

RFP #18-02 for College-Wide Roof Repairs

Damage Report

Attachment 2

POLK STATE COLLEGE

DEFECT/DAMAGE LIST HURRICANE IRMA

- 1. MISSING DRAIN BASKET
- 2. DAMAGED DRAIN BASKET
- 3. LOOSE MEMBRANE AT DRAIN SUMP AREA
- 4. MINERAL SURFACING ERODED BY WIND DRIVEN RAIN
- 5. DAMAGED EXPANSION JOINT COVER
- 6. PUNCTURED MEMBRANE
- 7. CLOGGED DRAIN LOCATION
- 8. ROOF MEMBRANE POSSIBLY UPLIFTED FROM WINDS
- 9. DEBRIS ON ROOF
- 10. DAMAGE TO EQUIPMENT- VENTS, POWER VENTILATORS, HOODS
- 11. DAMAGE TO AC UNITS
- 12. LOOSE BASE FLASHINGS
- 13. DISPLACED OR DAMAGED METAL FLASHINGS
- 14. GUTTER/DOWNSPOUT DAMAGED
- 15. BILISTERS PRESENT IN MEMBRANE
- 16. DAMAGE TO BRICK WALL
- 17. DAMAGED THRU-WALL FLASHING
- 18. DAMAGE TO SHINGLE ROOF SYSTEM, BROKEN SHINGLES, MISSING FLASHING
- 19. MISSING SIGNAGE
- 20. WATER BEHIND BASE FLASHING IN SINGLE PLY ROOF SYSTEM
- 21. POSSIBLE IMPACT DAMAGE TO STUCCO FINISH

| Table 1 |
|---------|
|---------|

| BUILDING # | NAME | DEFECTS IDENTIFIED | COMMENTS | CAMPUS |
|------------|-----------------|--|----------------------------|-----------------|
| 1 | ADMIN | 7 and 9 | MINOR DEBRIS/ DRAIN | WINTER HAVEN |
| 2 | LEARNING RES | 9 | MINOR DEBRIS | WINTER HAVEN |
| 3 | SCIENCE | 9 and 10 | LIGHTNING PROT/HOOD/DEBRIS | WINTER HAVEN |
| 4 | FINE ARTS | 1, 2, 3, 4, 5, 6, 8, 10, 15, 16 and 17 | EXTENSIVE COATING | WINTER HAVEN |
| 6 | STUDENT CENTER | 4, 8, 9 and 10 | REPLACE HIGH ROOF/COATING | WINTER HAVEN |
| 7 | CHAIN OF LAKES | 7, 9 and 20 | BASE FLASHING REPAIR | WINTER HAVEN |
| 13 | MULTI SERVICE | 4, 7, 9, 10 and 19 | COATING ROOF | WINTER HAVEN |
| 19 | HEALTH CENTER | 9 | DEBRIS REMOVAL | WINTER HAVEN |
| 70 | REHAB HEALTH | 18 | SHINGLE REPAIRS | WINTER HAVEN |
| | | | TOTAL: | |
| 1 | ACADEMIC CENTER | 9, 11 and 18 | MINOR REPAIRS | LAKELAND CAMPUS |
| 2 | MAINTENANCE | 18 | MINOR REPAIRS | LAKELAND CAMPUS |
| 3 | LEARNING CENTER | 8, 9,10 and 18 | SHINGLE/MEMBRANE | LAKELAND CAMPUS |
| 4 | MAINT/STORAGE | 9, 11 and 19 | MINOR REPAIRS | LAKELAND CAMPUS |
| 5 | TECHNOLOGY BLD. | 9 | MINOR CLEAN UP | LAKELAND CAMPUS |
| 6 | MODULAR E | 18 | MINOR | LAKELAND CAMPUS |
| 11 | WELLNESS CENTER | 13 | MINOR REPAIR | LAKELAND CAMPUS |
| 12 | MODULAR A | 18 | MINOR REPAIR | LAKELAND CAMPUS |
| 13 | MODULAR B | 18 | MINOR REPAIR | LAKELAND CAMPUS |
| 14 | MODULAR C | 18 | MINOR REPAIR | LAKELAND CAMPUS |

| BUILDING # | NAME | DEFECTS IDENTIFIED | COMMENTS | CAMPUS |
|------------|-------------------------|--------------------|----------------------------|-----------------|
| 15 | MODULAR D | 18 | MINOR REPAIR | LAKELAND CAMPUS |
| | CENTER PUBLIC SAFETY | | NO DAMAGE | |
| | AIRSIDE WEST | | AC DAMAGE/STUCCO | |
| | AIRSIDE EAST | | AC DAMAGE | |
| | CLEAR SPRINGS | | NO DAMAGE | |
| | | | TOTAL | |
| | | | TOTAL ALL CAMPUS LOCATIONS | |

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WST BUILDING # 6 WINTER HAVEN CAMPUS

DATE: 9/16/17

Active leaks: No active leaks were noted in interior spaces inspected. No active leaks have been reported.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the # and type of damage is also identified in the report.

Item # 4- Mineral surfacing eroded by wind driven rain.

Item # 8- Roof membrane possibly uplifted from winds.

Item # 9- Debris on roof.

Item # 10- Damage to equipment, vents, power ventilators or hoods.

Note: Item # 4 appears in several locations on the lower roof areas, generally the Northeast areas.

Note: Item # 8 is isolated on lower roofs and extensive on the high roof. Approximately 35% of the high roof appears to have lifted during the storm. Membrane remains sound but has detached from the substrate.

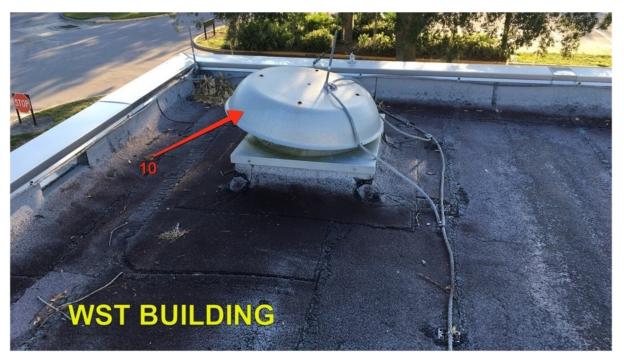
General Observations:



1 of 9

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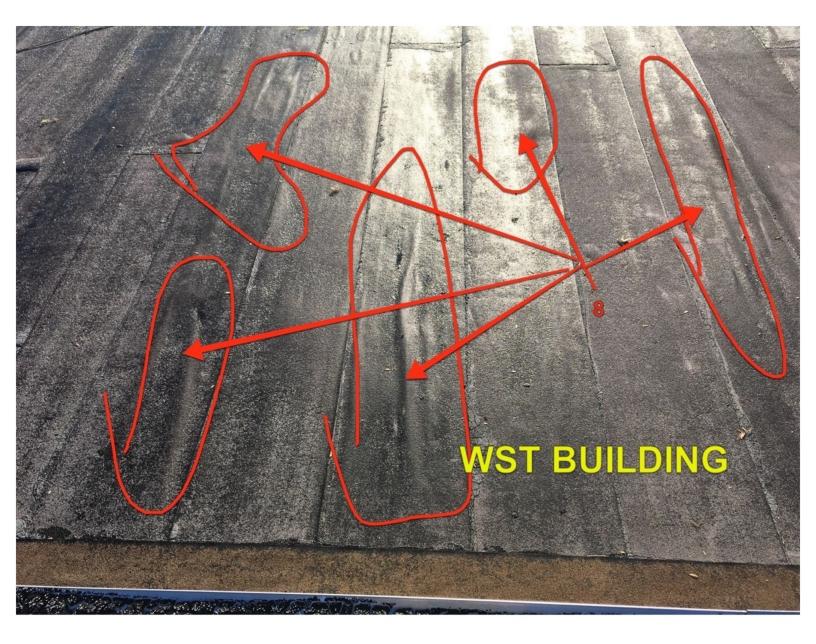






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Upper roof area.

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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WSC BUILDING # 3 WINTER HAVEN CAMPUS

DATE: 9/15/17

Active Leaks: No active leaks were noted in the spaces available for inspection. Class rooms received a "window view look" from door.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the # and type of damage is also identified in the report.

Item # 9- Isolated vegetation debris was present on the roof area.

Item # 10- Damage to equipment- vents, power ventilators, hoods. The cap to a stainless steel vent stack was missing from its attachment anchor.

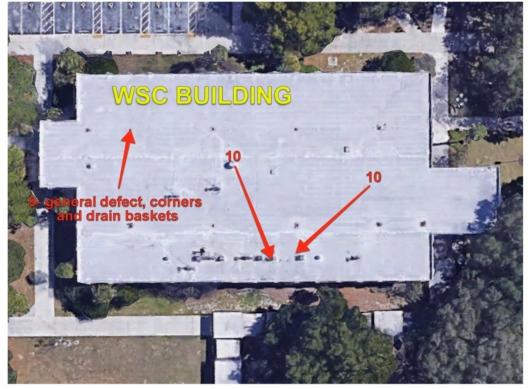
Note: No damage was noted to membrane from wind borne debris. Mineral surfacing appears in place with no major issues. Roof system appeared from walking observation to be well bonded to the substrate.

General Observations:









POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WRH BUILDING # 70 WINTER HAVEN CAMPUS

DATE: 9/15/17

Active Leaks: No active leaks were noted in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

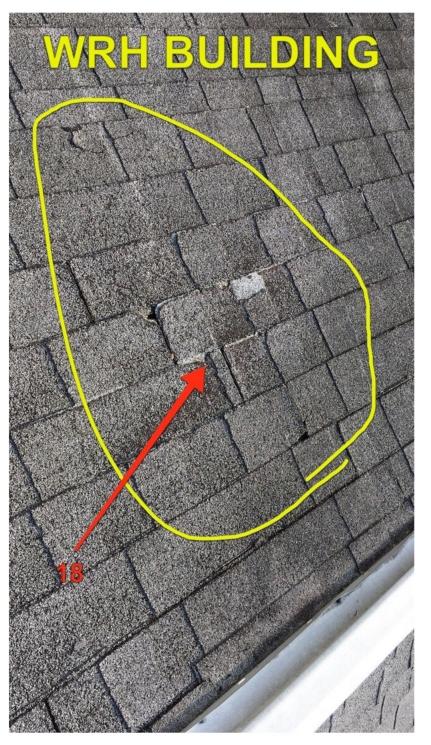
Item #18- damage to shingle roof system, broken shingles, missing shingles or flashings.

Note: Damage to shingles was limited to several locations with minor area damage.

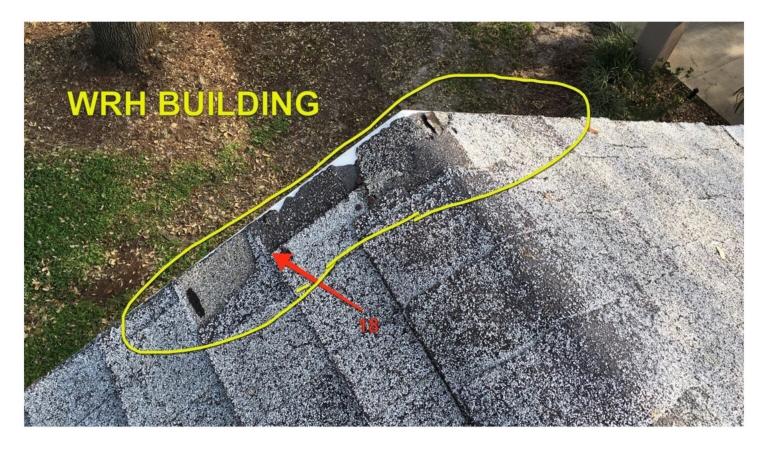
General Observations:



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End of report.

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POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WMS BUILDING # 13 WINTER HAVEN CAMPUS DATE: 9/15/17

Active Leaks: No active leaks reported in the WMS Building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 4- Mineral surfacing eroded by wind driven rain. It appears a significant area of the cap sheet mineral surfacing has been eroded by wind driven rain.

Item # 7- Clogged drain location. One roof drain was clogged by debris, this was partially cleared during the inspection to allow drainage.

Item # 9- Debris on roof. Vegetation debris is present on the roof.

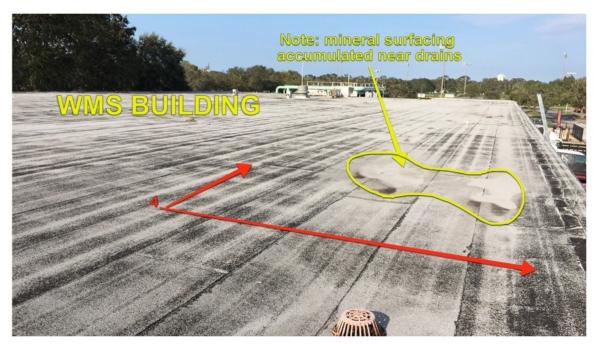
Item # 10- Damage to equipment, vents, power ventilators, hoods. At two locations the power ventilator is damaged.

Item # 19- Missing signage. Several signage letters are missing from the wall of the building.

General Observations:



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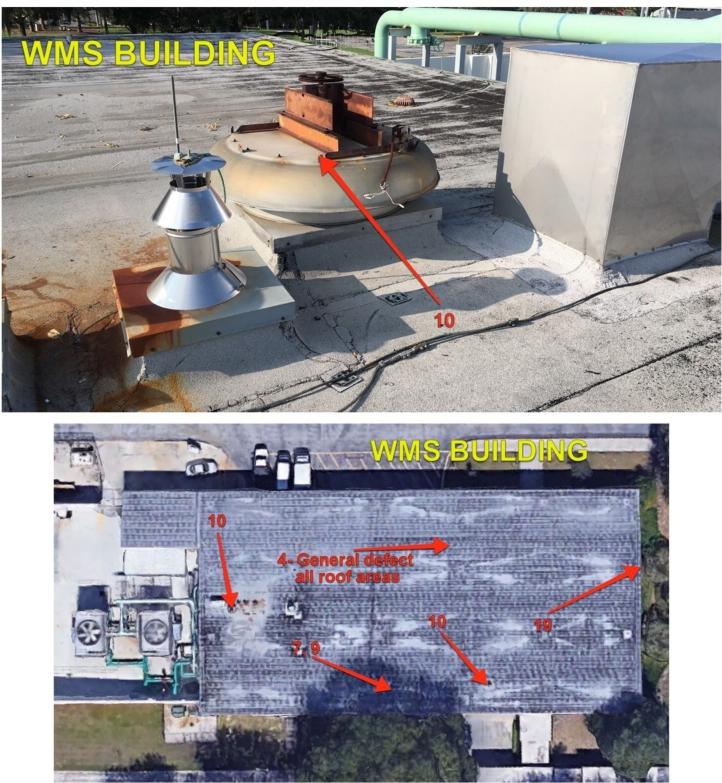












End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WLR BUILDING # 2 WINTER HAVEN CAMPUS

DATE: 9/15/17

Active Leaks: No active leaks were noted in the spaces available for inspection. Class rooms received a "window view look" from door.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the # and type of damage is also identified in the report.

Item # 9- Debris present on roof area. A limited amount of debris was present on the roof system. Drains has some debris at baskets but not to the extent to block drains.

Note: No damage was noted to membrane from wind borne debris. Mineral surfacing appears in place with no major issues. Roof system appeared from walking observation to be well bonded to the substrate.

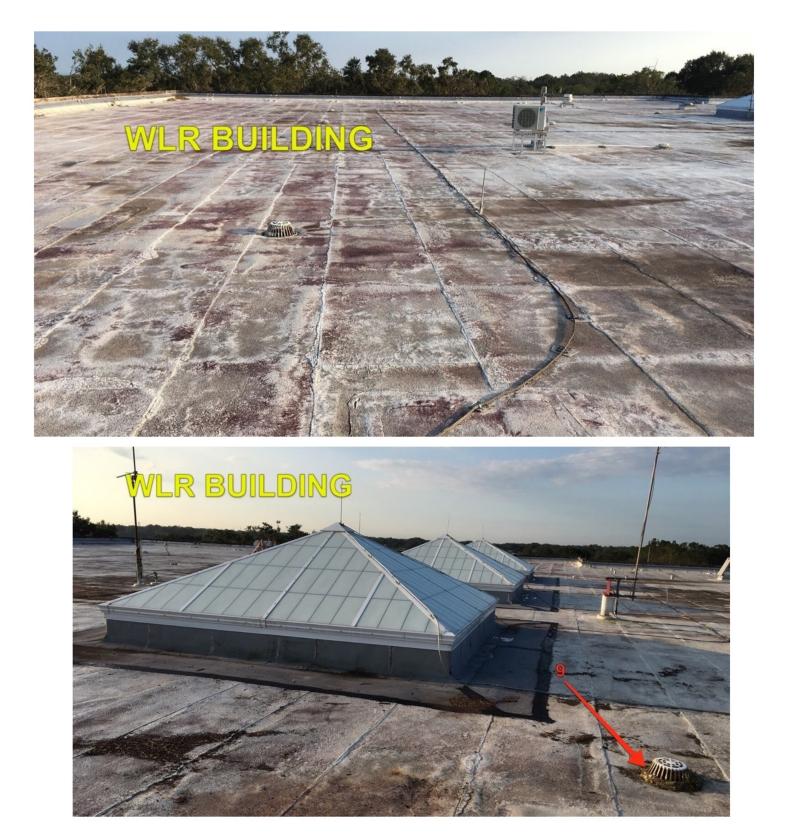
General Observations:



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End of report.

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POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WHC BUILDING # 17 WINTER HAVEN CAMPUS

DATE: 9/15/17

Active Leaks: No active leaks were noted in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 9- Debris on the roof. Debris was noted on the lower roof only.

Note: No damage to roof membrane or mineral surfacing was noted during the inspection. Lower roof area had the majority of the debris. No indication of damage to membrane from wind borne debris was noted.

General Observations:

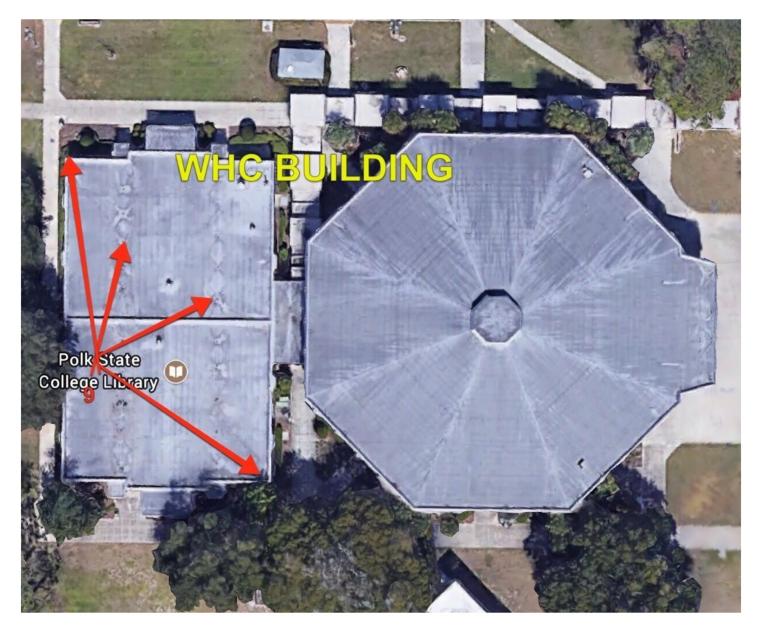












End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WFA BUILDING # 4 WINTER HAVEN CAMPUS

DATE: 9/14/17

Active Leaks: One active leak was noted in the hall area adjacent to the back of the stage. Ceiling tile was on floor at this location. Area is connection between low roof and high wall.

Note: Specific damage has been assigned a number from the attached defect list. The number of the defect corresponds with the number and arrow location on the overview roof photo. An example of the # and type of damage is also identified in the report.

Item # 1- a number of drain baskets have been displaced or are missing.

Item # 2- one drain basket appears to have suffered impact from debris and is damaged.

Item # 3- loose membrane at drain sump area. This condition is present at numerous locations. It appears it is possible that water pressure from water that overpowered the drains penetrated drain bowl flashing and caused the flashing membrane at the drain to be compromised. Membrane is loose at area that surrounds the drain bowl and sump.

Item # 4- mineral surfacing eroded by wind driven rain. It appears that extensive areas of mineral surfacing on modified bitumen cap sheet has eroded. Cap sheet has extensive areas with the black bitumen exposed, mineral surfacing damage has left the cap sheet smooth and exposed to UV damage. This is limited to areas where aluminum coating was not applied to mineral surfaced cap sheet.

Item # 5- damaged expansion joint cover. A section of the metal expansion joint cap on the low roof area has been displaced. This section of metal cap is approximately 20 l/f.

Item # 6- punctured roof membrane. Impact damage was noted at one location (area of damaged drain basket). Cap sheet has been damaged due to impact from debris.

Item # 7- clogged drain location. Several drains were clogged with leaves due to missing strainer baskets. These leaves were cleared from the drains during the inspection to allow free drainage.

Item # 8- roof membrane loose from substrate. In several locations the roof membrane is loose from the substrate and can be identified by foot traffic. It is possible that these locations are the result of uplift from storm winds. Additional testing may be required to confirm the extent of uplifted areas.

Item # 9- debris on roof. Roof was generally clean with isolated debris at interior corners and area where expansion joint cover is displaced.

Item # 10- Damage to equipment, vents, power ventilators, hoods. A smoke hatch on the upper roof appears to be partially "sprung" as it is not properly closed.

Item # 15- blisters present in membrane. Several blisters were noted during the inspection. One at the wall on the high roof and field of cap sheet.

Item # 16- damage to brick wall. A one location the brick wall has a crack that runs vertically from base to top. A lightning protection cable has been displaced at this location. It is not readily apparent if damage was existing or possibly caused by a lightning strike in the locations.

Item # 17- damage to thru-wall flashing. A an isolated location the thru-wall flashing appears to be displaced from possible impact from debris.

General notes: With exception of an isolated hole in the roof from debris impact the roof system remains in place and watertight. Areas were noted to have lifted from the substrate and should have additional testing to determine the extent of the damage. At this time these areas appear to be sound but loose with no opening at laps. Extensive damage to membrane (loose condition) is present at drain sumps but not open laps were noted. It appears that possible overload at drain caused the failure of flashing and separation of flashing membrane from field membrane at sumps.

Extent of damage to roof appears to be less than 25% of the roof area. Repairs can be accomplished providing additional testing determines membrane uplift conditions limited to areas noted during the inspection.



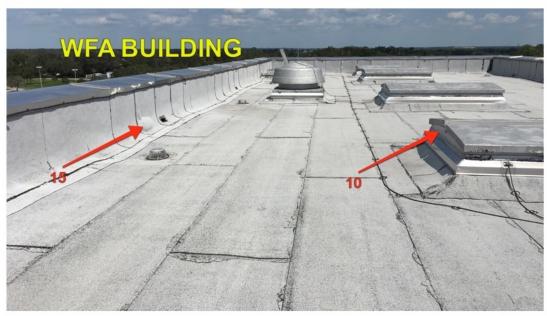
GENERAL OBSERVATIONS:





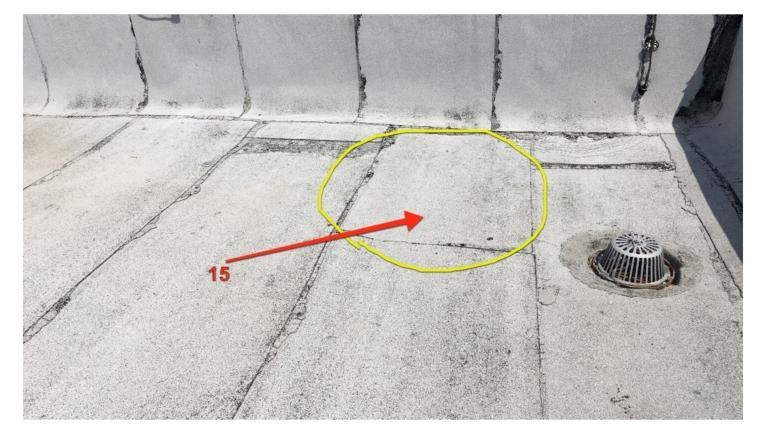


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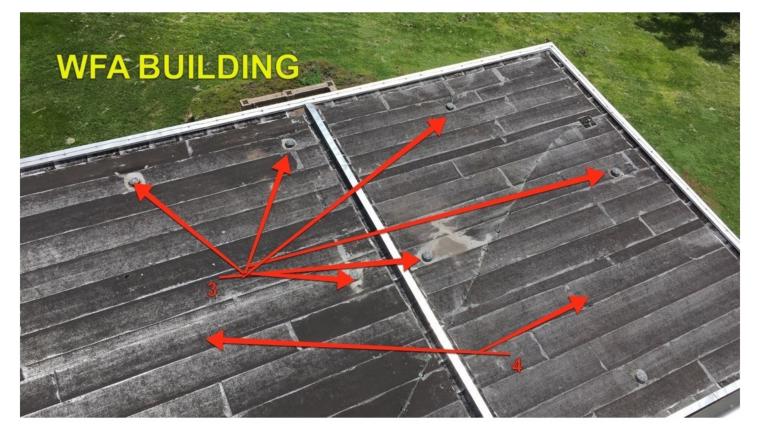






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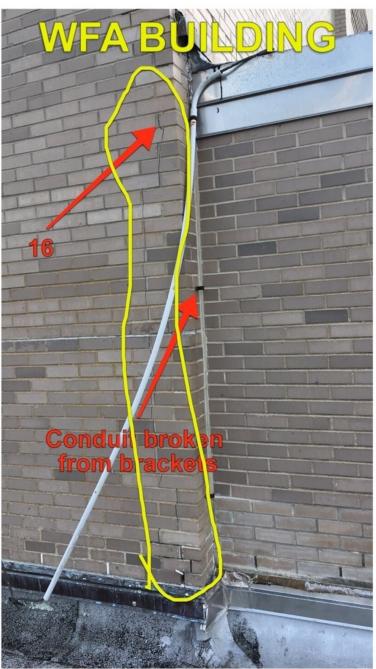


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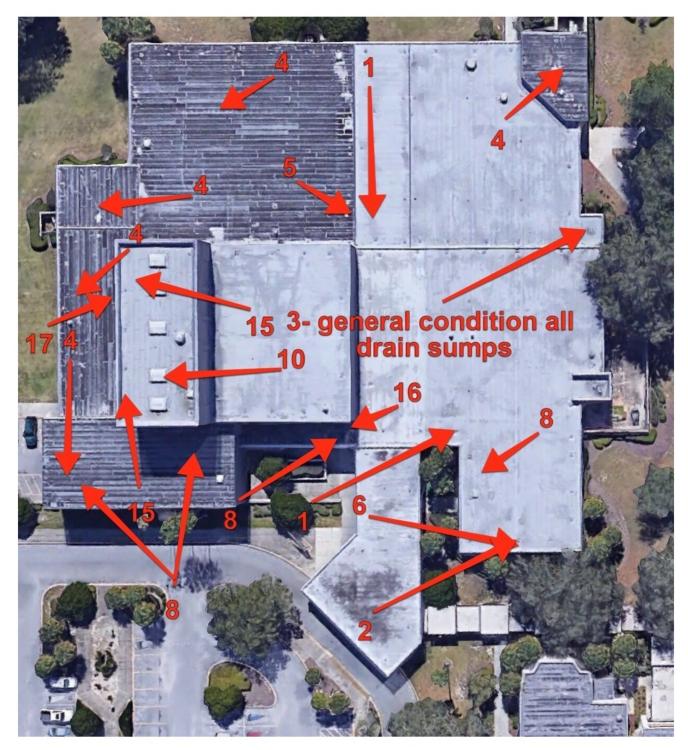
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END OF REPORT.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WCL BUILDING # 7 WINTER HAVEN CAMPUS

DATE: 9/16/17

Active Leaks: No active leaks were noted in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the # and type of damage is also identified in the report.

Item # 7- Clogged drain location. An isolated clogged drain was noted on the lower single ply roof.

Item # 9- Debris on roof. Isolated debris present on roof system.

Item # 20- Water behind the single ply membrane at the base flashing.

Note: No punctures or damage was noted on the single ply roof membrane from wind blown debris.

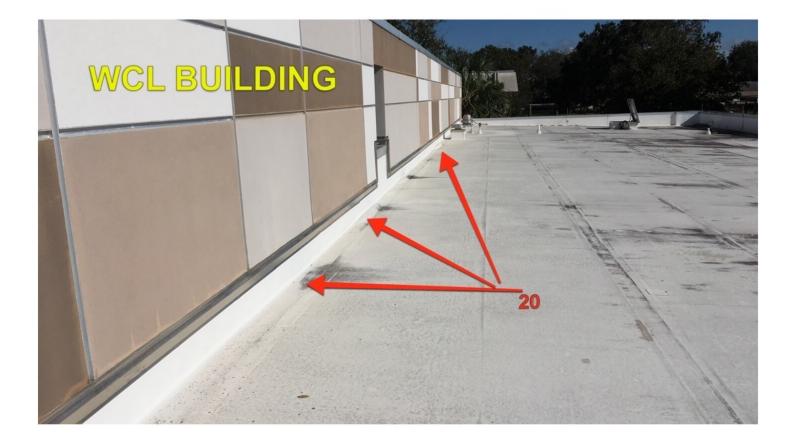
General Observations:









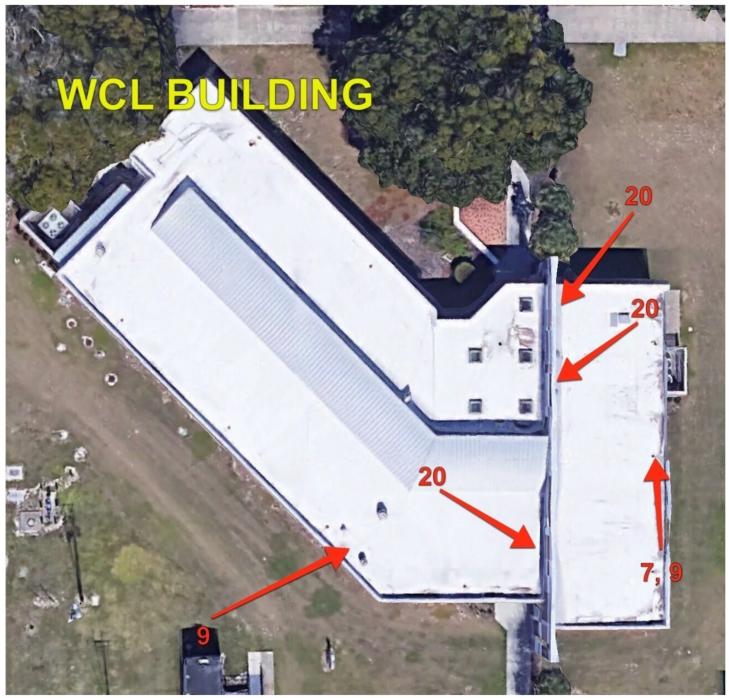


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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WAD BUILDING #1 WINTER HAVEN CAMPUS

DATE: 9/15/17

Active Leaks: No active leaks were noted in interior spaces during a walk through visual inspection of the 2nd floor.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 7- clogged roof drain. Several drains had strainer baskets clogged with leaves, restricting the drainage.

Item # 9- debris on roof. Vegetation debris from surrounding trees is present on the roof areas.

Note: No damage to roof membrane or mineral surfacing was noted during the inspection. Lower roof area had the majority of the debris. No indication of damage to membrane from wind borne debris was noted.

General Observations:













End of report.

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POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: WELLNESS CENTER BUILDING #11 LAKELAND CAMPUS DATE: 9/17/17

Active Leaks: No active leaks were reported in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

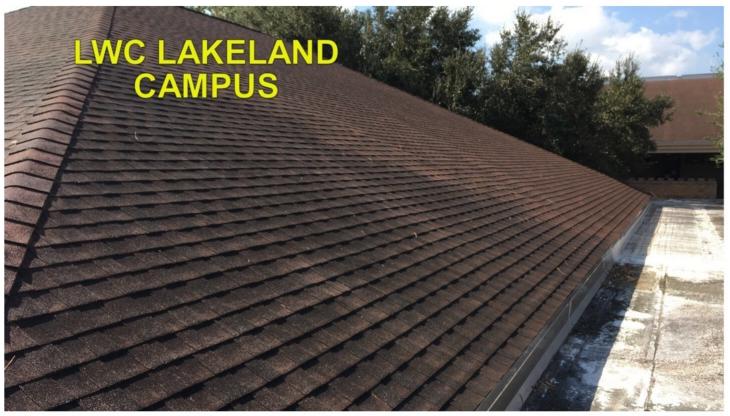
Item # 13- Displaced or damaged metal flashings.

Note: Item # 13 is also recorded in the LMS Building report as it is located between the two buildings.









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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: TECHNICAL BUILDING #5 LAKELAND CAMPUS DATE: 9/17/17

Active Leaks: No active leaks reported in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

General Observations:

Item # 9- Debris on roof system.

Note: Debris on roof areas are minimal and limited to two locations.

General Observations:









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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: MAINT/STORAGE # 4 LAKELAND CAMPUS DATE: 9/17/17

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 9- Debris on roof.

Item # 13- Damaged or displaced metal flashings.

Item # 19- Missing signage.

General Observations:



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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: MODULAR E # 6 LAKELAND CAMPUS

DATE: 9/17/17

Active Leaks: No leaks were reported in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 18- Damage to shingle system, broken shingles, missing flashings

Note: Minor shingle damage was noted.

General Observations:







End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: MODULAR D # 15 LAKELAND CAMPUS

DATE: 9/17/17

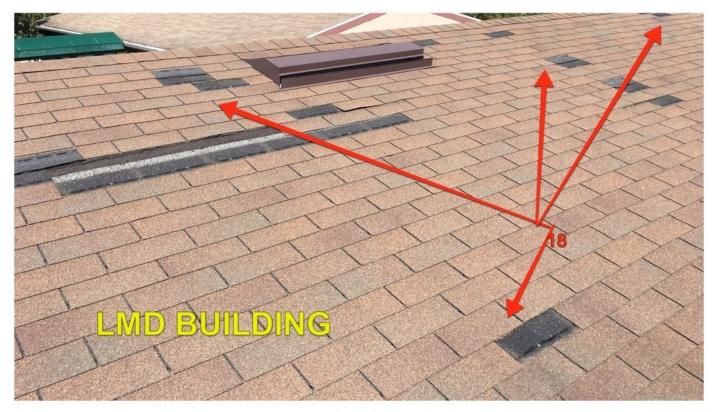
Active Leaks: No leaks were reported in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 18- Damage to shingle system, broken shingles, missing flashings

Note: Minor shingle damage was noted.

General Observations:





End of report.

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POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: MODULAR C #14 LAKELAND CAMPUS

DATE: 9/17/17

Active Leaks: No leaks were reported in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 18- Damage to shingle system, broken shingles, missing flashings

Note: Minor shingle damage was noted.

General Conditions:

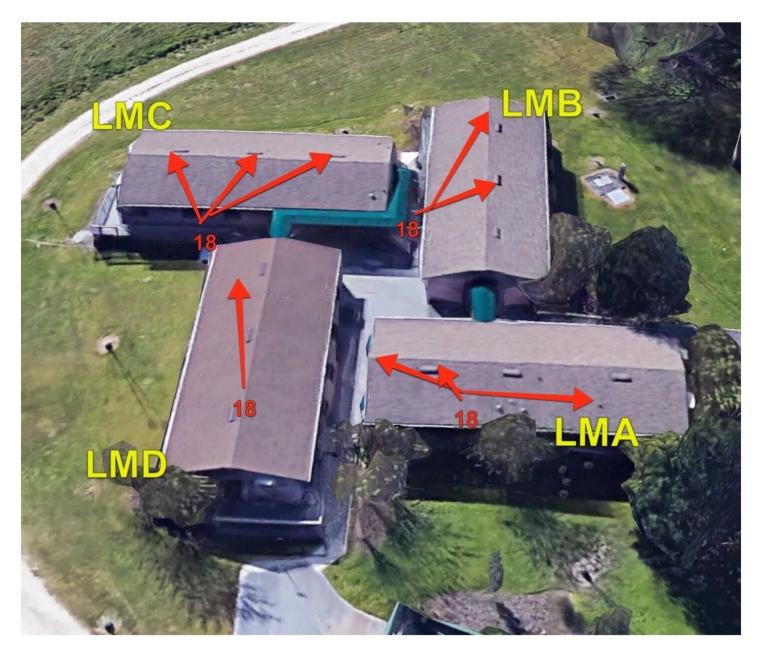


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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: MODULAR B # 13 LAKELAND CAMPUS

DATE: 9/17/17

Active Leaks: No leaks were reported in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 18- Damage to shingle system, broken shingles, missing flashings

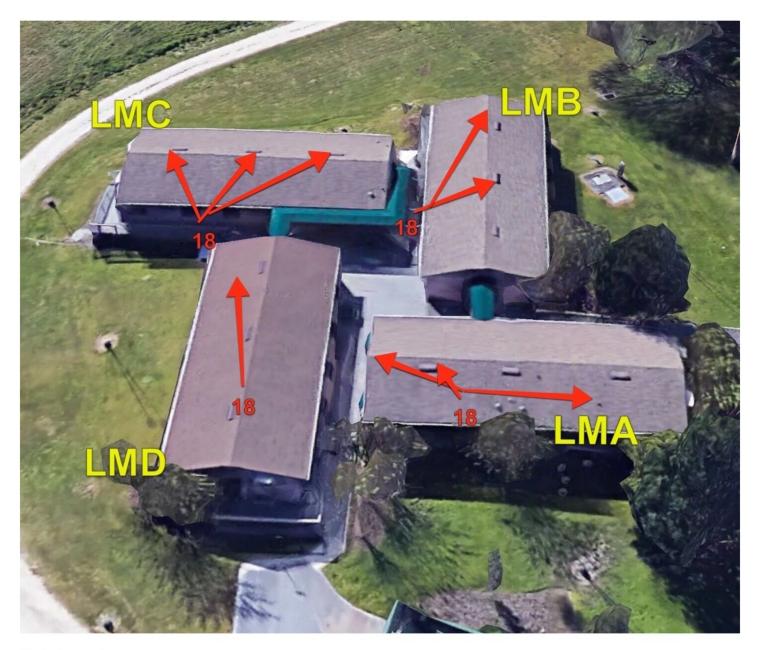
Note: Minor shingle damage was noted.

General Observations:





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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: MODULAR A # 12 LAKELAND CAMPUS

DATE: 9/17/17

Active Leaks: No leaks were reported in the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 18- Damage to shingle system, broken shingles, missing flashings

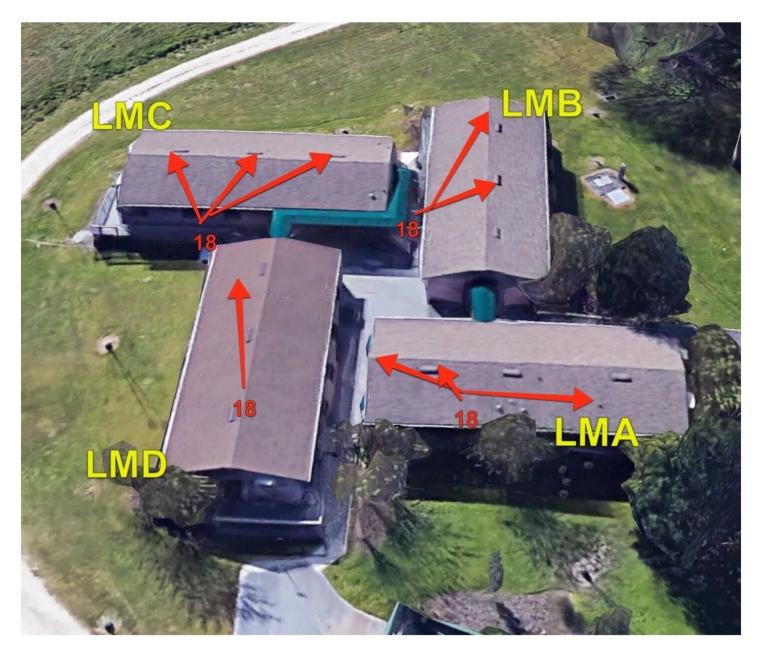
Note: Minor shingle damage was noted.







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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: LEARNING CENTER # 3 LAKELAND CAMPUS DATE: 9/17/17

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 8- Roof membrane possibly uplifted from winds. Isolated at one location on Modified Roof System.

Item # 9- Debris on roof.

Item # 10- Damage to equipment, vents, power ventilators hoods

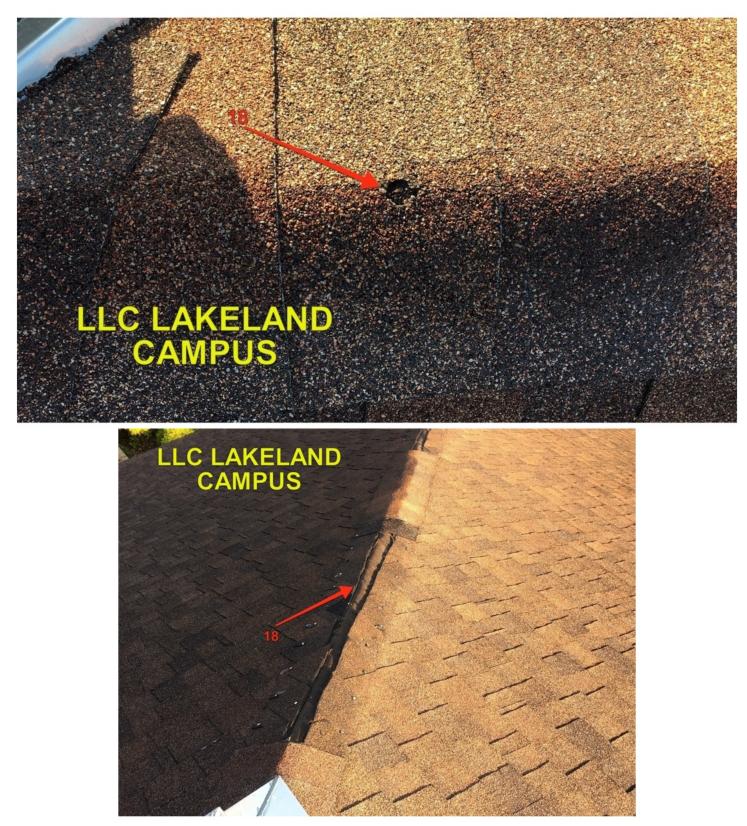
Item # 18- Damage to shingle roof system, broken shingles, missing flashings

Note: This appears the most damaged of buildings on the Lakeland Campus.

General Observations:



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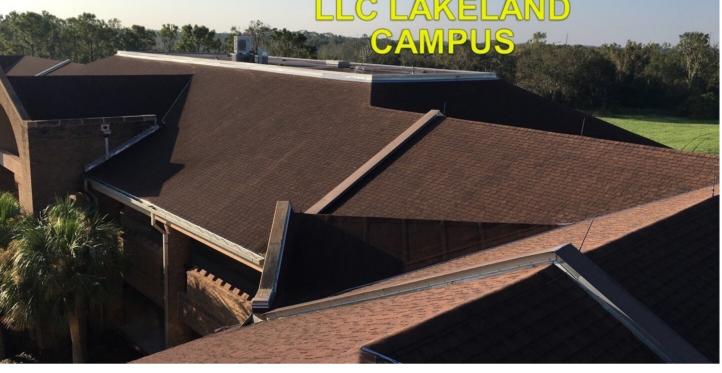






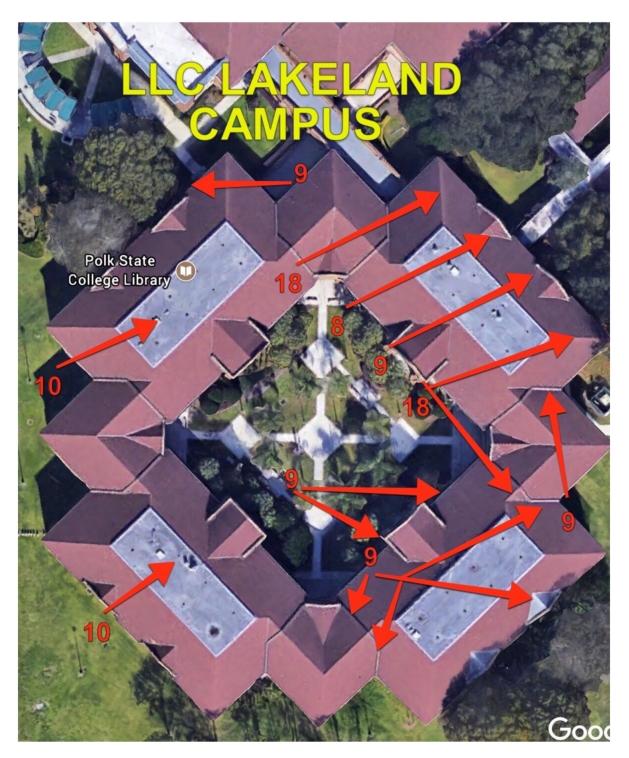






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End of report.

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POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: ACADEMIC CENTER # 1 LAKELAND CAMPUS

DATE: 9/17/17

Active Leaks: No active leaks have been reported.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Item # 9- Debris on roof areas.

Item # 11- Damage to air conditioning units.

Item # 18- Damage to shingle roof system, broken or missing shingles, missing flashings

General Observations:



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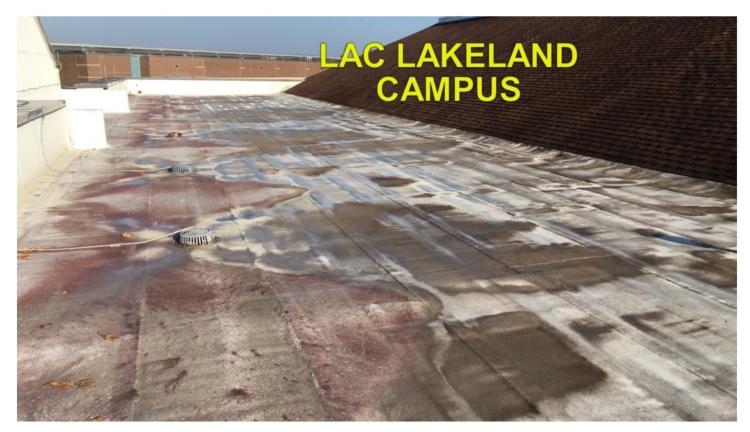




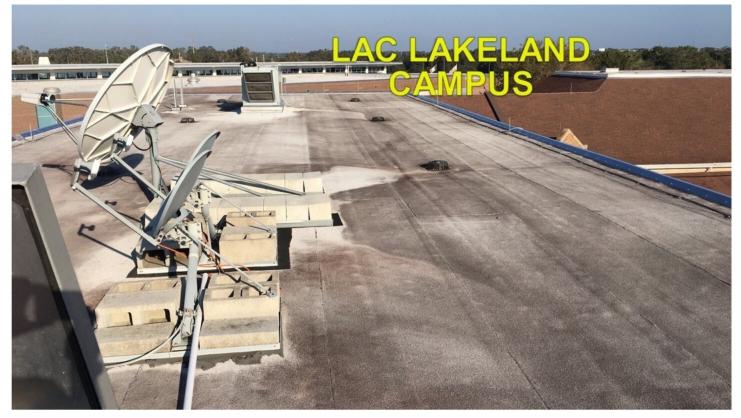
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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: AIRSIDE WEST # 1 LAKELAND

DATE: 9/23/17

Active Leaks: No leaks reported.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

- Item # 10- Damage to equipment, power ventilators, vents, hoods.
- Item # 11- Damage to Air Condition Units.
- Item # 13- Displaced or damaged metal flashings.
- Item # 21- Possible impact damage to stucco finish.

Note: It appears that HVAC units may have suffered some damage from parts blown off during storm. Additionally impact from parts may have cracked stucco finish at East side of high roof of building. The metal flashing is missing and damaged at the low metal roof at the rear of the building.

General Observations:



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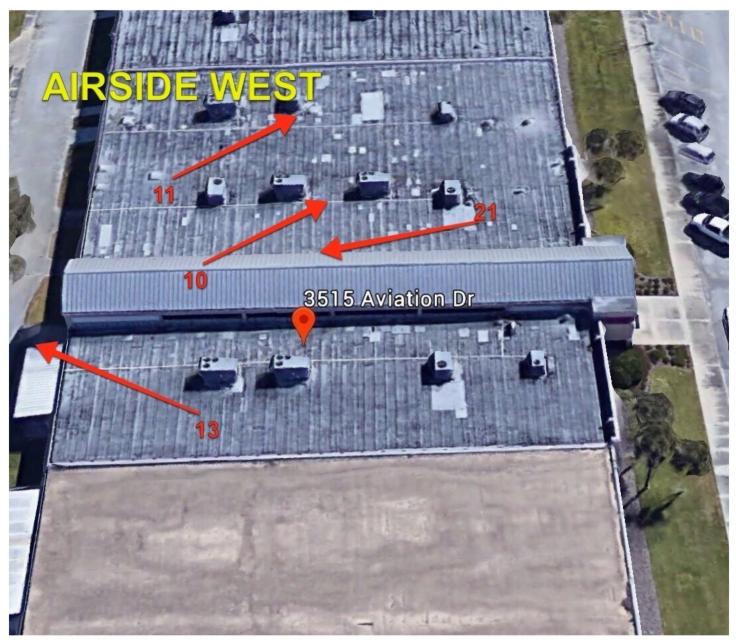


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End of report.

POLK STATE COLLEGE

ROOF SURVEY DAMAGE REPORT- HURRICANE IRMA

BUILDING: AIRSIDE EAST # 2 LAKELAND

DATE: 9/23/17

Active Leaks: No active leaks were reported or noted inside the building.

Note: Specific damage has been assigned a number from the attached list. The number of the defect corresponds with the number and arrow location on the overview roof photograph. An example photograph of the *#* and type of damage is also identified in the report.

Items # 11- Damage to air conditioning units.

Note: It appears wind damage has blown some covers and components of the HVAC units loose.

General Observations:



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End of report.