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Decision Note

Title: 18 Mount Cashel Road – REZ2400021 – Revised TOR

Date Prepared: September 18, 2025

Report To: Regular Meeting of Council

Councillor and Role: Councillor Maggie Burton, Planning

Ward: Ward 4

Decision/Direction Required:
To approve revised terms of reference for the Land Use Report (LUR) for the proposed residential development at 18 Mount Cashel Road.

Discussion – Background and Current Status:
On December 10, 2024, Council voted to consider an amendment to rezone 18 Mount Cashel Road from the Residential 2 Cluster (R2C) Zone to the Apartment 1 (A1) Zone to allow the development of two (2) three-storey Apartment Buildings with a total of 72 dwelling units and set the terms of reference for a Land Use Report (LUR).

The terms of reference did not require a Transportation Impact Assessment (TIA or traffic study. Section 5.2 of the City's Development Design Manual (DDM) outlines the situations where a traffic study may be required. Criteria such as traffic generation rates, traffic patterns in the area, location of access, the type of development, and density of the development are considered when preparing the terms of reference for an LUR. Typically, a development that may generate 100 or more trips during peak hours will require further study. Based on that criterion, staff determined that the proposed development did not require a traffic study.

The applicant carried out their own consultation over the summer, which is required prior to submitting the LUR. During this consultation, the City heard from residents with concerns about local traffic safety and transportation issues, including concerns about the cumulative traffic impacts from the various residential, institutional, and office uses in the neighbourhood.

On August 26, 2025, Council resolved to revise the terms of reference of the Land Use Report for the proposed development to include a traffic study, including at a minimum:

- Analyze current and projected traffic volumes on Mount Cashel Road and surrounding streets;

- Assess the cumulative impacts of nearby facilities, schools, religious institutions, and residential developments;
- Evaluate intersection performance, pedestrian crossings, shortcutting patterns, and potential safety concerns;
- Consider traffic calming measures and mitigation where appropriate; and
- Engagement with residents and stakeholders regarding traffic and safety concerns.

In response to Council's August 26, 2025 resolution, staff have prepared revised terms of reference (attached). The applicant must prepare a Transportation Impact Assessment that addresses the concerns outlined above and meets the City's Transportation Assessment Standard Terms of Reference.

Section 5.2(i) of the City's Development Design Manual states that a TIA may be required to fully evaluate a proposed development where other special transportation concerns are present, based on the adjacent community, design details, or specific usage proposed. Council's direction to provide a traffic study due to concerns about the cumulative traffic impact of multiple uses in the neighbhourhood falls under special transportation concerns based on the adjacent community.

Next Steps
Should Council approve and set the revised terms of reference for the Land Use Report, the applicant will be required to submit an LUR that includes a comprehensive Transportation Impact Assessment. Upon receipt of a satisfactory LUR, the application will proceed to the City's public consultation, including a public meeting chaired by an independent facilitator.

Key Considerations/Implications:

1. Budget/Financial Implications: Not applicable.

2. Partners or Interested Parties: Neighouring property owners and residents.

3. Is this a New Plan, Master Plan, Strategy, Report, or Framework: No

4. Alignment with Strategic Directions:

   A Sustainable City: Plan for land use and preserve and enhance the natural and built environment where we live.

   An Effective City: Ensure accountability and good governance through transparent and open decision making.

5. Alignment with Adopted Plans: Envision St. John's Municipal Plan and Development Regulations.

6. Accessibility and Inclusion: Not applicable.

7. Legal or Policy Implications: A map amendment (rezoning) to the Envision St. John's Development Regulations is required.

8. Privacy Implications: Not applicable.

9. Engagement and Communications Considerations: Public consultation, as per Section 4.8 of the Development Regulations, will be required after an acceptable Land Use Report is submitted. A public meeting is recommended.

10. Human Resource Implications: Not applicable.

11. Procurement Implications: Not applicable.

12. Information Technology Implications: Not applicable.

13. Information Management Implications: Not applicable.

14. Other Implications: Not applicable.

Recommendation:
That Council approve the revised terms of reference for a Land Use Report (LUR) for 18 Mount Cashel Road in response to Council's August 26, 2025 resolution to revise the terms of reference for the LUR to include a comprehensive traffic impact study.

Prepared by: Faith Ford, MCIP, Planner III
Approved by: Ken O'Brien, MCIP, Chief Municipal Planner

Report Approval Details

Document Title:	18 Mount Cashel Road - REZ2400021 - Revised Terms of Reference .docx
Attachments:	- TOR - 18 Mount Cashel Road - Revised September 18, 2025.pdf
Final Approval Date:	Sep 18, 2025

This report and all of its attachments were approved and signed as outlined below:

Ken O'Brien - Sep 18, 2025 - 11:58 AM

Jason Sinyard - Sep 18, 2025 - 4:07 PM

TERMS OF REFERENCE
LAND USE REPORT
APPLICATION FOR A RESIDENTIAL DEVELOPMENT
CONSISTING OF TWO APARTMENT BUILDINGS AT
18 MOUNT CASHEL ROAD
PROPONENT: KMK CAPITAL HODINGS ULC
Revised September 18, 2025

The proponent shall identify significant impacts and, where appropriate, also identify measures to mitigate impacts on land uses adjoining the subject property. All information is to be submitted under one report in a form that can be reproduced for public information and review. The numbering and ordering scheme used in the report shall correspond with that used in this Terms of Reference and a copy of the Terms of Reference shall be included as part of the report (include an electronic PDF version with a maximum file size of 15MB). A list of those persons/agencies who prepared the Land Use Report shall be provided as part of the report. The following items shall be addressed by the proponent at its expense:

A. Public Consultation

- Prior to submitting a draft of the Land Use Report to the City for review, the applicant must consult with neighbouring property owners. The Land Use Report must include a section which discusses feedback and/or concerns from the neighbourhood and how the proposed development/design addresses the concerns.
- Should the site plan change following this consultation, additional neighbourhood consultation may be required.

B. Building Use

- Identify the size of the proposed buildings by Gross Floor Area and identify all proposed uses/occupancies within the building by their respective Gross and Net Floor Area.
- Indicate total number of each dwelling unit type (micro unit, 1 bedroom dwelling, and 2 bedroom dwelling).
- If there are any proposed commercial uses within the Apartment Building, the days and hours of operation of each proposed use, number of employees on site at one time, and a description of the activities in the space (if applicable).

C. Building Location

- Identify graphically the exact location with a dimensioned civil site plan:
  - Lot area, lot coverage and frontage;
  - Location of the proposed buildings in relation to neighbouring buildings;
  - Proximity of the buildings to property lines and identify setbacks;
  - Illustrate any building stepbacks of higher storeys from lower storeys or building overhangs (if applicable);
  - Identify any encroachment over property lines (if applicable);
  - Identify building entrances and if applicable, door swing over pedestrian connections;
  - Information on the proposed construction of patios/balconies (if applicable); and
  - Identify any rooftop structures.
- Provide a Legal Survey of the property.

- Provide streetscape views/renderings of the proposed buildings from Mount Cashel Road. Include immediately adjacent building and spaces to inform scale/massing/context.

D. Elevation and Building Height

- Provide elevations of the proposed buildings.
- Identify the height of the buildings in metres, as per the definition of Building Height from the Development Regulations.

E. Exterior Equipment and Lighting

- Identify the location and type of exterior lighting to be utilized. Identify possible impacts on adjoining properties and measures to be instituted to minimize these impacts.
- Identify the location and type of any exterior HVAC equipment to be used to service the proposed building and identify possible impacts on adjoining properties and measures to be instituted to minimize these impacts.

F. Landscaping, Buffering & Snow Clearing/Snow Storage

- Identify with a landscaping plan where hard and soft landscaping is proposed.
- Identify the location and proposed methods of screening of any electrical transformers and refuse containers to be used at the site.
- Indicate the useable green space for the Cluster Development as per Section 6.9 of the Development Regulations, if applicable.
- Show the required Parking Lot buffer/screening as per Section 8.8 of the Development Regulations.
- Provide information on any snow clearing/snow removal operations. Onsite snow storage areas must be indicated.

G. Off-street Parking and Site Access

- Provide a dimensioned parking plan, including circulation details. Demonstrate feasibility of parking lot layout with turning movements for large SUV. Identify the number and location of off-street parking spaces to be provided, including accessible parking spaces.
  - The Envision St. John's Development Regulations sets out the number of required parking spaces. If the applicant is proposing a different number of parking spaces than required in the Development Regulations, a detailed Parking Report is required.
- Identify the number and location of bicycle parking spaces to be provided.
- Identify the location of all access and egress points, including pedestrian access.
- A direct pedestrian connection must be provided between the sidewalk and building entrances.
- Indicate how garbage will be handled onsite. The location of any exterior bins must be indicated and access to the bins must be provided.

H. Transportation

- A Transportation Impact Assessment prepared by a qualified engineer is required. The Transportation Impact Assessment must meet the Transportation Assessment Scope for 18 Mount Cashel Road and the City's Transportation Assessment Standard Terms of Reference.

I. Municipal Services

- Provide a preliminary site servicing plan.
- Identify if the buildings will be sprinklered or not, and location of the nearest hydrant and siamese connections.
- Identify points of connection to existing sanitary sewer, storm sewer and water system.
- The proposed development will be required to comply with the City's stormwater detention policy. Stormwater detention is required for this development. Indicate the location of the proposed stormwater detention facility.

J. Public Transit

- Consult with St. John's Metrobus (St. John's Transportation Commission) regarding public transit infrastructure requirements.

K. Construction Timeframe

- Indicate any phasing of the project and approximate timelines for beginning and completion of each phase or overall project.
- Indicate on a site plan any designated areas for equipment and materials during the construction period.

Transportation Assessment Scope

Project Title: 18 Mount Cashel Road

Date Prepared: September 17, 2025

The City of St. John's received an application for a proposed residential development at 18 Mount Cashel Road. The proposed development includes 72 dwelling units and 71 parking stalls. Given the surrounding context of the proposed development, a Transportation Assessment is required to evaluate its impacts to the surrounding transportation network and establish a baseline for future planning and developments in the area.

The City's standard terms of reference along with the following specific scope of work must be provided for review by the City's transportation engineering division.

Study Area:

The study area for this Transportation Assessment includes the proposed development area and the following key study intersections:

- Mount Cashel Road at Tiffany Lane
- Mount Cashel Road at Torbay Road
- Mount Cashel Road at New Cove Road
- Horwood Street at New Cove Road

Intersections not listed above may need to be modeled to assess the impact of the proposed development on the key study intersections.

Data Collection:

Turning movement counts to establish existing background traffic volumes and distribution patterns are to be completed at the key intersections listed above as per the City's Standard Terms of Reference for Transportation Assessments:

The count information collected will be used for the background conditions scenario and to confirm and potentially calibrate assumed background volumes for future assessment scenarios. If the existing mid-day peak hour volumes are more conservative than the AM peak hour, the City may require analysis of the mid-day peak hour, rather than the AM peak hour.

Travel Forecasting and Assessment Scenarios:

Trip generation rates recommended in the latest edition of the ITE Trip Generation Manual are to be used to estimate the level of traffic generated by the planned development.

Trip distribution of site generated traffic must be based on existing patterns at the study intersections.

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The Transportation Assessment must include analysis of the key intersections identified above for the following scenarios:

1. Background Conditions
    - Existing operations are based on recent turning movement counts collected for this assessment.
2. Future Background 2030 Horizon
    - This scenario provides a baseline condition to assess the impact of the proposed residential development.
    - This scenario assumes build-out of any approved developments with frontage on Tiffany Lane, Mount Cashel Road, Horwood Street, or that would have measurable transportation impacts to those streets.
3. Future Total 2030 Horizon
    - This scenario assumes full build-out of the proposed development by 2030 to assess transportation impacts and inform recommendations.

Analysis:

Study intersections are to be assessed for the identified horizons to determine appropriate traffic control and configuration, including considerations of transit, bicycle, pedestrian and vehicular modes.

Recommendations must be supported by nationally accepted guidance and criteria, and references should be provided.

Specific Concerns to be addressed:

Each of the following areas of concern should be addressed in the report with recommendations.

- Analysis of current and projected traffic volumes on Mount Cashel Road and surrounding streets;
- Assessment of cumulative impacts of nearby facilities, schools, religious institutions, and residential developments;
- Evaluation of intersection performance, pedestrian crossings, shortcutting patterns, and potential safety concerns;
- Consideration of traffic calming measures and mitigation strategies where appropriate; and
- Public engagement with residents and stakeholders regarding traffic and safety concerns.

Staff Liaison:

Any questions about this scope can be directed to:

Marianne Alaccoque
Transportation System Engineer
malacoque@stjohns.ca

Please carbon-copy your assigned development engineer on all email correspondence related to this file to maintain proper records.

Attachments:

Standard Terms of Reference – Transportation Assessment

STANDARD TERMS OF REFERENCE

CITY OF ST. JOHN'S

TRANSPORTATION ASSESSMENT

JUNE 2023

ST. JOHN'S

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1 INTRODUCTION

These terms of reference will serve as the framework and guide for the preparation of a transportation assessment in relation to a proposed development or other project.

The purpose of the transportation assessment will be to examine the potential transportation impacts associated with a project including access locations, vehicle volumes and any surrounding transportation system improvements required.

1.1 STUDY NEED

All development and transportation projects within the City have an associated impact on the overall transportation system. As the City continues to grow these impacts must be evaluated to ensure that issues are addressed and remediation measures put in place where necessary. In general, a transportation assessment may be required to fully evaluate a proposed development when one of the follow situations is present:

a) The development generates 100 or more trips during a peak hour
b) The development proposes access onto a high volume, high speed, or congested roadway
c) The development proposes access at or in close proximity to an intersection or other access
d) The development proposes a new intersection or upgrade to the traffic control of an existing intersection
e) High turning movements are associated with the proposed usage
f) High pedestrian activity is expected
g) The development proposes new crosswalks or is in close proximity to existing crosswalks
h) The development includes changes to existing street characteristics such as lane designations, left turn storage bays, or access restrictions
i) Other special transportation concerns are present based on the adjacent community, design details, or specific usage proposed

Based on the volume generated and specific concerns, one of three levels of assessment will be required:

1.1.1 NO FURTHER STUDY REQUIRED

If the proposed development is not expected to generate a significant number of new trips and no specific concerns are identified then the proponent will be notified that no further transportation evaluation is required. A full review of the development concept drawings and designs with respect to transportation considerations will still be required.

1.1.2 TRANSPORTATION IMPACT MEMO

For smaller developments that do not require a forecasting and analysis section a Transportation Impact Memo may be requested to address a small number of specific

transportation concerns. These may be, but are not limited to, community concerns/feedback, on site transportation design, traffic calming, crosswalk assessment, or access management.

The scope of the required memo will be provided by the City upon receipt of a development concept.

1.1.3 TRANSPORTATION IMPACT ASSESSMENT

If the proposed project is anticipated to generate significant volumes and/or other specific concerns that require a greater level of evaluation, a Traffic Impact Assessment (TIA) will be required. The general scope of a TIA may be large or small based on the identified study area and nature of the specific concerns identified. The site-specific terms of reference detailing the scope of a required TIA will be provided by the City prior to the applicant commencing the study.

2 BACKGROUND INFORMATION

The City of St. John's will provide the following background information to aid in the completion of a transportation assessment:

- Historical traffic/pedestrian/bicycle counts that are currently on file.
- Background mapping and /or aerial images that are available.
- Relevant transportation studies that have been conducted in the Study Area.

3 STUDY AREA

The study area for the TIA shall be identified by the City as part of the required study scope.

4 BASIC STUDY REQUIREMENTS

The consultant will be expected to examine the transportation impacts associated with the proposed development. The consultant will be expected to follow industry best practices, such as the Institute of Transportation Engineers recommended practices on Transportation Impact Analyses for Site Development, in the course of conducting this study to the satisfaction of the City.

4.1 DATA COLLECTION

The consultant will be expected to collect traffic/pedestrian/bicycle count information to support this transportation impact study. This data may include recent counts on file with the City or new counts collected by the consultant at certain points of interest identified by the City and obtained by the consultant prior to commencing the study.

4.1.1 TURNING MOVEMENT COUNTS

Any counts conducted shall be performed according to the following details:

a) Traffic count data must be collected in one week on a Tuesday, Wednesday and/or Thursday
b) During the AM peak period of 06:30 to 09:30 (this requirement may be waived for access points that serve business not open at this time)
c) During the Mid-day peak period of 11:30 to 13:30
d) During the PM peak period of 15:30 to 18:30
e) Counts shall be reported in 15 minute intervals for all movements at each count location.
f) All locations should be counted on the same day.
g) Counts will not be conducted during a week in which a local holiday or other major event falls.
h) Pedestrians or cyclists passing through the intersection shall be recorded in addition to motor vehicles.
i) Vehicle counts shall be classified into bins based on TAC Geometric Design Guide for Canadian Roads Vehicle Classifications (Section 1.2.4.2). Bins shall be constructed such that these three groupings can be determined:
    - Light Vehicles (P)
    - Medium Vehicles (LSU, MSU, HSU, A-BUS, I-BUS)
    - Heavy Vehicles (WB-19, WB-20, ATD, BTD, B-12)

4.2 TRAVEL FORECASTING

When required as part of the transportation assessment, travel forecasting will be conducted according to the standard four step model and adhere to the following:

1) Trip Generation rates shall be calculated using the latest edition of the ITE Trip Generation Manual. Trips generated will be recorded in the study report. Trips rates based on comparison site surveys, or first principles will be acceptable provided the approach is confirmed with the City prior to completion of the study. Any adjustments to the trip generation rates will be identified, rationalized, and thoroughly documented in the study report.
2) The trips generated shall be distributed to the road network using existing traffic patterns, and/or data from the City's VISUM model, and/or travel sheds/key demand locations for the area. Distribution estimates should be confirmed with the City prior to completion of the study.
3) Appropriate mode shares shall be identified and recommendations related to transit service or walking and cycling facilities shall be made. Anticipated pass-by demand characteristics shall be identified and applied.
4) Assignment of trips should be conducted based on existing patterns, area street network design, and the shortest path principal or reasonable alternative paths.

A summary table of all trip generation rates and inbound/outbound splits used in the assessment will be included in the report (example

Table A).

TABLE A: ASSUMED TRIP GENERATION RATES

Land Use	Source	AM Peak Hour			PM Peak Hour			Daily		
		Rate	IN	OUT	Rate	IN	OUT	Rate	IN	OUT
ex. Childcare	ITE LUC 565 Day Care Center	12.18/1,000 ft^2 GFA	53%	47%	12.34/1,000 ft^2 GFA	47%	53%	74.06/1,000 ft^2	50%	50%

A land use concept plan graphically identifying existing, background, and future development areas and land use should be included in the study report (example **Figure A**). Any segmentation of development area into phases and/or trip generation zones for assignment purposes will be illustrated and separate tables presenting a corresponding summary of background development (example **Table B**) and future site development (example **Table C**) trip generation will be provided.

FIGURE A: EXAMPLE LAND USE CONCEPT PLAN

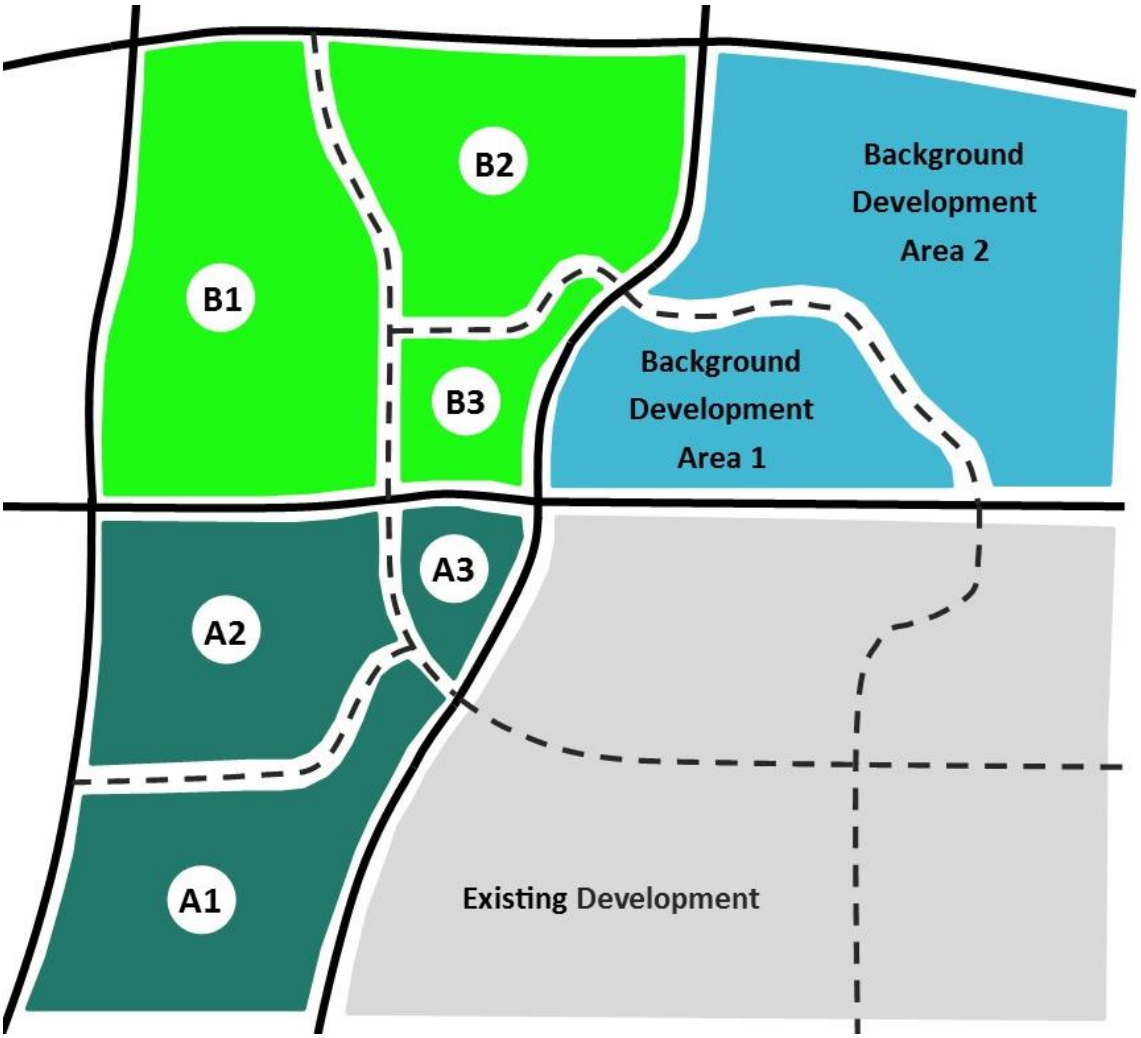


TABLE B: BACKGROUND DEVELOPMENT TRIP GENERATION

Background Development	Land Use	AM Peak Hour			PM Peak Hour			Daily		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Area 1										
Area 2										
Sub-Total	Residential									
	Non-Residential									
Adjustments										
TOTAL NET TRIPS										

TABLE C: FUTURE SITE DEVELOPMENT TRIP GENERATION

Area	Zone	Land Use	Area/Units	AM Peak Hour			PM Peak Hour			Daily		
				IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
A	A1											
	A2											
	A3											
B	B1											
	B2											
	B3											
Sub-Total		Residential										
		Non-Residential										
Adjustments												
TOTAL NET TRIPS												

Trip generation summary tables must include a breakdown of primary, pass-by, diverted, and internal trips where appropriate.

The assumed trip distribution shall be documented graphically in the study report. For complex development concepts and assessments, overall distribution patterns will be illustrated whereas for simple development scenarios, detailed trip distribution and assignment (turning movement level) will be illustrated.

4.3 METHOD OF ANALYSIS

The following shall direct the consultant in the methods of analysis acceptable to the City

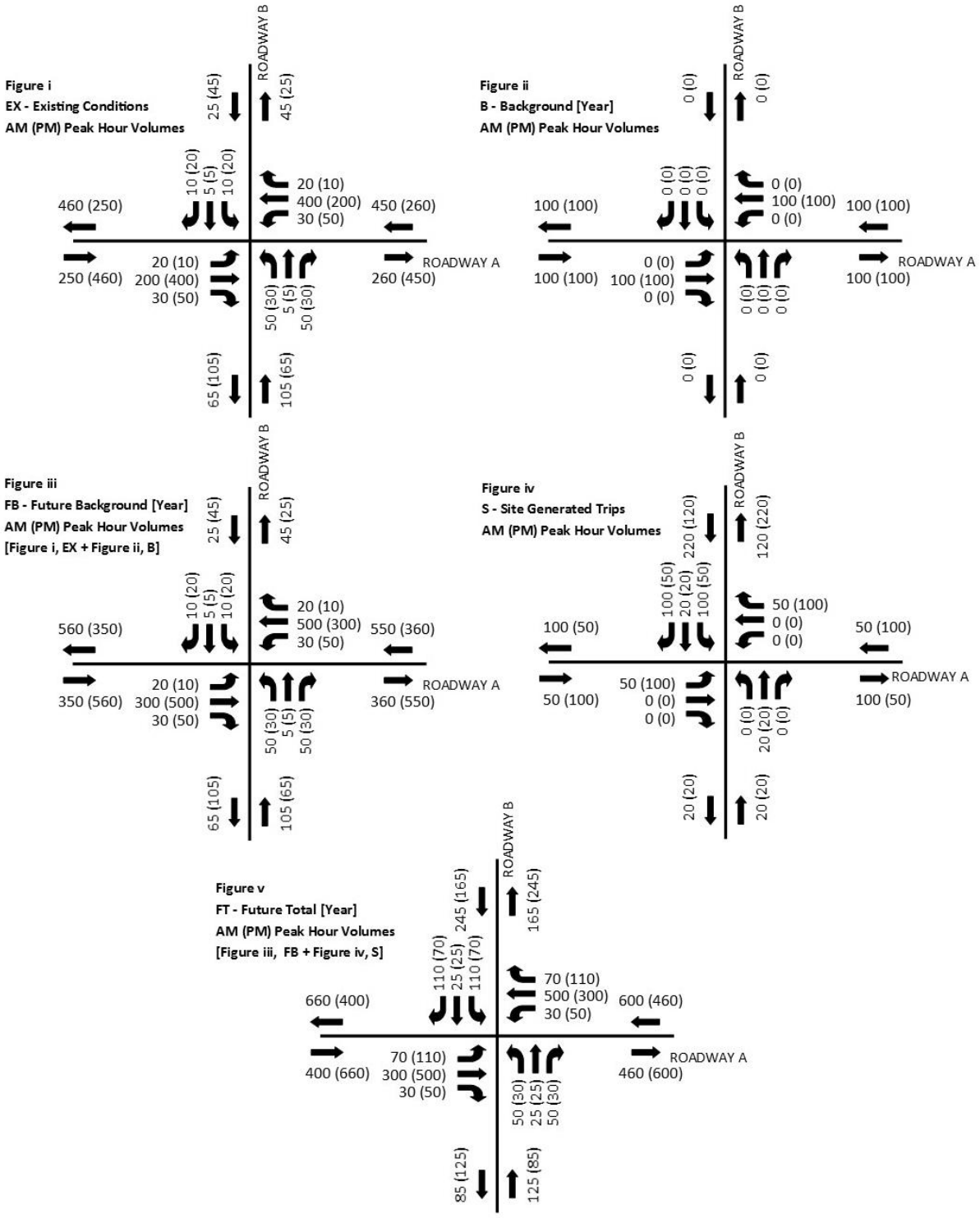
4.3.1 ASSESSMENT SCENARIOS

For the purposes of this transportation assessment, the consultant will be expected to build a model to examine, at minimum, each of the following scenarios for both the AM and PM peak traffic period during a typical weekday (unless an alternate/additional critical peak hour is identified):

a) EX – Existing conditions.
b) FB – Future Background, assuming no future site development, at a horizon identified by the City prior to commencing the study.
c) FTB – Future Total base network (includes build out of the subject site with no transportation improvements in place), at a horizon identified by the City prior to commencing the study.
d) FTM – Future Total with mitigation in place for deficiencies identified in FTB, at a horizon identified by the City prior to commencing the study.

Separate diagrams showing existing volumes, background trips, net site trips assigned to the network, and the total traffic volumes for each of the assessment scenarios are required as part of the study. Traffic volumes will be illustrated for each movement at each study intersection for the weekday AM and PM peak hours (or as per specific requirements). Diagrams should be developed so as to illustrate the incremental increase in traffic volumes on the network with total figures providing references to each specific volume component figure included. Example **Figure B** illustrates simplified traffic volume diagrams for a single intersection network given a single future analysis horizon. Roundabout intersection count information must also report circulating volumes.

FIGURE B: TRAFFIC VOLUME DIAGRAMS



In the event a proposed development is to be completed in stages and/or the City or consultant identifies the need to assess an interim build-out horizon, Future Background and Total assessments may need to be completed for the additional interim horizons (based on specific

requirements). The report will provide a clear summary of the assumed background development and future site generated trips included in each assessment horizon (example **Table D**).

TABLE D: STAGED ASSESSMENT HORIZON TRIP GENERATION

Table #: Interim Stage – [Horizon Year]										
Component		**AM Peak Hour**			**PM Peak Hour**			**Daily**		
		IN	**OUT**	**TOTAL**	**IN**	**OUT**	**TOTAL**	**IN**	**OUT**	**TOTAL**
Background	Area 1									
Future Site	Area A: Zone A1, A2, A3									
	Area B: Zone B1									
	Total Net Trips									

Table #: Full Build-Out – [Horizon Year]										
Component		**AM Peak Hour**			**PM Peak Hour**			**Daily**		
		IN	**OUT**	**TOTAL**	**IN**	**OUT**	**TOTAL**	**IN**	**OUT**	**TOTAL**
Background	Area 1									
	Area 2									
Future Site	Area A: Zone A1, A2, A3									
	Area B: Zone B1, B2, B3									
	Total Net Trips									

4.3.2 INTERSECTION CAPACITY ASSESSMENT

The latest version of Synchro shall be used by the consultant to compare the before and after intersection LOS and to evaluate the effectiveness of any proposed road network modifications/improvements. Roundabouts shall be assessed using SIDRA or Arcady. Alternate equivalent software may be used if confirmed in advance by the City.

To estimate operations over the full peak hour, a peak hour factor of 1.0 should be used in all analysis unless otherwise directed by the City.

A table reporting basic capacity analysis performance measures must be included for each study intersection for each assessment scenario using the template shown in example **Table E.** These tables must appear in line within the study report and not be separated into an appendix.

In this table the value that should be entered for the storage value is the effective storage length for turning lanes and the inter-block distance for through lanes. In cases where more than one lane serves the same movement the average length of all lanes should be used.

TABLE E: INTERSECTION PERFORMANCE TEMPLATE

Table #: Intersection Performance – [Scenario], [Horizon Year], [Analysis Period]														
Intersection	**Measure**		**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
[Synchro #]: [Intersection Name]	Volume													
	Delay													
	LOS													
	v/c													
	Queue	95th%ile												
		Storage												

In all intersection performance tables, colour shall be used to highlight performance concerns. These colour highlights shall follow the rules and colouration shown in **Table F**.

TABLE F: INTERSECTION PERFORMANCE TEMPLATE

Measure		**No concern**	**Caution**	**Deficient**
Volume		no colouration required		
Delay		LOS 'A' to 'D'	LOS 'E'	LOS 'F'
LOS		LOS 'A' to 'D'	LOS 'E'	LOS 'F'
v/c		<0.85	≥0.85 - <0.98	≥0.98
Queue	95th%ile	<85% of storage	≥85% of storage	exceeds storage
	Storage	no colouration required		

Study intersections are to be assessed for the identified assessment horizons to determine appropriate traffic control and configuration. Roundabout control must be considered as part of intersection assessment when a higher degree of traffic control is required, and corresponding lifecycle cost analysis must be provided.

4.3.3 TRAFFIC WARRANTS

TAC Traffic Signal Warrants shall be prepared to document the need, or lack thereof, for any traffic control signals. Forecasts for the six hours shall be based on expanding the peak hour forecasts proportionally to the highest six hours observed in counts. Pedestrian crossing and left turn lane warrants shall be conducted when/where necessary and in accordance with industry guidelines.

4.3.4 OTHER ANALYSIS

Additional analysis to address specific concerns including pedestrian and bicycle accommodation may be required. This may include assessment of existing and/or future crosswalks to determine appropriate control and/or warranted improvements, analysis supporting multi-modal facility type selection, or other analysis required based on transportation concerns specific to the development.

5 RECOMMENDATIONS

The consultant shall clearly outline the recommended actions and/or infrastructure that result from the analysis conducted including any off-site improvements.

Clear justification must be provided for any new infrastructure identified.

6 SPECIFIC CONCERNS

The City shall identify specific concerns related to the proposed development that will require particular attention by the consultant during the completion of the report. These concerns will vary in nature depending on the type and location of the proposed development. Specific concerns shall be identified by the City as part of the required study scope..

6.1 COMMON CONCERNS

Some common concerns that should be addressed in the report, where applicable, include:

a) On site circulation and right of way control
b) Access control and design
c) Drive-throughs
d) Community concerns
e) Off peak site activity
f) Pedestrian connections and accommodation
g) Traffic calming
h) Left turn queuing and storage bays

7 STUDY REPORT REQUIREMENTS

The Consultant will be expected to provide a detailed written report on the findings of this study. The report shall use figures, graphics, and tables to the extent possible to communicate technical content including descriptions of infrastructure, operations, assumptions, or trends. Prose shall be limited to what is necessary.

7.1 REPORT OUTLINE

The following general report outline is provided for reference. Sections of the study report may include, but not be limited to:

1) *Executive Summary* (maximum 1 page, optional)
2) *Introduction* – information on the project background, study scope, rationale, and methodology

3) *Study Area Context* – existing and future background area conditions including roadway network, land use, traffic counts, background traffic forecasting etc.
4) *Proposed Development* – proposed land use, site layout, access locations, future site trip generation, etc.
5) *Assessment Scenarios* (subsection for each scenario) – analysis horizons, rationale, staged development components, and traffic volumes
6) *Analysis* – capacity analysis assumptions and results, traffic warrants, addressing specific transportation concerns, identification of infrastructure thresholds
7) *Conclusions and Recommendations* – summary of recommended mitigation measures and improvement thresholds

7.2 REPORT SUBMISSION

Reports submission to the City will include:

a) A digital copy of the report in a PDF file format and one (1) hard copy of the report if requested by the City. Any unapproved draft reports submitted for City review must be clearly labeled as such. A copy of the approved report contents must be submitted and labeled as “Final”.
b) The final study report or memo shall bear the professional stamp and signature of a qualified engineer representing the firm and licensed to practice in the Province of Newfoundland and Labrador.
c) The study report shall be prepared and formatted to fit on standard 8½” x 11” letter sized paper.
d) All electronic documents of a technical nature generated as part of this study will be submitted to the City upon study completion to assist in review. These include CAD files, GIS files, spreadsheets, databases, documents, original graphics or any other electronic document relevant to the study.
e) All count data will be submitted in editable electronic format (Excel spreadsheet or MS Access database) to the City upon completion of the data collection program. A reporting template can be made available to the consultant.
f) Any modified VISUM files used in the analysis shall be submitted electronically to the City along with all adjustments made recorded individually as model transfer files.
g) Electronic copies of the Synchro/ SIDRA or Arcady models should be included with both the submission of the final study report and any interim review copies.