TORONTO TRANSIT COMMISSION
REPORT NO.

MEETING DATE: JULY 23, 2014

SUBJECT: MCNICOLL BUS GARAGE TRANSIT PROJECT ASSESSMENT STUDY

ACTION ITEM

RECOMMENDATION

It is recommended that the Board:

1. Approve the McNicoll Bus Garage Draft Environmental Project Report,

2. Note that two Public Information Centers as well as several consultation meetings with the local Councillor, adjacent property owners, and local community groups have been held. Additional public outreach will be conducted beginning in September 2014 and the Board will be advised of the results of these meetings, and

3. Forward this report to City Council through the appropriate committee for approval, and to authorize staff to submit the Environmental Project Report (EPR) to the Ministry of Environment.

FUNDING

Funds for the design of a new bus garage at the corner of Kennedy Road and McNicoll Avenue, capable of storing and maintaining 250 buses are available in Project 3.9 McNicoll Bus Garage, under Building and Structures as referenced in the 2014-2023 Capital Budget noted on pages 681-684, as approved by City of Toronto Council on January 29/30, 2014.

The 2014–2023 Capital Budget includes $181M for the project, however, only $80M in funding is available at this time. The funding shortfall of $101M can be addressed in one of two ways. The first option is for the TTC to request additional funding as part of the 2015–2024 capital budget submission. The second option is to build the garage in two stages to correspond to available funding where the first stage provides for storage of the buses only. If option 2 is chosen as the preferred option, there is a risk that the projected cost of $181M may not be sufficient as the operations of the garage would need to be maintained during the construction of the second stage. Furthermore, providing storage-only capabilities will not be acceptable, as maintenance functions are also required.

BACKGROUND

In the late 1980s Metropolitan Toronto purchased a property southeast of Markham Road and Steeles Avenue East to serve as a location for a future TTC bus garage. By the early 2000s, growth in the north-east part of the city was not progressing as quickly as anticipated, making the Markham and Steeles property less desirable as a bus maintenance and storage location. As a result, when a developer group approached the City and TTC in 2004 with a proposal to acquire the property, TTC staff viewed this as an opportunity to find a more suitable location. A property search identified a 19 acre site in the Milliken Employment District on the north side of McNicoll Avenue east of Kennedy Road. Compared to the Markham and Steeles site, it offered a significant reduction in bus operating costs as it was closer to the routes it would service. The site as shown on Attachment No. 1, was purchased by the City of Toronto in 2005.

The current total capacity of all existing TTC bus garages is approximately 1,630 buses. The existing bus fleet, at approximately 1,700 buses, therefore exceeds this existing capacity. As of 2014, forecasted growth in transit ridership is projected to require the acquisition of approximately 120 additional buses by 2018, some of which will be the significantly longer articulated buses. As a result, bus garage capacity must be increased by over 200 buses within the next five years.

At its meeting on April 30, 2014, a status report on planning activities for the McNicoll Bus Garage was presented to the Board for information.

DISCUSSION

Purpose of the McNicoll Bus Garage

The objective of this project is to provide a new bus garage that will accommodate buses required to meet increased service, improve the existing over-capacity condition at the current bus garages, and provide increased bus maintenance capacity.

Site Location and Study Area

The property for the McNicoll Bus Garage is located near the northeast corner of McNicoll Avenue and Kennedy Road in the city of Toronto. The site on which the McNicoll Bus Garage is planned is approximately 19 acres and is currently vacant.

The study area used to assess the potential impacts of the proposed bus garage is bounded by Kennedy Road to the west, Midland Avenue to the east, the north property line of the Scarborough Chinese Baptist Church to the north, and McNicoll Avenue to the south.

The property is zoned “Employment Heavy Industrial”. Other permitted uses include:

- Pesticide or fertilizer manufacturing
- Cement or asphalt plant
- Synthetic rubber manufacturing
- Large scale smelting
- Industrial gas or petrochemical manufacturing

The Process to Date

Under the Transit Projects Regulation of the Environment Assessment Act, transit projects, such as the McNicoll Bus Garage, are exempt from the requirements under Part II of the Act. The new regulation has created a process that allows for a Provincial assessment of potential environmental impacts to be completed and approval to proceed with the project to be obtained within six months of the formal start of the process.

The preliminary planning has been completed for the project and the Transit Project Assessment Process Notice of Commencement will be issued in September 2014. Public consultation has been included throughout the preliminary planning process and further consultation will be conducted on mitigating measures following the Notice of Commencement. The attached Executive Summary and Draft EPR, available at http://www.ttc.ca/About_the_TTC/Projects/McNicoll_Bus_Garage/index.jsp , provide details on:

1. the process followed to develop the project,
2. the rationale for the design elements selected for the McNicoll Bus Garage,
3. a summary of the environmental impacts of the project and net effects following proposed mitigation measures, and
4. the details of public consultation activities completed to date.

Community consultation in the development of new transit infrastructure is a key aspect of the Transit Project Assessment Process and the TTC's Good Neighbour Policy. Some changes incorporated into the design based on the community input include:

1. Reorientation of the fuelling lanes and diesel tanks from the west side of the building to the east side of the building to reduce night time noise and shield the high activity from the residents at the Mon Sheong Long Term Care Facility (Mon Sheong),
2. Relocation of the repair bays from the south side of the facility to the north side to reduce noise impact on Mon Sheong, and
3. Relocation of the vehicle entrance/exit to the north side of the property off Redlea Avenue to increase the distance from Mon Sheong.

Preferred Design

The preferred design as shown on Figure No. E-2, in the attached Executive Summary, includes a 19,000 sq. m lot to the west of Redlea Avenue, used for TTC staff parking. There will be approximately 350 parking spots. Access to the parking lot will be from Redlea Ave. The main facility will sit on a 62,000 sq. m property to the east of Redlea Avenue and is approximately 29,000 sq. m. The main entrance/exit will be on the north side of the property off Redlea Ave, with a second entrance on the south side of the property off Redlea Ave. The facility will operate 24/7 with approximately 100 bus maintenance staff and 400 operators reporting into the facility. The bus garage will include:

1. Capacity for 250 buses,
2. Two service lines with exterior wash system,

3. Interior bus cleaning area,
4. Repair bays,
5. Steam jenny room (heated power wash) with artic hoist,
6. Materials receiving, storage and distribution area (including loading docks),
7. Bus maintenance and transportation offices,
8. Employee amenities (parking, washrooms and locker rooms, lunch room/cafeteria) appropriate for 3 shifts.

Impact Assessment and Mitigation

Detailed assessments of the potential impacts of the bus garage are provided in the Draft EPR. A summary of the assessment of key issues raised by the community is provided below:

1. Noise concerns – Concerns were raised by local residents on the potential for increased noise levels as a result of the new facility. A Noise Study was conducted using measured existing noise levels to model the predicted impact of the garage. The noise study concluded that mitigations are required to attenuate noise impacts at the Mon Sheong facilities to the southwest. Mitigation measures including false façades atop the west wall of the Proposed Facility and localized rooftop barriers surrounding rooftop noise sources will be utilized. All applicable regulations will be adhered to,

2. Traffic Impact – Concerns were raised by the local community on the impact the facility would have on existing traffic conditions and pedestrian safety. A Traffic Impact Study was conducted based on existing observed and forecasted future traffic volumes. The study indicated that changes to peak hour traffic as a result of the bus garage are insignificant as most bus garage traffic occurs in the off peak hours,

3. Air quality – Concerns were raised on the potential impact to air quality by the local community. In order to assess the potential air quality impact of the project, the predicted effects at sensitive receptors were compared to established guidelines. The maximum combined concentrations of contaminants of interest were all below their respective MOE (Ministry of the Environment) guidelines or Canada Wide Standards (CWS), with minor exceptions. The assessment revealed exceedance of less than 1% of the time for benzene and PM10. As such, mitigation measures are not warranted per MOE guidelines and/or CWS since the contribution to air quality impact from this facility was considered to be minimal, and

4. Safety concerns around the storage of diesel fuel – Concerns were raised on potential hazards associated with the storage of diesel fuel on site. The proposed locations of the tanks meet all railway corridor setback requirements. All storage tanks are double walled, have a 2-hour safety rating, are protected by concrete barriers and bollards, and fuel levels will be monitored to detect leaks. All new fuel tank installations are inspected and

approved by TSSA prior to use and are governed by the standards of the Liquid Fuels Handling Code.

Property Requirements

The proposed bus maintenance and storage facility is situated on land currently owned by the City of Toronto and was purchased for this use in 2005. No additional property requirements have been identified or are anticipated for the construction of the McNicoll Bus Garage.

Future Commitments

TTC staff have worked with City staff and technical agencies to address environmental concerns and issues associated with the McNicoll Bus Garage. The potential impacts on traffic operations, transit operations, natural environment, socio-economic environment (including noise, traffic, and air quality) and cultural environment (including archaeology and built heritage), have been identified, evaluated, assessed and mitigation measures, if required, identified. The design process may lead to refinement or modifications to the proposed conceptual design. It is anticipated that such changes will be minor and will not alter the original project intent or commitments to the public and involved agencies. Additional approvals that will be obtained during the design phase are documented in Section 7.3 of the Draft EPR.

Through the implementation process, construction methods and staging will be evaluated to minimize impacts to the surrounding properties. This will include mitigation plans to address construction traffic staging, construction noise, air quality impacts during construction (dust), etc. On-going liaison with technical agencies and the community is anticipated. The TTC and City of Toronto will comply with regulatory government agencies' regulations, standards and directives.

In addition TTC is committed to undertake the following initiatives:

1. Provide a green roof as part of our commitment to build in accordance with the Toronto Green Standard,
2. Incorporate a storm water management system to control the quality and quantity of runoff from the site,
3. Provide landscaping around the perimeter of the property. Trees and other vegetation will be planted to enhance the areas that are visible to local residents, and
4. Install acoustic barriers at noise sources on the roof to minimize impact to neighbouring properties.

Schedule

The Notice of Commencement for the Transit Project Assessment Study will be distributed in September of 2014. Additional community and review agency consultation will continue through the fall of 2014, the results of which will be used to finalize the Environmental Project Report. The

Notice of Completion will be issued in January 2015 and the Transit Project Assessment Process will be complete in April 2015.

Construction for the McNicoll Bus Garage is anticipated to commence in the spring of 2016 with completion scheduled by the end of 2019.

JUSTIFICATION

The combination of an existing over-capacity situation in the current TTC bus garages, and new bus acquisitions required to meet ridership growth over the next five years, requires the construction of a new bus garage. Preliminary planning and community consultation has been completed for a new facility located on the north side of McNicoll Avenue east of Kennedy Road obtained for that purpose in 2005. TTC staff will continue to work with the local community throughout the completion of the Transit Project Assessment and the detailed design phase of the facility.

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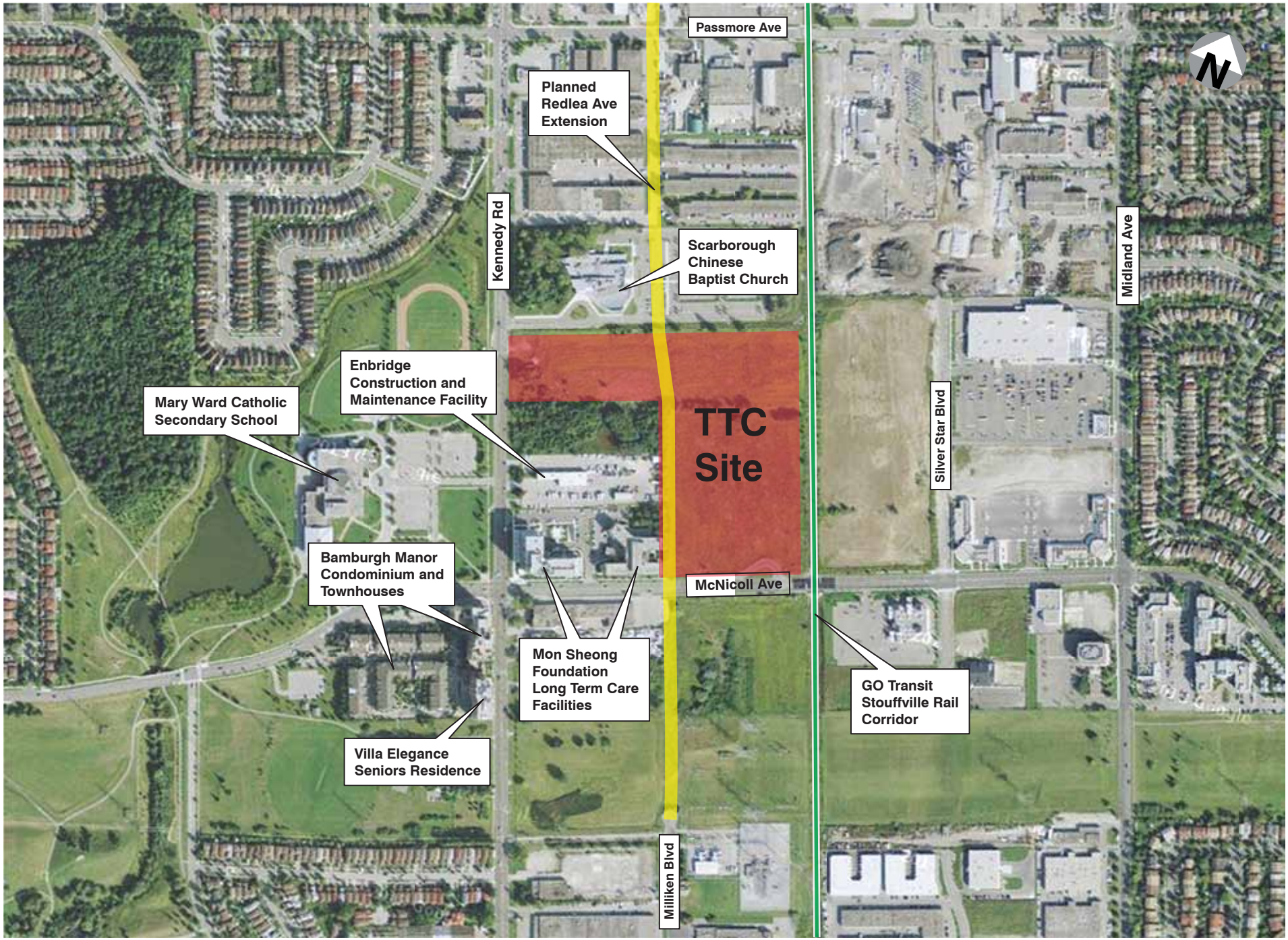
Attachments:
1) McNicoll Bus Garage - Proposed Site
2) Executive Summary - Draft Environmental Project Report

Attachment 1 – McNicoll Bus Garage - Proposed Site

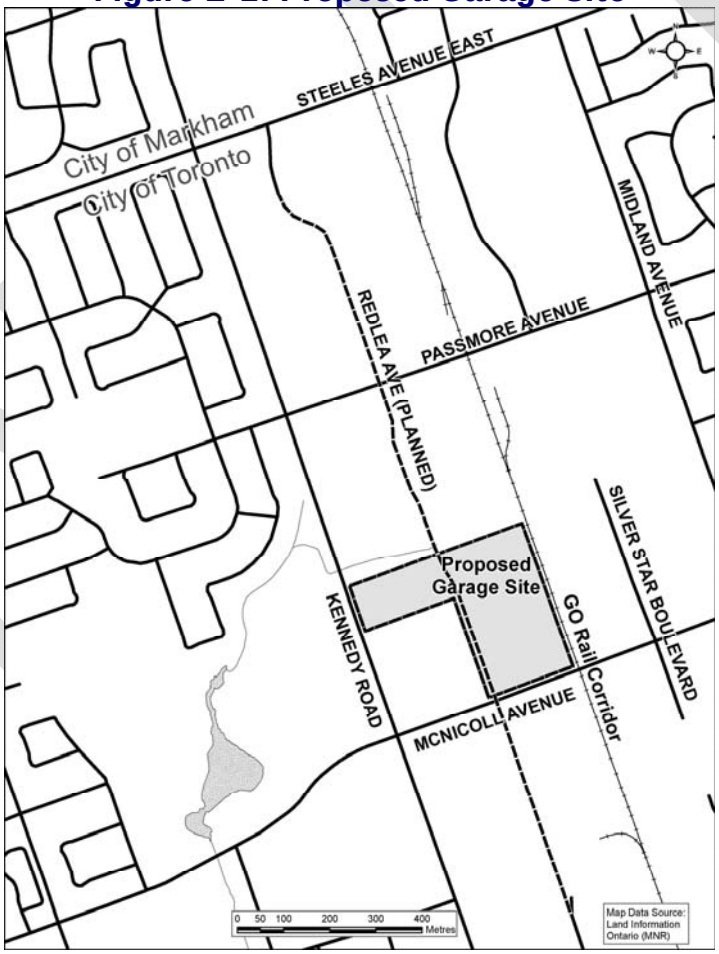


EXECUTIVE SUMMARY

The Toronto Transit Commission (TTC) operates and maintains a fleet of approximately 1,700 bus transit vehicles as part of its transit network of subways, streetcar lines and bus routes. The bus garages are currently operating overcapacity and range in age from 3 to 56 years old. As of 2014, forecasted growth in transit ridership is projected to require the acquisition of approximately 120 buses by 2018, some of which will be the significantly longer articulated buses (6.1 m longer in length than the current standard size buses). As a result, bus garage capacity must be increased by over 200 buses within the next five years.

The TTC has undertaken the Transit Project Assessment Process (TPAP) as prescribed in Ontario Regulation 231/08, Transit Projects and Metrolinx Undertakings, for a new bus garage. The proposed site for the McNicoll Bus Garage (MBG) is located near the intersection of Kennedy Road and McNicoll Avenue in the northeast end of the City of Toronto (**Figure E-1**).

Figure E-1: Proposed Garage Site



The project includes the design of an indoor storage facility that can accommodate 250 conventional buses, a maintenance shop and office, a transportation office and a bus service area.

The maintenance shop includes maintenance bays, brake shop, degrease shop, body shop, touch-up paint shop, inspection shop and tire shop. The MBG will include:

- Indoor storage for 250 buses in the barn, on hoists, pits, body shop, paint shop, bus cleaning area and service lines.
- Bus Maintenance and Transportation offices (including spaces required for the bus operators and management).
- Two service lines with exterior wash system.
- Bus special cleaning area.
- Repair Bay, including 14 hoists (eight articulated buses and six standard buses), two inspection pits, paint shop, body shop with two bays (one with hoist).
- Steam jenny room with hoist.
- Materials receiving, storage and distribution area (including loading docks).
- Appropriate building systems (HVAC, plumbing, electrical, communications, etc.) including a centralized building automated controls system.
- Employee amenities (parking, male / female washrooms and locker rooms, lunch room / cafeteria) appropriate for three shifts.
- Access / egress to the facility will be via Redlea Avenue.

Refer to **Chapter 3 and Figure E-2** for the details of the proposed facility.

The MBG is not anticipated to result in any significant negative environmental or community impacts:

- A traffic impact assessment was undertaken as part of this study. Employee and bus activity from the facility will occur primarily during off-peak hours. Site generated traffic during the peak periods of the adjacent road network is minimal, resulting in negligible changes to local traffic operations.
- An air quality assessment was undertaken as part of this study. The maximum combined concentrations of contaminants of interest were all below their respective MOE (Ministry of the Environment) guidelines or Canada Wide Standards, with minor exceptions. Assessment revealed excedence of less than 1% of the time for benzene and PM_{10}. As such, mitigation measures are not warranted per MOE guidelines and/or Canada Wide Standards.
- A noise assessment was undertaken as part of this study. Noise mitigation measures (i.e. acoustic panels around rooftop fans, false façade along the west side of the building) are required to reduce disruption to adjacent noise-sensitive areas. With the recommended mitigation measures, the facility noise will meet Provincial sound level requirements.
- A natural sciences assessment was undertaken to assess the impact to the natural features and functions located on the site. The site is dominated primarily by a significant non-native plant species that is typical for abandoned agriculture fields. No rare or endangered species (Species at Risk) were encountered during field work. A small portion of the north end of the site is located in the Toronto and Region Conservation

Authority (TRCA) regulated area. Impacts to the site are primarily related to vegetation clearing which can be addressed by standard measures for environmental protection.

- The results of the Stage 1 Archaeological Assessment indicate that, while some of the lands within the site appear to have been disturbed by past development, much of the site has archaeological potential. A Stage 2 Archaeological Assessment will be conducted by a licenced consultant archaeologist and will follow the requirements set out in the 2011 Standards and Guidelines for Consultant Archaeologists (MTCS 2011).

Refer to **Chapter 5** for a description of the potential environmental impacts and corresponding mitigation measures.

Various meetings were held with external agencies and key stakeholders throughout the duration of the study. The general public and property owners were able to choose their level of involvement through attending public open houses and/or contacting the Project Team directly. At the public open houses, information about the project was presented on display panels. Project staff were available at the open houses to answer directly any questions or concerns raised by a member of the public. Three formal rounds of public consultation were undertaken. Aboriginal Communities and government review agencies were also contacted. An overview of the consultation activities and input received is outlined in **Chapter 6**.

Figure E-2: Preliminary Concept of the McNicoll Bus Garage