	-	-	1.1%
<b>Pedestrians</b>	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Bicycles on Crosswalk</b>	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
<b>% Bicycles on Crosswalk</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Midday Peak (12:30 PM - 1:30 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

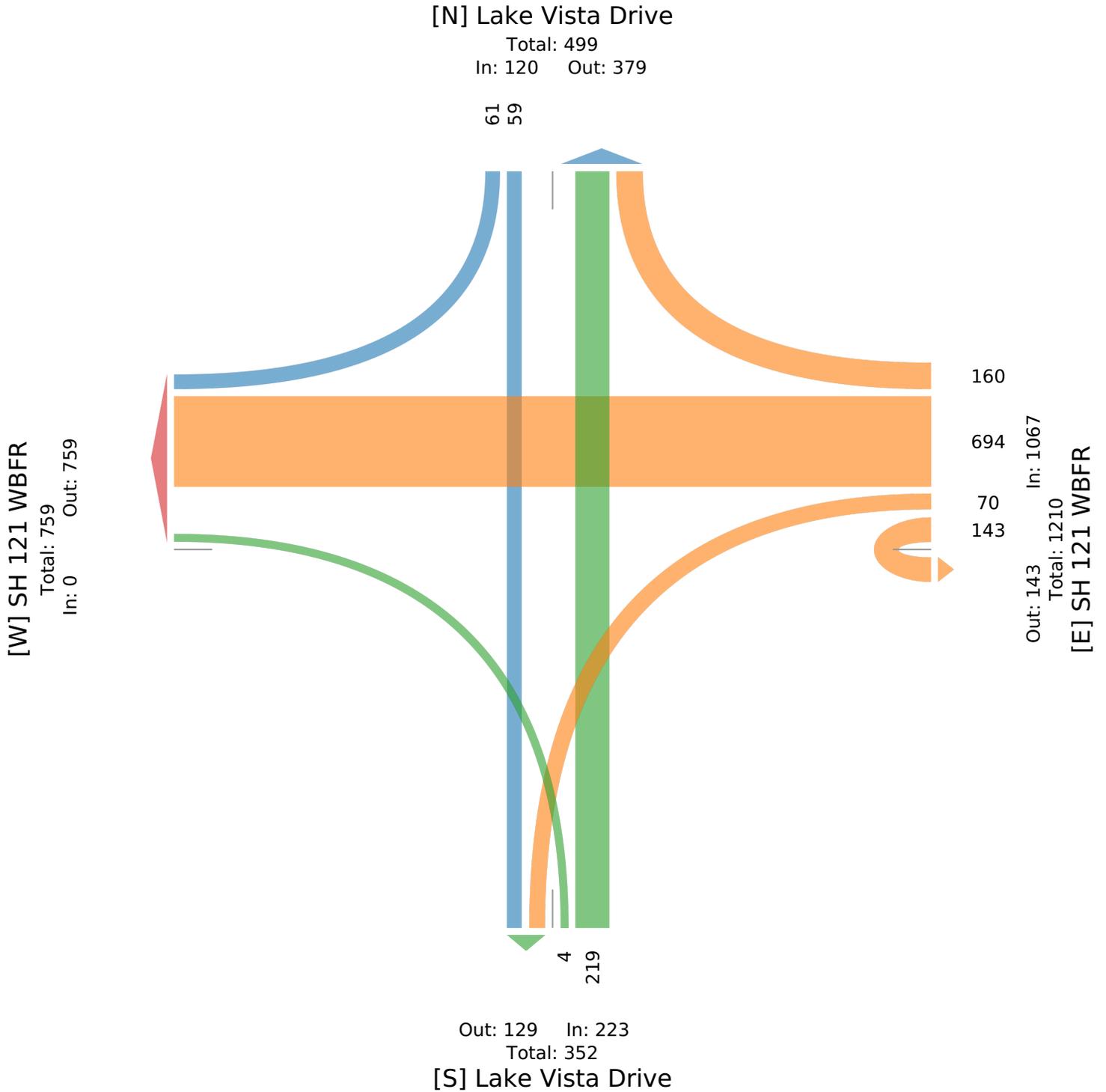
All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US



1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound						SH 121 WBFR Westbound						Lake Vista Drive Northbound						SH 121 WBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2025-05-28 5:00PM	0	17	14	0	31	0	6	228	66	29	329	0	0	61	0	0	61	0	0	0	0	0	0	0	421
5:15PM	0	18	15	0	33	0	8	229	50	31	318	0	4	74	0	0	78	0	0	0	0	0	0	0	429
5:30PM	0	16	21	0	37	0	4	226	66	26	322	0	1	79	0	0	80	0	0	0	0	0	0	0	439
5:45PM	0	22	16	0	38	0	9	236	72	25	342	0	1	74	0	0	75	0	0	0	0	0	0	0	455
<b>Total</b>	0	73	66	0	139	0	27	919	254	111	1311	0	6	288	0	0	294	0	0	0	0	0	0	0	1744
<b>% Approach</b>	0%	52.5%	47.5%	0%	-	-	2.1%	70.1%	19.4%	8.5%	-	-	2.0%	98.0%	0%	0%	-	-	0%	0%	0%	-	-	-	-
<b>% Total</b>	0%	4.2%	3.8%	0%	8.0%	-	1.5%	52.7%	14.6%	6.4%	75.2%	-	0.3%	16.5%	0%	0%	16.9%	-	0%	0%	0%	0%	-	-	-
<b>PHF</b>	-	0.830	0.786	-	0.914	-	0.750	0.974	0.882	0.895	0.958	-	0.375	0.911	-	-	0.919	-	-	-	-	-	-	-	0.958
<b>Lights</b>	0	73	66	0	139	-	27	914	254	111	1306	-	6	288	0	0	294	-	0	0	0	0	-	-	1739
<b>% Lights</b>	0%	100%	100%	0%	100%	-	100%	99.5%	100%	100%	99.6%	-	100%	100%	0%	0%	100%	-	0%	0%	0%	-	-	-	99.7%
<b>Articulated Trucks</b>	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	0	0	0	0	-	-	1
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	-	0%	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	-	0.1%
<b>Buses and Single-Unit Trucks</b>	0	0	0	0	0	-	0	4	0	0	4	-	0	0	0	0	0	-	0	0	0	0	-	-	4
<b>% Buses and Single-Unit Trucks</b>	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	-	0.2%
<b>Pedestrians</b>	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Bicycles on Crosswalk</b>	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
<b>% Bicycles on Crosswalk</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. SH 121 WBFR at Lake Vista Drive - TMC

Wed May 28, 2025

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304010, Location: 32.99589, -96.964893



Provided by: C. J. Hensch & Associates Inc.

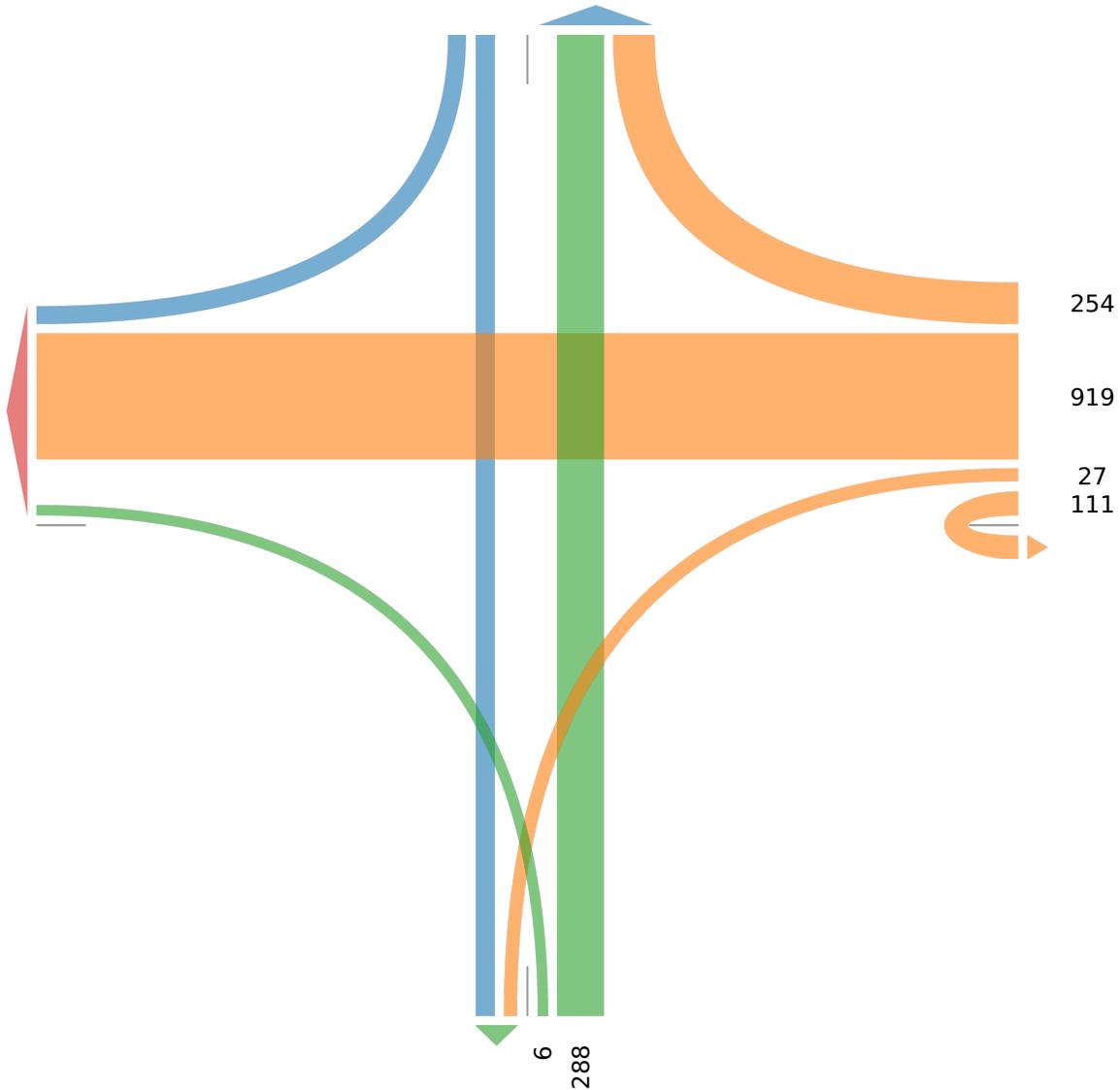
5215 Sycamore Ave.,  
Pasadena, TX, 77503, US

[N] Lake Vista Drive

Total: 681  
In: 139 Out: 542

66  
73

[W] SH 121 WBFR  
Total: 991  
In: 0 Out: 991



Out: 111 In: 1311  
Total: 1422  
[E] SH 121 WBFR

Out: 100 In: 294  
Total: 394  
[S] Lake Vista Drive

2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound						SH 121 EBFR Westbound						Lake Vista Drive Northbound						SH 121 EBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*		
2025-05-28 12:00AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	17	0	1	19	0	22	
12:15AM	4	0	0	0	4	0	0	0	0	0	0	0	0	3	0	3	0	0	24	1	0	25	0	32	
12:30AM	3	0	0	0	3	0	0	0	0	0	0	0	0	1	0	1	0	1	22	1	1	25	0	29	
12:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	15	0	1	16	0	19	
Hourly Total	10	0	0	0	10	0	0	0	0	0	0	0	0	7	0	7	0	2	78	2	3	85	0	102	
1:00AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11	0	15	
1:15AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	2	14	0	0	16	0	20	
1:30AM	2	0	0	0	2	0	0	0	0	0	0	0	0	1	0	1	0	1	16	0	1	18	0	21	
1:45AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	16	0	1	19	0	20	
Hourly Total	11	0	0	0	11	0	0	0	0	0	0	0	0	1	0	1	0	5	57	0	2	64	0	76	
2:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	18	0	0	19	0	19	
2:15AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	6	
2:30AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0	1	8	0	0	9	0	11	
2:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	1	15	0	15	
Hourly Total	0	1	0	1	2	0	0	0	0	0	0	0	0	1	0	1	0	2	45	0	1	48	0	51	
3:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	6	
3:15AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	11	0	12	
3:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	15	0	15	
3:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	17	0	0	22	0	22	
Hourly Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	49	0	0	54	0	55	
4:00AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	9	0	0	10	0	11	
4:15AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20	0	21	
4:30AM	1	1	0	0	2	0	0	0	0	0	0	0	0	2	0	2	0	1	23	1	0	25	0	29	
4:45AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	1	30	0	31	
Hourly Total	4	1	0	0	5	0	0	0	0	0	0	0	0	2	0	2	0	2	81	1	1	85	0	92	
5:00AM	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	1	0	5	46	0	0	51	0	56	
5:15AM	1	2	0	0	3	0	0	0	0	0	0	0	0	1	0	1	0	3	62	0	2	67	0	71	
5:30AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	108	2	1	113	0	116	
5:45AM	2	15	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	3	104	3	0	110	0	127	
Hourly Total	3	24	0	0	27	0	0	0	0	0	0	0	0	2	0	2	0	13	320	5	3	341	0	370	
6:00AM	5	14	0	0	19	0	0	0	0	0	0	0	0	1	0	1	0	6	115	2	2	125	0	145	
6:15AM	1	32	0	0	33	0	0	0	0	0	0	0	0	2	0	2	0	1	99	2	1	103	0	138	
6:30AM	4	29	0	0	33	0	0	0	0	0	0	0	1	2	0	3	0	8	131	3	0	142	0	178	
6:45AM	7	71	0	0	78	0	0	0	0	0	0	0	1	4	0	5	0	10	123	3	3	139	0	222	
Hourly Total	17	146	0	0	163	0	0	0	0	0	0	0	2	9	0	11	0	25	468	10	6	509	0	683	
7:00AM	4	36	0	0	40	0	0	0	0	0	0	0	1	5	0	6	0	8	148	1	1	158	0	204	
7:15AM	2	42	0	0	44	0	0	0	0	0	0	0	3	3	0	6	0	7	153	2	0	162	0	212	
7:30AM	7	65	0	0	72	0	0	0	0	0	0	0	1	9	0	10	0	6	122	2	2	132	0	214	
7:45AM	5	75	0	0	80	0	0	0	0	0	0	0	1	8	0	9	0	11	146	7	2	166	0	255	
Hourly Total	18	218	0	0	236	0	0	0	0	0	0	0	6	25	0	31	0	32	569	12	5	618	0	885	
8:00AM	5	56	0	0	61	0	0	0	0	0	0	0	0	4	0	4	0	14	146	0	1	161	0	226	
8:15AM	9	51	0	0	60	0	0	0	0	0	0	0	2	4	0	6	0	8	127	0	3	138	0	204	
8:30AM	3	56	0	0	59	0	0	0	0	0	0	0	2	5	0	7	0	11	138	7	0	156	0	222	
8:45AM	8	68	0	0	76	0	0	0	0	0	0	0	0	3	0	3	0	16	158	1	1	176	0	255	
Hourly Total	25	231	0	0	256	0	0	0	0	0	0	0	4	16	0	20	0	49	569	8	5	631	0	907	
9:00AM	10	37	0	0	47	0	0	0	0	0	0	0	1	4	0	5	0	8	153	2	7	170	0	222	
9:15AM	6	23	0	0	29	0	0	0	0	0	0	0	3	4	0	7	0	21	143	2	1	167	0	203	
9:30AM	4	11	0	0	15	0	0	0	0	0	0	0	4	10	0	14	0	17	144	3	5	169	0	198	
9:45AM	7	16	0	0	23	0	0	0	0	0	0	0	4	5	0	9	0	28	126	0	5	159	0	191	
Hourly Total	27	87	0	0	114	0	0	0	0	0	0	0	12	23	0	35	0	74	566	7	18	665	0	814	
10:00AM	2	13	0	0	15	0	0	0	0	0	0	0	3	10	0	13	0	25	112	5	5	147	0	175	
10:15AM	5	4	0	0	9	2	0	0	0	0	0	0	5	5	0	10	0	34	136	1	3	174	0	193	

Leg Direction	Lake Vista Drive Southbound						SH 121 EBFR Westbound					Lake Vista Drive Northbound						SH 121 EBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
10:30AM	13	9	0	0	22	1	0	0	0	0	0	0	1	8	0	9	0	25	102	0	6	133	0	164
10:45AM	10	9	0	0	19	0	0	0	0	0	0	0	3	12	0	15	0	38	113	3	1	155	0	189
Hourly Total	30	35	0	0	65	3	0	0	0	0	0	0	12	35	0	47	0	122	463	9	15	609	0	721
11:00AM	11	7	0	0	18	0	0	0	0	0	0	0	4	13	0	17	0	54	107	0	2	163	0	198
11:15AM	9	15	0	0	24	0	0	0	0	0	0	0	3	12	0	15	0	34	108	2	5	149	0	188
11:30AM	14	10	0	0	24	0	0	0	0	0	0	0	9	9	0	18	0	32	131	2	5	170	0	212
11:45AM	11	10	0	0	21	0	0	0	0	0	0	0	9	16	0	25	0	42	126	0	3	171	0	217
Hourly Total	45	42	0	0	87	0	0	0	0	0	0	0	25	50	0	75	0	162	472	4	15	653	0	815
12:00PM	7	18	0	0	25	0	0	0	0	0	0	0	15	22	0	37	0	49	112	3	6	170	0	232
12:15PM	6	16	0	0	22	0	0	0	0	0	0	0	3	16	0	19	0	40	117	1	10	168	0	209
12:30PM	10	21	0	0	31	0	0	0	0	0	0	0	6	8	0	14	0	48	126	1	7	182	0	227
12:45PM	11	21	0	0	32	0	0	0	0	0	0	0	9	10	0	19	0	48	113	1	8	170	0	221
Hourly Total	34	76	0	0	110	0	0	0	0	0	0	0	33	56	0	89	0	185	468	6	31	690	0	889
1:00PM	8	22	0	0	30	0	0	0	0	0	0	0	11	17	0	28	0	47	150	1	3	201	0	259
1:15PM	13	23	0	0	36	0	0	0	0	0	0	0	4	2	0	6	0	46	134	1	5	186	0	228
1:30PM	8	20	0	0	28	0	0	0	0	0	0	0	3	6	0	9	0	35	139	1	8	183	0	220
1:45PM	16	34	0	1	51	0	0	0	0	0	0	0	7	10	0	17	0	39	139	0	5	183	0	251
Hourly Total	45	99	0	1	145	0	0	0	0	0	0	0	25	35	0	60	0	167	562	3	21	753	0	958
2:00PM	11	8	0	0	19	0	0	0	0	0	0	0	9	9	0	18	0	44	137	1	13	195	0	232
2:15PM	13	5	0	0	18	0	0	0	0	0	0	0	5	8	0	13	0	42	169	1	8	220	0	251
2:30PM	11	10	0	0	21	0	0	0	0	0	0	0	1	16	0	17	0	37	179	1	8	225	0	263
2:45PM	19	8	0	0	27	0	0	0	0	0	0	0	3	12	0	15	0	39	202	0	7	248	0	290
Hourly Total	54	31	0	0	85	0	0	0	0	0	0	0	18	45	0	63	0	162	687	3	36	888	0	1036
3:00PM	16	7	0	0	23	0	0	0	0	0	0	0	3	17	0	20	0	36	214	2	4	256	0	299
3:15PM	11	6	0	0	17	0	0	0	0	0	0	0	6	18	0	24	0	46	190	3	3	242	0	283
3:30PM	8	11	0	0	19	0	0	0	0	0	0	0	2	29	0	31	0	45	234	2	4	285	0	335
3:45PM	14	7	0	0	21	0	0	0	0	0	0	0	6	23	0	29	0	42	193	0	5	240	0	290
Hourly Total	49	31	0	0	80	0	0	0	0	0	0	0	17	87	0	104	0	169	831	7	16	1023	0	1207
4:00PM	15	2	0	0	17	0	0	0	0	0	0	0	6	84	0	90	0	60	263	0	4	327	0	434
4:15PM	14	4	0	0	18	0	0	0	0	0	0	0	6	44	0	50	0	39	243	2	6	290	0	358
4:30PM	13	9	0	0	22	0	0	0	0	0	0	0	2	62	0	64	0	39	263	0	5	307	0	393
4:45PM	13	8	0	0	21	0	0	0	0	0	0	0	10	41	0	51	0	50	301	1	6	358	0	430
Hourly Total	55	23	0	0	78	0	0	0	0	0	0	0	24	231	0	255	0	188	1070	3	21	1282	0	1615
5:00PM	17	8	0	0	25	0	0	0	0	0	0	0	4	69	0	73	0	56	250	3	2	311	0	409
5:15PM	16	7	0	0	23	0	0	0	0	0	0	0	12	39	0	51	0	67	285	1	14	367	0	441
5:30PM	15	4	0	0	19	0	0	0	0	0	0	0	7	37	0	44	0	75	265	2	14	356	1	419
5:45PM	20	9	0	1	30	0	0	0	0	0	0	0	7	25	0	32	0	66	264	1	7	338	0	400
Hourly Total	68	28	0	1	97	0	0	0	0	0	0	0	30	170	0	200	0	264	1064	7	37	1372	1	1669
6:00PM	26	5	0	0	31	0	0	0	0	0	0	0	4	27	0	31	0	89	241	0	12	342	0	404
6:15PM	18	3	0	0	21	0	0	0	0	0	0	0	0	25	0	25	0	68	230	0	12	310	0	356
6:30PM	20	1	0	0	21	0	0	0	0	0	0	0	4	6	0	10	0	68	199	0	13	280	0	311
6:45PM	16	4	0	0	20	0	0	0	0	0	0	0	4	6	0	10	0	65	216	1	6	288	0	318
Hourly Total	80	13	0	0	93	0	0	0	0	0	0	0	12	64	0	76	0	290	886	1	43	1220	0	1389
7:00PM	13	11	0	0	24	0	0	0	0	0	0	0	3	13	0	16	0	59	170	2	5	236	1	276
7:15PM	14	3	0	0	17	0	0	0	0	0	0	0	1	14	0	15	0	59	184	0	8	251	0	283
7:30PM	7	6	0	0	13	0	0	0	0	0	0	0	20	5	0	25	0	65	114	3	15	197	0	235
7:45PM	8	4	0	0	12	0	0	0	0	0	0	0	26	5	0	31	0	60	97	3	10	170	1	213
Hourly Total	42	24	0	0	66	0	0	0	0	0	0	0	50	37	0	87	0	243	565	8	38	854	2	1007
8:00PM	12	2	0	0	14	0	0	0	0	0	0	0	17	6	0	23	0	43	108	4	6	161	0	198
8:15PM	10	3	0	0	13	0	0	0	0	0	0	0	1	10	0	11	0	20	104	0	2	126	2	150
8:30PM	11	2	0	0	13	0	0	0	0	0	0	0	4	2	0	6	0	11	130	0	4	145	0	164
8:45PM	10	4	0	0	14	0	0	0	0	0	0	0	1	6	0	7	0	12	127	2	5	146	0	167
Hourly Total	43	11	0	0	54	0	0	0	0	0	0	0	23	24	0	47	0	86	469	6	17	578	2	679
9:00PM	9	1	0	0	10	0	0	0	0	0	0	0	0	3	0	3	0	4	96	1	1	102	0	115
9:15PM	6	1	0	0	7	0	0	0	0	0	0	0	0	1	0	1	0	8	85	0	2	95	1	103
9:30PM	8	0	0	0	8	0	0	0	0	0	0	0	0	2	0	2	0	9	72	0	2	83	0	93
9:45PM	9	0	0	0	9	0	0	0	0	0	0	0	0	3	0	3	0	4	75	1	2	82	0	94
Hourly Total	32	2	0	0	34	0	0	0	0	0	0	0	0	9	0	9	0	25	328	2	7	362	1	405
10:00PM	9	1	0	0	10	0	0	0	0	0	0	0	0	1	0	1	0	10	81	1	2	94	0	105
10:15PM	4	0	0	0	4	0	0	0	0	0	0	0	1	0	0	1	0	5	93	0	2	100	0	105

Leg Direction	Lake Vista Drive Southbound						SH 121 EBFR Westbound						Lake Vista Drive Northbound						SH 121 EBFR Eastbound						
Time	L	T	R	U	App	Ped*	L	T	R	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int	
10:30PM	11	0	0	0	11	0	0	0	0	0	0	0	1	0	0	1	0	6	77	1	0	84	0	96	
10:45PM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	2	76	1	1	80	0	82	
Hourly Total	25	1	0	0	26	0	0	0	0	0	0	0	3	1	0	4	0	23	327	3	5	358	0	388	
11:00PM	7	0	0	0	7	0	0	0	0	0	0	0	0	1	0	1	0	3	57	0	1	61	0	69	
11:15PM	6	2	0	0	8	0	0	0	0	0	0	0	0	1	0	1	0	2	69	0	0	71	0	80	
11:30PM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	50	0	1	52	0	58	
11:45PM	4	0	0	0	4	0	0	0	0	0	0	0	0	1	0	1	0	2	29	1	0	32	0	37	
Hourly Total	23	2	0	0	25	0	0	0	0	0	0	0	0	3	0	3	0	8	205	1	2	216	0	244	
<b>Total</b>	741	1126	0	3	1870	3	0	0	0	0	0	0	296	933	0	1229	0	2303	11199	108	348	13958	6	17057	
<b>% Approach</b>	39.6%	60.2%	0%	0.2%	-	-	0%	0%	0%	-	-	0%	24.1%	75.9%	0%	-	-	16.5%	80.2%	0.8%	2.5%	-	-	-	
<b>% Total</b>	4.3%	6.6%	0%	0%	11.0%	-	0%	0%	0%	0%	-	0%	1.7%	5.5%	0%	7.2%	-	13.5%	65.7%	0.6%	2.0%	81.8%	-	-	
<b>Lights</b>	731	1116	0	3	1850	-	0	0	0	0	-	0	289	920	0	1209	-	2286	10980	104	342	13712	-	16771	
<b>% Lights</b>	98.7%	99.1%	0%	100%	98.9%	-	0%	0%	0%	-	-	0%	97.6%	98.6%	0%	98.4%	-	99.3%	98.0%	96.3%	98.3%	98.2%	-	98.3%	
<b>Articulated Trucks</b>	3	0	0	0	3	-	0	0	0	0	-	0	1	1	0	2	-	8	83	0	2	93	-	98	
<b>% Articulated Trucks</b>	0.4%	0%	0%	0%	0.2%	-	0%	0%	0%	-	-	0%	0.3%	0.1%	0%	0.2%	-	0.3%	0.7%	0%	0.6%	0.7%	-	0.6%	
<b>Buses and Single-Unit Trucks</b>	7	10	0	0	17	-	0	0	0	0	-	0	6	12	0	18	-	9	136	4	4	153	-	188	
<b>% Buses and Single-Unit Trucks</b>	0.9%	0.9%	0%	0%	0.9%	-	0%	0%	0%	-	-	0%	2.0%	1.3%	0%	1.5%	-	0.4%	1.2%	3.7%	1.1%	1.1%	-	1.1%	
Pedestrians	-	-	-	-	-	3	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83.3%	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.7%	-	

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

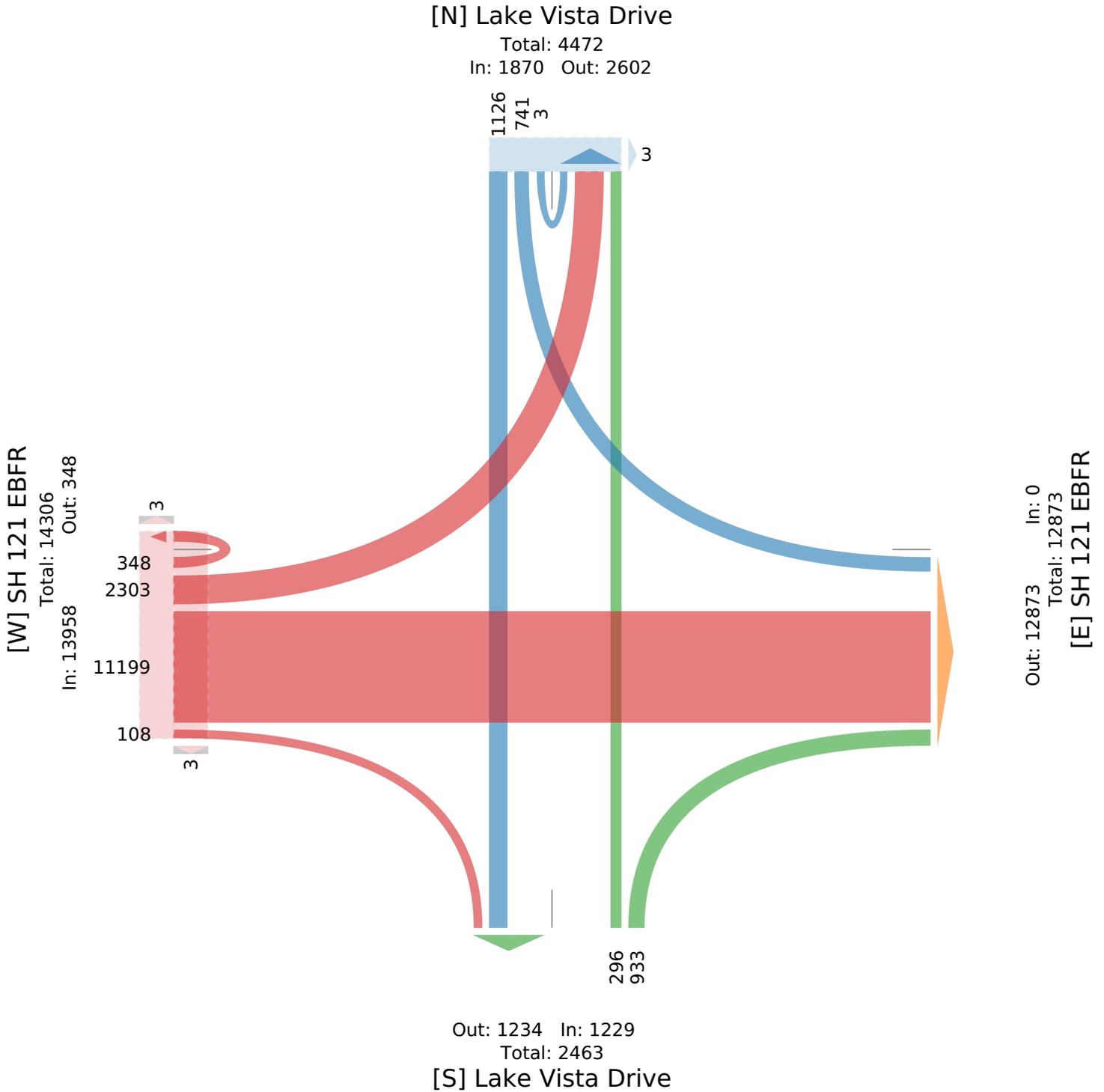
All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US



2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound					SH 121 EBFR Westbound					Lake Vista Drive Northbound					SH 121 EBFR Eastbound									
Time	L	T	R	U	App	Ped*	L	T	R	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int	
2025-05-28 7:15AM	2	42	0	0	44	0	0	0	0	0	0	0	3	3	0	6	0	7	153	2	0	162	0	212	
7:30AM	7	65	0	0	72	0	0	0	0	0	0	0	1	9	0	10	0	6	122	2	2	132	0	214	
7:45AM	5	75	0	0	80	0	0	0	0	0	0	0	1	8	0	9	0	11	146	7	2	166	0	255	
8:00AM	5	56	0	0	61	0	0	0	0	0	0	0	0	4	0	4	0	14	146	0	1	161	0	226	
<b>Total</b>	19	238	0	0	257	0	0	0	0	0	0	0	5	24	0	29	0	38	567	11	5	621	0	907	
<b>% Approach</b>	7.4%	92.6%	0%	0%	-	-	0%	0%	0%	-	-	0%	17.2%	82.8%	0%	-	-	6.1%	91.3%	1.8%	0.8%	-	-	-	
<b>% Total</b>	2.1%	26.2%	0%	0%	28.3%	-	0%	0%	0%	0%	-	0%	0.6%	2.6%	0%	3.2%	-	4.2%	62.5%	1.2%	0.6%	68.5%	-	-	
<b>PHF</b>	0.679	0.793	-	-	0.803	-	-	-	-	-	-	-	0.417	0.667	-	0.725	-	0.679	0.926	0.393	0.625	0.935	-	0.889	
<b>Lights</b>	18	238	0	0	256	-	0	0	0	0	-	0	5	24	0	29	-	38	553	11	5	607	-	892	
<b>% Lights</b>	94.7%	100%	0%	0%	99.6%	-	0%	0%	0%	-	-	0%	100%	100%	0%	100%	-	100%	97.5%	100%	100%	97.7%	-	98.3%	
<b>Articulated Trucks</b>	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	2	0	0	2	-	2	
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	0%	0%	0%	0%	0%	-	0%	0.4%	0%	0%	0.3%	-	0.2%	
<b>Buses and Single-Unit Trucks</b>	1	0	0	0	1	-	0	0	0	0	-	0	0	0	0	0	-	0	12	0	0	12	-	13	
<b>% Buses and Single-Unit Trucks</b>	5.3%	0%	0%	0%	0.4%	-	0%	0%	0%	-	-	0%	0%	0%	0%	0%	-	0%	2.1%	0%	0%	1.9%	-	1.4%	
Pedestrians	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

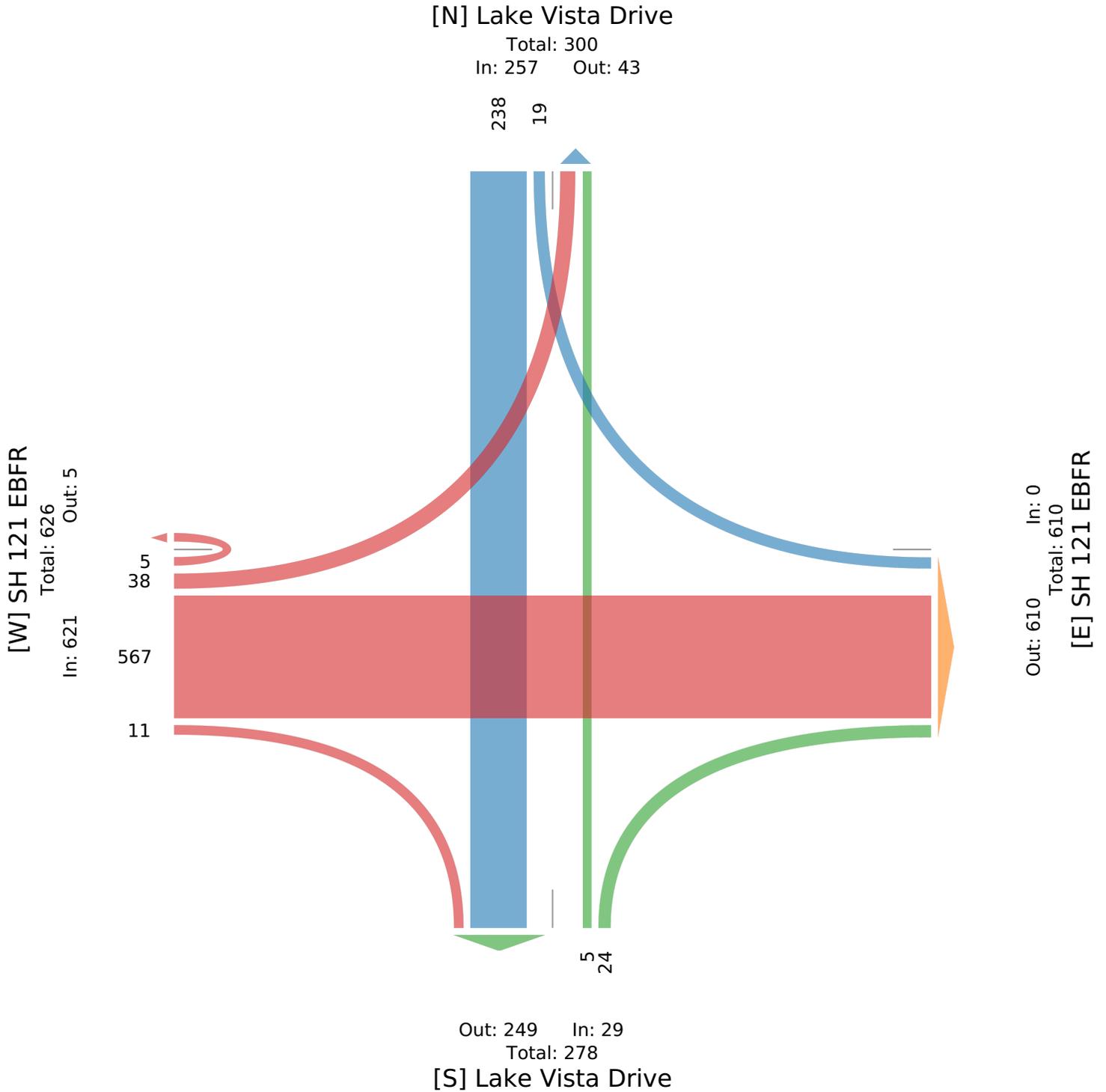
All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US



2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Midday Peak (1 PM - 2 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound						SH 121 EBFR Westbound						Lake Vista Drive Northbound						SH 121 EBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2025-05-28 1:00PM	8	22	0	0	30	0	0	0	0	0	0	0	0	11	17	0	28	0	47	150	1	3	201	0	259
1:15PM	13	23	0	0	36	0	0	0	0	0	0	0	0	4	2	0	6	0	46	134	1	5	186	0	228
1:30PM	8	20	0	0	28	0	0	0	0	0	0	0	0	3	6	0	9	0	35	139	1	8	183	0	220
1:45PM	16	34	0	1	51	0	0	0	0	0	0	0	0	7	10	0	17	0	39	139	0	5	183	0	251
<b>Total</b>	45	99	0	1	145	0	0	0	0	0	0	0	0	25	35	0	60	0	167	562	3	21	753	0	958
<b>% Approach</b>	31.0%	68.3%	0%	0.7%	-	-	0%	0%	0%	-	-	-	0%	41.7%	58.3%	0%	-	-	22.2%	74.6%	0.4%	2.8%	-	-	-
<b>% Total</b>	4.7%	10.3%	0%	0.1%	15.1%	-	0%	0%	0%	0%	-	-	0%	2.6%	3.7%	0%	6.3%	-	17.4%	58.7%	0.3%	2.2%	78.6%	-	-
<b>PHF</b>	0.703	0.728	-	0.250	0.711	-	-	-	-	-	-	-	-	0.568	0.515	-	0.536	-	0.888	0.937	0.750	0.656	0.937	-	0.925
<b>Lights</b>	44	98	0	1	143	-	0	0	0	0	-	-	0	25	34	0	59	-	167	547	3	21	738	-	940
<b>% Lights</b>	97.8%	99.0%	0%	100%	98.6%	-	0%	0%	0%	-	-	-	0%	100%	97.1%	0%	98.3%	-	100%	97.3%	100%	100%	98.0%	-	98.1%
<b>Articulated Trucks</b>	0	0	0	0	0	-	0	0	0	0	-	-	0	0	0	0	0	-	0	4	0	0	4	-	4
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	-	0%	0%	0%	0%	0%	-	0%	0.7%	0%	0%	0.5%	-	0.4%
<b>Buses and Single-Unit Trucks</b>	1	1	0	0	2	-	0	0	0	0	-	-	0	0	1	0	1	-	0	11	0	0	11	-	14
<b>% Buses and Single-Unit Trucks</b>	2.2%	1.0%	0%	0%	1.4%	-	0%	0%	0%	-	-	-	0%	0%	2.9%	0%	1.7%	-	0%	2.0%	0%	0%	1.5%	-	1.5%
<b>Pedestrians</b>	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0
<b>% Pedestrians</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Bicycles on Crosswalk</b>	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0
<b>% Bicycles on Crosswalk</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

Midday Peak (1 PM - 2 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave.,  
Pasadena, TX, 77503, US

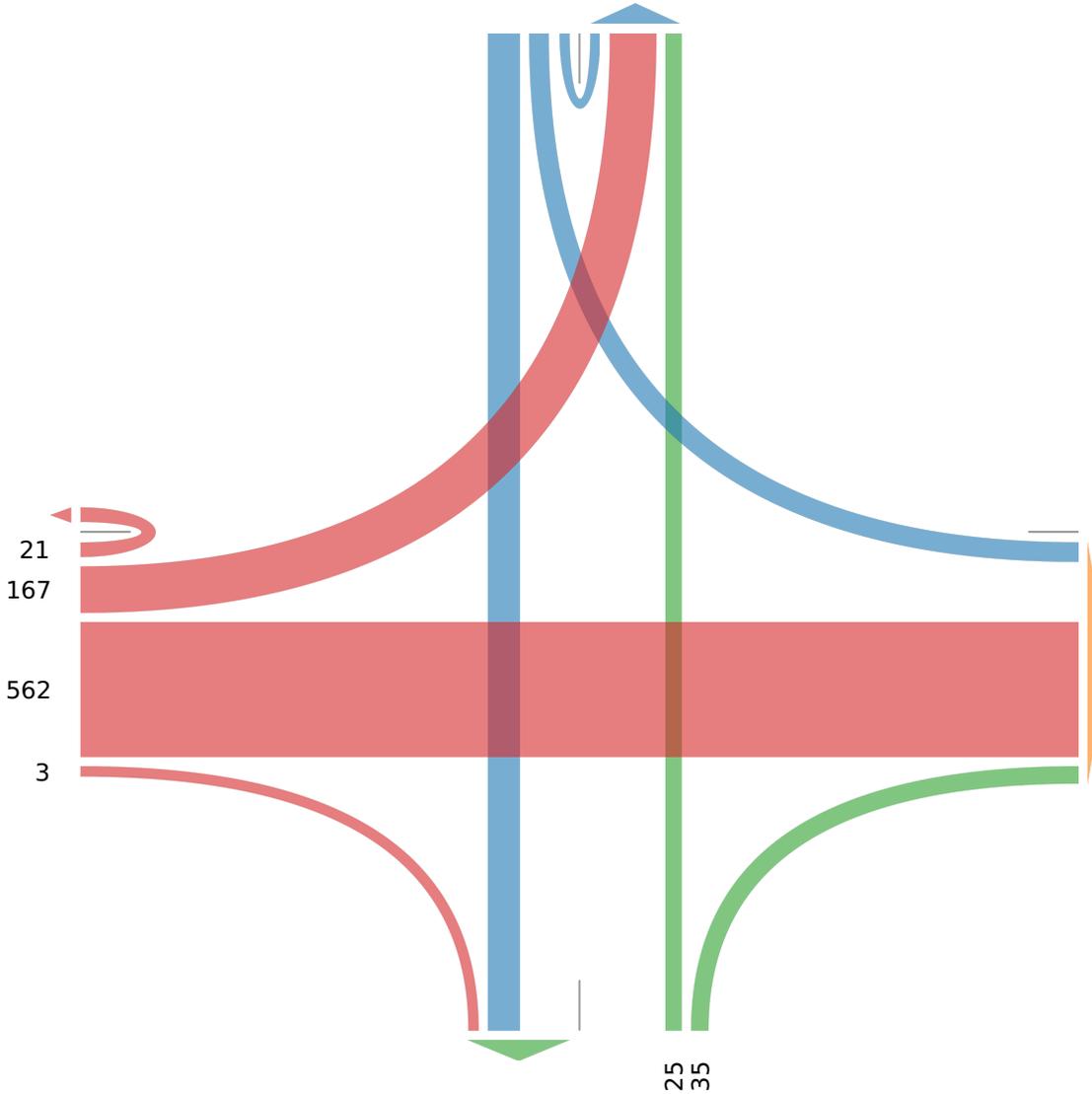
[N] Lake Vista Drive

Total: 338  
In: 145 Out: 193

99 45 1

[W] SH 121 EBFR

Total: 774  
In: 753 Out: 21



Out: 642 In: 0  
Total: 642  
[E] SH 121 EBFR

Out: 102 In: 60  
Total: 162  
[S] Lake Vista Drive

2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lake Vista Drive Southbound						SH 121 EBFR Westbound						Lake Vista Drive Northbound						SH 121 EBFR Eastbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2025-05-28 4:45PM	13	8	0	0	21	0	0	0	0	0	0	0	0	10	41	0	51	0	50	301	1	6	358	0	430
5:00PM	17	8	0	0	25	0	0	0	0	0	0	0	0	4	69	0	73	0	56	250	3	2	311	0	409
5:15PM	16	7	0	0	23	0	0	0	0	0	0	0	0	12	39	0	51	0	67	285	1	14	367	0	441
5:30PM	15	4	0	0	19	0	0	0	0	0	0	0	0	7	37	0	44	0	75	265	2	14	356	1	419
<b>Total</b>	61	27	0	0	88	0	0	0	0	0	0	0	0	33	186	0	219	0	248	1101	7	36	1392	1	1699
<b>% Approach</b>	69.3%	30.7%	0%	0%	-	-	0%	0%	0%	-	-	0%	15.1%	84.9%	0%	-	-	17.8%	79.1%	0.5%	2.6%	-	-	-	
<b>% Total</b>	3.6%	1.6%	0%	0%	5.2%	-	0%	0%	0%	0%	-	0%	1.9%	10.9%	0%	12.9%	-	14.6%	64.8%	0.4%	2.1%	81.9%	-	-	
<b>PHF</b>	0.897	0.844	-	-	0.880	-	-	-	-	-	-	-	0.688	0.674	-	0.750	-	0.827	0.914	0.583	0.643	0.948	-	0.963	
<b>Lights</b>	61	27	0	0	88	-	0	0	0	0	-	0	33	186	0	219	-	248	1090	7	36	1381	-	1688	
<b>% Lights</b>	100%	100%	0%	0%	100%	-	0%	0%	0%	-	-	0%	100%	100%	0%	100%	-	100%	99.0%	100%	100%	99.2%	-	99.4%	
<b>Articulated Trucks</b>	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	3	0	0	3	-	3	
<b>% Articulated Trucks</b>	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.2%	-	0.2%	
<b>Buses and Single-Unit Trucks</b>	0	0	0	0	0	-	0	0	0	0	-	0	0	0	0	0	-	0	8	0	0	8	-	8	
<b>% Buses and Single-Unit Trucks</b>	0%	0%	0%	0%	0%	-	0%	0%	0%	-	-	0%	0%	0%	0%	0%	-	0%	0.7%	0%	0%	0.6%	-	0.5%	
Pedestrians	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	

\* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. SH 121 EBFR at Lake Vista Drive - TMC

Wed May 28, 2025

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1304011, Location: 32.995314, -96.964236



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave.,  
Pasadena, TX, 77503, US

[N] Lake Vista Drive

Total: 369

In: 88 Out: 281

27  
61

[W] SH 121 EBFR

Total: 1428  
In: 1392 Out: 36

36  
248

1101

7

Out: 1348 In: 0

Total: 1348

[E] SH 121 EBFR

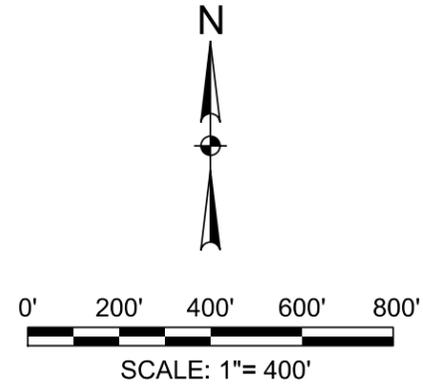
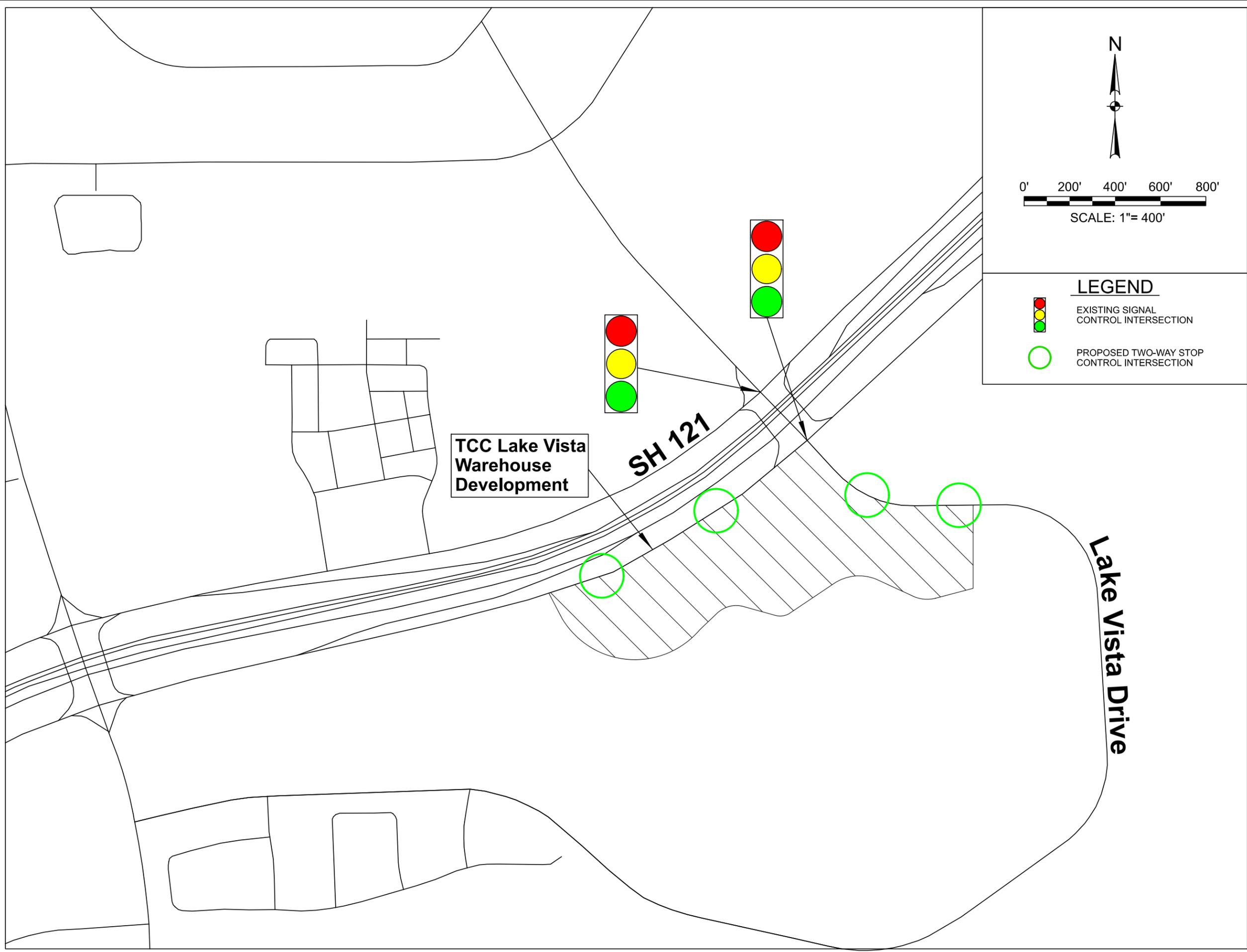
Out: 34 In: 219  
Total: 253

[S] Lake Vista Drive

33  
186

# Appendix C

## Turning Movement Traffic Volume Exhibits



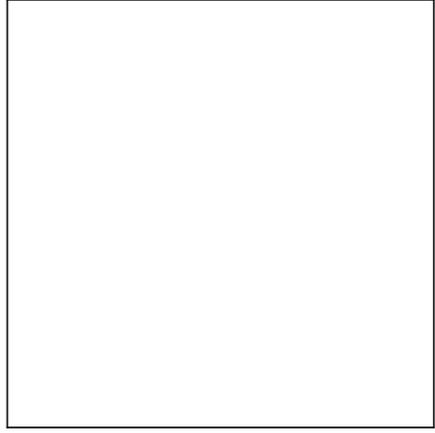
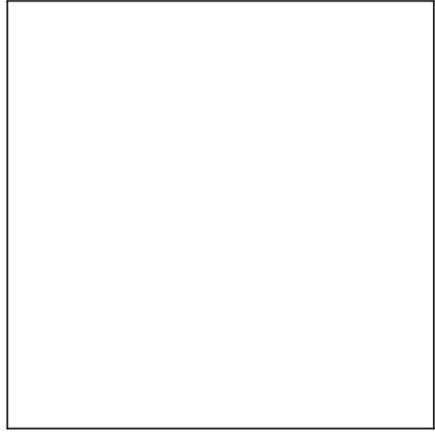
**LEGEND**

-  EXISTING SIGNAL CONTROL INTERSECTION
-  PROPOSED TWO-WAY STOP CONTROL INTERSECTION



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RICHARDSON, TX 75081-2275  
(214) 346-6600

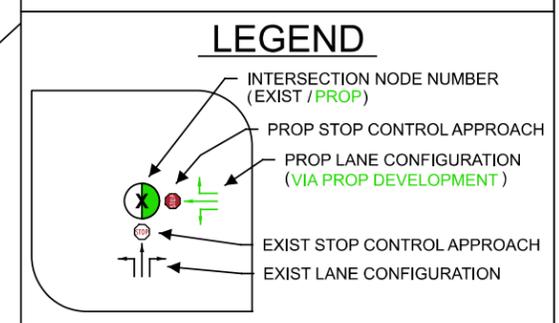
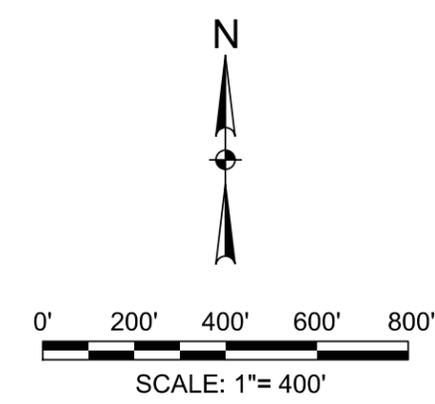
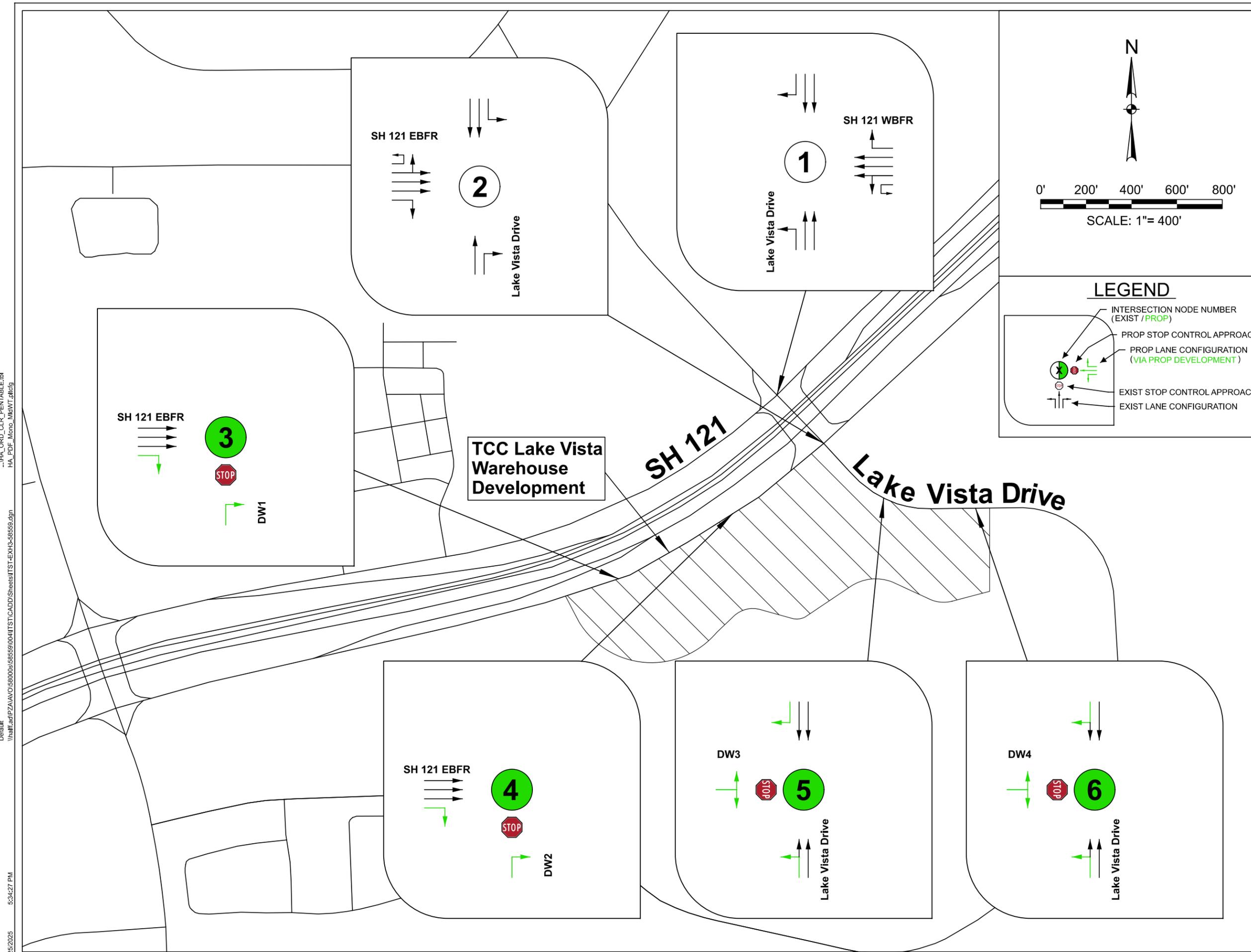
**TCC LAKE VISTA  
WAREHOUSE DEVELOPMENT  
LEWISVILLE, TEXAS**



Project No.:	58559
Issued:	6/23/2025
Drawn By:	JT
Checked By:	SM
Scale:	1" = 400'

Sheet Title  
**EXISTING & PROPOSED  
STUDY INTERSECTIONS**

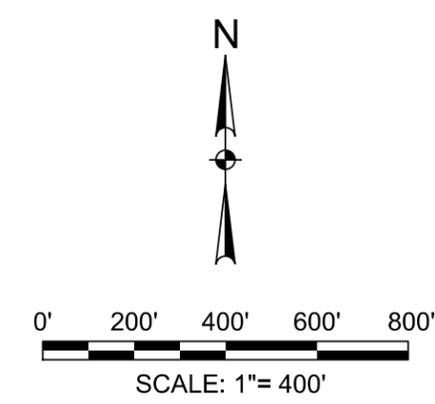
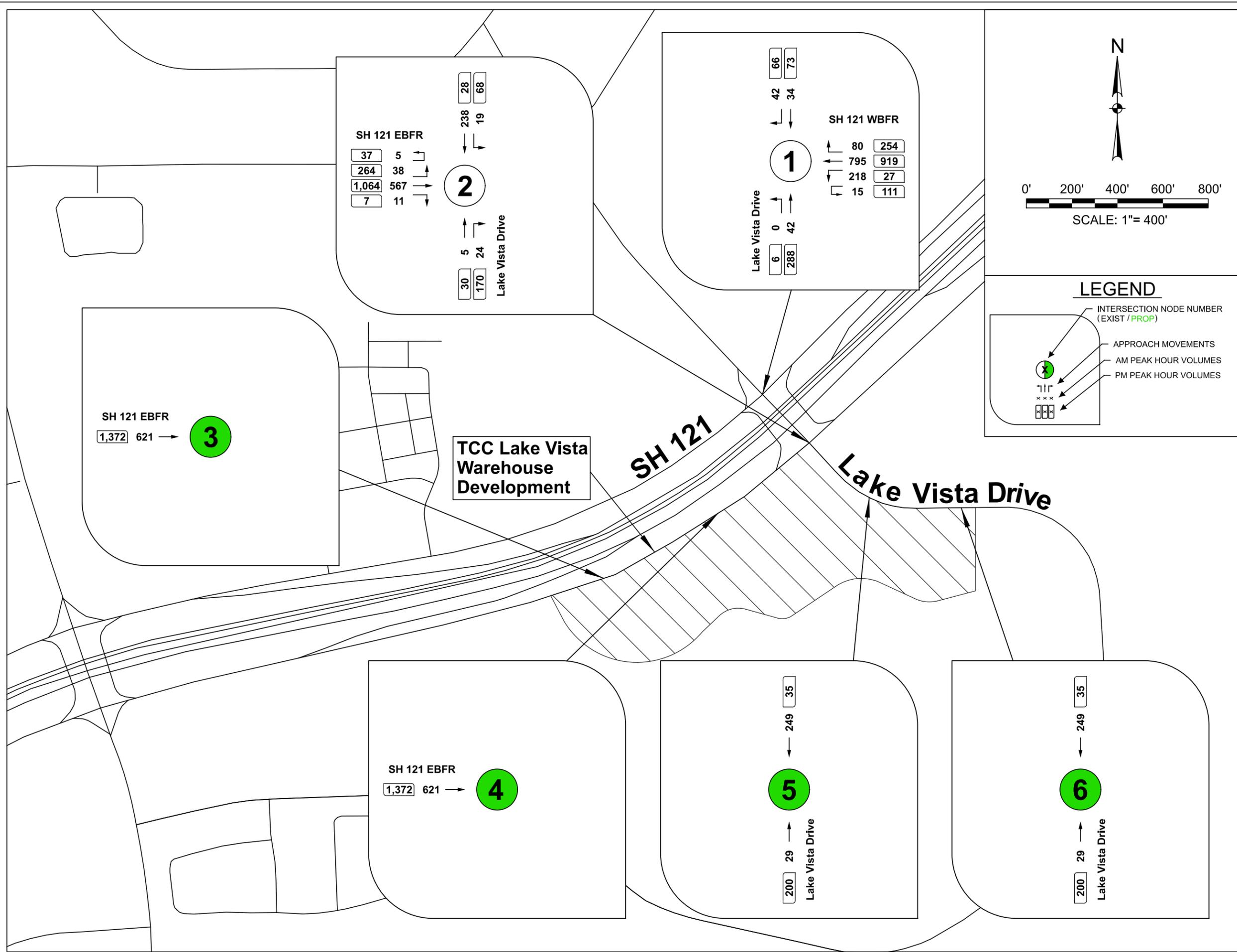
**EXHIBIT 2**  
Sheet Number



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 LEWISVILLE, TEXAS**

Project No.:	58559
Issued:	6/23/2025
Drawn By:	JT
Checked By:	SM
Scale:	1" = 400'
Sheet Title EXISTING & PROPOSED LANE ASSIGNMENTS & TRAFFIC CONTROL	
<b>EXHIBIT 3</b>	
Sheet Number	



**LEGEND**

- INTERSECTION NODE NUMBER (EXIST / PROP)
- APPROACH MOVEMENTS
- AM PEAK HOUR VOLUMES
- PM PEAK HOUR VOLUMES

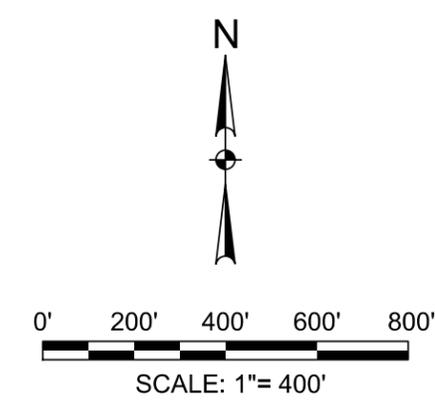
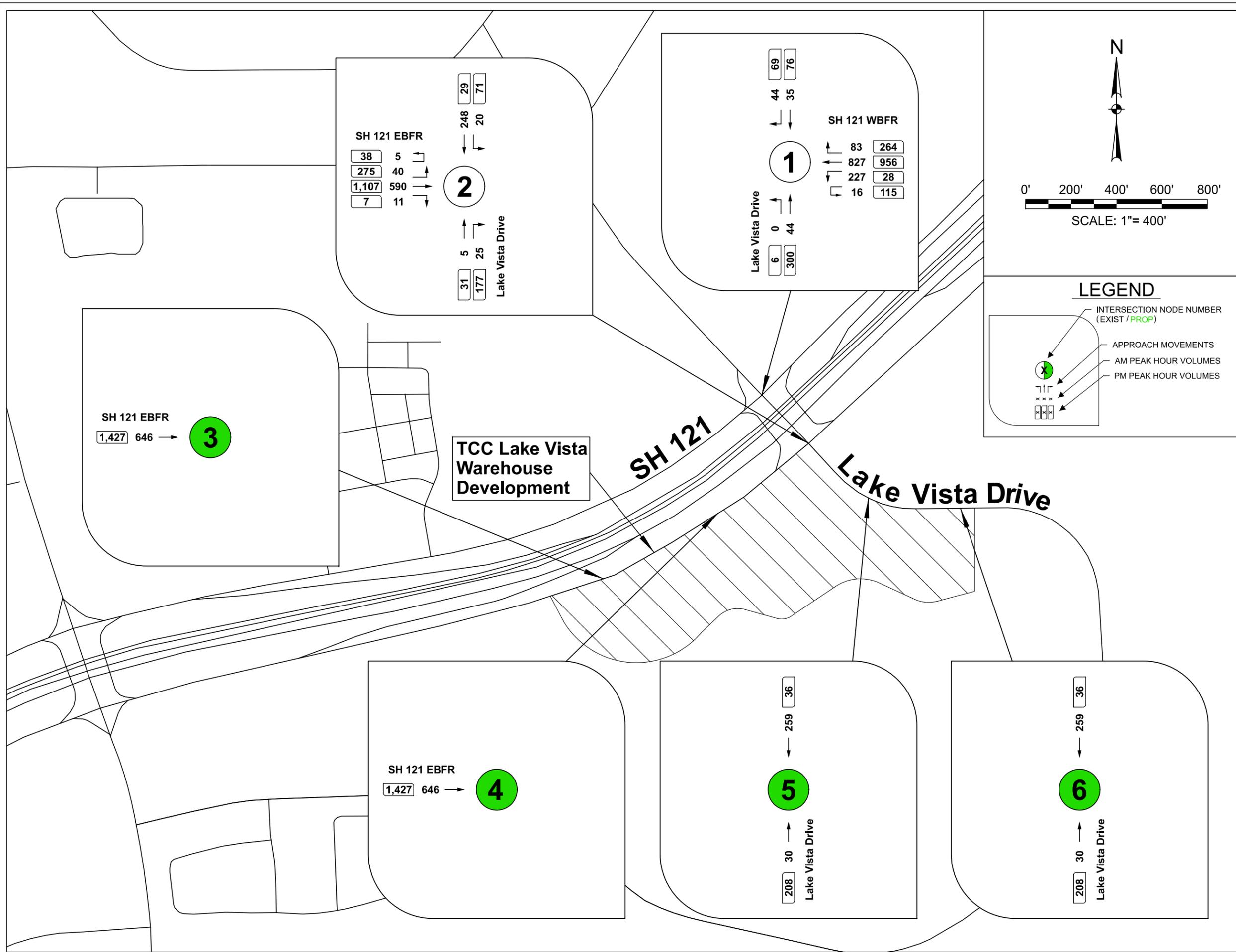
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 WAREHOUSE DEVELOPMENT  
 LEWISVILLE, TEXAS**

Project No.: 58559  
 Issued: 6/23/2025  
 Drawn By: JT  
 Checked By: SM  
 Scale: 1" = 400'

Sheet Title  
 2025 EXISTING  
 VOLUMES

**EXHIBIT 4**  
 Sheet Number



**LEGEND**

- INTERSECTION NODE NUMBER (EXIST / PROP)
- APPROACH MOVEMENTS
- AM PEAK HOUR VOLUMES
- PM PEAK HOUR VOLUMES

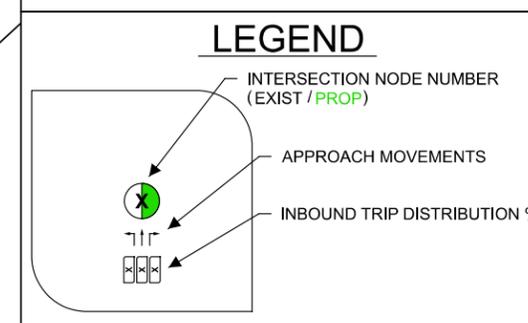
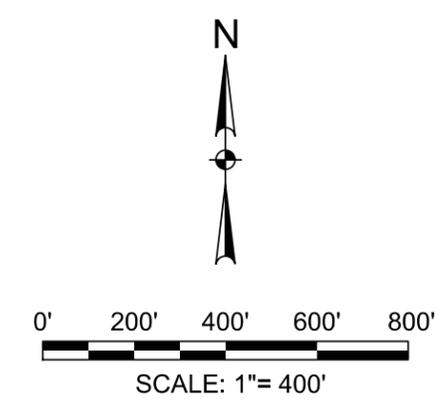
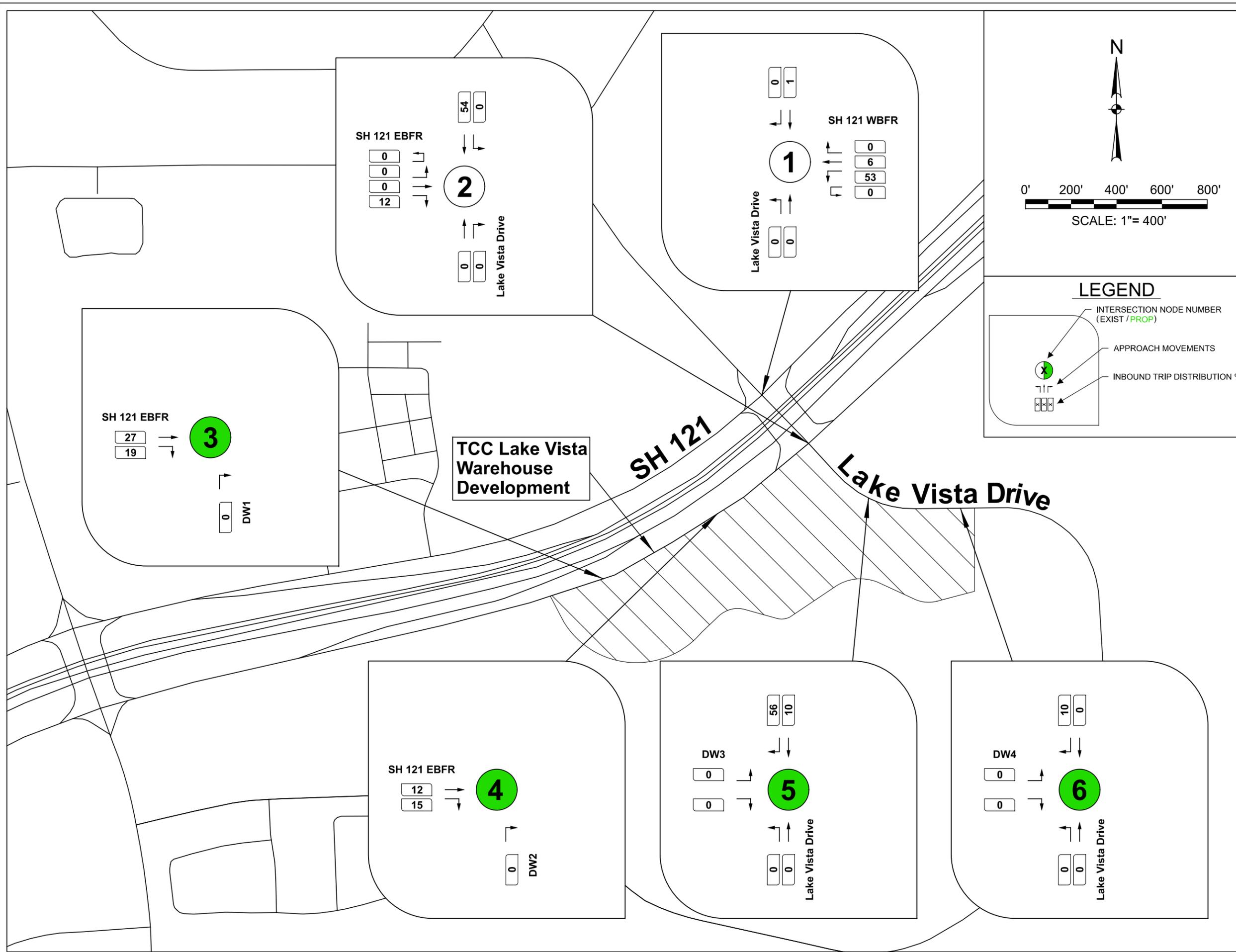
1201 NORTH BOWSER ROAD  
 RICHARDSON, TX 75081-2275  
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 WAREHOUSE DEVELOPMENT  
 LEWISVILLE, TEXAS**

Project No.: 58559  
 Issued: 6/23/2025  
 Drawn By: JT  
 Checked By: SM  
 Scale: 1" = 400'

Sheet Title  
 2027 NO BUILD  
 VOLUMES

**EXHIBIT 5**  
 Sheet Number



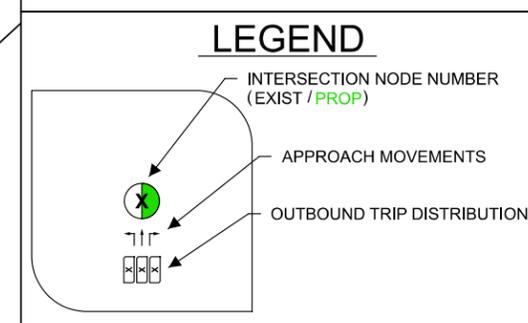
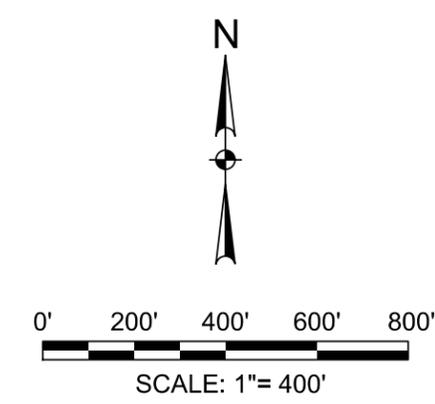
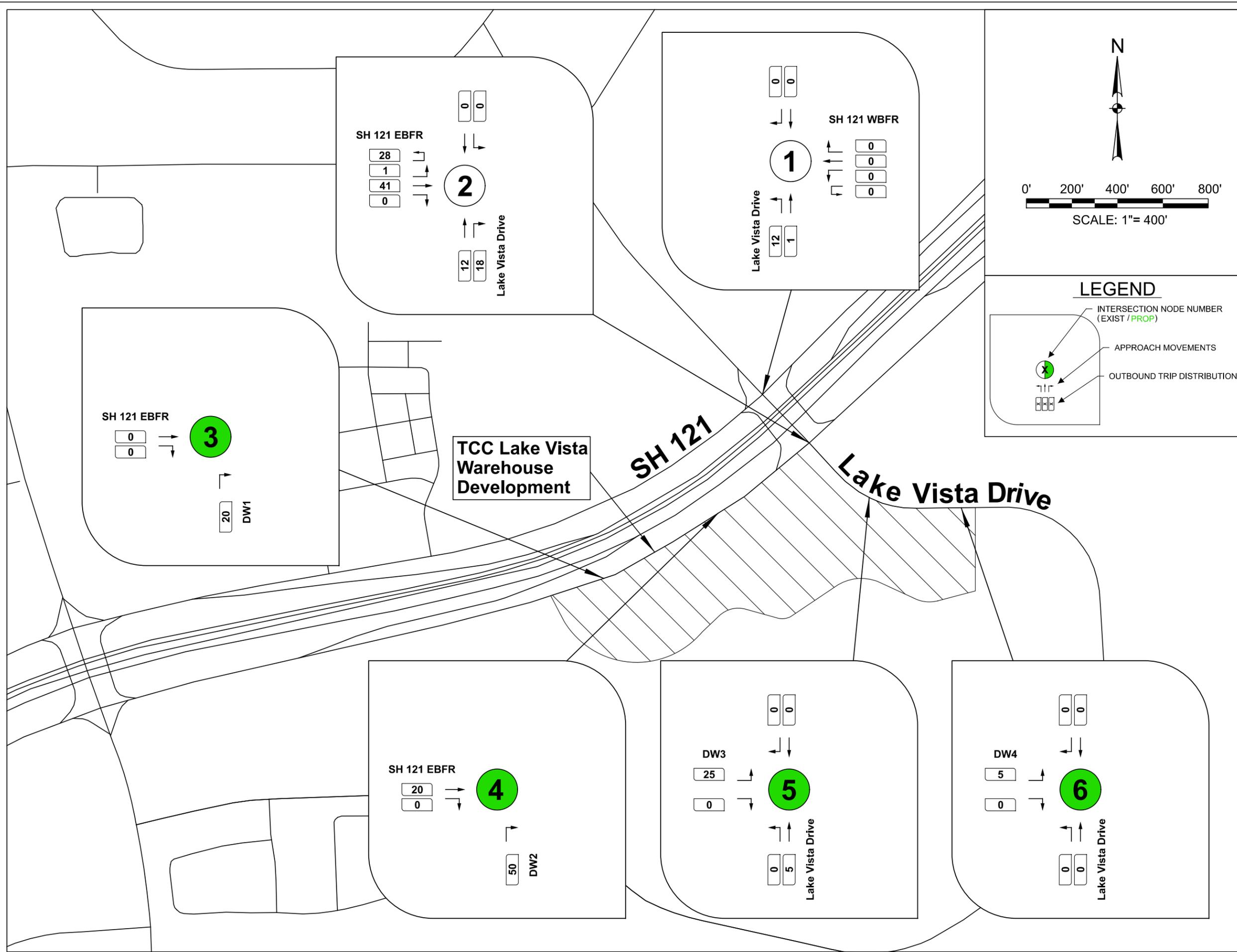
1201 NORTH BOWSER ROAD  
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**TCC LAKE VISTA  
 WAREHOUSE DEVELOPMENT  
 LEWISVILLE, TEXAS**

Project No.: 58559  
 Issued: 6/23/2025  
 Drawn By: JT  
 Checked By: SM  
 Scale: 1" = 400'

Sheet Title  
**INBOUND TRIP  
 DISTRIBUTION % -  
 TCC LAKE VISTA**

**EXHIBIT 6**  
 Sheet Number



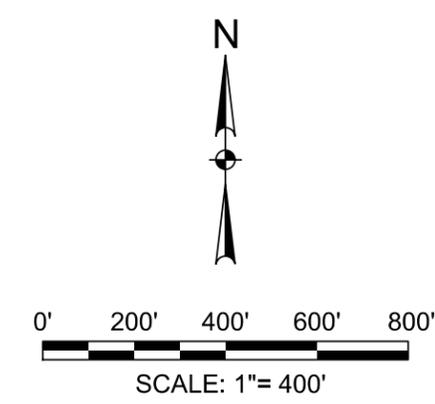
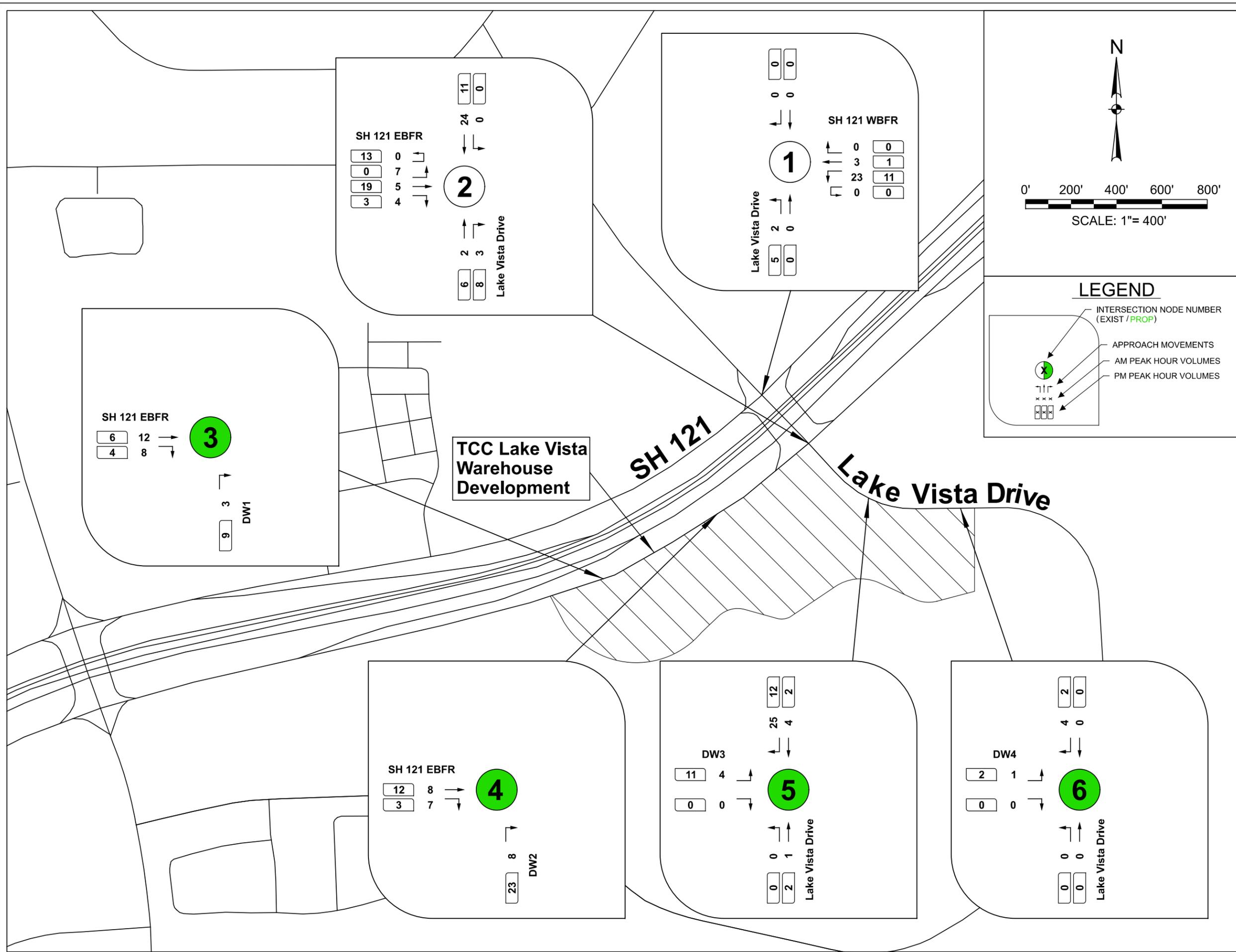
1201 NORTH BOWSER ROAD  
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**TCC LAKE VISTA  
 WAREHOUSE DEVELOPMENT  
 LEWISVILLE, TEXAS**

Project No.: 58559  
 Issued: 6/23/2025  
 Drawn By: JT  
 Checked By: SM  
 Scale: 1" = 400'

Sheet Title  
 OUTBOUND TRIP  
 DISTRIBUTION % -  
 TCC LAKE VISTA

**EXHIBIT 7**  
 Sheet Number



**LEGEND**

- INTERSECTION NODE NUMBER (EXIST / PROP)
- APPROACH MOVEMENTS
- AM PEAK HOUR VOLUMES
- PM PEAK HOUR VOLUMES

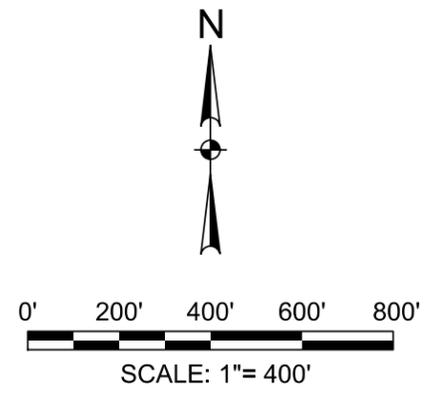
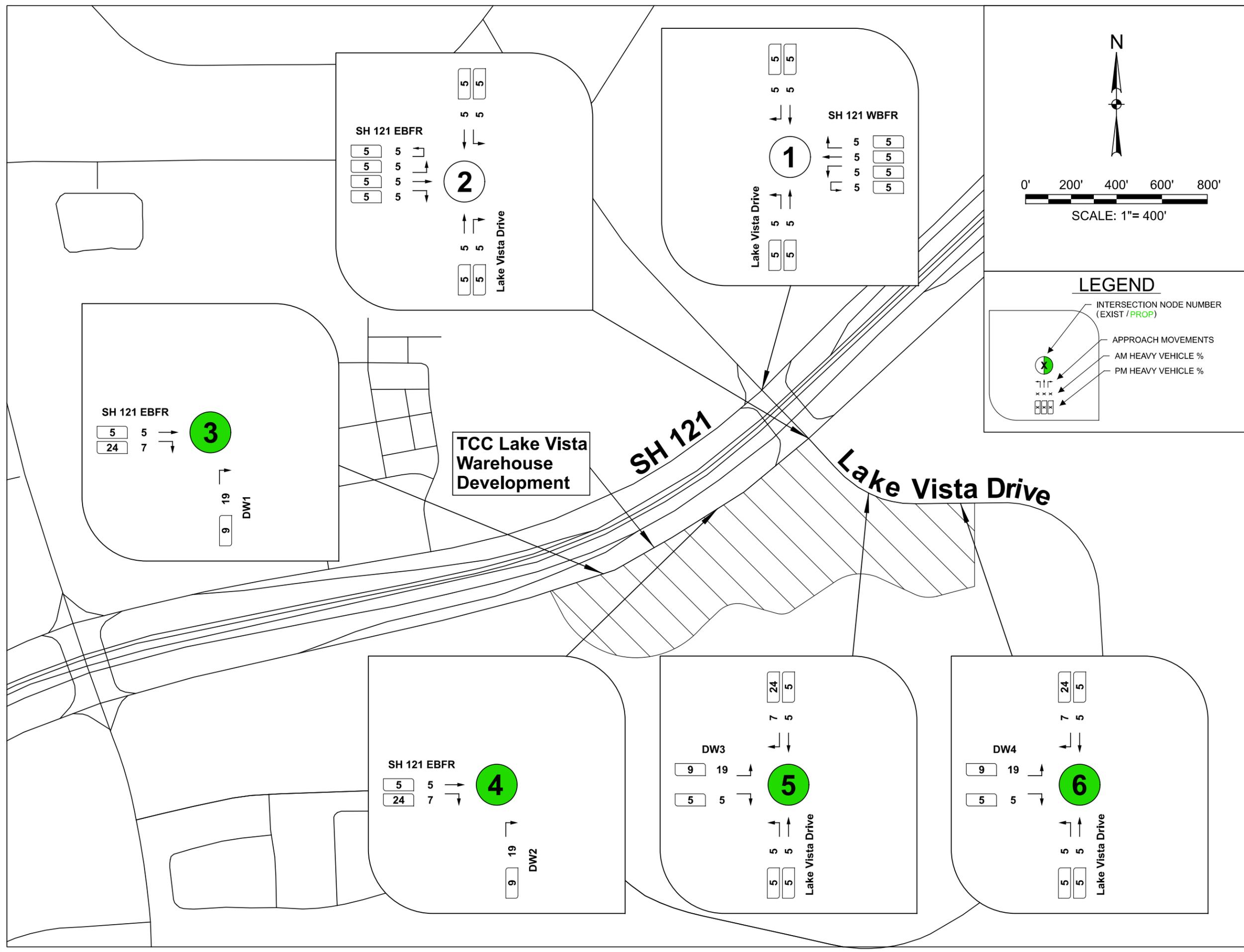
1201 NORTH BOWSER ROAD  
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**TCC LAKE VISTA  
WAREHOUSE DEVELOPMENT  
LEWISVILLE, TEXAS**

Project No.: 58559  
 Issued: 6/23/2025  
 Drawn By: JT  
 Checked By: SM  
 Scale: 1" = 400'

Sheet Title  
 DEVELOPMENT TRIPS -  
 TCC LAKE VISTA

**EXHIBIT 8**  
 Sheet Number



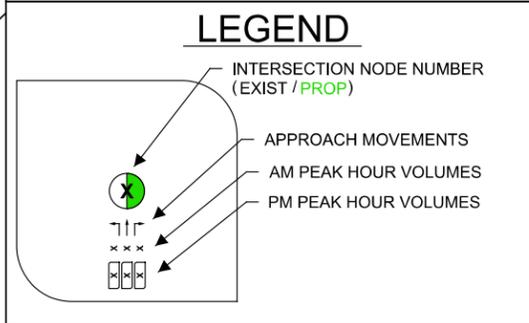
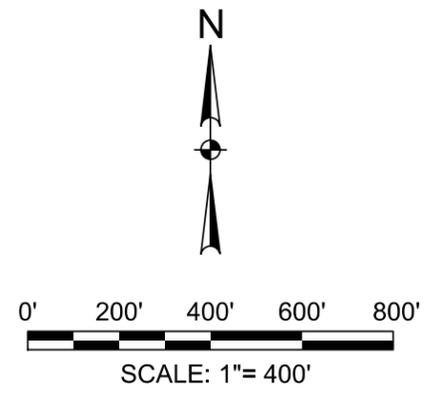
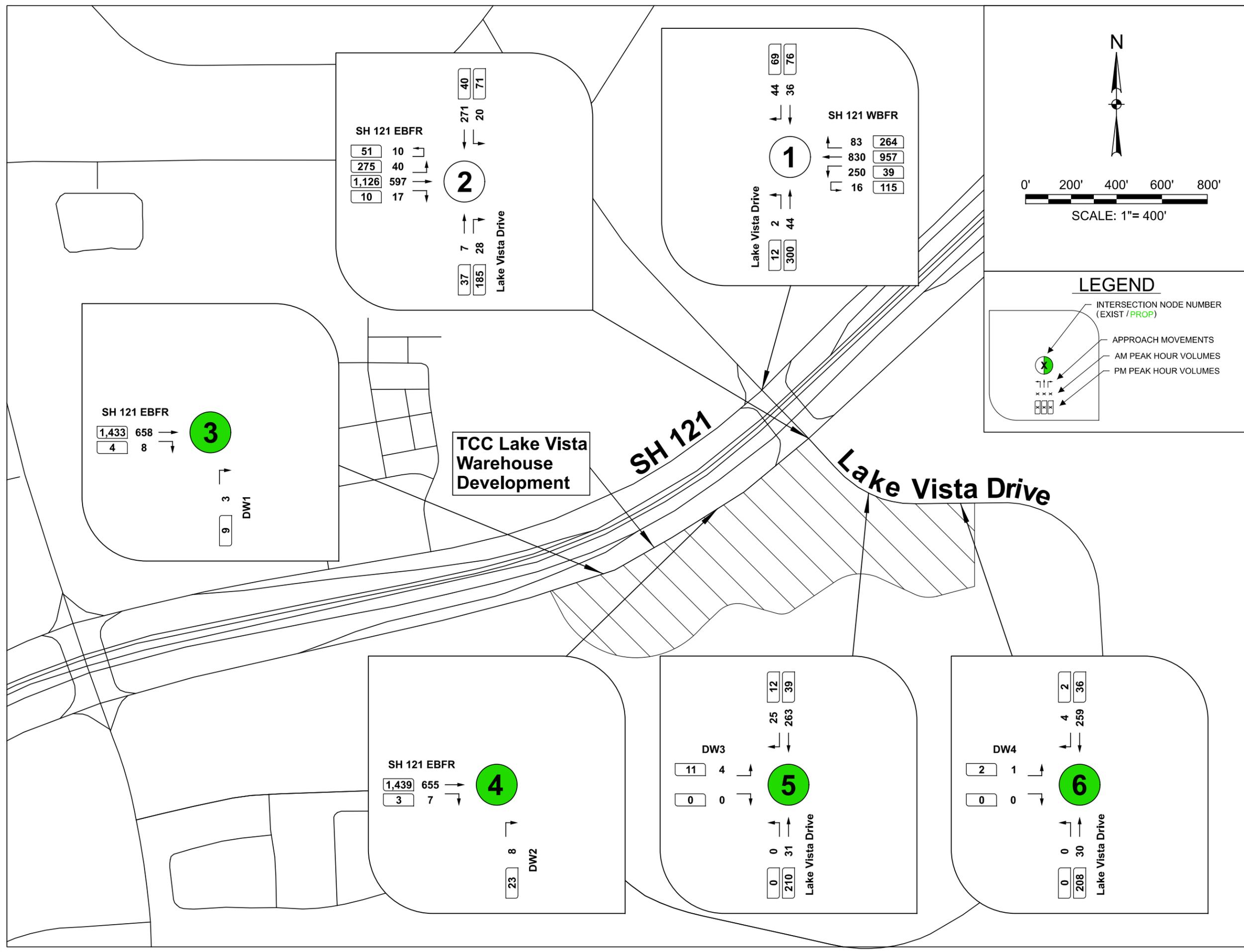
**LEGEND**

- INTERSECTION NODE NUMBER (EXIST / PROP)
- APPROACH MOVEMENTS
- AM HEAVY VEHICLE %
- PM HEAVY VEHICLE %



**TCC LAKE VISTA  
WAREHOUSE DEVELOPMENT  
LEWISVILLE, TEXAS**

Project No.:	58559
Issued:	6/23/2025
Drawn By:	JT
Checked By:	SM
Scale:	1" = 400'
Sheet Title	HEAVY VEHICLE % - TCC LAKE VISTA
Sheet Number	<b>EXHIBIT 9</b>



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**TCC LAKE VISTA  
WAREHOUSE DEVELOPMENT  
LEWISVILLE, TEXAS**

Project No.: 58559

Issued: 6/23/2025

Drawn By: JT

Checked By: SM

Scale: 1" = 400'

Sheet Title

2027 BUILD VOLUMES

**EXHIBIT 10**

Sheet Number

# Appendix D

## Synchro Report Sheets

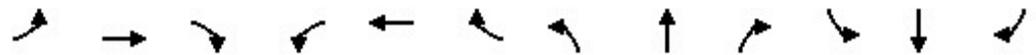
Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2025 Existing AM  
06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  			 			 	
Traffic Volume (vph)	0	0	0	218	795	80	0	42	0	0	34	42
Future Volume (vph)	0	0	0	218	795	80	0	42	0	0	34	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.989							
Satd. Flow (prot)	0	0	0	0	4886	1538	1810	3438	0	0	3438	1538
Flt Permitted					0.989							
Satd. Flow (perm)	0	0	0	0	4886	1538	1810	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						136						136
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		184			251			266			361	
Travel Time (s)		2.5			3.4			4.5			6.2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	248	903	91	0	48	0	0	39	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1151	91	0	48	0	0	39	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12		1	1 2			2	

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2025 Existing AM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							78.0				42.0	42.0
Total Split (%)							48.8%				26.3%	26.3%
Maximum Green (s)							72.0				36.0	36.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					99.5	99.5		53.6			6.3	6.3
Actuated g/C Ratio					0.62	0.62		0.34			0.04	0.04
v/c Ratio					0.38	0.09		0.04			0.29	0.25
Control Delay					20.5	0.8		12.5			79.6	3.1
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					20.5	0.8		12.5			79.6	3.1
LOS					C	A		B			E	A
Approach Delay					19.1			12.5			37.4	
Approach LOS					B			B			D	
90th %ile Green (s)							56.8				8.0	8.0
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							52.1				7.0	7.0
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							50.1				6.2	6.2
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							48.4				5.5	5.5
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							0.0				0.0	0.0
10th %ile Term Code							Skip				Skip	Skip
Queue Length 50th (ft)					258	0		18			21	0
Queue Length 95th (ft)					323	5		23			42	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					3038	1007		1984			773	451
Starvation Cap Reductn					0	0		0			0	0
Spillback Cap Reductn					0	0		0			0	0
Storage Cap Reductn					0	0		0			0	0
Reduced v/c Ratio					0.38	0.09		0.02			0.05	0.11

Intersection Summary

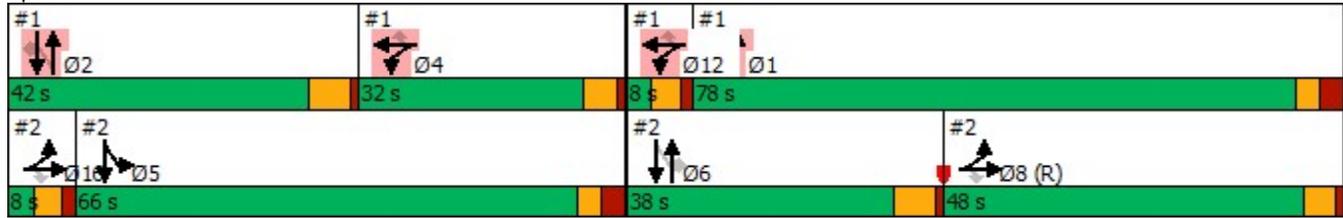
Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	32.0	66.0	38.0	48.0	8.0	8.0
Total Split (%)	20%	41%	24%	30%	5%	5%
Maximum Green (s)	26.9	60.0	32.0	42.9	3.0	3.0
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	Min	None	None	C-Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	47.6	51.2	6.3	75.9	25.5	4.5
90th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Gap
70th %ile Green (s)	46.6	49.0	5.5	78.7	32.2	4.7
70th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Gap
50th %ile Green (s)	46.4	48.1	5.0	80.2	35.2	4.6
50th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
30th %ile Green (s)	47.2	48.6	5.0	80.1	36.8	4.2
30th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
10th %ile Green (s)	32.0	21.0	5.0	106.8	117.9	5.1
10th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 1: Lake Vista Dr & SH 121 WB

2025 Existing AM  
 06/24/2025

Area Type:	Other		
Cycle Length:	160		
Actuated Cycle Length:	160		
Offset:	26 (16%), Referenced to phase 8:EBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.38		
Intersection Signal Delay:	20.0	Intersection LOS:	C
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

2025 Existing AM  
06/24/2025

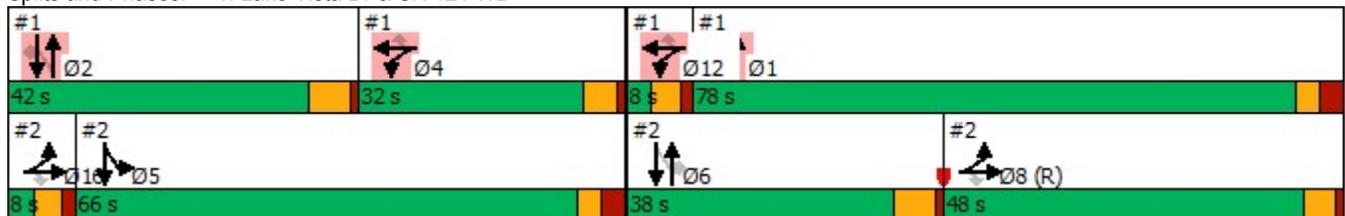


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	C-Min	None	None
Maximum Split (s)	78	42	32	66	38	48	8	8
Maximum Split (%)	48.8%	26.3%	20.0%	41.3%	23.8%	30.0%	5.0%	5.0%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	156	74	116	82	148	26	148	74
End Time (s)	74	116	148	148	26	74	156	82
Yield/Force Off (s)	68	110	142.9	142	20	68.9	151	77
Yield/Force Off 170(s)	68	92	142.9	142	2	53.9	151	77
Local Start Time (s)	130	48	90	56	122	0	122	48
Local Yield (s)	42	84	116.9	116	154	42.9	125	51
Local Yield 170(s)	42	66	116.9	116	136	27.9	125	51

Intersection Summary

Cycle Length 160  
Control Type Actuated-Coordinated  
Natural Cycle 120  
Offset: 26 (16%), Referenced to phase 8:EBTL, Start of Green

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2025 Existing AM  
06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  							 	 	  	
Traffic Volume (vph)	38	567	11	0	0	0	0	5	24	19	238	0
Future Volume (vph)	38	567	11	0	0	0	0	5	24	19	238	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.997								0.950		
Satd. Flow (prot)	0	4925	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.997								0.754		
Satd. Flow (perm)	0	4925	1538	0	0	0	0	1810	1538	1364	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136						136			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			435			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	43	637	12	0	0	0	0	6	27	21	267	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	680	12	0	0	0	0	6	27	21	267	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2025 Existing AM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								38.0	38.0	66.0		
Total Split (%)								23.8%	23.8%	41.3%		
Maximum Green (s)								32.0	32.0	60.0		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		94.0	94.0					5.4	5.4	48.9	54.9	
Actuated g/C Ratio		0.59	0.59					0.03	0.03	0.31	0.34	
v/c Ratio		0.24	0.01					0.10	0.15	0.04	0.23	
Control Delay		17.3	0.0					78.2	1.7	14.3	20.4	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	
Total Delay		17.3	0.0					78.2	1.7	14.3	20.5	
LOS		B	A					E	A	B	C	
Approach Delay		17.0						15.6			20.0	
Approach LOS		B						B			C	
90th %ile Green (s)								6.3	6.3	51.2		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								5.5	5.5	49.0		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								5.0	5.0	48.1		
50th %ile Term Code								Min	Min	Hold		
30th %ile Green (s)								5.0	5.0	48.6		
30th %ile Term Code								Min	Min	Hold		
10th %ile Green (s)								5.0	5.0	21.0		
10th %ile Term Code								Min	Min	Hold		
Queue Length 50th (ft)		128	0					6	0	4	50	
Queue Length 95th (ft)		163	0					23	0	7	51	
Internal Link Dist (ft)		165			90			355			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2892	959					362	416	651	1757	
Starvation Cap Reductn		0	0					0	0	0	716	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.24	0.01					0.02	0.06	0.03	0.26	

Intersection Summary

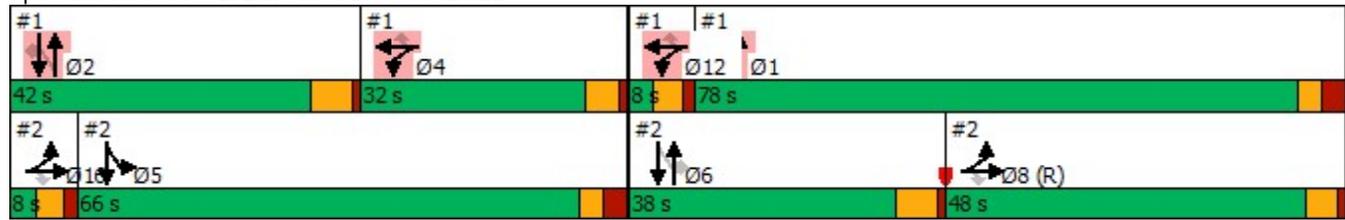
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	78.0	42.0	32.0	48.0	8.0	8.0
Total Split (%)	49%	26%	20%	30%	5%	5%
Maximum Green (s)	72.0	36.0	26.9	42.9	3.0	3.0
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	Min	C-Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	56.8	8.0	47.6	75.9	25.5	4.5
90th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
70th %ile Green (s)	52.1	7.0	46.6	78.7	32.2	4.7
70th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
50th %ile Green (s)	50.1	6.2	46.4	80.2	35.2	4.6
50th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
30th %ile Green (s)	48.4	5.5	47.2	80.1	36.8	4.2
30th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
10th %ile Green (s)	0.0	0.0	32.0	106.8	117.9	5.1
10th %ile Term Code	Skip	Skip	Gap	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2025 Existing AM  
 06/24/2025

Area Type:	Other		
Cycle Length:	160		
Actuated Cycle Length:	160		
Offset:	26 (16%), Referenced to phase 8:EBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.38		
Intersection Signal Delay:	17.8	Intersection LOS:	B
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2025 Existing PM  
06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  	 	 	  			 	 
Traffic Volume (vph)	0	0	0	27	919	254	6	288	0	0	73	66
Future Volume (vph)	0	0	0	27	919	254	6	288	0	0	73	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	4935	1538	1719	3438	0	0	3438	1538
Flt Permitted					0.999		0.705					
Satd. Flow (perm)	0	0	0	0	4935	1538	1276	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes		Yes				Yes
Satd. Flow (RTOR)						259						136
Link Speed (mph)		50			50			40				40
Link Distance (ft)		184			251			266				361
Travel Time (s)		2.5			3.4			4.5				6.2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	28	957	265	6	300	0	0	76	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	985	265	6	300	0	0	76	69
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2				2
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12			1	12			2

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2025 Existing PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							70.0				37.0	37.0
Total Split (%)							43.8%				23.1%	23.1%
Maximum Green (s)							64.0				31.0	31.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					81.9	81.9	61.0	67.0			8.0	8.0
Actuated g/C Ratio					0.51	0.51	0.38	0.42			0.05	0.05
v/c Ratio					0.39	0.29	0.01	0.21			0.44	0.34
Control Delay					25.7	4.0	2.2	7.5			81.7	4.4
Queue Delay					0.0	0.0	0.0	0.1			0.0	0.0
Total Delay					25.7	4.0	2.2	7.6			81.7	4.4
LOS					C	A	A	A			F	A
Approach Delay					21.1			7.5			44.9	
Approach LOS					C			A			D	
90th %ile Green (s)							64.0				10.4	10.4
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							58.4				9.0	9.0
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							52.3				8.0	8.0
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							48.2				6.9	6.9
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							42.3				5.5	5.5
10th %ile Term Code							Hold				Gap	Gap
Queue Length 50th (ft)					223	3	1	32			41	0
Queue Length 95th (ft)					310	59	m1	0			71	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					2526	913	722	1932			666	407
Starvation Cap Reductn					0	0	0	868			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.39	0.29	0.01	0.28			0.11	0.17

Intersection Summary

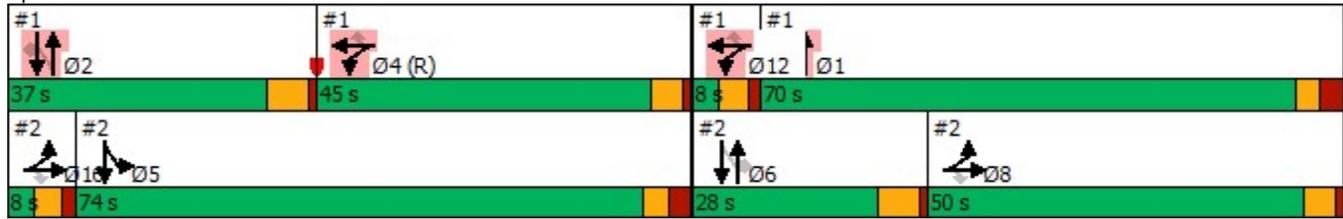
Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	45.0	74.0	28.0	50.0	8.0	8.0
Total Split (%)	28%	46%	18%	31%	5%	5%
Maximum Green (s)	39.9	68.0	22.0	44.9	3.0	3.0
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	C-Min	None	None	Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	60.5	68.0	13.9	53.0	3.0	3.0
90th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
70th %ile Green (s)	66.5	67.0	8.5	53.8	4.0	8.6
70th %ile Term Code	Coord	Hold	Gap	Gap	Max	Coord
50th %ile Green (s)	71.9	61.9	7.2	50.7	5.7	18.1
50th %ile Term Code	Coord	Hold	Gap	Gap	Gap	Coord
30th %ile Green (s)	77.2	57.0	6.0	47.7	5.6	27.2
30th %ile Term Code	Coord	Hold	Gap	Gap	Gap	Coord
10th %ile Green (s)	83.9	51.4	5.0	43.4	6.2	38.1
10th %ile Term Code	Coord	Hold	Min	Gap	Gap	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 1: Lake Vista Dr & SH 121 WB

2025 Existing PM  
 06/24/2025

Area Type:	Other	
Cycle Length:	160	
Actuated Cycle Length:	160	
Offset:	49 (31%), Referenced to phase 4:WBTL, Start of Green	
Natural Cycle:	120	
Control Type:	Actuated-Coordinated	
Maximum v/c Ratio:	0.72	
Intersection Signal Delay:	20.7	Intersection LOS: C
Intersection Capacity Utilization	54.9%	ICU Level of Service A
Analysis Period (min)	15	
m	Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

2025 Existing PM  
06/24/2025

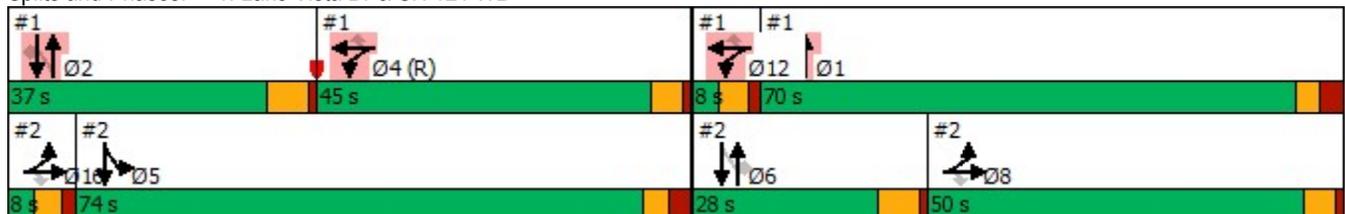


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Min	None	None	Min	None	None
Maximum Split (s)	70	37	45	74	28	50	8	8
Maximum Split (%)	43.8%	23.1%	28.1%	46.3%	17.5%	31.3%	5.0%	5.0%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	102	12	49	20	94	122	94	12
End Time (s)	12	49	94	94	122	12	102	20
Yield/Force Off (s)	6	43	88.9	88	116	6.9	97	15
Yield/Force Off 170(s)	6	25	73.9	88	98	6.9	97	15
Local Start Time (s)	53	123	0	131	45	73	45	123
Local Yield (s)	117	154	39.9	39	67	117.9	48	126
Local Yield 170(s)	117	136	24.9	39	49	117.9	48	126

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 49 (31%), Referenced to phase 4:WBTL, Start of Green	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2025 Existing PM  
06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑	↑	↑	↑↑	
Traffic Volume (vph)	264	1064	7	0	0	0	0	30	170	68	28	0
Future Volume (vph)	264	1064	7	0	0	0	0	30	170	68	28	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.990								0.950		
Satd. Flow (prot)	0	4891	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.990								0.736		
Satd. Flow (perm)	0	4891	1538	0	0	0	0	1810	1538	1332	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136						179			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			435			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	0%	0%	0%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	278	1120	7	0	0	0	0	32	179	72	29	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1398	7	0	0	0	0	32	179	72	29	0
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2025 Existing PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								28.0	28.0	74.0		
Total Split (%)								17.5%	17.5%	46.3%		
Maximum Green (s)								22.0	22.0	68.0		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		73.7	73.7					8.1	8.1	69.2	75.2	
Actuated g/C Ratio		0.46	0.46					0.05	0.05	0.43	0.47	
v/c Ratio		0.62	0.01					0.35	0.72	0.10	0.02	
Control Delay		35.5	0.0					82.3	25.9	11.4	6.9	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		35.5	0.0					82.3	25.9	11.4	6.9	
LOS		D	A					F	C	B	A	
Approach Delay		35.3						34.4			10.1	
Approach LOS		D						C			B	
90th %ile Green (s)								13.9	13.9	68.0		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								8.5	8.5	67.0		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								7.2	7.2	61.9		
50th %ile Term Code								Gap	Gap	Hold		
30th %ile Green (s)								6.0	6.0	57.0		
30th %ile Term Code								Gap	Gap	Hold		
10th %ile Green (s)								5.0	5.0	51.4		
10th %ile Term Code								Min	Min	Hold		
Queue Length 50th (ft)		399	0					33	0	62	12	
Queue Length 95th (ft)		521	0					69	80	0	0	
Internal Link Dist (ft)		165			90			355			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2231	775					248	365	781	1892	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.63	0.01					0.13	0.49	0.09	0.02	

Intersection Summary

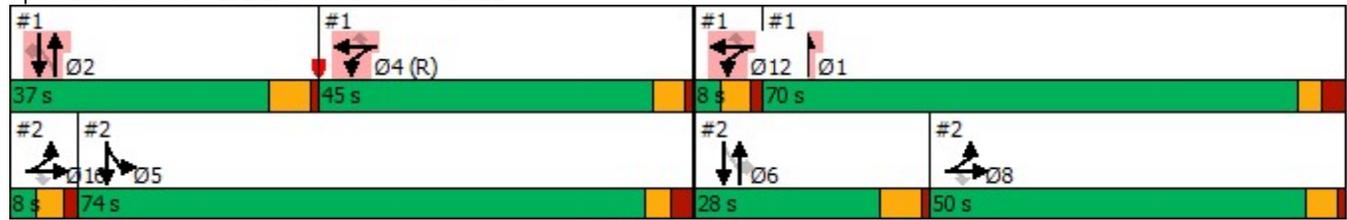
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	70.0	37.0	45.0	50.0	8.0	8.0
Total Split (%)	44%	23%	28%	31%	5%	5%
Maximum Green (s)	64.0	31.0	39.9	44.9	3.0	3.0
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	C-Min	Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	64.0	10.4	60.5	53.0	3.0	3.0
90th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
70th %ile Green (s)	58.4	9.0	66.5	53.8	4.0	8.6
70th %ile Term Code	Hold	Gap	Coord	Gap	Max	Coord
50th %ile Green (s)	52.3	8.0	71.9	50.7	5.7	18.1
50th %ile Term Code	Hold	Gap	Coord	Gap	Gap	Coord
30th %ile Green (s)	48.2	6.9	77.2	47.7	5.6	27.2
30th %ile Term Code	Hold	Gap	Coord	Gap	Gap	Coord
10th %ile Green (s)	42.3	5.5	83.9	43.4	6.2	38.1
10th %ile Term Code	Hold	Gap	Coord	Gap	Gap	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2025 Existing PM  
 06/24/2025

Area Type:	Other		
Cycle Length:	160		
Actuated Cycle Length:	160		
Offset:	49 (31%), Referenced to phase 4:WBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.72		
Intersection Signal Delay:	33.7	Intersection LOS:	C
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



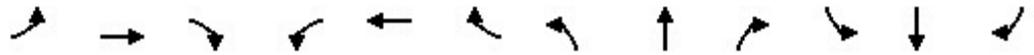
Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 No Build AM  
06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑	↑	↑	↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	227	827	83	0	44	0	0	35	44
Future Volume (vph)	0	0	0	227	827	83	0	44	0	0	35	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.989							
Satd. Flow (prot)	0	0	0	0	4886	1538	1810	3438	0	0	3438	1538
Flt Permitted					0.989							
Satd. Flow (perm)	0	0	0	0	4886	1538	1810	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						136						136
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		184			251			266			361	
Travel Time (s)		2.5			3.4			4.5			6.2	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	258	940	94	0	50	0	0	40	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1198	94	0	50	0	0	40	50
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12			1	12		2	

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 No Build AM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							78.0				42.0	42.0
Total Split (%)							48.8%				26.3%	26.3%
Maximum Green (s)							72.0				36.0	36.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					94.9	94.9		55.0			6.4	6.4
Actuated g/C Ratio					0.59	0.59		0.34			0.04	0.04
v/c Ratio					0.41	0.10		0.04			0.29	0.26
Control Delay					22.0	1.0		10.0			79.6	3.3
Queue Delay					0.0	0.0		0.0			0.0	0.0
Total Delay					22.0	1.0		10.0			79.6	3.3
LOS					C	A		A			E	A
Approach Delay					20.5			10.0			37.2	
Approach LOS					C			A			D	
90th %ile Green (s)							58.5				8.1	8.1
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							54.5				7.0	7.0
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							51.4				6.3	6.3
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							49.8				5.6	5.6
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							0.0				5.0	5.0
10th %ile Term Code							Skip				Min	Min
Queue Length 50th (ft)					277	0		18			22	0
Queue Length 95th (ft)					347	8		16			42	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					2896	967		2021			773	451
Starvation Cap Reductn					0	0		0			0	0
Spillback Cap Reductn					0	0		0			0	0
Storage Cap Reductn					0	0		0			0	0
Reduced v/c Ratio					0.41	0.10		0.02			0.05	0.11

Intersection Summary

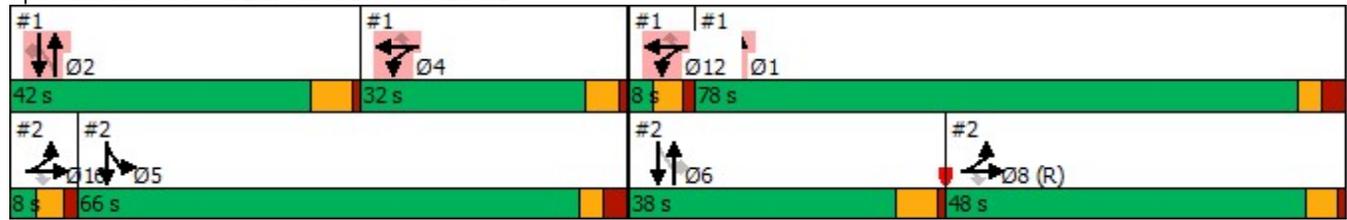
Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	32.0	66.0	38.0	48.0	8.0	8.0
Total Split (%)	20%	41%	24%	30%	5%	5%
Maximum Green (s)	26.9	60.0	32.0	42.9	3.0	3.0
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	Min	None	None	C-Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	49.1	52.8	6.3	74.3	22.2	4.5
90th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Gap
70th %ile Green (s)	48.0	50.7	5.5	77.3	28.4	4.4
70th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Gap
50th %ile Green (s)	48.4	50.5	5.0	78.1	31.8	4.3
50th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
30th %ile Green (s)	50.5	52.0	5.0	76.7	32.0	4.2
30th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
10th %ile Green (s)	43.0	44.0	5.0	84.8	95.9	4.1
10th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 1: Lake Vista Dr & SH 121 WB

2027 No Build AM  
 06/24/2025

Area Type:	Other		
Cycle Length:	160		
Actuated Cycle Length:	160		
Offset:	26 (16%), Referenced to phase 8:EBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.41		
Intersection Signal Delay:	21.2	Intersection LOS:	C
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

2027 No Build AM  
06/24/2025

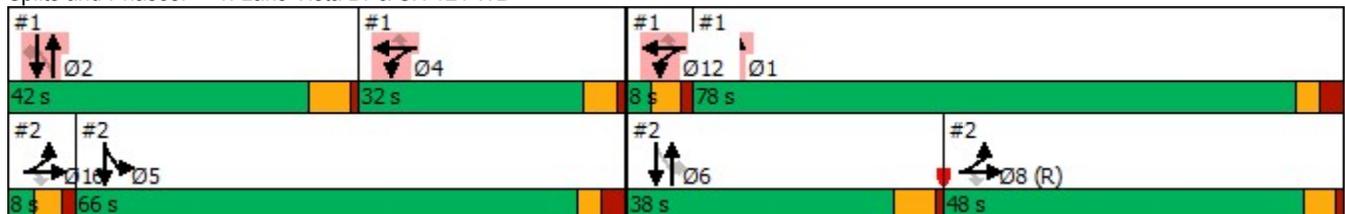


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	C-Min	None	None
Maximum Split (s)	78	42	32	66	38	48	8	8
Maximum Split (%)	48.8%	26.3%	20.0%	41.3%	23.8%	30.0%	5.0%	5.0%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	156	74	116	82	148	26	148	74
End Time (s)	74	116	148	148	26	74	156	82
Yield/Force Off (s)	68	110	142.9	142	20	68.9	151	77
Yield/Force Off 170(s)	68	92	142.9	142	2	53.9	151	77
Local Start Time (s)	130	48	90	56	122	0	122	48
Local Yield (s)	42	84	116.9	116	154	42.9	125	51
Local Yield 170(s)	42	66	116.9	116	136	27.9	125	51

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 26 (16%), Referenced to phase 8:EBTL, Start of Green	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 No Build AM

06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  							 	 	  	
Traffic Volume (vph)	40	590	11	0	0	0	0	5	25	20	248	0
Future Volume (vph)	40	590	11	0	0	0	0	5	25	20	248	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.997								0.950		
Satd. Flow (prot)	0	4925	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.997								0.754		
Satd. Flow (perm)	0	4925	1538	0	0	0	0	1810	1538	1364	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136						136			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			435			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	45	663	12	0	0	0	0	6	28	22	279	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	708	12	0	0	0	0	6	28	22	279	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 No Build AM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								38.0	38.0	66.0		
Total Split (%)								23.8%	23.8%	41.3%		
Maximum Green (s)								32.0	32.0	60.0		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		87.5	87.5					5.4	5.4	55.4	61.4	
Actuated g/C Ratio		0.55	0.55					0.03	0.03	0.35	0.38	
v/c Ratio		0.26	0.01					0.10	0.15	0.04	0.21	
Control Delay		19.8	0.0					78.2	1.8	12.7	16.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	
Total Delay		19.8	0.0					78.2	1.8	12.7	16.6	
LOS		B	A					E	A	B	B	
Approach Delay		19.5						15.3			16.3	
Approach LOS		B						B			B	
90th %ile Green (s)								6.3	6.3	52.8		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								5.5	5.5	50.7		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								5.0	5.0	50.5		
50th %ile Term Code								Min	Min	Hold		
30th %ile Green (s)								5.0	5.0	52.0		
30th %ile Term Code								Min	Min	Hold		
10th %ile Green (s)								5.0	5.0	44.0		
10th %ile Term Code								Min	Min	Hold		
Queue Length 50th (ft)		139	0					6	0	4	50	
Queue Length 95th (ft)		174	0					23	0	7	45	
Internal Link Dist (ft)		165			90			355			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2694	902					362	416	664	1890	
Starvation Cap Reductn		0	0					0	0	0	736	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.26	0.01					0.02	0.07	0.03	0.24	

Intersection Summary

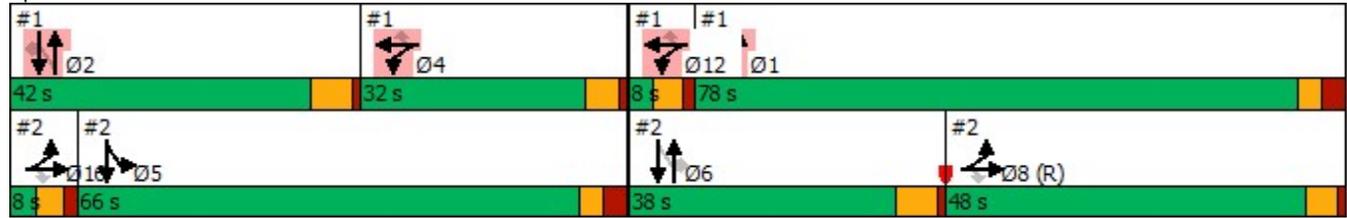
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	78.0	42.0	32.0	48.0	8.0	8.0
Total Split (%)	49%	26%	20%	30%	5%	5%
Maximum Green (s)	72.0	36.0	26.9	42.9	3.0	3.0
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	Min	C-Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	58.5	8.1	49.1	74.3	22.2	4.5
90th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
70th %ile Green (s)	54.5	7.0	48.0	77.3	28.4	4.4
70th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
50th %ile Green (s)	51.4	6.3	48.4	78.1	31.8	4.3
50th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
30th %ile Green (s)	49.8	5.6	50.5	76.7	32.0	4.2
30th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
10th %ile Green (s)	0.0	5.0	43.0	84.8	95.9	4.1
10th %ile Term Code	Skip	Min	Gap	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2027 No Build AM  
 06/24/2025

Area Type:	Other		
Cycle Length:	160		
Actuated Cycle Length:	160		
Offset:	26 (16%), Referenced to phase 8:EBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.41		
Intersection Signal Delay:	18.4	Intersection LOS:	B
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 No Build PM  
06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  	 	 	 			 	 
Traffic Volume (vph)	0	0	0	28	956	264	6	300	0	0	76	69
Future Volume (vph)	0	0	0	28	956	264	6	300	0	0	76	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.999		0.950					
Satd. Flow (prot)	0	0	0	0	4935	1538	1719	3438	0	0	3438	1538
Flt Permitted					0.999		0.703					
Satd. Flow (perm)	0	0	0	0	4935	1538	1272	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes		Yes				Yes
Satd. Flow (RTOR)						259						130
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		184			251			266			361	
Travel Time (s)		2.5			3.4			4.5			6.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	29	996	275	6	313	0	0	79	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1025	275	6	313	0	0	79	72
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12		1	1 2			2	

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 No Build PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							70.0				37.0	37.0
Total Split (%)							43.8%				23.1%	23.1%
Maximum Green (s)							64.0				31.0	31.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					80.8	80.8	62.1	68.1			8.3	8.3
Actuated g/C Ratio					0.50	0.50	0.39	0.43			0.05	0.05
v/c Ratio					0.41	0.30	0.01	0.21			0.44	0.35
Control Delay					25.7	4.0	8.2	12.2			80.9	4.8
Queue Delay					0.0	0.0	0.0	0.2			0.0	0.0
Total Delay					25.7	4.0	8.2	12.4			80.9	4.8
LOS					C	A	A	B			F	A
Approach Delay					21.1			12.3			44.6	
Approach LOS					C			B			D	
90th %ile Green (s)							56.2				11.6	11.6
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							51.3				9.1	9.1
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							53.9				8.1	8.1
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							55.5				7.1	7.1
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							52.3				5.6	5.6
10th %ile Term Code							Hold				Gap	Gap
Queue Length 50th (ft)					240	8	1	35			43	0
Queue Length 95th (ft)					300	62	m1	13			72	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					2490	904	720	1951			666	402
Starvation Cap Reductn					0	0	0	915			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.41	0.30	0.01	0.30			0.12	0.18

Intersection Summary

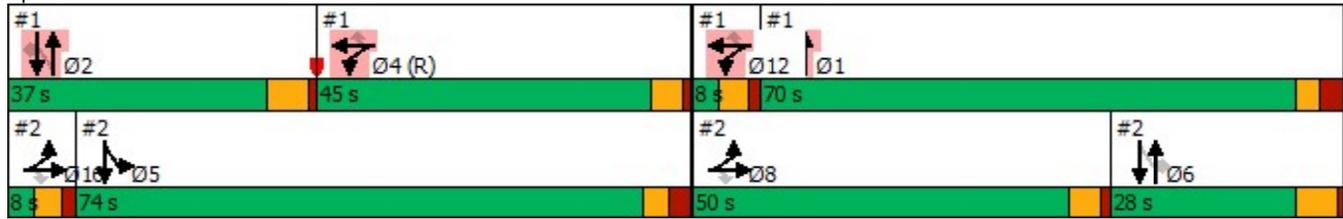
Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	45.0	74.0	28.0	50.0	8.0	8.0
Total Split (%)	28%	46%	18%	31%	5%	5%
Maximum Green (s)	39.9	68.0	22.0	44.9	3.0	3.0
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	C-Min	None	None	Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	67.1	68.0	14.2	44.9	3.0	10.8
90th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
70th %ile Green (s)	71.6	64.4	8.6	48.5	5.9	16.4
70th %ile Term Code	Coord	Hold	Gap	Max	Gap	Coord
50th %ile Green (s)	70.1	60.6	7.3	52.3	5.8	17.7
50th %ile Term Code	Coord	Hold	Gap	Max	Gap	Coord
30th %ile Green (s)	69.6	57.9	6.1	55.0	5.7	18.9
30th %ile Term Code	Coord	Hold	Gap	Max	Gap	Coord
10th %ile Green (s)	75.5	54.5	5.0	51.7	4.5	26.7
10th %ile Term Code	Coord	Hold	Min	Gap	Gap	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 1: Lake Vista Dr & SH 121 WB

2027 No Build PM  
 06/24/2025

Area Type:	Other	
Cycle Length:	160	
Actuated Cycle Length:	160	
Offset:	49 (31%), Referenced to phase 4:WBTL, Start of Green	
Natural Cycle:	130	
Control Type:	Actuated-Coordinated	
Maximum v/c Ratio:	0.73	
Intersection Signal Delay:	21.5	Intersection LOS: C
Intersection Capacity Utilization	56.3%	ICU Level of Service B
Analysis Period (min)	15	
m Volume for 95th percentile queue is metered by upstream signal.		

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

2027 No Build PM  
06/24/2025

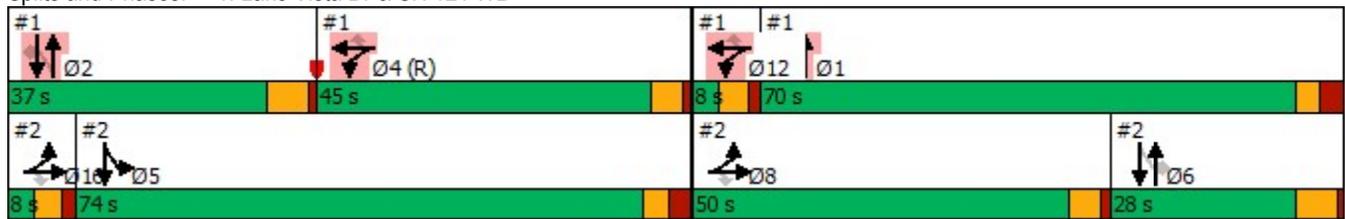


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Min	None	None	Min	None	None
Maximum Split (s)	70	37	45	74	28	50	8	8
Maximum Split (%)	43.8%	23.1%	28.1%	46.3%	17.5%	31.3%	5.0%	5.0%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	102	12	49	20	144	94	94	12
End Time (s)	12	49	94	94	12	144	102	20
Yield/Force Off (s)	6	43	88.9	88	6	138.9	97	15
Yield/Force Off 170(s)	6	25	73.9	88	148	138.9	97	15
Local Start Time (s)	53	123	0	131	95	45	45	123
Local Yield (s)	117	154	39.9	39	117	89.9	48	126
Local Yield 170(s)	117	136	24.9	39	99	89.9	48	126

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	130
Offset: 49 (31%), Referenced to phase 4:WBTL, Start of Green	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 No Build PM

06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  									 	
Traffic Volume (vph)	275	1107	7	0	0	0	0	31	177	71	29	0
Future Volume (vph)	275	1107	7	0	0	0	0	31	177	71	29	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.990								0.950		
Satd. Flow (prot)	0	4891	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.990								0.736		
Satd. Flow (perm)	0	4891	1538	0	0	0	0	1810	1538	1332	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			102						186			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			435			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	289	1165	7	0	0	0	0	33	186	75	31	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1454	7	0	0	0	0	33	186	75	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 No Build PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								28.0	28.0	74.0		
Total Split (%)								17.5%	17.5%	46.3%		
Maximum Green (s)								22.0	22.0	68.0		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lag	Lag	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		68.5	68.5					8.2	8.2	69.3	69.3	
Actuated g/C Ratio		0.43	0.43					0.05	0.05	0.43	0.43	
v/c Ratio		0.69	0.01					0.35	0.73	0.10	0.02	
Control Delay		28.5	0.0					82.3	25.7	14.5	11.3	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		28.5	0.0					82.3	25.7	14.5	11.3	
LOS		C	A					F	C	B	B	
Approach Delay		28.4						34.3			13.6	
Approach LOS		C						C			B	
90th %ile Green (s)								14.2	14.2	68.0		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								8.6	8.6	64.4		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								7.3	7.3	60.6		
50th %ile Term Code								Gap	Gap	Hold		
30th %ile Green (s)								6.1	6.1	57.9		
30th %ile Term Code								Gap	Gap	Hold		
10th %ile Green (s)								5.0	5.0	54.5		
10th %ile Term Code								Min	Min	Hold		
Queue Length 50th (ft)		346	0					34	0	64	13	
Queue Length 95th (ft)		448	0					71	81	105	27	
Internal Link Dist (ft)		165			90			355			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2093	716					248	371	799	1933	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.69	0.01					0.13	0.50	0.09	0.02	

Intersection Summary

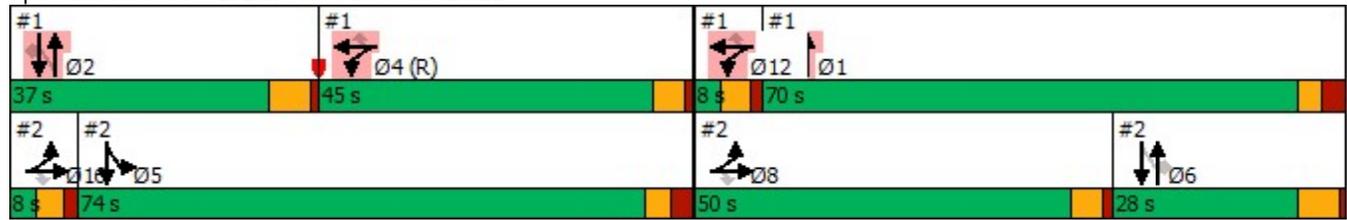
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	70.0	37.0	45.0	50.0	8.0	8.0
Total Split (%)	44%	23%	28%	31%	5%	5%
Maximum Green (s)	64.0	31.0	39.9	44.9	3.0	3.0
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	C-Min	Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	56.2	11.6	67.1	44.9	3.0	10.8
90th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
70th %ile Green (s)	51.3	9.1	71.6	48.5	5.9	16.4
70th %ile Term Code	Hold	Gap	Coord	Max	Gap	Coord
50th %ile Green (s)	53.9	8.1	70.1	52.3	5.8	17.7
50th %ile Term Code	Hold	Gap	Coord	Max	Gap	Coord
30th %ile Green (s)	55.5	7.1	69.6	55.0	5.7	18.9
30th %ile Term Code	Hold	Gap	Coord	Max	Gap	Coord
10th %ile Green (s)	52.3	5.6	75.5	51.7	4.5	26.7
10th %ile Term Code	Hold	Gap	Coord	Gap	Gap	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2027 No Build PM  
 06/24/2025

Area Type:	Other	
Cycle Length:	160	
Actuated Cycle Length:	160	
Offset:	49 (31%), Referenced to phase 4:WBTL, Start of Green	
Natural Cycle:	130	
Control Type:	Actuated-Coordinated	
Maximum v/c Ratio:	0.73	
Intersection Signal Delay:	28.2	Intersection LOS: C
Intersection Capacity Utilization	56.3%	ICU Level of Service B
Analysis Period (min)	15	

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build AM  
06/24/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑	↑	↑	↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	250	830	83	2	44	0	0	36	44
Future Volume (vph)	0	0	0	250	830	83	2	44	0	0	36	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.989		0.950					
Satd. Flow (prot)	0	0	0	0	4886	1538	1719	3438	0	0	3438	1538
Flt Permitted					0.989		0.729					
Satd. Flow (perm)	0	0	0	0	4886	1538	1319	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						136						136
Link Speed (mph)		50			50			40				40
Link Distance (ft)		184			251			266				361
Travel Time (s)		2.5			3.4			4.5				6.2
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	284	943	94	2	50	0	0	41	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1227	94	2	50	0	0	41	50
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2				2
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12			1	12			2

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build AM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							78.0				42.0	42.0
Total Split (%)							48.8%				26.3%	26.3%
Maximum Green (s)							72.0				36.0	36.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					94.3	94.3	50.8	55.6			6.4	6.4
Actuated g/C Ratio					0.59	0.59	0.32	0.35			0.04	0.04
v/c Ratio					0.43	0.10	0.00	0.04			0.30	0.26
Control Delay					22.6	1.0	7.5	9.2			79.7	3.3
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay					22.6	1.0	7.5	9.2			79.7	3.3
LOS					C	A	A	A			E	A
Approach Delay					21.1			9.2			37.7	
Approach LOS					C			A			D	
90th %ile Green (s)							59.3				8.1	8.1
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							55.3				7.1	7.1
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							52.0				6.3	6.3
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							50.5				5.6	5.6
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							0.0				5.0	5.0
10th %ile Term Code							Skip				Min	Min
Queue Length 50th (ft)					289	0	1	18			22	0
Queue Length 95th (ft)					361	8	m2	14			43	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					2878	961	775	2037			773	451
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.43	0.10	0.00	0.02			0.05	0.11

Intersection Summary

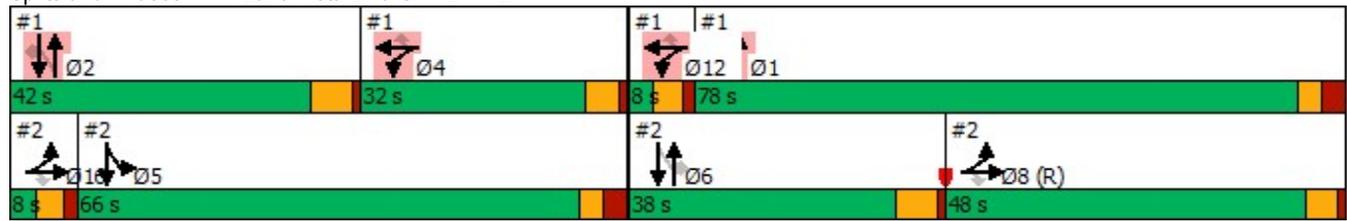
Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	32.0	66.0	38.0	48.0	8.0	8.0
Total Split (%)	20%	41%	24%	30%	5%	5%
Maximum Green (s)	26.9	60.0	32.0	42.9	3.0	3.0
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	Min	None	None	C-Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	49.7	53.3	6.6	73.4	20.8	4.6
90th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Gap
70th %ile Green (s)	49.4	52.2	5.8	75.5	26.1	4.4
70th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Gap
50th %ile Green (s)	49.7	51.8	5.1	76.7	29.9	4.3
50th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Gap
30th %ile Green (s)	52.5	54.0	5.0	74.7	29.3	4.2
30th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
10th %ile Green (s)	48.2	49.2	5.0	79.6	90.7	4.1
10th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 1: Lake Vista Dr & SH 121 WB

2027 Build AM  
 06/24/2025

Area Type:	Other	
Cycle Length:	160	
Actuated Cycle Length:	160	
Offset:	26 (16%), Referenced to phase 8:EBTL, Start of Green	
Natural Cycle:	120	
Control Type:	Actuated-Coordinated	
Maximum v/c Ratio:	0.43	
Intersection Signal Delay:	21.7	Intersection LOS: C
Intersection Capacity Utilization	43.7%	ICU Level of Service A
Analysis Period (min)	15	
m	Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

2027 Build AM  
06/24/2025

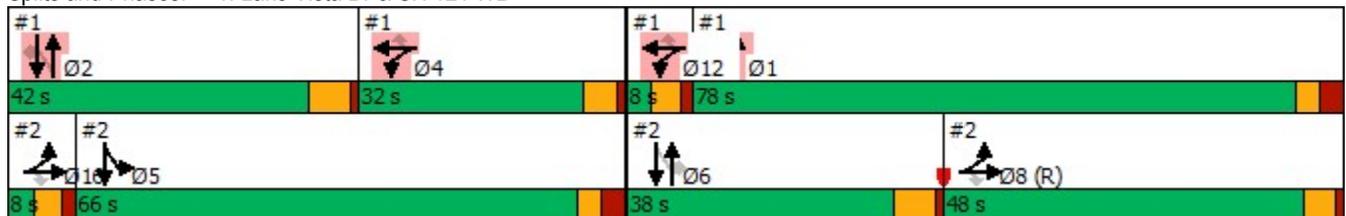


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	C-Min	None	None
Maximum Split (s)	78	42	32	66	38	48	8	8
Maximum Split (%)	48.8%	26.3%	20.0%	41.3%	23.8%	30.0%	5.0%	5.0%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	156	74	116	82	148	26	148	74
End Time (s)	74	116	148	148	26	74	156	82
Yield/Force Off (s)	68	110	142.9	142	20	68.9	151	77
Yield/Force Off 170(s)	68	92	142.9	142	2	53.9	151	77
Local Start Time (s)	130	48	90	56	122	0	122	48
Local Yield (s)	42	84	116.9	116	154	42.9	125	51
Local Yield 170(s)	42	66	116.9	116	136	27.9	125	51

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 26 (16%), Referenced to phase 8:EBTL, Start of Green	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

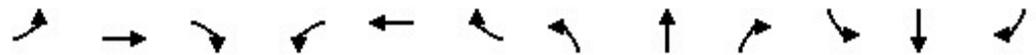
2027 Build AM  
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑	↑	↑	↑↑	
Traffic Volume (vph)	40	597	17	0	0	0	0	7	28	20	271	0
Future Volume (vph)	40	597	17	0	0	0	0	7	28	20	271	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.997								0.950		
Satd. Flow (prot)	0	4925	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.997								0.752		
Satd. Flow (perm)	0	4925	1538	0	0	0	0	1810	1538	1361	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136						136			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			434			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	45	671	19	0	0	0	0	8	31	22	304	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	716	19	0	0	0	0	8	31	22	304	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 Build AM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								38.0	38.0	66.0		
Total Split (%)								23.8%	23.8%	41.3%		
Maximum Green (s)								32.0	32.0	60.0		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		85.3	85.3					5.5	5.5	57.6	63.6	
Actuated g/C Ratio		0.53	0.53					0.03	0.03	0.36	0.40	
v/c Ratio		0.27	0.02					0.13	0.17	0.04	0.22	
Control Delay		20.9	0.1					79.1	2.0	11.6	15.2	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	
Total Delay		20.9	0.1					79.1	2.0	11.6	15.3	
LOS		C	A					E	A	B	B	
Approach Delay		20.4						17.8			15.1	
Approach LOS		C						B			B	
90th %ile Green (s)								6.6	6.6	53.3		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								5.8	5.8	52.2		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								5.1	5.1	51.8		
50th %ile Term Code								Gap	Gap	Hold		
30th %ile Green (s)								5.0	5.0	54.0		
30th %ile Term Code								Min	Min	Hold		
10th %ile Green (s)								5.0	5.0	49.2		
10th %ile Term Code								Min	Min	Hold		
Queue Length 50th (ft)		145	0					8	0	4	51	
Queue Length 95th (ft)		178	0					28	0	m6	43	
Internal Link Dist (ft)		165			90			354			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2625	883					362	416	675	1935	
Starvation Cap Reductn		0	0					0	0	0	726	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.27	0.02					0.02	0.07	0.03	0.25	

Intersection Summary

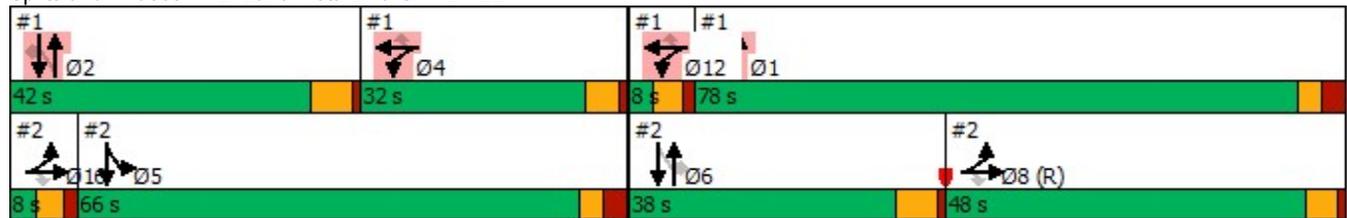
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	78.0	42.0	32.0	48.0	8.0	8.0
Total Split (%)	49%	26%	20%	30%	5%	5%
Maximum Green (s)	72.0	36.0	26.9	42.9	3.0	3.0
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	Min	C-Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	59.3	8.1	49.7	73.4	20.8	4.6
90th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
70th %ile Green (s)	55.3	7.1	49.4	75.5	26.1	4.4
70th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
50th %ile Green (s)	52.0	6.3	49.7	76.7	29.9	4.3
50th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
30th %ile Green (s)	50.5	5.6	52.5	74.7	29.3	4.2
30th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
10th %ile Green (s)	0.0	5.0	48.2	79.6	90.7	4.1
10th %ile Term Code	Skip	Min	Gap	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2027 Build AM  
 06/24/2025

Area Type:	Other		
Cycle Length:	160		
Actuated Cycle Length:	160		
Offset:	26 (16%), Referenced to phase 8:EBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.43		
Intersection Signal Delay:	18.7	Intersection LOS:	B
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		
m	Volume for 95th percentile queue is metered by upstream signal.		

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	658	8	0	0	0	3
Future Vol, veh/h	658	8	0	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	7	5	5	5	19
Mvmt Flow	715	9	0	0	0	3

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	358
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.48
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	4.09
Pot Cap-1 Maneuver	-	-	0	509
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	509
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	12.1
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	509	-	-
HCM Lane V/C Ratio	0.006	-	-
HCM Control Delay (s)	12.1	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	655	7	0	0	0	8
Future Vol, veh/h	655	7	0	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	7	5	5	5	19
Mvmt Flow	712	8	0	0	0	9

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	356
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.48
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	4.09
Pot Cap-1 Maneuver	-	-	0	511
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	511
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	12.2
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	511	-	-
HCM Lane V/C Ratio	0.017	-	-
HCM Control Delay (s)	12.2	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗			↖↗	↖↗	↘↗
Traffic Vol, veh/h	4	0	0	31	263	25
Future Vol, veh/h	4	0	0	31	263	25
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	-	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	19	5	5	5	5	7
Mvmt Flow	4	0	0	34	286	27

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	303	143	313	0	0
Stage 1	286	-	-	-	-
Stage 2	17	-	-	-	-
Critical Hdwy	7.18	7	4.2	-	-
Critical Hdwy Stg 1	6.18	-	-	-	-
Critical Hdwy Stg 2	6.18	-	-	-	-
Follow-up Hdwy	3.69	3.35	2.25	-	-
Pot Cap-1 Maneuver	620	869	1223	-	-
Stage 1	689	-	-	-	-
Stage 2	956	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	620	869	1223	-	-
Mov Cap-2 Maneuver	620	-	-	-	-
Stage 1	689	-	-	-	-
Stage 2	956	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1223	-	620	-	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	0	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	1	0	0	30	259	4
Future Vol, veh/h	1	0	0	30	259	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	19	5	5	5	5	7
Mvmt Flow	1	0	0	33	282	4

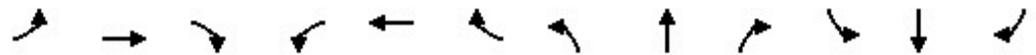
Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	301	143	286	0	-
Stage 1	284	-	-	-	-
Stage 2	17	-	-	-	-
Critical Hdwy	7.18	7	4.2	-	-
Critical Hdwy Stg 1	6.18	-	-	-	-
Critical Hdwy Stg 2	6.18	-	-	-	-
Follow-up Hdwy	3.69	3.35	2.25	-	-
Pot Cap-1 Maneuver	622	869	1252	-	-
Stage 1	691	-	-	-	-
Stage 2	956	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	622	869	1252	-	-
Mov Cap-2 Maneuver	622	-	-	-	-
Stage 1	691	-	-	-	-
Stage 2	956	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1252	-	622	-	-
HCM Lane V/C Ratio	-	-	0.002	-	-
HCM Control Delay (s)	0	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑	↑	↑	↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	39	957	264	12	300	0	0	76	69
Future Volume (vph)	0	0	0	39	957	264	12	300	0	0	76	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.998		0.950					
Satd. Flow (prot)	0	0	0	0	4930	1538	1719	3438	0	0	3438	1538
Flt Permitted					0.998		0.703					
Satd. Flow (perm)	0	0	0	0	4930	1538	1272	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						256						136
Link Speed (mph)		50			50			40				40
Link Distance (ft)		184			251			266				361
Travel Time (s)		2.5			3.4			4.5				6.2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	41	997	275	13	313	0	0	79	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1038	275	13	313	0	0	79	72
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2				2
Detector Template				Left	Thru	Right	Left	Thru				Thru
Leading Detector (ft)				20	100	20	20	100				100
Trailing Detector (ft)				0	0	0	0	0				0
Detector 1 Position(ft)				0	0	0	0	0				0
Detector 1 Size(ft)				20	6	20	20	6				6
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0				0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0				0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0				0.0
Detector 2 Position(ft)					94			94				94
Detector 2 Size(ft)					6			6				6
Detector 2 Type					Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				0.0
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12			1	1 2			2

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							70.0				37.0	37.0
Total Split (%)							43.8%				23.1%	23.1%
Maximum Green (s)							64.0				31.0	31.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					78.2	78.2	64.7	70.7			8.3	8.3
Actuated g/C Ratio					0.49	0.49	0.40	0.44			0.05	0.05
v/c Ratio					0.43	0.31	0.02	0.21			0.44	0.35
Control Delay					28.4	5.0	1.7	5.3			80.9	4.5
Queue Delay					0.0	0.0	0.0	0.2			0.0	0.0
Total Delay					28.4	5.0	1.7	5.5			80.9	4.5
LOS					C	A	A	A			F	A
Approach Delay					23.5			5.3			44.5	
Approach LOS					C			A			D	
90th %ile Green (s)							64.0				11.6	11.6
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							64.0				9.1	9.1
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							56.0				8.1	8.1
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							51.7				7.1	7.1
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							46.4				5.6	5.6
10th %ile Term Code							Hold				Gap	Gap
Queue Length 50th (ft)					251	10	1	20			43	0
Queue Length 95th (ft)					334	71	m0	0			72	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					2408	882	731	2007			666	407
Starvation Cap Reductn					0	0	0	928			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.43	0.31	0.02	0.29			0.12	0.18

Intersection Summary

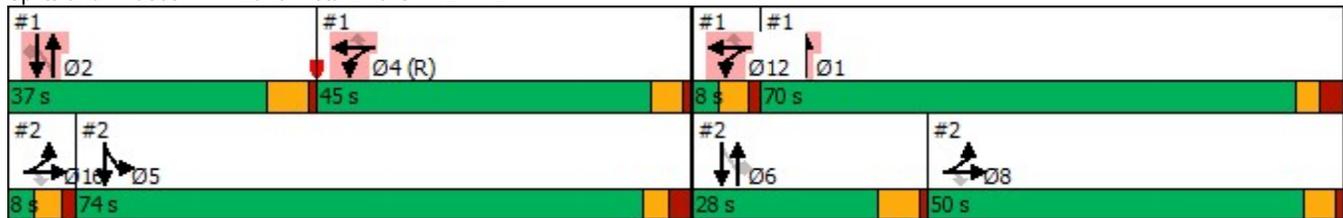
Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	45.0	74.0	28.0	50.0	8.0	8.0
Total Split (%)	28%	46%	18%	31%	5%	5%
Maximum Green (s)	39.9	68.0	22.0	44.9	3.0	3.0
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	C-Min	None	None	Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	59.3	68.0	14.5	52.4	3.0	3.0
90th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
70th %ile Green (s)	61.8	68.0	9.3	57.6	3.0	3.0
70th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
50th %ile Green (s)	68.0	65.0	7.9	53.8	5.8	11.2
50th %ile Term Code	Coord	Hold	Gap	Gap	Gap	Coord
30th %ile Green (s)	73.4	59.8	6.5	50.8	5.7	20.8
30th %ile Term Code	Coord	Hold	Gap	Gap	Gap	Coord
10th %ile Green (s)	80.5	53.6	5.0	46.7	5.4	32.6
10th %ile Term Code	Coord	Hold	Min	Gap	Gap	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 1: Lake Vista Dr & SH 121 WB

2027 Build PM  
 06/24/2025

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	49 (31%), Referenced to phase 4:WBTL, Start of Green
Natural Cycle:	120
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.73
Intersection Signal Delay:	22.0
Intersection LOS:	C
Intersection Capacity Utilization	57.2%
ICU Level of Service	B
Analysis Period (min)	15
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

2027 Build PM  
06/24/2025

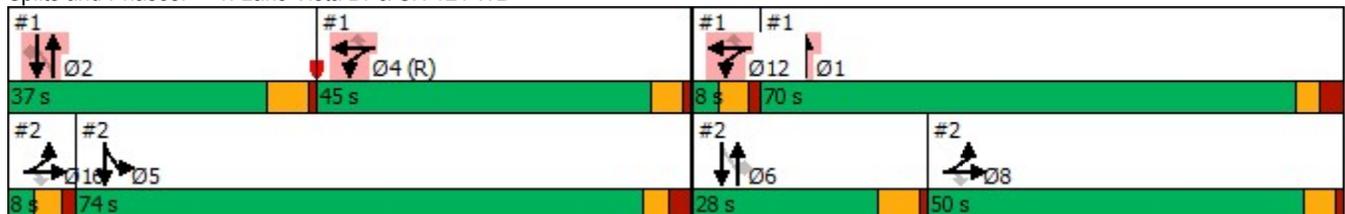


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Min	None	None	Min	None	None
Maximum Split (s)	70	37	45	74	28	50	8	8
Maximum Split (%)	43.8%	23.1%	28.1%	46.3%	17.5%	31.3%	5.0%	5.0%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	102	12	49	20	94	122	94	12
End Time (s)	12	49	94	94	122	12	102	20
Yield/Force Off (s)	6	43	88.9	88	116	6.9	97	15
Yield/Force Off 170(s)	6	25	73.9	88	98	6.9	97	15
Local Start Time (s)	53	123	0	131	45	73	45	123
Local Yield (s)	117	154	39.9	39	67	117.9	48	126
Local Yield 170(s)	117	136	24.9	39	49	117.9	48	126

Intersection Summary

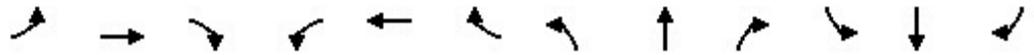
Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 49 (31%), Referenced to phase 4:WBTL, Start of Green	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 Build PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗					↑	↗	↘	↑↑	
Traffic Volume (vph)	275	1126	10	0	0	0	0	37	185	71	40	0
Future Volume (vph)	275	1126	10	0	0	0	0	37	185	71	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.990								0.950		
Satd. Flow (prot)	0	4891	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.990								0.732		
Satd. Flow (perm)	0	4891	1538	0	0	0	0	1810	1538	1325	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136						195			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			434			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	289	1185	11	0	0	0	0	39	195	75	42	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1474	11	0	0	0	0	39	195	75	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 Build PM  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								28.0	28.0	74.0		
Total Split (%)								17.5%	17.5%	46.3%		
Maximum Green (s)								22.0	22.0	68.0		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		71.4	71.4					8.6	8.6	71.5	77.5	
Actuated g/C Ratio		0.45	0.45					0.05	0.05	0.45	0.48	
v/c Ratio		0.68	0.01					0.40	0.73	0.10	0.03	
Control Delay		38.4	0.0					83.7	24.9	7.4	4.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		38.4	0.0					83.7	24.9	7.4	4.5	
LOS		D	A					F	C	A	A	
Approach Delay		38.1						34.7			6.4	
Approach LOS		D						C			A	
90th %ile Green (s)								14.5	14.5	68.0		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								9.3	9.3	68.0		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								7.9	7.9	65.0		
50th %ile Term Code								Gap	Gap	Hold		
30th %ile Green (s)								6.5	6.5	59.8		
30th %ile Term Code								Gap	Gap	Hold		
10th %ile Green (s)								5.0	5.0	53.6		
10th %ile Term Code								Min	Min	Hold		
Queue Length 50th (ft)		450	0					40	0	56	16	
Queue Length 95th (ft)		564	0					80	83	0	0	
Internal Link Dist (ft)		165			90			354			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2181	761					248	379	790	1939	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.68	0.01					0.16	0.51	0.09	0.02	

Intersection Summary

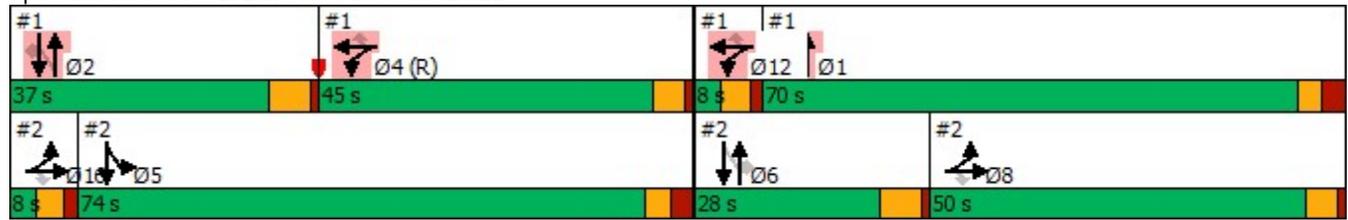
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	70.0	37.0	45.0	50.0	8.0	8.0
Total Split (%)	44%	23%	28%	31%	5%	5%
Maximum Green (s)	64.0	31.0	39.9	44.9	3.0	3.0
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	C-Min	Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	64.0	11.6	59.3	52.4	3.0	3.0
90th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
70th %ile Green (s)	64.0	9.1	61.8	57.6	3.0	3.0
70th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
50th %ile Green (s)	56.0	8.1	68.0	53.8	5.8	11.2
50th %ile Term Code	Hold	Gap	Coord	Gap	Gap	Coord
30th %ile Green (s)	51.7	7.1	73.4	50.8	5.7	20.8
30th %ile Term Code	Hold	Gap	Coord	Gap	Gap	Coord
10th %ile Green (s)	46.4	5.6	80.5	46.7	5.4	32.6
10th %ile Term Code	Hold	Gap	Coord	Gap	Gap	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2027 Build PM  
 06/24/2025

Area Type:	Other		
Cycle Length:	160		
Actuated Cycle Length:	160		
Offset:	49 (31%), Referenced to phase 4:WBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.73		
Intersection Signal Delay:	35.7	Intersection LOS:	D
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	1433	4	0	0	0	9
Future Vol, veh/h	1433	4	0	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	24	5	5	5	9
Mvmt Flow	1558	4	0	0	0	10

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	779
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.28
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	3.99
Pot Cap-1 Maneuver	-	-	0	279
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	279
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	18.4
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	279	-	-
HCM Lane V/C Ratio	0.035	-	-
HCM Control Delay (s)	18.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	1439	3	0	0	0	23
Future Vol, veh/h	1439	3	0	0	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	24	5	5	5	9
Mvmt Flow	1564	3	0	0	0	25

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	782
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.28
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	3.99
Pot Cap-1 Maneuver	-	-	0	277
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	277
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	19.3
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	277	-	-
HCM Lane V/C Ratio	0.09	-	-
HCM Control Delay (s)	19.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.3	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	0	0	210	39	12
Future Vol, veh/h	11	0	0	210	39	12
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	-	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	9	5	5	5	5	24
Mvmt Flow	12	0	0	228	42	13

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	156	21	55	0	0
Stage 1	42	-	-	-	-
Stage 2	114	-	-	-	-
Critical Hdwy	6.98	7	4.2	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-
Follow-up Hdwy	3.59	3.35	2.25	-	-
Pot Cap-1 Maneuver	800	1042	1526	-	-
Stage 1	955	-	-	-	-
Stage 2	878	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	800	1042	1526	-	-
Mov Cap-2 Maneuver	800	-	-	-	-
Stage 1	955	-	-	-	-
Stage 2	878	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1526	-	800	-	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	0	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	2	0	0	208	36	2
Future Vol, veh/h	2	0	0	208	36	2
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	92	92	92	92	92	92
Heavy Vehicles, %	9	5	5	5	5	24
Mvmt Flow	2	0	0	226	39	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	153	21	41	0	0
Stage 1	40	-	-	-	-
Stage 2	113	-	-	-	-
Critical Hdwy	6.98	7	4.2	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-
Follow-up Hdwy	3.59	3.35	2.25	-	-
Pot Cap-1 Maneuver	804	1042	1545	-	-
Stage 1	957	-	-	-	-
Stage 2	879	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	804	1042	1545	-	-
Mov Cap-2 Maneuver	804	-	-	-	-
Stage 1	957	-	-	-	-
Stage 2	879	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1545	-	804	-	-
HCM Lane V/C Ratio	-	-	0.003	-	-
HCM Control Delay (s)	0	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build AM Optimized  
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↑↑↑	↑	↑	↑↑			↑↑	↑
Traffic Volume (vph)	0	0	0	250	830	83	2	44	0	0	36	44
Future Volume (vph)	0	0	0	250	830	83	2	44	0	0	36	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.989		0.950					
Satd. Flow (prot)	0	0	0	0	4886	1538	1719	3438	0	0	3438	1538
Flt Permitted					0.989		0.800					
Satd. Flow (perm)	0	0	0	0	4886	1538	1448	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						182						182
Link Speed (mph)		50			50			40				40
Link Distance (ft)		184			251			266				361
Travel Time (s)		2.5			3.4			4.5				6.2
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	284	943	94	2	50	0	0	41	50
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1227	94	2	50	0	0	41	50
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2				2
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12			1	12			2

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build AM Optimized  
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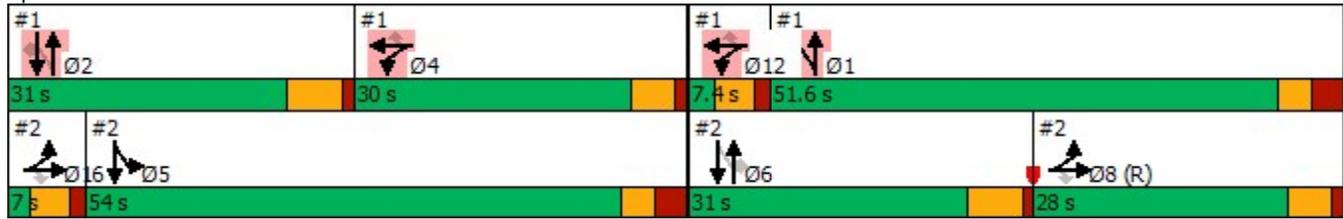
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							51.6				31.0	31.0
Total Split (%)							43.0%				25.8%	25.8%
Maximum Green (s)							45.6				25.0	25.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					66.7	66.7	40.7	46.5			6.0	6.0
Actuated g/C Ratio					0.56	0.56	0.34	0.39			0.05	0.05
v/c Ratio					0.45	0.10	0.00	0.04			0.24	0.20
Control Delay					22.1	0.2	1.0	2.1			57.8	1.8
Queue Delay					0.0	0.0	0.0	0.0			0.0	0.0
Total Delay					22.1	0.2	1.0	2.1			57.8	1.8
LOS					C	A	A	A			E	A
Approach Delay					20.5			2.0			27.0	
Approach LOS					C			A			C	
90th %ile Green (s)							45.6				7.4	7.4
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							45.5				6.5	6.5
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							42.3				5.9	5.9
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							39.9				5.2	5.2
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							0.0				0.0	0.0
10th %ile Term Code							Skip				Skip	Skip
Queue Length 50th (ft)					246	0	1	4			16	0
Queue Length 95th (ft)					306	0	m1	0			34	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					2714	935	713	2029			716	464
Starvation Cap Reductn					0	0	0	0			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.45	0.10	0.00	0.02			0.06	0.11

Intersection Summary

Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	30.0	54.0	31.0	28.0	7.4	7.0
Total Split (%)	25%	45%	26%	23%	6%	6%
Maximum Green (s)	24.9	48.0	25.0	22.9	2.4	2.0
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	Min	None	None	C-Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	42.5	48.0	6.3	41.6	2.4	2.0
90th %ile Term Code	Max	Hold	Gap	Coord	Coord	Max
70th %ile Green (s)	40.0	44.5	5.5	45.8	5.9	2.1
70th %ile Term Code	Gap	Hold	Gap	Coord	Coord	Max
50th %ile Green (s)	36.2	37.9	5.0	50.7	13.5	4.3
50th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
30th %ile Green (s)	33.7	34.8	5.0	53.9	19.1	4.2
30th %ile Term Code	Gap	Hold	Min	Coord	Coord	Gap
10th %ile Green (s)	19.2	9.1	5.0	79.6	90.7	4.2
10th %ile Term Code	Hold	Gap	Min	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Area Type:	Other		
Cycle Length:	120		
Actuated Cycle Length:	120		
Offset:	0 (0%), Referenced to phase 8:EBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.45		
Intersection Signal Delay:	20.3	Intersection LOS:	C
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		
m	Volume for 95th percentile queue is metered by upstream signal.		

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

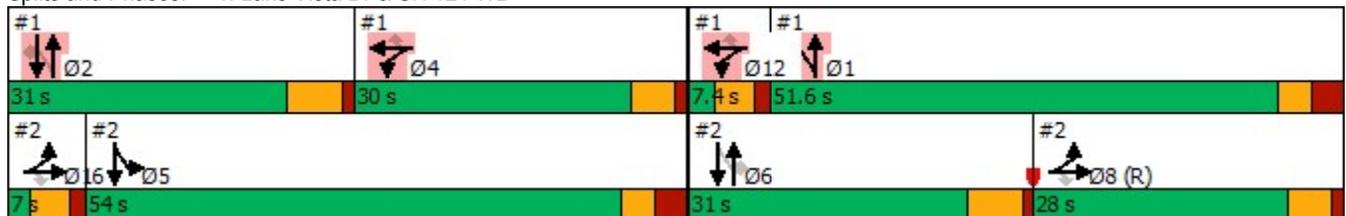


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	C-Min	None	None
Maximum Split (s)	51.6	31	30	54	31	28	7.4	7
Maximum Split (%)	43.0%	25.8%	25.0%	45.0%	25.8%	23.3%	6.2%	5.8%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	96.4	28	59	35	89	0	89	28
End Time (s)	28	59	89	89	0	28	96.4	35
Yield/Force Off (s)	22	53	83.9	83	114	22.9	91.4	30
Yield/Force Off 170(s)	22	35	83.9	83	96	7.9	91.4	30
Local Start Time (s)	96.4	28	59	35	89	0	89	28
Local Yield (s)	22	53	83.9	83	114	22.9	91.4	30
Local Yield 170(s)	22	35	83.9	83	96	7.9	91.4	30

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 0 (0%), Referenced to phase 8:EBTL, Start of Green	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



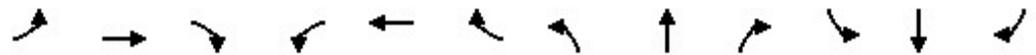
Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 Build AM Optimized  
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑					↑	↑	↑	↑↑	
Traffic Volume (vph)	40	597	17	0	0	0	0	7	28	20	271	0
Future Volume (vph)	40	597	17	0	0	0	0	7	28	20	271	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.997								0.950		
Satd. Flow (prot)	0	4925	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.997								0.752		
Satd. Flow (perm)	0	4925	1538	0	0	0	0	1810	1538	1361	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182						182			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			434			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	45	671	19	0	0	0	0	8	31	22	304	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	716	19	0	0	0	0	8	31	22	304	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 Build AM Optimized  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								31.0	31.0	54.0		
Total Split (%)								25.8%	25.8%	45.0%		
Maximum Green (s)								25.0	25.0	48.0		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		62.7	62.7					5.4	5.4	40.2	46.2	
Actuated g/C Ratio		0.52	0.52					0.04	0.04	0.34	0.38	
v/c Ratio		0.28	0.02					0.10	0.13	0.04	0.23	
Control Delay		18.7	0.1					57.4	1.1	3.0	9.4	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	
Total Delay		18.7	0.1					57.4	1.1	3.0	9.5	
LOS		B	A					E	A	A	A	
Approach Delay		18.2						12.6			9.1	
Approach LOS		B						B			A	
90th %ile Green (s)								6.3	6.3	48.0		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								5.5	5.5	44.5		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								5.0	5.0	37.9		
50th %ile Term Code								Min	Min	Hold		
30th %ile Green (s)								5.0	5.0	34.8		
30th %ile Term Code								Min	Min	Hold		
10th %ile Green (s)								5.0	5.0	9.1		
10th %ile Term Code								Min	Min	Gap		
Queue Length 50th (ft)		115	0					6	0	2	12	
Queue Length 95th (ft)		171	0					22	0	m0	1	
Internal Link Dist (ft)		165			90			354			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2572	890					377	464	716	1917	
Starvation Cap Reductn		0	0					0	0	0	732	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.28	0.02					0.02	0.07	0.03	0.26	

Intersection Summary

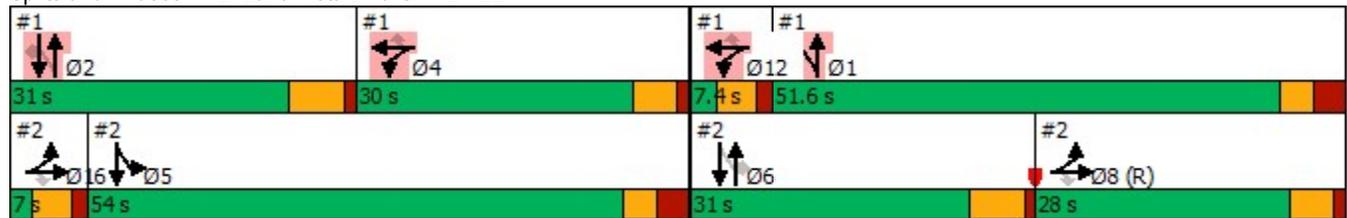
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	51.6	31.0	30.0	28.0	7.4	7.0
Total Split (%)	43%	26%	25%	23%	6%	6%
Maximum Green (s)	45.6	25.0	24.9	22.9	2.4	2.0
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	Min	C-Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	45.6	7.4	42.5	41.6	2.4	2.0
90th %ile Term Code	Hold	Gap	Max	Coord	Coord	Max
70th %ile Green (s)	45.5	6.5	40.0	45.8	5.9	2.1
70th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Max
50th %ile Green (s)	42.3	5.9	36.2	50.7	13.5	4.3
50th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
30th %ile Green (s)	39.9	5.2	33.7	53.9	19.1	4.2
30th %ile Term Code	Hold	Gap	Gap	Coord	Coord	Gap
10th %ile Green (s)	0.0	0.0	19.2	79.6	90.7	4.2
10th %ile Term Code	Skip	Skip	Hold	Coord	Coord	Gap
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2027 Build AM Optimized  
 06/24/2025

Area Type:	Other		
Cycle Length:	120		
Actuated Cycle Length:	120		
Offset:	0 (0%), Referenced to phase 8:EBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.45		
Intersection Signal Delay:	15.3	Intersection LOS:	B
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	658	8	0	0	0	3
Future Vol, veh/h	658	8	0	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	7	5	5	5	19
Mvmt Flow	715	9	0	0	0	3

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	358
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.48
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	4.09
Pot Cap-1 Maneuver	-	-	0	509
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	509
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	12.1
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	509	-	-
HCM Lane V/C Ratio	0.006	-	-
HCM Control Delay (s)	12.1	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	655	7	0	0	0	8
Future Vol, veh/h	655	7	0	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	7	5	5	5	19
Mvmt Flow	712	8	0	0	0	9

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	356
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.48
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	4.09
Pot Cap-1 Maneuver	-	-	0	511
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	511
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	12.2
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	511	-	-
HCM Lane V/C Ratio	0.017	-	-
HCM Control Delay (s)	12.2	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	31	263	25
Future Vol, veh/h	4	0	0	31	263	25
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	-	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	19	5	5	5	5	7
Mvmt Flow	4	0	0	34	286	27

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	303	143	313	0	0
Stage 1	286	-	-	-	-
Stage 2	17	-	-	-	-
Critical Hdwy	7.18	7	4.2	-	-
Critical Hdwy Stg 1	6.18	-	-	-	-
Critical Hdwy Stg 2	6.18	-	-	-	-
Follow-up Hdwy	3.69	3.35	2.25	-	-
Pot Cap-1 Maneuver	620	869	1223	-	-
Stage 1	689	-	-	-	-
Stage 2	956	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	620	869	1223	-	-
Mov Cap-2 Maneuver	620	-	-	-	-
Stage 1	689	-	-	-	-
Stage 2	956	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1223	-	620	-	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	0	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	1	0	0	30	259	4
Future Vol, veh/h	1	0	0	30	259	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	19	5	5	5	5	7
Mvmt Flow	1	0	0	33	282	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	301	143	286	0	-
Stage 1	284	-	-	-	-
Stage 2	17	-	-	-	-
Critical Hdwy	7.18	7	4.2	-	-
Critical Hdwy Stg 1	6.18	-	-	-	-
Critical Hdwy Stg 2	6.18	-	-	-	-
Follow-up Hdwy	3.69	3.35	2.25	-	-
Pot Cap-1 Maneuver	622	869	1252	-	-
Stage 1	691	-	-	-	-
Stage 2	956	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	622	869	1252	-	-
Mov Cap-2 Maneuver	622	-	-	-	-
Stage 1	691	-	-	-	-
Stage 2	956	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1252	-	622	-	-
HCM Lane V/C Ratio	-	-	0.002	-	-
HCM Control Delay (s)	0	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build PM Optimized  
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					  	 	 	 			 	 
Traffic Volume (vph)	0	0	0	39	957	264	12	300	0	0	76	69
Future Volume (vph)	0	0	0	39	957	264	12	300	0	0	76	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected					0.998		0.950					
Satd. Flow (prot)	0	0	0	0	4930	1538	1719	3438	0	0	3438	1538
Flt Permitted					0.998		0.703					
Satd. Flow (perm)	0	0	0	0	4930	1538	1272	3438	0	0	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						275						182
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		184			251			266			361	
Travel Time (s)		2.5			3.4			4.5			6.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	0	0	0	41	997	275	13	313	0	0	79	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1038	275	13	313	0	0	79	72
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				4 12	4 12		1	1 2			2	

Lanes, Volumes, Timings  
1: Lake Vista Dr & SH 121 WB

2027 Build PM Optimized  
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4 12	1 2					2
Detector Phase				4 12	4 12	4 12	1	1 2			2	2
Switch Phase												
Minimum Initial (s)							5.0				5.0	5.0
Minimum Split (s)							11.0				31.0	31.0
Total Split (s)							54.0				31.0	31.0
Total Split (%)							45.0%				25.8%	25.8%
Maximum Green (s)							48.0				25.0	25.0
Yellow Time (s)							3.0				5.0	5.0
All-Red Time (s)							3.0				1.0	1.0
Lost Time Adjust (s)							0.0				0.0	0.0
Total Lost Time (s)							6.0				6.0	6.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)							2.0				2.0	2.0
Recall Mode							None				None	None
Walk Time (s)											7.0	7.0
Flash Dont Walk (s)											18.0	18.0
Pedestrian Calls (#/hr)											0	0
Act Effct Green (s)					48.2	48.2	54.7	60.7			7.4	7.4
Actuated g/C Ratio					0.40	0.40	0.46	0.51			0.06	0.06
v/c Ratio					0.52	0.35	0.02	0.18			0.37	0.27
Control Delay					28.8	4.3	0.4	2.6			58.5	2.5
Queue Delay					0.0	0.0	0.0	0.1			0.0	0.0
Total Delay					28.8	4.3	0.4	2.7			58.5	2.5
LOS					C	A	A	A			E	A
Approach Delay					23.7			2.6			31.8	
Approach LOS					C			A			C	
90th %ile Green (s)							48.0				10.3	10.3
90th %ile Term Code							Hold				Gap	Gap
70th %ile Green (s)							48.0				8.1	8.1
70th %ile Term Code							Hold				Gap	Gap
50th %ile Green (s)							48.0				7.2	7.2
50th %ile Term Code							Hold				Gap	Gap
30th %ile Green (s)							48.0				6.3	6.3
30th %ile Term Code							Hold				Gap	Gap
10th %ile Green (s)							44.6				5.0	5.0
10th %ile Term Code							Hold				Min	Min
Queue Length 50th (ft)					221	0	0	0			31	0
Queue Length 95th (ft)					278	55	m1	0			56	0
Internal Link Dist (ft)		104			171			186			281	
Turn Bay Length (ft)												50
Base Capacity (vph)					1980	782	765	2229			716	464
Starvation Cap Reductn					0	0	0	991			0	0
Spillback Cap Reductn					0	0	0	0			0	0
Storage Cap Reductn					0	0	0	0			0	0
Reduced v/c Ratio					0.52	0.35	0.02	0.25			0.11	0.16

Intersection Summary

Lane Group	Ø4	Ø5	Ø6	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	8.0	5.0	5.0	8.0	2.0	2.0
Minimum Split (s)	27.1	11.0	31.0	27.1	7.0	7.0
Total Split (s)	28.0	51.1	31.0	30.0	7.0	7.9
Total Split (%)	23%	43%	26%	25%	6%	7%
Maximum Green (s)	22.9	45.1	25.0	24.9	2.0	2.9
Yellow Time (s)	3.9	3.0	5.0	3.9	3.5	3.5
All-Red Time (s)	1.2	3.0	1.0	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	2.0	2.0	3.0	1.0	1.0
Recall Mode	C-Min	None	None	Min	None	None
Walk Time (s)	7.0		7.0	7.0		
Flash Dont Walk (s)	15.0		18.0	15.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	37.6	45.1	13.1	36.8	2.0	2.9
90th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
70th %ile Green (s)	39.8	45.1	8.2	41.7	2.0	2.9
70th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
50th %ile Green (s)	40.7	45.1	7.0	42.9	2.0	2.9
50th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
30th %ile Green (s)	41.6	45.1	5.8	44.1	2.0	2.9
30th %ile Term Code	Coord	Hold	Gap	Max	Max	Coord
10th %ile Green (s)	46.3	0.0	5.0	41.5	2.0	57.4
10th %ile Term Code	Coord	Skip	Min	Gap	Max	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 1: Lake Vista Dr & SH 121 WB

2027 Build PM Optimized  
 06/24/2025

Area Type:	Other		
Cycle Length:	120		
Actuated Cycle Length:	120		
Offset:	0 (0%), Referenced to phase 4:WBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.69		
Intersection Signal Delay:	20.5	Intersection LOS:	C
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
m	Volume for 95th percentile queue is metered by upstream signal.		

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Timing Report, Sorted By Phase  
1: Lake Vista Dr & SH 121 WB

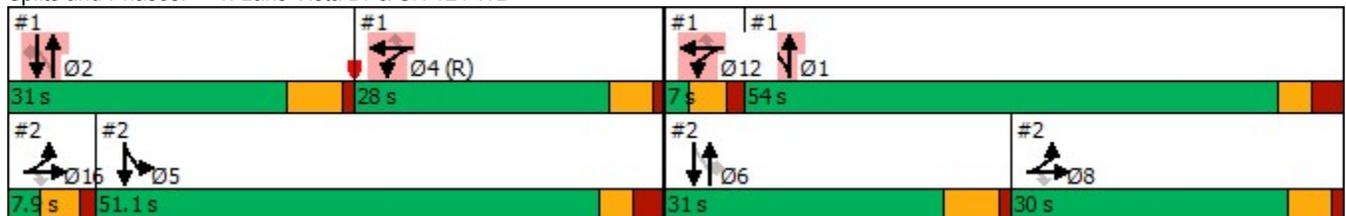


Phase Number	1	2	4	5	6	8	12	16
Node Number	1	1	1	2	2	2	1	2
Movement	NBTL	NBSB	WBTL	SBTL	NBSB	EBTL	WBTL	EBTL
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Min	None	None	Min	None	None
Maximum Split (s)	54	31	28	51.1	31	30	7	7.9
Maximum Split (%)	45.0%	25.8%	23.3%	42.6%	25.8%	25.0%	5.8%	6.6%
Minimum Split (s)	11	31	27.1	11	31	27.1	7	7
Yellow Time (s)	3	5	3.9	3	5	3.9	3.5	3.5
All-Red Time (s)	3	1	1.2	3	1	1.2	1.5	1.5
Minimum Initial (s)	5	5	8	5	5	8	2	2
Vehicle Extension (s)	2	2	3	2	2	3	1	1
Minimum Gap (s)	2	2	3	2	2	3	1	1
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7	7		7	7		
Flash Dont Walk (s)		18	15		18	15		
Dual Entry	No	Yes	No	No	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	35	89	0	96.9	28	59	28	89
End Time (s)	89	0	28	28	59	89	35	96.9
Yield/Force Off (s)	83	114	22.9	22	53	83.9	30	91.9
Yield/Force Off 170(s)	83	96	7.9	22	35	83.9	30	91.9
Local Start Time (s)	35	89	0	96.9	28	59	28	89
Local Yield (s)	83	114	22.9	22	53	83.9	30	91.9
Local Yield 170(s)	83	96	7.9	22	35	83.9	30	91.9

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 0 (0%), Referenced to phase 4:WBTL, Start of Green	

Splits and Phases: 1: Lake Vista Dr & SH 121 WB



Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 Build PM Optimized  
06/24/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  							 	 	 	
Traffic Volume (vph)	275	1126	10	0	0	0	0	37	185	71	40	0
Future Volume (vph)	275	1126	10	0	0	0	0	37	185	71	40	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		85	0		0	0		0	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected		0.990								0.950		
Satd. Flow (prot)	0	4891	1538	0	0	0	0	1810	1538	1719	3438	0
Flt Permitted		0.990								0.732		
Satd. Flow (perm)	0	4891	1538	0	0	0	0	1810	1538	1325	3438	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182						195			
Link Speed (mph)		50			50			40			40	
Link Distance (ft)		245			170			434			266	
Travel Time (s)		3.3			2.3			7.4			4.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	289	1185	11	0	0	0	0	39	195	75	42	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1474	11	0	0	0	0	39	195	75	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Split	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases	8 16	8 16						6		5	5 6	

Lanes, Volumes, Timings  
2: Lake Vista Dr & SH 121 EB

2027 Build PM Optimized  
06/24/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases			8 16						6	5 6		
Detector Phase	8 16	8 16	8 16					6	6	5	5 6	
Switch Phase												
Minimum Initial (s)								5.0	5.0	5.0		
Minimum Split (s)								31.0	31.0	11.0		
Total Split (s)								31.0	31.0	51.1		
Total Split (%)								25.8%	25.8%	42.6%		
Maximum Green (s)								25.0	25.0	45.1		
Yellow Time (s)								5.0	5.0	3.0		
All-Red Time (s)								1.0	1.0	3.0		
Lost Time Adjust (s)								0.0	0.0	0.0		
Total Lost Time (s)								6.0	6.0	6.0		
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)								2.0	2.0	2.0		
Recall Mode								None	None	None		
Walk Time (s)								7.0	7.0			
Flash Dont Walk (s)								18.0	18.0			
Pedestrian Calls (#/hr)								0	0			
Act Effct Green (s)		60.2	60.2					7.8	7.8	44.9	49.7	
Actuated g/C Ratio		0.50	0.50					0.06	0.06	0.37	0.41	
v/c Ratio		0.60	0.01					0.33	0.69	0.12	0.03	
Control Delay		27.2	0.0					59.8	20.5	3.5	1.5	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		27.2	0.0					59.8	20.5	3.5	1.5	
LOS		C	A					E	C	A	A	
Approach Delay		27.0						27.0			2.8	
Approach LOS		C						C			A	
90th %ile Green (s)								13.1	13.1	45.1		
90th %ile Term Code								Gap	Gap	Hold		
70th %ile Green (s)								8.2	8.2	45.1		
70th %ile Term Code								Gap	Gap	Hold		
50th %ile Green (s)								7.0	7.0	45.1		
50th %ile Term Code								Gap	Gap	Hold		
30th %ile Green (s)								5.8	5.8	45.1		
30th %ile Term Code								Gap	Gap	Hold		
10th %ile Green (s)								5.0	5.0	0.0		
10th %ile Term Code								Min	Min	Skip		
Queue Length 50th (ft)		339	0					30	0	1	0	
Queue Length 95th (ft)		434	0					63	71	0	m0	
Internal Link Dist (ft)		165			90			354			186	
Turn Bay Length (ft)			85									
Base Capacity (vph)		2453	862					377	474	732	2180	
Starvation Cap Reductn		0	0					0	0	0	0	
Spillback Cap Reductn		0	0					0	0	0	0	
Storage Cap Reductn		0	0					0	0	0	0	
Reduced v/c Ratio		0.60	0.01					0.10	0.41	0.10	0.02	

Intersection Summary

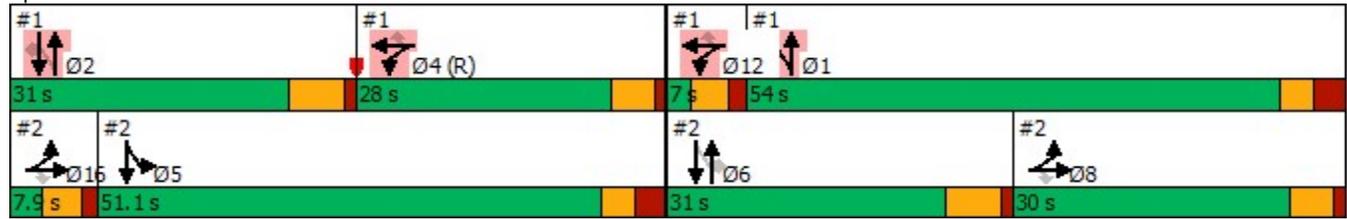
Lane Group	Ø1	Ø2	Ø4	Ø8	Ø12	Ø16
Permitted Phases						
Detector Phase						
Switch Phase						
Minimum Initial (s)	5.0	5.0	8.0	8.0	2.0	2.0
Minimum Split (s)	11.0	31.0	27.1	27.1	7.0	7.0
Total Split (s)	54.0	31.0	28.0	30.0	7.0	7.9
Total Split (%)	45%	26%	23%	25%	6%	7%
Maximum Green (s)	48.0	25.0	22.9	24.9	2.0	2.9
Yellow Time (s)	3.0	5.0	3.9	3.9	3.5	3.5
All-Red Time (s)	3.0	1.0	1.2	1.2	1.5	1.5
Lost Time Adjust (s)						
Total Lost Time (s)						
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	2.0	3.0	3.0	1.0	1.0
Recall Mode	None	None	C-Min	Min	None	None
Walk Time (s)		7.0	7.0	7.0		
Flash Dont Walk (s)		18.0	15.0	15.0		
Pedestrian Calls (#/hr)		0	0	0		
Act Effct Green (s)						
Actuated g/C Ratio						
v/c Ratio						
Control Delay						
Queue Delay						
Total Delay						
LOS						
Approach Delay						
Approach LOS						
90th %ile Green (s)	48.0	10.3	37.6	36.8	2.0	2.9
90th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
70th %ile Green (s)	48.0	8.1	39.8	41.7	2.0	2.9
70th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
50th %ile Green (s)	48.0	7.2	40.7	42.9	2.0	2.9
50th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
30th %ile Green (s)	48.0	6.3	41.6	44.1	2.0	2.9
30th %ile Term Code	Hold	Gap	Coord	Max	Max	Coord
10th %ile Green (s)	44.6	5.0	46.3	41.5	2.0	57.4
10th %ile Term Code	Hold	Min	Coord	Gap	Max	Coord
Queue Length 50th (ft)						
Queue Length 95th (ft)						
Internal Link Dist (ft)						
Turn Bay Length (ft)						
Base Capacity (vph)						
Starvation Cap Reductn						
Spillback Cap Reductn						
Storage Cap Reductn						
Reduced v/c Ratio						
Intersection Summary						

Lanes, Volumes, Timings  
 2: Lake Vista Dr & SH 121 EB

2027 Build PM Optimized  
 06/24/2025

Area Type:	Other		
Cycle Length:	120		
Actuated Cycle Length:	120		
Offset:	0 (0%), Referenced to phase 4:WBTL, Start of Green		
Natural Cycle:	120		
Control Type:	Actuated-Coordinated		
Maximum v/c Ratio:	0.69		
Intersection Signal Delay:	25.5	Intersection LOS:	C
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 2: Lake Vista Dr & SH 121 EB



Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	1433	4	0	0	0	9
Future Vol, veh/h	1433	4	0	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	24	5	5	5	9
Mvmt Flow	1558	4	0	0	0	10

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	779
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.28
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	3.99
Pot Cap-1 Maneuver	-	-	0	279
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	279
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	18.4
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	279	-	-
HCM Lane V/C Ratio	0.035	-	-
HCM Control Delay (s)	18.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑				↑
Traffic Vol, veh/h	1439	3	0	0	0	23
Future Vol, veh/h	1439	3	0	0	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	24	5	5	5	9
Mvmt Flow	1564	3	0	0	0	25

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	-	782
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	-	7.28
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	-	3.99
Pot Cap-1 Maneuver	-	-	0	277
Stage 1	-	-	0	-
Stage 2	-	-	0	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	277
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	0	19.3
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	277	-	-
HCM Lane V/C Ratio	0.09	-	-
HCM Control Delay (s)	19.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.3	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT			TT	TT	T
Traffic Vol, veh/h	11	0	0	210	39	12
Future Vol, veh/h	11	0	0	210	39	12
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	-	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	9	5	5	5	5	24
Mvmt Flow	12	0	0	228	42	13

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	156	21	55	0	0
Stage 1	42	-	-	-	-
Stage 2	114	-	-	-	-
Critical Hdwy	6.98	7	4.2	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-
Follow-up Hdwy	3.59	3.35	2.25	-	-
Pot Cap-1 Maneuver	800	1042	1526	-	-
Stage 1	955	-	-	-	-
Stage 2	878	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	800	1042	1526	-	-
Mov Cap-2 Maneuver	800	-	-	-	-
Stage 1	955	-	-	-	-
Stage 2	878	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1526	-	800	-	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	0	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	2	0	0	208	36	2
Future Vol, veh/h	2	0	0	208	36	2
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	92	92	92	92	92	92
Heavy Vehicles, %	9	5	5	5	5	24
Mvmt Flow	2	0	0	226	39	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	153	21	41	0	0
Stage 1	40	-	-	-	-
Stage 2	113	-	-	-	-
Critical Hdwy	6.98	7	4.2	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-
Follow-up Hdwy	3.59	3.35	2.25	-	-
Pot Cap-1 Maneuver	804	1042	1545	-	-
Stage 1	957	-	-	-	-
Stage 2	879	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	804	1042	1545	-	-
Mov Cap-2 Maneuver	804	-	-	-	-
Stage 1	957	-	-	-	-
Stage 2	879	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1545	-	804	-	-
HCM Lane V/C Ratio	-	-	0.003	-	-
HCM Control Delay (s)	0	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

# Appendix E

## Existing Traffic Signal Timing Sheets

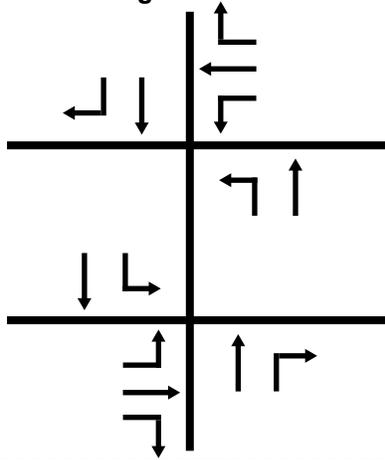
**Intersection:** \_\_\_\_\_  
 Schedule: \_\_\_\_\_  
 Action Plan for AM Peak: \_\_\_\_\_  
 Pattern Plan for AM Peak: \_\_\_\_\_

Control Type: \_\_\_\_\_  
 Day Plan: \_\_\_\_\_  
 Action Plan for PM Peak: \_\_\_\_\_  
 Pattern Plan for PM Peak: \_\_\_\_\_

**AM Peak Hour:**  
 Cycle Length (s): \_\_\_\_\_  
 Offset (s): \_\_\_\_\_  
 Referred to (Offset): \_\_\_\_\_  
 Timing Plan: \_\_\_\_\_  
 Sequence: \_\_\_\_\_  
 Coordination Phase(s): \_\_\_\_\_  
 Reference Phase(s): \_\_\_\_\_  
 Force Off: \_\_\_\_\_

**PM Peak Hour:**  
 Cycle Length (s): \_\_\_\_\_  
 Offset (s): \_\_\_\_\_  
 Referred to (Offset): \_\_\_\_\_  
 Timing Plan: \_\_\_\_\_  
 Sequence: \_\_\_\_\_  
 Coordination Phase(s): \_\_\_\_\_  
 Reference Phase(s): \_\_\_\_\_  
 Force Off: \_\_\_\_\_

**Phase Configuration:**



**Phase Sequence:**

<b>AM Peak:</b>								
Ring 1								
Ring 2								
<b>PM Peak:</b>								
Ring 1								
Ring 2								

Overlaps:

**Phasing Settings:**

TIMING PARAMETERS	Φ1	Φ2	Φ3	Φ4	Φ5	Φ6	Φ7	Φ8	Φ	Φ	Φ	Φ
Minimum Initial [ <i>Min Green</i> ]												
Minimum Split												
Maximum Split (AM Peak)												
Maximum Split (PM Peak)												
Lagging Phase? (Yes =✓; No = Blank)												
Yellow Time [ <i>Yellow</i> ]												
Red Time [ <i>Red Clear</i> ]												
Vehicle Extension [ <i>Vehicle Extf</i> ]												
Minimum Gap [ <i>Min Gap</i> ]												
Time Before Reduce [ <i>Time B4</i> ]												
Time to Reduce [ <i>TTReduc</i> ]												
Recall Mode (AM Peak)												
Recall Mode (PM Peak)												
Pedestrian Phase? (Yes =✓; No = Blank)												
Walk Time [ <i>Walk</i> ]												
Flash Don't Walk [ <i>Ped Clear</i> ]												
Dual Entry? (Yes =✓; No = Blank)												

Note: Synchro input names shown in **blue**; Econolite ASC3 input names shown in [*italics*].

Station : 124 - SRT & Lake Vista ( Standard File )

Phase [1.1.1]

	φ1	φ2 (ET)	φ3 (NL)	φ4 (ST)	φ5	φ6 (WT)	φ7 (SL)	φ8 (NT)	φ9	φ10	φ11	φ12	φ13	φ14	φ15	φ16
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Ped Clearance	0	18	0	15	0	18	0	15	0	0	0	0	0	0	0	0
Min Green	5	5	5	8	5	5	5	8	1	2	2	2	1	2	2	2
Passage	2	2	1	3	2	2	1	3	1	1	1	1	1	1	1	1
Max1	25	25	25	25	25	25	25	25	25	25	2	2	25	25	2	2
Max2	85	45	50	60	85	45	50	60	50	50	4	4	50	50	4	4
Yellow	3	5	3	3.9	3	5	3	3.9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	3	1	1.5	1.2	3	1	1.5	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enable	ON	ON		ON	ON	ON		ON	ON			ON	ON			ON
Auto Entry																
Auto Exit																
Non Act1																
Non Act2																
Lock Call																
Min Recall				ON				ON								
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON			ON							
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																

Close Loop Active      OFF

Prepared By  
System

Date Implemented

Reviewed By

Approved By

Station : 124 - SRT & Lake Vista ( Standard File )

PreemptionTimes[3.1]/Phases[3.2]/Options[3.3]/Times+[3.4]

Channel	1	2	3	4	5	6
Lock Input	ON	ON				
Override Flash	ON	ON				
Override Higher	ON	ON				
Flash Dwell	ON	ON				
Link	0	0	0	0	0	0
Delay	0	0	0	0	0	0
Min Duration	0	0	5	5	5	5
Min Green	0	0	5	5	5	5
Min Walk	0	0	3	3	3	3
Ped Clear	0	0	4	4	4	4
Track Green	0	0	0	0	0	0
Min Dwell	0	0	5	5	5	5
Max Presence	0	0	60	60	60	60
Track R1	0	0	0	0	0	0
Track R2	0	0	0	0	0	0
Track R3	0	0	0	0	0	0
Track R4	0	0	0	0	0	0
Dwell P1	0	0	1	2	1	4
Dwell P2	0	0	6	5	8	5
Dwell P3	0	0	0	0	0	0
Dwell P4	0	0	0	0	0	0
Exit R1	0	0	1	2	8	4
Exit R2	0	0	6	5	0	0
Exit R3	0	0	0	0	0	0
Exit R4	0	0	0	0	0	0
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Track Over 1	0	0	0	0	0	0
Track Over 2	0	0	0	0	0	0
Track Over 3	0	0	0	0	0	0
Track Over 4	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0
Yellow	0	0	0	0	0	0
Red	0	0	0	0	0	0

Low Priority Preempt [3]

Preempt	7	8	9	10
Min	0	0	0	0
Max	0	0	0	0
Type				
Platoon Rx				
Cond Lockout				
Coord in Preempt				
Platoon Tx				
Lock				
Begin Mode	SKIP	SKIP	SKIP	SKIP
Priority P1	0	0	0	0
Priority P2	0	0	0	0
Priority P3	0	0	0	0
Priority P4	0	0	0	0
Max Lockout	0	0	0	0
Ext Dwell	0	0	0	0
Ant Arrival	0	0	0	0
Max Grn 1	0	0	0	0
Max Grn 2	0	0	0	0
Max Grn 3	0	0	0	0
Max Grn 4	0	0	0	0
Max Grn 5	0	0	0	0
Max Grn 6	0	0	0	0
Max Grn 7	0	0	0	0
Max Grn 8	0	0	0	0
Max Grn 9	0	0	0	0
Max Grn 10	0	0	0	0
Max Grn 11	0	0	0	0
Max Grn 12	0	0	0	0
Max Grn 13	0	0	0	0
Max Grn 14	0	0	0	0
Max Grn 15	0	0	0	0
Max Grn 16	0	0	0	0
Headway Group				
Queue Jump				
Headway Time	0	0	0	0
TX Time	0	0	0	0
PP Hold Time	0	0	0	0
PP Tx Phase 1	0	0	0	0
PP Tx Phase 2	0	0	0	0
PP Tx Phase 3	0	0	0	0
PP Tx Phase 4	0	0	0	0

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases				Modifier Phases				Type	Green	Yellow	Red
Overlap 1	1	2	9	10					NORMAL		3.5	1.5
Overlap 2	5	6	13	14					NORMAL		3.5	1.5
Overlap 3									NORMAL		3.5	1.5
Overlap 4									NORMAL		3.5	1.5
Overlap 5									NORMAL		3.5	1.5
Overlap 6									NORMAL		3.5	1.5
Overlap 7									NORMAL		3.5	1.5
Overlap 8									NORMAL		3.5	1.5
Overlap 9	1	9	10						NORMAL		3.5	1.5
Overlap 10	3	11							NORMAL		3.5	1.5
Overlap 11	4	12							NORMAL		3.5	1.5
Overlap 12	5	13	14						NORMAL		3.5	1.5
Overlap 13	7	15							NORMAL		3.5	1.5
Overlap 14	8	16							NORMAL		3.5	1.5
Overlap 15									NORMAL		3.5	1.5
Overlap 16									NORMAL		3.5	1.5









Table : 9 Ring 3										
Table : 9 Ring 4										
Table : 10 Ring 1										
Table : 10 Ring 2										
Table : 10 Ring 3										
Table : 10 Ring 4										
Table : 11 Ring 1										
Table : 11 Ring 2										
Table : 11 Ring 3										
Table : 11 Ring 4										
Table : 12 Ring 1										
Table : 12 Ring 2										
Table : 12 Ring 3										
Table : 12 Ring 4										
Table : 13 Ring 1										
Table : 13 Ring 2										
Table : 13 Ring 3										
Table : 13 Ring 4										
Table : 14 Ring 1										
Table : 14 Ring 2										
Table : 14 Ring 3										
Table : 14 Ring 4										
Table : 15 Ring 1										
Table : 15 Ring 2										
Table : 15 Ring 3										
Table : 15 Ring 4										
Table : 16 Ring 1										
Table : 16 Ring 2										
Table : 16 Ring 3										
Table : 16 Ring 4										

Channels/SDLC+, IO Logic [1.8.7]

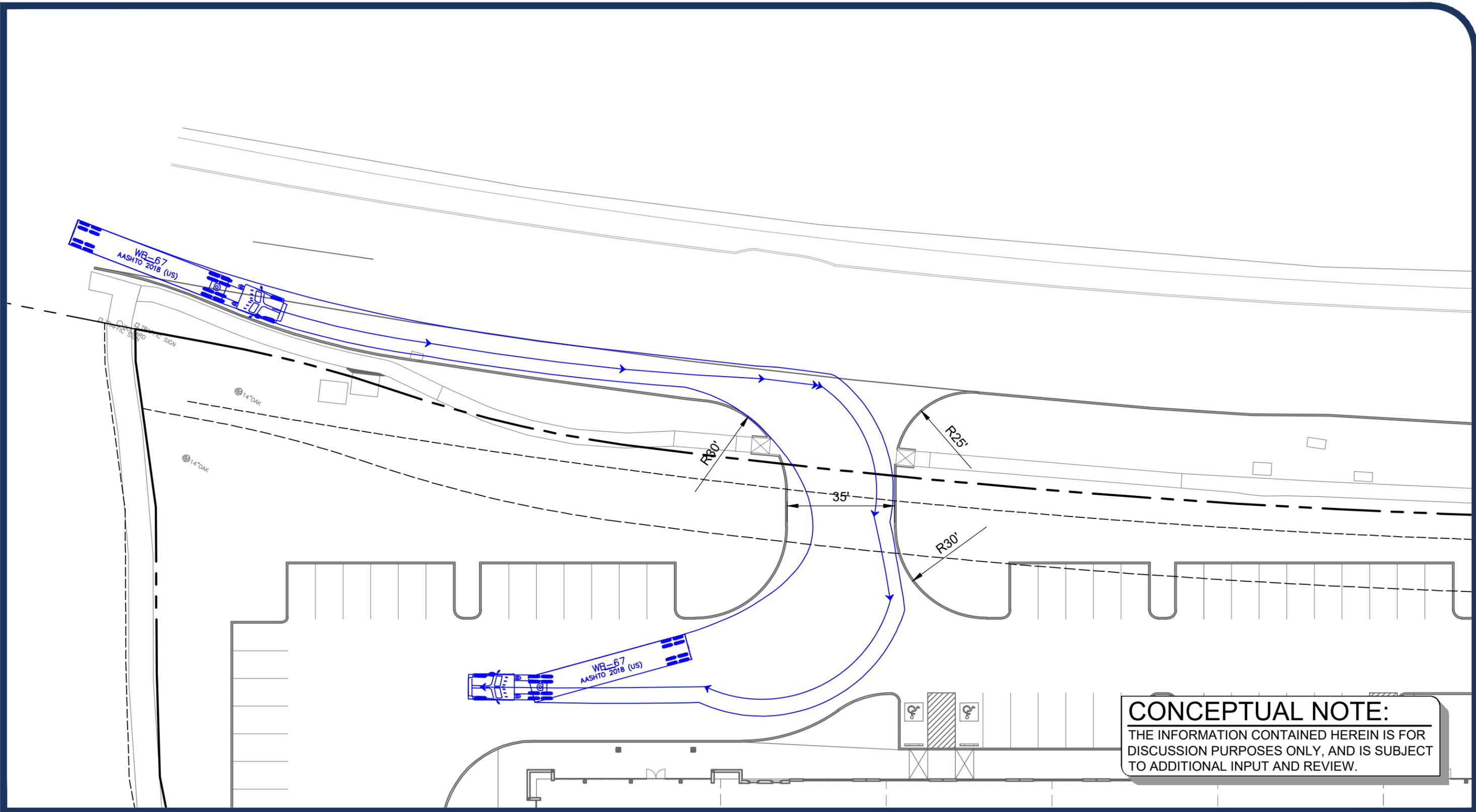
	1	2	3	4	5	6	7	8	9	10
Result	0	0	0	0	0	0	0	0	0	0
Operand 1 Result	1	1	1	1	1	1	1	1	1	1
Operand 1 IO	1	1	1	1	1	1	1	1	1	1
Operand 1 Invert	-	-	-	-	-	-	-	-	-	-
Operand 1	0	0	0	0	0	0	0	0	0	0
Operator 2 Function	----	----	----	----	----	----	----	----	----	----
Operand 2 IO	1	1	1	1	1	1	1	1	1	1
Operand 2 Invert	-	-	-	-	-	-	-	-	-	-
Operand 2	0	0	0	0	0	0	0	0	0	0
Operator 3 Function	----	----	----	----	----	----	----	----	----	----
Operand 3 IO	1	1	1	1	1	1	1	1	1	1
Operand 3 Invert	-	-	-	-	-	-	-	-	-	-
Operand 3	0	0	0	0	0	0	0	0	0	0
Time Operator	DLY									
Time	0	0	0	0	0	0	0	0	0	0

**User Comments:**

# Appendix F

## AutoTURN Exhibits

FILE NAME: A:\58000s\58559\004\LD\CADD\Sheets\EXBT-AUTOTURN-58599.dwg DATE: June 26, 2025, TIME: 10:35 AM, USER: ah2779



### Exhibit 11

# AutoTURN-1: DRIVE-1, RIGHT IN

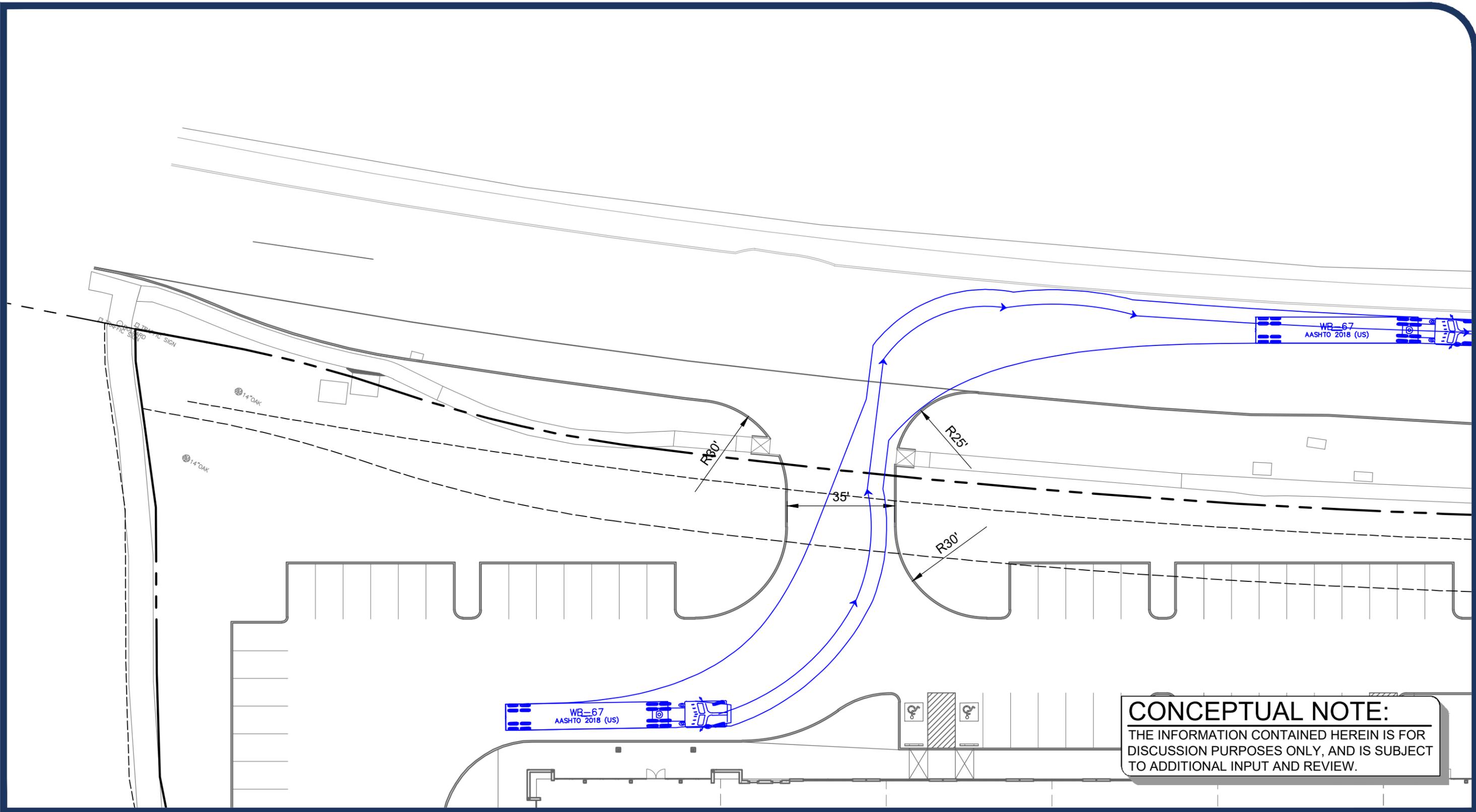


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### Exhibit 12

# AutoTURN-2: DRIVE-1, RIGHT OUT



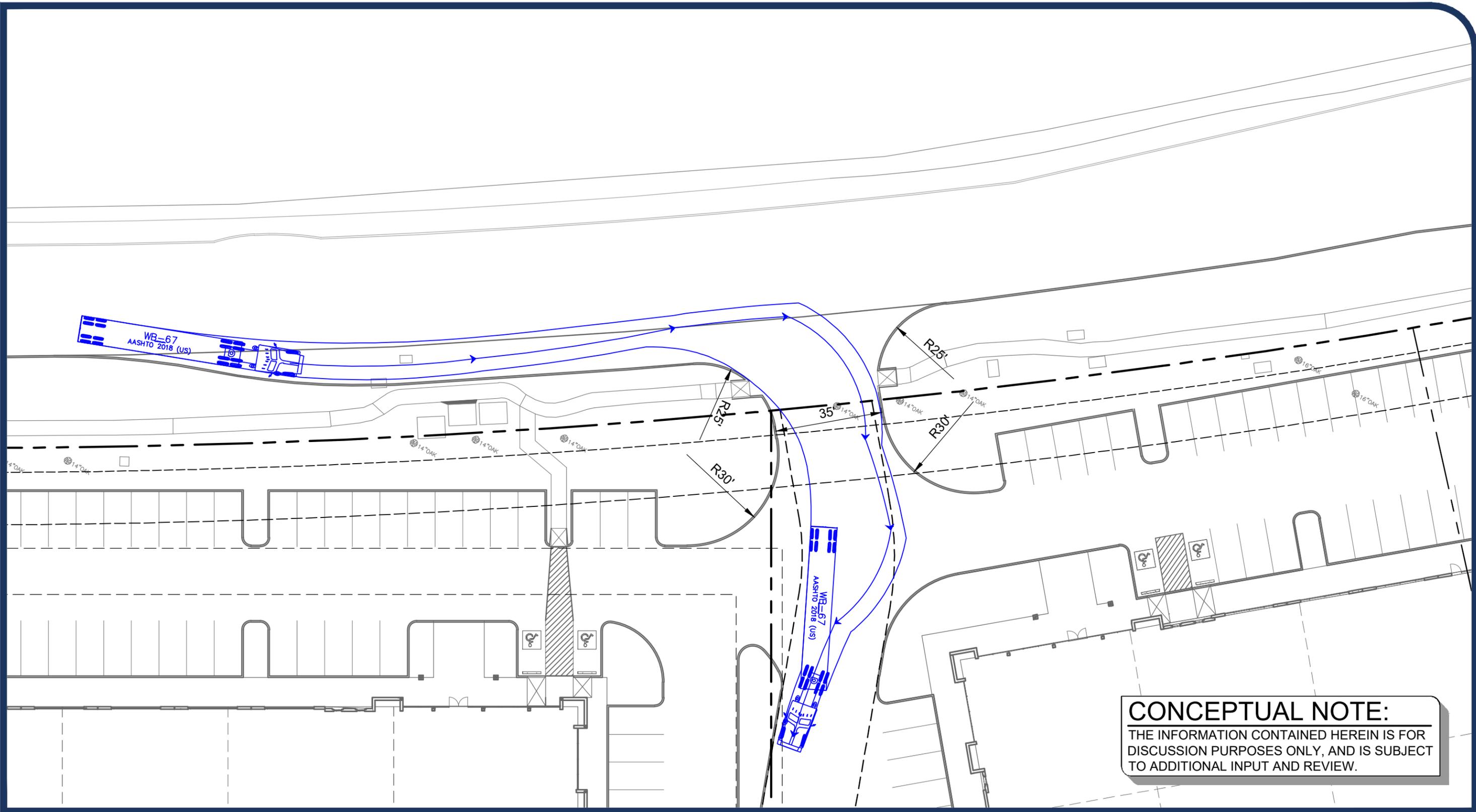
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**Exhibit 13**

**AutoTURN-3: DRIVE-2, RIGHT IN**

**JUNE 2025**

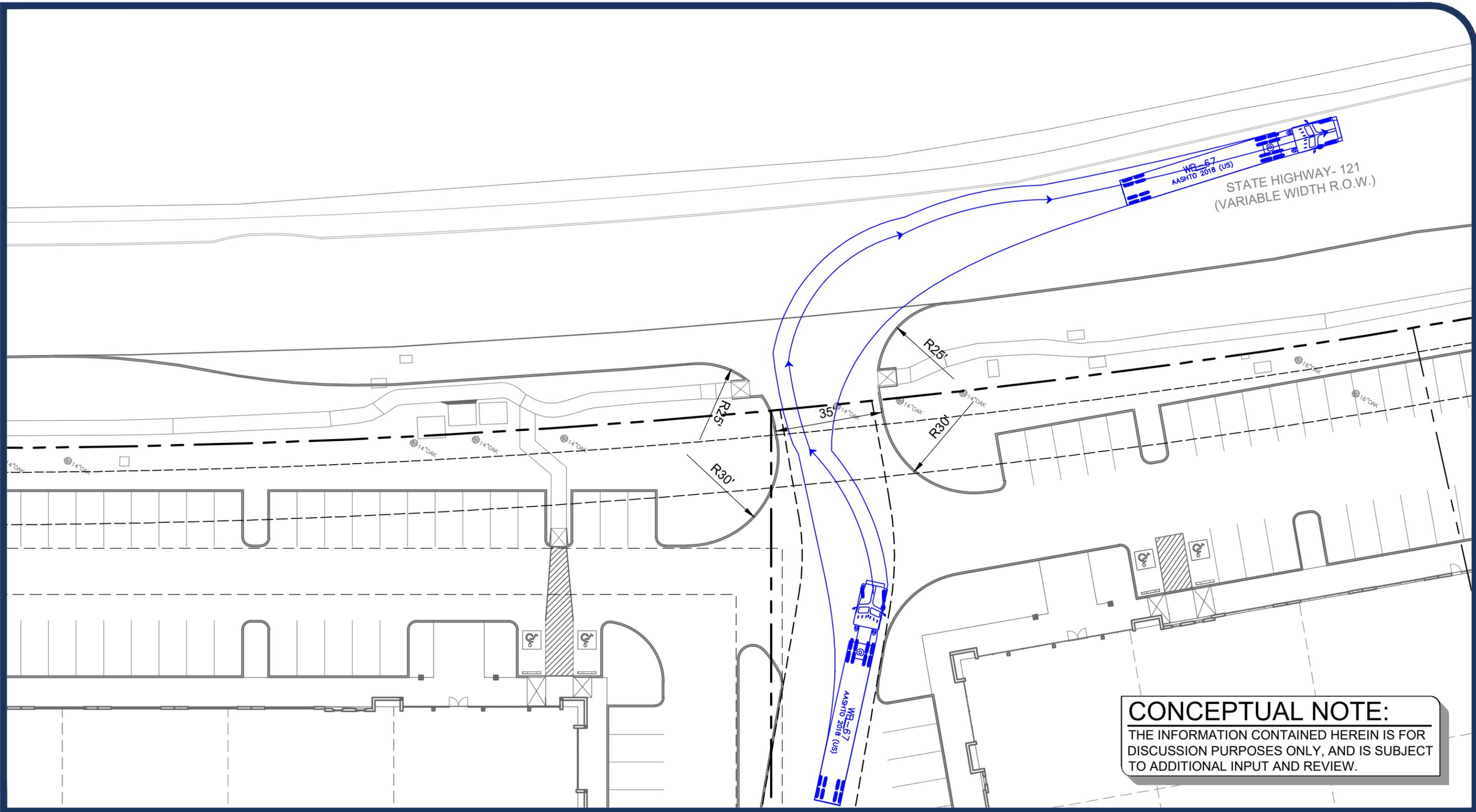
0 15 30 60  
SCALE IN FEET



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**Exhibit 14**

**AutoTURN-4: DRIVE-2, RIGHT OUT**

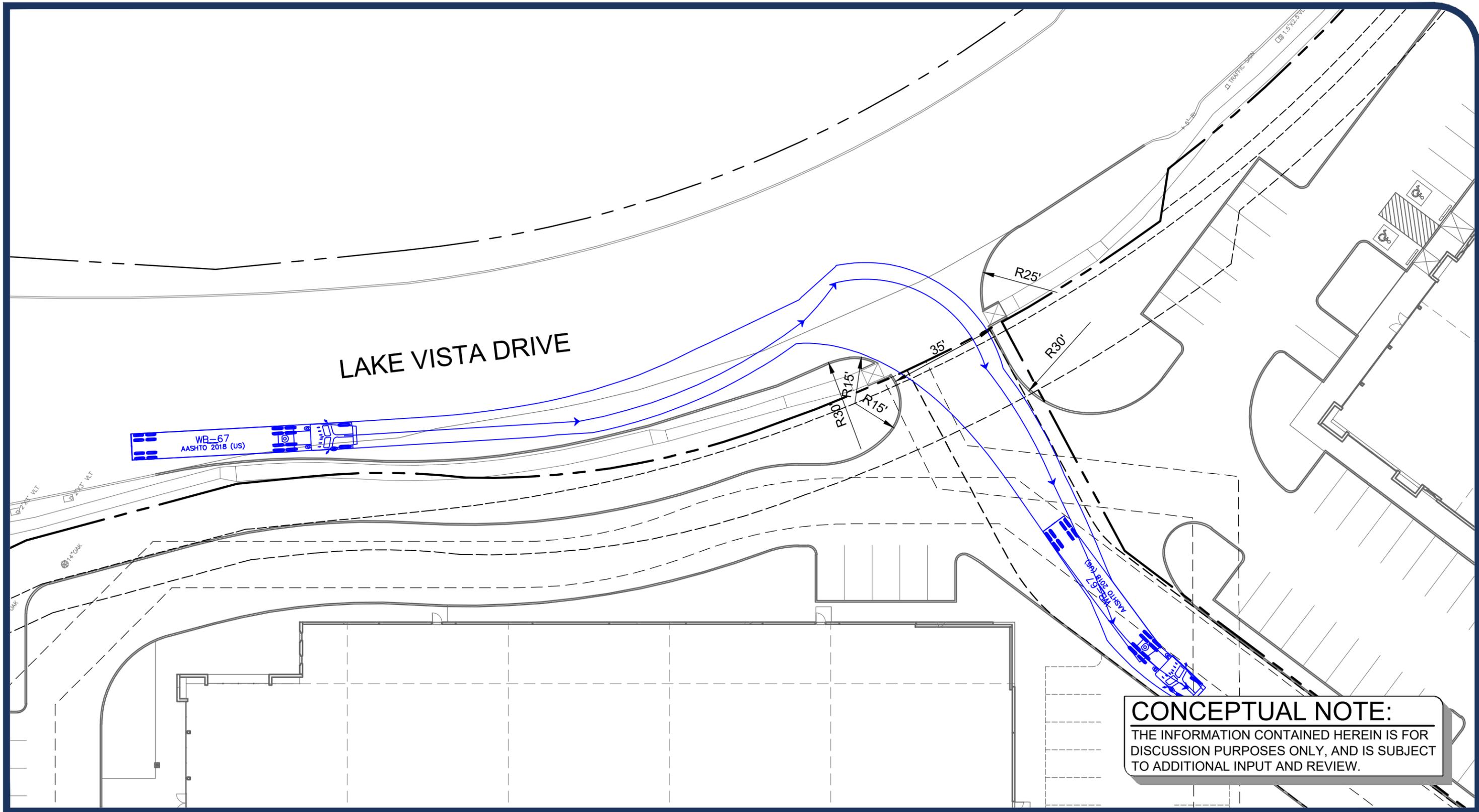


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### Exhibit 15

# AutoTURN-5: DRIVE-3, RIGHT IN

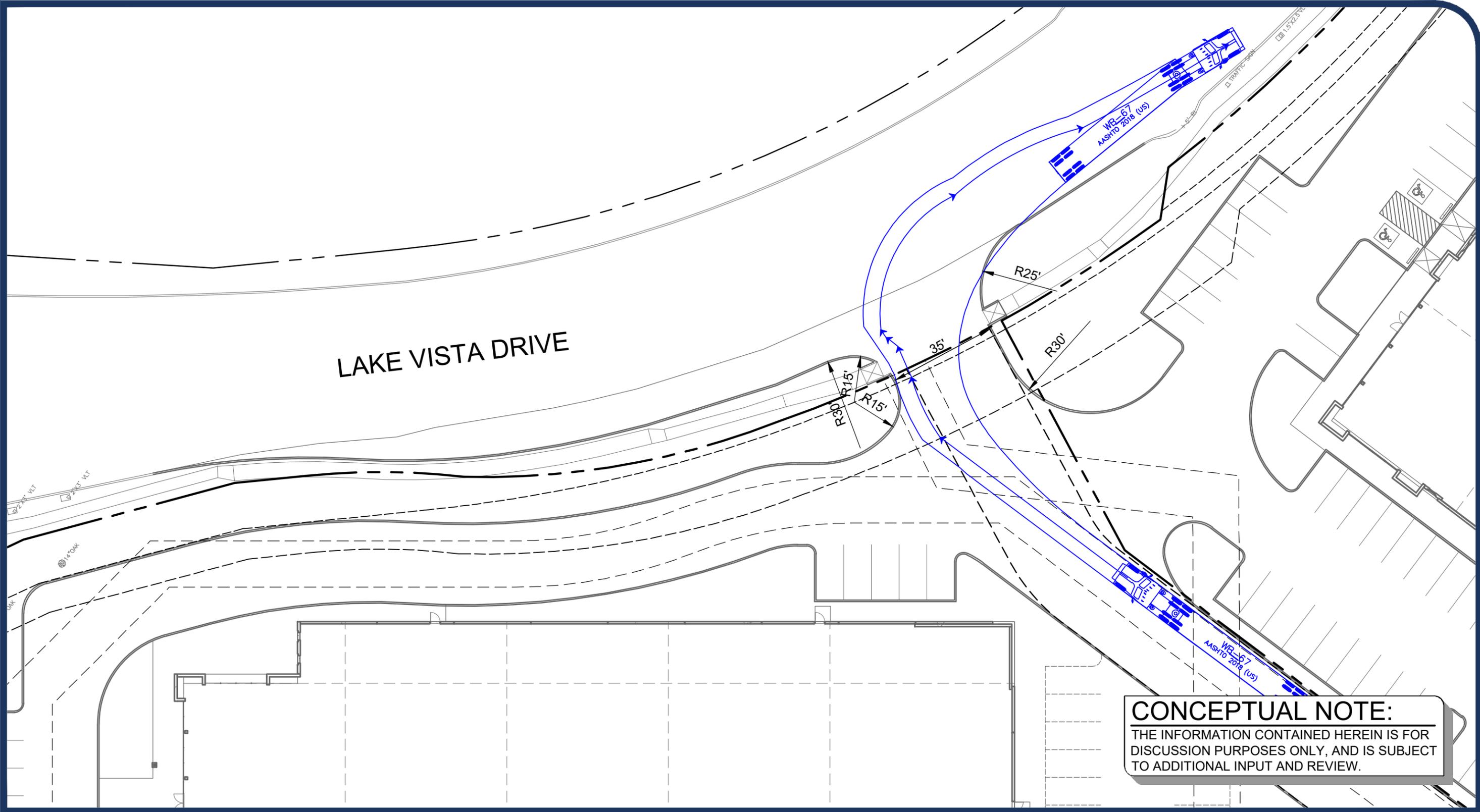


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### Exhibit 16

# AutoTURN-6: DRIVE-3, RIGHT OUT

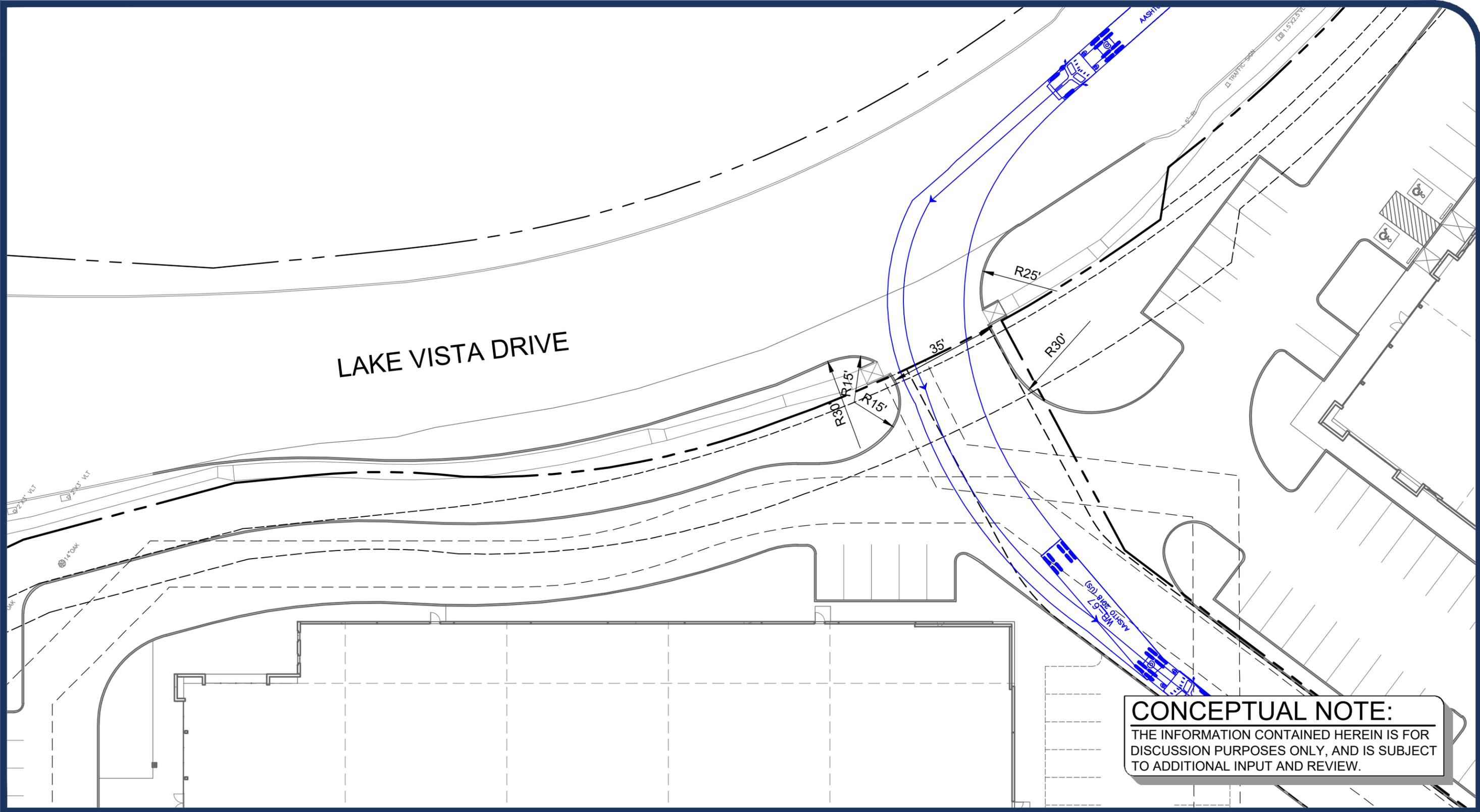


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### Exhibit 17

# AutoTURN-7: DRIVE-3, LEFT IN

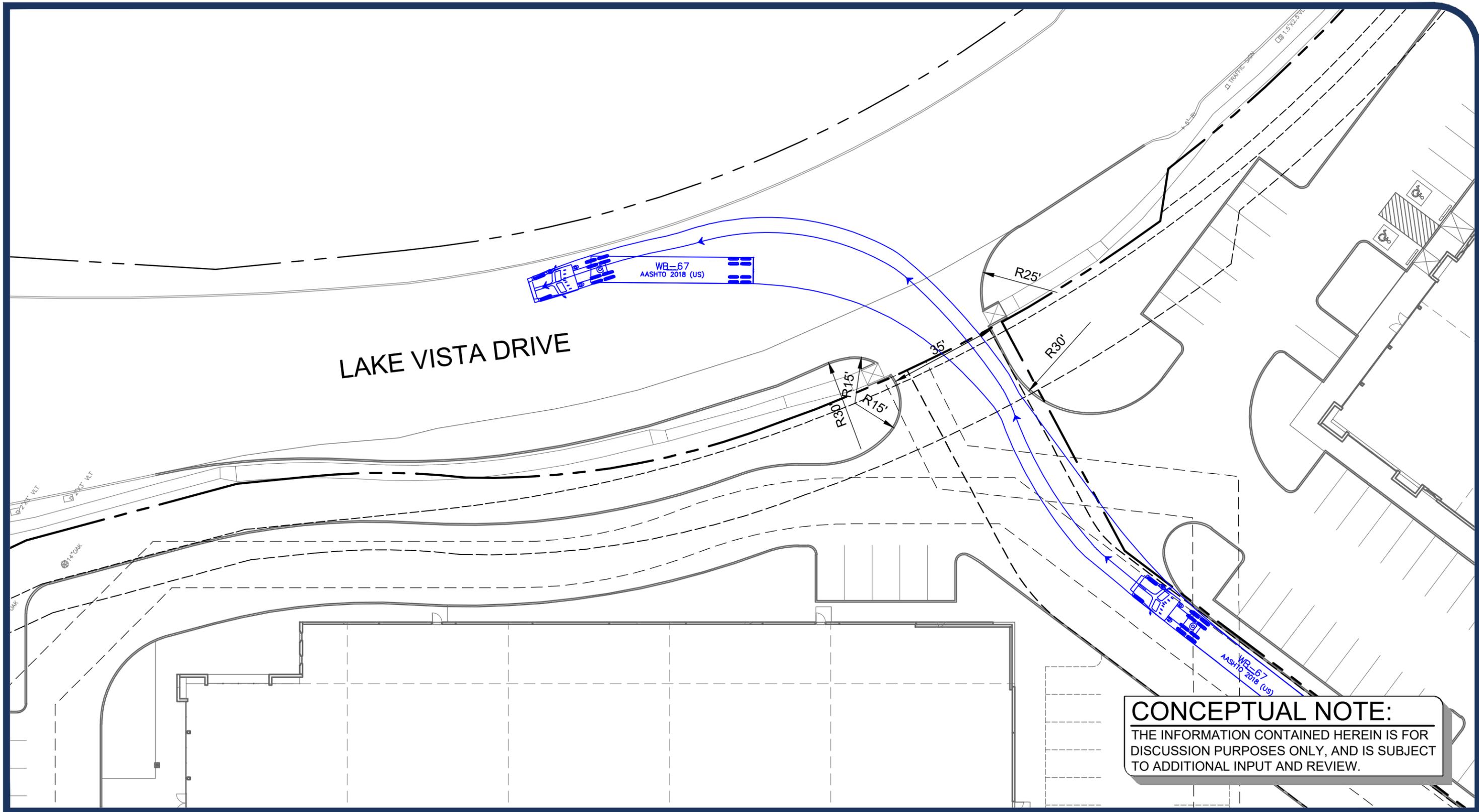


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**Exhibit 18**

**AutoTURN-8: DRIVE-3, LEFT OUT**

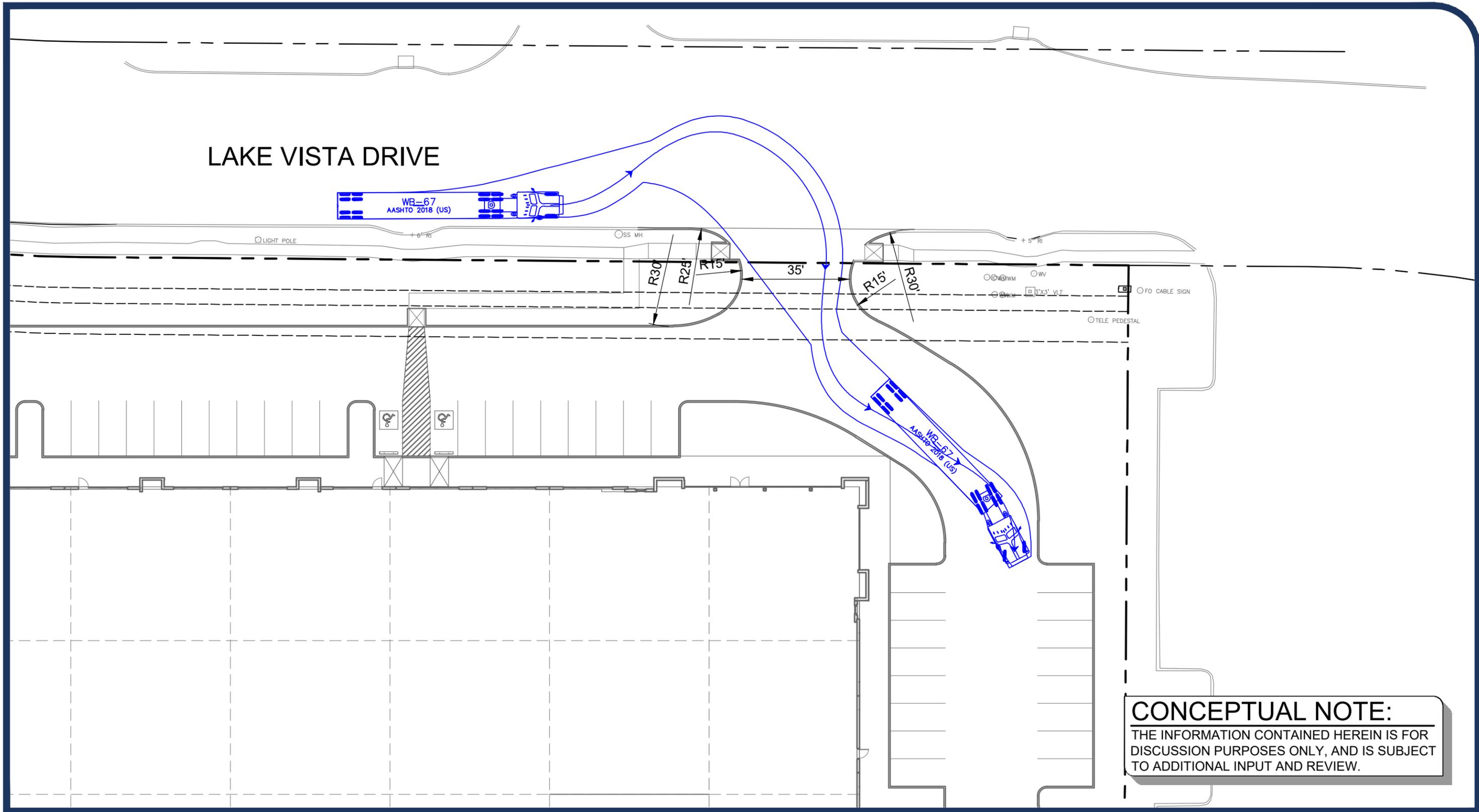


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**Exhibit 19**

**AutoTURN-9: DRIVE-4, RIGHT IN**

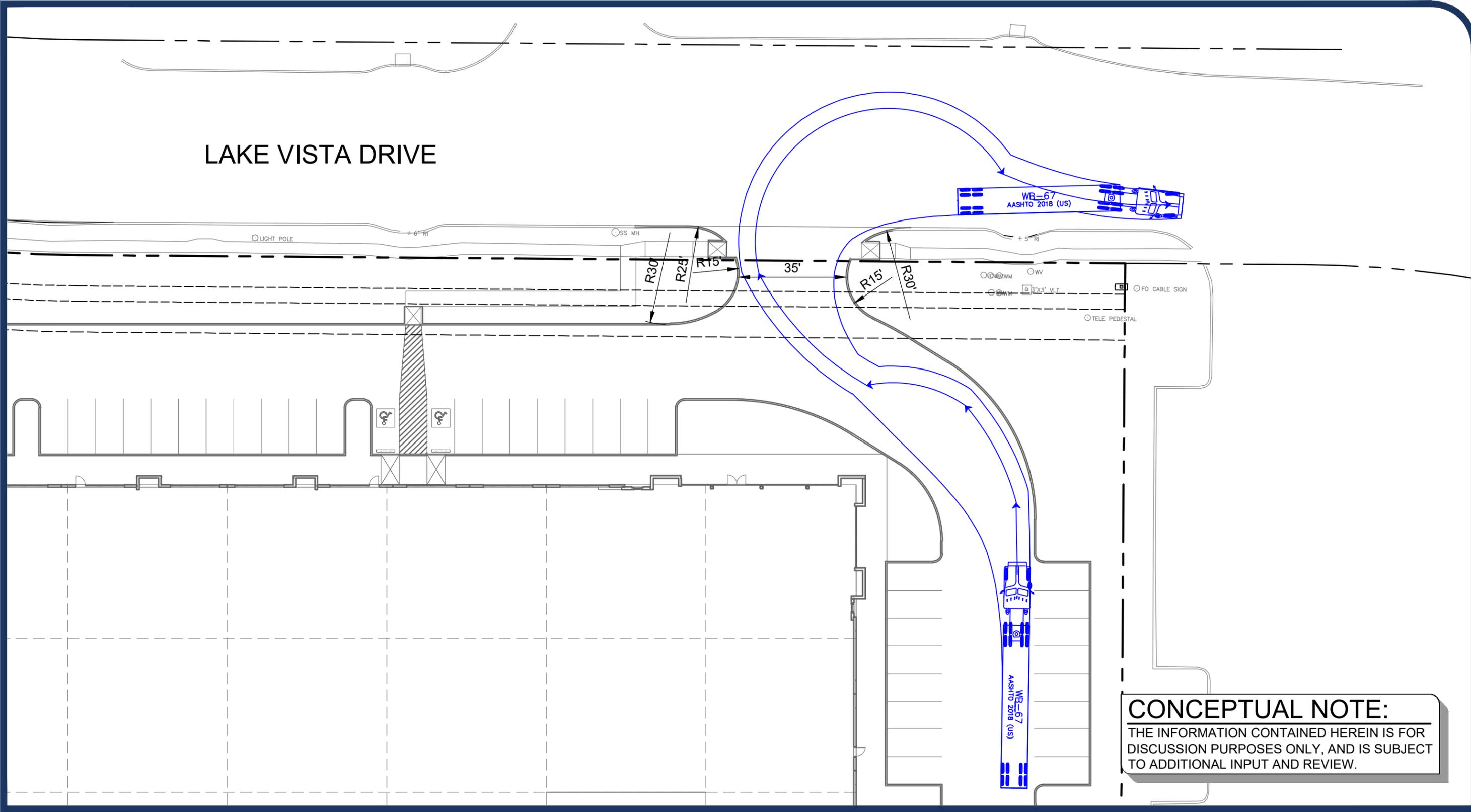
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 **SCALE IN FEET**



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**Exhibit 20**

**AutoTURN-10: DRIVE-4, RIGHT OUT**

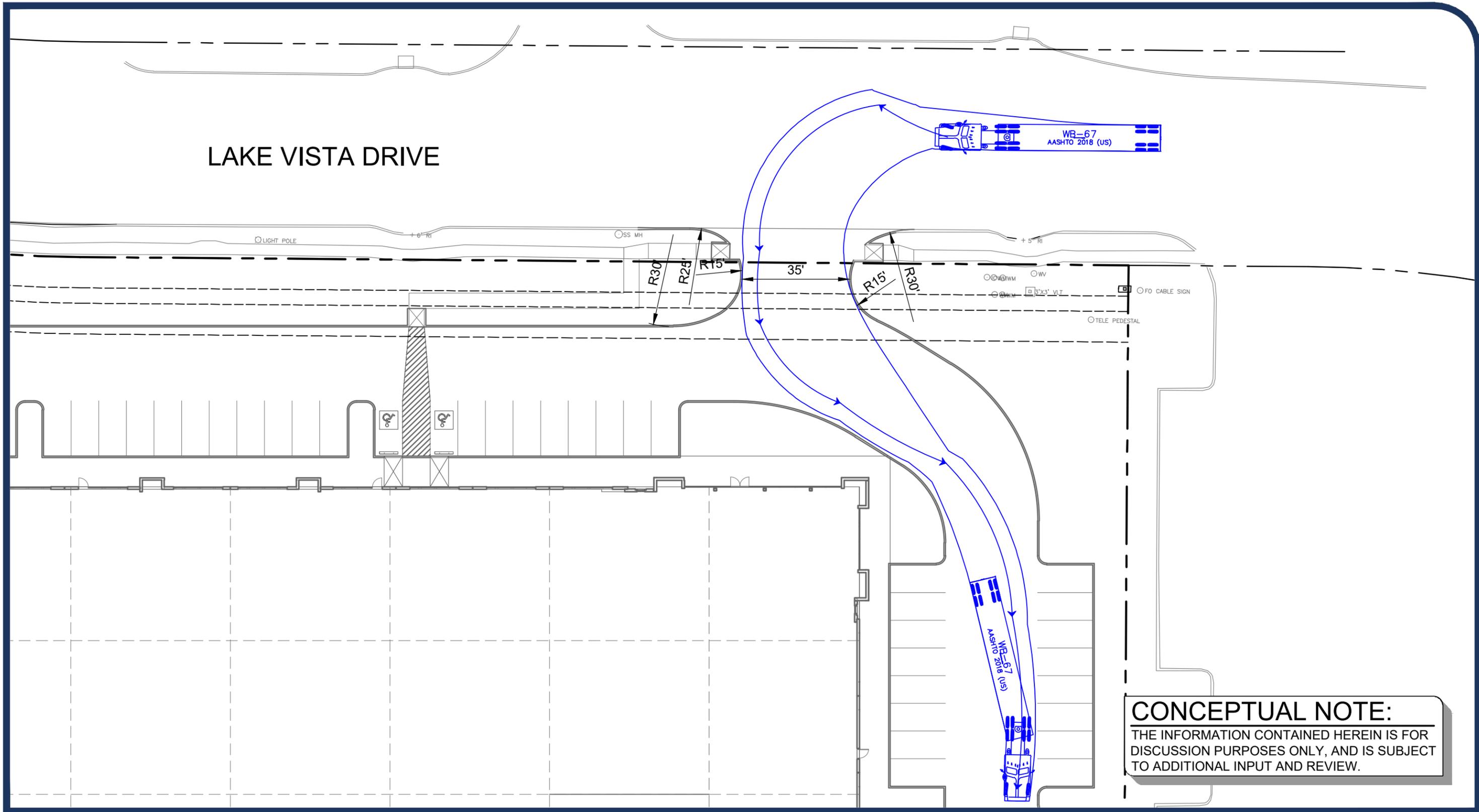


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**Exhibit 21**

**AutoTURN-11: DRIVE-4, LEFT IN**

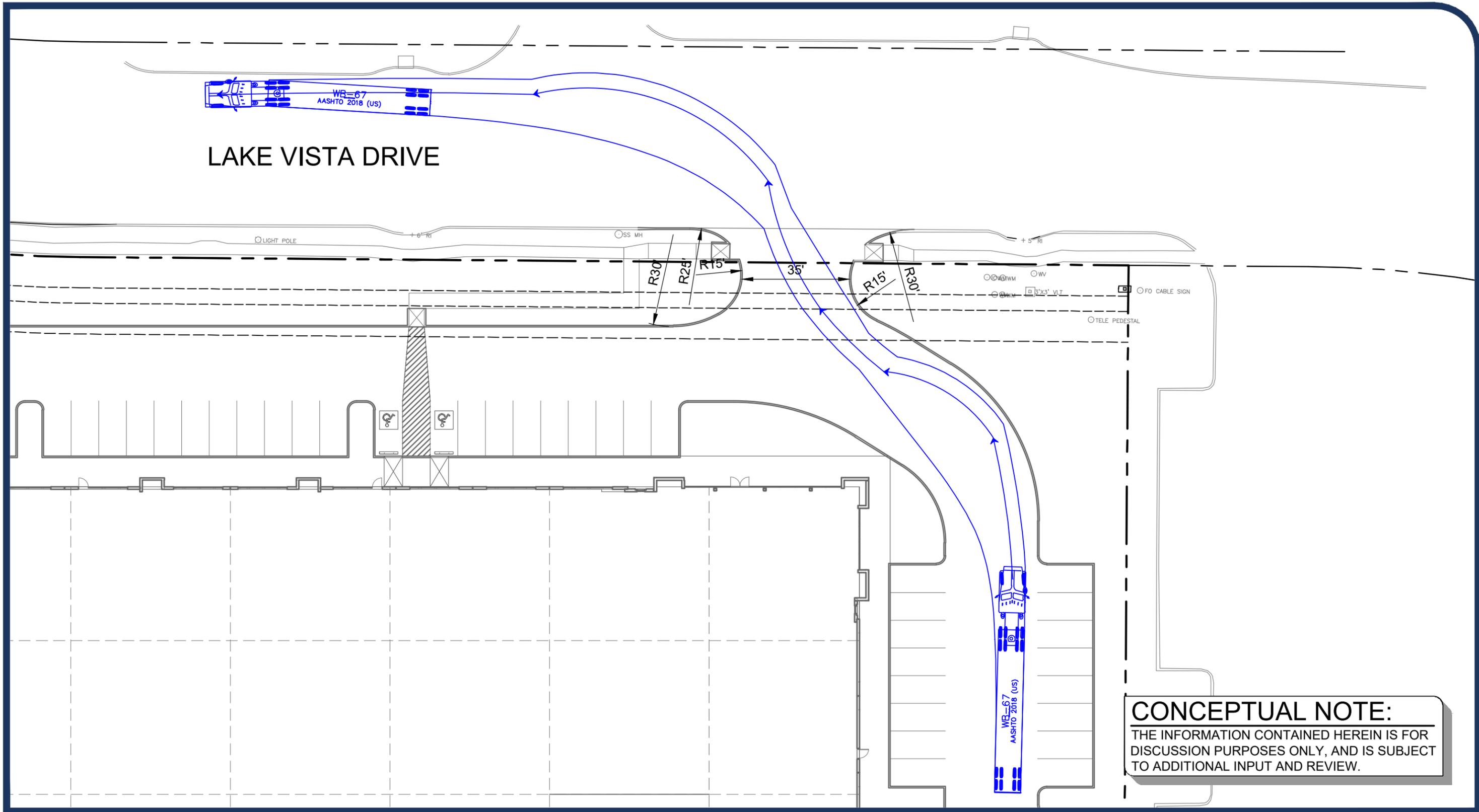


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**Exhibit 22**

**AutoTURN-12: DRIVE-4, LEFT OUT**



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