



Radcliff Elementary

Project Closeout Update

June 9, 2017

Exterior

Morel Construction removed the paint from the interior side of the exterior wall at the Classroom with the highest tested moisture content over Christmas Break. The intent was to remove the finish, provide dehumidifiers to draw the moisture out of the exterior wall, then reapply the finish paint. While one area previously tested had a much lower acceptable moisture content, the wettest areas were unaffected by the use of the dehumidifiers.

Below is a summary of Sherman Carter Barnhart's most recent correspondence with Morel Construction regarding the next steps at Radcliff Elementary School to eliminate the moisture that is present at the exterior wall. Morel has been asked to provide a response by Thursday, June 15th.

Morel

Per Wall Type "B" on Sheet A0.1 of the Radcliff MS Renovation – Phase One contract documents, the exterior side of CMU in exterior walls was to receive specified bituminous dampproofing. Additionally, General Partition Note P21 states "Concrete Masonry Units Installed at Exterior Walls Shall Receive Application of Specified Dampproofing On Cavity Face." This bituminous dampproofing was omitted by the mason. This omission has allowed the concrete masonry units (light weight units) that were used during Phase One construction to absorb moisture from the masonry wall cavity and become saturated resulting in failed paint systems on the exterior walls at Classrooms 147, 148, 213, and 214. SCB makes the following recommendation at those locations:

Classrooms 147, 148, 213, and 214

1. Remove existing brick at Type "B" walls (window infill)
2. Fill any gaps and or voids in CMU (once exposed) and install bituminous dampproofing as required by the contract documents.
3. Re-install brick at Type "B" walls (window infill) at Classrooms 147, 148, 213, and 214.
4. Re-stain new brick infill to match rear elevation
5. Remove and replace the perimeter sealant around the existing Type "C" Windows.
6. Remove existing paint at interior side of Type "B" walls and repaint to match adjacent finishes

Testing conducted by S&ME on behalf of Hardin County Schools has confirmed that other areas of window infill did not receive the specified application of dampproofing. However, presently there are no signs of water absorption at other areas of window infill (Type "B" walls) nor have failing paint systems been observed outside of the Classrooms identified above. It is SCB's opinion that Morel



failed to meet their contractual obligation to Hardin County Schools. SCB makes the following recommendation at all other window infill locations:

All Other Window Infill

Morel to provide additional 5 year warranty to cover all labor and material required for remediation at Type "B" walls (areas of window infill only) should moisture levels at these areas result in failed paint systems as presently observed at Classrooms 147, 148, 213, and 214.

Owner

Additional moisture infiltration issues have also been observed beyond the scope of Morel's contract. SCB makes the following recommendations to address these issues:

1. Seal the gap at the west end of the existing expansion joint at the roof.
2. Repair all gutter joints between the expansion joint and the mechanical enclosure at the rear elevation per Smacna standards.
3. Install weeps above existing concrete beam/brick lintels above each Type "C" Window to allow any moisture that is getting into the cavity to escape.
4. SCB does not recommend applying a masonry elastomeric coating to the west elevation of the building as this will represent a long-term maintenance commitment by Hardin County Schools.