Owners Thoughts on Coordination

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Tracy Moreno, P.E. (TX), LEED AP is a facility management professional with a diverse range of experience. Having worked as both a contractor and consulting engineer she brings a unique perspective to operations and maintenance and facility construction projects.

At present Tracy is the Site Services Manager for the Trinity Industries Corporate Campus facility in Dallas. Her responsibilities include Operations and Maintenance, management of construction projects, strategic planning for building infrastructure upgrades, and ensuring reliability of the electrical and mechanical systems supporting the Corporate Campus Data Center.

Education: Tracy holds a bachelor’s degree in Electrical Engineering from San Jose State University. She is a licensed Professional Engineer in Texas and California and is a LEED Accredited Professional.
Trinity Industries is a diversified industrial company that owns complementary, market-leading businesses providing products and services to the energy, chemical, agriculture, transportation, and construction sectors.

Our businesses play an important role in the overall economy by supplying essential infrastructure-related products and services ranging from barges, storage and distribution containers, construction aggregates, and highway products, to wind towers, utility structures, railcars, railcar parts, and railcar leasing, management, and maintenance services.
Facility Management

South - West

North - East

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TRINITY INDUSTRIES

BIMFORUM
Office Floor Flatness / Floor Levelness

What are the costs:
1. Schedule
2. Remove furniture and remove flooring
3. 20-80k in floor leveling
Office Floor Flatness / Floor Levelness
Office Floor Flatness / Floor Levelness
Inspection Reports

Run 1
Floor Flatness / Floor Levelness Inspection Results
Per ASTM 1155 Specifications

Run 2
Floor Flatness / Floor Levelness Inspection Results
Per ASTM 1155 Specifications

Run 3
Floor Flatness / Floor Levelness Inspection Results
Per ASTM 1155 Specifications
Submitted Report.

2016 MARCH

2016 APRIL

Call
Site Visit.
Shored Roof
Laser Scan Roof
Failed Support Angle Condition

Note that the support angle has pulled away from the wall and deflected down. The support anchor has also been bent and turn down as the masonry wall has fractured away from the area surrounding the bolt.
Figure 2: Field sketch of roof areas identifying the region that is ponding with water.

Figure 3: Field sketch showing elevation of roof supports angle below the roof.
Failed Support Angle Condition
North - East
Roof Structure Evaluation
Roof Structure Evaluation
Process, Process, Process...

1) Setup 2) Position 3) Scan, ...... Repeat
Structure Evaluation
Structure Evaluation
Lessons Learned

1. Have a BIM Plan Overall
2. Take it baby steps
3. Be an informed consumer.
4. Owners need training in using BIM data they receive.
5. Have requirements for your vendors, we are looking at:
   1. AGC Certificate of Management in BIM (CM-BIM.com)
   2. BIM Forum LOD Specification
   3. USIBD Level of Accuracy (LOA) Certification for Laser Scanning (UISBD.org)