



Wilson Bus Garage - Upgrades

Date: March 20, 2018
To: TTC Board
From: Chief Capital Officer

Summary

The purpose of this report is to obtain authorization for the award of Contract No. C1-51: Wilson Bus Garage Ventilation Upgrades, Anti-slip Flooring in Fuelling Lanes Area, Bus Washracks Upgrade and Overhead Door Replacement, to Black and McDonald Limited, in the amount \$35,685,400.00, inclusive of all taxes, on the basis of lowest total bid price.

Four separate construction packages for improvements to the Wilson Bus Garage, which are covered under four different projects of the Capital Program, have been consolidated under a single construction Contract No. C1-51. This is to facilitate earliest completion of the required improvements, reduce the cost of supervision/management due to multiple contracts and to address the constructor issues as a result of multiple contractors sharing a common work space within the same time duration.

The total bid price is comprised of all labour, equipment and materials to undertake the work for the following packages covered under Contract No. C1-51:

C1-41 – Wilson Bus Garage Ventilation Upgrades: Modernization and upgrade of the existing heating, ventilation and air-conditioning (HVAC) system throughout the entire Garage.

The modernization and upgrade is part of TTC Capital Project No. 6159, Wilson Garage Ventilation Upgrades, which is a facility-wide endeavour at the Garage to replace the existing aged, unreliable and underperforming HVAC system to comply with current codes, industry standards and TTC requirements for indoor ventilation capacity and air balance.

C1-47 – Wilson Bus Garage Anti-slip Flooring in Fuelling Lanes Area: Rehabilitation of the existing floors in the fuelling service lanes of the Garage.

The rehabilitation is part of TTC Capital Project No. 6195, Bus Garage/Shops Facility Renewal Program, which is a TTC-wide endeavour to maintain the bus garages and maintenance shops in a state of good repair.

C60-10 – Wilson Bus Garage Bus Washracks Upgrade: Replacement of the existing two bus wash systems at the Garage with two new hybrid bus wash systems, which employ a combination of soft-touch brushes and touchless wash systems, with the added capability of re-using wastewater from the nightly bus washing operations during the non-winter seasons.

The installation is part of TTC Capital Project No. 6176, Bus Washracks, which is a TTC-wide endeavour to replace the existing aged bus wash systems at five bus garages with the new hybrid bus wash systems to improve the quality of washes, minimize maintenance requirements, and reduce freshwater consumption for bus washing operation during the non-winter seasons.

C60-11 – Wilson Bus Garage Overhead Door Replacement: Replacement of four existing overhead doors at the Garage with four new roll-up speed doors and installation of a new manual steel rolling door.

The installation is part of TTC Capital Project No. 7883, Overhead Doors, which is a TTC-wide endeavour to replace the existing aged overhead doors with new reliable and efficient overhead doors at various facilities which include the bus garages, rail carhouses and shops to reduce maintenance requirements and building heat loss in the respective areas of the facilities serviced by the new doors.

In addition to the above noted work, Contract No. C1-51 includes one Specified Option as follows:

Specified Option No. 1 is the price credit for TTC supplied insurance in lieu of the Contractor providing insurance which is subject to review and acceptance by the TTC for ninety calendar days from Notification of Award.

Recommendations

It is recommended that the Board:

1. Authorize award of Contract No. C1-51, Wilson Bus Garage Ventilation Upgrades, Anti-slip Flooring in Fuelling Lanes Area, Bus Washracks Upgrade and Overhead Door Replacement, to Black and McDonald Limited, in the amount of \$35,685,400.00, inclusive of all taxes on the basis of lowest total bid price. Refer to Appendix E.

The total bid price for Contract No. C1-51 is comprised of all labour, equipment and materials to undertake the work for Construction Packages C1-41, Wilson Bus Garage Ventilation Upgrades, C1-47, Wilson Bus Garage Anti-slip Flooring in Fuelling Lanes Area, C60-10, Wilson Bus Garage Bus Washracks Upgrade, and C60-11, Wilson Bus Garage Overhead Door Replacement.

Financial Summary

Sufficient funds for this expenditure are included in the TTC's 2018-2027 Capital Budget and Plan as approved by Council on February 12, 2018 under the following:

C1-41 – Wilson Bus Garage Ventilation Upgrades: Project No. 6159 – 3.9 Wilson Garage Ventilation Upgrades.

C1-47 – Wilson Bus Garage Anti-slip Flooring in Fuelling Lanes Area: Project No. 6195 – 3.9 Bus Garage/Shops Facility Renewal Program.

C60-10 – Wilson Bus Garage Bus Washracks Upgrade: Project No. 6176 – 3.2 Bus Washracks.

C60-11 – Wilson Bus Garage Overhead Door Replacement: Project No. 7883 – 3.1 Overhead Doors.

The Chief Financial Officer has reviewed this report and agrees with the financial impact information.

Equity/Accessibility Matters

The Wilson Bus Garage is a vital facility for the servicing, repair and maintenance of its accessible TTC bus fleet which services numerous routes of the TTC bus network.

Decision History

No prior decision history.

Issue Background

Opened in March 1976, the Wilson Bus Garage is the one of the largest TTC bus facilities. The Garage has a building area of approximately 21,500 square metres (230,000 square feet) and is presently allocated with approximately 300 buses.

Refer to Appendix A, B and C respectively for the location, access and a layout of the Wilson Bus Garage at the TTC Wilson Complex.

The Garage currently provides daily servicing, routine maintenance inspections, and various repair activities for its TTC bus fleet which services numerous routes of the TTC bus network. The Transportation Office Building at the Garage provides operator dispatch services for its TTC bus fleet as well for as the TTC subway fleet stationed at the subway carhouse of the TTC Wilson Complex.

The majority of the rooftop HVAC units at the Garage were replaced between 1991 and 1994 to accommodate the introduction of compressed natural gas (CNG) for transit buses which are no longer in use by the TTC and there is no present plan to operate CNG buses at the Garage. Further upgrades to the HVAC equipment at the Garage were last completed in 1995 and 1996.

The current HVAC equipment at the Garage has exceeded its expected service life cycles, requiring replacement due to underperformance and low reliability, resulting in ongoing costly and difficult maintenance. Inadequate indoor ventilation has also been acknowledged in concerns raised by the Joint Health and Safety Committee.

Furthermore, there are severe negative pressures in some areas of the Garage due to an imbalance of air pressure, as verified in a ventilation study. The imbalance draws in excessive cold air from the outside during the winter season which reduces the indoor temperature, resulting in an uncomfortable working environment that is unresolvable with the existing HVAC system.

The modernization and upgrade of the existing HVAC system includes replacement of the existing 105 HVAC units with a total of 230 units at the Garage under Contract No. C1-51. The modernization and upgrade will ensure compliance with current codes, industry standards and TTC requirements for indoor ventilation capacity and air balance for TTC workforce occupancy and operations at the Garage. As there is no present plan to operate CNG buses at the Garage, the modernization and upgrade of the HVAC system does not include CNG requirements.

Four of the existing overhead doors servicing several areas of the Garage have exceeded their expected service life cycles, resulting in increasing maintenance and emergency repair costs, and increasing operating costs due to building heat loss. Replacement with new reliable and efficient overhead doors will contribute to the compliance requirements for indoor ventilation capacity and air balance. An additional manually operated steel rolling door will also be installed for the trash room at the Garage to comply with operational requirements.

To maintain safety of TTC workforce and efficiency of daily operations in the fuelling service area of the Garage, the lanes and walkways will be rehabilitated to address ongoing deterioration and potential trip hazards. The entire floor surface for the lanes and walkways will be recoated to address potential slip hazards.

The existing bus wash systems at the Garage have exceeded their expected service life cycles, resulting in inadequate exterior wash quality, particularly during the winter season, and increasing maintenance and emergency repair costs. The floors of the wash bays have deteriorated which require replacement in their entirety. Furthermore, the existing wash systems are incompatible with low floor buses and front mounted bicycle racks.

Replacement with new hybrid bus wash systems, which employ a combination of soft-touch brushes and touchless wash systems, and the associated upgrades will provide the quality of exterior bus washes required to keep its bus fleets clean in order to maintain a safe bus transit system and expected level of service on the bus routes. The replacement will minimize maintenance requirements and reduce freshwater consumption for bus washing operation during the non-winter seasons.

The modernization, upgrades, rehabilitation and replacement under Contract No. C1-51 will be phased, staged and facilitated in a manner to ensure minimal impacts on the daily operations and the TTC workforce at the Garage.

Refer to Appendix D for the location of the anti-slip flooring in fuelling lanes area, bus washracks upgrade and overhead door replacement at the Garage.

Comments

Contract No. C1-51 is comprised of all labour, equipment and materials to undertake the work for Construction Packages C1-41, Wilson Bus Garage Ventilation Upgrades, C1-47, Wilson Bus Garage Anti-slip Flooring in Fuelling Lanes Area, C60-10, Wilson Bus Garage Bus Washracks Upgrade, and C60-11, Wilson Bus Garage Overhead Door Replacement. In addition to the above noted work, Contract C1-51 includes the following specified option:

Specified Option No. 1 is the price credit for TTC supplied insurance in lieu of the Contractor providing insurance which is subject to review and acceptance by the TTC for ninety calendar days from Notification of Award.

In order to determine if Specified Option No. 1 is acceptable, it will be reviewed by the Risk Manager of the Finance Department. If determined acceptable, it will be added by Contract Change approval in accordance with the Authorization for Expenditures Policy.

A Request for Pre-Qualification statements (RFPQ) was issued, in order to establish a list of pre-qualified bidders to participate in a procurement process.

The RFPQ was publicly advertised on March 15, 2016 on the TTC's website and MERX with Pre-Qualification Statements to be submitted by April 29, 2016. Twenty-one companies downloaded copies of the pre-qualifications documents, out of which seven submitted a package.

In order to participate in the RFPQ, bidders were advised they had to either possess a Certificate of Recognition (COR™) as issued by the Infrastructure Health and Safety Association (IHSA) or an Interim Letter of Good Standing by the IHSA indicating they are COR™ registered. They were also advised that when the Request for Bids (RFB) are issued, the pre-qualified bidder(s) will be required to hold valid COR™ certification at time of bid closing for their bids to be considered. All pre-qualification statement packages received were reviewed and evaluated by the evaluation team. As a result of the evaluation and the completion of reference checks to determine that they possess

all the necessary qualifications and experience to be able to perform a contract of this size and complexity, the following five companies were pre-qualified to bid:

Buttcon Limited
Black and McDonald Limited
GEO. A. Kelson Company Limited
Servocraft Limited
The State Group Inc.

Subsequently, specifications and drawings were prepared for Contract No. C1-51 and a RFB was posted on the TTC's Website and MERX on December 20, 2017 with a closing date of February 2, 2018. The public advertisement indicated that the bid call was restricted to the five pre-qualified companies.

All of the pre-qualified companies downloaded copies of the bid documents of which three submitted a bid and are summarized on Appendix E. The bid validity expires on June 2, 2018.

The RFB specified that the Bidder must be COR™ certified, with IHSA, at the time of the bid closing and for the term of the contract.

Servocraft Limited has not yet achieved COR™ certification and therefore did not submit a bid.

GEO. A. Kelson Company Limited did not solely submit a bid. GEO. A. Kelson Company Limited confirmed to have instead opted to provide their service as a mechanical subcontractor under the bid submitted by Buttcon Limited.

Black and McDonald Limited submitted the lowest bid price and did not state any exceptions or qualifications. They are COR™ certified as verified and issued by IHSA. Their bid is considered commercially acceptable.

The State Group Inc. submitted the second lowest priced bid and also did not state any exceptions or qualifications. They are COR™ certified as verified and issued by IHSA. Their bid is considered commercially acceptable.

Buttcon Limited submitted the third lowest priced bid and also did not state any exceptions or qualifications. They are COR™ certified as verified and issued by IHSA. Their bid is considered commercially acceptable.

The Agreement to Bond submitted by Black and McDonald Limited covers both a Labour and Materials Payment Bond and a Performance Bond and was submitted by Travelers Insurance of Company of Canada, who have been verified as a Surety Company licensed to transact business under the Insurance Act of Ontario. As such they are considered financially capable of performing the work.

The successful bidder will be required to execute a Performance Bond and a Labour and Material Payment Bond each in the amount of 50% of the contract value.

Awarding this contract to Black and McDonald Limited would allow for modernization and upgrade of the existing HVAC equipment, bus wash systems, overhead doors and fuelling service lanes for Wilson Bus Garage.

Contact

Jane Murray
Chief Project Manager and Head – Construction Department
Phone: 416-590-6811
Email: Jane.Murray@ttc.ca

Signature

Susan Reed Tanaka
Chief Capital Officer

03075-4296-27

Attachments

Appendix A: TTC Wilson Complex and Wilson Bus Garage - Key Map

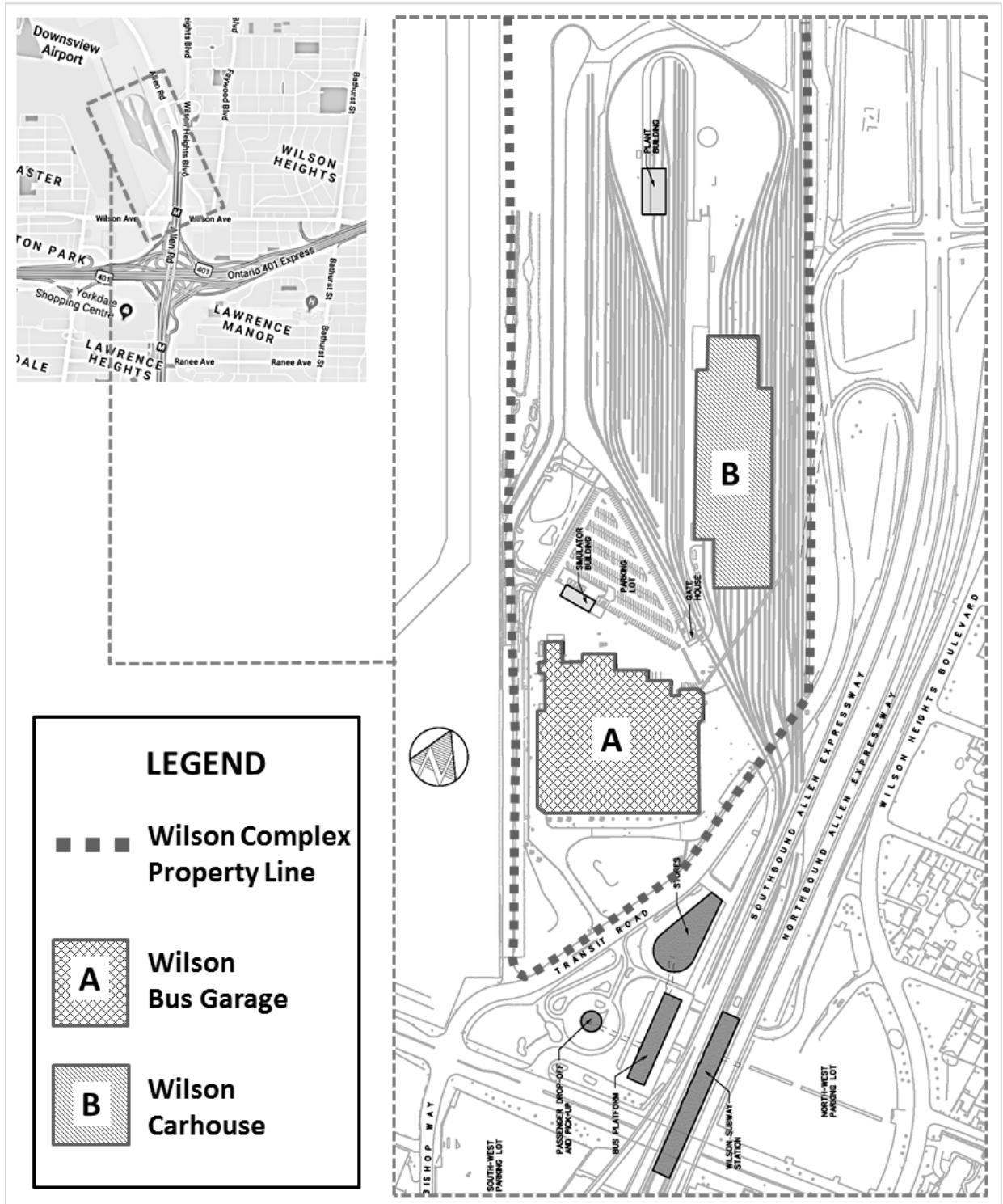
Appendix B: TTC Wilson Bus Garage - Site Access

Appendix C: TTC Wilson Bus Garage - Garage Layout

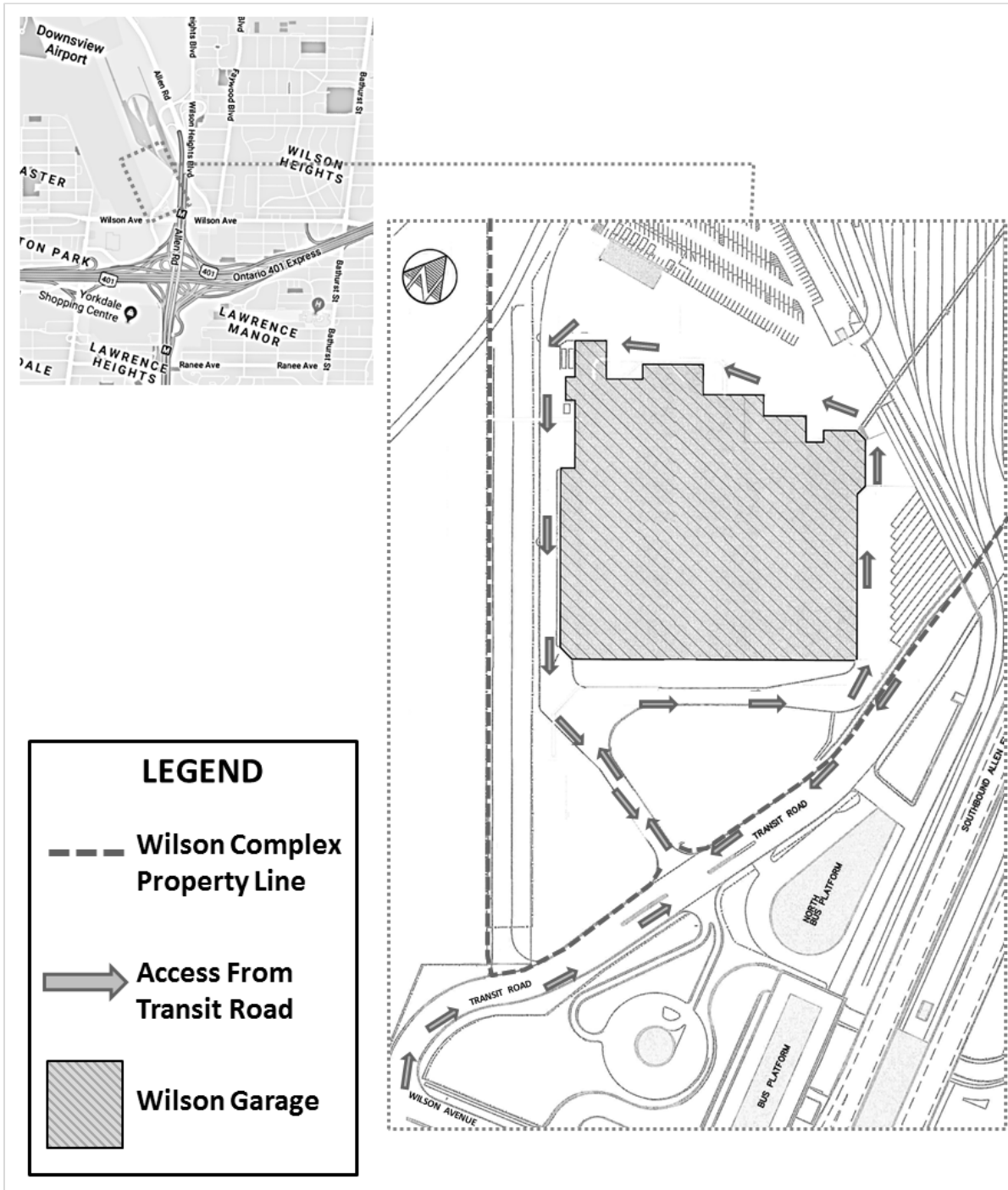
Appendix D: Location of Anti-slip Flooring in Fuelling Lanes Area, Bus Washracks Upgrade and Overhead Door Replacement

Appendix E: Procurement Authorization

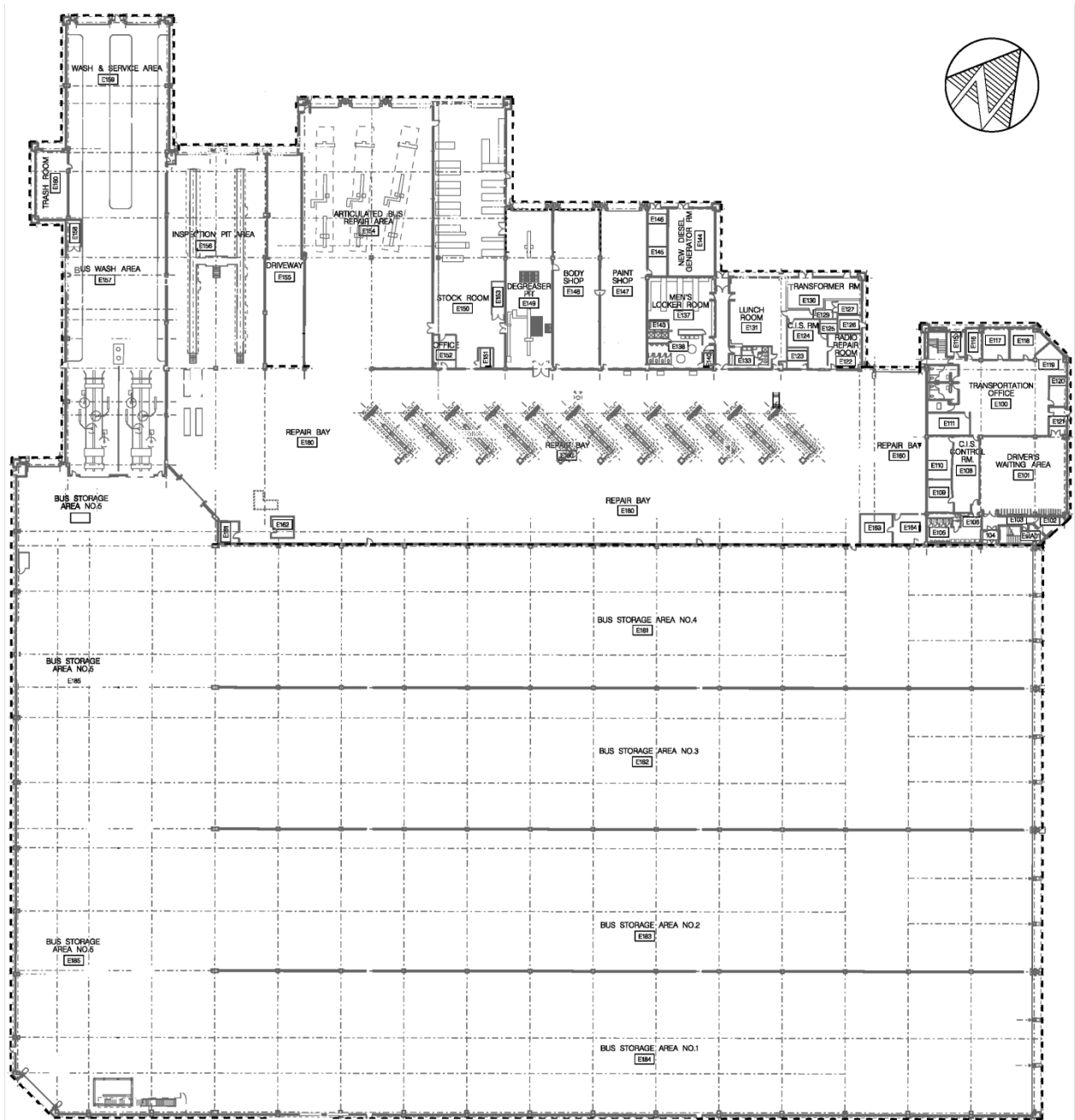
APPENDIX A: TTC Wilson Complex and Wilson Bus Garage - Key Map



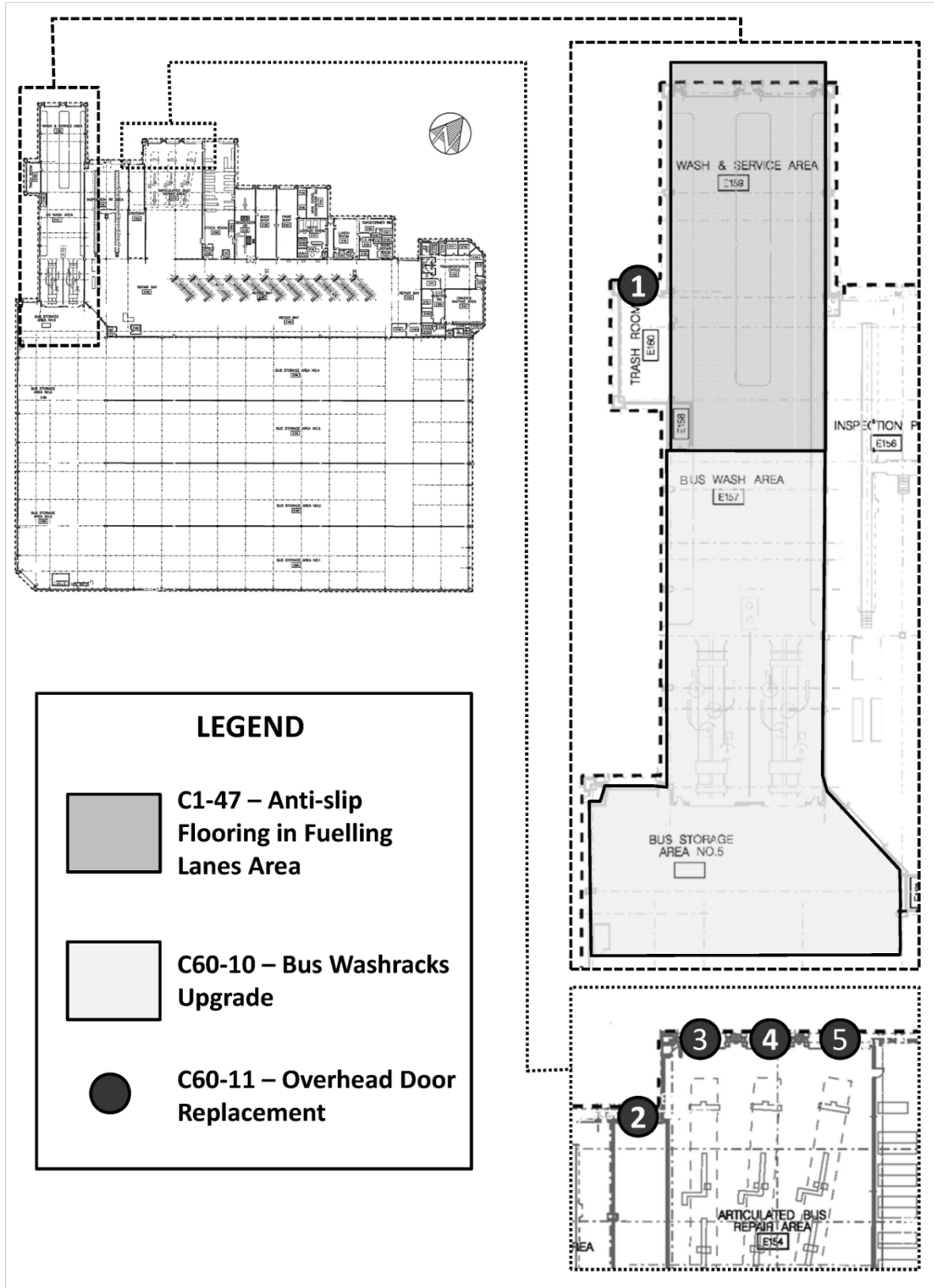
APPENDIX B: TTC Wilson Bus Garage - Site Access



APPENDIX C: TTC Wilson Bus Garage - Garage Layout



APPENDIX D: Location of Wilson Bus Garage - Upgrades



APPENDIX E: PROCUREMENT AUTHORIZATION - Wilson Bus Garage - Upgrades

SUMMARY OF BIDS

COMPANY	TOTAL BID PRICE (inclusive of HST)	SPECIFIED OPTION NO. 1 PRICE (Credit)
*Black and McDonald Limited	\$35,685,400.00	(\$80,000.00)
The State Group Inc.	\$41,097,711.28	(\$86,000.00)
Buttcon Limited	\$48,364,000.00	(\$150,000.00)

* Recommended company