

AVON MAITLAND DISTRICT SCHOOL BOARD

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

DIRECTOR'S INFORMATION REPORT

TO: Regular Board Meeting – Tuesday, April 11, 2017

AGENDA ITEM: 5.3 b)

SUBJECT: Comparison of 2015/2016 Actual Versus Tendered Prices

1.0 Background

- 1.1 Trustees have requested an annual information report on how the actual prices of tendered projects compare to the original tendered prices.
- 1.2 Projects completed within the fiscal year 2015/2016 and projects with substantial completion after the fiscal year end 2015/2016 were analyzed for comparison between tendered prices and the final construction costs.
- 1.3 The 2015/2016 construction year marks the thirteenth year that this analysis and reporting has been undertaken.

2.0 Ongoing Process Improvement Changes

- 2.1 A number of facilities planning and consultation changes implemented have helped, over time, to reduce the variance between the value of a tendered project and the final project cost.
- 2.2 Our ongoing focus is to develop better cost estimates for projects, based on the most current tenders experienced in Avon Maitland as well as other boards in close proximity.
- 2.3 We also strive to maintain a focus on standardization of the scope of any particular type of project, so that it is less reflective of individual wishes of administration or staff on-site, therefore making projects more predictive in terms of cost.

3.0 Facility Capital Projects: completed in 2015/2016 and post fiscal 2015/2016

- 3.1 Twenty one projects have spanned the last fiscal year, 2015/2016, and the current fiscal year 2016/2017 before achieving substantial completion as identified on the table attached. Some of these projects carried over into the current fiscal year, 2016/2017, in order for minor deficiencies to be addressed.
- 3.2 A comparison of the tendered price and the final construction cost for each project is shown on the attached spreadsheet (Appendix A). Table 1 reflects the comparison for each 2015/2016 tendered project completed within fiscal 2015/2016, while Table 2 shows the comparison for projects completed in fiscal 2016/2107.
- 3.3 The spreadsheet also clarifies the amount paid in consultant fees as part of the total cost of each capital project.

- 3.4 Contingency amounts are included in projects, as we plan for the worst, based on past experience and hope for the best in all our projects. Allowances included hazardous materials abatement, asbestos abatement, and other testing allowances. Asbestos tends to be difficult to estimate, as it is not our practice to perform destructive testing prior to construction to determine the extent of asbestos present. Other allowances include provision for unknown but suspected civil and structural conditions, and mechanical and electrical concerns which may be uncovered during construction, although at times, as noted below, we too are surprised by the extent of challenges uncovered, such as at DCVI last summer.
- 3.5 Changes during renovations are inevitable. At times, changes are required to ensure projects are completed on time, satisfy design changes requested by board staff, or as a result of unexpected site conditions which may relate to various code issues (e.g. roof failure, structural degradation, ground drainage, soil conditions, fire stopping). There remains the unique challenge, from time to time, of projects with unexpected deterioration issues that can only be discovered through invasive inspection or during the actual construction project.
- 3.6 The variance on five of the twenty one tendered projects undertaken was over the total including contingency amount specified by the consultant (Appendix A, Tables 1, 2) as explained below.
- 3.7 Goderich District Collegiate Institute had a project to upgrade the original 1992 ventilation and heating systems in the science labs in B hall with two new HVAC units. This project was over budget due to additional fire stopping required between the classrooms and the corridors.
- 3.8 At Central Huron Secondary School, work was undertaken to renovate six classrooms on the second floor into four new science lab classrooms. This project was just slightly over budget due to additional structural investigation and remediation required when deterioration of the Siporex roof deck was discovered when the roof deck was exposed during demolition of the original second floor classroom spaces.
- 3.9 Trustees will recall that the DCVI masonry project, approved on June 14, 2016 was planned for expansion by just less than 50% as part of the Tenders Over the Summer Board report on June 28, 2016. This expansion was in response to additional funding from the Ministry along with direction that, wherever possible, boards release more projects for summer work using this additional infrastructure capital. Subsequent to the direction to the successful general contractor regarding the expansion of project scope, on-site conditions were discovered which added to the scope and price of the contract, pictures and descriptions of which were shared in real time with Trustees via email. As identified on the spreadsheet, this project with all the required additional work, came in over budget.
- 3.10 The work at Sprucedale Public School was the second phase of drainage upgrades including connection to the municipal storm sewer and asphalt replacement in the playground, driveways and teacher parking lot. The work was tendered jointly with the Municipality of Perth East, with the contractor invoicing the municipality separately. This project came in over budget due to an additional cost for a sub drain installation determined to be required during excavation.

- 3.11 At Mitchell District High School work was completed to reroof the gym. The project came in over tender due to additional roof drains being required.
- 3.12 A few of the projects were significantly under the total identified by the consultant. In all cases allowances were not completely consumed during the course of the projects, for reasons including fewer architectural or structural issues at those sites than anticipated or deletion of portions of work to meet time constraints.
- 3.13 The net consolidated project costs are favorable to the board by 4.14% despite cost deviations, both over and under, for individual project tender amounts. The overall favorable result is due to tight control of project costs related to the management of allowances and the permitted use of contingencies.

4.0 Analysis and New Opportunities

- 4.1 Conversations are ongoing with our consultants regarding the amount of contingency recommended. Estimating a contingency is an art as well as a science, and is dependent on the size of the project, whether it's a 'clean' and straight forward scope of work or whether it entails a complex and 'messy' process with work which is concealed and not easily identified and quantified. Just as the Finance department would indicate, we plan for the worst and hope for the best.
- 4.2 Opportunities continue in all our projects for us to define and redefine standards for application across the system. Discussions regarding the application of proven past design or the implementation of new technology, where it better addresses identified needs, continues to inform our capital planning process. Over time, we evolve and take advantage of better materials and up-to-date technologies such as lighting controls, LED fixture applications, plumbing controls, high efficiency rooftop units and low maintenance or maintenance-free finishes in our construction and renovation projects.

Janet Baird-Jackson
Superintendent of Corporate Services

Lisa Walsh
Director of Education and
Secretary of the Board

Appendix A - Comparison of Tendered Prices with Final Construction Cost
Table 1
2015-16 Projects Completed in Fiscal 2015-2016

Appendix A

Date of Board Approval/ Requisition Approval	Project	Successful Contractor	Amount of Tender/Estimate Including HST	Total net of GST/HST rebate	Project Cost	% complete in 15/16	Donations (not included in variance)	Variance from Total (-unfav)	% Change from Total (-unfav)	Amount of Consultant Fees	Grand Total Project Value
Nov 26/15	Anne Hathaway - life safety upgrades	Brad Baker	109,045	98,584	92,970	100%		5,614	5.70%	22,690	115,660
Sub total			109,045	98,584	92,970		nil donations	5,614	5.70%	22,690	115,660

Table 2
2015-16 Projects Completed in Fiscal 2016-2017

Date of Board Approval/ Requisition Approval	Project	Successful Contractor	Amount of Tender/Estimate Including HST	Total net of GST/HST rebate	Project Cost	% complete by Mar 31/17	Donations (not included in variance)	Variance from Total (-unfav)	% Change from Total (-unfav)	Amount of Fees	Grand Total Project Value
Apr 12/16	Howick - renovations	K&L Construction	666,926	602,948	524,495	100%		78,453	13.01%	61,055	585,550
Apr 12/16	FEMSS - roofing	Smith Peat Roofing	355,555	321,446	280,582	100%		40,864	12.71%	17,812	298,395
Apr 12/16	CHSS - mechanical and lighting in small gym	Brad Baker	139,451	126,074	119,709	100%		6,365	5.05%	17,662	137,371
Apr 12/16	LDSS - roofing	Smith Peat Roofing	201,642	182,298	157,780	100%		24,518	13.45%	10,180	167,960
Apr 12/16	SNSS - roofing	Smith Peat Roofing	371,335	335,713	309,704	100%		26,009	7.75%	19,391	329,095
Apr 26/16	DCVI - mechanical in gym	Stratford Metal Products	135,059	122,103	108,452	100%		13,650	11.18%	17,050	125,502
Apr 26/16	Milverton - windows and masonry	Smith Construction	153,906	139,142	128,203	100%		10,939	7.86%	13,038	141,241
Apr 26/16	Mornington - windows	Elgin Contracting	245,210	221,687	199,185	100%		22,502	10.15%	20,257	219,442
Apr 26/16	LDSS - unit ventilators	Stratford Metal Products	126,532	114,394	111,060	100%		3,334	2.91%	16,005	127,064
Apr 26/16	GDCI - science labs HVAC	Brad Baker	235,902	213,272	216,420	100%		-3,147	-1.48%	30,940	247,359
Apr 26/16	CHSS - science lab renovations	Elgin Contracting	1,427,190	1,290,281	1,294,245	100%		-3,964	-0.31%	177,129	1,471,374
May 24/16	GDCI - washroom upgrades	Lannin Electric	91,460	82,686	77,911	100%		4,775	5.78%	20,199	98,109
June 14/16	DCVI - windows and masonry (actual tender)	K&L Construction	329,395								
	(increase to scope of project due to additional funding)		160,000 *	442,448	492,281	100%		-49,833	-11.26%	50,706	542,987
June 14/16	MDHS - cafeteria renovations	Feltz Design Build	387,278	350,126	325,893	100%		24,234	6.92%	47,822	373,715
June 14/16	Seaforth - front entrance and door upgrades	Smith Construction	144,640	130,765	114,018	100%		16,747	12.81%	12,248	126,266
July 28/16	Upper Thames - chiller replacement	Turner Plumbing	93,261	84,315	82,915	100%		1,400	1.66%	6,789	89,704
Project tender over summer 2016	Sprucedale - drainage and asphalt phase 2	R.Russell Construction	317,902	287,406	214,181	100%	80,459	-7,233	-2.52%	18,308	232,488
Project tender over summer 2016	MDHS - roofing	Smith Peat Roofing	400,470	362,053	362,177	100%		-124	-0.03%	23,012	385,189
Project tender over summer 2016	SHDHS - roofing	Smith Peat Roofing	224,536	202,996	181,600	100%		21,396	10.54%	15,324	196,924
Sub total			6,207,648	5,612,153	5,300,808		80,459	230,887	4.11%	594,926	5,895,734
Grand Total of both tables			6,316,693	5,710,738	5,393,778			236,501	4.14%	617,616	6,011,394

* Tenders Over the Summer report to Board on September 13, 2016 identified: discussion at the June 28, 2016 Board meeting of an expansion of the original project by approximately 50% was included in the summer projects, in response to Ministry direction that boards wherever possible, release more projects for summer work using the additional infrastructure funding capital released at that time.