

PURPOSE AND NEED

- 1. Joint headers are original, except for modifications implemented in early 2000s
- 2. Connections at 22 metal joint headers are deteriorated and loosening,
- 3. Deck adjacent to the joint headers is deteriorated with numerous spalls and patches,
- 4. Loose metal sections are a hazard to motorists, and
- 5. Multiple emergency task orders have been completed to remove broken and loose pieces.

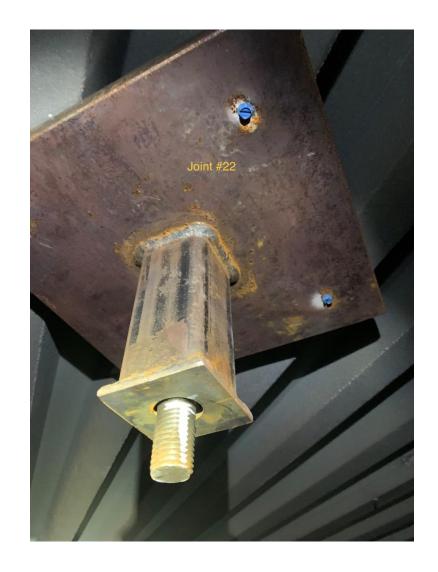






STEP 1 – Roadway Plating Preparation

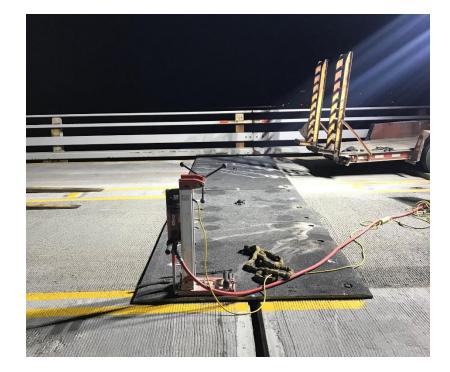
Core drill holes for steel plates and install spring boxes on the underside of deck with tapcon screws.





STEP 2 – Roadway Plating Installation

Install Steel Plates with threaded bolts each night before the morning roadway reopening.

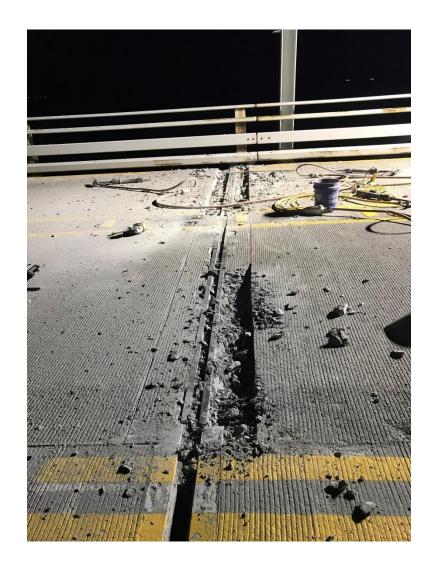






STEP 3 – Remove deteriorated concrete

Saw cut one foot back from each side of the joint and chip out the existing concrete.





STEP 4 – Clean and remove portions of existing header steel

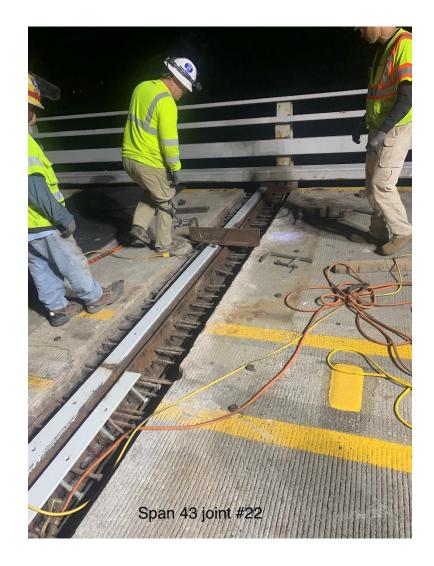
Using an air arc welder to demo out old joint steel for new steel. Use grinder and wire wheel to clean existing steel.





STEP 5 – Install new joint header steel

Welding the new steel joint in place.





STEP 6 – Install new deck steel for joint

Splice the steel rebar and form up the deck edge for concrete.





STEP 7 – Pour joint concrete

Pour rapid set concrete from existing concrete to the new joint.





STEP 8 – Remove assembly for roadway plates

Remove the spring boxes and fill holes with grout.

