From: Jeffrey Delapena
To: "Heidi Pozzo"
Cc: Oliver Orjiako; Jose Alvarez; Rebecca Messinger
Subject: RE: Comp Plan: Cresap Meadows and Pleasant Valley North Traffic Studies
Date: Monday, October 12, 2026 8:20:00 AM
Attachments: Cresap Meadows K - Traffic Study- reduced size.pdf
Pleasant Woods North K - Traffic Study - reduced sized.pdf

Hello Heidi,

Thank you for providing this comment and attachments. Confirming these have been received and will be added to the Comprehensive Plan Index of Record.

Best,

Jeff Delapena
Program Assistant
COMMUNITY PLANNING

564.397.4558

NOTICE OF PUBLIC DISCLOSURE: This e-mail account is public domain. Any correspondence from or to this e-mail account may be a public record. Accordingly, this email, in whole or in part may be subject to disclosure pursuant to RCW 42.56, regardless of any claim of confidentiality or privilege asserted by an external party.

-----Original Message-----
From: Heidi Pozzo <hcpheidi@yahoo.com>
Sent: Monday, October 12, 2026 6:38 AM
To: Jeffrey Delapena <Jeffrey.Delapena@clark.wa.gov>
Cc: Oliver Orjiako <Oliver.Orjiako@clark.wa.gov>; Jose Alvarez <Jose.Alvarez@clark.wa.gov>
Subject: Comp Plan: Cresap Meadows and Pleasant Valley North Traffic Studies

EXTERNAL: This email originated from outside of Clark County. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Jeff,

I've uploaded Cresap Meadows and Pleasant Valley North Traffic Studies to the link you provided me. Both do not appear to include in process developments outside the 1 mile radius that travel through the area, or Pleasant Valley North in Cresap. Also, road capacities are listed at their fully built out level even though they are not, overstating capacity used to calculate v/c. Please include these in the Comp Plan Index.

Thank you,

Heidi

TRANSPORTATION IMPACT STUDY

FOR

PLEASANT WOODS NORTH SUBDIVISION

5319 NE 129TH CIRCLE

CLARK COUNTY, WASHINGTON



11/26/2025

PREPARED BY

KELLY ENGINEERING

November 2025

TRANSPORTATION IMPACT STUDY

Pleasant Woods North Subdivision

Clark County, Washington

November 26, 2025

Prepared for:

Bridger Homes
Attn: Joel Hollingsworth
PO Box 821303
Battle Ground, WA 98682

Prepared by:

Kelly Engineering
1805 NE 94th St. No. 19
Vancouver, WA 98665
Phone: 360-433-7530
e-mail: Kellyengineer@comcast.net

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TRANSPORTATION IMPACT STUDY

PLEASANT WOODS NORTH SUBDIVISION

November 26, 2025

INTRODUCTION

A transportation impact study (TIS) for the Pleasant Woods North Subdivision was conducted to determine the potential traffic related impacts of the development to the surrounding roadway system. The development will consist of 29 new single family detached homes. One existing home will be demolished. The site is located at 5319 NE 129th Circle (parcel 198831010) in Clark County, Washington. The zoning designation for the 3.4 acre site is R1-7.5 (single family residential).

Access to the site will be onto NE 129th Street through NE 55th Avenue, NE 128th Street and NE 54th Avenue. NE 130th Street to the north will provide a connection to NE 50th Avenue.

Land uses within the vicinity of the site consist of single family homes. A vicinity map, aerial photograph, existing conditions map and preliminary plat are shown in Figures 1, 2, 3 and 4.

Roadway Characteristics

NE 129th Street is a 20 foot wide paved roadway with curbs and sidewalks on the north side of the street. Parking is not permitted on the south side of the street. The roadway is classified as an Urban Local Access. Frontage improvements and right-of-way (ROW) dedication will be completed along NE 129th Street.

NE 50th Avenue is a two lane paved roadway with intermittent curbs and sidewalks. Double yellow striping is along the centerline of the roadway indicating that passing is prohibited. The posted speed limit is 40 mph. The roadway is classified as a 2-lane collector with a center left turn lane and bike lanes.

The study area intersections in this report are controlled by stop signs on the minor street approaches and fully actuated traffic signals. The lane configurations at the intersections are shown in Figure 5.

Traffic Volumes

The traffic counts in this report were conducted from 7:00 to 9:00 am and 4:00 to 6:00 pm during November 2025. The traffic counts were conducted to determine the peak hours. The peak hour at the intersections is the one hour time period when traffic on the adjacent streets are the highest and congestion is most likely to occur. The existing traffic volumes are shown in Figure 6a and 6b. The raw traffic count data is included in Appendix A.

Trip Generation/Distribution

The Pleasant Woods North Subdivision will generate approximately 264 new trips per day. A trip is a one directional vehicle movement. 19 new trips will occur during the weekday AM peak hour and 26 trips will occur during the PM peak hour, ITE Trip Generation Manual, 11th edition. Credits were given for the existing home to be demolished. The trip generation rates are shown in Table 1.

Table 1
Site Traffic Generation

Land Use	ITE code	Dwelling Units	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
Proposed Single-Family Detached Housing	210	29	273	20 (in-5, out-15)	27 (in-17, out-10)
Existing Single-Family Detached Housing	210	1	9	1 (in-0, out-1)	1 (in-1, out-0)
Net New Trips			**264**	**19 (in-5, out-14)**	**26 (in-16, out-10)**

The directional distribution of traffic generated by the development was assigned to the study area intersections. The distribution was based on the existing traffic volumes. The site traffic distribution and assignment diagrams are shown in Figures 9a and 9b.

Year 2028 Traffic Volumes

The year 2028 traffic volumes included a two percent per year compounded growth factor over the existing traffic volumes and in-process traffic. In-process traffic is traffic from developments that have been approved, but are not generating full build out traffic volumes. The year 2028 traffic volumes without the project are shown in Figures 8a and 8b. The year 2028 traffic volumes with the project are shown in Figures 10a and 10b.

Concurrency

The study area for the project was based on Clark County's year 2000 Concurrency Ordinance. As required under the concurrency ordinance site generated traffic volumes must be provided for at key intersections along affected corridors within the one mile study area boundary of the subject site. The concurrency ordinance also states that an operational analysis should be conducted at proposed site access points, key intersections in the area and intersections of "regional significance" located outside the corridors.

Peak Hour Traffic Operations

The scope of the transportation impact study was based on the size of the development with a one mile study area boundary. Based on the one mile study area boundary an analysis was conducted at the following intersections during the weekday AM and PM peak hours:

(1) NE 139th Street & NE 50th Avenue
(2) NE 139th Street & NE 72nd Avenue
(3) NE 130th Street & NE 50th Avenue
(4) NE 119th Street & NE 50th Avenue
(5) NE 119th Street & NE 72nd Avenue

The intersection operational analysis was conducted using the procedures in the 2022 7th edition of the Highway Capacity Manual. These procedures describe the operation of an intersection in terms of its level of service (LOS). The LOS criteria ranges from "A", which indicates little, if any, delay to "F", which indicates that vehicles experience very long delays. The LOS criteria with the corresponding delay in seconds per vehicle is shown in Table 2. The capacity analysis summary is shown in Table 3 on page 4.

Table 2
Level of Service Criteria

Level of Service (LOS)	A	B	C	D	E	F
Unsignalized intersections Average Delay (seconds per vehicle)	≤10	>10 - 15	>15 - 25	>25 - 35	>35 - 50	>50

Table 3
Capacity Analysis Summary

	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
NE 139th Street & NE 50th Avenue				
Existing	A	9.7	B	10.8
Year 2028 w/o Project	A	9.8	B	11.1
Year 2028 with Project	A	9.8	B	11.2
NE 139th Street & NE 72nd Avenue				
Existing	D	31.5	E	35.8
Year 2028 w/o Project	D	33.2	E	46.7
Year 2028 with Project	D	33.9	E	46.8
NE 130th Street & NE 50th Avenue				
Existing	B	12.4	B	11.3
Year 2028 w/o Project	B	12.8	B	11.7
Year 2028 with Project	B	13.3	B	11.8
NE 119th Street & NE 50th Avenue				
Existing	C	24.2	C	23.1
Year 2028 w/o Project	C	24.5	C	23.9
Year 2028 with Project	C	24.8	C	24.2
NE 119th Street & NE 72nd Avenue				
Existing	C	21.7	C	27.0
Year 2028 w/o Project	C	23.7	C	33.2
Year 2028 with Project	C	23.8	C	33.4

Based on the results of the capacity analysis the study area intersections will operate at acceptable levels with build out of the Pleasant Woods North Subdivision. The NE 139th Street/NE 72nd Avenue intersection is operating at LOS E during the PM peak hour for vehicles approaching from the west. However, the Pleasant Woods North Subdivision will add no traffic to this approach. The intersection does not meet the necessary criteria for installation of a traffic signal. A traffic signal warrant analysis for the intersection is included in Appendix B. The LOS computer printouts are included in Appendix F.

Pedestrian/Bicycle/Transit Considerations

Low pedestrian and bicycle activities were observed within the vicinity of the site along NE 129th Street. There are no designated bike lanes. The site is not served by public transit service.

Cross Circulation

Code Section 40.350.030(B)(2) states that a circulation plan must be provided for to insure adequate cross circulation in a manner which allows subsequent developments to meet these standards, and to provide a mechanism for integrating various streets into an efficient and safe transportation network. Any cross circulation issues will be addressed by representatives from SGA Engineering & Design.

Sight Distance

Intersection and stopping sight distance was measured at the NE 50th Avenue/NE 130th Street intersection. The measured intersection sight distance when looking towards the south and north was over 400 feet. Based on the posted speed limit of 40 mph on NE 50th Avenue and the criteria in Clark County table 40.350.030-8 the recommended intersection sight distance is 400 feet. Therefore, the intersection sight distance requirement is met.

Based on the criteria in Clark County table 40.350.030-7 the recommended stopping sight distance for a speed limit of 40 mph on NE 50th Avenue is 305 feet. The measured stopping sight distance was over 305 feet for a vehicle approaching from the south and north. Therefore, the stopping sight distance requirement is met.

Transportation Improvements

No transportation improvement projects within the close proximity of the site are identified in Clark County's 2025 to 2030 Transportation Improvement Program. There is an improvement project to the east on NE 72nd Avenue from NE 122nd Street to NE 133rd Street. The project description is to consider intersection improvements, turn lanes/pockets and skinny road sections due to potential costs. No site generated traffic from the Pleasant Woods North Subdivision is anticipated to enter the roadway improvement area. A description of the project is included in Appendix E.

Turn Lanes

The requirement for additional turn lanes was evaluated at the study area intersections as based on guidelines in the Washington State Design Manual. Based on the findings additional turn lanes are not required.

Collision Data

Collision data was obtained from the Washington State Department of Transportation (WSDOT) for the most recent three years of available data. Based on the data the calculated accident rates are below the threshold of 1.0 accidents per MEV (million entering vehicles) that usually identifies an intersection with a high accident rate. The collision data is shown in Table 4 and Appendix D.

Table 4
Collision Data

Intersection	Number of Collisions	Collision Type			Rate MEV*
		Entering at Angle	Rear End	Other	
NE 139th St. & NE 50th Ave.	No Reported Crashes				
NE 139th St. & NE 72nd Ave.	6	6			0.43
NE 130th St. & NE 50th Ave.	No Reported Crashes				
NE 119th St. & NE 50th Ave.	2		1	1	0.13
NE 119th St. & NE 72nd Ave.	6		5	1	0.21

*Accident rate per million entering vehicles

Corridor Analysis

Based on the criteria in Code Section 40.350.020(G)(1) and the study area intersections three corridor segments were analyzed. The corridors were analyzed to determine the maximum volume to capacity (V/C) ratios. The three corridors were NE 50th Avenue, NE 139th Street and NE 119th Street. NE 50th Avenue is a 2-lane Collector with bike lanes (C-2cb) with a single direction capacity of 900 vehicles per hour. NE 139th Street is a 2-lane collector with a single direction capacity of 800 vehicles per hour. NE 119th Street is a 2-lane minor arterial with a CLT and bike lanes with a single direction capacity of 900 vehicles per hour west of NE 72nd Avenue. NE 119th Street is a 4-lane minor arterial with a CLT and bike lanes with a single direction capacity of 1,800 vehicles per hour east of NE 72nd Avenue.

Based on the findings of the corridor analysis the V/C ratios do not exceed 0.9. The roadway capacity for the corridors is also not exceeded. The corridor analysis is shown in Table 5.

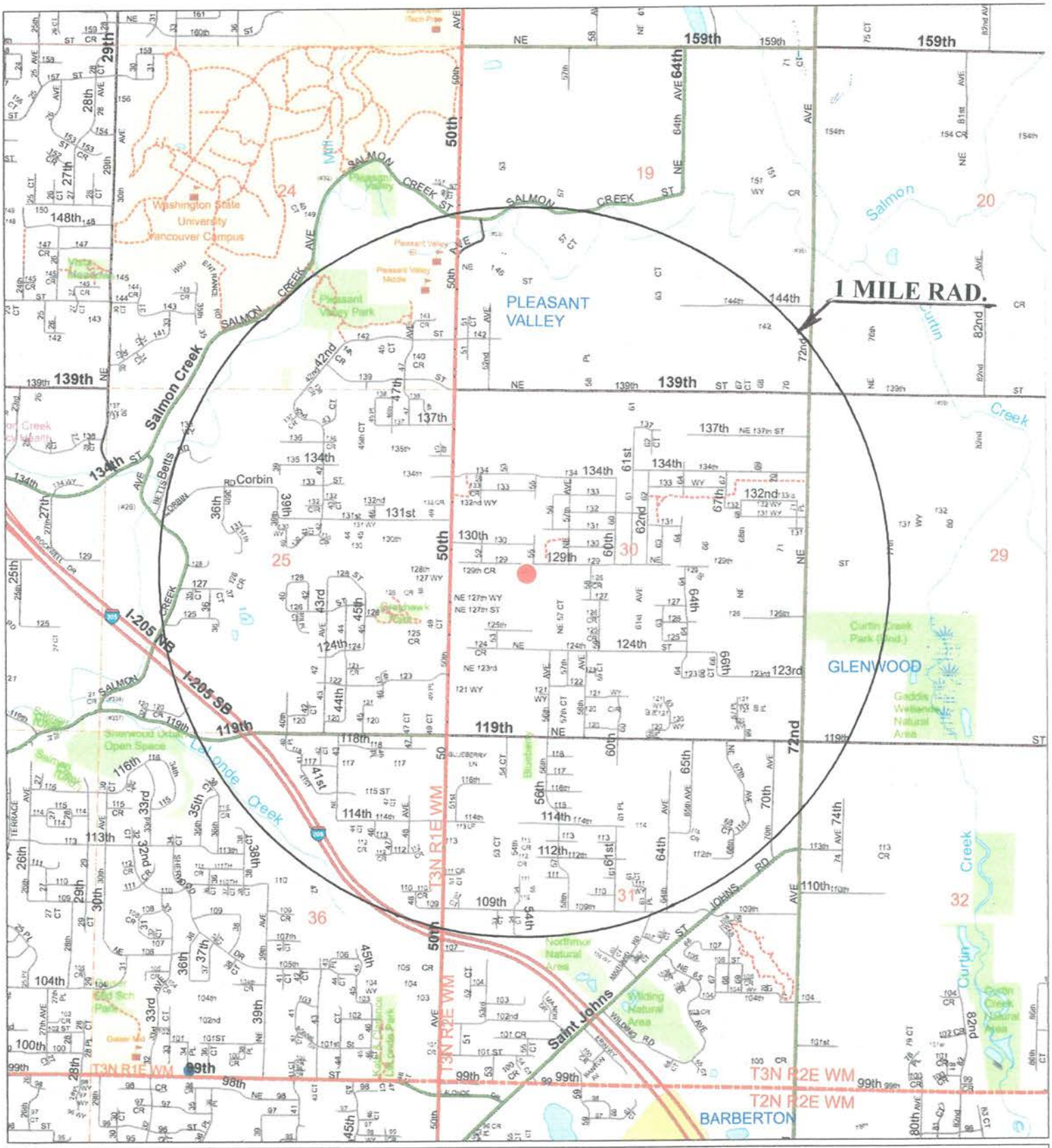
Table 5
Corridor Analysis, PM Peak Hour
Year 2028 Traffic Conditions with Project

Corridor Segment	Roadway Type	Measured Volume With Project		V/C Ratio With Project	
		Direction	Direction	Direction	Direction
NE 50th Ave. NE 139th St. to Salmon Creek St.	Urban Collector (C-2cb)	117 NB	176 SB	.13 NB	.20 SB
NE 139th St. NE 50th Ave. to NE 72nd Ave.	Urban Collector (C-2)	51 EB	60 WB	.06 EB	.07 WB
NE 50th Ave. NE 119th St. to NE 139th St.	Urban Collector (C-2cb)	122 NB	169 SB	.14 NB	.19 SB
NE 50th Ave. NE 99th St. to NE 119th St.	Urban Collector (C-2cb)	247 NB	219 SB	.27 NB	.24 SB
NE 119th St. NE 50th Ave. to NE 72nd Ave.	2-lane minor arterial (M-2cb)	489 EB	424 WB	.54 EB	.47 WB
NE 119th St. NE 72nd Ave. to NE 92nd Ave.	4-lane minor arterial (M-4cb)	983 EB	633 WB	.55 EB	.35 WB

CONCLUSIONS AND RECOMMENDATIONS

The Pleasant Woods North Subdivision is projected to generate 19 new trips during the AM Peak Hour and 26 new trips during the PM peak hour. A trip is a one directional vehicle movement. Credits were given for the existing home to be demolished.

Based on the findings of this transportation impact study the surrounding roadway system can adequately accommodate traffic from the development. No off site transportation improvements or traffic control devices were identified to accommodate the development.



General Location

Account: 198831010
Owner: LUBBERS DALE L H TRUSTEE & LUBBERS MARGARET
Address: 921 NW 58TH ST
C/S/Z: VANCOUVER, WA 98686

Printed on: August 12, 2025

CLARK COUNTY, WASHINGTON
Geographic Information System
0 1,000 2,000 Feet

Location of Subject Property(s)

FIGURE 1



2023 Aerial Photography

Account: 198831010
Owner: LUBBERS DALE L H TRUSTEE & LUBBERS MARGARET
Address: 921 NW 58TH ST
C/S/Z: VANCOUVER, WA 98686

Printed on: August 12, 2025

31124	32119	32120
31125	32130	32129
31136	32131	32132

CLARK COUNTY, WASHINGTON
Geographic Information System

N

0 200 400 Feet

information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

FIGURE 2



PLEASANT WOODS NORTH SUBDIVISION

BEING A PORTION OF THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 3 NORTH, RANGE 2 EAST OF THE WILLAMETTE MERIDIAN CLARK COUNTY, WASHINGTON

PRE-APPLICATION

AUGUST 2025

APPLICANT:	***PROPERTY OWNER:***
BRIDGER HOMES	DALE (TRUSTEE) & MARGARET LUBBERS
ATTN: JOEL HOLLINGSWORTH	921 NW 58TH ST
PO BOX 821303	VANCOUVER WA, 98685
BATTLE GROUND, WA 98604	
PH: 360-998-0671	
EM: JOEL.HOLLINGSWORTH140@GMAIL.COM	

PARCEL # & PROPERTY ADDRESS: 198831-010, 5319 NE 129TH CIR, VANCOUVER, WA 98686

CONTACT PERSON:

SGA ENGINEERING, PLLC
ATTN: SCOTT TAYLOR
2005 BROADWAY STREET
VANCOUVER, WA 98663
PH: 360.993.0911
FX: 360.993.0912
EM: STAYLOR@SGAENGINEERING.COM

EXISTING SITE INFORMATION

EXISTING PARCEL NUMBERS	198831-010
CURRENT USE	EXISTING SINGLE-FAMILY HOME WITH OUT BUILDING
ZONING DESIGNATION	R1-7.5
GROSS SITE AREA	3.39 ACRES 147,464 S.F.
TRANSIT ROUTES	NO ROUTES IMMEDIATELY NEARBY
EXISTING WATER AND SEWER	SEWER SERVICE WILL BE PROVIDED BY THE CLARK REGIONAL WASTEWATER. PUBLIC WATER SERVICE WILL BE PROVIDED BY CLARK PUBLIC UTILITIES. A SEPTIC SYSTEM IS KNOWN TO EXIST ON SITE. NO WELL IS KNOWN TO EXIST ON-SITE.

ENVIRONMENTAL CONDITIONS

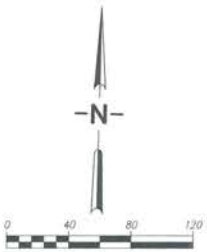
THE SITE IS NOT KNOWN TO CONTAINS ANY OF THE SIGNIFICANT ENVIRONMENTAL CONDITIONS LISTED IN THE APPLICATION CHECKLIST. THE SITE IS LOCATED IN THE SALMON CREEK WATERSHED. THE SITE IS MAPPED AS HAVING A HIGH PROBABILITY FOR ARCHAEOLOGICAL.

EXISTING CONDITIONS DISCLAIMER

THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE OBTAINED FROM INFORMATION PROVIDED BY PUBLIC RESOUCES. SGA ENGINEERING, PLLC DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION.



VICINITY MAP
NTS



Scale: 1" = 40'

SGA ENGINEERING & DESIGN

CIVIL ENGINEERING ~ LAND PLANNING
DEVELOPMENT SERVICES
LANDSCAPE ARCHITECTURE

2005 BROADWAY
VANCOUVER, WA 98663
PHONE (360)993-0911
FAX (360)993-0912

PRELIMINARY NOT FOR CONSTRUCTION

EXISTING CONDITIONS

PLEASANT WOODS NORTH SUBDIVISION

WASHINGTON
CLARK COUNTY

PRE-APPLICATION

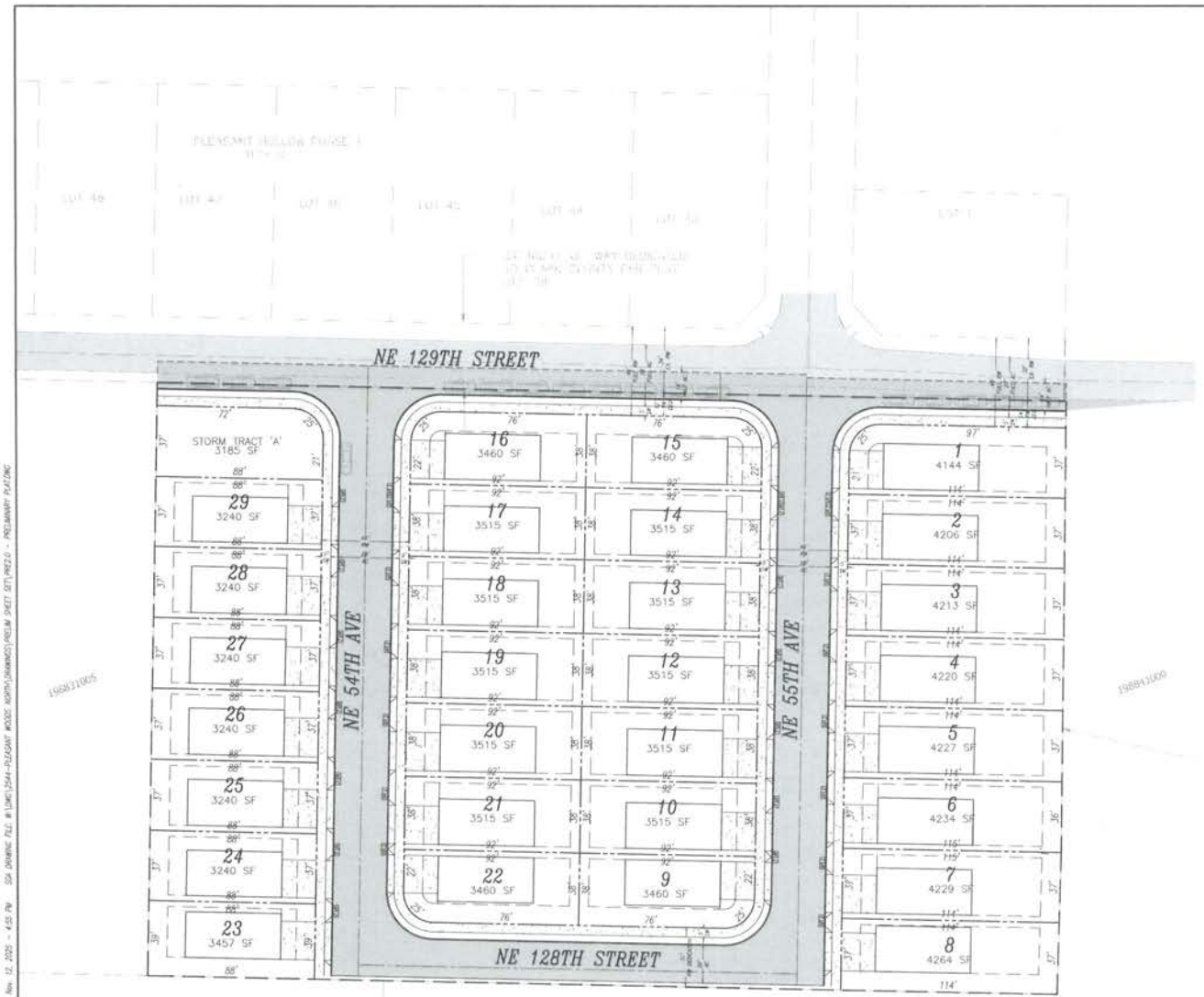
REVISIONS

DESIGNED BY:	AKG
DRAWN BY:	AKG
CHECKED BY:	SAT
SCALE:	1"=40'

JOB NUMBER	SHEET
2544	PRE1.0

© SGA ENGINEERING PLLC - DATE PLOTTED: Aug 19, 2025 - 4:05 PM SGA DRAWING FILE: W:\DWG\2544-PLEASANT WOODS NORTH\DRAWINGS\2544 - NEW SURVEY.DWG

FIGURE 3



PLEASANT WOODS NORTH SUBDIVISION

BEING A PORTION OF THE SOUTHWEST QUARTER OF SECTION 30, TOWNSHIP 3 NORTH, RANGE 2 EAST OF THE WILLAMETTE MERIDIAN CLARK COUNTY, WASHINGTON

PRELIMINARY APPLICATION

NOVEMBER 2025

APPLICANT:

BRODER HOMES
ATTN: JOEL HOLLINGSWORTH
PO BOX 821303
BATTLE GROUND, WA 98604
PH: 360-936-0671
EM: JOEL.HOLLINGSWORTH40@GMAIL.COM

PROPERTY OWNER:

DALE (TRUSTEE) & MARGARET LUBBERS
921 NW 58TH ST
VANCOUVER WA. 98686

PARCEL # & PROPERTY ADDRESS: 198831-010, 5319 NE 129TH CIR, VANCOUVER, WA 98686

CONTACT PERSON:

SGA ENGINEERING, PLLC
ATTN: SCOTT TAYLOR
2005 BROADWAY STREET
VANCOUVER, WA 98663
PH: 360.993.0911
FX: 360.993.0912
EM: STAYLOR@SGAENGINEERING.COM

EXISTING SITE INFORMATION

EXISTING PARCEL NUMBERS	198831-010			
CURRENT USE	EXISTING SINGLE-FAMILY HOME WITH OUT BUILDING			
ZONING DESIGNATION	R1-7.5			
GROSS SITE AREA	3.40	ACRES	148,255	S.F.
TRANSIT ROUTES	NO ROUTES IMMEDIATELY NEARBY			
EXISTING WATER AND SEWER	SEWER SERVICE WILL BE PROVIDED BY THE CLARK REGIONAL WASTEWATER, PUBLIC WATER SERVICE WILL BE PROVIDED BY CLARK PUBLIC UTILITIES. A SEPTIC SYSTEM IS KNOWN TO EXIST ON SITE, NO WELL IS KNOWN TO EXIST ON-SITE.			

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THE SITE IS NOT KNOWN TO CONTAINS ANY OF THE SIGNIFICANT ENVIRONMENTAL CONDITIONS LISTED IN THE APPLICATION CHECKLIST. THE SITE IS LOCATED IN THE SALMON CREEK WATERSHED. THE SITE IS MAPPED AS HAVING A HIGH PROBABILITY FOR ARCHAEOLOGICAL.

EXISTING CONDITIONS DISCLAIMER

THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE OBTAINED FROM INFORMATION PROVIDED BY MINISTER GLAESER SURVEYING. SGA ENGINEERING, PLLC DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION.

PROPOSED SITE INFORMATION

PROPOSED USE

SINGLE-FAMILY RESIDENTIAL (29 COMPACT LOTS) SUBDIVISION BASED UPON R1-7.5 ZONING

DEVELOPMENT STANDARDS

MINIMUM AVERAGE LOT AREA	3250 SF MIN. AVG. ALLOWED
AVERAGE MINIMUM LOT WIDTH	25' MIN. ALLOWED
AVERAGE MINIMUM LOT DEPTH	50' MIN. ALLOWED
FRONT YARD SETBACK	10' TO HOME, 18' TO GARAGE
STREET SIDE YARD SETBACK	10'
INTERIOR SIDE YARD SETBACK	3' MIN.
REAR YARD SETBACK	5' MIN.
PERIMETER SETBACK	10'
MAXIMUM LOT COVERAGE	60%
MAXIMUM BUILDING HEIGHT	35'

UTILITY PROVIDERS

SEWER	CRWWG
WATER	CLARK PUBLIC UTILITIES
ELECTRICAL	CLARK PUBLIC UTILITIES

STORMWATER MANAGEMENT

TREATMENT	STORMWATER IS PROPOSED TO BE TREATED USING BIO-RETENTION FACILITIES OR OTHER APPROVED BMP'S
DISPOSAL	STORMWATER WILL BE INFILTRATED INTO THE GROUND WHERE FEASIBLE OR DETAINED AND RELEASED AT OR BELOW PRE-DEVELOPED RATES.

PROPOSED SITE AREA SUMMARY

	ACRES	S.F.
GROSS SITE AREA	3.40	148255
R/W DEDICATED	0.91	39442
NET SITE AREA (GROSS AREA-R/W)	2.49	108812
STORM TRACT AREA	0.07	3180
TOTAL BUILDABLE LOT AREA	2.42	105627
AVERAGE LOT AREA	0.08	3642

-N-

0 30 60 90

Scale: 1" = 30'

SGA ENGINEERING & DESIGN

CIVIL ENGINEERING ~ LAND PLANNING
DEVELOPMENT SERVICES
LANDSCAPE ARCHITECTURE

2005 BROADWAY
VANCOUVER, WA 98663
PHONE (360)993-0911
FAX (360)993-0912

PRELIMINARY PLAT

PLEASANT WOODS NORTH SUBDIVISION

CLARK COUNTY WASHINGTON

PRELIMINARY

REVISIONS

DESIGNED BY:	ZRC
DRAWN BY:	ZRC
CHECKED BY:	KRS
SCALE:	1" = 30'

JOB NUMBER 2544 | SHEET PRE2.0

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FIGURE 4

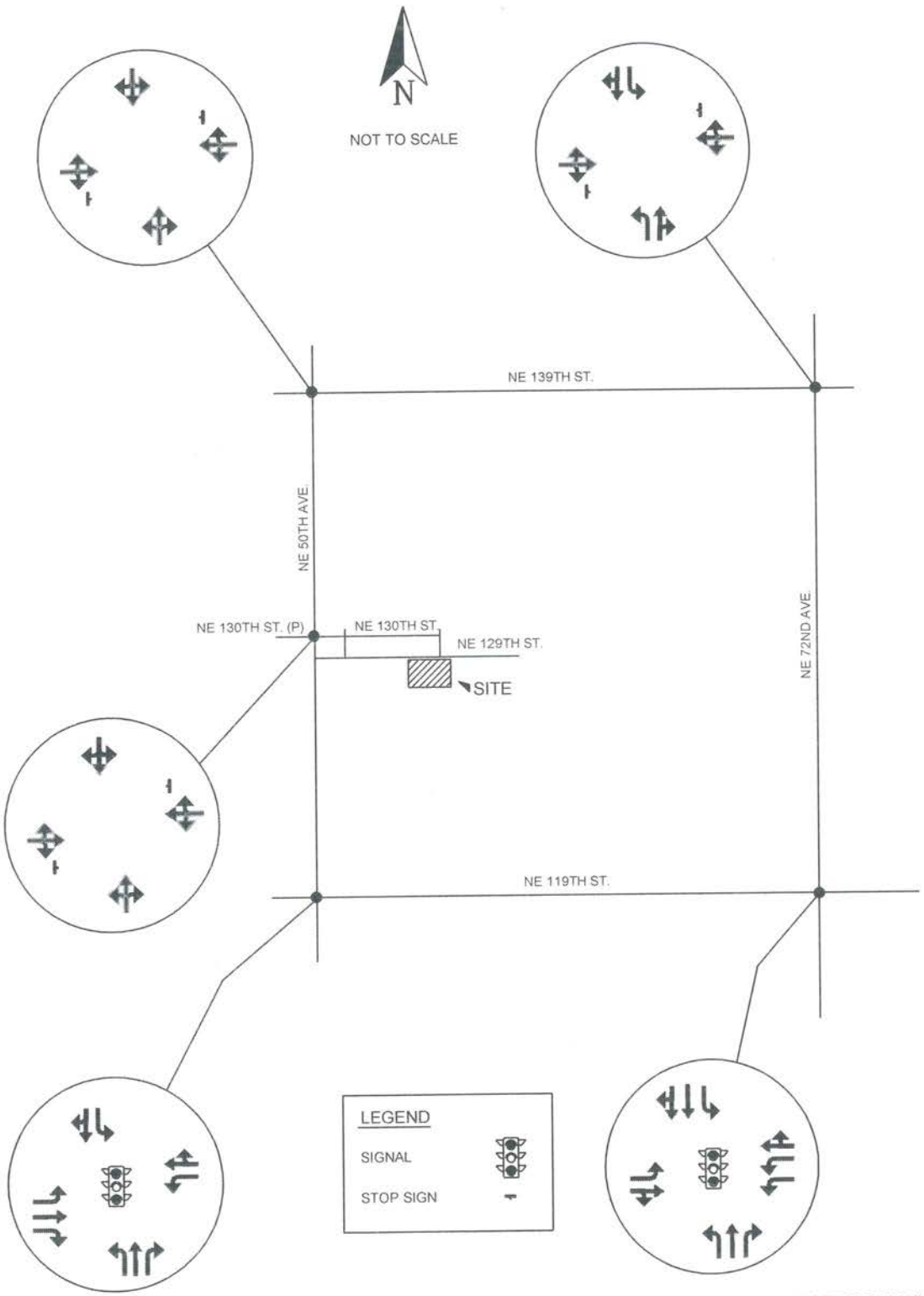
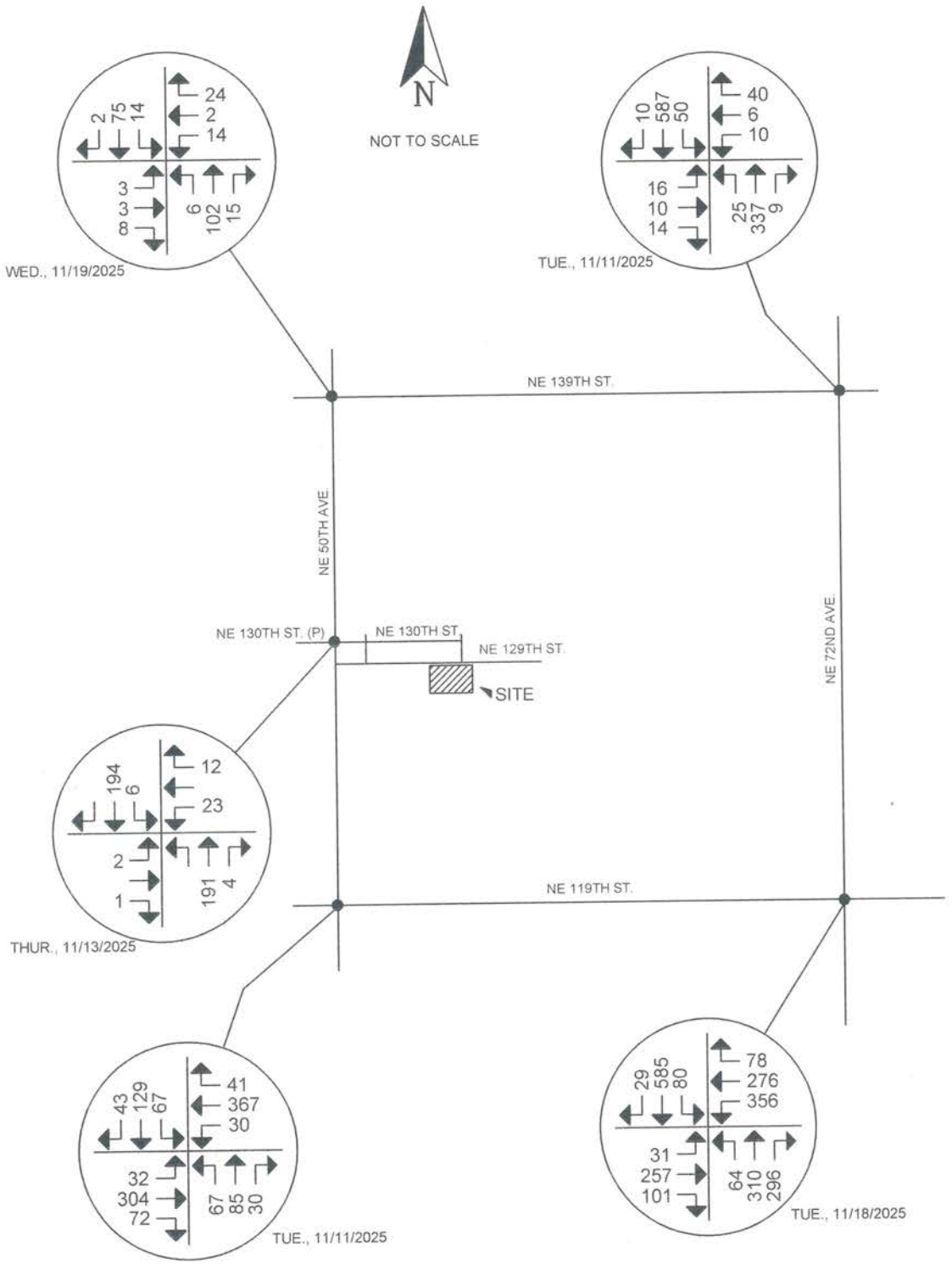


FIGURE 5
LANE CONFIGURATIONS
EXISTING CONDITIONS

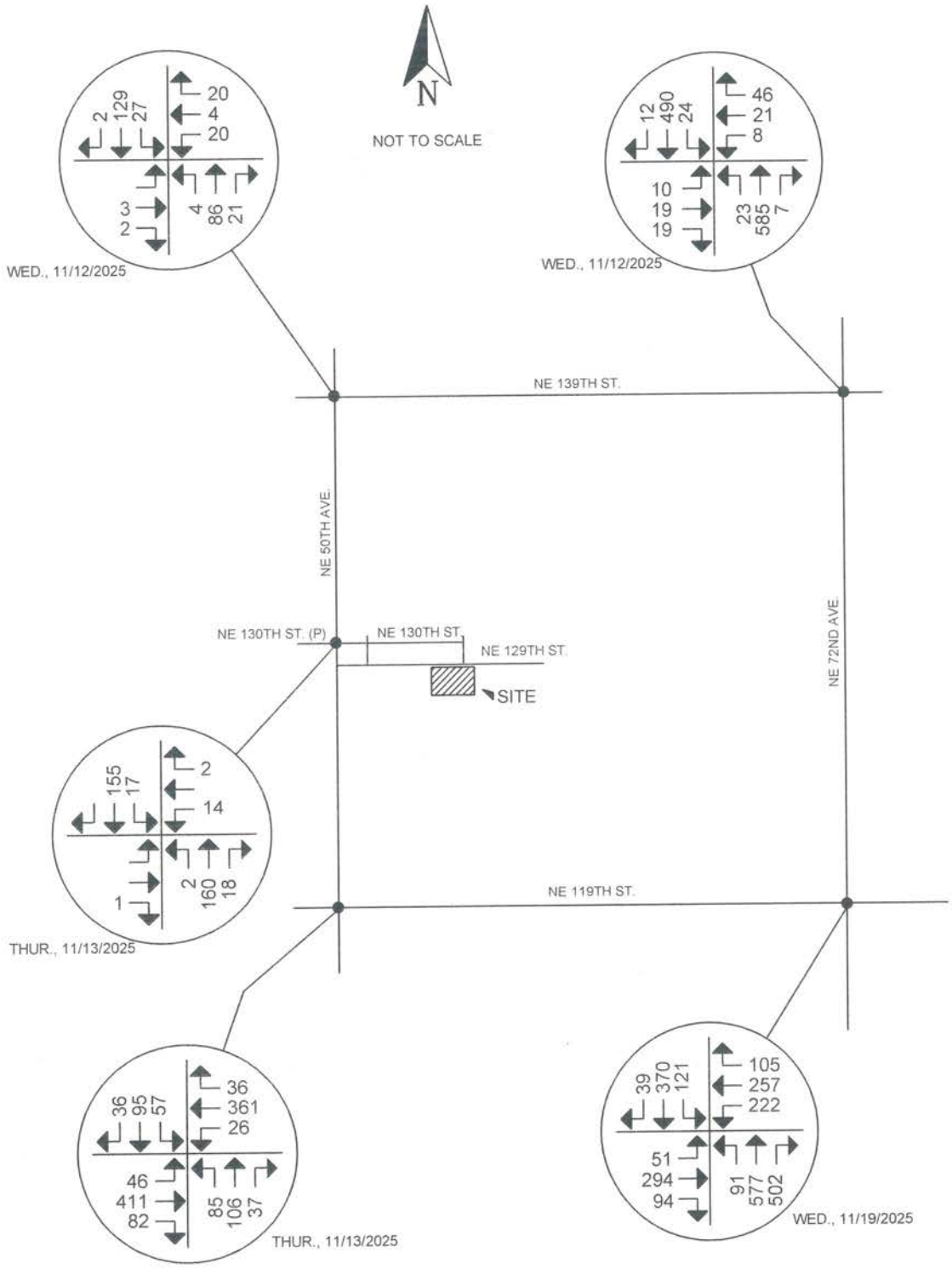
KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 6a
EXISTING TRAFFIC VOLUMES
AM PEAK HOUR

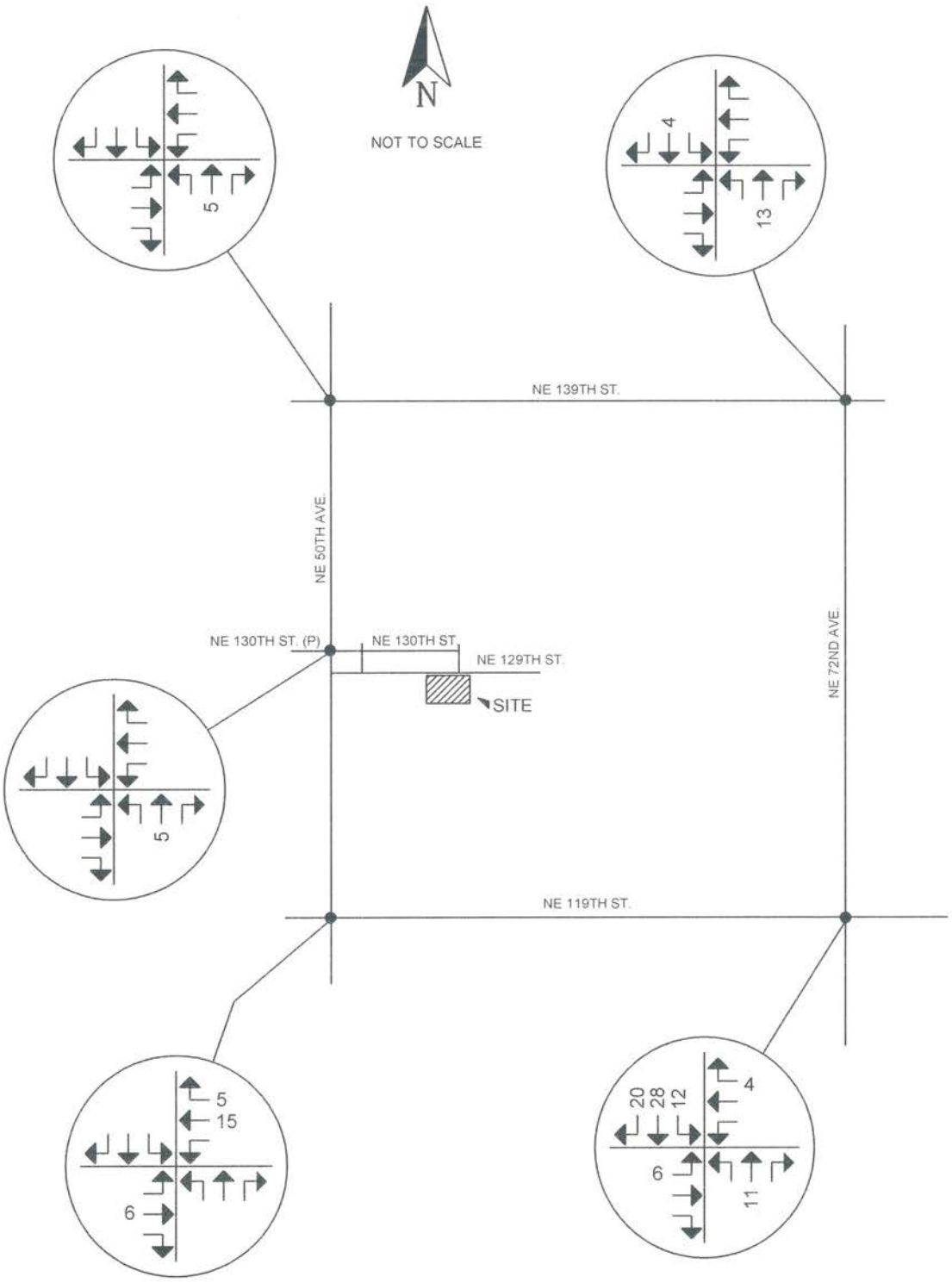
KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 6b
EXISTING TRAFFIC VOLUMES
PM PEAK HOUR

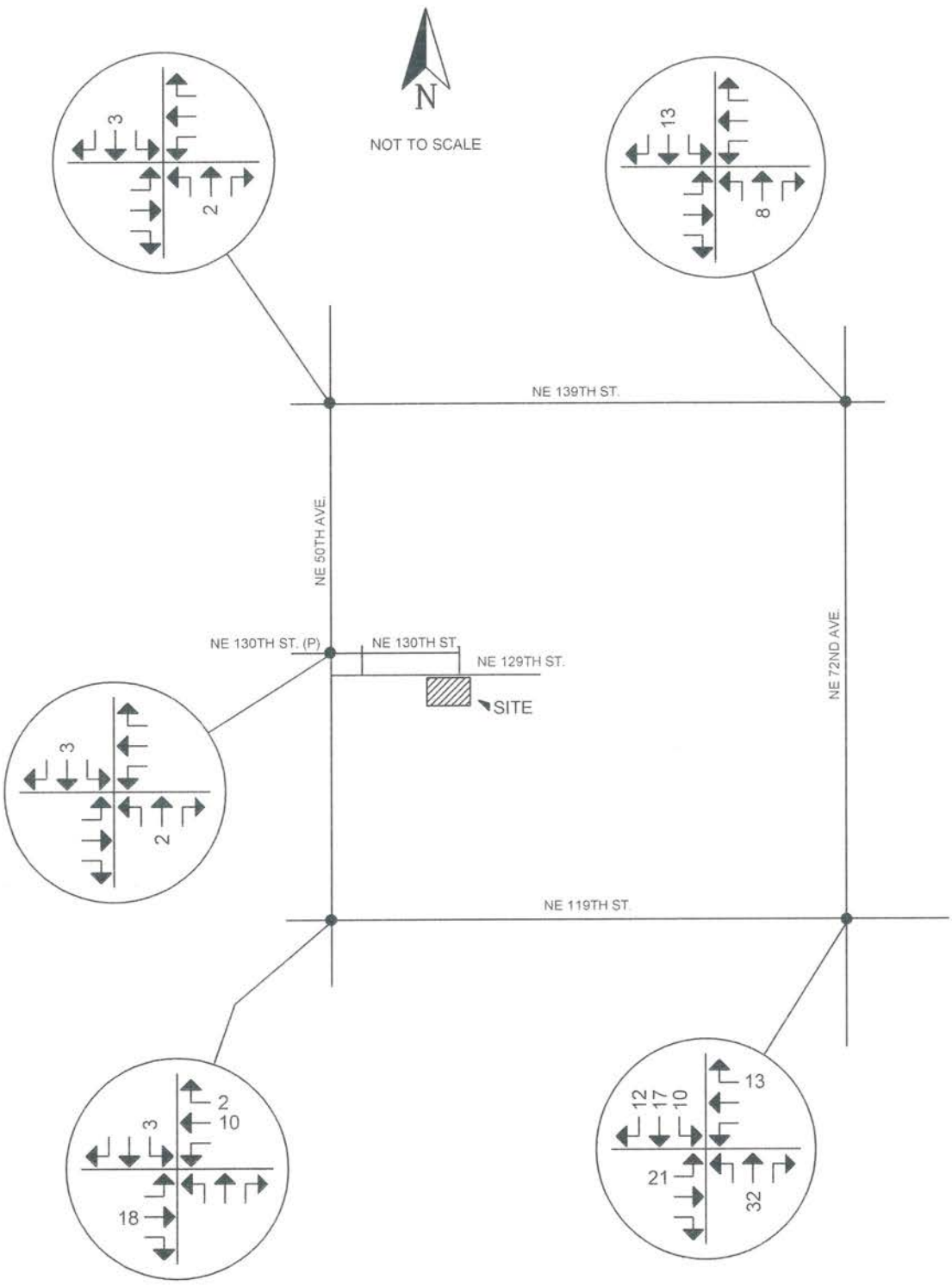
KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 7a
IN-PROCESS TRAFFIC
AM PEAK HOUR

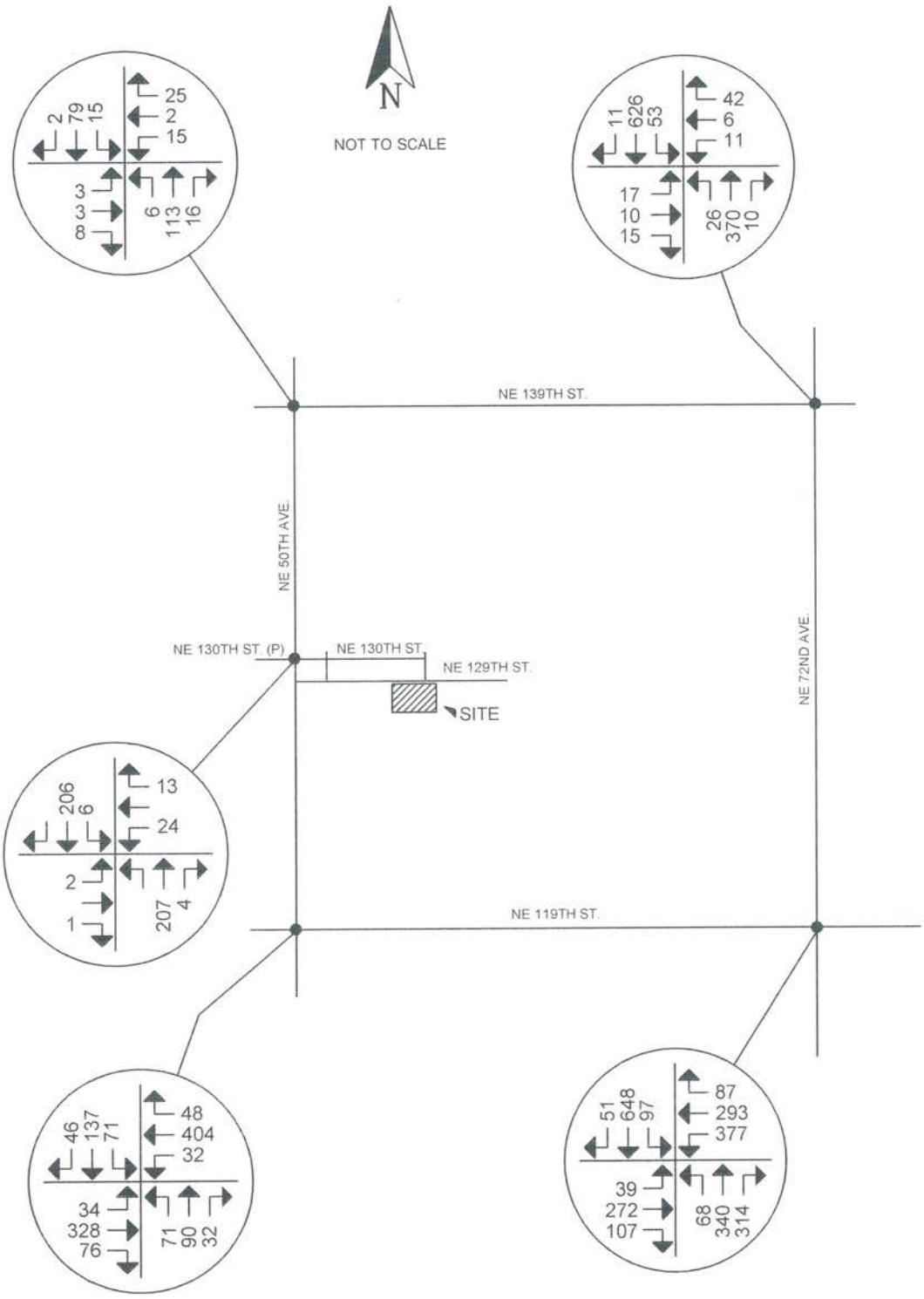
KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 7b
IN-PROCESS TRAFFIC
PM PEAK HOUR

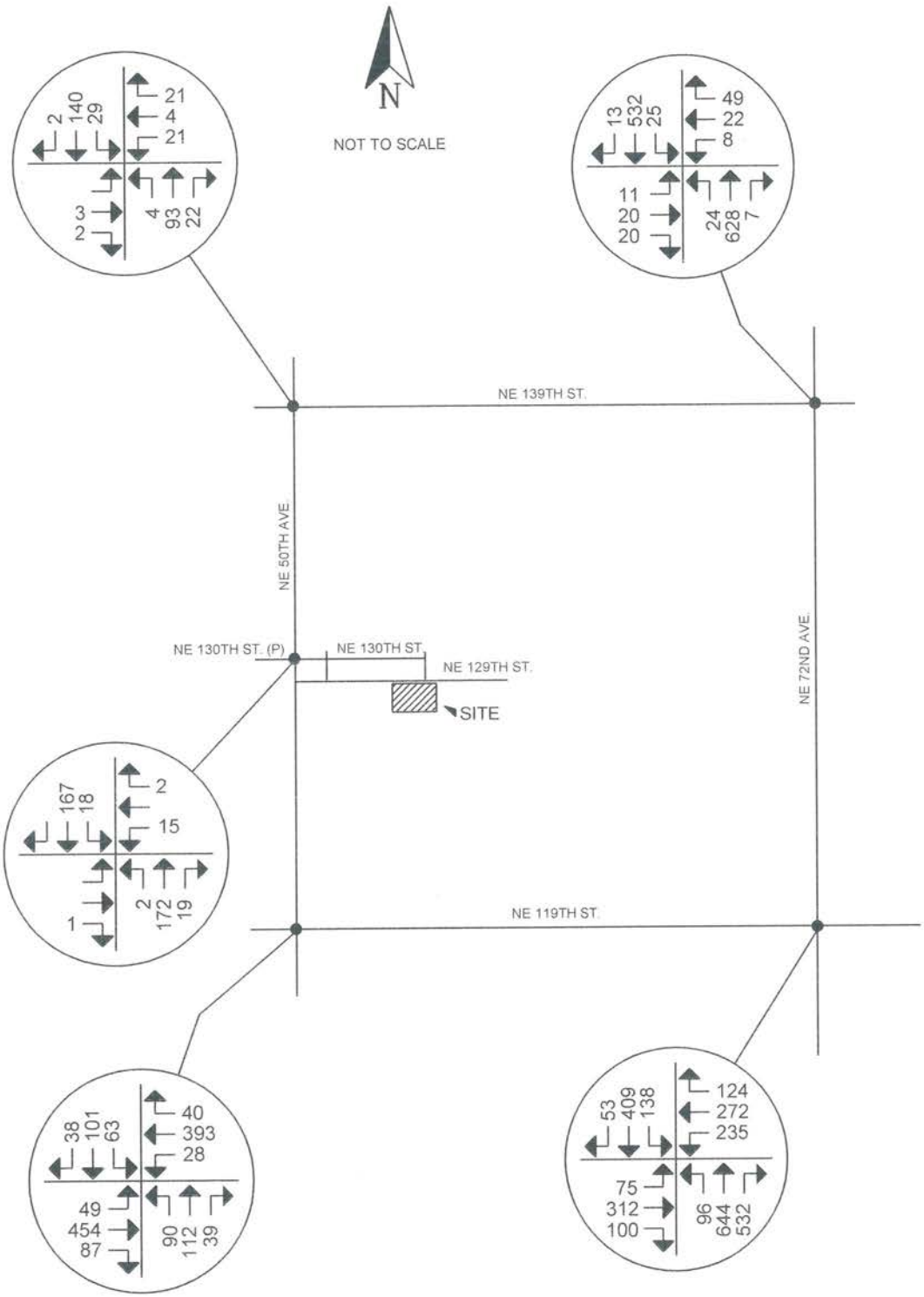
KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 8a
YEAR 2028 TRAFFIC VOLUMES
W/O PROJECT, AM PEAK HOUR

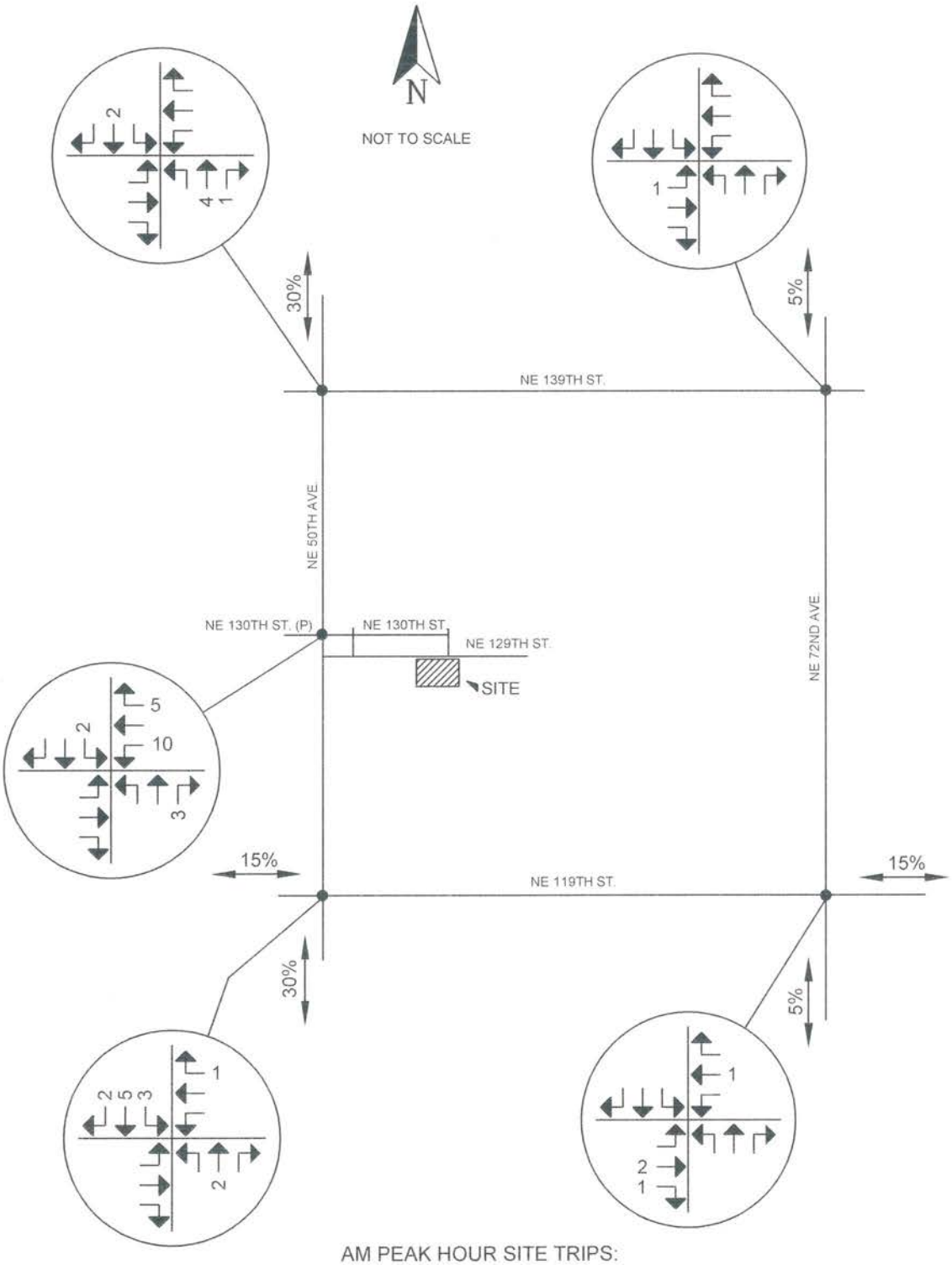
KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 8b
YEAR 2028 TRAFFIC VOLUMES
W/O PROJECT, PM PEAK HOUR

KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



AM PEAK HOUR SITE TRIPS:
IN-5, OUT-15

PLEASANT WOODS NORTH SUBDIVISION

FIGURE 9a
SITE TRAFFIC DISTRIBUTION/ASSIGNMENT
AM PEAK HOUR

KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530

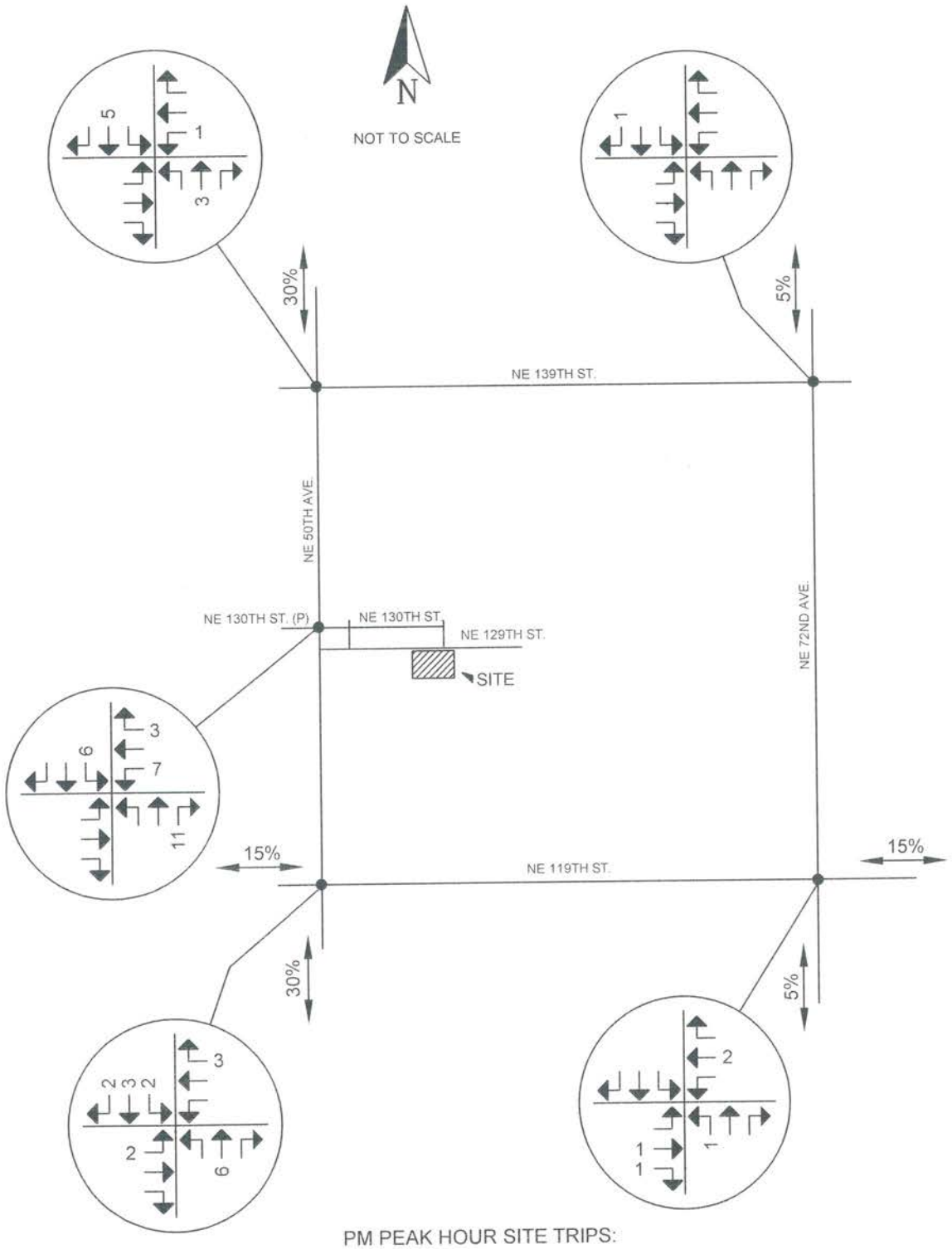
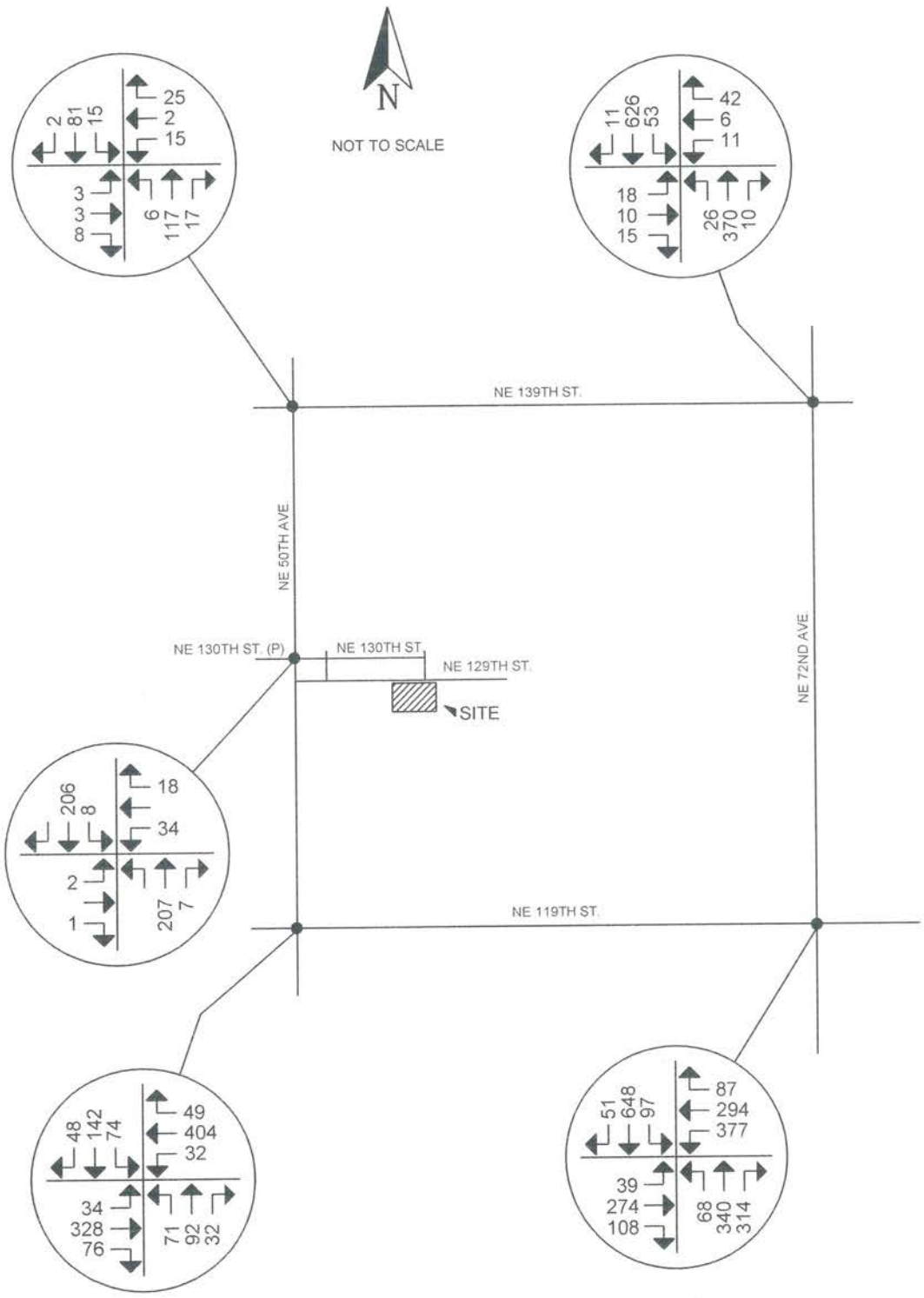


FIGURE 9b
SITE TRAFFIC DISTRIBUTION/ASSIGNMENT
PM PEAK HOUR

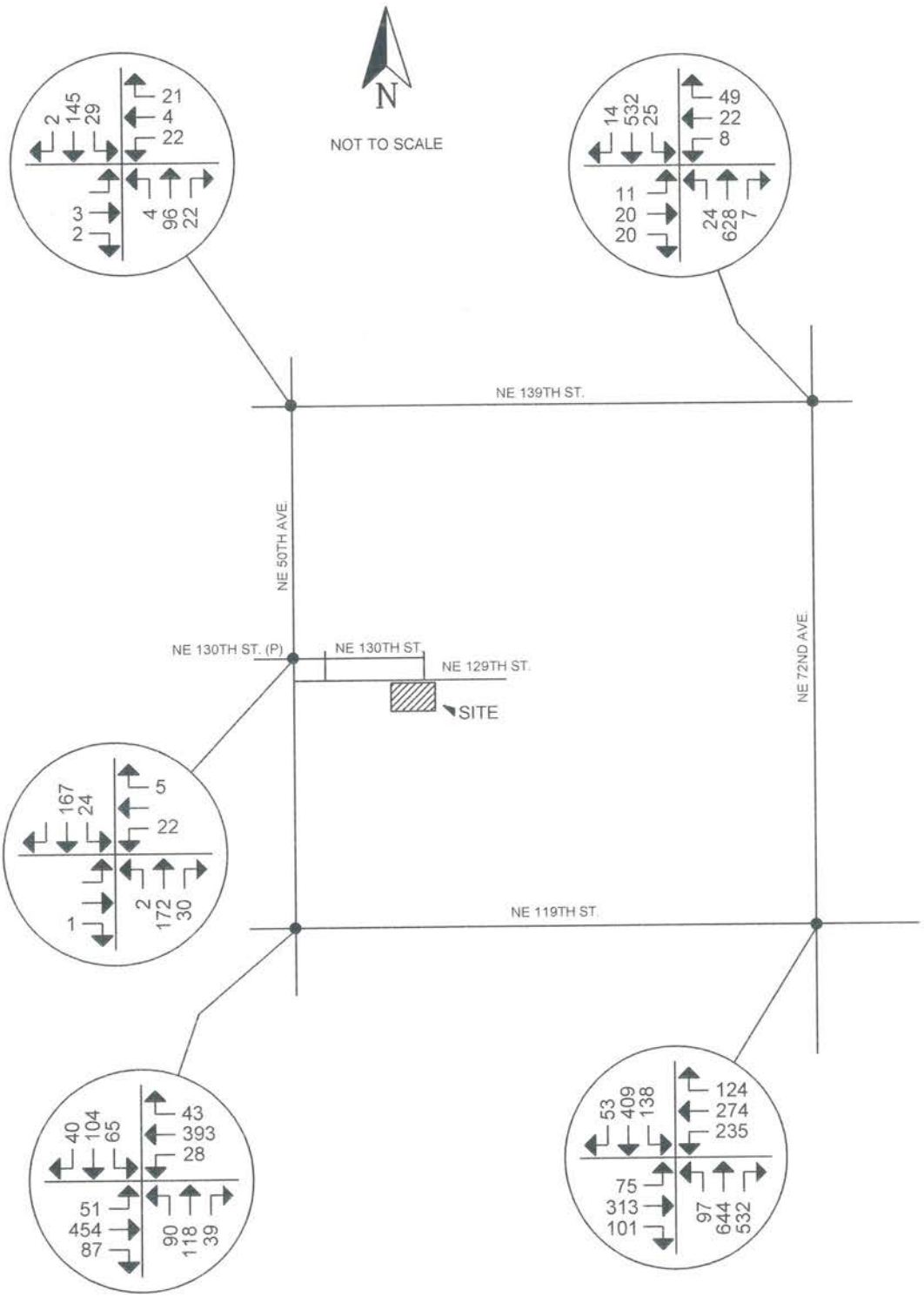
KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 10a
YEAR 2028 TRAFFIC VOLUMES
WITH PROJECT, AM PEAK HOUR

KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



PLEASANT WOODS NORTH SUBDIVISION

FIGURE 10b
YEAR 2028 TRAFFIC VOLUMES
WITH PROJECT, PM PEAK HOUR

KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530

APPENDIX A
RAW TRAFFIC COUNT DATA

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 139TH STREET

DATE OF COUNT: 11/19/2025, 07:00-09:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	0	6	0	1	0	2	0	4	2	0	1	0	16
07:05-07:10	0	4	0	1	1	2	0	3	2	0	0	0	13
07:10-07:15	1	1	0	0	0	0	0	5	1	2	1	1	12
07:15-07:20	0	2	0	1	0	1	1	2	2	0	0	0	9
07:20-07:25	1	6	0	2	1	1	0	4	1	0	0	0	16
07:25-07:30	0	5	0	2	0	2	0	8	0	0	1	0	18
07:30-07:35	2	5	0	1	0	1	0	6	0	0	0	0	15
07:35-07:40	0	2	0	2	0	1	1	7	0	0	0	0	13
07:40-07:45	**4**	**9**	**0**	**0**	**0**	**2**	**0**	**8**	**3**	**0**	**0**	**1**	**27**
07:45-07:50	**0**	**11**	**0**	**1**	**0**	**3**	**0**	**8**	**1**	**1**	**1**	**2**	**28**
07:50-07:55	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**8**	**3**	**0**	**1**	**1**	**18**
07:55-08:00	**2**	**4**	**0**	**2**	**0**	**3**	**2**	**12**	**1**	**0**	**0**	**1**	**27**
08:00-08:05	**4**	**3**	**1**	**2**	**1**	**1**	**0**	**10**	**1**	**0**	**0**	**0**	**23**
08:05-08:10	**1**	**2**	**0**	**2**	**0**	**2**	**0**	**5**	**1**	**0**	**0**	**0**	**13**
08:10-08:15	**1**	**6**	**1**	**0**	**0**	**4**	**0**	**7**	**0**	**0**	**0**	**2**	**21**
08:15-08:20	**0**	**6**	**0**	**2**	**0**	**2**	**2**	**8**	**1**	**1**	**0**	**0**	**22**
08:20-08:25	**0**	**7**	**0**	**2**	**0**	**2**	**1**	**7**	**0**	**0**	**0**	**1**	**20**
08:25-08:30	**0**	**10**	**0**	**0**	**0**	**1**	**0**	**12**	**0**	**0**	**0**	**0**	**23**
08:30-08:35	**0**	**8**	**0**	**3**	**1**	**0**	**1**	**7**	**2**	**1**	**0**	**0**	**23**
08:35-08:40	**2**	**5**	**0**	**0**	**0**	**3**	**0**	**10**	**2**	**0**	**1**	**0**	**23**
08:40-08:45	0	4	0	0	0	2	0	7	2	0	0	1	16
08:45-08:50	0	3	1	2	0	1	0	7	1	0	0	0	15
08:50-08:55	0	3	0	1	0	0	1	9	1	1	0	0	16
08:55-09:00	1	5	0	0	1	2	0	8	0	0	0	0	17
Peak Hour Total	**14**	**75**	**2**	**14**	**2**	**24**	**6**	**102**	**15**	**3**	**3**	**8**	**268**
% Trucks	0	0	0	0	0	0	0	1	0	9	0	4	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:40-08:40

PHF Intersection: 0.92

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 139TH STREET

DATE OF COUNT: 11/12/2025, 16:00-18:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	**4**	**18**	**0**	**4**	**1**	**1**	**0**	**8**	**1**	**0**	**0**	**0**	**37**
16:05-16:10	**1**	**8**	**1**	**2**	**0**	**4**	**1**	**7**	**2**	**0**	**0**	**0**	**26**
16:10-16:15	**7**	**16**	**1**	**4**	**0**	**2**	**0**	**8**	**3**	**0**	**1**	**0**	**42**
16:15-16:20	**3**	**19**	**0**	**4**	**0**	**1**	**0**	**6**	**1**	**0**	**0**	**0**	**34**
16:20-16:25	**2**	**3**	**0**	**2**	**0**	**1**	**0**	**9**	**4**	**0**	**0**	**0**	**21**
16:25-16:30	**4**	**9**	**0**	**2**	**0**	**4**	**1**	**8**	**1**	**0**	**0**	**0**	**29**
16:30-16:35	**1**	**15**	**0**	**0**	**0**	**3**	**0**	**5**	**1**	**0**	**0**	**0**	**25**
16:35-16:40	**0**	**15**	**0**	**0**	**0**	**1**	**0**	**4**	**2**	**0**	**2**	**0**	**24**
16:40-16:45	**2**	**8**	**0**	**0**	**1**	**2**	**2**	**4**	**3**	**0**	**0**	**0**	**22**
16:45-16:50	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**9**	**2**	**0**	**0**	**0**	**17**
16:50-16:55	**1**	**6**	**0**	**0**	**1**	**1**	**0**	**13**	**0**	**0**	**0**	**1**	**23**
16:55-17:00	**1**	**7**	**0**	**2**	**1**	**0**	**0**	**5**	**1**	**0**	**0**	**1**	**18**
17:00-17:05	3	7	0	3	0	0	0	5	2	0	0	0	20
17:05-17:10	2	18	0	1	1	0	0	11	3	0	0	0	36
17:10-17:15	1	9	1	0	0	0	1	6	1	0	0	0	19
17:15-17:20	1	7	0	1	0	0	0	6	0	0	1	0	16
17:20-17:25	1	4	0	2	0	0	1	6	3	0	0	0	17
17:25-17:30	1	11	0	1	1	1	0	3	2	0	0	0	20
17:30-17:35	4	9	0	3	0	1	0	9	5	0	0	0	31
17:35-17:40	1	11	0	1	1	0	0	5	0	0	0	0	19
17:40-17:45	0	9	0	0	0	0	0	6	2	0	0	0	17
17:45-17:50	1	7	0	1	1	1	0	5	0	0	0	0	16
17:50-17:55	1	6	0	0	0	1	0	4	3	0	0	0	15
17:55-18:00	0	9	0	0	0	0	0	7	0	0	0	0	16
Peak Hour Total	**27**	**129**	**2**	**20**	**4**	**20**	**4**	**86**	**21**	**0**	**3**	**2**	**318**
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:00-17:00

PHF Intersection: 0.76

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & 139TH STREET

DATE OF COUNT: 11/11/2025, 07:00-09:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	3	56	0	2	0	1	3	13	0	0	0	0	78
07:05-07:10	2	37	1	1	0	0	3	18	0	1	1	1	65
07:10-07:15	0	51	1	0	0	2	2	23	1	1	1	1	83
07:15-07:20	1	50	0	2	1	1	3	16	0	1	0	2	77
07:20-07:25	6	39	1	1	2	2	0	30	0	1	2	0	84
07:25-07:30	**3**	**50**	**1**	**2**	**0**	**3**	**0**	**37**	**1**	**2**	**0**	**1**	**100**
07:30-07:35	**5**	**40**	**1**	**1**	**0**	**1**	**0**	**26**	**1**	**3**	**0**	**1**	**79**
07:35-07:40	**12**	**54**	**0**	**0**	**1**	**2**	**2**	**31**	**1**	**0**	**3**	**4**	**110**
07:40-07:45	**4**	**69**	**0**	**0**	**1**	**2**	**2**	**24**	**0**	**1**	**1**	**2**	**106**
07:45-07:50	**0**	**62**	**3**	**1**	**0**	**5**	**5**	**19**	**2**	**1**	**2**	**2**	**102**
07:50-07:55	**7**	**49**	**0**	**0**	**0**	**1**	**1**	**35**	**3**	**0**	**1**	**1**	**98**
07:55-08:00	**2**	**43**	**3**	**1**	**0**	**10**	**0**	**21**	**0**	**2**	**1**	**1**	**84**
08:00-08:05	**0**	**38**	**0**	**2**	**3**	**5**	**9**	**41**	**1**	**1**	**0**	**0**	**100**
08:05-08:10	**4**	**29**	**0**	**1**	**1**	**3**	**1**	**28**	**0**	**3**	**0**	**0**	**70**
08:10-08:15	**2**	**47**	**1**	**2**	**0**	**6**	**1**	**26**	**0**	**0**	**1**	**1**	**87**
08:15-08:20	**7**	**50**	**1**	**0**	**0**	**1**	**0**	**24**	**0**	**2**	**1**	**1**	**87**
08:20-08:25	**4**	**56**	**0**	**0**	**0**	**1**	**4**	**25**	**0**	**1**	**0**	**0**	**91**
08:25-08:30	4	48	1	0	2	1	0	18	0	0	0	0	74
08:30-08:35	2	47	0	0	2	1	1	32	0	1	0	0	86
08:35-08:40	3	38	0	0	1	1	2	19	0	0	1	1	66
08:40-08:45	4	29	1	0	0	2	0	21	0	1	0	1	59
08:45-08:50	3	30	0	0	0	0	0	22	0	2	0	0	57
08:50-08:55	0	37	0	1	0	1	2	17	2	1	1	1	63
08:55-09:00	3	40	0	0	1	2	0	19	0	0	1	0	66
Peak Hour Total	**50**	**587**	**10**	**10**	**6**	**40**	**25**	**337**	**9**	**16**	**10**	**14**	**1114**
% Trucks	0	2	10	10	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:25-08:25

PHF Intersection: 0.88

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 139TH STREET

DATE OF COUNT: 11/12/2025, 16:00-18:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: KAK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	0	21	0	1	1	10	2	42	1	1	0	5	84
16:05-16:10	**2**	**43**	**2**	**1**	**3**	**8**	**2**	**61**	**0**	**0**	**2**	**3**	**127**
16:10-16:15	**1**	**46**	**0**	**1**	**2**	**6**	**2**	**50**	**1**	**0**	**1**	**2**	**112**
16:15-16:20	**2**	**36**	**2**	**0**	**3**	**8**	**4**	**57**	**1**	**1**	**2**	**3**	**119**
16:20-16:25	**3**	**32**	**1**	**0**	**0**	**0**	**1**	**44**	**1**	**0**	**0**	**2**	**84**
16:25-16:30	**2**	**47**	**1**	**0**	**0**	**0**	**2**	**46**	**0**	**0**	**1**	**2**	**101**
16:30-16:35	**4**	**38**	**1**	**0**	**0**	**3**	**2**	**46**	**2**	**1**	**2**	**1**	**100**
16:35-16:40	**0**	**29**	**0**	**0**	**6**	**2**	**1**	**61**	**2**	**1**	**2**	**0**	**104**
16:40-16:45	**3**	**54**	**1**	**0**	**2**	**2**	**1**	**42**	**0**	**5**	**1**	**0**	**111**
16:45-16:50	**0**	**35**	**0**	**4**	**1**	**5**	**0**	**38**	**0**	**0**	**4**	**0**	**87**
16:50-16:55	**2**	**56**	**2**	**1**	**1**	**5**	**4**	**49**	**0**	**0**	**0**	**3**	**123**
16:55-17:00	**3**	**39**	**1**	**1**	**2**	**2**	**1**	**43**	**0**	**1**	**3**	**0**	**96**
17:00-17:05	**2**	**35**	**1**	**0**	**1**	**5**	**3**	**48**	**0**	**1**	**1**	**3**	**100**
17:05-17:10	3	34	1	1	1	6	1	41	0	0	0	0	88
17:10-17:15	4	35	1	1	1	2	1	53	0	1	0	4	103
17:15-17:20	1	55	1	1	2	4	3	38	0	0	1	0	106
17:20-17:25	3	43	2	0	1	2	2	46	0	0	0	2	101
17:25-17:30	2	29	0	3	0	2	1	38	4	0	0	1	80
17:30-17:35	3	33	1	0	0	1	3	53	1	0	0	1	96
17:35-17:40	1	25	0	1	0	1	2	53	0	2	0	0	85
17:40-17:45	0	21	1	2	0	2	2	42	0	2	1	1	74
17:45-17:50	2	27	0	1	0	0	1	43	1	0	0	0	75
17:50-17:55	1	22	0	0	0	2	0	38	0	0	0	1	64
17:55-18:00	1	38	1	0	0	1	1	39	0	0	2	2	85
Peak Hour Total	**24**	**490**	**12**	**8**	**21**	**46**	**23**	**585**	**7**	**10**	**19**	**19**	**1264**
% Trucks	0	4	0	0	0	0	0	0	0	0	0	0	
Peds	0	2	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	1	0	0	0	0	

PEAK HOUR: 16:05-17:05

PHF Intersection: 0.88

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 130TH STREET

DATE OF COUNT: 11/13/2025, 07:00-09:00
DAY OF WEEK: THUR.
WEATHER: RAIN
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	0	9	0	1	0	1	0	3	1	0	0	0	15
07:05-07:10	0	12	0	1	0	2	0	10	1	1	0	0	27
07:10-07:15	2	10	0	1	0	0	0	7	1	0	0	0	21
07:15-07:20	0	7	0	0	0	1	0	5	0	0	0	0	13
07:20-07:25	0	10	0	0	0	1	0	9	0	0	0	0	20
07:25-07:30	0	12	0	0	0	0	0	6	0	0	0	0	18
07:30-07:35	0	13	0	3	0	0	0	8	0	0	0	0	23
07:35-07:40	**0**	**12**	**0**	**2**	**0**	**2**	**0**	**9**	**1**	**0**	**0**	**0**	**26**
07:40-07:45	**0**	**18**	**0**	**4**	**0**	**2**	**0**	**19**	**0**	**0**	**0**	**0**	**43**
07:45-07:50	**1**	**12**	**0**	**0**	**0**	**0**	**0**	**23**	**1**	**0**	**0**	**0**	**37**
07:50-07:55	**0**	**13**	**0**	**2**	**0**	**1**	**0**	**22**	**0**	**1**	**0**	**0**	**39**
07:55-08:00	**0**	**21**	**0**	**0**	**0**	**1**	**0**	**26**	**1**	**0**	**0**	**0**	**49**
08:00-08:05	**1**	**21**	**0**	**2**	**0**	**1**	**0**	**20**	**0**	**0**	**0**	**0**	**45**
08:05-08:10	**0**	**29**	**0**	**3**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**1**	**51**
08:10-08:15	**0**	**13**	**0**	**3**	**0**	**1**	**0**	**7**	**0**	**0**	**0**	**0**	**24**
08:15-08:20	**2**	**12**	**0**	**2**	**0**	**1**	**0**	**9**	**0**	**1**	**0**	**0**	**27**
08:20-08:25	**0**	**10**	**0**	**2**	**0**	**1**	**0**	**15**	**1**	**0**	**0**	**0**	**29**
08:25-08:30	**1**	**18**	**0**	**2**	**0**	**1**	**0**	**15**	**0**	**0**	**0**	**0**	**37**
08:30-08:35	**1**	**15**	**0**	**1**	**0**	**1**	**0**	**8**	**0**	**0**	**0**	**0**	**26**
08:35-08:40	0	10	0	1	0	0	0	11	0	0	0	0	22
08:40-08:45	1	9	0	2	0	1	0	9	0	0	0	0	22
08:45-08:50	0	10	0	0	0	0	0	7	1	0	0	0	18
08:50-08:55	0	11	0	0	0	0	0	8	0	0	0	0	19
08:55-09:00	1	10	0	1	0	1	0	10	0	0	0	0	96
Peak Hour Total	**6**	**194**	**0**	**23**	**0**	**12**	**0**	**191**	**4**	**2**	**0**	**1**	**433**
% Trucks	0	0	0	0	0	0	0	4	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:35-08:35

PHF Intersection: 0.75

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 130TH STREET

DATE OF COUNT: 11/13/2025, 16:00-18:00
DAY OF WEEK: THUR.
WEATHER: CLOUDY
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	5	18	0	1	0	1	0	14	1	0	0	0	40
16:05-16:10	0	13	0	1	0	0	0	16	2	0	0	0	32
16:10-16:15	**0**	**16**	**0**	**0**	**0**	**1**	**0**	**16**	**1**	**0**	**0**	**0**	**34**
16:15-16:20	**3**	**15**	**0**	**2**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**31**
16:20-16:25	**0**	**12**	**0**	**2**	**0**	**0**	**1**	**15**	**3**	**0**	**0**	**0**	**33**
16:25-16:30	**3**	**7**	**0**	**1**	**0**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**26**
16:30-16:35	**0**	**21**	**0**	**1**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**30**
16:35-16:40	**2**	**13**	**0**	**1**	**0**	**0**	**0**	**23**	**2**	**0**	**0**	**1**	**42**
16:40-16:45	**0**	**15**	**0**	**1**	**0**	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**24**
16:45-16:50	**2**	**13**	**0**	**1**	**0**	**1**	**0**	**14**	**1**	**0**	**0**	**0**	**32**
16:50-16:55	**0**	**5**	**0**	**2**	**0**	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**17**
16:55-17:00	**1**	**7**	**0**	**1**	**0**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**24**
17:00-17:05	**3**	**13**	**0**	**2**	**0**	**0**	**0**	**14**	**3**	**0**	**0**	**0**	**35**
17:05-17:10	**3**	**18**	**0**	**0**	**0**	**0**	**0**	**19**	**1**	**0**	**0**	**0**	**41**
17:10-17:15	1	9	0	1	0	1	0	16	3	0	0	1	32
17:15-17:20	1	6	0	0	0	0	0	15	2	0	0	0	24
17:20-17:25	0	8	0	1	0	0	0	22	2	0	0	0	33
17:25-17:30	1	5	0	1	0	0	0	13	1	0	0	0	21
17:30-17:35	0	11	0	0	0	0	0	13	4	0	0	0	28
17:35-17:40	1	12	0	0	0	0	0	10	2	0	0	0	25
17:40-17:45	1	7	0	1	0	0	0	9	1	0	0	0	19
17:45-17:50	0	6	0	1	0	0	0	8	0	0	0	0	15
17:50-17:55	0	5	0	0	0	0	0	10	2	0	0	0	17
17:55-18:00	0	7	0	0	0	0	0	11	1	0	0	0	19
Peak Hour Total	**17**	**155**	**0**	**14**	**0**	**2**	**2**	**160**	**18**	**0**	**0**	**1**	**369**
% Trucks	0	1	0	0	0	0	0	0	0	0	0	0	
Peds	0	1	0	0	0	0	0	1	0	0	0	0	
Bikes	0	0	0	0	0	0	0	1	0	0	0	0	

PEAK HOUR: 16:10-17:10

PHF Intersection: 0.92

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 119TH STREET

DATE OF COUNT: 11/11/2025, 07:00-09:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	2	4	3	0	23	2	2	7	0	0	15	3	61
07:05-07:10	4	8	6	0	19	0	5	1	2	2	13	2	62
07:10-07:15	4	5	0	0	19	3	4	4	3	1	21	2	66
07:15-07:20	5	5	1	2	13	0	3	1	3	1	25	5	64
07:20-07:25	4	5	4	0	24	3	7	2	2	1	23	2	77
07:25-07:30	**3**	**10**	**1**	**1**	**28**	**2**	**2**	**2**	**2**	**2**	**27**	**8**	**88**
07:30-07:35	**5**	**4**	**2**	**2**	**23**	**2**	**4**	**4**	**2**	**2**	**16**	**6**	**72**
07:35-07:40	**9**	**6**	**1**	**4**	**30**	**2**	**9**	**5**	**2**	**1**	**29**	**8**	**106**
07:40-07:45	**4**	**11**	**5**	**4**	**41**	**4**	**1**	**10**	**2**	**1**	**29**	**10**	**122**
07:45-07:50	**5**	**20**	**5**	**4**	**31**	**6**	**11**	**6**	**1**	**3**	**32**	**4**	**128**
07:50-07:55	**6**	**19**	**8**	**2**	**27**	**2**	**8**	**15**	**2**	**3**	**21**	**8**	**121**
07:55-08:00	**4**	**7**	**5**	**1**	**35**	**9**	**4**	**12**	**2**	**5**	**29**	**5**	**118**
08:00-08:05	**9**	**10**	**5**	**2**	**24**	**3**	**3**	**6**	**4**	**2**	**19**	**8**	**95**
08:05-08:10	**11**	**14**	**4**	**3**	**39**	**1**	**10**	**2**	**4**	**4**	**23**	**4**	**119**
08:10-08:15	**4**	**11**	**2**	**2**	**32**	**5**	**2**	**8**	**4**	**5**	**30**	**3**	**108**
08:15-08:20	**5**	**11**	**2**	**2**	**28**	**3**	**8**	**11**	**4**	**3**	**29**	**2**	**108**
08:20-08:25	**2**	**6**	**3**	**3**	**29**	**2**	**5**	**4**	**1**	**1**	**20**	**6**	**82**
08:25-08:30	3	6	5	3	30	2	5	5	3	3	12	3	80
08:30-08:35	7	7	12	3	23	2	5	3	3	0	8	5	78
08:35-08:40	4	6	5	1	22	4	6	9	2	1	13	4	77
08:40-08:45	5	10	4	1	20	1	3	4	3	2	14	4	71
08:45-08:50	4	7	2	2	28	3	4	5	1	2	10	3	71
08:50-08:55	6	8	1	2	27	5	6	2	4	1	14	5	81
08:55-09:00	5	6	4	0	29	2	3	2	2	0	9	4	66
Peak Hour Total	**67**	**129**	**43**	**30**	**367**	**41**	**67**	**85**	**30**	**32**	**304**	**72**	**1267**
% Trucks	0	0	2	3	0	2	0	6	0	3	0	3	
Peds	0	0	0	0	0	0	0	0	0	0	1	0	
Bikes	0	0	0	0	0	0	0	0	0	0	1	0	

PEAK HOUR: 07:25-08:25

PHF Intersection: 0.85

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 119TH STREET

DATE OF COUNT: 11/13/2025, 16:00-18:00
DAY OF WEEK: THUR.
WEATHER: RAIN
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	14	27	4	1	27	2	1	5	3	5	42	9	140
16:05-16:10	3	13	6	5	37	4	11	5	3	6	26	7	126
16:10-16:15	7	7	3	2	23	2	5	7	4	3	32	6	101
16:15-16:20	3	9	2	1	39	5	5	11	5	3	30	7	120
16:20-16:25	**11**	**12**	**4**	**0**	**25**	**4**	**3**	**3**	**0**	**3**	**43**	**7**	**115**
16:25-16:30	**7**	**8**	**5**	**1**	**24**	**2**	**6**	**4**	**5**	**1**	**44**	**9**	**116**
16:30-16:35	**5**	**3**	**2**	**4**	**25**	**0**	**13**	**9**	**3**	**6**	**34**	**11**	**115**
16:35-16:40	**3**	**4**	**3**	**3**	**25**	**4**	**7**	**3**	**3**	**5**	**32**	**7**	**99**
16:40-16:45	**4**	**8**	**4**	**4**	**25**	**3**	**8**	**11**	**3**	**4**	**36**	**8**	**118**
16:45-16:50	**5**	**7**	**3**	**3**	**29**	**6**	**5**	**10**	**5**	**7**	**32**	**2**	**114**
16:50-16:55	**3**	**3**	**3**	**2**	**35**	**3**	**5**	**13**	**2**	**3**	**36**	**3**	**111**
16:55-17:00	**4**	**7**	**4**	**4**	**35**	**3**	**4**	**13**	**1**	**2**	**29**	**7**	**113**
17:00-17:05	**5**	**14**	**2**	**0**	**32**	**0**	**6**	**8**	**3**	**8**	**28**	**5**	**111**
17:05-17:10	**4**	**16**	**4**	**2**	**29**	**5**	**16**	**11**	**6**	**1**	**27**	**7**	**128**
17:10-17:15	**3**	**6**	**2**	**3**	**40**	**3**	**3**	**13**	**5**	**2**	**29**	**6**	**115**
17:15-17:20	**3**	**7**	**0**	**0**	**37**	**3**	**9**	**8**	**1**	**4**	**41**	**10**	**123**
17:20-17:25	2	5	2	3	26	3	6	11	2	6	34	11	111
17:25-17:30	3	3	5	0	32	4	10	6	4	9	31	7	114
17:30-17:35	6	6	1	4	26	2	7	3	0	6	28	5	94
17:35-17:40	4	9	2	2	16	4	12	12	1	3	46	1	112
17:40-17:45	3	4	0	0	19	0	5	7	2	4	27	3	74
17:45-17:50	4	5	2	3	22	3	4	8	0	4	30	6	91
17:50-17:55	5	3	3	2	21	0	8	5	2	5	28	7	89
17:55-18:00	7	6	4	2	28	1	7	5	2	2	26	2	92
Peak Hour Total	**57**	**95**	**36**	**26**	**361**	**36**	**85**	**106**	**37**	**46**	**411**	**82**	**1378**
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	1	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:20-17:20

PHF Intersection: 0.94

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 119TH STREET

DATE OF COUNT: 11/18/2025, 07:00-09:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	4	39	3	17	9	6	8	24	18	3	13	6	150
07:05-07:10	7	26	0	34	16	4	0	19	9	2	17	8	142
07:10-07:15	3	46	3	23	9	3	3	20	11	4	12	9	146
07:15-07:20	**3**	**44**	**3**	**23**	**21**	**4**	**6**	**24**	**22**	**2**	**19**	**4**	**175**
07:20-07:25	**7**	**49**	**3**	**29**	**12**	**7**	**3**	**28**	**19**	**2**	**22**	**5**	**186**
07:25-07:30	**9**	**43**	**2**	**41**	**15**	**8**	**4**	**21**	**27**	**1**	**26**	**8**	**205**
07:30-07:35	**6**	**52**	**2**	**30**	**18**	**8**	**6**	**35**	**30**	**4**	**21**	**11**	**223**
07:35-07:40	**8**	**48**	**4**	**16**	**22**	**3**	**4**	**23**	**26**	**1**	**23**	**9**	**187**
07:40-07:45	**11**	**62**	**2**	**26**	**25**	**2**	**2**	**29**	**50**	**1**	**18**	**6**	**234**
07:45-07:50	**7**	**64**	**3**	**25**	**21**	**4**	**8**	**27**	**17**	**3**	**33**	**9**	**221**
07:50-07:55	**7**	**35**	**1**	**51**	**37**	**9**	**4**	**25**	**17**	**4**	**29**	**21**	**240**
07:55-08:00	**8**	**59**	**3**	**32**	**35**	**11**	**3**	**28**	**32**	**1**	**10**	**4**	**226**
08:00-08:05	**1**	**35**	**2**	**37**	**28**	**11**	**13**	**21**	**21**	**7**	**24**	**10**	**210**
08:05-08:10	**5**	**46**	**3**	**22**	**24**	**6**	**4**	**21**	**21**	**1**	**16**	**8**	**177**
08:10-08:15	**8**	**48**	**1**	**24**	**18**	**5**	**7**	**28**	**14**	**4**	**16**	**6**	**179**
08:15-08:20	7	39	4	36	17	6	4	13	21	2	15	4	167
08:20-08:25	10	43	4	19	24	5	3	25	20	2	26	11	192
08:25-08:30	4	49	2	22	29	5	6	29	22	2	19	11	200
08:30-08:35	10	37	5	21	16	4	5	15	21	4	17	10	165
08:35-08:40	4	59	3	22	27	8	8	37	12	3	17	4	204
08:40-08:45	2	37	2	24	21	5	4	21	17	1	18	6	158
08:45-08:50	3	36	1	19	22	6	5	22	19	1	20	9	163
08:50-08:55	1	27	3	20	17	4	6	15	10	2	19	10	134
08:55-09:00	5	31	3	22	20	5	5	21	22	2	16	8	160
Peak Hour Total	**80**	**585**	**29**	**356**	**276**	**78**	**64**	**310**	**296**	**31**	**257**	**101**	**2463**
% Trucks	5	1	0	1	0	0	0	1	0	0	1	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:15-08:15
PHF Intersection: 0.89

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 119TH STREET

DATE OF COUNT: 11/19/2025, 16:00-18:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	**8**	**30**	**0**	**13**	**9**	**7**	**10**	**60**	**43**	**6**	**30**	**7**	**223**
16:05-16:10	**9**	**36**	**0**	**22**	**33**	**11**	**15**	**34**	**35**	**4**	**22**	**8**	**229**
16:10-16:15	**8**	**38**	**1**	**11**	**24**	**8**	**4**	**57**	**38**	**1**	**22**	**4**	**216**
16:15-16:20	**8**	**24**	**5**	**25**	**28**	**7**	**2**	**43**	**40**	**7**	**30**	**9**	**228**
16:25-16:30	**3**	**19**	**5**	**36**	**30**	**10**	**5**	**33**	**29**	**8**	**39**	**8**	**225**
16:20-16:25	**19**	**31**	**3**	**10**	**15**	**7**	**7**	**49**	**58**	**3**	**22**	**8**	**232**
16:30-16:35	**18**	**28**	**5**	**26**	**11**	**5**	**13**	**53**	**57**	**6**	**17**	**7**	**246**
16:35-16:40	**11**	**35**	**3**	**9**	**20**	**8**	**9**	**45**	**39**	**2**	**25**	**11**	**217**
16:40-16:45	**11**	**30**	**3**	**23**	**25**	**9**	**6**	**44**	**46**	**9**	**24**	**7**	**237**
16:45-16:50	**1**	**39**	**8**	**13**	**29**	**14**	**6**	**48**	**43**	**5**	**24**	**7**	**237**
16:50-16:55	**12**	**29**	**4**	**18**	**18**	**7**	**5**	**58**	**44**	**0**	**17**	**12**	**224**
16:55-17:00	**13**	**31**	**2**	**16**	**15**	**12**	**9**	**53**	**30**	**0**	**22**	**6**	**209**
17:00-17:05	7	29	2	13	12	4	17	45	33	6	27	8	203
17:05-17:10	6	32	4	11	9	11	9	48	52	5	19	8	214
17:10-17:15	7	35	2	19	17	10	12	37	53	1	22	5	220
17:15-17:20	6	37	1	18	19	6	9	45	33	3	27	5	209
17:20-17:25	7	30	1	28	20	13	10	33	33	7	34	5	221
17:25-17:30	5	25	2	34	31	8	6	58	39	4	21	5	238
17:30-17:35	10	42	3	25	10	4	10	35	50	2	25	2	218
17:35-17:40	5	44	2	15	13	3	8	59	25	6	22	13	215
17:40-17:45	6	25	2	9	10	9	7	48	29	0	19	7	171
17:45-17:50	7	31	3	11	8	8	5	43	31	3	20	8	178
17:50-17:55	3	20	3	12	9	7	6	37	27	4	18	4	150
17:55-18:00	4	22	1	9	15	6	10	34	30	2	23	9	165
Peak Hour Total	**121**	**370**	**39**	**222**	**257**	**105**	**91**	**577**	**502**	**51**	**294**	**94**	**2723**
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:00-17:00

PHF Intersection: 0.97

KELLY ENGINEERING

APPENDIX B
TRAFFIC SIGNAL WARRANTS REPORT

HCS Warrants Report

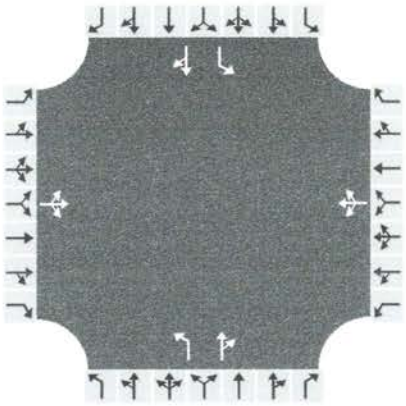
Project Information

Analyst	DSK	Date	11/27/2025
Agency	Kelly Engineering	Analysis Year	2028
Jurisdiction	Clark Co.	Time Period Analyzed	PM Peak Hour
Units	U.S. Customary	MUTCD Method	MUTCD 11 (2023)
Project Description	NE 72nd Ave. & NE 139th St. (Year 2028 with Project)		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	5:00	Coordinated Signal System	No
Major Street Speed (mi/h)	40	Nearest Signal (ft)	2000
Adequate Trials of Crash Exp. Alt.	No		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	0	1	0	1	1	0	1	1	0
Lane Usage		LTR			LTR		L	TR		L	TR	
Vehicle Volumes Averages (veh/h)	0	1	1	0	1	4	2	52	0	2	44	1
Pedestrian median refuge available	No			No			No			No		
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay Averages (s/veh)	0.0			0.0			0.0			0.0		
Delay Averages (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)	-	Tractor-Trailer Trucks (%)	0

Volume Summary

Hours	Major Volume (veh/h)	Minor Volume (veh/h)	Total Volume (veh/h)	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (80%)	4A (70%)	4B (70%)
5:00 - 6:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
6:00 - 7:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
7:00 - 8:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
8:00 - 9:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
9:00 - 10:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
10:00 - 11:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
11:00 - 12:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
12:00 - 13:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
13:00 - 14:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
14:00 - 15:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
15:00 - 16:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
16:00 - 17:00	1230	79	1360	0	0	No	No	Yes	Yes	No	No	No	No	No
Total	1230	79	1360	0	0	0	0	1	1	0	0	0	0	0

Pedestrian Volume

15th % pedestrian speed < 3.5 ft/s		Pedestrian refuge present?	NB		SB	

Hours	Major Street Vehicular Volume (veh/h)			Major Street Pedestrian Volume (ped/h)			4A (70%)	4B (70%)
	NB	SB	Total	NB	SB	Total		
5:00 - 6:00	0	0	0	0	0	0	No	No
6:00 - 7:00	0	0	0	0	0	0	No	No
7:00 - 8:00	0	0	0	0	0	0	No	No
8:00 - 9:00	0	0	0	0	0	0	No	No
9:00 - 10:00	0	0	0	0	0	0	No	No
10:00 - 11:00	0	0	0	0	0	0	No	No
11:00 - 12:00	0	0	0	0	0	0	No	No
12:00 - 13:00	0	0	0	0	0	0	No	No
13:00 - 14:00	0	0	0	0	0	0	No	No
14:00 - 15:00	0	0	0	0	0	0	No	No
15:00 - 16:00	0	0	0	0	0	0	No	No
16:00 - 17:00	659	571	1230	0	0	0	No	No
Totals	659	571	1230	0	0	0	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- more critical minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- more critical minor approach) --or--	
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 2: Four-Hour Vehicular Volume	
Four-Hour Vehicular Volume (Both major approaches --and-- more critical minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	

B. Peak-Hour Vehicular Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. Peak-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported Crash History --and--	✓
B1. Angle Crashes and Pedestrian Crashes within a 1-year Period (All Severities)	
B2. Angle Crashes and Pedestrian Crashes within a 1-year Period (Fatal-and-Injury)	
B3. Angle Crashes and Pedestrian Crashes within a 3-year Period (All Severities)	✓
B4. Angle Crashes and Pedestrian Crashes within a 3-year Period (Fatal-and-Injury)	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

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APPENDIX C
IN-PROCESS TRAFFIC

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SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

AM & PM Peak Hours

Figure 3

Leilani Pointe Apartments

7/29/2024

Figure 3
LOTI Apartments
11/25/2024

SITE TRIP DISTRIBUTION & ASSIGNMENT
Proposed Development Plan - Site Trips
AM & PM Peak Hours

lancaster mobley

LEGEND
XX% PERCENT OF PROJECT TRIPS

NET NEW TRIP GENERATION	IN	OUT	TOTAL
AM	5	13	18
PM	14	9	23

No Scale

PM PEAK HOUR

AM PEAK HOUR

Figure 3
Jailen's Pointe Apartments
7/24/2023

SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips
AM & PM Peak Hours

Lancaster mobley

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SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

AM & PM Peak Hours

Figure 3

Jailen's Pointe Apartments Phase 2

9/5/2023

APPENDIX D
COLLISION DATA

COUNTY ROAD INTERSECTIONS

119th St (Co Rd # 94100, mp 1.030 – 1.070) @ 50th Ave (Co Rd # 44150, mp 0.000 – 0.020 – North Leg & Co Rd # 19730, mp 1.220 – 1.240 – South Leg)

119th St (Co Rd # 94100, mp 2.060 – 2.100) @ 72nd Ave (Co Rd # 91250, mp 3.240 – 3.280)

130th St (Co Rd # 19841, mp 0.000 – 0.020) @ 50th Ave (Co Rd # 44150, mp 0.540 – 0.580)

139th St (Co Rd # 44154, mp 0.370 – 0.390 – West Leg & Co Rd # 44280, mp 0.980 – 1.00 – East Leg) @ 50th Ave (Co Rd # 44150, mp 0.980 – 1.020) – *No Reported Crashes*

139th St (Co Rd # 44280, mp 0.000 – 0.020 – West Leg & Co Rd # 50010, mp 1.730 – 1.750 – East Leg) @ 72nd Ave (Co Rd # 91250, mp 4.250 – 4.290)

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

9/29/2022 - 9/29/2025 *See 2nd tab below for road info*

Under 23 U.S. Code § 148 and 23 U.S. Code § 407, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	CO ONLY COUNTY ROAD NAME	PRIMARY TRAFFICWAY	MILEPOST	A / B	BLOCK NUMBER	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME
County Road	Clark		NE 50TH AVE	44150	0.000			94100	1.050				
County Road	Clark		NE 72ND AVE	91250	3.240								
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 139TH ST	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			50010	1.750				
County Road	Clark		NE 72ND AVE	91250	4.270			50010	1.750				
County Road	Clark		NE 119TH ST	94100	1.050			19730	1.240				
County Road	Clark		NE 119TH ST	94100	1.050			19730	1.240				
County Road	Clark		NE 119TH ST	94100	2.080			91250	3.260				
County Road	Clark		NE 72ND AVE										
County Road	Clark		NE 72ND AVE										
County Road	Clark		NE 50TH AVE										

SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE
No	ED23001	01/07/2023	09:26	Possible Injury	3	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED89220	04/18/2023	18:29	No Apparent Injury	0	0	2	0	0	Passenger Car
No	EF24779	09/22/2024	14:42	No Apparent Injury	0	0	4	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE09177	09/23/2023	12:32	Unknown	0	0	1	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE04322	09/08/2023	17:33	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED19308	12/21/2022	17:02	Possible Injury	2	0	3	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE64853	04/01/2024	14:39	Possible Injury	2	0	2	0	0	Passenger Car
No	EE14003	10/28/2023	00:11	Suspected Minor Injury	1	0	4	0	0	Passenger Car
No	EE81771	09/05/2023	18:36	Possible Injury	2	0	2	0	0	Passenger Car
No	ED70297	05/27/2023	10:33	Suspected Serious Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE69538	04/18/2024	12:45	Suspected Minor Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED94488	08/30/2023	08:00	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE22211	11/18/2023	17:00	No Apparent Injury	0	0	2	0	0	Passenger Car
No	EE45021	01/10/2024	07:42	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EF24817	09/28/2024	23:55	Suspected Minor Injury	2	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED20087	12/27/2022	13:39	Possible Injury	1	0	2	0	0	Passenger Car
No	ED45654	03/18/2023	08:44	Suspected Serious Injury	2	0	2	0	0	Passenger Car
No	EE97553	07/14/2024	12:47	No Apparent Injury	0	0	3	0	0	Passenger Car
No	EG39703	09/02/2025	19:03	No Apparent Injury	0	0	3	0	0	Passenger Car
No	EG17623	07/21/2025	06:33	Possible Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EG14545	07/22/2025	19:57	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb

VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION
Passenger Car	At Intersection and Related	Raining	Wet
Passenger Car	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry
Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
	Not at Intersection and Not Related	Overcast	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	Intersection Related but Not at Intersection	Clear	Dry
Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
Passenger Car	At Intersection and Related	Clear	Dry
Passenger Car	At Intersection and Related	Fog or Smog or Smoke	Dry
Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry
Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry
Truck (Flatbad,Van,etc)	At Intersection and Related	Overcast	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet
Passenger Car	At Intersection and Related	Clear	Dry
Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry

LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION
Daylight	Entering at angle	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead
Daylight	Tree or Stump (stationary)	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Dark-No Street Lights	Entering at angle	Going Straight Ahead
Daylight	Entering at angle	Starting in Traffic Lane
Daylight	Entering at angle	Going Straight Ahead
Daylight	Entering at angle	Making Left Turn
Daylight	Entering at angle	Stopped at Signal or Stop Sign
Dark-Street Lights On	Entering at angle	Going Straight Ahead
Daylight	Entering at angle	Starting in Traffic Lane
Dark - Unknown Lightin	Entering at angle	Going Straight Ahead
Daylight	From opposite direction - one left turn - one straight	Making Left Turn
Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Dark - Unknown Lightin	From opposite direction - one left turn - one straight	Making Left Turn
Daylight	From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane
Daylight	From same direction - one left turn - one straight	Overtaking and Passing

VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)
Going Straight Ahead	East	South	East	West	Disregard Traffic Sign and Signals
Going Straight Ahead	North	South	North	South	Unknown Distraction
Stopped for Traffic	South	North	South	Vehicle Stopped	Follow Too Closely
	North	South			Under Influence of Alcohol
Going Straight Ahead	South	North	South	North	Other Contributing Circ Not Listed
Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Follow Too Closely
Slowing	South	North	South	North	Follow Too Closely
Going Straight Ahead	West	East	North	South	Did Not Grant RW to Vehicle
Going Straight Ahead	West	East	North	South	Did Not Grant RW to Vehicle
Going Straight Ahead	West	East	North	South	Operating Defective Equipment
Going Straight Ahead	West	North	North	South	Disregard Traffic Sign and Signals
Going Straight Ahead	Vehicle Stopped	Vehicle Stopped	North	South	Improper Turn/Merge
Going Straight Ahead	West	East	South	North	None
Going Straight Ahead	Vehicle Stopped	Vehicle Stopped	South	North	Did Not Grant RW to Vehicle
Going Straight Ahead	South	North	West	East	None
Going Straight Ahead	East	South	West	East	Did Not Grant RW to Vehicle
Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Unknown Distraction
Slowing	East	West	East	West	Exceeding Stated Speed Limit
Going Straight Ahead	South	West	North	South	Did Not Grant RW to Vehicle
Stopped at Signal or Stop Sign	North	South	North	Vehicle Stopped	Lost in Thought / Day Dreaming
Making Left Turn	North	South	North	East	Improper Passing

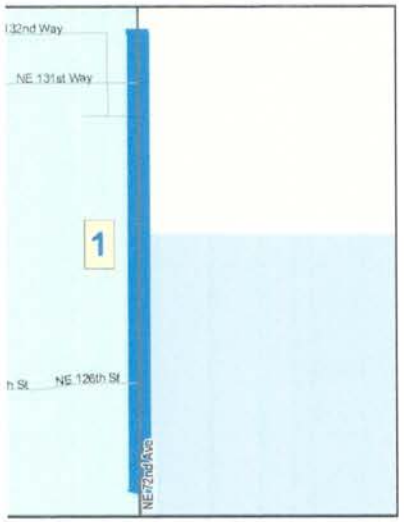
MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH - X 2010 - FORWARD	WA STATE PLANE SOUTH - Y 2010 - FORWARD
None	Lane of Primary Trafficway	1098725.04	143794.38
None	Lane of Primary Trafficway	1104114.24	143536.3
None	Lane of Primary Trafficway	1104110.3	143416.43
	Past the Outside Shoulder of Primary Trafficway	1104116.58	143601.28
None	Lane of Primary Trafficway	1104115.33	143566.34
None	Lane of Primary Trafficway	1104117.83	143636.3
None	Lane of Primary Trafficway	1104102.78	143177.23
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104788.26	175360.16
None	Lane of Primary Trafficway	1104245.6	148981.75
Disregard Traffic Sign and Signals	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1098725.04	143794.38
None	Lane of Primary Trafficway	1098725.04	143794.38
None	Lane of Primary Trafficway	1104317.51	143660.28
None	Lane of Primary Trafficway	1104245.6	148981.75
Lost in Thought / Day Dreaming	Lane of Primary Trafficway	1104119.05	143666.47
None	Lane of Primary Trafficway	1098800.99	146747.16

APPENDIX E
IMPROVEMENT PROJECT

2025 - 2030 Transportation Improvement Program

Project: 1. NE 72nd Avenue - NE 122nd Street to NE 133rd Street

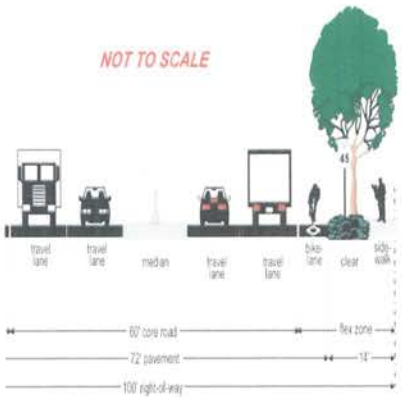
Vicinity Map



Project Summary

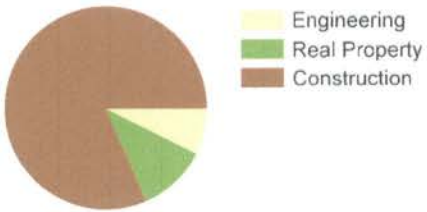
Project Number:	TBD	Project Length (mi.):	0.60
Project Manager:	Troy Pierce	Client:	Chris Carle
Basis for Project:	Safety; Economic Development; Provide more capacity/safety.		
Timeline:	PE 2025-2028; ROW 2026-2027; CN 2029-Post 2030		
Project Description:	Improve corridor to a 5-lane urban arterial standard or provide intersection widening and spot safety upgrades.		
Notes:	Consider intersection improvements, turn lanes/pockets and skinny road section due to potential costs. Possible safety project candidate.		
Status:	Traffic modeling and scoping anticipated to start in 2025. Funding Pending.		

Cross-Section Detail



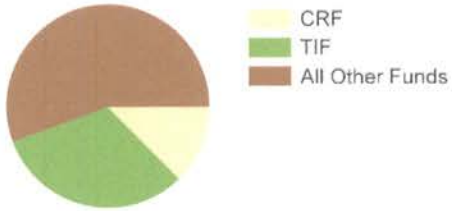
Project Cost Summary

Engineering:	$800,000
Real Property:	$1,200,000
Construction:	$8,800,000
Total:	$10,800,000



Funding Summary

County Road Fund:	$1,371,000
TIF:	$3,429,000
Federal Grant:	$0
State Grants:	$0
Loan:	$0
Other:	$5,500,000
Projected Funds:	$0
Unfunded:	$500,000
Total:	$10,800,000



PowerPoint Presentation - amended-2025-2030-transportation-impr...
https://clark.wa.gov/sites/default/files/media/document/2025-07/a

APPENDIX F
LEVEL OF SERVICE COMPUTER PRINTOUTS

HCS Two-Way Stop-Control Report

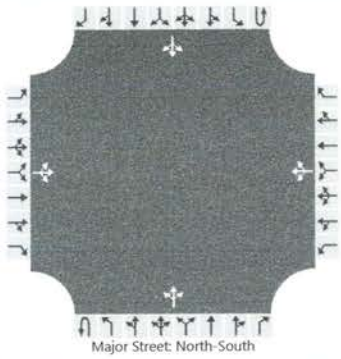
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	50th Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	8		14	2	24		6	102	15		14	75	2
Percent Heavy Vehicles (%)		9	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			15				43			7				15		
Capacity, c (veh/h)			803				815			1526				1471		
v/c Ratio			0.02				0.05			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5				5.0			0.0				0.0		
Control Delay (s/veh)			9.6				9.7			7.4	0.0	0.0		7.5	0.1	0.1
Level of Service (LOS)			A				A			A	A	A		A	A	A
Approach Delay (s/veh)		9.6				9.7				0.4				1.2		
Approach LOS		A				A				A				A		

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HCS Two-Way Stop-Control Report

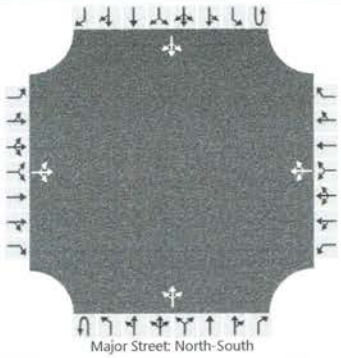
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 w/o Project

Site Information

Intersection	50th Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	8		15	2	25		6	113	16		15	79	2
Percent Heavy Vehicles (%)		9	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			15				46			7				16		
Capacity, c (veh/h)			789				796			1520				1455		
v/c Ratio			0.02				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5				5.0			0.0				0.0		
Control Delay (s/veh)			9.7				9.8			7.4	0.0	0.0		7.5	0.1	0.1
Level of Service (LOS)			A				A			A	A	A		A	A	A
Approach Delay (s/veh)		9.7				9.8				0.4				1.2		
Approach LOS		A				A				A				A		

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HCS Two-Way Stop-Control Report

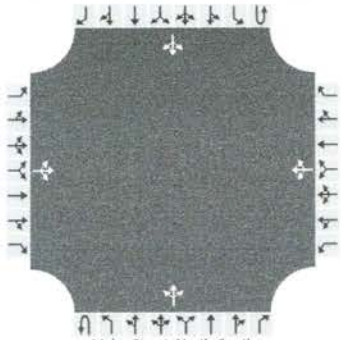
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 with Project

Site Information

Intersection	50th Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	8		15	2	25		6	117	17		15	81	2
Percent Heavy Vehicles (%)		9	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.19	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			15				46			7				16		
Capacity, c (veh/h)			783				789			1518				1449		
v/c Ratio			0.02				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5				5.0			0.0				0.0		
Control Delay (s/veh)			9.7				9.8			7.4	0.0	0.0		7.5	0.1	0.1
Level of Service (LOS)			A				A			A	A	A		A	A	A
Approach Delay (s/veh)		9.7				9.8				0.3				1.2		
Approach LOS		A				A				A				A		

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HCS Two-Way Stop-Control Report

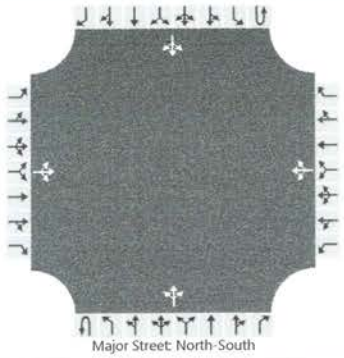
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	50th Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	3	2		20	4	20		4	86	21		27	129	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			7				58			5				36		
Capacity, c (veh/h)			629				677			1417				1455		
v/c Ratio			0.01				0.09			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.1		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				2.5		
Control Delay (s/veh)			10.8				10.8			7.6	0.0	0.0		7.5	0.2	0.2
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		10.8				10.8				0.3				1.5		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

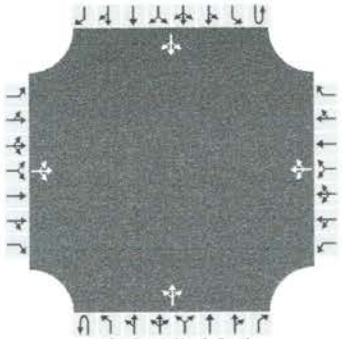
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 w/o Project

Site Information

Intersection	50th Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	3	2		21	4	21		4	93	22		29	140	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			7				61			5				38		
Capacity, c (veh/h)			607				654			1400				1442		
v/c Ratio			0.01				0.09			0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.1		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				2.5		
Control Delay (s/veh)			11.0				11.1			7.6	0.0	0.0		7.6	0.2	0.2
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		11.0				11.1				0.3				1.5		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

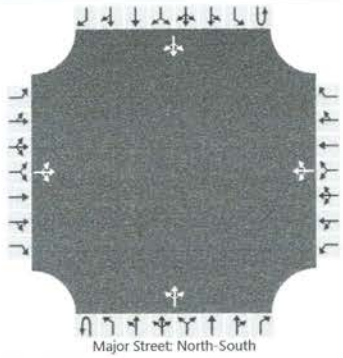
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 with Project

Site Information

Intersection	50th Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	3	2		22	4	21		4	96	22		29	145	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			7				62			5				38		
Capacity, c (veh/h)			600				643			1392				1437		
v/c Ratio			0.01				0.10			0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.1		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				2.5		
Control Delay (s/veh)			11.1				11.2			7.6	0.0	0.0		7.6	0.2	0.2
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		11.1				11.2				0.3				1.4		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

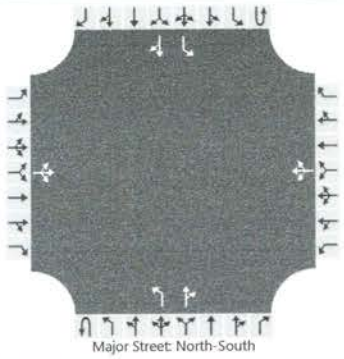
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	72nd Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		16	10	14		10	6	40		25	337	9		50	587	10
Percent Heavy Vehicles (%)		0	0	0		10	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.20	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.59	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			45				64			28				57		
Capacity, c (veh/h)			181				312			923				1176		
v/c Ratio			0.25				0.20			0.03				0.05		
95% Queue Length, Q_{95} (veh)			1.0				0.8			0.1				0.2		
95% Queue Length, Q_{95} (ft)			25.0				20.3			2.5				5.0		
Control Delay (s/veh)			31.5				19.5			9.0				8.2		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)	31.5				19.5				0.6				0.6			
Approach LOS	D				C				A				A			

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HCS Two-Way Stop-Control Report

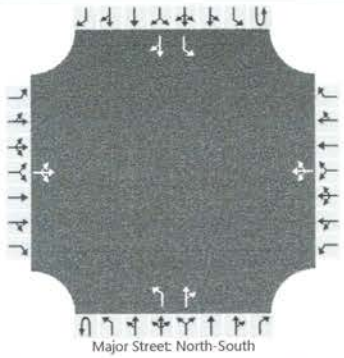
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 w/o Project

Site Information

Intersection	72nd Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		17	10	15		11	6	42		26	370	10		53	626	11
Percent Heavy Vehicles (%)		0	0	0		10	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.20	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.59	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			46				64			28				58		
Capacity, c (veh/h)			172				295			912				1157		
v/c Ratio			0.26				0.22			0.03				0.05		
95% Queue Length, Q_{95} (veh)			1.0				0.8			0.1				0.2		
95% Queue Length, Q_{95} (ft)			25.0				20.3			2.5				5.0		
Control Delay (s/veh)			33.2				20.5			9.1				8.3		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)		33.2				20.5				0.6				0.6		
Approach LOS		D				C				A				A		

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HCS Two-Way Stop-Control Report

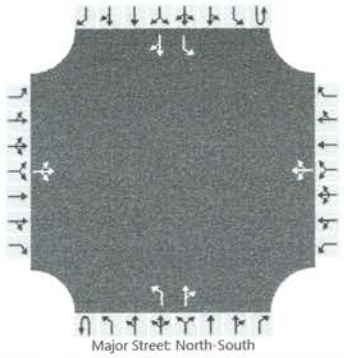
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 with Project

Site Information

Intersection	72nd Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		18	10	15		11	6	42		26	370	10		53	626	11
Percent Heavy Vehicles (%)		0	0	0		10	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.20	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.59	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			47				64			28				58		
Capacity, c (veh/h)			170				295			912				1157		
v/c Ratio			0.27				0.22			0.03				0.05		
95% Queue Length, Q_{95} (veh)			1.1				0.8			0.1				0.2		
95% Queue Length, Q_{95} (ft)			27.5				20.3			2.5				5.0		
Control Delay (s/veh)			33.9				20.5			9.1				8.3		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)		33.9				20.5				0.6				0.6		
Approach LOS		D				C				A				A		

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HCS Two-Way Stop-Control Report

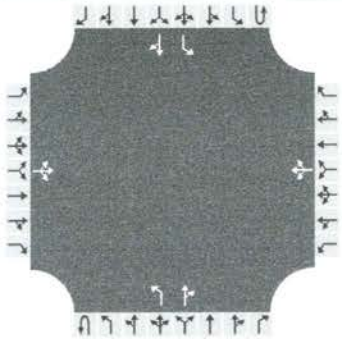
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	72nd Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	19	19		8	21	46		23	585	7		24	490	12
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage							Undivided									

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			55				85			26				27		
Capacity, c (veh/h)			170				230			1012				928		
v/c Ratio			0.32				0.37			0.03				0.03		
95% Queue Length, Q_{95} (veh)			1.3				1.6			0.1				0.1		
95% Queue Length, Q_{95} (ft)			32.5				40.0			2.5				2.5		
Control Delay (s/veh)			35.8				29.6			8.7				9.0		
Level of Service (LOS)			E				D			A				A		
Approach Delay (s/veh)		35.8				29.6				0.3				0.4		
Approach LOS		E				D				A				A		

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HCS Two-Way Stop-Control Report

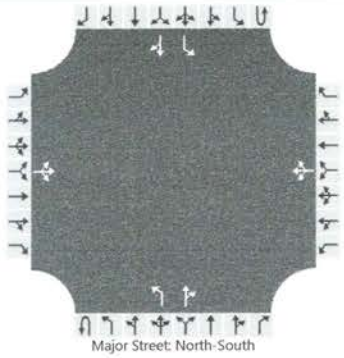
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 w/o Project

Site Information

Intersection	72nd Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		11	20	20		8	22	49		24	628	7		25	532	13
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			58				90			27				28		
Capacity, c (veh/h)			142				203			971				890		
v/c Ratio			0.41				0.44			0.03				0.03		
95% Queue Length, Q_{95} (veh)			1.8				2.1			0.1				0.1		
95% Queue Length, Q_{95} (ft)			45.0				52.5			2.5				2.5		
Control Delay (s/veh)			46.7				36.2			8.8				9.2		
Level of Service (LOS)			E				E			A				A		
Approach Delay (s/veh)		46.7				36.2				0.3				0.4		
Approach LOS		E				E				A				A		

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HCS Two-Way Stop-Control Report

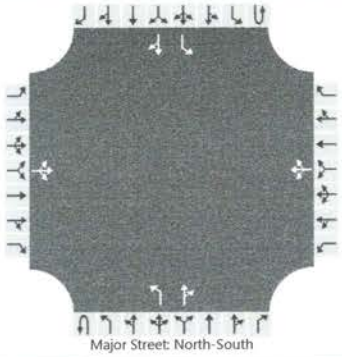
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 with Project

Site Information

Intersection	72nd Ave. & 139th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		11	20	20		8	22	49		24	628	7		25	532	14
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			58				90			27				28		
Capacity, c (veh/h)			142				202			970				890		
v/c Ratio			0.41				0.44			0.03				0.03		
95% Queue Length, Q_{95} (veh)			1.8				2.1			0.1				0.1		
95% Queue Length, Q_{95} (ft)			45.0				52.5			2.5				2.5		
Control Delay (s/veh)			46.8				36.2			8.8				9.2		
Level of Service (LOS)			E				E			A				A		
Approach Delay (s/veh)		46.8				36.2				0.3				0.4		
Approach LOS		E				E				A				A		

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HCS Two-Way Stop-Control Report

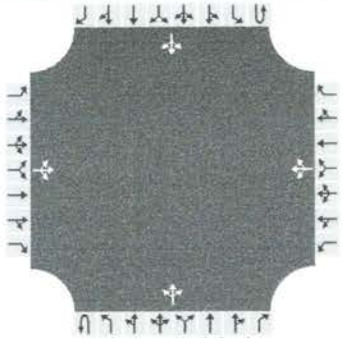
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2025
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	50th Ave. & 130th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	0	1		23	0	12		0	191	4		6	194	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				47			0				8		
Capacity, c (veh/h)			519				533			1318				1316		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				0.0		
Control Delay (s/veh)			12.0				12.4			7.7	0.0	0.0		7.8	0.1	0.1
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.0				12.4				0.0				0.3		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

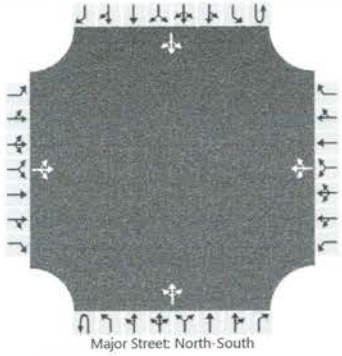
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 w/o Project

Site Information

Intersection	50th Ave. & 130th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	0	1		24	0	13		0	207	4		6	206	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				49			0				8		
Capacity, c (veh/h)			492				509			1300				1293		
v/c Ratio			0.01				0.10			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				0.0		
Control Delay (s/veh)			12.4				12.8			7.8	0.0	0.0		7.8	0.1	0.1
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.4				12.8				0.0				0.3		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

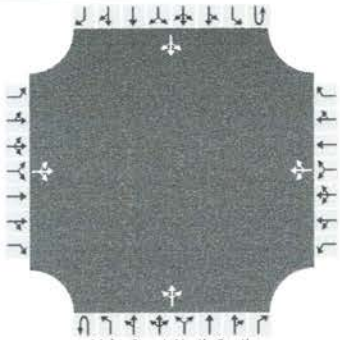
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 with Project

Site Information

Intersection	50th Ave. & 130th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	0	1		34	0	18		0	207	7		8	206	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				69			0				11		
Capacity, c (veh/h)			482				502			1300				1288		
v/c Ratio			0.01				0.14			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.5			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				12.5			0.0				0.0		
Control Delay (s/veh)			12.5				13.3			7.8	0.0	0.0		7.8	0.1	0.1
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.5				13.3				0.0				0.4		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

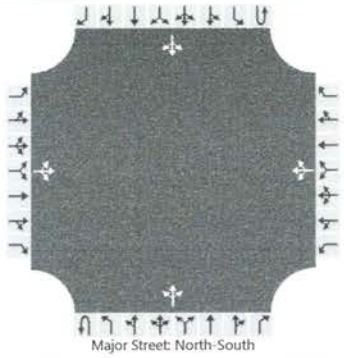
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2025
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	50th Ave. & 130th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		14	0	2		2	160	18		17	155	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				17			2				18		
Capacity, c (veh/h)			881				585			1421				1392		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				2.5			0.0				0.0		
Control Delay (s/veh)			9.1				11.3			7.5	0.0	0.0		7.6	0.1	0.1
Level of Service (LOS)			A				B			A	A	A		A	A	A
Approach Delay (s/veh)		9.1				11.3				0.1				0.9		
Approach LOS		A				B				A				A		

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HCS Two-Way Stop-Control Report

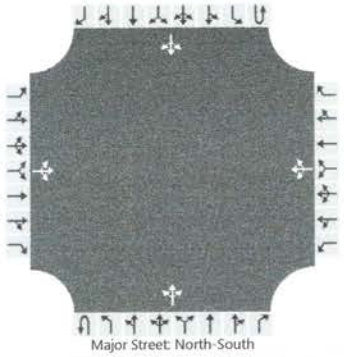
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 w/o Project

Site Information

Intersection	50th Ave. & 130th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		15	0	2		2	172	19		18	167	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				18			2				20		
Capacity, c (veh/h)			866				559			1406				1375		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				2.5			0.0				0.0		
Control Delay (s/veh)			9.2				11.7			7.6	0.0	0.0		7.7	0.1	0.1
Level of Service (LOS)			A				B			A	A	A		A	A	A
Approach Delay (s/veh)		9.2				11.7				0.1				0.9		
Approach LOS		A				B				A				A		

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HCS Two-Way Stop-Control Report

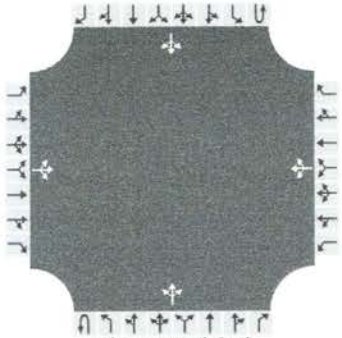
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	11/26/2025
Analysis Year	2028
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2028 with Project

Site Information

Intersection	50th Ave. & 130th St.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		22	0	5		2	172	30		24	167	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				29			2				26		
Capacity, c (veh/h)			866				556			1406				1362		
v/c Ratio			0.00				0.05			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.1		
95% Queue Length, Q_{95} (ft)			0.0				5.0			0.0				2.5		
Control Delay (s/veh)			9.2				11.8			7.6	0.0	0.0		7.7	0.2	0.2
Level of Service (LOS)			A				B			A	A	A		A	A	A
Approach Delay (s/veh)		9.2				11.8				0.1				1.1		
Approach LOS		A				B				A				A		

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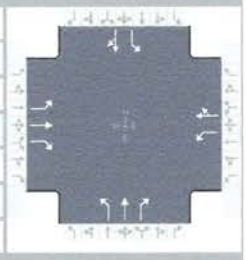
HCS Signalized Intersection Results Summary

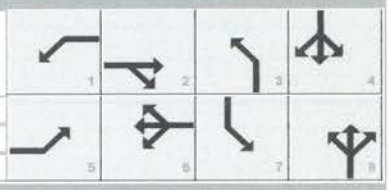
General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Nov 26, 2025	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.85
Urban Street		Analysis Year	2025	Analysis Period	1> 7:00
Intersection	119th St. & 50th Ave.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	32	304	72	30	367	41	67	85	30	67	129	43

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.2	0.1	78.0	6.1	15.7	0.0	
Yellow	4.0	0.0	4.0	4.0	4.0	0.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.3	82.1	8.2	82.0	10.1	19.7	10.1	19.7
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	4.5		2.8		6.5	7.8	6.5	15.1
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.1	0.6	0.1	0.6
Phase Call Probability	0.71		0.69		0.93	1.00	0.93	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	38	358	85	35	480		79	100	35	79	202	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1866		1810	1900	1610	1810	1818	
Queue Service Time (g_s), s	2.5	9.7	2.3	0.8	14.5		4.5	5.8	2.3	4.5	13.1	
Cycle Queue Clearance Time (g_c), s	2.5	9.7	2.3	0.8	14.5		4.5	5.8	2.3	4.5	13.1	
Green Ratio (*g/C*)	0.04	0.65	0.65	0.68	0.65		0.18	0.13	0.13	0.18	0.13	
Capacity (*c*), veh/h	65	1237	1048	698	1213		157	248	210	238	237	
Volume-to-Capacity Ratio (*X*)	0.582	0.289	0.081	0.051	0.396		0.501	0.403	0.168	0.332	0.853	
Back of Queue (*Q*), ft/ln (95 th percentile)	53	178	36	12	246		91	124	42	90	254	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	7.1	1.4	0.5	9.8		3.7	5.0	1.7	3.6	10.2	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	57.0	9.0	7.7	6.7	9.9		43.1	47.9	46.4	42.3	51.0	
Incremental Delay (d_2), s/veh	3.1	0.6	0.2	0.0	1.0		0.9	0.4	0.1	0.3	3.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	60.0	9.6	7.9	6.7	10.9		44.0	48.3	46.5	42.6	54.4	
Level of Service (LOS)	E	A	A	A	B		D	D	D	D	D	
Approach Delay, s/veh / LOS	13.2	B		10.6	B		46.4	D		51.1	D	
Intersection Delay, s/veh / LOS	24.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.07	B	1.88	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.28	A	1.34	A	0.84	A	0.95	A

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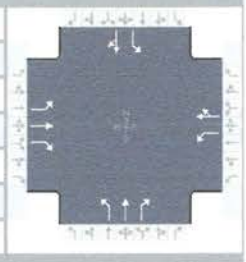
HCS Signalized Intersection Results Summary

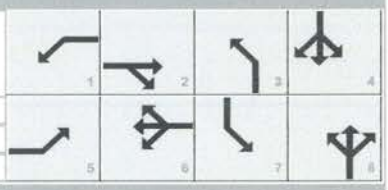
General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Nov 26, 2025	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.85
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	119th St. & 50th Ave.	File Name	Streets1.xus		
Project Description	Year 2028 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	34	328	76	32	404	48	71	90	32	71	137	46

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.3	0.1	76.7	6.4	16.5	0.0	
Yellow	4.0	0.0	4.0	4.0	4.0	0.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.4	80.8	8.3	80.7	10.4	20.5	10.4	20.5
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	4.6		2.8		6.7	8.1	6.7	15.9
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.1	0.6	0.1	0.6
Phase Call Probability	0.74		0.71		0.94	1.00	0.94	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	40	386	89	38	532		84	106	38	84	215	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1864		1810	1900	1610	1810	1818	
Queue Service Time (g_s), s	2.6	11.0	2.5	0.8	17.3		4.7	6.1	2.5	4.7	13.9	
Cycle Queue Clearance Time (g_c), s	2.6	11.0	2.5	0.8	17.3		4.7	6.1	2.5	4.7	13.9	
Green Ratio (*g/C*)	0.04	0.64	0.64	0.67	0.64		0.19	0.14	0.14	0.19	0.14	
Capacity (*c*), veh/h	67	1217	1031	664	1192		162	262	222	248	250	
Volume-to-Capacity Ratio (*X*)	0.600	0.317	0.087	0.057	0.446		0.516	0.405	0.170	0.337	0.860	
Back of Queue (*Q*), ft/ln (95 th percentile)	56	200	40	13	285		96	130	45	95	267	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	8.0	1.6	0.5	11.4		3.8	5.2	1.8	3.8	10.7	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	56.9	9.7	8.2	7.2	10.9		42.3	47.2	45.7	41.5	50.6	
Incremental Delay (d_2), s/veh	3.2	0.7	0.2	0.0	1.2		0.9	0.4	0.1	0.3	3.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	60.1	10.4	8.4	7.2	12.1		43.3	47.6	45.8	41.8	54.0	
Level of Service (LOS)	E	B	A	A	B		D	D	D	D	D	
Approach Delay, s/veh / LOS	13.9	B		11.8	B		45.7	D		50.6	D	
Intersection Delay, s/veh / LOS	24.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.07	B	1.88	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.34	A	1.43	A	0.86	A	0.98	A

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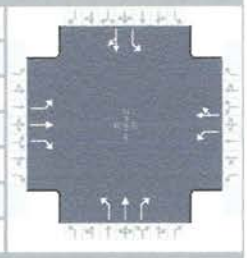
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Nov 26, 2025	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.85
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	119th St. & 50th Ave.	File Name	Streets1.xus		
Project Description	Year 2028 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	34	328	76	32	404	49	71	92	32	74	142	48

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.3	0.1		76.2	6.3	0.2		16.8			
Yellow	4.0	0.0		4.0	4.0	0.0		4.0			
Red	0.0	0.0		0.0	0.0	0.0		0.0			



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.4	80.3	8.3	80.2	10.3	20.8	10.6	21.1
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	4.6		2.8		6.7	8.2	6.9	16.4
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.1	0.7	0.1	0.6
Phase Call Probability	0.74		0.71		0.94	1.00	0.95	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	40	386	89	38	533		84	108	38	87	224	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1864		1810	1900	1610	1810	1817	
Queue Service Time (g_s), s	2.6	11.1	2.6	0.8	17.6		4.7	6.2	2.5	4.9	14.4	
Cycle Queue Clearance Time (g_c), s	2.6	11.1	2.6	0.8	17.6		4.7	6.2	2.5	4.9	14.4	
Green Ratio (*g/C*)	0.04	0.64	0.64	0.67	0.63		0.19	0.14	0.14	0.20	0.14	
Capacity (*c*), veh/h	67	1208	1024	658	1183		162	267	226	275	259	
Volume-to-Capacity Ratio (*X*)	0.600	0.319	0.087	0.057	0.451		0.516	0.406	0.167	0.317	0.864	
Back of Queue (*Q*), ft/ln (95 th percentile)	56	204	41	14	289		96	133	45	98	275	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.2	8.1	1.6	0.5	11.6		3.8	5.3	1.8	3.9	11.0	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	56.9	10.0	8.4	7.4	11.2		42.1	47.0	45.4	41.0	50.3	
Incremental Delay (d_2), s/veh	3.2	0.7	0.2	0.0	1.2		0.9	0.4	0.1	0.2	3.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	60.1	10.7	8.6	7.4	12.5		43.1	47.4	45.5	41.3	53.7	
Level of Service (LOS)	E	B	A	A	B		D	D	D	D	D	
Approach Delay, s/veh / LOS	14.2	B		12.1	B		45.5	D		50.2	D	
Intersection Delay, s/veh / LOS	24.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.07	B	1.88	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.34	A	1.43	A	0.87	A	1.00	A

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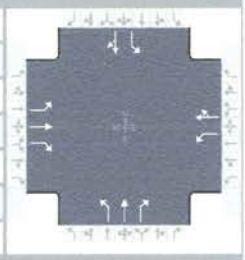
HCS Signalized Intersection Results Summary

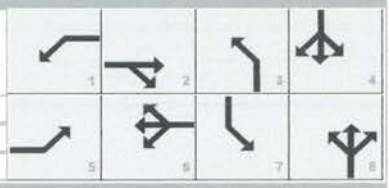
General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Nov 26, 2025	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2025	Analysis Period	1> 7:00
Intersection	119th St. & 50th Ave.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	411	82	26	361	36	85	106	37	57	95	36

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.6	1.2	80.6	5.2	1.8	11.6	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.8	85.8	7.6	84.6	11.0	17.4	9.2	15.6
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	5.2		2.6		7.3	8.7	5.6	11.0
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.1	0.5	0.0	0.5
Phase Call Probability	0.80		0.60		0.95	1.00	0.87	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	49	437	87	28	422		90	113	39	61	139	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1869		1810	1900	1610	1810	1810	
Queue Service Time (g_s), s	3.2	11.4	2.2	0.6	11.5		5.3	6.7	2.7	3.6	9.0	
Cycle Queue Clearance Time (g_c), s	3.2	11.4	2.2	0.6	11.5		5.3	6.7	2.7	3.6	9.0	
Green Ratio (*g/C*)	0.04	0.68	0.68	0.70	0.67		0.15	0.11	0.11	0.14	0.10	
Capacity (*c*), veh/h	73	1295	1097	665	1255		193	212	180	189	174	
Volume-to-Capacity Ratio (*X*)	0.672	0.338	0.079	0.042	0.336		0.469	0.532	0.219	0.321	0.800	
Back of Queue (*Q*), ft/ln (95 th percentile)	69	200	33	9	201		109	145	49	73	190	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.8	8.0	1.3	0.3	8.0		4.3	5.8	1.9	2.9	7.6	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	56.8	7.9	6.4	6.1	8.4		45.5	50.3	48.5	46.2	53.1	
Incremental Delay (d_2), s/veh	4.0	0.7	0.1	0.0	0.7		0.7	0.8	0.2	0.4	3.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	60.8	8.6	6.6	6.1	9.1		46.1	51.1	48.8	46.5	56.3	
Level of Service (LOS)	E	A	A	A	A		D	D	D	D	E	
Approach Delay, s/veh / LOS	12.8	B		8.9	A		48.9	D		53.3	D	
Intersection Delay, s/veh / LOS	23.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	1.87	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.43	A	1.23	A	0.89	A	0.82	A

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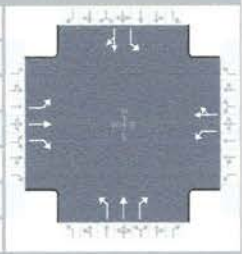
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Nov 26, 2025	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	119th St. & 50th Ave.	File Name	Streets1.xus		
Project Description	Year 2028 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	49	454	87	28	303	40	90	112	39	63	101	38

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	1.2		79.5	5.4	2.0		12.1				
Yellow	4.0	0.0		4.0	4.0	0.0		4.0				
Red	0.0	0.0		0.0	0.0	0.0		0.0				



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.9	84.7	7.8	83.5	11.4	18.1	9.4	16.1
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	5.4		2.6		7.6	9.1	5.9	11.6
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.1	0.5	0.1	0.5
Phase Call Probability	0.82		0.63		0.96	1.00	0.89	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	52	483	93	30	365		96	119	41	67	148	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1861		1810	1900	1610	1810	1811	
Queue Service Time (g_s), s	3.4	13.4	2.4	0.6	9.9		5.6	7.1	2.8	3.9	9.6	
Cycle Queue Clearance Time (g_c), s	3.4	13.4	2.4	0.6	9.9		5.6	7.1	2.8	3.9	9.6	
Green Ratio (*g/C*)	0.04	0.67	0.67	0.69	0.66		0.16	0.12	0.12	0.15	0.10	
Capacity (*c*), veh/h	75	1278	1083	621	1234		198	224	190	195	183	
Volume-to-Capacity Ratio (*X*)	0.699	0.378	0.085	0.048	0.296		0.484	0.532	0.219	0.343	0.808	
Back of Queue (*Q*), ft/ln (95 th percentile)	74	228	36	10	176		114	152	51	80	199	
Back of Queue (*Q*), veh/ln (95 th percentile)	2.9	9.1	1.5	0.4	7.0		4.6	6.1	2.0	3.2	8.0	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	56.8	8.6	6.8	6.6	8.5		44.8	49.8	47.9	45.7	52.8	
Incremental Delay (d_2), s/veh	4.4	0.9	0.2	0.0	0.6		0.7	0.7	0.2	0.4	3.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	61.2	9.5	7.0	6.6	9.1		45.5	50.5	48.1	46.1	56.0	
Level of Service (LOS)	E	A	A	A	A		D	D	D	D	E	
Approach Delay, s/veh / LOS	13.4	B		8.9	A		48.3	D		52.9	D	
Intersection Delay, s/veh / LOS	23.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	1.87	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.52	B	1.14	A	0.91	A	0.84	A

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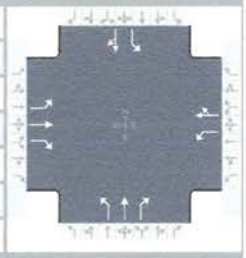
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Nov 26, 2025	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2028	Analysis Period	1> 7:00
Intersection	119th St. & 50th Ave.	File Name	Streets1.xus		
Project Description	Year 2028 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	454	87	28	303	43	90	118	39	65	104	40

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	1.2	79.1	5.5	1.9	12.5	1	2	3	4		
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	5	6	7	8		
Red	0.0	0.0	0.0	0.0	0.0	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.0	84.4	7.8	83.1	11.4	18.4	9.5	16.5
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	5.6		2.6		7.6	9.5	6.1	11.9
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.1	0.6	0.1	0.6
Phase Call Probability	0.84		0.63		0.96	1.00	0.90	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	54	483	93	30	368		96	126	41	69	153	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1858		1810	1900	1610	1810	1810	
Queue Service Time (g_s), s	3.6	13.5	2.4	0.6	10.1		5.6	7.5	2.8	4.1	9.9	
Cycle Queue Clearance Time (g_c), s	3.6	13.5	2.4	0.6	10.1		5.6	7.5	2.8	4.1	9.9	
Green Ratio (*g/C*)	0.04	0.67	0.67	0.69	0.66		0.17	0.12	0.12	0.15	0.10	
Capacity (*c*), veh/h	76	1272	1078	618	1225		198	227	193	195	189	
Volume-to-Capacity Ratio (*X*)	0.717	0.380	0.086	0.048	0.300		0.484	0.552	0.215	0.354	0.813	
Back of Queue (*Q*), ft/ln (95 th percentile)	77	231	37	10	180		114	161	51	82	204	
Back of Queue (*Q*), veh/ln (95 th percentile)	3.1	9.3	1.5	0.4	7.2		4.6	6.4	2.0	3.3	8.2	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	56.8	8.8	6.9	6.7	8.7		44.6	49.8	47.7	45.3	52.6	
Incremental Delay (d_2), s/veh	4.7	0.9	0.2	0.0	0.6		0.7	0.8	0.2	0.4	3.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	61.5	9.6	7.1	6.7	9.3		45.2	50.6	47.9	45.7	55.8	
Level of Service (LOS)	E	A	A	A	A		D	D	D	D	E	
Approach Delay, s/veh / LOS	13.7	B		9.1	A		48.2	D		52.7	D	
Intersection Delay, s/veh / LOS	24.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	1.88	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.53	B	1.14	A	0.92	A	0.85	A

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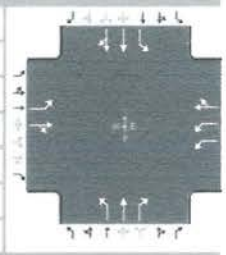
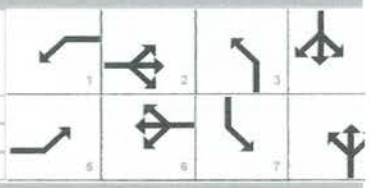
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.25
Analyst		Analysis Date	7/21/2019	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.89
Intersection	119th St. & 72nd Ave.	Analysis Year	2025	Analysis Period	1> 7:00
File Name	Streets1.xus				
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	31	257	101	356	276	78	64	310	296	80	585	29

Signal Information					EB		WB			NB			SB		
Cycle, s	68.7	Reference Phase	2												
Offset, s	0	Reference Point	End	Green	2.5	0.7	18.2	3.8	0.4	18.1					
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	4.0	4.0	4.0	0.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	1.0	0.0	1.0					



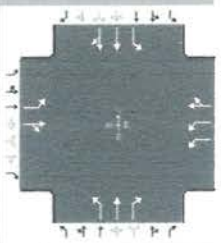
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	7.5	23.2	13.2	28.9	8.8	23.1	9.1	23.5
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	2.9	16.5	7.2	14.5	3.9	15.2	4.4	13.3
Green Extension Time (g_e), s	0.0	1.6	1.0	1.6	0.1	2.8	0.1	2.8
Phase Call Probability	0.49	1.00	1.00	1.00	0.75	1.00	0.82	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	35	402		400	398		72	348	333	90	348	342
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1808		1757	1828		1810	1900	1610	1810	1900	1868
Queue Service Time (g_s), s	0.9	14.5		5.2	12.5		1.9	11.4	13.2	2.4	11.3	11.3
Cycle Queue Clearance Time (g_c), s	0.9	14.5		5.2	12.5		1.9	11.4	13.2	2.4	11.3	11.3
Green Ratio (*g/C*)	0.30	0.27		0.42	0.35		0.32	0.26	0.26	0.33	0.27	0.27
Capacity (*c*), veh/h	311	480		741	638		263	503	426	319	513	505
Volume-to-Capacity Ratio (*X*)	0.112	0.837		0.540	0.623		0.273	0.692	0.780	0.282	0.677	0.678
Available Capacity (c_a), veh/h	1296	1049		2360	1060		1214	1102	934	1260	1102	1084
Back of Queue (*Q*), veh/ln (50th percentile)	0.4	5.9		1.8	4.8		0.8	4.8	4.7	0.9	4.7	4.6
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	17.7	23.9		15.8	18.7		17.9	22.8	23.5	17.6	22.5	22.5
Incremental Delay (d_2), s/veh	0.1	1.5		0.2	0.4		0.2	0.6	1.2	0.2	0.6	0.6
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	17.8	25.4		16.0	19.0		18.2	23.5	24.7	17.7	23.1	23.1
Level of Service (LOS)	B	C		B	B		B	C	C	B	C	C
Approach Delay, s/veh / LOS	24.8	C		17.5	B		23.5	C		22.5	C	
Intersection Delay, s/veh / LOS	21.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.4	B	2.4	B	2.3	B
Bicycle LOS Score / LOS	1.2	A	1.8	A	1.7	A	1.1	A

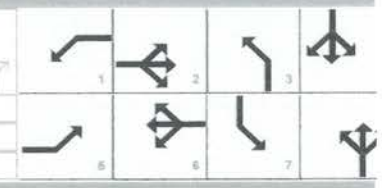
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.25
Analyst		Analysis Date	7/21/2019	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.89
Intersection	119th St. & 72nd Ave.	Analysis Year	2028	Analysis Period	1> 7:00
File Name	Streets1.xus				
Project Description	Year 2028 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	272	107	377	293	87	68	340	314	97	648	51

Signal Information			
Cycle, s	75.6	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



	EB			WB			NB			SB		
Green	3.0	1.1		20.8	4.0	0.9	20.8					
Yellow	4.0	4.0		4.0	4.0	0.0	4.0					
Red	1.0	1.0		1.0	1.0	0.0	1.0					

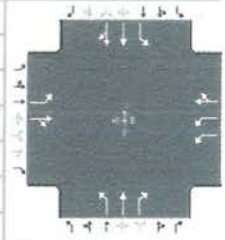
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.0	25.8	14.1	31.9	9.0	25.8	9.9	26.7
Change Period, (Y+R_c), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.3	19.0	8.0	17.0	4.3	17.5	5.2	16.4
Green Extension Time (g_e), s	0.1	1.7	1.0	1.7	0.1	3.2	0.2	3.2
Phase Call Probability	0.60	1.00	1.00	1.00	0.80	1.00	0.90	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	44	426		424	427		76	382	353	109	398	388
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1808		1757	1825		1810	1900	1610	1810	1900	1851
Queue Service Time (g_s), s	1.3	17.0		6.0	15.0		2.3	13.9	15.5	3.2	14.3	14.4
Cycle Queue Clearance Time (g_c), s	1.3	17.0		6.0	15.0		2.3	13.9	15.5	3.2	14.3	14.4
Green Ratio (*g*/*C*)	0.32	0.28		0.42	0.36		0.33	0.28	0.28	0.34	0.29	0.29
Capacity (*c*), veh/h	299	499		716	650		242	524	444	308	546	532
Volume-to-Capacity Ratio (*X*)	0.147	0.853		0.592	0.657		0.315	0.729	0.795	0.354	0.728	0.729
Available Capacity (c_a), veh/h	1178	951		2141	960		1098	999	847	1142	999	973
Back of Queue (*Q*), veh/ln (50th percentile)	0.5	7.0		2.2	5.9		0.9	5.9	5.7	1.3	6.1	6.0
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	19.0	26.1		17.4	20.6		19.6	25.0	25.5	19.0	24.4	24.4
Incremental Delay (d_2), s/veh	0.1	1.6		0.3	0.4		0.3	0.7	1.2	0.3	0.7	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.1	27.7		17.7	21.0		19.9	25.7	26.8	19.3	25.1	25.1
Level of Service (LOS)	B	C		B	C		B	C	C	B	C	C
Approach Delay, s/veh / LOS	26.9	C		19.4	B		25.6	C		24.4	C	
Intersection Delay, s/veh / LOS	23.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.4	B	2.4	B	2.3	B
Bicycle LOS Score / LOS	1.3	A	1.9	A	1.8	A	1.2	A

HCS Signalized Intersection Results Summary

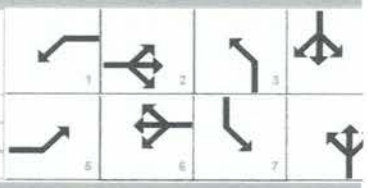
General Information				Intersection Information	
Agency				Duration, h	0.25
Analyst		Analysis Date	7/21/2019	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.89
Intersection	119th St. & 72nd Ave.	Analysis Year	2028	Analysis Period	1> 7:00
File Name	Streets1.xus				
Project Description	Year 2028 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	274	108	377	294	87	68	340	314	97	648	51

Signal Information			
Cycle, s	76.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.0	1.1	21.0	4.0	0.9	20.9	
Yellow	4.0	4.0	4.0	4.0	0.0	4.0	
Red	1.0	1.0	1.0	1.0	0.0	1.0	



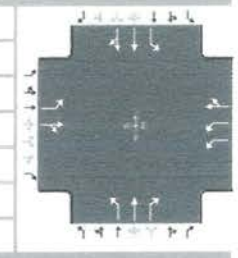
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.0	26.0	14.1	32.1	9.0	25.9	9.9	26.8
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.3	19.2	8.0	17.0	4.3	17.5	5.2	16.4
Green Extension Time (g_e), s	0.1	1.7	1.0	1.7	0.1	3.2	0.2	3.2
Phase Call Probability	0.61	1.00	1.00	1.00	0.80	1.00	0.90	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	44	429		424	428		76	382	353	109	398	388
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1808		1757	1825		1810	1900	1610	1810	1900	1851
Queue Service Time (g_s), s	1.3	17.2		6.0	15.0		2.3	13.9	15.5	3.2	14.4	14.4
Cycle Queue Clearance Time (g_c), s	1.3	17.2		6.0	15.0		2.3	13.9	15.5	3.2	14.4	14.4
Green Ratio (*g/C*)	0.32	0.28		0.43	0.36		0.33	0.27	0.27	0.34	0.29	0.29
Capacity (*c*), veh/h	300	502		714	653		242	523	444	307	546	532
Volume-to-Capacity Ratio (*X*)	0.146	0.855		0.594	0.656		0.316	0.730	0.795	0.355	0.728	0.729
Available Capacity (c_a), veh/h	1175	947		2132	956		1093	995	843	1137	995	969
Back of Queue (*Q*), veh/ln (50th percentile)	0.5	7.1		2.2	6.0		0.9	6.0	5.7	1.3	6.1	6.0
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	19.0	26.1		17.4	20.6		19.7	25.1	25.7	19.1	24.5	24.5
Incremental Delay (d_2), s/veh	0.1	1.7		0.3	0.4		0.3	0.7	1.2	0.3	0.7	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.1	27.8		17.7	21.0		20.0	25.8	26.9	19.4	25.2	25.3
Level of Service (LOS)	B	C		B	C		C	C	C	B	C	C
Approach Delay, s/veh / LOS	27.0	C		19.4	B		25.8	C		24.5	C	
Intersection Delay, s/veh / LOS	23.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.4	B	2.4	B	2.3	B
Bicycle LOS Score / LOS	1.3	A	1.9	A	1.8	A	1.2	A

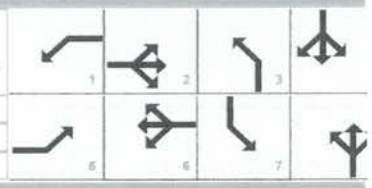
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.25
Analyst		Analysis Date	7/21/2019	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.97
Intersection	119th St. & 72nd Ave.	Analysis Year	2025	Analysis Period	1> 7:00
File Name	Streets1.xus				
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	294	94	222	257	105	91	577	502	121	370	39

Signal Information					EB			WB			NB			SB		
Cycle, s	83.8	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	3.6	2.9		21.3	4.5	1.0	30.6					
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	0.0		4.0	4.0	0.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0		1.0	1.0	0.0	1.0					



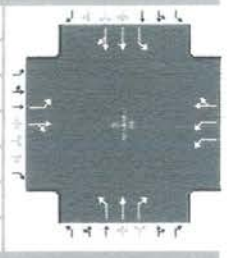
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.6	26.3	11.5	29.2	9.5	35.6	10.5	36.6
Change Period, (*Y*+*Rc*), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.2	3.1	3.2
Queue Clearance Time (g_s), s	3.8	19.7	5.9	17.6	4.7	27.3	5.5	8.7
Green Extension Time (g_e), s	0.1	1.5	0.5	1.5	0.2	3.1	0.2	3.5
Phase Call Probability	0.71	1.00	1.00	1.00	0.89	1.00	0.95	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	53	400		229	373		94	595	518	125	213	208
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1821		1757	1806		1810	1900	1610	1810	1900	1836
Queue Service Time (g_s), s	1.8	17.7		3.9	15.6		2.7	24.4	25.3	3.5	6.6	6.7
Cycle Queue Clearance Time (g_c), s	1.8	17.7		3.9	15.6		2.7	24.4	25.3	3.5	6.6	6.7
Green Ratio (*g*/*C*)	0.30	0.25		0.33	0.29		0.42	0.36	0.36	0.43	0.38	0.38
Capacity (*c*), veh/h	245	464		531	522		454	694	588	267	718	693
Volume-to-Capacity Ratio (*X*)	0.214	0.862		0.431	0.714		0.207	0.857	0.880	0.467	0.297	0.300
Available Capacity (c_a), veh/h	1028	865		1930	858		1217	903	765	1008	903	872
Back of Queue (*Q*), veh/ln (50th percentile)	0.7	7.6		1.5	6.5		1.0	11.2	10.2	1.4	2.8	2.7
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	22.8	30.0		22.2	26.8		15.4	24.7	25.0	18.8	18.4	18.4
Incremental Delay (d_2), s/veh	0.2	1.9		0.2	0.7		0.1	5.4	7.9	0.5	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	22.9	31.9		22.4	27.5		15.5	30.1	32.9	19.3	18.5	18.5
Level of Service (LOS)	C	C		C	C		B	C	C	B	B	B
Approach Delay, s/veh / LOS	30.8	C		25.6	C		30.2	C		18.7	B	
Intersection Delay, s/veh / LOS	27.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.4	B	2.4	B	2.3	B
Bicycle LOS Score / LOS	1.2	A	1.5	A	2.5	B	0.9	A

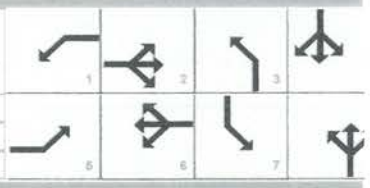
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency				Duration, h	0.25
Analyst		Analysis Date	7/21/2019	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.97
Intersection	119th St. & 72nd Ave.	Analysis Year	2028	Analysis Period	1> 7:00
File Name	Streets1.xus				
Project Description	Year 2028 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	312	100	235	272	124	96	644	532	138	409	53

Signal Information					EB			WB			NB			SB		
Cycle, s	95.3	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	4.4	2.8		25.1	4.9	1.7	36.4					
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	0.0		4.0	4.0	0.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0		1.0	1.0	0.0	1.0					



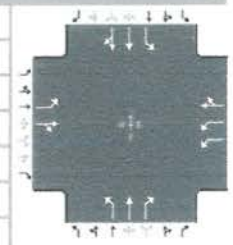
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.4	30.1	12.2	32.9	9.9	41.4	11.6	43.0
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	4.9	23.4	6.7	21.8	5.1	33.7	6.5	10.5
Green Extension Time (g_e), s	0.1	1.6	0.6	1.6	0.2	2.5	0.2	4.0
Phase Call Probability	0.87	1.00	1.00	1.00	0.93	1.00	0.98	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	77	425		242	408		99	664	548	142	242	235
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1820		1757	1799		1810	1900	1610	1810	1900	1824
Queue Service Time (g_s), s	2.9	21.4		4.7	19.8		3.1	31.7	30.5	4.5	8.4	8.5
Cycle Queue Clearance Time (g_c), s	2.9	21.4		4.7	19.8		3.1	31.7	30.5	4.5	8.4	8.5
Green Ratio (*g/C*)	0.31	0.26		0.34	0.29		0.43	0.38	0.38	0.45	0.40	0.40
Capacity (*c*), veh/h	224	480		496	528		440	725	614	239	758	728
Volume-to-Capacity Ratio (*X*)	0.345	0.884		0.489	0.774		0.225	0.916	0.893	0.596	0.319	0.32
Available Capacity (c_a), veh/h	897	762		1699	753		1104	795	674	870	795	763
Back of Queue (Q), veh/ln (50th percentile)	1.2	9.8		1.9	8.5		1.3	16.4	13.2	1.8	3.6	3.5
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	25.8	33.8		25.1	30.9		16.7	28.1	27.7	22.0	19.8	19.8
Incremental Delay (d_2), s/veh	0.3	4.9		0.3	1.8		0.1	13.8	12.7	0.9	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	26.1	38.6		25.4	32.7		16.8	41.9	40.4	22.9	19.9	19.9
Level of Service (LOS)	C	D		C	C		B	D	D	C	B	B
Approach Delay, s/veh / LOS	36.7	D		30.0	C		39.4	D		20.6	C	
Intersection Delay, s/veh / LOS	33.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.4	B	2.4	B	2.3	B
Bicycle LOS Score / LOS	1.3	A	1.6	A	2.7	B	1.0	A

HCS Signalized Intersection Results Summary

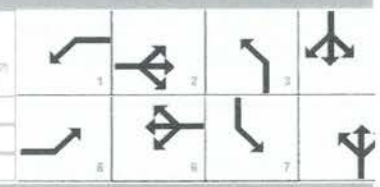
General Information				Intersection Information	
Agency				Duration, h	0.25
Analyst		Analysis Date	7/21/2019	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.97
Intersection	119th St. & 72nd Ave.	Analysis Year	2028	Analysis Period	1> 7:00
File Name	Streets1.xus				
Project Description	Year 2028 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	313	101	235	274	124	97	644	532	138	409	53

Signal Information			
Cycle, s	95.6	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.4	2.8		25.3	5.0	1.6	36.4					
Yellow	4.0	0.0		4.0	4.0	0.0	4.0					
Red	1.0	0.0		1.0	1.0	0.0	1.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.4	30.3	12.3	33.1	10.0	41.4	11.6	43.1
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	4.9	23.6	6.7	22.0	5.2	33.9	6.5	10.5
Green Extension Time (g_e), s	0.1	1.6	0.6	1.6	0.2	2.5	0.2	4.0
Phase Call Probability	0.87	1.00	1.00	1.00	0.93	1.00	0.98	1.00
Max Out Probability	0.00	0.01	0.00	0.00	0.00	0.60	0.00	0.01

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	77	427		242	410		100	664	548	142	242	235
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1820		1757	1799		1810	1900	1610	1810	1900	1824
Queue Service Time (g_s), s	2.9	21.6		4.7	20.0		3.2	31.9	30.6	4.5	8.4	8.5
Cycle Queue Clearance Time (g_c), s	2.9	21.6		4.7	20.0		3.2	31.9	30.6	4.5	8.4	8.5
Green Ratio (*g/C*)	0.31	0.26		0.34	0.29		0.43	0.38	0.38	0.45	0.40	0.40
Capacity (*c*), veh/h	224	482		494	529		440	724	614	238	757	726
Volume-to-Capacity Ratio (*X*)	0.346	0.885		0.490	0.775		0.227	0.916	0.893	0.598	0.320	0.32
Available Capacity (c_a), veh/h	895	759		1694	751		1101	793	672	868	793	761
Back of Queue (*Q*), veh/ln (50th percentile)	1.2	9.9		1.9	8.6		1.3	16.5	13.3	1.8	3.6	3.5
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	25.8	33.8		25.1	30.9		16.7	28.2	27.8	22.1	19.9	19.9
Incremental Delay (d_2), s/veh	0.3	5.1		0.3	1.9		0.1	13.9	12.8	0.9	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	26.2	38.9		25.4	32.8		16.8	42.1	40.7	23.0	20.0	20.0
Level of Service (LOS)	C	D		C	C		B	D	D	C	B	C
Approach Delay, s/veh / LOS	37.0	D		30.1	C		39.6	D		20.7	C	
Intersection Delay, s/veh / LOS	33.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.4	B	2.4	B	2.3	B
Bicycle LOS Score / LOS	1.3	A	1.6	A	2.7	B	1.0	A

APPENDIX G
REFERENCES

References

1. Trip Generation Manual, 11th Edition, 2021, Institute of Transportation Engineers.

2. Highway Capacity Manual, 7th Edition, 2022, Transportation Research Board, National Research Council.

3. Pleasant Woods North Subdivision, Pre-Application Conference Final Report, Clark County Case Number PAC2025-00339.

TRANSPORTATION IMPACT STUDY

FOR

CRESAP MEADOWS SUBDIVISION

6400 NE 129TH STREET

CLARK COUNTY, WASHINGTON



2/17/2026

PREPARED BY

KELLY ENGINEERING

February 2026

TRANSPORTATION IMPACT STUDY

Cresap Meadows Subdivision

Clark County, Washington

February 17, 2026

Prepared for:

Arthur Ryapolov
August Development
1919 E. 5th Street Ste A.
Vancouver, WA 98661

Prepared by:

Kelly Engineering
1805 NE 94th St. No. 19
Vancouver, WA 98665
Phone: 360-433-7530
e-mail: Kellyengineer@comcast.net

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TRANSPORTATION IMPACT STUDY

CRESAP MEADOWS SUBDIVISION

February 17, 2026

INTRODUCTION

A transportation impact study (TIS) for the Cresap Meadows Subdivision was conducted to determine the potential traffic related impacts of the development to the surrounding roadway system. The development will consist of 22 new single family detached homes. One existing home will be demolished. The site is located at 6400 NE 129th Street (parcel 198955000) in Clark County, Washington. The zoning designation for the 1.97 acre site is R1-6 (single family residential).

Access to the site will be onto NE 129th Street and NE 64th Avenue. NE 130th Street to the west will provide a connection to NE 50th Avenue. NE 123rd Street and NE 134th Street will provide a connection to NE 72nd Avenue.

Land uses within the vicinity of the site consist of single family homes. The RVHB Subdivision is under construction adjacent to and east of the Cresap Meadows Subdivision. The RVHB Subdivision will consist of 17 single family homes. A vicinity map, aerial photograph, existing conditions map and preliminary plat are shown in Figures 1, 2, 3 and 4.

Roadway Characteristics

NE 64th Avenue and NE 129th Street are both 28 foot wide paved roadways with curbs and sidewalks. There is no posted speed limit on either roadway. There is a posted speed limit sign of 25 mph on NE 23rd Street to the south and this would be the assumed speed limit in the vicinity of the site. NE 64th Avenue and NE 129th Street are classified as Urban Local Access Roads.

The study area intersections in this report are controlled by stop signs on the minor street approaches and fully actuated traffic signals. The lane configurations at the intersections are shown in Figure 5.

Traffic Volumes

The traffic counts in this report were conducted from 7:00 to 9:00 am and 4:00 to 6:00 pm during November and December 2025 and January and February 2026. The traffic counts were conducted to determine the peak hours. The peak hour at the intersections is the one hour time period when traffic on the adjacent streets are the highest and congestion is most likely to occur. The existing traffic volumes are included in Figures 6a and 6b. The raw traffic count data is included in Appendix A.

Trip Generation/Distribution

The Cresap Meadows Subdivision will generate approximately 191 new trips per day. A trip is a one directional vehicle movement. 14 new trips will occur during the weekday AM peak hour and 19 new trips will occur during the PM peak hour, ITE Trip Generation Manual, 12th edition. Credits were given for the existing home to be demolished. The trip generation rates are shown in Table 1.

Table 1
Site Traffic Generation

Land Use	ITE code	Dwelling Units	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
Proposed Single-Family Detached Housing	210	22	200	15 (in-4, out-11)	20 (in-13, out-7)
Existing Single-Family Detached Housing	210	1	9	1 (in-0, out-1)	1 (in-1, out-0)
Net New Trips			**191**	**14 (in-4, out-10)**	**19 (in-12, out-7)**

The directional distribution of traffic generated by the development was assigned to the study area intersections. The distribution was based on the existing traffic volumes. The site traffic distribution and assignment diagrams are shown in Figures 9a and 9b.

Year 2029 Traffic Volumes

The year 2029 traffic volumes included a two percent per year compounded growth factor over the existing traffic volumes and in-process traffic. In-process traffic is traffic from developments that have been approved, but are not generating full build out traffic volumes. The in-process traffic is shown in Figures 7a and 7b and Appendix C. The year 2029 traffic volumes without the project are shown in Figures 8a and 8b. The year 2029 traffic volumes with the project are shown in Figures 10a and 10b.

Concurrency

The study area for the project was based on Clark County's year 2000 Concurrency Ordinance. As required under the concurrency ordinance site generated traffic volumes must be provided for at key intersections along affected corridors within the one mile study area boundary of the subject site. The concurrency ordinance also states that an operational analysis should be conducted at proposed site access points, key intersections in the area and intersections of "regional significance" located outside the corridors.

Peak Hour Traffic Operations

The scope of the transportation impact study was based on the size of the development with a one mile study area boundary. Based on the one mile study area boundary an analysis was conducted at the following intersections during the weekday AM and PM peak hours:

(1) NE 139th Street & NE 50th Avenue
(2) NE 130th Street & NE 50th Avenue
(3) NE 119th Street & NE 50th Avenue
(4) Saint Johns Road & NE 72nd Avenue
(5) NE 119th Street & NE 72nd Avenue
(6) NE 123rd Street & NE 72nd Avenue
(7) NE 134th Street & NE 72nd Avenue
(8) NE 139th Street & NE 72nd Avenue

The intersection operational analysis was conducted using the procedures in the 2022 7th edition of the Highway Capacity Manual. These procedures describe the operation of an intersection in terms of its level of service (LOS). The LOS criteria ranges from "A", which indicates little, if any, delay to "F", which indicates that vehicles experience very long delays. The LOS criteria with the corresponding delay in seconds per vehicle is shown in Table 2. The capacity analysis summary is shown in Table 3 on page 4. The LOS computer printouts are included in Appendix F.

Table 2
Level of Service Criteria

Level of Service (LOS)	A	B	C	D	E	F
Unsignalized intersections Average Delay (seconds per vehicle)	≤10	>10 - 15	>15 - 25	>25 - 35	>35 - 50	>50

Table 3
Capacity Analysis Summary

	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
NE 139th Street & NE 50th Avenue				
Existing	A	9.7	B	10.8
Year 2029 w/o Project	A	9.8	B	11.1
Year 2029 with Project	A	9.8	B	11.1
NE 130th Street & NE 50th Avenue				
Existing	B	12.4	B	11.3
Year 2029 w/o Project	B	12.8	B	11.7
Year 2029 with Project	B	12.9	B	11.6
NE 119th Street & NE 50th Avenue				
Existing	C	22.4	C	21.9
Year 2029 w/o Project	C	22.5	C	21.4
Year 2029 with Project	C	22.6	C	21.5
Saint Johns Road & NE 72nd Avenue				
Existing	D	38.1	D	36.9
Year 2029 w/o Project	D	41.7	D	37.7
Year 2029 with Project	D	41.7	D	37.7
NE 119th Street & NE 72nd Avenue				
Existing	C	33.6	C	31.8
Year 2029 w/o Project	D	36.2	C	33.7
Year 2029 with Project	D	36.5	C	33.7
NE 123rd Street & NE 72nd Avenue				
Existing	C	16.8	C	18.2
Year 2029 w/o Project	C	21.3	C	21.8
Year 2029 with Project	C	21.6	C	21.5
NE 134th Street & NE 72nd Avenue				
Existing	C	16.2	B	14.9
Year 2029 w/o Project	C	17.4	C	16.0
Year 2029 with Project	C	17.6	C	16.4
NE 139th Street & NE 72nd Avenue				
Existing	D	26.6	E	35.8
Year 2029 w/o Project	D	38.3	E	36.4
Year 2029 with Project	E	38.4	E	47.6

Based on the results of the capacity analysis the study area intersections will operate at acceptable levels with build out of the Cresap Meadows Subdivision. The NE 139th Street/NE 72nd Avenue intersection is operating at LOS E during the PM peak hour for vehicles approaching from the east and west. However, the Cresap Meadows Subdivision will add no traffic to these approaches. The intersection also does not meet the necessary criteria for installation of a traffic signal. A traffic signal warrant analysis is included in Appendix B.

Pedestrian/Bicycle/Transit Considerations

Low pedestrian and no bicycle activities were observed within the vicinity of the site along NE 64th Avenue and NE 129th Street. There are no designated bike lanes. The site is not served by public transit service.

Cross Circulation

Code Section 40.350.030(B)(2) states that a circulation plan must be provided for to insure adequate cross circulation in a manner which allows subsequent developments to meet these standards, and to provide a mechanism for integrating various streets into an efficient and safe transportation network. NE 64th Avenue will provide a north/south connection through the site and NE 129th Street will provide a connection to the west.

Sight Distance

Intersection and stopping sight distance was measured at the NE 64th Avenue/NE 129th Street intersection and at the location of the future driveways serving Lots 16 through 22. The measured intersection sight distance when looking towards the west and east at all locations was over 250 feet. Based on an assumed speed limit of 25 mph on NE 129th Street and the criteria in Clark County table 40.350.030-8 the recommended intersection sight distance is 250 feet. Therefore, the intersection sight distance requirement is met.

Based on the criteria in Clark County table 40.350.030-7 the recommended stopping sight distance for an assumed speed limit of 25 mph on NE 129th Street is 155 feet. The measured stopping sight distance was over 155 feet for a vehicle approaching from the west and east at all locations. Therefore, the stopping sight distance requirement is met.

Transportation Improvements

Clark County's 2026 to 2031 Transportation Improvement Program identifies an improvement project to the east on NE 72nd Avenue from NE 122nd Street to NE 133rd Street. The project description is to consider intersection improvements, turn lanes/pockets and skinny road sections due to potential costs. A description of the project is included in Appendix E.

Turn Lanes

The requirement for additional turn lanes was evaluated at the study area intersections as based on guidelines in the Washington State Design Manual. Based on the findings additional turn lanes are not required.

Collision Data

Collision data was obtained from the Washington State Department of Transportation (WSDOT) for the most recent three years of available data. Based on the data the calculated accident rates are below the threshold of 1.0 accidents per MEV (million entering vehicles) that usually identifies an intersection with a high accident rate. The collision data is shown in Table 4 and Appendix D.

Table 4
Collision Data

Intersection	Number of Collisions	Collision Type			Rate MEV*
		Angle	Rear End	Other	
NE 139th St. & NE 50th Ave.	None				
NE 130th St. & NE 50th Ave.	None				
NE 119th St. & NE 50th Ave.	3	1	1	1	0.13
Saint Johns Rd. & NE 72nd Ave.	4	1		3	0.16
NE 119th St. & NE 72nd Ave.	6		5	1	0.21
NE 123rd St. & NE 72nd Ave.	None				
NE 134th St. & NE 72nd Ave.	None				
NE 139th St. & NE 72nd Ave.	6	6			0.43

*Accident rate per million entering vehicles

Corridor Analysis

Based on the criteria in Code Section 40.350.020(G)(1) and the study area intersections 5 corridor segments were analyzed. The corridors were analyzed to determine the maximum volume to capacity (V/C) ratios. The 5 corridors were NE 50th Avenue, NE 139th Street, NE 119th Street, St. Johns Road and NE 72nd Avenue. NE 50th Avenue and NE 139th Street are both 2-lane Collectors with a CLT and bike lanes (C-2cb) and a single direction capacity of 900 vehicles per hour. NE 119th Street west of NE 72nd Avenue is a 2-lane minor arterial with a CLT and bike lanes (M-2cb) with a single direction capacity of 900 vehicles per hour. St. Johns Road and NE 72nd Avenue are both 4-lane principal arterials (Pr-4cb) with a single direction capacity of 1800 vehicles per hour.

Based on the findings of the corridor analysis the V/C ratios do not exceed 0.9. The roadway capacity for the corridors is also not exceeded. The corridor analysis is shown in Table 5.

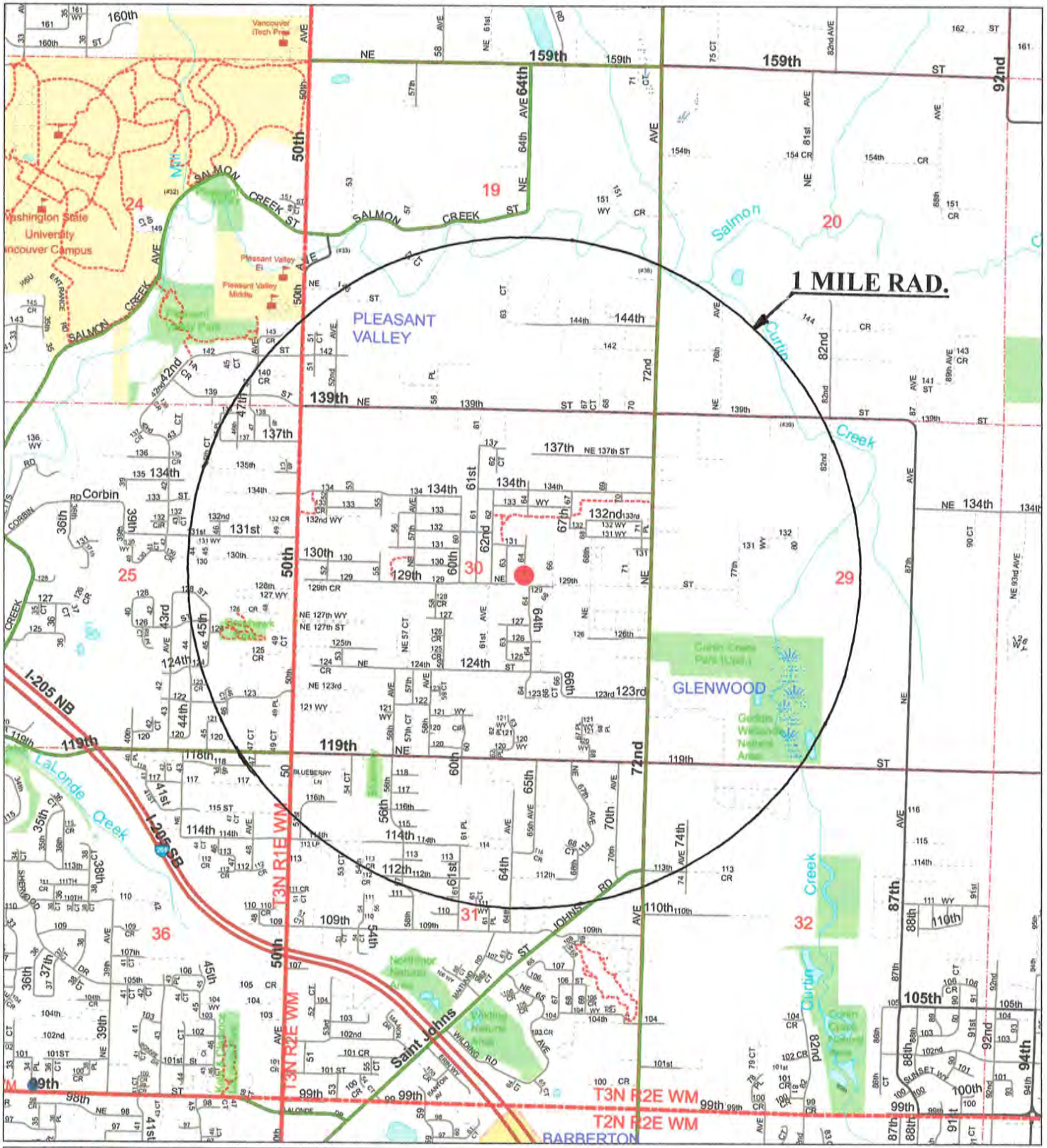
Table 5
Corridor Analysis, PM Peak Hour
Year 2029 Traffic Conditions with Project

Corridor Segment	Roadway Type	Measured Volume With Project		V/C Ratio With Project	
		Direction	Direction	Direction	Direction
NE 50th Ave. NE 139th St. to Salmon Creek St.	Urban Collector (C-2cb)	117 NB	176 SB	.13 NB	.20 SB
NE 139th St. NE 50th Ave. to NE 72nd Ave.	Urban Collector (C-2)	51 EB	60 WB	.06 EB	.07 WB
NE 50th Ave. NE 119th St. to NE 139th St.	Urban Collector (C-2cb)	122 NB	169 SB	.14 NB	.19 SB
NE 50th Ave. NE 99th St. to NE 119th St.	Urban Collector (C-2cb)	247 NB	219 SB	.27 NB	.24 SB
NE 119th St. NE 50th Ave. to NE 72nd Ave.	2-lane minor arterial (M-2cb)	489 EB	424 WB	.54 EB	.47 WB
St. Johns Road NE 99th St. to St. Johns Road	4-lane principal arterial (Pr-4cb)	321 EB	501 WB	.18 EB	.28 WB
NE 72nd Ave. NE 119th St. to NE 139th St.	4-lane principal arterial (Pr-4cb)	855 NB	608 SB	.47 NB	.34 SB

CONCLUSIONS AND RECOMMENDATIONS

The Cresap Meadows Subdivision is projected to generate 191 new trips per day. A trip is a one directional vehicle movement. 14 new trips will occur during the AM Peak Hour and 19 new trips during the PM peak hour. Credits were given for the existing home to be demolished.

Based on the findings of this transportation impact study the surrounding roadway system can adequately accommodate traffic from the development. No off site transportation improvements or traffic control devices were identified to accommodate the development.



General Location

Account: 198955000
Owner: CRESAP NANCY L
Address: 6400 NE 129TH ST
C/S/Z: VANCOUVER, WA 98686

Printed on: September 16, 2025

Location of Subject Property(s)

Geographic Information System

0 1,000 2,000 Feet

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

FIGURE 1



2023 Aerial Photography

Account: 198955000
Owner: CRESAP NANCY L
Address: 6400 NE 129TH ST
C/S/Z: VANCOUVER, WA 98686

Printed on: September 16, 2025

31124	32119	32120
31125	32130	32129
31136	32131	32132

CLARK COUNTY, WASHINGTON
Geographic Information System

N

0 200 400 Feet

Subject Property(s)

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

FIGURE 2

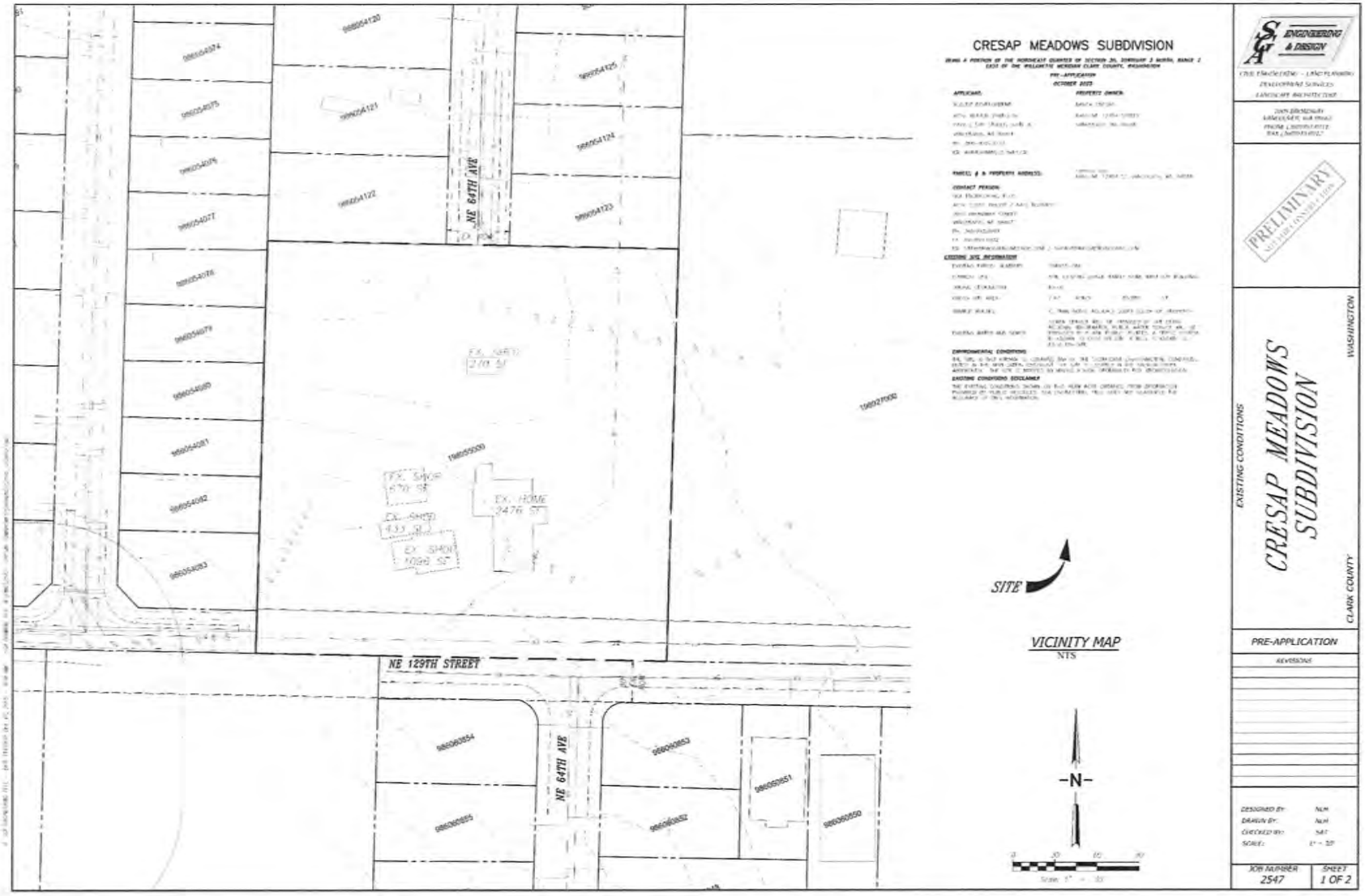

CRESAP MEADOWS SUBDIVISION
NE 64TH AVE
NE 129TH STREET
EX. SHED 270 SF
EX. SHED 670 SF
EX. SHED 433 SF
EX. SHED 1094 SF
EX. HOME 3476 SF
SITE
VICINITY MAP
NTS
-N-
ENGINEERING & DESIGN
PRELIMINARY
EXISTING CONDITIONS
CRESAP MEADOWS SUBDIVISION
WASHINGTON
CLARK COUNTY
PRE-APPLICATION
REVISIONS
JOB NUMBER 2547
SHEET 1 OF 2

FIGURE 3

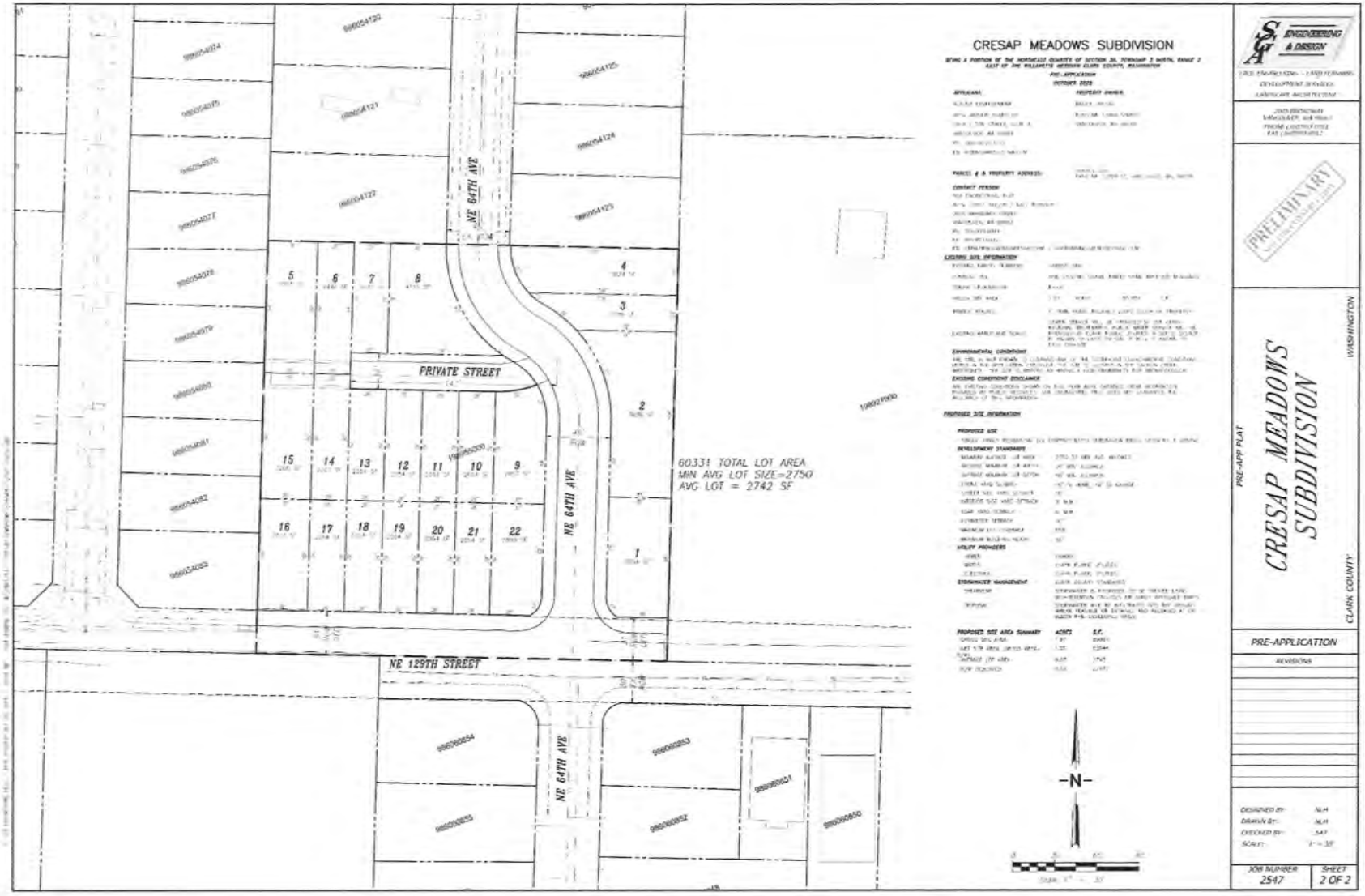

CRESAP MEADOWS SUBDIVISION
PRE-APPLICATION
OCTOBER 2023
PRELIMINARY
NOT FOR CONSTRUCTION
PRIVATE STREET
NE 64TH AVE
NE 129TH STREET
60331 TOTAL LOT AREA
MIN AVG LOT SIZE=2750
AVG LOT = 2742 SF
-N-
PRE-APP PLAT
CRESAP MEADOWS SUBDIVISION
WASHINGTON
CLARK COUNTY
PRE-APPLICATION
REVISIONS
DESIGNED BY: NLH
DRAWN BY: NLH
CHECKED BY: SAT
SCALE: 1" = 30'
JOB NUMBER 2547
SHEET 2 OF 2

FIGURE 4

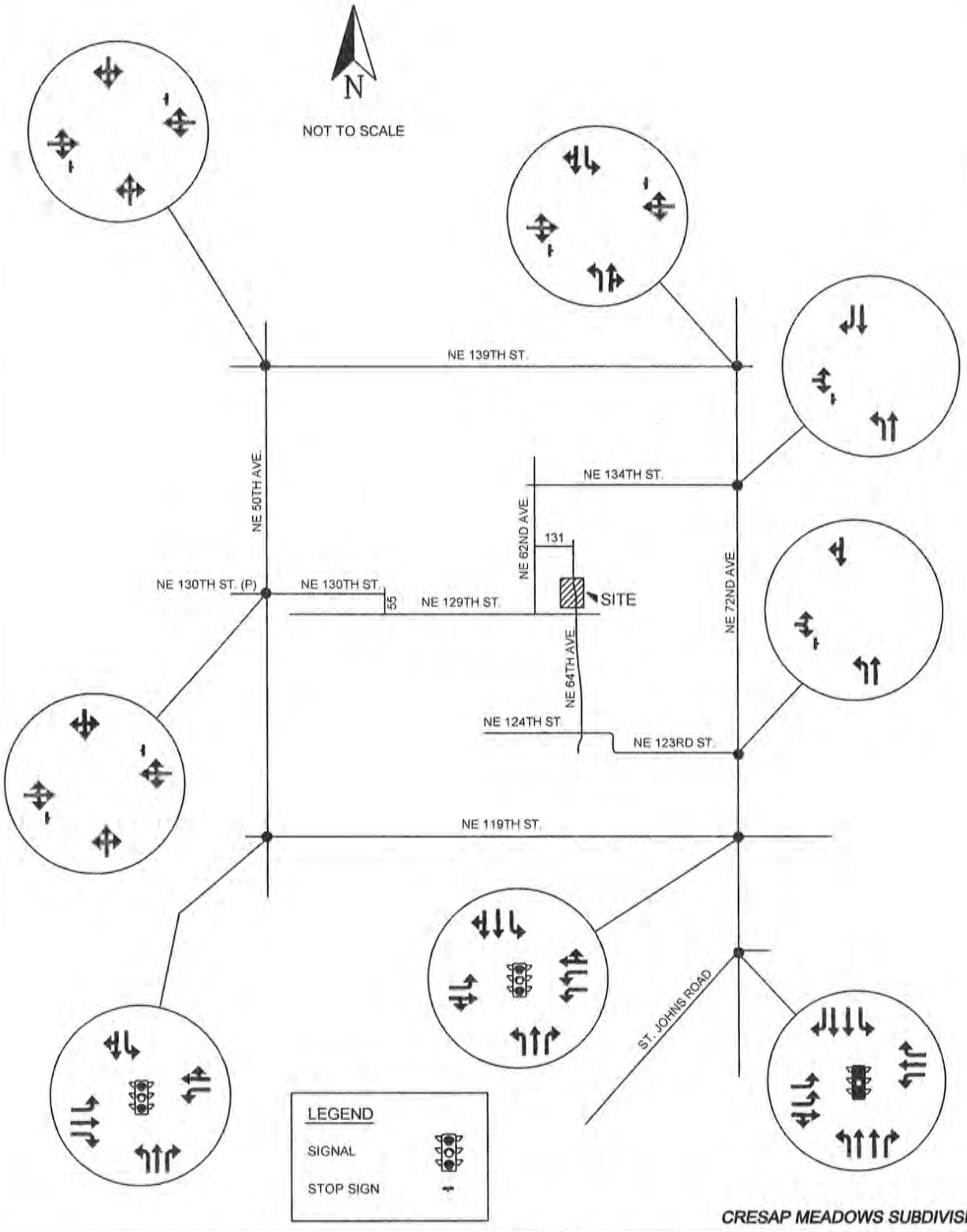


FIGURE 5
LANE CONFIGURATIONS
EXISTING CONDITIONS

KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530

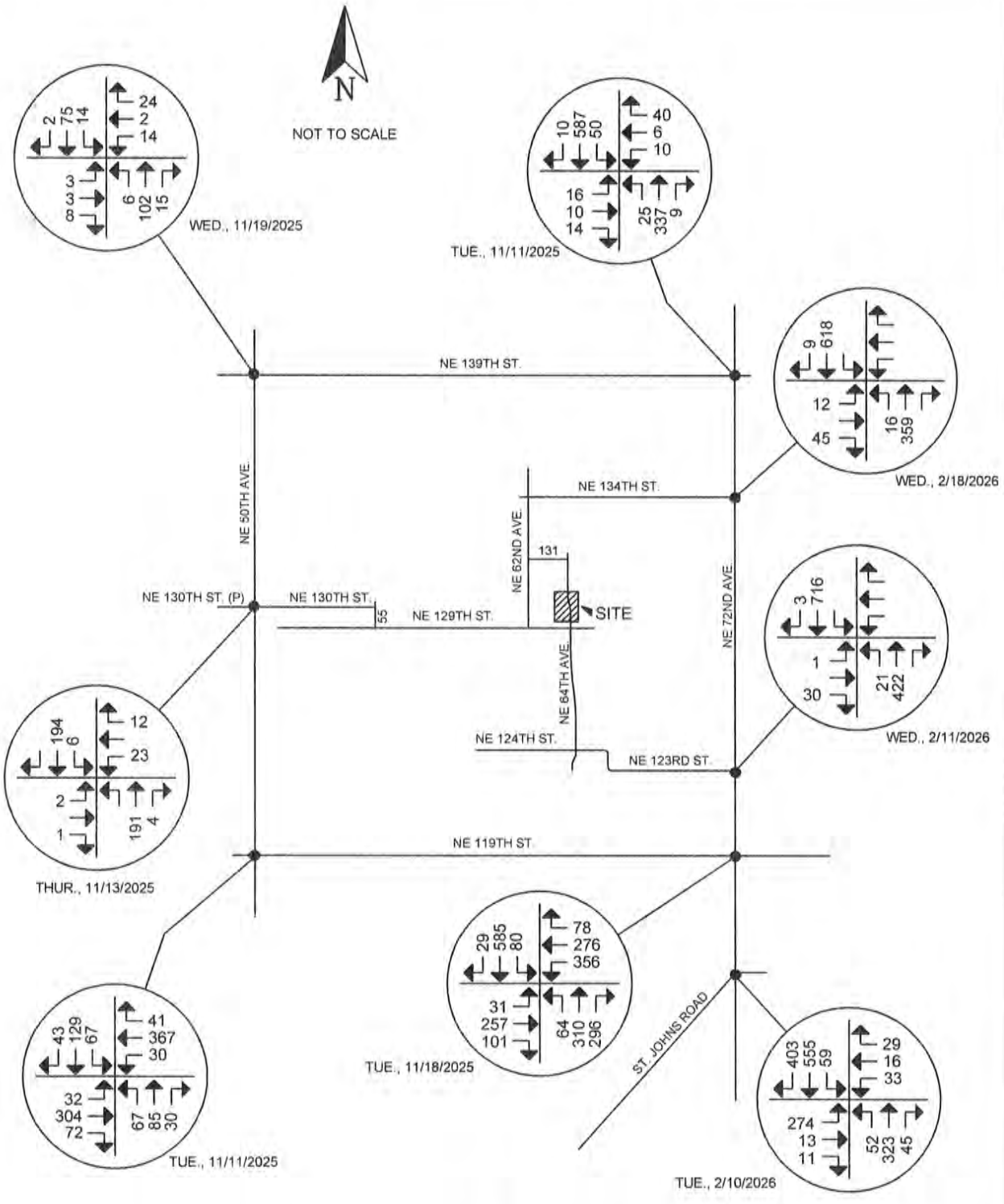


FIGURE 6a
EXISTING TRAFFIC VOLUMES
AM PEAK HOUR

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Phone: 360-433-7530

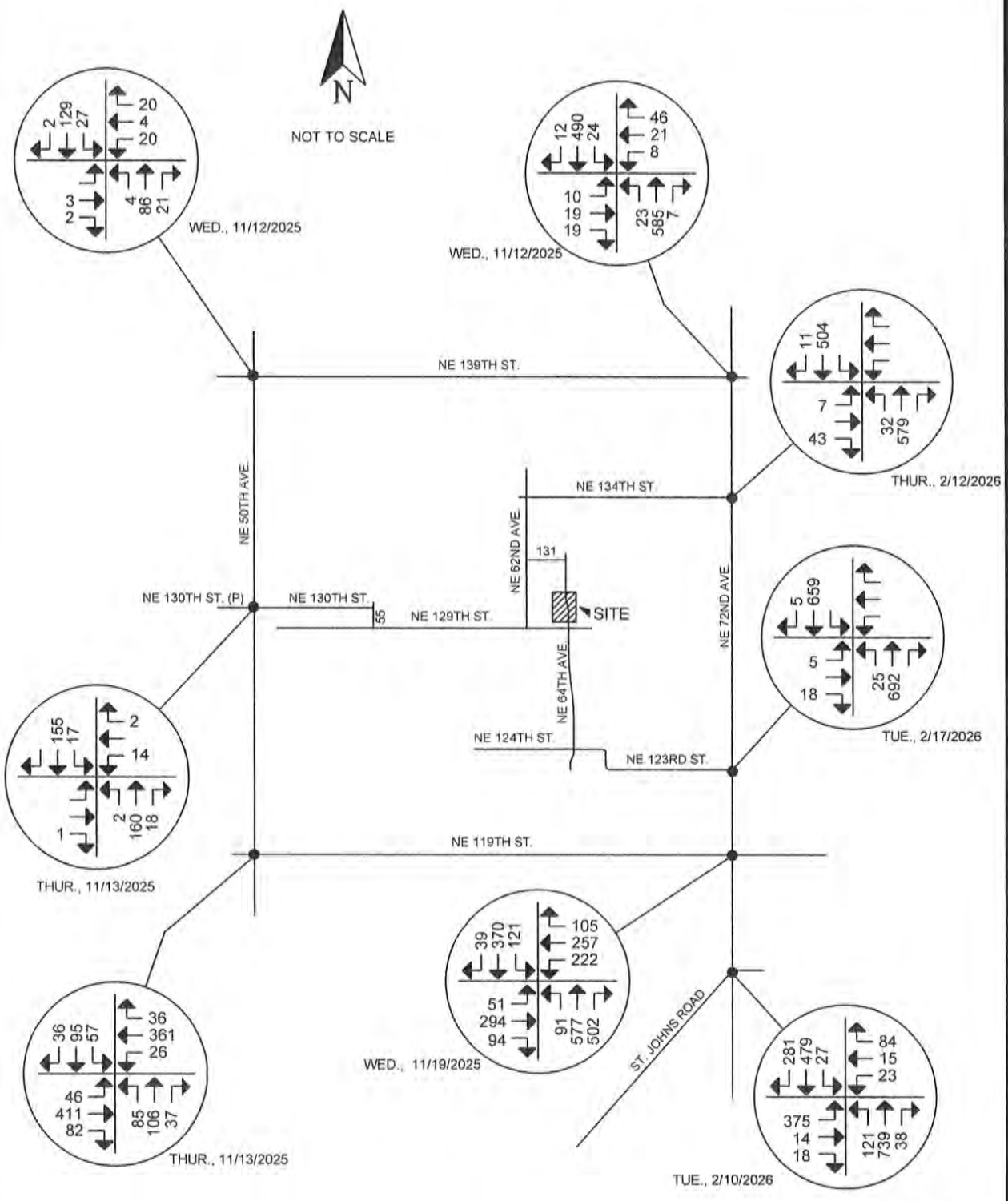

FIGURE 6b
EXISTING TRAFFIC VOLUMES
PM PEAK HOUR

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Phone: 360-433-7530

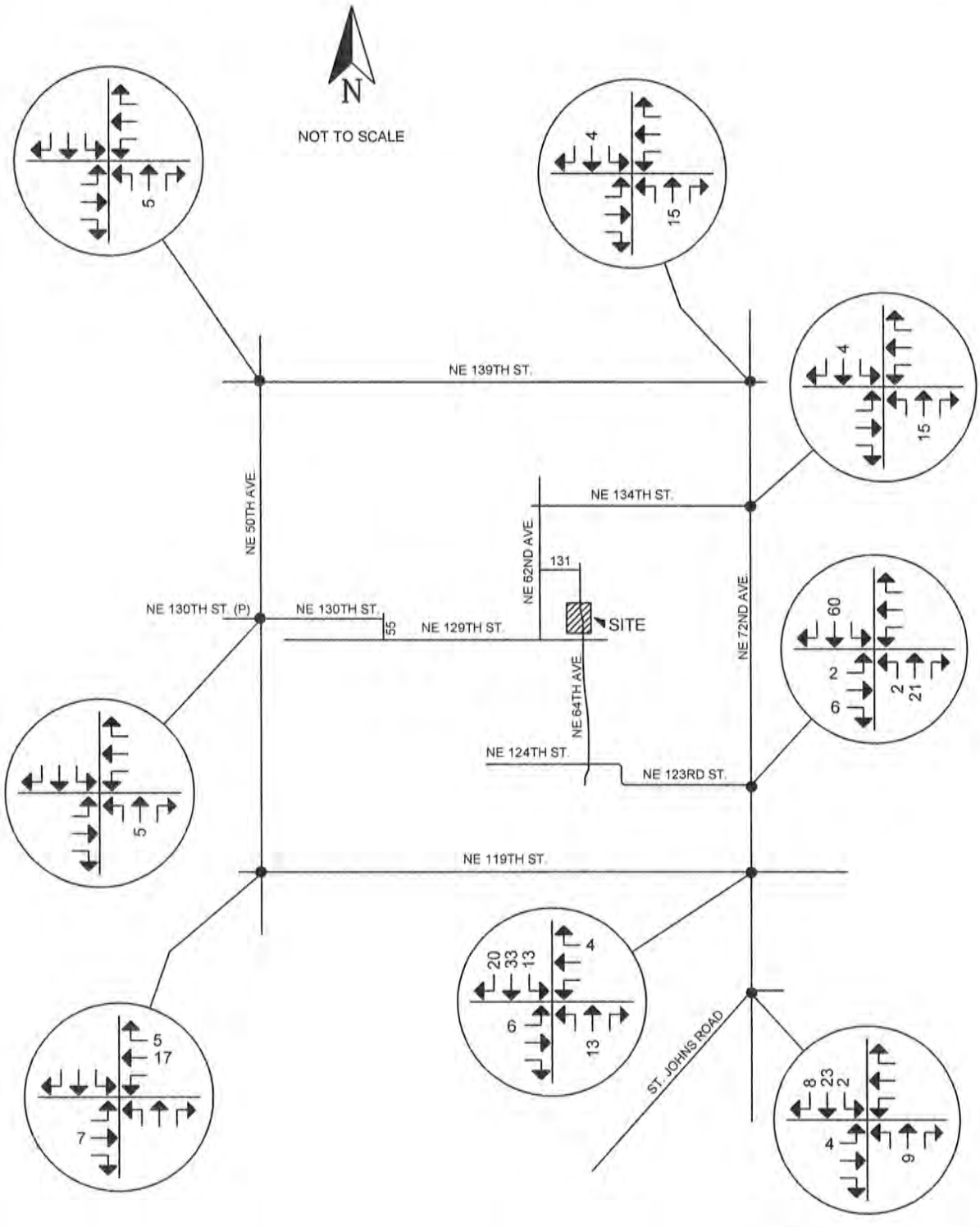

FIGURE 7a
IN=PROCESS TRAFFIC
AM PEAK HOUR

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Phone: 360-433-7530

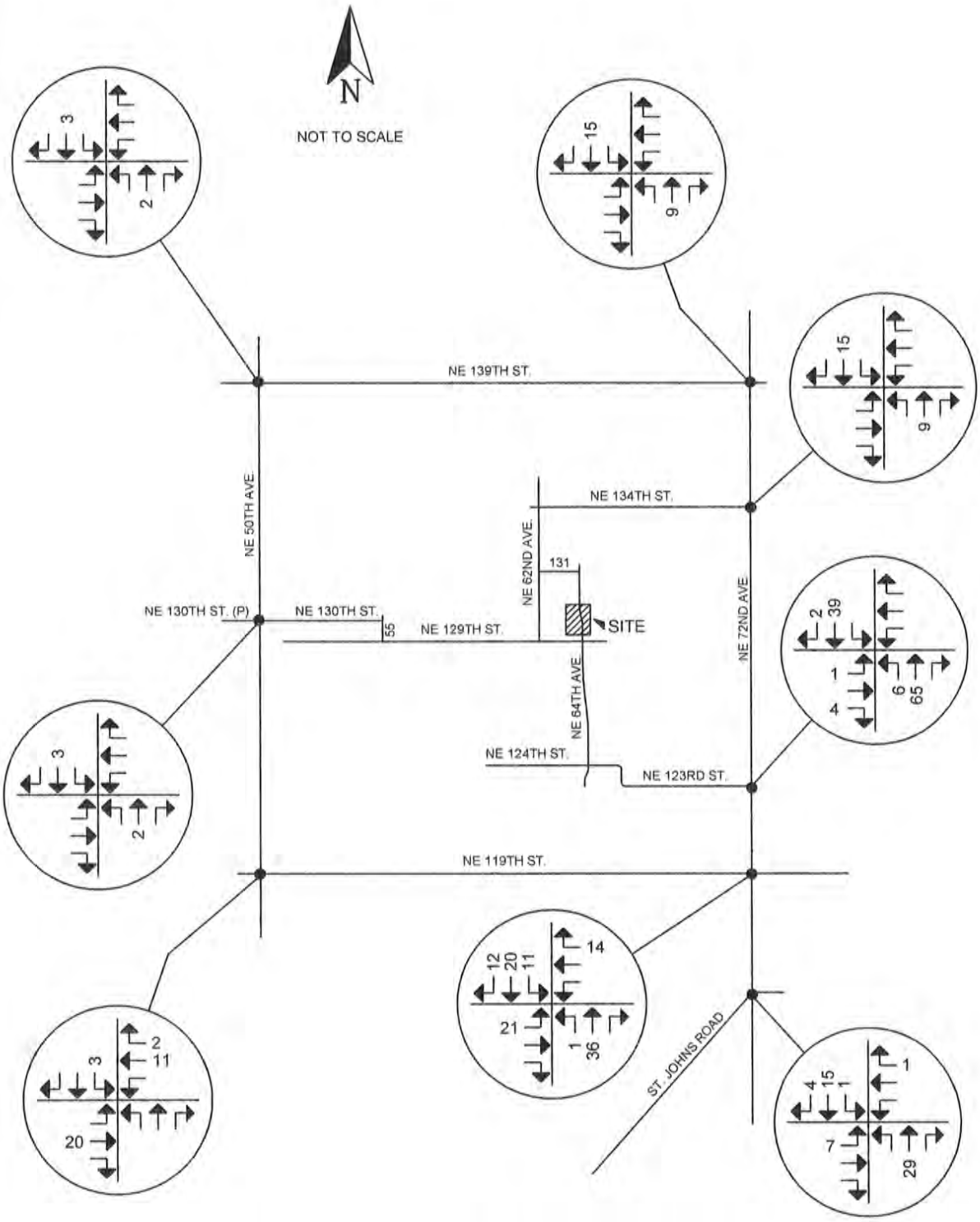

FIGURE 7b
IN-PROCESS TRAFFIC
PM PEAK HOUR

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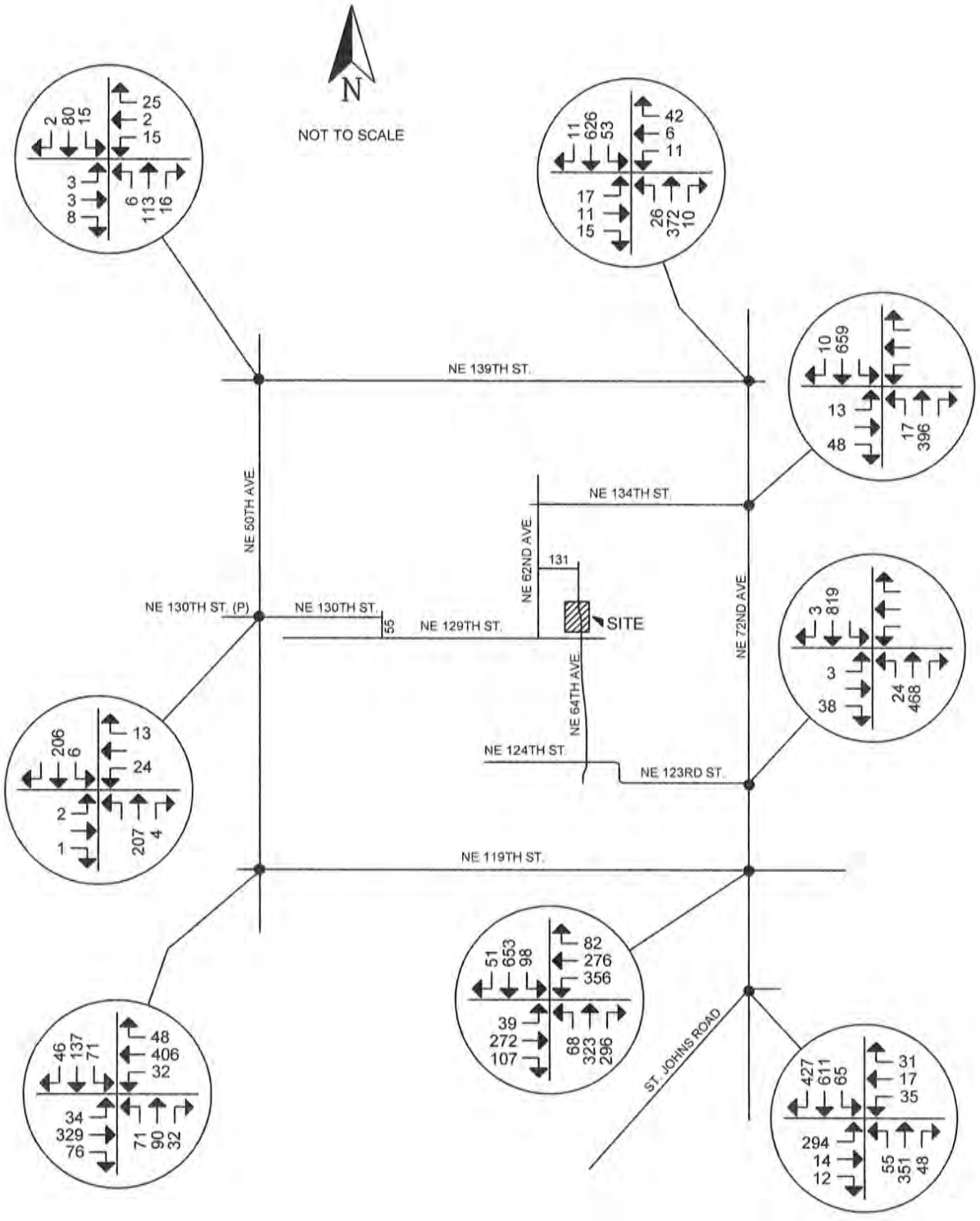
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



CRESAP MEADOWS SUBDIVISION

FIGURE 8a
YEAR 2029 TRAFFIC VOLUMES
W/O PROJECT, AM PEAK HOUR

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1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530

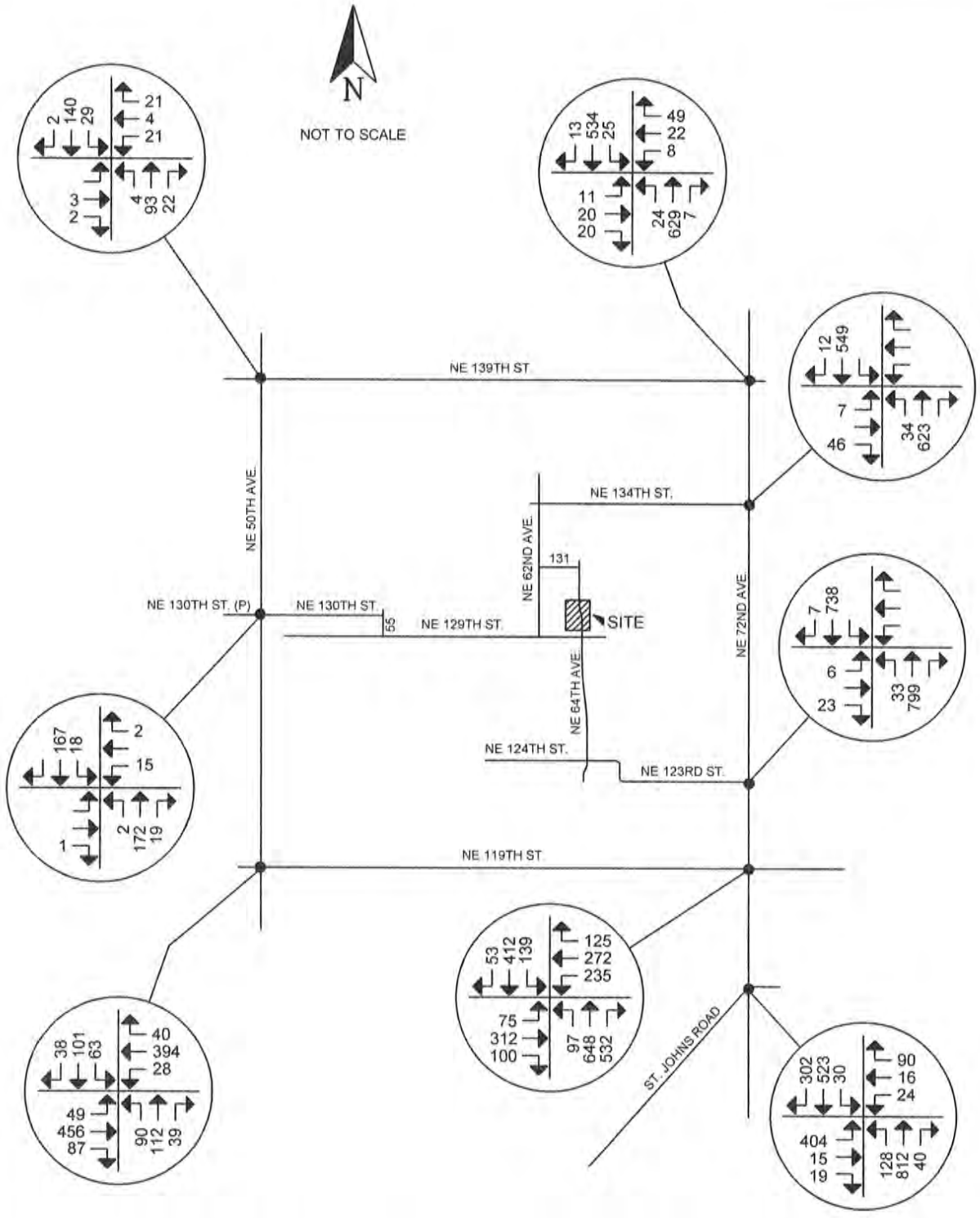
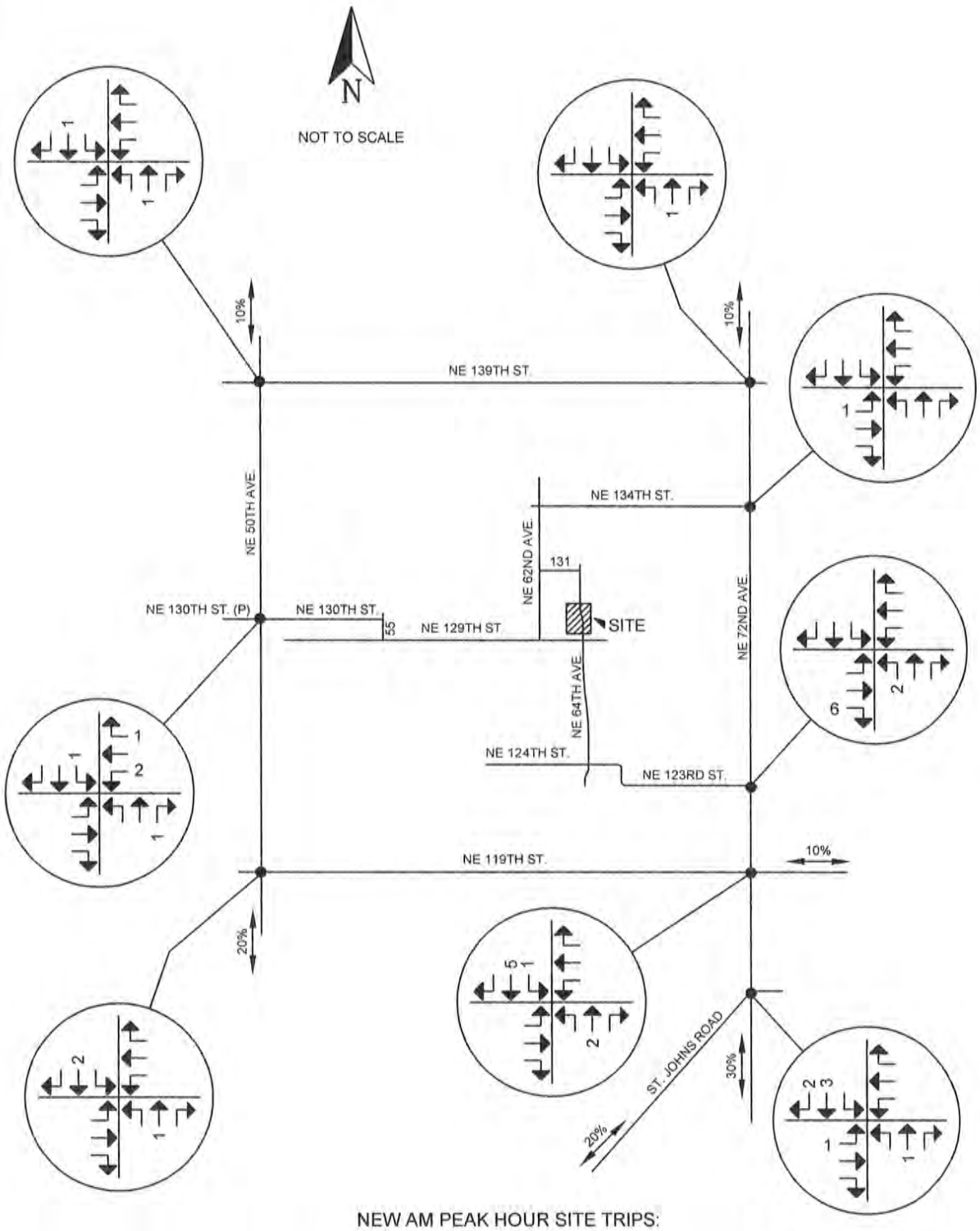


FIGURE 8b
YEAR 2029 TRAFFIC VOLUMES
W/O PROJECT, PM PEAK HOUR

KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530



NEW AM PEAK HOUR SITE TRIPS:
IN-4, OUT-10

CRESAP MEADOWS SUBDIVISION

FIGURE 9a
SITE TRAFFIC DISTRIBUTION/ ASSIGNMENT, AM PEAK HOUR

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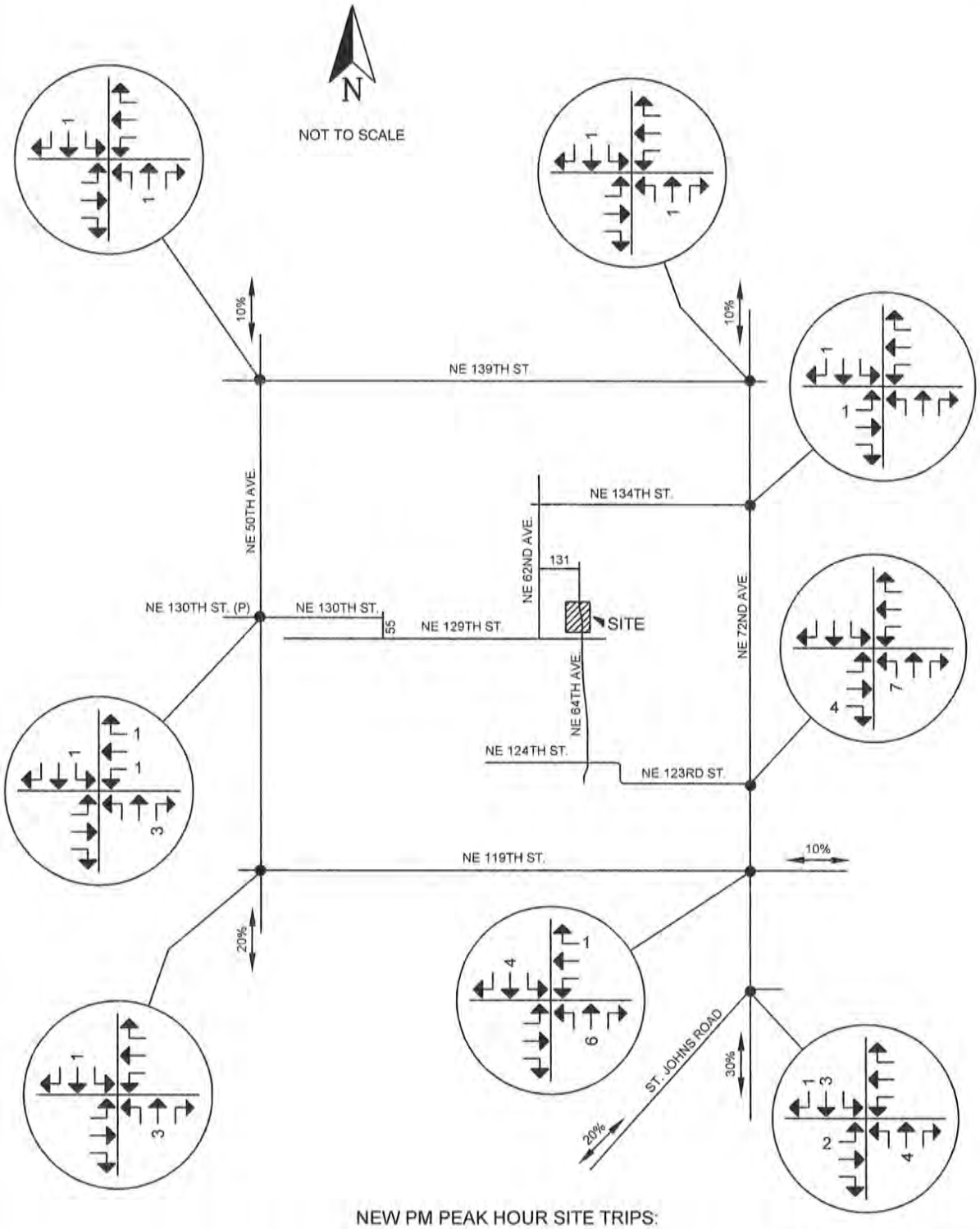
Phone: 360-433-7530



NEW PM PEAK HOUR SITE TRIPS:
IN-12, OUT-7

CRESAP MEADOWS SUBDIVISION

FIGURE 9b
SITE TRAFFIC DISTRIBUTION/ ASSIGNMENT, PM PEAK HOUR

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Phone: 360-433-7530

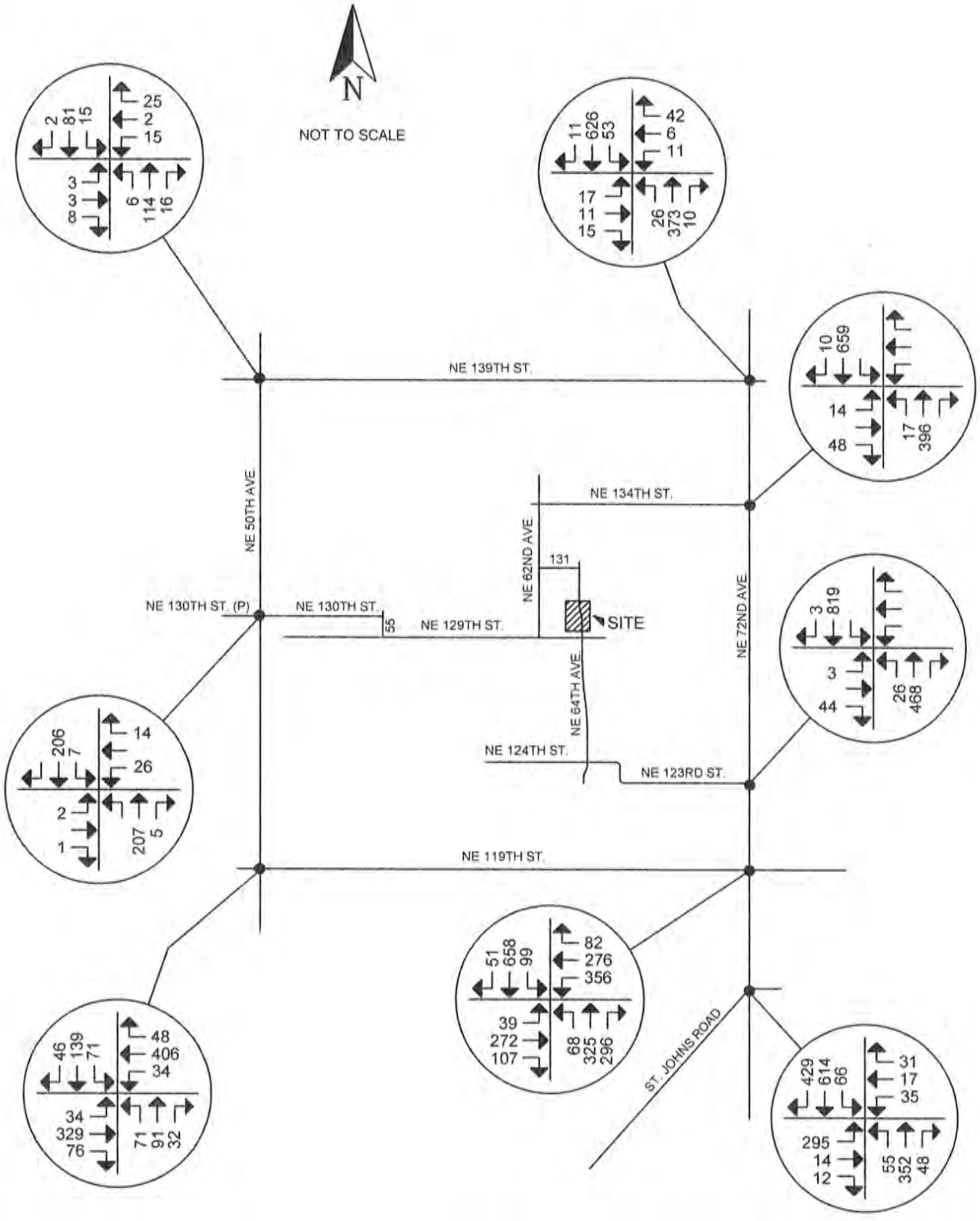

FIGURE 10a
YEAR 2029 TRAFFIC VOLUMES
WITH PROJECT, AM PEAK HOUR

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1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530

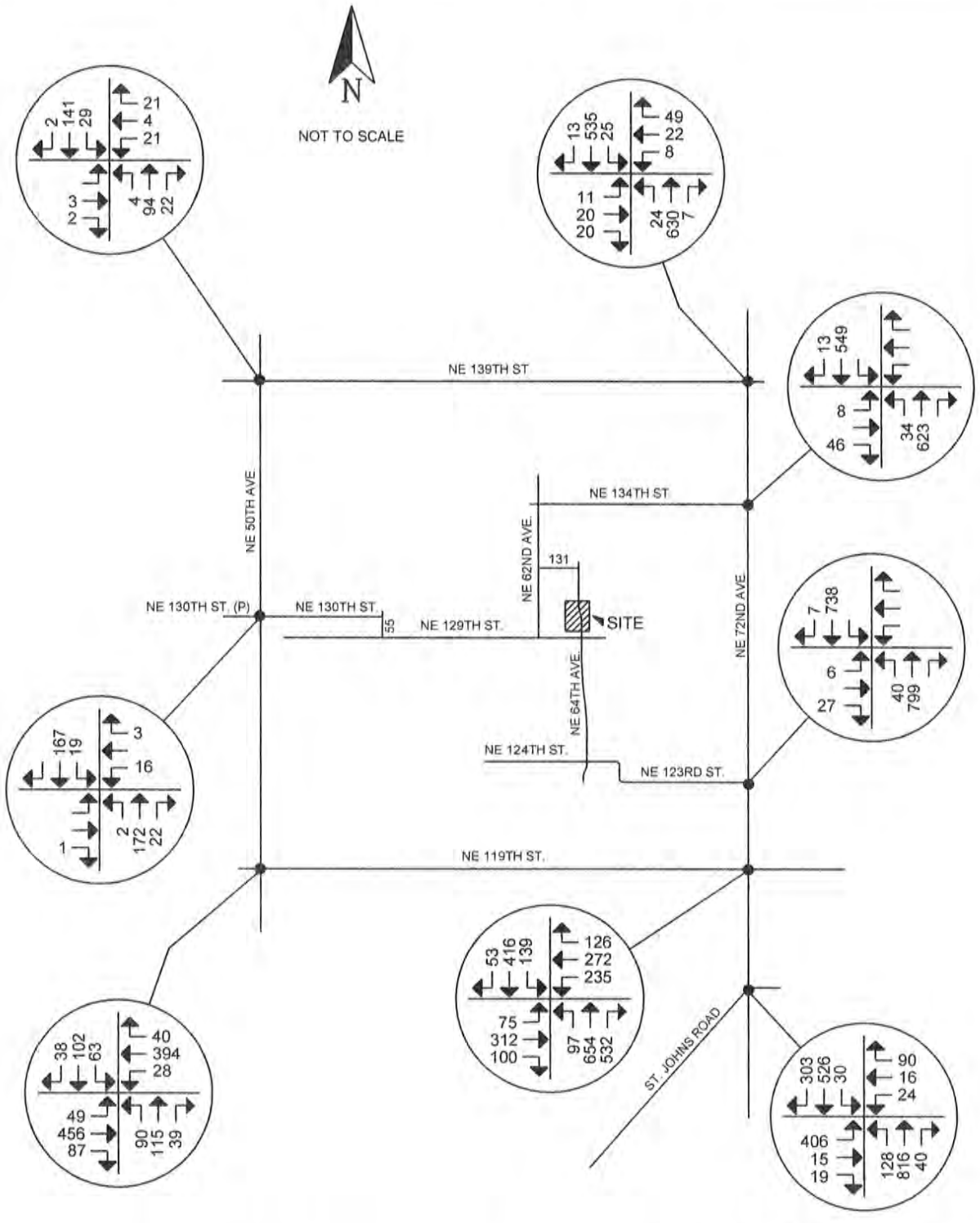


FIGURE 10b
YEAR 2029 TRAFFIC VOLUMES
WITH PROJECT, PM PEAK HOUR

KELLY ENGINEERING
1805 NE 94TH ST., NO. 19, VANCOUVER, WA 98665
Phone: 360-433-7530

APPENDIX A
RAW TRAFFIC COUNT DATA

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 139TH STREET

DATE OF COUNT: 11/19/2025, 07:00-09:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	0	6	0	1	0	2	0	4	2	0	1	0	16
07:05-07:10	0	4	0	1	1	2	0	3	2	0	0	0	13
07:10-07:15	1	1	0	0	0	0	0	5	1	2	1	1	12
07:15-07:20	0	2	0	1	0	1	1	2	2	0	0	0	9
07:20-07:25	1	6	0	2	1	1	0	4	1	0	0	0	16
07:25-07:30	0	5	0	2	0	2	0	8	0	0	1	0	18
07:30-07:35	2	5	0	1	0	1	0	6	0	0	0	0	15
07:35-07:40	0	2	0	2	0	1	1	7	0	0	0	0	13
07:40-07:45	**4**	**9**	**0**	**0**	**0**	**2**	**0**	**8**	**3**	**0**	**0**	**1**	**27**
07:45-07:50	**0**	**11**	**0**	**1**	**0**	**3**	**0**	**8**	**1**	**1**	**1**	**2**	**28**
07:50-07:55	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**8**	**3**	**0**	**1**	**1**	**18**
07:55-08:00	**2**	**4**	**0**	**2**	**0**	**3**	**2**	**12**	**1**	**0**	**0**	**1**	**27**
08:00-08:05	**4**	**3**	**1**	**2**	**1**	**1**	**0**	**10**	**1**	**0**	**0**	**0**	**23**
08:05-08:10	**1**	**2**	**0**	**2**	**0**	**2**	**0**	**5**	**1**	**0**	**0**	**0**	**13**
08:10-08:15	**1**	**6**	**1**	**0**	**0**	**4**	**0**	**7**	**0**	**0**	**0**	**2**	**21**
08:15-08:20	**0**	**6**	**0**	**2**	**0**	**2**	**2**	**8**	**1**	**1**	**0**	**0**	**22**
08:20-08:25	**0**	**7**	**0**	**2**	**0**	**2**	**1**	**7**	**0**	**0**	**0**	**1**	**20**
08:25-08:30	**0**	**10**	**0**	**0**	**0**	**1**	**0**	**12**	**0**	**0**	**0**	**0**	**23**
08:30-08:35	**0**	**8**	**0**	**3**	**1**	**0**	**1**	**7**	**2**	**1**	**0**	**0**	**23**
08:35-08:40	**2**	**5**	**0**	**0**	**0**	**3**	**0**	**10**	**2**	**0**	**1**	**0**	**23**
08:40-08:45	0	4	0	0	0	2	0	7	2	0	0	1	16
08:45-08:50	0	3	1	2	0	1	0	7	1	0	0	0	15
08:50-08:55	0	3	0	1	0	0	1	9	1	1	0	0	16
08:55-09:00	1	5	0	0	1	2	0	8	0	0	0	0	17
Peak Hour Total	**14**	**75**	**2**	**14**	**2**	**24**	**6**	**102**	**15**	**3**	**3**	**8**	**268**
% Trucks	0	0	0	0	0	0	0	1	0	9	0	4	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:40-08:40
PHF Intersection: 0.92

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 139TH STREET

DATE OF COUNT: 11/12/2025, 16:00-18:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	**4**	**18**	**0**	**4**	**1**	**1**	**0**	**8**	**1**	**0**	**0**	**0**	**37**
16:05-16:10	**1**	**8**	**1**	**2**	**0**	**4**	**1**	**7**	**2**	**0**	**0**	**0**	**26**
16:10-16:15	**7**	**16**	**1**	**4**	**0**	**2**	**0**	**8**	**3**	**0**	**1**	**0**	**42**
16:15-16:20	**3**	**19**	**0**	**4**	**0**	**1**	**0**	**6**	**1**	**0**	**0**	**0**	**34**
16:20-16:25	**2**	**3**	**0**	**2**	**0**	**1**	**0**	**9**	**4**	**0**	**0**	**0**	**21**
16:25-16:30	**4**	**9**	**0**	**2**	**0**	**4**	**1**	**8**	**1**	**0**	**0**	**0**	**29**
16:30-16:35	**1**	**15**	**0**	**0**	**0**	**3**	**0**	**5**	**1**	**0**	**0**	**0**	**25**
16:35-16:40	**0**	**15**	**0**	**0**	**0**	**1**	**0**	**4**	**2**	**0**	**2**	**0**	**24**
16:40-16:45	**2**	**8**	**0**	**0**	**1**	**2**	**2**	**4**	**3**	**0**	**0**	**0**	**22**
16:45-16:50	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**9**	**2**	**0**	**0**	**0**	**17**
16:50-16:55	**1**	**6**	**0**	**0**	**1**	**1**	**0**	**13**	**0**	**0**	**0**	**1**	**23**
16:55-17:00	**1**	**7**	**0**	**2**	**1**	**0**	**0**	**5**	**1**	**0**	**0**	**1**	**18**
17:00-17:05	3	7	0	3	0	0	0	5	2	0	0	0	20
17:05-17:10	2	18	0	1	1	0	0	11	3	0	0	0	36
17:10-17:15	1	9	1	0	0	0	1	6	1	0	0	0	19
17:15-17:20	1	7	0	1	0	0	0	6	0	0	1	0	16
17:20-17:25	1	4	0	2	0	0	1	6	3	0	0	0	17
17:25-17:30	1	11	0	1	1	1	0	3	2	0	0	0	20
17:30-17:35	4	9	0	3	0	1	0	9	5	0	0	0	31
17:35-17:40	1	11	0	1	1	0	0	5	0	0	0	0	19
17:40-17:45	0	9	0	0	0	0	0	6	2	0	0	0	17
17:45-17:50	1	7	0	1	1	1	0	5	0	0	0	0	16
17:50-17:55	1	6	0	0	0	1	0	4	3	0	0	0	15
17:55-18:00	0	9	0	0	0	0	0	7	0	0	0	0	16
Peak Hour Total	**27**	**129**	**2**	**20**	**4**	**20**	**4**	**86**	**21**	**0**	**3**	**2**	**318**
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:00-17:00

PHF Intersection: 0.76

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 130TH STREET

DATE OF COUNT: 11/13/2025, 07:00-09:00
DAY OF WEEK: THUR.
WEATHER: RAIN
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	0	9	0	1	0	1	0	3	1	0	0	0	15
07:05-07:10	0	12	0	1	0	2	0	10	1	1	0	0	27
07:10-07:15	2	10	0	1	0	0	0	7	1	0	0	0	21
07:15-07:20	0	7	0	0	0	1	0	5	0	0	0	0	13
07:20-07:25	0	10	0	0	0	1	0	9	0	0	0	0	20
07:25-07:30	0	12	0	0	0	0	0	6	0	0	0	0	18
07:30-07:35	0	13	0	3	0	0	0	8	0	0	0	0	23
07:35-07:40	**0**	**12**	**0**	**2**	**0**	**2**	**0**	**9**	**1**	**0**	**0**	**0**	**26**
07:40-07:45	**0**	**18**	**0**	**4**	**0**	**2**	**0**	**19**	**0**	**0**	**0**	**0**	**43**
07:45-07:50	**1**	**12**	**0**	**0**	**0**	**0**	**0**	**23**	**1**	**0**	**0**	**0**	**37**
07:50-07:55	**0**	**13**	**0**	**2**	**0**	**1**	**0**	**22**	**0**	**1**	**0**	**0**	**39**
07:55-08:00	**0**	**21**	**0**	**0**	**0**	**1**	**0**	**26**	**1**	**0**	**0**	**0**	**49**
08:00-08:05	**1**	**21**	**0**	**2**	**0**	**1**	**0**	**20**	**0**	**0**	**0**	**0**	**45**
08:05-08:10	**0**	**29**	**0**	**3**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**1**	**51**
08:10-08:15	**0**	**13**	**0**	**3**	**0**	**1**	**0**	**7**	**0**	**0**	**0**	**0**	**24**
08:15-08:20	**2**	**12**	**0**	**2**	**0**	**1**	**0**	**9**	**0**	**1**	**0**	**0**	**27**
08:20-08:25	**0**	**10**	**0**	**2**	**0**	**1**	**0**	**15**	**1**	**0**	**0**	**0**	**29**
08:25-08:30	**1**	**18**	**0**	**2**	**0**	**1**	**0**	**15**	**0**	**0**	**0**	**0**	**37**
08:30-08:35	**1**	**15**	**0**	**1**	**0**	**1**	**0**	**8**	**0**	**0**	**0**	**0**	**26**
08:35-08:40	0	10	0	1	0	0	0	11	0	0	0	0	22
08:40-08:45	1	9	0	2	0	1	0	9	0	0	0	0	22
08:45-08:50	0	10	0	0	0	0	0	7	1	0	0	0	18
08:50-08:55	0	11	0	0	0	0	0	8	0	0	0	0	19
08:55-09:00	1	10	0	1	0	1	0	10	0	0	0	0	96
Peak Hour Total	**6**	**194**	**0**	**23**	**0**	**12**	**0**	**191**	**4**	**2**	**0**	**1**	**433**
% Trucks	0	0	0	0	0	0	0	4	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:35-08:35

PHF Intersection: 0.75

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 130TH STREET

DATE OF COUNT: 11/13/2025, 16:00-18:00
DAY OF WEEK: THUR.
WEATHER: CLOUDY
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	5	18	0	1	0	1	0	14	1	0	0	0	40
16:05-16:10	0	13	0	1	0	0	0	16	2	0	0	0	32
16:10-16:15	**0**	**16**	**0**	**0**	**0**	**1**	**0**	**16**	**1**	**0**	**0**	**0**	**34**
16:15-16:20	**3**	**15**	**0**	**2**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**31**
16:20-16:25	**0**	**12**	**0**	**2**	**0**	**0**	**1**	**15**	**3**	**0**	**0**	**0**	**33**
16:25-16:30	**3**	**7**	**0**	**1**	**0**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**26**
16:30-16:35	**0**	**21**	**0**	**1**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**30**
16:35-16:40	**2**	**13**	**0**	**1**	**0**	**0**	**0**	**23**	**2**	**0**	**0**	**1**	**42**
16:40-16:45	**0**	**15**	**0**	**1**	**0**	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**24**
16:45-16:50	**2**	**13**	**0**	**1**	**0**	**1**	**0**	**14**	**1**	**0**	**0**	**0**	**32**
16:50-16:55	**0**	**5**	**0**	**2**	**0**	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**17**
16:55-17:00	**1**	**7**	**0**	**1**	**0**	**0**	**0**	**12**	**3**	**0**	**0**	**0**	**24**
17:00-17:05	**3**	**13**	**0**	**2**	**0**	**0**	**0**	**14**	**3**	**0**	**0**	**0**	**35**
17:05-17:10	**3**	**18**	**0**	**0**	**0**	**0**	**0**	**19**	**1**	**0**	**0**	**0**	**41**
17:10-17:15	1	9	0	1	0	1	0	16	3	0	0	1	32
17:15-17:20	1	6	0	0	0	0	0	15	2	0	0	0	24
17:20-17:25	0	8	0	1	0	0	0	22	2	0	0	0	33
17:25-17:30	1	5	0	1	0	0	0	13	1	0	0	0	21
17:30-17:35	0	11	0	0	0	0	0	13	4	0	0	0	28
17:35-17:40	1	12	0	0	0	0	0	10	2	0	0	0	25
17:40-17:45	1	7	0	1	0	0	0	9	1	0	0	0	19
17:45-17:50	0	6	0	1	0	0	0	8	0	0	0	0	15
17:50-17:55	0	5	0	0	0	0	0	10	2	0	0	0	17
17:55-18:00	0	7	0	0	0	0	0	11	1	0	0	0	19
Peak Hour Total	**17**	**155**	**0**	**14**	**0**	**2**	**2**	**160**	**18**	**0**	**0**	**1**	**369**
% Trucks	0	1	0	0	0	0	0	0	0	0	0	0	
Peds	0	1	0	0	0	0	0	1	0	0	0	0	
Bikes	0	0	0	0	0	0	0	1	0	0	0	0	

PEAK HOUR: 16:10-17:10
PHF Intersection: 0.92

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 119TH STREET

DATE OF COUNT: 11/11/2025, 07:00-09:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	2	4	3	0	23	2	2	7	0	0	15	3	61
07:05-07:10	4	8	6	0	19	0	5	1	2	2	13	2	62
07:10-07:15	4	5	0	0	19	3	4	4	3	1	21	2	66
07:15-07:20	5	5	1	2	13	0	3	1	3	1	25	5	64
07:20-07:25	4	5	4	0	24	3	7	2	2	1	23	2	77
07:25-07:30	**3**	**10**	**1**	**1**	**28**	**2**	**2**	**2**	**2**	**2**	**27**	**8**	**88**
07:30-07:35	**5**	**4**	**2**	**2**	**23**	**2**	**4**	**4**	**2**	**2**	**16**	**6**	**72**
07:35-07:40	**9**	**6**	**1**	**4**	**30**	**2**	**9**	**5**	**2**	**1**	**29**	**8**	**106**
07:40-07:45	**4**	**11**	**5**	**4**	**41**	**4**	**1**	**10**	**2**	**1**	**29**	**10**	**122**
07:45-07:50	**5**	**20**	**5**	**4**	**31**	**6**	**11**	**6**	**1**	**3**	**32**	**4**	**128**
07:50-07:55	**6**	**19**	**8**	**2**	**27**	**2**	**8**	**15**	**2**	**3**	**21**	**8**	**121**
07:55-08:00	**4**	**7**	**5**	**1**	**35**	**9**	**4**	**12**	**2**	**5**	**29**	**5**	**118**
08:00-08:05	**9**	**10**	**5**	**2**	**24**	**3**	**3**	**6**	**4**	**2**	**19**	**8**	**95**
08:05-08:10	**11**	**14**	**4**	**3**	**39**	**1**	**10**	**2**	**4**	**4**	**23**	**4**	**119**
08:10-08:15	**4**	**11**	**2**	**2**	**32**	**5**	**2**	**8**	**4**	**5**	**30**	**3**	**108**
08:15-08:20	**5**	**11**	**2**	**2**	**28**	**3**	**8**	**11**	**4**	**3**	**29**	**2**	**108**
08:20-08:25	**2**	**6**	**3**	**3**	**29**	**2**	**5**	**4**	**1**	**1**	**20**	**6**	**82**
08:25-08:30	3	6	5	3	30	2	5	5	3	3	12	3	80
08:30-08:35	7	7	12	3	23	2	5	3	3	0	8	5	78
08:35-08:40	4	6	5	1	22	4	6	9	2	1	13	4	77
08:40-08:45	5	10	4	1	20	1	3	4	3	2	14	4	71
08:45-08:50	4	7	2	2	28	3	4	5	1	2	10	3	71
08:50-08:55	6	8	1	2	27	5	6	2	4	1	14	5	81
08:55-09:00	5	6	4	0	29	2	3	2	2	0	9	4	66
Peak Hour Total	**67**	**129**	**43**	**30**	**367**	**41**	**67**	**85**	**30**	**32**	**304**	**72**	**1267**
% Trucks	0	0	2	3	0	2	0	6	0	3	0	3	
Peds	0	0	0	0	0	0	0	0	0	0	1	0	
Bikes	0	0	0	0	0	0	0	0	0	0	1	0	

PEAK HOUR: 07:25-08:25
PHF Intersection: 0.85

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 50TH AVENUE & NE 119TH STREET

DATE OF COUNT: 11/13/2025, 16:00-18:00
DAY OF WEEK: THUR.
WEATHER: RAIN
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	14	27	4	1	27	2	1	5	3	5	42	9	140
16:05-16:10	3	13	6	5	37	4	11	5	3	6	26	7	126
16:10-16:15	7	7	3	2	23	2	5	7	4	3	32	6	101
16:15-16:20	3	9	2	1	39	5	5	11	5	3	30	7	120
16:20-16:25	**11**	**12**	**4**	**0**	**25**	**4**	**3**	**3**	**0**	**3**	**43**	**7**	**115**
16:25-16:30	**7**	**8**	**5**	**1**	**24**	**2**	**6**	**4**	**5**	**1**	**44**	**9**	**116**
16:30-16:35	**5**	**3**	**2**	**4**	**25**	**0**	**13**	**9**	**3**	**6**	**34**	**11**	**115**
16:35-16:40	**3**	**4**	**3**	**3**	**25**	**4**	**7**	**3**	**3**	**5**	**32**	**7**	**99**
16:40-16:45	**4**	**8**	**4**	**4**	**25**	**3**	**8**	**11**	**3**	**4**	**36**	**8**	**118**
16:45-16:50	**5**	**7**	**3**	**3**	**29**	**6**	**5**	**10**	**5**	**7**	**32**	**2**	**114**
16:50-16:55	**3**	**3**	**3**	**2**	**35**	**3**	**5**	**13**	**2**	**3**	**36**	**3**	**111**
16:55-17:00	**4**	**7**	**4**	**4**	**35**	**3**	**4**	**13**	**1**	**2**	**29**	**7**	**113**
17:00-17:05	**5**	**14**	**2**	**0**	**32**	**0**	**6**	**8**	**3**	**8**	**28**	**5**	**111**
17:05-17:10	**4**	**16**	**4**	**2**	**29**	**5**	**16**	**11**	**6**	**1**	**27**	**7**	**128**
17:10-17:15	**3**	**6**	**2**	**3**	**40**	**3**	**3**	**13**	**5**	**2**	**29**	**6**	**115**
17:15-17:20	**3**	**7**	**0**	**0**	**37**	**3**	**9**	**8**	**1**	**4**	**41**	**10**	**123**
17:20-17:25	2	5	2	3	26	3	6	11	2	6	34	11	111
17:25-17:30	3	3	5	0	32	4	10	6	4	9	31	7	114
17:30-17:35	6	6	1	4	26	2	7	3	0	6	28	5	94
17:35-17:40	4	9	2	2	16	4	12	12	1	3	46	1	112
17:40-17:45	3	4	0	0	19	0	5	7	2	4	27	3	74
17:45-17:50	4	5	2	3	22	3	4	8	0	4	30	6	91
17:50-17:55	5	3	3	2	21	0	8	5	2	5	28	7	89
17:55-18:00	7	6	4	2	28	1	7	5	2	2	26	2	92
Peak Hour Total	**57**	**95**	**36**	**26**	**361**	**36**	**85**	**106**	**37**	**46**	**411**	**82**	**1378**
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	1	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:20-17:20

PHF Intersection: 0.94

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE ST. JOHNS ROAD

DATE OF COUNT: 2/10/2026, 07:00-09:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	5	34	18	6	0	0	7	16	3	14	1	0	104
07:05-07:10	3	48	29	2	1	1	3	18	2	17	0	0	124
07:10-07:15	4	48	16	2	1	3	9	18	2	25	1	1	130
07:15-07:20	2	41	37	3	0	0	5	16	2	14	0	0	120
07:20-07:25	5	43	34	1	0	4	3	23	2	19	0	0	134
07:25-07:30	**12**	**29**	**32**	**3**	**1**	**1**	**4**	**27**	**3**	**20**	**1**	**1**	**134**
07:30-07:35	**3**	**59**	**35**	**2**	**0**	**2**	**4**	**28**	**5**	**34**	**0**	**0**	**172**
07:35-07:40	**3**	**55**	**25**	**1**	**0**	**4**	**3**	**31**	**3**	**17**	**1**	**1**	**144**
07:40-07:45	**4**	**40**	**38**	**2**	**0**	**4**	**5**	**28**	**2**	**29**	**1**	**2**	**155**
07:45-07:50	**5**	**57**	**50**	**3**	**0**	**0**	**4**	**29**	**2**	**31**	**1**	**1**	**183**
07:50-07:55	**5**	**52**	**37**	**0**	**1**	**2**	**8**	**31**	**9**	**17**	**0**	**0**	**162**
07:55-08:00	**3**	**39**	**32**	**3**	**4**	**2**	**9**	**21**	**4**	**27**	**1**	**1**	**146**
08:00-08:05	**2**	**42**	**37**	**3**	**3**	**4**	**4**	**31**	**6**	**14**	**2**	**0**	**148**
08:05-08:10	**3**	**53**	**33**	**0**	**2**	**3**	**3**	**26**	**5**	**21**	**1**	**1**	**151**
08:10-08:15	**6**	**44**	**29**	**6**	**3**	**1**	**2**	**23**	**3**	**18**	**3**	**1**	**139**
08:15-08:20	**10**	**47**	**24**	**4**	**1**	**3**	**2**	**23**	**0**	**16**	**1**	**1**	**132**
08:20-08:25	**3**	**38**	**31**	**6**	**1**	**3**	**4**	**25**	**3**	**30**	**1**	**2**	**147**
08:25-08:30	2	51	30	2	0	3	4	21	2	14	1	3	133
08:30-08:35	2	44	23	4	1	2	4	32	5	9	2	1	129
08:35-08:40	1	43	35	3	1	5	1	32	6	19	1	0	147
08:40-08:45	2	40	28	5	0	3	2	25	3	17	0	1	126
08:45-08:50	3	39	24	1	2	2	3	22	2	11	1	1	111
08:50-08:55	5	27	25	4	1	2	1	29	4	12	1	0	111
08:55-09:00	4	29	19	0	1	3	4	28	3	20	0	1	112
Peak Hour Total	**59**	**555**	**403**	**33**	**16**	**29**	**52**	**323**	**45**	**274**	**13**	**11**	**1813**
% Trucks	3	2	8	8	1	5	3	9	6	6	8	2	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	2	0	0	0	0	0	0	0	0	1	0	

PEAK HOUR: 07:25-08:25

PHF Intersection: 0.91

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE ST. JOHNS ROAD

DATE OF COUNT: 2/10/2026, 16:00-18:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	1	38	27	5	2	4	8	52	7	22	0	0	166
16:05-16:10	1	35	25	0	2	6	8	29	3	27	3	1	140
16:10-16:15	**3**	**40**	**26**	**0**	**0**	**10**	**8**	**75**	**1**	**35**	**3**	**3**	**204**
16:15-16:20	**3**	**43**	**22**	**3**	**1**	**6**	**15**	**71**	**2**	**31**	**4**	**0**	**201**
16:20-16:25	**3**	**38**	**19**	**2**	**0**	**5**	**6**	**59**	**3**	**26**	**0**	**1**	**162**
16:25-16:30	**0**	**40**	**33**	**2**	**1**	**11**	**9**	**55**	**3**	**33**	**1**	**2**	**190**
16:30-16:35	**0**	**46**	**24**	**4**	**1**	**7**	**14**	**59**	**5**	**38**	**1**	**1**	**200**
16:35-16:40	**3**	**37**	**22**	**1**	**1**	**9**	**13**	**57**	**2**	**36**	**0**	**2**	**183**
16:40-16:45	**2**	**44**	**17**	**2**	**3**	**5**	**17**	**68**	**2**	**23**	**0**	**1**	**184**
16:45-16:50	**2**	**29**	**31**	**0**	**0**	**2**	**4**	**59**	**3**	**37**	**2**	**1**	**170**
16:50-16:55	**3**	**48**	**21**	**0**	**0**	**3**	**9**	**59**	**5**	**27**	**0**	**0**	**175**
16:55-17:00	**3**	**42**	**19**	**2**	**1**	**2**	**9**	**54**	**4**	**21**	**0**	**2**	**159**
17:00-17:05	**4**	**35**	**20**	**4**	**4**	**8**	**10**	**61**	**1**	**38**	**3**	**3**	**191**
17:05-17:10	**1**	**37**	**27**	**3**	**3**	**16**	**7**	**62**	**7**	**30**	**0**	**2**	**195**
17:10-17:15	0	19	30	0	0	8	6	64	2	39	0	3	171
17:15-17:20	2	43	31	1	2	5	13	65	1	34	3	1	201
17:20-17:25	0	47	22	4	1	10	8	57	3	33	0	1	186
17:25-17:30	1	21	30	1	1	7	7	55	3	30	1	2	159
17:30-17:35	1	36	22	0	0	4	13	45	2	30	0	1	154
17:35-17:40	1	49	21	4	0	8	3	46	2	27	1	2	164
17:40-17:45	0	37	19	2	0	4	5	39	2	21	1	1	131
17:45-17:50	2	38	20	1	1	5	7	55	3	25	2	0	159
17:50-17:55	0	40	18	0	1	3	6	54	1	30	1	2	156
17:55-18:00	1	41	17	2	0	2	7	60	3	25	0	2	160
Peak Hour Total	**27**	**479**	**281**	**23**	**15**	**84**	**121**	**739**	**38**	**375**	**14**	**18**	**2214**
% Trucks	11	0	0	4	0	4	0	0	5	0	7	6	
Peds	0	0	0	0	1	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:10-17:10

PHF Intersection: 0.98

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 119TH STREET

DATE OF COUNT: 11/18/2025, 07:00-09:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	4	39	3	17	9	6	8	24	18	3	13	6	150
07:05-07:10	7	26	0	34	16	4	0	19	9	2	17	8	142
07:10-07:15	3	46	3	23	9	3	3	20	11	4	12	9	146
07:15-07:20	**3**	**44**	**3**	**23**	**21**	**4**	**6**	**24**	**22**	**2**	**19**	**4**	**175**
07:20-07:25	**7**	**49**	**3**	**29**	**12**	**7**	**3**	**28**	**19**	**2**	**22**	**5**	**186**
07:25-07:30	**9**	**43**	**2**	**41**	**15**	**8**	**4**	**21**	**27**	**1**	**26**	**8**	**205**
07:30-07:35	**6**	**52**	**2**	**30**	**18**	**8**	**6**	**35**	**30**	**4**	**21**	**11**	**223**
07:35-07:40	**8**	**48**	**4**	**16**	**22**	**3**	**4**	**23**	**26**	**1**	**23**	**9**	**187**
07:40-07:45	**11**	**62**	**2**	**26**	**25**	**2**	**2**	**29**	**50**	**1**	**18**	**6**	**234**
07:45-07:50	**7**	**64**	**3**	**25**	**21**	**4**	**8**	**27**	**17**	**3**	**33**	**9**	**221**
07:50-07:55	**7**	**35**	**1**	**51**	**37**	**9**	**4**	**25**	**17**	**4**	**29**	**21**	**240**
07:55-08:00	**8**	**59**	**3**	**32**	**35**	**11**	**3**	**28**	**32**	**1**	**10**	**4**	**226**
08:00-08:05	**1**	**35**	**2**	**37**	**28**	**11**	**13**	**21**	**21**	**7**	**24**	**10**	**210**
08:05-08:10	**5**	**46**	**3**	**22**	**24**	**6**	**4**	**21**	**21**	**1**	**16**	**8**	**177**
08:10-08:15	**8**	**48**	**1**	**24**	**18**	**5**	**7**	**28**	**14**	**4**	**16**	**6**	**179**
08:15-08:20	7	39	4	36	17	6	4	13	21	2	15	4	167
08:20-08:25	10	43	4	19	24	5	3	25	20	2	26	11	192
08:25-08:30	4	49	2	22	29	5	6	29	22	2	19	11	200
08:30-08:35	10	37	5	21	16	4	5	15	21	4	17	10	165
08:35-08:40	4	59	3	22	27	8	8	37	12	3	17	4	204
08:40-08:45	2	37	2	24	21	5	4	21	17	1	18	6	158
08:45-08:50	3	36	1	19	22	6	5	22	19	1	20	9	163
08:50-08:55	1	27	3	20	17	4	6	15	10	2	19	10	134
08:55-09:00	5	31	3	22	20	5	5	21	22	2	16	8	160
Peak Hour Total	**80**	**585**	**29**	**356**	**276**	**78**	**64**	**310**	**296**	**31**	**257**	**101**	**2463**
% Trucks	5	1	0	1	0	0	0	1	0	0	1	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:15-08:15

PHF Intersection: 0.89

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 119TH STREET

DATE OF COUNT: 11/19/2025, 16:00-18:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	**8**	**30**	**0**	**13**	**9**	**7**	**10**	**60**	**43**	**6**	**30**	**7**	**223**
16:05-16:10	**9**	**36**	**0**	**22**	**33**	**11**	**15**	**34**	**35**	**4**	**22**	**8**	**229**
16:10-16:15	**8**	**38**	**1**	**11**	**24**	**8**	**4**	**57**	**38**	**1**	**22**	**4**	**216**
16:15-16:20	**8**	**24**	**5**	**25**	**28**	**7**	**2**	**43**	**40**	**7**	**30**	**9**	**228**
16:25-16:30	**3**	**19**	**5**	**36**	**30**	**10**	**5**	**33**	**29**	**8**	**39**	**8**	**225**
16:20-16:25	**19**	**31**	**3**	**10**	**15**	**7**	**7**	**49**	**58**	**3**	**22**	**8**	**232**
16:30-16:35	**18**	**28**	**5**	**26**	**11**	**5**	**13**	**53**	**57**	**6**	**17**	**7**	**246**
16:35-16:40	**11**	**35**	**3**	**9**	**20**	**8**	**9**	**45**	**39**	**2**	**25**	**11**	**217**
16:40-16:45	**11**	**30**	**3**	**23**	**25**	**9**	**6**	**44**	**46**	**9**	**24**	**7**	**237**
16:45-16:50	**1**	**39**	**8**	**13**	**29**	**14**	**6**	**48**	**43**	**5**	**24**	**7**	**237**
16:50-16:55	**12**	**29**	**4**	**18**	**18**	**7**	**5**	**58**	**44**	**0**	**17**	**12**	**224**
16:55-17:00	**13**	**31**	**2**	**16**	**15**	**12**	**9**	**53**	**30**	**0**	**22**	**6**	**209**
17:00-17:05	7	29	2	13	12	4	17	45	33	6	27	8	203
17:05-17:10	6	32	4	11	9	11	9	48	52	5	19	8	214
17:10-17:15	7	35	2	19	17	10	12	37	53	1	22	5	220
17:15-17:20	6	37	1	18	19	6	9	45	33	3	27	5	209
17:20-17:25	7	30	1	28	20	13	10	33	33	7	34	5	221
17:25-17:30	5	25	2	34	31	8	6	58	39	4	21	5	238
17:30-17:35	10	42	3	25	10	4	10	35	50	2	25	2	218
17:35-17:40	5	44	2	15	13	3	8	59	25	6	22	13	215
17:40-17:45	6	25	2	9	10	9	7	48	29	0	19	7	171
17:45-17:50	7	31	3	11	8	8	5	43	31	3	20	8	178
17:50-17:55	3	20	3	12	9	7	6	37	27	4	18	4	150
17:55-18:00	4	22	1	9	15	6	10	34	30	2	23	9	165
Peak Hour Total	**121**	**370**	**39**	**222**	**257**	**105**	**91**	**577**	**502**	**51**	**294**	**94**	**2723**
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:00-17:00

PHF Intersection: 0.97

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 123RD STREET

DATE OF COUNT: 2/11/2026, 07:00-09:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	0	46	0	0	0	0	0	18	0	0	0	0	64
07:05-07:10	0	47	0	0	0	0	0	18	0	1	0	2	68
07:10-07:15	0	56	0	0	0	0	0	18	0	0	0	0	74
07:15-07:20	0	63	0	0	0	0	0	33	0	0	0	1	97
07:20-07:25	0	49	0	0	0	0	3	25	0	0	0	5	82
07:25-07:30	0	49	0	0	0	0	1	51	0	1	0	1	103
07:30-07:35	0	51	0	0	0	0	1	29	0	0	0	2	83
07:35-07:40	0	62	0	0	0	0	1	30	0	1	0	3	97
07:40-07:45	**0**	**60**	**0**	**0**	**0**	**0**	**1**	**44**	**0**	**0**	**0**	**5**	**110**
07:45-07:50	**0**	**81**	**1**	**0**	**0**	**0**	**2**	**37**	**0**	**0**	**0**	**4**	**125**
07:50-07:55	**0**	**66**	**0**	**0**	**0**	**0**	**4**	**45**	**0**	**0**	**0**	**3**	**118**
07:55-08:00	**0**	**58**	**1**	**0**	**0**	**0**	**2**	**40**	**0**	**0**	**0**	**1**	**102**
08:00-08:05	**0**	**49**	**0**	**0**	**0**	**0**	**0**	**37**	**0**	**1**	**0**	**5**	**92**
08:05-08:10	**0**	**53**	**0**	**0**	**0**	**0**	**2**	**27**	**0**	**0**	**0**	**2**	**84**
08:10-08:15	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**33**	**0**	**0**	**0**	**2**	**90**
08:15-08:20	**0**	**55**	**0**	**0**	**0**	**0**	**1**	**25**	**0**	**0**	**0**	**3**	**84**
08:20-08:25	**0**	**59**	**0**	**0**	**0**	**0**	**2**	**39**	**0**	**0**	**0**	**1**	**101**
08:25-08:30	**0**	**50**	**1**	**0**	**0**	**0**	**2**	**30**	**0**	**0**	**0**	**0**	**83**
08:30-08:35	**0**	**69**	**0**	**0**	**0**	**0**	**3**	**21**	**0**	**0**	**0**	**2**	**95**
08:35-08:40	**0**	**61**	**0**	**0**	**0**	**0**	**2**	**44**	**0**	**0**	**0**	**2**	**109**
08:40-08:45	0	51	0	0	0	0	1	27	0	0	0	1	80
08:45-08:50	0	52	0	0	0	0	1	22	0	1	0	1	77
08:50-08:55	0	49	0	0	0	0	0	23	0	0	0	0	72
08:55-09:00	0	48	0	0	0	0	2	30	0	0	0	2	82
Peak Hour Total	**0**	**716**	**3**	**0**	**0**	**0**	**21**	**422**	**0**	**1**	**0**	**30**	**1193**
% Trucks	0	1	33	0	0	0	0	1	0	0	0	3	
Peds	0	1	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:40-08:40

PHF Intersection: 0.84

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 123RD STREET

DATE OF COUNT: 2/17/2026, 16:00-18:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	0	49	1	0	0	0	4	52	0	0	0	3	109
16:05-16:10	0	72	0	0	0	0	1	51	0	0	0	2	126
16:10-16:15	0	29	0	0	0	0	4	44	0	0	0	2	79
16:15-16:20	**0**	**53**	**1**	**0**	**0**	**0**	**3**	**71**	**0**	**0**	**0**	**2**	**130**
16:20-16:25	**0**	**54**	**2**	**0**	**0**	**0**	**1**	**55**	**0**	**0**	**0**	**2**	**114**
16:25-16:30	**0**	**51**	**0**	**0**	**0**	**0**	**1**	**50**	**0**	**0**	**0**	**2**	**104**
16:30-16:35	**0**	**54**	**0**	**0**	**0**	**0**	**1**	**51**	**0**	**1**	**0**	**0**	**107**
16:35-16:40	**0**	**70**	**0**	**0**	**0**	**0**	**4**	**40**	**0**	**1**	**0**	**1**	**116**
16:40-16:45	**0**	**53**	**2**	**0**	**0**	**0**	**3**	**78**	**0**	**0**	**0**	**2**	**138**
16:45-16:50	**0**	**68**	**0**	**0**	**0**	**0**	**3**	**42**	**0**	**1**	**0**	**1**	**115**
16:50-16:55	**0**	**42**	**0**	**0**	**0**	**0**	**4**	**63**	**0**	**0**	**0**	**1**	**110**
16:55-17:00	**0**	**50**	**0**	**0**	**0**	**0**	**2**	**63**	**0**	**1**	**0**	**1**	**117**
17:00-17:05	**0**	**57**	**0**	**0**	**0**	**0**	**0**	**50**	**0**	**0**	**0**	**3**	**110**
17:05-17:10	**0**	**41**	**0**	**0**	**0**	**0**	**0**	**64**	**0**	**1**	**0**	**1**	**107**
17:10-17:15	**0**	**66**	**0**	**0**	**0**	**0**	**3**	**65**	**0**	**0**	**0**	**2**	**136**
17:15-17:20	0	56	0	0	0	0	1	65	0	0	0	2	124
17:20-17:25	0	37	1	0	0	0	0	55	0	0	0	0	93
17:25-17:30	0	49	0	0	0	0	3	67	0	0	0	0	119
17:30-17:35	0	58	0	0	0	0	1	70	0	0	0	4	133
17:35-17:40	0	53	0	0	0	0	1	60	0	0	0	2	116
17:40-17:45	0	41	0	0	0	0	0	45	0	0	0	0	86
17:45-17:50	0	48	1	0	0	0	2	48	0	0	0	1	100
17:50-17:55	0	43	0	0	0	0	1	51	0	0	0	2	97
17:55-18:00	0	28	0	0	0	0	2	49	0	0	0	0	79
Peak Hour Total	**0**	**659**	**5**	**0**	**0**	**0**	**25**	**692**	**0**	**5**	**0**	**18**	**1404**
% Trucks	0	1	0	0	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:15-17:15

PHF Intersection: 0.95

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 134TH STREET

DATE OF COUNT: 2/18/2026, 07:00-09:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: DSK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	0	42	0	0	0	0	0	18	0	0	0	3	72
07:05-07:10	0	40	0	0	0	0	0	15	0	0	0	6	61
07:10-07:15	0	41	0	0	0	0	1	16	0	0	0	4	62
07:15-07:20	0	48	0	0	0	0	1	30	0	1	0	4	84
07:20-07:25	0	38	0	0	0	0	0	15	0	1	0	1	55
07:25-07:30	0	50	0	0	0	0	0	25	0	0	0	5	80
07:30-07:35	**0**	**52**	**0**	**0**	**0**	**0**	**1**	**33**	**0**	**4**	**0**	**3**	**93**
07:35-07:40	**0**	**53**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**0**	**2**	**79**
07:40-07:45	**0**	**59**	**1**	**0**	**0**	**0**	**3**	**32**	**0**	**2**	**0**	**6**	**103**
07:45-07:50	**0**	**62**	**0**	**0**	**0**	**0**	**1**	**21**	**0**	**2**	**0**	**2**	**88**
07:50-07:55	**0**	**60**	**1**	**0**	**0**	**0**	**0**	**27**	**0**	**2**	**0**	**5**	**95**
07:55-08:00	**0**	**50**	**1**	**0**	**0**	**0**	**1**	**36**	**0**	**0**	**0**	**1**	**89**
08:00-08:05	**0**	**40**	**0**	**0**	**0**	**0**	**3**	**35**	**0**	**1**	**0**	**3**	**82**
08:05-08:10	**0**	**33**	**2**	**0**	**0**	**0**	**0**	**44**	**0**	**0**	**0**	**5**	**84**
08:10-08:15	**0**	**49**	**1**	**0**	**0**	**0**	**1**	**20**	**0**	**0**	**0**	**6**	**77**
08:15-08:20	**0**	**33**	**2**	**0**	**0**	**0**	**1**	**35**	**0**	**0**	**0**	**3**	**74**
08:20-08:25	**0**	**72**	**1**	**0**	**0**	**0**	**2**	**30**	**0**	**1**	**0**	**3**	**109**
08:25-08:30	**0**	**55**	**0**	**0**	**0**	**0**	**3**	**22**	**0**	**0**	**0**	**6**	**86**
08:30-08:35	0	43	0	0	0	0	1	20	0	0	0	6	70
08:35-08:40	0	35	1	0	0	0	3	28	0	0	0	10	77
08:40-08:45	0	33	0	0	0	0	0	22	0	0	0	4	59
08:45-08:50	0	45	0	0	0	0	2	17	0	0	0	3	67
08:50-08:55	0	50	0	0	0	0	0	19	0	1	0	2	72
08:55-09:00	0	39	0	0	0	0	1	21	0	0	0	4	65
Peak Hour Total	**0**	**618**	**9**	**0**	**0**	**0**	**16**	**359**	**0**	**12**	**0**	**45**	**1059**
% Trucks	0	0	0	0	0	0	0	1	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:30-08:30
PHF Intersection: 0.93

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 134TH STREET

DATE OF COUNT: 2/12/2026, 16:00-18:00
DAY OF WEEK: THUR.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	0	35	0	0	0	0	2	51	0	1	0	3	92
16:05-16:10	**0**	**56**	**2**	**0**	**0**	**0**	**2**	**46**	**0**	**1**	**0**	**3**	**110**
16:10-16:15	**0**	**55**	**2**	**0**	**0**	**0**	**4**	**59**	**0**	**0**	**0**	**4**	**124**
16:15-16:20	**0**	**36**	**1**	**0**	**0**	**0**	**1**	**48**	**0**	**0**	**0**	**4**	**90**
16:20-16:25	**0**	**37**	**1**	**0**	**0**	**0**	**1**	**55**	**0**	**1**	**0**	**5**	**100**
16:25-16:30	**0**	**37**	**1**	**0**	**0**	**0**	**1**	**58**	**0**	**1**	**0**	**0**	**98**
16:30-16:35	**0**	**35**	**1**	**0**	**0**	**0**	**2**	**31**	**0**	**2**	**0**	**6**	**77**
16:35-16:40	**0**	**34**	**0**	**0**	**0**	**0**	**4**	**47**	**0**	**0**	**0**	**3**	**88**
16:40-16:45	**0**	**58**	**0**	**0**	**0**	**0**	**3**	**53**	**0**	**1**	**0**	**6**	**121**
16:45-16:50	**0**	**39**	**0**	**0**	**0**	**0**	**5**	**43**	**0**	**1**	**0**	**5**	**93**
16:50-16:55	**0**	**38**	**1**	**0**	**0**	**0**	**3**	**41**	**0**	**0**	**0**	**4**	**87**
16:55-17:00	**0**	**34**	**1**	**0**	**0**	**0**	**2**	**53**	**0**	**0**	**0**	**0**	**90**
17:00-17:05	**0**	**45**	**1**	**0**	**0**	**0**	**4**	**45**	**0**	**0**	**0**	**3**	**98**
17:05-17:10	0	32	2	0	0	0	7	43	0	0	0	6	90
17:10-17:15	0	33	0	0	0	0	2	42	0	1	0	1	79
17:15-17:20	0	49	0	0	0	0	6	51	0	0	0	1	107
17:20-17:25	0	50	0	0	0	0	1	43	0	0	0	1	95
17:25-17:30	0	33	1	0	0	0	8	54	0	0	0	3	99
17:30-17:35	0	48	0	0	0	0	3	48	0	0	0	3	102
17:35-17:40	0	26	1	0	0	0	7	43	0	0	0	1	78
17:40-17:45	0	45	0	0	0	0	5	35	0	0	0	4	89
17:45-17:50	0	34	0	0	0	0	2	39	0	1	0	3	79
17:50-17:55	0	35	1	0	0	0	2	42	0	0	0	2	82
17:55-18:00	0	37	1	0	0	0	3	41	0	0	0	1	83
Peak Hour Total	**0**	**504**	**11**	**0**	**0**	**0**	**32**	**579**	**0**	**7**	**0**	**43**	**1176**
% Trucks	0	0	9	0	0	0	0	0	0	0	0	5	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	2	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 16:05-17:05

PHF Intersection: 0.91

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & 139TH STREET

DATE OF COUNT: 11/11/2025, 07:00-09:00
DAY OF WEEK: TUE.
WEATHER: CLOUDY
COUNTER: LW

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
07:00-07:05	3	56	0	2	0	1	3	13	0	0	0	0	78
07:05-07:10	2	37	1	1	0	0	3	18	0	1	1	1	65
07:10-07:15	0	51	1	0	0	2	2	23	1	1	1	1	83
07:15-07:20	1	50	0	2	1	1	3	16	0	1	0	2	77
07:20-07:25	6	39	1	1	2	2	0	30	0	1	2	0	84
07:25-07:30	**3**	**50**	**1**	**2**	**0**	**3**	**0**	**37**	**1**	**2**	**0**	**1**	**100**
07:30-07:35	**5**	**40**	**1**	**1**	**0**	**1**	**0**	**26**	**1**	**3**	**0**	**1**	**79**
07:35-07:40	**12**	**54**	**0**	**0**	**1**	**2**	**2**	**31**	**1**	**0**	**3**	**4**	**110**
07:40-07:45	**4**	**69**	**0**	**0**	**1**	**2**	**2**	**24**	**0**	**1**	**1**	**2**	**106**
07:45-07:50	**0**	**62**	**3**	**1**	**0**	**5**	**5**	**19**	**2**	**1**	**2**	**2**	**102**
07:50-07:55	**7**	**49**	**0**	**0**	**0**	**1**	**1**	**35**	**3**	**0**	**1**	**1**	**98**
07:55-08:00	**2**	**43**	**3**	**1**	**0**	**10**	**0**	**21**	**0**	**2**	**1**	**1**	**84**
08:00-08:05	**0**	**38**	**0**	**2**	**3**	**5**	**9**	**41**	**1**	**1**	**0**	**0**	**100**
08:05-08:10	**4**	**29**	**0**	**1**	**1**	**3**	**1**	**28**	**0**	**3**	**0**	**0**	**70**
08:10-08:15	**2**	**47**	**1**	**2**	**0**	**6**	**1**	**26**	**0**	**0**	**1**	**1**	**87**
08:15-08:20	**7**	**50**	**1**	**0**	**0**	**1**	**0**	**24**	**0**	**2**	**1**	**1**	**87**
08:20-08:25	**4**	**56**	**0**	**0**	**0**	**1**	**4**	**25**	**0**	**1**	**0**	**0**	**91**
08:25-08:30	4	48	1	0	2	1	0	18	0	0	0	0	74
08:30-08:35	2	47	0	0	2	1	1	32	0	1	0	0	86
08:35-08:40	3	38	0	0	1	1	2	19	0	0	1	1	66
08:40-08:45	4	29	1	0	0	2	0	21	0	1	0	1	59
08:45-08:50	3	30	0	0	0	0	0	22	0	2	0	0	57
08:50-08:55	0	37	0	1	0	1	2	17	2	1	1	1	63
08:55-09:00	3	40	0	0	1	2	0	19	0	0	1	0	66
Peak Hour Total	**50**	**587**	**10**	**10**	**6**	**40**	**25**	**337**	**9**	**16**	**10**	**14**	**1114**
% Trucks	0	2	10	10	0	0	0	0	0	0	0	0	
Peds	0	0	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	0	0	0	0	0	

PEAK HOUR: 07:25-08:25

PHF Intersection: 0.88

KELLY ENGINEERING

INTERSECTION TURN MOVEMENT SURVEY
NE 72ND AVENUE & NE 139TH STREET

DATE OF COUNT: 11/12/2025, 16:00-18:00
DAY OF WEEK: WED.
WEATHER: CLOUDY
COUNTER: KAK

Time Period From – To	FROM NORTH			FROM EAST			FROM SOUTH			FROM WEST			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
16:00-16:05	0	21	0	1	1	10	2	42	1	1	0	5	84
16:05-16:10	**2**	**43**	**2**	**1**	**3**	**8**	**2**	**61**	**0**	**0**	**2**	**3**	**127**
16:10-16:15	**1**	**46**	**0**	**1**	**2**	**6**	**2**	**50**	**1**	**0**	**1**	**2**	**112**
16:15-16:20	**2**	**36**	**2**	**0**	**3**	**8**	**4**	**57**	**1**	**1**	**2**	**3**	**119**
16:20-16:25	**3**	**32**	**1**	**0**	**0**	**0**	**1**	**44**	**1**	**0**	**0**	**2**	**84**
16:25-16:30	**2**	**47**	**1**	**0**	**0**	**0**	**2**	**46**	**0**	**0**	**1**	**2**	**101**
16:30-16:35	**4**	**38**	**1**	**0**	**0**	**3**	**2**	**46**	**2**	**1**	**2**	**1**	**100**
16:35-16:40	**0**	**29**	**0**	**0**	**6**	**2**	**1**	**61**	**2**	**1**	**2**	**0**	**104**
16:40-16:45	**3**	**54**	**1**	**0**	**2**	**2**	**1**	**42**	**0**	**5**	**1**	**0**	**111**
16:45-16:50	**0**	**35**	**0**	**4**	**1**	**5**	**0**	**38**	**0**	**0**	**4**	**0**	**87**
16:50-16:55	**2**	**56**	**2**	**1**	**1**	**5**	**4**	**49**	**0**	**0**	**0**	**3**	**123**
16:55-17:00	**3**	**39**	**1**	**1**	**2**	**2**	**1**	**43**	**0**	**1**	**3**	**0**	**96**
17:00-17:05	**2**	**35**	**1**	**0**	**1**	**5**	**3**	**48**	**0**	**1**	**1**	**3**	**100**
17:05-17:10	3	34	1	1	1	6	1	41	0	0	0	0	88
17:10-17:15	4	35	1	1	1	2	1	53	0	1	0	4	103
17:15-17:20	1	55	1	1	2	4	3	38	0	0	1	0	106
17:20-17:25	3	43	2	0	1	2	2	46	0	0	0	2	101
17:25-17:30	2	29	0	3	0	2	1	38	4	0	0	1	80
17:30-17:35	3	33	1	0	0	1	3	53	1	0	0	1	96
17:35-17:40	1	25	0	1	0	1	2	53	0	2	0	0	85
17:40-17:45	0	21	1	2	0	2	2	42	0	2	1	1	74
17:45-17:50	2	27	0	1	0	0	1	43	1	0	0	0	75
17:50-17:55	1	22	0	0	0	2	0	38	0	0	0	1	64
17:55-18:00	1	38	1	0	0	1	1	39	0	0	2	2	85
Peak Hour Total	**24**	**490**	**12**	**8**	**21**	**46**	**23**	**585**	**7**	**10**	**19**	**19**	**1264**
% Trucks	0	4	0	0	0	0	0	0	0	0	0	0	
Peds	0	2	0	0	0	0	0	0	0	0	0	0	
Bikes	0	0	0	0	0	0	0	1	0	0	0	0	

PEAK HOUR: 16:05-17:05

PHF Intersection: 0.88

KELLY ENGINEERING

APPENDIX B
TRAFFIC SIGNAL WARRANTS REPORT

HCS Warrants Report

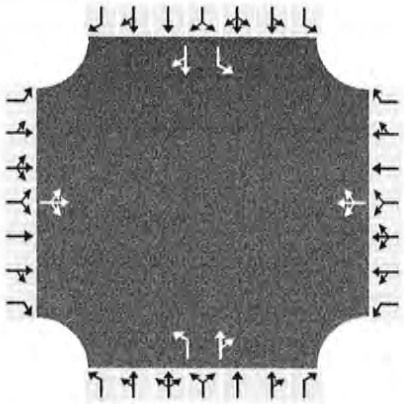
Project Information

Analyst	DSK	Date	11/27/2025
Agency	Kelly Engineering	Analysis Year	2029
Jurisdiction	Clark Co.	Time Period Analyzed	PM Peak Hour
Units	U.S. Customary	MUTCD Method	MUTCD 11 (2023)
Project Description	NE 72nd Ave. & NE 139th St. (Year 2029 with Project)		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	5:00	Coordinated Signal System	No
Major Street Speed (mi/h)	40	Nearest Signal (ft)	2000
Adequate Trials of Crash Exp. Alt.	No		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	0	1	0	1	1	0	1	1	0
Lane Usage		LTR			LTR		L	TR		L	TR	
Vehicle Volumes Averages (veh/h)	0	1	1	0	1	4	2	52	0	2	44	1
Pedestrian median refuge available	No			No			No			No		
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay Averages (s/veh)	0.0			0.0			0.0			0.0		
Delay Averages (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)	-	Tractor-Trailer Trucks (%)	0

Volume Summary

Hours	Major Volume (veh/h)	Minor Volume (veh/h)	Total Volume (veh/h)	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (80%)	4A (70%)	4B (70%)
5:00 - 6:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
6:00 - 7:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
7:00 - 8:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
8:00 - 9:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
9:00 - 10:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
10:00 - 11:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
11:00 - 12:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
12:00 - 13:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
13:00 - 14:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
14:00 - 15:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
15:00 - 16:00	0	0	0	0	0	No	No	No	No	No	No	No	No	No
16:00 - 17:00	1230	79	1360	0	0	No	No	Yes	Yes	No	No	No	No	No
Total	1230	79	1360	0	0	0	0	1	1	0	0	0	0	0

Pedestrian Volume

15th % pedestrian speed < 3.5 ft/s		Pedestrian refuge present?	NB		SB	

Hours	Major Street Vehicular Volume (veh/h)			Major Street Pedestrian Volume (ped/h)			4A (70%)	4B (70%)
	NB	SB	Total	NB	SB	Total		
5:00 - 6:00	0	0	0	0	0	0	No	No
6:00 - 7:00	0	0	0	0	0	0	No	No
7:00 - 8:00	0	0	0	0	0	0	No	No
8:00 - 9:00	0	0	0	0	0	0	No	No
9:00 - 10:00	0	0	0	0	0	0	No	No
10:00 - 11:00	0	0	0	0	0	0	No	No
11:00 - 12:00	0	0	0	0	0	0	No	No
12:00 - 13:00	0	0	0	0	0	0	No	No
13:00 - 14:00	0	0	0	0	0	0	No	No
14:00 - 15:00	0	0	0	0	0	0	No	No
15:00 - 16:00	0	0	0	0	0	0	No	No
16:00 - 17:00	659	571	1230	0	0	0	No	No
Totals	659	571	1230	0	0	0	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- more critical minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- more critical minor approach) --or--	
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 2: Four-Hour Vehicular Volume	
Four-Hour Vehicular Volume (Both major approaches --and-- more critical minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	

B. Peak-Hour Vehicular Volumes (Both major approaches --and-- more critical minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. Peak-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported Crash History --and--	✓
B1. Angle Crashes and Pedestrian Crashes within a 1-year Period (All Severities)	
B2. Angle Crashes and Pedestrian Crashes within a 1-year Period (Fatal-and-Injury)	
B3. Angle Crashes and Pedestrian Crashes within a 3-year Period (All Severities)	✓
B4. Angle Crashes and Pedestrian Crashes within a 3-year Period (Fatal-and-Injury)	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

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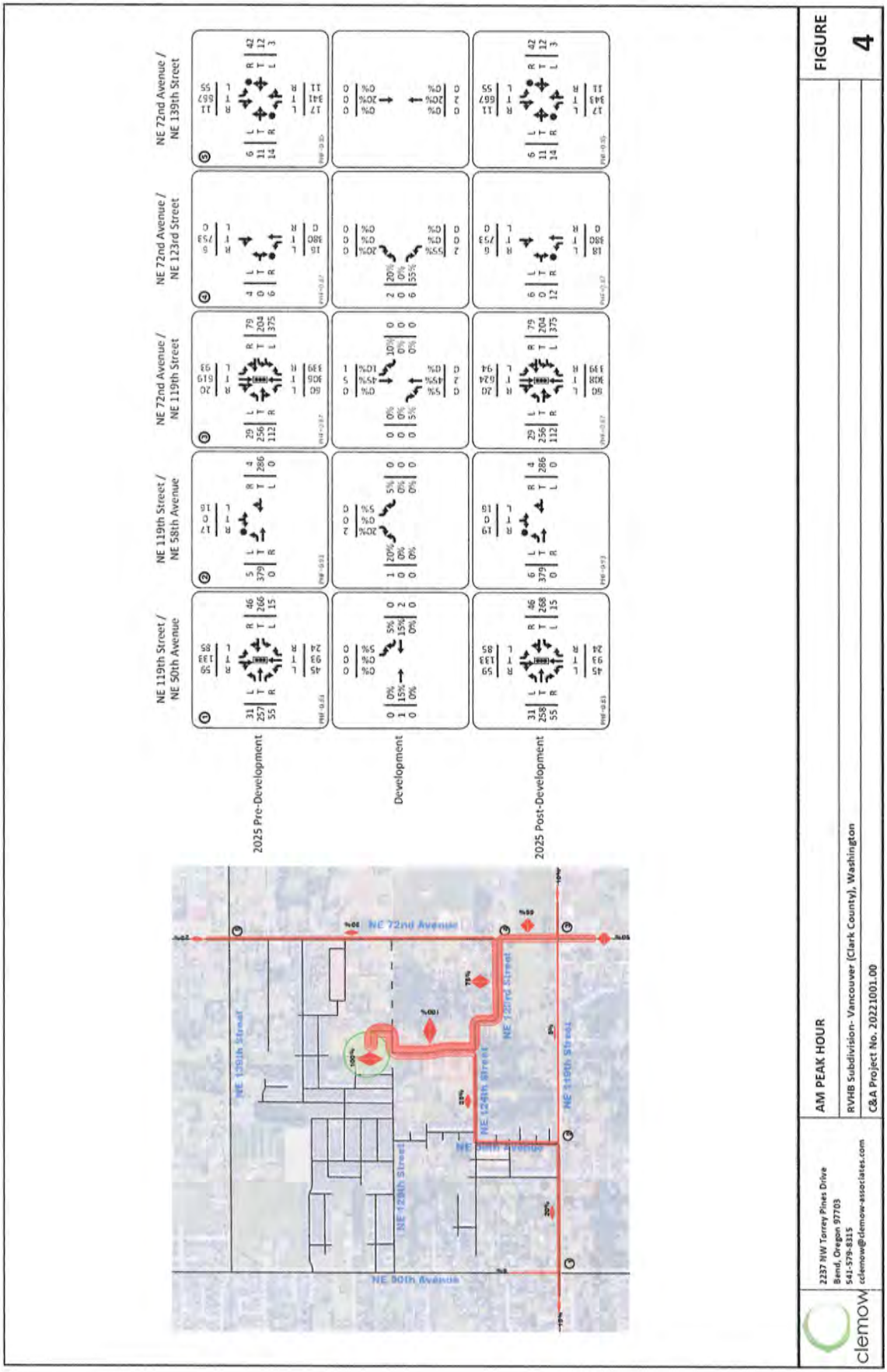
APPENDIX C
IN-PROCESS TRAFFIC


NE 119th Street / NE 50th Avenue
NE 119th Street / NE 58th Avenue
NE 72nd Avenue / NE 119th Street
NE 72nd Avenue / NE 123rd Street
NE 72nd Avenue / NE 139th Street
2025 Pre-Development
Development
2025 Post-Development
NE 72nd Avenue
NE 125th Street
NE 124th Street
NE 119th Street
NE 129th Street
NE 90th Avenue
FIGURE
4
AM PEAK HOUR
RVHB Subdivision- Vancouver (Clark County), Washington
C&A Project No. 20221001.00
clemow
2237 NW Torrey Pines Drive
Bend, Oregon 97703
541-579-8315
cclemow@clemow-associates.com


NE 119th Street / NE 50th Avenue
NE 119th Street / NE 58th Avenue
NE 72nd Avenue / NE 119th Street
NE 72nd Avenue / NE 123rd Street
NE 72nd Avenue / NE 139th Street
2025 Pre-Development
Development
2025 Post-Development
NE 72nd Avenue
NE 123rd Street
NE 124th Street
NE 119th Street
NE 129th Street
NE 50th Avenue
PM PEAK HOUR
RVHB Subdivision- Vancouver (Clark County), Washington
C&A Project No. 20221001.00
FIGURE
5
2237 NW Torrey Pines Drive
Bend, Oregon 97703
541-579-8315
cclemow@clemow-associates.com

Lancaster mobley

SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

AM & PM Peak Hours

11/25/2024

LOTI Apartments

Figure 3

LEGEND

XX% PERCENT OF PROJECT TRIPS

NET NEW TRIP GENERATION			
	IN	OUT	TOTAL
AM	5	13	18
PM	14	9	23

No Scale

PM PEAK HOUR

AM PEAK HOUR

mobley
lancaster
SITE TRIP DISTRIBUTION & ASSIGNMENT
Proposed Development Plan - Site Trips
AM & PM Peak Hours
Figure 3
Jailen's Pointe Apartments
1/24/2023
No. Scale
AM PEAK HOUR
PM PEAK HOUR
NE 87th Avenue
NE 72nd Avenue
NE 105th Street
NE 119th Street
NE 126th Street
NE 139th Street
NE St Johns Road
Interstate 205
1% Trip Origins/Ends
2% Trip Origins/Ends
12%
45%
17%
28%
9%
TOWEST TRIPS
RATIOW
TOTAL
39
39

lancaster mobley

SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips

AM & PM Peak Hours

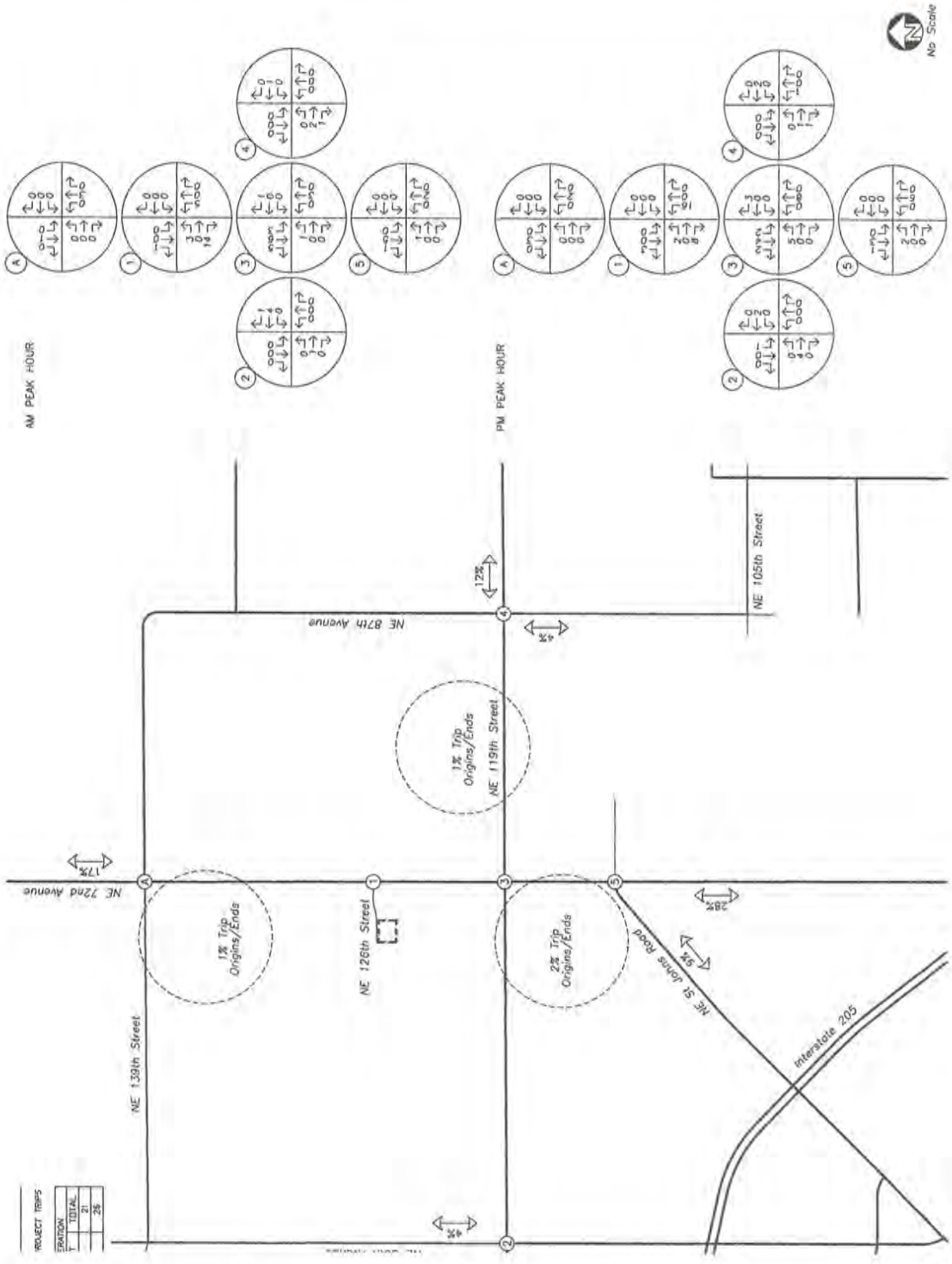
Figure 3

Leilani Pointe Apartments

7/29/2024

Figure 3
Jailen's Pointe Apartments Phase 2
9/5/2023

SITE TRIP DISTRIBUTION & ASSIGNMENT
Proposed Development Plan - Site Trips
AM & PM Peak Hours



APPENDIX D
COLLISION DATA

WSDOT <wsdot@mycusthelp.net> 12/16/2025 12:06 PM

[Records Center] Public Disclosure Request :: P019329-121125

To Kellyengineer@comcast.net <kellyengineer@comcast.net>

Washington State Department of Transportation

RE: Public Disclosure Request of December 11, 2025, Reference #P019329-121125

Dear David Kelly,

In accordance with the Public Records Act (RCW 42.56), this letter acknowledges receipt of your request for records Reference # P019329-121125 dated December 11, 2025, concerning:

I need accident data at 3 intersections in Clark County for a traffic study I am conducting. The 3 intersections are:

1. Saint Johns Road & NE 72nd Avenue
2. NE 123rd Street & NE 72nd Avenue
3. NE 134th Street & NE 72nd Avenue

Thanks,
David Kelly, P.E.
Transportation Engineer
Phone: 360-433-7530

The records have been released to our online Public Disclosure Request Center. You can log into the system to download your responsive records.

This production of records is a complete response to your request. Your request has been fulfilled by the production of records (including any exemptions claimed) and is now closed.

If any of the records released to you contain redactions, please review the summary on the final page of the released record. Pursuant to RCW 42.56.520 and WAC 468-06-080, you may submit a written petition for administrative review of this decision within 10 business days.

This is our final response. WSDOT does not intend to further address the request, and the PRA's one-year statute of limitations to seek judicial review has started to run as of the date of this correspondence.

Please contact me within 30 days by replying to this communication within the Public Records Request portal if you have any questions.

Thank you,

Dawn Roberts
Public Disclosure Coordinator
Washington Department of Transportation

OFFICER REPORTED CRASHES THAT OCCURRED AT THE FOLLOWING INTERSECTIONS IN CLARK COUNTY

123rd St (Co Rd # 44100, mp 0.000 - 0.020) @ 72nd Ave (Co Rd # 91250, mp 3.420 - 3.460) - *No Reported Crashes*

134th St(Co Rd # 44281, mp 0.000 - 0.020) @ 72nd Ave (Co Rd # 91250, mp 4.010 - 4.050) - *No Reported Crashes*

St Johns Rd (Co Rd # 91250, mp 2.910 - 2.930) / 113th St (Co Rd # 21762, mp 0.000 - 0.020) @ 72nd Ave (Co Rd # 92190, mp 7.010 - 7.050)

10/18/2022 - 10/18/2025

Under 23 U.S. Code § 148 and 23 U.S. Code § 407, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	CO ONLY COUNTY ROAD NAME	PRIMARY TRAFFICWAY	MILEPOST	A / B	BLOCK NUMBER	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MP	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME
County Road	Clark		NE 72ND AVE	91250	2.930			92190	7.030				
County Road	Clark		NE ST JOHNS RD	91250	2.930								
County Road	Clark		NE 72ND AVE										
County Road	Clark		NE 72ND AVE										

SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE
No	EF48831	12/18/2024	08:33	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED43203	02/24/2023	15:38	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EG34674	09/27/2025	19:40	No Apparent Injury	0	0	2	0	0	Passenger Car
No	EG45650	10/01/2025	22:40	Suspected Minor Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb

VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION
Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Wet
Passenger Car	Intersection Related but Not at Intersection	Clear	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry
Passenger Car	At Intersection and Related	Overcast	Wet

LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION
Daylight	Entering at angle	Making Left Turn	Making Left Turn
Daylight	From same direction - both going straight - one stopped - sideswipe	Stopped for Traffic	Changing Lanes
Dark-Street Lights On	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead
Dark-Street Lights On	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead

VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)
West	North	North	East	Disregard Traffic Sign and Signals	None
Vehicle Stopped	Vehicle Stopped	Southwest	Northeast	None	Did Not Grant RW to Vehicle
South	West	North	South	Did Not Grant RW to Vehicle	None
South	West	North	South	Did Not Grant RW to Vehicle	None

FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH - X 2010 - FORWARD	WA STATE PLANE SOUTH - Y 2010 - FORWARD
Lane of Primary Trafficway	1104089.52	142038.83
Lane of Primary Trafficway	1103883.62	141975.81
Lane of Primary Trafficway	1104052.74	142039.81
Lane of Primary Trafficway	1104089.52	142038.83

COUNTY ROAD INTERSECTIONS

119th St (Co Rd # 94100, mp 1.030 – 1.070) @ 50th Ave (Co Rd # 44150, mp 0.000 – 0.020 – North Leg & Co Rd # 19730, mp 1.220 – 1.240 – South Leg)

119th St (Co Rd # 94100, mp 2.060 – 2.100) @ 72nd Ave (Co Rd # 91250, mp 3.240 – 3.280)

130th St (Co Rd # 19841, mp 0.000 – 0.020) @ 50th Ave (Co Rd # 44150, mp 0.540 – 0.580)

139th St (Co Rd # 44154, mp 0.370 – 0.390 – West Leg & Co Rd # 44280, mp 0.980 – 1.00 – East Leg) @ 50th Ave (Co Rd # 44150, mp 0.980 – 1.020) – *No Reported Crashes*

139th St (Co Rd # 44280, mp 0.000 – 0.020 – West Leg & Co Rd # 50010, mp 1.730 – 1.750 – East Leg) @ 72nd Ave (Co Rd # 91250, mp 4.250 – 4.290)

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

9/29/2022 - 9/29/2025 *See 2nd tab below for road info*

Under 23 U.S. Code § 148 and 23 U.S. Code § 407, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	CO ONLY COUNTY ROAD NAME	PRIMARY TRAFFICWAY	MILEPOST	A / B	BLOCK NUMBER	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME
County Road	Clark		NE 50TH AVE	44150	0.000			94100	1.050				
County Road	Clark		NE 72ND AVE	91250	3.240								
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	3.260			94100	2.080				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 139TH ST	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			44280	0.000				
County Road	Clark		NE 72ND AVE	91250	4.270			50010	1.750				
County Road	Clark		NE 72ND AVE	91250	4.270			50010	1.750				
County Road	Clark		NE 119TH ST	94100	1.050			19730	1.240				
County Road	Clark		NE 119TH ST	94100	1.050			19730	1.240				
County Road	Clark		NE 119TH ST	94100	2.080			91250	3.260				
County Road	Clark		NE 72ND AVE										
County Road	Clark		NE 72ND AVE										
County Road	Clark		NE 50TH AVE										

SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE
No	ED23001	01/07/2023	09:26	Possible Injury	3	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED89220	04/18/2023	18:29	No Apparent Injury	0	0	2	0	0	Passenger Car
No	EF24779	09/22/2024	14:42	No Apparent Injury	0	0	4	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE09177	09/23/2023	12:32	Unknown	0	0	1	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE04322	09/08/2023	17:33	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED19308	12/21/2022	17:02	Possible Injury	2	0	3	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE64853	04/01/2024	14:39	Possible Injury	2	0	2	0	0	Passenger Car
No	EE14003	10/28/2023	00:11	Suspected Minor Injury	1	0	4	0	0	Passenger Car
No	EE81771	09/05/2023	18:36	Possible Injury	2	0	2	0	0	Passenger Car
No	ED70297	05/27/2023	10:33	Suspected Serious Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE69538	04/18/2024	12:45	Suspected Minor Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED94488	08/30/2023	08:00	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EE22211	11/18/2023	17:00	No Apparent Injury	0	0	2	0	0	Passenger Car
No	EE45021	01/10/2024	07:42	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EF24817	09/28/2024	23:55	Suspected Minor Injury	2	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	ED20087	12/27/2022	13:39	Possible Injury	1	0	2	0	0	Passenger Car
No	ED45654	03/18/2023	08:44	Suspected Serious Injury	2	0	2	0	0	Passenger Car
No	EE97553	07/14/2024	12:47	No Apparent Injury	0	0	3	0	0	Passenger Car
No	EG39703	09/02/2025	19:03	No Apparent Injury	0	0	3	0	0	Passenger Car
No	EG17623	07/21/2025	06:33	Possible Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb
No	EG14545	07/22/2025	19:57	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb

VEHICLE 2 TYPE	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION
Passenger Car	At Intersection and Related	Raining	Wet
Passenger Car	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry
Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
	Not at Intersection and Not Related	Overcast	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	Intersection Related but Not at Intersection	Clear	Dry
Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
Passenger Car	At Intersection and Related	Clear	Dry
Passenger Car	At Intersection and Related	Fog or Smog or Smoke	Dry
Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry
Passenger Car	At Intersection and Related	Clear or Partly Cloudy	Dry
Truck (Flatbad,Van,etc)	At Intersection and Related	Overcast	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Raining	Wet
Passenger Car	At Intersection and Related	Clear	Dry
Passenger Car	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry
Pickup,Panel Truck or Vanette under 10,000 lb	At Intersection and Related	Clear or Partly Cloudy	Dry

LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION
Daylight	Entering at angle	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead
Daylight	Tree or Stump (stationary)	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Dark-No Street Lights	Entering at angle	Going Straight Ahead
Daylight	Entering at angle	Starting in Traffic Lane
Daylight	Entering at angle	Going Straight Ahead
Daylight	Entering at angle	Making Left Turn
Daylight	Entering at angle	Stopped at Signal or Stop Sign
Dark-Street Lights On	Entering at angle	Going Straight Ahead
Daylight	Entering at angle	Starting in Traffic Lane
Dark - Unknown Lightin	Entering at angle	Going Straight Ahead
Daylight	From opposite direction - one left turn - one straight	Making Left Turn
Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead
Daylight	From same direction - both going straight - both moving - rear-end	Going Straight Ahead
Dark - Unknown Lightin	From opposite direction - one left turn - one straight	Making Left Turn
Daylight	From same direction - both going straight - one stopped - rear-end	Starting in Traffic Lane
Daylight	From same direction - one left turn - one straight	Overtaking and Passing

VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)
Going Straight Ahead	East	South	East	West	Disregard Traffic Sign and Signals
Going Straight Ahead	North	South	North	South	Unknown Distraction
Stopped for Traffic	South	North	South	Vehicle Stopped	Follow Too Closely
	North	South			Under Influence of Alcohol
Going Straight Ahead	South	North	South	North	Other Contributing Circ Not Listed
Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Follow Too Closely
Slowing	South	North	South	North	Follow Too Closely
Going Straight Ahead	West	East	North	South	Did Not Grant RW to Vehicle
Going Straight Ahead	West	East	North	South	Did Not Grant RW to Vehicle
Going Straight Ahead	West	East	North	South	Operating Defective Equipment
Going Straight Ahead	West	North	North	South	Disregard Traffic Sign and Signals
Going Straight Ahead	Vehicle Stopped	Vehicle Stopped	North	South	Improper Turn/Merge
Going Straight Ahead	West	East	South	North	None
Going Straight Ahead	Vehicle Stopped	Vehicle Stopped	South	North	Did Not Grant RW to Vehicle
Going Straight Ahead	South	North	West	East	None
Going Straight Ahead	East	South	West	East	Did Not Grant RW to Vehicle
Stopped at Signal or Stop Sign	East	West	Vehicle Stopped	Vehicle Stopped	Unknown Distraction
Slowing	East	West	East	West	Exceeding Stated Speed Limit
Going Straight Ahead	South	West	North	South	Did Not Grant RW to Vehicle
Stopped at Signal or Stop Sign	North	South	North	Vehicle Stopped	Lost in Thought / Day Dreaming
Making Left Turn	North	South	North	East	Improper Passing

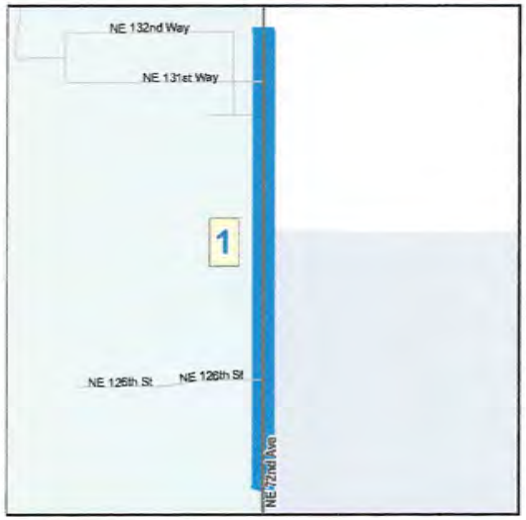
MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH - X 2010 - FORWARD	WA STATE PLANE SOUTH - Y 2010 - FORWARD
None	Lane of Primary Trafficway	1098725.04	143794.38
None	Lane of Primary Trafficway	1104114.24	143536.3
None	Lane of Primary Trafficway	1104110.3	143416.43
	Past the Outside Shoulder of Primary Trafficway	1104116.58	143601.28
None	Lane of Primary Trafficway	1104115.33	143566.34
None	Lane of Primary Trafficway	1104117.83	143636.3
None	Lane of Primary Trafficway	1104102.78	143177.23
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1104788.26	175360.16
None	Lane of Primary Trafficway	1104245.6	148981.75
Disregard Traffic Sign and Signals	Lane of Primary Trafficway	1104245.6	148981.75
None	Lane of Primary Trafficway	1098725.04	143794.38
None	Lane of Primary Trafficway	1098725.04	143794.38
None	Lane of Primary Trafficway	1104317.51	143660.28
None	Lane of Primary Trafficway	1104245.6	148981.75
Lost in Thought / Day Dreaming	Lane of Primary Trafficway	1104119.05	143666.47
None	Lane of Primary Trafficway	1098800.99	146747.16

APPENDIX E
IMPROVEMENT PROJECT

2026 - 2031 Transportation Improvement Program

Project: 1. NE 72nd Avenue - NE 122nd Street to NE 133rd Street

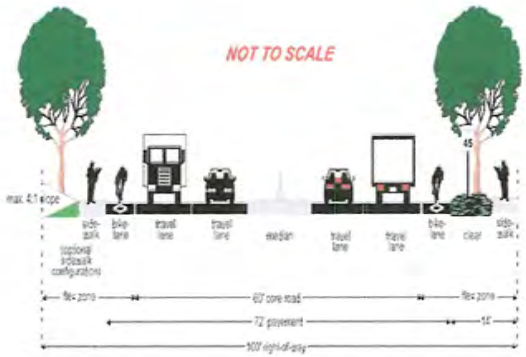
Vicinity Map



Project Summary

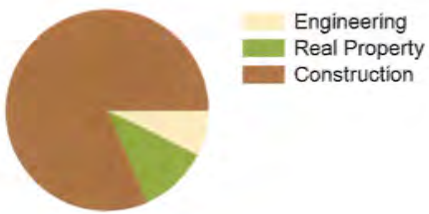
Project Number:	353522	Project Length (mi.):	0.60
Project Manager:	Scott Fakler	Client:	Chris Carle
Basis for Project:	Safety; Economic Development; Provide more capacity/safety.		
Timeline:	PE Pre 2026-2029; ROW 2028-2029; CN 2031-Post 2031		
Project Description:	Improve corridor to a 5-lane urban arterial standard or provide intersection widening and spot safety upgrades.		
Notes:	Consider intersection improvements, turn lanes/pockets and skinny road section due to potential costs. Possible safety project candidate.		
Status:	Traffic modeling and scoping anticipated to start in 2026. Funding Pending.		

Cross-Section Detail



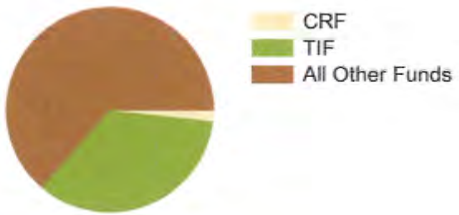
Project Cost Summary

Engineering:	$800,000
Real Property:	$1,200,000
Construction:	$8,800,000
Total:	$10,800,000



Funding Summary

County Road Fund:	$186,000
TIF:	$3,736,000
Federal Grant:	$0
State Grants:	$0
Loan:	$0
Other:	$3,578,000
Projected Funds:	$0
Unfunded:	$3,300,000
Total:	$10,800,000



APPENDIX F
LEVEL OF SERVICE COMPUTER PRINTOUTS

HCS Two-Way Stop-Control Report

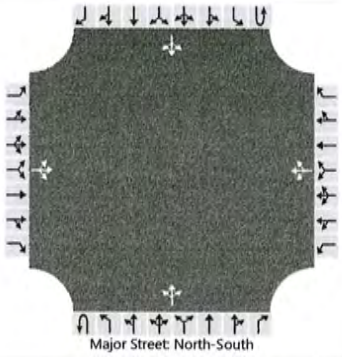
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2026
Time Analyzed	Am Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	139th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	8		14	2	24		6	102	15		14	75	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			15				43			7				15		
Capacity, c (veh/h)			809				815			1526				1447		
v/c Ratio			0.02				0.05			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5				5.0			0.0				0.0		
Control Delay (s/veh)			9.5				9.7			7.4	0.0	0.0		7.5	0.1	0.1
Level of Service (LOS)			A				A			A	A	A		A	A	A
Approach Delay (s/veh)		9.5				9.7				0.4				1.2		
Approach LOS		A				A				A				A		

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HCS Two-Way Stop-Control Report

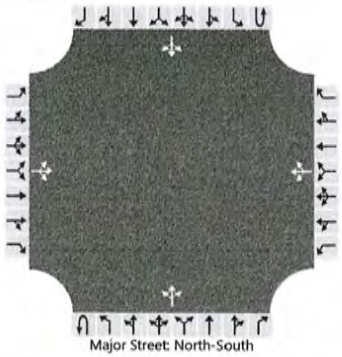
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	Am Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o Project

Site Information

Intersection	139th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	8		15	2	26		6	113	16		15	80	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			15				47			7				16		
Capacity, c (veh/h)			793				798			1519				1431		
v/c Ratio			0.02				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5				5.0			0.0				0.0		
Control Delay (s/veh)			9.6				9.8			7.4	0.0	0.0		7.5	0.1	0.1
Level of Service (LOS)			A				A			A	A	A		A	A	A
Approach Delay (s/veh)		9.6				9.8				0.4				1.2		
Approach LOS		A				A				A				A		

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HCS Two-Way Stop-Control Report

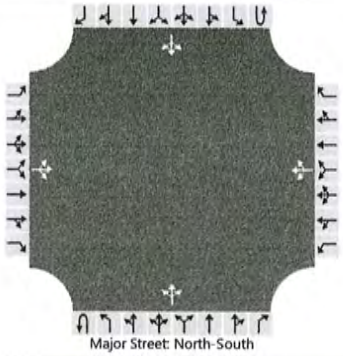
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	Am Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 with Project

Site Information

Intersection	139th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		3	3	8		15	2	26		6	114	16		15	81	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			15				47			7				16		
Capacity, c (veh/h)			791				796			1518				1429		
v/c Ratio			0.02				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.1				0.2			0.0				0.0		
95% Queue Length, Q_{95} (ft)			2.5				5.0			0.0				0.0		
Control Delay (s/veh)			9.6				9.8			7.4	0.0	0.0		7.5	0.1	0.1
Level of Service (LOS)			A				A			A	A	A		A	A	A
Approach Delay (s/veh)		9.6				9.8				0.4				1.2		
Approach LOS		A				A				A				A		

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HCS Two-Way Stop-Control Report

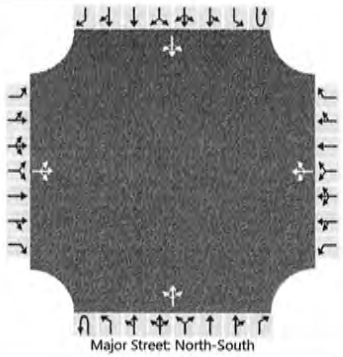
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	139th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	3	2		20	4	20		4	86	21		27	129	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			7				58			5				36		
Capacity, c (veh/h)			629				677			1417				1430		
v/c Ratio			0.01				0.09			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.1		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				2.5		
Control Delay (s/veh)			10.8				10.8			7.6	0.0	0.0		7.6	0.2	0.2
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		10.8				10.8				0.3				1.5		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

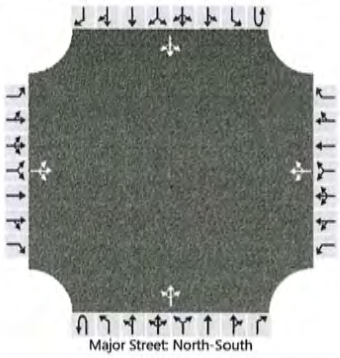
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o Project

Site Information

Intersection	139th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	3	2		21	4	21		4	93	22		29	140	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			7				61			5				38		
Capacity, c (veh/h)			607				654			1400				1417		
v/c Ratio			0.01				0.09			0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.1		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				2.5		
Control Delay (s/veh)			11.0				11.1			7.6	0.0	0.0		7.6	0.2	0.2
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		11.0				11.1				0.3				1.5		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

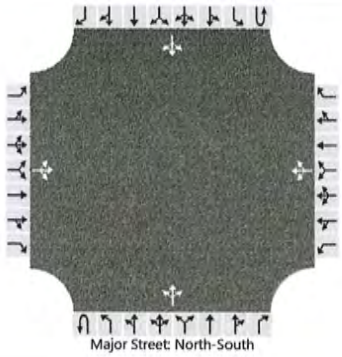
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 with Project

Site Information

Intersection	139th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	50th Ave.
Peak Hour Factor	0.76
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	3	2		21	4	21		4	94	22		29	141	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			7				61			5				38		
Capacity, c (veh/h)			605				652			1398				1416		
v/c Ratio			0.01				0.09			0.00				0.03		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.1		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				2.5		
Control Delay (s/veh)			11.0				11.1			7.6	0.0	0.0		7.6	0.2	0.2
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		11.0				11.1				0.3				1.5		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

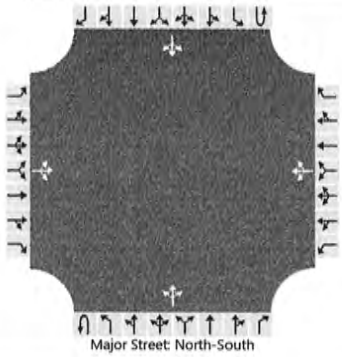
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	130th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	130th St.
North/South Street	50th Ave.
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	0	1		23	0	12		0	191	4		6	194	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				47			0				8		
Capacity, c (veh/h)			518				533			1318				1293		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				0.0		
Control Delay (s/veh)			12.0				12.4			7.7	0.0	0.0		7.8	0.1	0.1
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.0				12.4				0.0				0.3		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

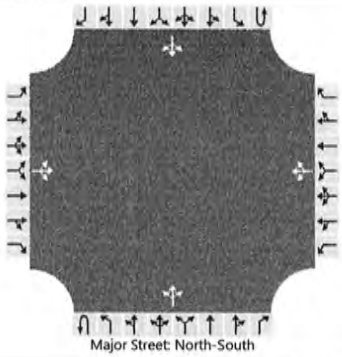
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o Project

Site Information

Intersection	130th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	130th St.
North/South Street	50th Ave.
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	0	1		24	0	13		0	207	4		6	206	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				49			0				8		
Capacity, c (veh/h)			492				509			1300				1270		
v/c Ratio			0.01				0.10			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				7.5			0.0				0.0		
Control Delay (s/veh)			12.4				12.8			7.8	0.0	0.0		7.9	0.1	0.1
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.4				12.8				0.0				0.3		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

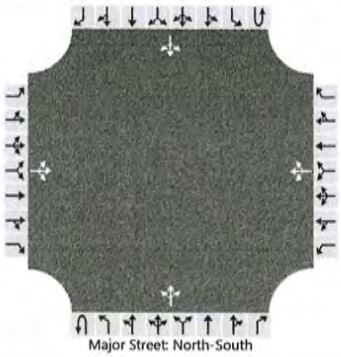
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 with Project

Site Information

Intersection	130th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	130th St.
North/South Street	50th Ave.
Peak Hour Factor	0.75
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		2	0	1		26	0	14		0	207	5		7	206	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				4		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.24		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				53			0				9		
Capacity, c (veh/h)			489				506			1300				1268		
v/c Ratio			0.01				0.11			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.4			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				10.0			0.0				0.0		
Control Delay (s/veh)			12.4				12.9			7.8	0.0	0.0		7.9	0.1	0.1
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.4				12.9				0.0				0.3		
Approach LOS		B				B				A				A		

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HCS Two-Way Stop-Control Report

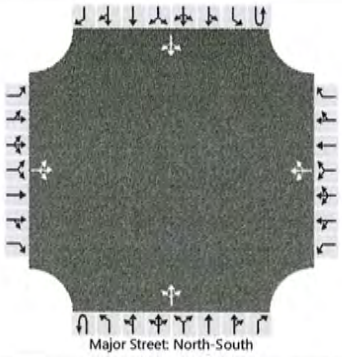
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	130th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	130th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		14	0	2		2	160	18		17	155	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				17			2				18		
Capacity, c (veh/h)			881				585			1421				1392		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				2.5			0.0				0.0		
Control Delay (s/veh)			9.1				11.3			7.5	0.0	0.0		7.6	0.1	0.1
Level of Service (LOS)			A				B			A	A	A		A	A	A
Approach Delay (s/veh)		9.1				11.3				0.1				0.9		
Approach LOS		A				B				A				A		

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HCS Two-Way Stop-Control Report

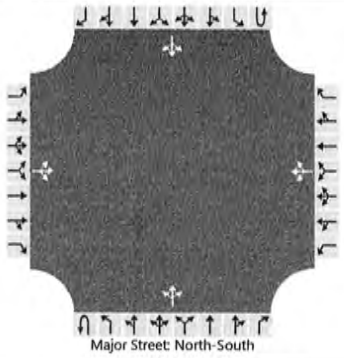
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o Project

Site Information

Intersection	130th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	130th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		15	0	2		2	172	19		18	167	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				18			2				20		
Capacity, c (veh/h)			866				559			1406				1375		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				2.5			0.0				0.0		
Control Delay (s/veh)			9.2				11.7			7.6	0.0	0.0		7.7	0.1	0.1
Level of Service (LOS)			A				B			A	A	A		A	A	A
Approach Delay (s/veh)		9.2				11.7				0.1				0.9		
Approach LOS		A				B				A				A		

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HCS Two-Way Stop-Control Report

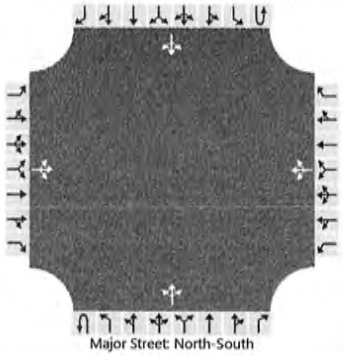
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/13/2026
Analysis Year	2029
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 with Project

Site Information

Intersection	130th St. & 50th Ave.
Jurisdiction	Clark Co.
East/West Street	130th St.
North/South Street	50th Ave.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	1		16	0	3		2	172	22		19	167	0
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			1				21			2				21		
Capacity, c (veh/h)			866				564			1406				1372		
v/c Ratio			0.00				0.04			0.00				0.02		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
95% Queue Length, Q_{95} (ft)			0.0				2.5			0.0				0.0		
Control Delay (s/veh)			9.2				11.6			7.6	0.0	0.0		7.7	0.1	0.1
Level of Service (LOS)			A				B			A	A	A		A	A	A
Approach Delay (s/veh)		9.2				11.6				0.1				0.9		
Approach LOS		A				B				A				A		

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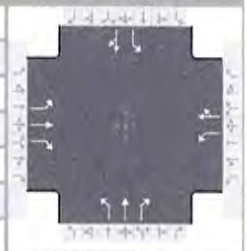
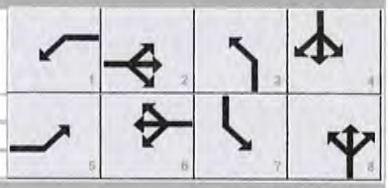
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2026	Analysis Period	1> 7:00
Intersection	50th Ave. & 119th St.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	32	304	72	30	367	41	67	85	30	67	129	43

Signal Information													
Cycle, s	120.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On	Green	3.9	0.1	80.0	5.6	14.4	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	4.0	0.0			
				Red	0.0	0.0	0.0	0.0	0.0	0.0			



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.1	84.1	7.9	84.0	9.6	18.4	9.6	18.4
Change Period, (*Y+R c*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (*g s*), s	2.7		2.6		6.1	7.3	6.1	13.8
Green Extension Time (*g e*), s	0.0	0.0	0.0	0.0	0.1	0.5	0.1	0.5
Phase Call Probability	0.68		0.65		0.91	1.00	0.91	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	34	323	77	32	434		71	90	32	71	183	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1866		1810	1900	1610	1810	1818	
Queue Service Time (*g s*), s	0.7	8.2	2.0	0.6	12.1		4.1	5.3	2.1	4.1	11.8	
Cycle Queue Clearance Time (*g c*), s	0.7	8.2	2.0	0.6	12.1		4.1	5.3	2.1	4.1	11.8	
Green Ratio (*g/C*)	0.70	0.67	0.67	0.70	0.67		0.17	0.12	0.12	0.17	0.12	
Capacity (*c*), veh/h	670	1269	1075	745	1244		150	227	193	223	217	
Volume-to-Capacity Ratio (*X*)	0.051	0.255	0.071	0.043	0.349		0.476	0.398	0.166	0.320	0.841	
Back of Queue (*Q*), ft/ln (95 th percentile)	11	147	30	10	210		84	113	39	83	235	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.4	5.9	1.2	0.4	8.4		3.4	4.5	1.6	3.3	9.4	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (*d 1*), s/veh	6.1	8.0	7.0	6.0	8.7		44.3	48.8	47.4	43.7	51.7	
Incremental Delay (*d 2*), s/veh	0.0	0.5	0.1	0.0	0.8		0.9	0.4	0.1	0.3	3.4	
Initial Queue Delay (*d 3*), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	6.1	8.5	7.1	6.0	9.5		45.1	49.2	47.6	44.0	55.1	
Level of Service (LOS)	A	A	A	A	A		D	D	D	D	E	
Approach Delay, s/veh / LOS	8.0	A		9.2	A		47.5	D		52.0	D	
Intersection Delay, s/veh / LOS	22.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	1.87	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.20	A	1.26	A	0.81	A	0.91	A

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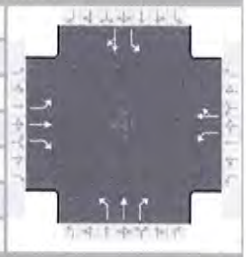
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	50th Ave. & 119th St.	File Name	Streets1.xus		
Project Description	Year 2029 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	34	329	76	32	406	48	71	90	32	71	137	46

Signal Information					EB			WB			NB			SB		
Cycle, s	120.0	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	4.1	0.1		78.8	5.9		15.1	0.0				
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	0.0		4.0	4.0		4.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0		0.0	0.0		0.0	0.0				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.2	82.9	8.1	82.8	9.9	19.1	9.9	19.1
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	2.8		2.7		6.3	7.6	6.3	14.6
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.1	0.6	0.1	0.6
Phase Call Probability	0.70		0.68		0.92	1.00	0.92	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	36	350	81	34	483		76	96	34	76	195	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1865		1810	1900	1610	1810	1818	
Queue Service Time (g_s), s	0.8	9.3	2.2	0.7	14.4		4.3	5.6	2.3	4.3	12.6	
Cycle Queue Clearance Time (g_c), s	0.8	9.3	2.2	0.7	14.4		4.3	5.6	2.3	4.3	12.6	
Green Ratio (*g/C*)	0.69	0.66	0.66	0.69	0.66		0.18	0.13	0.13	0.18	0.13	
Capacity (*c*), veh/h	621	1250	1059	712	1224		154	240	203	232	229	
Volume-to-Capacity Ratio (*X*)	0.058	0.280	0.076	0.048	0.394		0.490	0.399	0.168	0.326	0.849	
Back of Queue (*Q*), ft/ln (95 th percentile)	12	169	34	11	243		88	119	41	87	247	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.5	6.8	1.3	0.5	9.7		3.5	4.8	1.6	3.5	9.9	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	6.7	8.6	7.4	6.4	9.5		43.5	48.2	46.8	42.9	51.3	
Incremental Delay (d_2), s/veh	0.0	0.6	0.1	0.0	1.0		0.9	0.4	0.1	0.3	3.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	6.7	9.2	7.5	6.4	10.5		44.4	48.6	46.9	43.2	54.7	
Level of Service (LOS)	A	A	A	A	B		D	D	D	D	D	
Approach Delay, s/veh / LOS	8.7	A		10.2	B		46.8	D		51.5	D	
Intersection Delay, s/veh / LOS	22.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.07	B	1.88	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.26	A	1.34	A	0.83	A	0.93	A

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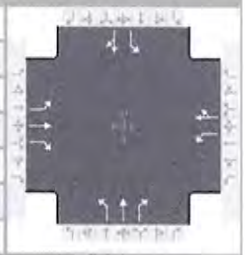
HCS Signalized Intersection Results Summary

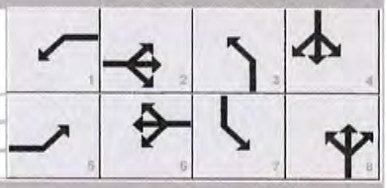
General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	50th Ave. & 119th St.	File Name	Streets1.xus		
Project Description	Year 2029 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	34	329	76	34	406	48	71	91	32	71	139	46

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.2	78.7	5.9	15.3	0.0	0.0	
Yellow	4.0	4.0	4.0	4.0	0.0	0.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.2	82.7	8.2	82.7	9.9	19.3	9.9	19.3
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	2.8		2.8		6.3	7.6	6.3	14.7
Green Extension Time (g_e), s	0.0	0.0	0.0	0.0	0.1	0.6	0.1	0.6
Phase Call Probability	0.70		0.70		0.92	1.00	0.92	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	36	350	81	36	483		76	97	34	76	197	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1865		1810	1900	1610	1810	1819	
Queue Service Time (g_s), s	0.8	9.3	2.2	0.8	14.5		4.3	5.6	2.3	4.3	12.7	
Cycle Queue Clearance Time (g_c), s	0.8	9.3	2.2	0.8	14.5		4.3	5.6	2.3	4.3	12.7	
Green Ratio (*g/C*)	0.69	0.66	0.66	0.69	0.66		0.18	0.13	0.13	0.18	0.13	
Capacity (*c*), veh/h	604	1245	1056	711	1222		154	242	205	232	232	
Volume-to-Capacity Ratio (*X*)	0.060	0.281	0.077	0.051	0.395		0.490	0.400	0.166	0.325	0.850	
Back of Queue (*Q*), ft/ln (95 th percentile)	12	171	34	12	243		88	120	41	87	249	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.5	6.8	1.4	0.5	9.7		3.5	4.8	1.6	3.5	10.0	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	7.0	8.7	7.5	6.4	9.6		43.5	48.1	46.7	42.8	51.2	
Incremental Delay (d_2), s/veh	0.0	0.6	0.1	0.0	1.0		0.9	0.4	0.1	0.3	3.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	7.1	9.3	7.6	6.4	10.6		44.4	48.5	46.8	43.1	54.6	
Level of Service (LOS)	A	A	A	A	B		D	D	D	D	D	
Approach Delay, s/veh / LOS	8.8	A		10.3	B		46.7	D		51.4	D	
Intersection Delay, s/veh / LOS	22.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.07	B	1.88	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.26	A	1.34	A	0.83	A	0.94	A

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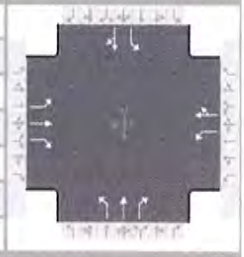
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2026	Analysis Period	1> 7:00
Intersection	50th Ave. & 119th St.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	46	411	82	26	361	36	85	106	37	57	95	57

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.6	1.2	79.0	5.2	1.8	13.2	1	2	3	4	5	6	7	8
Yellow	4.0	0.0	4.0	4.0	0.0	4.0								
Red	0.0	0.0	0.0	0.0	0.0	0.0								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.8	84.2	7.6	83.0	11.0	19.0	9.2	17.2
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.0		2.6		7.3	8.6	5.5	12.7
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.1	0.6	0.0	0.6
Phase Call Probability	0.80		0.60		0.95	1.00	0.87	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	49	437	87	28	422		90	113	39	61	162	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1869		1810	1900	1610	1810	1780	
Queue Service Time (g_s), s	1.0	11.9	2.3	0.6	12.0		5.3	6.6	2.6	3.5	10.7	
Cycle Queue Clearance Time (g_c), s	1.0	11.9	2.3	0.6	12.0		5.3	6.6	2.6	3.5	10.7	
Green Ratio (*g/C*)	0.70	0.67	0.67	0.69	0.66		0.17	0.12	0.12	0.15	0.11	
Capacity (*c*), veh/h	680	1270	1076	648	1230		192	237	201	207	196	
Volume-to-Capacity Ratio (*X*)	0.072	0.344	0.081	0.043	0.343		0.472	0.475	0.196	0.292	0.824	
Back of Queue (*Q*), ft/ln (95 th percentile)	16	209	35	9	210		107	142	48	72	213	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.6	8.4	1.4	0.4	8.4		4.3	5.7	1.9	2.9	8.5	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	6.2	8.6	7.0	6.6	9.1		44.2	48.9	47.1	44.7	52.3	
Incremental Delay (d_2), s/veh	0.0	0.7	0.1	0.0	0.8		0.7	0.6	0.2	0.3	3.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	6.3	9.3	7.1	6.6	9.8		44.9	49.4	47.3	45.0	55.6	
Level of Service (LOS)	A	A	A	A	A		D	D	D	D	E	
Approach Delay, s/veh / LOS	8.7	A		9.6	A		47.4	D		52.7	D	
Intersection Delay, s/veh / LOS	21.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	1.88	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.43	A	1.23	A	0.89	A	0.85	A

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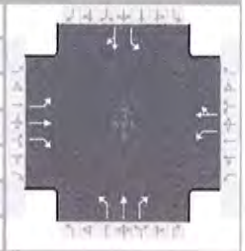
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	50th Ave. & 119th St.	File Name	Streets1.xus		
Project Description	Year 2029 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	49	456	87	28	394	40	90	112	39	63	101	38

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.8	1.2	79.5	5.4	2.0	12.1	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.9	84.7	7.8	83.5	11.4	18.1	9.4	16.1
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.1		2.6		7.6	9.1	5.9	11.6
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.1	0.5	0.1	0.5
Phase Call Probability	0.82		0.63		0.96	1.00	0.89	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	52	485	93	30	462		96	119	41	67	148	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1869		1810	1900	1610	1810	1811	
Queue Service Time (g_s), s	1.1	13.5	2.4	0.6	13.3		5.6	7.1	2.8	3.9	9.6	
Cycle Queue Clearance Time (g_c), s	1.1	13.5	2.4	0.6	13.3		5.6	7.1	2.8	3.9	9.6	
Green Ratio (*g/C*)	0.70	0.67	0.67	0.69	0.66		0.16	0.12	0.12	0.15	0.10	
Capacity (*c*), veh/h	656	1278	1083	620	1239		198	224	190	195	183	
Volume-to-Capacity Ratio (*X*)	0.079	0.380	0.085	0.048	0.373		0.484	0.532	0.219	0.343	0.808	
Back of Queue (*Q*), ft/ln (95 th percentile)	16	230	36	10	226		114	152	51	80	199	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.7	9.2	1.5	0.4	9.1		4.6	6.1	2.0	3.2	8.0	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	6.2	8.6	6.8	6.6	9.1		44.8	49.8	47.9	45.7	52.8	
Incremental Delay (d_2), s/veh	0.0	0.9	0.2	0.0	0.9		0.7	0.7	0.2	0.4	3.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	6.2	9.5	7.0	6.6	9.9		45.5	50.5	48.1	46.1	56.0	
Level of Service (LOS)	A	A	A	A	A		D	D	D	D	E	
Approach Delay, s/veh / LOS	8.9	A		9.7	A		48.3	D		52.9	D	
Intersection Delay, s/veh / LOS	21.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	1.87	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.53	B	1.30	A	0.91	A	0.84	A

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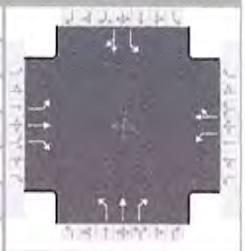
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.94
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	50th Ave. & 119th St.	File Name	Streets1.xus		
Project Description	Year 2029 with Project				

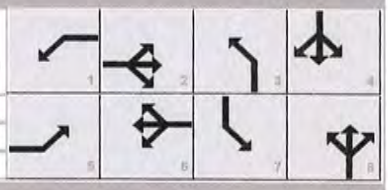


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	49	456	87	28	394	40	90	115	39	63	102	38

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.8	1.2		79.5	5.4	2.0	12.2					
Yellow	4.0	0.0		4.0	4.0	0.0	4.0					
Red	0.0	0.0		0.0	0.0	0.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.9	84.6	7.8	83.5	11.4	18.2	9.4	16.2
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.1		2.6		7.6	9.3	5.9	11.7
Green Extension Time (g_e), s	0.1	0.0	0.0	0.0	0.1	0.6	0.1	0.5
Phase Call Probability	0.82		0.63		0.96	1.00	0.89	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	52	485	93	30	462		96	122	41	67	149	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1810	1869		1810	1900	1610	1810	1811	
Queue Service Time (g_s), s	1.1	13.5	2.4	0.6	13.3		5.6	7.3	2.8	3.9	9.7	
Cycle Queue Clearance Time (g_c), s	1.1	13.5	2.4	0.6	13.3		5.6	7.3	2.8	3.9	9.7	
Green Ratio (*g/C*)	0.70	0.67	0.67	0.69	0.66		0.16	0.12	0.12	0.15	0.10	
Capacity (*c*), veh/h	656	1277	1082	619	1238		198	225	191	194	184	
Volume-to-Capacity Ratio (*X*)	0.079	0.380	0.086	0.048	0.373		0.484	0.543	0.217	0.346	0.808	
Back of Queue (*Q*), ft/ln (95 th percentile)	16	230	37	10	227		114	157	51	80	200	
Back of Queue (*Q*), veh/ln (95 th percentile)	0.7	9.2	1.5	0.4	9.1		4.6	6.3	2.0	3.2	8.0	
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	6.2	8.7	6.8	6.6	9.1		44.8	49.8	47.9	45.6	52.8	
Incremental Delay (d_2), s/veh	0.0	0.9	0.2	0.0	0.9		0.7	0.8	0.2	0.4	3.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	6.2	9.5	7.0	6.6	9.9		45.5	50.6	48.1	46.0	55.9	
Level of Service (LOS)	A	A	A	A	A		D	D	D	D	E	
Approach Delay, s/veh / LOS	8.9	A		9.7	A		48.3	D		52.9	D	
Intersection Delay, s/veh / LOS	21.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.06	B	1.87	B	1.95	B	2.14	B
Bicycle LOS Score / LOS	1.53	B	1.30	A	0.92	A	0.84	A

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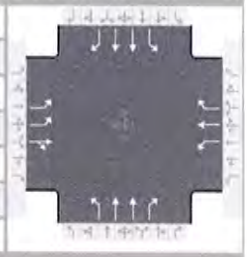
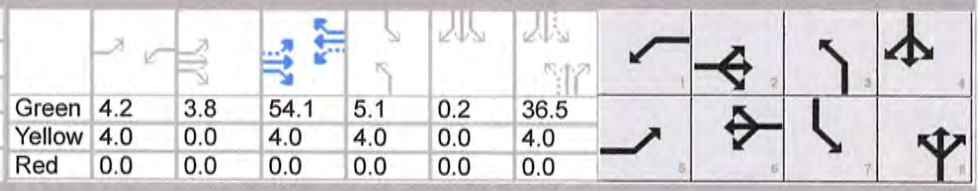
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	2/13/2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.91
Urban Street		Analysis Year	2026	Analysis Period	1> 7:00
Intersection	St. Johns Rd. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	274	13	11	33	16	29	52	323	45	59	555	403

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.2	3.8	54.1	5.1	0.2	36.5	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	12.0	61.9	8.2	58.1	9.1	40.5	9.3	40.7
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	7.5		3.3		4.6	11.8	5.0	36.6
Green Extension Time (g_e), s	0.5	0.0	0.0	0.0	0.0	3.7	0.1	0.2
Phase Call Probability	1.00		0.70		0.85	1.00	0.88	1.00
Max Out Probability	0.01		0.00		0.00	0.01	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	301	26		36	18	32	57	355	49	65	610	443
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1675	1646		1697	1885	1547	1767	1682	1535	1767	1781	1510
Queue Service Time (g_s), s	5.5	1.0		1.3	0.6	1.4	2.6	9.8	2.8	3.0	17.2	34.6
Cycle Queue Clearance Time (g_c), s	5.5	1.0		1.3	0.6	1.4	2.6	9.8	2.8	3.0	17.2	34.6
Green Ratio (*g/C*)	0.53	0.48		0.49	0.45	0.45	0.35	0.30	0.30	0.35	0.31	0.31
Capacity (*c*), veh/h	1550	795		714	850	698	252	1024	467	364	1090	462
Volume-to-Capacity Ratio (*X*)	0.194	0.033		0.051	0.021	0.046	0.226	0.347	0.106	0.178	0.559	0.958
Back of Queue (*Q*), ft/ln (95 th percentile)	97	19		25	13	24	51	193	48	58	302	616
Back of Queue (*Q*), veh/ln (95 th percentile)	3.7	0.7		0.9	0.5	0.9	2.0	7.2	1.9	2.3	11.9	23.2
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	14.4	16.3		16.2	18.2	18.5	28.1	32.4	30.0	26.9	34.9	40.9
Incremental Delay (d_2), s/veh	0.0	0.1		0.0	0.0	0.1	0.2	0.1	0.0	0.1	0.4	30.9
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	14.4	16.4		16.2	18.3	18.6	28.2	32.5	30.0	26.9	35.2	71.8
Level of Service (LOS)	B	B		B	B	B	C	C	C	C	D	E
Approach Delay, s/veh / LOS	14.6	B		17.5	B		31.7	C		49.2	D	
Intersection Delay, s/veh / LOS	38.1						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.42	B	2.43	B	2.12	B	2.12	B
Bicycle LOS Score / LOS	1.03	A	0.63	A	0.87	A	1.41	A

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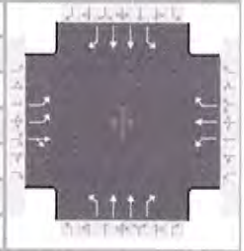
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	2/13/2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.91
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	St. Johns Rd. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	294	14	12	35	17	31	55	351	48	65	611	427

Signal Information					EB			WB			NB			SB		
Cycle, s	120.0	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	4.3	0.1		53.5	5.2	0.2	36.5					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0		4.0	4.0	0.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0		0.0	0.0	0.0	0.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	12.5	61.7	8.3	57.5	9.2	40.5	9.4	40.8
Change Period, (*Y+R c*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (*g s*), s	8.0		3.4		4.8	12.8	5.3	38.8
Green Extension Time (*g e*), s	0.5	0.0	0.0	0.0	0.0	4.1	0.1	0.0
Phase Call Probability	1.00		0.72		0.87	1.00	0.91	1.00
Max Out Probability	0.01		0.00		0.00	0.01	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	323	29		38	19	34	60	386	53	71	671	469
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1675	1645		1697	1885	1547	1767	1682	1535	1767	1781	1510
Queue Service Time (*g s*), s	6.0	1.1		1.4	0.7	1.5	2.8	10.8	3.0	3.3	19.3	36.8
Cycle Queue Clearance Time (*g c*), s	6.0	1.1		1.4	0.7	1.5	2.8	10.8	3.0	3.3	19.3	36.8
Green Ratio (*g/C*)	0.53	0.48		0.48	0.45	0.45	0.35	0.30	0.30	0.35	0.31	0.31
Capacity (*c*), veh/h	1547	791		708	841	690	234	1024	467	352	1092	463
Volume-to-Capacity Ratio (*X*)	0.209	0.036		0.054	0.022	0.049	0.258	0.377	0.113	0.203	0.615	1.014
Back of Queue (*Q*), ft/ln (95 th percentile)	105	21		27	14	26	54	210	52	64	334	708
Back of Queue (*Q*), veh/ln (95 th percentile)	4.0	0.8		1.0	0.5	1.0	2.1	7.8	2.0	2.5	13.1	26.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	14.5	16.5		16.5	18.6	18.8	28.4	32.8	30.1	27.0	35.6	41.6
Incremental Delay (*d 2*), s/veh	0.0	0.1		0.0	0.0	0.1	0.2	0.1	0.0	0.1	0.8	45.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	14.5	16.6		16.5	18.6	19.0	28.7	32.9	30.1	27.1	36.3	87.0
Level of Service (LOS)	B	B		B	B	B	C	C	C	C	D	F
Approach Delay, s/veh / LOS	14.7	B		17.8	B		32.1	C		55.4	E	
Intersection Delay, s/veh / LOS	41.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.42	B	2.43	B	2.12	B	2.12	B
Bicycle LOS Score / LOS	1.07	A	0.64	A	0.90	A	1.49	A

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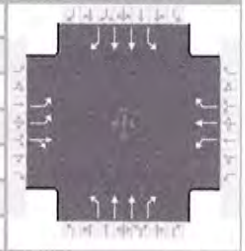
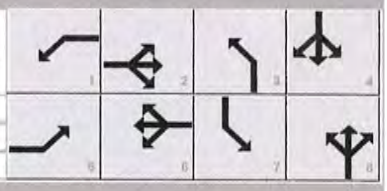
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	2/13/2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.91
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	St. Johns Rd. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	295	14	12	35	17	31	55	352	48	65	614	427

Signal Information					EB			WB			NB			SB		
Cycle, s	120.0	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	4.3	0.2		53.5	5.2	0.2	36.5					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0		4.0	4.0	0.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0		0.0	0.0	0.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	12.5	61.7	8.3	57.5	9.2	40.5	9.4	40.8
Change Period, (*Y+R c*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (*g s*), s	8.0		3.4		4.8	12.8	5.3	38.8
Green Extension Time (*g e*), s	0.5	0.0	0.0	0.0	0.0	4.1	0.1	0.0
Phase Call Probability	1.00		0.72		0.87	1.00	0.91	1.00
Max Out Probability	0.01		0.00		0.00	0.01	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	324	29		38	19	34	60	387	53	71	675	469
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1675	1645		1697	1885	1547	1767	1682	1535	1767	1781	1510
Queue Service Time (*g s*), s	6.0	1.1		1.4	0.7	1.5	2.8	10.8	3.0	3.3	19.5	36.8
Cycle Queue Clearance Time (*g c*), s	6.0	1.1		1.4	0.7	1.5	2.8	10.8	3.0	3.3	19.5	36.8
Green Ratio (*g/C*)	0.53	0.48		0.48	0.45	0.45	0.35	0.30	0.30	0.35	0.31	0.31
Capacity (*c*), veh/h	1547	791		708	841	690	233	1024	467	351	1092	463
Volume-to-Capacity Ratio (*X*)	0.210	0.036		0.054	0.022	0.049	0.259	0.378	0.113	0.203	0.618	1.014
Back of Queue (*Q*), ft/ln (95 th percentile)	105	21		27	14	26	54	210	52	64	336	708
Back of Queue (*Q*), veh/ln (95 th percentile)	4.0	0.8		1.0	0.5	1.0	2.1	7.8	2.0	2.5	13.2	26.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	14.5	16.5		16.5	18.6	18.8	28.5	32.8	30.1	27.0	35.6	41.6
Incremental Delay (*d 2*), s/veh	0.0	0.1		0.0	0.0	0.1	0.2	0.1	0.0	0.1	0.8	45.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	14.5	16.6		16.5	18.7	19.0	28.7	32.9	30.1	27.1	36.4	87.0
Level of Service (LOS)	B	B		B	B	B	C	C	C	C	D	F
Approach Delay, s/veh / LOS	14.7	B		17.9	B		32.1	C		55.4	E	
Intersection Delay, s/veh / LOS	41.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.42	B	2.43	B	2.12	B	2.12	B
Bicycle LOS Score / LOS	1.07	A	0.64	A	0.90	A	1.49	A

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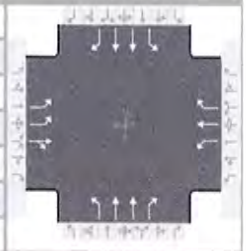
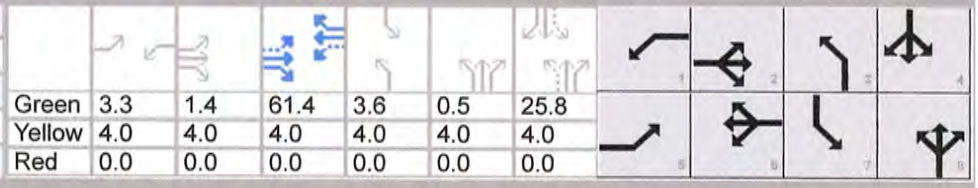
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	2/13/2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.98
Urban Street		Analysis Year	2026	Analysis Period	1> 7:00
Intersection	St. Johns Rd. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	375	14	18	23	15	84	121	739	38	27	479	281

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.3	1.4		61.4	3.6	0.5	25.8					
Yellow	4.0	4.0		4.0	4.0	4.0	4.0					
Red	0.0	0.0		0.0	0.0	0.0	0.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	12.7	70.8	7.3	65.4	12.1	34.3	7.6	29.8
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	7.9		2.8		8.2	25.6	3.5	22.4
Green Extension Time (g_e), s	0.8	0.0	0.0	0.0	0.1	3.5	0.0	3.4
Phase Call Probability	1.00		0.54		0.98	1.00	0.60	1.00
Max Out Probability	0.00		0.00		0.00	0.11	0.00	0.15

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	383	33		23	15	86	123	754	39	28	489	287
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1631		1753	1900	1560	1810	1809	1547	1654	1809	1610
Queue Service Time (g_s), s	5.9	1.1		0.8	0.5	3.4	6.2	23.6	2.3	1.5	14.7	20.4
Cycle Queue Clearance Time (g_c), s	5.9	1.1		0.8	0.5	3.4	6.2	23.6	2.3	1.5	14.7	20.4
Green Ratio (*g/C*)	0.60	0.56		0.54	0.51	0.51	0.30	0.25	0.25	0.24	0.21	0.21
Capacity (*c*), veh/h	1816	908		800	972	798	268	914	391	135	777	346
Volume-to-Capacity Ratio (*X*)	0.211	0.036		0.029	0.016	0.107	0.461	0.825	0.099	0.203	0.629	0.829
Back of Queue (*Q*), ft/ln (95 th percentile)	98	19		14	10	58	122	404	41	31	269	340
Back of Queue (*Q*), veh/ln (95 th percentile)	3.9	0.7		0.5	0.4	2.3	4.9	16.2	1.6	1.1	10.7	13.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	10.8	12.0		12.9	14.4	15.1	33.0	42.3	34.4	36.7	42.8	45.0
Incremental Delay (d_2), s/veh	0.0	0.1		0.0	0.0	0.3	0.5	3.2	0.0	0.3	0.3	7.4
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	10.8	12.1		12.9	14.5	15.4	33.4	45.5	34.4	37.0	43.1	52.4
Level of Service (LOS)	B	B		B	B	B	C	D	C	D	D	D
Approach Delay, s/veh / LOS	10.9	B		14.8	B		43.4	D		46.2	D	
Intersection Delay, s/veh / LOS	36.9						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.41	B	2.42	B	2.13	B	2.13	B
Bicycle LOS Score / LOS	1.17	A	0.69	A	1.24	A	1.15	A

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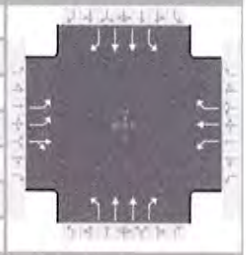
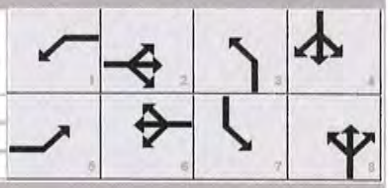
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	2/13/2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.98
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	St. Johns Rd. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	404	15	19	24	16	90	128	812	40	30	523	302

Signal Information					EB			WB			NB			SB		
Cycle, s	120.0	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	3.3	2.1		58.7	3.8	0.6	27.4					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0		4.0	4.0	4.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0		0.0	0.0	0.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	13.5	68.9	7.3	62.7	12.4	35.9	7.8	31.4
Change Period, (*Y*+*R c*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (*g s*), s	8.6		2.8		8.4	28.2	3.7	23.9
Green Extension Time (*g e*), s	0.9	0.0	0.0	0.0	0.1	3.5	0.0	3.5
Phase Call Probability	1.00		0.56		0.99	1.00	0.64	1.00
Max Out Probability	0.00		0.00		0.00	0.25	0.00	0.27

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	412	35		24	16	92	131	829	41	31	534	308
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1632		1753	1900	1560	1810	1809	1547	1654	1809	1610
Queue Service Time (*g s*), s	6.6	1.2		0.8	0.5	3.8	6.4	26.2	2.4	1.7	16.0	21.9
Cycle Queue Clearance Time (*g c*), s	6.6	1.2		0.8	0.5	3.8	6.4	26.2	2.4	1.7	16.0	21.9
Green Ratio (*g/C*)	0.59	0.54		0.52	0.49	0.49	0.31	0.27	0.27	0.26	0.23	0.23
Capacity (*c*), veh/h	1774	882		771	930	764	270	963	412	132	825	367
Volume-to-Capacity Ratio (*X*)	0.232	0.039		0.032	0.018	0.120	0.483	0.860	0.099	0.231	0.646	0.839
Back of Queue (*Q*), ft/ln (95 th percentile)	113	22		15	11	66	126	447	42	33	288	366
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	0.8		0.6	0.4	2.6	5.1	17.9	1.6	1.2	11.5	14.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	11.7	12.9		14.2	15.8	16.6	31.9	41.9	33.2	35.9	41.9	44.2
Incremental Delay (*d 2*), s/veh	0.0	0.1		0.0	0.0	0.3	0.5	5.2	0.0	0.3	0.5	9.4
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	11.8	13.0		14.2	15.8	16.9	32.4	47.1	33.2	36.2	42.4	53.6
Level of Service (LOS)	B	B		B	B	B	C	D	C	D	D	D
Approach Delay, s/veh / LOS	11.9	B		16.3	B		44.6	D		46.2	D	
Intersection Delay, s/veh / LOS	37.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.41	B	2.42	B	2.13	B	2.13	B
Bicycle LOS Score / LOS	1.23	A	0.71	A	1.31	A	1.21	A

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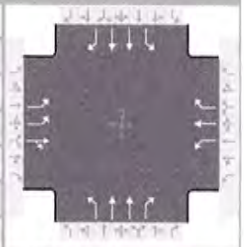
HCS Signalized Intersection Results Summary

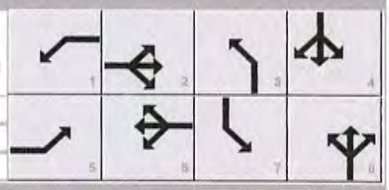
General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	2/13/2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.98
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	St. Johns Rd. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	406	15	19	24	16	90	128	816	40	30	526	303

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.3	2.2		58.6	3.8	0.6	27.5					
Yellow	4.0	4.0		4.0	4.0	4.0	4.0					
Red	0.0	0.0		0.0	0.0	0.0	0.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	13.5	68.8	7.3	62.6	12.4	36.0	7.8	31.5
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	8.7		2.8		8.4	28.3	3.7	24.0
Green Extension Time (g_e), s	0.9	0.0	0.0	0.0	0.1	3.5	0.0	3.5
Phase Call Probability	1.00		0.56		0.99	1.00	0.64	1.00
Max Out Probability	0.00		0.00		0.00	0.26	0.00	0.28

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	414	35		24	16	92	131	833	41	31	537	309
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1632		1753	1900	1560	1810	1809	1547	1654	1809	1610
Queue Service Time (g_s), s	6.7	1.2		0.8	0.5	3.8	6.4	26.3	2.4	1.7	16.1	22.0
Cycle Queue Clearance Time (g_c), s	6.7	1.2		0.8	0.5	3.8	6.4	26.3	2.4	1.7	16.1	22.0
Green Ratio (*g/C*)	0.58	0.54		0.52	0.49	0.49	0.32	0.27	0.27	0.26	0.23	0.23
Capacity (*c*), veh/h	1772	881		769	928	762	270	965	413	132	828	368
Volume-to-Capacity Ratio (*X*)	0.234	0.039		0.032	0.018	0.121	0.484	0.863	0.099	0.232	0.648	0.839
Back of Queue (*Q*), ft/ln (95 th percentile)	113	22		15	11	66	126	450	42	33	289	368
Back of Queue (*Q*), veh/ln (95 th percentile)	4.5	0.8		0.6	0.4	2.6	5.1	18.0	1.6	1.2	11.6	14.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	11.8	13.0		14.2	15.8	16.7	31.9	41.9	33.1	35.9	41.9	44.2
Incremental Delay (d_2), s/veh	0.0	0.1		0.0	0.0	0.3	0.5	5.3	0.0	0.3	0.5	9.5
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	11.8	13.1		14.2	15.9	17.0	32.4	47.2	33.2	36.2	42.4	53.7
Level of Service (LOS)	B	B		B	B	B	C	D	C	D	D	D
Approach Delay, s/veh / LOS	11.9	B		16.4	B		44.7	D		46.2	D	
Intersection Delay, s/veh / LOS	37.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.41	B	2.42	B	2.13	B	2.13	B
Bicycle LOS Score / LOS	1.23	A	0.71	A	1.32	A	1.21	A

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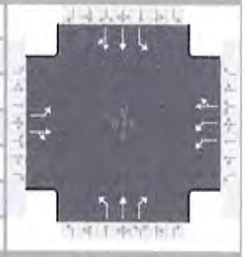
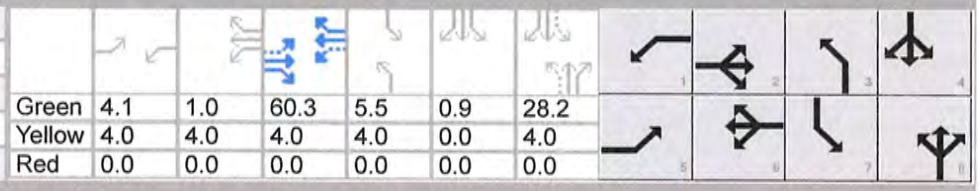
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.89
Urban Street		Analysis Year	2026	Analysis Period	1> 7:00
Intersection	119th St. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	31	257	101	356	276	78	64	310	296	80	585	29

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.1	1.0	60.3	5.5	0.9	28.2	
Yellow	4.0	4.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.1	64.3	13.1	69.3	9.5	32.2	10.4	33.2
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.1		8.2		5.6	25.9	6.7	22.6
Green Extension Time (g_e), s	0.0	0.0	0.9	0.0	0.1	2.3	0.1	2.6
Phase Call Probability	0.69		1.00		0.91	1.00	0.95	1.00
Max Out Probability	0.00		0.00		0.00	0.20	0.00	0.07

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	35	402		400	398		72	348	333	90	348	342
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1794		1757	1813		1795	1900	1610	1739	1885	1853
Queue Service Time (g_s), s	1.1	17.3		6.2	15.4		3.6	20.6	23.9	4.7	20.5	20.6
Cycle Queue Clearance Time (g_c), s	1.1	17.3		6.2	15.4		3.6	20.6	23.9	4.7	20.5	20.6
Green Ratio (*g/C*)	0.54	0.50		0.59	0.54		0.28	0.24	0.24	0.29	0.24	0.24
Capacity (*c*), veh/h	522	901		1102	986		183	447	379	217	458	451
Volume-to-Capacity Ratio (*X*)	0.067	0.446		0.363	0.403		0.392	0.779	0.878	0.415	0.759	0.760
Back of Queue (*Q*), ft/ln (95 th percentile)	20	299		106	269		72	381	401	93	378	371
Back of Queue (*Q*), veh/ln (95 th percentile)	0.8	11.9		4.2	10.7		2.9	15.2	16.0	3.6	15.0	14.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	13.8	19.2		13.1	16.0		34.5	43.0	44.2	34.0	42.1	42.2
Incremental Delay (d_2), s/veh	0.0	1.6		0.1	1.2		0.5	4.1	12.3	0.5	3.3	3.4
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	13.8	20.8		13.1	17.2		35.0	47.0	56.6	34.4	45.4	45.5
Level of Service (LOS)	B	C		B	B		D	D	E	C	D	D
Approach Delay, s/veh / LOS	20.2	C		15.2	B		50.1	D		44.2	D	
Intersection Delay, s/veh / LOS	33.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.27	B	2.09	B	2.13	B	1.94	B
Bicycle LOS Score / LOS	1.21	A	1.80	B	1.73	B	1.13	A

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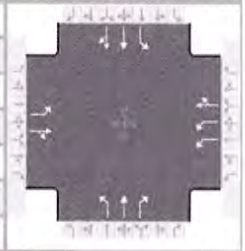
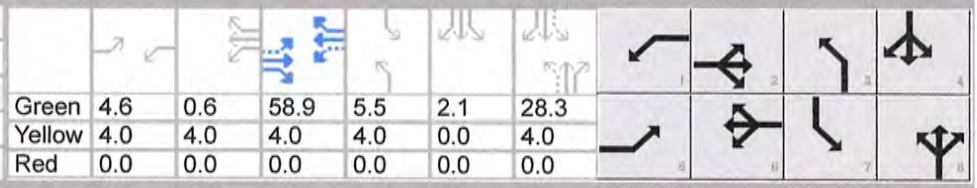
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.89
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	119th St. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	272	107	356	276	82	68	323	296	98	653	51

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.6	0.6	58.9	5.5	2.1	28.3	
Yellow	4.0	4.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.6	62.9	13.2	67.5	9.5	32.3	11.6	34.4
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.4		8.4		5.8	25.9	7.7	26.2
Green Extension Time (g_e), s	0.0	0.0	0.8	0.0	0.1	2.4	0.1	2.6
Phase Call Probability	0.77		1.00		0.92	1.00	0.97	1.00
Max Out Probability	0.00		0.00		0.00	0.31	0.00	0.21

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	44	426		400	402		76	363	333	110	400	391
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1794		1757	1811		1795	1900	1610	1739	1885	1837
Queue Service Time (g_s), s	1.4	19.0		6.4	16.1		3.8	21.7	23.9	5.7	24.2	24.2
Cycle Queue Clearance Time (g_c), s	1.4	19.0		6.4	16.1		3.8	21.7	23.9	5.7	24.2	24.2
Green Ratio (*g/C*)	0.53	0.49		0.58	0.53		0.28	0.24	0.24	0.30	0.25	0.25
Capacity (*c*), veh/h	507	880		1039	958		167	448	380	225	477	465
Volume-to-Capacity Ratio (*X*)	0.086	0.484		0.385	0.420		0.459	0.810	0.876	0.489	0.840	0.841
Back of Queue (*Q*), ft/ln (95 th percentile)	26	325		109	281		77	405	403	113	450	438
Back of Queue (*Q*), veh/ln (95 th percentile)	1.0	12.9		4.4	11.2		3.0	16.2	16.1	4.3	17.8	17.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	14.4	20.4		14.0	17.1		35.0	43.3	44.2	33.6	42.5	42.5
Incremental Delay (d_2), s/veh	0.0	1.9		0.1	1.4		0.7	6.2	13.1	0.6	8.0	8.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	14.5	22.3		14.1	18.4		35.8	49.5	57.3	34.3	50.5	50.7
Level of Service (LOS)	B	C		B	B		D	D	E	C	D	D
Approach Delay, s/veh / LOS	21.6	C		16.3	B		51.5	D		48.6	D	
Intersection Delay, s/veh / LOS	36.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.27	B	2.09	B	2.13	B	1.94	B
Bicycle LOS Score / LOS	1.26	A	1.81	B	1.76	B	1.23	A

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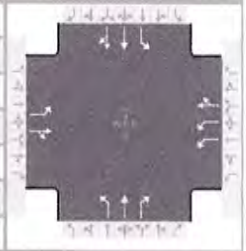
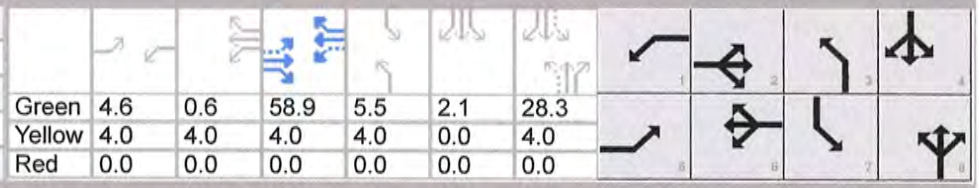
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	AM Peak Hour	PHF	0.89
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	119th St. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	272	107	356	276	82	68	325	296	98	658	51

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	4.6	0.6	58.9	5.5	2.1	28.3	
Yellow	4.0	4.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	8.6	62.9	13.2	67.5	9.5	32.3	11.6	34.4
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	3.4		8.4		5.8	25.9	7.7	26.4
Green Extension Time (g_e), s	0.0	0.0	0.8	0.0	0.1	2.4	0.1	2.6
Phase Call Probability	0.77		1.00		0.92	1.00	0.97	1.00
Max Out Probability	0.00		0.00		0.00	0.31	0.00	0.22

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	44	426		400	402		76	365	333	110	403	393
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1794		1757	1811		1795	1900	1610	1739	1885	1837
Queue Service Time (g_s), s	1.4	19.0		6.4	16.1		3.8	21.8	23.9	5.7	24.4	24.4
Cycle Queue Clearance Time (g_c), s	1.4	19.0		6.4	16.1		3.8	21.8	23.9	5.7	24.4	24.4
Green Ratio (*g/C*)	0.53	0.49		0.58	0.53		0.28	0.24	0.24	0.30	0.25	0.25
Capacity (*c*), veh/h	507	880		1039	958		165	448	380	224	477	465
Volume-to-Capacity Ratio (*X*)	0.086	0.484		0.385	0.420		0.462	0.815	0.875	0.492	0.845	0.846
Back of Queue (*Q*), ft/ln (95 th percentile)	26	325		109	282		77	408	403	113	455	443
Back of Queue (*Q*), veh/ln (95 th percentile)	1.0	12.9		4.4	11.2		3.0	16.3	16.1	4.3	18.0	17.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	14.4	20.4		14.0	17.1		35.1	43.4	44.1	33.7	42.6	42.6
Incremental Delay (d_2), s/veh	0.0	1.9		0.1	1.4		0.7	6.4	13.1	0.6	8.4	8.6
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	14.5	22.3		14.1	18.5		35.8	49.8	57.2	34.3	51.0	51.2
Level of Service (LOS)	B	C		B	B		D	D	E	C	D	D
Approach Delay, s/veh / LOS	21.6	C		16.3	B		51.6	D		49.1	D	
Intersection Delay, s/veh / LOS	36.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.27	B	2.09	B	2.13	B	1.94	B
Bicycle LOS Score / LOS	1.26	A	1.81	B	1.76	B	1.24	A

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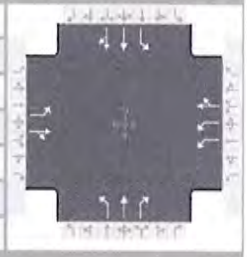
HCS Signalized Intersection Results Summary

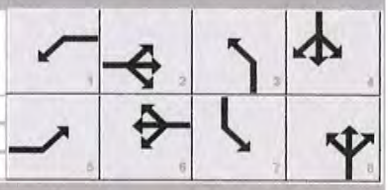
General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.97
Urban Street		Analysis Year	2026	Analysis Period	1> 7:00
Intersection	119th St. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	51	204	94	222	257	105	91	577	502	121	370	39

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.0	2.1	47.3	5.8	1.5	42.3	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.0	51.3	11.1	53.4	9.8	46.3	11.3	47.8
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.2	3.1	3.2
Queue Clearance Time (g_s), s	4.0		6.6		5.9	38.8	7.2	11.8
Green Extension Time (g_e), s	0.1	0.0	0.5	0.0	0.2	3.5	0.2	3.6
Phase Call Probability	0.83		1.00		0.96	1.00	0.98	1.00
Max Out Probability	0.00		0.00		0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	53	307		229	373		94	595	518	125	213	208
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1798		1757	1806		1810	1900	1610	1810	1900	1836
Queue Service Time (g_s), s	2.0	15.0		4.6	18.4		3.9	35.4	36.8	5.2	9.6	9.8
Cycle Queue Clearance Time (g_c), s	2.0	15.0		4.6	18.4		3.9	35.4	36.8	5.2	9.6	9.8
Green Ratio (*g/C*)	0.44	0.39		0.45	0.41		0.40	0.35	0.35	0.41	0.37	0.37
Capacity (*c*), veh/h	382	708		913	743		410	670	568	218	694	671
Volume-to-Capacity Ratio (*X*)	0.137	0.434		0.251	0.502		0.229	0.888	0.911	0.571	0.307	0.311
Back of Queue (*Q*), ft/ln (95 th percentile)	38	274		83	324		75	574	521	101	194	191
Back of Queue (*Q*), veh/ln (95 th percentile)	1.5	11.0		3.3	13.0		3.0	22.9	20.9	4.0	7.8	7.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	21.2	26.6		20.2	26.2		23.2	36.6	37.0	28.3	27.2	27.3
Incremental Delay (d_2), s/veh	0.1	1.9		0.1	2.4		0.1	1.8	3.3	0.9	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	21.2	28.5		20.2	28.6		23.3	38.4	40.4	29.2	27.3	27.4
Level of Service (LOS)	C	C		C	C		C	D	D	C	C	C
Approach Delay, s/veh / LOS	27.5	C		25.4	C		38.0	D		27.8	C	
Intersection Delay, s/veh / LOS	31.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.28	B	2.11	B	2.12	B	1.93	B
Bicycle LOS Score / LOS	1.08	A	1.48	A	2.48	B	0.94	A

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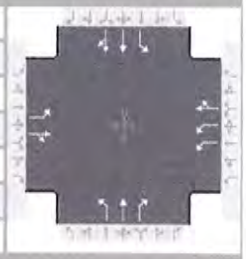
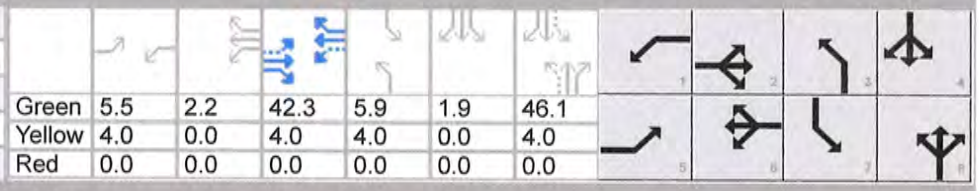
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.97
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	119th St. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 w/o Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	312	100	235	272	125	97	648	532	139	412	53

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.5	2.2	42.3	5.9	1.9	46.1	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.5	46.3	11.7	48.5	9.9	50.1	11.9	52.1
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (g_s), s	5.2		7.2		6.0	42.1	7.7	12.7
Green Extension Time (g_e), s	0.1	0.0	0.6	0.0	0.2	4.1	0.3	4.1
Phase Call Probability	0.92		1.00		0.96	1.00	0.99	1.00
Max Out Probability	0.00		0.00		0.00	0.01	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	77	425		242	409		100	668	548	143	243	236
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1820		1757	1798		1810	1900	1610	1810	1900	1824
Queue Service Time (g_s), s	3.2	23.7		5.2	22.3		4.0	40.1	38.2	5.7	10.6	10.7
Cycle Queue Clearance Time (g_c), s	3.2	23.7		5.2	22.3		4.0	40.1	38.2	5.7	10.6	10.7
Green Ratio (*g/C*)	0.40	0.35		0.42	0.37		0.43	0.38	0.38	0.45	0.40	0.40
Capacity (*c*), veh/h	311	641		650	666		423	730	619	218	761	731
Volume-to-Capacity Ratio (*X*)	0.249	0.662		0.373	0.614		0.236	0.915	0.886	0.657	0.320	0.323
Back of Queue (*Q*), ft/ln (95 th percentile)	62	417		96	387		75	651	537	110	207	203
Back of Queue (*Q*), veh/ln (95 th percentile)	2.5	16.7		3.8	15.5		3.0	26.0	21.5	4.4	8.3	8.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	24.9	32.8		24.5	30.8		20.9	35.1	34.5	27.8	24.7	24.8
Incremental Delay (d_2), s/veh	0.2	5.3		0.1	4.2		0.1	4.9	3.7	1.3	0.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	25.0	38.1		24.6	35.0		21.0	39.9	38.2	29.0	24.8	24.9
Level of Service (LOS)	C	D		C	C		C	D	D	C	C	C
Approach Delay, s/veh / LOS	36.1	D		31.1	C		37.8	D		25.8	C	
Intersection Delay, s/veh / LOS	33.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.12	B	2.11	B	1.92	B
Bicycle LOS Score / LOS	1.32	A	1.56	B	2.66	C	1.00	A

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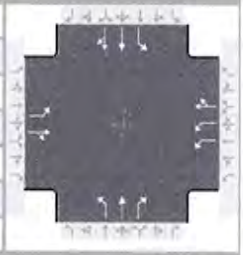
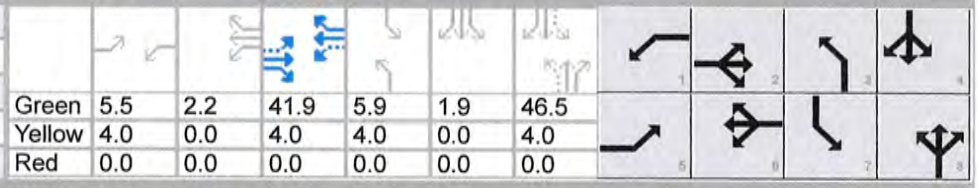
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Kelly Engineering			Duration, h	0.250
Analyst	DSK	Analysis Date	Feb 13, 2026	Area Type	Other
Jurisdiction	Clark Co.	Time Period	PM Peak Hour	PHF	0.97
Urban Street		Analysis Year	2029	Analysis Period	1> 7:00
Intersection	119th St. & 72nd Ave.	File Name	Streets1.xus		
Project Description	Year 2029 with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	312	100	235	272	126	97	654	532	139	416	53

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	5.5	2.2	41.9	5.9	1.9	46.5	
Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	1.1	4.0	1.1	4.0	1.1	3.0	1.1	4.0
Phase Duration, s	9.5	45.9	11.8	48.1	9.9	50.5	11.8	52.4
Change Period, (*Y+R c*), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.1	3.1	3.1
Queue Clearance Time (*g s*), s	5.2		7.2		6.0	42.4	7.6	12.7
Green Extension Time (*g e*), s	0.1	0.0	0.6	0.0	0.2	4.1	0.3	4.1
Phase Call Probability	0.92		1.00		0.96	1.00	0.99	1.00
Max Out Probability	0.00		0.00		0.00	0.01	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	77	425		242	410		100	674	548	143	245	238
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1820		1757	1798		1810	1900	1610	1810	1900	1825
Queue Service Time (*g s*), s	3.2	23.8		5.2	22.4		4.0	40.4	38.0	5.6	10.6	10.7
Cycle Queue Clearance Time (*g c*), s	3.2	23.8		5.2	22.4		4.0	40.4	38.0	5.6	10.6	10.7
Green Ratio (*g/C*)	0.40	0.35		0.42	0.37		0.44	0.39	0.39	0.45	0.40	0.40
Capacity (*c*), veh/h	306	636		642	661		425	736	624	217	767	737
Volume-to-Capacity Ratio (*X*)	0.253	0.668		0.377	0.621		0.236	0.915	0.879	0.659	0.320	0.323
Back of Queue (*Q*), ft/ln (95 th percentile)	62	419		96	391		75	657	533	109	208	203
Back of Queue (*Q*), veh/ln (95 th percentile)	2.5	16.8		3.8	15.6		3.0	26.3	21.3	4.4	8.3	8.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	25.2	33.2		24.8	31.1		20.7	34.9	34.1	27.7	24.5	24.5
Incremental Delay (*d 2*), s/veh	0.2	5.5		0.1	4.4		0.1	5.1	3.4	1.3	0.1	0.1
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	25.3	38.7		24.9	35.4		20.8	39.9	37.6	29.0	24.6	24.6
Level of Service (LOS)	C	D		C	D		C	D	D	C	C	C
Approach Delay, s/veh / LOS	36.6	D		31.5	C		37.5	D		25.6	C	
Intersection Delay, s/veh / LOS	33.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	2.12	B	2.11	B	1.92	B
Bicycle LOS Score / LOS	1.32	A	1.56	B	2.67	C	1.00	A

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HCS Two-Way Stop-Control Report

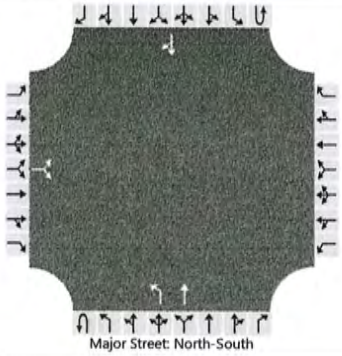
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	123rd St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	123rd St.
North/South Street	72nd Ave.
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		1		30						21	422				716	3
Percent Heavy Vehicles (%)		0		3						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.23						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.33						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37							25						
Capacity, c (veh/h)			342							793						
v/c Ratio			0.11							0.03						
95% Queue Length, Q_{95} (veh)			0.4							0.1						
95% Queue Length, Q_{95} (ft)			10.2							2.5						
Control Delay (s/veh)			16.8							9.7						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		16.8								0.5						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

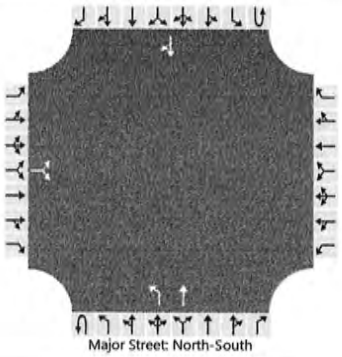
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2029
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o project

Site Information

Intersection	123rd St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	123rd St.
North/South Street	72nd Ave.
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		3		38						24	468				819	9
Percent Heavy Vehicles (%)		0		3						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.23						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.33						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			49							29						
Capacity, c (veh/h)			269							709						
v/c Ratio			0.18							0.04						
95% Queue Length, Q_{95} (veh)			0.6							0.1						
95% Queue Length, Q_{95} (ft)			15.3							2.5						
Control Delay (s/veh)			21.3							10.3						
Level of Service (LOS)			C							B						
Approach Delay (s/veh)		21.3								0.5						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
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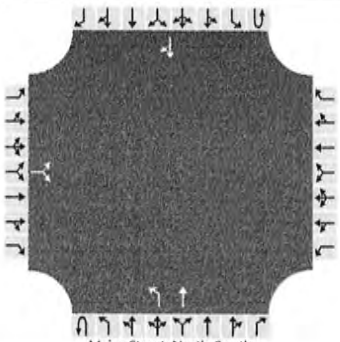
Intersection Orientation	North-South
Project Description	Year 2029 with project

Site Information

Intersection	123rd St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	123rd St.
North/South Street	72nd Ave.
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		3		44						26	468				819	9
Percent Heavy Vehicles (%)		0		3						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.23						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.33						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			56							31						
Capacity, c (veh/h)			273							709						
v/c Ratio			0.21							0.04						
95% Queue Length, Q_{95} (veh)			0.8							0.1						
95% Queue Length, Q_{95} (ft)			20.4							2.5						
Control Delay (s/veh)			21.6							10.3						
Level of Service (LOS)			C							B						
Approach Delay (s/veh)		21.6								0.5						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
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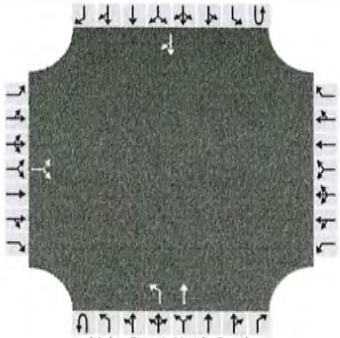
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	123rd St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	123rd St.
North/South Street	72nd Ave.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		5		18						25	692				659	5
Percent Heavy Vehicles (%)		0		3						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.23						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.33						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			24							26						
Capacity, c (veh/h)			296							907						
v/c Ratio			0.08							0.03						
95% Queue Length, Q_{95} (veh)			0.3							0.1						
95% Queue Length, Q_{95} (ft)			7.6							2.5						
Control Delay (s/veh)			18.2							9.1						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		18.2								0.3						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

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Analyst	DSK
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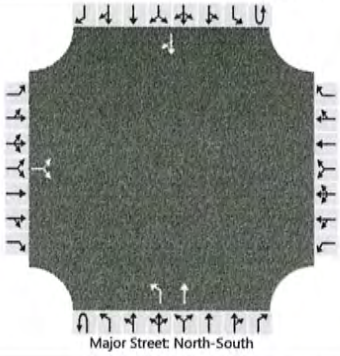
Intersection Orientation	North-South
Project Description	Year 2029 w/o project

Site Information

Intersection	123rd St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	123rd St.
North/South Street	72nd Ave.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		6		23						33	799				738	7
Percent Heavy Vehicles (%)		0		3						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.23						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.33						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			31							35						
Capacity, c (veh/h)			244							843						
v/c Ratio			0.13							0.04						
95% Queue Length, Q_{95} (veh)			0.4							0.1						
95% Queue Length, Q_{95} (ft)			10.2							2.5						
Control Delay (s/veh)			21.8							9.5						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		21.8								0.4						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

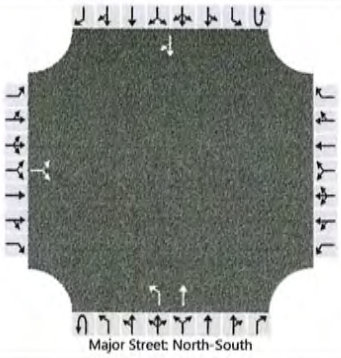
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2029
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 with project

Site Information

Intersection	123rd St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	123rd St.
North/South Street	72nd Ave.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	0
Configuration			LR							L	T					TR
Volume (veh/h)		6		27						40	799				738	7
Percent Heavy Vehicles (%)		0		3						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.23						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.33						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			35							42						
Capacity, c (veh/h)			252							843						
v/c Ratio			0.14							0.05						
95% Queue Length, Q_{95} (veh)			0.5							0.2						
95% Queue Length, Q_{95} (ft)			12.7							5.0						
Control Delay (s/veh)			21.5							9.5						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		21.5								0.5						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

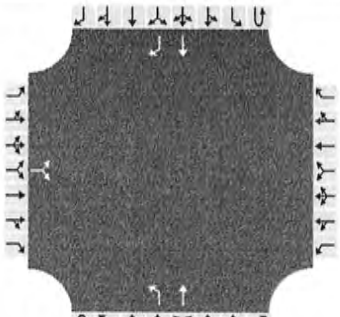
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	134th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	134th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	1
Configuration			LR							L	T				T	R
Volume (veh/h)		12		45						16	359				618	9
Percent Heavy Vehicles (%)		0		3						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.23						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.33						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			61							17						
Capacity, c (veh/h)			383							926						
v/c Ratio			0.16							0.02						
95% Queue Length, Q_{95} (veh)			0.6							0.1						
95% Queue Length, Q_{95} (ft)			15.3							2.5						
Control Delay (s/veh)			16.2							9.0						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		16.2								0.4						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

General Information

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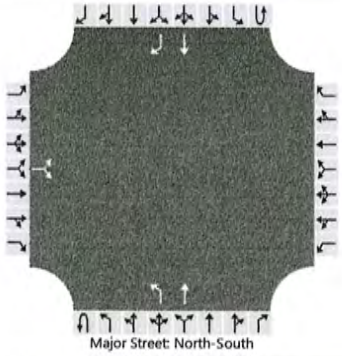
Project Description	Year 2029 w/o project

Site Information

Intersection	134th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	134th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	1
Configuration			LR							L	T				T	R
Volume (veh/h)		13		48						17	396				659	10
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			66							18						
Capacity, c (veh/h)			356							891						
v/c Ratio			0.18							0.02						
95% Queue Length, Q_{95} (veh)			0.7							0.1						
95% Queue Length, Q_{95} (ft)			17.5							2.5						
Control Delay (s/veh)			17.4							9.1						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		17.4								0.4						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

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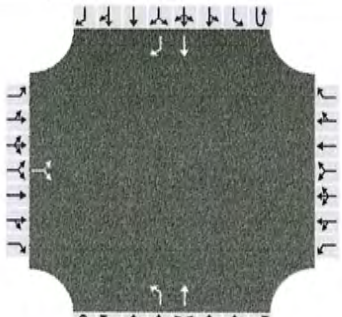
East/West Street	134th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	1
Configuration			LR							L	T				T	R
Volume (veh/h)		14		48						17	396				659	10
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			67							18						
Capacity, c (veh/h)			352							891						
v/c Ratio			0.19							0.02						
95% Queue Length, Q_{95} (veh)			0.7							0.1						
95% Queue Length, Q_{95} (ft)			17.5							2.5						
Control Delay (s/veh)			17.6							9.1						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		17.6								0.4						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
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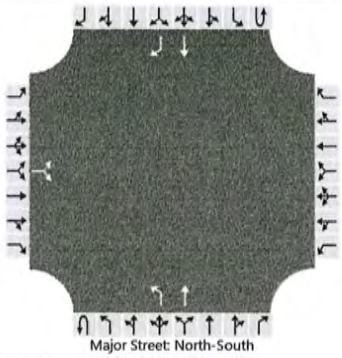
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	134th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	134th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	1
Configuration			LR							L	T				T	R
Volume (veh/h)		7		43						32	579				504	11
Percent Heavy Vehicles (%)		0		5						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.25						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.35						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			55							35						
Capacity, c (veh/h)			417							1016						
v/c Ratio			0.13							0.03						
95% Queue Length, Q_{95} (veh)			0.5							0.1						
95% Queue Length, Q_{95} (ft)			12.9							2.5						
Control Delay (s/veh)			14.9							8.7						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)		14.9								0.5						
Approach LOS		B								A						

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HCS Two-Way Stop-Control Report

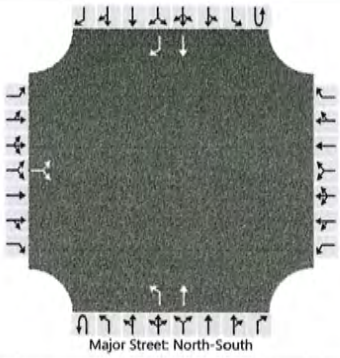
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o Project

Site Information

Intersection	134th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	134th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	1
Configuration			LR							L	T				T	R
Volume (veh/h)		7		46						34	623				549	13
Percent Heavy Vehicles (%)		0		5						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.25						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.35						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			58							37						
Capacity, c (veh/h)			386							972						
v/c Ratio			0.15							0.04						
95% Queue Length, Q_{95} (veh)			0.5							0.1						
95% Queue Length, Q_{95} (ft)			12.9							2.5						
Control Delay (s/veh)			16.0							8.9						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		16.0								0.5						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

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Site Information

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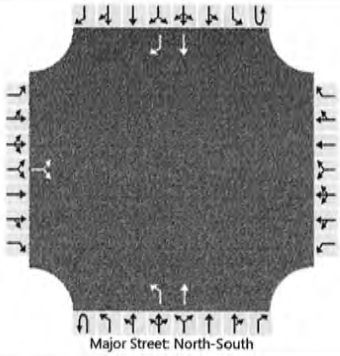
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	1	0	0	0	1	1
Configuration			LR							L	T				T	R
Volume (veh/h)		8		46						34	623				549	13
Percent Heavy Vehicles (%)		0		5						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized														No		
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.25						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.35						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			59							37						
Capacity, c (veh/h)			376							972						
v/c Ratio			0.16							0.04						
95% Queue Length, Q_{95} (veh)			0.6							0.1						
95% Queue Length, Q_{95} (ft)			15.5							2.5						
Control Delay (s/veh)			16.4							8.9						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		16.4								0.5						
Approach LOS		C								A						

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HCS Two-Way Stop-Control Report

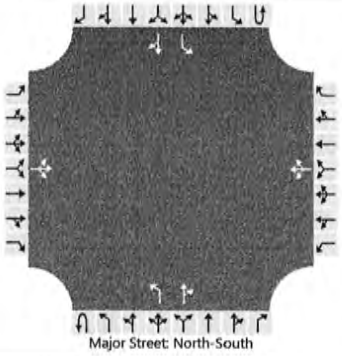
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	139th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		16	10	14		10	6	40		25	237	9		50	587	10
Percent Heavy Vehicles (%)		0	0	0		10	0	0		0				3		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.20	6.50	6.20		4.10				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.59	4.00	3.30		2.20				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			45				64			28				57		
Capacity, c (veh/h)			212				370			923				1277		
v/c Ratio			0.21				0.17			0.03				0.04		
95% Queue Length, Q_{95} (veh)			0.8				0.6			0.1				0.1		
95% Queue Length, Q_{95} (ft)			20.0				15.2			2.5				2.6		
Control Delay (s/veh)			26.6				16.7			9.0				7.9		
Level of Service (LOS)			D				C			A				A		
Approach Delay (s/veh)		26.6				16.7				0.8				0.6		
Approach LOS		D				C				A				A		

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HCS Two-Way Stop-Control Report

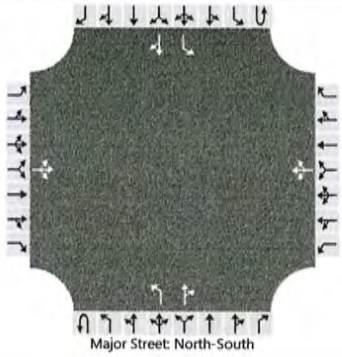
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2029
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o project

Site Information

Intersection	139th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		17	11	15		11	6	42		26	372	10		53	626	11
Percent Heavy Vehicles (%)		0	0	0		10	0	0		0				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.20	6.50	6.20		4.10				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.59	4.00	3.30		2.20				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			49				67			30				60		
Capacity, c (veh/h)			156				271			888				1120		
v/c Ratio			0.31				0.25			0.03				0.05		
95% Queue Length, Q_{95} (veh)			1.3				1.0			0.1				0.2		
95% Queue Length, Q_{95} (ft)			32.5				25.4			2.5				5.1		
Control Delay (s/veh)			38.3				22.6			9.2				8.4		
Level of Service (LOS)			E				C			A				A		
Approach Delay (s/veh)		38.3				22.6				0.6				0.6		
Approach LOS		E				C				A				A		

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HCS Two-Way Stop-Control Report

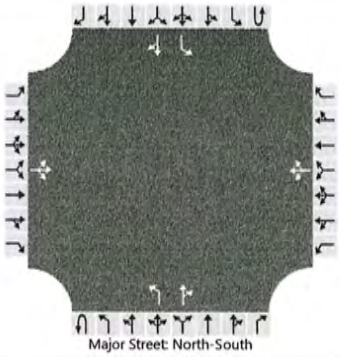
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2029
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 with project

Site Information

Intersection	139th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		17	11	15		11	6	42		26	373	10		53	626	11
Percent Heavy Vehicles (%)		0	0	0		10	0	0		0				3		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.20	6.50	6.20		4.10				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.59	4.00	3.30		2.20				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			49				67			30				60		
Capacity, c (veh/h)			156				270			888				1119		
v/c Ratio			0.31				0.25			0.03				0.05		
95% Queue Length, Q_{95} (veh)			1.3				1.0			0.1				0.2		
95% Queue Length, Q_{95} (ft)			32.5				25.4			2.5				5.1		
Control Delay (s/veh)			38.4				22.7			9.2				8.4		
Level of Service (LOS)			E				C			A				A		
Approach Delay (s/veh)		38.4				22.7				0.6				0.6		
Approach LOS		E				C				A				A		

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HCS Two-Way Stop-Control Report

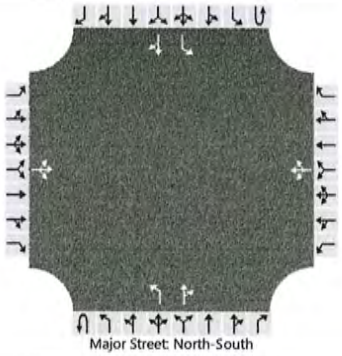
General Information

Analyst	DSK
Agency/Co.	Kelly Engineering
Date Performed	2/14/2026
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	139th St. & 72nd Ave.
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		10	19	19		8	21	46		23	585	7		24	490	12
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			55				85			26				27		
Capacity, c (veh/h)			170				230			1012				928		
v/c Ratio			0.32				0.37			0.03				0.03		
95% Queue Length, Q_{95} (veh)			1.3				1.6			0.1				0.1		
95% Queue Length, Q_{95} (ft)			32.5				40.0			2.5				2.5		
Control Delay (s/veh)			35.8				29.6			8.7				9.0		
Level of Service (LOS)			E				D			A				A		
Approach Delay (s/veh)		35.8				29.6				0.3				0.4		
Approach LOS		E				D				A				A		

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HCS Two-Way Stop-Control Report

General Information

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Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Year 2029 w/o project

Site Information

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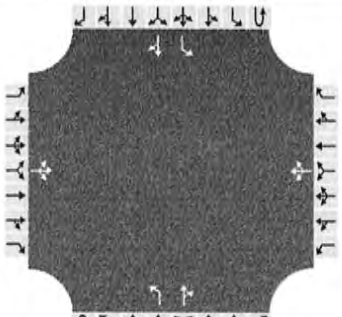
Jurisdiction	Clark Co.
East/West Street	139th St.
North/South Street	72nd Ave.
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		11	20	20		8	22	49		24	629	7		25	534	13
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			58				90			27				28		
Capacity, c (veh/h)			141				202			969				889		
v/c Ratio			0.41				0.45			0.03				0.03		
95% Queue Length, Q_{95} (veh)			1.8				2.1			0.1				0.1		
95% Queue Length, Q_{95} (ft)			45.0				52.5			2.5				2.5		
Control Delay (s/veh)			47.1				36.4			8.8				9.2		
Level of Service (LOS)			E				E			A				A		
Approach Delay (s/veh)		47.1				36.4				0.3				0.4		
Approach LOS		E				E				A				A		

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East/West Street	139th St.
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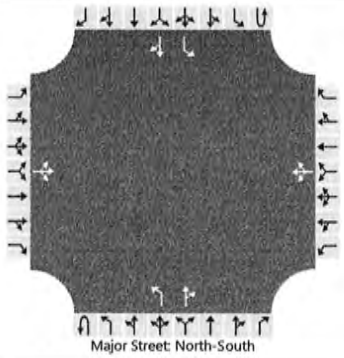
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		11	20	20		8	22	49		24	631	7		25	536	13
Percent Heavy Vehicles (%)		0	0	0		0	0	0		0				0		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.20				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			58				90			27				28		
Capacity, c (veh/h)			140				201			967				887		
v/c Ratio			0.41				0.45			0.03				0.03		
95% Queue Length, Q_{95} (veh)			1.8				2.1			0.1				0.1		
95% Queue Length, Q_{95} (ft)			45.0				52.5			2.5				2.5		
Control Delay (s/veh)			47.6				36.7			8.8				9.2		
Level of Service (LOS)			E				E			A				A		
Approach Delay (s/veh)		47.6				36.7				0.3				0.4		
Approach LOS		E				E				A				A		

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APPENDIX G
REFERENCES

References

1. Trip Generation Manual, 12th Edition, 2025, Institute of Transportation Engineers.

2. Highway Capacity Manual, 7th Edition, 2022, Transportation Research Board, National Research Council.

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