

**Roof Inspection Report  
East Hants Swimming Pool  
Milford, N.S.**

**Prepared by**



**Atlantic Division**

**16/10/14**

# Roof Inspection Report

Roof 1 Consultant: Roger Prime RRO  
Client: Municipality of East Hants  
Roof 1 Project No.: A14441  
Purpose: Condition Inspection  
General Contractor: N/A  
Roofing Contractor: N/A

Date of Report: October 16, 2014

## 1.0 Introduction

Roof 1 Consultants Ltd. was retained by the Municipality of East Hants to inspect the roof of the Community Swimming Pool located in Milford, N.S.

The intent of the investigation was to determine the general condition of the roof system on this facility and provide recommendations to extend the life of the existing roof for another 3 to 5 years until a new pool building is constructed.

A visual site inspection was conducted by Roger Prime RRO of Roof 1 Consultants Ltd.

The roof is a barrel vault design with a total roof area of approximately 15,158 ft<sup>2</sup>.

Our inspection revealed the following roof type through visual observation:

- Wood glue-lam beams at 6 ft. o.c.
- Tongue and groove wood deck
- Vapour retarder (assumed)
- Wood strapping
- Air space
- ½ in. plywood sheathing
- Asphalt felt underlayment
- 3 tab asphalt shingles
- Continuous ridge vent
- Continuous intake vent at the bottom of the slope

## 2.0 Observations

A visual inspection was conducted on the roof membrane and flashings.

The following general observations were made as a result of our inspection:

1) The asphalt shingles are in generally poor condition.

2) An area of approximately 48 ft. x 24 ft. at the rear and 10 ft. x 10 ft. at the front appears to have some rotted plywood sheathing (see Drawing A1 attached).

- 3) A crack was observed in the chimney cap.
- 4) The sealant at the electrical mast roof flashing is split.
- 5) Bees have established a nest under the shingles at one location on the left rear.

The following photographs illustrate our observations:

### 3.0 Photos/Observations

Photo 1

Front view of building.



Photo 2

Left side view looking back to front.



Photo 3

Right side view looking back to front.



Photo 4

Rear view of building.



Photo 5

Interior view showing glue-lam beams and tongue and groove decking. The decking appears to be in good condition from the underside.

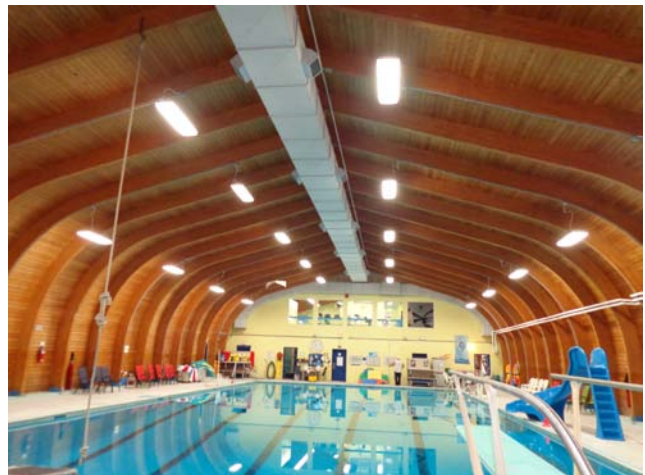


Photo 6

24 ft. x 24 ft. area at right rear where the sheathing is soft and appears to be deteriorated.



Photo 7

24 ft. x 24 ft. area at left rear where the sheathing is soft and appears to be deteriorated although not as bad as the right side.



Photo 8

Overview of areas shown in Photos 6 and 7.





Photo 9

Typical shingle deterioration.  
The plywood sheathing is exposed at this location.



Photo 10

Typical shingle deterioration.  
Nails are protruding at this location.



Photo 11

View of typical warped sheathing at distressed locations.



Photo 12

Crack observed in the chimney cap.



Photo 13

Sealant has dried out and split at the electrical mast roof flashing.



Photo 14

View of missing and damaged shingles on the left side of the building.





Photo 15

Location where bees were seen going under the shingles.



Photo 16

Overview of location where bees were seen going under the shingles.



Photo 17

Typical shingle deterioration exposing the plywood sheathing to water intrusion.





Photo 18

View of missing and damaged shingles on the right side of the building.



Photo 19

View of continuous ridge vent.



Photo 20

View of continuous intake vent along bottom of the slope.



## 4.0 Conclusions

The asphalt shingle roof system on this building is in generally poor condition. In particular an area approximately 48 ft. wide x 24 ft. long at the rear appears to have some deteriorated plywood sheathing and possibly damaged insulation and wood strapping.

There also appears to be a 10 ft. x 10 ft. section in similar condition at the left front.

## **5.0 Recommendations**

We would normally recommend a full replacement for a roof in this condition.

However we recognize that the Municipality plans to replace the building in 3 to 5 years and wishes to spend a minimum to maintain the roof for that period of time.

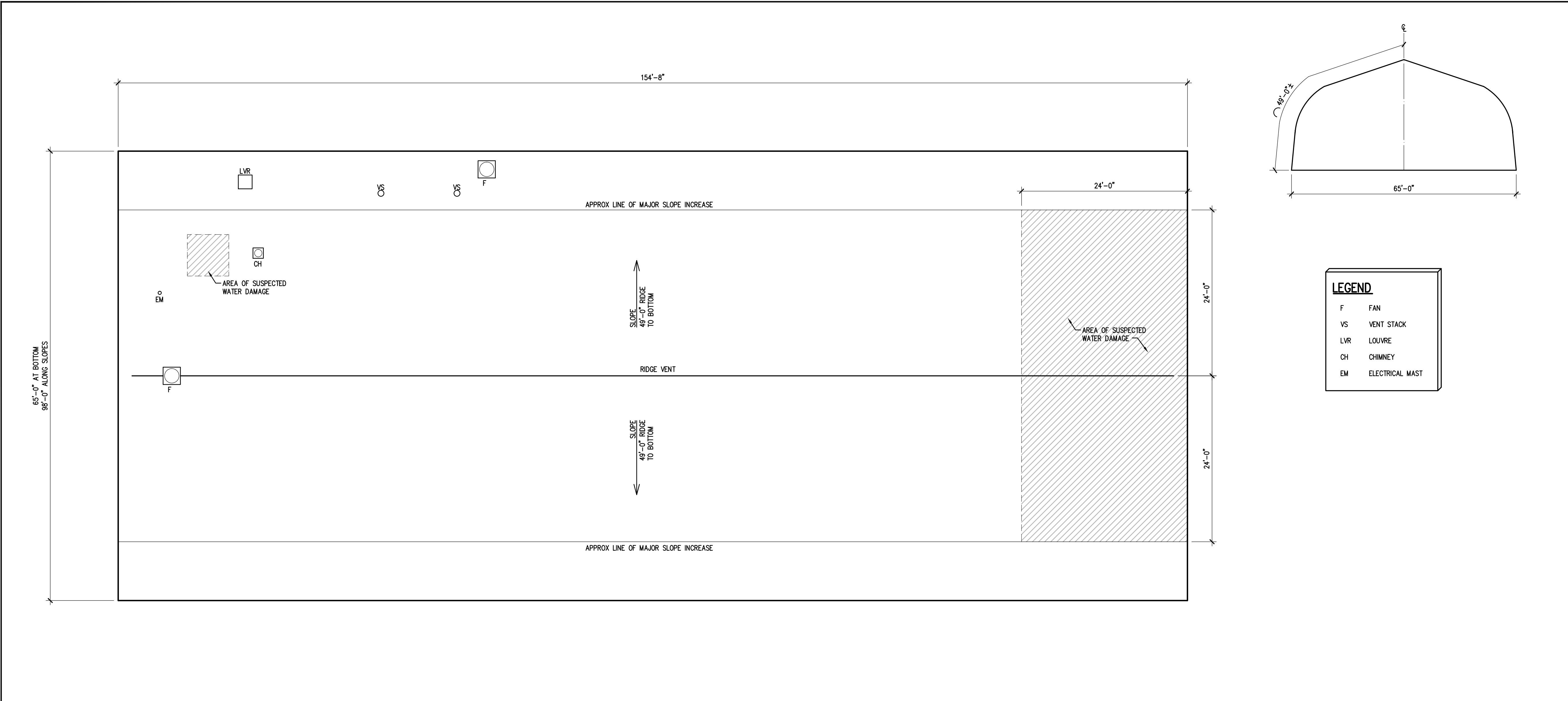
In light of this mandate the following recommendations are offered:

- 1) Completely replace the approximately 48 ft. x 24 ft. and 10 ft. x 10 ft. areas where the plywood sheathing appears to be deteriorated. This may include replacement of plywood sheathing, wood strapping, insulation and vapour retarder.
- 2) On the balance of the roof replace all missing, split or otherwise deteriorated shingles.
- 3) Replace any other deteriorated plywood sheathing including underlying components that may be encountered while replacing the shingles on the balance of the roof.
- 4) Repair the crack in the chimney cap.
- 5) Re-seal the roof flashing at the electrical mast.
- 6) Keep the intake vent at the bottom of the slope open to facilitate proper ventilation of the roof assembly.
- 7) Closely monitor the roof and replace any shingles that may blow off in the future as soon as practically feasible.

**Preliminary Budget for the above scope of work: \$35,000.00 (HST Extra)**

**Note:** This type of repair work is difficult to budget as the full extent of the roof deterioration may not become evident until the work is in progress and the underlying components are exposed.

**End of Report**



1

A1

ROOF PLAN

SCALE 1/8" = 1'-0"

1.	--	--
NO.	REVISION	DATE

ROO1

CONSULTANTS

ATLANTIC DIVISION  
Phone: 877-870-8274  
Email: info @ roof1consultants.com  
www.roof1consultants.com

ROOF PLAN  
EAST HANTS SWIMMING  
POOL BUILDING  
MILFORD, NS

ROOF PLAN  
.  
.  
.  
.  
.

SCALE: AS NOTED	A1
DATE: SEPTEMBER 2014	
14081	