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2026-03-25
Project: (250849)

Zac Racher
Cyril J. Demeyere Limited
261 Broadway, P.O. Box 460
Tillsonburg, Ontario. N4G 4H8

RE: MINOR OFFICE ADDITION, 300 ELM STREET, ST. THOMAS TRANSPORTATION IMPACT BRIEF

Paradigm Transportation Solutions Limited (Paradigm) has prepared this Transportation Impact Brief for a proposed addition of a building to an existing Domino's Pizza outlet, located at 300 Elm Street, St. Thomas.

The subject site is located in the northeast corner of the intersection of Elm Street and First Avenue. There is an existing building on-site accommodating a Domino's Pizza business. An additional building is proposed on-site while the Domino's Pizza building remains in operation. The eventual use of the new building has not been determined, but it is expected to be an office-type of use.

The proposed new parking supply of 29 spaces exceeds the ZBL requirement of 27 spaces.

Figure 1 (attached) illustrates the location of the subject site.

The access to the site is now provided by two driveways, one each on Elm Street and on First Avenue. The two driveways will remain in place as part of the site redevelopment.

Figure 2 (attached) illustrates the subject site plan including the existing and the proposed buildings, as well as the two driveways.

In considering the proposed site changes, the City of St. Thomas has requested the following:

> *The submission of a letter from a qualified person to address Section 5.7.3.2 (iv) and (x) of the City of St. Thomas Official Plan, which provides that applications for approval of a minor commercial use shall be reviewed on the basis of conformity with the following policies: iv) the access to and traffic generated by the site shall not create traffic hazards on abutting roads and x) adequate off-street parking shall be provided.*

As noted, the subject site will include adequate parking for both the existing and proposed uses.

This Transportation Impact Brief includes a review of the increase in site generated traffic volumes on the existing site driveways and the implications for adjacent roadways, viz., First Avenue and Elm Street.

Existing Traffic Volumes

As can be seen in **Figure 1**, both First Avenue and Elm Street have a general four-lane cross-section approaching their intersection, where the subject site is located in the northeast corner. Auxiliary turn lanes are provided on all legs, and the intersection is under traffic signal control.

Existing roadway traffic volumes were obtained from turning movement counts at the intersection of First Avenue and Elm Street, conducted by Paradigm on 03 February 2026.

Consistent with the observed roadway traffic volumes, the subject site driveway turning movements were conservatively estimated based on trip generation rates at each of the site driveways.

Table 1 summarizes the estimated site trips using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 12th Edition, for Land Use Code 930, Fast Casual Restaurant.

TABLE 1: EXISTING DOMINO'S TRIP GENERATION

Land Use Code	GFA	AM Peak Hour				PM Peak Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
930: Fast Casual Restaurant	3,400 sq. ft.	1.58	3	2	**5**	14.35	26	23	**49**
Total Trip Generation			**3**	**2**	**5**		**26**	**23**	**49**

A total of 5 trips (3 inbound and 2 outbound), and 49 trips (26 inbound and 23 outbound) are estimated to be generated, respectively during the AM and PM peak hours, by the existing Domino's Pizza outlet.

The site trips were distributed between the two driveways and assigned to the two roads based on the existing directional distribution of traffic at the intersection of First Avenue and Elm Street.

Figure 3 (attached) illustrates the existing AM and PM weekday peak hour turning movement traffic volumes.

Table 2 summarizes the directional distribution of traffic at the First Avenue and Elm Street intersection.

TABLE 2: DIRECTIONAL DISTRIBUTION OF TRAFFIC

Origin/Destination	Distribution
North via First Avenue	10%
South via First Avenue	10%
East via Elm Street	45%
West via Elm Street	35%
Total	**100%**

Existing traffic volumes as shown **Figure 3**, indicate a peak directional traffic volume less than 500 vph in the northbound direction on First Avenue, and a peak directional traffic volume less than 650 vph in the westbound direction on Elm Street, during the AM peak hour.

During the PM peak hour, the peak directional volume on First Avenue is less than 300 vph in the northbound direction on First Avenue, and less than 1,200 vph in the westbound direction on Elm Street.

The above peak hour/peak directional volumes are significant, but they are withing the capacities of each road. At the same time, the estimated site traffic generated by the existing Domino's Pizza outlet is comparatively insignificant, with the highest driveway turning movement being 3 vph and 11 vph, both inbound, during AM and PM peak hours, respectively. It is reasonable to consider the site traffic impact on the two roadways and their intersection to be minimal.

Office Addition Trip Generation

The trip generation for a potential Office building addition on-site has been estimated using trip generation rates from the ITE Trip Generation Manual, 12th Edition, for Land Use Code 712, Small Office Building.

Table 3 summarizes the forecast number of net new trips generated by the proposed office building addition.

TABLE 3: OFFICE BUILDING ADDITION TRIP GENERATION

Land Use Code	GFA	AM Peak Hour				PM Peak Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
712: Small Office Building	2,945 sq. ft.	1.64	4	1	**5**	2.16	2	4	**6**
Total Trip Generation			**4**	**1**	**5**		**2**	**4**	**6**

The total trip generation for the Office Building Addition is 5 AM peak hour trips (4 in/ 1 out) and 6 PM peak hour trips (2 in/ 4 out).

The site trips have been assigned to the site driveways and adjacent road network based on the existing directional distribution summarized in **Table 2**. The site trips are expected to follow the same general travel patterns as the surrounding traffic.

Figure 4 (attached) illustrates the site traffic volumes generated by the proposed office addition.

The additional traffic on either roadway is estimated to be two vehicles per hour during either peak hour, with minimal impacts as under existing conditions.

Summary

In summary, the proposed office building addition is expected to generate minimal vehicular traffic, with minimal impacts on First Avenue, Elm Street, and at both site driveways. The revised onsite parking supply has been confirmed to be in conformance with the City's ZBL requirements for the two uses as proposed.

We respectfully submit the above information as requested.

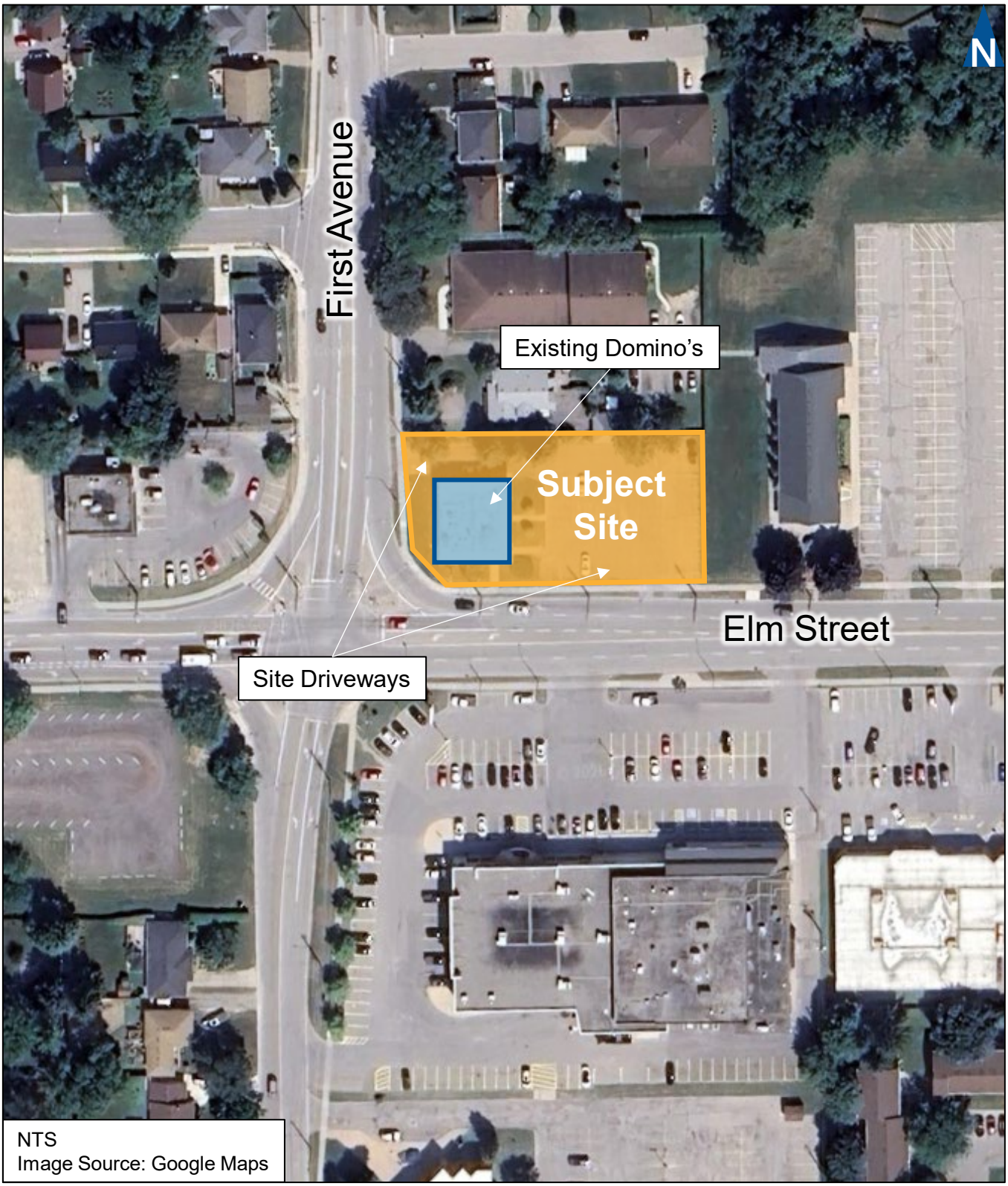
Yours very truly,

PARADIGM TRANSPORTATION SOLUTIONS LIMITED



Rajan Philips
M.Sc., P.Eng.
Senior Transportation Consultant

Figures

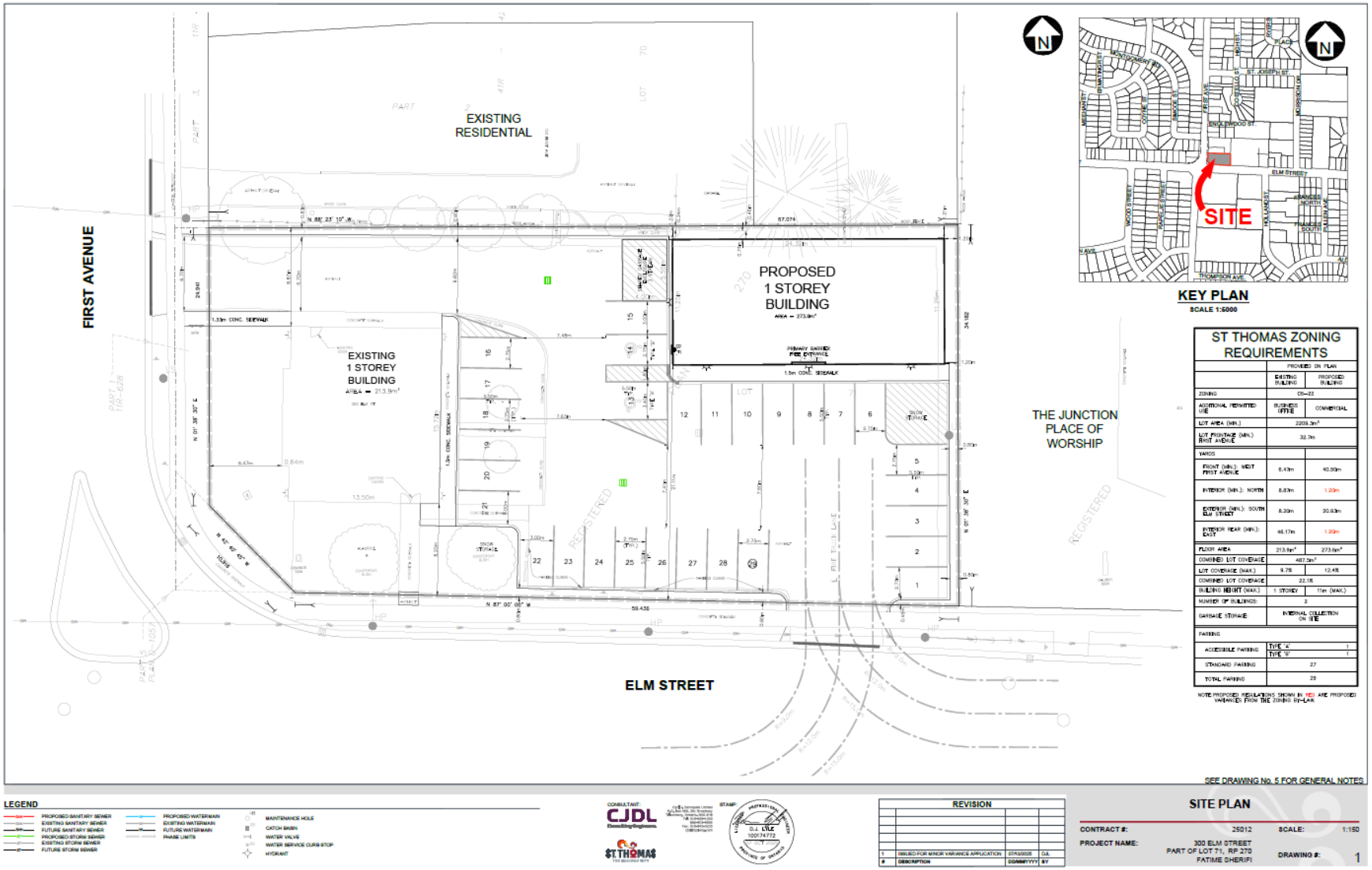


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Location of Subject Site

300 Elm Street, St. Thomas TIB
250849

Figure 1



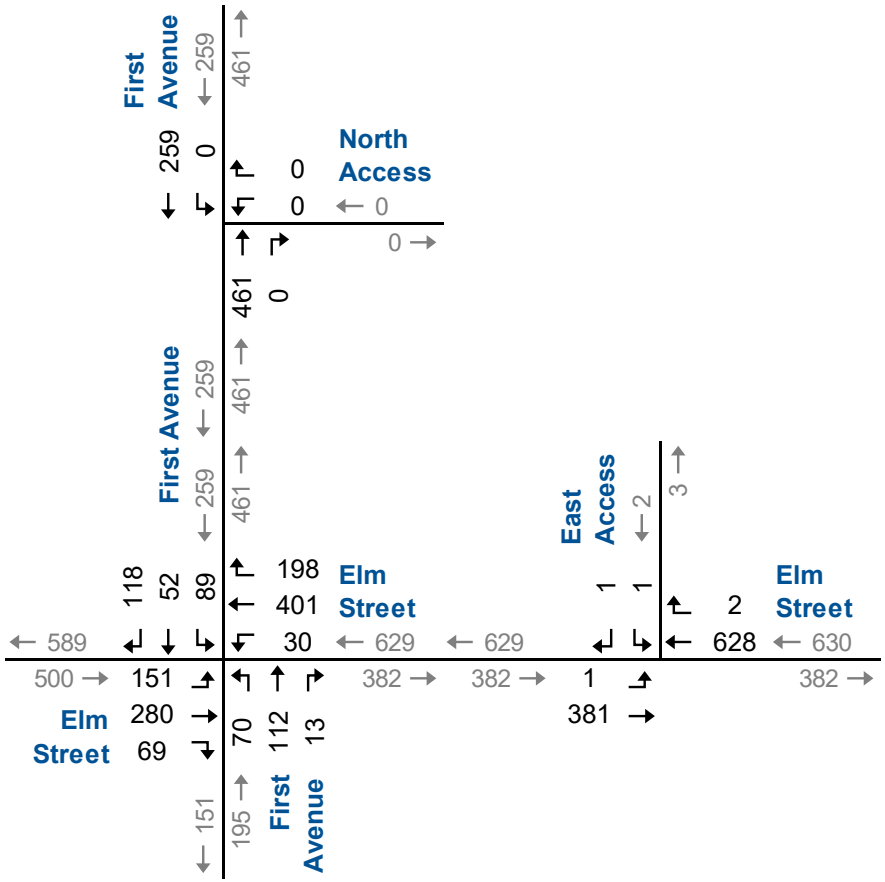
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Concept Site Plan

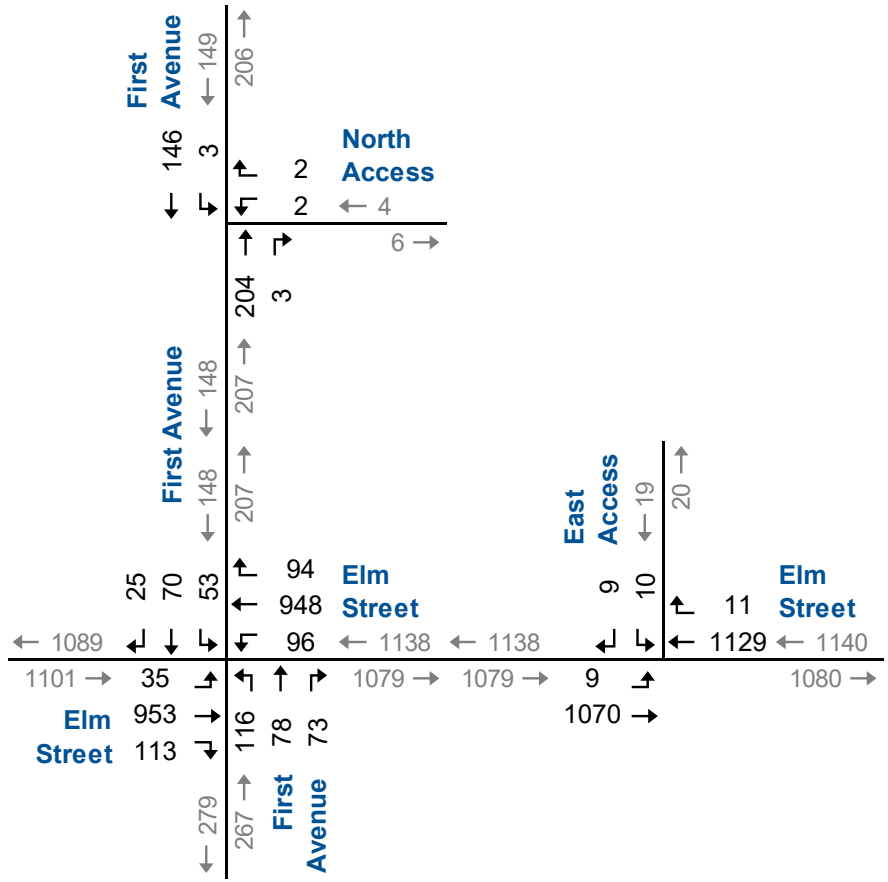
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Figure 2

AM Peak Hour



PM Peak Hour



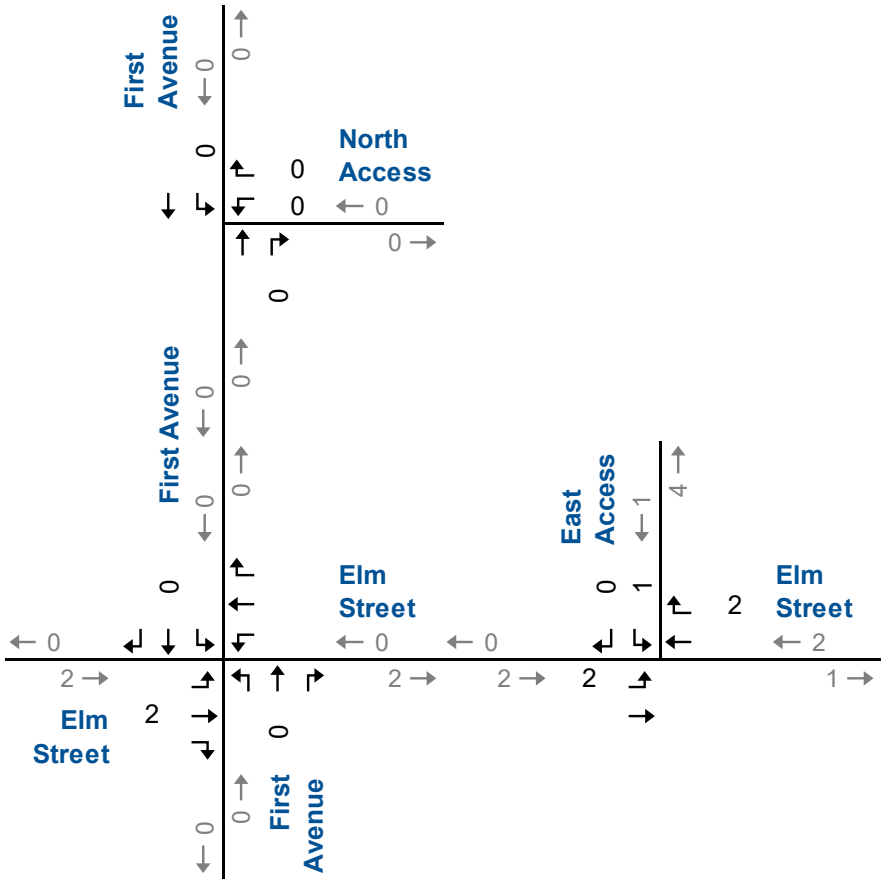
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Existing Traffic Volumes

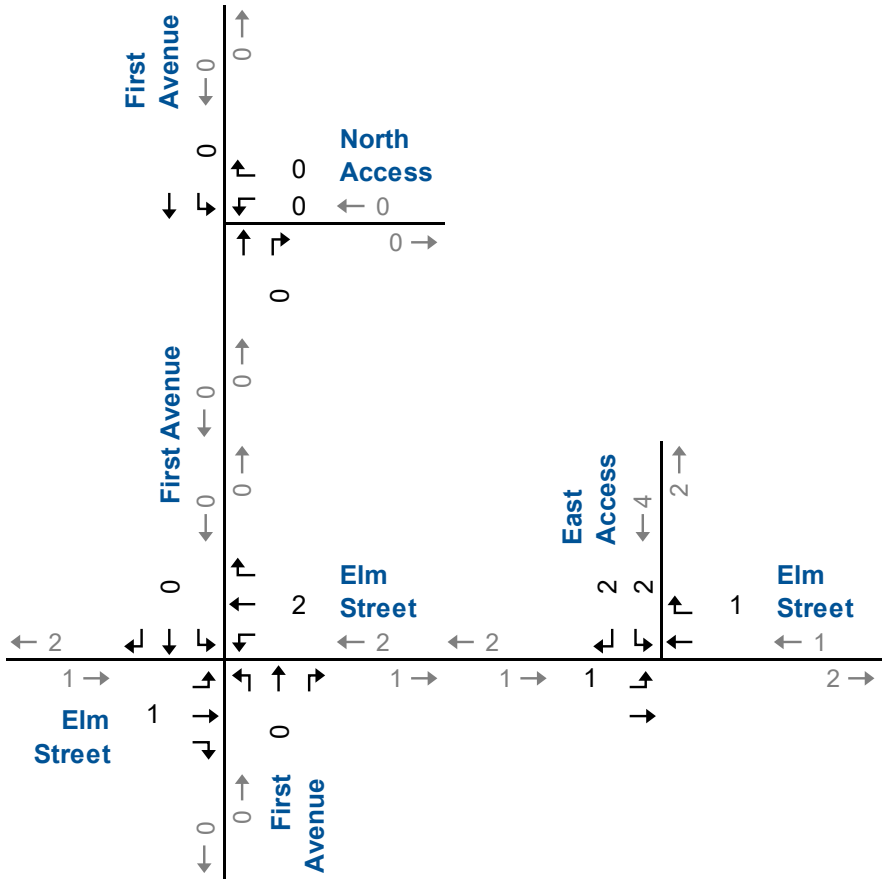
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Figure 3

AM Peak Hour



PM Peak Hour



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Proposed Office Addition Site Traffic Volumes

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Figure 4