

LORAIN COUNTY • ROOF EVALUATION 2011 REPORT

CRITICAL/URGENT (1-3 YEARS) INTERMEDIATE (3-5 YEARS) LONG TERM (5-9 YEARS) RECOMMENDED 2011 ACTION

8/18/2011

RECORD CENTER & EMERGENCY SERVICES BUILDING

320 N. Gateway Blvd.  
Elyria, Ohio



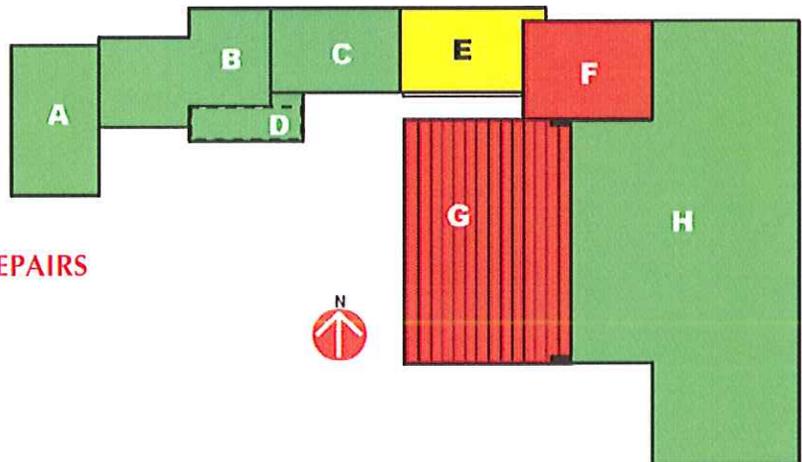
TOTAL BUILDING ROOF AREA .. 32,311± S.F.\*

\* Owner Provided Information

2012 GUESSTIMATE COST FOR ROOF REPLACEMENT

Roof Section F and Section G:

\$ 145,000 to \$ 175,000



GUESSTIMATE COST FOR ROOF REPAIRS

Roof Section H:

\$ 5,000 to \$ 9,000

RECOMMENDATIONS

- Sections A – D: NO WORK required except yearly PM 12-15 Years
- Section E: Inspect and repair as needed, including PM. Paint gutters. 3-5 Years
- Section F: Total REPLACEMENT. 1-3 years
- Section G: Total IMMEDIATE REPLACEMENT 0-Years
- Section H: Immediate Flashing Repairs, Install heat cables, 7-10 Years [REPAIRS]  
Aggressive Preventative Maintenance Program.

• **FIELD EVALUATION:** (6/29/11)

1. **Section A:** totally adhered membrane in very good condition no work required.
2. **Section B:** totally adhered membrane in very good condition no work required.
3. **Section C:** totally adhered membrane in very good condition no work required.
4. **Section D:** totally adhered membrane in very good condition no work required.
5. **Section E:** totally adhered membrane in fair condition with some minor repairs required.
  - a. The gutter is beginning to show signs of rust and should be cleaned and painted.
6. **Section F;** Totally adhered membrane in poor condition. Found puncture and there is a lot of wet insulation. There are two roofs in place.
7. **Section G;** this is a sloped roof that has a cap ply of a modified membrane installed over at least three other roofs with no insulation within the system.
  - a. There is a saddle located on the west side which is in total failure.
  - b. This roof should be removed down to the deck and a new roof installed.
8. **Section H;** this roof is a conventional BUR roof with a 4-ply roof installed over 1" perlite insulation.
  - a. The deck is a concrete deck.
  - b. The flashing needs some minor repairs and will need continuous maintenance.
  - c. Roof appears to be in good condition. Some slippage of bitumen which may be affecting the plies
  - d. This roof drains through scuppers and heat cables should be installed to keep them open during the winter months.

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■ 2011 ROOF INSPECTION (By *RMCS* - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 1 -4)



**1-A** Overview of this section of roof. We started at the west side and worked our way across.



**2-A** Found a puncture in roof which we repaired. This is a newer roof and in good condition.



**3-B** Overview of this section of the roof. This is a newer roof and in good condition.



**4-C** Overview of this section of the roof. The arrow is pointing to an older roof and is not part of this phase

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■ 2011 ROOF INSPECTION (6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 5 -8)



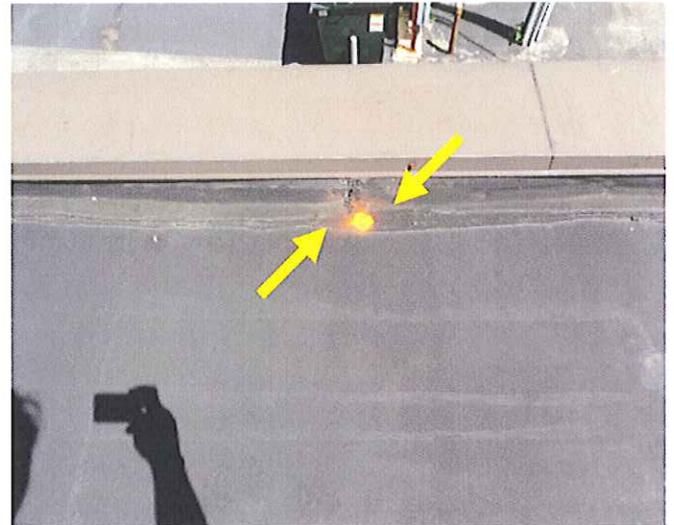
**5-C** Overview of this section of the roof which is a newer roof and in good condition.



**6-E** This is an older roof which is in fair condition.



**7-E** This is an older roof which is in fair condition.



**8-E** Found an opening at the base tie in.

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■ 2011 ROOF INSPECTION (By **RMCS** - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 9 -12)



**9-F** This is the last section of rubber. There is wet insulation and we found a puncture in the roof which we repaired.



[Redacted]



**11-D** This is a lower rubber roof that is covered by the metal canopy.



**12-F** Improperly installed lines which are most likely a source of leaks.

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■ 2011 ROOF INSPECTION (By **RMCS** - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 13-16)



**13-F** Someone attempted to repair a seam using what appears to be a trowel grade of asphaltic



**14-F** Found a puncture and this was repaired



**15-F** Test cut showing two inch Isocyanurate insulation that is 100% saturated over an existing built up roof



**16-F** I could not test cut the lower roof due to the amount of moisture between the two roofs.

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■ 2011 ROOF INSPECTION (By **RMCS** - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 17-20)



**17-G** This roof is a modified membrane with an aluminum coating.



**18-G** The test cut shows a concrete deck with 2 – 3 conventional BUR roofs and then a base sheet and modified was torched to the roof.



**19-G** Improper flashing details and most likely is allowing water in the system.



**20-G** Pitch pocket that is open

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■ 2011 ROOF INSPECTION (By **RMCS** - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 21-24)



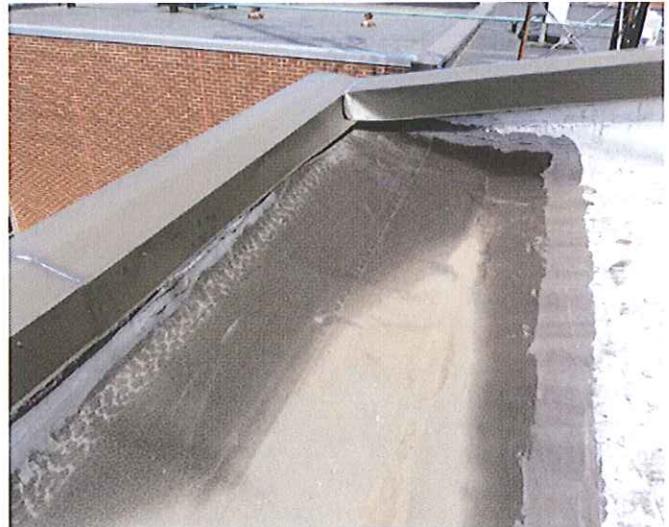
**21-G** Someone attempted to install some tapered insulation and a repair using a modified membrane. This is a very poor installation and is in total failure and should be replaced.



**22-G** The flashing has fallen down allowing substantial water between the roofs.



**23-G** There is no flow at the laps which is problematic

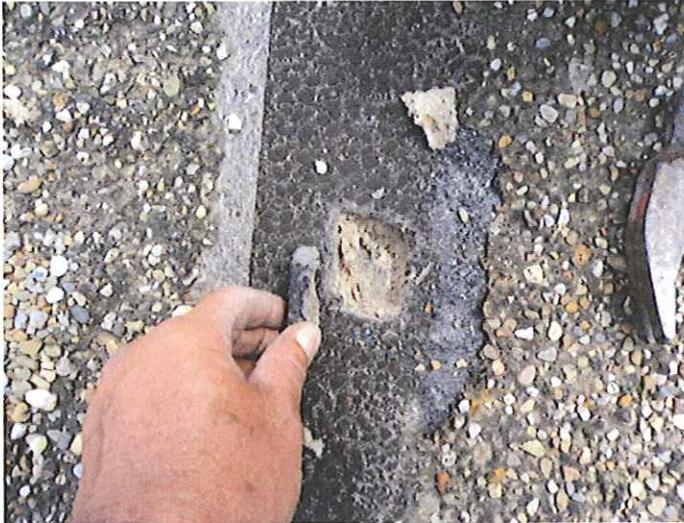


**24-G** No Flashing was installed and the top of the ply is open and allowing water in.

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■ 2011 ROOF INSPECTION (By **RMCS** - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 25-28)



**25-H** Upper school roof test cut showing concrete deck, 1" perlite insulation and a 4-ply asphalt & gravel



**26-H** Overview of the roof. There is some evidence of the top pouring sliding due to the slope and improper use of type of asphalt



**27-H** Showing the different details



**28-H** Aftermarket installation that did not use a cant strip at the angle change.

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■ 2011 ROOF INSPECTION (By **RMCS** - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 29-32)



**29-H** The top of the flashing does not have a metal counter flashing and is open.



**30-H** Large opening at the top of flashing which is allowing water to get in and because of the concrete deck is ruining your insulation but not showing up as a leak



**31-H** Concrete ledge that appears to be in good condition.

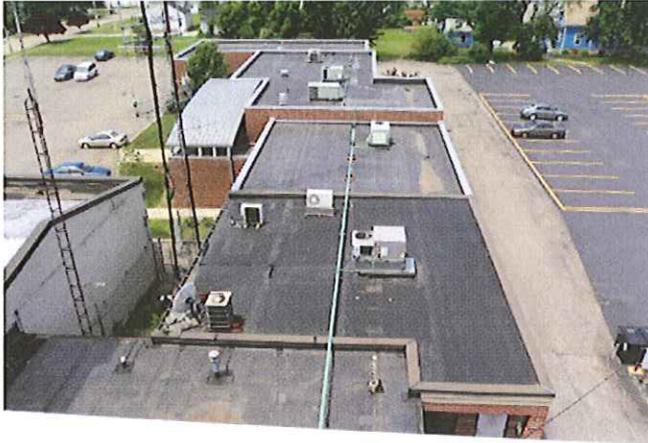


**32-H** Overview of the roof

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■ 2011 ROOF INSPECTION (By **RMCS** - 6/29/2011)

FIELD PHOTOGRAPHS (Cont'd) • (Photos 33-35)



**33-H** Overview of the lower roofs. We started our inspection at the far end



**34-H** This roof drain to scuppers that have no heat cables. This roof could build up a substantial amount of water during the winter months



**35-H** Note the top pouring of asphalt is sliding due to improper use of the correct type of asphalt needed for this slope of roof. This is probably affecting the plies as well.