

AVON MAITLAND DISTRICT SCHOOL BOARD

Create Positive, Inclusive Learning Environments, and Maximize Outcomes for Students

DIRECTOR'S ACTION REPORT

TO: Regular Board Meeting – Tuesday, May 9, 2017

AGENDA ITEM: 6.3 d)

SUBJECT: Approval of Tender: Mechanical and Electrical Upgrades at Mitchell District High School

1.0 Background

1.1 As part of the ongoing infrastructure improvements to be funded through Ministry facility grants, mechanical and electrical work was identified as being required in the science classrooms and adjacent classrooms in the south east area of the school, plus the library at Mitchell District High School. The work includes replacing the 1992 mechanical units with 2 rooftop units to serve the science rooms and unit ventilators to serve each of the regular classrooms. The new systems will be more efficient, provide improved indoor air quality to meet current standards, and replace components that are beyond their useful life. Lighting in the science and regular classroom areas will be replaced with LED fixtures with occupancy and dimming controls and daylight sensors to reduce energy consumption. As well the fire alarm signaling will be upgraded throughout the school.

2.0 Project

2.1 Mitchell District High School

2.1.1 Four contractors received tender packages. The following three prices were received.

Contractor	Tender Price (including taxes)
Conestogo Mechanical Incorporated	\$787,610.00
JMR Electric Limited	\$583,396.40
Brad Baker Plumbing, Heating & Electrical Inc.	\$551,553.00

2.1.2 To ensure timely completion of this project, it was recommended by the consultant that 'owner-supplied' LED lighting fixtures be simultaneously purchased through Metalumen Manufacturing. This manufacturing company has supplied lighting for many past tendered projects of the Board. The cost for these fixtures is \$42,289.87 (\$37,424.66 + \$4,865.21 HST).

2.1.3 MNE Engineering Incorporated recommends that the low bidder Brad Baker Plumbing, Heating & Electrical Inc. be awarded the contract in the amount of \$551,553.00. The total project cost is \$593,842.87 which includes the owner-supplied lighting in the amount of \$42,289.87.

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- 2.1.4 The recommended tender amount is higher than the estimated projections, although there is money in the capital budget to pay for this increased cost as well as fees of 12% for MNE Engineering Incorporated.
- 2.1.5 This project will be funded through the School Condition Improvement funding. Attached is the recommendation from the Board's Consultant, which Administration supports.

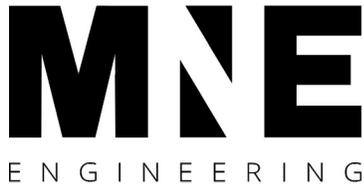
3.0 Recommendation

It is recommended that

the Avon Maitland District School Board accept the tender from Brad Baker Plumbing, Heating & Electrical Inc. for mechanical and lighting upgrades at Mitchell District High School in the amount of \$551,553.00

Janet Baird-Jackson
Superintendent of Corporate Services

Lisa Walsh
Director of Education and
Secretary of the Board



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April 26, 2017

Mrs. Janet Baird-Jackson - Superintendent of Corporate Services

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**RE: Request for Tender Report
17-11105 Mitchell District Secondary School - Science Rooms & Library HVAC Upgrades
MNE Project No. 17034**

This letter serves to summarize the tender process for the aforementioned project.

As part of the ongoing facilities upgrades for the AMDSB, MNE Engineering was retained to prepare drawings and specifications suitable for tender. The design mandate was to replace the HVAC systems and lighting in the Southeast teaching spaces, replace the HVAC unit serving the Library and to upgrade the fire alarm signaling throughout.

The existing gas fired make-up air units serving the Science rooms and other teaching space are 25 years old and they have passed their useful service life.

The new air handling systems will be more efficient, will improve indoor air quality by utilizing demand control ventilation and eliminate odour migration between Science classrooms.

Solid state, or LED lighting fixtures have been specified on previous AMDSB designs due to their advantages over fluorescent sources. LED drivers are inherently dimmable while fluorescent dimming is a significant cost to base fixtures. The cost for interior LED lighting has continued to decrease as LED products continue to be more prominent in the market. The vast majority of North American lighting sales for interior lighting are now LED products.

New LED lighting was specified in the Southeast teaching spaces that were areas affected by the HVAC upgrades. The fixtures are specified with simple occupancy and dimming controls, as well as daylight sensors to reduce energy when warranted by ambient light conditions.

To aid in the timely completion of the project, MNE recommended that the AMDSB enter directly into an agreement with Metalumen Manufacturing for 'Owner-Supplied' lighting fixtures. Metalumen have been directly involved in many school lighting upgrades with numerous Ontario school boards, and have developed an LED product specifically tailored to replace the suspended fluorescent fixtures found in many of the AMDSB classrooms. Metalumen's literature indicates an efficacy of 119lm/W. By comparison, the most efficient fluorescent product is 100lm/W. MNE evaluated the Metalumen LED product, performed lighting simulations, and agreed that it was a suitable fixture for the application.

MNE specified the type and quantity of 'Owner-Supplied' lighting fixtures applicable to this project, and calculated the total to be **\$37,424.66** + HST.

A bidder's package was prepared to incorporate the AMDSB's Broad Public Sector (BPS) process. An ad was placed in the Daily Commercial News, the tender package was posted at the Construction Associations, and the tender package was made available to all interested Mechanical Contractors. The following table summarizes the results that were received prior to the specified closing time:

Contractor	Contract Price	HST
Culliton	did not submit	
Conestogo Mechanical Incorporated	\$697,000.00	\$90,610.00
JMR Electric Limited	\$516,280.00	\$67,116.40
Brad Baker Plumbing, Heating & Electrical Inc.	\$488,100.00	\$63,453.00

Brad Baker's submission was in order.

It is our experience that Brad Baker has successfully completed projects for the AMDSB. MNE recommend that the AMDSB award this contract to Brad Baker Plumbing, Heating & Electrical Incorporated for the total amount of **\$551,553.00** (Contract Price + HST). The total cost of the project with Owner-supplied lighting and taxes is \$593,842.87.

If you have questions or require any additional information, please do not hesitate to contact our office.

Regards,



Jozsef Meszaros
Project Manager