

To Whom it May Concern:

The following is a Summary of the Findings and Recommendations of the Roof IR Condition Assessment:

### **ROOF CONSULTING FINDINGS:**

On a Thermal drone inspection was conducted on the above referenced property by during the hours of pm. The review was intended to provide a surface analysis of the roof system assemblies and note visible deficiencies.

#### **HISTORY**

At the time of the site visit, the pilot noticed some minor debris on the roof, and the roof had surface condensate line moisture near HVAC's (typical, but important to keep an eye on in the long term).

Type of roof: This is low-sloped (flat) roof of likely single-ply EPDM roofing systems membrane.

# SITE OVERVIEW

The roof of this building is in overall good condition; however, thermal anomalies were detected. An aerial overview of the site is provided as an attachment to this report. The following are the buildings and their corresponding roof system type:

■ LINK TO PHOTOS: LEAVE BLANK

# OBSERVED DEFICIENCIES

Below is a list of deficiencies found in the roof system. This list is not exhaustive. Deficiencies may exist but were not seen or noted.

Deficiency List: Appears to have some minor debris in corners and along the edges of the roof. There appears to be dirt near water lines and thermal indicates moisture near HVAC units. HVAC unit C2's surface moisture line extends from the unit and travels to the east wall of the building. A large thermal roof anomaly was detected along the North wall and smaller anomalies around A1, C2 and South wall in section B. HVAC units A1 and C2 appear warmer than other nearby units.

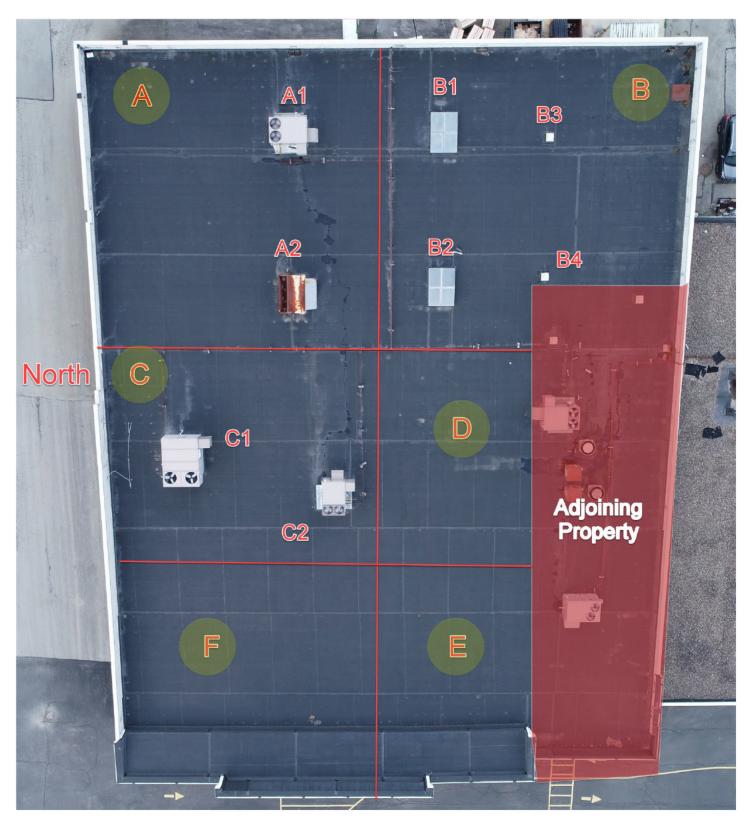
## **ROOFING CONCLUSIONS**

In conclusion, thermal anomalies were detected, especially along the length of the North side of the building, as well as, smaller areas in section A (near A1), B (near south wall) and C (near C2). Based on these thermal findings, the roof should be further evaluated for possible repair. Thermal images of this flat insulated roof do show moisture near HVAC units. The roof appears to have minor debris in corners and along the edges of building and appear to have dirt near water lines.

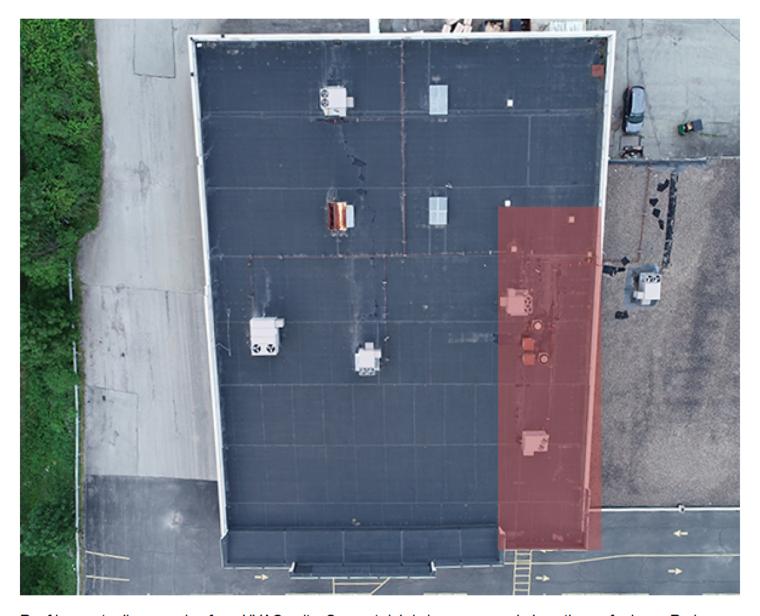
# **FURTHER RECOMMENDATIONS**

- 1. Evaluate roof for water leaks in the area of thermal anomalies.
- 2. Inspect HVAC (A1 and C2) units for failing components.
- 3. It is important to take care of any surface moisture near the HVAC units, clear off any dirt/debris. Accumulated dirt and debris can cause larger issues in the future if not removed and cleared regularly.





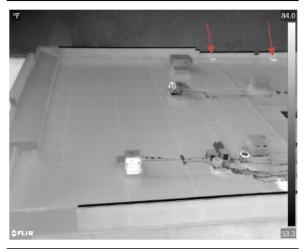
Front/West



Roof has water lines coming from HVAC units. Suspect debris in corners and along the roof edges. Red area indicates adjoining property and was not described in this report.



#1: VIEW FROM WEST (FRONT) RED ARROWS POINT TO POSSIBLE ANOMALY.



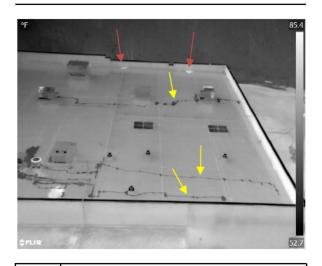
#3: VIEW FROM SOUTH SHOWING SECTIONS E,F,D. RED ARROWS POINT TO POSSIBLE ANOMALY.



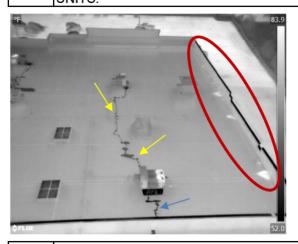
#2: VIEW FROM WEST (FRONT)



#4: VIEW FROM SOUTH SHOWING SECTIONS E,F,D.



#5: VIEW FROM SOUTH SHOWING SECTIONS A,B,D. RED ARROWS POINT TO POSSIBLE ANOMALY. YELLOW ARROWS INDICATE SURFACE MOISTURE FROM HVAC UNITS.



VIEW FROM EAST (BACK SIDE)
SHOWING SECTIONS A,C,D,E,F. RED
CIRCLE INDICATES POSSIBLE
ANOMALY ALONG NORTH WALL OF
STRUCTURE. MAYBE CONSISENT
WITH WATER TRAPED UNDER ROOF
MEMBRANE. YELLOW ARROWS
INDICATE SURFACE MOISTURE
FROM HVAC UNITS COMING FROM
C2. MOISTURE LINE (BLUE ARROW)
APPEARS TO BE COMING FROM A1,
BASED ON THERMAL SIGNATURE.

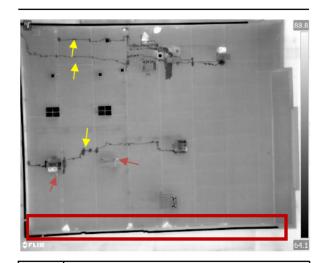
#7:



#6: VIEW FROM SOUTH SHOWING SECTIONS A,B,D

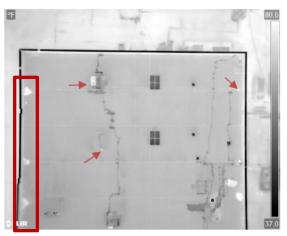


#8: EAST/BACK SIDE OF STRUCTURE SHOWING SECTIONS A,C,D,E,F. VISABLE WATER LINES AROUND HVAC UNITS.



BIRDS EYE VIEW OF STRUCTURE.
RED BOX INDICATES POSSIBLE
ANOMALY ALONG NORTH WALL OF
STRUCTURE. MAYBE CONSISENT
WITH WATER TRAPED UNDER ROOF
MEMBRANE. YELLOW ARROWS
(SECTIONS A AND B) INDICATE
SURFACE MOISTURE FROM HVAC
UNITS. RED ARROWS POINT TO
POSSIBLE ANOMALY UNDER A1 AND
A2. NOTE-FAN AREA ON A1 APPEARS
WARMER THAN THE OTHER HVAC
FANS. NO ANOMALIES SEEN IN
SECTION D,E,F.

#9:



RED BOX INDICATES POSSIBLE
ANOMALY ALONG NORTH WALL OF
STRUCTURE. MAYBE CONSISENT
WITH WATER TRAPED UNDER ROOF
MEMBRANE. RED ARROWS POINT TO
POSSIBLE ANOMALY UNDER A1, A2
AND SECTION B. NOTE-FAN AREA ON
A1 APPEARS WARMER THAN THE
OTHER HVAC FANS.

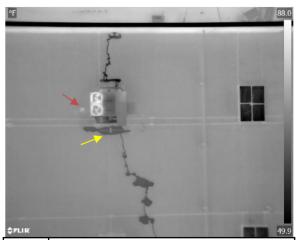
BIRDS EYE VIEW OF STRUCTURE.



#10: BIRDS EYE VIEW OF STRUCTURE.
VISABLE WATER LINES AROUND
HVAC UNITS IN SECTIONS A AND C.

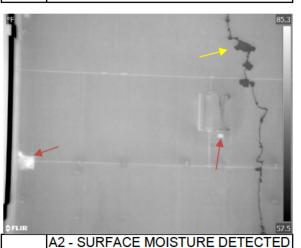


#12: BIRDS EYE VIEW OF STRUCTURE.
VISABLE WATER LINES AROUND
HVAC UNITS.



#13:

A1 – SURFACE MOISTURE
DETECTED ON WEST SIDE HVAC
UNIT (YELLOW ARROW). THIS LINE
OF SURFACE MOISTURE APPEARS
WARMER THAN THE MOISTURE LINE
NOTED ON THE EAST SIDE OF THE
UNIT. SUSPECT SURFACE MOISTURE
MIGRATED FROM HVAC UNIT C2.
POSSIBLE ROOF ANOMALY ON
NORTH SIDE OF A1. NOTE-FAN
AREA ON A1 APPEARS WARMER
THAN THE OTHER HVAC FANS.

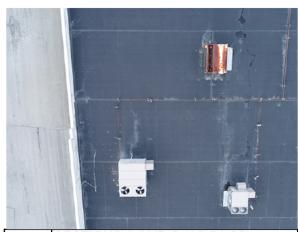


#15: (YELLOW ARROW). POSSIBLE ROOF ANOMALY ON NORTH SIDE WALL AND WEST SIDE OF UNIT.

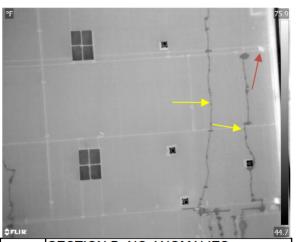


SECTIONS A AND B (A1, A2, B1, B2). VISABLE WATER LINES AROUND HVAC UNITS.

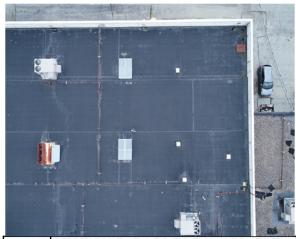
#14:



#16: SECTIONS A AND C (A2,C1,C2).
VISABLE WATER LINES AROUND HVAC UNITS.



#17: SECTION B- NO ANOMALIES
DETECTED AROUND B1,B2,B3,B4.
SURFACE MOISTURE DETECTED
FROM ADJOINING PROPERTY
(YELLOW ARROWS). POSSIBLE
ROOF ANOMALY ALONG SOUTH
WALL.

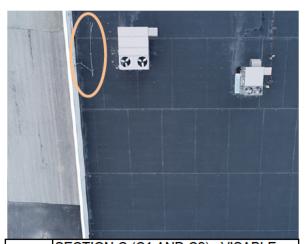


SECTION B (B1,B2,B3,B4). VISABLE WATER LINES FROM ADJOING PROPERTY HVAC UNITS.

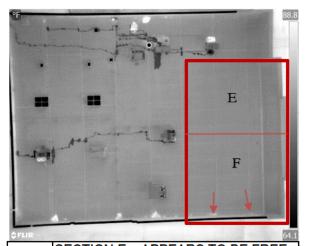
#18:



SECTION C - SURFACE MOISTURE
DETECTED ON EAST SIDE C2 HVAC
UNIT (YELLOW ARROW). POSSIBLE
#19: ROOF ANOMALY ALONG NORTH
WALL. NOTE-LEFT FAN AREA ON C2
APPEARS WARMER THAN RIGHT
FAN.



SECTION C (C1 AND C2). VISABLE
WATER LINES FROM BOTH HVAC
UNITS. DEBRIS ALONG NORTH SIDE
#20: EDGE OF ROOF (ORANGE CIRCLE).



#21: SECTION E – APPEARS TO BE FREE OF ANOMALIES, SECTION F-APPEARS TO HAVE ANOMALIES ALONG THE NORTH WALL.



#22: ALONG WEST WALL (ORANGE CIRCLE).