

FIELD REPORT – LYNNWOOD RECREATION CENTER – FIELD REPORT

REPORT #05

Job No. 10-100622B1

Date: September 25th, 2013

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City of Lynnwood
Parks, Recreation & Cultural Arts
PO Box 5008
Lynnwood WA, 98046-5008

Job Site Address:
18900 44th Avenue West
Lynnwood WA, 98036

Attn:	Keith Skore (City of Lynnwood)	Phone: 425-670-5240	Email: kskore@ci.lynnwood.wa.us
Cc:	Anton Woody (Holmberg)	Phone: 206-730-0385	Email: anton@holmbergco.com
	Mark Puetz (Queen City Roofing)	Phone: 206-272-0127	Email: markpuetz@comcast.net
	Rich Kerns (Queen City Roofing)	Phone: 206-272-0127	Email: richkerns@comcast.net

Weather: Clouds **Temp.:** ~50°F

Contractor(s): Holmberg, Queen City Roofing **Foreman:** Anton Woody, Rich Kerns **Workers On-Site:** ~5/QCR

Contact w/: Keith Skore (City of Lynnwood), Anton Woody (General Contractor, Holmberg), Rich Kerns (Foreman, QCR),

Location(s) of Work: Natatorium roof.

Materials: Hot Stuff Type IV asphalt, John Manville GlasPly IV plysheet, Karnak 108 primer, Firestone TPO, Firestone UltraPly Adhesive, ¼-inch DensDeck, polyiso insulation (both organic and glass faced).

Project Conditions Photo:



Photo of the Lynnwood Recreation Center building taken facing southeast.

Foreword:

At the request of Keith Skore (Project Manager, City of Lynnwood) this writer was onsite to review the installation of new TPO roofing at the curbs on the Natatorium Roof. A hand-written copy of Field Notes #05 was reviewed with Keith Skore (City of Lynnwood), Rich Kerns, (Foreman, QCR) and Anton Woody (GC, Holmberg) and is left in the onsite job trailer for storage. The following items were observed, noted and/or discussed regarding the roof.

Signed: Chris Northern, Field Inspector

Sent: September 30, 2013

Reviewed By: George Hopkins, Inspector Supervisor

Roof System Description:

Roof Replacement Assembly:

Layer	Specified Products
(E) Roof Structure	(E) metal deck, (E) concrete deck.
Vapor Retarder Layer	2-Ply John Mansville Type IV set in Type IV Hot Asphalt, Glaze coat of Type IV Hot Asphalt
Insulation	Rigid Polyiso Insulation and Tapered Polyiso Insulation ¼.” per foot.
Coverboard	DensDeck Prime Coverboard mechanically fastened.
Adhesive	UltraPly TPO bonding Adhesive
TPO Roofing	Firestone UltraPly TPO, (fully adhered)

Running Punch List/Action Items:

(Items will be removed and updated as addressed)

Observations:

- 5.1 Delta Construction is installing unistrut supports for the new HVAC ductwork at the Natatorium Roof. Queen City Roofing is installing TPO baseflashing onto the upper half of the new HVAC curbs.

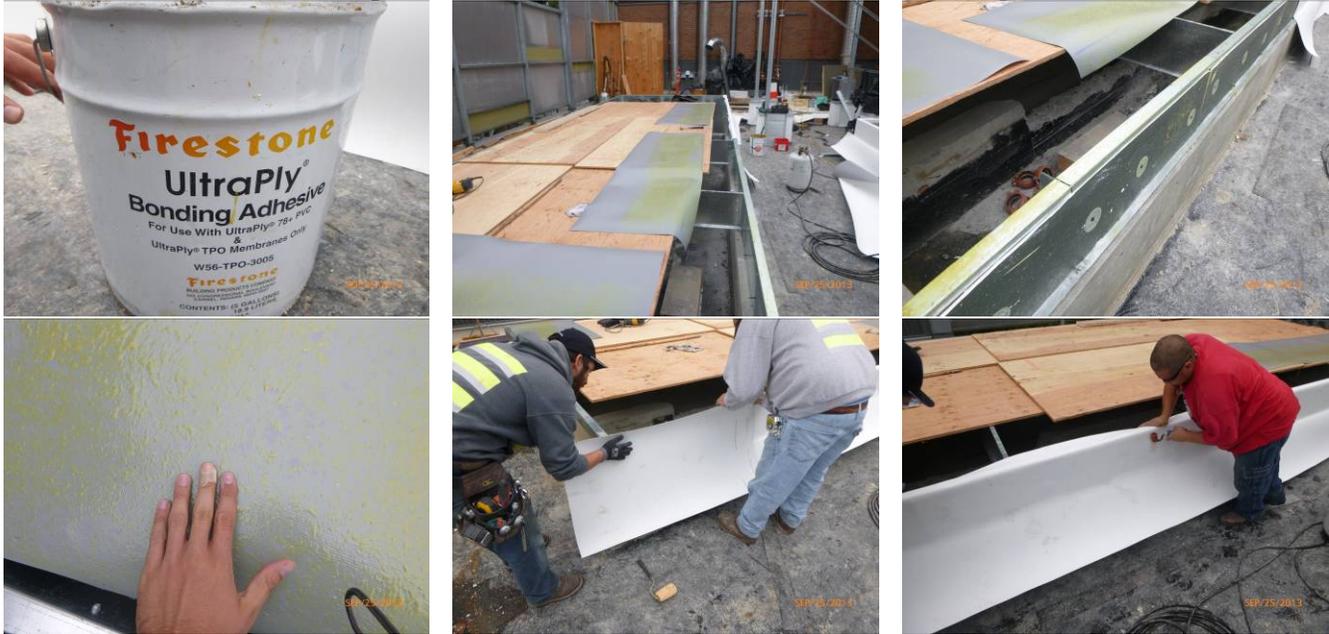


Overview of the Natatorium Roof taken facing southeast.

- 5.2 The concrete curbs have been poured during a previous site visit. The existing curb to the west has been extended (extended to the east) and the curb at the east side of the Natatorium Roof is new. Flat stock insulation is inserted into the cavity of the metal HVAC curb and ¼-inch DensDeck coverboard is mechanically fastened with 3-inch plates at approximate 12-inch intervals.



5.2a Firestone UltraPly Bonding Adhesive is roller applied onto the coverboard, top of the metal supports and onto the backside of the Firestone TPO membrane. The adhesive is allowed to flash off and then the membrane is set into place. Rollers are utilized over the membrane to promote adhesion.

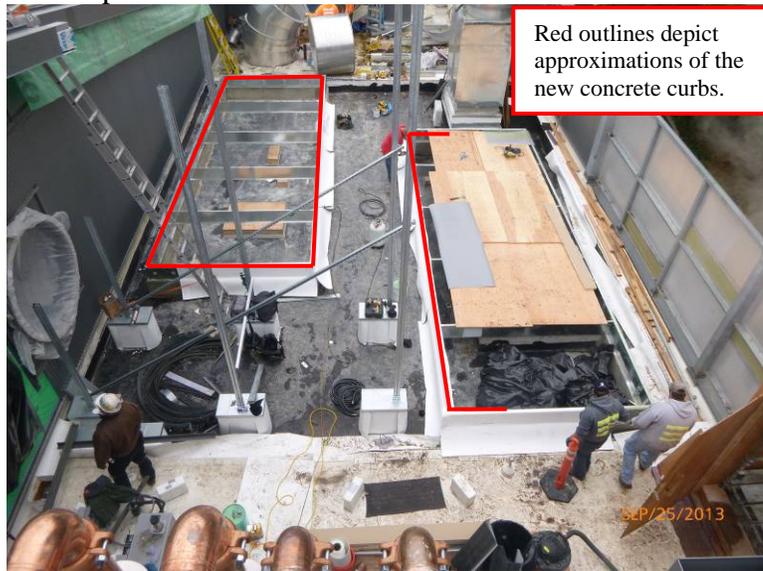


5.2b The seams in the upper half of the baseflashing membrane are welded utilizing a hand-held hot air welder and silicone roller to promote adhesion. Corners are welded on the inside with the membrane turning approximately 2-inches down into the interior of the curb. No labels are observed for the Firestone TPO membrane on site at this time.



Continued from Item 5.2b on the previous page.

5.2c Per conversation with Rich Kerns (Foreman, QCR) the concrete that was recently poured is still green (or curing of moisture) and that the vapor retarder layer is to be installed tomorrow (9/26/2013) to continue the temporary roof up the new curbs. Also per conversation a 20 ton crane is scheduled for Friday of this week which means that the baseflashing is to be installed as soon as possible. Recommended that the new concrete is allowed to cure prior to installing asphaltic roofing. Item is provided as an observation.



5.3 The upper steep slope roof above the Natatorium Roof is cut out to accommodate new HVAC units that are too tall for the area. Recommended that Green Guard C500 weather resistant barrier (WRB) at the soffit is continuous and wrapped up the fascia sequenced with the vapor retarder layer (beneath the metal roof) lapping over. (See *New Problems/Solutions Item 5.7 below*)



Overview of the sawcut at the upper sloped roof taken facing east.

Continued from Item 5.3 on the previous page.

5.3a The existing metal fascia is retained and re-installed with two rows of gasketed fasteners at approximate 12-inch intervals.



5.3b The WRB and vapor retarder layer are not continuous and the sheet metal is installed over bare wood at the fascia. Recommend that the sheet metal is removed the WRB continued onto the fascia with new self-adhered roof membrane lapping over to complete the air barrier. Carlisle WHT 300 is previously installed below the metal roofing. *(See New Problems/Solutions Item 5.7 below)*



5.4 At the upper roof above the chiller room the temporary vapor retarder layer is installed with a glazing of hot asphalt over. Per conversation with Rich (Foreman, QCR) the temporary roof consists of John Manville Type 1V two-ply set in moppings of Type IV hot asphalt. Standing water is observed at 1/2-inch approximate depth over the vapor retarder layer.



Overview of the roof above the chiller room taken facing east.

5.5 The overview photo is taken at this writer's departure from the site visit and depicts progress.



New Problems/Solutions:

5.6 The roof drain overflow at the northwest corner of the Natatorium Roof is plugged. This writer cannot verify why the roof drain is plugged during this site visit. Recommend that the overflow is unplugged in the event of a heavy rain and that the drains are protected from debris entering and clogging the drainage pipes.



5.7 The WRB and vapor retarder layer are not continuous and the sheet metal is installed over bare wood at the fascia. Recommend that the sheet metal is removed the WRB continued onto the fascia with new self-adhered roof membrane lapping over to complete the air barrier. Carlisle WHT 300 is previously installed below the metal roofing.



5.8 The vapor retarder layer at the Natatorium Roof is damaged in general. The construction team has been aware that construction sequencing would more than likely damage the vapor retarder layer. Per conversation with Rich Kerns (Foreman, QCR) the temporary roof/ vapor retarder layer is to be repaired with moppings of hot asphalt and plysheet as needed during construction.



5.9 TPO wrapped curbs are installed at the Natatorium Roof. Supports for the new ductwork are bolted through the membrane at the top of the curb. Recommend that waterblock (Firestone S20) sealant is injected into the bolt penetrations and that the unistrut plate is embedded into sealant to prevent water intrusion and subsequent damage to the new roof.



Incomplete/Unaddressed/Problematic Issues from Previous Reports:

(Items will be updated and removed as addressed)

4.6 At the southwest corner of the Natatorium Roof, voids are observed in the temporary roof/ vapor retarder layer. Per conversation with Rich Kerns (Foreman, QCR) these locations are to be repaired during this workday.

Update FR#05 – 09/25/2013: Item is closed. Roof cement appears to have been applied at the fishmouths.



2.4 Per Wetherholt recommendation, the existence of a vapor retarder layer should be verified at the adjacent roof located south of the Natatorium Roof. If the adjacent roof was installed without a vapor barrier there is a possibility that water vapor may transfer over into the new roof assembly and damage the components. Per conversation with Anton Woody (GC, Holmberg) this is out of the scope of his contract but the construction team is aware of this issue.

Update FR#03 – 09/13/2013: Item is unresolved

Update FR#04 – 09/19/2013: Item is unresolved

Update FR#05 – 09/25/2013: Item is unresolved. No work is performed to open up this roof area yet.



Overview of the separator curb at the south end of the Natatorium Roof taken facing south.

CASC Roof Progress Plan / Locator Map:

**Please note that areas or locations denoted are approximate.*

LEGEND:



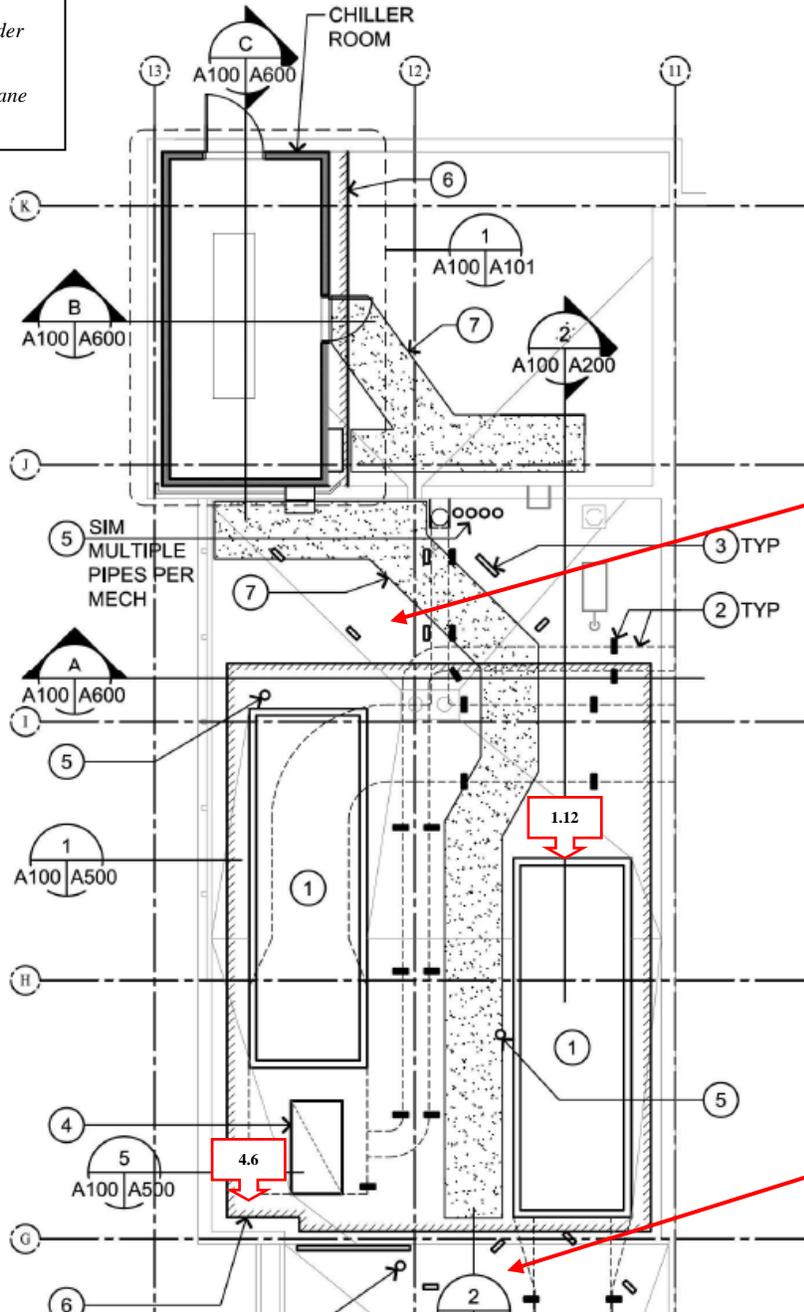
Problem Item



Installed through Vapor Retarder



Installed through TPO Membrane



North of this line (approx.) the remainder of the Natatorium roof is wet and damaged as an existing condition.

Recommend verifying the presence of a vapor retarder layer over the deck south of Natatorium Roof.

-End of Report-