



CENTRAL YORK FIRE SERVICES

November 18, 2016

CENTRAL YORK FIRE SERVICES REPORT 2016-02

To: Joint Council Committee
Origin: Central York Fire Services - Fire Chief
Subject: Fire Station 4-5 Project Plan

RECOMMENDATIONS

THAT Central York Fire Services Report 2016-02 dated November 18, 2016, Fire Station 4-5 Project Plan be received for information purposes;

AND THAT Joint Council Committee (JCC) approve and recommend to the Councils of Aurora and Newmarket that staff proceed with the design of a fire hall in Aurora which includes administration, fire suppression and training services (Option A);

AND THAT a budget of \$495,000 be approved to complete the detailed design phase, including project support;

AND THAT JCC recommend to the Council of Aurora that staff be authorized to negotiate a single source procurement with Thomas Brown Architects to complete the detailed design;

AND THAT staff report back to JCC prior to issuing the tender to provide a project update and seek approval for the final construction budget.

BACKGROUND

At its meeting of April 7, 2015, the JCC considered staff report 2015-04 dated March 18, 2015 and approved the following motion:

THAT JCC make a recommendation to the Councils of the two municipalities to proceed with a land securement, subject to a report for final approval in 2015 for the construction of a new fire facility to include Administration, Training and Suppression Crew and provide for possible inclusion of Fire Prevention Division.

AND THAT Development Charge funds to an upset limit of \$25,000 be approved to hire, by RFP, an architect consultant to assist in the land securement and upon approval of land purchase and approval of further funding, to undertake the facility design.

Subsequently, staff retained the services of Thomas Brown Architects to assist in block planning of a facility to assist in identifying suitable sites. A site was selected in Aurora and the municipalities purchased the land on the north side of Isaacson Crescent in early 2016. The site selection process included all anticipated future needs, as identified in staff report 2015-04.

The staff report 2015-08 dated October 7, 2015 requesting direction on fire station 4-5 considerations was presented at the October 13, 2015 JCC meeting and the following motion was approved:

THAT Central York Fire Services Report 2015-08 Dated October 7, 2015 be deferred to a future meeting.

Staff report 2016-01 dated February 17, 2016 was considered at the March 1, 2016 JCC meeting and the following motion was approved:

THAT JCC authorize the retention of a consultant to assist with the design and preparation of options regarding site development and configuration of the new fire station;

AND THAT the Fire Chief and consultant report back to JCC with an analysis of the options regarding the development of the site and request that authorization to proceed with construction upon Council approval.

AND THAT staff prepare a report outlining a full analysis on or off site related to each of the following: administration, training, and fire suppression.

This report in conjunction with the deferred report 2015-08 provides the information required to proceed to detailed design and construction.

COMMENTS

Summary of Station Options

Options for the new fire services facility have been provided in previous reports and in various configurations. The purpose of this report is to present the options JCC requested in the motion approved at the March 1st meeting which include:

Option A- fire suppression, administration, and training in one facility

Option B- fire suppression and administration in one facility; training off site

Option C- fire suppression, and training in one facility; administration off site

Option D- fire suppression only; training and administration off site

Option A is the most cost effective from both a capital and operating perspective when considering the long terms needs of having to provide both administrative and training facilities. There are inherent operational efficiencies that will result in reduced operating costs from having all functions in the same facility. There is also increased efficiency with land use, by maximizing efficiency with setback requirements. This scenario keeps all "on duty" CYFS resources immediately available to respond to emergency situations in our first response area (Aurora/Newmarket). The need to call additional staff in on overtime is reduced which lessens the pressure on the operating budget. It is estimated that any scenario which includes Training offsite will result in additional operating expenses, including overtime, of approximately \$600,000 annually.

In Dillon Consulting's Fire Consolidation Feasibility Study, Preliminary Key Finds Report prepared for Richmond Hill's Fire Consolidation Study they concluded that preliminary findings support that the proposed CYFS training facility would still be required within a consolidation model. "Two training facilities would provide greater flexibility and enhanced training opportunities for firefighters and provide greater flexibility for scheduling training activities."

This option only differs slightly from the guidelines in the Fire Department Master Plan which recommended Fire Prevention also be included at the new station. As this is not a recommended option, costing has not been obtained. The recommended option will allow for additional space to accommodate future Fire Prevention services at Station 4-1 which are constrained at this time.

When considering only capital costs, there is a benefit in consolidating all services on one site and all other alternatives will require a second site. While

some costs may be recoverable if Training is off-site, another centralized or decentralized location will need to be procured for Training. The current training site at Timothy Street is only available on a short-term basis. Once a decision is made to repurpose that site, there will be an immediate need to find alternate training facilities. If Administration is not included in the new fire station other suitable accommodation will need to be acquired.

When considering the operating costs from a life cycle perspective, there is a strong argument to consolidate services as much as possible. By accommodating all services identified in option A in the new facility there will be expected efficiencies in the following areas:

- Staff cost savings through reduced need to travel to various facilities for training;
- Increase in available space at Station 4-1 to accommodate growth of the fire prevention program and allow for these services to stay within one building;
- Opportunity for making the new training facility available as a revenue generator;
- Having administration located within the operating building that includes all these services will result in better management and increased efficiencies;
- There will be significant savings in overtime costs by consolidating functions in one facility;
- Building operating cost efficiencies as the cost of operating a consolidated new building would be lower on a per square foot basis than renovation or expansion into an existing building where energy efficiency will be lower;
- The new site is able to replace the existing outdoor training space of 1.5 acres currently used at the Timothy site resulting in no loss to training services once Timothy site is repurposed.

Current Site Fulfills Needs for Option A

The current property site is 4 acres in size. This site is sufficient to provide for the new building to accommodate the suppression, administration and training facilities in a new building that will have a footprint of approximately 17,000 sq.ft. The total building area will be approximately 24,800 sq.ft., as parts of the building will be two stories in height. This facility along with required parking, access considerations, vehicle maneuverability and set back requirements can be accommodated in about 2 to 2.5 acres.

The existing outdoor Timothy training facility currently provides about 1.5 acres but is not fully usable due to building locations and the overall condition of the site. Combining these functions will require a site of 3.5 to 4 acres as identified during the land procurement process.

Any remaining available space will be beneficial to reserve for site screening or other security and community enhancements to mitigate any visual or operational issues that could occur in the operation of a fire hall site.

It is therefore recommended that the full 4 acres be retained to allow for the planned services whether constructed at this time or at a future date.

Building quality will be set to blend into existing community

The cost estimate for the building is set to create a building that will provide for long term reliable and durable service to the community while making efforts to incorporate architectural features that harmonize with the community and Fire Services standards. Typical features planned for the building are:

- Masonry and block construction for exterior and interior high use areas
- Steel roofing and metal framing for durability
- Drywall construction in low impact areas such as training and administration
- Durable low maintenance finishes
- Environmental and air quality features to create a high quality environment while achieving high levels of energy efficiency.

Financial Analysis

	Suppression	Headquarters	Training	Total
Square feet of space	12,920	2,800	4,100	19,820
Circulation and walls	4,955			4,955
Total square footage	17,875	2,800	4,100	24,775
Cost per square foot	\$ 315	\$ 315	\$ 315	
Construction	\$ 5,630,625	\$ 882,000	\$ 1,291,500	\$ 7,804,125
Training area			750,000	750,000
Escalation at 3%	168,919	26,450	45,536	240,915
Project management	300,000			300,000
Consultant	432,896	67,810	99,294	600,000
Permits	50,000			50,000
Adverse soils	200,000			200,000
	\$ 6,782,440	\$ 976,270	\$ 2,186,330	\$ 9,945,040
Contingency	719,590	103,490	231,880	1,054,960
Total	\$ 7,502,030	\$ 1,079,760	\$ 2,418,210	\$ 11,000,000

The financial analysis was prepared based on numbers provided by Thomas Brown Architects. Calculations and preparatory work for the last DC background study were done in 2013. Costs have increased by approximately \$1 Million since that time. Also, rough estimates were used back then versus detailed analysis by professionals that were obtained now. As neither the consultant who prepared the FDMPU nor the consultant for the DC background study used by Aurora (Watson & Associates) nor the consultant used by Newmarket (Hemson Consulting) questioned the estimates, we assumed they were sufficient to use for DC's and budget purposes.

The project is still within the funding envelope of both municipalities. As this facility is required to accommodate the growing communities of Aurora and Newmarket, it is prudent planning to maximize this funding source for as much future growth as practical. The budget for this project has been set at \$11,000,000.

Funding

Funding for the construction of the new fire hall, administration and training centre is available as follows:

	Requested Funding	Proportional Funding
Aurora	4,426,400	40.24%
Newmarket	6,573,600	59.76%
Total	11,000,000	

Development Charges will be a significant portion of the funding for this project. Each municipality will provide a funding report when they go before their respective Councils.

Project Schedule

The following is a preliminary schedule for project delivery:

Milestone	Target
JCC approval	Nov, 2016
Aurora and Newmarket Council Budget March Approval	Feb 1, 2017
Secure Architect	March 1, 2017

Design Activity Complete	Sept 1, 2017
JCC/ Council Design Approval	Nov 1, 2017
Tender Period	Feb 1, 2018
JCC/ Council Tender Approval	March 1, 2018
Construction Complete	May 1, 2019

Thomas Brown Architects have been retained to assist in the site selection process, preliminary space needs assessment, site layout and block planning for the new facility and are nearing the end of their current assignment. They have performed this activity well and have provided valuable guidance in the development of this project based on their long standing experience and involvement in over 150 fire hall related projects in Ontario.

Due to their expertise in this area and the fact that Thomas Brown was involved in the delivery of Fire Hall 4-4 (Wellington), there is value in considering a single source assignment for the following reasons:

- This firm specializes in the delivery of fire halls and has a good reputation for cost effective delivery of these types of buildings in southern Ontario.
- This firm has worked in Aurora and was successful in delivery of Fire Hall 4-4.
- This firm has the resources necessary to deliver the components required for this project.

Single source selection is not uncommon for the design of fire halls. The Aurora Procurement by-law has provision for single source selection when skills are specialized sufficiently to result in an advantage to the municipality by using the single source provisions. Pursuing this award method will result in a faster award process and advance the project by four to six months. Fees for the design service will be negotiated with the firm and verified for competitive fairness based on industry standards for architectural services which are well defined.

CONCLUSION

A site has been secured to accommodate the future needs of the fire service. Staff, with support from a consultant, have verified that the most cost effective option is to proceed with construction of a facility which includes suppression, administration and training in one facility (Option A). The capital costs required to accommodate these services will be substantially funded from Development Charges for the purpose of accommodating future growth needs in the community.

For a number of operational reasons and applying a prudent investment approach, it is recommended that full accommodation of the desired services be approved to leverage growth related funding. This will result in the best use of capital growth funds combined with the most cost effective service delivery model which will minimize future long term operating costs.

IMPACT ON THE MASTER FIRE PLAN

The FDMPU outlines the future direction of CYFS and has been discussed and approved by JCC and both Municipal Councils. Building the new fire station to deliver services to the public in a more effective manner is a key component of the FDMPU.

CONSULTATION

The Director, Infrastructure and Environmental Services in Aurora and the Finance departments of both municipalities were consulted.

CONTACT

For further information or questions regarding this report, please contact;



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