



STAFF REPORT ACTION REQUIRED

Procurement Authorization Duncan Shop Ventilation Upgrade, Supply and Install Monorail Crane, and Bus Hoist Replacement Phase 1 Contract M1-115

Date:	November 30, 2016
To:	TTC Board
From:	Chief Executive Officer

Summary

The purpose of this report is to obtain authorization for the award of the following to Black and McDonald Limited:

- Contract M1-115, Duncan Shop Ventilation Upgrade, Supply and Install Monorail Crane, and Bus Hoist Replacement Phase 1 in the amount \$36,725,000.00, inclusive of all taxes, on the basis of lowest total bid price, and
- Specified Option 2 for Construction Package M60-78, Bus Hoist Replacement Phase 1, in the amount of \$4,842,050.00, inclusive of all taxes.

Three separate construction packages for improvements to Duncan Shop, which are covered under three different projects of the Capital Program, have been consolidated under a single construction Contract M1-115. 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 same time duration.

The total bid price for Contract M1-115 is comprised of all labour, equipment and materials to undertake the work for Construction Package M1-94, Duncan Shop Ventilation Upgrade, and M35-2, Duncan Shop Supply and Install Monorail Crane:

M1-94 – Duncan Shop Ventilation Upgrade: Modernization and upgrade of the existing heating, ventilation and air-conditioning (HVAC) system throughout the entire Shop. The modernization and upgrade is part of TTC Capital Project No. 6648, Duncan Shop Ventilation Upgrade, which is a facility-wide endeavour at the Shop to replace the existing aged, unreliable and underperforming ventilation system to comply with current codes, industry standards and TTC requirements for indoor ventilation capacity and air balance.

M35-2 – Duncan Shop Supply and Install Monorail Crane: Installation of an overhead monorail crane with fall arrest system in each of two bus maintenance bays at the Shop. The installation is part of TTC Capital Project No. 6207 Bus Facility Modifications – Hybrid Buses, which is a TTC-wide endeavour to modify the bus garages and maintenance shops to accommodate the configuration and associated maintenance and inspection activities.

In addition to the above noted work, Contract M1-115 includes two Specified Options as follows:

1. Specified Option 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; and
2. Specified Option 2 is the Construction Package M60-78 – Bus Hoist Replacement Phase 1 consisting of the: Replacement of ten (10) existing standard and one (1) articulated in-ground post hoists with eleven (11) new scissor-type bus hoists at the Shop. The installation is part of TTC Capital Project No. 6050 Bus Hoists, which is a TTC-wide endeavour to replace the existing bus hoists at various bus garages and maintenance shops with new and efficient hoists that meet current codes, industry standards and TTC requirements for standard and articulated bus fleet maintenance.

Recommendations

It is recommended that the Board authorize:

- 1) Award of Contract M1-115, Duncan Shop Ventilation Upgrade, Supply and Install Monorail Crane, and Bus Hoist Replacement Phase 1, to Black and McDonald Limited in the amount of \$36,725,000.00, inclusive of all taxes on the basis of lowest total bid price. Refer to Appendix D.

The total bid price for Contract M1-115 is comprised of all labour, equipment and materials to undertake the work for Construction Package M1-94, Duncan Shop Ventilation Upgrade, and M35-2, Duncan Shop Supply and Install Monorail Crane.

- 2) Award of Specified Option for Construction Package M60-78, Bus Hoist Replacement Phase 1, to Black and McDonald Limited in the amount of \$4,842,050.00, inclusive of all taxes.

Financial Summary

Sufficient funds for this expenditure are included in the TTC's 2016-2025 Capital Budget under the following:

1. M1-94 – Duncan Shop Ventilation Upgrade: Project No. 6648 – 3.9 Duncan Shop - Ventilation Upgrade, which was approved by City Council on February 17, 2016.
2. M35-2 – Duncan Shop Supply and Install Monorail Crane: Project No. 6207 – 3.9 Bus Facility Modifications - Hybrid Buses, which was approved by City Council on February 17, 2016.
3. M60-78 – Duncan Shop Bus Hoist Replacement Phase 1: Project No. 6050 – 3.2 Bus Hoists, which was approved by City Council on February 17, 2016.

Contract M1-115 qualifies for Public Transit Initiative Fund (PTIF) and the funding under this Federal program is being pursued by the TTC.

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

Accessibility/Equity Matters

Duncan Shop is a vital facility for the repair and maintenance of TTC bus and non-revenue vehicle fleets. The upgrade of the ventilation system has been undertaken in order to provide a healthier and improved working environment for the TTC employees that work in this facility.

Issue Background

The Duncan Shop is the largest facility for repair and maintenance of the TTC's fleet of buses and non-revenue vehicles, with a building area of approximately 22,000 square meters (235,000 square feet). The facility is used for overhauling components, performing major repairs and repainting to meet the needs of the bus operating divisions. In addition, the facility houses the Materials and Procurement Department and maintains miscellaneous equipment for various departments at the TTC.

Refer to Appendix A, Appendix B and Appendix C for location of Duncan Shop at Hillcrest Complex and a layout of Duncan Shop respectively.

The majority of the existing HVAC equipment at the Duncan Shop have been in operation since its opening in July 1987, and have exceeded their expected service life cycles, requiring replacement due to underperformance, low reliability, and resulting in ongoing costly and difficult maintenance including excessive service calls, downtime and inefficiencies. Inadequate indoor ventilation has also been acknowledged in concerns raised by the Shop's Joint Health and Safety Committee (JH&SC).

Furthermore, there are severe negative pressures in some areas of the Shop due to an imbalance of air pressure that were 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. Existing combustible gas equipment inside the Shop may also not be ventilated properly as a result of the imbalance.

The modernization and upgrade of the existing HVAC system which includes replacement of 144 existing HVAC units and installation of additional new units at the Shop under Contract M1-115 will ensure compliance with current codes, industry standards and TTC requirements for indoor ventilation capacity and air balance favourable for daily TTC workforce occupancy and operations at the Shop. The modernization and upgrade will be phased and staged in a manner to ensure minimal impacts on the daily operations and TTC's workforce at the Shop.

Provisions for inspection and maintenance of buses remain outstanding at the Duncan Shop. An overhead monorail crane with fall arrest system has been identified for installation under Contract M1-115 for each of two existing bus repair and maintenance bays to expand the Shop's capability for inspection and maintenance of the rooftop-mounted equipment.

The existing bus hoists at the Duncan Shop have exceeded their expected service life cycles as recommended by the equipment manufacturer. Replacement of the existing bus hoists are required due to ongoing deteriorating conditions and limited availability of spare parts resulting in significant downtime, including health, safety and environmental concerns.

As confirmed in a condition assessment, forty (40) of the existing bus hoists at the Shop require replacement which is intended to be completed in three phases in consideration of the current and ongoing operational requirements at the Shop.

The first phase is comprised of the replacement of existing ten (10) standard and one (1) articulated in-ground post hoists with eleven (11) new scissor-type bus hoists, is a Specified Option under Contract M1-115. The reason that the hoist replacement was included as a Specified Option was to provide Service Delivery staff with additional time needed to confirm the suitability of the hoist selection. This has since been confirmed and the hoist replacement as covered under Package M60-78 is recommended to be awarded and completed under Contract M1-115.

The replacement would be completed sequentially, with a typical replacement of two existing (2) hoists at any given time, for an overall replacement duration of approximately 10 months. This is to minimize the impact of construction on daily bus repair and maintenance operations at the Shop.

The production capacity of the Shop is directly dependent on the number of bus hoists that are available to service the maintenance and repair bays. Given this, the importance of functional, safe and efficient hoists at the Shop could not be overemphasized. The replacement of existing bus hoists with new equipment will ensure the availability of reliable, efficient and most up-to-date bus hoisting equipment at the Shop.

Comments

Contract M1-115 is comprised of all labour, equipment and materials to undertake the work for Construction Package M1-94 – Duncan Shop Ventilation Upgrade and Construction Package M35-2 – Duncan Shop Supply and Install Monorail Crane. In addition to the above noted work, Contract M1-115 includes two Specified Options as follows:

1. Specified Option 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; and
2. Specified Option 2 is the Construction Package M60-78 – Bus Hoist Replacement Phase 1 at Duncan Shop which is subject to acceptance for the duration of the Contract.

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 via a Contract Change with approval in accordance with the Authorization for Expenditures and other Commitments 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 for Contract M1-115 Duncan Shop – Ventilation Upgrade, Supply and Install Monorail Crane, and Bus Hoist Replacement and Contract C1-41: Wilson Bus Garage Ventilation Upgrades and Bus Washracks Upgrade. 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) were issued, the pre-qualified bidder(s) will be required to hold valid COR™ certification at time of bid closing.

All pre-qualification statement packages received were reviewed and evaluated by the evaluation team. As a result of the evaluation, the following five companies were pre-qualified to bid on Contract M1-115 and Contract C1-41:

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

Subsequently, specifications and drawings were prepared for Contract M1-115 and a RFB was posted on the TTC's Website and MERX as of August 4, 2016. The public advertisement indicated that the bid call was restricted to the five pre-qualified companies; however, the bid was advertised to allow subcontractors the opportunity to review the overall scope of work and download the documents if interested in participating through any of the pre-qualified companies. All of the pre-qualified companies downloaded copies of the bid documents of which four (4) submitted a bid and are summarized on Appendix D. The bid validity expires on December 27, 2016.

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

Prior to the RFB closing, Servocraft Limited advised that they were unable to obtain their COR™ certification and therefore would not be submitting a bid.

Black and McDonald Limited (Black & McDonald) 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.

Buttcon Limited 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.

The State Group submitted the third lowest priced bid and also did not state any exceptions or qualifications. As per the IHSA's published list on their website and as confirmed by the IHSA, they are not COR™ certified. As a result they are commercially non-compliant and their bid is considered unacceptable.

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 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 favorable for daily TTC workforce occupancy and operations at the Duncan Shop, and for installation of monorail cranes with fall arrest systems to expansion the Shop's inspection and maintenance capability for ongoing receipt of buses.

Contact

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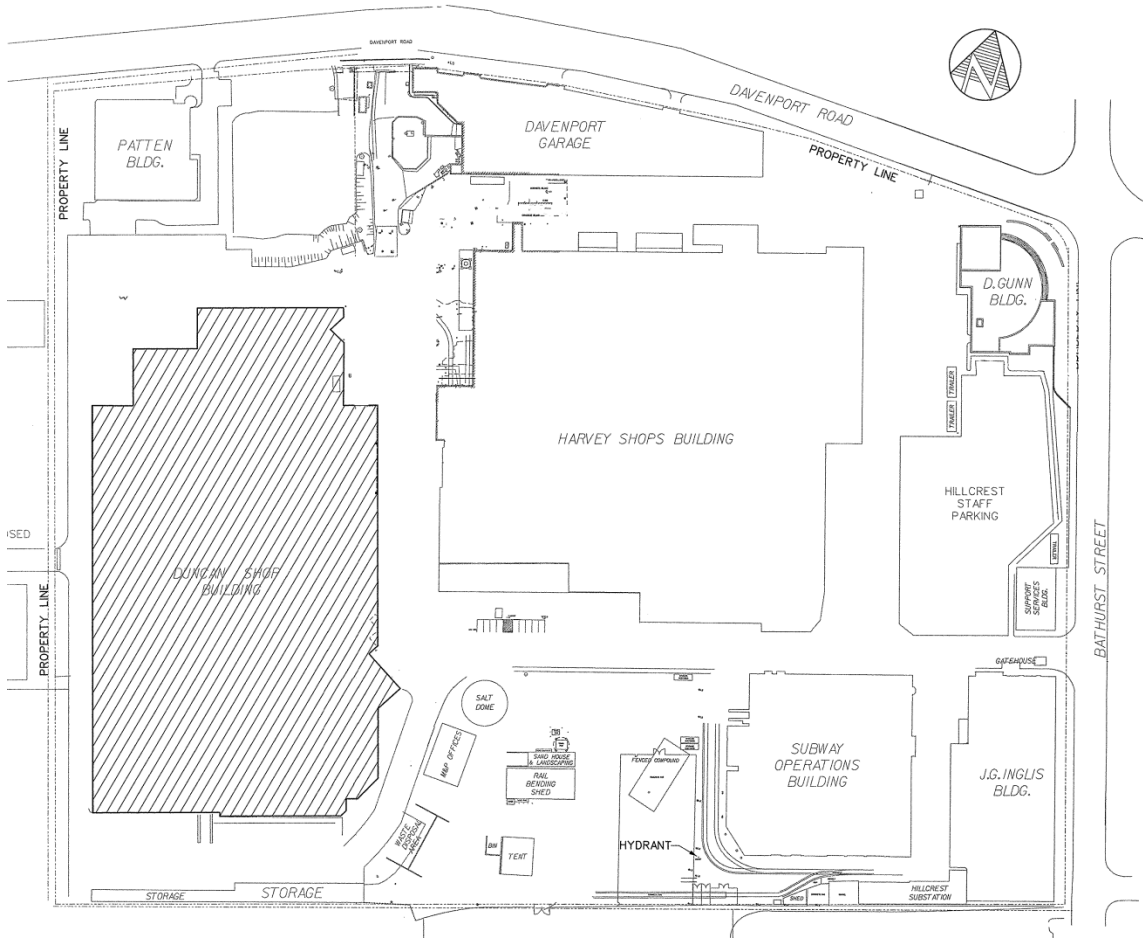
Attachments

- Appendix A: Key Map
- Appendix B: Shop Areas
- Appendix C: Location of Hoist Replacement and Monorail Installation
- Appendix D: Procurement Authorization

APPENDIX A

TTC DUNCAN SHOP AT HILLCREST COMPLEX

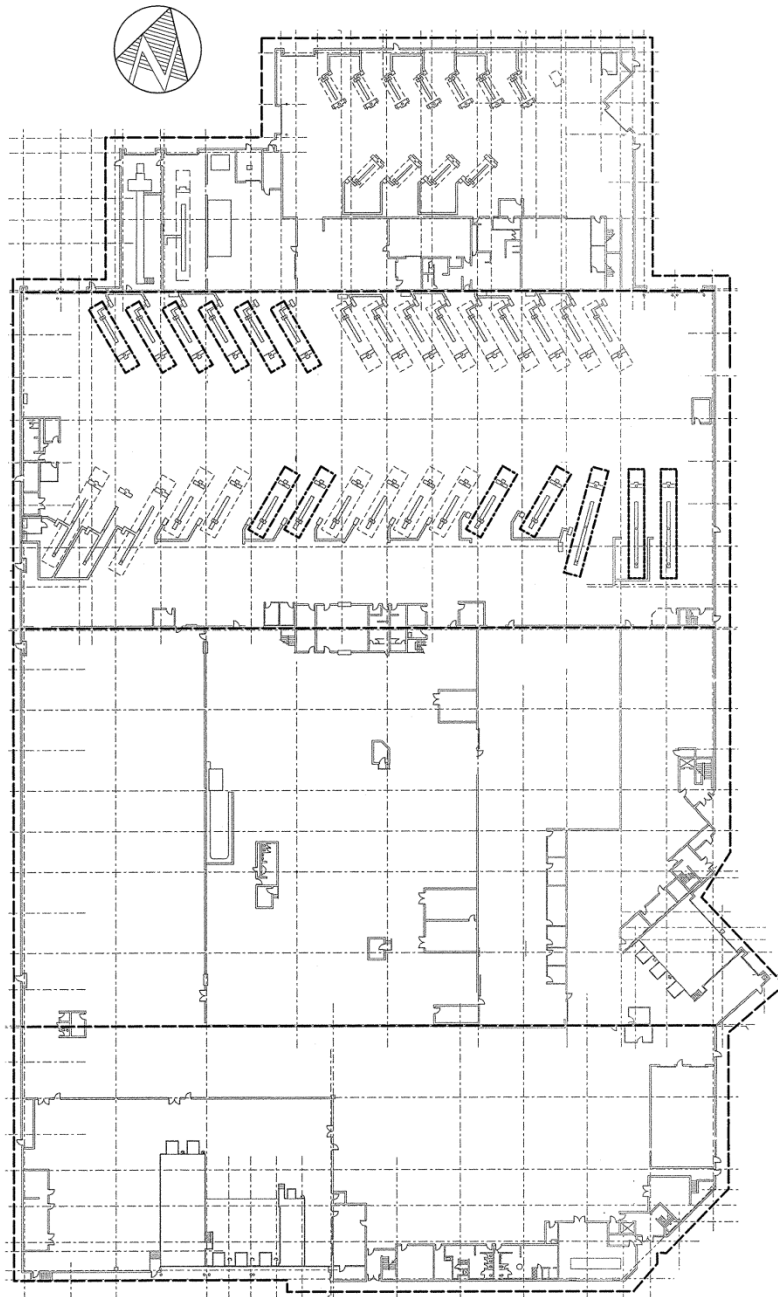
Key Map



APPENDIX B

TTC DUNCAN SHOP

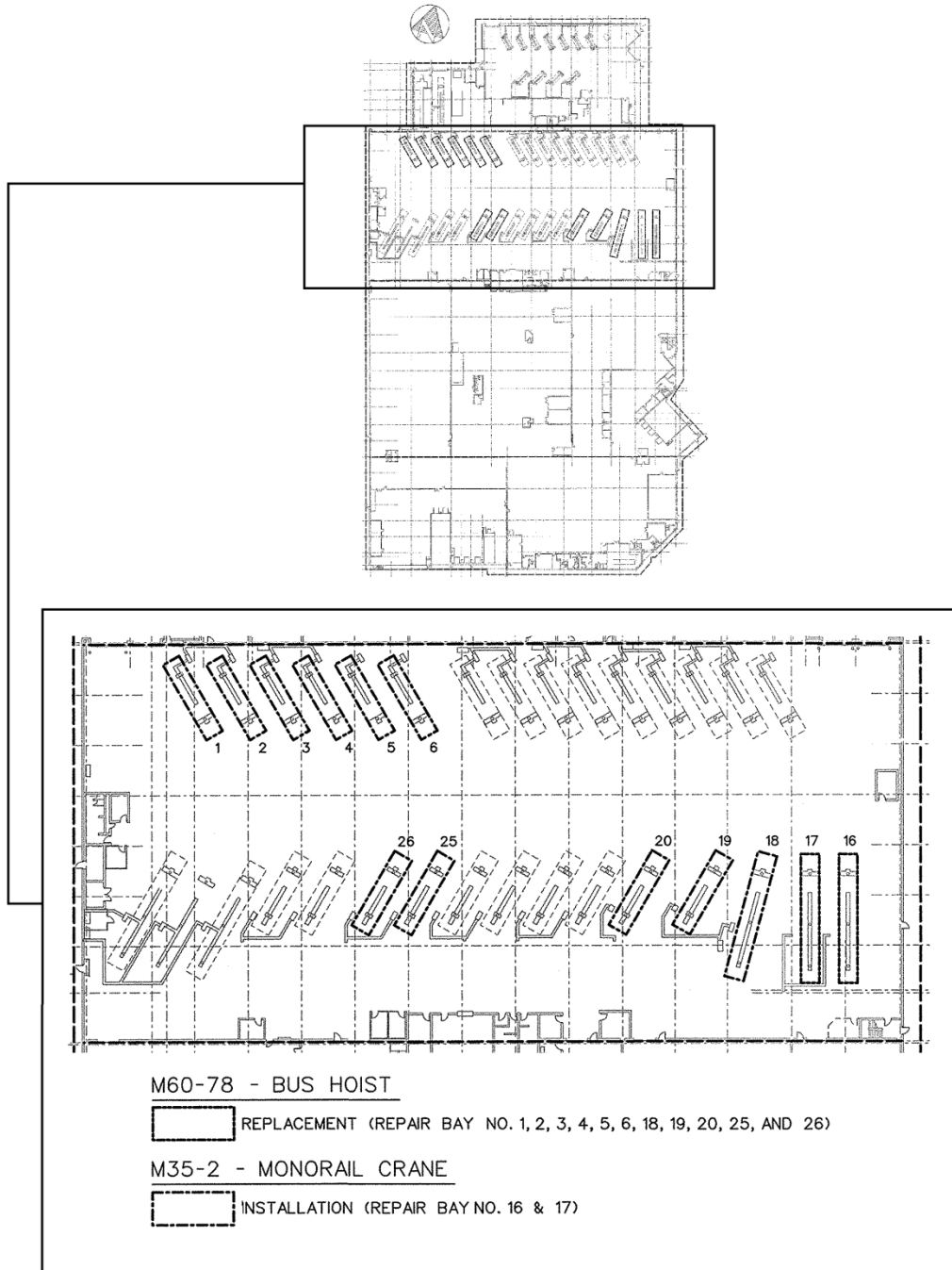
Shop Areas



APPENDIX C

TTC DUNCAN SHOP

Location of Hoist Replacement and Monorail Installation



APPENDIX D

PROCUREMENT AUTHORIZATION

Duncan Shop Ventilation Upgrade, Supply and Install Monorail Crane, and Bus Hoist
Replacement Phase 1
Contract M1-115

SUMMARY OF BIDS

COMPANY	TOTAL BID PRICE (inclusive of HST)	SPECIFIED OPTION 2 PRICE (inclusive of HST)	SPECIFIED OPTION 1 PRICE (Credit)
Black and McDonald Limited*	\$36,725,000.00	\$4,842,050.00	(\$80,000.00)
Buttcon Limited	\$39,437,000.00	\$4,523,390.00	(\$100,000.00)
The State Group	\$42,863,705.00	\$7,006,000.00	(\$120,750.00)
Geo. A. Kelson Company Ltd.	\$47,234,000.00	\$6,328,000.00	(\$30,000.00)

* **Recommended company**