WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation X	Decision Request ☐	Councillor Activity ☐

To: Mayor Zebian and Members of West Hants Regional Municipality Council

Submitted by: _____
Sara Poirier, Director of Planning and Development

Date: July 23, 2024

Subject: Development Agreement: 1781 King Street, Windsor (PID 45162005) and PID 45408374, Edward Drive, Garlands Crossing; File #24-15 A

LEGISLATIVE AUTHORITY

Section 230 of the Municipal Government Act.

RECOMMENDATION

Staff do not recommend in favour of the application as currently criteria 5.4.6 (c) compatibility with residential character of the area with respect to traffic generation, 5.4.6 (e) well designed parking areas, 5.4.6 (g) minimal traffic impact, 5.3.7 (c) compatibility with the character of the area with respect to traffic generation, 5.3.7 (d) adequacy of proposed streets, 16.3.1 (a) (iv) the adequacy of road networks leading to the development, and 16.3.1 (b) suitability of auto movement, are not met.

PAC/HAC recommends that Council make the following motions:

> …that Council gives First Reading and will hold a Public Hearing to consider entering into a development agreement to allow a total of 92 dwelling units within 23 four-unit dwellings grouped on a portion of PID 45162005 and PID 45408374 in Windsor and Garlands Crossing, subject to the successful resolution of all the outstanding matters in the report, which is substantively the same as the draft set out in Appendix A of the report File #24-15 A to Council dated July 23, 2024.

…that Council require that the development agreement with Mitch Brison for PID 45162005 and PID 45408374 be signed within 120 days from the date of final approval by Council or the date that any appeals have been disposed of; otherwise this approval will be void and obligations arising hereunder shall be at an end.

BACKGROUND

An original application letter entitled *"Rezoning for Brison Developments*" was received on October 5, 2023, from Chrystal Fuller on behalf of the owner, Mitch Brison of 3229190 Nova Scotia Limited, outlining the request to rezone PID 45162005 from Agriculture (AG) to Two Unit Residential (R-2) as the first step of the overall development proposal. This rezoning was approved by Council on May 28, 2024.

The original application also discussed future applications for potential Windsor Municipal Planning Strategy (WMPS) text amendments and a development agreement to permit grouped dwellings. At the meeting on June 25, 2024, Council approved amendments to the criteria of Policy 5.4.6 to allow multi-unit developments or grouped dwellings over 12 units to be considered by development agreement on local roads if a favorable traffic impact study, and where necessary, an emergency access is provided.

An amendment to the original application was received on February 13, 2024, from Chrystal Fuller to confirm the owner's development plans. The application requests Council consider a development agreement to permit up to 88 dwelling units within 22 four-unit dwellings grouped on the subject lots. The proposal has since been updated to include 92 dwelling units within 23 four-unit dwellings. The applicant has requested this application be brought forward to PAC/HAC and Council for further direction.

A Public Information Meeting was held for this application on March 5, 2024. Comments during the Public Information Meeting included support for Irven Drive connecting to Payzant Drive, impact on a shared driveway and sewer easement within the property at 1781 King Street, support for affordable housing, and traffic concerns on King Street.

On July 11, 2024, staff presented a recommendation report to the Planning and Heritage Advisory Committee (PAC/HAC) (Appendix C). The Committee discussed the application and the proposed development at length. Traffic impacts were a large topic of conversation including the calculation of the 400 m cul-de-sac length, and the Municipal Traffic Impact Study that is underway to provide updated traffic counts for the overall area taking into consideration the future planned connections at Payzant Drive - Irven Drive via Community Way and Edward Drive - Cole Drive via Abbey Road. The Committee also discussed concerns with the proposed density on a cul-de-sac in relation to on-street parking. Some noted that an emergency access did not seem sufficient for the proposal. There was discussion on the gravel emergency access road, required through the Crossing development agreement, and the easement for the Crossing development to the Avon View High School lot. A Committee member also emphasized the need for the Municipality to connect Payzant Drive to King Street. The

Committee approved an amended motion to Council in support of the proposal that is *"subject to the successful resolution of all the outstanding matters in the report".*

As noted in the staff report dated July 11, 2024, there were a few outstanding items in relation to this file:

- Municipal Traffic Authority comments regarding the potential traffic impact following the completion of the Municipal Traffic Impact Study;
- Fire Chiefs and Municipal Emergency Management Coordinator comment on the design of the proposed emergency access route;
- Revisions to the design from the applicant to address the parking concerns from the Municipal Public Works Engineering Division;
- Municipal legal review of the draft development agreement; and
- Comments from the applicant on the draft development agreement.

Staff have since received comments from the Municipal Traffic Authority on the Municipal Traffic Impact Study, the Municipal legal review of the draft development agreement as presented to PAC/HAC, and comments from the applicant on the draft development agreement. These items are discussed below. The other items are still outstanding.

Municipal Traffic Impact Study

The Municipal Public Works Engineering Division engaged a consultant, WSP, to perform a Traffic Impact and Connection Study to consider a wholistic view of the area from Underwood Road, King Street, Wentworth Road, Payzant Drive, Cole Drive and the entire Crossing Development. All known development information and the future planned connections from Payzant Drive - Irven Drive via Community Way, Edward Drive - Cole Drive via Abbey Road, and Payzant Drive – King Street, as well as traffic calming, were included in the scope of the study.

The final Traffic Impact and Connection Study was submitted to the Municipal Traffic Authority on July 11, 2024 (Appendix B). The Municipal Traffic Authority noted there were three recommendations provided in the study. One of the three recommendations reads as follows:

> "*West Hants Regional Municipality should continue to plan for the construction of two new intersections at King Street at Payzant Drive and Payzant Drive at Irven Drive. These additional intersections increase options for traffic throughout the area and provide an opportunity for a crosswalk and new road connection between King Street and the Avon View High School. If these intersections are constructed, both should be STOP controlled and a left turn lane should be included on King Street for traffic turning to Payzant Drive."*

In light of this new information and in relation to the application being considered in this report, staff requested confirmation from the Municipal Traffic Authority on their previously submitted responses, specifically in relation to the impact the proposal will have on traffic in the area and the adequacy of the existing and proposed road network. The Municipal Traffic Authority responded that *"If Irven Dr connects with the Payzant Dr connector as recommended in the July 2024 WSP Traffic Impact and Connection Study and the WHRM Municipal Engineer, I would consider the traffic compatible with no negative impact. Without this connection as it is*

proposed in the DA I would consider the traffic to not be compatible having negative impacts on the roads network." They added that *"The existing road networks are inadequate in relation to the Irven Dr Extension DA proposal as the proposal is a high-density development on a dead-end street that is over 400m with poor connectivity. With the proposed addition of the Payzant Dr connection to King St and the proposed Irven Dr connection to Payzant which is also recommended in the 2024 WSP Traffic Impact and Connection Study, I would consider the road network adequate."*

The current development agreement proposes Irven Drive Extension to end in a cul-de-sac with a 25 ft. wide access easement in favour of the Municipality to provide an emergency access / active transportation connection. This is not acceptable to the Municipal Traffic Authority.

Staff also requested additional information from the Municipal Traffic Authority on their previously submitted response which stated *"Until such time that Staff receives this completed TIS, Staff is not in the position to comment on the GAALCO report. Staff will comment once all the relevant information is in front of them."* In relation to this previously submitted statement, the Municipal Traffic Authority provided the following response:

> *"After reviewing the January 2024 Traffic Report, April 2024 GAALCO Traffic Impact Analysis, along with the March 2024 WSP Memorandum and the July 2024 WSP Traffic Impact and Connection Study, I've concluded both GAALCO Reports were narrowly focused only considering and collecting data at one intersection. They did not take in account "P loop" starting at Merriweather Crescent which would extend over 400m as a dead end (as per the WHRM Municipal Specifications) or any other intersection in the area. As well they only focused on the Irven Dr Extension proposal. Contrary to the GALLCO Reports the WSP Memorandum and Study focused on multiple current and proposed intersections surrounding the Irven Dr Extension proposal as well as all known proposed developments known to WHRM. Following is an excerpt from the WSP Memorandum regarding the "P-loop" starting at Merriweather Cresent, and the three recommendations from the WSP Study with particular interest in the second recommendation as it pertains to this DA proposal.*
>
> - **"*The length of Irven Drive and Goosie Loop (P-loop) is approximately 350m prior to the extension of Irven Drive. It appears the plan proposes to extend Irven Drive by approximately an additional 180m. For reference, HRM's Municipal Design Guidelines limit culs-de-sac and P-loops to 400m in length in rural areas and 150m in urban areas."***
>
> Note: WHRM considers this development as an urban area in relation to the above bullet above.
>
> ***<u>Recommendations</u>***
>
> 1. ***"West Hants Regional Municipality should review and revise the signal timings of the existing signalized intersections as traffic volumes change over the years. Initial timings are included in the Synchro reports.***

2. ***West Hants Regional Municipality should continue to plan for the construction of two new intersections at King Street at Payzant Drive and Payzant Drive at Irven Drive. These additional intersections increase options for traffic throughout the area and provide an opportunity for a crosswalk and new road connection between King Street and the Avon View High School. If these intersections are constructed, both should be STOP controlled and a left turn lane should be included on King Street for traffic turning to Payzant Drive.***
3. ***A right turn lane should be considered on Wentworth Road for traffic turning to Payzant Drive, without or with construction of the additional intersections."***

The Municipal Traffic Authority concluded that *"Based on the vast differences in scope, traffic data collection, intersection focus and proposed development consideration between the GALLCO Reports and the WSP Memorandum and Study, Staff's opinion is to agree with the more in-depth evaluation provided by WSP. The WHRM Traffic Authority recommends and agrees with the WHRM Municipal Engineer that the Irven Dr Extension DA includes a 16m wide land parcel be turned over to WHRM to allow Irven Dr to connect with the Payzant Dr connector at some point in the future."*

In relation to the updated responses from the Municipal Traffic Authority, the application as presented in the draft development agreement would still not meet criteria 5.4.6 (c) compatibility with residential character of the area with respect to traffic generation, 5.4.6 (g) minimal traffic impact, 5.3.7 (c) compatibility with the character of the area with respect to traffic generation, 5.3.7 (d) adequacy of proposed streets, 16.3.1 (a) (iv) the adequacy of road networks leading to the development, and 16.3.1 (b) suitability of auto movement.

Legal Review

Staff send all draft development agreements to a Municipal lawyer prior to review by Council. Staff received a response from the lawyer on July 10 in relation to the review of this draft development agreement. There are a few changes that have been made in the draft development agreement since being presented to PAC/HAC. These include edits to Section 2.3 (c), (d), and (e) based on the overall design within the site plan not referencing a full road connection to the Payzant Drive Connection and to ensure the Municipality has the right to complete the emergency access / active transportation connection, at the cost of the owner, if the owner does not have the connection built within the required timelines.

The Municipal lawyer also requested the applicant provide an updated site plan to show clear boundaries of the road reserve on PID 45162005 as discussed in Section 2.14 of the draft development agreement and to specifically reference "Irven Drive Extension" and the "emergency access / active transportation trail" as described throughout the draft development agreement. This has been requested from the applicant but has yet to be received.

The draft development agreement in Appendix A has been updated to reflect the Municipal legal review.

Applicant Comments on the draft Development Agreement

On July 16, 2024, Planning staff met with the applicant to discuss their proposed changes to the draft development agreement. The proposed changes are listed in the chart below. The draft development agreement in Appendix A has not been updated to reflect these changes as staff require comments from other Departments on certain changes and the proposed amendments have not yet received Municipal legal review.

Section of Draft Development Agreement	Original	Requested Changes by Applicant	Planning Staff Initial Comments
2.2 (b)	Side yard requirement of 10 ft. (3.05 m.)	Side yard requirement reduced to 7 ft. (2.13 m.)	Planning staff reviewed the requested minimum side yard and minimum distance between grouped dwellings with the Manager of Building and Fire Inspection Services. The Manager noted that once the minimum side yards reduce to under 6.56 ft. (2 m.) the Building and Fire Code becomes more restrictive in terms of the number of openings (i.e., windows, etc.) a dwelling unit can have. The applicant was made aware of this and understands all Building and Fire Code requirements will have to be met. Policy 5.4.6 (a) (i) requires Council to consider whether the development is generally consistent with the High Density Residential (R-4) zone standards in relation to
2.2 (c)	Minimum distance between grouped dwellings requirement of 20 ft. (6.10 m.)	Minimum distance between grouped dwellings requirement reduced to 14 ft. (4.27 m.)	

			this proposal. As noted in the staff report to PAC/HAC dated July 11, 2024, the High Density Residential (R-4) zone requires a minimum of a 15 ft. side yard on one side with a 5 ft. side yard on the other, as well as a minimum of 20 ft. (6.10 m.) between grouped dwellings. Considering this proposal is an extension of the existing Crossing development and the applicant is aware of the Building and Fire Code requirements if the minimum side yards or minimum distance between grouped dwellings are further reduced, Planning staff have no concerns with this requested change.
2.3 (d)	Specifies that the emergency access / active transportation trail will not be a Municipal public street and shall be maintained and kept accessible at all times by the owner.	The Municipality own and maintain the emergency access / active transportation trail.	Need to discuss with CAO, Director of Community Development and Director of Public Works. There would be ongoing maintenance costs to the Municipality in relation to this request.
2.3 (e)	During Municipal legal review it was suggested an addition	Change the requirement to bonding instead of lien.	Planning staff have no concerns with this requested change as

	be made to 2.2 (e) to allow the Municipality the ability to lien the property if the emergency access / active transportation trail is not completed by the owner within the specified timeframe and the Municipality has to construct it.		the performance surety section of the Windsor Subdivision By-law can be referenced in the draft development agreement instead.
2.4 (f)	No on-street parking will be permitted on Irven Drive Extension, unless written permission is provided by the Municipal Traffic Authority.	Consider allowing on-street parking for visitors.	The Municipal Public Works Engineering Division has already highlighted concerns with the proposed design due to the potential for parking to impact the sidewalk, snow removal, street maintenance and solid waste collection. Need to discuss the request with the Municipal Public Works Engineering Division.
2.5 (a)	No development permit shall be issued until the location and connection design of any fire hydrant(s) connected to the Municipal water supply has been approved by the water utility, in consultation with the local Fire Chief.	No development permit shall be issued until the location and connection design of any fire hydrant(s) connected to the Municipal water supply has been approved by the water utility, in accordance with the Municipal Standards Specifications Manual.	Planning staff have no concerns with this requested change. Section 7.2.13 of the Municipal Standards Specifications Manual specifies the required spacing and desirable locations for fire hydrants.
2.12	A road reserve on PID 45162005 as shown on Schedule B is required	Consider the road reserve that may be required on PID	Need to discuss the request with the Municipal Public Works

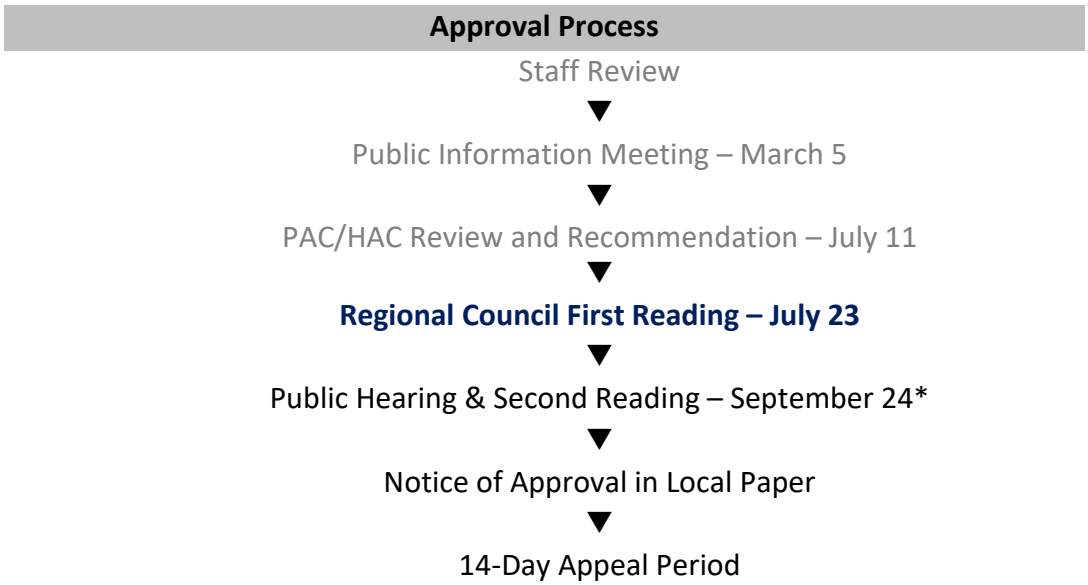
	to ensure that there is available land to construct the Payzant Drive Connection to King Street in the most effective way. In the event that the Municipal Engineer determines in their discretion that the road reserve is unnecessary for the construction of the Payzant Drive Connection, the Developer may construct on this portion of the lot with the written permission of the Municipal Engineer and the Development Officer, and changes to the Site Plan reflecting this will not be deemed an amendment to this Agreement.	45162005 to construct the Payzant Drive Connection to King Street at a later date and not within the development agreement.	Engineering Division, however, Planning staff have no initial concerns as long as the section acknowledges the road reserve may be required of the owner to construct the Payzant Drive Connection to King Street.
2.13	Current phasing section acknowledged that the development may be constructed in phases and required all construction to be completed within thirty-six (36) months of the development agreement being registered.	Consider: • Permitting the development of up to 56 units within 14 four-unit dwellings as grouped dwellings prior to Final Subdivision Approval as Phase 1 • Acknowledging that the owner intends to subdivide a portion of the four-unit dwellings onto individual lots following the	Need to discuss the request with the Municipal Public Works Engineering Division and Development Control, however, Planning staff have no initial concerns. Planning Staff could include wording to allow up to 44 dwelling units within 11 four-unit dwellings as Phase 1 and the remainder as Phase 2. Timelines could be increased for

		Municipal Services Specifications Manual, the draft development agreement and Subdivision By-law • Requiring the emergency access / active transportation trail to be constructed or bonded prior to development permits being issued for Phase 2 • Increasing the timelines for completion of both Phase 1 and Phase 2	Phase 1 to be completed within sixty (60) months of the development agreement being registered due to the number of units and complexity of subdivision process in coordinator with Municipal infrastructure takeover and increased for Phase 2 to be completed within one-hundred and twenty (120) months of the development agreement being registered. The applicant would need to update the site plan to identify Phase 1 and Phase 2.
4.2 (a)	The Owner shall provide record drawings to the Development Officer for any portion of the Development for which an engineered design is required, within ten (10) days of completion of any work which requires the engineered design.	The Owner shall provide record drawings to the Development Officer for any portion of the Development for which an engineered design is required, within thirty (30) days of completion of any work which requires the engineered design.	Planning staff have no concerns with this requested change but would need to confirm with the Municipal Public Works Engineering Division.

NEXT STEPS

As noted above, in relation to the Municipal Traffic Authority responses, the proposed development agreement does not meet the criteria of Policy 5.4.6 (c) and (g), 5.3.7 (c) and (d),

or 16.3.1 (a) (iv) and (b) therefore staff do not recommend moving forward with this application.



*anticipated dates; final dates set by Council

FINANCIAL IMPLICATIONS

The current development as proposed poses no cost to the Municipality other than providing services such as water, sewer, snow plowing, and garbage collection to new residents which would be offset by Municipal taxes.

In response to the proposed length of cul-de-sac, the Municipal Public Works Engineering Division stated *"Our suggestion would be to require a 16 meter road reserve to connect to the Payzant Connection. This would allow the municipality to construct a local municipal street in future when required."* If this was added as a requirement of the development proposal, the future construction of this road would be an additional cost to the Municipality, however, could be included in the overall project budget for the Payzant Drive Connection.

If the Municipality were to own and maintain the emergency access / active transportation trail as requested by the applicant, there would be ongoing maintenance costs.

ALTERNATIVES

In response to the application, Council may decide to:

- hold First Reading and authorize a Public Hearing to approve the development agreement as drafted or as specifically revised by direction of Council;
- hold First Reading and authorize a Public Hearing to refuse the development agreement as drafted, citing the criteria that Council consider not to be met; or

- provide alternative direction, such as requesting further information on a specific topic.

ATTACHMENTS

Appendix A	Revised Draft Development Agreement
Appendix B	Traffic Impact and Connection Study
Appendix C	2024-07-11 Staff Report - Development Agreement: 1781 King Street, Windsor (PID 45162005) and PID 45408374, Edward Drive, Garlands Crossing; File #24-15

CHIEF ADMINISTRATIVE OFFICER REVIEW

Staff have provided comments on the incompleteness of the application as well as the areas for which criteria have not been met. It is important to note that development agreements often provide for changes or alterations to municipal requirements when permitted. This can allow for greater density or specific site allowances as an example. Staff and the developer have successfully agreed upon most of the items listed in the DA with a few exceptions. Two notable exceptions are the request from the developer to include a cul-de-sac in the development at the end of Irven vs. a connection of Irven through to Payzant (connector) and the parking layout for the units in relation to the street and street parking.

Staff have provided comments as well on the changes requested by the applicant at the July 16, 2024 meeting. The comments reflect a positive outlook by staff attempting to endorse the changes where possible such as setbacks and construction phasing but note that certain items require further review.

The applicant has requested that the DA be forwarded for 1st reading consideration at this time despite the outstanding issues. The applicant is within their right to do so. Council must consider if the draft DA and the approval of 1st Reading is something they wish to proceed with at this time with the outstanding items noted.

Report Prepared by: _____
Sara Poirier, Director of Planning and Development

Report Reviewed by: _____
Alex Dunphy, Senior Planner

Report Approved by: 

Mark Phillips, Chief Administrative Officer

Appendix A

West Hants

DEVELOPMENT AGREEMENT

THIS AGREEMENT made this day of , 2024.

BETWEEN:

WEST HANTS REGIONAL MUNICIPALITY, a body corporate pursuant to the *Municipal Government Act*, having its chief place of business at 76 Morison Drive, Wentworth Creek, in the County of Hants, Province of Nova Scotia,

(Hereinafter referred to as the "Municipality")

OF THE FIRST PART

- and -

3229190 NOVA SCOTIA LIMITED a body corporate, with a head office at 130 Eileen Stubbs Avenue, Suite 201, in the County of Halifax, Province of Nova Scotia,

(Hereinafter referred to as the "Owner")

OF THE SECOND PART

WHEREAS the Owner is the registered Owner of the parcels of land located at 1781 King Street in Windsor (PID 45162005) and PID 45408374 on Edward Drive in Garlands, hereinafter referred to as the "Properties", which lands are more particularly described in Schedule A attached hereto; and

WHEREAS PID 45162005 and the majority of PID 45408374 are designated Residential on the Generalized Future Land Use Map of the Windsor Municipal Planning Strategy and zoned Two Unit Residential (R-2) on the Zoning Map of the Windsor Land Use By-law; and

WHEREAS a small portion of PID 45408374 is designated Residential on the Generalized Future Land Use Map of the West Hants Municipal Planning Strategy and zoned Two Unit Residential (R-2) on the Zoning Map of the Land Use By-law; and

WHEREAS the Owner has requested that the Municipality enter into a development agreement to permit up to 92 dwelling units within 23 four-unit dwellings grouped on the Properties (the "Development"); and

WHEREAS Policy 5.4.6 of the Windsor Municipal Planning Strategy and Section 6.1 (b) of the Windsor Land Use By-law enable Council to consider entering into a development agreement to allow new multiple unit residential developments consisting of three or more units and grouped dwellings in the Residential designation, and Policy 5.3.10 of the West Hants Municipal Planning Strategy and Section 6.1 (c) of the West Hants Land Use By-law enable Council to consider entering into a development agreement to allow development of grouped dwellings consisting of six or more dwelling units in the Three Mile Plains Growth Centre; and

WHEREAS the Council of the Municipality, at a meeting held on **Month Day**, 2024, approved this request and adopted this Agreement by policy, subject to the execution of this development agreement by the parties hereto;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants and agreements herein contained, the parties agree as follows:

PART 1 AGREEMENT CONTEXT

1.1 Definitions

In this Agreement, all words or phrases used shall carry their customary meaning unless otherwise set out in the applicable Land Use By-law, except those defined as follows:

(a) "Active Construction" means that the Owner has active development and building permits for the construction of the dwellings, and that construction activity including but not limited to equipment, machinery, and employees, are on-site working towards the necessary building inspections leading to an occupancy permit;

(b) "Applicable Land Use By-law" means the Land Use By-law that has jurisdiction related to the properties or portion thereof (i.e., the West Hants Land Use By-law applies to the properties or portion thereof in the former District of West Hants and the Windsor Land Use By-law applies to the properties or portion thereof in the former Town of Windsor);

(c) "Commencement" means the date the Owner begins Active Construction on the dwellings within this Agreement as permitted by an issued development and building permit; and

(d) "Irven Drive Extension" means a new Municipal street and associated sidewalk, water, wastewater and storm water infrastructure to be constructed at the Owner's expense on the area shown as Irven Drive Extension on Schedule B which will be deeded to the Municipality in accordance with the applicable Subdivision By-law.

1.2 Schedules

The following attached schedules shall form part of this Agreement:

Schedule A - Legal Description

Schedule B – Site Plan

1.3 Municipal Planning Strategy, Land Use By-law and Subdivision By-law

(a) *West Hants Municipal Planning Strategy* means the West Hants Municipal Planning Strategy, approved on May 13, 2008, as amended, or successor By-laws;

(b) *West Hants Land Use By-law* means the West Hants Land Use By-law, approved on May 13, 2008, as amended, or successor By-laws;

(c) *West Hants Subdivision By-law* means the West Hants Subdivision By-law, approved on May 13, 2008, as amended, or successor By-laws;

(d) *Windsor Municipal Planning Strategy* means the Municipal Planning Strategy of the Town of Windsor, approved on August 23, 2005, as amended, or successor by-laws;

(e) *Windsor Land Use By-law* means the Land Use By-law of the Town of Windsor, approved on August 23, 2005, as amended, or successor by-laws;

(f) *Windsor Subdivision By-law* means the Subdivision By-law of the Town of Windsor, approved on January 24, 2012, as amended, or successor by-laws.

PART 2 DEVELOPMENT REQUIREMENTS

2.1 Use

(a) The Parties agree that uses on the Properties shall be limited to the following:

(i) those uses permitted by the underlying zoning in the applicable Land Use By-law; and

(ii) residential development consisting of a maximum of 92 dwelling units in four-unit dwellings.

Except as otherwise provided in this Agreement, the provisions of the applicable Land Use By-law and Subdivision By-law apply to any development undertaken pursuant to this Agreement.

2.2 Development Location and Design

(a) The Development location and design shall be generally consistent with the Site Plan shown in Schedule B. Changes to the Site Plan may be approved in writing in accordance with reports generated in Section 2.6, *Site Drainage*, of this Agreement.

(b) The four-unit dwellings shall be limited to a maximum of 92 dwelling units on the Properties. The four-unit dwellings shall conform to the following requirements:

Minimum Frontage	60 ft. (18.29 m.)
Minimum Front Yard	25 ft. (7.62 m.)
Minimum Rear Yard	15 ft. (4.57 m.)
Minimum Side Yard	10 ft. (3.05 m.)*
Maximum Building Height	35 ft. (10.67 m.)
Maximum Height of Accessory Building	15 ft. (4.57 m.)

*No side yard setback is required along the common wall dividing each unit.

(c) The minimum distance between grouped dwellings shall be 20 ft. (6.10 m.).

(d) In the event that the Owner chooses to build and occupy one building at a time, the following infrastructure is required for each such building:

(i) the necessary services for the proper use and enjoyment of the building including but not limited to the public street and sidewalk, a driveway and access, landscaping, parking, lighting, and water and sewer services.

(f) Accessory buildings are permitted in accordance with Section 5.1 of the applicable Land Use By-law, *Accessory Buildings and Structures*.

(h) The Owner shall keep all undeveloped areas of the Properties landscaped which may include grass, shrubs, trees or other appropriate vegetative cover.

(i) Fencing is required along the southern lot line of the Properties where they abut with PID 45294980.

2.3 Road and Municipal Services

(a) Roads and Municipal Services in the Development shall conform to the following:

(i) the layout of the Irven Drive Extension shall be as generally shown on Schedule B. The Development Officer, in consultation with the Municipal Engineer, may give consideration to minor incidental changes to its design, without such changes being deemed to be amendments to this development agreement; and

(ii) the Irven Drive Extension, sidewalk, municipal services, and stormwater management shall be designed and constructed in accordance with the requirements of the Municipal Services Specifications Manual. Detailed design plans of the Irven Drive Extension water and sewer servicing, and storm water systems shall be approved by the Municipal Engineer for each phase of the development prior to construction commencing for that phase.

(b) In accordance with the Municipal Services Specifications Manual, the Owner shall provide a sidewalk on one side of the Irven Drive Extension.

(c) ~~Should the Owner choose not to construct Irven Drive Extension to connect to Payzant Drive Connection,~~ a minimum of 30 ft. (9.14 m.) wide emergency access / active transportation trail shall be built at the western end of Irven Drive Extension as shown on Schedule B. This emergency access must be approved by the Municipal Engineer and Traffic Authority, in consultation with the Fire Chief. ~~The Municipality shall consult with emergency service providers on the design of the emergency access. The Owner shall provide to the Municipality a copy of the maintenance agreement pertaining to the emergency access.~~

(d) The emergency access / active transportation trail will not be a Municipal public street and shall be maintained and kept accessible at all times by the Owner to the satisfaction of the Municipal Engineer and in the event of default the Municipality, in addition to any other remedies, shall have the right to undertake remediation and charge the costs back to the Owner collectible as a tax and as a first lien against the Property. Appropriate signage shall be erected at the ends of the trail indicating that the road is only for vehicular traffic as ~~to be used for~~ an emergency access only.

(e) Irven Drive Extension and the emergency access / active transportation trail will be required to be completed by the Owner to the satisfaction of the Development Officer and Municipal Engineer by December 31, 2030, or in conjunction of with the completion of the Payzant Drive Connection to King Street to be completed by the Municipality, whichever occurs first ("Emergency Access Completion Deadline"). In the event that any dwellings enabled pursuant

to this Agreement have been granted an occupancy permit and that the Emergency Access Completion Deadline has been reached, without the emergency access / active transportation trail having been completed, the Municipality, in addition to any other remedies, shall have the right to undertake completion and charge the cost back to the Owner collectable as a tax and as a first lien against the Property.

2.4 Driveways and Parking

(a) The Owner shall develop, construct, and maintain the driveways for the grouped four-unit dwellings within the Development. The distance between the driveways must be approved by the Municipal Engineer in accordance with the Municipal Services Specifications Manual.

(b) A minimum of one (1) parking space per dwelling unit shall be provided on the same lot as that building.

(c) Each required parking space shall be a minimum of 10 ft. by 20 ft. (3.05 m. by 6.10 m.) exclusive of driveways and manoeuvring aisles. Parking aisles shall be a minimum of 20 ft. (6.1 m.) wide.

(d) The driveways and parking spaces shall be constructed so as to create a stable surface for vehicle traffic and be clearly demarcated and lined by the Owner. They may be constructed using permeable construction materials to assist with stormwater retention. The vehicular entrance and exit shall be clearly demarcated.

(e) The Owner agrees that it will seek and obtain approval in writing from the Municipality before any driveway from the Development is connected to the Irven Drive Extension or any other public road.

(f) No on-street parking will be permitted on Irven Drive Extension, unless written permission is provided by the Municipal Traffic Authority.

(g) The number of parking spaces may be varied in writing by the Development Officer in accordance with Section 2.11, *Variance*, of this Agreement.

2.5 Fire Safety

(a) No development permit shall be issued until the location and connection design of any fire hydrant(s) connected to the Municipal water supply has been approved by the water utility, in consultation with the local Fire Chief.

(b) All access routes shall be kept clear of overhead obstructions and wires and be maintained by the Owner to allow unimpeded access to the Properties by

emergency services vehicles, unless otherwise agreed to in writing by the Fire Chief.

2.6 Site Drainage

(a) No development permit shall be issued until the Owner provides to the Development Officer a stormwater management plan that satisfies the Municipal Engineer that historical flooding patterns and area drainage systems have been considered and that storm water discharge will balance pre- and post-construction flows to ensure there is no negative impact on downstream properties. If the stormwater management plan provided by the Owner does not in fact balance pre-and post-construction flows to ensure the absence of such impacts the Owner shall undertake such remediation as the Municipal Engineer may reasonably require.

(b) The Owner shall undertake all construction activities in accordance with an erosion and sedimentation control plan prepared by a Professional Engineer, unless otherwise directed by Nova Scotia Environment, and also agrees to assume sole responsibility for compliance with all regulations of Nova Scotia Environment.

2.7 Servicing

(a) Waste Collection

(i) Municipal garbage collection will be provided to the dwellings in this Agreement.

(ii) The Owner shall keep any outdoor storage of garbage in an enclosed structure or in some way adequately screened so as not to be visible from or cause a nuisance to nearby properties and abutting roads.

(b) Water and Sewer Services

(i) The buildings shall be serviced with water and sewer services provided by West Hants Regional Municipality authorized by the Municipal Engineer. Detailed design plans of the water and sewer servicing connections and layout shall be in accordance with the Municipal Services Specifications Manual and shall be submitted to the Municipal Engineer for approval prior to construction.

(ii) The Owner shall be responsible for constructing, installing and maintaining the water and sewer services on the Properties.

(c) Snow Plowing

The Owner shall have sole responsibility for snow plowing within the Development, excluding the Irven Drive Extension once deeded to the Municipality.

2.8 Maintenance

The Owner shall keep the Properties and buildings and any portion thereof clean and in good repair. Any driveways, walkways, emergency access routes, active transportation trails, fences, lawns, trees, shrubs, and other landscaping elements shall be regularly maintained and kept in a tidy state and free from unkempt materials or matter of any kind.

2.9 Signs and Lighting

Signage and illumination shall be regulated under Sections 5.18 and 7.0 of the applicable Land Use By-law, *Illumination* and *Signs*, which controls lighting, size, location, and number of signs. Exterior lighting for driveways, parking areas, signs or structures shall be shielded and directed downward to ensure there is no light spilling, glare or light cast over neighbouring properties or the street.

2.10 Subdivision

Subdivision of the properties shall be permitted in accordance with this Agreement and the applicable Subdivision By-law. No additional parkland or parkland fees shall be required for subdivision or consolidation of the Properties subject to this Agreement.

2.11 Variance

In accordance with Section 5.48 of the Windsor Land Use By-law and Section 5.40 of the West Hants Land Use By-law, *Variance*, the Development Officer may grant a variance for one or more of the following requirements subject to the requirements of the *Municipal Government Act*:

(i) minimum lot area and frontage;
(ii) minimum required yard dimensions; and
(iii) number of parking spaces required.

2.12 Road Reserve

A road reserve on PID 45162005 as shown on Schedule B is required to ensure that there is available land to construct the Payzant Drive Connection to King Street in the most effective way. In the event that the Municipal Engineer determines in their discretion that the road reserve is unnecessary for the construction of the Payzant Drive Connection, the Developer may construct on this portion of the lot with the written

permission of the Municipal Engineer and the Development Officer, and changes to the Site Plan reflecting this will not be deemed an amendment to this Agreement.

2.13 Phasing

The Municipality and the Owner acknowledge that the Development as shown on Schedule B is a phased Development. Construction of the buildings and all relevant infrastructure shall be completed within thirty-six (36) months of the development agreement being registered at the Land Registry Office. If, in the opinion of the Development Officer, this time limit has not been met, Development in accordance with this Agreement shall no longer be permitted and this Agreement may be discharged in whole or in part at the option of the Municipality by resolution of Council in accordance with Section 229 of the Municipal Government Act thirty (30) days after giving Notice of Intent to Discharge to the Owner. Upon the written request of the Owner, the Municipality, by resolution of Council, may grant an extension to the date of completion of Development without such an extension being deemed to be an amendment to this Agreement.

PART 3 CHANGES AND DISCHARGE

3.1 The Owner shall not vary or change the use of the Property from that provided for in Section 2.1 of this Agreement, *Use*, unless a new agreement is entered into with the Municipality or this Agreement is amended.

3.2 Any matters in this Agreement which are not specified in Subsection 3.3 below are not substantive matters and may be approved in writing by the Development Officer without a public hearing, in accordance with Section 230 of the *Municipal Government Act*, provided that the Development Officer determines that the changes do not significantly alter the intended effect of this Agreement.

3.3 The following matters are substantive matters:

(a) the uses permitted on the Property as listed in Section 2.1;
(b) the requirement of an emergency access / active transportation trail to be provided ~~if the Owner choses not to connect Irven Drive Extension to the Payzant Drive~~ Connection, as listed in Section 2.3;
(c) the fire safety requirements listed in Section 2.5; and
(d) the requirements for a stormwater management plan to be submitted prior to a development permit being issued as listed in Section 2.6.

3.4 Upon conveyance of land by the Owner to either:

(a) the Municipality for the purpose of creating or expanding a public street over the Properties, including for the Irven Drive Extension or a portion of the Payzant Drive Connection; or

(b) the Municipality for the purpose of creating or expanding any Municipally owned facility or infrastructure over the Properties;

registration of the deed reflecting the conveyance shall be conclusive evidence that that this agreement shall be discharged as it relates to the public street or public facility, as the case may be, as of the date of registration with the Land Registry Office, but this Agreement shall remain in full force and effect for all remaining portions of the Properties.

3.5 Notwithstanding the foregoing, discharge of this Agreement is not a substantive matter, and this Agreement may be discharged by the Chief Administrative Officer in accordance with Section 229 of the *Municipal Government Act.*

3.6 Notice of Intent to Discharge this Agreement in whole or in part may be given by the Municipality to the Owner following a resolution of Council to give such Notice:

(a) as provided for in this Agreement; or

(b) at the discretion of the Municipality, with or without the concurrence of the Owner, where the Development has, in the reasonable opinion of Council on advice from the Development Officer, ceased operation for a period of at least twenty-four (24) months; or

(c) at any time upon the written request of the Owner, provided the use of the Properties is in accordance with the Land Use By-law or a new Agreement has been entered into.

3.7 Council may discharge this Agreement in whole or in part 30 days after a Notice of Intent to Discharge has been given.

PART 4 IMPLEMENTATION

4.1 Commencement of Development

The Owner may not commence any construction or use on the Properties until the Municipality has issued any development permit, building permit and/or occupancy permit that may be required. The date of commencement will be determined as the date the Owner begins Active Construction on the building within this Agreement as permitted by an issued development and building permit.

4.2 Material to be Provided

(a) The Owner shall provide record drawings to the Development Officer for any portion of the Development for which an engineered design is required, within ten (10) days of completion of any work which requires the engineered design.

(b) The Owner shall, upon written request, provide the Municipality with copies of any documentation, permits or approvals required by Provincial or Federal governments or agencies.

PART 5 ADMINISTRATION and COMPLIANCE

5.1 Compliance with other By-laws and Regulations

(a) Nothing in this Agreement shall exempt the Owner from complying with Federal, Provincial and Municipal laws, by-laws and regulations in force or from obtaining any Federal, Provincial, or Municipal license, permission, permit, authority, or approval required thereunder.

(b) Where the provisions of this Agreement conflict with those of any by-law of the Municipality applicable to the Properties (other than the Windsor or West Hants Land Use By-laws and Subdivision By-laws to the extent expressly varied by this Agreement) or any statute or regulation, the higher or more stringent requirements shall prevail.

5.2 Severability of Provisions

The provisions of this Agreement are severable from one another and the invalidity or unenforceability of one provision shall not affect the validity or enforceability of any other provision.

5.3 Interpretation

(a) Where the context requires, the singular shall include the plural and the masculine gender shall include the feminine and neutral gender.

(b) Where the written text of this Agreement conflicts with information provided in the Schedules attached to this Agreement, the written text of this Agreement shall prevail.

(c) References to particular sections of statutes and bylaws shall be deemed to be references to any successor legislation and bylaws even if the content has been amended, unless the context otherwise requires.

5.4 Municipal Responsibility

(a) The Municipality does not make any representations to the Owner about the suitability of the Properties for the Development proposed by this Agreement.

The Owner assumes all risks and must ensure that any proposed Development complies with this Agreement and all other laws pertaining to the Development.

(b) Any failure of the Municipality to insist upon a strict performance of any requirements or conditions contained in this Agreement shall not be deemed a waiver of any rights or remedies that the Municipality may have and shall not be deemed a waiver of any subsequent breach or default in the conditions or requirements contained in this Agreement.

5.5 Breach of Terms or Conditions

Upon breach of any term or condition of this Agreement, the Municipality may notify the Owner in writing. In the event that the Owner have not cured any such breach or entered into arrangements with the Municipality related to such breach to the Municipality's satisfaction, acting reasonably, within six (6) months of such notice, then the Municipality may rely upon the remedies contained in Section 264 of the *Municipal Government Act* and may enter the land and perform any of the terms contained in the Development Agreement, or take such remedial action as is considered necessary to correct a breach of the Agreement, including the removal or destruction of anything that contravenes the terms of the Agreement and including decommissioning the site. It is agreed that all reasonable expenses, whether arising out of the entry on the land or from the performance of the terms, are a first lien on the land that is the subject of the Development Agreement.

5.6 Costs

The Owner shall pay all costs associated with registering this Agreement and all costs associated with any amendment thereof.

5.7 Development Agreement Bound to Land

This Agreement shall be binding upon the parties hereto and their heirs, executors, administrators, successors and assigns, and shall run with the land which is the subject of this Agreement until such time as it is discharged by the Municipality in accordance with Section 229 of the *Municipal Government Act*.

5.8 Assignment of Agreement

The Owner may, at any time and from time to time, transfer or assign this Agreement and its rights hereunder and may delegate its obligations hereunder to an assign, successor, heir, or purchaser of the land bound by this Agreement.

5.9 Written Notice

(a) The Municipality may serve notice on the Owner personally or by ordinary mail which shall be deemed to have been received within three (3) business days of mailing, addressed to Mitchell W. Brison at 130 Eileen Stubbs Avenue, Suite 201, Dartmouth, NS, B3B 2C4, or at any other address provided in writing or email by the Owner.

(b) The Owner may serve notice on the Municipality by registered mail addressed to the Chief Administrative Officer, West Hants Regional Municipality, 76 Morison Drive, P.O. Box 3000, Windsor, NS, B0N 2T0, or at any successor address provided in writing or email by the Municipality to the Owner.

5.10 Full Agreement

This Agreement replaces and discharges the development agreement registered on PID 45408374, dated April 2, 2019 between the Municipality of the District of West Hants and 3229190 Nova Scotia Limited, 3307437 Nova Scotia Limited and 3307427 Nova Scotia Limited recorded at the Registry of Deeds in Hants County, Nova Scotia on May 16, 2019 as document #114467864, such that the sole development agreement applicable to the lands described in Schedule A attached hereto is this agreement.

IN WITNESS WHEREOF this Agreement was properly executed by the respective parties hereto on the day and year first above written.

SIGNED, SEALED AND DELIVERED	**) WEST HANTS REGIONAL**
In the presence of:	**) MUNICIPALITY**
	)
	)
	)
_____	Per: _____
Witness	) Mark Phillips, Chief Administrative Officer
	)
	)
	)
_____	) Per: _____
Witness	) Deanna Snair, Municipal Clerk
	)
	)
	)

) **3229190 NOVA SCOTIA LIMITED**
)
)
)
_____ Per:_____
Witness) Mitchell W. Brison, President

PROVINCE OF NOVA SCOTIA
COUNTY OF HANTS

ON THIS day of , A.D. 2024, before me, the subscriber, personally came and appeared , a subscribing witness to the foregoing Indenture, who, having been by me duly sworn, made oath and said that **WEST HANTS REGIONAL MUNICIPALITY**, one of the parties thereto, caused the same to be executed in its name and on its behalf and its corporate seal to be thereunto affixed in presence.

_____

A Commissioner of the Supreme Court of Nova Scotia

PROVINCE OF NOVA SCOTIA
COUNTY OF HANTS

ON THIS day of , A.D. 2024, before me, the subscriber, personally came and appeared , a subscribing witness to the foregoing Indenture, who, having been by me duly sworn, made oath and said that, **Mitchell W. Brison**, one of the parties thereto, signed, sealed and delivered the same in presence.

_____

A Commissioner of the Supreme Court of Nova Scotia

AFFIDAVIT OF CLERK

WEST HANTS REGIONAL MUNICIPALITY

I, Deanna Snair of _____, Hants County, Nova Scotia make oath and swear that:

1. I am the Clerk of the West Hants Regional Municipality (the "Municipality") and I have personal knowledge of the matters to which I have sworn in this Affidavit.

2. The Municipality is a body corporate pursuant to the *Municipal Government Act*, S.N.S. 1988, c.18, as amended.

3. I acknowledge that the Municipality executed the attached Instrument by its proper designates duly authorized in that regard under seal on the date of this Affidavit pursuant to subsection 13(3) of the *Municipal Government Act*, S.N.S. 1988, c.18, as amended. This acknowledgement is made pursuant to subsection 31(a) of the Registry Act, R.S.N.S. 1989, c.392 and/or clause 79(1)(a) of the Land Registry Act, S.N.S. 2001, c.6, as amended, for the purpose of registering or recording the Instrument.

4. The Municipality is resident in Canada for the purposes of the Income Tax Act (Canada).

I certify that on this _____, 2024
the Municipal Clerk, Deanna Snair came before me, made oath,
and swore the foregoing affidavit at
_____, Nova Scotia.

_____
A BARRISTER/COMMISSIONER OF THE
SUPREME COURT OF NOVA SCOTIA

_____
Deanna Snair, Clerk

Canada
Province of Nova Scotia

AFFIDAVIT & PROOF OF EXECUTION (CORPORATE)

I, Mitchell W. Brison, Nova Scotia, make oath and say that:

1. I, Mitchell W. Brison, of **3229190 NOVA SCOTIA LIMITED** the "Corporation". Except as otherwise stated I have personal knowledge of the matters to which I have sworn in this Affidavit.

2. I acknowledge that I executed the foregoing instrument on behalf of the Corporation on the date of this affidavit; this acknowledgment is made for the purpose of registering such instrument pursuant to s.31(a) of the Registry Act, R.S.N.S. 1989, c.392 or ss.79 and 83 of the Land Registration Act as the case may be.

3. I verify that I have the authority to execute the foregoing instrument on behalf of the corporation and thereby bind the Corporation.

4. The Corporation is a resident of Canada under the Income Tax Act (Canada).

5. The Ownership of a share or an interest in a share of the Corporation does not entitle the owner of such share or interest in such share to occupy a dwelling owned by the Corporation.

I certify that on this _____, 2024
the Deponents came before me, made oath,
and swore the foregoing affidavit at
_____, Nova Scotia.

_____ _____

A BARRISTER/COMMISSIONER OF THE SUPREME COURT OF NOVA SCOTIA

MITCHELL W. BRISON, President

Schedule A
Legal Description

PID 45162005

ALL that lot of land in the Town of Windsor shown as Lot AB-1 on a plan of lands of Nova Scotia Farm Loan Board (Philip I. Burgess) made by Robert S. Redden, NSLS, dated the 31 st day of July A.D., 1981, approved by the Town of Windsor on the 18th day of August, A.D., 1981 and filed at the Registry of Deeds at Windsor as Plan P-3400, said Lot being described as follows:

BEGINNING at a survey marker driven in the ground on the Eastern boundary of the Old Halifax Road, the said survey marker being distant five hundred seventy-seven decimal twenty-five feet (577.25 feet) in a direction South eighty-eight degrees thirty minutes fifty-five seconds East (S 88 degrees 30 minutes 55 seconds E) from NSCM No. 8629;

THENCE IN A Northeasterly and Easterly direction following the boundary of the old Halifax Road three hundred seventy feet (370 feet) more or less to another survey marker driven in the ground at a point distant three hundred fifty-eight decimal twenty-three feet (358.23 feet) in a direction North sixty-two degrees fifty-seven minutes fifty-eight seconds West (N 62 degrees 57 minutes 58 seconds W) from the survey marker at the place of beginning;

THENCE North sixty-seven degrees zero zero minutes zero zero seconds East (N 67 degrees 00 minutes 00 seconds E) seven hundred seventy-five decimal zero six feet (775.06 feet) to a survey marker driven in the ground;

THENCE South twenty-six degrees fifty-nine minutes fifty-five seconds East (S 26 degrees 59 minutes 55 seconds E) four hundred eighteen decimal eight-six feet (418.86 feet) to a survey marker driven in the ground;

THENCE South seventy-eight degrees zero nine minutes thirteen seconds West (S 78 degrees 09 minutes 13 seconds W) three hundred decimal thirteen feet (300.13 feet) to an iron bar driven in the ground;

THENCE South seventy-seven degrees forty-four minutes zero two seconds West (S 77 degrees 44 minutes 02 seconds W) one hundred thirty-six decimal fifty-five feet (136.55 feet) to an iron bar driven in the ground;

THENCE North twenty-three degrees twenty-one minutes twenty seconds West (N23 degrees 21 minutes 20 seconds W) thirty-nine decimal sixty-six feet (39.66 feet) to a survey marker driven in the ground;

THENCE South sixty-two degrees fifty-eight minutes fifty-six seconds West (S 62 degrees 58 minutes 56 seconds W) seventy feet (70 feet) to a survey marker driven in the ground;

THENCE south eighty degrees twenty-eight minutes fifty-six seconds West (S 80 degrees 28 minutes 56 seconds W) fifty feet (50 feet) to a survey marker driven in the ground;

THENCE North eighty-six degrees thirty-one minutes zero four seconds West (N 86 degrees 31 minutes 04 seconds W) thirty feet (30 feet) to the survey marker at the place of beginning;

CONTAINING five decimal zero (5.0) acres more or less;

Burden One:

SUBJECT TO a sewer line easement 20 feet in width from the Southerly boundary of Lot AB-1 Northerly over, across and under Lot AB-1 to where the present sewer line is located to the manhole at or near the northerly boundary of Lot AB-1, said easement for the benefit of the lands presently of Grant A. Burgess.

Burden Two:

SUBJECT TO an easement 66 feet in width for access from the former Old Halifax Road along the northerly boundary of Lot AB-1 to the lands of Philip Burgess.

Benefit:

TOGETHER WITH a right of way for all purposes from King Street, in the Town of Windsor, aforesaid, to Lot AB-1, which said right-of-way has been previously described as follows:

Also a right-of-way from the lands hereby conveyed on, to and over the old Halifax Road aforesaid and across lands of the Nova Scotia Railway, now the Dominion Atlantic Railway, and unto to the new post road leading from Windsor to Halifax as it was formerly used by the said Thomas McLatchy, and for all purposes whatsoever.

*** Municipal Government Act, Part IX Compliance ***

Compliance:

The parcel is created by a subdivision (details below) that has been filed under the Registry Act or registered under the Land Registration Act

Registration District: HANTS COUNTY
Registration Year: 1981
Plan or Document Number: 3400

PID 45408374

ALL that certain lot, piece or parcel of land situate, lying and being at Windsor and Garlands Crossing in the County of Hants, Province of Nova Scotia which may be more particularly bounded and described as follows:

BEGINNING at a survey marker set in the southwesterly margin of Irven Drive, so called, at a northerly corner of Block 4, which said survey marker is 4,512.427 meters from NSHPN 208653 when measured on Calculated Grid Tie line having a bearing of North 67 degrees 07 minutes 31.5 seconds West therefrom;

THENCE North 16 degrees 19 minutes 22 seconds West along the southwesterly margin of Irven Drive a distance of 16.002 meters to the southeasterly boundary of Lot 445;

THENCE South 73 degrees 40 minutes 38 seconds West along Lot 445 a distance of 7.305 meters to a survey marker set at the southwesterly corner thereof;

THENCE North 16 degrees 19 minutes 22 seconds West along Lot 445 a distance of 36.576 meters to a survey marker set in the southerly boundary of lands now or formerly of Her Majesty the Queen in right of the Province of Nova Scotia represented by the Department of Transportation and Public Works;

THENCE South 73 degrees 40 minutes 38 seconds West along lands now or formerly of Her Majesty the Queen in right of the Province of Nova Scotia represented by the Department of Transportation and Public Works a distance of 115.54 meters more of less to a survey marker found at the northeast corner of Lot AB-1 as shown on Plan No. 3400 filed at the Registry of Deeds for Hants County on September 17, 1981;

THENCE Southeasterly along Lot AB-1 a distance of 418.86 feet more or less to a survey marker found in the northerly boundary of Lot 1A;

THENCE North 78 degrees 09 minutes 13 seconds East along Lot 1A a distance of 190.87 feet to a survey marker found in the southwesterly boundary of Block 4;

THENCE North 11 degrees 50 minutes 58 seconds West along Block 4 a distance of 195.457 meters to a survey marker set at a northwest corner thereof;

THENCE North 73 degrees 40 minutes 38 seconds East along Block 4 a distance of 35.140 meters to the place of beginning.

SUBJECT to an easement to the Municipality of the District of West Hants over and across Parcel SSE-1 as shown on Plan 107927965 which said easement is more fully described in a Grant of Easement dated the 18th day of August, 2015 and recorded in the Hants County Land Registration Office as document 107947526 on October 16, 2015.

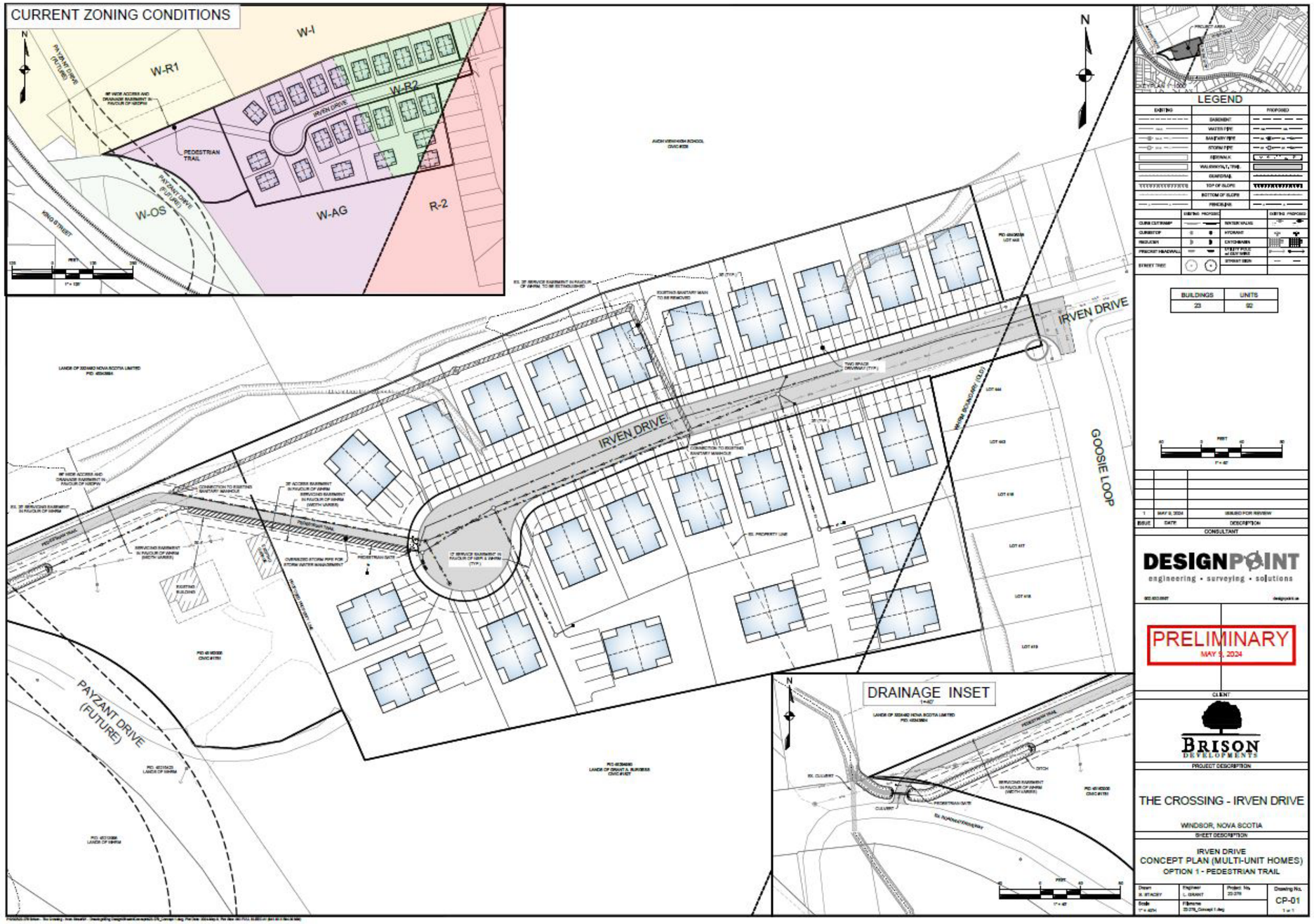
*** Municipal Government Act, Part IX Compliance ***

Compliance:

The parcel is created by a subdivision (details below) that has been filed under the Registry Act or registered under the Land Registration Act

Registration District: HANTS COUNTY
Registration Year: 2018
Plan or Document Number: 112989844

Schedule B
Site Plan


CURRENT ZONING CONDITIONS
W-I
W-R1
W-R2
W-AG
W-OS
R-2
PEDESTRIAN TRAIL
IRVEN DRIVE
WING STREET
PAYZANT DRIVE (FUTURE)
IRVEN DRIVE
GOOSIE LOOP
DRAINAGE INSET
LEGEND
BUILDINGS
UNITS
23
92
PRELIMINARY
MAY 9, 2024
BRISON DEVELOPMENTS
THE CROSSING - IRVEN DRIVE
WINDSOR, NOVA SCOTIA
IRVEN DRIVE
CONCEPT PLAN (MULTI-UNIT HOMES)
OPTION 1 - PEDESTRIAN TRAIL
CP-01

Appendix B

WEST HANTS
TRAFFIC IMPACT AND CONNECTION STUDY
FINAL REPORT

PREPARED FOR:
WEST HANTS REGIONAL MUNICIPALITY

Project No. CA0022664.7995

JULY 2024

wsp

TABLE OF CONTENTS

APPENDICES

PREPARED BY: FARIBA HOSSAIN
BRIANNA RIETZEL, EIT
PATRICK HATTON, P.ENG.

1 INTRODUCTION

Background

The West Hants Regional Municipality (WHRM) is seeing substantial development within the Windsor / Garlands Crossing area and has retained WSP Canada Inc. to complete this Traffic Impact and Connection Study that projects the future traffic volumes in proximity to the Crossing development in Windsor, NS. The study area is shown in Figure 1 while the potential alignment of new roadways in the area considered in this project are shown in Figure 2. The Traffic Impact and Connection Study will consider connectivity and requirements for new intersection(s) for connection options in the area and identifies the lane configurations and alignments of new recommended intersections.

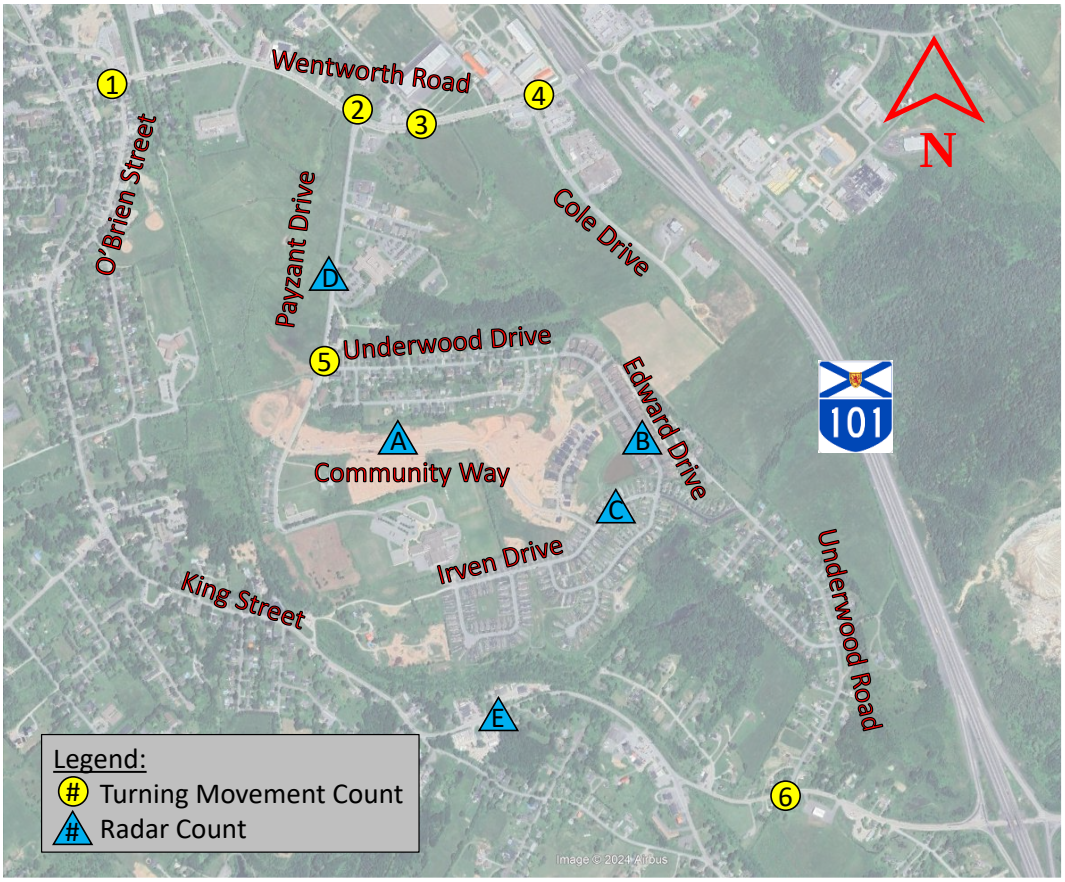


Figure 1 – Study Area and Study Intersections

Study Objectives

The objectives of the Traffic Impact Study are to:

1. Develop projected 2040 background weekday AM and PM peak hourly volumes for Study Intersections.
2. Estimate the number of weekdays AM and PM peak hour trips that will be generated by the proposed development.
3. Distribute and assign site generated trips to Study Intersections to project 2040 peak hourly volumes that include trips generated by planned developments in the area.
4. Evaluate impacts of site generated traffic on the performance of Study Intersections.
5. Complete warrant analyses, as necessary, for Study Intersections and recommend improvements that may be needed at Study Intersections to mitigate the impacts of site development.

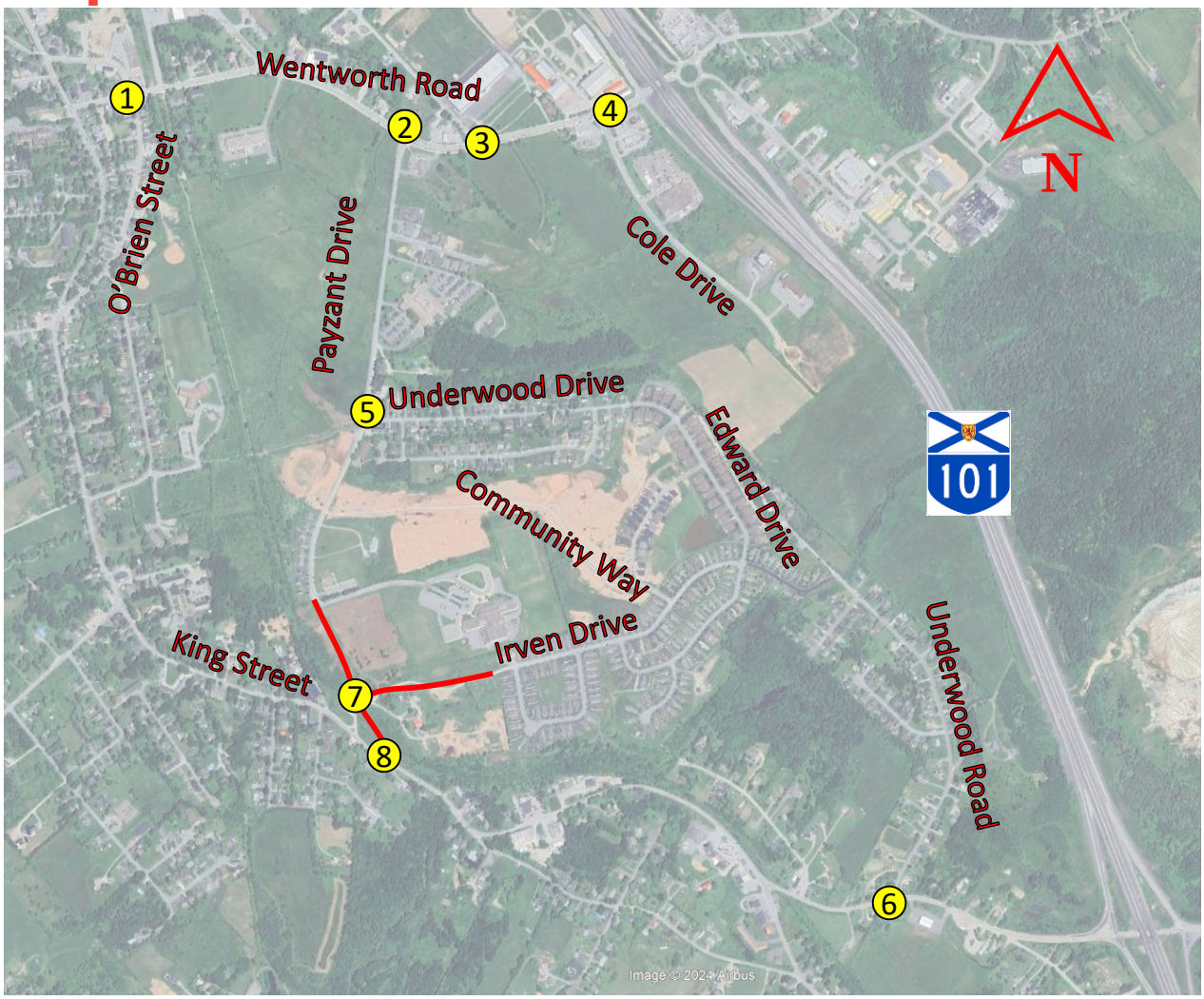


Figure 2 – Potential Road Layout

2 STUDY AREA DESCRIPTIONS

Existing Study Road Descriptions

Wentworth Road is a three-lane collector roadway (one lane in each direction and a centre left-turning lane). The posted speed limit within the study area is 50 km/h. There are concrete sidewalks on both sides of Wentworth Road.

Payzant Drive is a minor collector road that has two lanes with one lane in each direction and a posted speed limit of 50 km/h. There is an asphalt sidewalk on the east side of the road.

O'Brien Street / King Street is a major collector that serves as a portion of Nova Scotia Trunk 1. The corridor has two lanes with one lane in each direction and a posted speed limit of 50 km/h in the study area. King Street has a 60km/h posted speed limit south of the study area. There is asphalt / concrete sidewalk on one or both sides along portions of this corridor.

Cole Drive is a two-lane collector road with one lane in each direction and a posted speed limit of 50 km/h. There is a sidewalk on the east side of the road.

Trunk 14 is Nova Scotia highway that has two lanes with one lane in each direction and a posted speed limit of 50 km/h within the study area.

Existing Study Intersection Descriptions

Intersection #1 – Wentworth Road at O'Brien Street is a 4-leg signalized intersection with a single lane approach in the eastbound direction and a dedicated left-turn lane, a through lane, and a dedicated right-turn lane in the westbound direction on Wentworth Road. The northbound approach has a shared left-turn/through lane and a right-turn lane, and the southbound approach has a left-turn lane and a shared through/right-turn lane on O'Brien Street. There are marked pedestrian crossings on all approaches.

Intersection #2 – Wentworth Road at Payzant Drive is a 4-leg intersection with stop control on the Payzant Drive (northbound) approach and Legal Aid Driveway (southbound) approach. The eastbound and westbound approaches have a shared through/right-turn lane and a dedicated left-turn lane, and the northbound approach has a left-turn lane and a right-turn lane. The southbound approach is a single lane. There is a marked pedestrian crossing on the northbound and southbound approach and an RA-5 crossing on the westbound approach.

Intersection #3 – Wentworth Road at Centennial Drive is a 3-leg intersection with stop control on the Centennial Drive approach (southbound approach). The eastbound approach has a through lane and a dedicated left-turn lane, and the westbound approach has a shared through/right-turn lane. The southbound approach is a single lane.

Intersection #4 – Wentworth Road at Cole Drive is a 4-leg signalized intersection. The eastbound approach has a right-turn lane and a shared through/left-turn lane, and the westbound approach has a left-turn lane and a shared through/right-turn lane. The northbound approach has a right-turn channelized lane and a shared through/left-turn lane, and the southbound approach is a single lane. There are marked pedestrian crossings on all approaches.

Intersection #5 – Payzant Drive at Underwood Drive is a 3-leg intersection with stop control on Underwood Drive. All approaches are shared movements. There are marked pedestrian crossings at the northbound and westbound approaches.

Intersection #6 – Trunk 14 at Underwood Road is a 3-leg intersection with stop control on Underwood Road. All approaches are shared movements and there are no marked pedestrian crossings at this intersection.

3 BACKGROUND TRAFFIC, TRIP GENERATION, DISTRIBUTION, AND ASSIGNMENT

Turning Movement Counts

Turning movement counts were collected by WSP on Wednesday, April 3rd, 2024 at the study intersections during the morning (7:00-9:00AM) and afternoon (4:00-6:00PM) peak periods. Additional turning movement counts were collected on Wednesday, June 26th, 2024 at the Trunk 14 / Underwood Road intersection during the morning (7:00-9:00AM) and afternoon (4:00-6:00PM) peak periods. Intersection counts have been tabulated in 15-minute intervals with peak hours indicated by shaded areas. Turning movement volumes are provided in Tables A-1 to A-6, Appendix A.

Radar Counts

Radar count data were collected by WSP beginning in the afternoon on Monday, June 10th, 2024, and ending late morning on Friday, June 14th, 2024, at five radar locations (See Figure 1). Radar counts are provided in Tables A-7 to A-11, Appendix A.

Traffic Growth Rate

An annual growth rate of 1.0% has been applied to project the 2040 background volumes for this Traffic Impact Study for the planned developments.

Future Nearby Development

There is ongoing development planned or proposed within the study area. Information on development plans for 10 development areas (parcels) has been provided by the West Hants Regional Municipality. In total, approximately 2,102 residential units are anticipated, and the trips generated by these nearby developments have been considered in the volume projections.

Prepared Trip Generation Estimates

When using the published trip generation rates in the *Trip Generation Manual (Institute of Transportation Engineers)*, the transportation engineer's objective should be to provide a realistic estimate of the number of trips that will be generated by the proposed development.

Estimation of Trips Generated by Background Development

There are ten development areas that have been considered and are expected to include a total of about 2,102 residential units. The approximate area of each of these ten development parcels are shown in Figure 3.

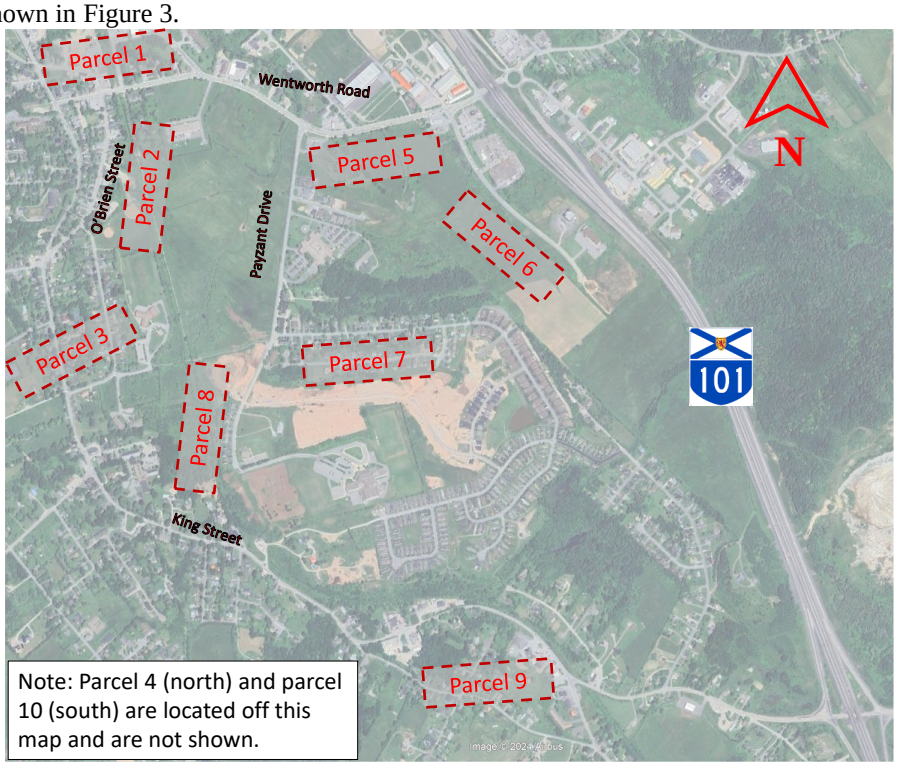


Figure 3 – Future Development Areas

Proposed Development

The proposed development is expected to include 1,224 multifamily mid-rise housing, 533 single-family attached housing and 345 single-family detached housing.

Anticipated Land Use for the Proposed Development

Trip generation estimates for the proposed development were prepared using published rates from *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, Washington, 2021).
Using the methodology provided in *Trip Generation Handbook, 3rd Edition* (Institute of Transportation Engineers, Washington, 2017), estimates of the vehicle trips generated by these additional developments (See Table 1).

Trips Generated by the Proposed Development

Trip generation estimates for the proposed developments are summarized in Table 1. It is estimated that the development will generate:

- 945 two-way vehicle trips (244 entering and 701 exiting) during the AM peak hour; and,
- 1,108 two-way vehicle trips (671 entering and 437 exiting) during the PM peak hour.

Table 1 – Trip Generation Estimates for the Proposed Developments

Parcel	Land Use[1]	Units[2]	Trip Generation Rates[3]				Trip Generation Estimates[2]			
			AM Peak		PM Peak		AM Peak		PM Peak	
			In	Out	In	Out	In	Out	In	Out
1	Multifamily Housing (Mid Rise) (Dwelling Units) Land Use 221	108	Equations from Page 275 & 276				8	28	26	17
	Single-Family Attached Housing (Dwelling Units) Land Use 215	113	Equations from Page 239 & 240				16	37	36	27
2	Multifamily Housing (Mid Rise) (Dwelling Units) Land Use 221	112	Equations from Page 275 & 276				9	29	27	17
3	Multifamily Housing (Mid Rise) (Dwelling Units) Land Use 221	126	Equations from Page 275 & 276				10	34	30	19
4	Multifamily Housing (Mid Rise) (Dwelling Units) Land Use 221	164	Equations from Page 275 & 276				14	47	39	25
5	Multifamily Housing (Mid Rise) (Dwelling Units) Land Use 221	240	Equations from Page 275 & 276				22	72	57	37
6	Single-Family Attached Housing (Dwelling Units) Land Use 215	84	Equations from Page 239 & 240				12	26	26	20
	Single-Family Detached Housing (Dwelling Units) Land Use 210	232	Equations from Page 220 & 221				42	119	138	81
7	Single-Family Detached Housing (Dwelling Units) Land Use 210	63	Equations from Page 220 & 221				13	36	41	24
	Multifamily Housing (Mid Rise) (Dwelling Units) Land Use 221	176	Equations from Page 275 & 276				15	51	42	27
	Single-Family Attached Housing (Dwelling Units) Land Use 215	111	Equations from Page 239 & 240				16	36	36	27
8	Single-Family Attached Housing (Dwelling Units) Land Use 215	90	Equations from Page 239 & 240				13	28	29	22
	Multifamily Housing (Mid Rise) (Dwelling Units) Land Use 221	298	Equations from Page 275 & 276				27	92	71	45
9	Single-Family Attached Housing (Dwelling Units) Land Use 215	21	Equations from Page 239 & 240				2	4	5	4
10	Single-Family Detached Housing (Dwelling Units) Land Use 210	50	Equations from Page 220 & 221				10	29	33	19
	Single-Family Attached Housing (Dwelling Units) Land Use 215	87	Equations from Page 239 & 240				12	27	28	21
	Single-Family Attached Housing (Dwelling Units) Land Use 215	27	Equations from Page 239 & 240				3	6	7	5
Baseline Vehicle Trip Estimate for the Proposed Development							244	701	671	437

NOTES:
1. Land Use Codes are from Trip Genration, 11th Edition, (Institute of Transportation Engineers, Washington, 2021).
2. "Residential Units" for Multifamily Housing, Single-Family Attached Housing and Single-Family Detached Housing.
3. Rates and equations are from Trip Generation, 11th Edition, Institute of Transportation Engineers, 2021. Directional splits were corrected using the Errata released by ITE. Rates are 'vehicles per hour per unit'; trips generated are 'vehicles per hour for peak hours'.

Trip Distribution and Assignment

The trips generated by each development were distributed to the Study Intersections for each parcel based on counted volumes and local knowledge of the area considering major trip origins and destinations in the region. The estimated directional distributions are provided below.

Direction	Distribution	Description
Highway 101 W	30%	Hantsport, Kentville, Wolfville,
Wentworth Commercial Area Highway 101 E	55%	Wentworth Commercial Area, East Uniacke, Halifax
Other	15%	Trunk 14, Downtown Windsor

Peak hourly estimated site generated vehicle volumes were distributed and assigned to external streets and intersections in the study area using the above assumptions.

Volume Figures

Peak hourly existing traffic volumes for AM and PM peak hours of the existing intersections of the study area are illustrated diagrammatically on Figure A-1, Appendix A.

Future 2040 traffic volumes that include the background growth rate and consider the full buildout of the area developments are illustrated diagrammatically on Figure A-2, Appendix A.

With the development of two new intersections, the peak hourly estimated site generated vehicle volumes were redistributed and reassigned to study streets and intersections with future 2040 volumes illustrated diagrammatically on Figure A-3, Appendix A.

4 INTERSECTION OPERATIONAL ANALYSIS

Intersection Capacity Analysis was completed to estimate how intersections may be expected to operate into the future without and with two new intersections built. This section of the report addresses how left-turn lane warrants and traffic signal warrants were conducted and how each intersection was evaluated. The following subsections identify each study intersection and summarize the results of the operational analysis.

Left-Turn Lane Warrant Analysis

Left-turn movements on a two-lane street may cause both operational and safety problems. Operational problems result as a vehicle stopped waiting for an opportunity to turn across 'heavy' opposing traffic causes a queue of stopped vehicles to form. Safety problems result from rear end collisions when a stopped left-turning vehicle is struck by an advancing vehicle, or from head-on or right-angle collisions when a left-turning vehicle is struck by an opposing vehicle.

The *Geometric Design Standards for Ontario Highways Manual* contains nomographs for left-turn lane analysis for two lane streets at unsignalized intersections. The analysis method, which is normally used by WSP Atlantic to evaluate the need for left-turn lanes, uses a series of nomographs that consider speed, advancing volumes, left-turns as a percentage of advancing volumes, and opposing volumes. A point, based on 'opposing' and 'advancing' volumes, plotted to the right of the 'warrant line' of the appropriate '% left-turns' and 'approach speed' nomograph, indicates that a left-turn lane is warranted for the conditions used in the analysis. Similarly, a point that is plotted to the left of the warrant line indicates that a left-turn lane is not warranted.

Left turn lane analyses have been completed for the King Street at Payzant Drive intersection using projected 2040 peak hourly volumes with site generated trips (Figure B-1, Appendix B). The following is the result:

- **King Street at Payzant Drive** – A left-turn lane **is warranted** along King Street for traffic turning to Payzant Drive during the PM peak hour.

Traffic Signal Warrant Analysis

A signal warrant analysis is completed to determine if the installation of traffic signals at an intersection will provide a positive impact on total intersection operation. That is, the benefits in time saved and improved safety that will accrue to vehicles entering from a side street will exceed the impact that signals will have in time lost and potential additional collisions for vehicles approaching the intersection on the main street.

The *Canadian Traffic Signal Warrant Matrix Analysis (Transportation Association of Canada (TAC), 2005)* considers 100 warrant points as an indication that traffic signals will provide a positive impact. Signal warrant analysis uses vehicular and pedestrian volumes, and intersection, roadway and study area characteristics to calculate a warrant point value.

Evaluation of traffic signal warrants were completed for the future King Street at Payzant Drive intersection using 2040 traffic volumes with the proposed development and **traffic signalization is not warranted** at this intersection (The warrant is included on Page B-2, Appendix B). Therefore, STOP control on Payzant Drive and free flow along King Street is recommended for this intersection.

Intersection Capacity Analysis Results

Synchro 11 software have been used for performance evaluation of the Study Intersections. Summaries of the results are provided in the following sub-sections and detailed results of the analyses are included in Appendix C.

The level or quality of performance of an intersection in terms of traffic movement is determined by a level of service (LOS) analysis. LOS for intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and increased travel time. LOS criteria are stated in terms of average control delay per vehicle which includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

The projected 95th percentile vehicle queue is the length that the projected queue is expected to be less than 95% of the time during the associated peak hour.

One other measure to compare intersection operations is the volume to capacity ratio (v/c). A v/c ratio of 1.00 indicates that the intersection or approach is operating at capacity while a v/c less than 1.00 indicates that the intersection is operating with additional available capacity for future growth. Generally, v/c ratios of less than 0.85 indicate sufficient reserve capacity and the intersection will be performing within acceptable delays.

4.1 ANALYSIS SCENARIOS

Summary Analysis Scenarios Considered

***Scenario 1 – Future 2040 with Site*:** Represents future 2040 traffic volumes on the existing road network, including the traffic control and lane configurations that may be warranted background growth and with site generated trips.

Scenario 2 – Future 2040 with Site & intersection modifications: Represents future 2040 traffic volumes with the proposed development, including the extension of Payzant Drive to King Street and of Irven Drive to the extended Payzant Drive.

4.2 INT #1: WENTWORTH ROAD AT O'BRIEN STREET

Operational performance results the AM and PM peak hours at this intersection under the two analysis scenarios are provided in Table 2.

The intersection is expected to operate well under all scenarios and peak hours. The southbound left turn queue is expected to extend beyond the available storage (about 30m) during the PM peak hour and consideration should be given to extending this storage if opportunities are available. The northbound lane on O'Brien Street north of the intersection is wide in this area and there may be opportunities to extend this southbound left turn lane through pavement marking modifications. The westbound left turn queue is expected to extend beyond the available storage of 24m during the PM peak hour and consideration could be given to extending this storage if opportunities are available.

Table 2 - Intersection Capacity Analysis: Wentworth Road at O'Brien Street

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement								Overall Intersection	
	Wentworth Road				O'Brien Street					
	EB-LTR	WB-L	WB-T	WB-R	NB-LT	NB-R	SB-L	SB-TR	Delay	Control
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections AM Peak Hour										
Delay	12.0	14.6	9.8	3.8	10.2	3.8	15.1	8.9	8.9	
LOS	B	B	A	A	B	A	B	A		
v/c	0.35	0.42	0.08	0.38	0.23	0.46	0.51	0.02		
Queue	24.0	21.1	7.1	10.6	16.9	11.9	27.3	3.3		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections AM Peak Hour										
Delay	12.8	13.8	9.5	3.7	9.8	3.8	14.8	9.1	8.9	
LOS	B	B	A	A	A	A	B	A		
v/c	0.44	0.39	0.08	0.40	0.14	0.43	0.49	0.02		
Queue	29.9	18.7	6.9	10.6	11.4	11.4	27.0	3.4		
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections PM Peak Hour										
Delay	37.0	18.8	13.9	3.2	36.4	8.4	19.4	13.4	17.7	
LOS	D	B	B	A	D	A	B	B		
v/c	0.58	0.60	0.12	0.41	0.56	0.47	0.54	0.09		
Queue	50.1	54.1	17.9	14.3	46.8	17.2	52.1	12.9		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections PM Peak Hour										
Delay	34.5	16.5	12.3	3.0	34.9	9.9	19.9	13.8	16.5	
LOS	C	B	B	A	C	A	B	B		
v/c	0.59	0.57	0.12	0.42	0.42	0.45	0.54	0.09		
Queue	50.7	46.6	16.0	13.4	30.7	15.9	52.5	13.3		

4.3 INT #2: WENTWORTH ROAD AT COLE DRIVE

Operational performance results for this intersection are provided in Table 3 for both the AM and PM peak hours.

The intersection is expected to operate well under each scenario with operations improving (particularly the heavy eastbound through movement) with the added connection of Payzant Drive to King Street (Scenario 2) due to the reassigned traffic to that new connection.

The westbound left turn queue is expected to extend beyond the available storage of 33m during the PM peak hour, but conditions improved due to the reassigned traffic to that new connection. This improvement results in reduced queueing on the westbound left turn movement in Scenario 2, reducing the spill back and impact to the westbound through volume during the PM peak hour. Consideration could be given to extending this storage if opportunities are available.

Table 3 - Intersection Capacity Analysis: Wentworth Road at Cole Drive

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement							Overall Intersection	
	Wentworth Road				Cole Drive				
	EB-LT	EB-R	WB-L	WB-TR	NB-LT	NB-R	SB-LTR	Delay	Control
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections AM Peak Hour									
Delay	27.3	8.2	13.8	11.3	35.5	6.7	23.0	18.0	
LOS	C	A	B	B	D	A	C		
v/c	0.81	0.28	0.59	0.56	0.61	0.38	0.01		
Queue	133.0	23.4	26.0	91.6	45.2	14.3	1.8		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections AM Peak Hour									
Delay	23.1	6.6	9.5	12.0	29.5	6.2	20.0	15.0	
LOS	C	A	A	B	C	A	B		
v/c	0.69	0.32	0.45	0.58	0.57	0.36	0.01		
Queue	81.9	18.0	24.4	85.2	43.2	13.8	1.7		
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections PM Peak Hour									
Delay	39.1	10.4	25.3	11.9	43.6	6.5	0.0	23.3	
LOS	D	B	C	B	D	A	A		
v/c	0.88	0.37	0.75	0.58	0.76	0.48	0.00		
Queue	147.7	28.7	57.3	83.0	65.7	17.4	0.0		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections PM Peak Hour									
Delay	32.1	9.1	16.2	11.2	39.7	6.3	0.0	19.3	
LOS	C	A	B	B	D	A	A		
v/c	0.81	0.38	0.68	0.52	0.73	0.47	0.00		
Queue	115.9	25.6	39.6	67.8	65.7	17.4	0.0		

4.4 INT #3: WENTWORTH ROAD AT PAYZANT DRIVE

Operational performance results for this intersection are provided in Table 4 for both the AM and PM peak hours.

With planned signalization of this intersection, the eastbound through, westbound left, and northbound left movements are expected to continue to operate with higher delays, volume to capacity ratios, and queues.

Consideration could be given to the construction of an eastbound right turn lane on Wentworth Drive for traffic turning to Payzant Drive to improve the queue and volume to capacity ratios for that approach. However, conditions improved due to the reassigned traffic to that new connection during the PM peak hour.

Table 4 - Intersection Capacity Analysis: Wentworth Road at Payzant Drive and Legal Aid Driveway

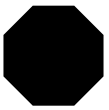
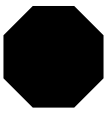
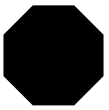
LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement							Overall Intersection	
	Wentworth Road				Payzant Drive		Legal Aid Driveway		
	EB-L	EB-TR	WB-L	WB-TR	NB-L	NB-TR	SB-LTR	Delay	Control
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections AM Peak Hour									
Delay	15.8	40.9	36.4	6.7	33.5	10.0	0.0	25.6	
LOS	B	D	D	A	C	B	A		
v/c	0.02	0.91	0.86	0.32	0.45	0.74	0.02		
Queue	3.2	167.7	96.0	41.5	27.2	24.4	0.0		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections AM Peak Hour									
Delay	15.7	40.2	32.4	6.6	33.1	9.6	22.3	25.1	
LOS	B	D	C	A	C	A	C		
v/c	0.02	0.92	0.83	0.32	0.44	0.70	0.02		
Queue	3.2	170.3	84.1	41.5	26.3	22.1	2.3		
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections PM Peak Hour									
Delay	13.0	33.5	37.6	9.4	43.4	12.6	0.0	24.0	
LOS	B	C	D	A	D	B	A		
v/c	0.01	0.88	0.85	0.52	0.65	0.72	0.01		
Queue	1.7	168.0	82.3	76.1	47.7	36.2	0.0		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections PM Peak Hour									
Delay	13.0	30.3	17.6	10.0	40.7	10.4	22.3	19.5	
LOS	B	C	B	A	D	B	C		
v/c	0.01	0.86	0.66	0.54	0.63	0.72	0.01		
Queue	1.7	142.8	36.6	76.1	49.2	32.4	2.4		

4.5 INT #4: WENTWORTH ROAD AT CENTENNIAL DRIVE

Operational performance results for this intersection are provided in
Table 5 for both the AM and PM peak hours. The intersection is expected to operate well under all scenarios.

With planned new connection and reassigned traffic, the southbound left movements are expected to continue to operate with higher delays, volume to capacity ratios, and queues during the PM peak hour.

Table 5 - Intersection Capacity Analysis: Wentworth Road at Centennial Drive

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement				Overall Intersection	
	Wentworth Road			Centennial Drive		
	EB-L	EB-T	WB-TR	SB-LR	Delay	Control
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections AM Peak Hour						
Delay	10.3	0.0	0.0	25.5	1.3	
LOS	B	A	A	D		
v/c	0.11	0.40	0.47	0.21		
Queue	2.8	0.0	0.0	6.0		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections AM Peak Hour						
Delay	10.3	0.0	0.0	25.8	1.3	
LOS	B	A	A	D		
v/c	0.11	0.40	0.47	0.22		
Queue	2.8	0.0	0.0	6.1		
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections PM Peak Hour						
Delay	10.7	0.0	0.0	32.9	2.2	
LOS	B	A	A	D		
v/c	0.07	0.50	0.52	0.47		
Queue	1.7	0.0	0.0	17.4		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections PM Peak Hour						
Delay	10.0	0.0	0.0	63.0	4.3	
LOS	B	A	A	F		
v/c	0.06	0.45	0.48	0.67		
Queue	1.5	0.0	0.0	29.5		

4.6 INT #5: PAYZANT DRIVE AT UNDERWOOD DRIVE

Operational performance results for this intersection are provided in Table 6 for both the AM and PM peak hours. The intersection is expected to operate well under all scenarios.

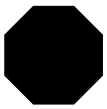
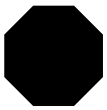
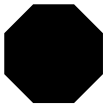
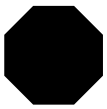
Table 6 - Intersection Capacity Analysis: Payzant Drive at Underwood Drive

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement			Overall Intersection	
	Underwood Drive	Payzant Drive			
	WB-LR	NB-TR	SB-LT	Delay	Control
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections AM Peak Hour					
Delay	14.7	0.0	2.0	3.4	
LOS	B	A	A		
v/c	0.34	0.30	0.05		
Queue	11.2	0.0	1.2		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections AM Peak Hour					
Delay	15.2	0.0	1.0	2.3	
LOS	C	A	A		
v/c	0.27	0.31	0.03		
Queue	8.4	0.0	0.7		
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections PM Peak Hour					
Delay	9.9	0.0	3.8	3.7	
LOS	A	A	A		
v/c	0.14	0.12	0.10		
Queue	3.7	0.0	2.4		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections PM Peak Hour					
Delay	11.6	0.0	2.3	2.4	
LOS	B	A	A		
v/c	0.14	0.19	0.06		
Queue	3.6	0.0	1.6		

4.7 INT #6: TRUNK 14 AT UNDERWOOD ROAD

Operational performance results for this intersection are provided in Table 7 for both the AM and PM peak hours. The intersection is expected to operate well under all scenarios.

Table 7 - Intersection Capacity Analysis: King Street at Underwood Road

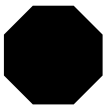
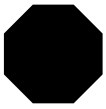
LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement			Overall Intersection	
	Trunk 14		Underwood Road		
	EB-LT	WB-TR	SB-LR	Delay	Control
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections AM Peak Hour					
Delay	0.6	0.0	15.1	2.8	
LOS	A	A	C		
v/c	0.27	0.17	0.26		
Queue	0.4	0.0	7.9		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections AM Peak Hour					
Delay	0.5	0.0	17.5	2.7	
LOS	A	A	C		
v/c	0.39	0.15	0.30		
Queue	0.4	0.0	9.7		
Scenario 1 - 2040 Estimated Condition with Site Development without New Intersections PM Peak Hour					
Delay	1.7	0.0	20.5	2.7	
LOS	A	A	C		
v/c	0.40	0.32	0.31		
Queue	1.3	0.0	9.9		
Scenario 2 - 2040 Estimated Condition with Site Development with New Intersections PM Peak Hour					
Delay	1.7	0.0	23.7	2.8	
LOS	A	A	C		
v/c	0.45	0.36	0.35		
Queue	1.4	0.0	11.8		

4.8 INT #7: PAYZANT DRIVE AT IRVEN DRIVE

Operational performance results for this intersection are provided in Table 8 for both the AM and PM peak hours. The intersection is expected to operate well with STOP control on Irven Drive and single lanes on each approach.

If Irven Drive is extended and this intersection created, the spacing between this intersection and the King Street at Payzant Drive intersection should be considered to ensure proper spacing and limit queue interactions between these intersections.

Table 8 - Intersection Capacity Analysis: Payzant Drive at Irven Drive

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement			Overall Intersection	
	Irven Drive	Payzant Drive			
	WB-LR	NB-TR	SB-LT	Delay	Control
2040 Estimated Condition with Site Development with New Intersections AM Peak Hour					
Delay	11.1	0.0	1.2	2.2	
LOS	B	A	A		
v/c	0.09	0.08	0.02		
Queue	2.3	0.0	0.5		
2040 Estimated Condition with Site Development with New Intersections PM Peak Hour					
Delay	11.6	0.0	1.8	1.5	
LOS	B	A	A		
v/c	0.07	0.18	0.03		
Queue	1.7	0.0	0.6		

4.9 INT #8: KING STREET AT PAYZANT DRIVE

Operational performance results for this intersection are provided in Table 9 for both the AM and PM peak hours.

A left-turn lane warrant was completed for the intersection, and it was determined that an eastbound left-turn lane is warranted on King Street for traffic turning to Payzant Drive, see Figure B-1 in Appendix B. A signal warrant was completed and confirmed that signalization of this intersection would not be warranted. If this intersection is constructed, it should therefore include an eastbound left turn lane on King Street and STOP control on Payzant Drive with free flow along King Street. While the Payzant Drive approach is expected to operate with LOS E during the PM peak hour, there is residual capacity, and this delay is expected for turning from STOP control onto a major street.

Table 9 - Intersection Capacity Analysis: King Street at Payzant Drive

LOS Criteria	Control Delay (sec/veh), Level of Service (LOS), v/c Ratio, and 95th %ile Queue (m) by Intersection Movement				Overall Intersection	
	King Street			Payzant Drive		
	EB-L	EB-T	WB-TR	SB-LR	Delay	Control
2040 Estimated Condition with Site Development with New Intersections AM Peak Hour						
Delay	8.0	0.0	0.0	22.5	7.6	
LOS	A	A	A	C		
v/c	0.06	0.12	0.17	0.55		
Queue	1.4	0.0	0.0	24.9		
2040 Estimated Condition with Site Development with New Intersections PM Peak Hour						
Delay	8.7	0.0	0.0	40.9	7.4	
LOS	A	A	A	E		
v/c	0.12	0.19	0.27	0.64		
Queue	3.2	0.0	0.0	30.2		

5 SUMMARY & CONCLUSIONS

5.1 SUMMARY

Background

1. Significant development is occurring within the Windsor / Garlands Crossing area and the Municipality is reviewing connectivity options including the possible extension of Payzant Drive to King Street. This Traffic Impact and Connection Study has been prepared to review the impacts of planned development and assess the connectivity options and impacts.

Description of Proposed Development

2. Development in this area includes 10 developments with a total of approximately 2,102 residential units.

Study Area Roads

3. The study considers Wentworth Road, Payzant drive, O'Brien Street, King Street, Cole Drive, Trunk 1, and Trunk 14.

Traffic Data Collection

4. Turning movement volumes were collected by WSP at the study area intersections on Wednesday, April 3r^{d}, 2024.

5. Radar counts were collected by WSP from 6:00PM of June 10th, 2024, to 11:00AM of June 14th, 2024.

Background Traffic Volumes

6. Projected 2040 peak hour future background volumes include an annual growth of 1.0% between 2024 and 2040. Trips generated by the 10 planned / proposed developments in the area have been considered separately.

Estimation of Proposed Development Trips

7. Trip generation estimates for the proposed developments were prepared using equations published in *Trip Generation, 11th Edition* (Institute of Transportation Engineers, Washington, 2021).

8. It is estimated that the area development will generate:
   - 945 two-way primary vehicle trips (244 entering and 701 exiting) during the AM peak hour; and,
   - 1,108 two-way pass-by vehicle trips (671 entering and 437 exiting) during the PM peak hour.

Trip Distribution and Assignment

9. Proposed development generated trips were distributed to the Study Intersections based on counted volumes and local knowledge of the area considering major trip origins and destinations in the region. Trips were distributed to Highway 101 West (30%), Wentworth Commercial Area and Highway 101 East (55%) and in other directions (15%).

Analysis Scenarios Considered

10. ***Scenario 1 – Future 2040 with Site*:** Represents future 2040 traffic volumes on the existing road network, including the traffic control and lane configurations that may be warranted with site generated trips.

11. ***Scenario 2 – Future 2040 with Site & intersection modifications:*** Represents future 2040 traffic volumes with the proposed development, including two new intersections built in the study area.

Warrant Analysis Summary

12. Warrant reviews were completed for left-turn lanes and traffic signals with the projected traffic volumes.

13. It was determined that left-turn lanes are warranted at the following study intersection:
    - King Street @ Payzant Drive (with new intersections developed)

14. It was determined that traffic signals are not warranted at this unsignalized study intersections.

Summary – Intersection Capacity Analysis

15. Intersection performance analysis was completed using *Synchro 11* at the Study Intersections.

16. The **Wentworth Road at O'Brien Street intersection** is expected to operate well under all scenarios and peak hours. The southbound left turn queue is expected to extend beyond the available storage (about 30m) during the PM peak hour and consideration should be given to extending this storage if opportunities are available. The northbound lane on O'Brien Street north of the intersection is wide in this area and there may be opportunities to extend this southbound left turn lane through pavement marking modifications. The westbound left turn queue is expected to extend beyond the available storage of 24m during the PM peak hour and consideration could be given to extending this storage if opportunities are available.

17. The **Wentworth Road at O'Brien Street intersection** is expected to operate well under each scenario with operations improving (particularly the heavy eastbound through movement) with the added connection of Payzant Drive to King Street (Scenario 2) due to the reassigned traffic to that new connection. The westbound left turn queue is expected to extend beyond the available storage of 33m during the PM peak hour, but conditions improved due to the reassigned traffic to that new connection. This improvement results in reduced queueing on the westbound left turn movement in Scenario 2, reducing the spill back and impact to the westbound through volume during the PM peak hour. Consideration could be given to extending this storage if opportunities are available.

18. The **Wentworth Road at Payzant Drive intersection w**ith planned signalization, the eastbound through, westbound left, and northbound left movements are expected to continue to operate with higher delays, volume to capacity ratios, and queues. Consideration could be given to the construction of an eastbound right turn lane on Wentworth Drive for traffic turning to Payzant Drive to improve the queue and volume to capacity ratios for that approach. However, conditions improved due to the reassigned traffic to that new connection during the PM peak hour.

19. The **Wentworth Road at Centennial Drive intersection** is expected to operate well under all scenarios. With planned new connection and reassigned traffic, the southbound left movements are expected to continue to operate with higher delays, volume to capacity ratios, and queues during the PM peak hour.

20. The **Payzant Drive at Underwood Drive intersection** is expected to operate well under all scenarios.

21. The **King Street at Underwood Road intersection** is expected to operate well under all scenarios.

22. The **Payzant Drive at Irven Drive intersection** is expected to operate well with STOP control on Irven Drive and single lanes on each approach. If Irven Drive is extended and this intersection created, the spacing between this intersection and the King Street at Payzant Drive intersection should be considered to ensure proper spacing and limit queue interactions between these intersections.

23. The **King Street at Payzant Drive intersection** is checked for a left-turn lane warrant, and it was determined that an eastbound left-turn lane is warranted on King Street for traffic turning to Payzant Drive, see Figure B-1 in Appendix B. A signal warrant was completed and confirmed that signalization of this intersection would not be warranted. If this intersection is constructed, it should therefore include an eastbound left turn lane on King Street and STOP control on Payzant Drive with free flow along King Street. While the Payzant Drive approach is expected to operate with LOS E during the PM peak hour, there is residual capacity, and this delay is expected for turning from STOP control onto a major street.

5.2 RECOMMENDATIONS

Recommendations	24. West Hants Municipality should review and revise the signal timings of the existing signalized intersections as traffic volumes change over the years. 25. West Hants Municipality should continue to plan for the construction of two new intersections at King Street at Payzant Drive and Payzant Drive at Irven Drive. 26. West Hants Municipality should install a left-turn lane at the King Street at Payzant Drive intersection.

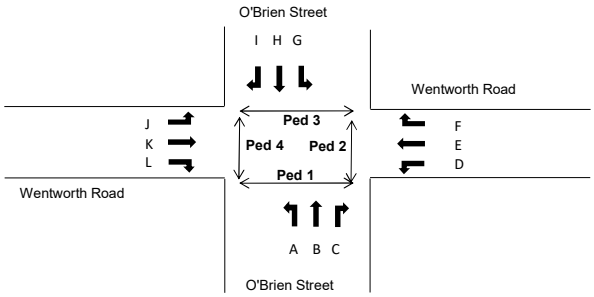
APPENDIX

A TRAFFIC VOLUME DATA

Table A-1

Wentworth Road
@
O'Brien Street

Windsor, NS
Wednesday, April 03, 2024



AM Peak Period Volume Data

Time		O'Brien Street Northbound Approach			Wentworth Road Westbound Approach			O'Brien Street Southbound Approach			Wentworth Road Eastbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
07:00	07:15	2	12	34	13	8	19	20	0	0	0	20	5	133
07:15	07:30	0	21	44	12	3	21	9	3	0	0	33	2	148
07:30	07:45	3	18	37	24	5	25	27	4	0	0	30	1	174
07:45	08:00	1	24	58	22	8	27	29	3	0	0	36	0	208
08:00	08:15	1	34	62	19	6	37	37	2	0	0	27	1	226
08:15	08:30	2	26	50	28	10	35	30	1	0	0	38	0	220
08:30	08:45	1	27	83	23	8	46	49	3	0	0	44	0	284
08:45	09:00	0	22	57	32	11	64	37	6	0	0	53	0	282
AM Peak Hour		**4**	**109**	**252**	**102**	**35**	**182**	**153**	**12**	**0**	**0**	**162**	**1**	**1012**
07:00	**08:00**	**6**	**75**	**173**	**71**	**24**	**92**	**85**	**10**	**0**	**0**	**119**	**8**	**663**
08:00	**09:00**	**4**	**109**	**252**	**102**	**35**	**182**	**153**	**12**	**0**	**0**	**162**	**1**	**1012**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
07:00	**08:00**	**6**			**3**			**1**			**1**			**11**
08:00	**09:00**	**4**			**3**			**3**			**11**			**21**

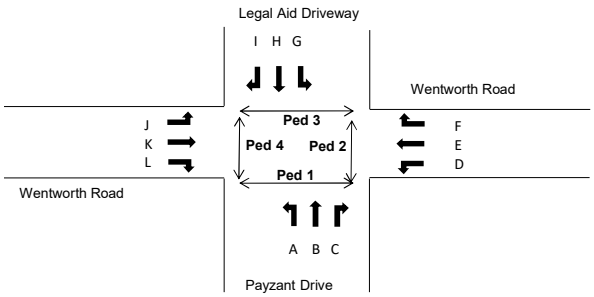
PM Peak Period Volume Data

Time		O'Brien Street Northbound Approach			Wentworth Road Westbound Approach			O'Brien Street Southbound Approach			Wentworth Road Eastbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
16:00	16:15	2	36	36	64	24	71	54	9	1	0	41	1	339
16:15	16:30	0	33	34	51	14	63	51	10	3	1	41	0	301
16:30	16:45	1	37	42	62	21	69	57	10	3	0	36	0	338
16:45	17:00	2	30	34	55	17	67	43	12	2	0	35	0	297
17:00	17:15	0	28	40	55	20	58	60	13	1	2	38	2	317
17:15	17:30	0	21	46	42	21	57	54	10	2	0	37	2	292
17:30	17:45	2	31	39	37	8	41	43	10	0	0	24	0	235
17:45	18:00	6	29	46	52	17	53	30	8	0	1	37	0	279
PM Peak Hour		**5**	**136**	**146**	**232**	**76**	**270**	**205**	**41**	**9**	**1**	**153**	**1**	**1275**
16:00	**17:00**	**5**	**136**	**146**	**232**	**76**	**270**	**205**	**41**	**9**	**1**	**153**	**1**	**1275**
17:00	**18:00**	**8**	**109**	**171**	**186**	**66**	**209**	**187**	**41**	**3**	**3**	**136**	**4**	**1123**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
16:00	**17:00**	**15**			**13**			**1**			**2**			**31**
17:00	**18:00**	**7**			**5**			**1**			**2**			**15**

Table A-2

Wentworth Road
@
Payzant Drive/Legal Aid Driveway

Windsor, NS
Wednesday, April 03, 2024



AM Peak Period Volume Data

Time		Payzant Drive Northbound Approach			Wentworth Road Westbound Approach			Legal Aid Driveway Southbound Approach			Wentworth Road Eastbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
07:00	07:15	2	0	17	15	44	0	0	0	0	0	64	10	152
07:15	07:30	8	0	11	20	39	1	0	0	0	2	66	10	157
07:30	07:45	7	0	13	22	56	1	0	0	0	1	71	9	180
07:45	08:00	10	0	18	29	66	1	0	0	0	1	94	21	240
08:00	08:15	12	0	20	40	62	0	0	0	0	0	76	28	238
08:15	08:30	10	0	32	57	66	1	2	0	0	2	74	33	277
08:30	08:45	12	1	42	69	70	1	0	0	1	1	103	58	358
08:45	09:00	17	0	75	84	104	1	0	0	0	2	74	49	406
AM Peak Hour		**51**	**1**	**169**	**250**	**302**	**3**	**2**	**0**	**1**	**5**	**327**	**168**	**1279**
07:00	**08:00**	**27**	**0**	**59**	**86**	**205**	**3**	**0**	**0**	**0**	**4**	**295**	**50**	**729**
08:00	**09:00**	**51**	**1**	**169**	**250**	**302**	**3**	**2**	**0**	**1**	**5**	**327**	**168**	**1279**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
07:00	**08:00**	**4**			**2**			**1**			**0**			**7**
08:00	**09:00**	**5**			**0**			**7**			**0**			**12**

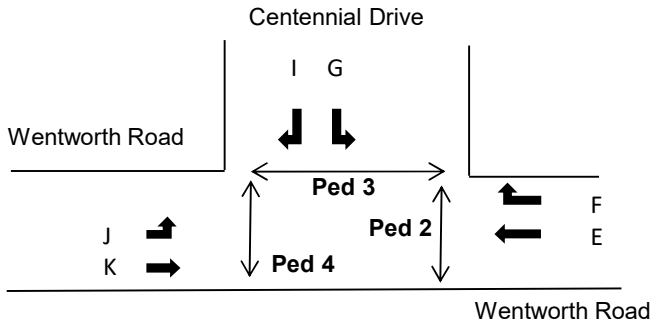
PM Peak Period Volume Data

Time		Payzant Drive Northbound Approach			Wentworth Road Westbound Approach			Legal Aid Driveway Southbound Approach			Wentworth Road Eastbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
15:00	15:15	24	0	30	36	98	1	0	0	0	1	105	29	324
15:15	15:30	55	0	98	21	126	1	0	0	1	1	105	21	429
15:30	15:45	26	0	45	17	105	0	0	0	2	1	119	16	331
15:45	16:00	16	0	35	7	109	0	0	0	0	1	117	13	298
16:00	16:15	20	0	47	18	141	0	0	0	0	0	118	12	356
16:15	16:30	19	0	10	11	101	0	0	0	1	0	119	16	277
16:30	16:45	20	0	27	17	106	1	2	1	3	1	124	19	321
16:45	17:00	19	0	27	19	93	0	3	0	3	0	86	20	270
17:00	17:15	15	0	22	20	119	0	0	0	0	0	112	17	305
17:15	17:30	9	0	21	9	90	0	0	0	0	1	103	18	251
17:30	17:45	8	0	12	17	77	0	0	0	0	0	86	13	213
17:45	18:00	11	0	13	23	87	0	0	0	1	0	98	10	243
PM Peak Hour		**117**	**0**	**225**	**63**	**481**	**1**	**0**	**0**	**3**	**3**	**459**	**62**	**1414**
15:00	**16:00**	**121**	**0**	**208**	**81**	**438**	**2**	**0**	**0**	**3**	**4**	**446**	**79**	**1382**
16:00	**17:00**	**78**	**0**	**111**	**65**	**441**	**1**	**5**	**1**	**7**	**1**	**447**	**67**	**1224**
17:00	**18:00**	**43**	**0**	**68**	**69**	**373**	**0**	**0**	**0**	**1**	**1**	**399**	**58**	**1012**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
15:00	**16:00**	**5**			**5**			**7**			**0**			**17**
16:00	**17:00**	**6**			**6**			**8**			**0**			**20**
17:00	**18:00**	**2**			**1**			**5**			**0**			**8**

Table A-3

Wentworth Road
@
Centennial Drive

Windsor, NS
Wednesday, April 03, 2024



AM Peak Period Volume Data

Time		Wentworth Road Westbound Approach		Centennial Drive Southbound Approach		Wentworth Road Eastbound Approach		Total Vehicles
		E	F	G	I	J	K	
07:00	07:15	51	2	1	5	3	72	134
07:15	07:30	53	3	0	3	7	72	138
07:30	07:45	84	1	2	3	8	80	178
07:45	08:00	92	1	1	9	11	102	216
08:00	08:15	102	5	0	5	7	88	207
08:15	08:30	118	16	4	8	14	104	264
08:30	08:45	133	14	1	12	24	115	299
08:45	09:00	172	5	2	6	22	126	333
AM Peak Hour		**525**	**40**	**7**	**31**	**67**	**433**	**1103**
07:00	**08:00**	**280**	**7**	**4**	**20**	**29**	**326**	**666**
08:00	**09:00**	**525**	**40**	**7**	**31**	**67**	**433**	**1103**
		Ped 2		**Ped 3**		**Ped 4**		**Total Peds**
07:00	**08:00**	**0**		**3**		**0**		**3**
08:00	**09:00**	**0**		**4**		**0**		**4**

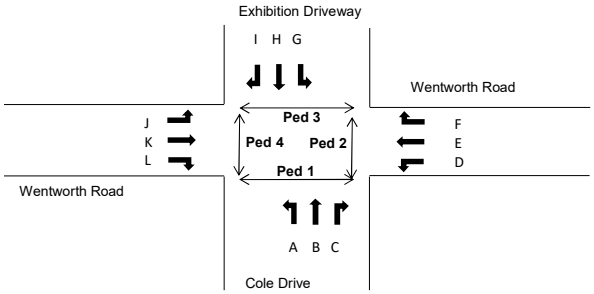
PM Peak Period Volume Data

Time		Wentworth Road Westbound Approach		Centennial Drive Southbound Approach		Wentworth Road Eastbound Approach		Total Vehicles
		E	F	G	I	J	K	
16:00	16:15	138	6	10	25	15	146	340
16:15	16:30	99	4	6	7	11	119	246
16:30	16:45	116	7	8	15	11	134	291
16:45	17:00	99	4	6	10	0	121	240
17:00	17:15	118	4	2	16	4	124	268
17:15	17:30	88	5	5	7	10	113	228
17:30	17:45	84	7	3	4	4	91	193
17:45	18:00	101	11	7	8	13	99	239
PM Peak Hour		**452**	**21**	**30**	**57**	**37**	**520**	**1117**
16:00	**17:00**	**452**	**21**	**30**	**57**	**37**	**520**	**1117**
17:00	**18:00**	**391**	**27**	**17**	**35**	**31**	**427**	**928**
		Ped 2		**Ped 3**		**Ped 4**		**Total Peds**
16:00	**17:00**	**0**		**6**		**0**		**6**
17:00	**18:00**	**0**		**2**		**0**		**2**

Table A-4

Wentworth Road
@
Cole Drive/Exhibition Driveway

Windsor, NS
Wednesday, April 03, 2024



AM Peak Period Volume Data

Time		Cole Drive Northbound Approach			Wentworth Road Westbound Approach			Exhibition Driveway Southbound Approach			Wentworth Road Eastbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
07:00	07:15	21	0	11	23	32	0	0	0	1	0	42	30	160
07:15	07:30	21	1	15	30	38	1	0	0	0	0	46	24	176
07:30	07:45	23	0	19	39	55	0	0	0	0	0	37	31	204
07:45	08:00	34	1	17	32	60	0	0	0	0	0	54	48	246
08:00	08:15	30	0	17	44	76	1	1	1	0	0	42	41	253
08:15	08:30	32	0	22	29	100	0	0	0	0	0	61	40	284
08:30	08:45	41	0	17	37	104	0	0	0	0	0	70	38	307
08:45	09:00	46	0	15	35	137	1	0	0	0	1	79	47	361
AM Peak Hour		**149**	**0**	**71**	**145**	**417**	**2**	**1**	**1**	**0**	**1**	**252**	**166**	**1205**
07:00	**08:00**	**99**	**2**	**62**	**124**	**185**	**1**	**0**	**0**	**1**	**0**	**179**	**133**	**786**
08:00	**09:00**	**149**	**0**	**71**	**145**	**417**	**2**	**1**	**1**	**0**	**1**	**252**	**166**	**1205**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
07:00	**08:00**	**3**			**2**			**3**			**0**			**8**
08:00	**09:00**	**3**			**3**			**3**			**0**			**9**

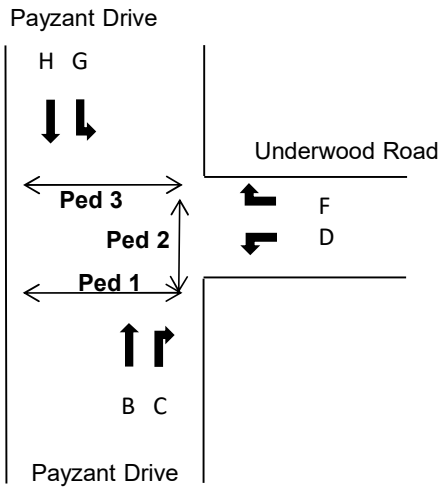
PM Peak Period Volume Data

Time		Cole Drive Northbound Approach			Wentworth Road Westbound Approach			Exhibition Driveway Southbound Approach			Wentworth Road Eastbound Approach			Total Vehicles
		A	B	C	D	E	F	G	H	I	J	K	L	
16:00	16:15	63	0	46	42	79	0	0	0	0	0	97	58	385
16:15	16:30	44	0	50	34	64	0	0	0	0	0	68	49	309
16:30	16:45	41	0	42	45	77	0	0	0	0	0	91	50	346
16:45	17:00	50	0	36	44	59	0	0	0	0	0	76	40	305
17:00	17:15	51	0	50	40	79	0	0	0	0	0	78	51	349
17:15	17:30	44	0	44	43	59	1	0	0	0	0	66	46	303
17:30	17:45	32	0	27	45	54	0	0	0	0	0	60	35	253
17:45	18:00	44	0	34	34	66	0	1	0	0	0	55	45	279
PM Peak Hour		**198**	**0**	**174**	**165**	**279**	**0**	**0**	**0**	**0**	**0**	**332**	**197**	**1345**
16:00	**17:00**	**198**	**0**	**174**	**165**	**279**	**0**	**0**	**0**	**0**	**0**	**332**	**197**	**1345**
17:00	**18:00**	**171**	**0**	**155**	**162**	**258**	**1**	**1**	**0**	**0**	**0**	**259**	**177**	**1184**
		Ped 1			**Ped 2**			**Ped 3**			**Ped 4**			**Total Peds**
16:00	**17:00**	**6**			**3**			**7**			**0**			**16**
17:00	**18:00**	**4**			**4**			**3**			**0**			**11**

Table A-5

Payzant Drive
@
Underwood Road

Windsor, NS
Wednesday, April 03, 2024



AM Peak Period Volume Data

Time		Payzant Drive Northbound Approach		Underwood Road Westbound Approach		Payzant Drive Southbound Approach		Total Vehicles
		B	C	D	F	G	H	
07:00	07:15	3	3	0	7	0	1	14
07:15	07:30	1	2	0	6	0	1	10
07:30	07:45	5	2	0	12	0	2	21
07:45	08:00	10	5	2	11	0	7	35
08:00	08:15	22	3	0	6	0	12	43
08:15	08:30	45	6	0	13	0	19	83
08:30	08:45	95	10	4	9	3	38	159
08:45	09:00	117	4	1	9	0	68	199
AM Peak Hour		**279**	**23**	**5**	**37**	**3**	**137**	**484**
07:00	**08:00**	**19**	**12**	**2**	**36**	**0**	**11**	**80**
08:00	**09:00**	**279**	**23**	**5**	**37**	**3**	**137**	**484**
		Ped 1		**Ped 2**		**Ped 3**		**Total Peds**
07:00	**08:00**	**2**		**2**		**0**		**4**
08:00	**09:00**	**0**		**2**		**0**		**2**

PM Peak Period Volume Data

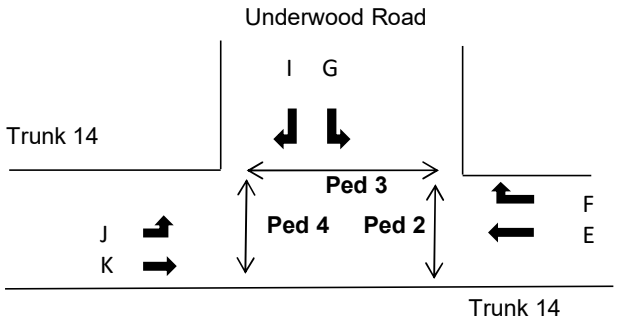
Time		Payzant Drive Northbound Approach		Underwood Road Westbound Approach		Payzant Drive Southbound Approach		Total Vehicles
		B	C	D	F	G	H	
16:00	16:15	6	13	0	12	0	16	47
16:15	16:30	7	11	0	4	0	8	30
16:30	16:45	18	9	0	6	1	15	49
16:45	17:00	14	14	0	5	1	11	45
17:00	17:15	20	7	1	12	0	17	57
17:15	17:30	10	13	0	4	0	17	44
17:30	17:45	5	10	0	6	0	4	25
17:45	18:00	3	14	1	10	1	3	32
PM Peak Hour		**62**	**43**	**1**	**27**	**2**	**60**	**195**
16:00	**17:00**	**45**	**47**	**0**	**27**	**2**	**50**	**171**
17:00	**18:00**	**38**	**44**	**2**	**32**	**1**	**41**	**158**
		Ped 1		**Ped 2**		**Ped 3**		**Total Peds**
16:00	**17:00**	**1**		**3**		**0**		**4**
17:00	**18:00**	**2**		**4**		**0**		**6**

Table A-6

Trunk 14 @ Underwood Road

Garlands Crossing, NS

Wednesday, June 26, 2024



AM Peak Period Volume Data

Time		Trunk 14 Westbound Approach		Underwood Road Southbound Approach		Trunk 14 Eastbound Approach		Total Vehicles
		E	F	G	I	J	K	
07:00	07:15	24	3	3	5	6	67	108
07:15	07:30	28	5	9	3	1	61	107
07:30	07:45	53	3	4	2	5	60	127
07:45	08:00	57	3	9	2	2	50	123
08:00	08:15	41	7	12	9	6	48	123
08:15	08:30	26	3	8	8	1	54	100
08:30	08:45	40	4	10	6	1	42	103
08:45	09:00	50	3	4	6	8	53	124
AM Peak Hour		**179**	**18**	**34**	**16**	**14**	**219**	**480**
07:00	**08:00**	**162**	**14**	**25**	**12**	**14**	**238**	**465**
08:00	**09:00**	**157**	**17**	**34**	**29**	**16**	**197**	**450**
		Ped 2		**Ped 3**		**Ped 4**		**Total Peds**
07:00	**08:00**	**0**		**0**		**0**		**0**
08:00	**09:00**	**0**		**0**		**0**		**0**

PM Peak Period Volume Data

Time		Trunk 14 Westbound Approach		Underwood Road Southbound Approach		Trunk 14 Eastbound Approach		Total Vehicles
		E	F	G	I	J	K	
16:00	16:15	62	11	5	6	10	76	170
16:15	16:30	78	12	5	2	7	62	166
16:30	16:45	87	15	5	11	8	59	185
16:45	17:00	77	5	8	7	12	52	161
17:00	17:15	79	14	7	7	3	53	163
17:15	17:30	87	8	5	10	10	45	165
17:30	17:45	57	9	10	3	4	70	153
17:45	18:00	58	10	7	8	1	59	143
PM Peak Hour		**304**	**43**	**23**	**26**	**37**	**249**	**682**
16:00	**17:00**	**304**	**43**	**23**	**26**	**37**	**249**	**682**
17:00	**18:00**	**281**	**41**	**29**	**28**	**18**	**227**	**624**
		Ped 2		**Ped 3**		**Ped 4**		**Total Peds**
16:00	**17:00**	**0**		**0**		**0**		**0**
17:00	**18:00**	**0**		**0**		**0**		**0**

Speeds

Location	Community Way									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
	85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)	
12:00:00 AM			*	*	*	*	*	*	114.0	83.0
1:00:00 AM			52.0	55.0	*	66.0	*	*	*	*
2:00:00 AM			*	*	*	*	*	*	*	*
3:00:00 AM			*	*	*	*	*	*	*	*
4:00:00 AM			*	*	*	*	*	*	*	*
5:00:00 AM			*	*	*	49.0	*	*	*	55.0
6:00:00 AM			55.0	57.0	67.0	72.0	61.0	65.0	43.0	39.0
7:00:00 AM			63.0	65.0	63.0	65.0	71.0	55.0	60.0	61.0
8:00:00 AM			57.0	59.0	58.0	59.0	53.0	54.0	57.0	53.0
9:00:00 AM			58.0	58.0	55.0	57.0	60.0	59.0	56.0	59.0
10:00:00 AM			63.0	61.0	55.0	64.0	57.0	63.0	60.0	57.0
11:00:00 AM			58.0	60.0	61.0	56.0	62.0	66.0		
12:00:00 PM			55.0	53.0	53.0	58.0	58.0	65.0		
1:00:00 PM			54.0	61.0	61.0	63.0	61.0	57.0		
2:00:00 PM			57.0	55.0	55.0	64.0	61.0	55.0		
3:00:00 PM			57.0	60.0	63.0	68.0	53.0	57.0		
4:00:00 PM			60.0	62.0	57.0	61.0	61.0	59.0		
5:00:00 PM			58.0	60.0	53.0	55.0	53.0	57.0		
6:00:00 PM			60.0	63.0	53.0	61.0	56.0	58.0		
7:00:00 PM			54.0	58.0	51.0	59.0	50.0	60.0		
8:00:00 PM			59.0	57.0	49.0	52.0	58.0	58.0		
9:00:00 PM	61.0	62.0	53.0	51.0	57.0	67.0	61.0	62.0		
10:00:00 PM	53.0	49.0	50.0	56.0	68.0	52.0	47.0	58.0		
11:00:00 PM	50.0	*	*	54.0	*	58.0	51.0	66.0		

Volume

Location	Community Way									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
	Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)	
12:00:00 AM			*	*	*	*	*	*	1	1
1:00:00 AM			1	2	*	2	*	*	*	*
2:00:00 AM			*	*	*	*	*	*	*	*
3:00:00 AM			*	*	*	*	*	*	*	*
4:00:00 AM			*	*	*	*	*	*	*	*
5:00:00 AM			*	*	*	1	*	*	*	1
6:00:00 AM			2	2	4	2	2	4	2	1
7:00:00 AM			12	9	8	6	8	7	13	8
8:00:00 AM			11	13	16	10	11	11	13	10
9:00:00 AM			21	26	16	27	16	28	12	22
10:00:00 AM			10	24	25	21	17	23	19	30
11:00:00 AM			15	18	19	24	21	25		
12:00:00 PM			18	18	23	20	26	29		
1:00:00 PM			25	23	22	28	31	37		
2:00:00 PM			28	34	21	18	19	18		
3:00:00 PM			23	28	28	30	25	20		
4:00:00 PM			29	16	30	25	21	19		
5:00:00 PM			15	20	28	20	18	19		
6:00:00 PM			14	16	15	19	8	20		
7:00:00 PM			6	15	10	16	12	18		
8:00:00 PM			22	21	13	6	14	16		
9:00:00 PM	9	5	17	12	18	7	8	3		
10:00:00 PM	5	4	6	2	5	3	2	5		
11:00:00 PM	3	*	*	1	*	2	2	3		

*Indicates no data was collected during this timeframe

Speeds

Location	Edward Drive north of Irven Drive									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound
	85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)	
12:00:00 AM			26.0	1.0	*	*	*	*	*	*
1:00:00 AM			*	*	*	*	*	*	*	*
2:00:00 AM			*	*	*	*	*	*	*	*
3:00:00 AM			*	*	*	*	*	*	*	*
4:00:00 AM			*	*	*	*	*	*	*	*
5:00:00 AM			36.0	1.0	30.0	1.0	28.0	2.0	34.0	2.0
6:00:00 AM			43.0	2.0	35.0	2.0	35.0	5.0	35.0	3.0
7:00:00 AM			52.0	3.0	26.0	3.0	34.0	3.0	40.0	4.0
8:00:00 AM			36.0	7.0	35.0	4.0	30.0	7.0	35.0	6.0
9:00:00 AM			34.0	10.0	29.0	3.0	43.0	12.0	35.0	8.0
10:00:00 AM			34.0	10.0	38.0	9.0	33.0	11.0		
11:00:00 AM			32.0	7.0	40.0	14.0	32.0	8.0		
12:00:00 PM			35.0	10.0	39.0	11.0	38.0	14.0		
1:00:00 PM			32.0	12.0	32.0	5.0	39.0	6.0		
2:00:00 PM			33.0	11.0	37.0	18.0	34.0	13.0		
3:00:00 PM			32.0	11.0	48.0	12.0	33.0	10.0		
4:00:00 PM			35.0	8.0	36.0	12.0	43.0	19.0		
5:00:00 PM			36.0	10.0	44.0	13.0	44.0	7.0		
6:00:00 PM			52.0	8.0	36.0	5.0	37.0	6.0		
7:00:00 PM			38.0	8.0	30.0	6.0	37.0	10.0		
8:00:00 PM	30.0	3.0	37.0	9.0	24.0	4.0	36.0	3.0		
9:00:00 PM	48.0	3.0	*	*	37.0	4.0	*	*		
10:00:00 PM	*	*	*	*	*	*	*	*		
11:00:00 PM	*	*	*	*	*	*	*	*		

Volume

Location	Edward Drive north of Irven Drive									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound
	Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)	
12:00:00 AM			1	3	*	*	*	*	*	*
1:00:00 AM			*	*	*	*	*	*	*	*
2:00:00 AM			*	*	*	*	*	*	*	*
3:00:00 AM			*	*	*	*	*	*	*	*
4:00:00 AM			*	*	*	*	*	2	*	2
5:00:00 AM			1	1	1	1	2	1	2	*
6:00:00 AM			2	4	2	6	5	5	3	2
7:00:00 AM			3	6	3	4	3	2	4	5
8:00:00 AM			7	3	4	10	7	5	6	8
9:00:00 AM			10	7	3	9	12	12	8	7
10:00:00 AM			10	12	9	7	11	10		
11:00:00 AM			7	11	14	12	8	14		
12:00:00 PM			10	13	11	12	14	13		
1:00:00 PM			12	9	5	10	6	11		
2:00:00 PM			11	10	18	9	13	19		
3:00:00 PM			11	9	12	8	10	10		
4:00:00 PM			8	8	12	14	19	16		
5:00:00 PM			10	6	13	15	7	5		
6:00:00 PM			8	9	5	6	6	6		
7:00:00 PM			8	6	6	8	10	8		
8:00:00 PM	3	6	9	5	4	8	3	1		
9:00:00 PM	3	4	*	*	4	4	*	*		
10:00:00 PM	*	2	*	1	*	*	*	1		
11:00:00 PM	*	*	*	*	*	*	*	1		

*Indicates no data was collected during this timeframe

Speeds

Location	Irven Drive between Community Way and Edward Drive									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound
	85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)	
12:00:00 AM			30.0	29.0	26	25	28	37	33	30
1:00:00 AM			14.0	29.0	*	*	33	*	*	*
2:00:00 AM			*	26.0	*	*	*	22	*	*
3:00:00 AM			*	*	*	*	14	31	14	28
4:00:00 AM			*	30.0	14.0	*	*	25.0	*	28
5:00:00 AM			*	*	25.0	44.0	*	*	34.0	22.0
6:00:00 AM			*	33.0	34.0	48.0	28.0	33.0	*	35.0
7:00:00 AM			37.0	29.0	32.0	40.0	33.0	33.0	35.0	35.0
8:00:00 AM			34.0	32.0	36.0	37.0	32.0	34.0	38.0	32.0
9:00:00 AM			35.0	33.0	34.0	34.0	33.0	33.0	34.0	33.0
10:00:00 AM			32.0	34.0	34.0	32.0	34.0	34.0	32.0	34.0
11:00:00 AM			32.0	31.0	34.0	37.0	31.0	33.0	32.0	37.0
12:00:00 PM			34.0	33.0	32.0	37.0	32.0	34.0		
1:00:00 PM			34.0	36.0	34.0	43.0	35.0	32.0		
2:00:00 PM			34.0	33.0	32.0	37.0	34.0	35.0		
3:00:00 PM			32.0	34.0	32.0	36.0	32.0	33.0		
4:00:00 PM			33.0	35.0	30.0	39.0	34.0	34.0		
5:00:00 PM			31.0	35.0	33.0	49.0	33.0	36.0		
6:00:00 PM			34.0	33.0	35.0	42.0	34.0	33.0		
7:00:00 PM			33.0	33.0	33.0	36.0	35.0	30.0		
8:00:00 PM			30.0	35.0	29.0	33.0	27.0	33.0		
9:00:00 PM	34.0	31.0	34.0	32.0	34.0	25.0	31.0	34.0		
10:00:00 PM	30.0	33.0	34.0	32.0	32.0	*	31.0	26.0		
11:00:00 PM	26.0	25	26	*	23	*	34	30		

Volume

Location	Irven Drive between Community Way and Edward Drive									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound
	Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)	
12:00:00 AM			4	2	1	2	1	2	4	1
1:00:00 AM			1.0	2.0	*	*	2	*	*	*
2:00:00 AM			*	1.0	*	*	*	1	*	*
3:00:00 AM			*	*	*	*	1	1	1	1
4:00:00 AM			*	1.0	1.0	36.0	*	1	*	1
5:00:00 AM			*	*	1	20	*	*	2	1
6:00:00 AM			*	6	3	32	4	9	*	9
7:00:00 AM			11	12	6	37	11	12	10	15
8:00:00 AM			23	18	20	34	31	22	16	18
9:00:00 AM			31	34	25	32	37	35	19	27
10:00:00 AM			20	30	23	32	27	47	27	34
11:00:00 AM			25	35	32	33	6	28	1	2
12:00:00 PM			31	37	35	32	44	48		
1:00:00 PM			24	60	28	34	37	50		
2:00:00 PM			32	44	36	33	32	41		
3:00:00 PM			34	39	39	33	41	45		
4:00:00 PM			33	45	39	35	34	51		
5:00:00 PM			32	18	48	35	29	32		
6:00:00 PM			40	29	33	35	21	24		
7:00:00 PM			22	28	30	36	28	26		
8:00:00 PM			10	21	19	32	16	22		
9:00:00 PM	16	12	12	19	8	32	8.0	13		
10:00:00 PM	11	11	6	7	8.0	34.0	11.0	5		
11:00:00 PM	4.0	3	2	*	1	18	4	5		

*Indicates no data was collected during this timeframe

Speeds

Location	Payzant Drive south of Underwood Drive									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound
	85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)	
12:00:00 AM			42.0	62.0	45	45	48	54	*	39
1:00:00 AM			*	*	*	*	*	75	60	54
2:00:00 AM			*	*	*	*	*	*	*	*
3:00:00 AM			*	*	*	*	*	*	*	*
4:00:00 AM			*	*	*	53.0	*	*	*	54
5:00:00 AM			48.0	51.0	50.0	58.0	57.0	52.0	48.0	53.0
6:00:00 AM			54.0	52.0	57.0	50.0	53.0	53.0	57.0	55.0
7:00:00 AM			55.0	55.0	57.0	55.0	53.0	52.0	52.0	51.0
8:00:00 AM			53.0	51.0	53.0	51.0	53.0	52.0	53.0	50.0
9:00:00 AM			57.0	52.0	53.0	53.0	56.0	52.0	54.0	51.0
10:00:00 AM			62.0	55.0	56.0	55.0	55.0	54.0		
11:00:00 AM			57.0	57.0	56.0	53.0	56.0	53.0		
12:00:00 PM			53.0	52.0	54.0	54.0	54.0	52.0		
1:00:00 PM			58.0	54.0	58.0	58.0	57.0	52.0		
2:00:00 PM			51.0	55.0	54.0	55.0	52.0	52.0		
3:00:00 PM			55.0	54.0	56.0	52.0	54.0	53.0		
4:00:00 PM			56.0	54.0	54.0	55.0	53.0	53.0		
5:00:00 PM			52.0	53.0	54.0	55.0	55.0	54.0		
6:00:00 PM			57.0	51.0	55.0	53.0	56.0	52.0		
7:00:00 PM			56.0	51.0	56.0	53.0	60.0	49.0		
8:00:00 PM	58.0	46.0	50.0	50.0	52.0	51.0	54.0	56.0		
9:00:00 PM	54.0	49.0	44.0	55.0	58.0	51.0	55.0	49.0		
10:00:00 PM	50.0	*	*	50.0	*	47.0	55.0	52.0		
11:00:00 PM	*	51	*	51	57	49	51	54		

Volume

Location	Payzant Drive south of Underwood Drive									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound
	Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)	
12:00:00 AM			1	3	1	2	1	2	*	2
1:00:00 AM			*	*	*	*	*	1	1	1
2:00:00 AM			*	*	*	*	*	*	*	*
3:00:00 AM			*	*	*	*	*	*	*	*
4:00:00 AM			*	*	*	1.0	*	*	*	1
5:00:00 AM			4	5	5	3	2	5	3	3
6:00:00 AM			14	13	9	11	9	13	12	11
7:00:00 AM			21	23	23	27	27	24	21	21
8:00:00 AM			207	184	203	185	191	171	189	202
9:00:00 AM			43	73	56	94	58	97	50	93
10:00:00 AM			41	50	37	53	45	58		
11:00:00 AM			52	62	50	67	55	101		
12:00:00 PM			38	68	32	65	33	71		
1:00:00 PM			88	118	61	102	70	98		
2:00:00 PM			52	70	68	61	64	66		
3:00:00 PM			70	207	74	173	72	191		
4:00:00 PM			54	51	32	61	26	51		
5:00:00 PM			47	71	52	59	35	34		
6:00:00 PM			21	26	136	83	39	33		
7:00:00 PM			28	59	42	63	38	58		
8:00:00 PM	14	11	24	18	42	132	19	50		
9:00:00 PM	8	19	4	28	14	79	19.0	10		
10:00:00 PM	2	*	*	2	*	3.0	9.0	34		
11:00:00 PM	*	4	*	4	1	2	1	4		

*Indicates no data was collected during this timeframe

Speeds

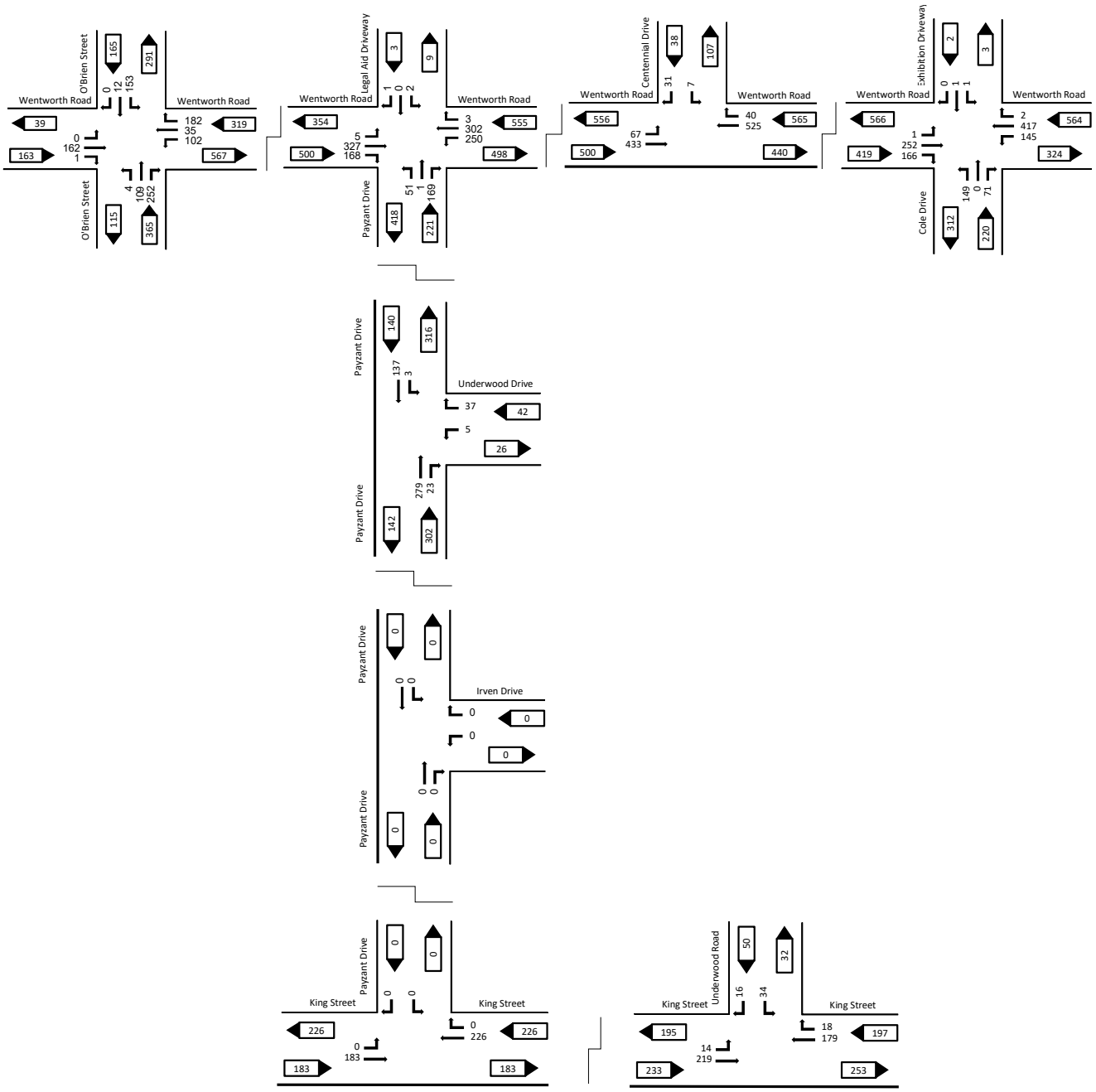
Location	King Street south of Cocoa Pesto Food Shoppe									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
	85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)		85th (km/h)	
12:00:00 AM			60.0	60.0	64	61	61	61	56	62
1:00:00 AM			58.0	60.0	57	56	55	59	61	60
2:00:00 AM			62.0	58.0	56	54	61	58	58	58
3:00:00 AM			*	*	55	59	56	59	53	57
4:00:00 AM			63.0	48.0	67.0	56.0	67.0	56.0	55	55
5:00:00 AM			65.0	56.0	63.0	58.0	60.0	56.0	61.0	64.0
6:00:00 AM			65.0	67.0	64.0	65.0	63.0	65.0	65.0	62.0
7:00:00 AM			62.0	63.0	63.0	65.0	65.0	65.0	64.0	64.0
8:00:00 AM			61.0	60.0	61.0	60.0	62.0	60.0	61.0	60.0
9:00:00 AM			59.0	60.0	59.0	59.0	58.0	59.0	59.0	59.0
10:00:00 AM			60.0	59.0	58.0	59.0	57.0	58.0	60.0	58.0
11:00:00 AM			59.0	58.0	57.0	57.0	59.0	57.0	56.0	55.0
12:00:00 PM			59.0	59.0	58.0	58.0	58.0	57.0		
1:00:00 PM			58.0	57.0	59.0	57.0	58.0	60.0		
2:00:00 PM			59.0	57.0	58.0	58.0	58.0	59.0		
3:00:00 PM			57.0	59.0	58.0	58.0	58.0	58.0		
4:00:00 PM			57.0	59.0	59.0	60.0	58.0	59.0		
5:00:00 PM			60.0	59.0	60.0	57.0	60.0	59.0		
6:00:00 PM			60.0	62.0	61.0	61.0	60.0	61.0		
7:00:00 PM	63.0	61.0	62.0	61.0	60.0	62.0	60.0	61.0		
8:00:00 PM	61.0	63.0	60.0	62.0	60.0	60.0	60.0	62.0		
9:00:00 PM	61.0	62.0	60.0	62.0	61.0	60.0	61.0	61.0		
10:00:00 PM	60.0	61.0	58.0	61.0	59.0	60.0	58.0	59.0		
11:00:00 PM	61.0	66	63	59	63	58	65	65		

Volume

Location	King Street south of Cocoa Pesto Food Shoppe									
End Time	June 10 2024		June 11 2024		June 12 2024		June 13 2024		June 14 2024	
	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
	Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)		Volume (vph)	
12:00:00 AM			15	12	15	16	16	15	20	18
1:00:00 AM			5.0	11.0	5	4	3	9	9	9
2:00:00 AM			3.0	4.0	1	3	3	4	2	7
3:00:00 AM			*	*	1	4	2	2	4	4
4:00:00 AM			3.0	2.0	3.0	7.0	3.0	2	5	2
5:00:00 AM			10	3	12	6	10	7	11	9
6:00:00 AM			54	43	49	39	53	45	50	37
7:00:00 AM			134	107	135	112	104	124	122	122
8:00:00 AM			162	188	153	169	163	198	141	199
9:00:00 AM			164	172	161	209	183	226	162	204
10:00:00 AM			145	200	140	208	157	226	157	209
11:00:00 AM			164	198	181	236	180	225	50	44
12:00:00 PM			202	187	215	212	235	219		
1:00:00 PM			204	264	206	223	229	235		
2:00:00 PM			214	240	213	231	215	224		
3:00:00 PM			231	210	237	224	249	231		
4:00:00 PM			240	230	185	167	266	221		
5:00:00 PM			319	278	276	257	262	262		
6:00:00 PM			234	246	254	265	234	243		
7:00:00 PM	21	26	145	181	173	225	174	199		
8:00:00 PM	131	153	172	151	167	127	172	162		
9:00:00 PM	98	129	124	105	140	144	135.0	135		
10:00:00 PM	75	62	53	54	60.0	69.0	69.0	60		
11:00:00 PM	33.0	31	26	27	23	42	43	44		

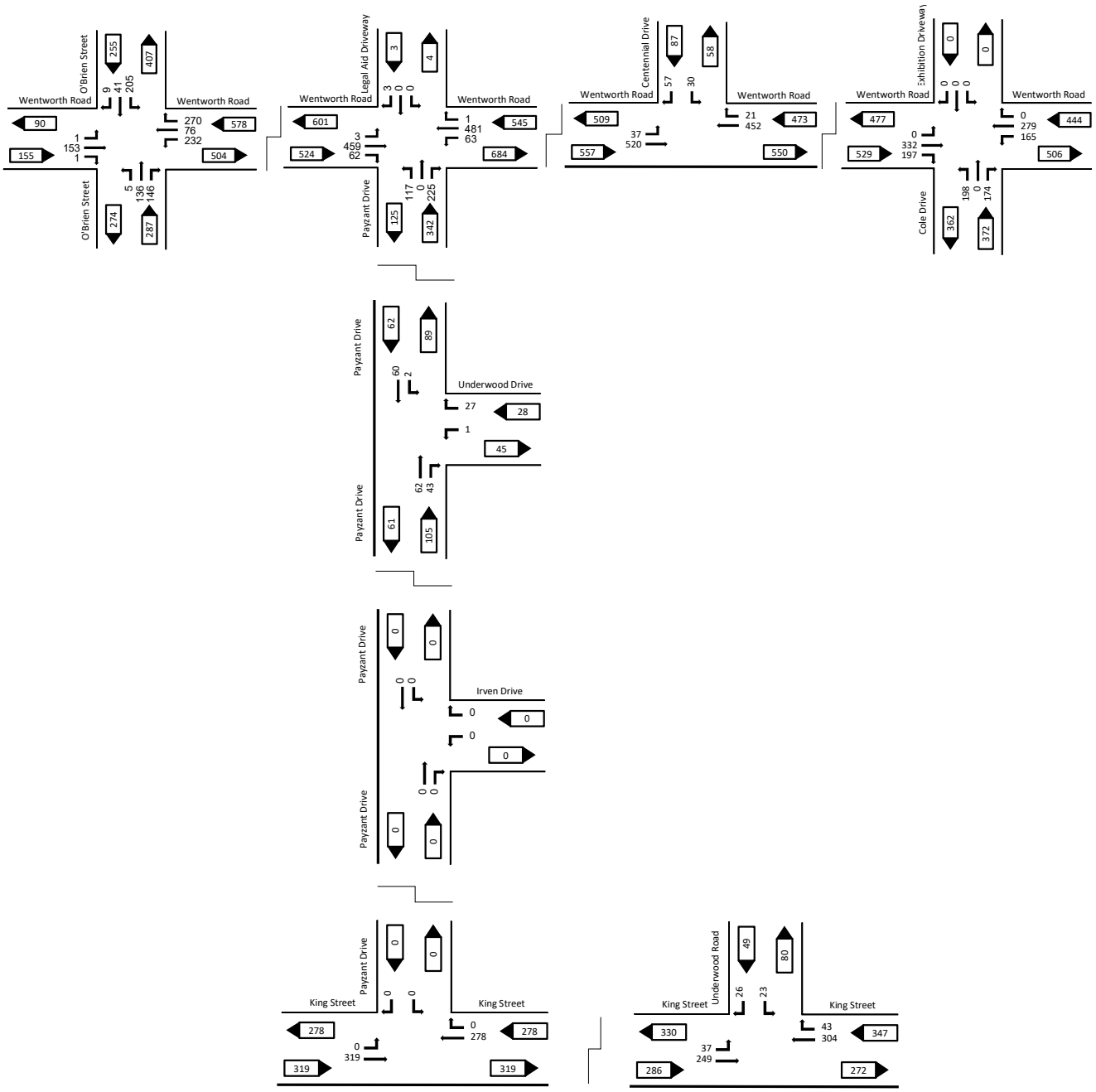
*Indicates no data was collected during this timeframe

Weekday AM Peak Hour
2024 Existing Traffic Volumes



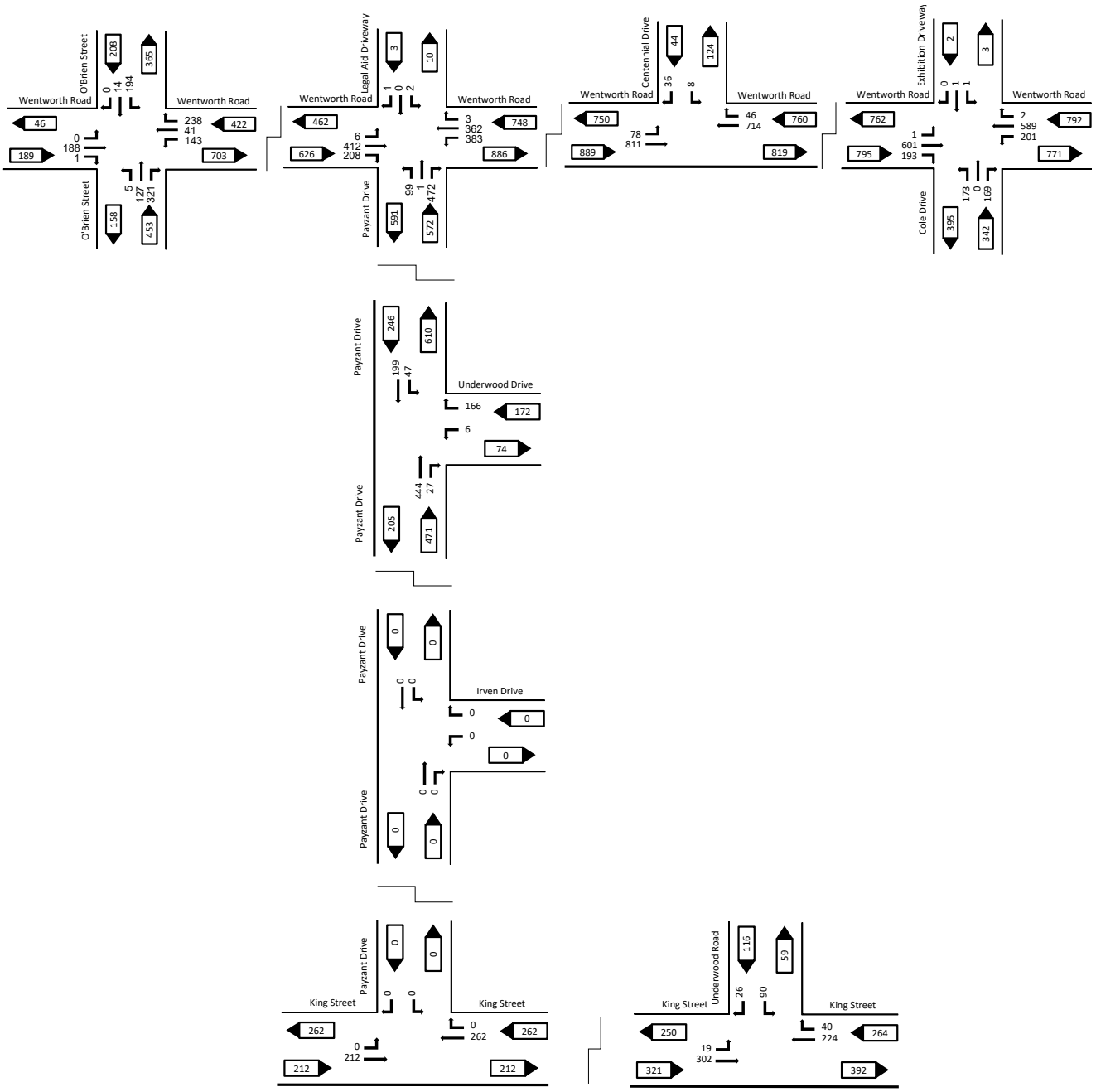
wsp	Traffic Impact and Connection Study West Hants, NS	Figure A-1A
	Weekday AM Peak Hour 2024 Existing Traffic Volumes	June 2024

Weekday PM Peak Hour
2024 Existing Traffic Volumes



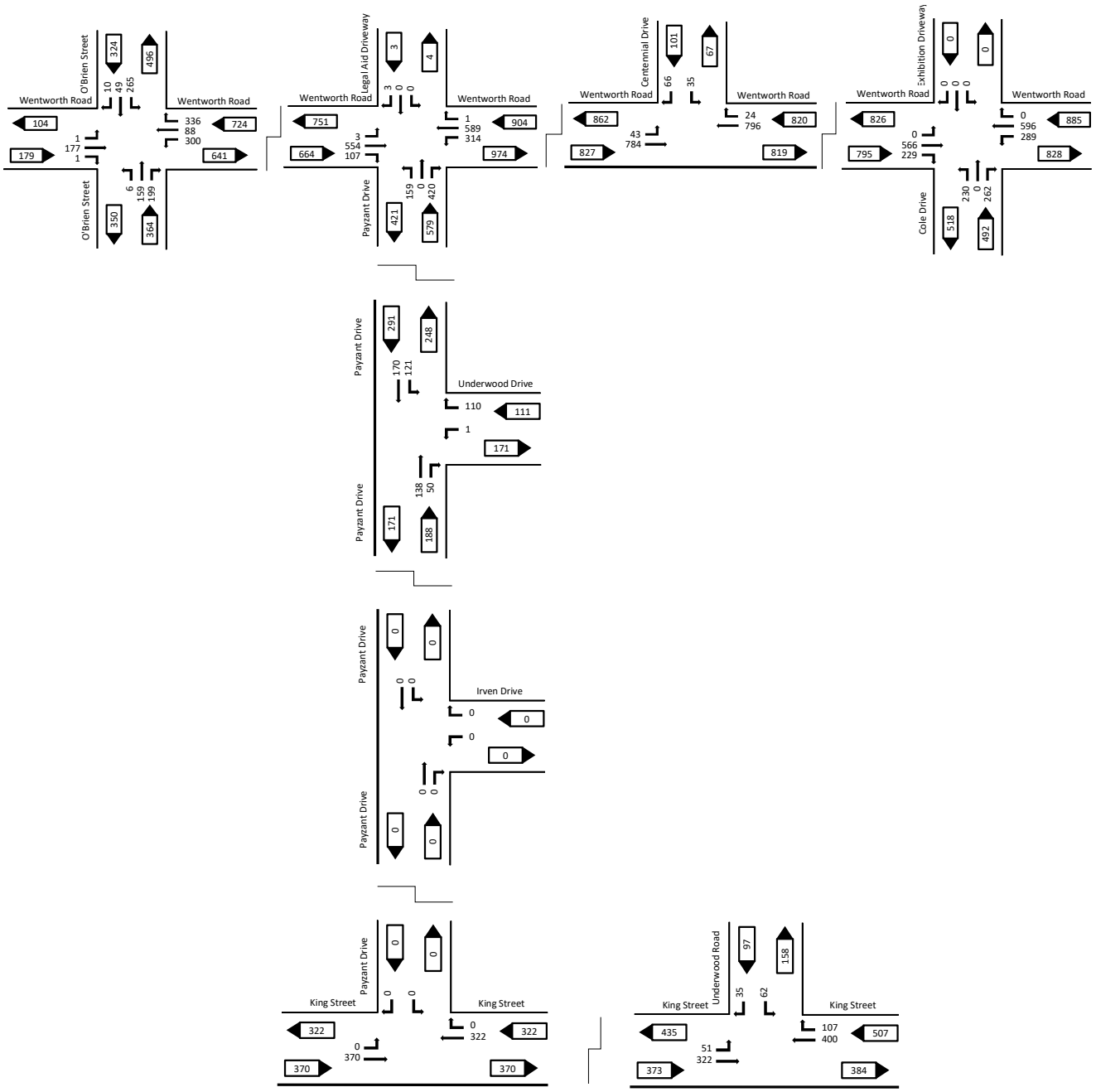
wsp	Traffic Impact and Connection Study West Hants, NS	Figure A-1B
	Weekday PM Peak Hour 2024 Existing Traffic Volumes	June 2024

Weekday AM Peak Hour
2040 Traffic Volumes with New Development



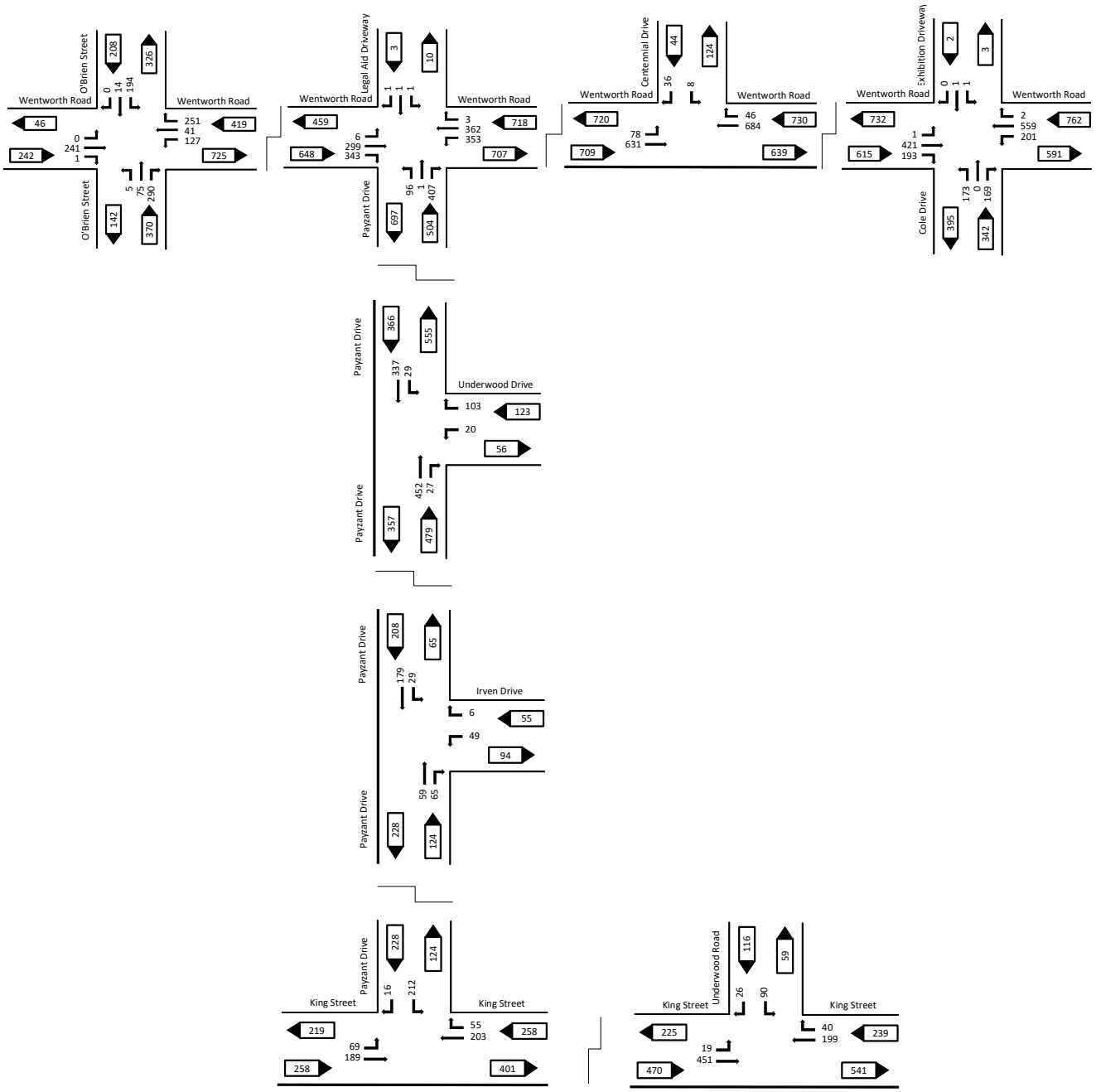
wsp	Traffic Impact and Connection Study West Hants, NS	Figure A-2A
	Weekday AM Peak Hour 2040 Traffic Volumes with New Development	June 2024

Weekday PM Peak Hour
2040 Traffic Volumes with New Development



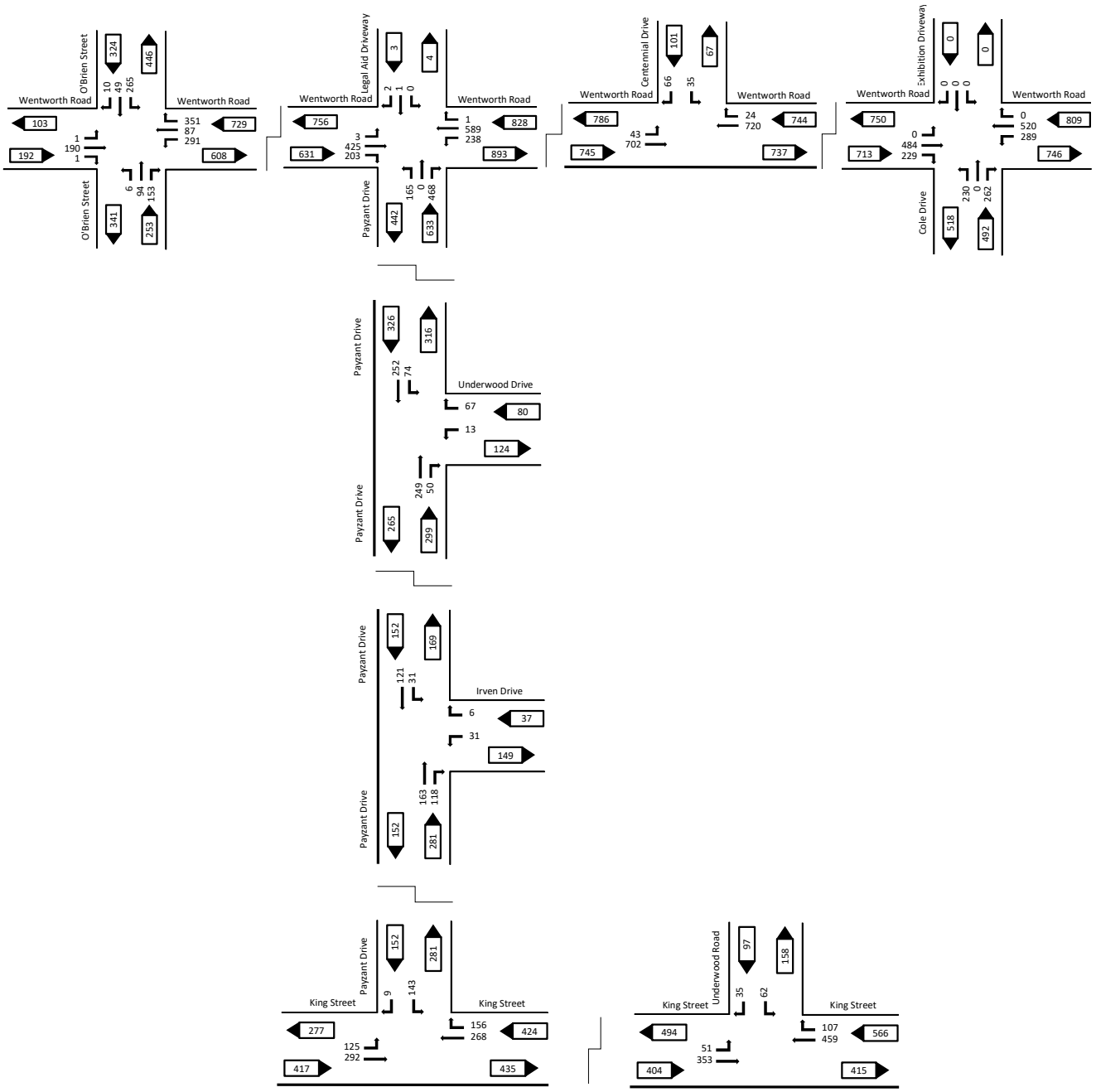
wsp	Traffic Impact and Connection Study West Hants, NS	Figure A-2B
	Weekday PM Peak Hour 2040 Traffic Volumes with New Development	June 2024

Weekday AM Peak Hour
2040 Trip Assignment with Development and Two New Intersections



wsp	Traffic Impact and Connection Study West Hants, NS	Figure A-3A
	Weekday AM Peak Hour 2040 Trip Assignment with Development and Two New Intersections	June 2024

Weekday PM Peak Hour
2040 Trip Assignment with Development and Two New Intersections

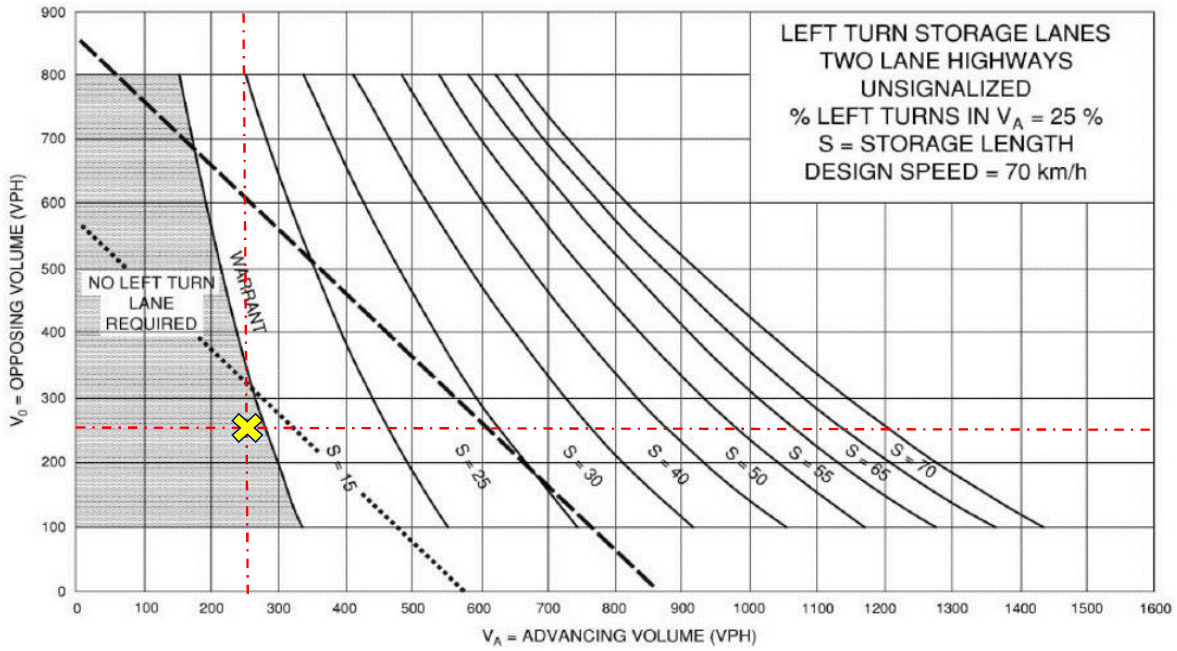


wsp	Traffic Impact and Connection Study West Hants, NS	Figure A-3B
	Weekday PM Peak Hour 2040 Trip Assignment with Development and Two New Intersections	June 2024

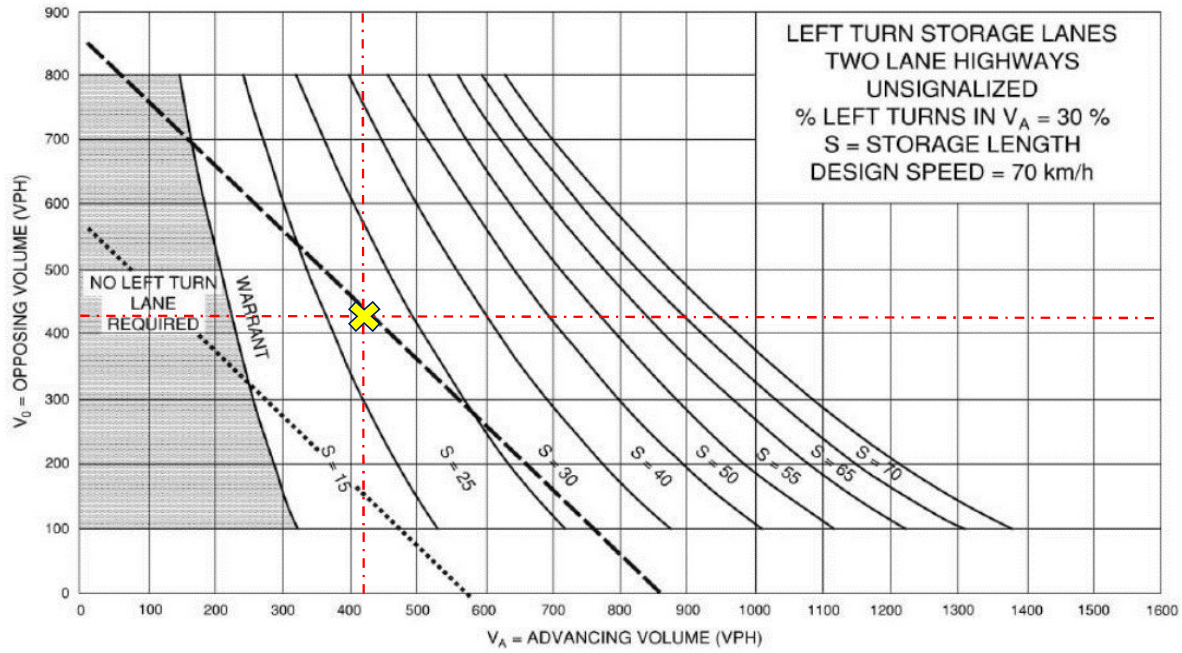
APPENDIX

B WARRANT ANALYSIS

Left Lane Warrants for Weekday AM and PM Peak Hours
King Street at Payzant Drive Intersection



Left Lane Warrants for Weekday AM Peak Hour



Left Lane Warrants for Weekday PM Peak Hour

wsp	Windsor West Hants, NS	Figure B-1
	Left Lane Warrants for Weekday AM and PM Peak Hours King Street at Payzant Drive Intersection	June 2024

2005 Canadian Traffic Signal Warrant Matrix Analysis

Table: B-1 - King Street @ Payzant Drive (NS)

2040 Future with Site Generated Trips

Main Street (name)	King Street	Direction (EW or NS)	EW	Date:	June 27, 2024
Side Street (name)	Payzant Drive	Direction (EW or NS)	NS	City:	West Hants, NS

Lane Configuration		Excl LT	Th & LT	Through or Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes	
King Street	WB				1		1,000		
King Street	EB	1		1			1,000		
Payzant Drive	NB								
Payzant Drive	SB			1					

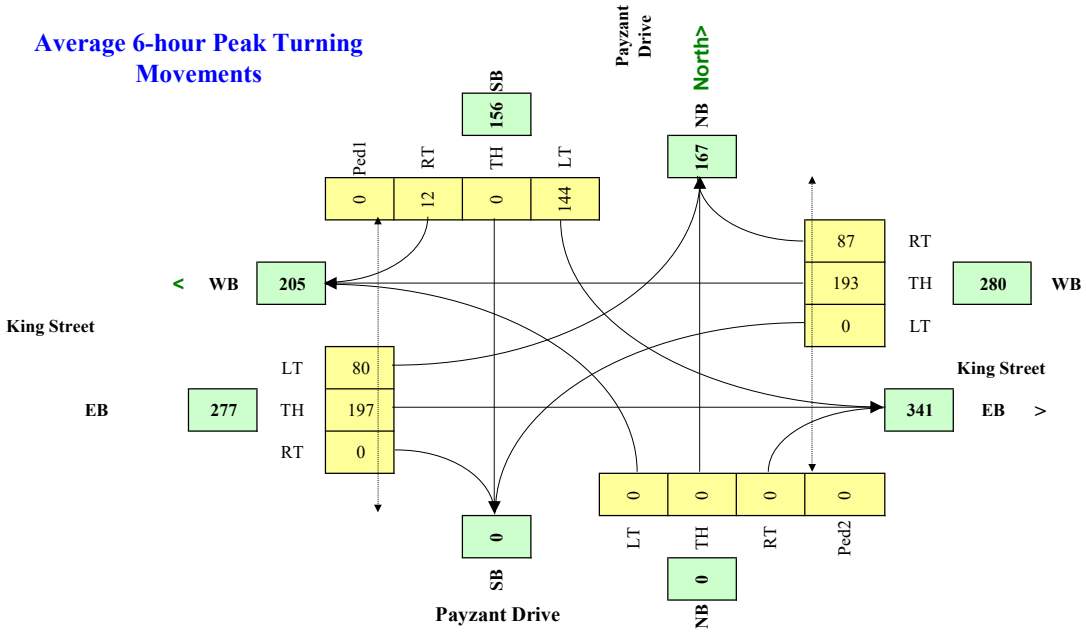
Other input		Speed (Km/h)	Trucks %	Bus Rt (y/n)	Median (m)
King Street	EW	50	2.0%	n	0.0
Payzant Drive	NS	50	2.0%	n	

	Ped1 NS W Side	Ped2 NS E Side	Ped3 EW N Side	Ped4 EW S side
7:00 - 8:00				
8:00 - 9:00				
11:30 - 12:30				
12:30 - 13:30				
16:00 - 17:00				
17:00 - 18:00				
Total (6-hour peak)	**0**	**0**	**0**	**0**
Average (6-hour peak)	**0**	**0**	**0**	**0**

Demographics		
Elementary School	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	3,700
Central Business District	(y/n)	n

Traffic Input	NB			SB			WB			EB		
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT
7:00 - 8:00	0	0	0	180	0	15	0	175	45	60	160	0
8:00 - 9:00	0	0	0	210	0	15	0	205	55	70	190	0
11:30 - 12:30	0	0	0	105	0	10	0	140	65	60	145	0
12:30 - 13:30	0	0	0	105	0	10	0	140	65	60	145	0
16:00 - 17:00	0	0	0	145	0	10	0	270	155	125	290	0
17:00 - 18:00	0	0	0	120	0	10	0	230	135	105	250	0
Total (6-hour peak)	**0**	**0**	**0**	**865**	**0**	**70**	**0**	**1,160**	**520**	**480**	**1,180**	**0**
Average (6-hour peak)	**0**	**0**	**0**	**144**	**0**	**12**	**0**	**193**	**87**	**80**	**197**	**0**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	59	59	0
		Veh	*Ped*

NOT Warranted

APPENDIX

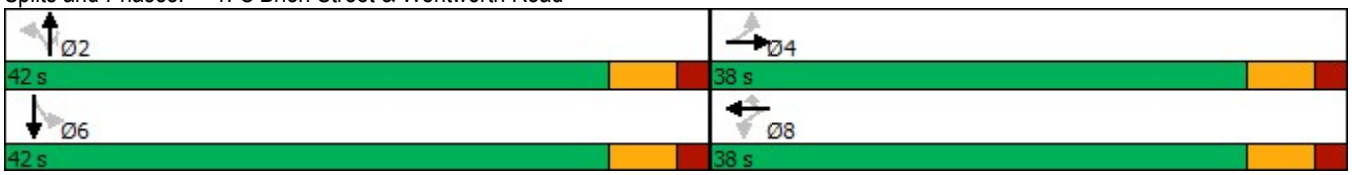
C

INTERSECTION PERFORMANCE ANALYSIS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	188	1	143	41	238	5	127	321	194	14	0
Future Volume (vph)	0	188	1	143	41	238	5	127	321	194	14	0
Satd. Flow (prot)	0	1882	0	1789	1883	1601	0	1880	1601	1789	1883	0
Flt Permitted				0.629				0.991		0.666		
Satd. Flow (perm)	0	1882	0	1185	1883	1601	0	1866	1601	1254	1883	0
Satd. Flow (RTOR)						259			349			
Lane Group Flow (vph)	0	205	0	155	45	259	0	143	349	211	15	0
Turn Type		NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		
Total Split (s)	38.0	38.0		38.0	38.0	38.0	42.0	42.0	42.0	42.0	42.0	
Total Lost Time (s)		6.1		6.1	6.1	6.1		6.1	6.1	6.1	6.1	
Act Effct Green (s)		10.9		10.9	10.9	10.9		11.7	11.7	11.7	11.7	
Actuated g/C Ratio		0.31		0.31	0.31	0.31		0.33	0.33	0.33	0.33	
v/c Ratio		0.35		0.42	0.08	0.38		0.23	0.46	0.51	0.02	
Control Delay		12.0		14.6	9.8	3.8		10.2	3.8	15.1	8.9	
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		12.0		14.6	9.8	3.8		10.2	3.8	15.1	8.9	
LOS		B		B	A	A		B	A	B	A	
Approach Delay		12.0			8.0			5.7			14.7	
Approach LOS		B			A			A			B	
Queue Length 50th (m)		8.4		6.5	1.7	0.0		5.3	0.0	8.6	0.5	
Queue Length 95th (m)		24.0		21.1	7.1	10.6		16.9	11.9	27.3	3.3	
Internal Link Dist (m)		115.1			661.3			372.8			188.5	
Turn Bay Length (m)				45.0		25.0			20.0	20.0		
Base Capacity (vph)		1668		1050	1669	1448		1737	1515	1167	1753	
Starvation Cap Reductn		0		0	0	0		0	0	0	0	
Spillback Cap Reductn		0		0	0	0		0	0	0	0	
Storage Cap Reductn		0		0	0	0		0	0	0	0	
Reduced v/c Ratio		0.12		0.15	0.03	0.18		0.08	0.23	0.18	0.01	

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 35.4	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 55.9%	ICU Level of Service B
Analysis Period (min) 15	

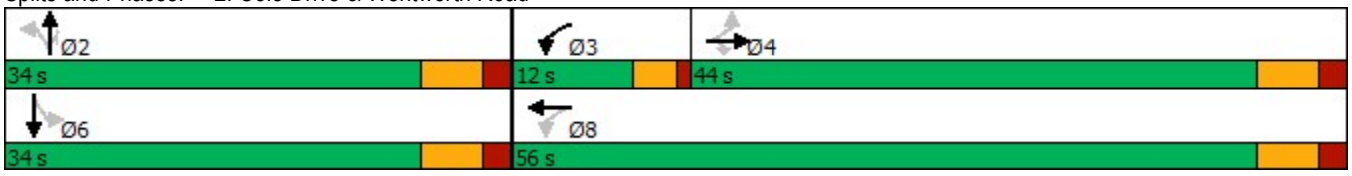
Splits and Phases: 1: O'Brien Street & Wentworth Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	601	193	201	589	2	173	0	169	1	1	0
Future Volume (vph)	1	601	193	201	589	2	173	0	169	1	1	0
Satd. Flow (prot)	0	1883	1601	1789	1883	0	0	1789	1601	0	1838	0
Flt Permitted		0.999		0.168				0.757			0.880	
Satd. Flow (perm)	0	1882	1601	316	1883	0	0	1426	1601	0	1657	0
Satd. Flow (RTOR)			104						184			
Lane Group Flow (vph)	0	654	210	218	642	0	0	188	184	0	2	0
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Total Split (s)	44.0	44.0	44.0	12.0	56.0		34.0	34.0	34.0	34.0	34.0	
Total Lost Time (s)		6.1	6.1	4.0	6.1			6.1	6.1		6.1	
Act Effct Green (s)		30.0	30.0	44.4	42.2			15.0	15.0		15.0	
Actuated g/C Ratio		0.43	0.43	0.64	0.60			0.21	0.21		0.21	
v/c Ratio		0.81	0.28	0.59	0.56			0.61	0.38		0.01	
Control Delay		27.3	8.2	13.8	11.3			35.5	6.7		23.0	
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay		27.3	8.2	13.8	11.3			35.5	6.7		23.0	
LOS		C	A	B	B			D	A		C	
Approach Delay		22.6			11.9			21.3			23.0	
Approach LOS		C			B			C			C	
Queue Length 50th (m)		70.9	8.1	10.2	44.3			23.0	0.0		0.2	
Queue Length 95th (m)		#133.0	23.4	#26.0	91.6			45.2	14.3		1.8	
Internal Link Dist (m)		258.6			117.5			316.2			132.8	
Turn Bay Length (m)			28.0	33.0					50.0			
Base Capacity (vph)		1058	946	375	1394			590	770		686	
Starvation Cap Reductn		0	0	0	0			0	0		0	
Spillback Cap Reductn		0	0	0	0			0	0		0	
Storage Cap Reductn		0	0	0	0			0	0		0	
Reduced v/c Ratio		0.62	0.22	0.58	0.46			0.32	0.24		0.00	

Intersection Summary			
Cycle Length: 90			
Actuated Cycle Length: 69.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 18.0		Intersection LOS: B	
Intersection Capacity Utilization 94.3%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: Cole Drive & Wentworth Road

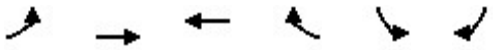


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	412	208	383	362	3	99	1	472	2	0	1
Future Volume (vph)	6	412	208	383	362	3	99	1	472	2	0	1
Satd. Flow (prot)	1789	1789	0	1789	1882	0	1789	1601	0	0	1741	0
Flt Permitted	0.528			0.121			0.756				0.392	
Satd. Flow (perm)	994	1789	0	228	1882	0	1424	1601	0	0	705	0
Satd. Flow (RTOR)		36			1			513			97	
Lane Group Flow (vph)	7	674	0	416	396	0	108	514	0	0	3	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Total Split (s)	35.0	35.0		20.0	55.0		25.0	25.0		25.0	25.0	
Total Lost Time (s)	6.1	6.1		4.0	6.1		6.1	6.1			6.1	
Act Effct Green (s)	29.1	29.1		50.3	48.1		12.2	12.2			12.2	
Actuated g/C Ratio	0.40	0.40		0.69	0.66		0.17	0.17			0.17	
v/c Ratio	0.02	0.91		0.86	0.32		0.45	0.74			0.02	
Control Delay	15.8	40.9		36.4	6.7		33.5	10.0			0.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	15.8	40.9		36.4	6.7		33.5	10.0			0.0	
LOS	B	D		D	A		C	B			A	
Approach Delay		40.6			21.9			14.1				
Approach LOS		D			C			B				
Queue Length 50th (m)	0.6	81.3		36.2	18.9		13.6	0.1			0.0	
Queue Length 95th (m)	3.2	#167.7		#96.0	41.5		27.2	24.4			0.0	
Internal Link Dist (m)		661.3			158.1			656.5			63.1	
Turn Bay Length (m)	35.0			87.0			63.0					
Base Capacity (vph)	397	737		503	1275		372	798			256	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.02	0.91		0.83	0.31		0.29	0.64			0.01	

Intersection Summary

Cycle Length: 80
Actuated Cycle Length: 72.6
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 25.6 Intersection LOS: C
Intersection Capacity Utilization 98.4% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Payzant Drive/Legal Aid Driveway & Wentworth Road



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	631	684	46	8	36
Future Volume (Veh/h)	78	631	684	46	8	36
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	85	686	743	50	9	39
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		182	283			
pX, platoon unblocked	0.79				0.79	0.79
vC, conflicting volume	793				1624	768
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	600				1658	568
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				88	90
cM capacity (veh/h)	768				75	410

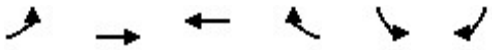
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	85	686	793	48
Volume Left	85	0	0	9
Volume Right	0	0	50	39
cSH	768	1700	1700	223
Volume to Capacity	0.11	0.40	0.47	0.21
Queue Length 95th (m)	2.8	0.0	0.0	6.0
Control Delay (s)	10.3	0.0	0.0	25.5
Lane LOS	B			D
Approach Delay (s)	1.1		0.0	25.5
Approach LOS				D

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	166	444	27	47	199
Future Volume (Veh/h)	6	166	444	27	47	199
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	180	483	29	51	216
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	816	498			512	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	816	498			512	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	69			95	
cM capacity (veh/h)	330	573			1053	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	187	512	267
Volume Left	7	0	51
Volume Right	180	29	0
cSH	557	1700	1053
Volume to Capacity	0.34	0.30	0.05
Queue Length 95th (m)	11.2	0.0	1.2
Control Delay (s)	14.7	0.0	2.0
Lane LOS	B		A
Approach Delay (s)	14.7	0.0	2.0
Approach LOS	B		

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	302	224	40	90	26
Future Volume (Veh/h)	19	302	224	40	90	26
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	328	243	43	98	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	286				634	264
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	286				634	264
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				78	96
cM capacity (veh/h)	1276				436	774

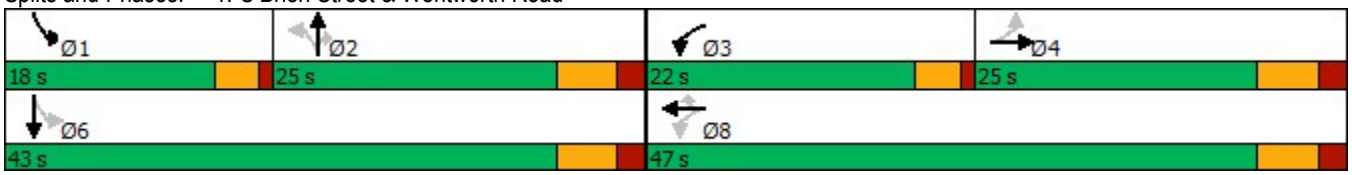
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	349	286	126
Volume Left	21	0	98
Volume Right	0	43	28
cSH	1276	1700	482
Volume to Capacity	0.02	0.17	0.26
Queue Length 95th (m)	0.4	0.0	7.9
Control Delay (s)	0.6	0.0	15.1
Lane LOS	A		C
Approach Delay (s)	0.6	0.0	15.1
Approach LOS			C

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	177	1	300	88	336	6	159	199	265	49	10
Future Volume (vph)	1	177	1	300	88	336	6	159	199	265	49	10
Satd. Flow (prot)	0	1882	0	1789	1883	1601	0	1880	1601	1789	1834	0
Flt Permitted		0.999		0.411				0.987		0.473		
Satd. Flow (perm)	0	1880	0	774	1883	1601	0	1859	1601	891	1834	0
Satd. Flow (RTOR)						365			216		11	
Lane Group Flow (vph)	0	194	0	326	96	365	0	180	216	288	64	0
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8		8	2		2	6		
Total Split (s)	25.0	25.0		22.0	47.0	47.0	25.0	25.0	25.0	18.0	43.0	
Total Lost Time (s)		6.1		4.0	6.1	6.1		6.1	6.1	4.0	6.1	
Act Effct Green (s)		12.9		33.1	30.9	30.9		12.7	12.7	31.3	29.1	
Actuated g/C Ratio		0.18		0.46	0.43	0.43		0.17	0.17	0.43	0.40	
v/c Ratio		0.58		0.60	0.12	0.41		0.56	0.47	0.54	0.09	
Control Delay		37.0		18.8	13.9	3.2		36.4	8.4	19.4	13.4	
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		37.0		18.8	13.9	3.2		36.4	8.4	19.4	13.4	
LOS		D		B	B	A		D	A	B	B	
Approach Delay		37.0			11.0			21.1			18.3	
Approach LOS		D			B			C			B	
Queue Length 50th (m)		24.9		28.7	7.8	0.0		23.2	0.0	25.7	4.3	
Queue Length 95th (m)		50.1		54.1	17.9	14.3		46.8	17.2	52.1	12.9	
Internal Link Dist (m)		115.1			661.3			372.8			188.5	
Turn Bay Length (m)				45.0		25.0			20.0	20.0		
Base Capacity (vph)		507		613	1100	1087		501	589	562	971	
Starvation Cap Reductn		0		0	0	0		0	0	0	0	
Spillback Cap Reductn		0		0	0	0		0	0	0	0	
Storage Cap Reductn		0		0	0	0		0	0	0	0	
Reduced v/c Ratio		0.38		0.53	0.09	0.34		0.36	0.37	0.51	0.07	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 72.7	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

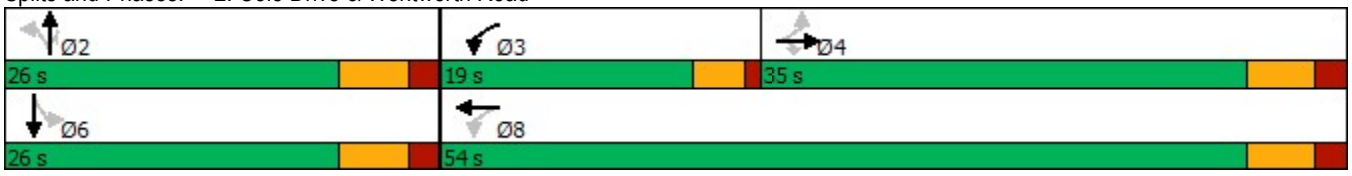
Splits and Phases: 1: O'Brien Street & Wentworth Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	566	229	289	596	0	230	0	262	0	0	0
Future Volume (vph)	0	566	229	289	596	0	230	0	262	0	0	0
Satd. Flow (prot)	0	1883	1601	1789	1883	0	0	1789	1601	0	1883	0
Flt Permitted				0.134				0.757				
Satd. Flow (perm)	0	1883	1601	252	1883	0	0	1426	1601	0	1883	0
Satd. Flow (RTOR)			134						285			
Lane Group Flow (vph)	0	615	249	314	648	0	0	250	285	0	0	0
Turn Type		NA	Perm	pm+pt	NA		Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Total Split (s)	35.0	35.0	35.0	19.0	54.0		26.0	26.0	26.0	26.0	26.0	
Total Lost Time (s)		6.1	6.1	4.0	6.1			6.1	6.1		6.1	
Act Effct Green (s)		27.0	27.0	45.7	43.5			16.8	16.8			
Actuated g/C Ratio		0.37	0.37	0.63	0.60			0.23	0.23			
v/c Ratio		0.88	0.37	0.75	0.58			0.76	0.48			
Control Delay		39.1	10.4	25.3	11.9			43.6	6.5			
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0			
Total Delay		39.1	10.4	25.3	11.9			43.6	6.5			
LOS		D	B	C	B			D	A			
Approach Delay		30.8			16.2			23.8				
Approach LOS		C			B			C				
Queue Length 50th (m)		85.8	11.7	24.8	54.5			34.2	0.0			
Queue Length 95th (m)		#147.7	28.7	#57.3	83.0			#65.7	17.4			
Internal Link Dist (m)		258.6			117.5			316.2			132.8	
Turn Bay Length (m)			28.0	33.0					50.0			
Base Capacity (vph)		764	729	481	1266			398	652			
Starvation Cap Reductn		0	0	0	0			0	0			
Spillback Cap Reductn		0	0	0	0			0	0			
Storage Cap Reductn		0	0	0	0			0	0			
Reduced v/c Ratio		0.80	0.34	0.65	0.51			0.63	0.44			

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 72.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 23.3		Intersection LOS: C	
Intersection Capacity Utilization 89.2%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: Cole Drive & Wentworth Road

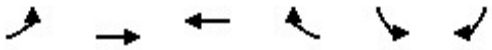


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	554	107	314	589	1	159	0	420	0	0	3
Future Volume (vph)	3	554	107	314	589	1	159	0	420	0	0	3
Satd. Flow (prot)	1789	1838	0	1789	1883	0	1789	1601	0	0	1629	0
Flt Permitted	0.421			0.123			0.756					
Satd. Flow (perm)	793	1838	0	232	1883	0	1424	1601	0	0	1629	0
Satd. Flow (RTOR)		14						411			307	
Lane Group Flow (vph)	3	718	0	341	641	0	173	457	0	0	3	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA			NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Total Split (s)	48.0	48.0		17.0	65.0		25.0	25.0		25.0	25.0	
Total Lost Time (s)	6.1	6.1		4.0	6.1		6.1	6.1			6.1	
Act Effct Green (s)	34.7	34.7		53.4	51.2		14.8	14.8			14.8	
Actuated g/C Ratio	0.44	0.44		0.68	0.65		0.19	0.19			0.19	
v/c Ratio	0.01	0.88		0.85	0.52		0.65	0.72			0.01	
Control Delay	13.0	33.5		37.6	9.4		43.4	12.6			0.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	13.0	33.5		37.6	9.4		43.4	12.6			0.0	
LOS	B	C		D	A		D	B			A	
Approach Delay		33.4			19.2			21.0				
Approach LOS		C			B			C				
Queue Length 50th (m)	0.3	96.6		31.2	46.6		26.0	6.3			0.0	
Queue Length 95th (m)	1.7	#168.0		#82.3	76.1		47.7	36.2			0.0	
Internal Link Dist (m)		661.3			158.1			656.5			63.1	
Turn Bay Length (m)	35.0			87.0			63.0					
Base Capacity (vph)	436	1019		423	1436		354	706			635	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.01	0.70		0.81	0.45		0.49	0.65			0.00	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 78.6
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 24.0 Intersection LOS: C
Intersection Capacity Utilization 92.6% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Payzant Drive/Legal Aid Driveway & Wentworth Road



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	43	784	796	24	35	66
Future Volume (Veh/h)	43	784	796	24	35	66
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	47	852	865	26	38	72
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		182	283			
pX, platoon unblocked	0.76				0.83	0.76
vC, conflicting volume	891				1824	878
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	701				1246	684
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				74	79
cM capacity (veh/h)	683				148	342

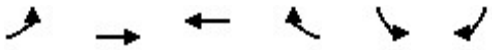
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	47	852	891	110
Volume Left	47	0	0	38
Volume Right	0	0	26	72
cSH	683	1700	1700	236
Volume to Capacity	0.07	0.50	0.52	0.47
Queue Length 95th (m)	1.7	0.0	0.0	17.4
Control Delay (s)	10.7	0.0	0.0	32.9
Lane LOS	B			D
Approach Delay (s)	0.6		0.0	32.9
Approach LOS				D

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	110	138	50	121	170
Future Volume (Veh/h)	1	110	138	50	121	170
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	120	150	54	132	185
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	626	177			204	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	626	177			204	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			90	
cM capacity (veh/h)	405	866			1368	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	121	204	317
Volume Left	1	0	132
Volume Right	120	54	0
cSH	858	1700	1368
Volume to Capacity	0.14	0.12	0.10
Queue Length 95th (m)	3.7	0.0	2.4
Control Delay (s)	9.9	0.0	3.8
Lane LOS	A		A
Approach Delay (s)	9.9	0.0	3.8
Approach LOS	A		

Intersection Summary			
Average Delay		3.7	
Intersection Capacity Utilization		42.8%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	51	322	400	107	62	35
Future Volume (Veh/h)	51	322	400	107	62	35
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	55	350	435	116	67	38
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	551				953	493
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	551				953	493
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				75	93
cM capacity (veh/h)	1019				272	576

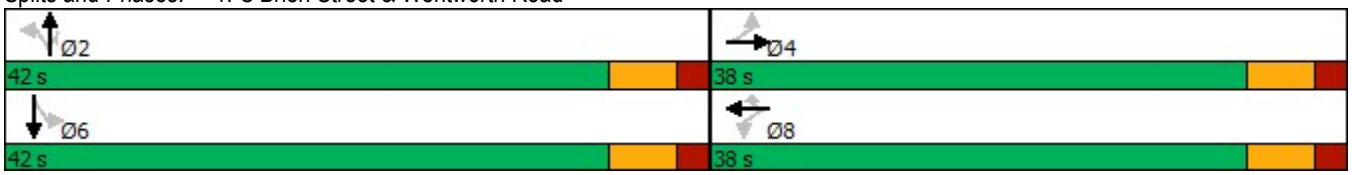
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	405	551	105
Volume Left	55	0	67
Volume Right	0	116	38
cSH	1019	1700	336
Volume to Capacity	0.05	0.32	0.31
Queue Length 95th (m)	1.3	0.0	9.9
Control Delay (s)	1.7	0.0	20.5
Lane LOS	A		C
Approach Delay (s)	1.7	0.0	20.5
Approach LOS			C

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	241	1	127	41	251	5	75	290	194	14	0
Future Volume (vph)	0	241	1	127	41	251	5	75	290	194	14	0
Satd. Flow (prot)	0	1882	0	1789	1883	1601	0	1878	1601	1789	1883	0
Flt Permitted				0.597				0.985		0.701		
Satd. Flow (perm)	0	1882	0	1124	1883	1601	0	1855	1601	1320	1883	0
Satd. Flow (RTOR)						273			315			
Lane Group Flow (vph)	0	263	0	138	45	273	0	87	315	211	15	0
Turn Type		NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		
Total Split (s)	38.0	38.0		38.0	38.0	38.0	42.0	42.0	42.0	42.0	42.0	
Total Lost Time (s)		6.1		6.1	6.1	6.1		6.1	6.1	6.1	6.1	
Act Effct Green (s)		11.1		11.1	11.1	11.1		11.4	11.4	11.4	11.4	
Actuated g/C Ratio		0.31		0.31	0.31	0.31		0.32	0.32	0.32	0.32	
v/c Ratio		0.44		0.39	0.08	0.40		0.14	0.43	0.49	0.02	
Control Delay		12.8		13.8	9.5	3.7		9.8	3.8	14.8	9.1	
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		12.8		13.8	9.5	3.7		9.8	3.8	14.8	9.1	
LOS		B		B	A	A		A	A	B	A	
Approach Delay		12.8			7.4			5.1			14.4	
Approach LOS		B			A			A			B	
Queue Length 50th (m)		11.0		5.7	1.7	0.0		3.2	0.0	8.7	0.5	
Queue Length 95th (m)		29.9		18.7	6.9	10.6		11.4	11.4	27.0	3.4	
Internal Link Dist (m)		115.1			661.3			372.8			188.5	
Turn Bay Length (m)				45.0		25.0			20.0	20.0		
Base Capacity (vph)		1673		999	1674	1454		1734	1517	1234	1760	
Starvation Cap Reductn		0		0	0	0		0	0	0	0	
Spillback Cap Reductn		0		0	0	0		0	0	0	0	
Storage Cap Reductn		0		0	0	0		0	0	0	0	
Reduced v/c Ratio		0.16		0.14	0.03	0.19		0.05	0.21	0.17	0.01	

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 35.3	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

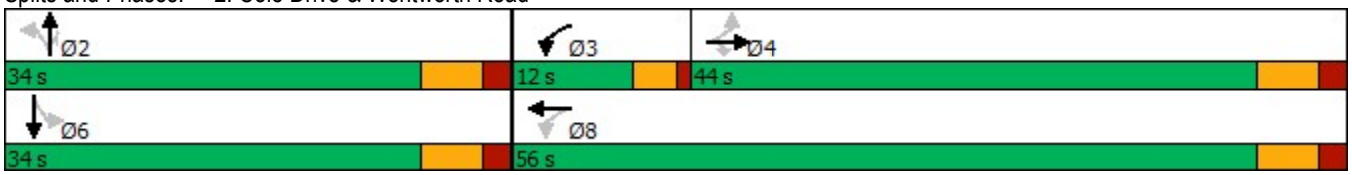
Splits and Phases: 1: O'Brien Street & Wentworth Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	421	193	201	559	2	173	0	169	1	1	0
Future Volume (vph)	1	421	193	201	559	2	173	0	169	1	1	0
Satd. Flow (prot)	0	1883	1601	1789	1883	0	0	1789	1601	0	1838	0
Flt Permitted		0.999		0.284				0.757			0.873	
Satd. Flow (perm)	0	1882	1601	535	1883	0	0	1426	1601	0	1644	0
Satd. Flow (RTOR)			148						184			
Lane Group Flow (vph)	0	459	210	218	610	0	0	188	184	0	2	0
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Total Split (s)	44.0	44.0	44.0	12.0	56.0		34.0	34.0	34.0	34.0	34.0	
Total Lost Time (s)		6.1	6.1	4.0	6.1			6.1	6.1		6.1	
Act Effct Green (s)		21.2	21.2	35.6	33.4			13.9	13.9		13.9	
Actuated g/C Ratio		0.35	0.35	0.59	0.56			0.23	0.23		0.23	
v/c Ratio		0.69	0.32	0.45	0.58			0.57	0.36		0.01	
Control Delay		23.1	6.6	9.5	12.0			29.5	6.2		20.0	
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay		23.1	6.6	9.5	12.0			29.5	6.2		20.0	
LOS		C	A	A	B			C	A		B	
Approach Delay		17.9			11.3			18.0			20.0	
Approach LOS		B			B			B			B	
Queue Length 50th (m)		40.4	4.3	9.1	37.3			17.9	0.0		0.2	
Queue Length 95th (m)		81.9	18.0	24.4	85.2			43.2	13.8		1.7	
Internal Link Dist (m)		258.6			117.5			316.2			132.8	
Turn Bay Length (m)			28.0	33.0					50.0			
Base Capacity (vph)		1247	1111	492	1579			695	875		802	
Starvation Cap Reductn		0	0	0	0			0	0		0	
Spillback Cap Reductn		0	0	0	0			0	0		0	
Storage Cap Reductn		0	0	0	0			0	0		0	
Reduced v/c Ratio		0.37	0.19	0.44	0.39			0.27	0.21		0.00	

Intersection Summary			
Cycle Length: 90			
Actuated Cycle Length: 60.1			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 83.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Cole Drive & Wentworth Road

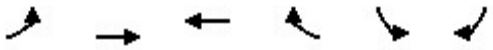


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	299	343	353	362	3	96	1	407	1	1	1
Future Volume (vph)	6	299	343	353	362	3	96	1	407	1	1	1
Satd. Flow (prot)	1789	1733	0	1789	1882	0	1789	1601	0	0	1770	0
Flt Permitted	0.528			0.120			0.756				0.413	
Satd. Flow (perm)	994	1733	0	226	1882	0	1424	1601	0	0	743	0
Satd. Flow (RTOR)		81			1			442			1	
Lane Group Flow (vph)	7	698	0	384	396	0	104	443	0	0	3	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Total Split (s)	35.0	35.0		20.0	55.0		25.0	25.0		25.0	25.0	
Total Lost Time (s)	6.1	6.1		4.0	6.1		6.1	6.1			6.1	
Act Effct Green (s)	29.2	29.2		49.3	47.2		11.8	11.8			11.8	
Actuated g/C Ratio	0.41	0.41		0.69	0.66		0.17	0.17			0.17	
v/c Ratio	0.02	0.92		0.83	0.32		0.44	0.70			0.02	
Control Delay	15.7	40.2		32.4	6.6		33.1	9.6			22.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	15.7	40.2		32.4	6.6		33.1	9.6			22.3	
LOS	B	D		C	A		C	A			C	
Approach Delay		40.0			19.3			14.0			22.3	
Approach LOS		D			B			B			C	
Queue Length 50th (m)	0.6	80.6		31.0	18.7		13.1	0.1			0.2	
Queue Length 95th (m)	3.2	#170.3		#84.1	41.5		26.3	22.1			2.3	
Internal Link Dist (m)		661.3			158.1			656.5			63.1	
Turn Bay Length (m)	35.0			87.0			63.0					
Base Capacity (vph)	406	756		510	1302		380	751			199	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.02	0.92		0.75	0.30		0.27	0.59			0.02	

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 71.3	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 25.1	Intersection LOS: C
Intersection Capacity Utilization 95.0%	ICU Level of Service F
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Payzant Drive/Legal Aid Driveway & Wentworth Road



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	631	684	46	8	36
Future Volume (Veh/h)	78	631	684	46	8	36
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	85	686	743	50	9	39
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		182	283			
pX, platoon unblocked	0.77				0.77	0.77
vC, conflicting volume	793				1624	768
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	584				1661	551
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				88	91
cM capacity (veh/h)	764				73	412

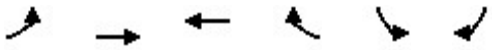
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	85	686	793	48
Volume Left	85	0	0	9
Volume Right	0	0	50	39
cSH	764	1700	1700	221
Volume to Capacity	0.11	0.40	0.47	0.22
Queue Length 95th (m)	2.8	0.0	0.0	6.1
Control Delay (s)	10.3	0.0	0.0	25.8
Lane LOS	B			D
Approach Delay (s)	1.1		0.0	25.8
Approach LOS				D

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	103	452	27	29	337
Future Volume (Veh/h)	20	103	452	27	29	337
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	112	491	29	32	366
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	936	506			520	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	936	506			520	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	80			97	
cM capacity (veh/h)	285	567			1046	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	134	520	398
Volume Left	22	0	32
Volume Right	112	29	0
cSH	488	1700	1046
Volume to Capacity	0.27	0.31	0.03
Queue Length 95th (m)	8.4	0.0	0.7
Control Delay (s)	15.2	0.0	1.0
Lane LOS	C		A
Approach Delay (s)	15.2	0.0	1.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	451	199	40	90	26
Future Volume (Veh/h)	19	451	199	40	90	26
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	490	216	43	98	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	259				770	238
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	259				770	238
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				73	97
cM capacity (veh/h)	1306				363	801

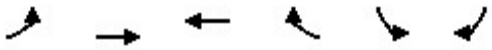
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	511	259	126
Volume Left	21	0	98
Volume Right	0	43	28
cSH	1306	1700	413
Volume to Capacity	0.02	0.15	0.30
Queue Length 95th (m)	0.4	0.0	9.7
Control Delay (s)	0.5	0.0	17.5
Lane LOS	A		C
Approach Delay (s)	0.5	0.0	17.5
Approach LOS			C

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	49	6	59	65	29	179
Future Volume (Veh/h)	49	6	59	65	29	179
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	7	64	71	32	195
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	358	100			135	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	358	100			135	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	99			98	
cM capacity (veh/h)	626	956			1449	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	60	135	227
Volume Left	53	0	32
Volume Right	7	71	0
cSH	652	1700	1449
Volume to Capacity	0.09	0.08	0.02
Queue Length 95th (m)	2.3	0.0	0.5
Control Delay (s)	11.1	0.0	1.2
Lane LOS	B		A
Approach Delay (s)	11.1	0.0	1.2
Approach LOS	B		

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	31.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	69	189	203	55	212	16
Future Volume (Veh/h)	69	189	203	55	212	16
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	75	205	221	60	230	17
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	281				606	251
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	281				606	251
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				47	98
cM capacity (veh/h)	1282				433	788

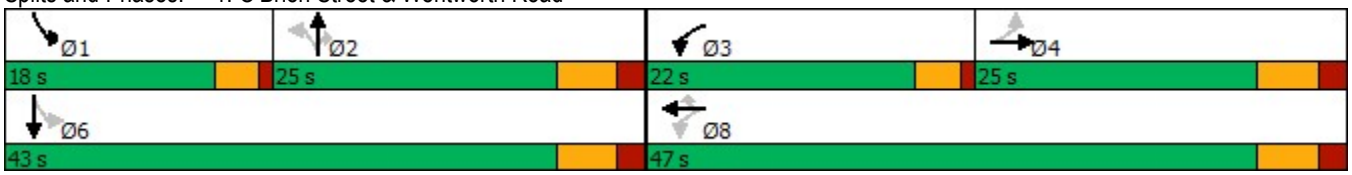
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	280	281	247
Volume Left	75	0	230
Volume Right	0	60	17
cSH	1282	1700	447
Volume to Capacity	0.06	0.17	0.55
Queue Length 95th (m)	1.4	0.0	24.9
Control Delay (s)	2.5	0.0	22.5
Lane LOS	A		C
Approach Delay (s)	2.5	0.0	22.5
Approach LOS			C

Intersection Summary			
Average Delay	7.8		
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	190	1	291	87	351	6	94	153	265	49	10
Future Volume (vph)	1	190	1	291	87	351	6	94	153	265	49	10
Satd. Flow (prot)	0	1882	0	1789	1883	1601	0	1878	1601	1789	1834	0
Flt Permitted		0.999		0.406				0.976		0.491		
Satd. Flow (perm)	0	1880	0	765	1883	1601	0	1838	1601	925	1834	0
Satd. Flow (RTOR)						382			166		11	
Lane Group Flow (vph)	0	209	0	316	95	382	0	109	166	288	64	0
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8		8	2		2	6		
Total Split (s)	25.0	25.0		22.0	47.0	47.0	25.0	25.0	25.0	18.0	43.0	
Total Lost Time (s)		6.1		4.0	6.1	6.1		6.1	6.1	4.0	6.1	
Act Effct Green (s)		13.0		32.4	30.3	30.3		9.8	9.8	28.3	26.2	
Actuated g/C Ratio		0.19		0.47	0.44	0.44		0.14	0.14	0.41	0.38	
v/c Ratio		0.59		0.57	0.12	0.42		0.42	0.45	0.54	0.09	
Control Delay		34.5		16.5	12.3	3.0		34.9	9.9	19.9	13.8	
Queue Delay		0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		34.5		16.5	12.3	3.0		34.9	9.9	19.9	13.8	
LOS		C		B	B	A		C	A	B	B	
Approach Delay		34.5			9.5			19.8			18.8	
Approach LOS		C			A			B			B	
Queue Length 50th (m)		25.2		25.3	7.0	0.0		13.2	0.0	25.0	4.2	
Queue Length 95th (m)		50.7		46.6	16.0	13.4		30.7	15.9	52.5	13.3	
Internal Link Dist (m)		115.1			661.3			372.8			188.5	
Turn Bay Length (m)				45.0		25.0			20.0	20.0		
Base Capacity (vph)		530		634	1149	1126		518	571	560	1015	
Starvation Cap Reductn		0		0	0	0		0	0	0	0	
Spillback Cap Reductn		0		0	0	0		0	0	0	0	
Storage Cap Reductn		0		0	0	0		0	0	0	0	
Reduced v/c Ratio		0.39		0.50	0.08	0.34		0.21	0.29	0.51	0.06	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 69	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 16.5	Intersection LOS: B
Intersection Capacity Utilization 62.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: O'Brien Street & Wentworth Road

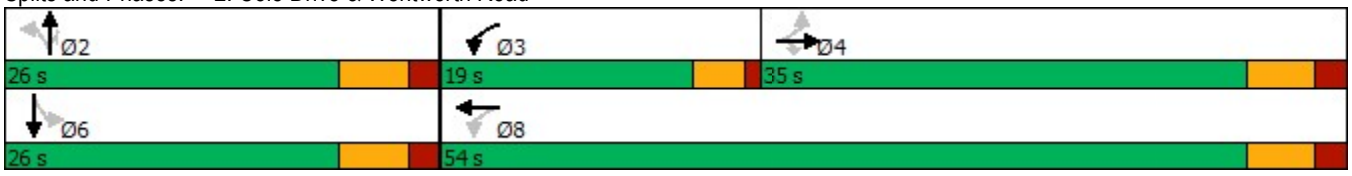


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	484	229	289	520	0	230	0	262	0	0	0
Future Volume (vph)	0	484	229	289	520	0	230	0	262	0	0	0
Satd. Flow (prot)	0	1883	1601	1789	1883	0	0	1789	1601	0	1883	0
Flt Permitted				0.200				0.757				
Satd. Flow (perm)	0	1883	1601	377	1883	0	0	1426	1601	0	1883	0
Satd. Flow (RTOR)			156						285			
Lane Group Flow (vph)	0	526	249	314	565	0	0	250	285	0	0	0
Turn Type		NA	Perm	pm+pt	NA		Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8			2		2	6		
Total Split (s)	35.0	35.0	35.0	19.0	54.0		26.0	26.0	26.0	26.0	26.0	
Total Lost Time (s)		6.1	6.1	4.0	6.1			6.1	6.1		6.1	
Act Effct Green (s)		23.7	23.7	41.4	39.2			16.4	16.4			
Actuated g/C Ratio		0.35	0.35	0.61	0.57			0.24	0.24			
v/c Ratio		0.81	0.38	0.68	0.52			0.73	0.47			
Control Delay		32.1	9.1	16.2	11.2			39.7	6.3			
Queue Delay		0.0	0.0	0.0	0.0			0.0	0.0			
Total Delay		32.1	9.1	16.2	11.2			39.7	6.3			
LOS		C	A	B	B			D	A			
Approach Delay		24.7			13.0			21.9				
Approach LOS		C			B			C				
Queue Length 50th (m)		64.1	8.7	19.1	44.1			31.8	0.0			
Queue Length 95th (m)		#115.9	25.6	39.6	67.8			#65.7	17.4			
Internal Link Dist (m)		258.6			117.5			316.2			132.8	
Turn Bay Length (m)			28.0	33.0					50.0			
Base Capacity (vph)		829	792	550	1369			432	684			
Starvation Cap Reductn		0	0	0	0			0	0			
Spillback Cap Reductn		0	0	0	0			0	0			
Storage Cap Reductn		0	0	0	0			0	0			
Reduced v/c Ratio		0.63	0.31	0.57	0.41			0.58	0.42			

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 68.3	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 80.8%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Cole Drive & Wentworth Road

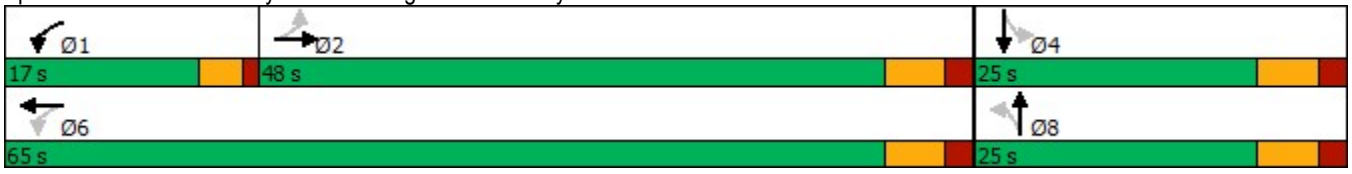


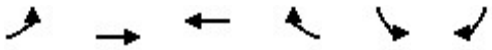
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	425	203	238	589	1	165	0	468	0	1	2
Future Volume (vph)	3	425	203	238	589	1	165	0	468	0	1	2
Satd. Flow (prot)	1789	1791	0	1789	1883	0	1789	1601	0	0	1714	0
Flt Permitted	0.421			0.150			0.756					
Satd. Flow (perm)	793	1791	0	283	1883	0	1424	1601	0	0	1714	0
Satd. Flow (RTOR)		36						488			2	
Lane Group Flow (vph)	3	683	0	259	641	0	179	509	0	0	3	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA			NA	
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Total Split (s)	48.0	48.0		17.0	65.0		25.0	25.0		25.0	25.0	
Total Lost Time (s)	6.1	6.1		4.0	6.1		6.1	6.1			6.1	
Act Effct Green (s)	32.3	32.3		48.8	46.6		14.8	14.8			14.8	
Actuated g/C Ratio	0.43	0.43		0.66	0.63		0.20	0.20			0.20	
v/c Ratio	0.01	0.86		0.66	0.54		0.63	0.72			0.01	
Control Delay	13.0	30.3		17.6	10.0		40.7	10.4			22.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	13.0	30.3		17.6	10.0		40.7	10.4			22.3	
LOS	B	C		B	A		D	B			C	
Approach Delay		30.2			12.2			18.2			22.3	
Approach LOS		C			B			B			C	
Queue Length 50th (m)	0.3	82.1		13.6	47.8		24.3	2.5			0.1	
Queue Length 95th (m)	1.7	#142.8		36.6	76.1		49.2	32.4			2.4	
Internal Link Dist (m)		661.3			158.1			656.5			63.1	
Turn Bay Length (m)	35.0			87.0			63.0					
Base Capacity (vph)	471	1078		463	1497		381	786			460	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.01	0.63		0.56	0.43		0.47	0.65			0.01	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 74.3
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 19.5 Intersection LOS: B
Intersection Capacity Utilization 90.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Payzant Drive/Legal Aid Driveway & Wentworth Road





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	43	702	720	24	35	66
Future Volume (Veh/h)	43	702	720	24	35	66
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	47	763	783	26	38	72
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		182	283			
pX, platoon unblocked	0.81				0.81	0.81
vC, conflicting volume	809				1653	796
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	647				1689	631
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				51	82
cM capacity (veh/h)	760				78	390

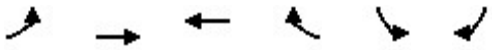
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	47	763	809	110
Volume Left	47	0	0	38
Volume Right	0	0	26	72
cSH	760	1700	1700	164
Volume to Capacity	0.06	0.45	0.48	0.67
Queue Length 95th (m)	1.5	0.0	0.0	29.5
Control Delay (s)	10.0	0.0	0.0	63.0
Lane LOS	B			F
Approach Delay (s)	0.6		0.0	63.0
Approach LOS				F

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	67	249	50	74	252
Future Volume (Veh/h)	13	67	249	50	74	252
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	73	271	54	80	274
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	732	298			325	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	732	298			325	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	96	90			94	
cM capacity (veh/h)	363	741			1235	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	87	325	354
Volume Left	14	0	80
Volume Right	73	54	0
cSH	635	1700	1235
Volume to Capacity	0.14	0.19	0.06
Queue Length 95th (m)	3.6	0.0	1.6
Control Delay (s)	11.6	0.0	2.3
Lane LOS	B		A
Approach Delay (s)	11.6	0.0	2.3
Approach LOS	B		

Intersection Summary			
Average Delay		2.4	
Intersection Capacity Utilization		48.4%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	51	353	459	107	62	35
Future Volume (Veh/h)	51	353	459	107	62	35
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	55	384	499	116	67	38
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	615				1051	557
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	615				1051	557
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				72	93
cM capacity (veh/h)	965				237	530

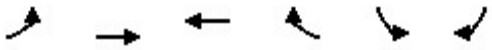
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	439	615	105
Volume Left	55	0	67
Volume Right	0	116	38
cSH	965	1700	296
Volume to Capacity	0.06	0.36	0.35
Queue Length 95th (m)	1.4	0.0	11.8
Control Delay (s)	1.7	0.0	23.7
Lane LOS	A		C
Approach Delay (s)	1.7	0.0	23.7
Approach LOS			C

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	31	6	163	118	31	121
Future Volume (Veh/h)	31	6	163	118	31	121
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	34	7	177	128	34	132
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	441	241			305	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	441	241			305	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	99			97	
cM capacity (veh/h)	558	798			1256	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	41	305	166
Volume Left	34	0	34
Volume Right	7	128	0
cSH	588	1700	1256
Volume to Capacity	0.07	0.18	0.03
Queue Length 95th (m)	1.7	0.0	0.6
Control Delay (s)	11.6	0.0	1.8
Lane LOS	B		A
Approach Delay (s)	11.6	0.0	1.8
Approach LOS	B		

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	125	292	268	156	143	9
Future Volume (Veh/h)	125	292	268	156	143	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	136	317	291	170	155	10
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	461				965	376
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	461				965	376
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	88				37	99
cM capacity (veh/h)	1100				248	670

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	136	317	461	165
Volume Left	136	0	0	155
Volume Right	0	0	170	10
cSH	1100	1700	1700	258
Volume to Capacity	0.12	0.19	0.27	0.64
Queue Length 95th (m)	3.2	0.0	0.0	30.2
Control Delay (s)	8.7	0.0	0.0	40.9
Lane LOS	A			E
Approach Delay (s)	2.6		0.0	40.9
Approach LOS				E

Intersection Summary			
Average Delay	7.4		
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix C

West Hants
something inspiring awaits

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation X	Decision Request ☐	Councillor Activity ☐

To: Members of Planning and Heritage Advisory Committee (PAC/HAC)

Submitted by: _____
Sara Poirier, Director of Planning and Development

Date: July 11, 2024

Subject: Development Agreement: 1781 King Street, Windsor (PID 45162005) and PID 45408374, Edward Drive, Garlands Crossing; File #24-15

LEGISLATIVE AUTHORITY

Section 230 of the Municipal Government Act.

RECOMMENDATION

Based on the information staff have at the time of drafting this report, staff do not recommend in favour of the application until such time that further information can be provided from the Municipal Traffic Authority regarding the potential traffic impact, from the Fire Chiefs on the design of the proposed emergency access route and from the applicant to address the parking concerns from the Municipal Public Works Engineering Division. Currently criteria 5.4.6 (c) compatibility with residential character of the area with respect to traffic generation, 5.4.6 (e) well designed parking areas, 5.4.6 (g) minimal traffic impact, 5.3.7 (c) compatibility with the character of the area with respect to traffic generation, 5.3.7 (d) adequacy of proposed streets, 16.3.1 (a) (iv) the adequacy of road networks leading to the development, and 16.3.1 (b) suitability of auto movement, are not met.

If the PAC/HAC would like to recommend in favour of the application the following motion would be in order:

…that PAC/HAC recommends that Council give First Reading and hold a Public Hearing to consider entering into a development agreement to allow a total of 92 dwelling units within 23 four-unit dwellings grouped on a portion of PID 45162005 and PID 45408374 in Windsor and Garlands Crossing which is substantively the same as the draft set out in Attachment C of the report File #24-15 to the Planning and Heritage Advisory Committee dated July 11, 2024.

…that PAC/HAC recommends that Council require that the development agreement with Mitch Brison for PID 45162005 and PID 45408374 be signed within 120 days from the date of final approval by Council or the date that any appeals have been disposed of; otherwise this approval will be void and obligations arising hereunder shall be at an end.

BACKGROUND

An original application letter entitled *"Rezoning for Brison Developments*" was received on October 5, 2023, from Chrystal Fuller on behalf of the owner, Mitch Brison of 3229190 Nova Scotia Limited, outlining the request to rezone PID 45162005 from Agriculture (AG) to Two Unit Residential (R-2) as the first step of the overall development proposal. This rezoning was approved by Council on May 28, 2024.

The original application also discussed future applications for potential Windsor Municipal Planning Strategy (WMPS) text amendments and a development agreement to permit grouped dwellings. At the meeting on June 25, 2024, Council approved amendments to the criteria of Policy 5.4.6 to allow multi-unit developments or grouped dwellings over 12 units to be considered by development agreement on local roads if a favorable traffic impact study, and where necessary, an emergency access is provided.

An amendment to the original application was received on February 13, 2024, from Chrystal Fuller to confirm the owner's development plans. The application requests Council consider a development agreement to permit up to 88 dwelling units within 22 four-unit dwellings grouped on the subject lots. The proposal has since been updated to include 92 dwelling units within 23 four-unit dwellings. The applicant has requested this application be brought forward to PAC/HAC and Council for further direction.

DISCUSSION

PID 45162005 is approximately 5 acres in size and PID 45408374 is approximately 2.6 acres in size. The application states the proposed development will utilize 6.3 acres of the subject lots.

PID 45162005 at 1781 King Street is currently occupied by a single unit dwelling and a detached garage/accessory building with a large field behind these structures. The property also includes a gravel emergency access road, required through the Crossing development agreement, that extends from the end of Irven Drive to the shared driveway that provides access to King Street. PID 45408374 is currently vacant.

PID 45162005 and the majority of PID 45408374 are designated Residential on the Generalized Future Land Use Map of the WMPS and a small portion of PID 45408374 is designated Residential on the Generalized Future Land Use Map of the West Hants Municipal Planning Strategy (Figure 1). PID 45162005 and the majority of PID 45408374 are zoned Two Unit Residential (R-2) on the Zoning Map of the Windsor Land Use By-law a small portion of PID 45408374 is zoned Two Unit Residential (R-2) on the Zoning Map of the West Hants Land Use By-law.

Dwellings with more than two units and grouped dwellings are not permitted in the underlying Two Unit Residential (R-2) zone.

In May 2024, the Government of Canada opened up a funding stream to incentivize the construction of purpose-built rental housing by providing a 100% rebate on the Goods and Services Tax (GST), or the Federal portion of the Harmonized Sales Tax (HST), on new purpose-built rental housing. The Government of Nova Scotia has also announced that it will provide a 100% rebate of the Provincial portion of HST for the same purpose. Eligible projects in this program need to include at least 4 residential units per building, with at least 90% of the residential units to be held for long-term residential rental, and developers need to begin construction on these units by 2031 with completion by 2036. The applicant has purposely designed this application for four-unit dwellings to submit the project to this and any future funding opportunity.

Surrounding Context

This proposal at the end of Irven Drive is seen as an extension of the Crossing. The properties surrounding the subject lots include the Avon View High School and future residential development to the north, the Crossing development to the east, residential properties and King Street to the south and west. These properties are designated Community Use and Residential. They have a variety of zoning including Institutional (I), Single Unit Residential (R-1), Two Unit Residential (R-2), Agriculture (AG) and Open Space (OS).

Additional Information

Staff have discussed the proposed Irven Drive Extension with the applicant since the fall of 2023. Throughout these discussions staff highlighted concerns with the proposed design of the Irven Drive Extension due to the following:

- The length of cul-de-sac being proposed;
- The criteria of Policy 5.4.6 requiring the development to abut an arterial or collector street as shown on the Transportation Map (Map 2) if the development consists of 12 or more units; and
- In relation to the Future Streets Map of the Subdivision By-law which shows a future connection from the Crossing to King Street.

For these reasons, staff have been advocating for the Irven Drive Extension to connect to the future Payzant Drive Connection in relation to this proposal.

<u>Length of Proposed Cul-de-sac</u>

The Municipal Services Specifications Manual (2022) states that *"the maximum length of a cul-de-sac shall be as established in the Subdivision By-Law but shall not exceed 400m unless otherwise approved by the Municipal Engineer."* The cul-de-sac proposed by the applicant for the Irven Drive Extension is greater than 400m in length, therefore the Public Works Engineering Division has stated that a road reserve should be provided to allow a future street connection to the Payzant Drive Connection. The Municipal Services Specifications Manual (2022) states *"acceptable road reserves to adjacent properties must be identified and deeded to the Municipality. These reserves must be not more than 400 m apart. Road reserves and their spacing are subject to acceptance by the Municipal Engineer. The road reserves will be located along the subdivision boundary in such a manner as to not prejudice development of the adjacent land."* Staff received a memorandum from Traffic Engineers from WSP which highlighted that the cul-de-sac length starts from the bottom of the "P" intersection at Irven Drive and Merriweather Cresent as this where the one way in and out begins.

Although the Municipal Services Specifications Manual states that "*the maximum length of a cul-de-sac shall be as established in the Subdivision By-Law but shall not exceed 400m unless otherwise approved by the Municipal Engineer"* the Municipal Public Works Engineering Division has confirmed that they will not approve a cul-de-sac exceeding 400m in this location for the following reasons:

- *"Density proposed is high and would present risks, related to road closures for watermain repair, road construction and maintenance, emergency response, structure fires blocking street.*
- *Emergencies requiring more than one access point.*
- *Evacuations requiring more than one exit point.*
- *Safe and efficient movement of traffic in all conditions and storm events.*
- *Snow removal and solid waste collection issues with a long street with no connection.*

Our suggestion would be to require a 16 meter road reserve to connect to the Payzant Connection. This would allow the municipality to construct a local municipal street in future when required."

<u>Criteria of Policy 5.4.6</u>

The criteria of Policy 5.4.6 (g) required the development to abut an arterial or collector street as shown on the Transportation Map (Map 2) if the development consists of 12 or more units. The current Irven Drive is shown as a local street on the Windsor Municipal Planning Strategy Transportation Map (Map 2) therefore the Irven Drive Extension would also be considered a local road unless connected to the future Payzant Drive Connection.

The applicant requested text amendments to this criterion of the WMPS. At the meeting on June 25, 2024, Council approved amendments to the criteria of Policy 5.4.6 to allow multi-unit developments or grouped dwellings over 12 units to be considered by development agreement on local roads if a favorable traffic impact study, and where necessary, an emergency access is provided. Therefore, the Irven Drive Extension is no longer required to connect to the future Payzant Drive Connection if a favourable traffic impact study and emergency access are provided and acceptable to the Municipal Public Works Engineering Division.

Future Streets Map

In relation to the Future Streets Map of the Subdivision By-law which shows a future connection from the Crossing to King Street. Section 28 of the Windsor Subdivision By-law states:

> *"(c) Where an area of land being subdivided includes or abuts land that contains a Required Street Connection as identified on the Future Streets Map (Map 1), the general layout of new streets in the proposed subdivision shall conform to the Future Streets Map. The location of such new streets is not required to be an exact match of the Future Streets Map, but must allow for, in the opinion of the Development Officer, the future continuation and completion of any Required Street Connection."*

The Development Officer stated that if the applicant is proposing to further develop and subdivide the subject lots with the creation of a new public street, they would need to connect from Irven Drive Extension to Payzant Drive Connection. The exact location may be varied to some degree, but the street connection form Irven Drive Extension to Payzant Drive Connection is required.

Applicant Submissions and Staff Response

On January 24, 2024, the applicant submitted the following traffic information:

- GAALCO Traffic Engineering Report dated June 21, 2021, entitled *"Brison Developments Ltd. The Crossing, Windsor/West Hants, Additional Street Connection Traffic Impact Study"*;
- Letter from GAALCO Traffic Engineering dated September 1, 2023, entitled *"The Crossing: Additional Street Connectors"*; and
- GAALCO Traffic Engineering Report dated January 9, 2024, entitled *"Brison Developments Ltd. The Crossing, Windsor/West Hants, 22 Four-plex units on Irven Drive Traffic Report".*

The conclusion of the reports as cited in the letter from GAALCO Traffic Engineering (September 2023) states:

> *"The analysis of the four scenarios definitely demonstrated that the **best** connection for **both** the residents of The Crossing and the **general public** is Community Way connected to Payzant Drive. This connection will allow residents of The Crossing direct access to the hospital, the school, and a commercial district in Windsor; it will allow the public much better access to the hospital, the school, and a commercial district in Windsor.*
>
> *The **worst** connection for both the residents and the general public is Irven Drive connected to King Street. This connection does little for the residents of The Crossing to access their desired destinations and allows the general public to use a long and circuitous route through The Crossing to reach the hospital, the school, etc. This route would **not** be of great benefit to the public, compared to Payzant Drive connected to King Street, and would have the very undesirable effect of bringing 'short cutting' traffic through The Crossing using Irven Drive. Irven Drive is already built as a residential street, not a collector, and which cannot be rebuilt, even if one wanted; the short-cutting traffic would be quite detrimental to the residents quality of life."*

The Municipal Traffic Authority requested a Traffic Engineer at WSP to review the Traffic Impact Study provided by the applicant and received a memorandum entitled *"Review of the Crossing Development Plans and Traffic Impact Study (TIS)"* dated March 27, 2024. This memorandum provided feedback on the Traffic Impact Study provided by the applicant. In response to the feedback from WSP, on April 19, 2024, the applicant provided:

- A memorandum from Allan Golding of GAALCO Traffic Engineering entitled *"Re: Memorandum to Troy Burgess from Patrick Hatton March 27 2024"; and*
- GAALCO Traffic Engineering Report dated April 15, 2024 entitled *"Brison Developments Ltd. The Crossing, Windsor/West Hants, 22 Four-plex units on Irven Drive Traffic Impact Analysis"*.

On May 7, 2024, the Municipal Traffic Authority stated the following:

> *"The GAALCO Report is in contradiction to information given to WHRM Staff by WSP. As a result, WHRM commissioned a TIS. Taking in account traffic with a wholistic view of the entire area from Underwood Rd, King St, Wentworth Rd, Payzant, Cole Dr and the entire Crossing Development. All known development information and the connect to Community Way to Payzant, the connection from Edward Dr to Cole Dr, Payzant Dr to King St connection and traffic calming all being considered. Until such time that Staff receives this completed TIS, Staff is not in the position to comment on the GAALCO report. Staff will comment once all the relevant information is in front of them."*

On May 27, 2024, the Municipal Traffic Authority confirmed:

> *"The contradiction to the GAALCO report mention was the fact that WSP told Staff they felt there should be a connection from Irven to Payzant and WSP's advice is that the Cul-de-sac starts at Merriweather not Goosie Loop. Staff agree with this point. The Municipal Traffic Impact Study is expected to be completed in July."*

Connection Options

The applicant has provided three design options for a connection between Irven Drive Extension and the Payzant Drive Connection (Figure 3-5).

Option 1 shows the proposed Irven Drive Extension ending in a cul-de-sac with a 25 ft. wide access easement in favour of the Municipality to provide an emergency access / active transportation connection. This is the option that is attached to the draft development agreement. Due to the reasons mentioned above (i.e., length of cul-de-sac and Future Streets Map requirements) this option is not recommended by staff.

Option 2 shows the proposed Irven Drive Extension ending in a cul-de-sac with a road reserve being provided, angled towards the abutting private property to the north west. The applicant suggests that the two private property owners could provide land to allow the road reserve to connect the future Irven Drive Extension to the future Payzant Drive Extension. However, unless there is agreement from both property owners to provide the road reserve as depicted on the plan it would not be a feasible option.

Option 3 shows the proposed Irven Drive Extension ending in a cul-de-sac with a road reserve being provided on the applicant's property and connecting to the future Payzant Drive Connection. This would be the most viable option provided and is preferred by staff.

Summary

At this time staff do not recommend in favour of the application until such time that further information can be provided from the Municipal Traffic Authority regarding the potential traffic impact, from the Fire Chiefs on the design of the proposed emergency access route and from the applicant to address the parking concerns from the Municipal Public Works Engineering Division.

Windsor and West Hants Municipal Planning Strategy's

WMPS Specific Criteria

Policy 5.4.6 of the WMPS establishes the intent of Council to consider entering into a development agreement to allow new multiple unit residential development consisting of three or more units and grouped dwellings in the Residential designation. The criteria of Policy 5.4.6 are examined in detail in Attachment A. In summary the proposal does not meet the criteria since:

- the Municipal Traffic Authority is unable to provide final comment on traffic impact of the proposal to determine the compatiability and impact of traffic generation (5.4.6 (c) and (g));
- the applicant has not addressed the concerns of the Municipal Public Works Engineering Division regarding potential impacts of the proposed parking to the sidewalk, snow removal, street maintenance and solid waste collection (5.4.6 (e)); and
- the local Fire Chiefs and the Municipal Emergency Management Coordinator has not had sufficient time to comment on the proposed emergency access (5.4.6 (g)).

WHMPS Specific Criteria

Policy 5.3.10 of the WHMPS establishes the intent of Council to consider entering into a development agreement to allow grouped dwellings consisting of six or more dwelling units in the Three Mile Plains Growth Centre. The criteria of Policy 5.3.10 are examined in detail in Attachment A. In summary the proposal does not meet the criteria since:

- the Municipal Traffic Authority is unable to provide final comment on the compatiability of traffic generation and the adequacy of proposed streets (5.3.7 (c) and (d)).

WMPS and WHMPS General Criteria

Policy 16.3.1 of the WMPS and WHMPS outlines the general criteria for development agreements. These criteria are examined in detail in Attachment B. In summary, the proposal does not meet the criteria as:

- the Municipal Traffic Authority is unable to provide final comment on the adequacy of proposed streets and suitability of auto movement (16.3.1 (a) (iv), WMPS 16.3.1 (b), WHMPS 16.3.1 (c)).

MUNICIPAL CLIMATE CHANGE ACTION PLAN

The Municipal Climate Change Action Plan (MCCAP) for Windsor (2014) highlights two simulated flooding scenarios. The first scenario is based on a storm surge that occurred in 1997, which shows the expected damage is to occur along the coastline. The second scenario shows the simulated flooding extent for probable maximum flood due to climate change. Under this scenario most of the community of Windsor will experience extensive flooding. However, the mapping does not recognize the subject lots to be at risk as this area is located further inland. The subject lots do not contain any identified watercourses.

Property owners are responsible for ensuring that the lot is suitable for the proposed uses.

NEXT STEPS

As noted above, the proposed development agreement has been considered within the context of both the specific and general criteria of the WMPS and WHMPS. Until such time that further information can be provided from the Municipal Traffic Authority regarding the traffic impact, from the Fire Chief on the design of the proposed emergency access route and from the applicant to address the parking concerns from the Municipal Public Works Engineering Division staff do not recommend moving forward with this application.

Note: the draft development requires legal review. This is anticipated prior to Council's First Reading. The applicant has also not provided any feedback on the draft development agreement.

Approval Process

Staff Review

▼

Public Information Meeting – March 5

▼

PAC/HAC Review and Recommendation – July 11

▼

Regional Council First Reading – July 23*

▼

Public Hearing & Second Reading – September 24*

▼

Notice of Approval in Local Paper

▼

14-Day Appeal Period

*anticipated dates; final dates set by Council

FINANCIAL IMPLICATIONS

The current development as proposed poses no cost to the Municipality other than providing services such as water, sewer, snow plowing, and garbage collection to new residents which would be offset by Municipal taxes.

In response to the proposed length of cul-de-sac, the Municipal Public Works Engineering Division stated *"Our suggestion would be to require a 16 meter road reserve to connect to the Payzant Connection. This would allow the municipality to construct a local municipal street in future when required."* If this was added as a requirement of the development proposal, the future construction of this road would be an additional cost to the Municipality, however, could be included in the overall project budget for the Payzant Drive Connection.

ALTERNATIVES

In response to the application, PAC/HAC may recommend that Council:

- hold First Reading and authorize a Public Hearing to approve the development agreement as drafted or as specifically revised by direction of PAC/HAC;
- hold First Reading and authorize a Public Hearing to refuse the development agreement as drafted, citing the criteria that PAC/HAC consider not to be met; or
- provide alternative direction, such as requesting further information on a specific topic.

ATTACHMENTS

Figure 1	GFLUM Extract
Figure 2	Zoning Map Extract
Figure 3	Applicants Proposed Design Option 1
Figure 4	Applicants Proposed Design Option 2
Figure 5	Applicants Proposed Design Option 3
Attachment A	Specific Criteria for Development Agreement
Attachment B	General Criteria for Development Agreement
Attachment C	Draft Development Agreement
Attachment D	Public Information Meeting Notes

Report Prepared by: _____

Sara Poirier, Director of Planning and Development

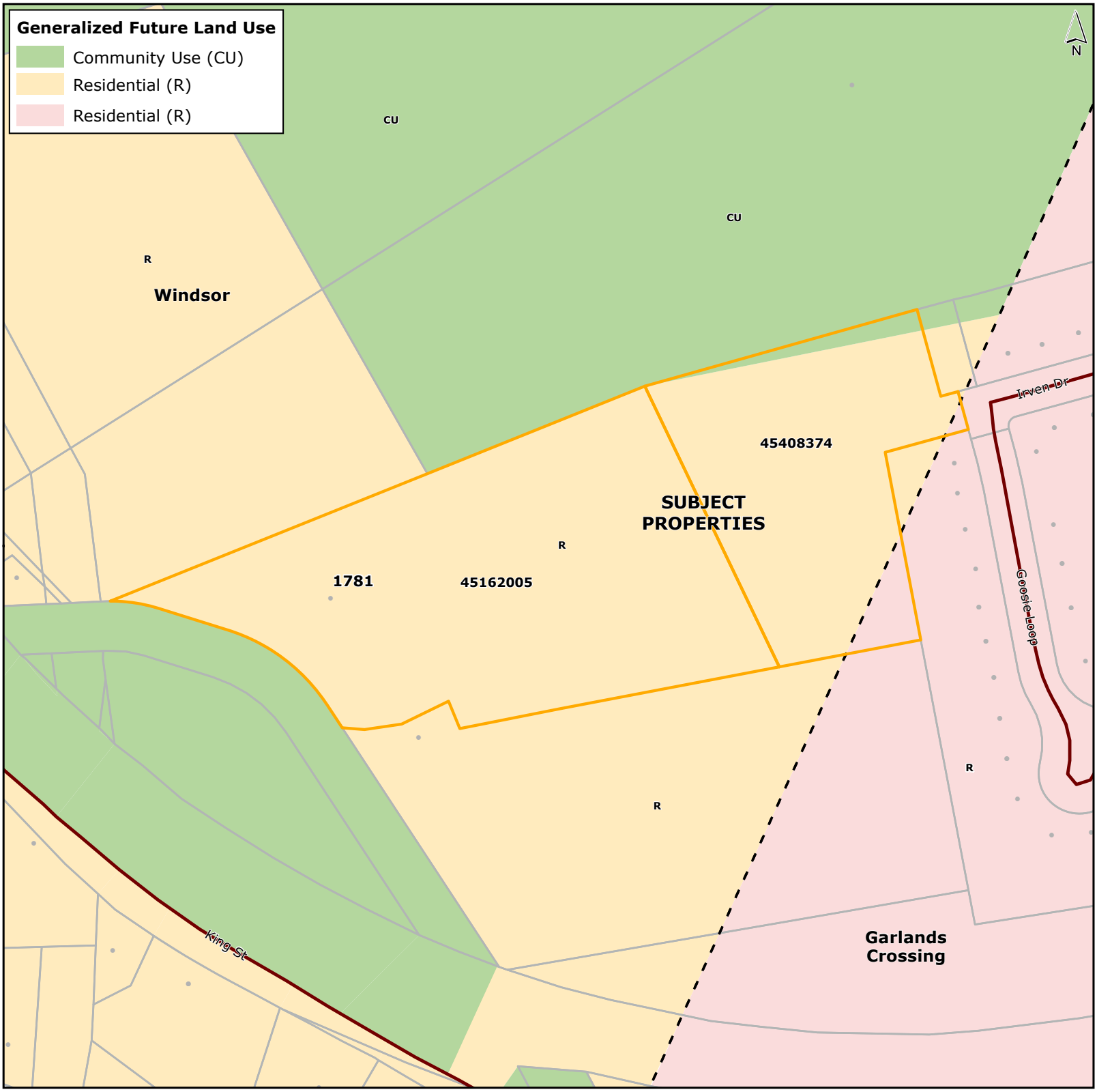
Report Reviewed by: _____

Alex Dunphy, Senior Planner

Figure 1 - GFLUM Extract

1781 King Street, PID 45162005 and Edward Drive, PID 45408374

West Hants



Base data derived from the Nova Scotia Property Records Database (NSPRD) and the Nova Scotia, Geomatics Centre (NSGC), Copyright Her Majesty The Queen in Right of the Province of Nova Scotia.

This map is a graphical representation only. It is not a land survey and is not intended for used for legal descriptions or to calculate exact dimensions or area.

Prepared by: West Hants Regional Planning and Development Department June, 2024.

Generalized Future Land Use

0 30 60

Metres

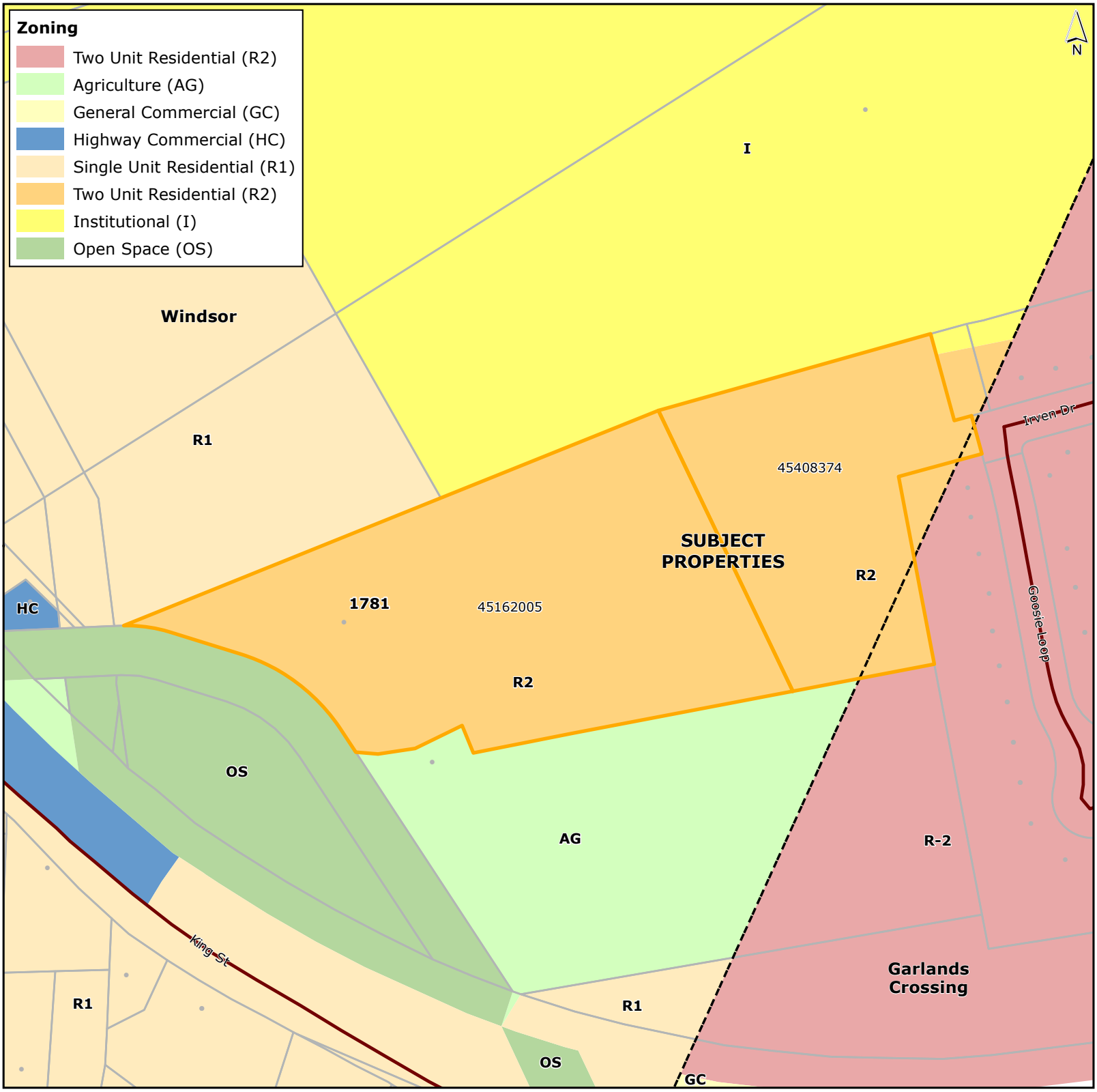
Scale: 1:2,100

- PID 45162005 and 45408374
- Communities
- Parcels
- Civics
- Roads

Figure 2 - Zoning Map Extract

1781 King Street, PID 45162005 and Edward Drive, PID 45408374

West Hants



Base data derived from the Nova Scotia Property Records Database (NSPRD) and the Nova Scotia, Geomatics Centre (NSGC), Copyright Her Majesty The Queen in Right of the Province of Nova Scotia.

This map is a graphical representation only. It is not a land survey and is not intended for used for legal descriptions or to calculate exact dimensions or area.

Prepared by: West Hants Regional Planning and Development Department June, 2024.

Zoning

0 30 60

Metres

Scale: 1:2,100

PID 45162005 and 45408374

Communities

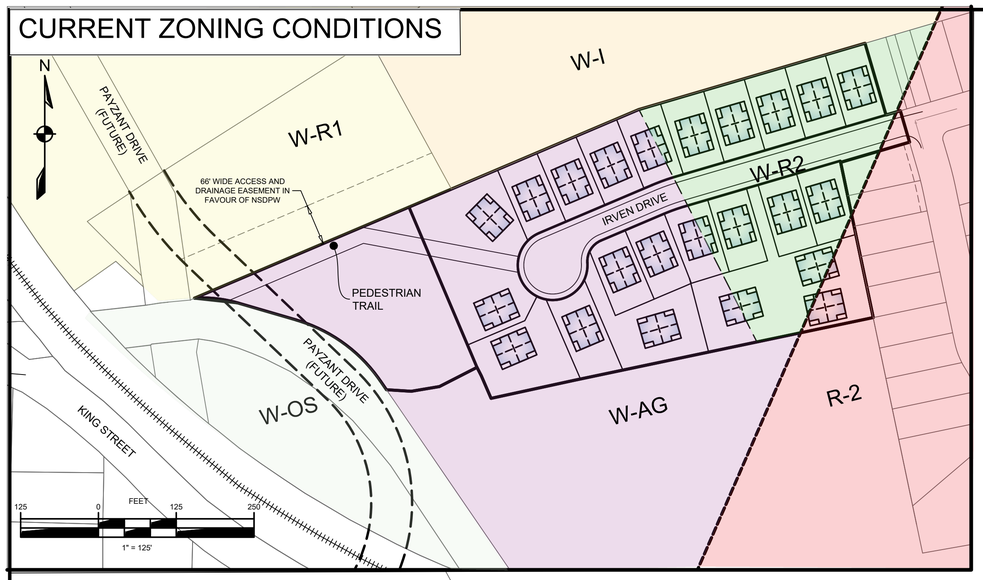
Parcels

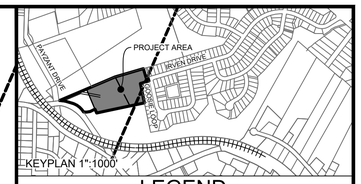
Civics

Roads

Figure 3 - Applicants Proposed Design Option 1

CURRENT ZONING CONDITIONS





LEGEND

EXISTING		PROPOSED
	EASEMENT	
WAE	WATER PIPE	WA
SAE	SANITARY PIPE	SA
STE	STORM PIPE	ST
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			WATER VALVE		
CURBSTOP			HYDRANT		
REDUCER			CATCHBASIN		
PRECAST HEADWALL			UTILITY POLE w/ GUY WIRE		
STREET TREE			STREET SIGN		

BUILDINGS	UNITS
23	92

40 0 FEET 40 80
1" = 40'

ISSUE	DATE	DESCRIPTION
1	MAY 9, 2024	ISSUED FOR REVIEW

CONSULTANT

DESIGNPOINT
engineering • surveying • solutions
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PRELIMINARY
MAY 9, 2024

CLIENT

BRISON DEVELOPMENTS

PROJECT DESCRIPTION

THE CROSSING - IRVEN DRIVE

WINDSOR, NOVA SCOTIA

SHEET DESCRIPTION

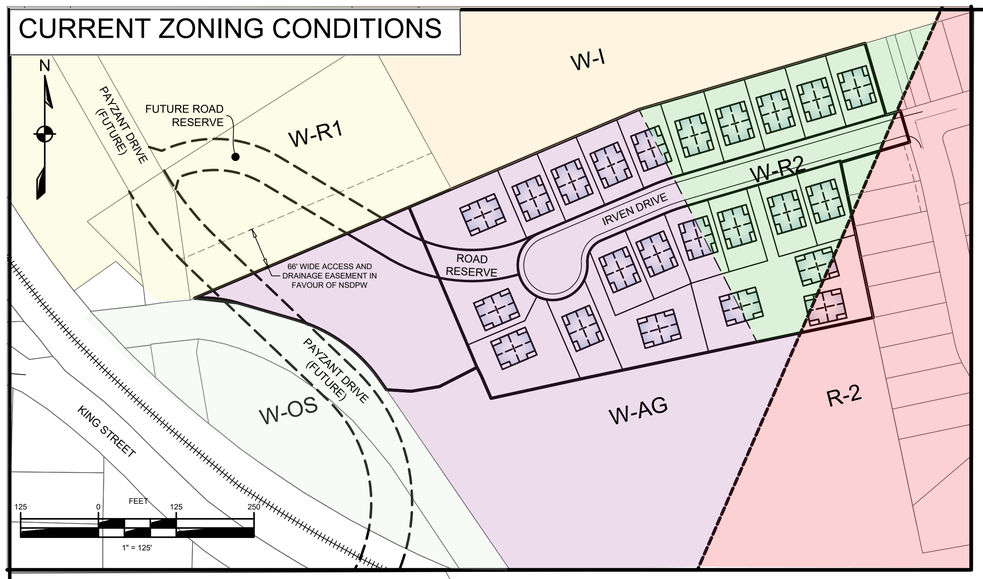
IRVEN DRIVE
CONCEPT PLAN (MULTI-UNIT HOMES)
OPTION 1 - PEDESTRIAN TRAIL

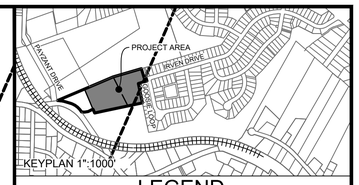
Drawn	Engineer	Project No.	Drawing No.
S. STACEY	L. GRANT	22-278	CP-01
Scale	Filename		1 of 1
1" = 40'H	22-278_Concept 1.dwg		

P:\2022\22-278 Brison - The Crossing - Irven Street\01 - Drawings\Eng Design\Sheets\Concepts\22-278_Concept 1.dwg, Plot Date: 2024-May-9, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)

Figure 4 - Applicants Proposed Design Option 2

CURRENT ZONING CONDITIONS





LEGEND

EXISTING		PROPOSED
	EASEMENT	
WAE	WATER PIPE	WA
SAE	SANITARY PIPE	SA
STE	STORM PIPE	ST
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			WATER VALVE		
CURBSTOP			HYDRANT		
REDUCER			CATCHBASIN		
PRECAST HEADWALL			UTILITY POLE w/ GUY WIRE		
STREET TREE			STREET SIGN		

BUILDINGS	UNITS
23	92

40 0 FEET 40 80
1" = 40'

ISSUE	DATE	DESCRIPTION
1	MAY 9, 2024	ISSUED FOR REVIEW

CONSULTANT

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PRELIMINARY
MAY 9, 2024

CLIENT

BRISON DEVELOPMENTS

PROJECT DESCRIPTION

THE CROSSING - IRVEN DRIVE

WINDSOR, NOVA SCOTIA

SHEET DESCRIPTION

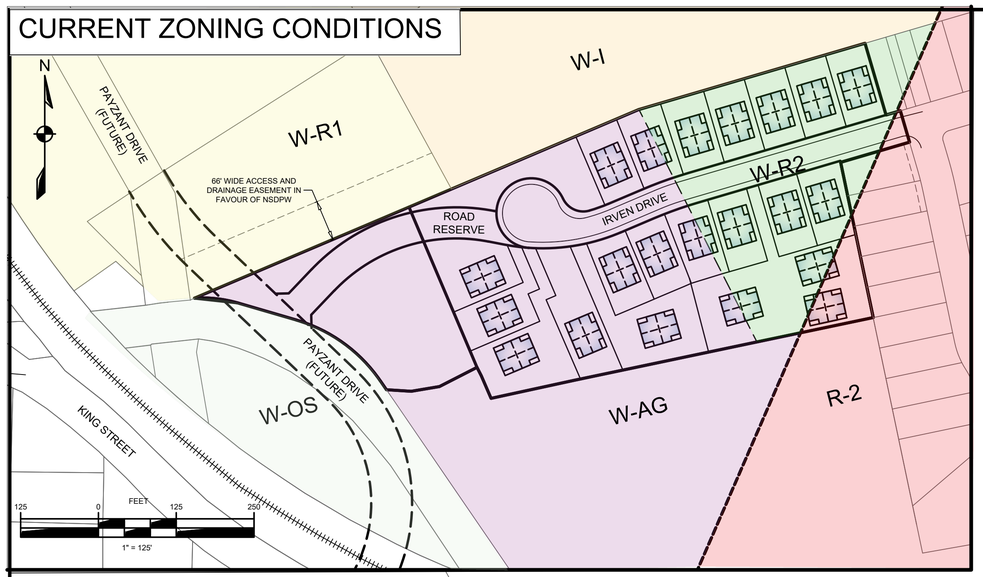
IRVEN DRIVE
CONCEPT PLAN (MULTI-UNIT HOMES)
OPTION 2 - ROAD RESERVE (OWNER)

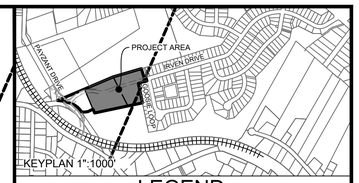
Drawn	Engineer	Project No.	Drawing No.
S. STACEY	L. GRANT	22-278	CP-01
Scale	Filename		1 of 1
1" = 40'H	22-278_Concept 2.dwg		

P:\2022\22-278 Brison - The Crossing - Irven Street\01 - Drawings\Eng Design\Sheets\Concepts\22-278_Concept 2.dwg, Plot Date: 2024-May-9, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)

Figure 5 - Applicants Proposed Design Option 3

CURRENT ZONING CONDITIONS





LEGEND

EXISTING		PROPOSED
	EASEMENT	
WAE	WATER PIPE	WA
SAE	SANITARY PIPE	SA
STE	STORM PIPE	ST
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X X	FENCELINE	X X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			WATER VALVE		
CURBSTOP			HYDRANT		
REDUCER			CATCHBASIN		
PRECAST HEADWALL			UTILITY POLE w/ GUY WIRE		
STREET TREE			STREET SIGN		

BUILDINGS	UNITS
21	84

40 0 FEET 40 80
1" = 40'

ISSUE	DATE	DESCRIPTION
1	MAY 9, 2024	ISSUED FOR REVIEW

CONSULTANT

DESIGNPOINT
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PRELIMINARY
MAY 9, 2024

CLIENT

BRISON DEVELOPMENTS

PROJECT DESCRIPTION

THE CROSSING - IRVEN DRIVE

WINDSOR, NOVA SCOTIA

SHEET DESCRIPTION

IRVEN DRIVE
CONCEPT PLAN (MULTI-UNIT HOMES)
OPTION 3 - ROAD RESERVE (MUNICIPALITY)

Drawn	Engineer	Project No.	Drawing No.
S. STACEY	L. GRANT	22-278	CP-01
Scale	Filename		1 of 1
1" = 40'/H	22-278_Concept 3.dwg		

Attachment A
Specific Criteria for Development Agreements

Windsor Municipal Planning Strategy

Policy 5.4.6 It shall be the policy of Council to consider entering into a development agreement to allow, in the Residential designation, new multiple unit residential development consisting of three or more units, grouped dwellings, boarding houses and residential care facilities, as well as the conversion of existing buildings to three or more units, subject to the following:

CRITERIA		COMMENT
(a) the proposed use meets one of the following:		
(i)	in the case of a new building or the conversion of an existing non-residential building, that the development is generally consistent with the High Density Residential (R-4) zone standards; or	The developer is proposing to construct 92 dwelling units within 23 four-unit dwellings grouped on the subject lots through the draft development agreement. The High Density Residential (R-4) zone requires a minimum of 100 ft. of frontage per lot, 35 ft. for front and rear yards, and a 15 ft. side yard on one side with a 5 ft. side yard on the other. The draft development agreement requires slightly less minimum lot requirements for this proposed development as the development is an extension of the existing Crossing development and this will maximize the potential of the subject lots. The draft development agreement requires a minimum of 60 ft. of frontage, 25 ft. front yard and 15 ft. rear yard, with a 10 ft. minimum side yard on both sides. The maximum height of the main buildings and accessory buildings, as well as the minimum distance between grouped dwellings, is consistent with the High Density Residential (R-4) zone.
(ii)	in the case of a conversion of an existing residential building, that any addition or enlargement to the building meets the	Not applicable as the existing residential dwelling located at 1781 King Street is not being converted as

setback requirements of the zone in which it is located, or that any undersized setbacks are not further reduced by the addition or enlargement;	part of this proposal. It will remain as-is.
(b) the height, bulk, lot coverage and appearance of any building is compatible with adjacent land uses;	This proposal is considered an extension of the land leased community known as the Crossing and is very similar in design in relation to the height, bulk, lot coverage and appearance as the Crossing. This proposal is also considered compatible with adjacent land uses, including the existing single unit on PID 45162005, the Crossing, single unit dwellings on King Street and Payzant Drive, and the Avon View High School.
(c) the development is considered compatible with the residential character of the area with respect to traffic generation and population density;	On January 24, 2024, the applicant submitted a GAALCO Traffic Engineering Report dated January 9, 2024, entitled *"Brison Developments Ltd. The Crossing, Windsor/West Hants, 22 Four-plex units on Irven Drive Traffic Report".* In response to an inquiry, in April 2024 the Municipal Traffic Authority stated "*As the road network is now and illustrated on the attached drawing this extension to Irven Dr would exceed 400m with only one entrance. This would contravene the WHRM Specifications."* In May, the Municipal Traffic Authority provided additional details on their review of the Traffic Impact Study provided by the developer. They noted *"The GAALCO Report is in contradiction to information given to WHRM Staff by WSP. As a result, WHRM commissioned a Traffic Impact Study taking in account traffic with a wholistic view of the entire area from Underwood Rd., King St., Wentworth Rd., Payzant Dr., Cole*

	Dr. and the entire Crossing Development. All known development information and the connection from Community Way to Payzant Dr., the connection from Edward Dr. to Cole Dr., connection from Payzant Dr. to King St. and traffic calming will all be considered. Until such time that Staff receives this completed Traffic Impact Study, Staff is not in the position to comment on the GAALCO report. Staff will comment once all the relevant information is in front of them." The Municipal Traffic Authority clarified that *"the contradiction to the GAALCO report mention was the fact that WSP told Staff they felt there should be a connection from Irven Dr. to Payzant Dr."* The Municipal Traffic Impact Study is expected to be completed in July. Windsor has a population density of 522 people per sq. km. (Statistics Canada Census for 2022). The Crossing development as currently constructed has a population density of almost double this and this area of Burgess Crescent, Underwood Drive and Fraser Drive has a population density almost three and a half times the population density of Windsor. A 6-storey 83-unit apartment building in the Crossing is in the process of being constructed with three other apartment buildings in the area already received development agreement approval from Council. The density proposed through this development agreement would be consistent with the current and future development plans and population for the area. Due to the Municipal Traffic Authority not being able to provide final comment on traffic impact of the

	proposal this criterion is considered not to be met.
(d) consideration is given to the provision of fences and/or landscaping as part of the residential development to minimize effects on adjacent land uses;	As this proposal is considered an extension of the land leased community known as the Crossing the effects on adjacent land uses is expected to be minimal. There is a requirement written in the draft development agreement to require fencing along the subject lot boundaries with PID 45294980 as this lot is currently zoned Agriculture (AG).
(e) adequate on-site parking is provided and parking areas are well designed;	Parking for each dwelling unit is required to be located on the same lot as that dwelling unit within the draft development agreement. In response to an inquiry, the Municipal Public Works Engineering Division responded in April 2024 that *"currently the proposed driveways (parking for units) looks like it would impact the sidewalk. Driveways must be constructed to prevent cars encroaching onto sidewalk or road ROW. There is no room on the street for any additional parking, this presents a concern for snow removal, street maintenance and solid waste collection."* This criterion is not considered to be met as the applicant has not addressed the concerns of the Municipal Public Works Engineering Division regarding potential impacts of the proposed parking to the sidewalk, snow removal, street maintenance and solid waste collection.
(f) there is adequate on-site recreational open space suitable in extent and design to the nature of the development; for conversion of existing buildings, nearby public parks may be deemed sufficient;	Due to the proximity of the subject lots to Payzant Drive and the Crossing development it is expected that nearby public parks, such as the Tregothic Trail and Burgess Crescent park, as well as

	the private parkland within the Crossing development would be sufficient to serve the residents of this development. This proposal also includes an emergency access / active transportation route which will connect active transportation users from the Irven Drive Extension to the future Payzant Drive Connection.
(g) the development abuts an arterial or collector street as shown on the Transportation Map (Map 2) if the development consists of 12 or more units, unless a traffic impact study indicates there will be minimal impact on traffic and an emergency access is provided if the site only has one road access. In circumstances where these parameters can be met, more than 12 units can be considered without abutting an arterial or collector street.	The current Irven Drive is shown as a local street on the Windsor Municipal Planning Strategy Transportation Map (Map 2). On January 24, 2024, the applicant submitted a GAALCO Traffic Engineering Report dated January 9, 2024, entitled *"Brison Developments Ltd. The Crossing, Windsor/West Hants, 22 Four-plex units on Irven Drive Traffic Report".* In response to an inquiry, in April 2024 the Municipal Traffic Authority stated "*As the road network is now and illustrated on the attached drawing this extension to Irven Dr would exceed 400m with only one entrance. This would contravene the WHRM Specifications."* In May, the Municipal Traffic Authority provided additional details on their review of the Traffic Impact Study provided by the developer. They noted *"The GAALCO Report is in contradiction to information given to WHRM Staff by WSP. As a result, WHRM commissioned a Traffic Impact Study taking in account traffic with a wholistic view of the entire area from Underwood Rd., King St., Wentworth Rd., Payzant Dr., Cole Dr. and the entire Crossing Development. All known development information and the connection from Community Way to Payzant Dr., the connection from Edward Dr. to Cole Dr.,*

	connection from Payzant Dr. to King St. and traffic calming will all be considered. Until such time that Staff receives this completed Traffic Impact Study, Staff is not in the position to comment on the GAALCO report. Staff will comment once all the relevant information is in front of them." The Municipal Traffic Authority clarified that *"the contradiction to the GAALCO report mention was the fact that WSP told Staff they felt there should be a connection from Irven Dr. to Payzant Dr."* The Municipal Traffic Impact Study is expected to be completed in July. The proposed emergency access was sent to the local Fire Chiefs and the Municipal Emergency Management Coordinator on June 27, 2024, for review. A response is yet to be received regarding the adequacy of the design of the emergency access for the proposal. Due to the Municipal Traffic Authority not being able to provide final comment on traffic impact of the proposal and the local Fire Chiefs and the Municipal Emergency Management Coordinator having insufficient time to comment on the proposed emergency access this criterion is considered not to be met.
(h) the architectural design of the development is reasonably consistent with the provisions of the Architectural Design Manual if the proposed development is located in an Architectural Control District;	Not applicable as the subject lots are not within an Architectural Control District.
(i) in the case of the conversion of an existing structure, renovations can be made to ensure the safety of residents in case of fire;	Not applicable as the existing residential dwelling located at 1781 King Street is not being converted as part of this proposal. It will remain as-is.

(j) any other matter which may be addressed in a development agreement; and	All other matters are addressed elsewhere in this report.
(k) the provisions of Policy 16.3.1 of the Municipal Planning Strategy.	Please see Attachment B for further details.

West Hants Municipal Planning Strategy

Policy 5.3.10 *It shall be the policy of Council to consider development of grouped dwellings consisting of six or more dwelling units in the Three Mile Plains Growth Centre by development agreement subject to the following:*

CRITERIA	COMMENT
(a) the development has frontage on:	
(i) a public street; or	The proposed Irven Drive Extension will be a public street.
(ii) a right-of-way clearly granted by deed or easement, unrestricted	Not applicable as the development will have frontage on a public street as noted in Policy 5.3.10 (a)(i).
(b) where access to the development is by a right-of-way as specified in clause (a)(ii), the street along such right-of-way shall be designed by a professional engineer, who is a member in good standing of the Association of Professional Engineers of Nova Scotia and who carries appropriate professional liability insurance, who will certify that the design and construction of the street are adequate to accommodate the traffic generated by the development and access by emergency protection vehicles. Street design and construction plans shall be subject to review by the Municipal Engineer;	Not applicable as the development will have frontage on a public street as noted in Policy 5.3.10 (a)(i).
(c) building clusters are located so as to conserve existing natural features of the site;	The subject lots gently slope towards the south and is mostly cleared of vegetation. There are no identified watercourses or marsh areas. Due to the lack of existing natural features on the site the developer has created the site plan to maximize the potential of the subject lots.

(d) the specific requirements for multiple unit development set out in clauses (b) to (h) of Policy 5.3.7;	The specific requirements in clauses (b) to (h) of Policy 5.3.7 are reviewed below.
(e) the application is accompanied by:	
(i) a site plan drawn to scale showing the proposed number, location and type of buildings, lot coverage, parking areas, vehicular and pedestrian circulation systems within the development, access to the site and open space and recreational areas;	Site plans were submitted with the application. A site plan showing the Irven Drive Extension ending in a cul-de-sac with an emergency access / active transportation route is included as part of the draft development agreement.
(ii) other supporting maps showing the topography of the lot including contours at five meter intervals, and significant natural features such as watercourses, wetlands and unique habitat or vegetation; and	The application letter included proposed site plans, building plan, and a master plan of the Crossing development. As noted previously there are no significant natural features identified on the subject lots.
(iii) photo examples, plans or drawings showing the exterior design of the proposed buildings;	The applicant did not provide any photo examples or drawings of the exterior of the proposed buildings, however, they did provide a proposed building plan for the four-unit dwellings as an attachment to the application letter.
(f) any other matter which may be addressed by development agreement; and	All other matters are addressed elsewhere in this report.
(g) Policy 16.3.1	Please see Attachment B for further details.

Policy 5.3.7 It shall be the policy of Council to consider rezoning land within the Three Mile Plains Growth Centre to R-3 subject to the following:

CRITERIA	COMMENT
(b) the lot is serviced, or is capable of being serviced, with municipal water and sewer;	The lot is capable of being serviced with municipal water and sewer. There are currently a sewer easement and a service easement in favour of the Municipality on the subject lots where

	the current servicing for the area is located. It is anticipated that the developer will request these easements be discharged once they relocate the servicing to be located beneath the Irven Drive Extension and potential emergency access / active transportation route.
(c) the development is compatible with the character of the area with respect to building scale and design, traffic generation, population density and similar matters;	Please see Policy 5.4.6 (b) and (c) above.
(d) existing and proposed streets are adequate to support the development and existing streets will not require major infrastructure improvements as a result of the development; a traffic impact study may be required in accordance with Section 14.6 of this Strategy;	Based on the current proposal, traffic traveling to and from the proposed development is expected to enter through the Crossing development to the extension of Irven Drive which would be constructed by the developer and end in a cul-de-sac with emergency access / active transportation route option. As noted in 5.4.6 (g) in April 2024 the Municipal Traffic Authority stated "*As the road network is now and illustrated on the attached drawing this extension to Irven Dr. would exceed 400m with only one entrance. This would contravene the WHRM Specifications."* The Traffic Authority noted that *"WRHM has to rely on the interpretation of the two WSP Traffic Engineers who produced the memo I sent to you previously, which states* [the 400m calculation begins at] *the bottom of the "P" intersection at Irven Dr and Merriweather Cresent because this is where the one way in and out begins."* In May, 2024, the Public Works Engineering Division stated the reasoning for following the 400m rule in the Municipal Services Specifications

	Manual in relation to this proposal. They stated *"The 400m must be followed for the following reasons:* • *Density proposed is high and would present risks, related to road closures for watermain repair, road construction and maintenance, emergency response, structure fires blocking street.* • *Emergencies requiring more than one access point* • *Evacuations requiring more than one exit point* • *Safe and efficient movement of traffic in all conditions and storm events* • *Snow removal and solid waste collection issues with a long street with no connection* *Our suggestion would be to require a 16 meter road reserve to connect to the Payzant Connection. This would allow the municipality to construct a local municipal street in future when required."* This proposal outlines that the development will have an emergency access / active transportation route instead of Irven Drive Extension being built out to the future Payzant Drive Connector. Based on the comments received from the Municipal Traffic Authority and Public Works Engineering Division which indicate the proposed streets do not meet the requirements of the Municipal Services Specifications Manual and are therefore inadequate to support the development, staff do not consider this criterion to be met.
(e) adequate open space or recreational space is provided;	Please see 5.4.6 (f).

(f) adequate on-site parking is provided;	Parking for each dwelling unit is required to be located on the same lot as that dwelling unit within the draft development agreement.
(g) any other matter which may be addressed by in a Land Use By law; and	All other matters are addressed elsewhere in this report.
(h) Policy 16.3.1	Please see Attachment B for further details.

Attachment B
General Criteria for Development Agreements

Windsor Municipal Planning Strategy

Policy 16.3.1 In considering development agreements and amendments to the Town of Windsor Land Use By-law, in addition to the criteria set out in various policies of this Strategy, Council shall consider:

CRITERIA	COMMENT
(a) whether the proposal is considered premature or inappropriate in terms of:	
(i) the adequacy of sewer and water services;	The lot is capable of being serviced with municipal water and sewer. There are currently a sewer easement and a service easement in favour of the Municipality on the subject lots where the current servicing for the area is located. It is anticipated that the developer will request these easements be discharged once they relocate the servicing to be located beneath the Irven Drive Extension and potential emergency access / active transportation route.
(ii) the adequacy of school facilities;	The Windsor Elementary School and Avon View High School are both within walking distance of the subject lots. It is Staff's understanding that the Annapolis Valley Regional Centre for Education are prepared to accommodate any increase in student population within the school network.
(iii) the adequacy of fire protection;	The subject lots are located within the Windsor and Three Mile Plains Fire Districts. In response to an inquiry, the Windsor Fire Chief (April 2024) responded that *"There is adequate fire protection. As for the connection, whenever we can create multiple routes of access and egress it, this benefits our operational options. I support the idea of connectivity and believe that would*

	be best case scenario for emergency services, as it gives the chance to use alternate routes if the primary access is compromised. Where this property borders two fire districts it also allows for responding departments to choose the quickest and most efficient and direct route." As noted above, the Fire Chief confirmed there is adequate fire protection available. The proposed emergency access was sent to the local Fire Chiefs and the Municipal Emergency Management Coordinator on June 27, 2024, for review. A response is yet to be received regarding the adequacy of the design of the emergency access for the proposal.
(iv) the adequacy of road networks adjacent to, or leading to the development; and	Please see response to 5.3.7 (d).
(v) the financial capacity of the Town to absorb any costs relating to the development.	The current development as proposed poses no cost to the Municipality other than providing services such as water, sewer, snow plowing, and garbage collection to new residents which would be offset by Municipal taxes. In response to the proposed length of cul-de-sac, the Municipal Public Works Engineering Division stated *"Our suggestion would be to require a 16 meter road reserve to connect to the Payzant Connection. This would allow the municipality to construct a local municipal street in future when required."* If this was added as a requirement of the development proposal, the future construction of this road would be an additional cost to the Municipality, however, could be included in the overall project budget for the Payzant Drive Connection.

(b) the suitability with any aspect relative to the movement of auto, rail and pedestrian traffic;	As mentioned elsewhere the Municipal Traffic Authority has stated that the proposed extension of Irven Drive would exceed 400m which would contravene the Municipal Services Specifications Manual. In addition, they noted that "*Until such time that Staff receives this completed Traffic Impact Study, Staff is not in the position to comment on the GAALCO report. Staff will comment once all the relevant information is in front of them."* Due to the Municipal Traffic Authority not being able to provide final comment on traffic impact of the proposal this criterion is considered not to be met. The Municipal Public Works Engineering Division confirmed that a sidewalk would be required on at least one side of the new public road. There is no active rail transportation in the vicinity.
(c) the adequacy of the dimensions and shape of the lot for the intended use;	The application states the proposed development will utilize 6.3 acres of the subject lots. The applicant will be responsible for constructing a new public road to service the proposed lots following the requirements of the draft development agreement, Subdivision By-law and Municipal Services Specifications Manual. The dimensions and shape of the lot appear adequate to support the proposed uses.
(d) the pattern of development which the proposal might create;	The proposal would not create any unusual development patterns. This proposal is considered an extension of the land leased community known as the Crossing and is very similar in design in relation to the height, bulk, lot coverage and appearance as the Crossing.

(e) the suitability of the area in terms of steepness of grade, soil and geological conditions, location of water courses, marshes or bogs and susceptibility of flooding;	The subject lots gently slope towards the south. There are no identified watercourses on the subject lots and they are not located within any protected marsh areas.
(f) whether the proposal meets the requirements of the appropriate provincial or federal agencies as well as whether it conforms to all other relevant municipal by-laws and regulations; and	All Municipal, Provincial, and Federal regulations will have to be met.
(g) any other matter required by relevant policies of this Strategy.	All relevant matters have been addressed in this report.

West Hants Municipal Planning Strategy

Policy 16.3.1 In considering development agreements and amendments to the West Hants Land Use By law, in addition to the criteria set out in various policies of this Strategy, Council shall consider:

CRITERIA	**COMMENT**
(a) whether the proposal is considered premature or inappropriate in terms of:	
(i) the adequacy of sewer and water services;	Please see 16.3.1 (a)(i) above.
(ii) the adequacy of school facilities;	Please see 16.3.1 (a) (ii) above.
(iii) the adequacy of fire protection and other emergency services;	Please see 16.3.1 (a) (iii) above.
(iv) the adequacy of road networks adjacent to, or leading to the development; and	Please see 16.3.1 (a) (iv) above.
(v) the financial capacity of the Municipality to absorb any costs relating to the development.	Please see 16.3.1 (a) (v) above.
(b) whether the development is serviced, or capable of being serviced, by a potable water supply and either central sewer or an approved on site sewage disposal system;	Please see 16.3.1 (a)(i) above.
(c) the suitability with any aspect relative to the movement of auto, rail and pedestrian traffic;	Please see 16.3.1 (b) above.

(d) the adequacy of the dimensions and shape of the lot for the intended use;	Please see 16.3.1 (c) above.
(e) the pattern of development which the proposal might create;	Please see 16.3.1 (d) above.
(f) the suitability of the area in terms of steepness of grade, soil and geological conditions, location of water courses or wetlands, and susceptibility of flooding;	Please see 16.3.1 (e) above.
(g) whether the proposal meets the requirements of the appropriate provincial or federal agencies as well as whether it conforms to all other relevant municipal by laws and regulations; and	All Municipal, Provincial, and Federal regulations will have to be met.
(h) any other matter required by relevant policies of this Strategy.	All relevant matters have been addressed in this report.

Attachment C

DEVELOPMENT AGREEMENT

THIS AGREEMENT made this day of , 2024.

BETWEEN:

WEST HANTS REGIONAL MUNICIPALITY, a body corporate pursuant to the *Municipal Government Act*, having its chief place of business at 76 Morison Drive, Wentworth Creek, in the County of Hants, Province of Nova Scotia,

(Hereinafter referred to as the "Municipality")

OF THE FIRST PART

- and -

3229190 NOVA SCOTIA LIMITED a body corporate, with a head office at 130 Eileen Stubbs Avenue, Suite 201, in the County of Halifax, Province of Nova Scotia,

(Hereinafter referred to as the "Owner")

OF THE SECOND PART

WHEREAS the Owner is the registered Owner of the parcels of land located at 1781 King Street in Windsor (PID 45162005) and PID 45408374 on Edward Drive in Garlands, hereinafter referred to as the "Properties", which lands are more particularly described in Schedule A attached hereto; and

WHEREAS PID 45162005 and the majority of PID 45408374 are designated Residential on the Generalized Future Land Use Map of the Windsor Municipal Planning Strategy and zoned Two Unit Residential (R-2) on the Zoning Map of the Windsor Land Use By-law; and

WHEREAS a small portion of PID 45408374 is designated Residential on the Generalized Future Land Use Map of the West Hants Municipal Planning Strategy and zoned Two Unit Residential (R-2) on the Zoning Map of the Land Use By-law; and

WHEREAS the Owner has requested that the Municipality enter into a development agreement to permit up to 92 dwelling units within 23 four-unit dwellings grouped on the Properties (the "Development"); and

WHEREAS Policy 5.4.6 of the Windsor Municipal Planning Strategy and Section 6.1 (b) of the Windsor Land Use By-law enable Council to consider entering into a development agreement to allow new multiple unit residential developments consisting of three or more units and grouped dwellings in the Residential designation, and Policy 5.3.10 of the West Hants Municipal Planning Strategy and Section 6.1 (c) of the West Hants Land Use By-law enable Council to consider entering into a development agreement to allow development of grouped dwellings consisting of six or more dwelling units in the Three Mile Plains Growth Centre; and

WHEREAS the Council of the Municipality, at a meeting held on **Month Day**, 2024, approved this request and adopted this Agreement by policy, subject to the execution of this development agreement by the parties hereto;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants and agreements herein contained, the parties agree as follows:

PART 1 AGREEMENT CONTEXT

1.1 Definitions

In this Agreement, all words or phrases used shall carry their customary meaning unless otherwise set out in the applicable Land Use By-law, except those defined as follows:

(a) "Active Construction" means that the Owner has active development and building permits for the construction of the dwellings, and that construction activity including but not limited to equipment, machinery, and employees, are on-site working towards the necessary building inspections leading to an occupancy permit;

(b) "Applicable Land Use By-law" means the Land Use By-law that has jurisdiction related to the properties or portion thereof (i.e., the West Hants Land Use By-law applies to the properties or portion thereof in the former District of West Hants and the Windsor Land Use By-law applies to the properties or portion thereof in the former Town of Windsor);

(c) "Commencement" means the date the Owner begins Active Construction on the dwellings within this Agreement as permitted by an issued development and building permit; and

(d) "Irven Drive Extension" means a new Municipal street and associated sidewalk, water, wastewater and storm water infrastructure to be constructed at the Owner's expense on the area shown as Irven Drive Extension on Schedule B which will be deeded to the Municipality in accordance with the applicable Subdivision By-law.

1.2 Schedules

The following attached schedules shall form part of this Agreement:

Schedule A - Legal Description

Schedule B – Site Plan

1.3 Municipal Planning Strategy, Land Use By-law and Subdivision By-law

(a) *West Hants Municipal Planning Strategy* means the West Hants Municipal Planning Strategy, approved on May 13, 2008, as amended, or successor By-laws;

(b) *West Hants Land Use By-law* means the West Hants Land Use By-law, approved on May 13, 2008, as amended, or successor By-laws;

(c) *West Hants Subdivision By-law* means the West Hants Subdivision By-law, approved on May 13, 2008, as amended, or successor By-laws;

(d) *Windsor Municipal Planning Strategy* means the Municipal Planning Strategy of the Town of Windsor, approved on August 23, 2005, as amended, or successor by-laws;

(e) *Windsor Land Use By-law* means the Land Use By-law of the Town of Windsor, approved on August 23, 2005, as amended, or successor by-laws;

(f) *Windsor Subdivision By-law* means the Subdivision By-law of the Town of Windsor, approved on January 24, 2012, as amended, or successor by-laws.

PART 2 DEVELOPMENT REQUIREMENTS

2.1 Use

(a) The Parties agree that uses on the Properties shall be limited to the following:

(i) those uses permitted by the underlying zoning in the applicable Land Use By-law; and

(ii) residential development consisting of a maximum of 92 dwelling units in four-unit dwellings.

Except as otherwise provided in this Agreement, the provisions of the applicable Land Use By-law and Subdivision By-law apply to any development undertaken pursuant to this Agreement.

2.2 Development Location and Design

(a) The Development location and design shall be generally consistent with the Site Plan shown in Schedule B. Changes to the Site Plan may be approved in writing in accordance with reports generated in Section 2.6, *Site Drainage*, of this Agreement.

(b) The four-unit dwellings shall be limited to a maximum of 92 dwelling units on the Properties. The four-unit dwellings shall conform to the following requirements:

Minimum Frontage	60 ft. (18.29 m.)
Minimum Front Yard	25 ft. (7.62 m.)
Minimum Rear Yard	15 ft. (4.57 m.)
Minimum Side Yard	10 ft. (3.05 m.)*
Maximum Building Height	35 ft. (10.67 m.)
Maximum Height of Accessory Building	15 ft. (4.57 m.)

*No side yard setback is required along the common wall dividing each unit.

(c) The minimum distance between grouped dwellings shall be 20 ft. (6.10 m.).

(d) In the event that the Owner chooses to build and occupy one building at a time, the following infrastructure is required for each such building:

(i) the necessary services for the proper use and enjoyment of the building including but not limited to the public street and sidewalk, a driveway and access, landscaping, parking, lighting, and water and sewer services.

(f) Accessory buildings are permitted in accordance with Section 5.1 of the applicable Land Use By-law, *Accessory Buildings and Structures*.

(h) The Owner shall keep all undeveloped areas of the Properties landscaped which may include grass, shrubs, trees or other appropriate vegetative cover.

(i) Fencing is required along the southern lot line of the Properties where they abut with PID 45294980.

2.3 Road and Municipal Services

(a) Roads and Municipal Services in the Development shall conform to the following:

(i) the layout of the Irven Drive Extension shall be as generally shown on Schedule B. The Development Officer, in consultation with the Municipal Engineer, may give consideration to minor incidental changes to its design, without such changes being deemed to be amendments to this development agreement; and

(ii) the Irven Drive Extension, sidewalk, municipal services, and stormwater management shall be designed and constructed in accordance with the requirements of the Municipal Services Specifications Manual. Detailed design plans of the Irven Drive Extension water and sewer servicing, and storm water systems shall be approved by the Municipal Engineer for each phase of the development prior to construction commencing for that phase.

(b) In accordance with the Municipal Services Specifications Manual, the Owner shall provide a sidewalk on one side of the Irven Drive Extension.

(c) Should the Owner choose not to construct Irven Drive Extension to connect to Payzant Drive Connection, a minimum of 30 ft. (9.14 m.) wide emergency access / active transportation trail shall be built at the western end of Irven Drive Extension as shown on Schedule B. This emergency access must be approved by the Municipal Engineer and Traffic Authority. The Municipality shall consult with emergency service providers on the design of the emergency access. The Owner shall provide to the Municipality a copy of the maintenance agreement pertaining to the emergency access.

(d) The emergency access / active transportation trail will not be a Municipal public street and shall be maintained and kept accessible at all times by the Owner. Appropriate signage shall be erected indicating that the road is to be used for emergency access only.

(e) Irven Drive Extension and the emergency access / active transportation trail will be required to be completed by the Owner to the satisfaction of the Development Officer and Municipal Engineer by December 31, 2030, or in conjunction of with the completion of the Payzant Drive Connection to King Street to be completed by the Municipality, whichever occurs first.

2.4 Driveways and Parking

(a) The Owner shall develop, construct, and maintain the driveways for the grouped four-unit dwellings within the Development. The distance between the driveways must be approved by the Municipal Engineer in accordance with the Municipal Services Specifications Manual.

(b) A minimum of one (1) parking space per dwelling unit shall be provided on the same lot as that building.

(c) Each required parking space shall be a minimum of 10 ft. by 20 ft. (3.05 m. by 6.10 m.) exclusive of driveways and manoeuvring aisles. Parking aisles shall be a minimum of 20 ft. (6.1 m.) wide.

(d) The driveways and parking spaces shall be constructed so as to create a stable surface for vehicle traffic and be clearly demarcated and lined by the Owner. They may be constructed using permeable construction materials to assist with stormwater retention. The vehicular entrance and exit shall be clearly demarcated.

(e) The Owner agrees that it will seek and obtain approval in writing from the Municipality before any driveway from the Development is connected to the Irven Drive Extension or any other public road.

(f) No on-street parking will be permitted on Irven Drive Extension, unless written permission is provided by the Municipal Traffic Authority.

(g) The number of parking spaces may be varied in writing by the Development Officer in accordance with Section 2.11, *Variance*, of this Agreement.

2.5 Fire Safety

(a) No development permit shall be issued until the location and connection design of any fire hydrant(s) connected to the Municipal water supply has been approved by the water utility, in consultation with the local Fire Chief.

(b) All access routes shall be kept clear of overhead obstructions and wires and be maintained by the Owner to allow unimpeded access to the Properties by emergency services vehicles, unless otherwise agreed to in writing by the Fire Chief.

2.6 Site Drainage

(a) No development permit shall be issued until the Owner provides to the Development Officer a stormwater management plan that satisfies the Municipal Engineer that historical flooding patterns and area drainage systems have been considered and that storm water discharge will balance pre- and post-construction flows to ensure there is no negative impact on downstream properties. If the stormwater management plan provided by the Owner does not in fact balance pre-and post-construction flows to ensure the absence of such impacts the Owner

shall undertake such remediation as the Municipal Engineer may reasonably require.

(b) The Owner shall undertake all construction activities in accordance with an erosion and sedimentation control plan prepared by a Professional Engineer, unless otherwise directed by Nova Scotia Environment, and also agrees to assume sole responsibility for compliance with all regulations of Nova Scotia Environment.

2.7 Servicing

(a) Waste Collection

(i) Municipal garbage collection will be provided to the dwellings in this Agreement.

(ii) The Owner shall keep any outdoor storage of garbage in an enclosed structure or in some way adequately screened so as not to be visible from or cause a nuisance to nearby properties and abutting roads.

(b) Water and Sewer Services

(i) The buildings shall be serviced with water and sewer services provided by West Hants Regional Municipality authorized by the Municipal Engineer. Detailed design plans of the water and sewer servicing connections and layout shall be in accordance with the Municipal Services Specifications Manual and shall be submitted to the Municipal Engineer for approval prior to construction.

(ii) The Owner shall be responsible for constructing, installing and maintaining the water and sewer services on the Properties.

(c) Snow Plowing

The Owner shall have sole responsibility for snow plowing within the Development, excluding the Irven Drive Extension once deeded to the Municipality.

2.8 Maintenance

The Owner shall keep the Properties and buildings and any portion thereof clean and in good repair. Any driveways, walkways, emergency access routes, active transportation trails, fences, lawns, trees, shrubs, and other landscaping elements shall be regularly maintained and kept in a tidy state and free from unkempt materials or matter of any kind.

2.9 Signs and Lighting

Signage and illumination shall be regulated under Sections 5.18 and 7.0 of the applicable Land Use By-law, *Illumination* and *Signs*, which controls lighting, size, location, and number of signs. Exterior lighting for driveways, parking areas, signs or structures shall be shielded and directed downward to ensure there is no light spilling, glare or light cast over neighbouring properties or the street.

2.10 Subdivision

Subdivision of the properties shall be permitted in accordance with this Agreement and the applicable Subdivision By-law. No additional parkland or parkland fees shall be required for subdivision or consolidation of the Properties subject to this Agreement.

2.11 Variance

In accordance with Section 5.48 of the Windsor Land Use By-law and Section 5.40 of the West Hants Land Use By-law, *Variance*, the Development Officer may grant a variance for one or more of the following requirements subject to the requirements of the *Municipal Government Act*:

(i) minimum lot area and frontage;
(ii) minimum required yard dimensions; and
(iii) number of parking spaces required.

2.14 Road Reserve

A road reserve on PID 45162005 as shown on Schedule B is required to ensure that there is available land to construct the Payzant Drive Connection to King Street in the most effective way. In the event that the Municipal Engineer determines in their discretion that the road reserve is unnecessary for the construction of the Payzant Drive Connection, the Developer may construct on this portion of the lot with the written permission of the Municipal Engineer and the Development Officer, and changes to the Site Plan reflecting this will not be deemed an amendment to this Agreement.

2.15 Phasing

The Municipality and the Owner acknowledge that the Development as shown on Schedule B is a phased Development. Construction of the buildings and all relevant infrastructure shall be completed within thirty-six (36) months of the development agreement being registered at the Land Registry Office. If, in the opinion of the Development Officer, this time limit has not been met, Development in accordance with this Agreement shall no longer be permitted and this Agreement may be discharged in whole or in part at the option of the Municipality by resolution of Council in accordance with Section 229 of the Municipal Government Act thirty (30) days after giving Notice of Intent to Discharge to the Owner. Upon the written request of the Owner, the

Municipality, by resolution of Council, may grant an extension to the date of completion of Development without such an extension being deemed to be an amendment to this Agreement.

PART 3 CHANGES AND DISCHARGE

3.1 The Owner shall not vary or change the use of the Property from that provided for in Section 2.1 of this Agreement, *Use*, unless a new agreement is entered into with the Municipality or this Agreement is amended.

3.2 Any matters in this Agreement which are not specified in Subsection 3.3 below are not substantive matters and may be approved in writing by the Development Officer without a public hearing, in accordance with Section 230 of the *Municipal Government Act*, provided that the Development Officer determines that the changes do not significantly alter the intended effect of this Agreement.

3.3 The following matters are substantive matters:

(a) the uses permitted on the Property as listed in Section 2.1;
(b) the requirement of an emergency access / active transportation trail to be provided if the Owner choses not to connect Irven Drive Extension to the Payzant Drive Connection, as listed in Section 2.3;
(c) the fire safety requirements listed in Section 2.5; and
(d) the requirements for a stormwater management plan to be submitted prior to a development permit being issued as listed in Section 2.6.

3.4 Upon conveyance of land by the Owner to either:

(a) the Municipality for the purpose of creating or expanding a public street over the Properties, including for the Irven Drive Extension or a portion of the Payzant Drive Connection; or

(b) the Municipality for the purpose of creating or expanding any Municipally owned facility or infrastructure over the Properties;

registration of the deed reflecting the conveyance shall be conclusive evidence that that this agreement shall be discharged as it relates to the public street or public facility, as the case may be, as of the date of registration with the Land Registry Office, but this Agreement shall remain in full force and effect for all remaining portions of the Properties.

3.5 Notwithstanding the foregoing, discharge of this Agreement is not a substantive matter, and this Agreement may be discharged by the Chief Administrative Officer in accordance with Section 229 of the *Municipal Government Act.*

3.6 Notice of Intent to Discharge this Agreement in whole or in part may be given by the Municipality to the Owner following a resolution of Council to give such Notice:

(a) as provided for in this Agreement; or

(b) at the discretion of the Municipality, with or without the concurrence of the Owner, where the Development has, in the reasonable opinion of Council on advice from the Development Officer, ceased operation for a period of at least twenty-four (24) months; or

(c) at any time upon the written request of the Owner, provided the use of the Properties is in accordance with the Land Use By-law or a new Agreement has been entered into.

3.7 Council may discharge this Agreement in whole or in part 30 days after a Notice of Intent to Discharge has been given.

PART 4 IMPLEMENTATION

4.1 Commencement of Development

The Owner may not commence any construction or use on the Properties until the Municipality has issued any development permit, building permit and/or occupancy permit that may be required. The date of commencement will be determined as the date the Owner begins Active Construction on the building within this Agreement as permitted by an issued development and building permit.

4.2 Material to be Provided

(a) The Owner shall provide record drawings to the Development Officer for any portion of the Development for which an engineered design is required, within ten (10) days of completion of any work which requires the engineered design.

(b) The Owner shall, upon written request, provide the Municipality with copies of any documentation, permits or approvals required by Provincial or Federal governments or agencies.

PART 5 ADMINISTRATION and COMPLIANCE

5.1 Compliance with other By-laws and Regulations

(a) Nothing in this Agreement shall exempt the Owner from complying with Federal, Provincial and Municipal laws, by-laws and regulations in force or from obtaining any Federal, Provincial, or Municipal license, permission, permit, authority, or approval required thereunder.

(b) Where the provisions of this Agreement conflict with those of any by-law of the Municipality applicable to the Properties (other than the Windsor or West Hants Land Use By-laws and Subdivision By-laws to the extent expressly varied by this Agreement) or any statute or regulation, the higher or more stringent requirements shall prevail.

5.2 Severability of Provisions

The provisions of this Agreement are severable from one another and the invalidity or unenforceability of one provision shall not affect the validity or enforceability of any other provision.

5.3 Interpretation

(a) Where the context requires, the singular shall include the plural and the masculine gender shall include the feminine and neutral gender.

(b) Where the written text of this Agreement conflicts with information provided in the Schedules attached to this Agreement, the written text of this Agreement shall prevail.

(c) References to particular sections of statutes and bylaws shall be deemed to be references to any successor legislation and bylaws even if the content has been amended, unless the context otherwise requires.

5.4 Municipal Responsibility

(a) The Municipality does not make any representations to the Owner about the suitability of the Properties for the Development proposed by this Agreement. The Owner assumes all risks and must ensure that any proposed Development complies with this Agreement and all other laws pertaining to the Development.

(b) Any failure of the Municipality to insist upon a strict performance of any requirements or conditions contained in this Agreement shall not be deemed a waiver of any rights or remedies that the Municipality may have and shall not be deemed a waiver of any subsequent breach or default in the conditions or requirements contained in this Agreement.

5.5 Breach of Terms or Conditions

Upon breach of any term or condition of this Agreement, the Municipality may notify the Owner in writing. In the event that the Owner have not cured any such breach or entered into arrangements with the Municipality related to such breach to the Municipality's satisfaction, acting reasonably, within six (6) months of such notice, then the Municipality may rely upon the remedies contained in Section 264 of the *Municipal*

Government Act and may enter the land and perform any of the terms contained in the Development Agreement, or take such remedial action as is considered necessary to correct a breach of the Agreement, including the removal or destruction of anything that contravenes the terms of the Agreement and including decommissioning the site. It is agreed that all reasonable expenses, whether arising out of the entry on the land or from the performance of the terms, are a first lien on the land that is the subject of the Development Agreement.

5.6 Costs

The Owner shall pay all costs associated with registering this Agreement and all costs associated with any amendment thereof.

5.7 Development Agreement Bound to Land

This Agreement shall be binding upon the parties hereto and their heirs, executors, administrators, successors and assigns, and shall run with the land which is the subject of this Agreement until such time as it is discharged by the Municipality in accordance with Section 229 of the *Municipal Government Act*.

5.8 Assignment of Agreement

The Owner may, at any time and from time to time, transfer or assign this Agreement and its rights hereunder and may delegate its obligations hereunder to an assign, successor, heir, or purchaser of the land bound by this Agreement.

5.9 Written Notice

(a) The Municipality may serve notice on the Owner personally or by ordinary mail which shall be deemed to have been received within three (3) business days of mailing, addressed to Mitchell W. Brison at 130 Eileen Stubbs Avenue, Suite 201, Dartmouth, NS, B3B 2C4, or at any other address provided in writing or email by the Owner.

(b) The Owner may serve notice on the Municipality by registered mail addressed to the Chief Administrative Officer, West Hants Regional Municipality, 76 Morison Drive, P.O. Box 3000, Windsor, NS, B0N 2T0, or at any successor address provided in writing or email by the Municipality to the Owner.

5.10 Full Agreement

This Agreement replaces and discharges the development agreement registered on PID 45408374, dated April 2, 2019 between the Municipality of the District of West Hants and 3229190 Nova Scotia Limited, 3307437 Nova Scotia Limited and 3307427 Nova Scotia Limited recorded at the Registry of Deeds in Hants County, Nova Scotia on May

16, 2019 as document #114467864, such that the sole development agreement applicable to the lands described in Schedule A attached hereto is this agreement.

IN WITNESS WHEREOF this Agreement was properly executed by the respective parties hereto on the day and year first above written.

SIGNED, SEALED AND DELIVERED	**) WEST HANTS REGIONAL**
In the presence of:	**) MUNICIPALITY**
	)
	)
	)
_____	Per: _____
Witness	) Mark Phillips, Chief Administrative Officer
	)
	)
	)
_____	) Per: _____
Witness	) Deanna Snair, Municipal Clerk
	)
	)
	)
	) 3229190 NOVA SCOTIA LIMITED
	)
	)
	)
_____	Per:_____
Witness	) Mitchell W. Brison, President

PROVINCE OF NOVA SCOTIA
COUNTY OF HANTS

ON THIS day of , A.D. 2024, before me, the subscriber, personally came and appeared , a subscribing witness to the foregoing Indenture, who, having been by me duly sworn, made oath and said that **WEST HANTS REGIONAL MUNICIPALITY**, one of the parties thereto, caused the same to be executed in its name and on its behalf and its corporate seal to be thereunto affixed in presence.

_____

A Commissioner of the Supreme Court of Nova Scotia

PROVINCE OF NOVA SCOTIA
COUNTY OF HANTS

ON THIS day of , A.D. 2024, before me, the subscriber, personally came and appeared , a subscribing witness to the foregoing Indenture, who, having been by me duly sworn, made oath and said that, **Mitchell W. Brison**, one of the parties thereto, signed, sealed and delivered the same in presence.

_____

A Commissioner of the Supreme Court of Nova Scotia

AFFIDAVIT OF CLERK

WEST HANTS REGIONAL MUNICIPALITY

I, Deanna Snair of _____, Hants County, Nova Scotia make oath and swear that:

1. I am the Clerk of the West Hants Regional Municipality (the "Municipality") and I have personal knowledge of the matters to which I have sworn in this Affidavit.

2. The Municipality is a body corporate pursuant to the *Municipal Government Act*, S.N.S. 1988, c.18, as amended.

3. I acknowledge that the Municipality executed the attached Instrument by its proper designates duly authorized in that regard under seal on the date of this Affidavit pursuant to subsection 13(3) of the *Municipal Government Act*, S.N.S. 1988, c.18, as amended. This acknowledgement is made pursuant to subsection 31(a) of the Registry Act, R.S.N.S. 1989, c.392 and/or clause 79(1)(a) of the Land Registry Act, S.N.S. 2001, c.6, as amended, for the purpose of registering or recording the Instrument.

4. The Municipality is resident in Canada for the purposes of the Income Tax Act (Canada).

I certify that on this _____, 2024
the Municipal Clerk, Deanna Snair came before me, made oath,
and swore the foregoing affidavit at
_____, Nova Scotia.

_____
A BARRISTER/COMMISSIONER OF THE
SUPREME COURT OF NOVA SCOTIA

_____
Deanna Snair, Clerk

Canada
Province of Nova Scotia

AFFIDAVIT & PROOF OF EXECUTION (CORPORATE)

I, Mitchell W. Brison, Nova Scotia, make oath and say that:

1. I, Mitchell W. Brison, of **3229190 NOVA SCOTIA LIMITED** the "Corporation". Except as otherwise stated I have personal knowledge of the matters to which I have sworn in this Affidavit.

2. I acknowledge that I executed the foregoing instrument on behalf of the Corporation on the date of this affidavit; this acknowledgment is made for the purpose of registering such instrument pursuant to s.31(a) of the Registry Act, R.S.N.S. 1989, c.392 or ss.79 and 83 of the Land Registration Act as the case may be.

3. I verify that I have the authority to execute the foregoing instrument on behalf of the corporation and thereby bind the Corporation.

4. The Corporation is a resident of Canada under the Income Tax Act (Canada).

5. The Ownership of a share or an interest in a share of the Corporation does not entitle the owner of such share or interest in such share to occupy a dwelling owned by the Corporation.

I certify that on this _____, 2024
the Deponents came before me, made oath,
and swore the foregoing affidavit at
_____, Nova Scotia.

_____ _____

A BARRISTER/COMMISSIONER OF THE SUPREME COURT OF NOVA SCOTIA

MITCHELL W. BRISON, President

Schedule A
Legal Description

PID 45162005

ALL that lot of land in the Town of Windsor shown as Lot AB-1 on a plan of lands of Nova Scotia Farm Loan Board (Philip I. Burgess) made by Robert S. Redden, NSLS, dated the 31 st day of July A.D., 1981, approved by the Town of Windsor on the 18th day of August, A.D., 1981 and filed at the Registry of Deeds at Windsor as Plan P-3400, said Lot being described as follows:

BEGINNING at a survey marker driven in the ground on the Eastern boundary of the Old Halifax Road, the said survey marker being distant five hundred seventy-seven decimal twenty-five feet (577.25 feet) in a direction South eighty-eight degrees thirty minutes fifty-five seconds East (S 88 degrees 30 minutes 55 seconds E) from NSCM No. 8629;

THENCE IN A Northeasterly and Easterly direction following the boundary of the old Halifax Road three hundred seventy feet (370 feet) more or less to another survey marker driven in the ground at a point distant three hundred fifty-eight decimal twenty-three feet (358.23 feet) in a direction North sixty-two degrees fifty-seven minutes fifty-eight seconds West (N 62 degrees 57 minutes 58 seconds W) from the survey marker at the place of beginning;

THENCE North sixty-seven degrees zero zero minutes zero zero seconds East (N 67 degrees 00 minutes 00 seconds E) seven hundred seventy-five decimal zero six feet (775.06 feet) to a survey marker driven in the ground;

THENCE South twenty-six degrees fifty-nine minutes fifty-five seconds East (S 26 degrees 59 minutes 55 seconds E) four hundred eighteen decimal eight-six feet (418.86 feet) to a survey marker driven in the ground;

THENCE South seventy-eight degrees zero nine minutes thirteen seconds West (S 78 degrees 09 minutes 13 seconds W) three hundred decimal thirteen feet (300.13 feet) to an iron bar driven in the ground;

THENCE South seventy-seven degrees forty-four minutes zero two seconds West (S 77 degrees 44 minutes 02 seconds W) one hundred thirty-six decimal fifty-five feet (136.55 feet) to an iron bar driven in the ground;

THENCE North twenty-three degrees twenty-one minutes twenty seconds West (N23 degrees 21 minutes 20 seconds W) thirty-nine decimal sixty-six feet (39.66 feet) to a survey marker driven in the ground;

THENCE South sixty-two degrees fifty-eight minutes fifty-six seconds West (S 62 degrees 58 minutes 56 seconds W) seventy feet (70 feet) to a survey marker driven in the ground;

THENCE south eighty degrees twenty-eight minutes fifty-six seconds West (S 80 degrees 28 minutes 56 seconds W) fifty feet (50 feet) to a survey marker driven in the ground;

THENCE North eighty-six degrees thirty-one minutes zero four seconds West (N 86 degrees 31 minutes 04 seconds W) thirty feet (30 feet) to the survey marker at the place of beginning;

CONTAINING five decimal zero (5.0) acres more or less;

Burden One:

SUBJECT TO a sewer line easement 20 feet in width from the Southerly boundary of Lot AB-1 Northerly over, across and under Lot AB-1 to where the present sewer line is located to the manhole at or near the northerly boundary of Lot AB-1, said easement for the benefit of the lands presently of Grant A. Burgess.

Burden Two:

SUBJECT TO an easement 66 feet in width for access from the former Old Halifax Road along the northerly boundary of Lot AB-1 to the lands of Philip Burgess.

Benefit:

TOGETHER WITH a right of way for all purposes from King Street, in the Town of Windsor, aforesaid, to Lot AB-1, which said right-of-way has been previously described as follows:

Also a right-of-way from the lands hereby conveyed on, to and over the old Halifax Road aforesaid and across lands of the Nova Scotia Railway, now the Dominion Atlantic Railway, and unto to the new post road leading from Windsor to Halifax as it was formerly used by the said Thomas McLatchy, and for all purposes whatsoever.

*** Municipal Government Act, Part IX Compliance ***

Compliance:

The parcel is created by a subdivision (details below) that has been filed under the Registry Act or registered under the Land Registration Act

Registration District: HANTS COUNTY
Registration Year: 1981
Plan or Document Number: 3400

PID 45408374

ALL that certain lot, piece or parcel of land situate, lying and being at Windsor and Garlands Crossing in the County of Hants, Province of Nova Scotia which may be more particularly bounded and described as follows:

BEGINNING at a survey marker set in the southwesterly margin of Irven Drive, so called, at a northerly corner of Block 4, which said survey marker is 4,512.427 meters from NSHPN 208653 when measured on Calculated Grid Tie line having a bearing of North 67 degrees 07 minutes 31.5 seconds West therefrom;

THENCE North 16 degrees 19 minutes 22 seconds West along the southwesterly margin of Irven Drive a distance of 16.002 meters to the southeasterly boundary of Lot 445;

THENCE South 73 degrees 40 minutes 38 seconds West along Lot 445 a distance of 7.305 meters to a survey marker set at the southwesterly corner thereof;

THENCE North 16 degrees 19 minutes 22 seconds West along Lot 445 a distance of 36.576 meters to a survey marker set in the southerly boundary of lands now or formerly of Her Majesty the Queen in right of the Province of Nova Scotia represented by the Department of Transportation and Public Works;

THENCE South 73 degrees 40 minutes 38 seconds West along lands now or formerly of Her Majesty the Queen in right of the Province of Nova Scotia represented by the Department of Transportation and Public Works a distance of 115.54 meters more of less to a survey marker found at the northeast corner of Lot AB-1 as shown on Plan No. 3400 filed at the Registry of Deeds for Hants County on September 17, 1981;

THENCE Southeasterly along Lot AB-1 a distance of 418.86 feet more or less to a survey marker found in the northerly boundary of Lot 1A;

THENCE North 78 degrees 09 minutes 13 seconds East along Lot 1A a distance of 190.87 feet to a survey marker found in the southwesterly boundary of Block 4;

THENCE North 11 degrees 50 minutes 58 seconds West along Block 4 a distance of 195.457 meters to a survey marker set at a northwest corner thereof;

THENCE North 73 degrees 40 minutes 38 seconds East along Block 4 a distance of 35.140 meters to the place of beginning.

SUBJECT to an easement to the Municipality of the District of West Hants over and across Parcel SSE-1 as shown on Plan 107927965 which said easement is more fully described in a Grant of Easement dated the 18th day of August, 2015 and recorded in the Hants County Land Registration Office as document 107947526 on October 16, 2015.

*** Municipal Government Act, Part IX Compliance ***

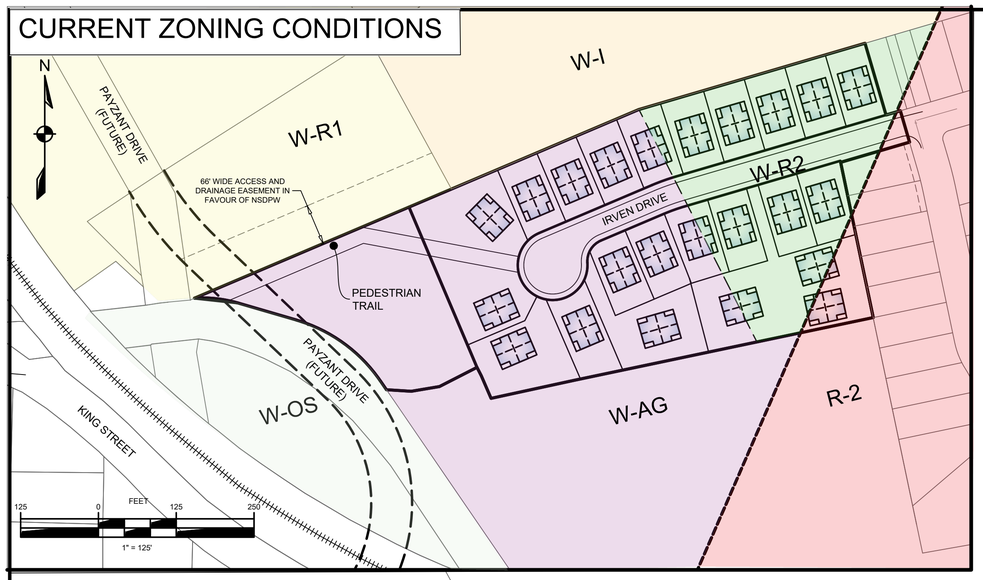
Compliance:

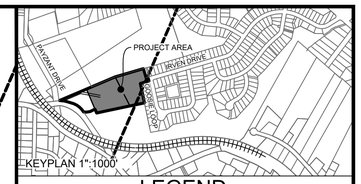
The parcel is created by a subdivision (details below) that has been filed under the Registry Act or registered under the Land Registration Act

Registration District: HANTS COUNTY
Registration Year: 2018
Plan or Document Number: 112989844

Schedule B
Site Plan

CURRENT ZONING CONDITIONS





LEGEND

EXISTING		PROPOSED
	EASEMENT	
WAE	WATER PIPE	WA
SAE	SANITARY PIPE	SA
STE	STORM PIPE	ST
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			WATER VALVE		
CURBSTOP			HYDRANT		
REDUCER			CATCHBASIN		
PRECAST HEADWALL			UTILITY POLE w/ GUY WIRE		
STREET TREE			STREET SIGN		

BUILDINGS	UNITS
23	92

40 0 FEET 40 80
1" = 40'

ISSUE	DATE	DESCRIPTION
1	MAY 9, 2024	ISSUED FOR REVIEW

CONSULTANT

DESIGNPOINT
engineering • surveying • solutions
902.832.5597 designpoint.ca

PRELIMINARY
MAY 9, 2024

CLIENT

BRISON DEVELOPMENTS

PROJECT DESCRIPTION

THE CROSSING - IRVEN DRIVE

WINDSOR, NOVA SCOTIA

SHEET DESCRIPTION

IRVEN DRIVE
CONCEPT PLAN (MULTI-UNIT HOMES)
OPTION 1 - PEDESTRIAN TRAIL

Drawn	Engineer	Project No.	Drawing No.
S. STACEY	L. GRANT	22-278	CP-01
Scale	Filename		1 of 1
1" = 40'H	22-278_Concept 1.dwg		

P:\2022\22-278 Brison - The Crossing - Irven Street\01 - Drawings\Eng Design\Sheets\Concepts\22-278_Concept 1.dwg, Plot Date: 2024-May-9, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)

Attachment D

Public Information Meeting Notes

March 5 – 19, 2024

Development Agreement: PID 45162005 and PID 45408374, Windsor; File 24-09

Meeting date and time	A public information meeting was held on March 5, 2024 beginning at 6:56 p.m. in Council Chambers at 76 Morison Drive in Windsor.
Attending	In attendance: • Chair – Councillor Laurie Murley Four (4) members of staff: • Director of Planning and Development, Sara Poirier (online) • Senior Planner, Mark Fredericks • Planner, Alex Dunphy • Planning Administrative Assistant Vanessa Lake Council members • Mayor Zebian • Councillor Murley Applicant • Chrystal Fuller 6 members of the public attended the meeting.
Applicants: Chrystal Fuller on behalf of Brison Developments **Property:** PID 45162005 and PID 45408374	Planner Fredericks outlined the request for a development agreement to build 88 units in a grouped dwelling configuration of 22 fourplexes at the end of Irven Drive on an extension of this road. The planning policies for both the Windsor MPS and West Hants MPS were reviewed because a small portion of PID 45408374 falls within the West Hants boundary. Chrystal Fuller outlined the proposal for fourplex style buildings which would include 4 units, each approximately 600 square feet in floor area. This housing form would provide affordable and alternative housing options. The ability to build these in a grouped dwelling configuration helps keep costs lower as the road construction expense is spread across more units.

Comments	3 members of the public spoke at the Public Information Meeting. The questions and comments from the public are summarized below. No comments were received following the meeting during the comment period. At the Public Information Meeting the following comments were made: • Rick Purcell owns the nearby Windsor Motors auto repair business and shared his support for Irven Drive having a connection to Payzant Drive instead of allowing a cul-de-sac. He shared that the road network in the Crossing area is like a maze now, and more connections would be helpful for everyone. He also highlighted the gravel driveway at the end of Irven Drive is currently used frequently as a connection to King Street. • Grant Burgess lives close to the subject lot and operates a trucking and excavation business from his adjacent property. Mr. Burgess has a shared driveway and a sewer easement that are within the property at 1781 King Street. He has concerns about these and how they may be maintained or changed in the future. Mr. Burgess also shared that the proposed grouped dwellings would be very close to his house and would like to see more separation. • David Pemberton – shared his desire to have the Municipality do more to support affordable housing and shared his traffic concerns around King Street and how this development could increase the traffic problems. He lives on King Street and sees vehicles traveling at high speeds.
Adjournment	There being no further business, the meeting adjourned at 7:34 p.m.