Southern Oregon Transportation Engineering, LLC
319 Eastwood Drive - Medford, Or. 97504 – Phone (541) 608-9923 – Email: Kim.parducci@gmail.com

December 5, 2018

Jordan Cogburn, City Planner
City of Junction City
1171 Elm Street / P.O. Box 250
Junction City, Oregon 97448

RE: Rolling Meadows PUD Site Revision Traffic Analysis

Dear Jordan,

Southern Oregon Transportation Engineering, LLC evaluated site layout and phasing changes made to the Rolling Meadows Planned Unit Development (PUD), located along the west side of Oaklea Drive, between 10th Avenue and 6th Avenue in Junction City, Oregon. Our firm prepared the original traffic impact analysis in December of 2014 for the proposed PUD. This letter is provided to outline what has changed and any corresponding impacts to the transportation system.

Background

The original PUD traffic impact analysis evaluated a mix of residential units (308 total lots) made up of low, medium, and high density uses. The revised PUD includes a similar mix of residential uses, but the number of lots has increased from 308 to 333, with the increase split between low density and medium density uses. The change in number of lots does not change the traffic impact much from an analysis standpoint, but a bigger change occurs with the phasing plan. Originally, the phasing schedule started along 10th Avenue (an extension of 10th Avenue from the east side of Oaklea Drive) and worked its way south to 6th Avenue (an extension of 6th Avenue east of Oaklea Drive). The proposed new site plan reverses this phasing schedule and starts at 6th Avenue and works its way north to 10th Avenue. The new phasing schedule is proposed to build Phases 1-5 with traffic flow to the 6th Avenue / Oaklea Drive intersection, and split between two accesses (6th Avenue and 10th Avenue) after Phase 6 of proposed development.

Potential impacts from the revised site layout and phasing changes are expected to only affect the intersections of 6th Avenue / Oaklea Drive and 10th Avenue / Oaklea Drive. These two intersections were re-analyzed with proposed site changes to determine what impacts would occur as a result.

Traffic Data Development

Current traffic counts were gathered in October of 2018 at the 6th Avenue and 10th Avenue intersections with Oaklea Drive. Counts were gathered during the a.m. and p.m. peak periods to account for school traffic in the local area. A seasonal adjustment was determined from the 2017 ODOT Seasonal Trend Table and applied to raw count data to develop year 2018 no-build volumes. Growth was assumed to occur at the same rate as previously evaluated and followed what was shown in the City's Transportation System Plan (TSP). Refer to the attachments for count data.

The revised phasing schedule is provided in Table 1. In the original traffic analysis the base year was 2014 and first phase of development occurred in year 2015. The same timeline was kept for each phase of development in this revised analysis, but the base year was changed to 2018 and each design year followed the same schedule respectively. Design years included Phase 1 design year 2019, Phase 1-3 design year 2022, Phase 1-5 design year 2024, and Phase 1-7 (full build) future year 2035.

Table 1 – Development Trip Generations

Land Use	Unit	Size	Weekday (ADT)	AM			PM		
				Total	In	Out	Total	In	Out
Phase 1 Development (Year 2019)									
210-Single Family Residential	DU	75	708	**56**	***14***	***42***	**74**	***47***	***27***
Phase 1-3 Development (Year 2022)									
210-Single Family Residential	DU	153	1444	**113**	***28***	***85***	**151**	***95***	***56***
Phase 1-5 Development (Year 2024)									
210-Single Family Residential	DU	242	2284	179	45	134	240	151	89
220-Apartments	Unit	20	109	7	2	5	9	5	4
230-Townhouse	DU	20	189	15	4	11	20	13	7
Phase 1-5 Total Trips				**201**	***51***	***150***	**269**	***169***	***100***
Phase 1-7 Development (Year 2035)									
210-Single Family Residential	DU	278	2624	206	52	154	275	173	102
220-Apartments	Unit	20	109	7	2	5	9	5	3
230-Townhouse	DU	54	510	40	10	30	53	34	20
Full Build Total Trips				**253**	***64***	***189***	**337**	***212***	***125***

SF – square feet, DU – Dwelling Unit, ADT-Average Daily Trips

Year 2019, 2022, 2024, and 2035 Build Intersection Operations

Design year 2019, 2022, 2024, and 2035 build scenarios were evaluated with proposed site plan and phasing revisions. The City's performance standard is a level of service (LOS) "D" and volume-to-capacity (V/C) ratio of 0.75. Results are provided in Table 2 for the a.m. and p.m. peak hours.

Table 1 – Build Intersection Operations, AM/PM Peak Hours

Intersection	Phase 1 Year 2019		Phase 1-3 Year 2022		Phase 1-5 Year 2024		Full Build Year 2035	
	AM	PM	AM	PM	AM	PM	AM	PM
6th Ave / Oaklea Dr	B, 0.16	B, 0.12	C, 0.22	B, 0.20	C, 0.48	C, 0.34	C, 0.44	D, 0.56
10th Ave / Oaklea Dr	B, 0.16	B, 0.08	B, 0.19	B, 0.10	B, 0.22	B, 0.13	C, 0.29	C, 0.36

Note: Exceeded performance standards are shown in bold, italic

Results of the analysis show both intersections continue to operate within performance standards for all analysis scenarios with site and phasing revisions. The intersection of 6th Avenue / Oaklea Drive is shown to have a higher v/c ratio (eastbound left turn movement) in the Phase 1-5 design year 2024

analysis scenario than it does in the full build future year 2035 scenario because in 2024 all traffic for phases 1-5 are using the 6th Avenue intersection. In the full build scenario, traffic is using both the 6th Avenue intersection and 10th Avenue intersection with Oaklea Drive. Refer to the attachments for synchro output sheets.

Turn Lane Criterion

Left and right turn lane criterion was re-evaluated with site and phasing revisions to determine whether criterion is still met at 6th Avenue / Oaklea Drive and 10th Avenue / Oaklea Drive and, if so, when criterion is met. Results showed criterion for a center left turn lane on Oaklea Drive is first met at 6th Avenue under design year 2022 Phase 1-3 build conditions. Center left turn lane criterion is not met on Oaklea Drive at 10th Avenue until Phase 6 of proposed development, which is planned by the future year 2035.

Right turn lane criterion was not shown to be met on Oaklea Drive at either intersection under any analysis scenario. Turn lane graphs are provided in the attachment for further reference.

Conclusions

The findings of the traffic analysis conclude that the proposed site and phasing revisions for the Rolling Meadows PUD result in no additional impacts to the transportation system. The same improvements are still shown to be required, which include a center left turn lane on Oaklea Drive at 6th Avenue and 10th Avenue intersections. The only noted changes, as a result of site and phasing revisions, involve the timing of improvements. These are as follows:

- Criterion for a center left turn lane on Oaklea Drive at 6th Avenue is shown to be met under design year 2022 Phase 1-3 build conditions during both the a.m. and p.m. peak hours.
- Criterion for a center left turn lane on Oaklea Drive at 10th Avenue is shown to be met under future year 2035 full build conditions during both the a.m. and p.m. peak hours. This was the first analysis scenario evaluated with an extension of 10th Avenue because a connection is not planned until Phase 6 of proposed development. In the event that this changes, it is recommended that a center turn lane on Oaklea Drive be implemented at such time that a 10th Avenue connection is made.

Please feel free to contact me if you have any questions or concerns regarding this analysis.

Sincerely,

Kimberly Parducci PE, PTOE
Southern Oregon Transportation Engineering, LLC

REGISTERED PROFESSIONAL ENGINEER
53200PE
OREGON
SEPT 10, 2002
KIMBERLY PARDUCCI
RENEWS 12/31/18

Attachments: Revised Site Plan, Count Data, Figures, Synchro Output, Turn Lane Graphs

ATTACHMENTS

TENTATIVE MASTER PLAN FOR:

ROLLING MEADOWS PUD

SITUATED IN THE SW 1/4 OF SECTION 31,T15S, R04W,
W.M., LANE COUNTY, OREGON

OCTOBER 2018

VICINITY MAP
N.T.S.

SHADING LEGEND:

- HIGH DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- LOW DENSITY RESIDENTIAL
- OPEN SPACE
- DELINEATED WETLAND
- PEDESTRIAN PATHWAY
- SIGHT & SOUND BARRIER FENCE

LOTS BY PHASE:

PHASE	HIGH DENSITY	MED. DENSITY	LOW DENSITY	TOTAL LOTS	TOTAL PARK SPACE	TOTAL ACREAGE
1	0	0	75	75	0.32 ac.	14.52 ac.
2	0	0	37	37	0.07 ac.	7.51 ac.
3	0	0	41	41	0.00 ac.	7.31 ac
4	0	18	41	59	0.39 ac.	11.95 ac
5	0	2	48	50	0.22 ac.	9.63 ac.
6	1	28	0	29	0.00 ac.	7.84 ac.
7	0	6	36	42	0.00 ac.	8.06 ac.
TOTALS:	1	54	278	333	1.00 ac.	66.82 ac.

STORMWATER FACILITY: 2.28 ACRES
OPEN SPACE/WETLAND: 16.26 ACRES

TOTAL DEVELOPMENT AREA: 85.36 ACRES

TENTATIVE CONSTRUCTION TIMETABLE:

PHASE	ROAD/UTILITY CONSTRUCTION	HOME BUILD-OUT
1	APRIL 2019	OCTOBER 2020
2	APRIL 2020	OCTOBER 2021
3	APRIL 2021	OCTOBER 2022
4	APRIL 2022	OCTOBER 2023
5	APRIL 2023	OCTOBER 2024
6	APRIL 2024	OCTOBER 2025
7	APRIL 2025	OCTOBER 2026

Pacific National Development, Inc
P.O. Box 3550
Salem, OR 97302
(503) 990-7003

RHINE-CROSS GROUP LLC
ENGINEERING - SURVEYING - PLANNING
112 N. 5th ST - SUITE 200 - P.O. BOX 909
KLAMATH FALLS, OREGON 97601
Phone: (541) 851-9405 Fax: (541) 273-9200 admin@rc-grp.com

REGISTERED PROFESSIONAL ENGINEER 55,506PE OREGON MARCUS D. CROSS
RENEWS: 12-31-19
10-15-2018

ROLLING MEADOWS
TENTATIVE PUD
MASTER PLAN
JUNCTION CITY OREGON

SHEET NAME: MASTER PLAN

DRAWN BY: MDC
CHKD BY: DAC
DATE: October, 2018

REVISIONS:

JOB NO. 1718

SHEET NO. MP 1
SHEET 1 of 2

SANDOWENGINEERING

160 Madison St. Suite A
Eugene, Oregon 97402

North-South: Oaklea Drive
East Approach: 6th Street
Weather: Overcast
Type: All Vehicles

File Name : Oaklea_6th
Site Code : 00000001
Start Date : 10/23/2018
Page No : 1

Groups Printed- All Veh

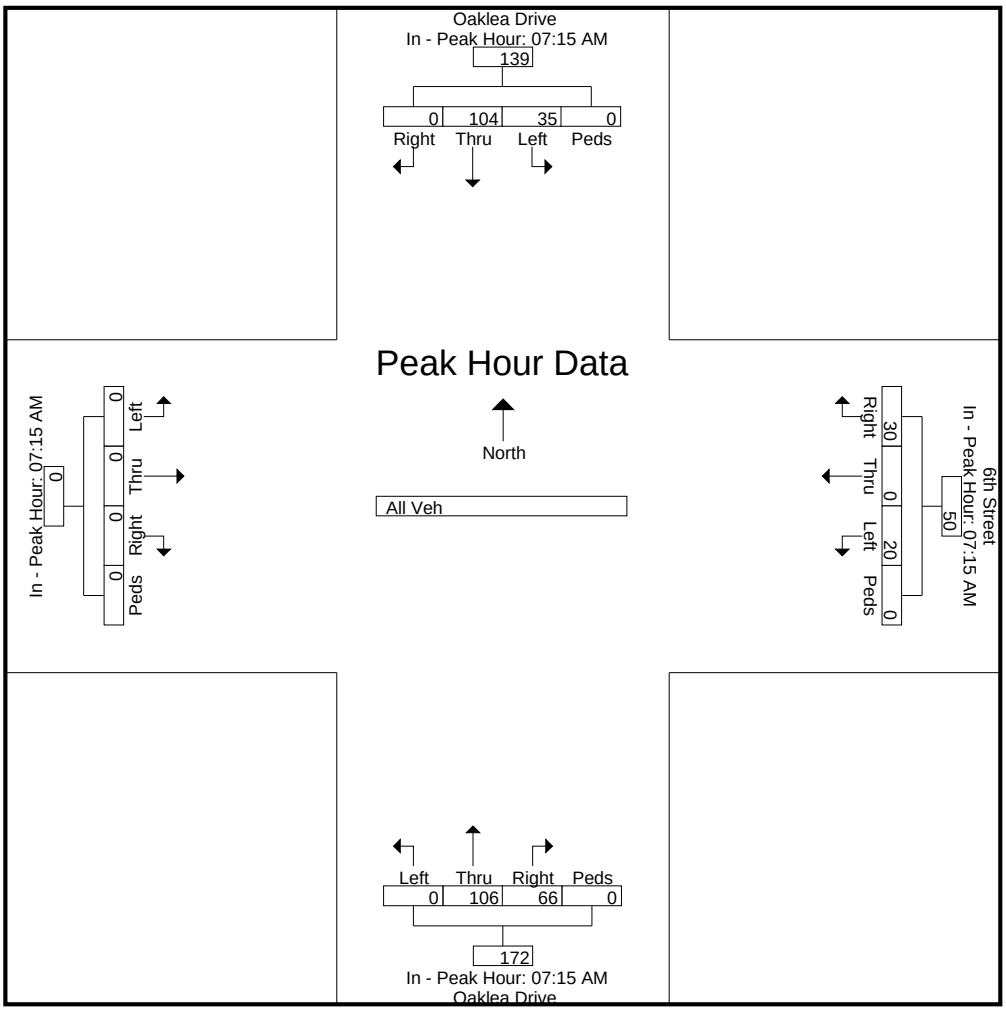
	Oaklea Drive From North					6th Street From East					Oaklea Drive From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	18	0	0	19	3	0	0	0	3	0	9	5	0	14	0	0	0	0	0	36
07:15 AM	4	21	0	0	25	2	0	5	0	7	0	20	8	0	28	0	0	0	0	0	60
07:30 AM	13	21	0	0	34	6	0	10	0	16	0	24	14	0	38	0	0	0	0	0	88
07:45 AM	15	30	0	0	45	8	0	11	0	19	0	40	29	0	69	0	0	0	0	0	133
Total	33	90	0	0	123	19	0	26	0	45	0	93	56	0	149	0	0	0	0	0	317
08:00 AM	3	32	0	0	35	4	0	4	0	8	0	22	15	0	37	0	0	0	0	0	80
08:15 AM	5	22	0	0	27	0	0	3	0	3	0	22	5	0	27	0	0	0	0	0	57
08:30 AM	3	13	0	0	16	2	0	0	0	2	0	17	3	0	20	0	0	0	0	0	38
08:45 AM	1	13	0	0	14	2	0	1	0	3	0	8	2	0	10	0	0	0	0	0	27
Total	12	80	0	0	92	8	0	8	0	16	0	69	25	0	94	0	0	0	0	0	202
*** BREAK ***																					
03:00 PM	1	21	0	0	22	4	0	1	0	5	0	19	2	0	21	0	0	0	0	0	48
03:15 PM	2	17	0	0	19	4	0	1	0	5	0	20	3	0	23	0	0	0	0	0	47
03:30 PM	4	13	0	0	17	5	0	6	0	11	0	17	0	0	17	0	0	0	0	0	45
03:45 PM	4	22	0	0	26	4	0	8	0	12	0	21	4	0	25	0	0	0	0	0	63
Total	11	73	0	0	84	17	0	16	0	33	0	77	9	0	86	0	0	0	0	0	203
04:00 PM	1	20	0	0	21	7	0	1	0	8	0	27	0	0	27	0	0	0	0	0	56
04:15 PM	3	17	0	0	20	4	0	2	0	6	0	24	1	0	25	0	0	0	0	0	51
04:30 PM	1	20	0	0	21	6	0	5	0	11	0	19	6	0	25	0	0	0	0	0	57
04:45 PM	6	19	0	0	25	3	0	5	0	8	0	33	1	0	34	0	0	0	0	0	67
Total	11	76	0	0	87	20	0	13	0	33	0	103	8	0	111	0	0	0	0	0	231
05:00 PM	2	35	0	0	37	8	0	5	0	13	0	37	7	0	44	0	0	0	0	0	94
05:15 PM	6	23	0	0	29	3	0	7	0	10	0	28	2	0	30	0	0	0	0	0	69
05:30 PM	2	27	0	0	29	2	0	1	0	3	0	27	0	0	27	0	0	0	0	0	59
05:45 PM	2	23	0	0	25	2	0	6	0	8	0	29	4	0	33	0	0	0	0	0	66
Total	12	108	0	0	120	15	0	19	0	34	0	121	13	0	134	0	0	0	0	0	288
Grand Total	79	427	0	0	506	79	0	82	0	161	0	463	111	0	574	0	0	0	0	0	1241
Apprch %	15.6	84.4	0	0		49.1	0	50.9	0		0	80.7	19.3	0		0	0	0	0		
Total %	6.4	34.4	0	0	40.8	6.4	0	6.6	0	13	0	37.3	8.9	0	46.3	0	0	0	0	0	

SANDOWENGINEERING
160 Madison St. Suite A
Eugene, Oregon 97402

North-South: Oaklea Drive
East Approach: 6th Street
Weather: Overcast
Type: All Vehicles

File Name : Oaklea_6th
Site Code : 00000001
Start Date : 10/23/2018
Page No : 2

	Oaklea Drive From North					6th Street From East					Oaklea Drive From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:15 AM					07:15 AM					07:15 AM					07:15 AM					
+0 mins.	4	21	0	0	25	2	0	5	0	7	0	20	8	0	28	0	0	0	0	0	
+15 mins.	13	21	0	0	34	6	0	10	0	16	0	24	14	0	38	0	0	0	0	0	
+30 mins.	**15**	30	0	0	**45**	**8**	0	**11**	0	**19**	0	**40**	**29**	0	**69**	0	0	0	0	0	
+45 mins.	3	**32**	0	0	35	4	0	4	0	8	0	22	15	0	37	0	0	0	0	0	
Total Volume	35	104	0	0	139	20	0	30	0	50	0	106	66	0	172	0	0	0	0	0	
% App. Total	25.2	74.8	0	0		40	0	60	0		0	61.6	38.4	0		0	0	0	0		
PHF	.583	.813	.000	.000	.772	.625	.000	.682	.000	.658	.000	.663	.569	.000	.623	.000	.000	.000	.000	.000	



SANDOWENGINEERING
160 Madison St. Suite A
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North-South: Oaklea Drive
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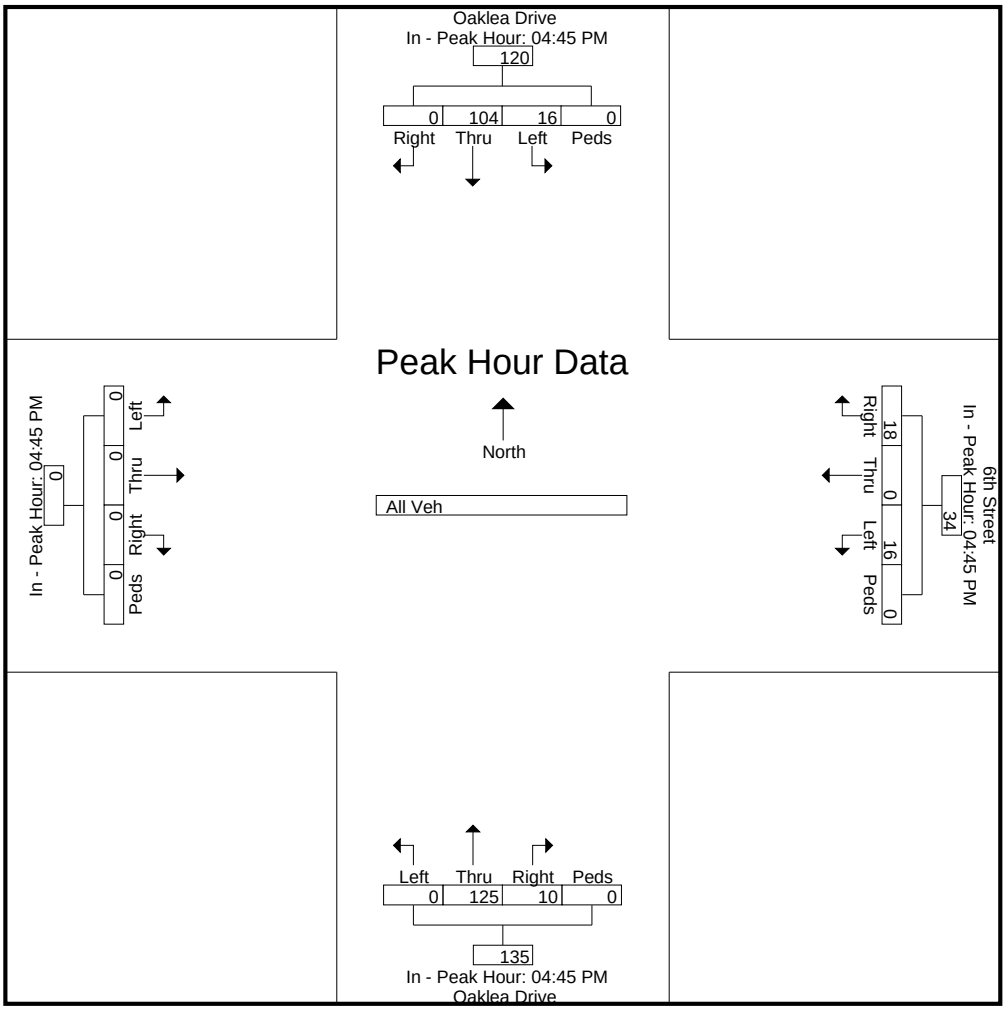
File Name : Oaklea_6th
Site Code : 00000001
Start Date : 10/23/2018
Page No : 3

	Oaklea Drive From North					6th Street From East					Oaklea Drive From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:45 PM					04:45 PM					04:45 PM					04:45 PM					
+0 mins.	**6**	19	0	0	25	3	0	5	0	8	0	33	1	0	34	0	0	0	0	0	
+15 mins.	2	**35**	0	0	**37**	**8**	0	5	0	**13**	0	**37**	**7**	0	**44**	0	0	0	0	0	
+30 mins.	6	23	0	0	29	3	0	**7**	0	10	0	28	2	0	30	0	0	0	0	0	
+45 mins.	2	27	0	0	29	2	0	1	0	3	0	27	0	0	27	0	0	0	0	0	
Total Volume	16	104	0	0	120	16	0	18	0	34	0	125	10	0	135	0	0	0	0	0	
% App. Total	13.3	86.7	0	0		47.1	0	52.9	0		0	92.6	7.4	0		0	0	0	0		
PHF	.667	.743	.000	.000	.811	.500	.000	.643	.000	.654	.000	.845	.357	.000	.767	.000	.000	.000	.000	.000	



SANDOWENGINEERING

160 Madison St. Suite A
Eugene, Oregon 97402

North-South: Oaklea Drive
East Approach: 10th Street
Weather: Overcast
Type: All Vehicles

File Name : Oaklea_10th
Site Code : 00000001
Start Date : 10/23/2018
Page No : 1

Groups Printed- All Veh

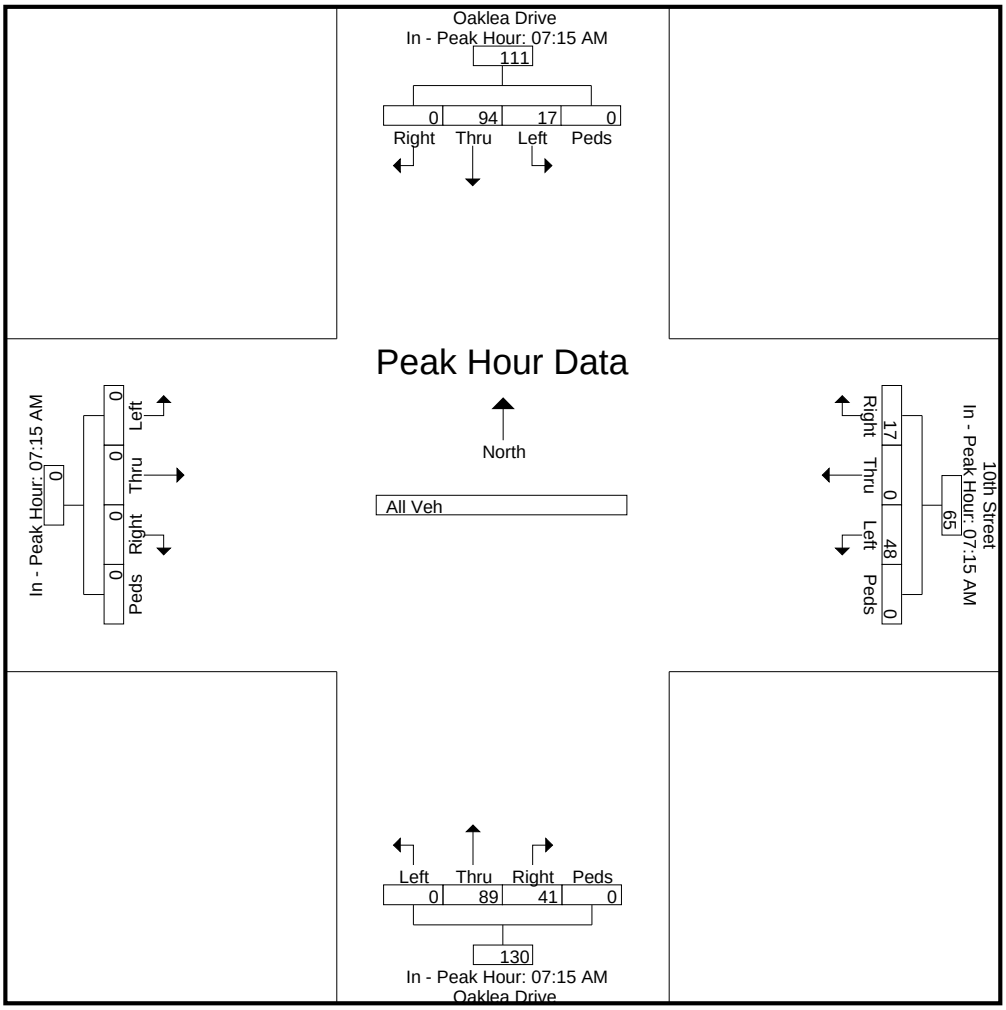
	Oaklea Drive From North					10th Street From East					Oaklea Drive From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	14	0	0	16	3	0	6	0	9	0	8	3	0	11	0	0	0	0	0	36
07:15 AM	3	19	0	0	22	9	0	3	0	12	0	14	12	0	26	0	0	0	0	0	60
07:30 AM	7	25	0	0	32	9	0	2	0	11	0	29	5	0	34	0	0	0	0	0	77
07:45 AM	6	27	0	0	33	18	0	7	0	25	0	35	10	0	45	0	0	0	0	0	103
Total	18	85	0	0	103	39	0	18	0	57	0	86	30	0	116	0	0	0	0	0	276
08:00 AM	1	23	0	0	24	12	0	5	0	17	0	11	14	0	25	0	0	0	0	0	66
08:15 AM	1	24	0	0	25	3	0	2	0	5	0	17	7	0	24	0	0	0	0	0	54
08:30 AM	0	12	0	0	12	5	0	1	0	6	0	16	0	0	16	0	0	0	0	0	34
08:45 AM	3	7	0	0	10	5	0	1	0	6	0	8	1	0	9	0	0	0	0	0	25
Total	5	66	0	0	71	25	0	9	0	34	0	52	22	0	74	0	0	0	0	0	179
*** BREAK ***																					
03:00 PM	4	15	0	0	19	6	0	6	0	12	0	17	5	0	22	0	0	0	0	0	53
03:15 PM	0	20	0	0	20	1	0	3	0	4	0	11	9	0	20	0	0	0	0	0	44
03:30 PM	0	12	0	0	12	4	0	2	0	6	0	19	7	0	26	0	0	0	0	0	44
03:45 PM	4	22	0	0	26	4	0	5	0	9	0	24	4	0	28	0	0	0	0	0	63
Total	8	69	0	0	77	15	0	16	0	31	0	71	25	0	96	0	0	0	0	0	204
04:00 PM	5	16	0	0	21	5	0	5	0	10	0	26	5	0	31	0	0	0	0	0	62
04:15 PM	6	16	0	0	22	3	0	4	0	7	0	20	5	0	25	0	0	0	0	0	54
04:30 PM	3	16	0	0	19	5	0	2	0	7	0	22	3	0	25	0	0	0	0	0	51
04:45 PM	5	24	0	0	29	1	0	6	0	7	0	29	9	0	38	0	0	0	0	0	74
Total	19	72	0	0	91	14	0	17	0	31	0	97	22	0	119	0	0	0	0	0	241
05:00 PM	3	29	0	0	32	8	0	6	0	14	0	28	14	0	42	0	0	0	0	0	88
05:15 PM	3	22	0	0	25	6	0	8	0	14	0	27	8	0	35	0	0	0	0	0	74
05:30 PM	1	27	0	0	28	3	0	4	0	7	0	17	12	0	29	0	0	0	0	0	64
05:45 PM	5	25	0	0	30	2	0	0	0	2	0	27	8	0	35	0	0	0	0	0	67
Total	12	103	0	0	115	19	0	18	0	37	0	99	42	0	141	0	0	0	0	0	293
Grand Total	62	395	0	0	457	112	0	78	0	190	0	405	141	0	546	0	0	0	0	0	1193
Apprch %	13.6	86.4	0	0		58.9	0	41.1	0		0	74.2	25.8	0		0	0	0	0		
Total %	5.2	33.1	0	0	38.3	9.4	0	6.5	0	15.9	0	33.9	11.8	0	45.8	0	0	0	0	0	

SANDOWENGINEERING
160 Madison St. Suite A
Eugene, Oregon 97402

North-South: Oaklea Drive
East Approach: 10th Street
Weather: Overcast
Type: All Vehicles

File Name : Oaklea_10th
Site Code : 00000001
Start Date : 10/23/2018
Page No : 2

	Oaklea Drive From North					10th Street From East					Oaklea Drive From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:15 AM					07:15 AM					07:15 AM					07:15 AM					
+0 mins.	3	19	0	0	22	9	0	3	0	12	0	14	12	0	26	0	0	0	0	0	
+15 mins.	**7**	25	0	0	32	9	0	2	0	11	0	29	5	0	34	0	0	0	0	0	
+30 mins.	6	**27**	0	0	**33**	**18**	0	**7**	0	**25**	0	**35**	10	0	**45**	0	0	0	0	0	
+45 mins.	1	23	0	0	24	12	0	5	0	17	0	11	**14**	0	25	0	0	0	0	0	
Total Volume	17	94	0	0	111	48	0	17	0	65	0	89	41	0	130	0	0	0	0	0	
% App. Total	15.3	84.7	0	0		73.8	0	26.2	0		0	68.5	31.5	0		0	0	0	0		
PHF	.607	.870	.000	.000	.841	.667	.000	.607	.000	.650	.000	.636	.732	.000	.722	.000	.000	.000	.000	.000	



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160 Madison St. Suite A
Eugene, Oregon 97402

North-South: Oaklea Drive
East Approach: 10th Street
Weather: Overcast
Type: All Vehicles

File Name : Oaklea_10th
Site Code : 00000001
Start Date : 10/23/2018
Page No : 3

	Oaklea Drive From North					10th Street From East					Oaklea Drive From South					From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:45 PM					04:45 PM					04:45 PM					04:45 PM					
+0 mins.	**5**	24	0	0	29	1	0	6	0	7	0	**29**	9	0	38	0	0	0	0	0	
+15 mins.	3	**29**	0	0	**32**	**8**	0	6	0	**14**	0	28	**14**	0	**42**	0	0	0	0	0	
+30 mins.	3	22	0	0	25	6	0	**8**	0	14	0	27	8	0	35	0	0	0	0	0	
+45 mins.	1	27	0	0	28	3	0	4	0	7	0	17	12	0	29	0	0	0	0	0	
Total Volume	12	102	0	0	114	18	0	24	0	42	0	101	43	0	144	0	0	0	0	0	
% App. Total	10.5	89.5	0	0		42.9	0	57.1	0		0	70.1	29.9	0		0	0	0	0		
PHF	.600	.879	.000	.000	.891	.563	.000	.750	.000	.750	.000	.871	.768	.000	.857	.000	.000	.000	.000	.000	

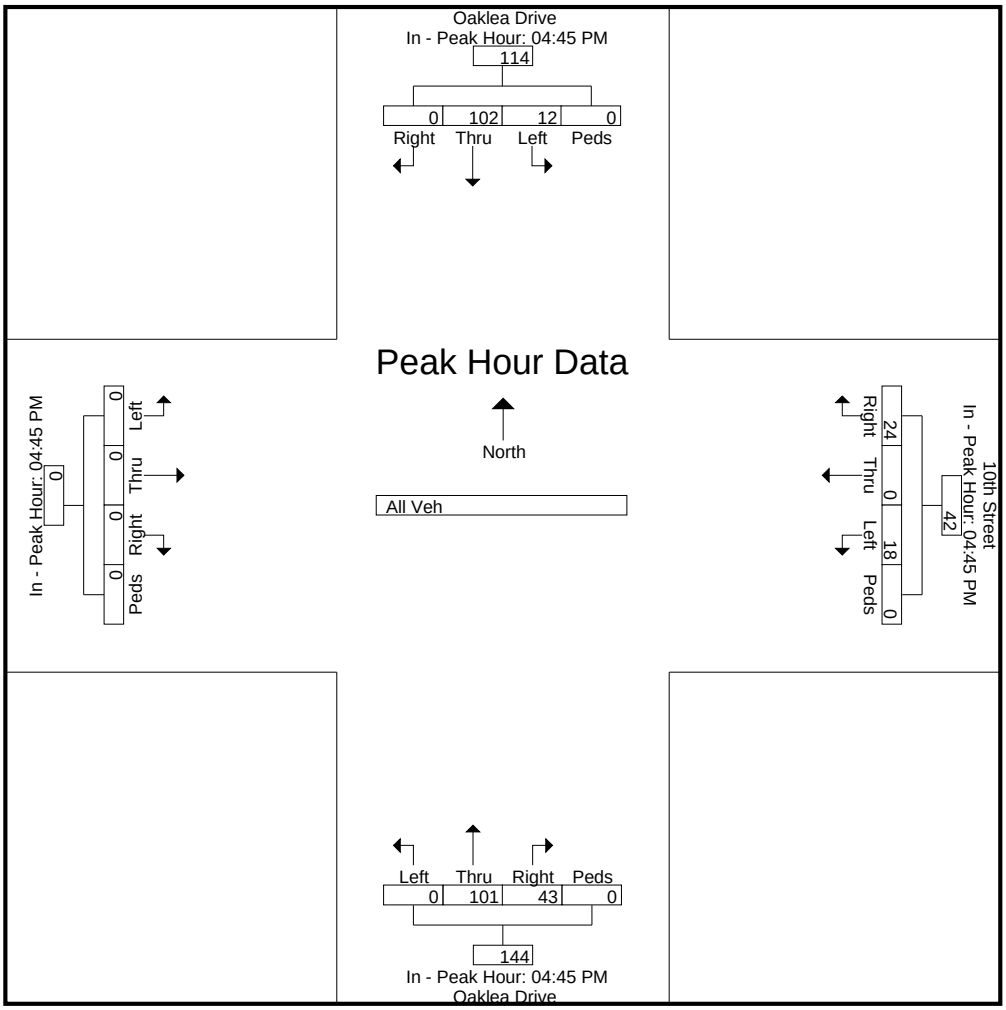

Fig 1 : Year 2018 Raw Traffic Volumes - (A.M.) P.M. Peak Hours

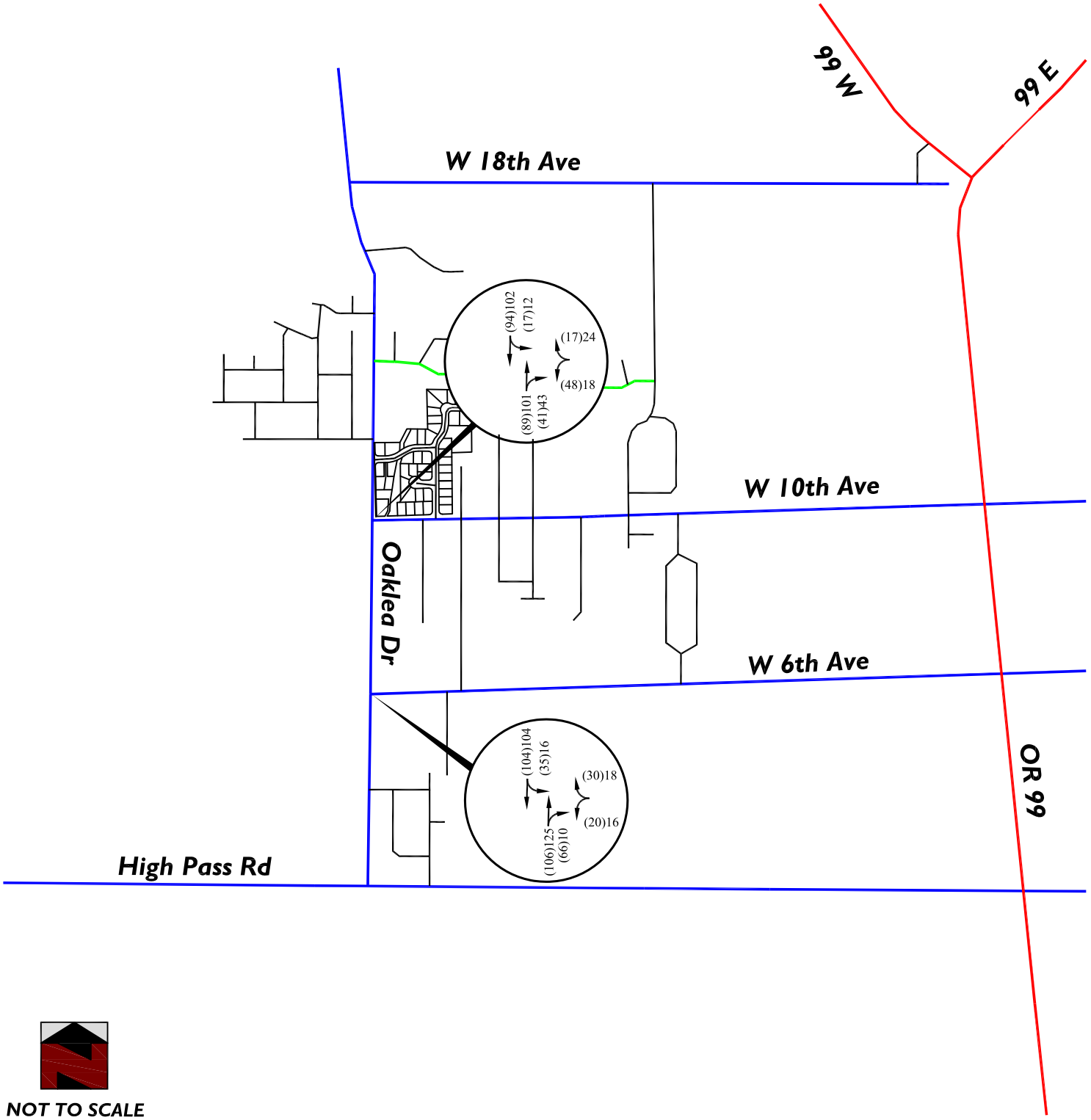

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Fig 2 : Design Yr 2019 No-Build Traffic Volumes - (A.M.) P.M. Peak Hours

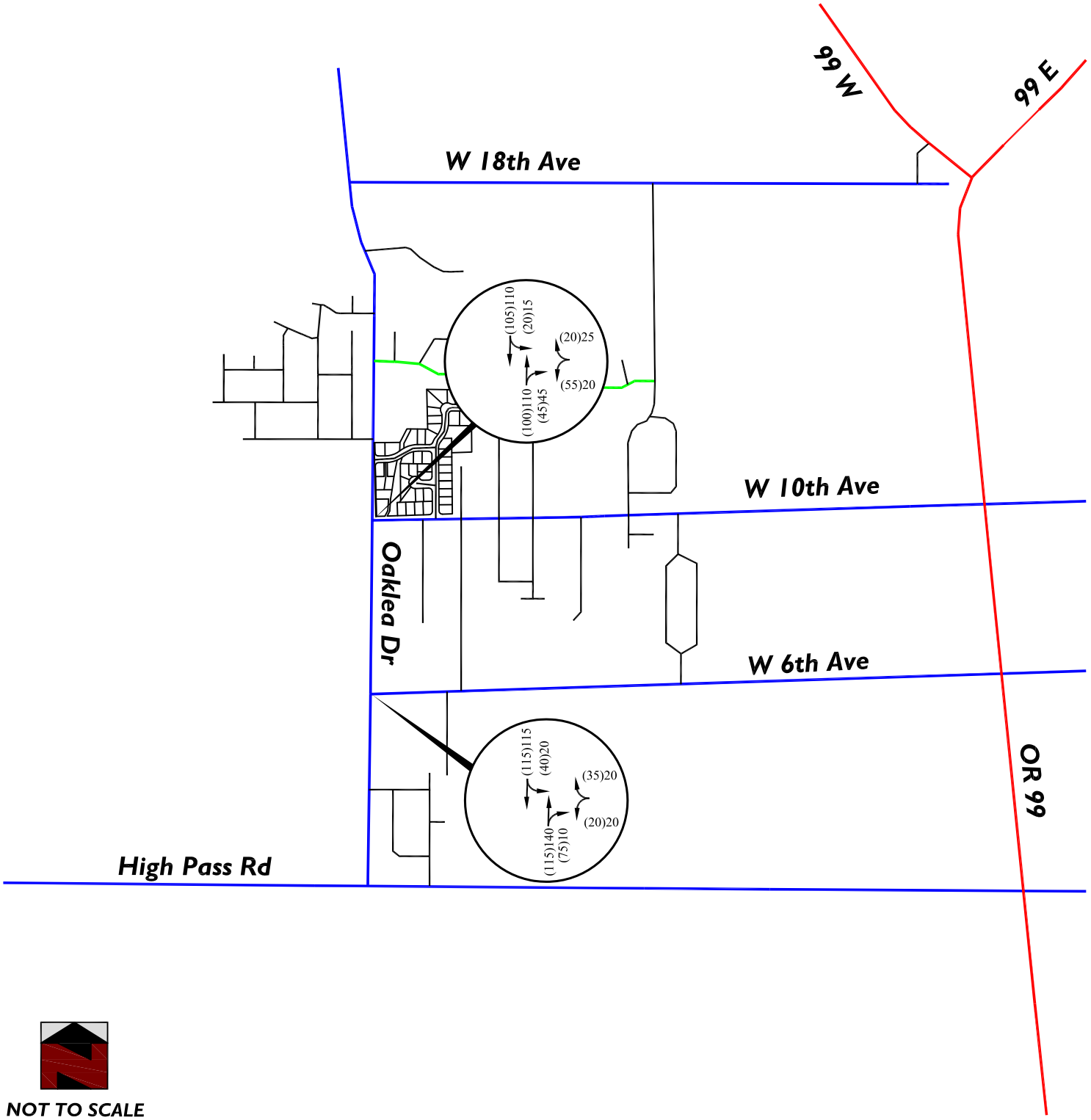

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Fig 3 : Phase 1 Development - (A.M.) P.M. Peak Hours

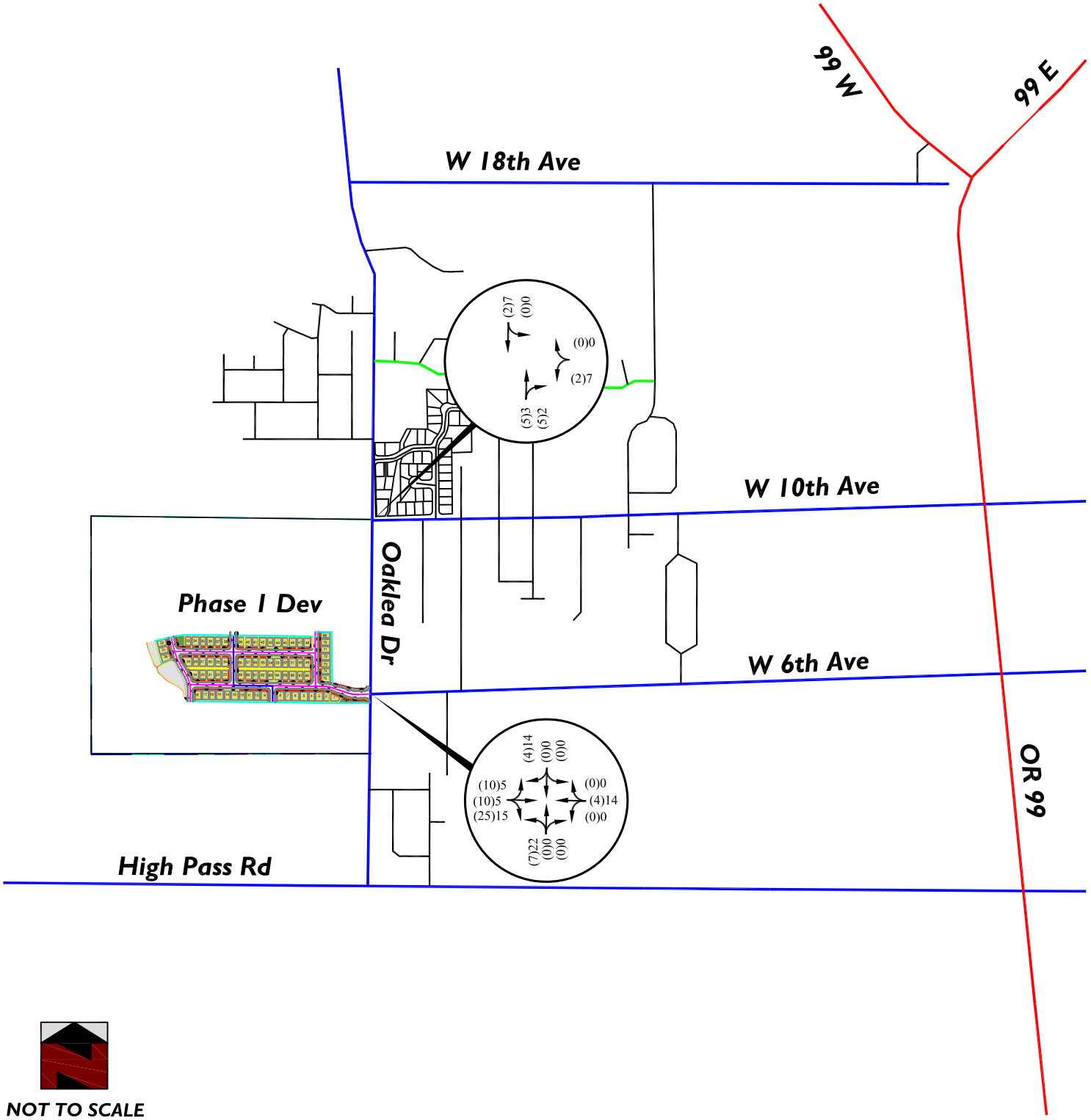

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Fig 4 : Yr 2019 Ph 1 Build Traffic Volumes - (A.M.) P.M. Peak Hours

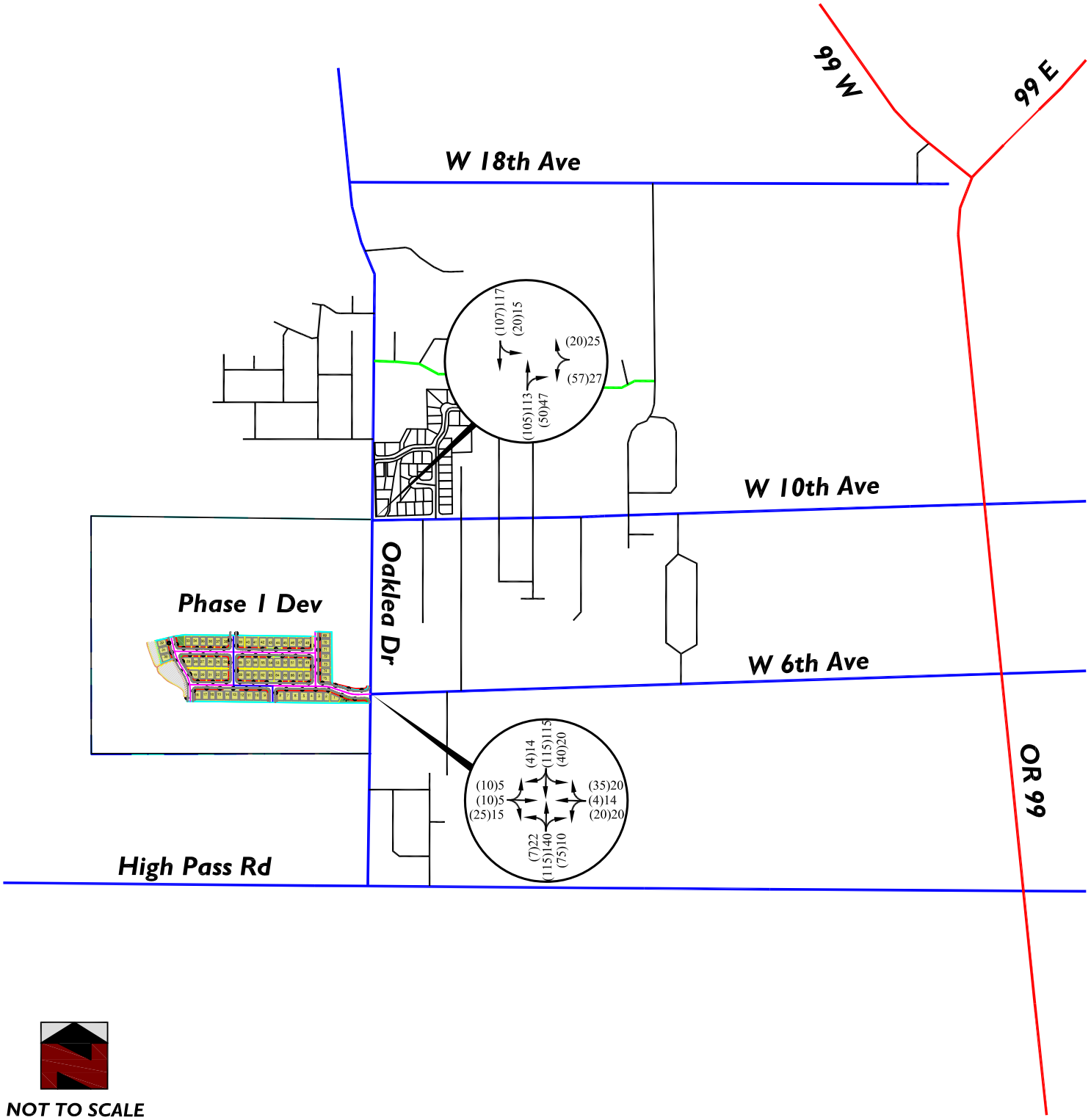

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Fig 5 : Design Yr 2022 No-Build Traffic Volumes - (A.M.) P.M. Peak Hours

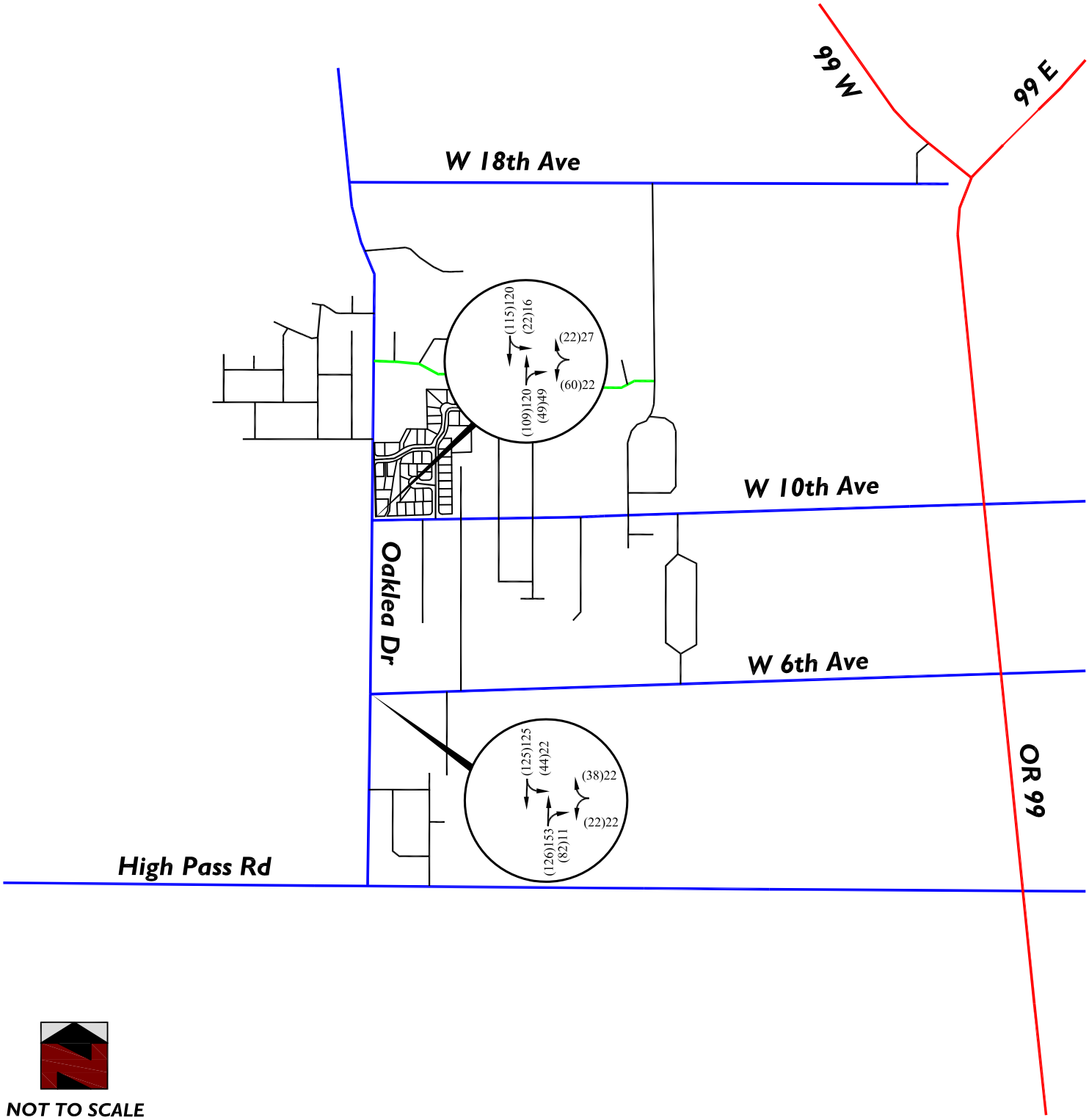

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Fig 6 : Phase 1-3 Development - (A.M.) P.M. Peak Hours

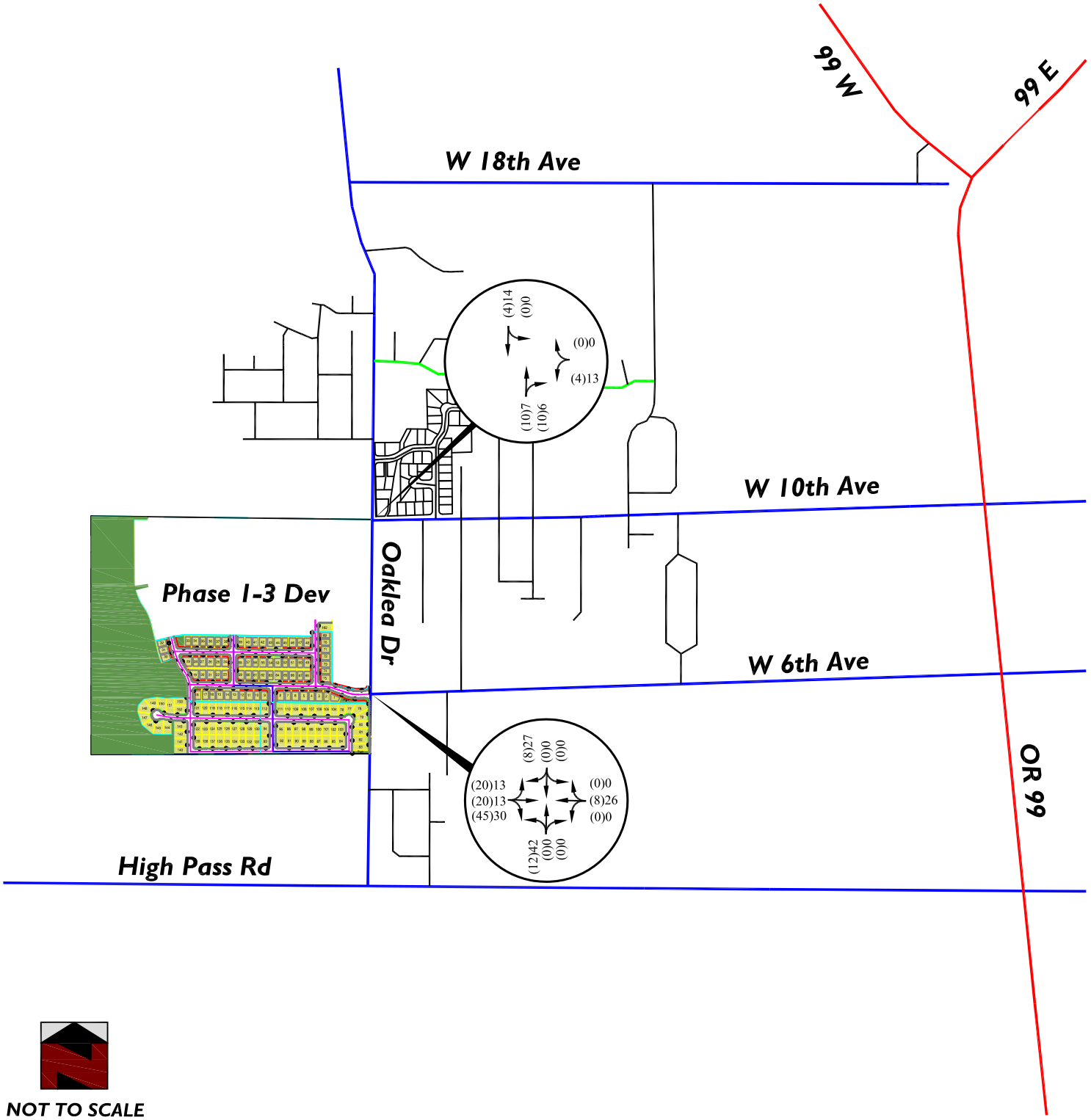

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Fig 7 : Design Yr 2022 Ph 1-3 Build Traffic Volumes - (AM) PM Peak Hours

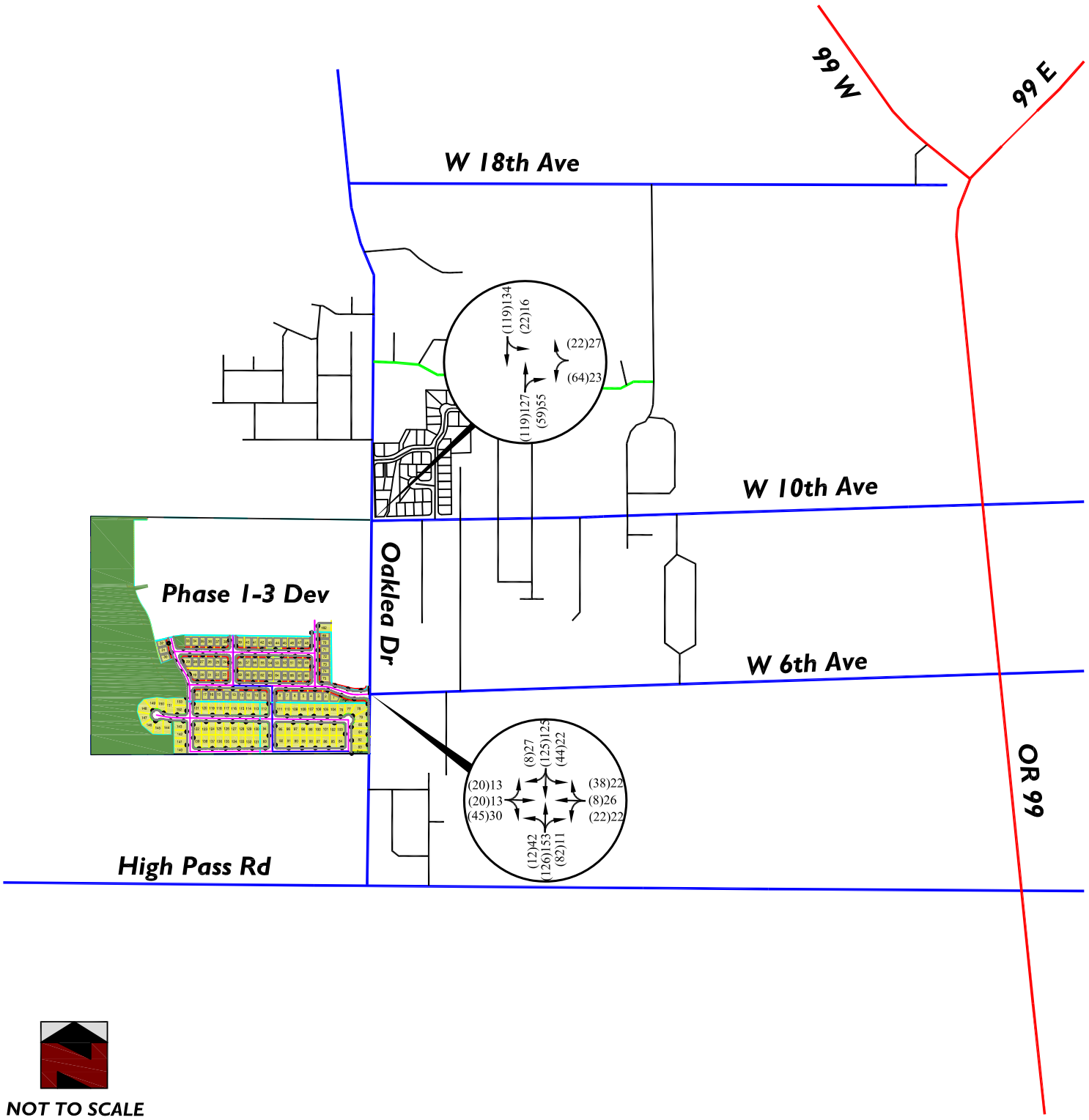

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Fig 8 : Design Yr 2024 No-Build Traffic Volumes - (A.M.) P.M. Peak Hours

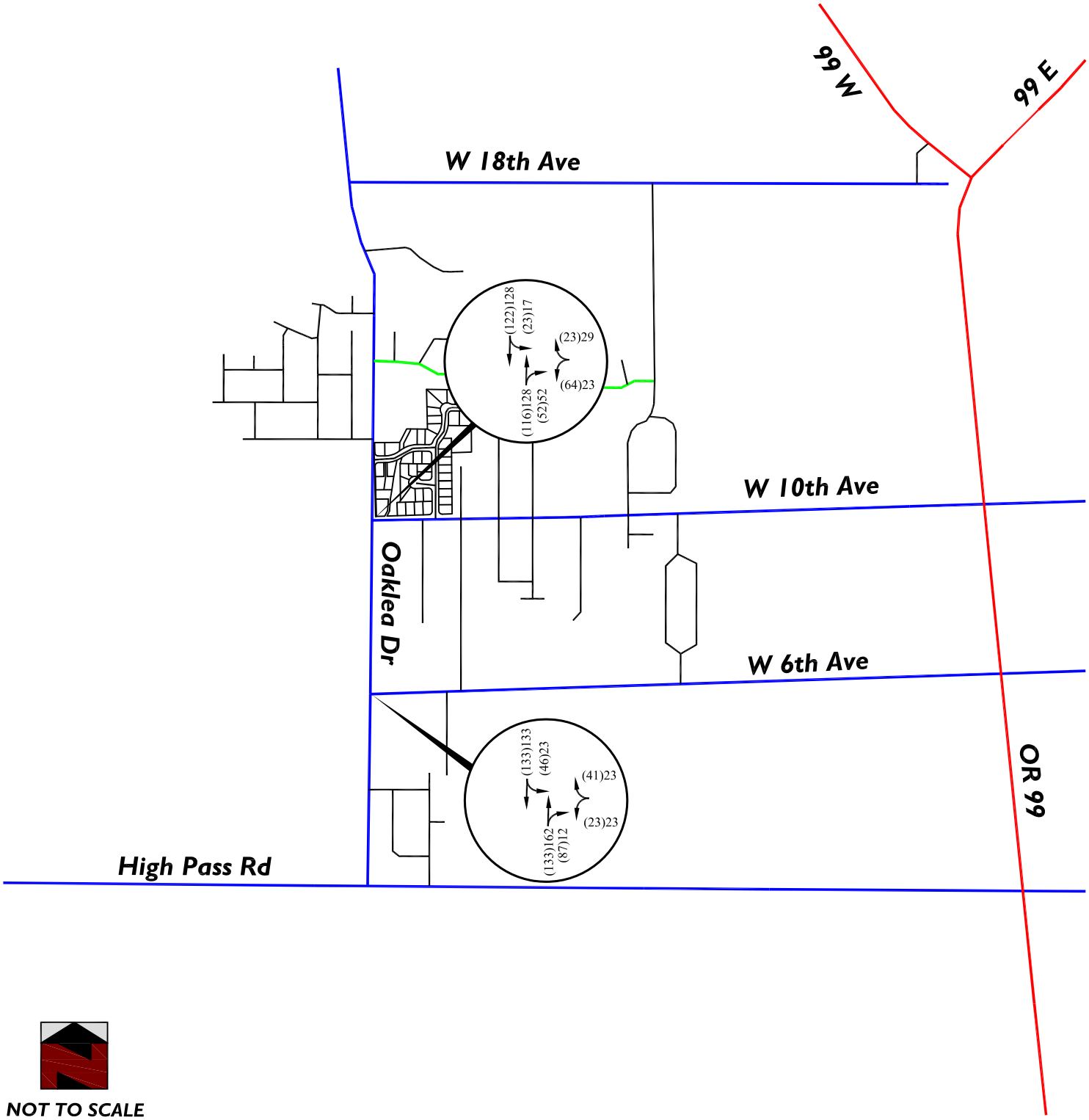

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Fig 9 : Phase 1-5 Development - (A.M.) P.M. Peak Hours

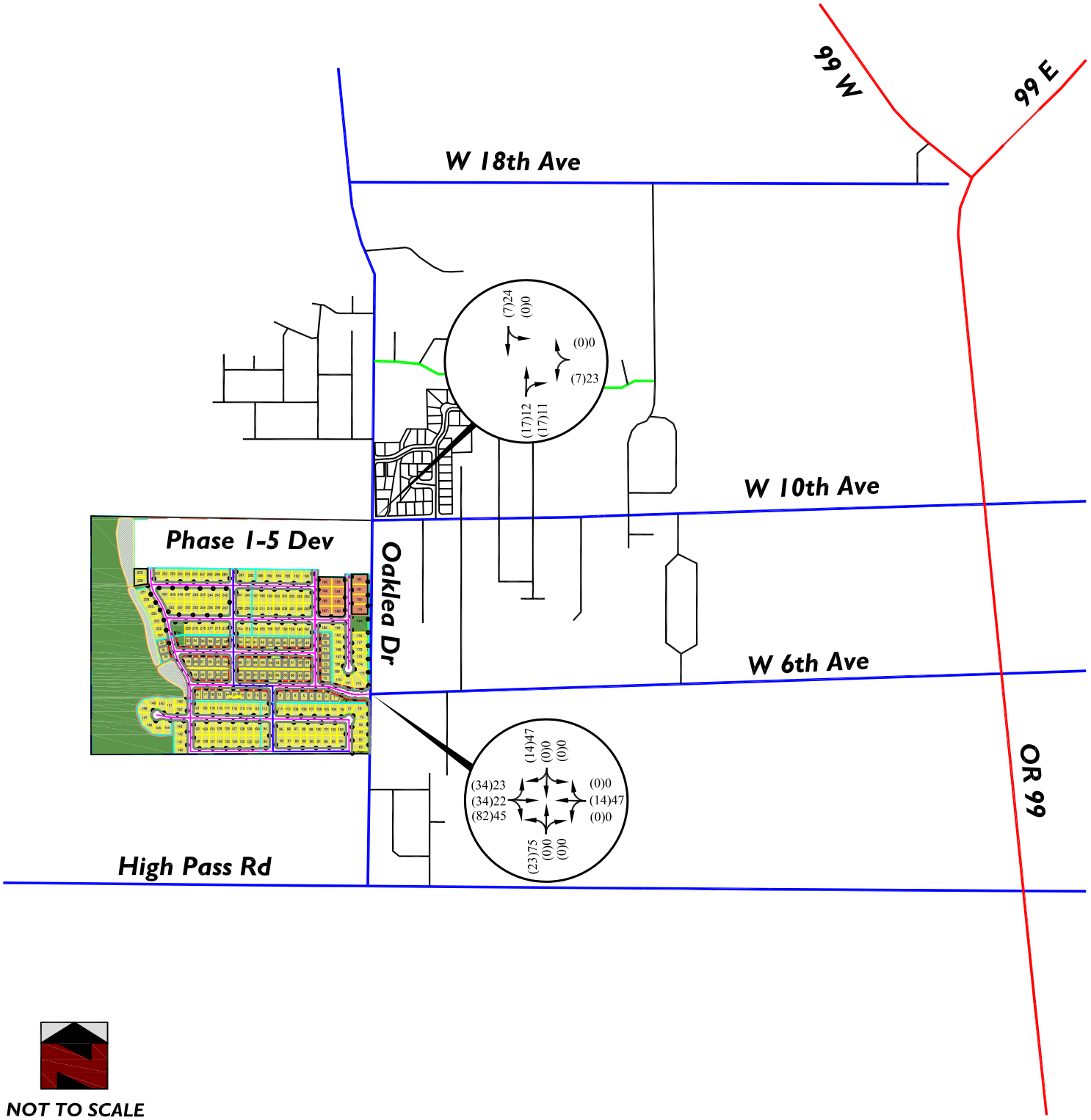

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Fig 10: Design Yr 2024 Ph 1-5 Build Traffic Volumes - (AM) PM Peak Hours

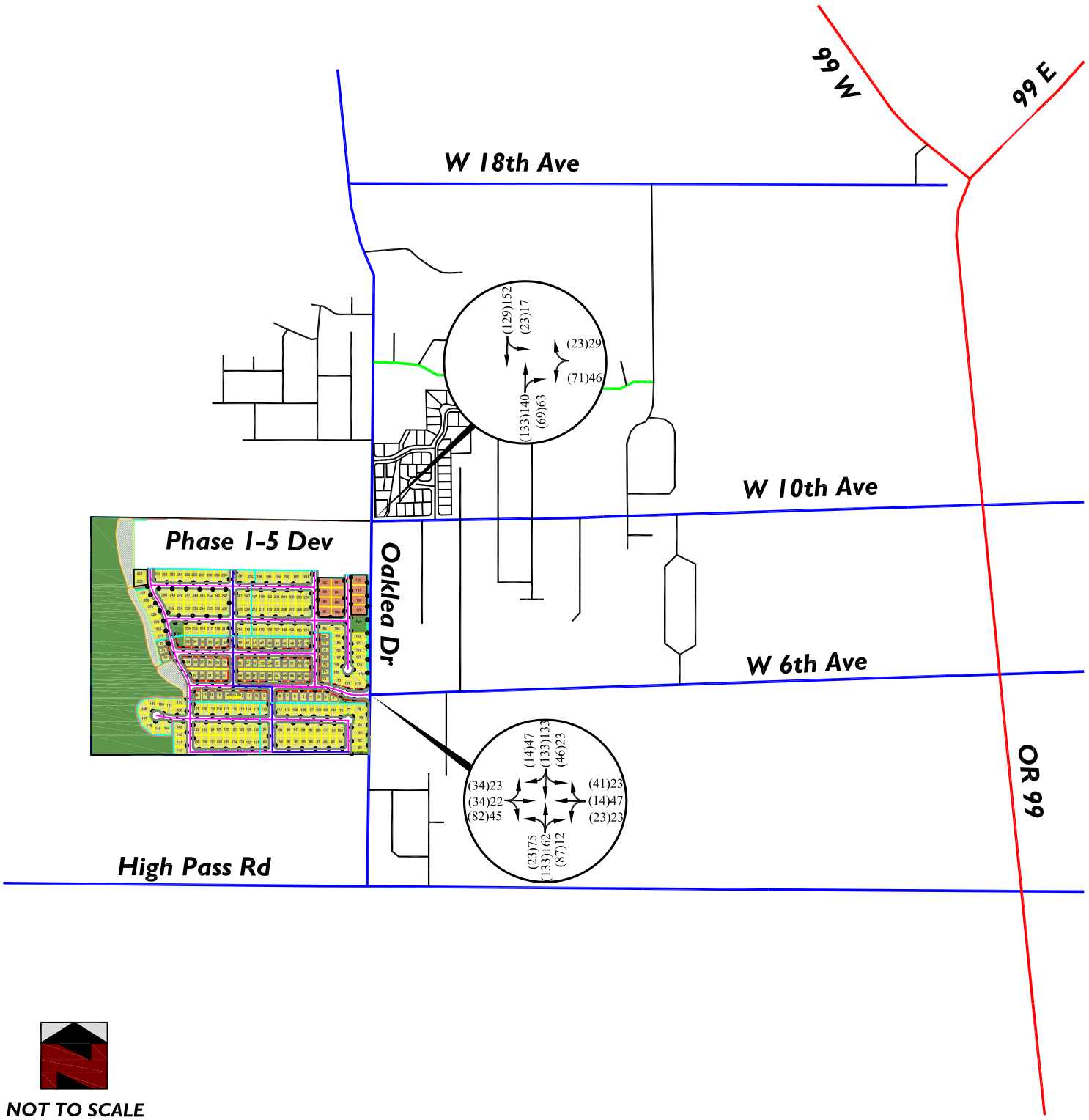

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Fig 11 : Future Yr 2035 No-Build Traffic Volumes - (A.M.) P.M. Peak Hours

(Junction City TSP Data)

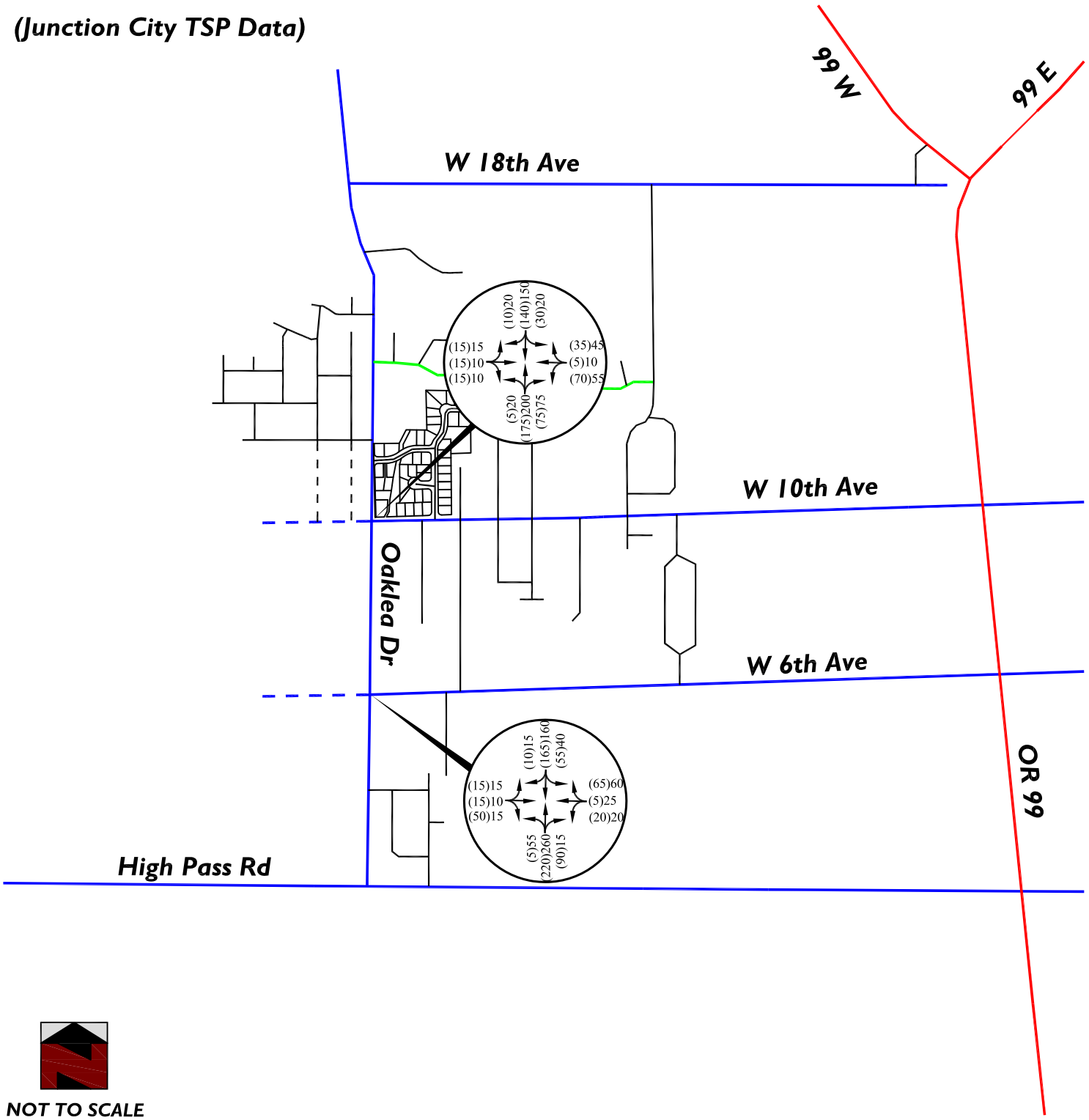

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Fig 12 : Phase 1-7 Development - (A.M.) P.M. Peak Hours

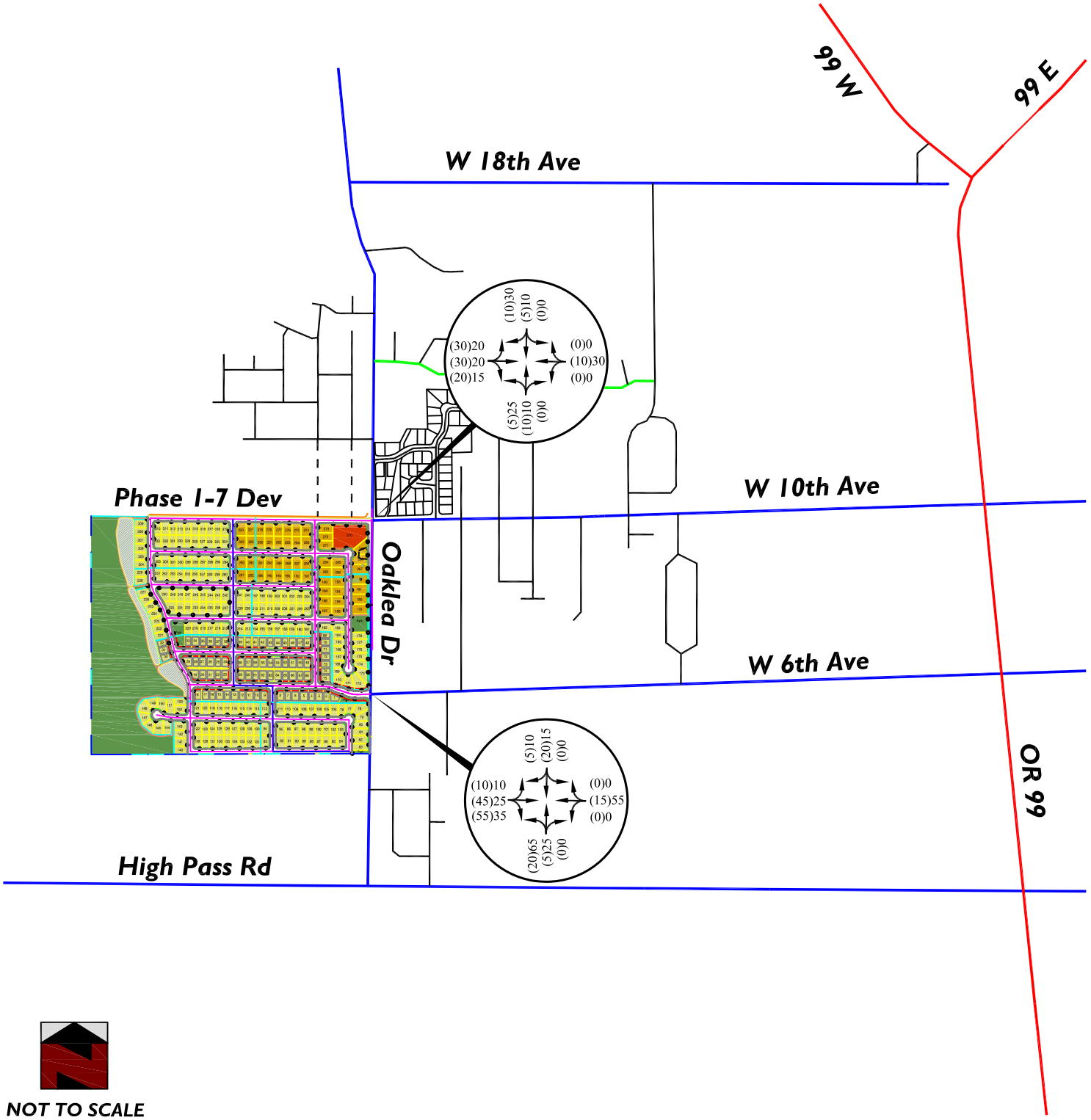

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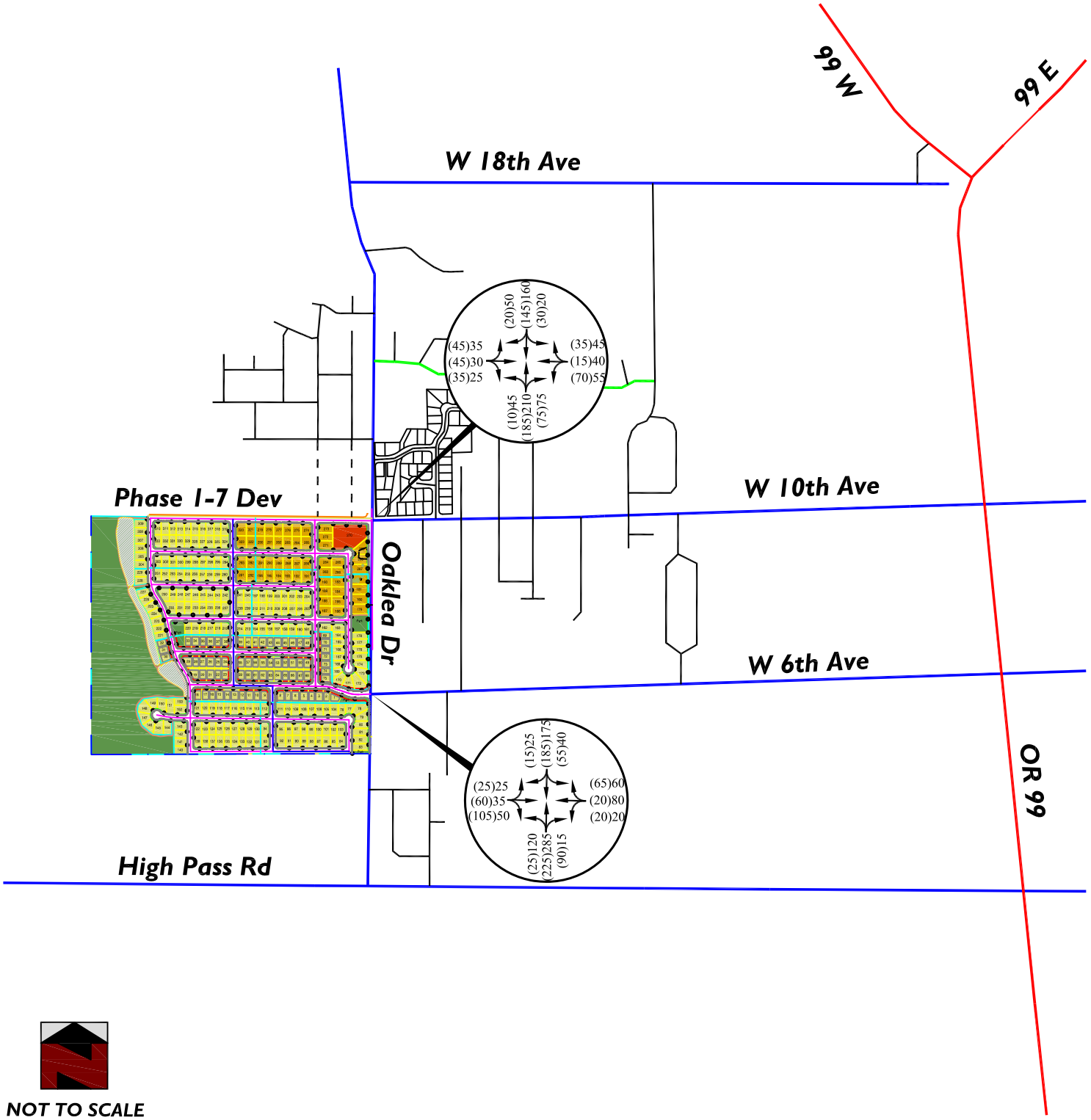
Fig 13 : Future Yr 2035 Build Traffic Volumes - (A.M.) P.M. Peak Hours



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Rolling Meadows
Planned Unit Development
Revised Traffic Analysis
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Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	20	100	45	20	105
Future Vol, veh/h	55	20	100	45	20	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	0	12	4	10	3
Mvmt Flow	74	27	135	61	27	142

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	362	166	0	0	196	0
Stage 1	166	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.2	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.29	-
Pot Cap-1 Maneuver	637	884	-	-	1330	-
Stage 1	863	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	623	884	-	-	1330	-
Mov Cap-2 Maneuver	623	-	-	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	819	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	676	1330	-
HCM Lane V/C Ratio	-	-	0.15	0.02	-
HCM Control Delay (s)	-	-	11.3	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	35	115	75	40	115
Future Vol, veh/h	20	35	115	75	40	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	25	26	6	7	5	2
Mvmt Flow	29	51	169	110	59	169

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	511	224	0	0	279	0
Stage 1	224	-	-	-	-	-
Stage 2	287	-	-	-	-	-
Critical Hdwy	6.65	6.46	-	-	4.15	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.534	-	-	2.245	-
Pot Cap-1 Maneuver	484	759	-	-	1267	-
Stage 1	762	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	459	759	-	-	1267	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	676	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	2.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	613	1267	-
HCM Lane V/C Ratio	-	-	0.132	0.046	-
HCM Control Delay (s)	-	-	11.8	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	25	110	45	15	110
Future Vol, veh/h	20	25	110	45	15	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	24	29	129	53	18	129

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	321	156	0	0	182	0
Stage 1	156	-	-	-	-	-
Stage 2	165	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	677	895	-	-	1405	-
Stage 1	877	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	668	895	-	-	1405	-
Mov Cap-2 Maneuver	668	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	857	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	778	1405	-
HCM Lane V/C Ratio	-	-	0.068	0.013	-
HCM Control Delay (s)	-	-	10	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	20	140	10	20	115
Future Vol, veh/h	20	20	140	10	20	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	0	0	0	0	1
Mvmt Flow	26	26	182	13	26	149

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	390	189	0	0	195	0
Stage 1	189	-	-	-	-	-
Stage 2	201	-	-	-	-	-
Critical Hdwy	6.45	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	608	858	-	-	1390	-
Stage 1	836	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	596	858	-	-	1390	-
Mov Cap-2 Maneuver	596	-	-	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	703	1390	-
HCM Lane V/C Ratio	-	-	0.074	0.019	-
HCM Control Delay (s)	-	-	10.5	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	20	105	50	20	107
Future Vol, veh/h	57	20	105	50	20	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	0	12	4	10	3
Mvmt Flow	77	27	142	68	27	145

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	375	176	0	0	210	0
Stage 1	176	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.2	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.29	-
Pot Cap-1 Maneuver	626	872	-	-	1314	-
Stage 1	855	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	612	872	-	-	1314	-
Mov Cap-2 Maneuver	612	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	817	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	663	1314	-
HCM Lane V/C Ratio	-	-	0.157	0.021	-
HCM Control Delay (s)	-	-	11.4	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	25	20	4	35	7	115	75	40	115	4
Future Vol, veh/h	10	10	25	20	4	35	7	115	75	40	115	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	25	0	26	0	6	7	5	2	0
Mvmt Flow	15	15	37	29	6	51	10	169	110	59	169	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	563	589	172	560	537	224	175	0	0	279	0	0
Stage 1	290	290	-	244	244	-	-	-	-	-	-	-
Stage 2	273	299	-	316	293	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.5	6.46	4.1	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4	3.534	2.2	-	-	2.245	-	-
Pot Cap-1 Maneuver	440	423	877	406	453	759	1414	-	-	1267	-	-
Stage 1	722	676	-	711	708	-	-	-	-	-	-	-
Stage 2	737	670	-	649	674	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	387	398	877	361	426	759	1414	-	-	1267	-	-
Mov Cap-2 Maneuver	387	398	-	361	426	-	-	-	-	-	-	-
Stage 1	716	641	-	705	702	-	-	-	-	-	-	-
Stage 2	676	665	-	576	639	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.2	13.1	0.3	2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1414	-	-	566	532	1267	-	-
HCM Lane V/C Ratio	0.007	-	-	0.117	0.163	0.046	-	-
HCM Control Delay (s)	7.6	0	-	12.2	13.1	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	25	113	47	15	117
Future Vol, veh/h	27	25	113	47	15	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	32	29	133	55	18	138

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	335	161	0	0	188	0
Stage 1	161	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	664	889	-	-	1398	-
Stage 1	873	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	655	889	-	-	1398	-
Mov Cap-2 Maneuver	655	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	849	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	750	1398	-
HCM Lane V/C Ratio	-	-	0.082	0.013	-
HCM Control Delay (s)	-	-	10.2	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	15	20	14	20	22	140	10	20	115	14
Future Vol, veh/h	5	5	15	20	14	20	22	140	10	20	115	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	5	0	0	0	0	0	0	1	0
Mvmt Flow	6	6	19	26	18	26	29	182	13	26	149	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	479	463	158	470	466	189	167	0	0	195	0	0
Stage 1	210	210	-	247	247	-	-	-	-	-	-	-
Stage 2	269	253	-	223	219	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	500	499	893	499	497	858	1423	-	-	1390	-	-
Stage 1	797	732	-	750	706	-	-	-	-	-	-	-
Stage 2	741	701	-	773	726	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	455	477	893	467	475	858	1423	-	-	1390	-	-
Mov Cap-2 Maneuver	455	477	-	467	475	-	-	-	-	-	-	-
Stage 1	779	717	-	733	690	-	-	-	-	-	-	-
Stage 2	684	685	-	734	711	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	12.3	1	1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1423	-	-	653	565	1390	-	-
HCM Lane V/C Ratio	0.02	-	-	0.05	0.124	0.019	-	-
HCM Control Delay (s)	7.6	0	-	10.8	12.3	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	20	110	50	20	115
Future Vol, veh/h	60	20	110	50	20	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	0	12	4	10	3
Mvmt Flow	81	27	149	68	27	155

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	392	183	0	0	217	0
Stage 1	183	-	-	-	-	-
Stage 2	209	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.2	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.29	-
Pot Cap-1 Maneuver	612	865	-	-	1307	-
Stage 1	848	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	598	865	-	-	1307	-
Mov Cap-2 Maneuver	598	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	648	1307	-
HCM Lane V/C Ratio	-	-	0.167	0.021	-
HCM Control Delay (s)	-	-	11.7	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	40	125	80	45	125
Future Vol, veh/h	20	40	125	80	45	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	25	26	6	7	5	2
Mvmt Flow	29	59	184	118	66	184

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	559	243	0	0	302	0
Stage 1	243	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.65	6.46	-	-	4.15	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.534	-	-	2.245	-
Pot Cap-1 Maneuver	453	740	-	-	1242	-
Stage 1	746	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	426	740	-	-	1242	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	2.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	594	1242	-
HCM Lane V/C Ratio	-	-	0.149	0.053	-
HCM Control Delay (s)	-	-	12.1	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	25	120	50	15	120
Future Vol, veh/h	25	25	120	50	15	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	29	141	59	18	141

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	348	171	0	0	200	0
Stage 1	171	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	653	878	-	-	1384	-
Stage 1	864	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	644	878	-	-	1384	-
Mov Cap-2 Maneuver	644	-	-	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	743	1384	-
HCM Lane V/C Ratio	-	-	0.079	0.013	-
HCM Control Delay (s)	-	-	10.3	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	25	155	10	20	125
Future Vol, veh/h	20	25	155	10	20	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	0	0	0	0	1
Mvmt Flow	26	32	201	13	26	162

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	422	208	0	0	214	0
Stage 1	208	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Critical Hdwy	6.45	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	583	837	-	-	1368	-
Stage 1	820	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	571	837	-	-	1368	-
Mov Cap-2 Maneuver	571	-	-	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	693	1368	-
HCM Lane V/C Ratio	-	-	0.084	0.019	-
HCM Control Delay (s)	-	-	10.7	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	64	22	119	59	22	119
Future Vol, veh/h	64	22	119	59	22	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	0	12	4	10	3
Mvmt Flow	86	30	161	80	30	161

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	422	201	0	0	241	0
Stage 1	201	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.2	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.29	-
Pot Cap-1 Maneuver	588	845	-	-	1280	-
Stage 1	833	-	-	-	-	-
Stage 2	816	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	573	845	-	-	1280	-
Mov Cap-2 Maneuver	573	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	795	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	624	1280	-
HCM Lane V/C Ratio	-	-	0.186	0.023	-
HCM Control Delay (s)	-	-	12.1	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	20	45	22	8	38	12	126	82	44	125	8
Future Vol, veh/h	20	20	45	22	8	38	12	126	82	44	125	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	25	0	26	0	6	7	5	2	0
Mvmt Flow	29	29	66	32	12	56	18	185	121	65	184	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	636	662	190	650	608	246	196	0	0	306	0	0
Stage 1	320	320	-	282	282	-	-	-	-	-	-	-
Stage 2	316	342	-	368	326	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.5	6.46	4.1	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4	3.534	2.2	-	-	2.245	-	-
Pot Cap-1 Maneuver	393	385	857	352	413	737	1389	-	-	1238	-	-
Stage 1	696	656	-	678	681	-	-	-	-	-	-	-
Stage 2	699	642	-	607	652	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	335	357	857	287	382	737	1389	-	-	1238	-	-
Mov Cap-2 Maneuver	335	357	-	287	382	-	-	-	-	-	-	-
Stage 1	685	617	-	667	670	-	-	-	-	-	-	-
Stage 2	625	632	-	502	614	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.5	15.1	0.4	2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1389	-	-	505	456	1238	-	-
HCM Lane V/C Ratio	0.013	-	-	0.248	0.219	0.052	-	-
HCM Control Delay (s)	7.6	0	-	14.5	15.1	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.8	0.2	-	-

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	27	127	55	16	134
Future Vol, veh/h	35	27	127	55	16	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	41	32	149	65	19	158

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	378	182	0	0	214	0
Stage 1	182	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	628	866	-	-	1368	-
Stage 1	854	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	619	866	-	-	1368	-
Mov Cap-2 Maneuver	619	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	707	1368	-
HCM Lane V/C Ratio	-	-	0.103	0.014	-
HCM Control Delay (s)	-	-	10.7	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	13	30	22	26	22	42	153	11	22	125	27
Future Vol, veh/h	13	13	30	22	26	22	42	153	11	22	125	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	5	0	0	0	0	0	0	1	0
Mvmt Flow	17	17	39	29	34	29	55	199	14	29	162	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	586	561	180	582	571	206	197	0	0	213	0	0
Stage 1	238	238	-	316	316	-	-	-	-	-	-	-
Stage 2	348	323	-	266	255	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	425	439	868	420	434	840	1388	-	-	1369	-	-
Stage 1	770	712	-	689	659	-	-	-	-	-	-	-
Stage 2	672	654	-	733	700	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	365	409	868	368	404	840	1388	-	-	1369	-	-
Mov Cap-2 Maneuver	365	409	-	368	404	-	-	-	-	-	-	-
Stage 1	735	695	-	658	629	-	-	-	-	-	-	-
Stage 2	587	625	-	667	683	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.6	14.6	1.6	1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1388	-	-	549	466	1369	-	-
HCM Lane V/C Ratio	0.039	-	-	0.132	0.195	0.021	-	-
HCM Control Delay (s)	7.7	0	-	12.6	14.6	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.7	0.1	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	20	110	50	20	115
Future Vol, veh/h	60	20	110	50	20	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	0	12	4	10	3
Mvmt Flow	81	27	149	68	27	155

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	392	183	0	0	217	0
Stage 1	183	-	-	-	-	-
Stage 2	209	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.2	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.29	-
Pot Cap-1 Maneuver	612	865	-	-	1307	-
Stage 1	848	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	598	865	-	-	1307	-
Mov Cap-2 Maneuver	598	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	648	1307	-
HCM Lane V/C Ratio	-	-	0.167	0.021	-
HCM Control Delay (s)	-	-	11.7	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	40	125	80	45	125
Future Vol, veh/h	20	40	125	80	45	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	25	26	6	7	5	2
Mvmt Flow	29	59	184	118	66	184

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	559	243	0	0	302	0
Stage 1	243	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.65	6.46	-	-	4.15	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.534	-	-	2.245	-
Pot Cap-1 Maneuver	453	740	-	-	1242	-
Stage 1	746	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	426	740	-	-	1242	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	2.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	594	1242	-
HCM Lane V/C Ratio	-	-	0.149	0.053	-
HCM Control Delay (s)	-	-	12.1	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	30	130	50	15	130
Future Vol, veh/h	25	30	130	50	15	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	35	153	59	18	153

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	372	183	0	0	212	0
Stage 1	183	-	-	-	-	-
Stage 2	189	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	633	865	-	-	1370	-
Stage 1	853	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	624	865	-	-	1370	-
Mov Cap-2 Maneuver	624	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	836	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	736	1370	-
HCM Lane V/C Ratio	-	-	0.088	0.013	-
HCM Control Delay (s)	-	-	10.4	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	30	160	15	25	130
Future Vol, veh/h	20	30	160	15	25	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	5	0	0	0	0	1
Mvmt Flow	26	39	208	19	32	169

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	451	218	0	0	227	0
Stage 1	218	-	-	-	-	-
Stage 2	233	-	-	-	-	-
Critical Hdwy	6.45	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	561	827	-	-	1353	-
Stage 1	811	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	546	827	-	-	1353	-
Mov Cap-2 Maneuver	546	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	686	1353	-
HCM Lane V/C Ratio	-	-	0.095	0.024	-
HCM Control Delay (s)	-	-	10.8	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	71	23	133	69	23	129
Future Vol, veh/h	71	23	133	69	23	129
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	0	12	4	10	3
Mvmt Flow	96	31	180	93	31	174

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	463	227	0	0	273	0
Stage 1	227	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.42	6.2	-	-	4.2	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	-	-	2.29	-
Pot Cap-1 Maneuver	557	817	-	-	1245	-
Stage 1	811	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	541	817	-	-	1245	-
Mov Cap-2 Maneuver	541	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	590	1245	-
HCM Lane V/C Ratio	-	-	0.215	0.025	-
HCM Control Delay (s)	-	-	12.8	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.1	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	34	82	23	14	41	23	133	87	46	133	14
Future Vol, veh/h	34	34	82	23	14	41	23	133	87	46	133	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	25	0	26	0	6	7	5	2	0
Mvmt Flow	50	50	121	34	21	60	34	196	128	68	196	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	712	735	207	756	681	260	217	0	0	324	0	0
Stage 1	343	343	-	328	328	-	-	-	-	-	-	-
Stage 2	369	392	-	428	353	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.5	6.46	4.1	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4	3.534	2.2	-	-	2.245	-	-
Pot Cap-1 Maneuver	350	349	839	298	375	724	1365	-	-	1219	-	-
Stage 1	676	641	-	639	651	-	-	-	-	-	-	-
Stage 2	655	610	-	562	634	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	285	317	839	209	340	724	1365	-	-	1219	-	-
Mov Cap-2 Maneuver	285	317	-	209	340	-	-	-	-	-	-	-
Stage 1	655	600	-	619	631	-	-	-	-	-	-	-
Stage 2	563	591	-	413	593	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.7	18.8	0.7	1.9
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1365	-	-	463	375	1219	-	-
HCM Lane V/C Ratio	0.025	-	-	0.476	0.306	0.055	-	-
HCM Control Delay (s)	7.7	0	-	19.7	18.8	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	2.5	1.3	0.2	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	29	140	63	17	152
Future Vol, veh/h	46	29	140	63	17	152
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	54	34	165	74	20	179

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	421	202	0	0	239	0
Stage 1	202	-	-	-	-	-
Stage 2	219	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	593	844	-	-	1340	-
Stage 1	837	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	583	844	-	-	1340	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	808	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	662	1340	-
HCM Lane V/C Ratio	-	-	0.133	0.015	-
HCM Control Delay (s)	-	-	11.3	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	22	45	23	47	23	75	162	12	23	133	47
Future Vol, veh/h	23	22	45	23	47	23	75	162	12	23	133	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	5	0	0	0	0	0	0	1	0
Mvmt Flow	30	29	58	30	61	30	97	210	16	30	173	61

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	722	684	204	719	706	218	234	0	0	226	0	0
Stage 1	264	264	-	412	412	-	-	-	-	-	-	-
Stage 2	458	420	-	307	294	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	345	374	842	340	363	827	1345	-	-	1354	-	-
Stage 1	746	694	-	611	598	-	-	-	-	-	-	-
Stage 2	587	593	-	696	673	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	262	334	842	272	324	827	1345	-	-	1354	-	-
Mov Cap-2 Maneuver	262	334	-	272	324	-	-	-	-	-	-	-
Stage 1	684	676	-	560	548	-	-	-	-	-	-	-
Stage 2	461	544	-	604	656	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.3	19.9	2.4	0.9
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1345	-	-	435	361	1354	-	-
HCM Lane V/C Ratio	0.072	-	-	0.269	0.335	0.022	-	-
HCM Control Delay (s)	7.9	0	-	16.3	19.9	7.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.1	1.4	0.1	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	15	15	70	5	35	5	175	75	30	140	10
Future Vol, veh/h	15	15	15	70	5	35	5	175	75	30	140	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	0	0	0	12	4	10	3	0
Mvmt Flow	16	16	16	76	5	38	5	190	82	33	152	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	487	506	158	481	470	231	163	0	0	272	0	0
Stage 1	224	224	-	241	241	-	-	-	-	-	-	-
Stage 2	263	282	-	240	229	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.5	6.2	4.1	-	-	4.2	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4	3.3	2.2	-	-	2.29	-	-
Pot Cap-1 Maneuver	494	472	893	495	495	813	1428	-	-	1246	-	-
Stage 1	783	722	-	762	710	-	-	-	-	-	-	-
Stage 2	747	681	-	763	718	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	455	456	893	461	479	813	1428	-	-	1246	-	-
Mov Cap-2 Maneuver	455	456	-	461	479	-	-	-	-	-	-	-
Stage 1	780	701	-	759	707	-	-	-	-	-	-	-
Stage 2	704	678	-	710	697	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	13.6	0.1	1.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1428	-	-	544	536	1246	-	-
HCM Lane V/C Ratio	0.004	-	-	0.09	0.223	0.026	-	-
HCM Control Delay (s)	7.5	0	-	12.3	13.6	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.8	0.1	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	15	50	20	5	65	5	220	90	55	165	10
Future Vol, veh/h	15	15	50	20	5	65	5	220	90	55	165	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	25	0	26	0	6	7	5	2	0
Mvmt Flow	16	16	54	22	5	71	5	239	98	60	179	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	641	652	185	638	608	288	190	0	0	337	0	0
Stage 1	305	305	-	298	298	-	-	-	-	-	-	-
Stage 2	336	347	-	340	310	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.5	6.46	4.1	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4	3.534	2.2	-	-	2.245	-	-
Pot Cap-1 Maneuver	390	390	862	359	413	697	1396	-	-	1206	-	-
Stage 1	709	666	-	664	671	-	-	-	-	-	-	-
Stage 2	682	638	-	629	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	331	367	862	310	388	697	1396	-	-	1206	-	-
Mov Cap-2 Maneuver	331	367	-	310	388	-	-	-	-	-	-	-
Stage 1	706	629	-	661	668	-	-	-	-	-	-	-
Stage 2	605	635	-	542	626	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	13.4	0.1	1.9
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1396	-	-	555	527	1206	-	-
HCM Lane V/C Ratio	0.004	-	-	0.157	0.186	0.05	-	-
HCM Control Delay (s)	7.6	0	-	12.7	13.4	8.1	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.7	0.2	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	10	10	55	10	45	20	200	75	20	150	20
Future Vol, veh/h	15	10	10	55	10	45	20	200	75	20	150	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	16	11	11	60	11	49	22	217	82	22	163	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	550	561	174	531	531	258	185	0	0	299	0	0
Stage 1	218	218	-	302	302	-	-	-	-	-	-	-
Stage 2	332	343	-	229	229	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	449	439	875	462	457	786	1402	-	-	1274	-	-
Stage 1	789	726	-	712	668	-	-	-	-	-	-	-
Stage 2	686	641	-	778	718	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	401	422	875	434	440	786	1402	-	-	1274	-	-
Mov Cap-2 Maneuver	401	422	-	434	440	-	-	-	-	-	-	-
Stage 1	774	712	-	698	655	-	-	-	-	-	-	-
Stage 2	621	629	-	742	704	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	13.7	0.5	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1402	-	-	483	532	1274	-	-
HCM Lane V/C Ratio	0.016	-	-	0.079	0.225	0.017	-	-
HCM Control Delay (s)	7.6	0	-	13.1	13.7	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.9	0.1	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	10	15	20	25	60	55	260	15	40	160	15
Future Vol, veh/h	15	10	15	20	25	60	55	260	15	40	160	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	5	0	0	0	0	0	0	1	0
Mvmt Flow	16	11	16	22	27	65	60	283	16	43	174	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	725	687	182	693	687	291	190	0	0	299	0	0
Stage 1	268	268	-	411	411	-	-	-	-	-	-	-
Stage 2	457	419	-	282	276	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	343	372	866	354	372	753	1396	-	-	1274	-	-
Stage 1	742	691	-	612	598	-	-	-	-	-	-	-
Stage 2	587	593	-	718	685	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	274	339	866	316	339	753	1396	-	-	1274	-	-
Mov Cap-2 Maneuver	274	339	-	316	339	-	-	-	-	-	-	-
Stage 1	703	665	-	580	567	-	-	-	-	-	-	-
Stage 2	484	562	-	667	659	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	14.7	1.3	1.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1396	-	-	394	484	1274	-	-
HCM Lane V/C Ratio	0.043	-	-	0.11	0.236	0.034	-	-
HCM Control Delay (s)	7.7	0	-	15.3	14.7	7.9	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.9	0.1	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	45	35	70	15	35	10	185	75	30	145	20
Future Vol, veh/h	45	45	35	70	15	35	10	185	75	30	145	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	0	0	0	12	4	10	3	0
Mvmt Flow	49	49	38	76	16	38	11	201	82	33	158	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	526	540	169	543	510	242	180	0	0	283	0	0
Stage 1	235	235	-	264	264	-	-	-	-	-	-	-
Stage 2	291	305	-	279	246	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.5	6.2	4.1	-	-	4.2	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4	3.3	2.2	-	-	2.29	-	-
Pot Cap-1 Maneuver	466	451	880	451	469	802	1408	-	-	1235	-	-
Stage 1	773	714	-	741	694	-	-	-	-	-	-	-
Stage 2	721	666	-	728	706	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	419	433	880	383	451	802	1408	-	-	1235	-	-
Mov Cap-2 Maneuver	419	433	-	383	451	-	-	-	-	-	-	-
Stage 1	766	693	-	734	688	-	-	-	-	-	-	-
Stage 2	664	660	-	628	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.9	15.8	0.3	1.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1408	-	-	498	462	1235	-	-
HCM Lane V/C Ratio	0.008	-	-	0.273	0.282	0.026	-	-
HCM Control Delay (s)	7.6	0	-	14.9	15.8	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.1	1.1	0.1	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	60	105	20	20	65	25	225	90	55	185	15
Future Vol, veh/h	25	60	105	20	20	65	25	225	90	55	185	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	25	0	26	0	6	7	5	2	0
Mvmt Flow	27	65	114	22	22	71	27	245	98	60	201	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	724	726	209	767	685	294	217	0	0	343	0	0
Stage 1	329	329	-	348	348	-	-	-	-	-	-	-
Stage 2	395	397	-	419	337	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.35	6.5	6.46	4.1	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.725	4	3.534	2.2	-	-	2.245	-	-
Pot Cap-1 Maneuver	344	354	836	292	373	692	1365	-	-	1199	-	-
Stage 1	688	650	-	623	638	-	-	-	-	-	-	-
Stage 2	634	607	-	569	645	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	276	325	836	201	343	692	1365	-	-	1199	-	-
Mov Cap-2 Maneuver	276	325	-	201	343	-	-	-	-	-	-	-
Stage 1	671	613	-	607	622	-	-	-	-	-	-	-
Stage 2	536	592	-	414	608	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.3	16.9	0.6	1.8
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1365	-	-	474	417	1199	-	-
HCM Lane V/C Ratio	0.02	-	-	0.436	0.274	0.05	-	-
HCM Control Delay (s)	7.7	0	-	18.3	16.9	8.2	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	2.2	1.1	0.2	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	30	25	55	40	45	45	210	75	20	160	50
Future Vol, veh/h	35	30	25	55	40	45	45	210	75	20	160	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	38	33	27	60	43	49	49	228	82	22	174	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	658	653	201	642	639	269	228	0	0	310	0	0
Stage 1	245	245	-	367	367	-	-	-	-	-	-	-
Stage 2	413	408	-	275	272	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	380	389	845	390	397	775	1352	-	-	1262	-	-
Stage 1	763	707	-	657	626	-	-	-	-	-	-	-
Stage 2	620	600	-	736	688	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	309	364	845	335	372	775	1352	-	-	1262	-	-
Mov Cap-2 Maneuver	309	364	-	335	372	-	-	-	-	-	-	-
Stage 1	729	693	-	628	598	-	-	-	-	-	-	-
Stage 2	515	574	-	665	674	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.9	18.1	1.1	0.7
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1352	-	-	400	425	1262	-	-
HCM Lane V/C Ratio	0.036	-	-	0.245	0.358	0.017	-	-
HCM Control Delay (s)	7.8	0	-	16.9	18.1	7.9	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	1.6	0.1	-	-

Intersection	
Int Delay, s/veh	9.7

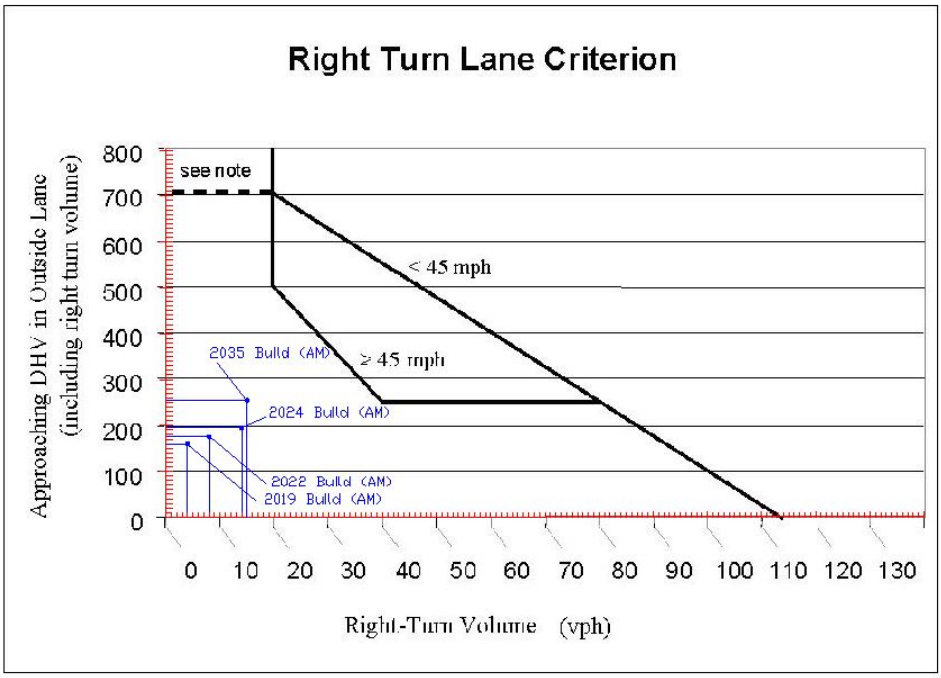
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	35	50	20	80	60	120	285	15	40	175	25
Future Vol, veh/h	25	35	50	20	80	60	120	285	15	40	175	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	5	0	0	0	0	0	0	1	0
Mvmt Flow	27	38	54	22	87	65	130	310	16	43	190	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	944	876	204	914	881	318	217	0	0	326	0	0
Stage 1	290	290	-	578	578	-	-	-	-	-	-	-
Stage 2	654	586	-	336	303	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.15	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.15	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.545	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	244	290	842	251	288	727	1365	-	-	1245	-	-
Stage 1	722	676	-	496	504	-	-	-	-	-	-	-
Stage 2	459	500	-	672	667	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	143	246	842	183	245	727	1365	-	-	1245	-	-
Mov Cap-2 Maneuver	143	246	-	183	245	-	-	-	-	-	-	-
Stage 1	638	650	-	438	445	-	-	-	-	-	-	-
Stage 2	297	442	-	569	641	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.6	30.7	2.3	1.3
HCM LOS	D	D		

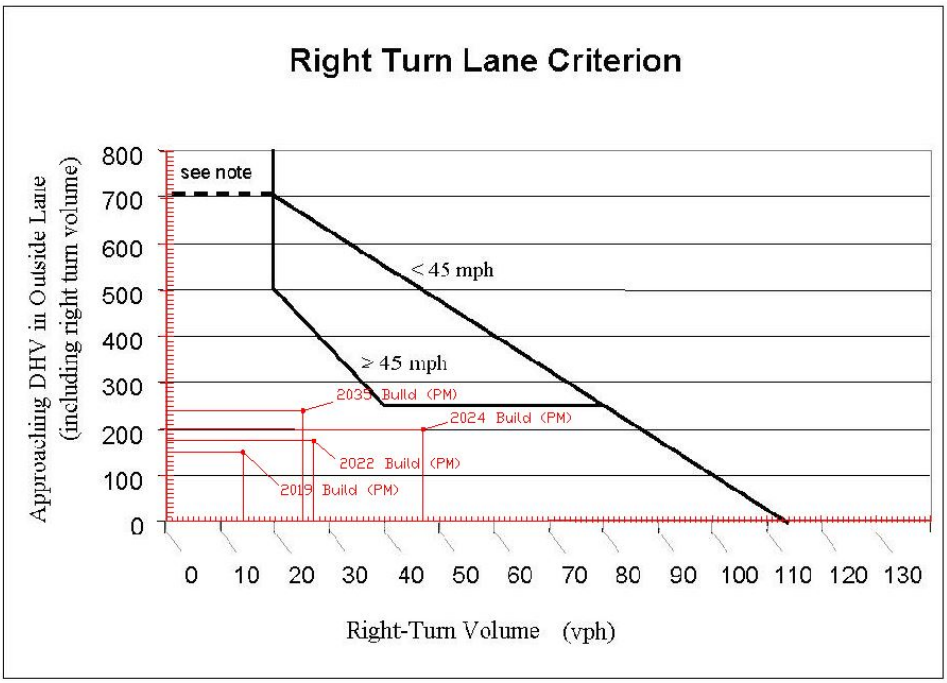
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1365	-	-	292	309	1245	-	-
HCM Lane V/C Ratio	0.096	-	-	0.409	0.563	0.035	-	-
HCM Control Delay (s)	7.9	0	-	25.6	30.7	8	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.9	3.2	0.1	-	-

Exhibit 7-2 Right Turn Lane Criterion (W 6th Avenue & Oaklea Drive)



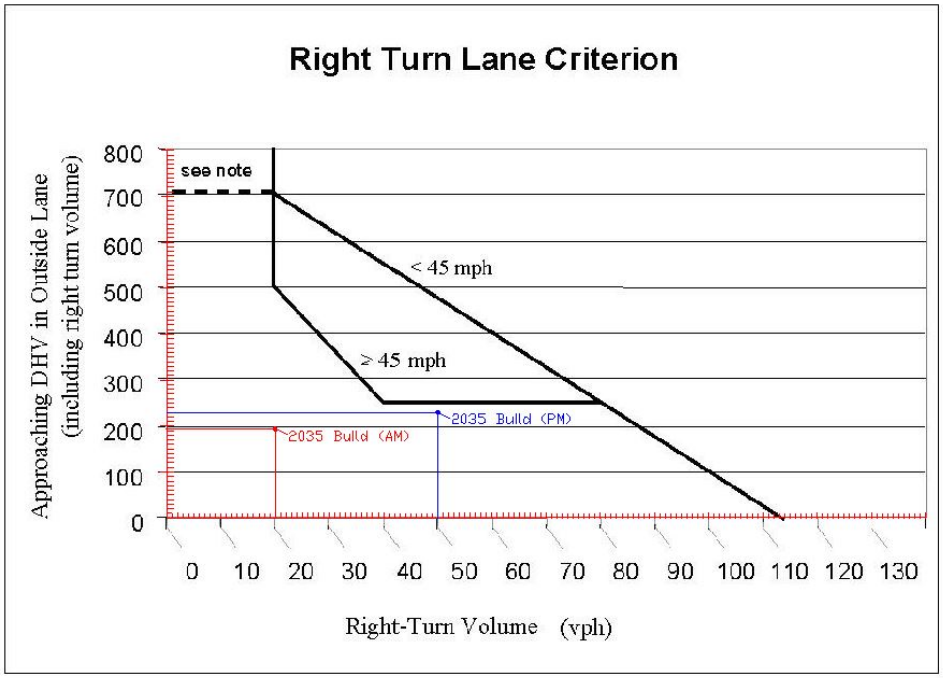
Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

Exhibit 7-2 Right Turn Lane Criterion (W 6th Avenue & Oaklea Drive)



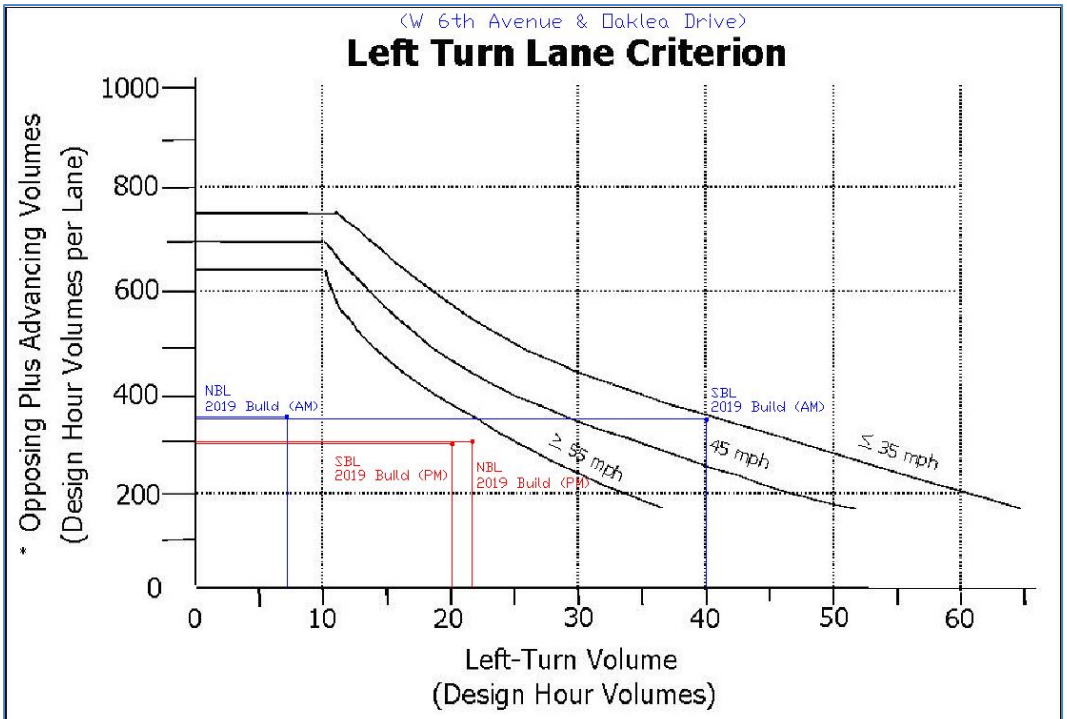
Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

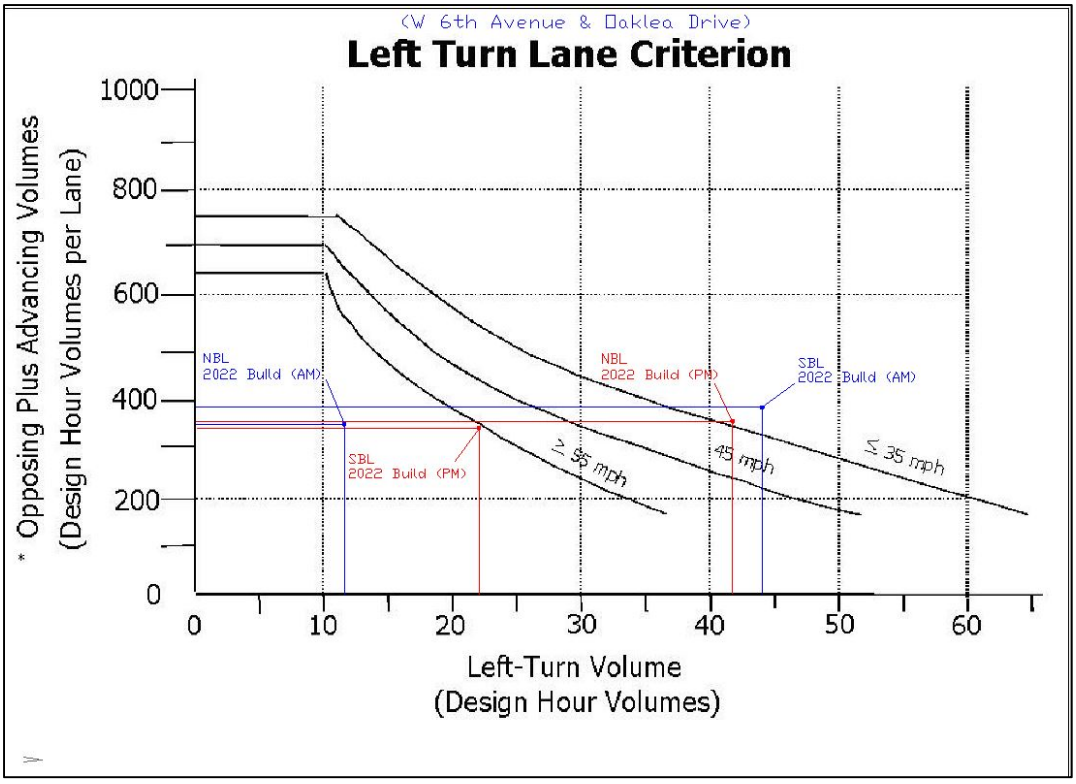
Exhibit 7-2 Right Turn Lane Criterion (W 10th Avenue & Oaklea Drive)

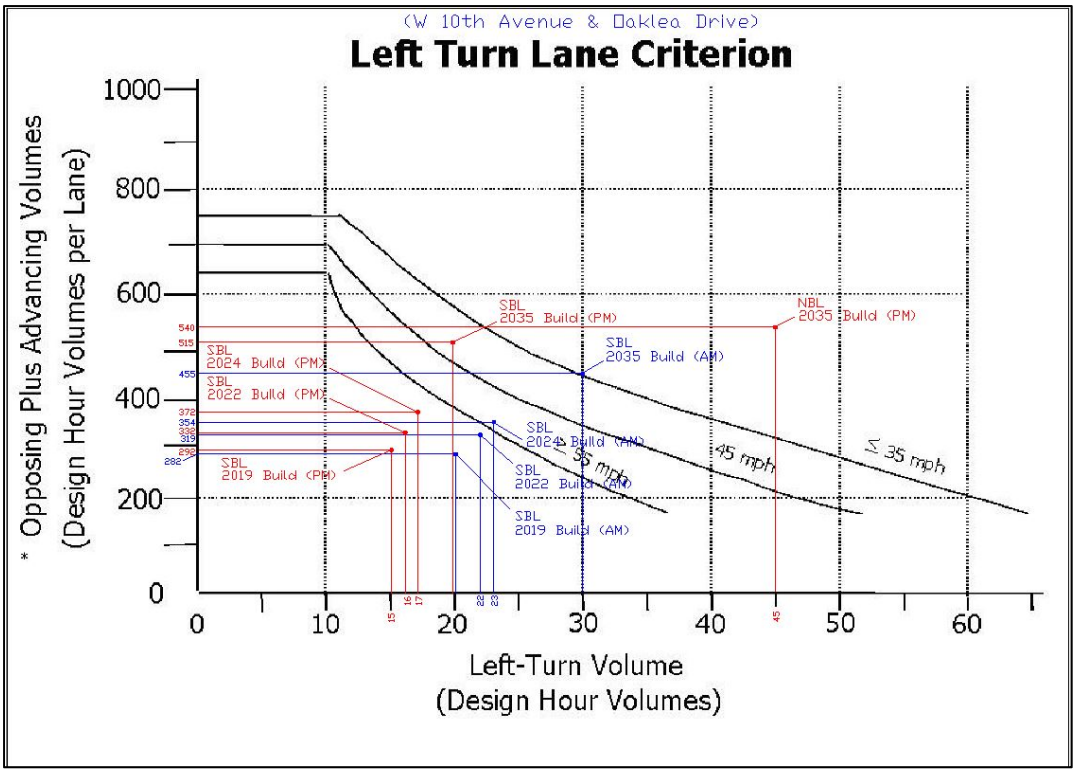


Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

(W 6th Avenue & Oaklea Drive)




(W 6th Avenue & Oaklea Drive)
Left Turn Lane Criterion
* Opposing Plus Advancing Volumes
(Design Hour Volumes per Lane)
1000
800
600
400
200
0
NBL
2022 Build (AM)
NBL
2022 Build (PM)
SBL
2022 Build (AM)
SBL
2022 Build (PM)
≥ 55 mph
45 mph
≤ 35 mph
0
10
20
30
40
50
60
Left-Turn Volume
(Design Hour Volumes)


(W 10th Avenue & Oaklea Drive)
Left Turn Lane Criterion
* Opposing Plus Advancing Volumes
(Design Hour Volumes per Lane)
1000
800
600
400
200
0
SBL
2035 Build (PM)
NBL
2035 Build (PM)
SBL
2035 Build (AM)
SBL
2024 Build (PM)
SBL
2022 Build (PM)
SBL
2024 Build (AM)
SBL
2022 Build (AM)
SBL
2019 Build (PM)
SBL
2019 Build (AM)
≥ 55 mph
45 mph
≤ 35 mph
0
10
20
30
40
50
60
Left-Turn Volume
(Design Hour Volumes)