

# WALTER P MOORE

August 3, 2017

Mr. Joshua Lamonde  
Office Management and Budget  
City-County Building, Room 502  
Pittsburgh, PA 15219

Re: Public Works Facility Structural Assessment  
Division 4 Public Works Facility  
414 Bausmann Street, Pittsburgh, PA  
Walter P Moore Project No. D01.17017.00

Dear Joshua:

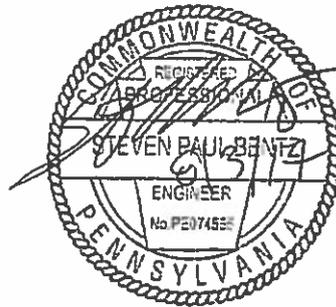
We have completed the structural condition assessment and analysis of the referenced project in accordance with our proposal 17-1460 dated June 13, 2017.

Included in our report are our observations, discussion, conclusions, and recommendations based on the documents provided to us and our visual assessment performed July 10 and 11, 2017.

We very much appreciate this opportunity to provide these services to you. Please do not hesitate to contact us if we can further assist you with the follow-up evaluation or development of structural strengthening documents described in the following report.

Sincerely,

WALTER P. MOORE AND ASSOCIATES, INC.

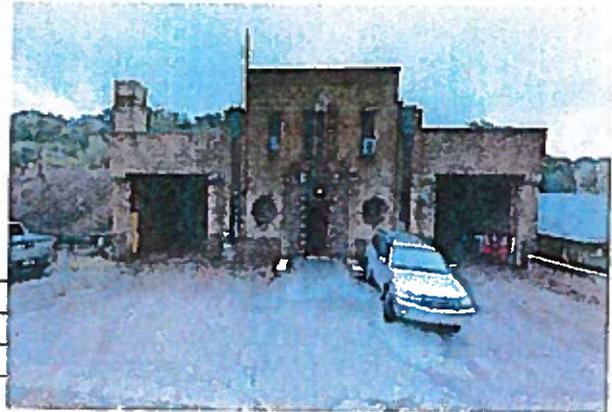


*Jason Siwek*  
Jason Siwek  
Graduate Engineer  
Diagnostics Group

Steven Bentz  
Principal | Managing Director  
Diagnostics Group

**DIVISION 4 PUBLIC WORKS FACILITY  
STRUCTURAL ASSESSMENT**

414 Bausmann Street  
Pittsburgh, PA



Report Date	August 3, 2017
WPM Proposal No.	17-1460
WPM Project No.	D01.17017.00

**EXECUTIVE SUMMARY**

Walter P. Moore and Associates, Inc. (WPM) has completed a structural condition assessment of the 4<sup>th</sup> Division Public Works Facility in Pittsburgh, PA. Our assessment consisted of a walkthrough visual review of the building and salt shed structure to identify the structural member sizes, framing plan, occupancy, waterproofing, and other miscellaneous items in need of repair.

Typical distress items identified in this report include the deteriorating independent dome structure used as a storage facility for salt, section loss on structural columns in the garage, spalled concrete slabs with exposed rebar, missing fireproofing, deteriorating roof and façade.

The overhead roof structure presents a structural concern that it may not be able to support the code-required snow loads in its present condition, WPM has concerns for occupant safety beneath the roof structural systems at the building. Pedestrian safety is also a concern due to the deteriorated state of the facade components and the potential for overhead hazards. Overall, the building is in poor condition and in need of extensive repairs to correct potential life safety hazards that currently exist.

The second level garage framing and load bearing walls are showing signs of distress, the corrosion is a sign that there may be more underlying conditions. The steel beams are currently supporting the street cleaners and small pick-up trucks, deflection was not observed, only corrosion and deterioration. This means that the floors can support the current equipment; however, larger equipment may cause deflection. That said, we don't advise applying any additional loading which could be in the form of but not limited to; more vehicles, larger vehicles, or using the garage for additional storage.

*Option of probable costs to repair are \$1,270,000. See Table 1 for total estimated cost breakdown. Please note this cost includes demolition and removal of the salt dome only, replacement costs are not provided.*

**DOCUMENT REVIEW**

Walter P Moore preformed a document review of *The City of Pittsburgh Facility Analysis Report for Public Works 4<sup>th</sup> Division*, prepared by Massaro CM Services, LLC dated August 6, 2010

Roofs/Attic

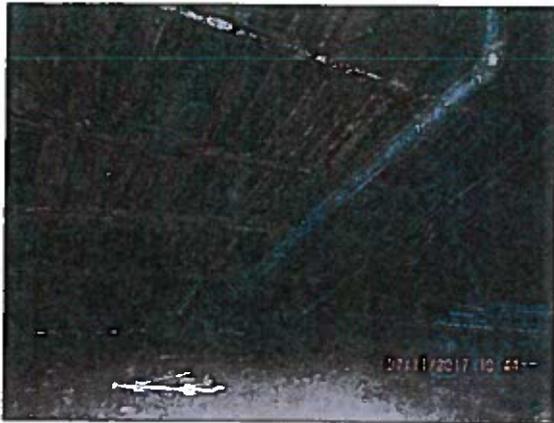


Photo 11 - Compromised gable roof.

The attic above the attached garage consists of a wood floor supported by wood joists and steel double T members in the ceiling of the garage below. These joists and double T's also support the truss system and roof that are above the attic. While the truss system of the attic appears in salvageable condition, the wooden roof has been compromised and the supporting structure requires significant repairs.

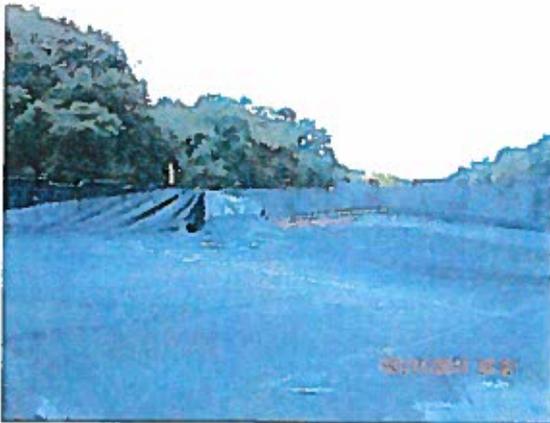


Photo 12 - Waterproofing membrane pulling away from termination bar.

The gable roof (above the attic and attached garage) is constructed with steel purlins that span between the truss top chords, which run east to west, and wood planking that span between the purlins running north to south. The shingles on this roof are aged, cracked, and deteriorated. The flashing, gutters, and down spouts of this roof are in poor condition or missing. The lack of proper drainage components is allowing water through the roof and into the building.



Photo 13 - Daylight seen in roof.

The flat roof above rooms 100 and 200 is constructed with wood joists and wood sheathing. The flashing, gutters, and down spouts of this roof are in poor condition or missing. The waterproofing membrane is deteriorated and has open seams/rips in some areas. Water leaks have caused the wood deck at the south-west corner of the roof to collapse, resulting in a hole in the roof.