

1 **Q. Project: Holyrood – Install Fire Protection Upgrades – \$369,100**

2 Reference: Application pages D-76 to D-97

3 The Project Description on page D-76 describes three separate fire protection
4 upgrades, (1) install concrete curbing, (2) install automatic fuel shut-off valve and
5 (3) apply fire proofing to the pipe supports.

6 a) Please list the project cost for each of these three upgrades.

7 b) From a fire protection point of view, please list these upgrades in priority.

8 c) Appendix A (page D-81) indicates that FM Global made these
9 recommendations during and/or following a site inspection on August 24,
10 2011. Did FM Global make any of these recommendations prior to August
11 24, 2011 and, if so, please provide the dates.

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14 **A.** The following provides answers to the three part question above.

15 a) The list of the project cost for the three upgrades is shown in the following
16 table:

Project Cost:(\$ x1,000)	Curbing	Shut-off Valve	Fire Proofing	Total
Material Supply	0.0	17.5	0.0	17.5
Labour	34.5	41.8	30.7	107.0
Consultant	0.0	0.0	0.0	0.0
Contract Work	54.0	49.0	48.0	151.0
Other Direct Costs	1.0	1.0	1.0	3.0
Interest and Escalation	11.3	13.6	10.0	34.9
Contingency	17.9	21.9	15.9	55.7
TOTAL	118.7	144.8	105.6	369.1

17 b) From a fire protection point of view these upgrades are listed in priority as

18 follows:

- 1 i) Install automatic fuel shut-off valve;
- 2 ii) Install concrete curbing; and
- 3 iii) Apply fire proofing to the pipe supports.
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- 5 c) Yes, FM Global made these recommendations prior to August 24, 2011. They
- 6 were initially made in a FM Global Risk Report (Fire & Natural Hazards
- 7 Special Risk Evaluation) dated Oct 21, 2008.