

Project: Southern Lehigh School District –

Liberty Bell Elementary School

REVIEWER(s):

El Associates:

C. Bruce Christman Jr. Michael Wozny

**TRADE: Architectural** 

Date Reviewed: 31 May 2023

## FIELD OBSERVATION REPORT

## OBSERVATIONS:

- We generally agree with the conclusions stated in the roof investigation report for Liberty Bell Elementary School, performed in April 2022 by Peter D. Di Buono – Simon Roofing Products, Inc. We strongly recommend discussions and review of any new roofing systems or "fix" PRIOR to implementing suggested strategies from said report.
- The quantity of roof drains (mostly aligned in center of roof, with no overflow drains) looks to be on the minimal side. We recommend water flow calculations be performed to confirm if the existing roof drains are adequate to handle the storm water flow from the roof surface. (Figure #6).
- Several "soft spots" were noticed while walking the roof system, however these areas
  do not seem to be wide spread or create any concerns regarding the structural
  integrity of the roof system. (Figure #5).
- There were no roof leaks noticeable / identified from our visual observations. (The School District also confirmed that there were no roof leaks within the roof system).
- Several areas of minor roof patching / repair noticed (Figure #3).
- El Associates recommends a larger sampling of Indoor Air Quality (IAQ) Testing
  within the occupied spaces below to determine if the moisture saturated roofing
  system (per referenced report) is negatively impacting the occupied spaces below
  from an indoor air quality standpoint.
- Current flat white TPO roof is currently out of warranty (per School District's data).
- Most areas of the roof seem to be in good condition.
- Dried ponding residue (dirt / sediment) was observed in several locations on the roof and near the roof drains. (Figures #1, #5 & #10).
- Based on the current condition of the roof, it is our opinion that the roofing system should be replaced, in its entirety, within the next 24 months, (or sooner if significant conditions arise due to unforeseen circumstances).

## **PHOTOGRAPHS:**















