

Mayne Island Improvement District

Report by the 2009 Ad Hoc Committee on the Proposed Emergency Services Complex

Purpose: To pose and answer questions on the proposed Emergency Services Complex.

MEMBERS:

Mayne Island Improvement District: ("MIID")	Jim Marlon-Lambert, Trustee and Chair Paddy Lambert, Trustee (Aaron Somerville, Trustee as Alternate)
Mayne Island Fire/Rescue Services ("MIFRS")	Steve DeRousie, Deputy Fire Chief
Mayne Island Fire Fighters Association: ("FFA")	Lt. Amanda Gunn (FF. Bernadette Hennebery as Alternate)
Mayne Island Residents and Ratepayers Association ("MIRRA")	Jon Hoff, Director (David Maude, Appointed Representative as Alternate)
Mayne Island Community Representative:	Brian Dearden
Recording Secretary:	Moira McCulloch, Administrator MIID

SUMMARY:

The *Ad Hoc* Committee met on five (5) separate occasions during the months of May (7th, 14th and 28th) and June (4th and 11th) 2009. Notes rather than Minutes were taken during these meetings as the issue was more for discussion than action. Not all members were available for all meetings but each group providing members was adequately represented at each meeting.

The Questions, along with their respective Answers, form the body of this Report. The Questions selected were those felt by all parties to be representative as well as significant questions that would be posed by our community.

QUESTIONS:

Q1. Why do we have to replace the current Firehall?

-The current Firehall has an aggregate age of just over 40 years. It was designed and built in an age when there were few special design criteria for Emergency Service buildings and little in the way of building inspection. The Firehall has been added on to at various times in its life to accommodate some of the increases in vehicle numbers and equipment required. Please note that the nature of Fire/Rescue Service work has changed significantly over the last 40+ years by provincial legislation and regulation. The increase in capability of the current Firehall has not kept pace with the constantly increasing service requirements.

The current Firehall will not meet the standards for a “safe workplace” under the BC Workers’ Compensation Act for the following reasons:

- “the inability to withstand even a moderate earthquake” as noted in at least 3 structural engineering reviews carried out since 1994.;
- Insufficient clearance between, behind and in front of vehicles resulting in tripping hazards and obstruction hazards as a minimum.;
- The air compressor and cascade system used for pressuring air bottles and truck brakes is not located in a separate room.;
- No separation between potentially contaminated and non-contaminated zones.;
- Inadequate showering and washroom facilities.;
- and
- No vehicle exhaust control facilities resulting in the garage and adjoining areas being polluted with carcinogenic fumes each time the vehicles are driven out of and back into the Firehall.

The current Firehall is also too small for existing operations and for the range of operations we can anticipate being called out for. Specifically there is:

- Insufficient inside parking area for all of the MIFRS first-line vehicles with the result that 2 of the vehicles must be parked outside the Firehall. In the 2008-2009 winter the vehicles parked outside were not available for immediate use because of frozen windows, doors, water and hose lines, etc. causing MIFRS a temporary but vital loss of effectiveness in responding to community needs.;
- Insufficient storage area for the variety of personal protective ensembles, tools, hoses and other necessary equipment.;
- and
- Inadequate rooms, equipment and facilities for briefing, debriefing, training, leading, radio communications and administering the MIFRS.

Q2. Why will the proposed Emergency Services Complex cost so much?

-There are four primary causative factors behind the relatively high cost of the proposed ESC. These are:

1. The 2.5 times factor on earthquake loading for all Emergency Services buildings as required by the National Building Code of Canada. This means

that the buildings must be designed to withstand 2.5 times the earthquake load of a similar commercial property and continue being serviceable after the event. All structural components as well as all fitting components such as doors and windows including water and septic services have to be stronger and thus proportionately more expensive.;

2. The internal vehicle parking area has been designed to accommodate the size of vehicles we anticipate will be required over the next 40 years. This combined with the requirements for EOC facilities leads to a much larger footprint than with the current Firehall.;
3. The additional costs for transportation of materials and specialized construction personnel plus their on-island living costs.;
4. The Ministry of Community Development's requirement for comprehensive contingency factors to be added to project cost estimates.

Q3. *How much and for how long will the proposed Emergency Services Complex ("ESC") cost individual property owners?*

-The "average" cost per property will be approximately \$189 per year for the following 20 years. This amount is based on paying down a \$4,216,000 loan over 20 years at an average interest rate of 6.5%. This amount also includes the Provincial Surveyor of Taxes 5% premium for collecting property taxes. Should the total construction cost be less than \$4,216,000 the average annual per property cost would be proportionately lower. Should the MIID obtain "infrastructure" or other grants then the average annual amount would also be lower. The \$4,216,000 amount is the maximum that could be expended on the project.

Q4. *Can properties be taxed on some other basis than Total Assessed Value?*

-Yes. The *Ad Hoc* Committee has discussed this issue in detail and has explored the practicalities, fairness and appropriateness of a variety of different taxing methods. These taxing methods ranged from a straight parcel tax (a fixed levy per property) to a conventional property tax based on Total Assessment.

The *Ad Hoc* Committee recommends a blended taxing method in which 50% of the necessary funds are raised through "Parcel Taxes" with an additional 10% from a property tax on Assessed Land values and the final 40% from a property tax on Assessed Improvement (building) values. In the beginning there was a wide variation in opinion between *Ad Hoc* Committee members as to the appropriate taxation method to be used but, in the end, all agreed that the blended method presented the overall "fairest" method. The MIID Board of Trustees has agreed to present this as a Motion for Board approval at their next regular monthly meeting.

The recommended blended taxing method would mean that more than half of the properties on Mayne Island would pay \$200 or less per year for the proposed ESC. Readers should be aware that the actual Taxation Model to be used is defined annually according to the Local Government Act. It is unlikely but not impossible that future Boards of Trustees may consider that a different taxation model be used in subsequent years.

Q5. Can an alternate Cost Estimate be prepared?

-Yes. The MIID will provide access to all of its building design information for alternative cost estimates. These must include full consideration of the 2.5 multiplication factor required for earthquake loading of emergency services buildings. Only preliminary design has been carried out so far thus overall construction quantities are approximate only and are also limited in scope.

Q6. Why does the Emergency Operations Centre (“EOC”) cost so much (i.e. \$475,000) and could we not use a more conventional construction method other than removing the top floor of the existing Fire Hall and re-erecting it on a new foundation?

-The top floor of the existing Fire Hall is quite adequate for the longer-term intended purposes *inter alia* as an EOC and as an administration centre for the MIID with the proposed ground floor as a new support and medium-term equipment storage centre for the Fire Department.

The preliminary design considers moving the top floor of the existing Fire Hall onto a new earthquake-proof foundation level. The top floor would itself have to be strengthened to withstand the Building Code requirements for Emergency Services buildings (2.5 times the recommended earthquake loading). Some members of the *Ad Hoc* Committee believe that it might be more cost-effective to scrap the old top floor along with the old Fire Hall and construct a completely new earthquake-resistant EOC instead.

The MIID expended the bulk of its efforts during the preliminary design phase on designing a New Fire Hall which would be a “bare bones” facility in order to keep the overall project costs as low as possible yet still satisfy the “minimum” requirements for a modern Fire Hall. As the EOC represents only 11% of the overall costs we felt that this approach was justified and that the actual details of the EOC construction could be left to the detailed design phase.

The MIID intends to fully review the actual design and construction details for the proposed EOC in order to determine whether a “new build” would provide a lower cost than the currently envisaged “move and support”.

Q7. How can we get as much as possible of the construction work done by island contractors?

- The advantages of using island contractors for parts of the construction of the proposed ESC are obvious. Not the least of these is that it would keep as much as possible of “our money” circulating within the community.

While the MIID wants to have as much work as possible carried out by on-island contractors we are faced with at least two primary limitations:

- 1. The major above ground structural components will be of pre-manufactured steel girders, beams and bolted/welded connections. This will require a highly-skilled erection crew along with very specialized erection equipment**

not available on the island, but commonly available via steel building contractors.

2. The nature of the project requires the employment of a major contractor who will be in charge and responsible for maintaining a strict time schedule (with penalties for delays). This major contractor will be responsible for providing, coordinating and managing all of the trades and sub-contractors required at the various construction stages.

These limitations do not preclude the use of island contractors but will curtail the overall type and scope of the components they can be involved in. The MIID will encourage the use of qualified island contractors, trades people and labourers through our eventual tender documents to ensure that island contractors will be invited to participate in a timely and cost-effective manner.

Q8. What is the proposed construction schedule?

- Given a successful (i.e. "YES") vote in the Referendum on September 19th 2009 then the project would proceed as follows:

- The Architects and Project Manager would be immediately instructed to start the detailed design process with construction drawings and tender documents to be available for public invitation to tender in January 2010.
- Tender responses to be received by mid-February 2010.
- Contract to be awarded by the beginning of March 2010 with construction to begin at the beginning of April 2010.
- It is anticipated that the overall project could be completed by the end of 2010.

Q9. Why does an island of 1,600 or so parcels require a Fire Department of 5 fire-fighting vehicles?

- Mayne Island is an island with no ability to get immediate fire-fighting vehicle assistance from other Fire Departments. We will be able to get additional fire-fighting personnel from other Fire Departments within 4 hours if needed but they will only be able to bring their protective clothing with them and will have to use our equipment (hoses, pumps, engines, tenders, etc.) once they get here. If the fire were to last more than a day then we would probably be able to get a few additional vehicles via B.C. Ferries.

Our current fleet of 5 vehicles has been determined by the Office of the Fire Commissioner and previous MIID Boards of Trustees to be the minimum required for MIFRS to respond quickly and efficiently to those fire/rescue/first-response scenarios we will most likely be faced with. The Strategic Planning carried out by the MIID Board of Trustees and the Tactical Planning carried out by the MIFRS also confirm this fleet size as the minimum required.

This fleet size and the fact that Fire/Rescue vehicles will increase in length by 5 to 6 feet over the next decade are one of the critical factor sets for the design of the new Firehall.

Q10. What are the facts behind the possibility for obtaining reduced homeowner Fire Insurance Costs by getting Fire Underwriters' approval for Superior Shuttle Service accreditation?

-Fire Insurance rates for Homeowners are dependent on a number of factors but the most predominant ones are:

1. The replacement cost for the building(s),
2. The replacement cost for the contents,
3. The Insurer, and
4. The fire protection rating for the area.

The first two factors are unique to the individual Homeowner but the latter is the rating used by the Insurer to classify the level of fire protection offered in the community.

The fire protection rating generally has three levels:

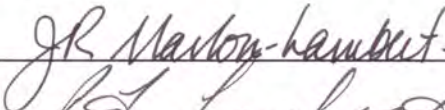
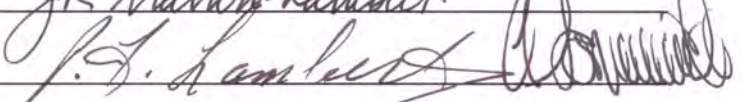
1. Fire Hall and Hydrant Protected (also known as 'Hydrant Protected'),
2. Fire Hall Protected, and
3. Not Protected.

Typically for houses on Mayne Island (which is currently rated as "Fire Hall Protected") the relative cost for a "Hydrant Protected" rating would be about 57% of the current cost. "Not Protected" rates would be at least 100% more.

The construction of a new Firehall is a required element for us to retain our current "Firehall Protected" status. It is also the first step in our application for "Superior Shuttle Service" accreditation which could give us the equivalent to "Hydrant Protection" and thus providing the community with the relatively lower homeowner fire insurance costs.

THIS REPORT IS APPROVED on June 17, 2009 by:

Mayne Island Improvement District:

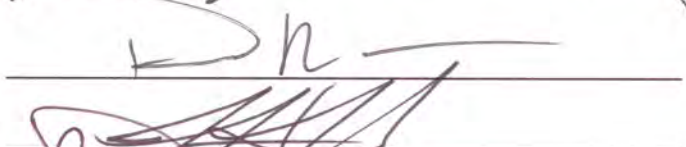
Mayne Island Fire/Rescue Services:



Mayne Island Fire Fighters Association:



Mayne Island Residents and Ratepayers Association:



Mayne Island Community Representative:

