



Supply of Special Trackwork Castings Contract

Date: February 27, 2019
To: TTC Board
From: Chief Vehicles Officer

Summary

The purpose of this report is to obtain procurement authorization for the supply of surface special trackwork castings.

The supply of surface special trackwork includes specialized components that are required for the TTC's Surface Track capital program. TTC's Surface Track capital program is an ongoing program to ensure effective repair and replacement of streetcar track for the provision of safe and reliable streetcar service.

Recommendations

It is recommended that the TTC Board:

1. Authorize issuing a contract to Voestalpine Nortrak Inc. in an amount of up to \$37,650,000 USD including applicable taxes (which is equivalent to \$50,014,260 CDN) for the supply of surface special trackwork commencing upon notification of award and covering deliveries of material for up to the five-year period January 1, 2020 to December 31, 2024;
2. Delegate authority to the CEO to add up to \$15,060,000 USD including applicable taxes to the contract with Nortrak to cover the cost of special trackwork during a period of up to two additional years beyond the initial term;
3. Delegate authority to the CEO to authorize the issuance of a contract(s) in an amount(s) of up to \$7,530,000 USD including HST to other suppliers, in order to secure alternate sources of supply (via a competitive bid process).

Financial Summary

The recommended procurement authorization requires capital funding of up to \$50 million for the five-year period from January 1, 2020 to December 31, 2024 for the supply of surface special track work. It is also recommended that authority be provided to extend this authorization for an additional two-year period for an added cost of up to \$20 million.

The TTC's 2018 – 2027 Capital Budget and Plan as approved by Council on February 12, 2018 includes \$306 million in funding within the 1.2 Surface Track capital program, including \$194 million in funding during the seven-year period from January 1, 2020 to December 31, 2026.

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

Equity/Accessibility Matters

No equity or accessibility impacts were identified.

Decision History

At its meeting on February 25, 2013, the TTC Board authorized the award of a five-year contract for the supply of various surface special trackwork castings to Nortrak for a period ending December 31, 2018. Within the contract terms the TTC reserved the right, at its sole discretion, to extend the contract for up to two additional years.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2013/March 27/Minutes/1956M-February 25 2.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2013/March%2027/Minutes/1956M-February%2025%202.pdf)

At its meeting on February 12, 2018, the TTC Board approved the 2018-2027 TTC Capital Budget and Plan allowing for the continued purchase of surface special trackwork to support Streetcar's Surface Track capital program.

<http://cs.int.ttc.ca/dc/finance/departement/financialm/bbl/Blue%20Page%20Summaries.pdf>

At its meeting on May 8, 2018, the Board authorized the issuance of a contract amendment to exercise the first contract extension option with Nortrak in the amount of \$7,000,000 including HST for the period January 1, 2019 to December 31, 2019.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2018/June 12/Minutes/Minutes May 8 2018.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2018/June%2012/Minutes/Minutes%20May%208%202018.pdf)

Issue Background

Surface special trackwork castings are manganese steel components that are used to make the connection to diverging tracks, or intersect and cross other tracks. Castings known as switches and mates are used to divert streetcars onto connecting tracks; crossing frogs and diamonds are used when tracks intersect and cross one another. The TTC's five-year special trackwork rehabilitation is continually updated based on the annual condition survey of the system.

The current contract expires December 31, 2019. However, due to the long lead times required to fabricate special trackwork castings, the first year of the contract for this requirement is typically used to cover the design and fabrication of patterns and assemblies. As a result, an order must be placed in early 2019 to allow for the replacement of special trackwork to be completed in 2020, to ensure continued safe and reliable operation.

The supply of this manganese steel trackwork is highly specialized and the supplier base is relatively small. In addition, long-term demand in the market has remained high. These factors have contributed to TTC receiving a limited number of bids in the past.

Staff exercised due diligence and researched the marketplace to determine potential sources of supply and the likelihood of these companies participating in future TTC request for bids. In addition, various transit agencies that have surface trackwork with similar types of manganese castings were contacted to obtain the names of companies they utilize to supply manganese castings. Among these agencies were the Southeastern Pennsylvania Transportation Authority (SEPTA), the San Francisco Municipal Transit Authority (SFMTA), and the Metropolitan Boston Transit Authority (MBTA). The Metropolitan Transit Authority (MTA) also uses this type of special trackwork in its subway system. Based on information received from the transit agencies and marketplace research, staff determined that the market for manganese switch, tongue and mate trackwork is limited only to a few manufacturers globally i.e. Voestalpine Nortrak, Progress Rail, Atlantic Track & Turnout Co. and Beckwith Iron (previously known as Davies and Baird). Note: Beckwith Iron is sold through its representative H.J. Skelton Canada Ltd. (H.J. Skelton).

Progress Rail Services (Progress Rail) and H.J. Skelton have both previously indicated that they have the ability to supply special trackwork material in accordance with TTC's specifications. Prior to issuing the RFB, TTC staff met with H.J. Skelton and their Australian manufacturer (Beckwith Iron) who advised that they would be able to supply castings to the TTC specifications and expressed interest to participate in future bidding opportunities. Further, staff met with H.J. Skelton and their European manufacturer (DT-Pointworks and Engineering, PLC) who advised that they were interested in supplying special trackwork components to the TTC.

Comments

A Request for Bid (RFB) was publicly advertised on the MERX website as of October 11, 2018. Five companies were notified of this requirement and 12 companies downloaded copies of the bid documents, though only Nortrak submitted a bid.

The RFB was issued for the design, manufacture, encapsulation in rubber and assembly of surface special trackwork (i.e. various types of patterns, castings and joint bars etc.). The intention was to award a primary contract to cover the majority of the work and a secondary contract (to a different company) to cover less work. The secondary contract would also be used as a back-up in the event the company

with the primary contract could not schedule all of the work to meet TTC's project delivery dates. Bidders had the option of submitting a bid on the primary contract, the secondary, or both.

The RFB indicated that the successful bidder for the primary contract would be awarded a contract in an upset limit amount based on TTC's preliminary estimate of the value of the work for the primary contract – approximately \$38,000,000 CDN for the five year supply of special trackwork or a lesser amount for a term of less than five years. Based on TTC's preliminary estimate, the value of the work for the secondary contract was approximately \$12,000,000 CDN over five years. In the event there was only one compliant bidder and a secondary contract could not be awarded, one contract would be awarded based on the aggregate upset limit amounts.

Nortrak submitted the only bid and provided all mandatory submission requirements, including the required agreement to provide contract security in the amount of \$400,000 CDN, references of similar work performed and the required pricing. Nortrak submitted its bid in US funds, did not state any exceptions or qualifications to the TTC's terms and its bid is considered commercially and technically compliant.

Nortrak is the TTC's current supplier for surface special trackwork components and has performed the work in a satisfactory manner.

Since Nortrak submitted the only bid, they are recommended for award of a contract covering a period of up to five years (2020 – 2024) for the supply of special trackwork in the total upset limit amount of up to \$37,650,000 USD which is equivalent to \$50,014,260 CDN. The upset limit amount represents the aggregate preliminary estimates of both the primary and secondary contract.

Nortrak's bid pricing for year one of the new contract is approximately 38.19% higher than the current contract pricing for both surface special trackwork and rubber encapsulation. Nortrak's bid pricing in years two through five increase annually at a rate of less than 2.75%.

The price increase in year one of the new contract compared to the current pricing is mainly attributed to Canadian-US dollar exchange rate variations as follows: pricing under the current contract was submitted to TTC in January 2013 (in Canadian funds) and at that time the Canadian and US dollar were at near parity, whereas the current recommended bid was submitted in US funds and the exchange rate used for evaluation purposes was \$1.00 CDN = \$0.7528 USD. Over this approximate six-year period, the Canadian dollar has depreciated by approximately 25% in comparison to the US dollar. Nortrak advised that all costs (material and labour) are incurred in US funds.

Staff will continue its efforts to promote competition for the supply of special trackwork, source and develop alternate suppliers. Based on market feedback (specifically from London Trackwork), there may be sources of supply interested in

this work, however barriers to market entry may include lack of expertise and experience in manufacturing specialized manganese castings, especially for large projects. Maintaining a steady supply of special trackwork from manufacturers with expertise, appropriate capacity and the requisite experience is essential to successfully delivering these long-lead time specialized components and critical for the safe operation of TTC's streetcar fleet. In addition to the main supply contract, staff will work to source vendors (via competitive processes) on a smaller scale in order to develop the supplier base by, for example, awarding contracts for some of the less complex components and/or smaller projects. In addition to seeking secondary/alternate sources for the proven manganese castings, staff will consider alternative technical solutions which may be proposed by the market.

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