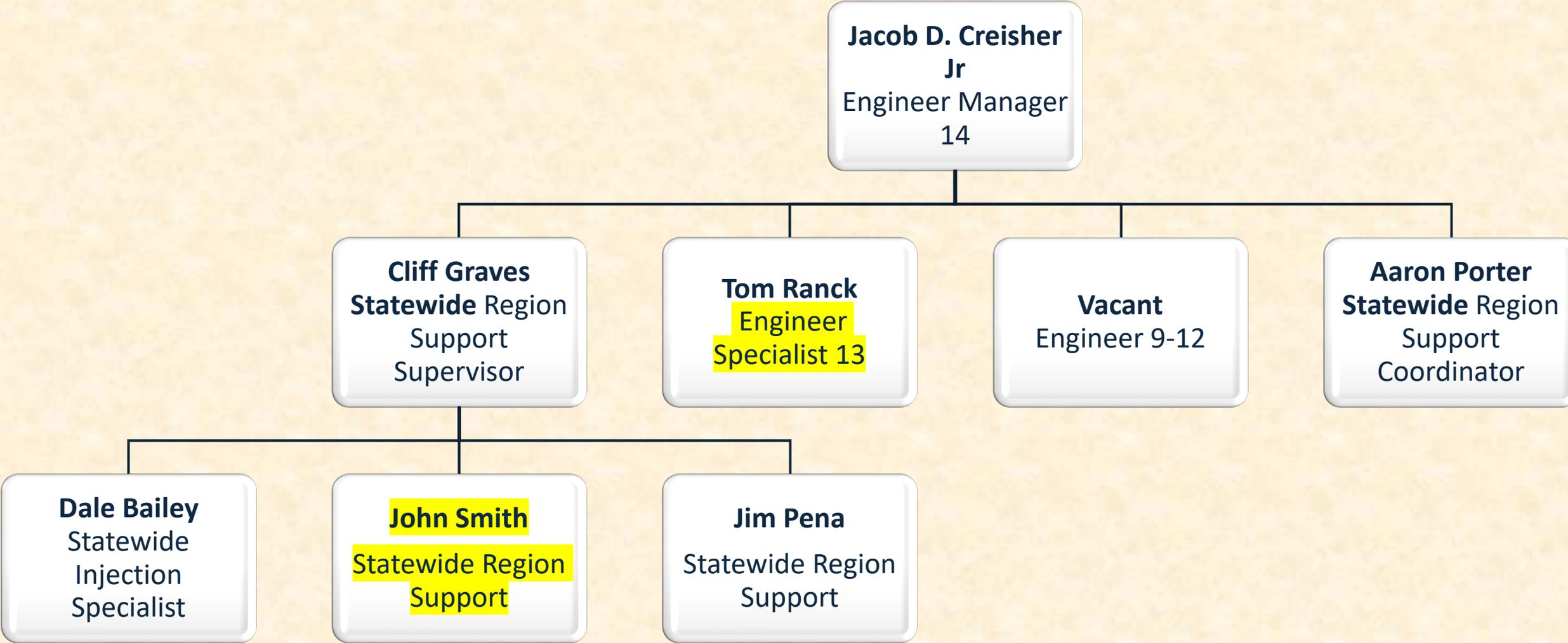


Statewide Region Support Unit Update

Jacob Creisher Jr., P.E.



STATEWIDE REGION SUPPORT UNIT



Statewide Region Support Unit - Updates

- Region Support
 - Special Provision Updates
 - Ingham County Healer Sealer
 - High Friction Epoxy Overlay on IBA.
 - Culvert Repair for a TSC
- Specialty Maintenance Activities
 - Concrete Beam Epoxy Injections
 - Pier Cap Epoxy Injection
 - Abutment Epoxy Injection
 - Abutment Poly Injection
 - T-17 Concrete Beam Repair
- Specialty Equipment
 - New Injection Trailer
 - Slab Lifting and Soil Stabilization Trailer (Almost finished)
 - Epoxy Rig (Almost finished)

Statewide Region Support Unit – SP Updates

- Frequently Used Special Provisions (FUSP)
 - **20SP-602C-02 – Pressure Relief Joints**
 - Added 2 more products and comments regarding proper sealing of the joint
 - **20SP- 706A-02 – Sealing Localized Cracks**
 - Added language of engineer approving cleaning operations.
 - **20SP- 710B-04 – Penetrating Epoxy Healer Sealer on Bridge Decks**
 - Added language of engineer inspect and approve cleaning operations.
And the correct shot size for the operation
 - **20SP- 710C-03 – Substructure Horizontal Surface Sealer**
 - Added language on proper placing the material.

Statewide Region Support Unit – SP Updates

- Frequently Used Special Provisions (FUSP)
 - **20SP-712B-02 – Thin Epoxy Polymer Bridge Deck Overlay**
 - Added clarification of squeegee size and size of shot for the shotblasting.
 - **20SP- 712C-02 – Performance Warranty, Thin Epoxy Polymer Bridge Deck Overlay**
 - Added clarification of squeegee size and size of shot for the shotblasting.
 - **20SP- 800A-02 – High Friction Surface Treatment**
 - Added clarification of squeegee size and size of shot for the shotblasting.

Statewide Region Support Unit – SP (New)

- Other Special Provisions
 - **Performance Warranty High Friction Hybrid Polyester Copolymer Bridge Deck Overlay**
 - This is similar to a combo healer sealer & bridge deck overlay with calcium bauxite.
 - **Silane and Penetrating Epoxy Healer Sealer Treatment for Bridge Concrete**
 - This is a silane and healer sealer combo for bridge decks. (May 2025)

Ingham County Healer Sealer

- Assist Ingham county with bridge preservation on deck patching and application of healer sealer

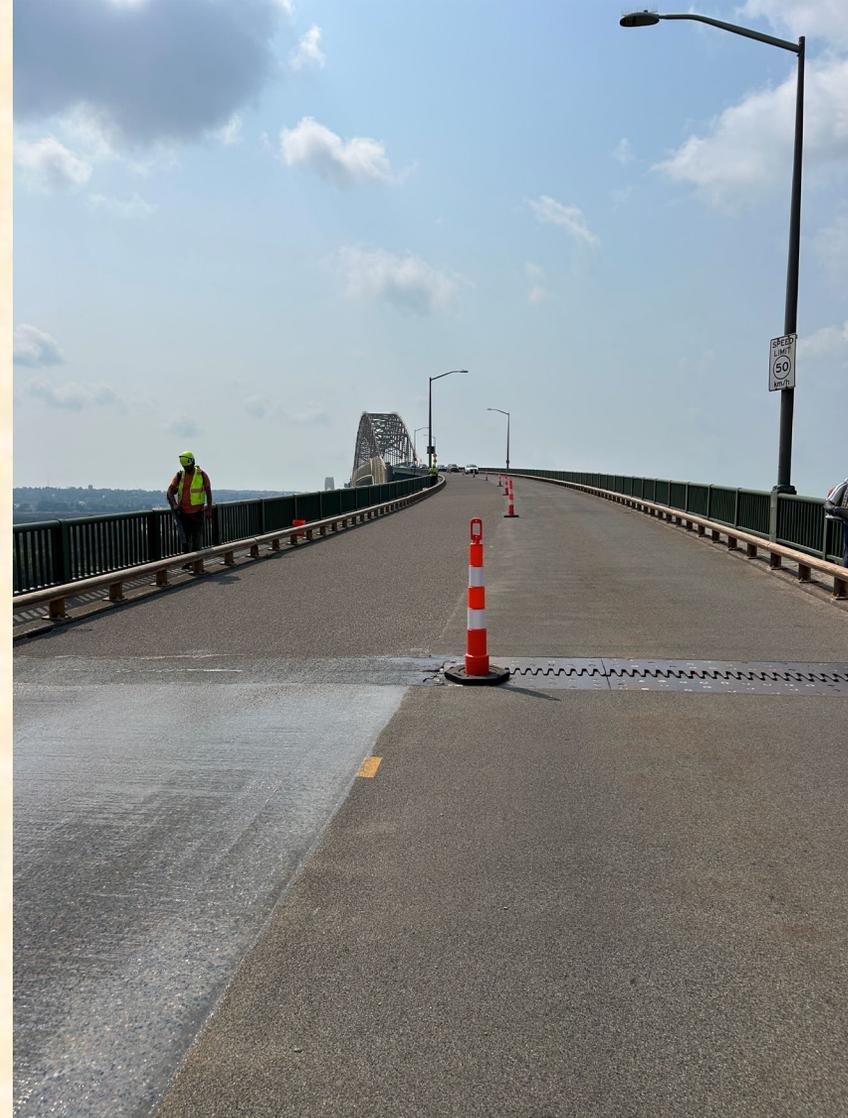


IBA High Friction Epoxy Overlay

- Applied silane and a one course High Friction Epoxy Overlay to the IBA Bridge

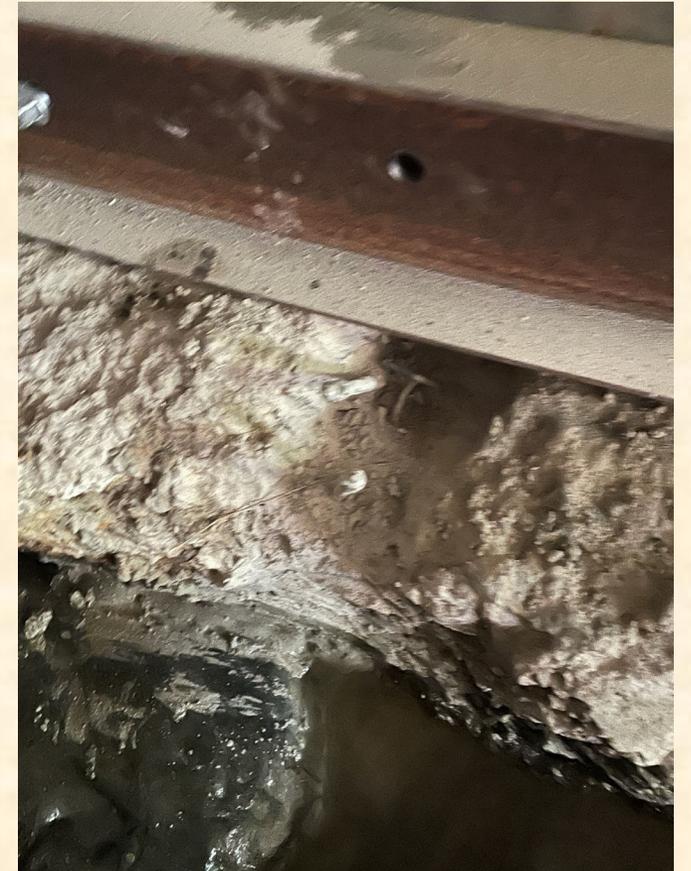


IBA High Friction Epoxy Overlay



Culvert Repair & Soil Stabilization

- Assisted region on ancillary culvert repair and soil stabilization.



Concrete Beam Epoxy Injection

- Extensive Beam Crack Repair caused by a contractor when it was built



Concrete Beam Epoxy Injection

- Using our Deck Injection Trailer and Statewide Hydro-platform



Experiment with Pier Cap Injection

- Using our deck injection process on the substructure face of the pier cap.
- Crack all over the pier cap end.
- We placed over 50 ports all over the face of the pier cap.



Experiment with Pier Cap Injection

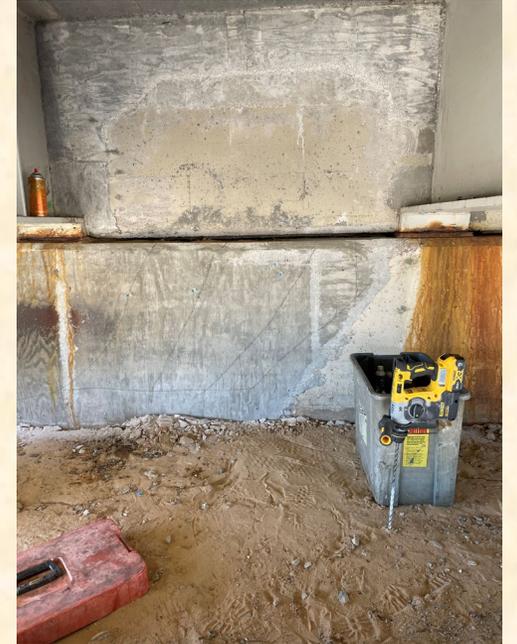


Experiment with Pier Cap Injection



Abutment Injection

- Using our deck injection process on the substructure face.
- Delamination on newly repaired wall.
- Crack along the top of the stem under the backwall.



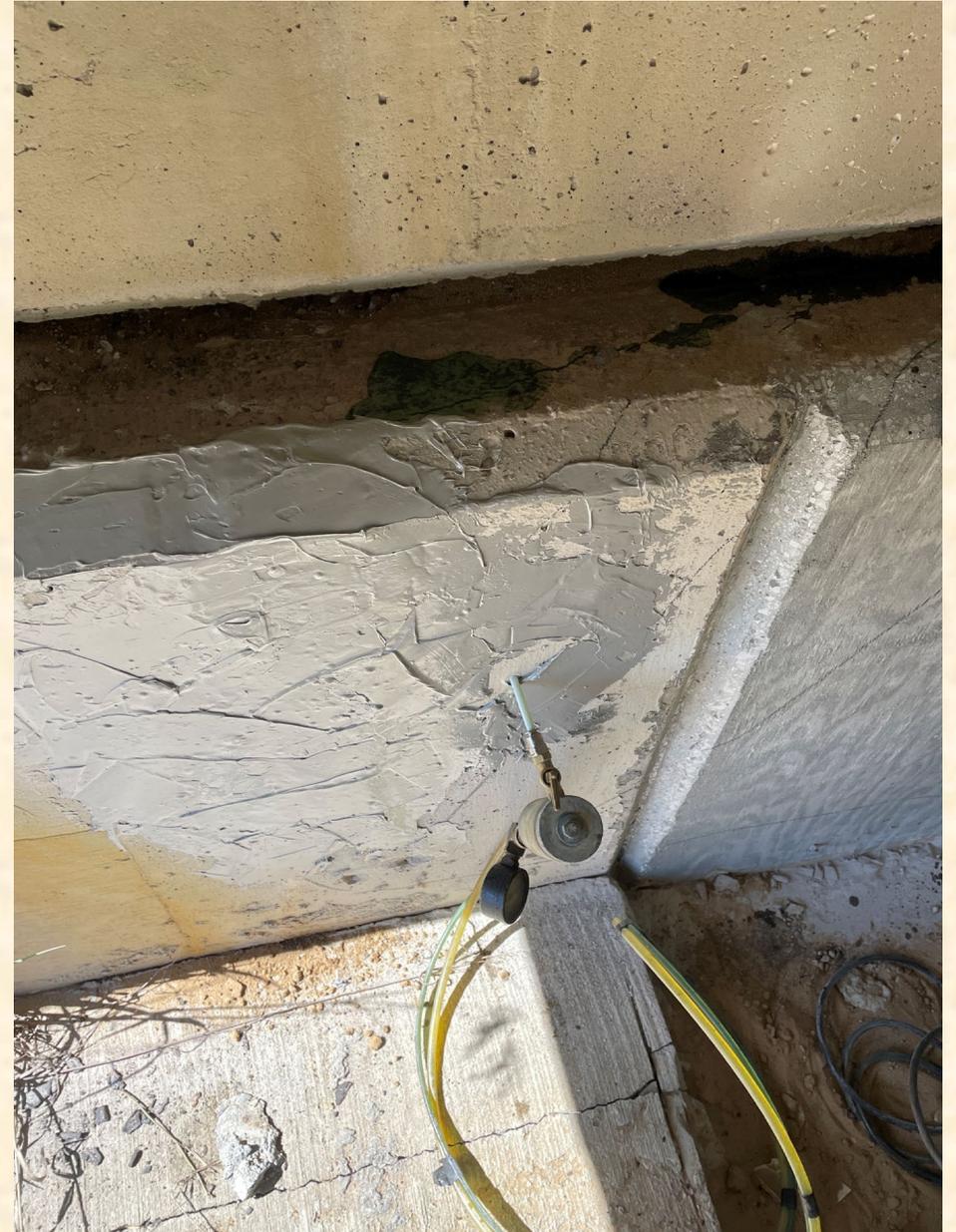
Abutment Injection

- We drilled about 8 to 10 inches into the stem approximately 6 to 12 inches below the top of the stem.
- We noticed a void based on the drills action inside the stem
- We started from the bottom port.



Abutment Injection

- The front face had some honeycomb holes from the concrete repair that we had to seal first.
- See the pool of epoxy on top



Abutment Poly Injection

- Sealed along the face of backwall and bottom of deck.



T-17 Conc Beam End Repair

- Tail span exterior beam and first interior

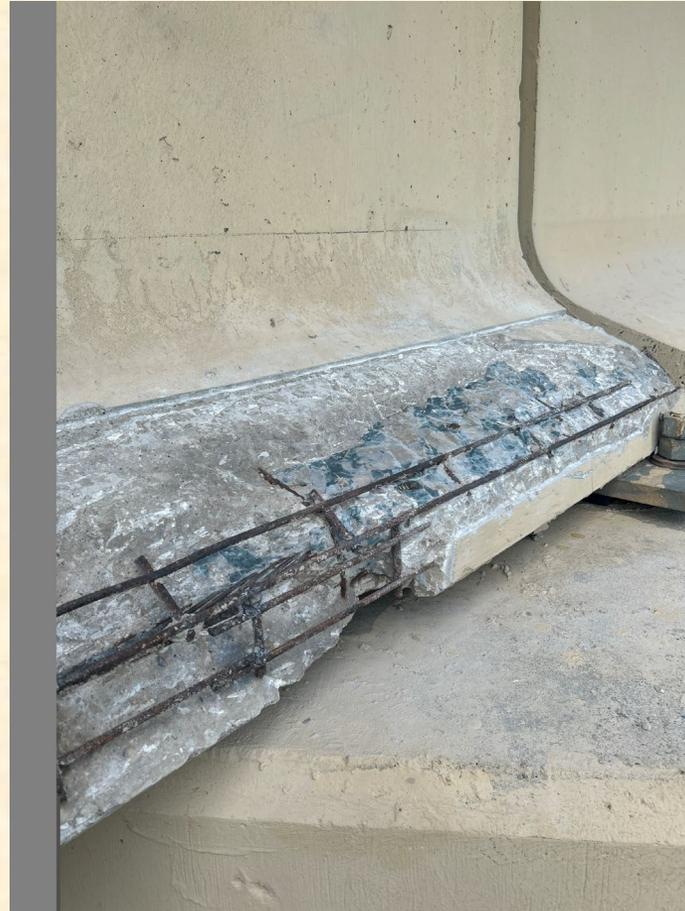


T-17 Conc Beam End Repair

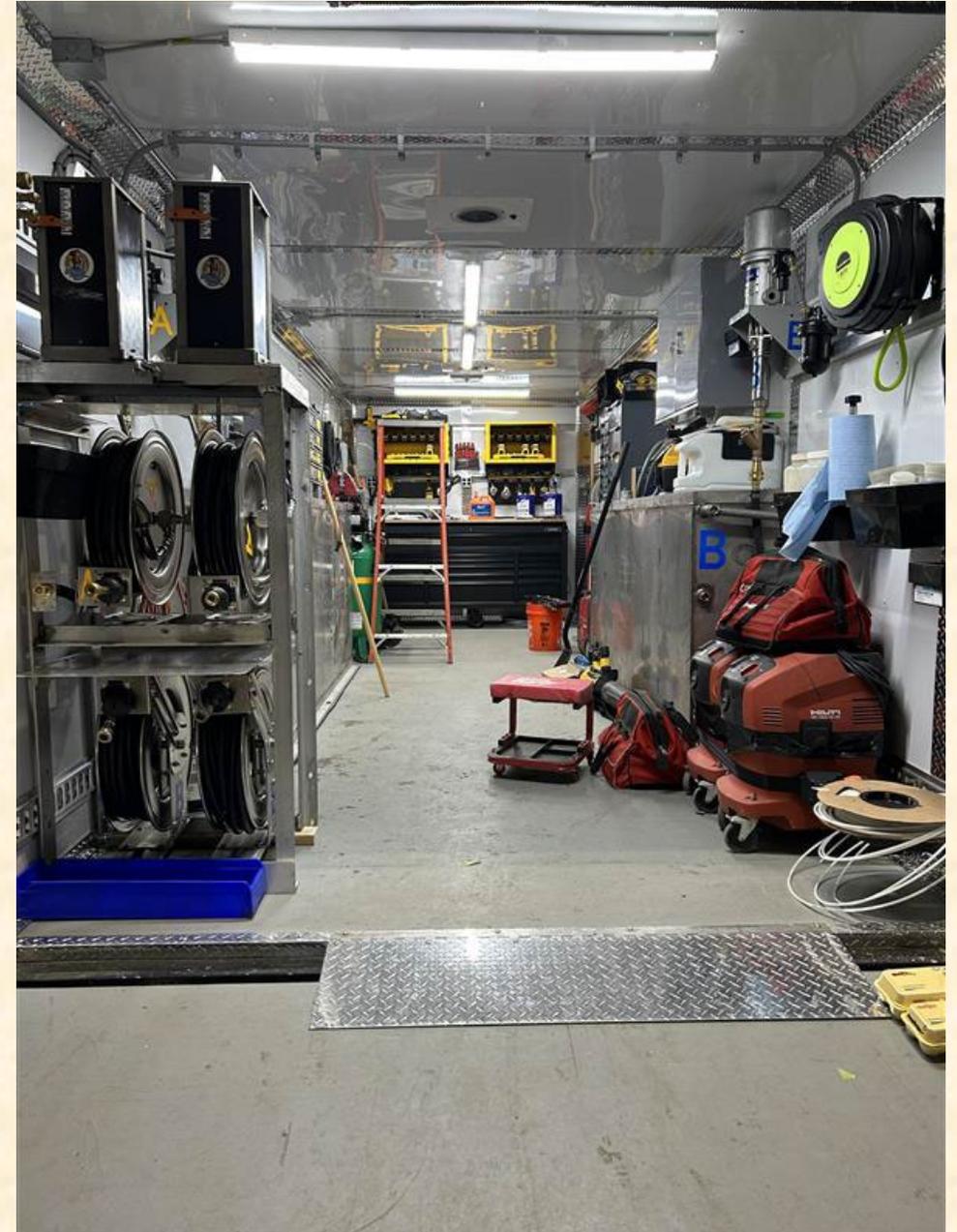


T-17 Conc Beam End Repair

- Exterior beam
- One year later



Epoxy Injection Trailer



Epoxy Injection Trailer



Slab Lifting & Soil Stabilization Trailer



Slab Lifting & Soil Stabilization Trailer



Epoxy Trailer



QUESTIONS

