Prepared For:
City of Rochester
Department of Environmental Services
Bureau of Architecture and Engineering
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Submitted by:
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RUNDEL LIBRARY Parapet Monitoring – Drone Inspection

SEPTEMBER 2019

LBA PROJECT NO. 217916.08

August 15, 2019

Brian Grinnell, AIA NCARB
Architect
City of Rochester
Department of Environmental Services
Bureau of Architecture and Engineering
414 Andrews Street
Rochester, NY 14604

RE: Rundel Library High Parapet Monitoring
115 South Avenue, Rochester NY
LaBella Project No. 2171916.08

Dear Brian,

As part of the Parapet Monitoring project, and as a follow-up to our last parapet inspection, LaBella Associates D.P.C. (LBA) performed a second visual inspection and photo documentation of the Rundel Library's high parapets with the use of a drone. This letter summarizes our observations, professional assessment and any recommendations.

SCOPE OF WORK

The purpose of our visual inspection with aerial photography is to document changes to the exterior façade at the western high parapet since our March 2019 inspection, as well as to identify any new areas of concern around the perimeter of the building.

PROJECT BACKGROUND

A portion of the stone façade on the West parapet detached from the structure on February 8, 2019 and fell to a balcony below as well as into the Genesee River. LaBella provided details for steel brackets to brace remaining loose panels from falling off.

LaBella Associates performed a visual inspection of the high parapets on March 27, 2019, identifying additional parapet façade panels at risk of detaching from the building, as well as cracks on the inside face of the parapets. Crack gages were installed to monitor movement in the masonry parapets and additional braces were installed.

LaBella has been documenting the crack gages on a monthly basis to monitor movement. An additional drone inspection was requested by the City of Rochester to assess the condition of the stone façade panels already identified by our previous inspection, as well as to identify if any new panels were of concern.

FIELD OBSERVATIONS

On August 15, 2019, LaBella structural engineers performed a visual inspection of the parapets with the use of a drone to provide detailed views of the exterior façade panels.

North Parapet

The north parapet extends approximately 3 feet above roof level. [Photo 1]

- Sealant deterioration and gaps are visible between stone façade panels along the parapet's length. [Photo 2]
- 3 adjacent stone façade panels near the center of the parapet appear to be leaning away from the building, with large sealant gaps between the tops of panels and the parapet cap stones above. [Photos 3 - 6]

West Parapet

The northern portion of the west parapet extends approximately 3 feet above roof level. [Photo 7]

- Sealant deterioration and gaps are visible along the entire length of the northern portion of the west parapet in the horizontal joint between the stone façade panels and the parapet cap stones. [Photos 8 - 9]
    - These blocks to not appear to be out-of-plane or leaning away from the structure.

DISCUSSION AND RECOMMENDATIONS

It is our opinion that the 3 stone façade panels on the north parapet should be restrained from falling in a manner similar to the braces that have been previously installed.

Documentation photos of the braced portions of the east and west parapets have been included in Appendix A. [Photos 10 – 21]

Respectfully submitted,

LABELLA ASSOCIATES, D.P.C.

Andrew Karlson, PE, Assoc. AIA
Structural Engineer | Buildings Engineering

APPENDIX A

SITE PHOTOS

PHOTO 1

North Parapet

PHOTO 2

North Parapet

Sealant gaps between panels

PHOTO 3

North Parapet

3 panels leaning away from parapet

PHOTO 4

North Parapet

3 panels leaning away from parapet

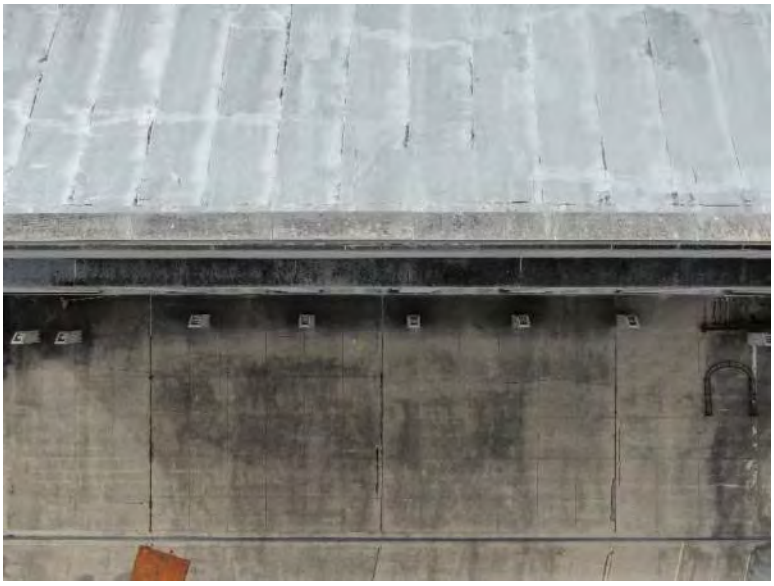

PHOTO 5

North Parapet

3 panels leaning away from parapet

PHOTO 6

North Parapet

3 panels leaning away from parapet

PHOTO 7

West Parapet

Northwest corner of west parapet

PHOTO 8

West Parapet

Sealant gaps along tops of panels

PHOTO 9

West Parapet

Sealant gaps along tops of panels

PHOTO 10

East Parapet

Southern High Parapet

PHOTO 11

East Parapet

Southern High Parapet

PHOTO 12

East Parapet

Southern High Parapet

PHOTO 13

East Parapet

Northern High Parapet

PHOTO 14

East Parapet

Northern High Parapet

PHOTO 15

East Parapet

Northern High Parapet

PHOTO 16
West Parapet

PHOTO 17
West Parapet

High Parapet – Northwest Corner

PHOTO 18
West Parapet

High Parapet – Northwest Corner

PHOTO 19

West Parapet

High Parapet - Bracing

PHOTO 20

West Parapet

High Parapet - Bracing

PHOTO 21

West Parapet

High Parapet - Bracing