



Multipurpose Complex Feasibility Study

Prepared for the City of Elliot Lake

December 12, 2016

820612-0021 (v1.0)







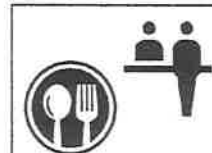



Functional Program Requirements and Options











Updated Requirements

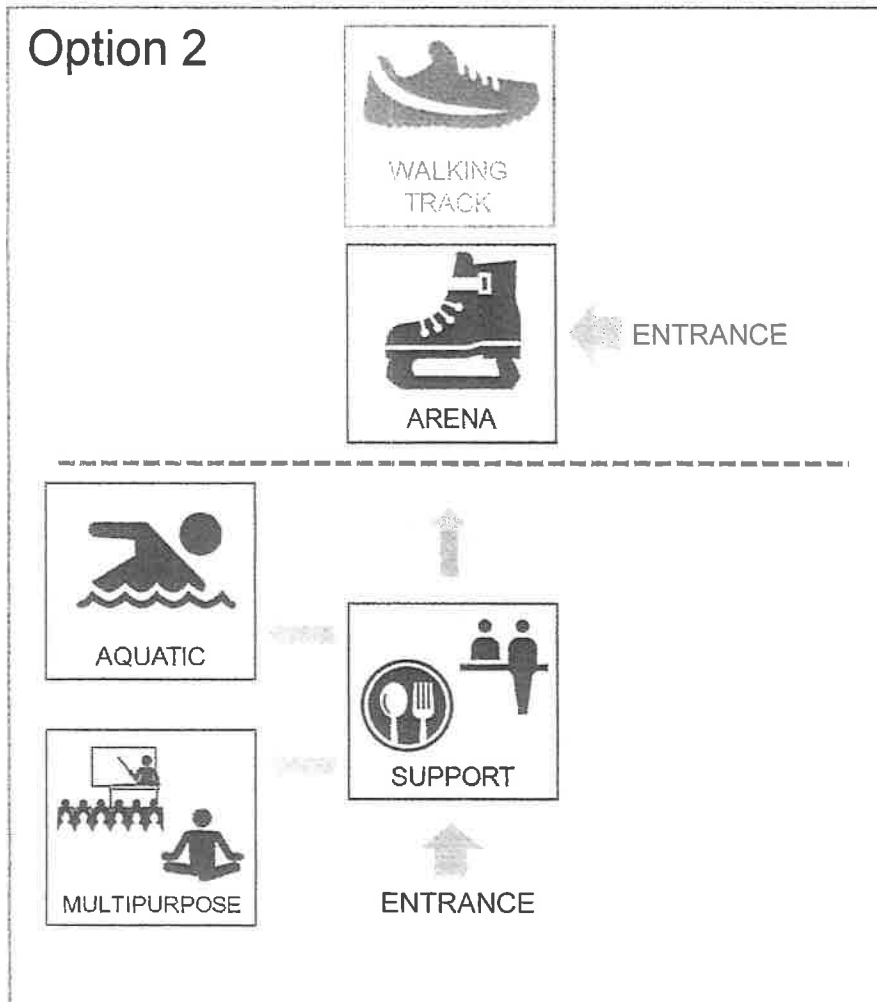
2016 Requirements

 ARENA	 AQUATIC	 GYMNASIUM	 MULTIPURPOSE
 FITNESS	 WALKING TRACK	 SUPPORT	 CURLING

2016 Priorities

High Level Priorities		Medium Priorities		Low Priority
 ARENA	 SUPPORT	 MULTIPURPOSE	 FITNESS	
 AQUATIC		 GYMNASIUM	 WALKING TRACK	

Functional Program – Multipurpose Complex



Overview

- 62,800 sq.ft (5,834m²) new facility
- 34,900 sq.ft (arena) + 27,900 sq.ft (aquatic centre)

Advantages

- Arena and walking track can be built as a free standing building
- Key requirements and long term objectives are met

Considerations

- Significant investment
- Potential long-term impact on taxes

Site Options Desk Top Analysis



Site 1 - 151 Ontario Street



This site is the former Algo Centre Mall. It is flat and offers ample room for development and parking. It is adjacent to city hall and emergency services buildings.

Lot Size	14.9 acres (649,044 sq. ft.)
Services	Serviced
Ownership	Private
Location	Central / Adjacent to City Hall
Development Costs	\$\$

Advantages

- Site available/on-market
- Site is fully serviced
- Lot size allows for implementation of all requirements and future exterior feature development
- Location offers potential operating efficiencies and synergies with City Hall

Considerations

- Acquisition costs
- Historical background (opportunity to incorporating a memorial tribute to victims)



Site 3 - Esten Drive - Highway 108



This lot is large, partially treed lot and nearby residential subdivision. Currently designated as green space in the City's Official Plan.

Lot Size	TBC
Services	No Serviced
Ownership	Municipal
Location	Highly accessible to highway and residential area
Development Costs	\$

Advantages

- Good location for local residents
- Municipally owned; no land acquisition costs

Considerations

- Users from out of town may be less inclined to go into the city's core
- Not serviced

Site 5 - Spruce Avenue at Highway 108



This site is a vacant gravel/sand lot with highway access, adjacent to current arena and municipal baseball diamond.

Lot Size	~4.8 acres (~210,000 sq ft)
Services	Serviced
Ownership	Private
Location	Access to Highway 108 with view of Horne Lake,
Development Costs	\$\$

Advantages

- Great location for local residents and visitors alike
- Flat and fully serviced
- Adjacent to existing sports/recreation facilities, near subdivision

Considerations

- Small lot size
- Acquisition cost
- Potential environmental remediation issues

Site Analysis – Evaluation Grid and Criteria

Criteria	Criteria Weights	Points	Site Evaluation Score					
			1	2	3	4	5	6
Lot Size	Over 5 acres	10						
	3 to 5 acres	5	10	10	5	5	5	5
	Less than 3 acres	0						
Location and Access	Very Good Access	10						
	Good Access	5	10	5	5	5	10	10
	Poor Access	0						
Acquisition Cost	Municipal Ownership	10						
	Medium Level	5	5	0	10	10	0	10
	High Level	0						
Special Developmental Requirements	Minimal	10						
	Medium	5	10	0	5	5	5	0
	Significant	0						
Project Delivery Impacts	Minimal	10						
	Medium	5	5	0	5	5	5	5
	Significant	0						
Score over maximum score of 50 points			40	15	30	30	25	30

Capital Cost Estimates Breakdown

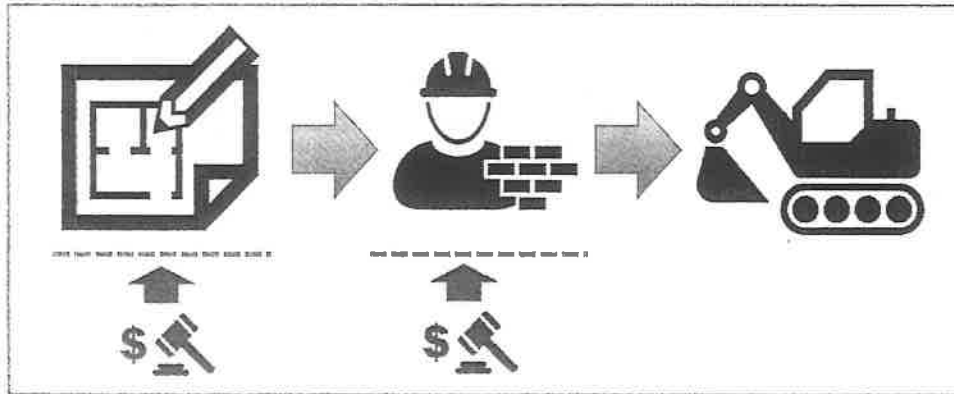
Project Element Description	A - Arena	B - Aquatic Center	C - Gym & Fitness Center
Building Construction			
A - Arena @ \$200/square feet	\$ 6,980,000		
B - Aquatic Center @ \$314/square feet		\$ 8,749,224	
C - Gym & Fitness Centre @ \$196/square feet			\$ 2,842,910
<i>Building Construction Cost Sub-Total</i>	\$ 6,980,000	\$ 8,749,224	\$ 2,842,910
Site Development			
Services and landscaping 10%	\$ 698,000	\$ 874,922	\$ 284,291
<i>Site Development Sub-Total</i>	\$ 698,000	\$ 874,922	\$ 284,291
Construction and Site Sub-Total	\$ 7,678,000	\$ 9,624,147	\$ 3,127,201
Fees and Expenses			
Signage, Furniture and Equipment 6%	\$ 460,680	\$ 577,449	\$ 187,632
Professional Fees 10%	\$ 767,800	\$ 962,415	\$ 312,720
Disbursement 5%	\$ 383,900	\$ 481,207	\$ 156,360
<i>Fees and Expenses Sub-Total</i>	\$ 1,612,380	\$ 2,021,071	\$ 656,712
Construction , Site and Fees Sub-Total	\$ 9,290,380	\$ 11,645,218	\$ 3,783,913
Design and Construction Contingencies 15%	\$ 1,393,557	\$ 1,746,783	\$ 567,587
Total Estimated Capital Project Cost	\$ 10,683,937	\$ 13,392,000	\$ 4,351,500
Total area in square feet	34,900	27,900	14,505
Project Cost per square feet	\$ 306	\$ 480	\$ 300
Walking Track Allowance	\$ 750,000		

Financial Models

Financial Models – Community Hub

	SCENARIO 1	SCENARIO 2	SCENARIO 3
Total Capital Cost	(\$30,000,000)	(\$30,000,000)	(\$30,000,000)
Funding by the City of Elliot Lake	\$10,000,000	\$20,000,000	\$30,000,000
Funding from other sources	\$20,000,000	\$10,000,000	\$0
Annual Revenue	\$500,000	\$500,000	\$500,000
Annual Operating Expenditure	(\$1,000,000)	(\$1,000,000)	(\$1,000,000)
Annual Capital Expenditure Reserve	\$0	\$0	\$0
Annual Debt Service	(\$605,059)	(\$1,210,117)	(\$1,815,176)
Annual Net Position	(\$1,105,059)	(\$1,710,117)	(\$2,315,176)

Design-Bid-Build Delivery Model



Three sequential project phases:

- 1) Design by independent consultant
- 2) Competitive procurement of a contractor
- 3) Construction as designed

Advantages

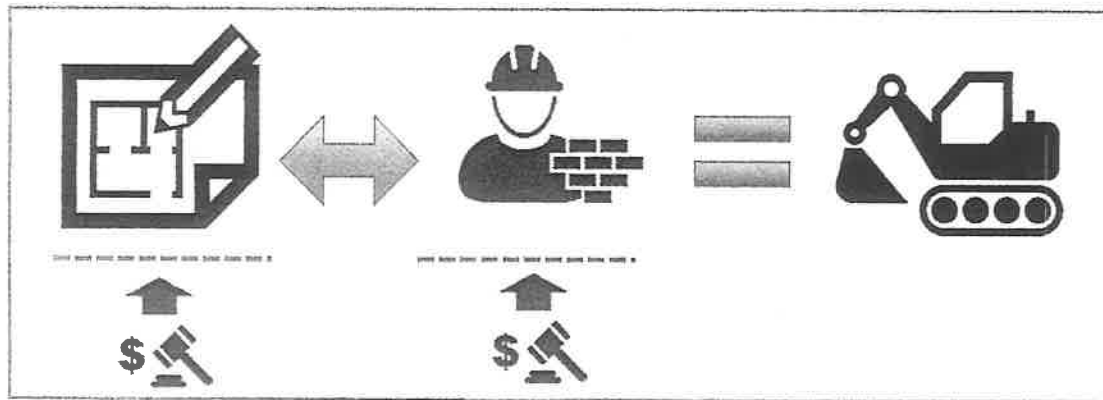
- Owner controls design and construction quality
- Design is complete prior to construction award
- Construction cost is fixed at contract award
- Low bid cost, maximum competition
- Relative ease of implementation

Considerations

- Requires significant owner expertise and resources
- Shared responsibility for project delivery
- Owner at risk to contractor for design errors
- Design and construction are sequential, typically resulting in longer schedules



Construction Management Delivery Model



Non-sequential project delivery model.
Selected activities are completed in parallel and are fast tracked
Transfer of selected risks from the owner onto a construction manager.

Advantages

- Transfer of responsibility for construction, and some risk, from owner to CM
- CM has total control of construction and all subcontractors
- Construction may start before design completion, reducing project schedule

Considerations

- Reduced owner control of construction
- Design changes after construction begins are costly
- Potentially conflicting interests as both CM and contractor



Recommendations



Recommendations

2. Site Selection

- One of the three sites owned by the municipality or the former Algo Mall Centre should be considered for this project
- The final site selection should be based on the detailed technical and financial comparative analysis of these four sites

3. Project Delivery Model Selection

- The Design-Bid-Build or Design-Build models are proposed optional models
- Design-Build is recommended to expedite project delivery

4. Financial Model Selection

- The city should position itself as soon as possible to seek funding support from upper-order governments, and seek innovative and energetic ways of raising the share of funding it will require (potentially up to 33% of eligible project costs, pending program decisions by the federal government on phase two of its "Investing in Canada" plan, which includes a social infrastructure component).

Next Steps

Proposed Action Items

Final Option Selections

- Evaluate the optional programs against financial metrics and budgetary constraints
- Conduct a cost-benefit analysis of building new versus rehabilitating existing facilities prior to making final decision
- Further investigate physical conditions of four sites
- Develop a functional program to identify detailed technical and operational requirements (if a Design-Build-Bid model is to be used)
- Develop performance specifications (if Design-Build model is to be used)

Discussion & Questions



Support Documentation

Financial Model

Annual Debt Services Assumptions

\$25M Multipurpose Complex

	SCENARIO 1	SCENARIO 2	SCENARIO 3
Term	30 Years	30 Years	30 Years
Nominal Interest Rate	4.50%	4.50%	4.50%
Compounding Periods/Year	2	2	2
Payment Periods/Year	12	12	12
Annual Interest Payment	(\$221,272)	(\$663,816)	(\$1,106,360)
Annual Principal Payment	(\$81,257)	(\$243,772)	(\$406,286)
Monthly Debt Service	(\$25,211)	(\$75,632)	(\$126,054)
Annual Debt Service	(\$302,529)	(\$907,588)	(\$1,512,647)

\$30M Multipurpose Complex

	SCENARIO 1	SCENARIO 2	SCENARIO 3
Term	30 Years	30 Years	30 Years
Nominal Interest Rate	4.50%	4.50%	4.50%
Compounding Periods/Year	2	2	2
Payment Periods/Year	12	12	12
Annual Interest Payment	(\$442,544)	(\$885,088)	(\$1,327,633)
Annual Principal Payment	(\$162,514)	(\$325,029)	(\$487,543)
Monthly Debt Service	(\$50,422)	(\$100,843)	(\$151,265)
Annual Debt Service	(\$605,059)	(\$1,210,117)	(\$1,815,176)

Scenarios and Timelines

Assumptions

Assumptions

- Financing activities such as the development of a business case, the seeking and securing of funding are completed prior or in parallel to the launching of the project delivery
- Consultation activities such as public consultation and the securing of collaboration opportunities with partners are completed prior or in parallel to the launching of the project delivery
- Resources are readily available to complete Financing, Consultation, Project Planning and Procurement activities including external support services
- Scenario is based on a Design-Build project delivery model and selected construction activities being fast-tracked (i.e. site development construction occurring while design of the building is still being developed)
- Durations are considered aggressive and optimistic i.e.no float or buffer is included to manage the risk of activities being delayed, activities are completed sequentially or in parallel,
- Design and construction durations are subject to final building size and complexity, site development scope, industry condition, Design-Build team implementation strategy and any other unknowns at this pre-project stage.