



September 16, 2019

Mr. Ben Newman, P.E.
City of North Port
1100 N. Chamberlain Boulevard
North Port, FL 34286

**RE: *The Woodlands
Traffic Impact Statement (TIS)
City of North Port, Florida***

Dear Mr. Newman:

Pursuant to the comments received from the pre-application meeting on March 19, 2019 and the comments received on September 6, 2019 regarding the proposed industrial development, this report provides the findings of the Traffic Impact Statement (TIS) performed for the Woodlands. The project site is located in the southeast quadrant of Plantation Boulevard & North Toledo Blade Boulevard in the City of North Port in Sarasota County, Florida. The conceptual site plan is attached.

Narrative

The existing site is vacant, and the site is proposed to include up to 275,250 square feet of General Light Industrial use. The eastern and western access connections along Plantation Boulevard are proposed to remain as full access at this time. It is proposed to close the western median opening (to allow for a right-in/right-out only) before the Certification of Occupancy (C.O.) for the second building is issued. A right-in/right-out access connection is proposed along Toledo Blade Boulevard.

Trip Generation

The trip generation potential for the proposed industrial use was based on the Institute of Transportation Engineer's (ITE) *Trip Generation Manual*, 10th Edition, for Land Use Code 110 (General Light Industrial).

The trip generation analysis for the net, new trips for the proposed development is summarized in **Table 1**. As indicated in **Table 1**, the proposed development is anticipated to generate 193 a.m. peak-hour trips (170 entering/23 exiting) and 173 p.m. peak-hour trips (22 entering/151 exiting).

Table 1: Trip Generation

ITE Trip Generation						Directional Distribution		Gross Trips			Internal Capture		Net New Trips		
Land Use	Period	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	%	IC Trips	In	Out	Total
						In	Out								
General Light Industrial	AM	10	110	275,250	KSF	88%	12%	170	23	193	0%	0	170	23	193
General Light Industrial	PM	10	110	275,250	KSF	13%	87%	22	151	173	0%	0	22	151	173

The study area for the net, new p.m. peak-hour trips for the proposed development is summarized in **Table 2**. The project distribution is based upon the Florida Standard Urban Transportation Model

(FSUTMS) for District 1 and is attached. As indicated in **Table 2**, the adjacent roadway segments are not anticipated to be significantly impacted by the project traffic (i.e. the proposed development is not anticipated to impact the adjacent roadway segments by more than 5%). Per the City of North Port’s Concurrency Management guidelines, this project is “de minimis.” Therefore, no roadway or intersection analysis is required.

Table 2: Study Area

Roadway Segment	From	To	Lane	LOS D Service Volume	Project Traffic Distribution	Project Traffic Volumes	Project Traffic % of Service Volume	Significant Segment?
Plantation Road	N. Toledo Blvd	Project Access	4	3,222	80%	138	4.28%	No
	Project Access	Panacea Blvd	4	3,222	20%	35	1.09%	No
N. Toledo Boulevard	I-75 Ramps	Plantation Blvd	4	3,383	30%	52	1.54%	No
	Plantation Blvd	Gateway Ave	4	3,383	31%	54	1.60%	No
Panacea Boulevard	N. Toledo Blvd	Plantation Blvd	4	3,222	4%	7	0.22%	No
	Plantation Blvd	Marton Oak Blvd	4	3,222	9%	16	0.50%	No

Turn Lane Analysis

Currently, the western access connection along Plantation Boulevard has an existing 100-foot westbound left-turn lane. The eastern access connection along Plantation Boulevard has an existing 130-foot westbound left-turn lane. Based upon the comments received on September 6, 2019 the City of North Port is requiring the western full access to be converted to a right-in/right-out access and a new concrete traffic separator to be constructed along Plantation Boulevard. The site is proposed to be built as two separate phases (for the two buildings). Therefore, it is proposed to close the median opening before the Certification of Occupancy (C.O.) for the second building is issued. The median opening would need to be closed prior to the second building C.O. if operational issues occur before the time as required by City staff.

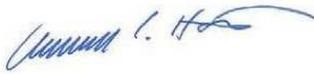
A traffic distribution is provided for the future buildout of the site (with the construction of the concrete traffic separator).

For all access connections, a right-turn lane warrant was performed for the a.m. peak-hour period. A right-turn lane is not warranted at the eastern or western access connection along Plantation Boulevard. In addition, a right-turn lane is not warranted at the project access connection along Toledo Blade Boulevard.

Conclusion

Based upon the above information, the Woodlands is not anticipated to have a significant impact on the existing roadway network. Based upon the comments received on September 6, 2019 the City of North Port is requiring the western full access to be converted to a right-in/right-out access and a new concrete traffic separator to be constructed along Plantation Boulevard. The site is proposed to be built as two separate phases (for the two buildings). Therefore, it is proposed to close the median opening before the Certification of Occupancy (C.O.) for the second building is issued. The median opening would need to be closed prior to the second building C.O. if operational issues occur before the time as required by City staff.

Sincerely,



Christopher Hatton, P.E.
Senior Vice-President



Kelly Fearon, P.E.
Project Manager

Copy to: Todd Mathes, Benderson Development

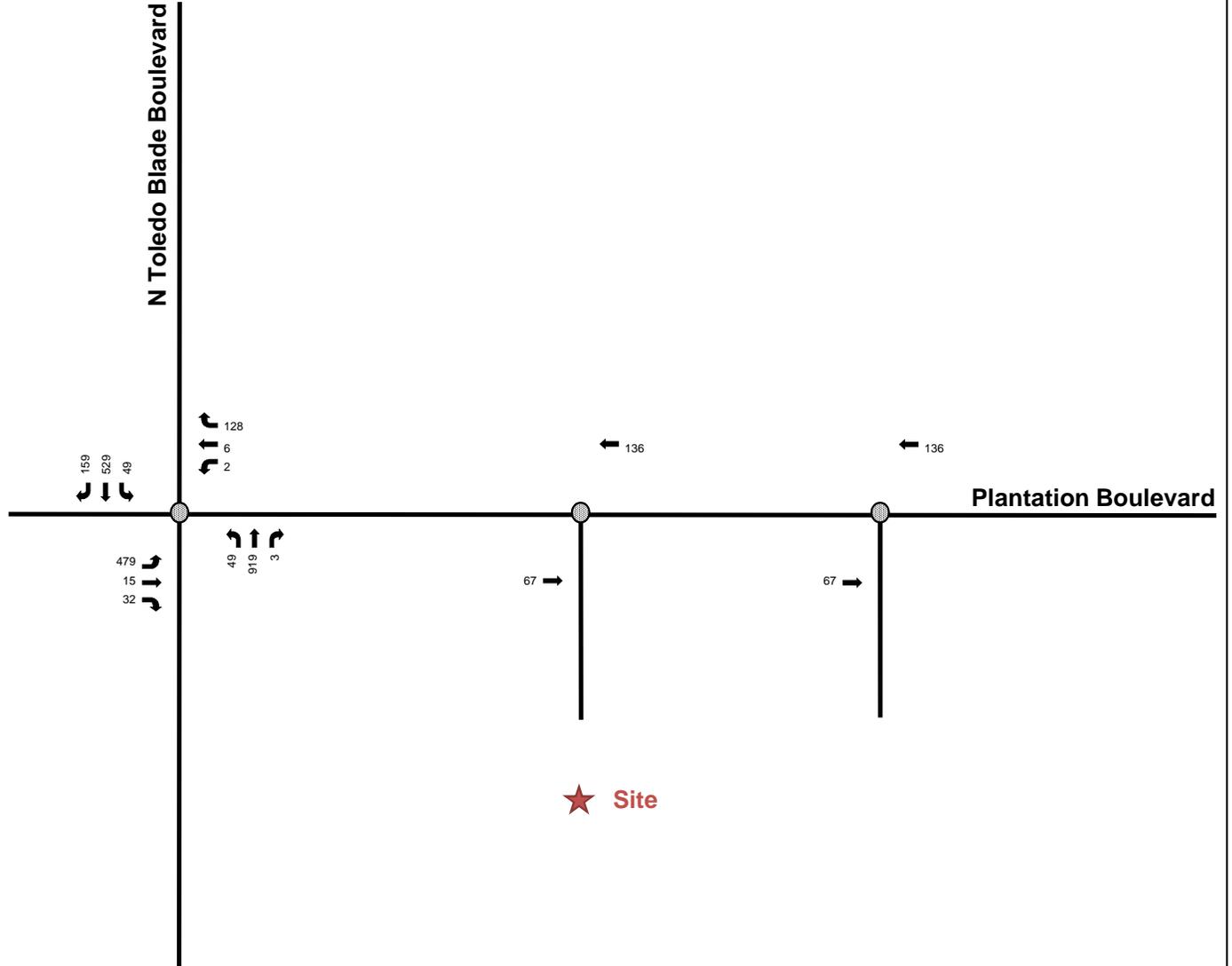
Attachments: A.M. Peak-Hour Peak Season Existing Traffic
P.M. Peak-Hour Peak Season Existing Traffic
Project Traffic Distribution (Phase 1)
A.M. Peak-Hour Project Traffic (Phase 1)
P.M. Peak-Hour Project Traffic (Phase 1)
A.M. Peak-Hour Total Traffic (Phase 1)
P.M. Peak-Hour Total Traffic (Phase 1)
Project Traffic Distribution (Buildout)
A.M. Peak-Hour Project Traffic (Buildout)
P.M. Peak-Hour Project Traffic (Buildout)
A.M. Peak-Hour Total Traffic (Buildout)
P.M. Peak-Hour Total Traffic (Buildout)
FSUTMS Model Plot
Right-Turn Lane Warrants



NOT TO SCALE

Legend

-  Roadway
-  Study Intersection
-  A.M. Peak-Hour Existing Traffic

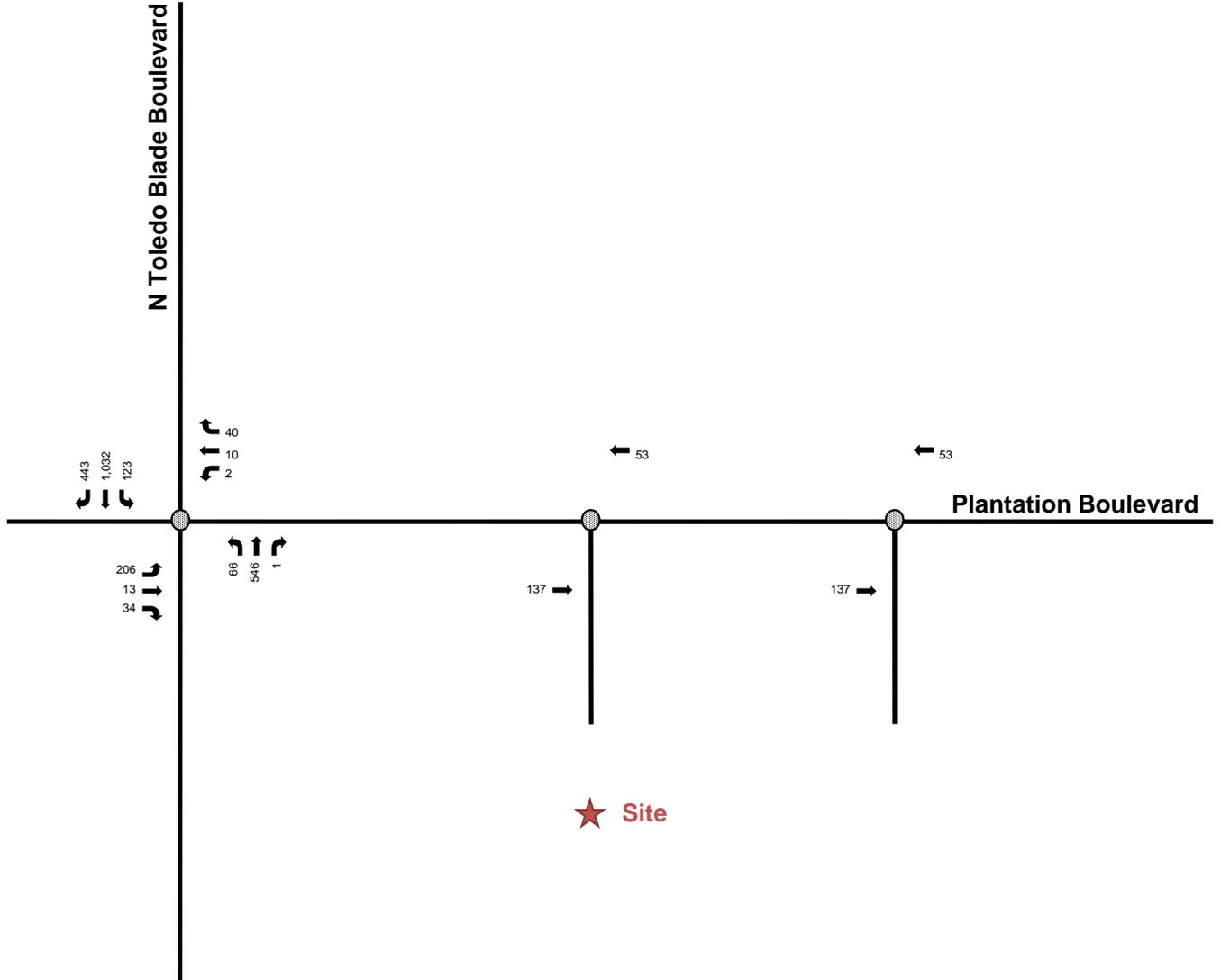




NOT TO SCALE

Legend

- Roadway
- Study Intersection
- XX P.M. Peak-Hour Existing Traffic

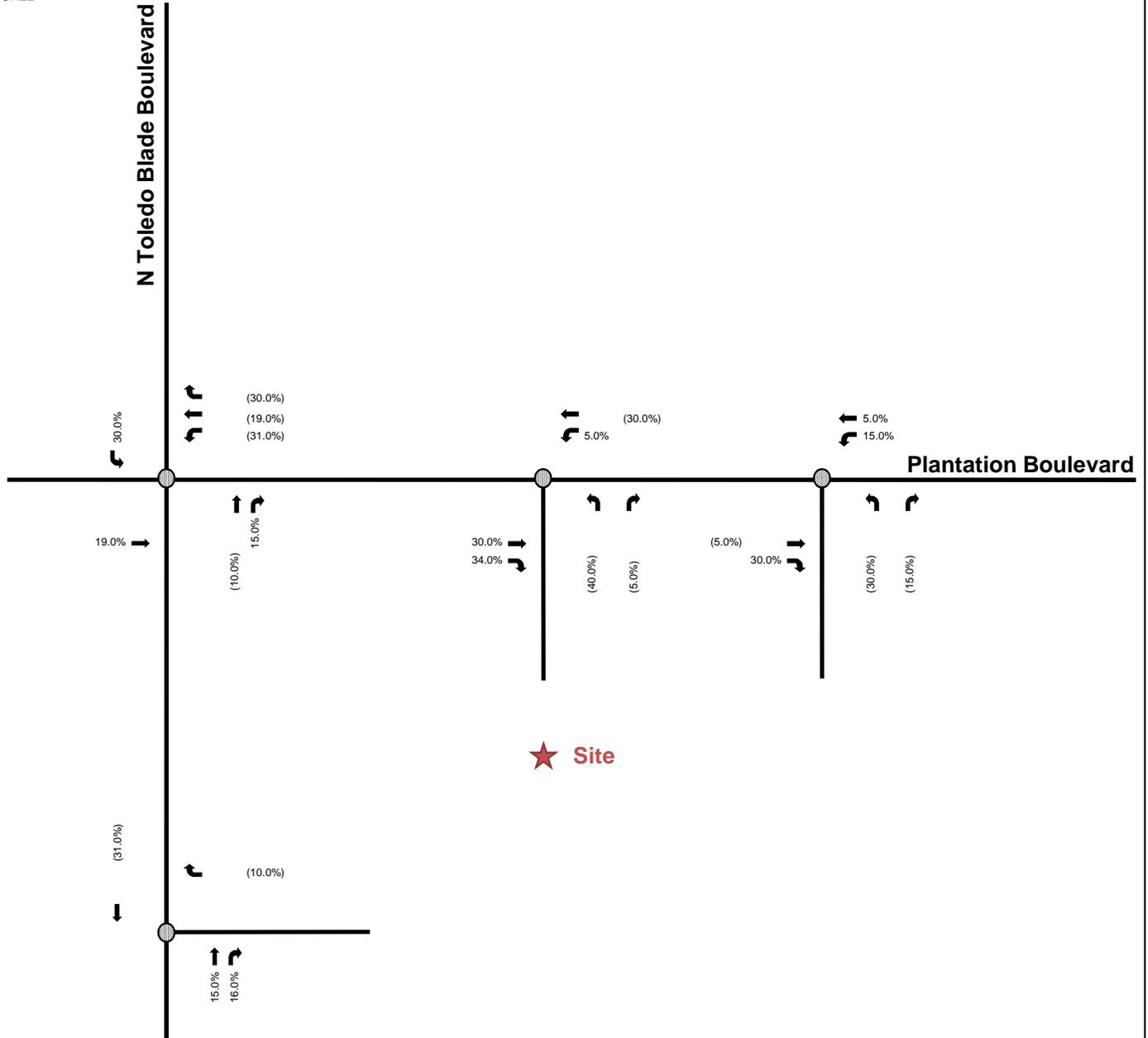




NOT TO SCALE

Legend

-  Roadway
-  Study Intersection
- XX% Entering Distribution
- (XX)% Exiting Distribution

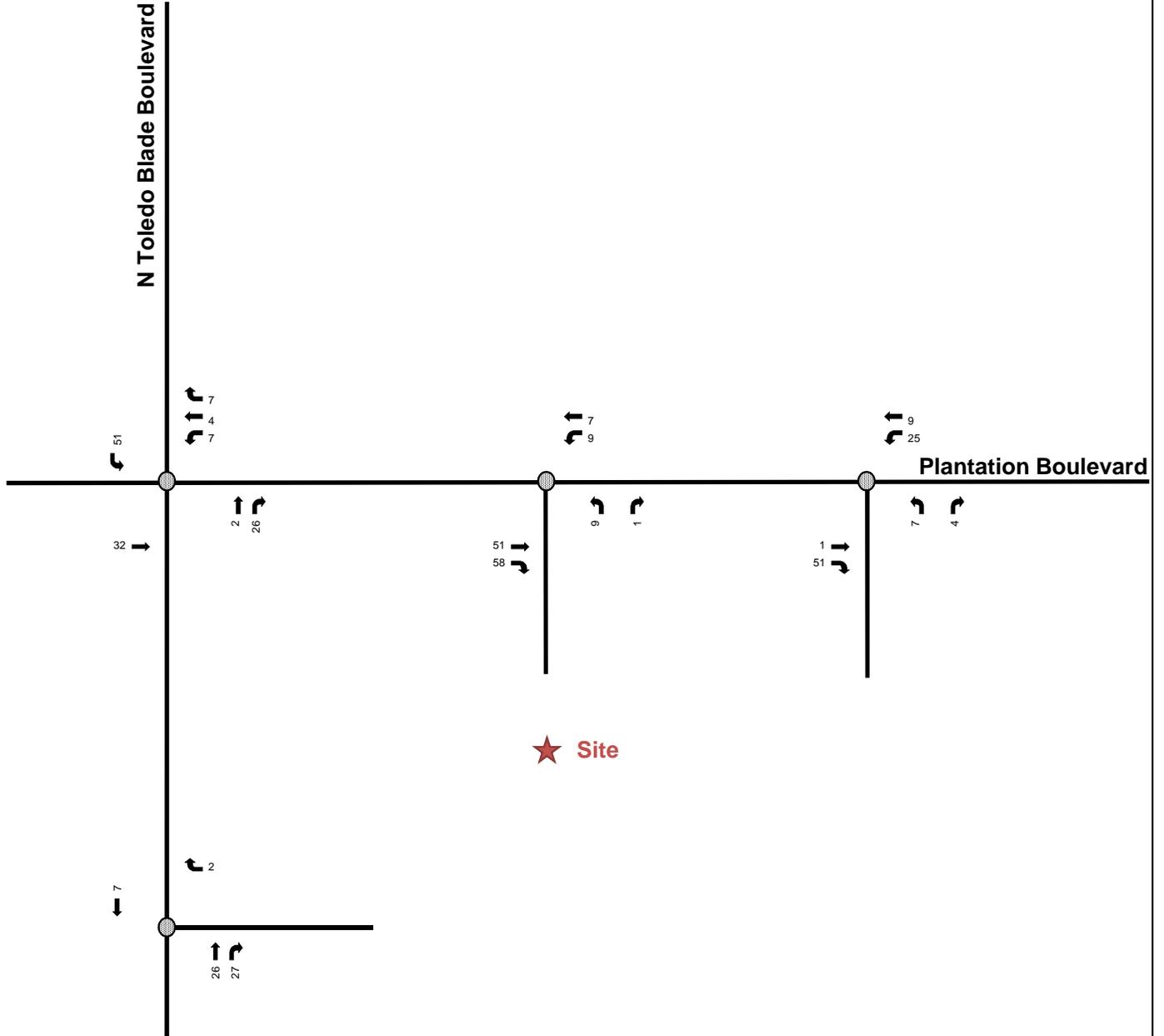




NOT TO SCALE

Legend

- Roadway
- Study Intersection
- XX A.M. Peak-Hour Project Traffic

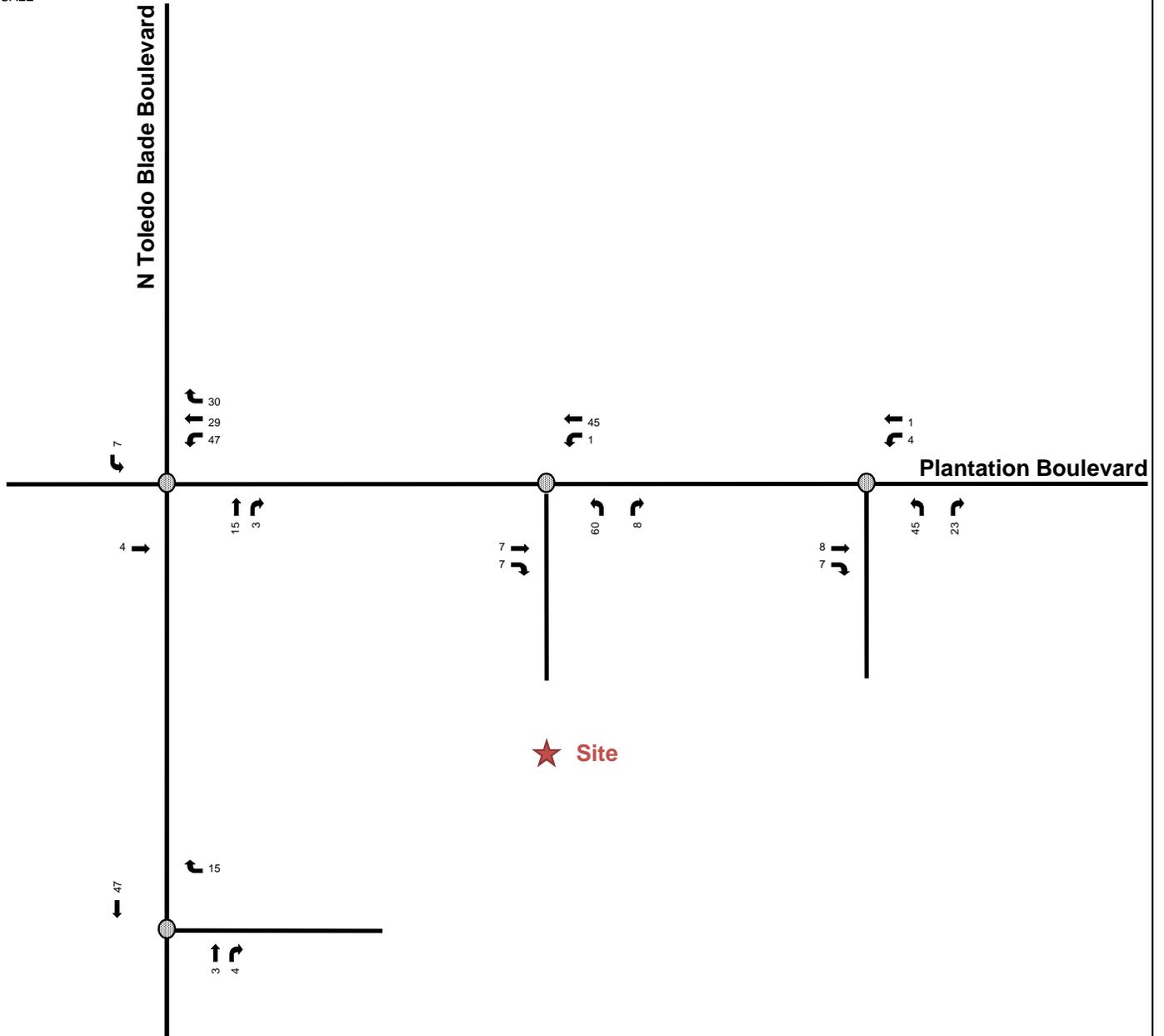




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Legend

-  Roadway
-  Study Intersection
-  P.M. Peak-Hour Project Traffic

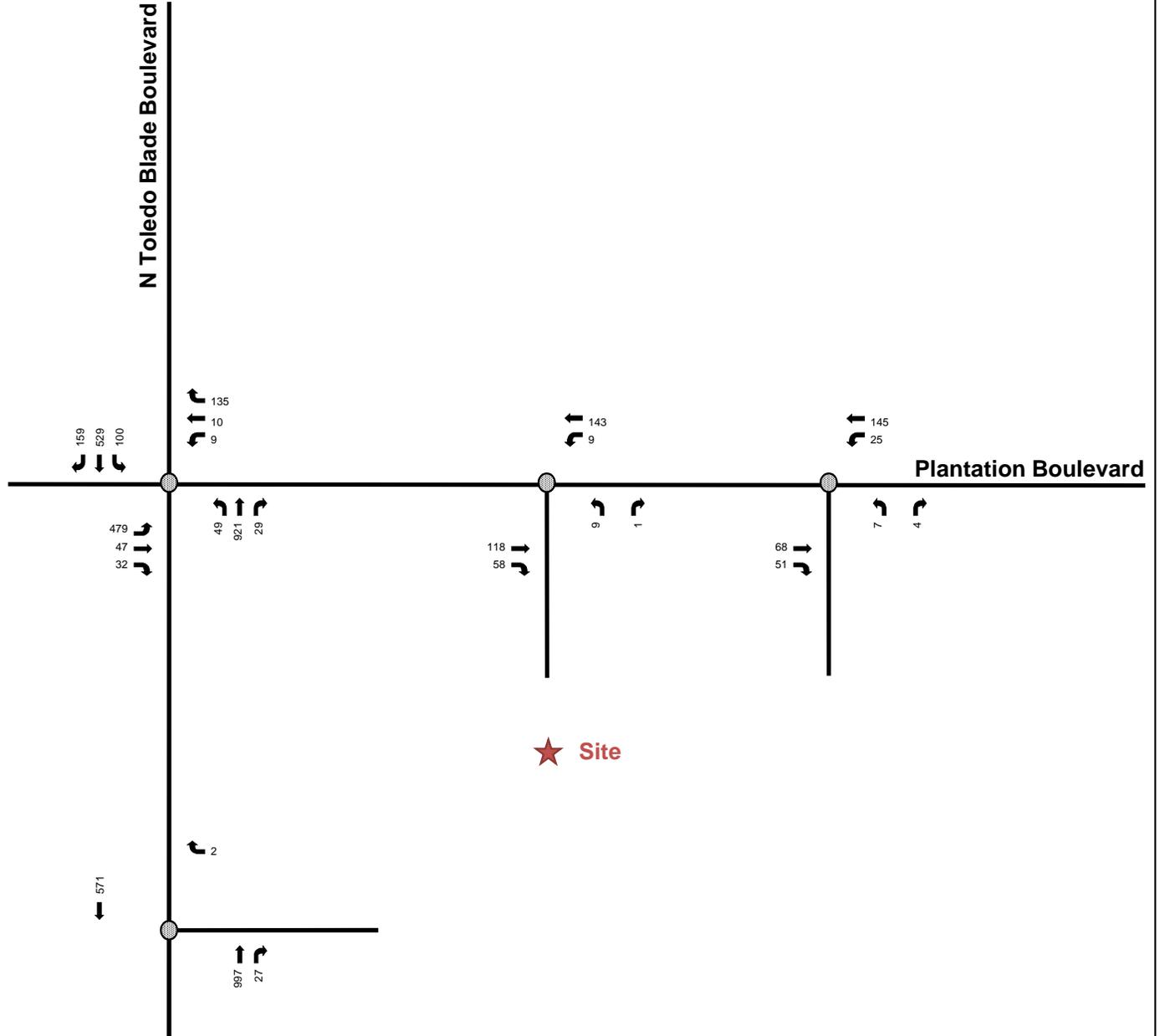




NOT TO SCALE

Legend

- Roadway
- Study Intersection
- XX A.M. Peak-Hour Total Traffic

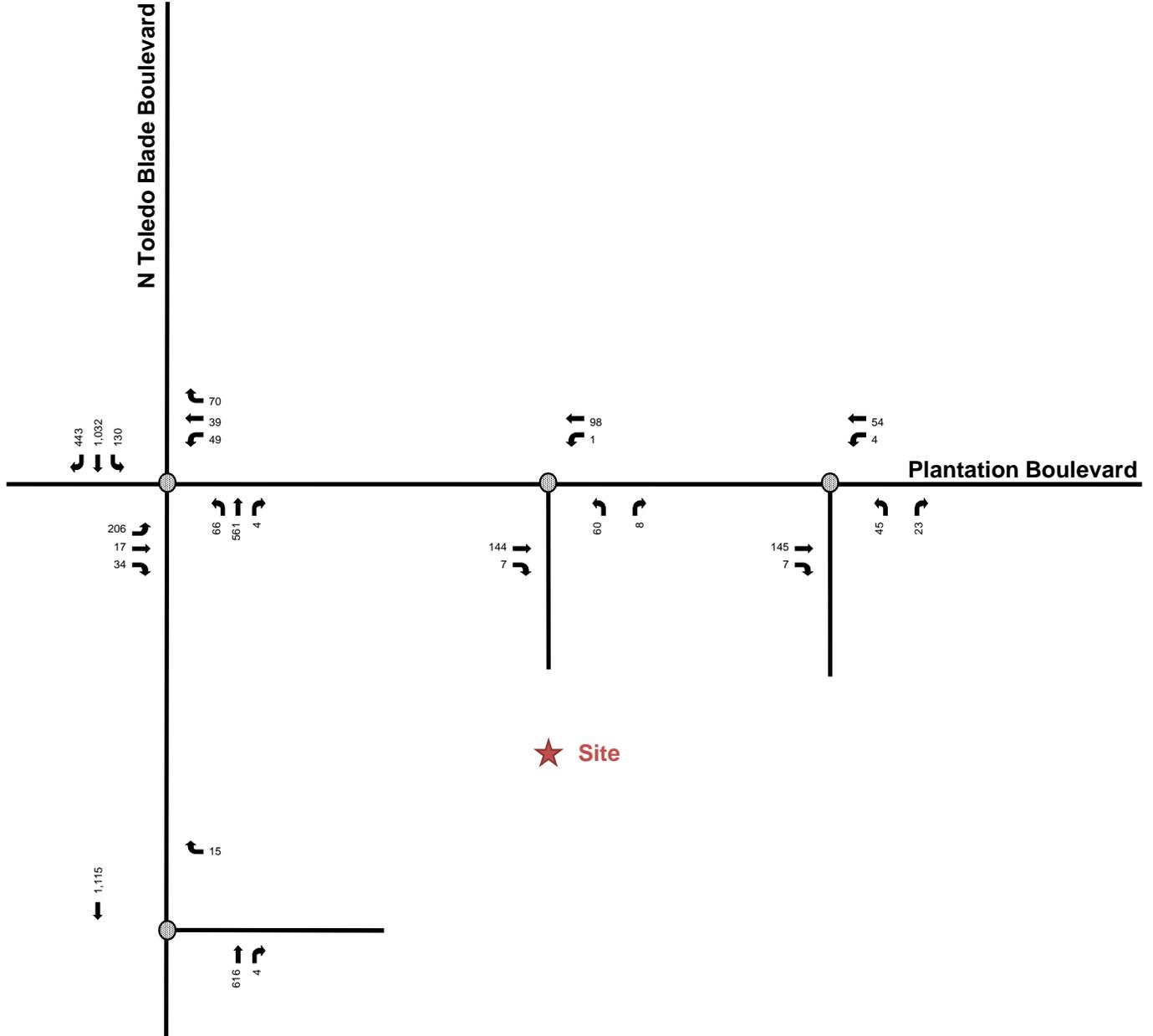




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Legend

- Roadway
- Study Intersection
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NOT TO SCALE

Legend

-  Roadway
-  Study Intersection
- XX% Entering Distribution
- (XX)% Exiting Distribution

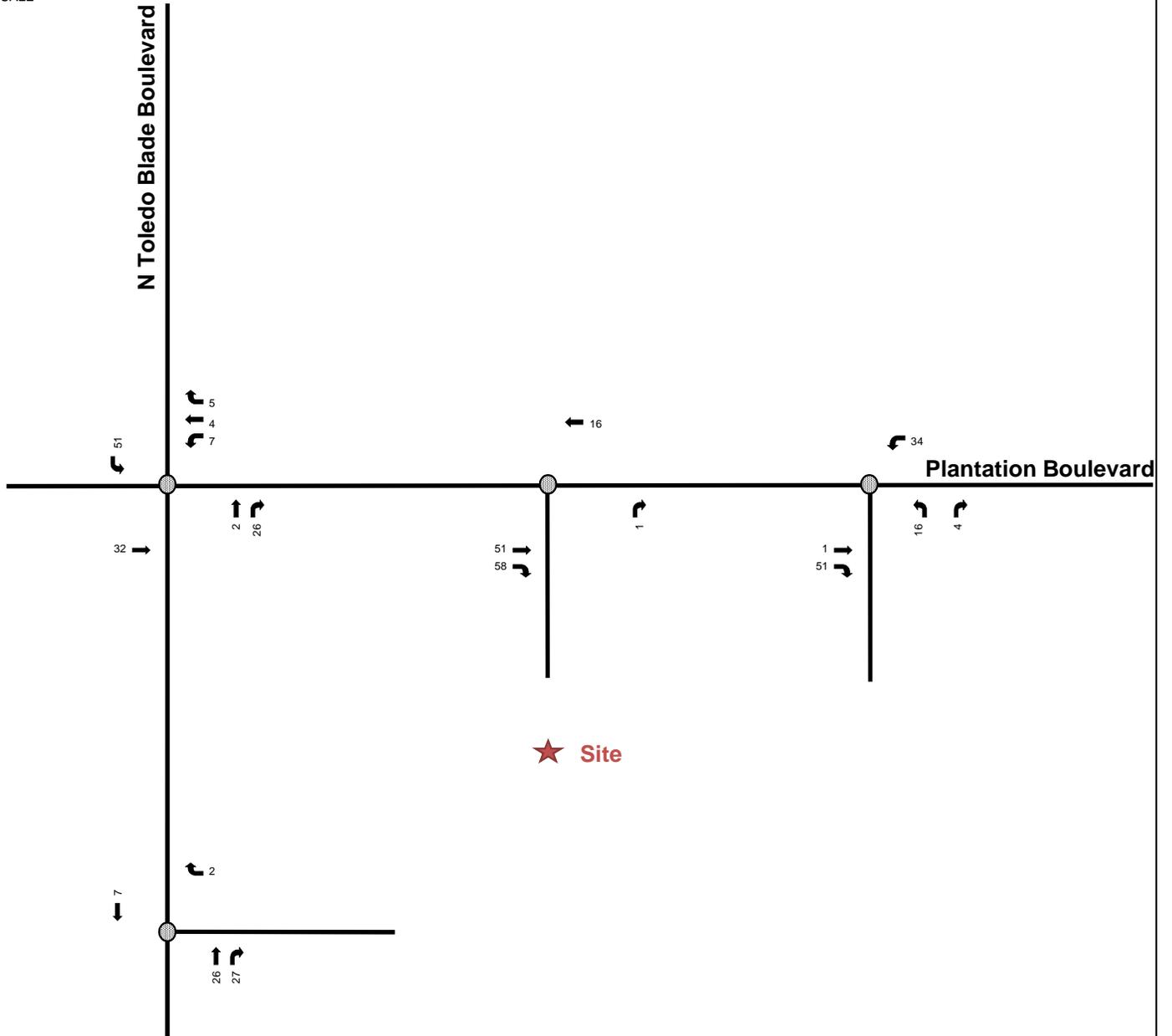




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-  A.M. Peak-Hour Project Traffic

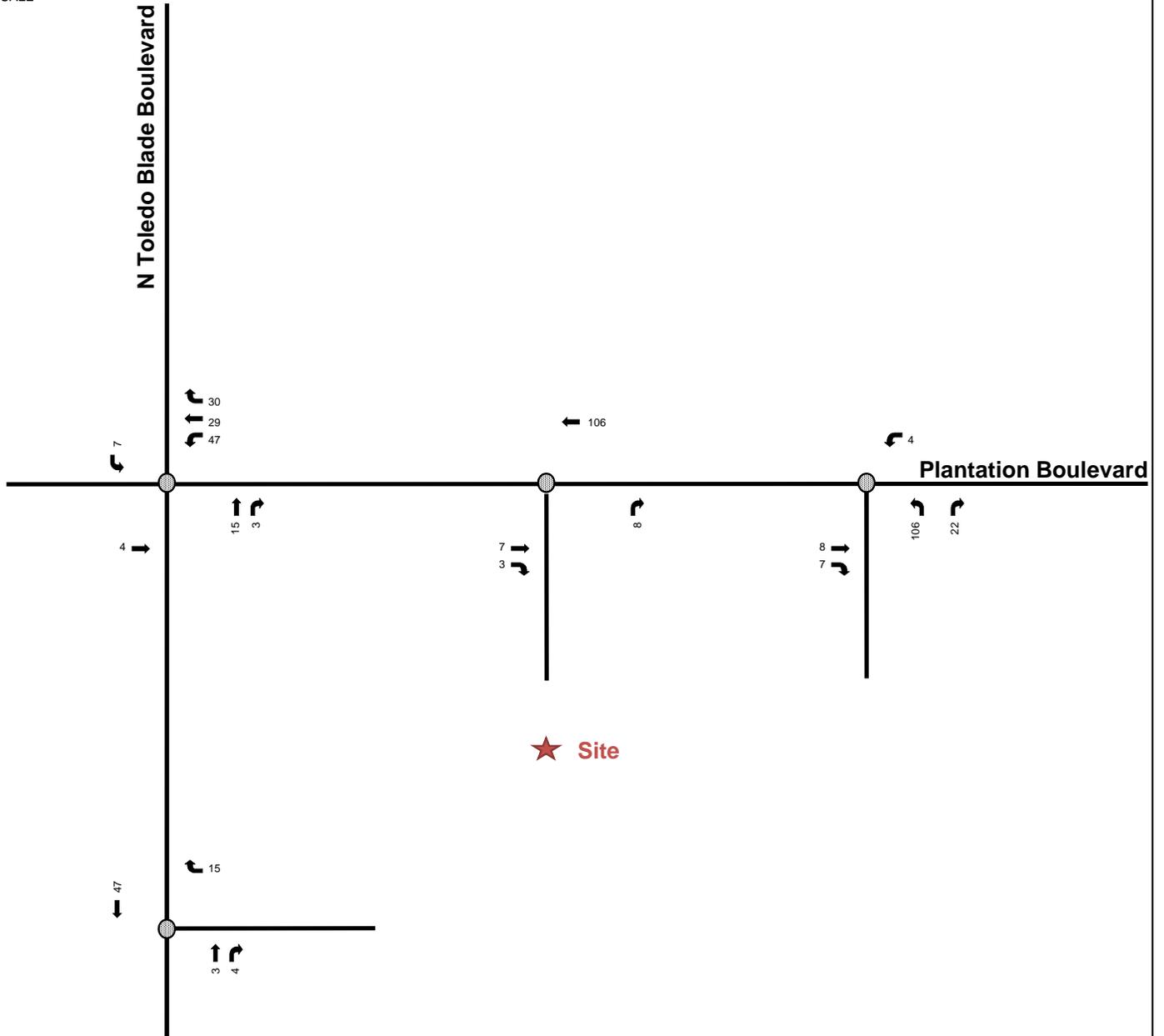




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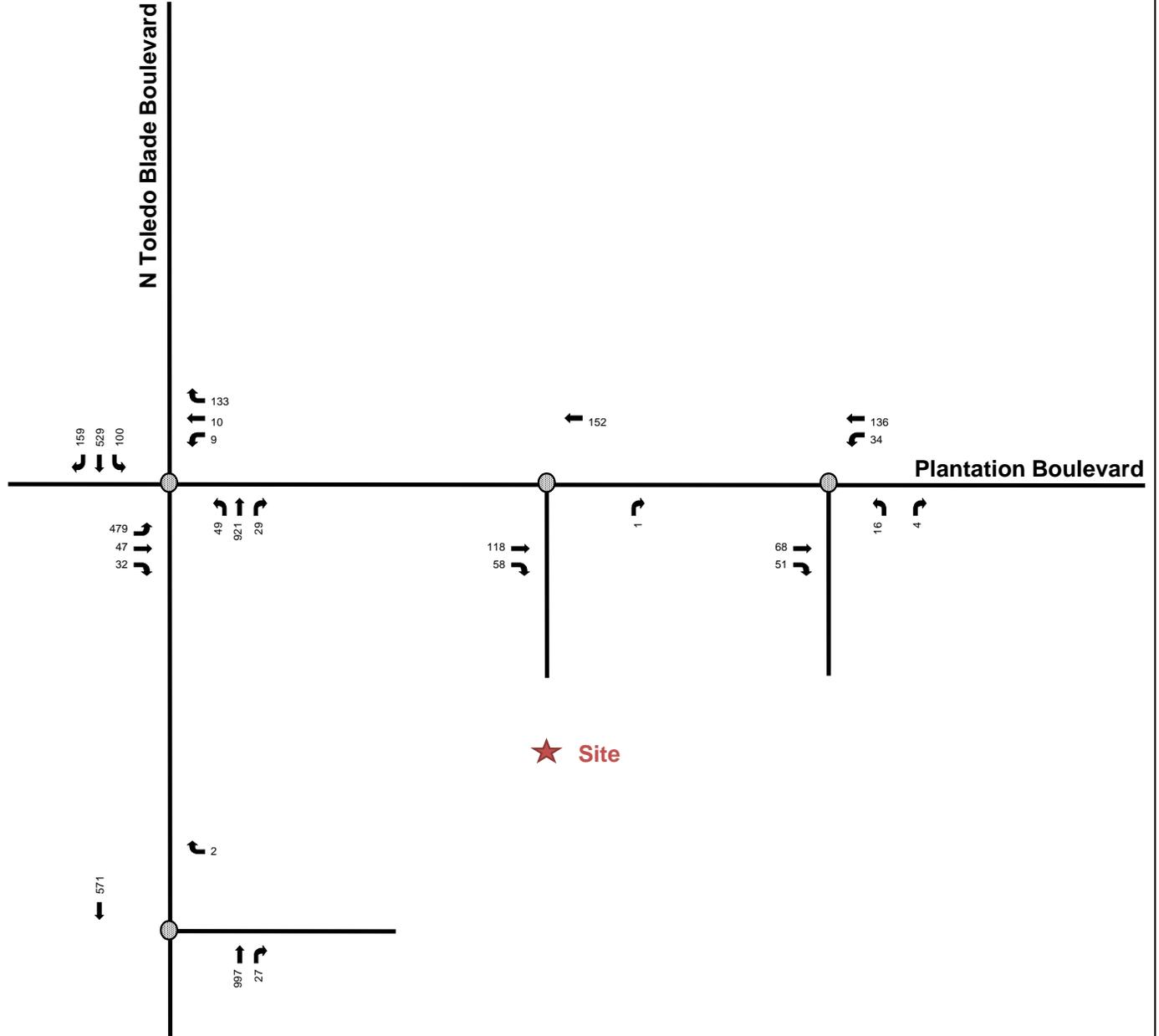




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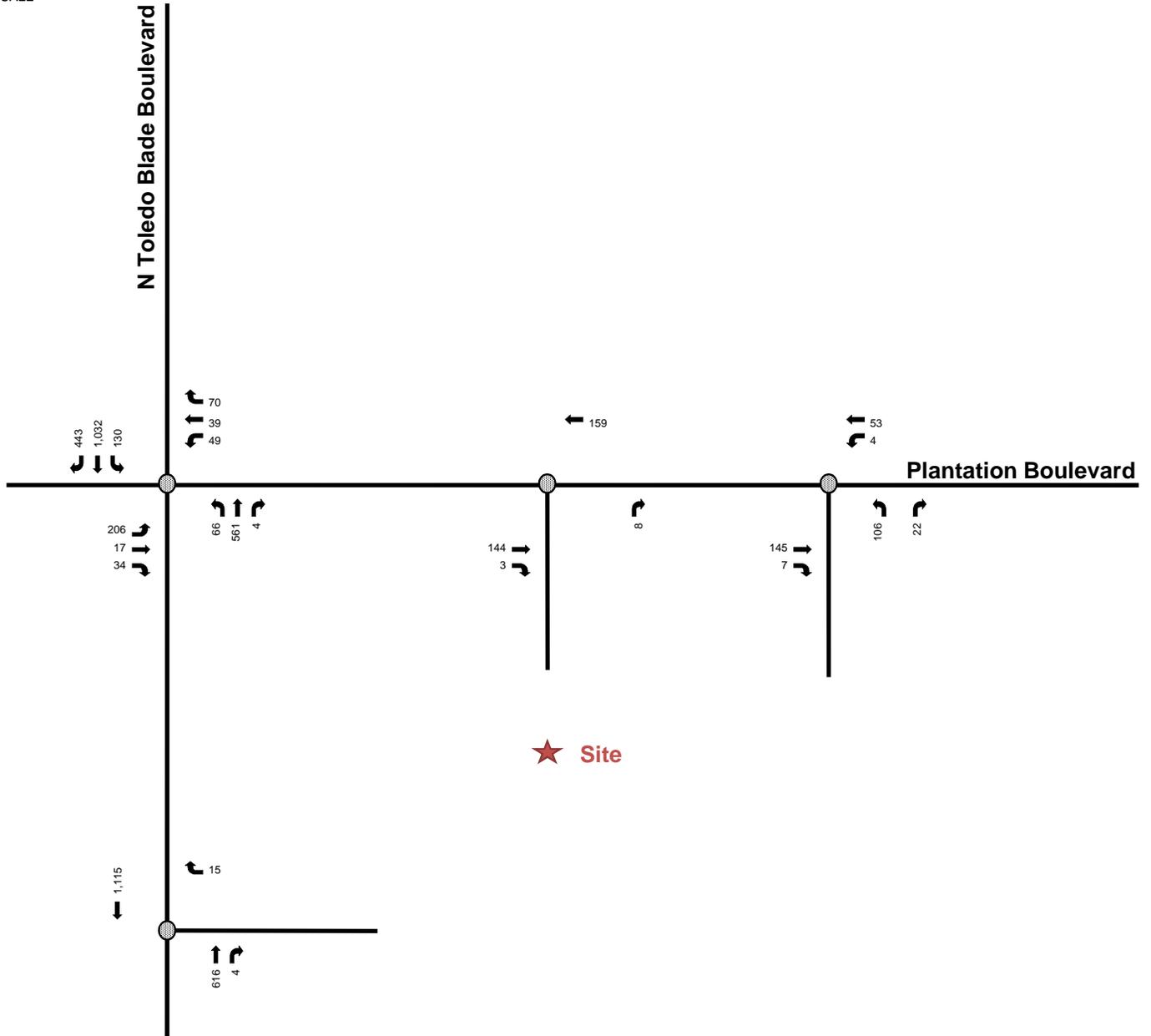


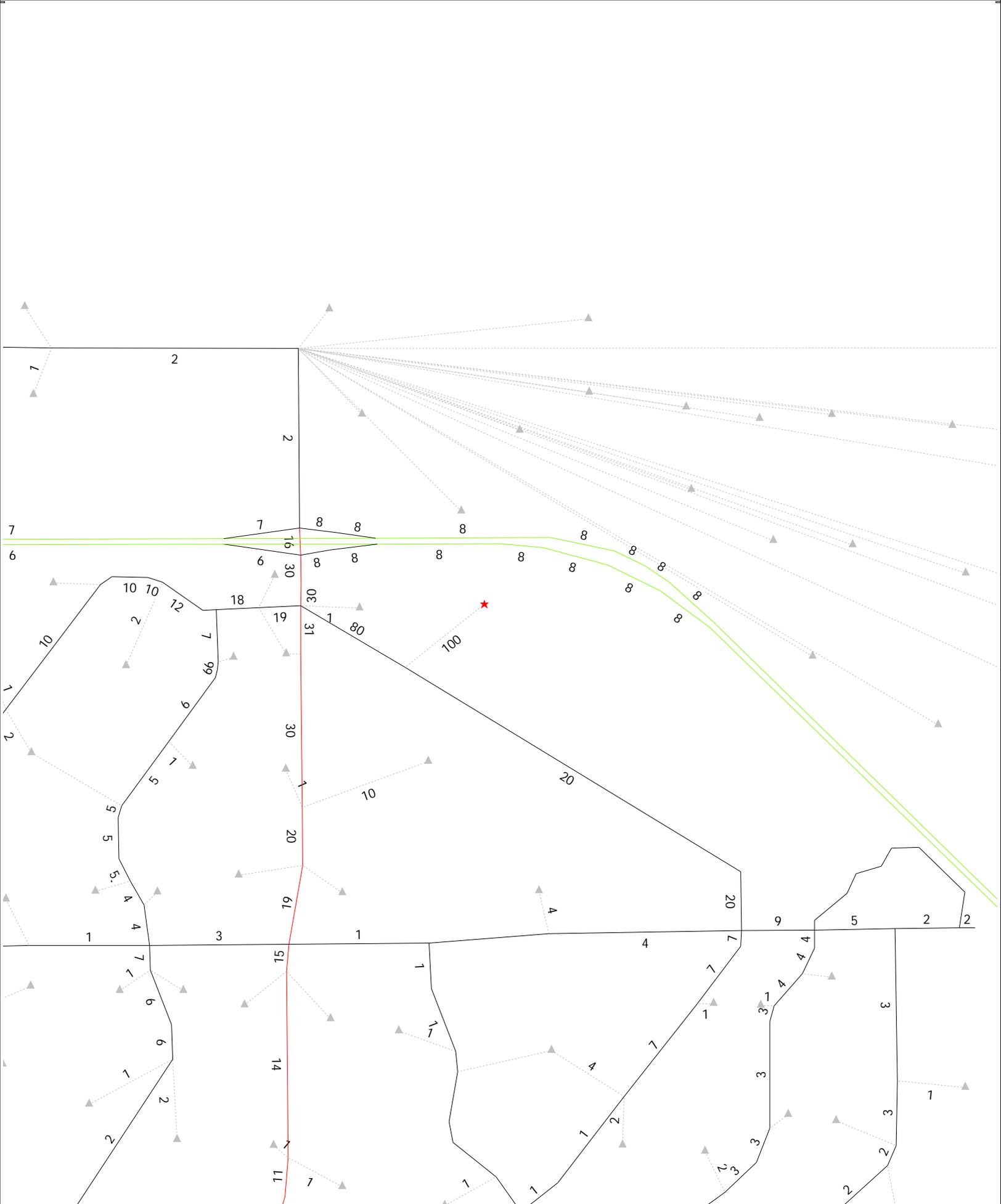


NOT TO SCALE

Legend

- Roadway
- Study Intersection
- XX P.M. Peak-Hour Total Traffic





The Woodlands
 2021C:\FSUTMS\D1\D1RPM_v1.0.6\YR2010\EC\Woodlands\HWYLOAD_18B.NET
 Select Zone

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	176
Right-turn volume, veh/h:	58

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	8690
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	

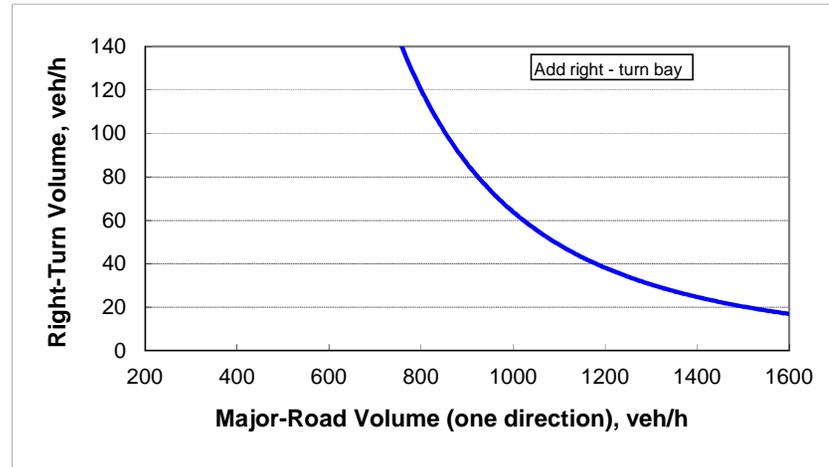


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	119
Right-turn volume, veh/h:	51

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	26286
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	

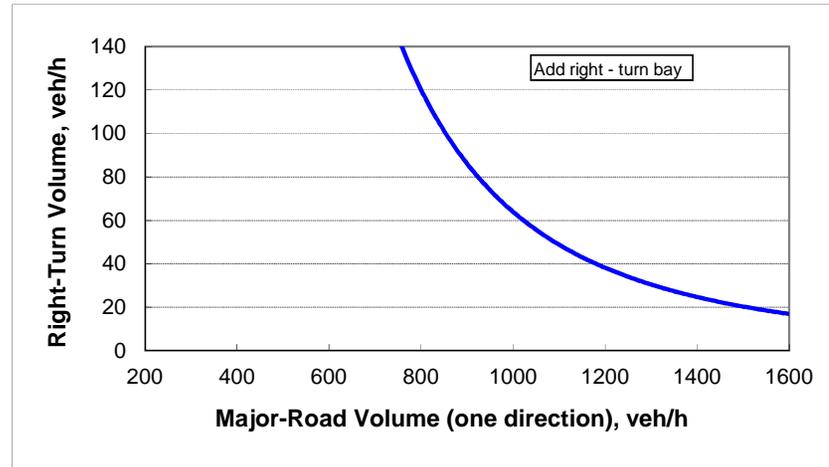


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	45
Major-road volume (one direction), veh/h:	1024
Right-turn volume, veh/h:	27

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	29
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	

