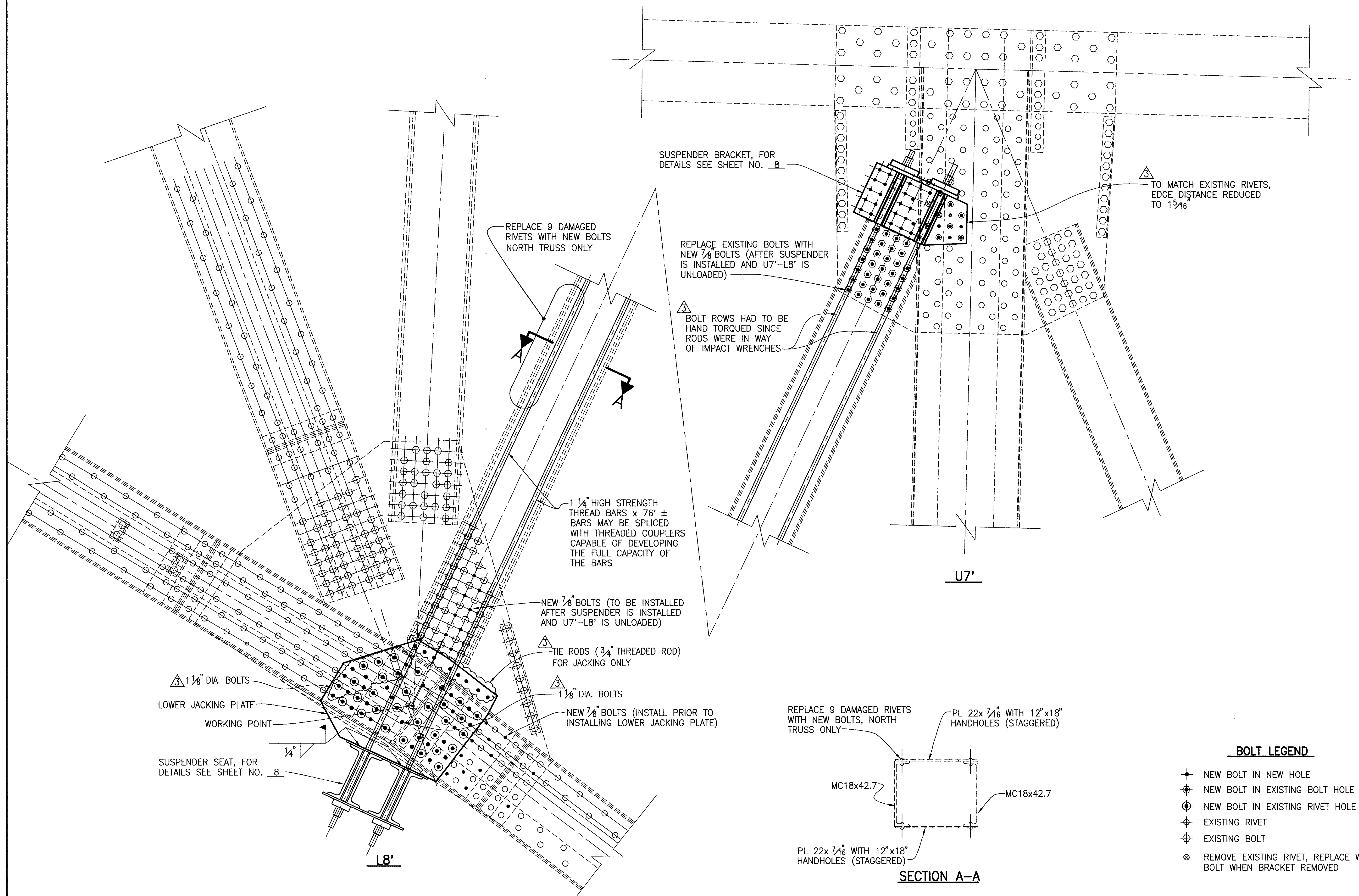


Job No. 96073sd Date 3/12/97 Drawn By RB,JFS,JLS,JFS



SUSPENDER BRACKET, FOR DETAILS SEE SHEET NO. 8

REPLACE 9 DAMAGED RIVETS WITH NEW BOLTS NORTH TRUSS ONLY

REPLACE EXISTING BOLTS WITH NEW 7/8 BOLTS (AFTER SUSPENDER IS INSTALLED AND U7'-L8' IS UNLOADED)

BOLT ROWS HAD TO BE HAND TORQUED SINCE RODS WERE IN WAY OF IMPACT WRENCHES

TO MATCH EXISTING RIVETS, EDGE DISTANCE REDUCED TO 1 5/16"

1 1/4" HIGH STRENGTH THREAD BARS x 76' ± BARS MAY BE SPLICED WITH THREADED COUPLERS CAPABLE OF DEVELOPING THE FULL CAPACITY OF THE BARS

NEW 7/8 BOLTS (TO BE INSTALLED AFTER SUSPENDER IS INSTALLED AND U7'-L8' IS UNLOADED)

TIE RODS (3/4" THREADED ROD) FOR JACKING ONLY

1 1/8" DIA. BOLTS

NEW 7/8 BOLTS (INSTALL PRIOR TO INSTALLING LOWER JACKING PLATE)

1 1/8" DIA. BOLTS

LOWER JACKING PLATE

WORKING POINT

SUSPENDER SEAT, FOR DETAILS SEE SHEET NO. 8

REPLACE 9 DAMAGED RIVETS WITH NEW BOLTS, NORTH TRUSS ONLY

PL 22x 7/16 WITH 12"x18" HANDHOLES (STAGGERED)

PL 22x 7/16 WITH 12"x18" HANDHOLES (STAGGERED)

SECTION A-A

BOLT LEGEND

- ⊕ NEW BOLT IN NEW HOLE
- ⊕ NEW BOLT IN EXISTING BOLT HOLE
- ⊕ NEW BOLT IN EXISTING RIVET HOLE
- ⊕ EXISTING RIVET
- ⊕ EXISTING BOLT
- ⊕ REMOVE EXISTING RIVET, REPLACE WITH BOLT WHEN BRACKET REMOVED

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DATE 7/10/96
REVIEWED DAP
STRUCTURE FILE NO. 4304985
DRAWN RRB
CHECKED RWR
DESIGNED DLR
REVISION 2/20/97

STRENGTHENING DETAILS - 1
BRIDGE NO. LAK-90-2342 R
OVER THE GRAND RIVER

LAK-90-23.42 L&R