PREPARED BY:
MDT URBAN TRAFFIC SOLUTIONS LTD.

60-68 HIGH STREET

TRANSPORTATION IMPACT ASSESSMENT

CITY OF LONDON

JUNE 2026

PREPARED FOR:
FOUNDATION DEVELOPMENT FUND II

60-68 High Street
Transportation Impact Assessment

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Executive Summary

This report presents a Transportation Impact Assessment (TIA) for the proposed high-rise residential development located at 60-68 High Street (High Tower), in the City of London, Ontario, herein referred to as the subject site. The subject site consists of a 25-storey residential tower comprising of 432 dwelling units and forms Phase 2 of the broader Wellington Tower redevelopment (57-75 Wellington Road and 68 High Street). Similar to Phase 1, the development is intended to function as a transit-oriented development with limited on-site vehicle parking and a strong reliance on transit, active transportation, and passenger pick-up/drop-off activity.

Study Area and Analysis Framework

The analysis considers AM and PM weekday operations at the following study area intersections:

1. Grand Avenue and Wellington Road (signalized);
2. Grand Avenue and High Street (signalized); and
3. Site driveway connection to High Street.

Existing Traffic Operations

The study area intersections are currently operating with satisfactory levels of service during the AM and PM peak hours.

Horizon Year

The development is anticipated to be operational by 2030. A 2035 horizon year (five years post-buildout) was selected for analysis in accordance with City of London TIA Guidelines.

Background Developments and Growth Rate

A review of the City of London's development applications and planning information identified no background developments within proximity of the study area to be incorporated into the analysis. This was further confirmed through pre-study consultation with City staff.

In the absence of specific background developments, a 2.0% annual growth rate was applied to all study area traffic movements to establish 2035 Background Traffic conditions. This rate was previously confirmed by the City and provides a reasonable and conservative estimate of general traffic growth within the corridor. In addition to background growth, the previously approved Phase 1 Wellington Tower development has been incorporated into the 2035 Background Traffic conditions.

Development Trip Generation

Trip generation was estimated using the ITE Trip Generation Manual, 12th Edition (Land Use Code 222 – Multifamily Housing, High-Rise, Close to Transit) under a Dense Multi-Use Urban setting. The base ITE rates were adjusted to reflect the site context, including a 32.5% non-auto mode share reduction consistent with City policy.

To reflect the expected operational characteristics of the development, including a high reliance on pick-up/drop-off (PUDO) and ride-hail activity, directional distributions were refined and a balanced operational sensitivity approach was applied. Under this approach, the peak directional volume was applied to both inbound and outbound movements to conservatively account for short-duration vehicle turnover at the site.

Based on this methodology, the development is expected to generate approximately 45 inbound and 45 outbound trips in the AM peak hour, and 38 inbound and 38 outbound trips in the PM peak hour.

2035 Background Traffic Operations

The study area intersections are forecast to operate with similar levels of service as existing conditions.

2035 Future Total Traffic Operations

Future Total Traffic operations were assessed for the 2035 horizon year, incorporating background growth, the Phase 1 Wellington Tower development, and planned network improvements associated with the Wellington Gateway project. The study area intersections are expected to operate acceptably under Future Total Traffic conditions, and the development can be accommodated within the existing and planned transportation network.

Mitigation Measures

No geometric improvements are warranted based on the analysis and no mitigation measures are required to support the proposed development from a transportation perspective. A minor queue storage exceedance is forecast for the eastbound dual left-turn lane at Wellington Road and Grand Avenue during the AM peak hour; however, the exceedance is localized in nature and does not represent a capacity deficiency requiring mitigation. Periodic monitoring and optimization of signal timing plans is recommended to maintain efficient operations

Site Access Review

Site access is proposed via a full-moves driveway to High Street. The access location satisfies City corner clearance and sight distance requirements and is considered appropriate from an operational perspective. No dedicated southbound left-turn lane is warranted at the site access. Opportunities exist to further optimize the access configuration during detailed design, as the spacing between the primary site access and underground parking access is limited relative to the City's access management objectives. Potential improvements include increasing the separation between the access points and/or relocating the underground parking access to the internal site circulation system.

Pick-Up / Drop-Off (PUDO) Operations

Site operations are expected to be dominated by short-duration pick-up/drop-off (PUDO) activity. Phase 2 is anticipated to generate a peak concurrent demand of approximately 2 vehicles, while the combined Phase 1 and Phase 2 development is anticipated to generate a peak concurrent demand of approximately 5 vehicles. Provision for up to 5 PUDO spaces should therefore be considered within the proposed internal circulation system.

Swept Path Assessment

A swept path assessment completed using Autodesk Vehicle Tracking confirms that emergency services, waste disposal service, and passenger vehicles can safely access and circulate within the site. A minor design refinement to the central island is recommended during detailed design to provide additional clearance for waste collection vehicles through either reduction in radius by 1.0m or incorporating a mountable curb treatment.

Transportation Demand Management

The following TDM measures are provided or represent opportunities associated with the subject site:

- Sidewalks and active transportation infrastructure are provided along Wellington Road and High Street, supporting pedestrian connectivity to surrounding land uses, along with internal pedestrian connections between building entrances and the public realm;
- Bicycle parking facilities consist of approximately 232 spaces which is below the requirement of approximately 432 spaces. Opportunities exist to increase bicycle parking supply, including:
    - optimization of the P1 parking level
    - additional sheltered facilities and weather-protected long-term spaces
    - potential reallocation of vehicle parking and circulation space in parking level P1
- The development is located along the Wellington Gateway Bus Rapid Transit corridor and existing London Transit services, providing high-quality transit access within walking distance of the site;
- Opportunities for future car-share integration; and
- Wayfinding and trip planning information can be provided to support awareness and use of transit and active transportation options

High Street Right-of-Way Review

The proposed development accommodates the City's requested High Street right-of-way widening. The approximately 1.44 m dedication requirement can be accommodated within the approximately 1.49 m setback currently provided between the building face and property line and does not affect the proposed development.

Conclusion

Overall, the development is supported by strong transit accessibility, active transportation infrastructure, and a transportation strategy focused on reduced reliance on private vehicles. Based on the analysis presented herein, the proposed development can be accommodated without significant adverse impacts to the surrounding transportation network and represents an appropriate form of transit-oriented intensification within the Rapid Transit Corridor Place Type.

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1 Introduction

MDT Urban Traffic Solutions Limited (MDT) was retained by Foundation Development Fund II to conduct this Transportation Impact Assessment (TIA) for the proposed redevelopment of an existing parcel of land located on the east side of High Street in the lands municipally known as 60-68 High Street in the City of London, Ontario. **Figure 1** indicates the subject site:

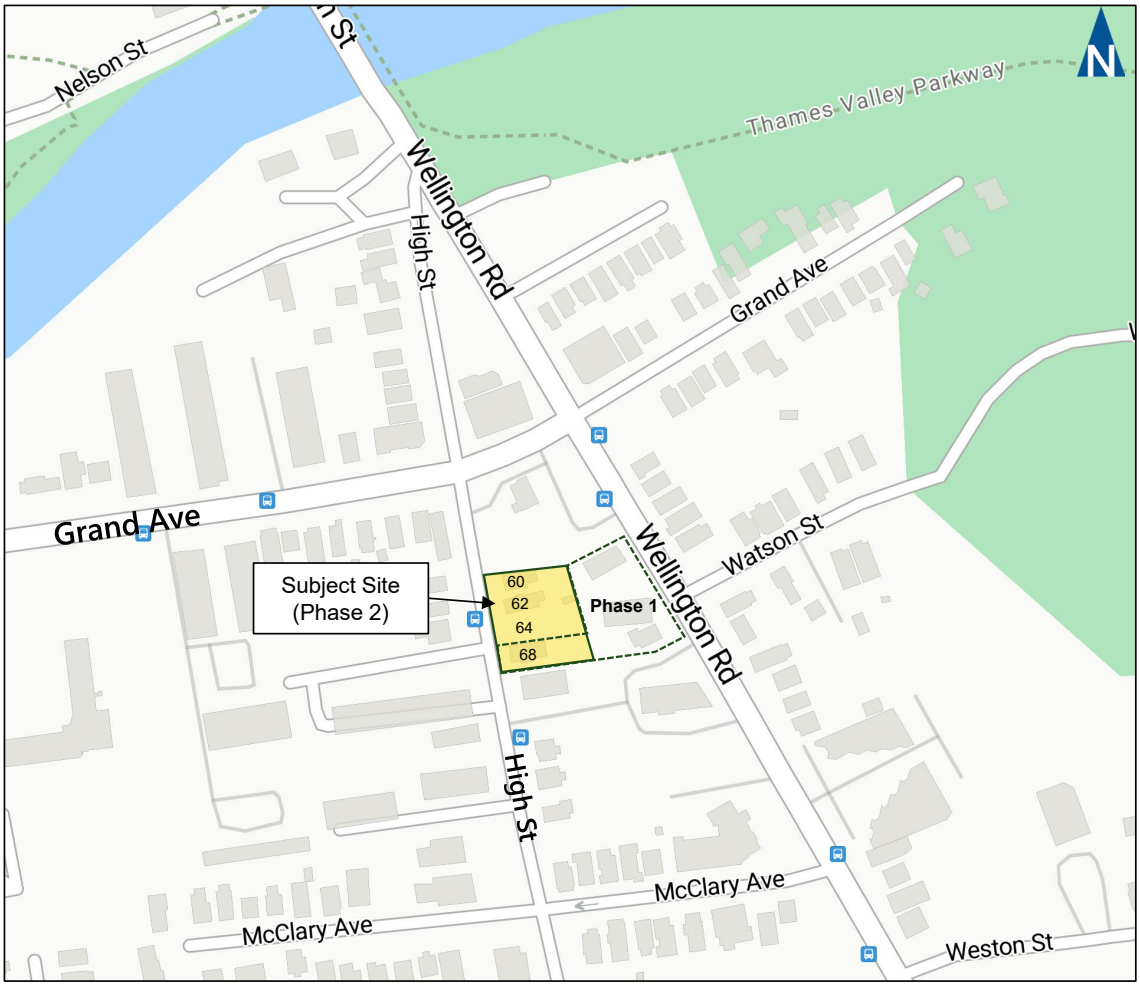

Figure 1 – Location of Subject Site

The site currently contains a mix of single-family detached homes, duplexes and a vacant lot, which are proposed to be redeveloped into a high-rise residential tower. This tower is the second phase of the development proposed at the municipal address of 57-75 Wellington Road and 68 High Street (Wellington Tower) and is denoted above as Phase 1. This report focuses on Phase 2 (herein referred to as High Tower), which consists of a 25-storey residential building located along the High Street frontage, with vehicular access provided via a full-moves driveway to High Street at the approximate location of 68 High Street.

Similar to Phase 1, the development is planned with limited on-site vehicle parking, consisting of approximately 9 visitor parking spaces located below grade, and is intended to operate with a strong

reliance on transit, active transportation, and passenger pick-up/drop-off activity. The site benefits from direct access to the Wellington Gateway Bus Rapid Transit (BRT) corridor, with a future transit hub located in close proximity at the future Bond Street station.

This report has been prepared in accordance with the City of London Transportation Impact Assessment Guidelines[1]. A Terms of Reference (TOR) for Phase 2 was prepared and submitted to the City on May 19; however, a pre-study consultation was held on April 13 for the Phase 1 scope, during which the scope of work and traffic data collection program were reviewed and accepted. A subsequent pre-application consultation with City staff and the developer was held on April 16, during which additional comments were provided, including right-of-way requirements along High Street and site design considerations. A copy of the Phase 1 TOR and Phase 2 TOR, including pre-study and pre-application consultation materials, and related correspondence is provided in **Appendix A.**

1.1 Purpose and Scope

The purpose of the TIA is to determine the impacts of the development traffic on the surrounding road network and identify any improvements necessary to accommodate this traffic. The scope of the assessment includes:

1. Determination of the current traffic and site conditions in the vicinity of the development;
2. Estimates of background traffic growth in the area;
3. Estimates of the additional traffic that will be generated by the development;
4. The impact of the traffic at a five-year horizon (2035) from opening day of the planned construction for Phase 2, assumed to be 2030, including the impact of background development traffic related to Phase 1; and
5. Providing recommendations on the remedial measures necessary to accommodate the future traffic in a satisfactory manner.

1.2 Study Area

The following intersections have been analyzed in this report to examine the impacts of additional traffic due to the development of the subject site:

1. Grand Avenue and Wellington Road (signalized);
2. Grand Avenue and High Street (signalized); and
3. Site driveway connection to High Street.

[1] City of London Transportation Impact Assessment Guidelines, April 2012

2 Existing Conditions

This section documents the transportation network in the study area in 2026, including existing roadways, traffic control measures, transit operations, walking and cycling facilities, traffic volumes, and intersection performance.

2.1 Road Network

All study area roads fall under the jurisdiction of the City of London and are designated as public roads. The characteristics of the roadways in the vicinity of the subject site considered in assessing the traffic impacts of the development include:

- **Wellington Road** is a north-south Rapid Transit Boulevard[2] with a 4-lane cross section that includes provision for centre-running Bus Rapid Transit (BRT) lanes and has a posted speed limit of 50 km/h.
- **Grand Avenue** is an east-west Neighbourhood Connector with a two-lane cross section and a posted speed limit of 40 km/h.
- **High Street** is a north-south Neighbourhood Connector with a two-lane cross section. The speed is not posted within the immediate study area, and has been assumed to be 50 km/h.

Figure 2 illustrates the existing study area lane configuration and traffic control.

[2] City of London, The London Plan Map 3 – Street Classifications, 2024.

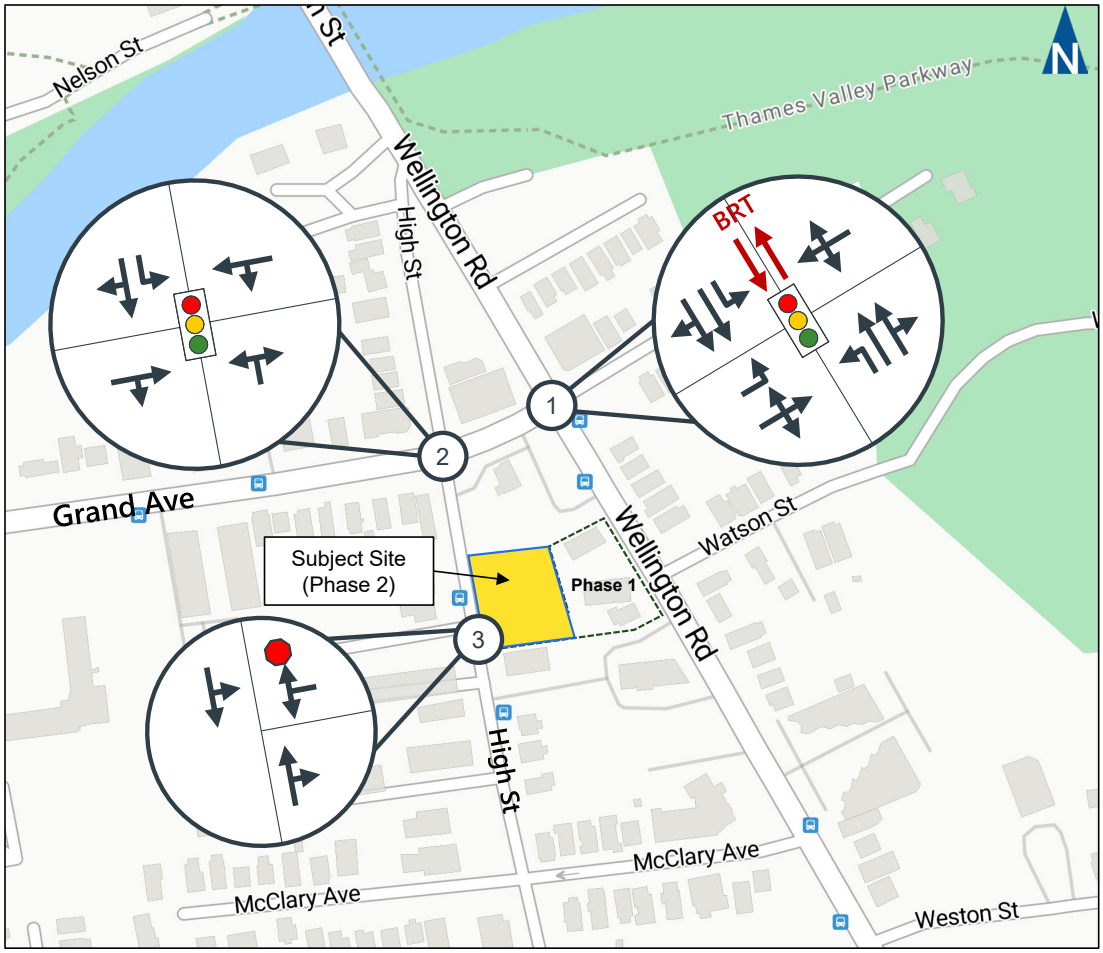

Figure 2 – Existing Study Area Lane Configuration and Traffic Control

2.2 Active Transportation

Sidewalks are provided on both sides of the road throughout the entire study area along Wellington Road, Grand Avenue and High Street.

Bike lanes are not provided within the study area, however there are plans to incorporate a multi-use path and shared space along Wellington Road as part of the Wellington Gateway Bus Rapid Transit project. Study plans indicate a 2.0m wide concrete sidewalk on the west side and 3.0m multi-use pathway on the east side of Wellington Road.

In addition, the Thames Valley Parkway multi-use trail is accessible from the north via Wellington Road and provides connection east-west across London, including Western University.

Figure 3 illustrates the existing cycling and trail network.

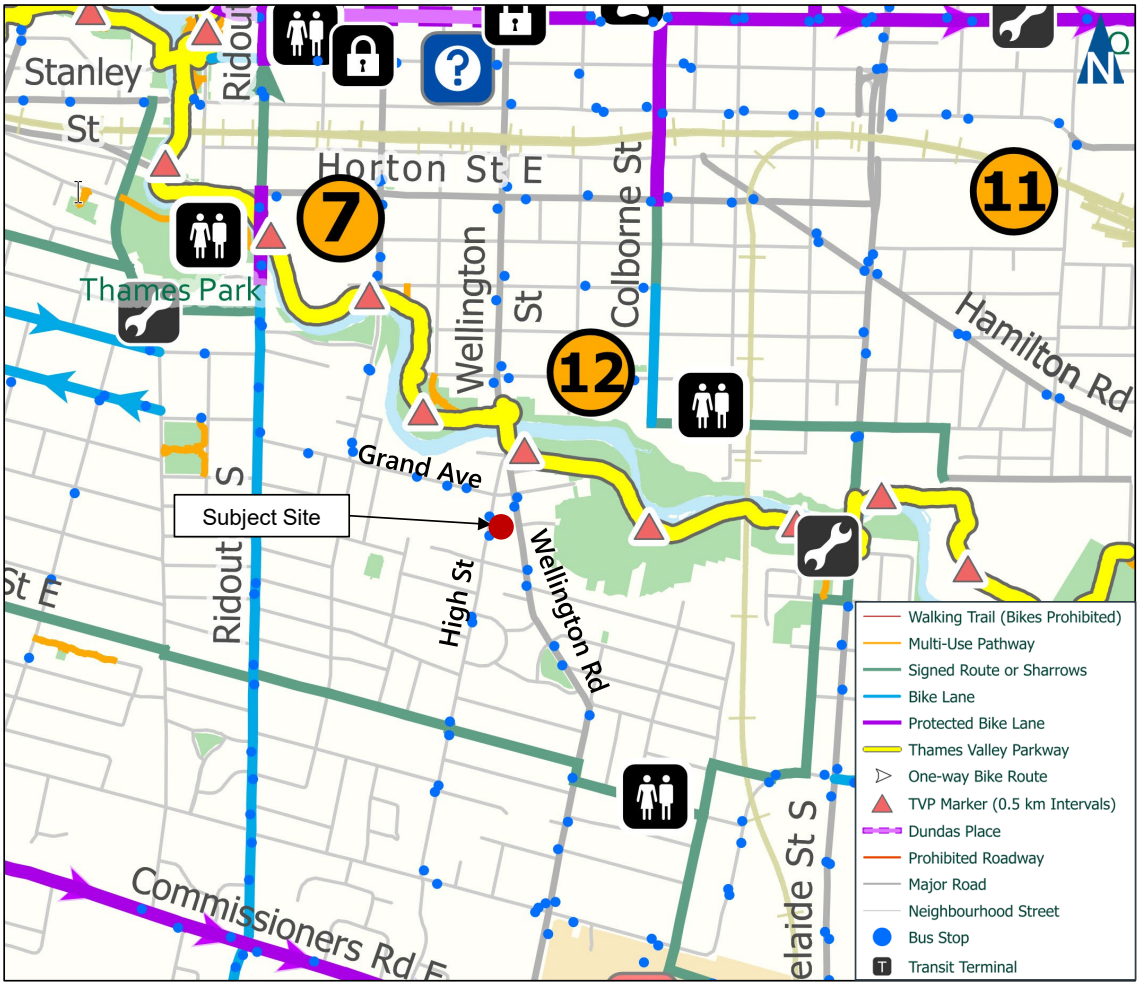

Figure 3 – Existing Cycling and Trail Network (source: London's 2025 Bike and Walk Map)

2.3 Transit Network

London Transit Routes 1, 13 and 90 operate along Wellington Road within immediate vicinity of the site and provides direct connection to Downtown London and the south of the city to White Oaks Mall. The routes operate Monday to Sunday and holidays with 15 to 30-minute headways depending on the route. The closest stops are located right at the intersection of Wellington Road and Grand Avenue.

London Transit Route 6 operates along High Street immediately in front of the site and provides an additional direct connection between Downtown London to the north and the Victoria Hospital/Children's Hospital at Base Line Road in the south. The route operates Monday to Sunday and holidays with 25 to 30-minute headways. The closest stop northbound is located immediately south of the site access at ~68 High Street on the east side. The southbound transit stop is located on the west side of High Street directly in front of the site.

Figure 4 illustrates the existing transit network.

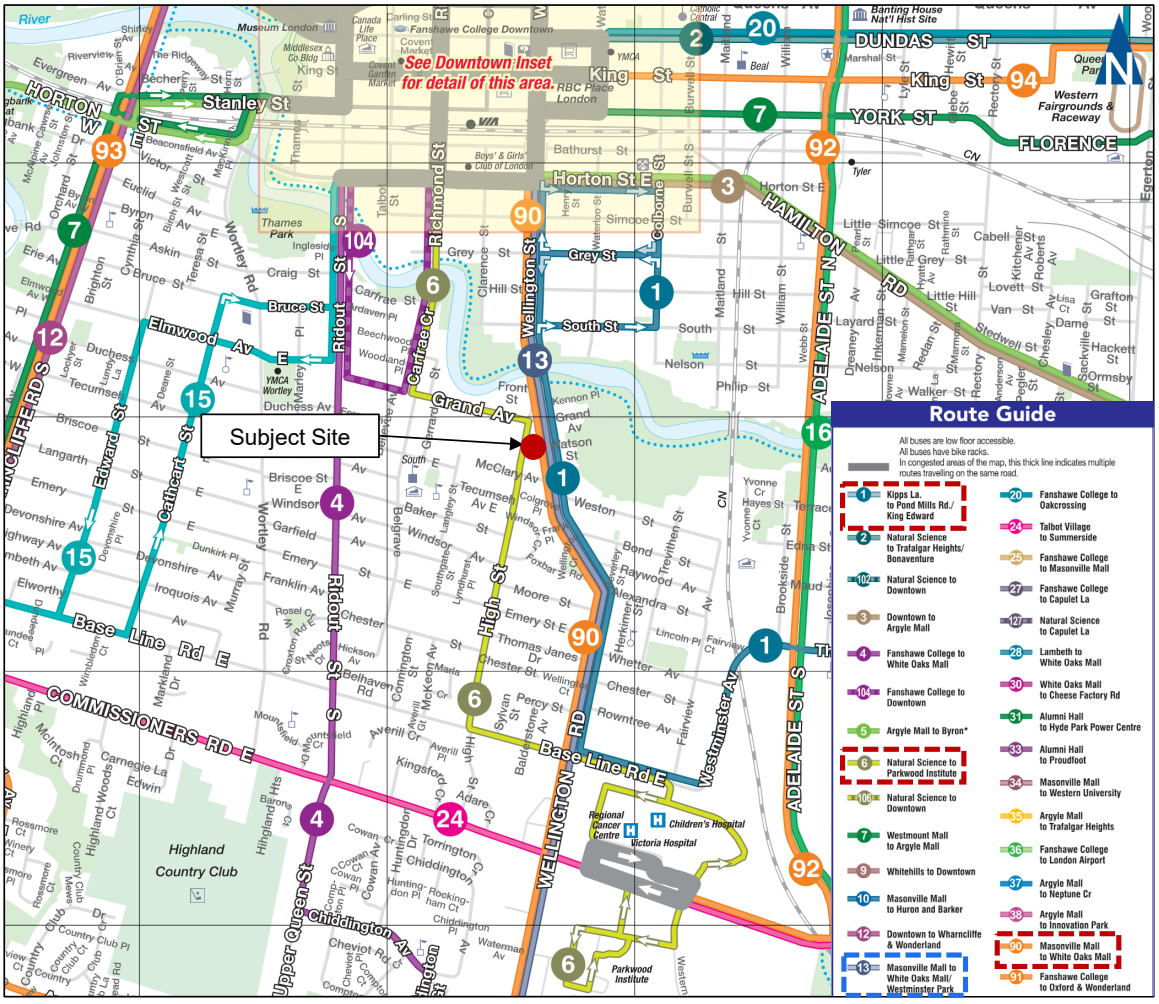

Figure 4 – Existing Transit Network (source: London Transit - System Map 2025)

2.3.1 Future Transit Network – Wellington Gateway Project

The City of London is currently implementing the Wellington Gateway Bus Rapid Transit (BRT) project along Wellington Road, located immediately east of the subject site for Phase 2. The project is being delivered in multiple phases and represents a significant transformation of the corridor intended to support higher-order transit, improved multimodal operations, and transit-oriented development along the Wellington Road corridor.

Figure 5 illustrates the Wellington Gateway project alignment and phasing in relation to the subject site.

Figure 5 – Wellington Gateway Construction Phasing and Timeline (source: Wellington Gateway Project)

Phase 1 (Downtown) has been completed, and the Clark's Bridge segment immediately north of the site is substantially constructed, with the roadway currently operating in its intended configuration. Minor finishing works remain ongoing; however, the corridor infrastructure is generally in place and operational.

The subject site is situated at the transition point between the completed Clark's Bridge segment and the future Phase 2 works. Based on available City project information, the Phase 2 improvements will extend the corridor south of the site, connecting the Clark's Bridge segment to the remainder of the Wellington Gateway corridor toward Base Line Road and beyond. Construction of the remaining Phase 2 segments, including Phase 2B, is anticipated to occur in the near term, with completion targeted for approximately 2028.

Figure 6 and **Figure 7** illustrate the planned roadway configuration at the southern limits of the Clark's Bridge segment and the northern limits of Phase 2B in relation to the subject site.

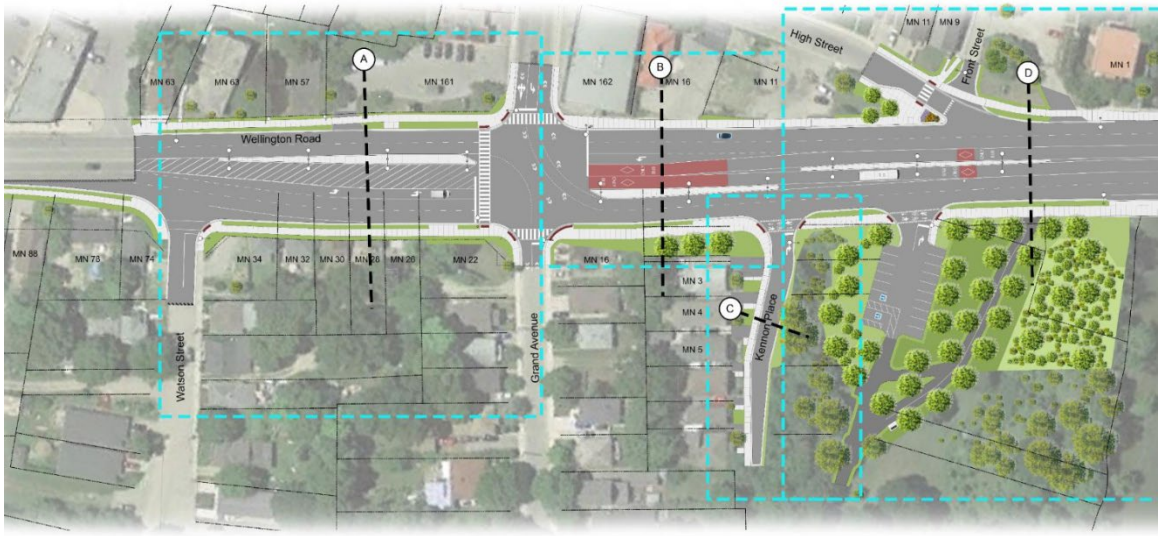

Figure 6 – Clark's Bridge Road Layout Southern Project Limits (source: Wellington Gateway Project)

Figure 7 – Phase 2B Road Layout Northern Project Limits (source: Wellington Gateway Project)

The Wellington Gateway project establishes the ultimate cross-section for Wellington Road, incorporating two general purpose lanes in each direction, centre-running BRT infrastructure, and enhanced pedestrian and boulevard elements. As such, the corridor design and right-of-way configuration in the vicinity of the subject site are largely defined through this ongoing capital works program.

For the purposes of this Transportation Impact Assessment, the Wellington Gateway project is considered representative of the planned future transportation network in the vicinity of the subject site. Accordingly, the assessment has been prepared with consideration of both existing operating conditions and the planned long-term geometric and operational configuration of the Wellington Road corridor associated with the Wellington Gateway project improvements.

2.3.2 Transit Network Summary

Overall, the subject site is anticipated to benefit from strong long-term transit accessibility due to its proximity to the Wellington Gateway corridor and planned BRT infrastructure. The planned corridor improvements will enhance multimodal connectivity within the study area and support the transit-oriented nature of the proposed development, including planned BRT stop locations within approximately a 5–6-minute walking distance of the subject site.

2.4 Existing Traffic Volumes

Traffic data for the study area intersections was previously collected by Pyramid Traffic Inc. on April 16, 2026, as part of the Wellington Tower Phase 1 Transportation Impact Assessment, and has been carried forward for the purposes of this assessment.

Figure 8 illustrates the existing weekday AM and PM peak hour traffic volumes within the study area. Traffic volumes along Grand Avenue between High Street and Wellington Road were balanced to reflect the close proximity and coordinated operation of the adjacent signalized intersections. Detailed traffic count data and signal timing information obtained from the City are provided in **Appendix B**.

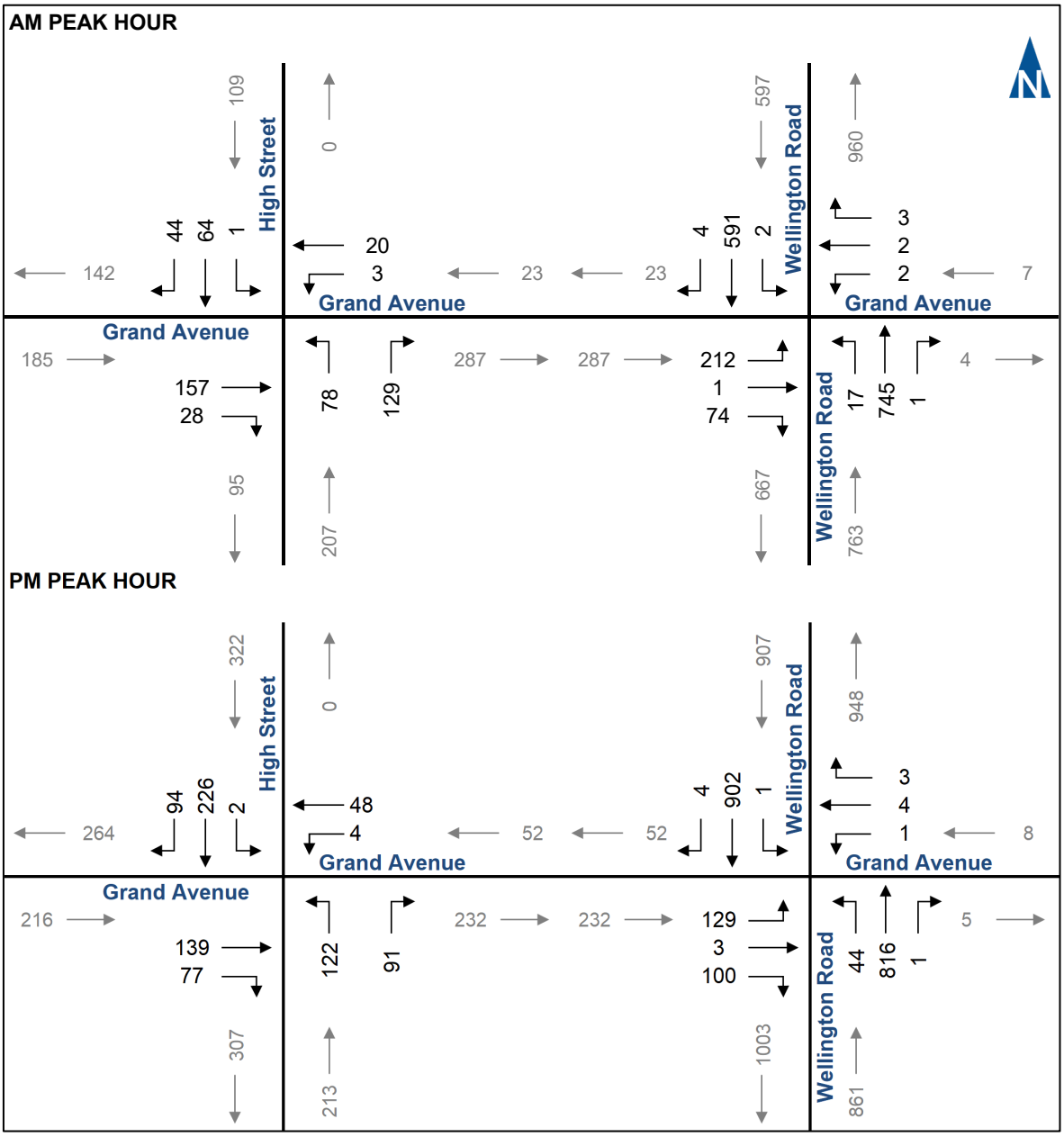

Figure 8 – Existing Traffic 2026 (AM/PM)

2.5 Existing Traffic Operations

The operations at the study area intersections have been assessed using Synchro 12. Movements are considered critical under the following conditions:

- volume/capacity (v/c) ratios for overall intersection operations, through movements or shared through/turning movements increased to 0.90 or above and level of service (LOS) 'E' or worse;
- v/c ratios for dedicated turning movements increased to 0.90 or above and LOS 'E' or worse; or
- 95th percentile queue lengths for individual movements exceed available lane storage.

Intersection LOS is a recognized method of quantifying the average delay experienced by drivers at intersections. It is based on the delay experienced by individual vehicles executing various movements. The delay is related to the number of vehicles intending to make a particular movement, compared to the estimated capacity for that movement. The capacity is based on a number of criteria related to the opposing traffic flows and intersection geometry.

The highest possible rating is LOS A, under which the average total delay is equal to or less than 10.0 seconds per vehicle. When the average delay exceeds 80 seconds for signalized intersections, 50 seconds for unsignalized intersections or when the volume to capacity ratio is greater than 1.0, the movement is classed as LOS F and remedial measures are usually implemented, if they are feasible. LOS E is usually used as a guideline for the determination of road improvement needs on through lanes, while LOS F may be acceptable for left-turn movements at peak times, depending on delays.

Table 1 summarizes the results of the intersection operational analysis under existing conditions, including the AM and PM peak hour LOS, v/c ratios, and 95th percentile queues.

Table 1 – 2026 Existing Traffic Operations

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																	
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	1 - Wellington Road/ Grand Avenue	TCS	LOS	C	B	-	C	-	D	-	D	C	B	-	B	D	C	-	C	C
			Delay	28	12		20		39		39	34	12		12	50	34		34	22
			V/C	0.56	0.48				0.10			0.04	0.35			0.02	0.59			0.68
			Q	24	31				10			12	74			5	87			
			Ex.	37					200			45				25				
			Avail	13					190			33				20				
	2 - High Street/ Grand Avenue	TCS	LOS	-	D	-	D	-	D	-	D	-	B	-	B	B	A	-	A	C
			Delay		50		50		50		50		13		13	15	9		9	27
			V/C		0.68				0.09				0.43			0.00	0.11			0.68
			Q		59				16				46				23			
			Ex.		449				37				82				106			
			Avail		390				21				36				83			
PM Peak Hour	1 - Wellington Road/ Grand Avenue	TCS	LOS	C	B	-	B	-	D	-	D	D	B	-	B	D	D	-	D	C
			Delay	29	6		18		46		46	38	12		13	55	38		38	25
			V/C	0.48	0.38				0.11			0.09	0.37			0.01	0.77			0.77
			Q	18	29				9			25	80			14	126			
			Ex.	37					200			45				25				
			Avail	19					191			20				11				
	2 - High Street/ Grand Avenue	TCS	LOS	-	D	-	D	-	E	-	E	-	B	-	B	B	B	-	B	C
			Delay		54		54		63		63		17		17	14	11		11	28
			V/C		0.72				0.19				0.52			0.00	0.30			0.77
			Q		64				25				60			2	56			
			Ex.		449				37				82			106	106			
			Avail		385				12				22			104	50			

MOE - Measure of Effectiveness
LOS - Level of Service
Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length
Ex. - Existing Available Storage
Avail. - Available Storage

TCS - Traffic Control Signal
TWSC - Two-Way Stop Control

The results indicate that the study area intersections are operating with acceptable levels of service.

Appendix C contains the detailed Synchro 12 reports for Existing Traffic Operations.

3 Development Concept

The subject site is located between High Street and Wellington Road and forms part of a broader phased high-rise residential redevelopment. This TIA addresses Phase 2, referred to as "High Tower," which is located on the western portion of the site fronting onto High Street. The Phase 1 portion of the development is referred to as "Wellington Tower" and was previously assessed as part of the 57-75 Wellington Road and 68 High Street Transportation Impact Assessment.

The Phase 2 development includes a 25-storey residential building comprising approximately 432 dwelling units, including studio, one-bedroom, and two-bedroom units. Construction of Phase 1 is anticipated to be completed by 2029, with Phase 2 anticipated to follow within the subsequent year, with an assumed opening year of 2030 for the purposes of this assessment.

Primary vehicular access is proposed via a full-moves driveway connection to High Street at the approximate municipal address of 68 High Street, which provides access to the shared internal site circulation system serving both development phases. The shared access incorporates an internal circular driveway intended to support pick-up/drop-off activity, short-term circulation, and servicing access. In addition, the Phase 2 parking garage access is proposed via a separate driveway connection to High Street located immediately north of the shared site access.

Figure 9 illustrates the proposed development concept and site layout for High Tower, with its orientation in relation to Phase 1 Wellington Tower.

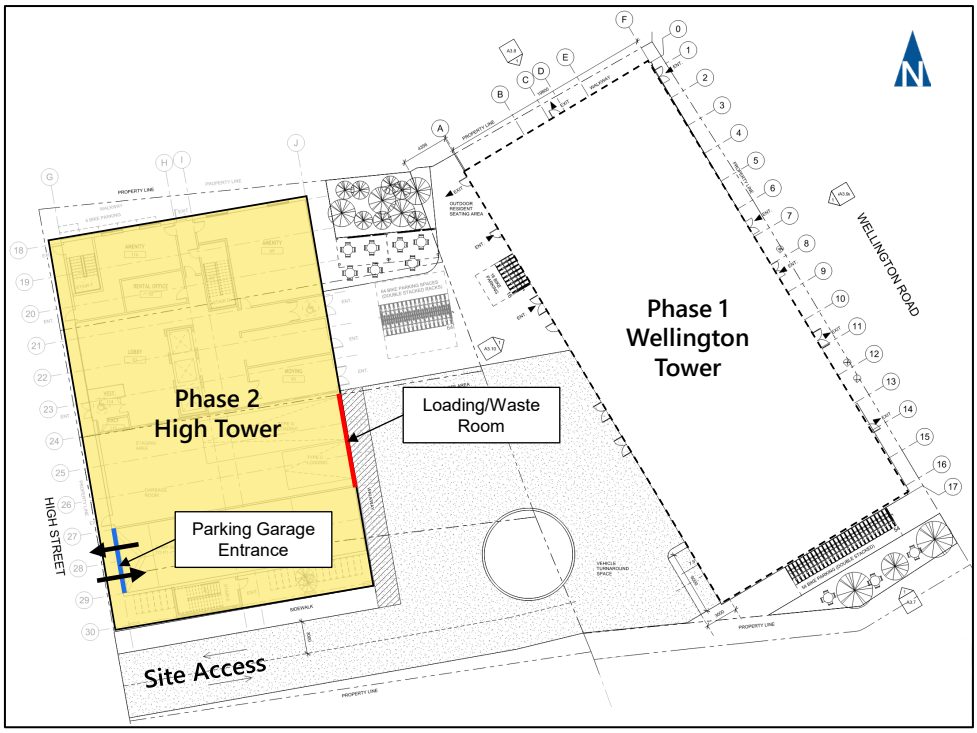

Figure 9 – Proposed Development Concept and Site Layout

3.1 Vehicle Parking Provision

The subject site is located within the Rapid Transit Corridor Place Type identified by The London Plan. As part of the City's parking policy framework, minimum vehicle parking requirements have been removed for developments located within the Downtown, Transit Village, Rapid Transit Corridor, and Main Street Place Types in order to support transit-oriented development and reduce automobile dependency. As such, the proposed development is not subject to a minimum vehicle parking requirement.

Consistent with this policy framework, no resident vehicle parking is currently proposed. The proposed development includes a total of 9 on-site vehicle parking spaces intended primarily to accommodate short-term visitor parking demand. This supply includes one accessible Type A parking space with a width of 3.4 metres and an adjacent 1.5 metre access aisle in accordance with applicable accessibility design standards.

The proposed parking supply forms part of a broader transportation strategy focused on transit usage, active transportation, and pick-up/drop-off activity. This approach reflects the site's direct access to the Wellington Gateway Bus Rapid Transit corridor and the broader transportation objectives of the City of London.

3.2 Bicycle Parking

Unlike vehicle parking, bicycle parking requirements continue to apply within the Rapid Transit Corridor Place Type. Based on the City of London Zoning By-law requirements, approximately 432 bicycle parking spaces would be required for the proposed 432-unit development, consisting of approximately 90% long-term and 10% short-term bicycle parking spaces.

The proposed development currently includes a total of approximately 232 bicycle parking spaces consisting of both short-term and long-term bicycle parking accommodations. Long-term bicycle parking is proposed within the P1 parking level, while additional short-term bicycle parking is provided at grade throughout the site. Accordingly, the current development concept is deficient relative to the applicable Zoning By-law bicycle parking requirements.

In consideration of the proposed transportation strategy and site constraints, a detailed assessment of bicycle parking provision, functionality, and opportunities for refinement is provided in **Section 8.2**.

4 Trip Generation

Trip generation for the proposed development was estimated based on industry standard methodologies and adjusted to reflect the site's urban context, transit accessibility, and restricted on-site parking supply. The analysis considers ITE-based trip generation, mode share adjustments, and site-specific operational characteristics, including pick-up/drop-off activity. The following subsections outline the methodology and assumptions applied.

4.1 Trip Generation Methodology

Trip generation for the proposed development was estimated using the ITE Trip Generation Manual (12th Edition), Land Use Code 222 (Multifamily Housing High-Rise), within a Dense Multi-Use Urban setting and Close to Transit. Both the fitted regression curve and average rate were reviewed, and the average rate was selected, as it produces a higher and more conservative estimate of peak hour trip generation for the subject site. Based on 432 units, this results in 95 AM peak hour trips and 82 PM peak hour trips.

The standard ITE directional distributions are not fully representative of developments with minimal on-site parking and high reliance on ride-hail and PUDO activity and have therefore been adjusted to better reflect expected operational conditions in the following sections.

4.1.1 Mode Share Adjustment

Given the site's location along a Bus Rapid Transit (BRT) corridor and its limited on-site parking supply, a 32.5% non-auto mode share reduction was applied to the ITE trip generation rate. This reduction is consistent with direction provided by the City of London through the pre-application consultation process. As noted in the meeting summary, the City's current transportation planning objective is to achieve a 32.5% non-auto mode share target by 2050, as outlined in the Mobility Master Plan (July 2025). While the 32.5% target may not fully capture the behaviour of a near-zero parking development, it provides a standardized and City-aligned basis for assessment and is considered a reasonable and somewhat conservative estimate of site-generated vehicle traffic. **Table 2** defines the Mode Share reduction:

Table 2 – ITE Trip Generation and Mode Share Adjustment

Peak Hour	Rate (Trips/Unit)	Units	Total Trips	Reduction	Adjusted Trips
AM Peak Hour	0.22	432	95	-32.5%	64
PM Peak Hour	0.19	432	82	-32.5%	55

4.1.2 Directional Distribution Adjustment

The ITE Trip Generation Manual identifies directional splits of approximately 11%/89% (IN/OUT) in the AM peak hour and 69%/31% (IN/OUT) in the PM peak hour for multifamily residential developments. These splits reflect conventional auto-oriented travel patterns.

The AM directional distribution of 11%/89% (IN/OUT) reflects a strong bias toward resident vehicle departures typical of developments with high car ownership. This is not representative of the proposed

development, which includes no resident parking and is intended to support alternative travel modes such as transit, walking, and cycling, along with short-duration pick-up/drop-off activity.

Accordingly, the AM peak hour split has been moderated to 30%/70% (IN/OUT) to better reflect expected site operations while maintaining a reasonable commuter bias. The PM peak hour distribution of 69%/31% (IN/OUT) has been retained as it is considered representative of return-home travel patterns.

Table 3 shows the adjusted directional distribution.

Table 3 – ITE Trip Distribution vs. Adjusted Directional Distribution

Scenario	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
ITE Directional Split (%)	11%	89%	100%	69%	31%	100%
Modal Split Reduction (32.5%)	7	57	64	38	17	55
Adjusted Directional Split	30%	70%	100%	69%	31%	100%
Adjusted Trip Generation	**19**	**45**	**64**	**38**	**17**	**55**

4.1.3 Balanced Operational Sensitivity Adjustment

Due to the anticipated prominence of pick-up/drop-off and ride-hail activity, a conservative operational sensitivity scenario was considered to account for anticipated short-duration vehicle turnover at the site.

Under this condition, the upper bound directional volume in each peak hour was selected and applied on a like-for-like basis to both inbound and outbound movements. This approach reflects the operational reality of pick-up/drop-off activity, where vehicles arriving at the site will also depart within the same peak period, resulting in a mirrored pattern of inbound and outbound movements. As a result, this method increases the total number of site access movements relative to the reduced ITE trip generation, providing a conservative estimate of driveway and site circulation activity.

Table 4 shows the sensitivity adjustment.

Table 4 – Balanced Operation Sensitivity Adjustment

Operational Sensitivity Adjustment	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Upper Bound Operational Sensitivity Adjustment	45	45	90	38	38	76
Balanced Operational Sensitivity Split (%)	50%	50%	100%	50%	50%	100%

This approach provides an overall conservative representation of site access activity, capturing the effects of short-duration vehicle turnover associated with ride-hail and pick-up/drop-off operations without overstating overall trip generation.

4.2 Trip Distribution

The trip distribution was determined based on existing traffic patterns, roadway connectivity, and logical routing to and from the proposed site access. No traffic was assigned east of the site via Grand Avenue, as this segment functions as a dead-end local street and does not provide a meaningful external travel route.

For inbound and outbound site traffic, movements observed on both High Street and Wellington Road were consolidated into north- and south-oriented travel patterns to better reflect expected departure routes. All southbound trips were assumed to travel south from the site via High Street, consistent with the most direct and logical routing as would be selected by typical route choice behaviour. This avoids the unrealistic condition where vehicles would travel north to access Wellington Road, incur delay at the signalized intersections at High Street/Grand Avenue and Grand Avenue/Wellington Road, and then proceed south.

Table 5 displays the breakdown of trip distribution used in this study across the study area.

Table 5 – Estimated Trip Distribution

		AM		PM	
Route	**Direction**	**In**	**Out**	**In**	**Out**
High St.	North High	38%	0%	49%	0%
Wellington Rd.	North Wellington	0%	51%	0%	38%
High St.	South	52%	41%	42%	52%
Grand Ave.	West	10%	8%	9%	10%
Total		**100%**	**100%**	**100%**	**100%**

Notes:
1. East on Grand Ave, not utilized for routing due to being a dead-end street
2. North on High St, inbound functions as ramp from Wellington Rd. All inbound from north on Wellington adjusted to North on High St.

4.3 Trip Assignment

The trips were assigned to the roadway network based on the trip distribution outlined above. The resulting site-generated trip assignment is displayed in the following **Figures 10** and **Figure 11**, for AM and PM Peak Hours, respectively.

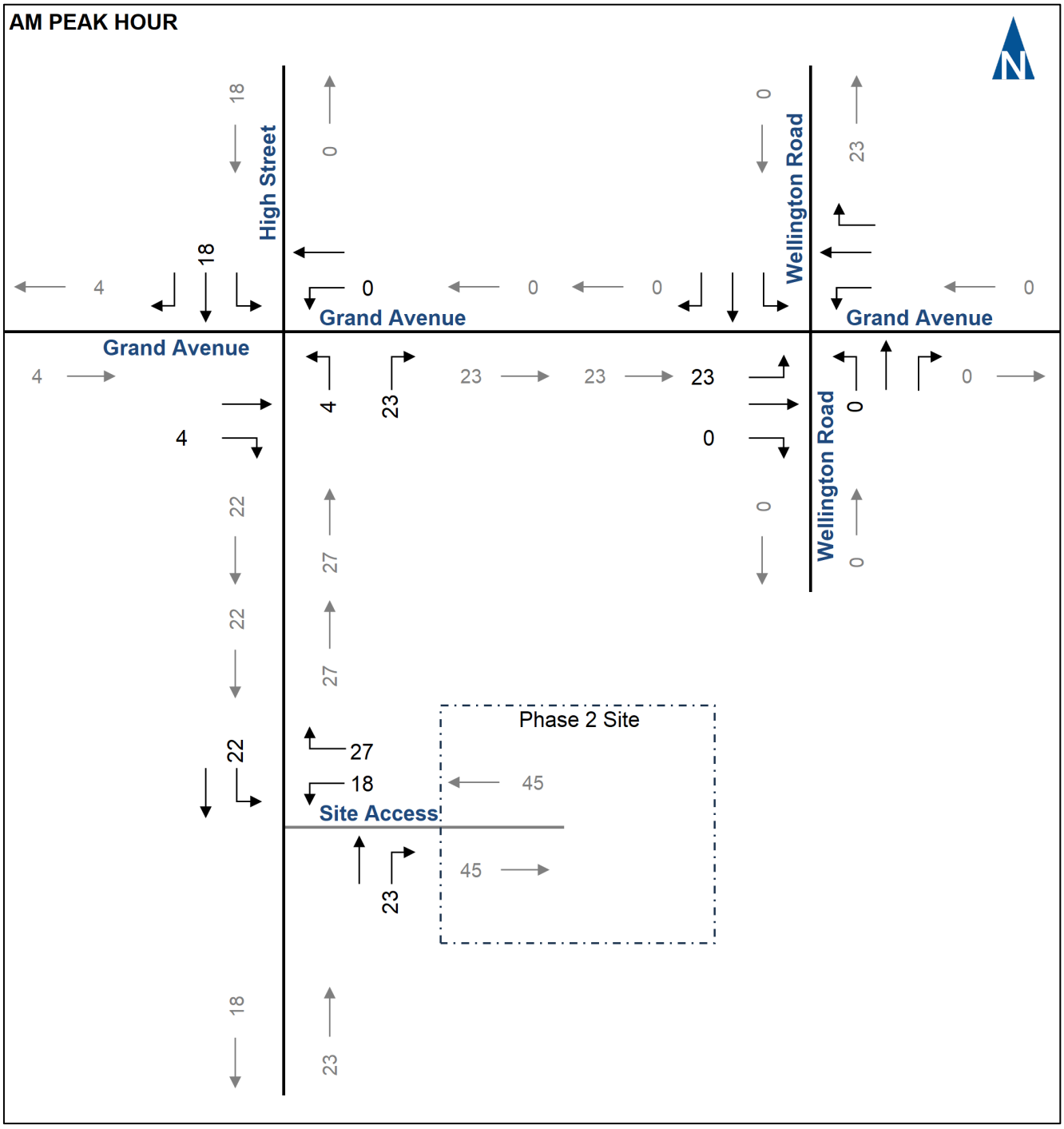

Figure 10 – Phase 2 Estimated Site Traffic (AM Peak Hour)

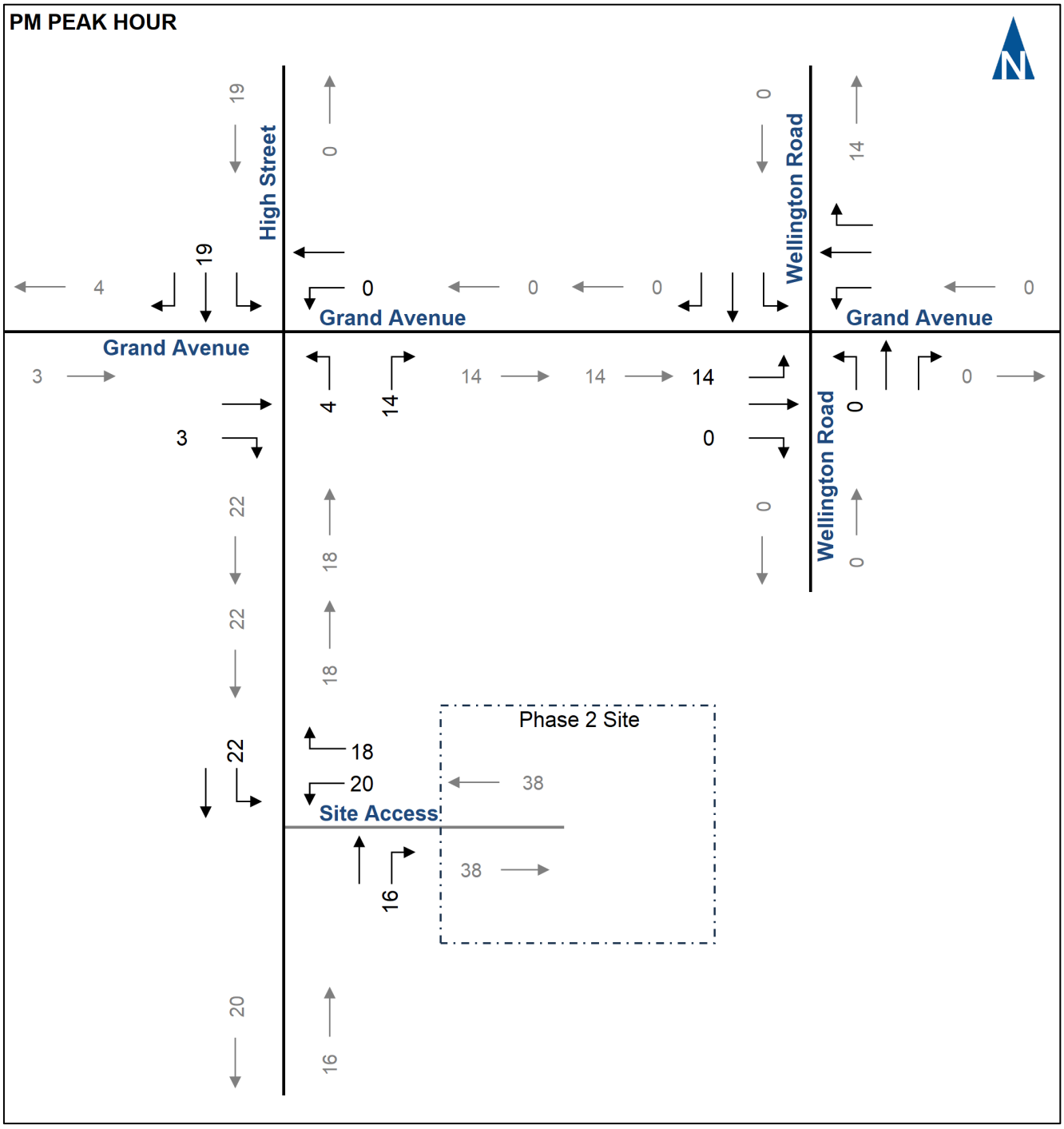

Figure 11 – Phase 2 Estimated Site Traffic (PM Peak Hour)

5 Future Traffic Operations

The assessment of future traffic conditions in this section includes estimates of background traffic and future total traffic volumes. This section discusses the proposed horizon year for the purpose of analyzing future traffic conditions, the background traffic growth rate, and the anticipated future transportation network improvements.

5.1 Horizon Year

Per the City of London Transportation Impact Assessment Guidelines (April 2012), the future analysis horizon is defined as five years beyond the anticipated build-out of the development. The Phase 1 Wellington Tower development is anticipated to be operational by 2029 and forms part of the future background traffic conditions for this assessment. The Phase 2 development assessed herein is anticipated to be operational by 2030, approximately one year following completion of Phase 1.

Accordingly, a 2035 horizon year has been selected to represent future conditions, consistent with the City's guideline for a five-year post build-out assessment relative to the Phase 2 development. The 2035 horizon year is used for the evaluation of both Background Traffic Conditions and Future Total Traffic Conditions.

5.2 Background Developments

A review of the City of London's current development applications and publicly available planning information was undertaken to identify any background developments within proximity of the study area. Upon review, no additional development applications or proposals were identified within immediate proximity of the study area. Furthermore, no additional background developments were identified or requested for inclusion by City staff during the pre-consultation process and review of the Terms of Reference.

As part of this assessment, the planned Phase 1 Wellington Tower development has been incorporated into the Background Traffic Conditions, given the anticipated 2029 opening year and its relationship to the Phase 2 development assessed herein. No other specific background developments have been incorporated into the analysis.

5.3 Growth Rate

Traffic growth has been applied to all movements within the study area to develop 2035 Background Traffic Conditions. In the absence of detailed corridor-specific growth data, a 2.0% annual growth rate has been applied to all study area intersections. This rate was confirmed in consultation with City staff through pre-study consultation for Phase 1 and is considered appropriate for the study area.

The application of a 2.0% annual growth rate is considered conservative given the planned and ongoing Wellington Gateway Project along the Wellington Road corridor, which is expected to support increased transit use and reduce future reliance on private automobile travel. Accordingly, the applied growth rate is anticipated to overestimate long-term automobile traffic growth within the study area, particularly in combination with the site's transit-oriented location and limited parking supply.

5.4 Future Transportation Network Improvements

A review of planned transportation infrastructure within the study area identified ongoing and future improvements associated with the Wellington Gateway Project, which includes modifications to Wellington Road to support enhanced transit operations, including Bus Rapid Transit (BRT) infrastructure.

Under existing conditions, roadway improvements associated with the Clark's Bridge component of the project have already been completed, including upgrades at the intersection of Wellington Road and Grand Avenue extending north of the site. The southern continuation of these improvements is currently planned for completion by 2028 as part of Phase 2B, which represents the final phase of the project. Accordingly, by the 2035 horizon year, the Wellington Gateway Project is expected to be fully operational. The future analysis therefore assumes the ultimate roadway geometry and operating conditions along Wellington Road, including the section south of Wellington Road and Grand Avenue, consistent with the completed design.

Figure 12 illustrates the future road network which includes the addition of centre running BRT bus lanes to the south of Grand Avenue and Wellington Road. This is the only change documented between Existing conditions and the ultimate condition of the Wellington Gateway Project.

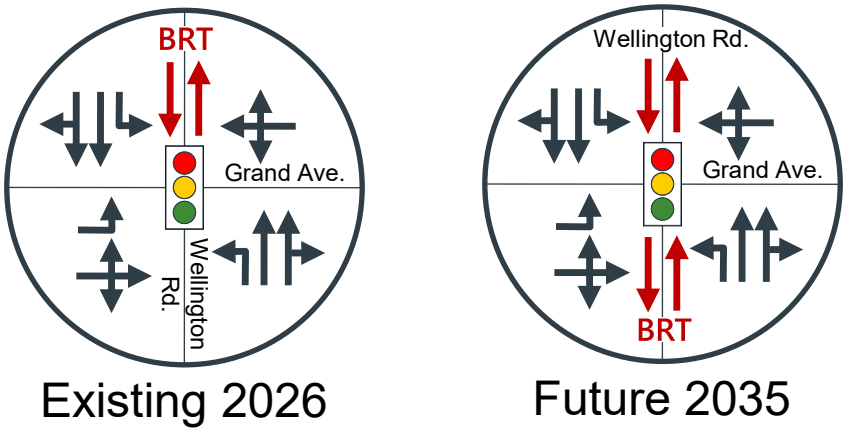

Figure 12 – Future Network Improvements (Wellington Gateway Project Completion)

Given the limitations of Synchro to model BRT lanes, it is assumed the BRT lanes operate on the same signal timing as the southbound and northbound through movements, as was visible from the signal timing plans provided by the City that reflect the condition already within their timing plans. As such, no new network changes were created in the Synchro analysis.

5.5 2035 Background Traffic

The 2035 Background Traffic volumes were derived by applying a growth rate of 2.0% per annum to the existing 2026 traffic volumes and including the background development traffic from the Phase 1 Wellington Tower site. The Phase 1 site-generated traffic volumes were assigned in accordance with the trip distribution and assignment methodology presented in this report and are illustrated in **Figure 13** and **Figure 14.**

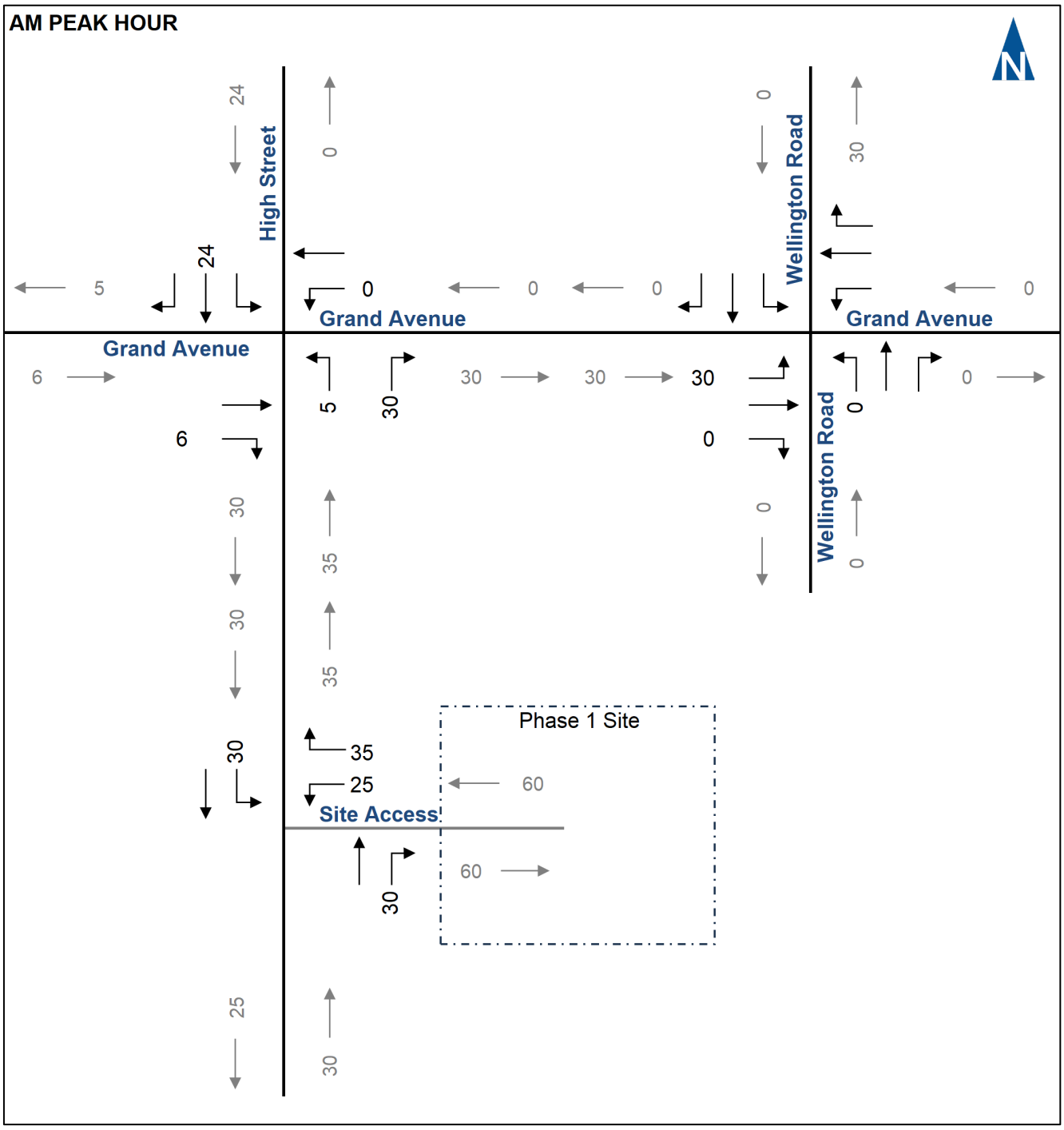

Figure 13 – Phase 1 Estimated Site Traffic (AM Peak Hour)

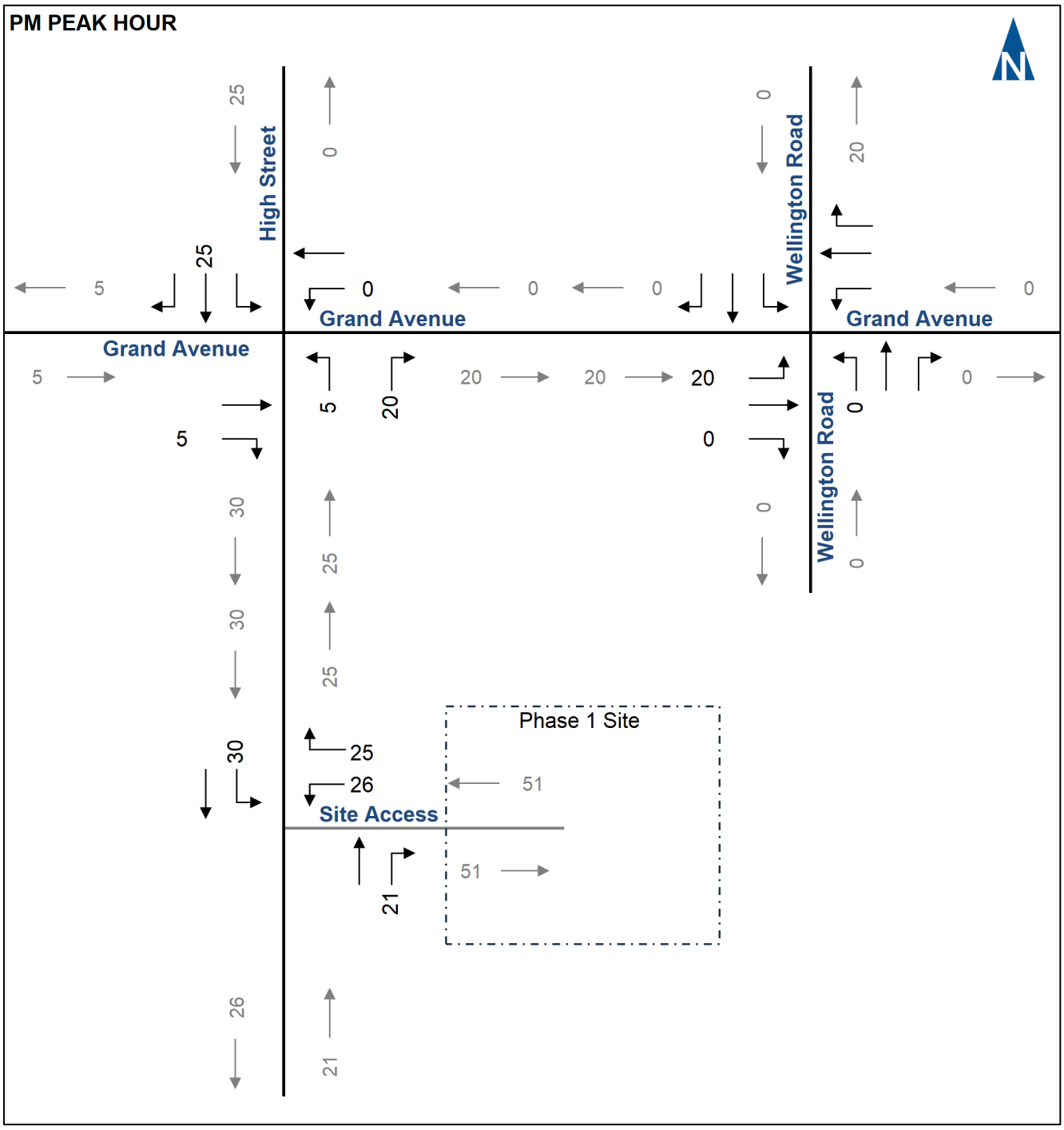

Figure 14 – Phase 1 Estimated Site Traffic (PM Peak Hour)

Figure 15 and **Figure 16** below summarize the 2035 Background Traffic Volumes, including the Phase 1 site traffic, for both the AM and PM peak hours, respectively.

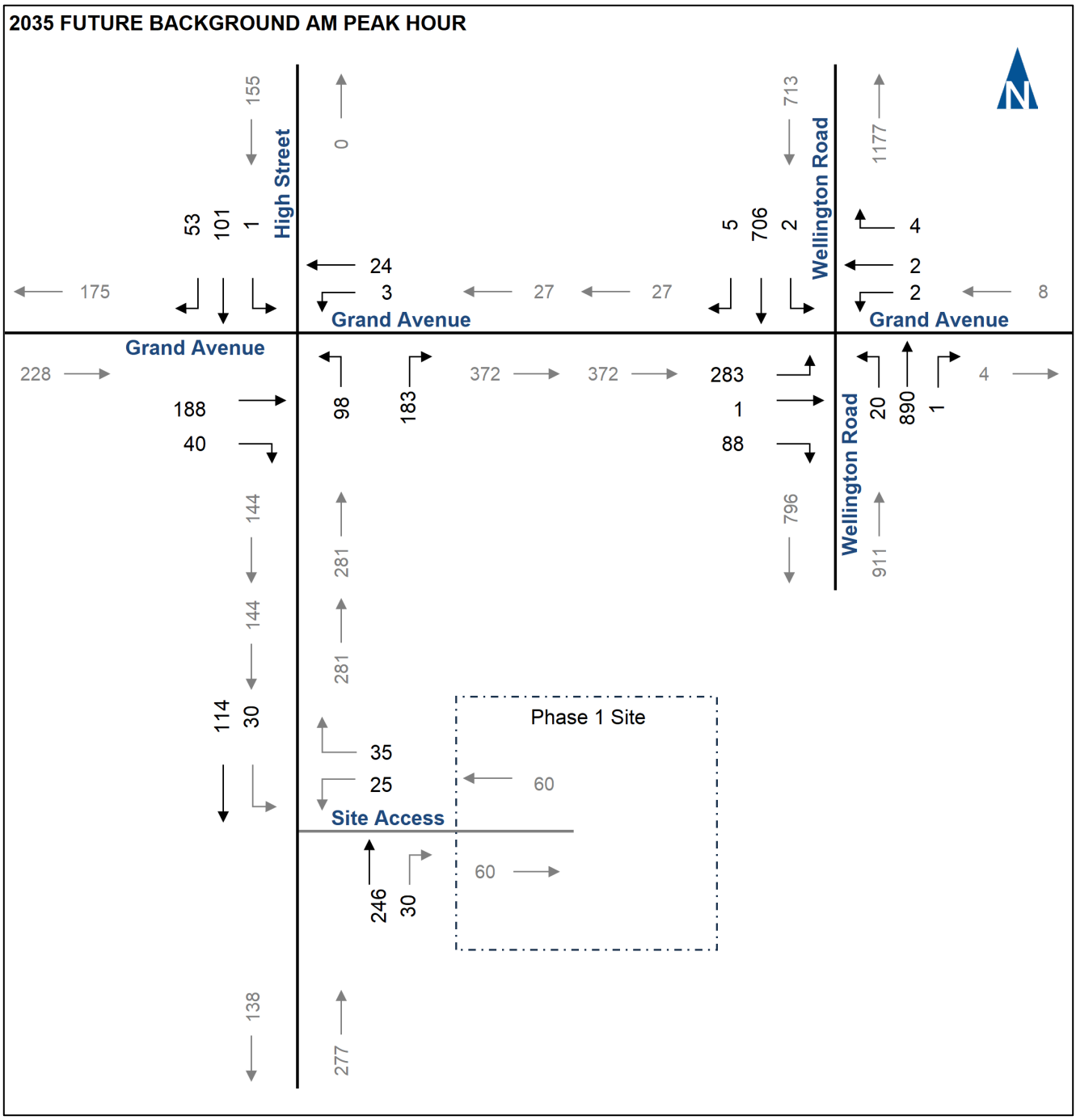

Figure 15 – 2035 Future Background Traffic (AM Peak Hour)

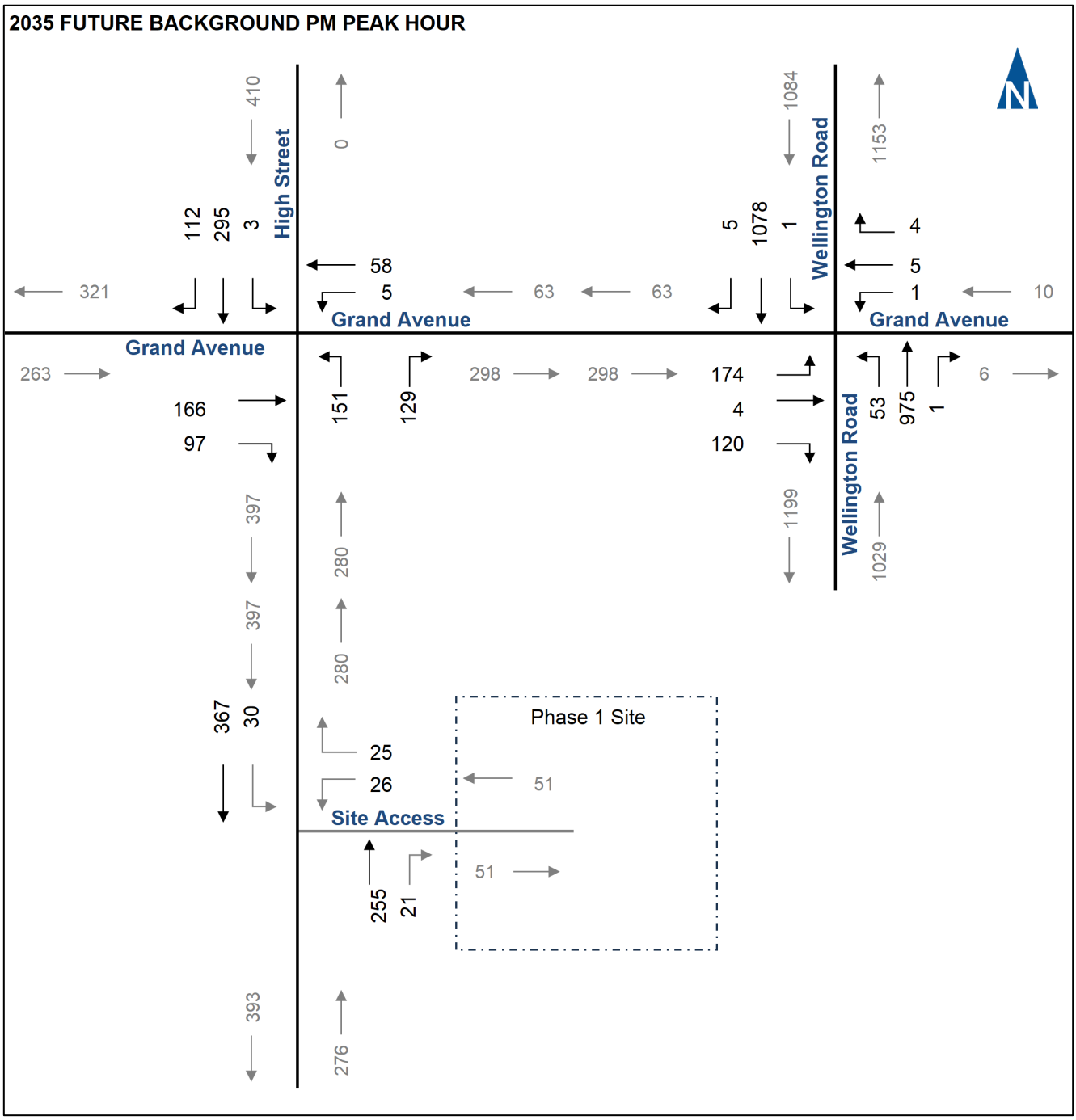

Figure 16 – 2035 Future Background Traffic (PM Peak Hour)

5.6 2035 Background Traffic Operations

The 2035 Background Traffic volumes have been analyzed using the same methodology as under existing traffic conditions. In line with the Phase 1 Wellington Tower TIA, signal timings have been optimized to a cycle length of 100s for the AM peak hour and 115s for the PM peak hour from 110s and 120s respectively.

Table 6 summarizes the results of the 2035 Background Traffic operations. The results indicate that the study area intersections are forecast to operate with similar levels of service as under existing traffic conditions.

Table 6 – 2035 Background Traffic Operations

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																Overall
				Eastbound				Westbound				Northbound				Southbound				
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	1 - Wellington Road/ Grand Avenue	TCS	LOS	C	B	-	B	-	C	-	C	C	B	-	B	D	D	-	D	C
			Delay	24	13		18		33		33	32	16		16	45	50		50	29
			V/C	0.59	0.51				0.11			0.04	0.46			0.02	0.89			0.89
			Q	28	35				11			15	88			18	105			
			Ex.	37	37				200			45				25				
			Avail	9	2				189			30				7				
	2 - High Street/ Grand Avenue	TCS	LOS	-	D	-	D	-	D	-	D	-	C	-	C	B	B	-	B	C
			Delay		42		42		40		40		23		23	18	12		12	28
			V/C		0.68				0.08				0.68			0.00	0.17			0.89
			Q		58				17				63				29			
			Ex.		449				37				82				106			
			Avail		391				20				19				77			
	3 - High Street/ Site Access	TWSC	LOS	-	-	-	-	-	B	-	B	-	A	-	A	-	A	-	A	A
			Delay				-		11		11		0		0		2		2	2
			V/C						0.10				0.18				0.03			
			Q						17				4				11			
			Ex.																	
			Avail																	
PM Peak Hour	1 - Wellington Road/ Grand Avenue	TCS	LOS	C	A	-	B	-	D	-	D	D	B	-	B	D	D	-	D	C
			Delay	29	7		19		43		43	47	17		19	52	45		45	30
			V/C	0.54	0.39				0.17			0.15	0.49			0.01	0.90			0.90
			Q	25	36				11			36	91			2	150			
			Ex.	37	37				200			45				25				
			Avail	12	1				189			9				23				
	2 - High Street/ Grand Avenue	TCS	LOS	-	D	-	D	-	D	-	D	-	C	-	C	B	B	-	B	C
			Delay		49		49		54		54		25		25	18	17		17	30
			V/C		0.73				0.18				0.69			0.00	0.42			0.90
			Q		71				32				75			3	66			
			Ex.		449				37				82			106	106			
			Avail		378				6				8			103	40			
	3 - High Street/ Site Access	TWSC	LOS	-	-	-	-	-	B	-	B	-	A	-	A	-	A	-	A	A
			Delay				-		13		13		0		0		1		1	1
			V/C						0.11				0.18				0.03			
			Q						17				7				13			
			Ex.																	
			Avail																	

MOE - Measure of Effectiveness
LOS - Level of Service
Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length
Ex. - Existing Available Storage
Avail. - Available Storage

TCS - Traffic Control Signal
TWSC - Two-Way Stop Control

Appendix D contains the detailed Synchro 12 reports for the 2035 Background Traffic Operations.

5.7 2035 Future Total Traffic

The 2035 Future Total Traffic volumes were derived by combining the 2035 Background Traffic with the proposed development site traffic from Phase 2. **Figure 17** and **Figure 18** summarize the 2035 Total Traffic Volumes for AM and PM Peak Hours, respectively.

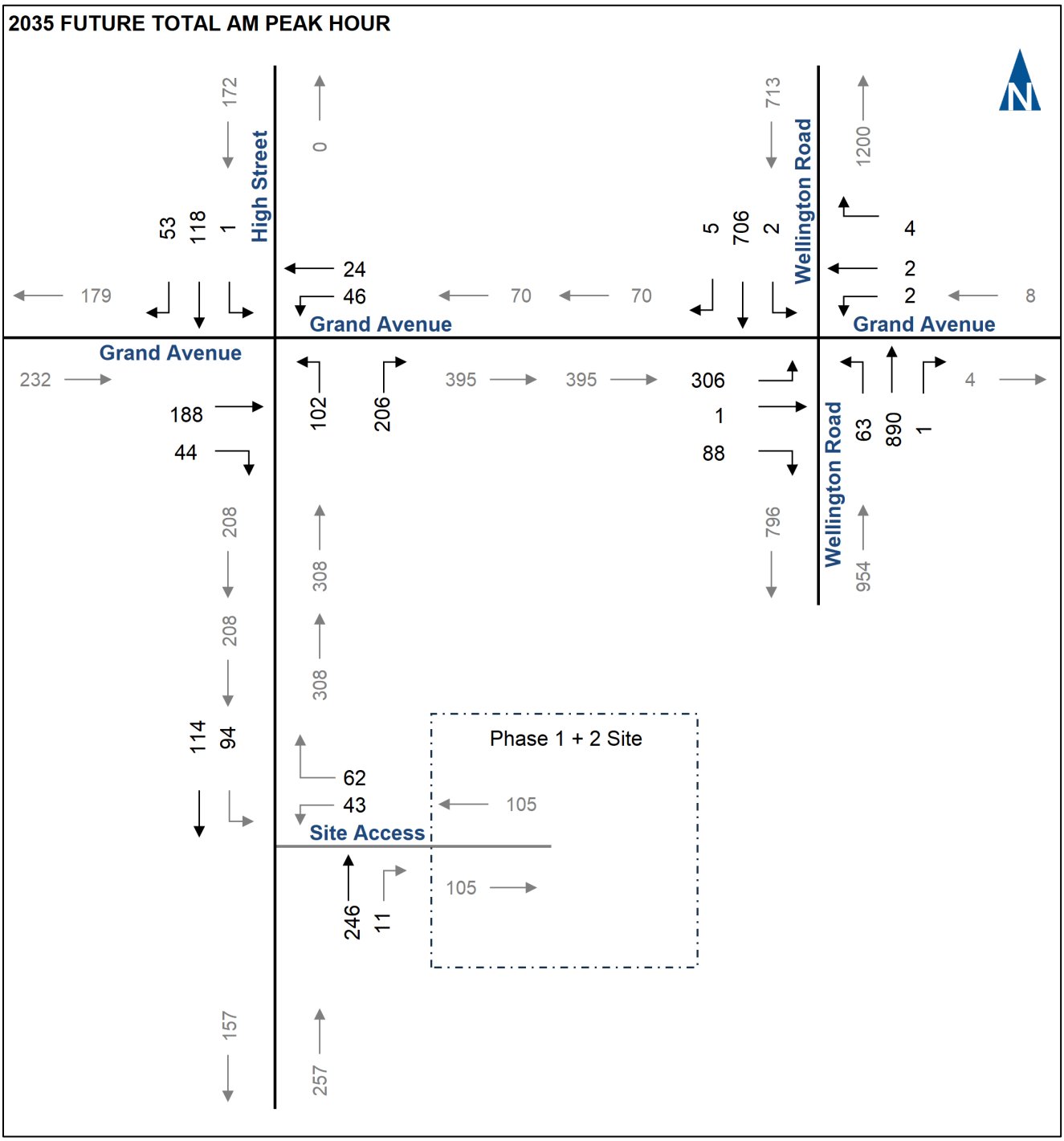

Figure 17 – 2035 Future Total Traffic (AM Peak Hour)

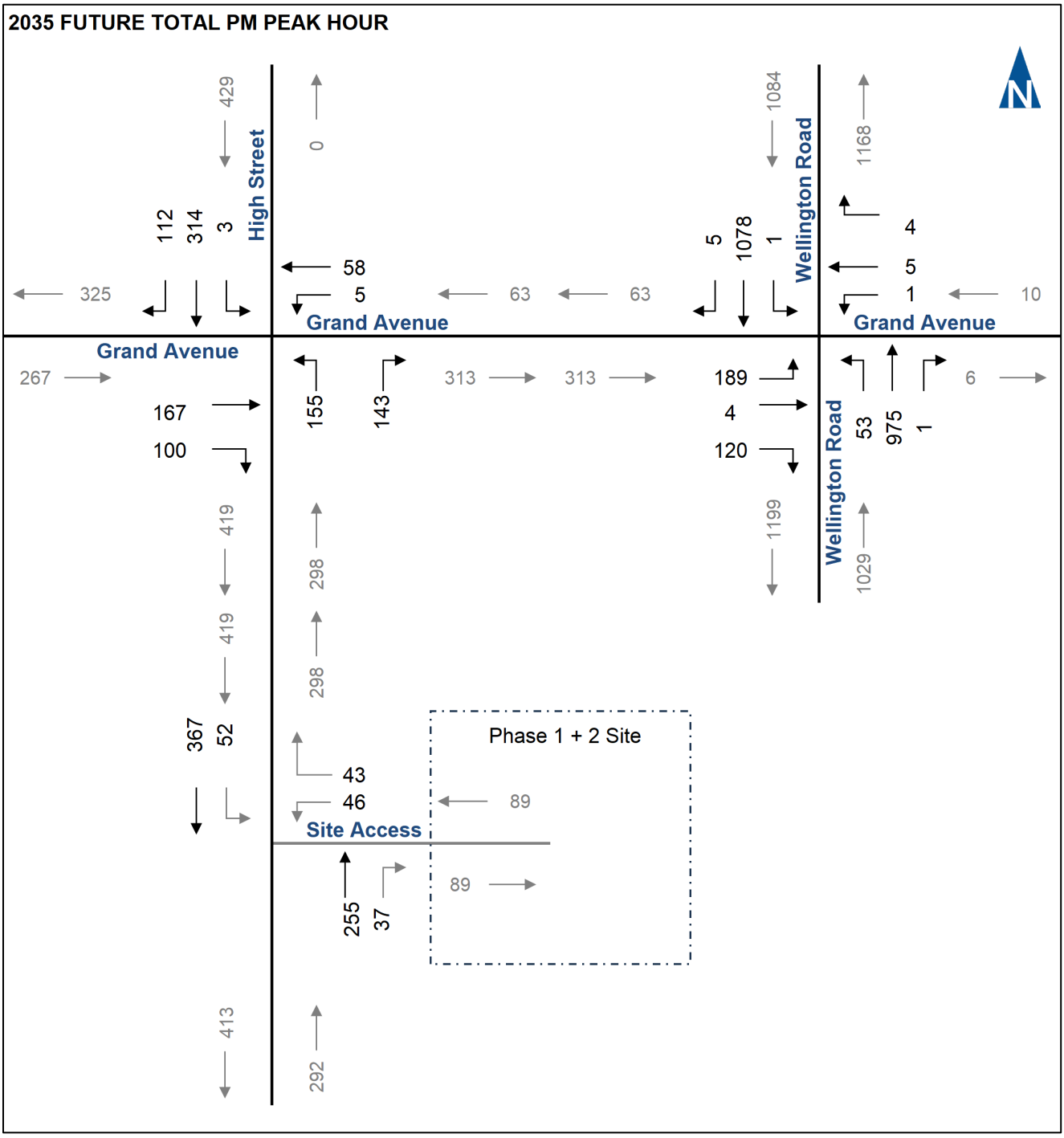

Figure 18 – 2035 Future Total Traffic (PM Peak Hour)

5.8 2035 Future Total Traffic Operations

The 2035 Future Total Traffic volumes have been analyzed using the same methodology as under Existing Traffic and 2035 Background Traffic conditions. Signal timings have been optimized to a cycle length of 100s

for the AM peak hour and 115s for the PM peak hour from 110s and 120s respectively. **Table 7** summarizes the results of the 2035 Future Total Traffic operations.

Table 7 – 2035 Future Total Traffic Operations

Analysis Period	Intersection	Control Type	MOE	Direction / Movement / Approach																	
				Eastbound				Westbound				Northbound				Southbound				Overall
				Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	Left	Through	Right	Approach	
AM Peak Hour	1 - Wellington Road/ Grand Avenue	TCS	LOS	C	B	-	C	-	C	-	C	C	B	-	B	D	D	-	D	C
			Delay	25	16		20		33		33	32	16		16	45	50		50	29
			V/C	0.61	0.56				0.11			0.04	0.46			0.02	0.89			0.89
			Q	37	40				10			13	90			3	98			
			Ex.	37	37				200			45				25				
			Avail	0	-3				190			32				22				
	2 - High Street/ Grand Avenue	TCS	LOS	-	D	-	D	-	D	-	D	-	C	-	C	B	B	-	B	C
			Delay		42		42		40		40		28		28	18	13		13	29
			V/C		0.67				0.08				0.75			0.00	0.19			0.89
			Q		60				17				77				33			
			Ex.		449				37				82				106			
			Avail		389				20				5				73			
	3 - High Street/ Site Access	TWSC	LOS	-	-	-	-	-	B	-	B	-	A	-	A	-	A	-	A	A
			Delay				-		12		12		0		0		3		3	3
			V/C						0.19				0.19				0.04			
			Q						19				3				16			
			Ex.																	
			Avail																	
PM Peak Hour	1 - Wellington Road/ Grand Avenue	TCS	LOS	C	A	-	B	-	D	-	D	D	B	-	B	D	D	-	D	C
			Delay	29	7		19		43		43	47	17		19	52	45		45	30
			V/C	0.54	0.39				0.17			0.15	0.49			0.01	0.90			0.90
			Q	26	35				11			37	90			1	152			
			Ex.	37	37				200			45				25				
			Avail	11	2				189			8				24				
	2 - High Street/ Grand Avenue	TCS	LOS	-	D	-	D	-	D	-	D	-	C	-	C	B	B	-	B	C
			Delay		49		49		54		54		25		25	18	17		17	30
			V/C		0.73				0.18				0.69			0.00	0.42			0.90
			Q		70				31				72			3	65			
			Ex.		449				37				82			106	106			
			Avail		379				6				10			103	41			
	3 - High Street/ Site Access	TWSC	LOS	-	-	-	-	-	B	-	B	-	A	-	A	-	A	-	A	A
			Delay				-		13		13		0		0		1		1	1
			V/C						0.11				0.18				0.03			
			Q						17				6				13			
			Ex.																	
			Avail																	

MOE - Measure of Effectiveness
LOS - Level of Service
Delay - Average Delay per Vehicle in Seconds

Q - 95th Percentile Queue Length
Ex. - Existing Available Storage
Avail. - Available Storage

TCS - Traffic Control Signal
TWSC - Two-Way Stop Control

The results indicate that the study area intersections are forecast to operate at acceptable levels of service overall, with the following observations:

The AM peak hour analysis indicates that the eastbound dual left-turn lane storage at Wellington Road and Grand Avenue is forecast to experience a minor storage deficiency under Future Total Traffic conditions. The 95th percentile queue is forecast to exceed the available storage length by 3 m (approximately one passenger vehicle). Given the limited magnitude of the exceedance and the infrequent nature of 95th percentile queue conditions, the deficiency is not anticipated to result in significant operational impacts to the adjacent intersection.

Notwithstanding the above, the identified queue exceedance is localized in nature and does not represent a system-wide operational deficiency. Overall, the study area intersections are forecast to continue operating at acceptable levels of service under Future Total Traffic conditions.

Appendix E contains the detailed Synchro 12 reports for the 2035 Future Total Traffic Operations.

6 Mitigation Measures

Based on the results of the traffic operations analysis, all study area intersections are expected to operate at acceptable levels of service under Future Total Traffic conditions. A minor queue storage exceedance is forecast for the eastbound dual left-turn lane at Wellington Road and Grand Avenue during the AM peak hour; however, this condition is localized in nature and is not indicative of a capacity deficiency requiring geometric or operational improvements.

As such, no geometric improvements are warranted based on the analysis and no mitigation measures are required to support the proposed development from a transportation perspective. Periodic review and optimization of signal timing plans should continue as part of ongoing corridor operations management.

7 Site Access and Operations

7.1 Site Access Management

The proposed site access configuration was reviewed in accordance with the City of London Transportation Impact Assessment Guidelines and Access Management Guidelines. The review considered access location, corner clearance, sight distance, and the interaction of proposed access points with the surrounding road network.

7.1.1 Site Access Location and Corner Clearance

Vehicular access to the proposed development will be provided via a full-movement driveway on High Street. The City of London Access Management Guidelines recommend a minimum corner clearance of 75 m between a signalized intersection and an adjacent driveway access. The proposed access is located approximately 82 m south of the signalized intersection of High Street and Grand Avenue, exceeding the City's minimum corner clearance requirement. As such, the proposed access location is considered appropriate from an access management perspective.

7.1.2 Sight Distance

The proposed access location provides adequate sight distance in both directions along High Street. High Street is relatively flat in the vicinity of the site and no significant obstructions to driver visibility were identified. As such, vehicles entering and exiting the site are expected to have sufficient visibility to safely complete turning movements.

7.1.3 Driveway Spacing

As discussed in **Section 3**, the proposed development includes a secondary driveway providing access to the underground parking structure from High Street in addition to the primary site access. Based on the current concept plan, the spacing between the two access points is approximately 11.45 m as measured centreline-to-centreline.

Figure 19 illustrates the site access configuration.

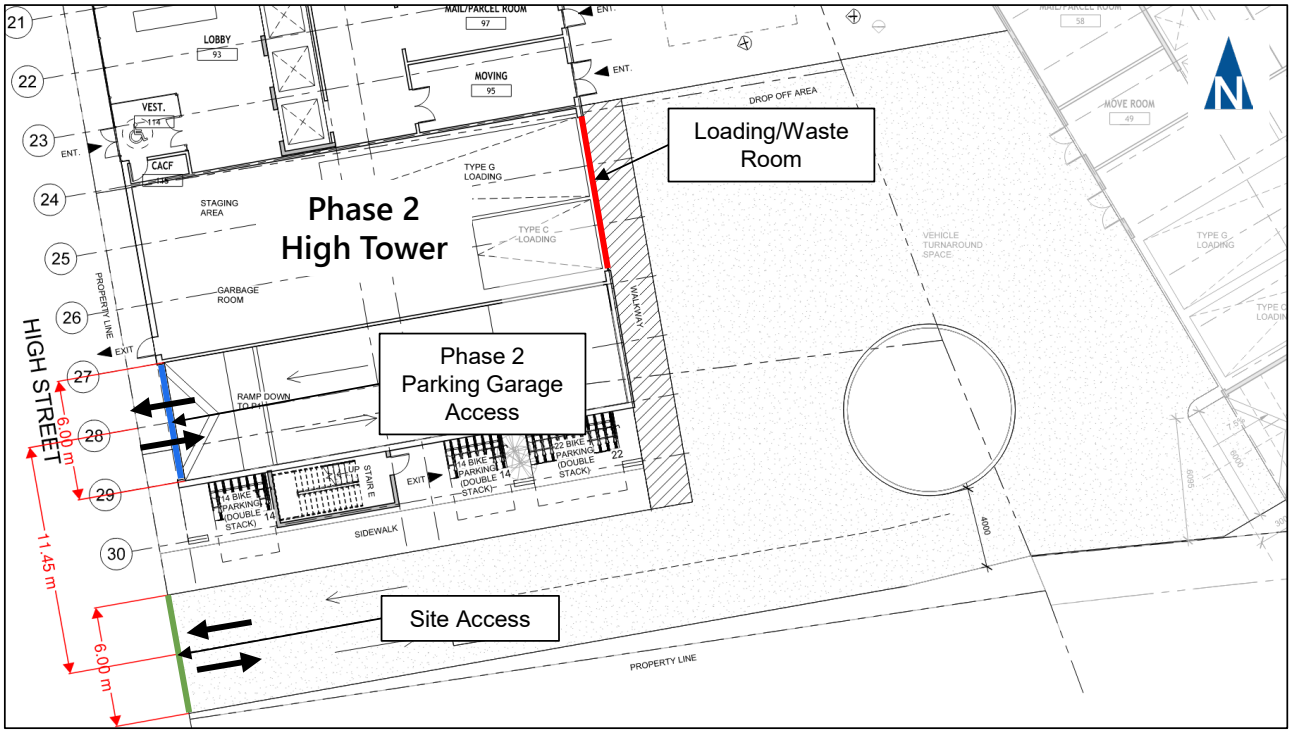

Figure 19 – Proposed Phase 2 Site Access Configuration

High Street is classified as a Neighbourhood Connector and is characterized by a two-lane cross-section within the vicinity of the site. The City of London Access Management Guidelines indicate that driveway spacing should generally be maximized and note that a spacing of 30m to 60m is typically used along Arterial and Primary Collector roadways. The Guidelines further indicate that the minimum spacing between adjacent driveways should include curb return radii and a 10m tangent section between access points.

As shown in **Figure 19**, the proposed spacing is limited relative to the access spacing objectives identified within the City's Access Management Guidelines. Accordingly, opportunities to optimize the access configuration should be considered during detailed design, including:

- Increasing the separation between the primary site access and underground parking access; and/or
- Relocating the underground parking access to the internal site circulation system adjacent to the proposed loading and waste collection area.

Given the limited parking supply associated with the development, the underground parking access is expected to accommodate relatively low traffic volumes. Notwithstanding this, the current access arrangement is not ideal from an access management and user wayfinding perspective. Relocation of the underground parking access could reduce the potential for driver confusion between the primary site access and the underground parking entrance. The preferred approach would be to provide access to the underground parking structure through the internal site circulation system adjacent to the proposed loading and waste collection area, which would consolidate site access functions and provide a clearer and more intuitive arrival experience for visitors and site users. Overall, the proposed site access satisfies the City's corner clearance and sight distance objectives; however, opportunities exist to further optimize the access configuration during detailed design.

Note: Should the P1 parking level ultimately be repurposed as a bicycle parking facility, the underground parking access could potentially be eliminated, which would further improve the access management characteristics of the site.

7.2 Passenger Pick-Up / Drop-Off (PUDO) and Curbside Operations

Given the proposed development includes minimal on-site parking and is located along a high-order transit corridor, a significant portion of site-related vehicle activity is expected to occur through pick-up/drop-off (PUDO), ride-hail, taxi, and short-duration passenger loading. For the purpose of assessing curbside operations, a conservative assumption has been applied whereby 80% of the peak hour balanced operational sensitivity volumes are attributed to PUDO activity. **Table 8** defines the PUDO assumptions.

Table 8 – PUDO Demand Assumptions

ameter	AM Peak Hour	PM Peak Hour
Total Balanced Volume (In/Out)	45 / 45	38 / 38
PUDO Share	80%	80%
PUDO Events (veh/hr)	36	30
Average Dwell Time	3–4 min	3–4 min
Estimated Concurrent Vehicles	2 vehicles	2 vehicles

An average dwell time of 3 to 4 minutes per vehicle has been assumed, reflecting typical short-duration passenger loading associated with ride-hail, taxi, and residential pick-up/drop-off activity in urban high-density environments. While longer dwell durations may occasionally occur, these are not representative of average peak hour conditions. Based on the above assumptions, the Phase 2 development is expected to generate a peak concurrent PUDO demand of approximately 2 vehicles during the peak periods.

7.2.1 Operational Considerations

While the above analysis relates specifically to the Phase 2 development, the proposed tower is intended to operate in conjunction with the previously assessed Phase 1 development. The Phase 1 TIA identified a peak concurrent PUDO demand of approximately 3 vehicles. Accordingly, the combined Phase 1 and Phase 2 development is expected to generate a total peak concurrent PUDO demand of approximately 5 vehicles during the peak periods.

The site is currently designed with an internal roundabout, which provides flexibility for short-term vehicle circulation, staging, and turnover without reliance on the public roadway. A generous area is identified on the site plan adjacent to the roundabout for pick-up/drop-off activity, although it is not explicitly delineated at this stage. This area is expected to function as the primary PUDO zone and can be formalized through detailed design. Based on the above, the following operational considerations apply:

- Provision for up to 5 short-term PUDO spaces should be considered across the combined Phase 1 and Phase 2 development;

- These spaces may be accommodated within identified drop-off areas as defined laybys or through flexible stopping along the internal circulation network, subject to detailed design;
- The circular driveway enables continuous vehicle movement and short-term staging within the site, reducing the potential for queueing or spillback onto High Street.

7.2.2 Paratransit Accommodation

Accommodation for paratransit vehicles has been considered in response to comments received from the City during the Phase 1 pre-study consultation process. As the Phase 1 and Phase 2 developments are intended to function as an integrated development, a shared paratransit loading area may be provided to serve both buildings.

To accommodate occasional paratransit activity, consideration should be given to providing at least one enlarged PUDO space with dimensions of approximately 3.5 m × 12 m. This space may be located along the Wellington Tower frontage near the principal entrance, or within another suitable location that minimizes interference with internal circulation and site operations.

Given the relatively low and irregular frequency of paratransit activity, these vehicles are expected to be accommodated within the overall PUDO operations without conflict. The final location and configuration of any dedicated paratransit loading area should be confirmed through detailed design.

7.2.3 Potential High Street Layby Opportunity

As part of future detailed design, consideration may be given to the provision of a curbside layby/loading area along the High Street frontage. Subject to confirmation of available roadway width, right-of-way requirements, streetscape considerations, and other detailed design requirements, such a facility could provide additional flexibility for short-term passenger loading and unloading activities including paratransit. The feasibility and ultimate configuration of any layby facility should be confirmed through detailed design.

7.2.4 Summary

Based on the foregoing assessment, the following recommendations are provided:

- Provision for up to 5 short-term PUDO spaces should be considered across the combined Phase 1 and Phase 2 development, with the final configuration to be confirmed through detailed design;
- Paratransit activity can be accommodated through one enlarged PUDO space serving both buildings, with dimensions of approximately 3.5 m × 12 m to be considered during detailed design;
- Consideration may be given to a future curbside layby/loading area along the High Street frontage to provide additional operational flexibility, subject to detailed design, roadway requirements, and streetscape considerations.

7.3 Left Turn Lane Warrant

The need for a southbound left-turn lane at the proposed site access was evaluated in accordance with the Ministry of Transportation Design Supplement to the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads. The assessment utilized the applicable left-turn lane warrant nomographs for a two-lane undivided roadway operating under unsignalized conditions with a design speed of 50 km/h.

The assessment considered the 2035 Future Total Traffic conditions and evaluated the southbound left-turn movement at the proposed site access. Based on the warrant assessment, a dedicated southbound left-turn lane is not warranted at the proposed site access under the Future Total Traffic conditions. **Figure 20** below presents the southbound left-turn lane warrant assessment for both the AM and PM peak hours.

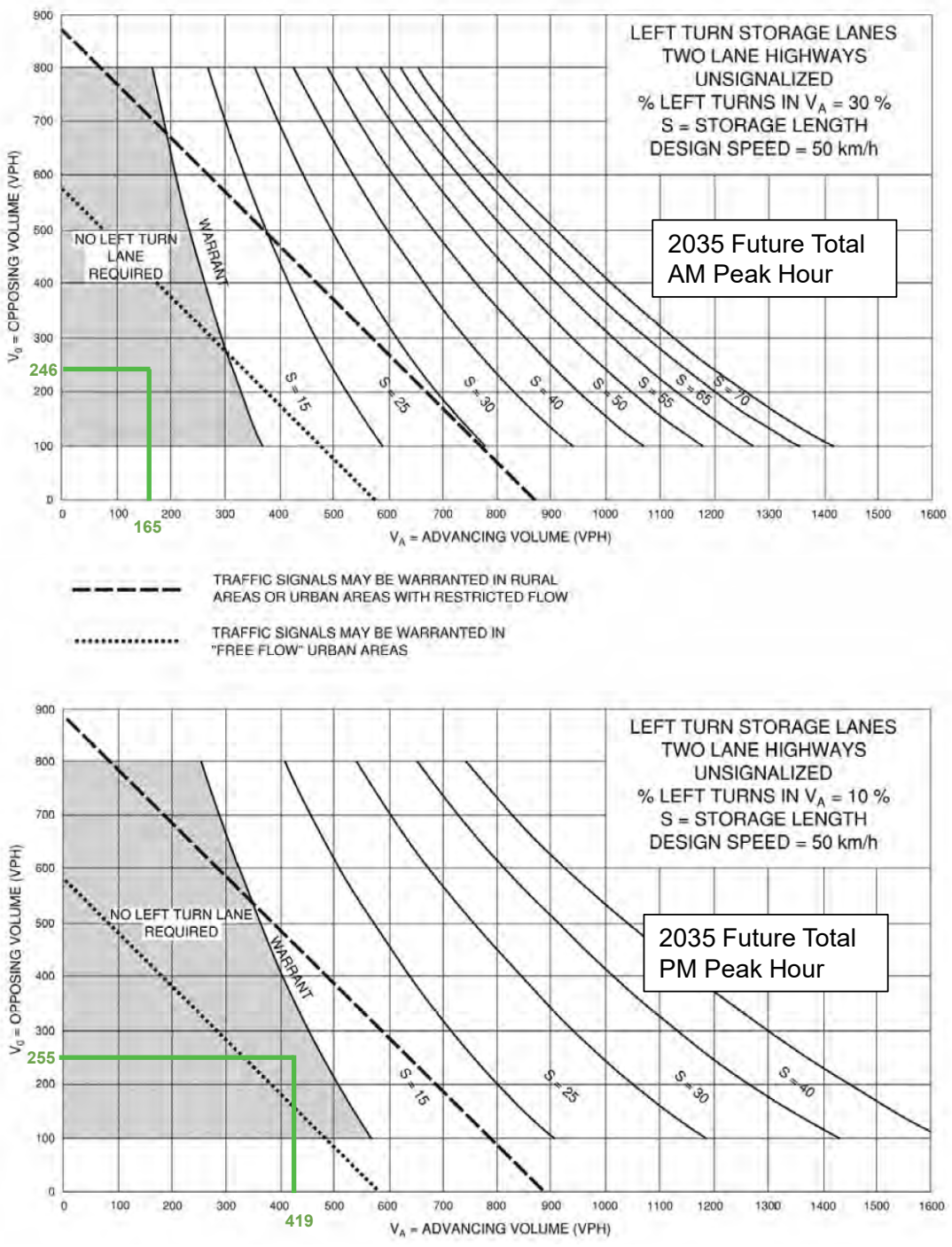

Figure 20 – Southbound Left-Turn Lane Warrants (2035 Future Total AM and PM Peak Hours)

7.4 Swept Path Assessment

A vehicle swept path assessment was completed using Autodesk Vehicle Tracking to evaluate site access and internal circulation. The analysis was undertaken using the following design vehicles:

- Aerial Fire Truck (NCHRP 659, 11.89 m length)
- Rear-Load Garbage Truck (NCHRP 659)
- Standard Passenger Car (TAC, 2017)

As the City does not prescribe specific design vehicles for fire services or waste collection, the above vehicles were selected as conservative and representative examples. Final vehicle selection may be refined during the site plan review process in consultation with emergency services and the waste collection provider; however, the vehicles used in this assessment are considered appropriate for evaluating site functionality at this stage.

The assessment confirms that the design vehicles can safely enter, circulate within, and exit the site while accessing their intended operational areas, subject to one minor design refinement. The swept path assessment identified a minor deficiency associated with the rear-load garbage truck, which results in insufficient clearance adjacent to the central circular island during circulation through the site. As part of detailed design, consideration should be given to reducing the radius of the central island by approximately 1.0 m and/or incorporating a mountable curb treatment to provide the additional clearance required for waste collection operations.

Overall, the proposed site access and internal circulation layout are considered functional for anticipated emergency services, waste disposal service, and passenger vehicle operations. The swept path analysis drawings are provided in **Appendix F**.

7.5 Driveway Width Considerations

During the Phase 1 review process, City staff identified a preference for a 6.7 m driveway width in accordance with the Site Plan Control By-law. As the proposed access configuration remains substantially unchanged from that previously assessed, the conclusions of the Phase 1 TIA remain applicable. The proposed 6.0 m driveway width has been demonstrated to accommodate anticipated passenger, waste disposal service, and emergency vehicle movements and is considered operationally appropriate for the development.

8 TRANSPORTATION DEMAND MANAGEMENT (TDM) STRATEGY

Transportation Demand Management (TDM) refers to strategies that improve the efficiency of the transportation network by reducing reliance on private automobile travel and encouraging the use of alternative modes such as transit, walking, and cycling. TDM measures consider how travel behaviour is influenced by factors such as site design, parking availability, proximity to transit, and mobility options.

In accordance with City of London requirements, this study identifies potential TDM measures that may be considered for the proposed development to support reduced automobile dependence. Given the site's location along a planned Bus Rapid Transit (BRT) corridor and the limited provision of on-site vehicle parking, the measures outlined below are intended to support a shift toward more sustainable travel patterns. Potential TDM measures appropriate to the subject development are outlined below:

8.1 Walking

The subject site is situated within an established urban area with existing pedestrian infrastructure along adjacent roadways. Direct and accessible pedestrian connections are proposed between the building entrances and the municipal sidewalk network, supporting walking-based access to nearby transit stops and surrounding amenities. The pedestrian-oriented design of the site supports walking as a practical travel option for many daily trips.

8.2 Cycling

Cycling infrastructure within the surrounding area includes existing and planned facilities that support connections to the broader network, including corridor improvements along Wellington Road as part of the Wellington Gateway project. These connections provide opportunities for cycling to function as a viable mode of transportation for both commuting and recreational trips.

8.2.1 Bicycle Parking Requirements

The City of London Zoning By-law (Section 4.19) requires a minimum bicycle parking provision of 0.9 long-term spaces per unit and 0.1 short-term spaces per unit. Based on the proposed 432-unit development, this corresponds to approximately 389 long-term spaces and 43 short-term spaces, for a total of 432 bicycle parking spaces.

These requirements are prescriptive and represent the standard requirements as part of the development, particularly in the context of a project with limited on-site vehicle parking and a strong reliance on alternative modes of transportation.

8.2.2 Proposed Bicycle Parking Supply

The proposed development includes a total of 232 bicycle parking spaces consisting of both short-term and long-term bicycle parking accommodations. Based on the submitted plans, the bicycle parking supply consists of:

- Exterior at-grade (unsheltered): approximately 120 spaces (short-term)
- P1 parking level (sheltered): approximately 112 spaces (long-term)

This results in an overall bicycle parking provision rate of approximately 0.54 spaces per unit.

8.2.3 Cycling Assessment and Opportunities

The proposed bicycle parking supply is deficient relative to the zoning requirement. Notwithstanding this, the subject site is located within the Rapid Transit Corridor Place Type where no minimum vehicle parking requirement applies. As such, opportunities exist to further optimize the balance between vehicle parking, vehicle circulation, and bicycle parking facilities as part of the detailed design process. Potential opportunities to improve bicycle parking provision include:

- Optimization of bicycle parking layouts within the P1 level to increase overall bicycle parking capacity, including the use of vertical bicycle parking systems and other space-efficient bicycle parking configurations where appropriate;
- Reallocation of space currently dedicated to vehicle parking and circulation functions to additional long-term bicycle parking facilities. Given that no minimum vehicle parking requirement applies within the Rapid Transit Corridor Place Type, opportunities may exist to repurpose a substantial portion, or potentially the entirety, of the P1 level as a secure and weather-protected bicycle parking facility;
- Introduction of additional sheltered bicycle parking facilities at grade where feasible to increase the overall bicycle parking supply and improve functionality; and
- Development of a centralized, secure, and sheltered bicycle facility between the Phase 1 and Phase 2 towers, potentially below-grade and accessible to both buildings.

8.2.4 Conclusion

The proposed bicycle parking supply is deficient relative to the City of London Zoning By-law requirements. Notwithstanding this, the site benefits from a transit-supportive location within the Rapid Transit Corridor Place Type and opportunities exist to substantially increase the provision of secure and weather-protected bicycle parking through future design refinements. Given that no minimum vehicle parking requirement applies within the Rapid Transit Corridor, opportunities should be explored during detailed design to further optimize the allocation of transportation-related space within the development. This may include optimization of the proposed bicycle parking layouts, expansion of sheltered bicycle parking facilities, and the reallocation of vehicle parking and circulation space to bicycle parking uses.

Depending on the preferred design approach, a substantial portion, or potentially the entirety, of the P1 parking level could be repurposed as a dedicated long-term bicycle parking facility. Such an approach would significantly increase bicycle parking supply while remaining consistent with the City's transit-oriented development objectives and broader transportation policy framework.

8.3 Transit

The subject site is well served by existing and planned transit infrastructure, providing direct and convenient access to higher-order transit services. The development is located along the Wellington Road corridor,

which is being upgraded as part of the Wellington Gateway Bus Rapid Transit (BRT) project. Upon completion, the nearest BRT stop will be located approximately 380 metres south of the site at the intersection of Bond Street and Wellington Crescent, representing a comfortable walking distance and providing frequent, high-capacity transit service along a key north-south corridor.

In addition to the future BRT service, the site is currently served by multiple London Transit routes along Wellington Road, as well as Route 6 along High Street immediately fronting the Phase 2 site. These services provide direct connections to Downtown London, major institutional uses, and regional destinations.

The proximity to both existing and planned transit services supports transit as a primary mode of travel for residents and represents a key component of the overall TDM strategy. The site's direct access to the Wellington Gateway Bus Rapid Transit corridor significantly reduces reliance on private vehicle ownership and supports the development's transit-oriented design.

8.4 Car Share Program

Car-share services provide short-term access to a vehicle without the need for ownership, supporting reduced reliance on private automobiles and more efficient use of limited parking supply. This measure is particularly relevant for developments with constrained parking provision, where a portion of residents may reasonably choose not to own a vehicle. Communauto currently operates within the City of London and represents a viable opportunity for integration at the site.

Should vehicle parking spaces ultimately be provided as part of the final site design, consideration should be given to allocating a portion of the parking supply for future car-share operations, subject to market demand and operator participation. The provision of dedicated car-share spaces can further reduce private vehicle ownership while supporting the overall transit-oriented transportation strategy for the development.

8.5 Wayfinding and Trip Planning

Improving awareness of available transportation options can support reduced reliance on private vehicles and encourage the use of sustainable travel modes. For a residential development of this scale, providing clear and accessible information to residents is an effective TDM measure. This may include the provision of a resident welcome package outlining nearby transit services, cycling routes, and active transportation connections. In addition, the installation of real-time transit information displays or static wayfinding signage within common areas (e.g., lobbies or amenity spaces) can assist residents in planning trips using transit and other non-auto modes.

These measures are intended to improve visibility and understanding of available travel options, supporting the overall TDM strategy and encouraging long-term shifts toward more sustainable travel behaviour.

9 High Street Right-of-Way Review

9.1 Existing and Future Right-of-Way Condition

As part of the Pre-Application Consultation Meeting held on April 16, 2026 (see **Appendix A**), City staff identified a requirement for a minimum offset of 11.5m from the centreline of High Street along the subject site frontage. Based on the legal survey, the existing High Street right-of-way in the vicinity of the subject site is approximately 20.13m to 20.14m wide. Based on the City's requested offset of 11.5 m from the centreline of High Street this results in a widening requirement between 1.435m and 1.43m, respectively. This aligns with the City's requested additional dedication of approximately 1.442 m along the subject frontage.

Figure 21 illustrates the existing High Street right-of-way condition and the relationship between the existing property boundaries and roadway centreline.

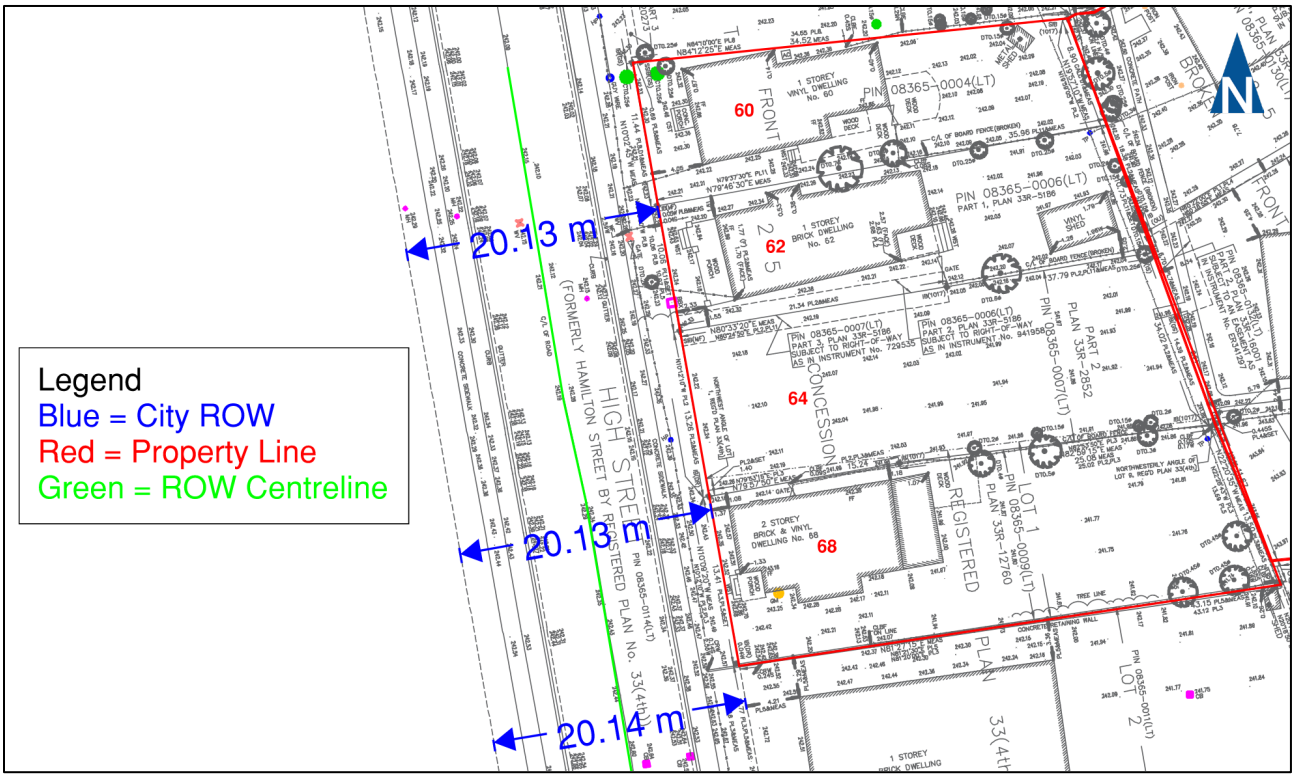

Figure 21 – Existing High Street Right-of-Way

9.2 Development Implications

The proposed development currently provides approximately 1.49m setback between the building face and the existing property line, as illustrated in **Figure 22**.

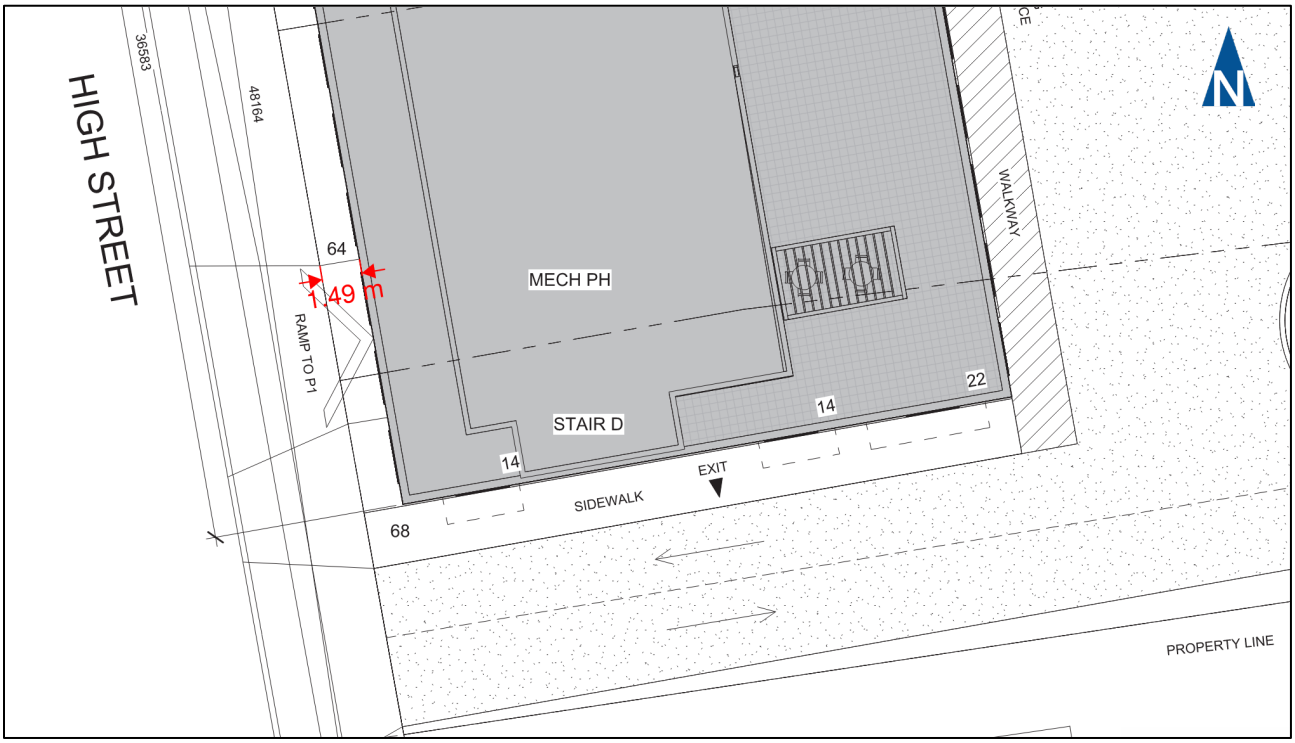

Figure 22 – Phase 2 Building Setback

Based on the current site design, the City's requested dedication of approximately 1.442 m can be accommodated within the available setback area while maintaining the proposed building footprint.

9.3 High Street Right-of-Way Conclusion

Based on the City's requested offset of 11.5 m from the centreline of High Street, approximately 1.44 m of dedication would be required along the subject frontage. Review of the legal survey confirms that this requirement is consistent with the existing right-of-way width and can be accommodated within the approximately 1.49 m setback currently provided between the building face and property line. As such, the requested widening does not affect the proposed development or the transportation conclusions presented herein.

10 Overall Conclusion

Based on the analysis presented in this report, the following conclusions are provided:

- The proposed development will generate moderate traffic volumes, which can be accommodated within the existing and future road network without significant impact to intersection operations;
- The site is well served by existing and planned transit infrastructure, including the Wellington Gateway BRT corridor, supporting a transit-oriented development framework;
- 2035 Background Traffic and Future Total Traffic operations are forecast to operate at acceptable levels of service. A minor queue storage exceedance is forecast for the eastbound dual left-turn lane at Wellington Road and Grand Avenue during the AM peak hour (2035 Future Total); however, this condition is localized in nature and does not warrant mitigation outside of signal timing adjustments and monitoring;
- Site access via High Street satisfies City guidelines and is considered appropriate, with no requirement for a dedicated southbound left-turn lane;
- The proposed development can accommodate the City's requested right-of-way widening of 1.442m within the 1.49m setback currently provided between the building face and property line;
- Internal site operations, including PUDO activity, are expected to function effectively. The combined Phase 1 and Phase 2 development is anticipated to generate a peak concurrent PUDO demand of approximately 5 vehicles, which can be accommodated within the internal circulation system;
- The swept path assessment confirms that emergency services, waste disposal service, and passenger vehicles can safely access and circulate within the site. A reduction in the central island radius of approximately 1.0m and/or provision of a mountable curb treatment should be considered during detailed design to accommodate waste collection operations;
- No minimum vehicle parking requirement applies to the development as it is located within the Rapid Transit Corridor Place Type. The proposed parking strategy is consistent with City policy;
- The proposed bicycle parking supply is deficient relative to the City of London Zoning By-law requirements; however, opportunities exist to increase bicycle parking provision through future design refinements, including optimization of the P1 level and potential reallocation of vehicle parking and circulation space to bicycle parking uses. Given the site constraints, full compliance may not be feasible; however, efforts should be made to improve alignment with the intent of the By-law;
- Transportation Demand Management measures support reduced reliance on private vehicle ownership, including strong transit accessibility, active transportation connections, bicycle parking facilities, opportunities for future bicycle parking expansion, and potential car-share integration;
- No transportation improvements are required to support the proposed development. Periodic monitoring and optimization of corridor signal timing plans should continue as part of ongoing transportation network management.

Overall, the proposed development is functional from a transportation perspective, with site access, operations, and supporting infrastructure designed to accommodate anticipated demand while aligning with the City's objectives for transit-oriented development within the Rapid Transit Corridor Place Type. Based on the foregoing, the proposed development represents an appropriate and supportable form of transit-oriented intensification that can be accommodated within the existing and planned transportation network.

APPENDIX A

(Terms of Reference, Pre-Study Consultation Minutes and Email Correspondence)

APPENDIX B

(Traffic Data and Signal Timing Plans)

APPENDIX C

(Existing Traffic Operations – Synchro Reports)

APPENDIX D

(2035 Background Traffic Operations – Synchro Reports)

APPENDIX E

(2035 Future Total Traffic Operations – Synchro Reports)

APPENDIX F

(Swept Path Analysis)