Allan Avis architects inc.

SITE VISIT REPORT

North Huron Wescast Community Complex	Project No.: 1550.00
	Date of Visit: 16-December-2015
	Time of Visit: 12:00 PM
	Weather: 3°C Windy, Overcast

Present: Pat Newson - North Huron
Larry Meyer - North Huron
Jeff Allison & Terry - Smith Peat Roofing & Sheet Metal Ltd.
Matt Nigh - Allan Avis Architects Inc.
Mitch Finley - Allan Avis Architects. Inc.

REPORT

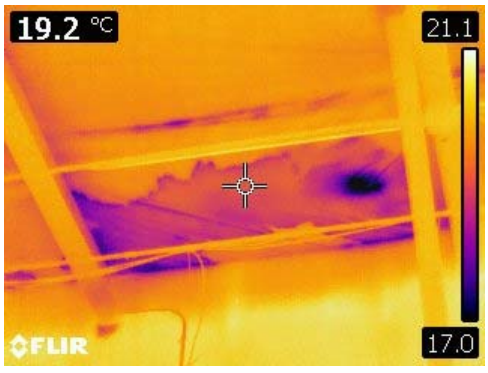
ACTION BY:

OBSERVATIONS AND COMMENTS

1. AAA reviewed the top of wall connection between the Fitness Centre and the pool. Test cuts were not completed at this time. Gypsum board was previously removed by L. Meyer at water damaged locations above the curtain wall. North Huron staff stated that work had not been completed at the bulkhead.

Info

2. Theremographic images were taken at the top of wall and heat loss at the top of the bulkhead was observed. Signs of moisture damage and pooling water above the pinched insulation was also observed. The moisture generally occurs above the purlins for +/-10' at the pool wall.



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3. Review of the mechanical room penetrations was conducted. Two of the exhaust vents, one from the furnace and one from an HRV was observed with active dripping of water.
Postscript: It is unclear from review of the tender documents if the HRV or furnace is original. From review of the construction photos it appears that the gooseneck and stack were installed between 2010 and 2015.

4. Cut 1: location at the bottom of the 2-ply roof. The plywood sheathing is wet and rotting. Two exposed 2x4 framing members extend from below the roof and appear to be wicking water up below the roof. The bottom of the roof area does not align with a 'Z' girt and the metal roofing deflects and may allow wind driven rain or snow to enter.

5. Cut 2: located at the top of the 2-ply roof and was dry.

6. Cut 3: Through the ridge sheathing and was dry. The closure is fastened directly to the Z-girt at the top of the metal roof.

7. Cut 4: Through the curb at the stacks. Thermographic images show a high heat loss at the stacks. The curb is not original to the work completed by smith peat and is verified by photos from 2010. The curb was added and the insulation at the 2-ply roof was removed. A +/-18" dia. Hole was cut in the metal roof below and the existing spray polyurethane foam insulation was removed. The air temperature within the curb was observed at 20°C. The air from the mechanical room and pool is condensing on the underside of the concrete deck and on the exhaust vents and dripping into the mechanical room and is not a result of a penetration through the roofing membrane.

Curb Cut No. 4

Exhaust Vent at Curb

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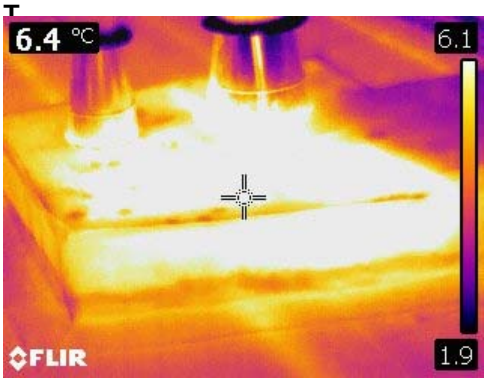

hermographic Image of Curb

2010 Work

8. During the review the relative humidity at the pool was 71. With an air temperature of 24°C dewpoint will occur at 18²C. The structural steel beams above the pool will not be kept warm enough to not condensate. Review of the mechanical systems to reduce the relative humidity will be conducted.

9. Conclusion: The bottom of the 2-ply roofing should be extended to align with a Z-girt and the rotten framing and sheathing removed and disposed of. The curb at the exhaust vents should also be opened and spray polyurathane foam insulation applied between the vent and concrete deck. The curb should also be filled with mineral wool insulation to prevent condensation due to the exhaust vents within the curb.

- END OF REPORT -

If any of the recorded information differs from your understanding please notify Allan Avis Architects Inc. in writing within 5 days.