- C JOINT @ BENT 8 AND 13 CONTINUOUS PREMOLDED NEOPRENE OR EPDM GLAND · € ¾″Ø HEX HEAD STAINLESS STEEL BOLT AND STAINLESS STEEL WASHER (TYP.) (REMOVE & RESET) (REMOVE & REPLACE) AFTER TOROUING BOLTS IN ACCORDANCE - WITH INSTALLATION PROCEDURE, FILL RECESS WITH NEOPRENE SEALANT (TYP.) 1%"Ø_ 13/₁₆"Ø 4" (TYP.) NEOPRENE SEALANT TYP.) HOLD-DOWN PLATE (TYP.) (REMOVE & RESET) 1/4" MAX. (TYP.) (REMOVE & REPLACE) $-\frac{1}{8}$ " MIN., $\frac{1}{4}$ " MAX. (TYP.) $-1\frac{3}{8}$ " MIN., $1\frac{1}{2}$ " MAX. (TYP.) -SEE DETAIL "A" SECTION E-E (SECTION NORMAL TO JOINT -- STEEL SUPERSTRUCTURE)

REPAIR INSTALLATION PROCEDURE

LOOSEN THE EXISTING BOLTS AND HOLD DOWN PLATES TO REMOVE AND REPLACE THE EXISTING GLAND. REMOVE THE EXISTING NEOPRENE SEALANT AND CLEAN THE EXISTING BASE ANGLE OF OIL, GREARSE AND OTHER LATENTS.

LAY THE NEW GLAND ON THE BASE ANGLE AND FIELD MARK THE NEW GLAND FOR THE BOLT HOLES. HOLES IN THE NEW GLAND SHALL BE PUNCHED % " IN DIAMETER WITH A HAND PUNCH.

IN ORDER TO CHECK FOR PROPER ALIGNMENT, PLACE THE NEW GLAND AND HOLD-DOWN PLATES ON THE BASE ANGLE. DO NOT APPLY NEW NEOPRENE SEALANT. BOLT THE HOLD-DOWN PLATES TO THE BASE ANGLE, BUT DO NOT TIGHTEN. THE ENGINEER WILL INSPECT THE JOINT SEAL DEVICE FOR PROPER ALIGNMENT.

AFTER INSPECTION, REMOVE THE HOLD-DOWN PLATES AND NEW GLAND. APPLY NEW NEOPRENE SEALANT TO THE BASE ANGLE IN ACCORDANCE WITH THE "INSTALLATION SKETCH". PLACE NEW GLAND AND HOLD-DOWN PLATES ON THE BASE ANGLE, BOLT THE HOLD-DOWN PLATES TO THE BASE ANGLE ASSEMBLY AND TORQUE THE BOLTS TO 88 FT-LBS WITH A TORQUE WRENCH. CHECK THE TORQUE AFTER THREE (3) HOURS AND, IF NECESSARY, RETICHTEN TO 88 FT-LBS. A FINAL CHECK SHALL BE MADE AT SEVEN (7) DAYS. TORQUE SHALL NOT BE LESS THAN 80 FT-LBS AFTER SEVEN (7) DAYS.

AFTER PROPER TOROUING, CLEAN THE BOLT HOLE RECESSES AND THE RECESS BETWEEN THE JOINT SEAL DEVICE AND CONCRETE, COMPLETELY FILL THESE RECESSES WITH NEW NEOPRENE SEALANT.

GENERAL NOTES

ALL HOLD-DOWN BOLTS SHALL CONFORM TO ASTM F593
ALLOY 304 STAINLESS STEEL AND WASHERS SHALL CONFORM
TO ASTM F844 EXCEPT THEY SHALL BE MADE FROM ALLOY 304
STAINLESS STEEL.

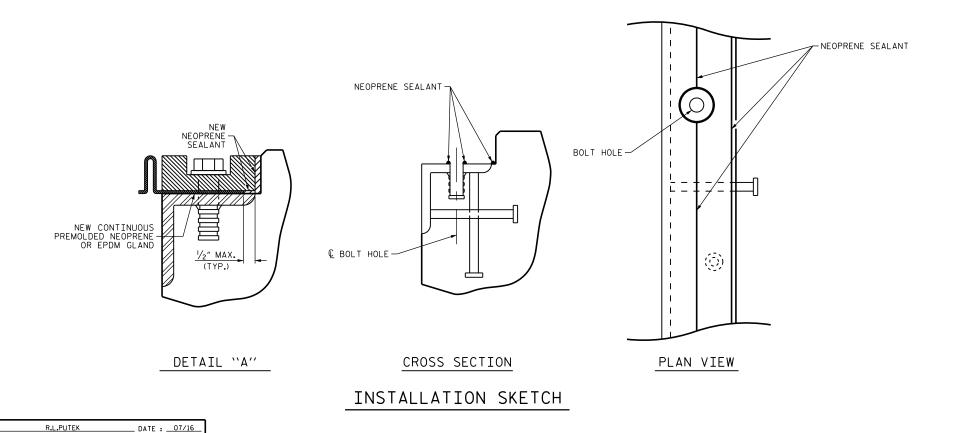
A PREMOLDED CORRUGATED OR NON-CORRUGATED GLAND SHALL BE USED FOR JOINTS SKEWED BETWEEN 50° THRU 130°.

THE FINISHED EXPANSION SEAL DEVICE SHALL BE A MINIMUM ${}^{\prime\prime}_8{}^{\prime\prime}$ AND A MAXIMUM OF ${}^{\prime\prime}_4{}^{\prime\prime}$ BELOW THE TOP OF SLAB.

FOR EXPANSION JOINT SEAL REPAIR, SEE SPECIAL PROVISIONS.

NO SEPARATE PAYMENT WILL BE MADE FOR REMOVING AND REINSTALLING MEDIAN AND BARRIER RAIL COVER PLATES. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR "EXPANSION JOINT SEALS".

MOVEMENT AND SETTING AT JOINT						
BRIDGE	LOCATION	SKEW ANGLE	TOTAL MOVEMENT (ALONG (L RDWY)	PERPENDICULAR JOINT OPENING AT 30° F	PERPENDICULAR JOINT OPENING AT 60° F	PERPENDICULAR JOINT OPENING AT 90° F
143	BENT 8	90°00′00″	23/8″	2¾"	23/16"	15/8″
	BENT 13	90°00′00″	23/8″	2¾″	23/16"	15/8″



PROJECT NO. I-5894

CASTON COUNTY
BRIDGE NO. 143

DEPARTMENT OF TRANSPORTATION

RALEIGH

SEAL

SEA

32492

· CACINEER

1/29/2017

YANN

EXPANSION JOINT SEAL DETAILS

REVISIONS SHEET NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED 2

DATE : <u>12/16</u>

DRAWN BY .

CHECKED BY :

J.YANNACCONE