

Inspection Report



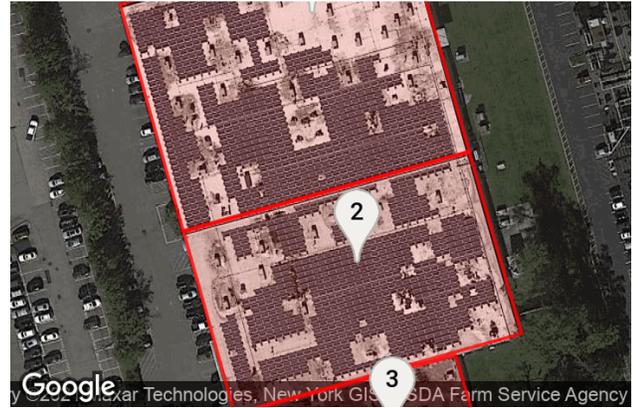
Prepared For:

SAMPLE

Site Overview

Total Sections: 3

Total Sq/Ft: 106,225



Map	Section Name	Sq/Ft	Grade
1	Section 1	51,503	C
2	Section 2	41,524	C
3	Section 3	13,198	D

Section Overview

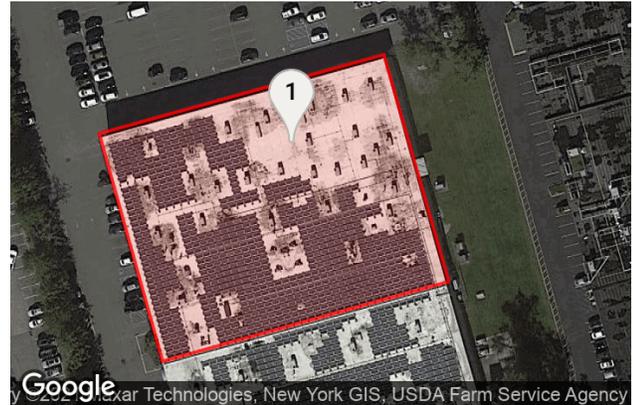
Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



north



east



south



west

Observations

Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Drainage 11-8", 2 Of the 8 are retrofit drains, 9-8" are cast iron internal drains.



Plumbing vents 4-4"



Gravity vent 2-2 x 3, 2-3 x 8



EF 2-3 x 3

Observations

Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

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J vents 1-3 x 4



RTU 24- 4 x 8



HS 4-12"



Squirrel cage EF 4-8-4' equipment rails 4- 2 x2 curbs

Observations

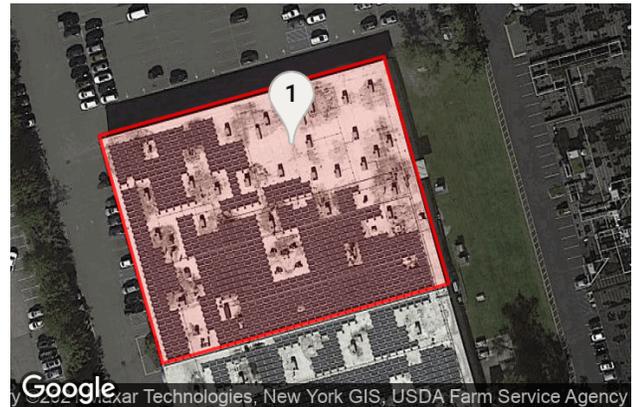
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Overall Grade: C

Inspection Date: 04/19/2021

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Pitch pockets 2-6" potals



EF 1-3 x3, 2-3-5 x5



Solar Array covers 90% of roof system



Condenser units 2-8'long 1- 2 x 2 curb

Observations

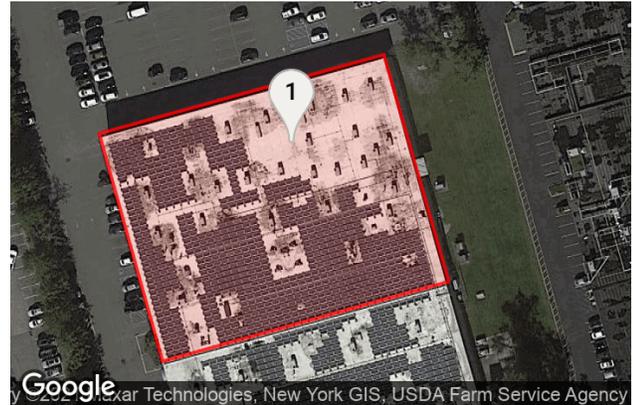
Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



EJ divides sections 1&2 253'



Solar array ballast blocks disintegrating



Edge metal 6" face



Roof Sketch

Deficiencies

Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Curb - Abandoned

Quantity: 2 EA

Deficiency:

Units are removed from abandoned curb leaving the curb open for roof leaks.

Corrective Action:

Remove existing curb, install steel decking, install matching insulation, install waterproofing membrane to match existing roof system.

Estimated Repair Cost:

\$1,400



Membrane - Temporary Repair

Quantity: 30 EA

Deficiency:

Leak location detected in the roof system allowing water to enter into the building.

Corrective Action:

Clean the area to the best of our ability and apply water proof sealant to temporarily solve the roof leak.

Estimated Repair Cost:

\$3,750

Deficiencies

Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Drainage-Clogged drain screen

Quantity: 11 ea

Deficiency:

Debris collected in drain screen.

Corrective Action:

Remove existing drain screen thoroughly clean and re-install

Estimated Repair Cost:

\$440

Summary

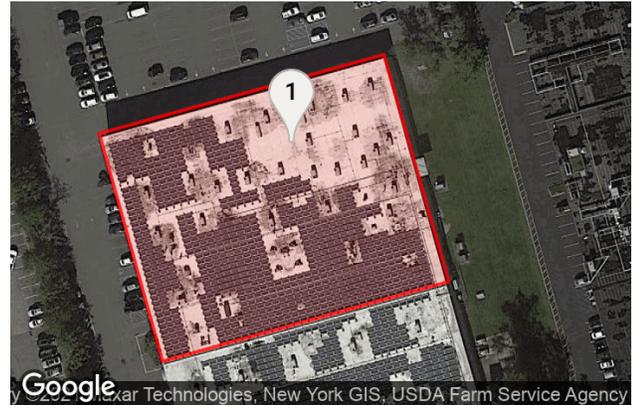
Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Condition Summary

Membrane:	C
Flashings:	C
Sheet Metal:	B-
<hr/>	
Overall:	C

- A Roof is "New" or in "Like New" condition.** Continue to monitor and maintain.
- B Roof is "Good" condition.** General repairs may be required and a maintenance program may minimize unnecessary leaks
- C Roof is in "Fair" condition.** The roof is beginning to show age-related deficiencies, or is a newer roof that is not performing as expected. A maintenance program may help prevent unnecessary leaks and minimize repair costs.
- D Roof is in "Poor" condition and is nearing the end of its useful life.** Repairs could help reduce unexpected leaks, depending on the severity.
- F Roof has failed.** The roof has exceeded its expected service life. While it may be possible to address active leaks, it should be assumed that leaks will continue to develop.

Estimated Replace: 2026

Recommendations:

The existing roof system is a TPO thermoplastic membrane mechanically attached with plates and screws to the steel substrate. There are approx. thirty (30) areas of temporary repairs completed with caulking through out the roof system. This might have been done as the existing TPO is no longer weldable.

Solar covers 90% of this roof section. The array is ballasted with cinder blocks, the existing cinder blocks are degrading/ disintegrating. These blocks overtime left to decompose will no longer function as ballast thus allowing the array to potentially blow off the roof system.

The roof system is very dirty and has algae in large ponding areas as the solar array is hindering the positive drainage of the roof system. The drain screens are in need of cleaning and must be maintained every three (3) months to ensure positive drainage of the roof system.

With the implementation of a service and maintenance program this roof system should perform should perform as designed for the next 6 to 8 years.

Estimated Repair Cost: \$5,590

Estimated Replacement Cost: \$360,521

Budget Module

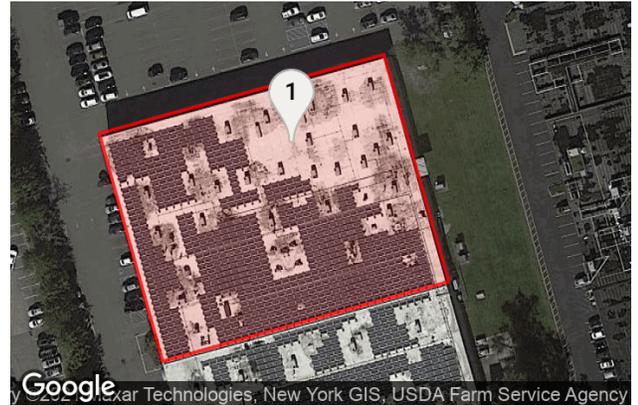
Section: Section 1

Size: 51,503

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



1 - Section 1 (51,503 SF) Grade C

Deficiencies	Qty	Emergency	Proactive	Replacement
Curb - Abandoned	2 EA		\$1,400	
Membrane - Temporary Repair	30 EA		\$3,750	
Drainage-Clogged drain screen	11 ea		\$440	
Full Replacement	51,503 SF			\$360,521
Total		\$0	\$5,590	\$360,521

Composition

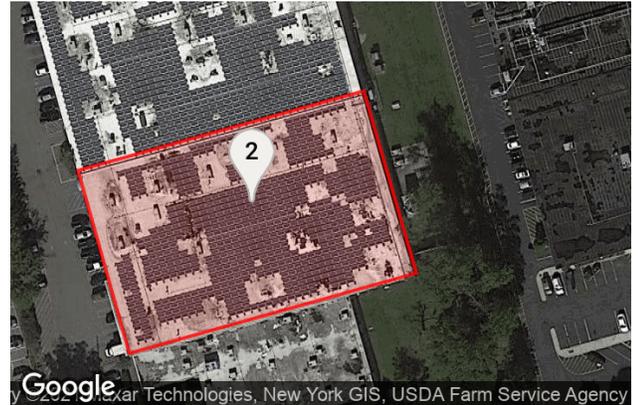
Section: Section 2

Size: 41,524

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



1

No test cut performed during inspection It is believed the existing roof system is PVC membrane over 2" EPS insulation over steel deck substrate.

Section Overview

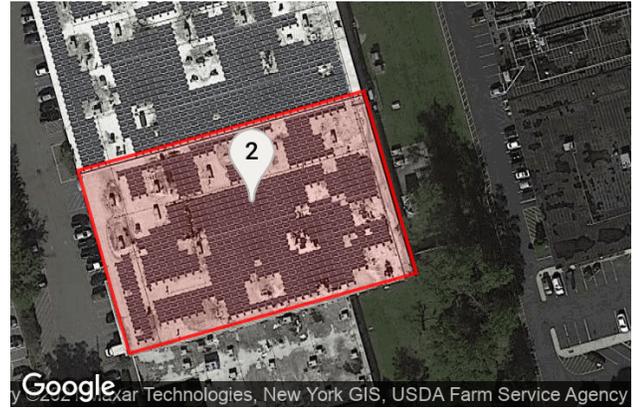
Section: Section 2

Size: 41,524

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



east



south



west



north

Observations

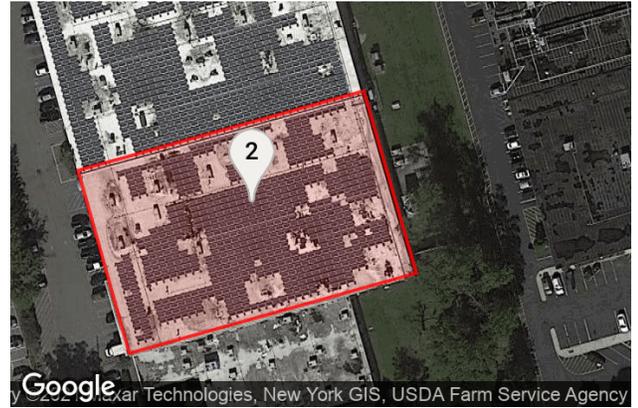
Section: Section 2

Size: 41,524

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Drainage 10- 4"



RTU 7-4 x 8



Gravity vent 1-5 x 6, 1-4 x 10., 1-5 x5



Hs 7- 12

Observations

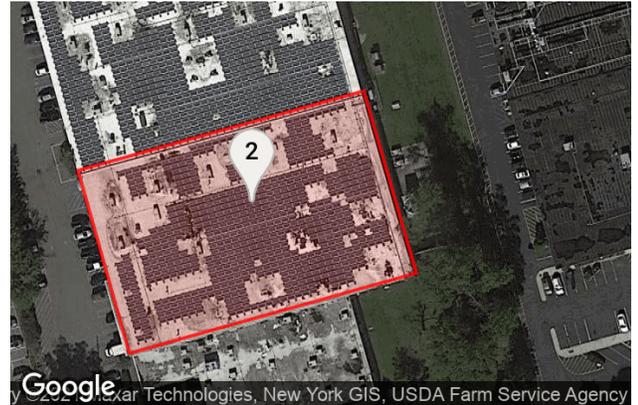
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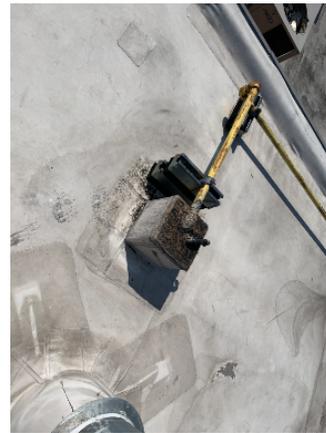
Solar array ballast blocks disintegrating



Plumbing vents 3-3"



Solar array covers 90% of the roof system



Pitch pockets 3- 6"

Observations

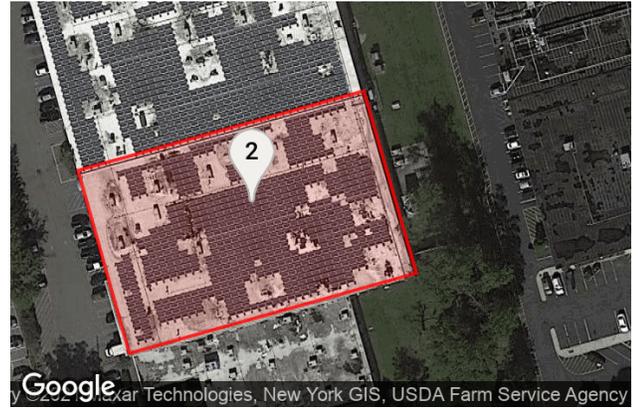
Section: Section 2

Size: 41,524

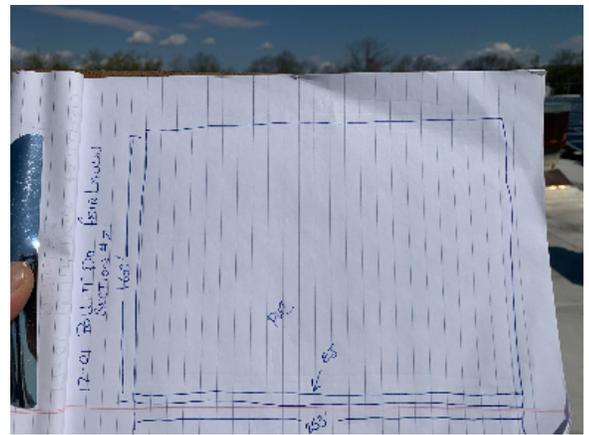
Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Metal edge 6" face



Roof Sketch

Deficiencies

Section: Section 2

Size: 41,524

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Curb - Abandoned

Quantity: 3 EA

Deficiency:

Units are removed from abandoned curb leaving the curb open for roof leaks.

Corrective Action:

Remove and discard curb from roof system. Install steel decking, install matching insulation, install TPO membrane.

Estimated Repair Cost:

\$2,100



Curbs - Termination bar seal (Emergency)

Quantity: 12 LF

Deficiency:

The seal over the termination bar around the perimeter of the curb appears to be degraded and is prone to allow water to enter into the roof system.

Corrective Action:

Either trowel out caulking and re-apply or remove termination bar and re-install around the perimeter of the curb.

Estimated Repair Cost:

\$240

Deficiencies

Section: Section 2

Size: 41,524

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Penetrations - Pitch pan failing (Emergency)

Quantity: 1 EA

Deficiency:

Pitch pan failing due to no flashings installed to the portals curb, portals caulked to roof system.

Corrective Action:

Install new TPO flashings per the manufacturers guidelines.

Estimated Repair Cost:

\$350



Drainage-Clogged drain screen

Quantity: 11 ea

Deficiency:

Debris collected in drain screen.

Corrective Action:

Remove existing drain screen thoroughly clean and re-install

Estimated Repair Cost:

\$440

Summary

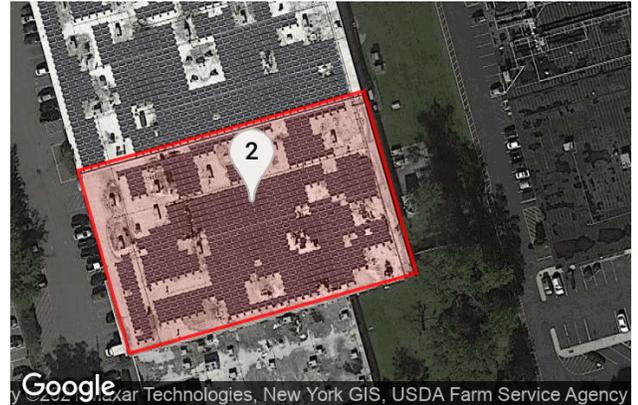
Section: Section 2

Size: 41,524

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Condition Summary

Membrane:	C-
Flashings:	C-
Sheet Metal:	B-
<hr/>	
Overall:	C
Estimated Replace:	2026

- A Roof is "New" or in "Like New" condition.** Continue to monitor and maintain.
- B Roof is "Good" condition.** General repairs may be required and a maintenance program may minimize unnecessary leaks
- C Roof is in "Fair" condition.** The roof is beginning to show age-related deficiencies, or is a newer roof that is not performing as expected. A maintenance program may help prevent unnecessary leaks and minimize repair costs.
- D Roof is in "Poor" condition and is nearing the end of its useful life.** Repairs could help reduce unexpected leaks, depending on the severity.
- F Roof has failed.** The roof has exceeded its expected service life. While it may be possible to address active leaks, it should be assumed that leaks will continue to develop.

Recommendations:

The existing roof system is a PVC thermoplastic membrane mechanically attached with plates and screws to the steel substrate. Solar covers 90% of this roof section. The array is ballasted with cinder blocks, the existing cinder blocks are degrading/ disintegrating. These blocks overtime left to decompose will no longer function as ballast thus allowing the array to potentially blow off the roof system.

The roof system is very dirty and has algae in large ponding areas, as the solar array is hindering the positive drainage of the roof system. The drain screens are in need of cleaning and must be maintained every three (3) months to ensure positive drainage of the roof system.

The pitch pocket (with no flashing) should be addressed, as well as the large heat stack where the existing sealant is failed and letting water into the roof system.

With the implementation of a service and maintenance program this roof system should perform should perform as designed for the next 6 to 8 years.

Estimated Repair Cost: \$3,130

Estimated Replacement Cost: \$290,668

Budget Module

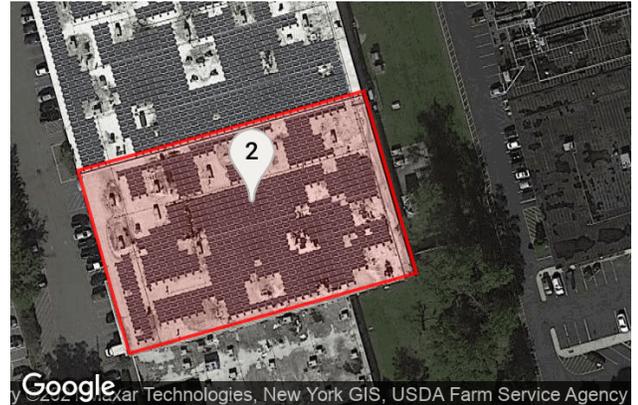
Section: Section 2

Size: 41,524

Overall Grade: C

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



2 - Section 2 (41,524 SF) Grade C

Deficiencies	Qty	Emergency	Proactive	Replacement
Curb - Abandoned	3 EA		\$2,100	
Curbs - Termination bar seal	12 LF	\$240		
Penetrations - Pitch pan failing	1 EA	\$350		
Drainage-Clogged drain screen	11 ea		\$440	
Full Replacement	41,524 SF			\$290,668
Total		\$590	\$2,540	\$290,668

Composition

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



1

No test cut performed during inspection. It is believed the existing roof system is PVC membrane over 2" Polyisocyanurate insulation over steel deck substrate.

Section Overview

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



west



east



south



north

Observations

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Drainage 2-4", 2-6"



Plumbing vents 2-2", 2-4", 2-3"



EF 2-2 x 2, 1-3 x 3



RTU 4-4 x 7, 10-4 x 5

Observations

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Condenser units 2- 5 x5, w 2-6" portals



Gravity vent 2-3 x 5



Raised platform 4-4" pipes, 4-1" conduits



Natural gas line feed to RTU

Observations

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



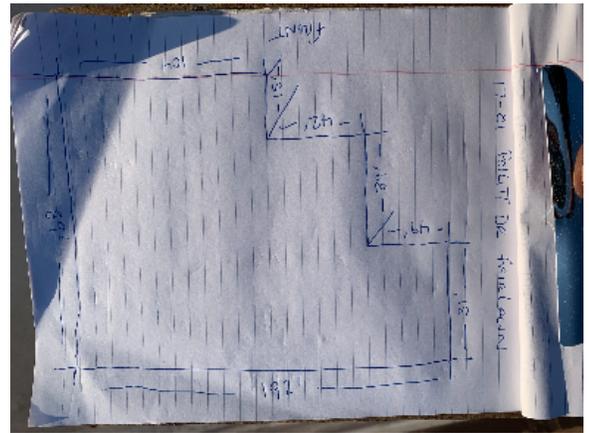
Main gasline at upper roof wall



Reglet flashing at high wall to Section 2



Edge metal 6" face



Roof Sketch

Deficiencies

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Debris - Material left on roof

Quantity: 10 EA

Deficiency:

Loose debris has a high probability of blowing around on the roof and causing damage to the waterproofing membrane.

Corrective Action:

Remove loose debris from roof area and include as part of routine preventative maintenance. Inspect and repair damaged membrane resulting from wind blown debris. Price is per bag.

Estimated Repair Cost:

\$750



A/C - Wood Runner Damaged Membrane

Quantity: 12 EA

Deficiency:

The existing wood runner is damaging the existing roof membrane.

Corrective Action:

Repair the roof surface where the damage occurs. Install a new wood runner and roof pad.

Estimated Repair Cost:

\$3,000

Deficiencies

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Penetrations - Abandoned penetration

Quantity: 0 EA

Deficiency:

Pitch pan and penetrations have been abandoned. The abandoned penetrations allow water to infiltrate the roof flashing, roof system and building interior.

Corrective Action:

Remove abandoned pitch pan or penetration and repair roof membrane using compatible materials.

Estimated Repair Cost:

\$0



Perimeter - Counter Flashing Caulk Failure (Emergency)

Quantity: 192 LF

Deficiency:

Sealant along counter flashing is failed or failing and allowing water to migrate into the roof system.

Corrective Action:

Remove the old caulking, wire brush as needed, prime the area and install new sealant tooled to ensure water tightness.

Estimated Repair Cost:

\$2,880

Deficiencies

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Debris - Trash on Roof

Quantity: 10 EA

Deficiency:

Loose debris has a high probability of blowing around on the roof and causing damage to the waterproofing membrane.

Corrective Action:

Remove loose debris from roof area and include as part of routine preventative maintenance. Inspect and repair damaged membrane resulting from wind blown debris.

Price is per bag.

Estimated Repair Cost:

\$750



Membrane- Sheet is failing (Emergency)

Quantity: 1 ea

Deficiency:

The membrane due to age and UV is deteriorating.

Corrective Action:

Clean, prepare the area (s) as to accept a new layer of membrane.

Estimated Repair Cost:

\$200

Deficiencies

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Drainage - Missing drain bolts

Quantity: 4 EA

Deficiency:

The existing drain screen is not secured to the roof system. As the drain assembly is a membrane retrofit drain.

Corrective Action:

Install PVC straps to roof system and screen, as to keep screen in place.

Estimated Repair Cost:

\$700

Summary

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



Condition Summary

Membrane:	D-
Flashings:	D-
Sheet Metal:	C-
<hr/>	
Overall:	D
 Estimated Replace:	 2024

- A Roof is "New" or in "Like New" condition.** Continue to monitor and maintain.
- B Roof is "Good" condition.** General repairs may be required and a maintenance program may minimize unnecessary leaks
- C Roof is in "Fair" condition.** The roof is beginning to show age-related deficiencies, or is a newer roof that is not performing as expected. A maintenance program may help prevent unnecessary leaks and minimize repair costs.
- D Roof is in "Poor" condition and is nearing the end of its useful life.** Repairs could help reduce unexpected leaks, depending on the severity.
- F Roof has failed.** The roof has exceeded its expected service life. While it may be possible to address active leaks, it should be assumed that leaks will continue to develop.

Recommendations:

The existing roof system is a PVC thermoplastic membrane mechanically attached with plates and screws to the steel substrate. This roof section ponds a lot of water due to poor drainage system in place. This roof section only has four (4) drains on it. The roof system is covered with debris from trees. The existing drain screens are clogged as well as not attached to the drain assemblies as there is no clamping rings present. The drain assemblies are the manufacturers membrane retrofit drains sold with the system warranty.

The drain screens should be strapped to the roof system utilizing the manufacturers PVC membrane and bolts. The drain screens are in need of cleaning and must be maintained every three (3) months to ensure positive drainage of the roof system.

All the roof systems walk pad from the walk way and at the mechanical units are piled up in the middle of the roof system. These items should be removed from the roof system, as they have a great possibility of blowing across the roof system and causing damage. Some of the walk pads have already blown off the roof system and are laying on the east side lawn.

The two (2) condenser units have concrete blocks supporting the units which is point loading the roof system as the load is not evenly disbursed. The concrete blocks should be removed and discarded and 6" x 6" wood sleepers installed to evenly disburse the load of the units.

There is one (1) abandoned vent pipe that should be removed and cap off with PVC membrane.

There are signs of the existing PVC membrane beginning to fail as the top of the membrane is creasing. This condition should be monitored moving forward so you don't experience un wanted leaks.

With the implementation of a service and maintenance program this roof system should perform should perform as designed for the next 3 to 5 years.

Estimated Repair Cost: \$8,280

Estimated Replacement Cost: \$85,787

Budget Module

Section: Section 3

Size: 13,198

Overall Grade: D

Inspection Date: 04/19/2021

Inspected By: Walter Potvin



3 - Section 3 (13,198 SF) Grade D

Deficiencies	Qty	Emergency	Proactive	Replacement
Debris - Material left on roof	10 EA		\$750	
A/C - Wood Runner Damaged Membrane	12 EA		\$3,000	
Penetrations - Abandoned penetration	0 EA		\$0	
Perimeter - Counter Flashing Caulk Failure	192 LF	\$2,880		
Debris - Trash on Roof	10 EA		\$750	
Membrane- Sheet is failing	1 ea	\$200		
Drainage - Missing drain bolts	4 EA		\$700	
Full Replacement	13,198 SF			\$85,787
Total		\$3,080	\$5,200	\$85,787

Site Overview

Total Sections: 3

Total Sq/Ft: 106,225

- A Roof is "New" or in "Like New" condition.** Continue to monitor and maintain.
- B Roof is "Good" condition.** General repairs may be required and a maintenance program may minimize unnecessary leaks
- C Roof is in "Fair" condition.** The roof is beginning to show age-related deficiencies, or is a newer roof that is not performing as expected. A maintenance program may help prevent unnecessary leaks and minimize repair costs.
- D Roof is in "Poor" condition and is nearing the end of its useful life.** Repairs could help reduce unexpected leaks, depending on the severity.
- F Roof has failed.** The roof has exceeded its expected service life. While it may be possible to address active leaks, it should be assumed that leaks will continue to develop.



1 - Section 1 (51,503 SF) Grade C

Deficiencies	Qty	Emergency	Proactive	Replacement
Curb - Abandoned	2 EA		\$1,400	
Membrane - Temporary Repair	30 EA		\$3,750	
Drainage-Clogged drain screen	11 ea		\$440	
Full Replacement	51,503 SF			\$360,521
Total		\$0	\$5,590	\$360,521

2 - Section 2 (41,524 SF) Grade C

Deficiencies	Qty	Emergency	Proactive	Replacement
Curb - Abandoned	3 EA		\$2,100	
Curbs - Termination bar seal	12 LF	\$240		
Penetrations - Pitch pan failing	1 EA	\$350		
Drainage-Clogged drain screen	11 ea		\$440	
Full Replacement	41,524 SF			\$290,668
Total		\$590	\$2,540	\$290,668

3 - Section 3 (13,198 SF) Grade D

Deficiencies	Qty	Emergency	Proactive	Replacement
Debris - Material left on roof	10 EA		\$750	
A/C - Wood Runner Damaged Membrane	12 EA		\$3,000	
Penetrations - Abandoned penetration	0 EA		\$0	
Perimeter - Counter Flashing Caulk Failure	192 LF	\$2,880		
Debris - Trash on Roof	10 EA		\$750	
Membrane- Sheet is failing	1 ea	\$200		
Drainage - Missing drain bolts	4 EA		\$700	
Full Replacement	13,198 SF			\$85,787
Total		\$3,080	\$5,200	\$85,787

Budget Totals	Emergency	Proactive	Replacement
	\$3,670	\$13,330	\$736,976

Description	Amount
_____ Emergency	\$3,670.00
_____ Proactive	\$13,330.00

Terms and Conditions

Payment is due upon completion of work unless specified in another agreement. An invoice will be sent with documentation of work performed.

Work Authorization

I hereby authorize the work indicated in this document. I understand the minimum cost per service work order is \$500.

Signature: _____ Date: _____

Printed Name: _____ PO#: _____