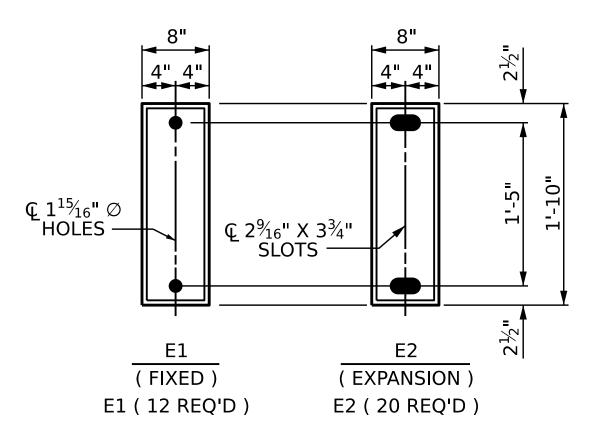


TYPICAL SECTION OF ELASTOMERIC BEARINGS

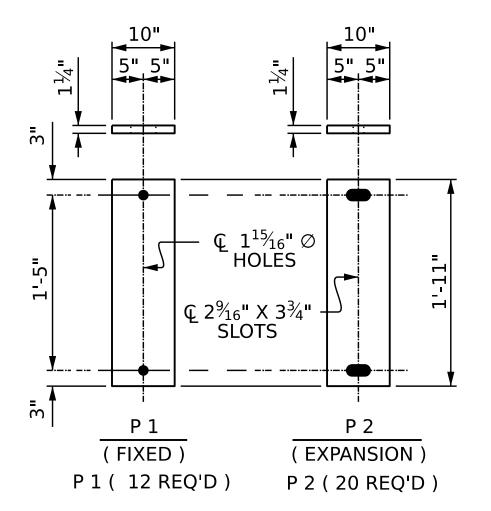


PLAN VIEW OF ELASTOMERIC BEARING

TYPE I

MAXIMUM ALLOWABLE SERVICE LOADS					
D.L.+L.L. (NO IMPACT)					
TYPE I	140 k				

ASSEMBLED BY : S. T. SANDO	OR DATE: 08/22/22
CHECKED BY : W.C.SMITH	DATE: 5/31/23
DRAWN BY: JMB 11/87 CHECKED BY: ARB 11/87	REV. 6/13 AAC/MAA REV. 12/17 MAA/THC REV. 10/21 BNB/AAI



BENT #

3

NEAR

4 P2

4 E1

4 E1

4 P1

4 E1

4 P1

EXP.

FIX

FIX

FIX

FAR

EXP.

EXP.

4 E2

4 P2

4 E2

4 P2

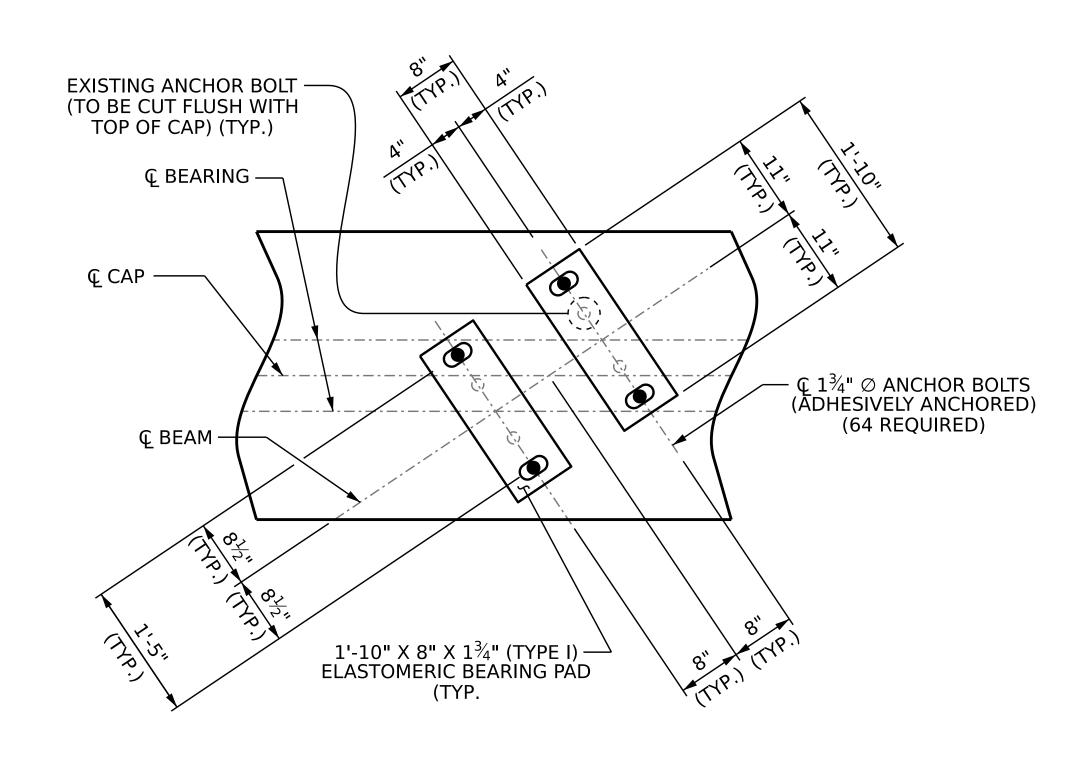
4 E2

4 P2

4 E2

4 P2

SOLE PLATE DETAILS (



TYPICAL ANCHOR BOLT LAYOUT

NOTES

AT ALL FIXED POINTS OF SUPPORT, NUTS FOR ANCHOR BOLTS ARE TO BE TIGHTENED FINGER TIGHT AND THEN BACKED OFF $\frac{1}{2}$ TURN. THE THREAD OF THE NUT AND BOLT SHALL THEN BE BURRED WITH A SHARP POINTED TOOL

THE 2" Ø PIPE SLEEVE SHALL BE CUT FROM SCHEDULE 40 PVC PLASTIC PIPE. THE PVC PLASTIC PIPE SHALL MEET THE REQUIREMENTS OF ASTM D1785.

THE PAYMENT FOR THE PIPE SLEEVES SHALL BE INCLUDED IN THE SEVERAL PAY ITEMS.

FOR PAINTED STRUCTURAL STEEL (EXCLUDING AASHTO M270 GRADE 50W), SOLE PLATES, ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

FOR AASHTO M270 GRADE 50W STRUCTURAL STEEL, SOLE PLATE SHALL BE AASHTO M270 GRADE 50W AND SHALL NOT BE GALVANIZED. ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF ASTM A449. NUTS SHALL MEET THE REQUIREMENTS OF AASHTO M291-DH OR AASHTO M292-2H. WASHERS SHALL MEET THE REQUIREMENTS OF AASHTO M293. SHOP DRAWINGS ARE NOT REQUIRED FOR ANCHOR BOLTS, NUTS AND WASHERS. SHOP INSPECTION IS REQUIRED.

WHEN FIELD WELDING THE SOLE PLATE TO THE GIRDER FLANGE, USE TEMPERATURE INDICATING WAX PENS, OR OTHER SUITABLE MEANS, TO ENSURE THAT THE TEMPERATURE OF THE SOLE PLATE DOES NOT EXCEED 300°F. TEMPERATURES ABOVE THIS MAY DAMAGE THE ELASTOMER.

ALL SURFACES OF BEARING PLATES SHALL BE SMOOTH AND STRAIGHT.

THE ELASTOMER IN THE STEEL REINFORCED BEARINGS SHALL HAVE A SHEAR MODULUS OF 0.160 KSI, IN ACCORDANCE WITH AASHTO M251.

FOR STEEL REINFORCED ELASTOMERIC BEARINGS, SEE SPECIAL PROVISIONS.

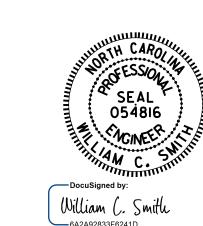
CUT EXISTING ANCHOR BOLTS FLUSH TO THE TOP OF CONCRETE. BOLT ENDS SHALL BE COATED WITH AN APPROVED EPOXY PAINT.

THE CONTRACTOR SHALL CORE INTO EXISTING BENT CAP TO INSTALL ANCHOR BOLTS. BOLTS SHALL BE ADHESIVELY ANCHORED; SEE STANDARD SPECIFICATIONS. CONTRACTOR SHALL SUBMIT PROPOSED ADHESIVE FOR APPROVAL. ADHESIVE FOR NEW ANCHOR BOLTS SHALL BE ON THE NCDOT APPROVED PRODUCT LIST, FOR THE PROPOSED USE.

ADHESIVELY ANCHORED BOLTS SHALL BE SUBJECT TO LEVEL 1 FIELD TESTING, IN ACCORDANCE WITH STANDARD SPECIFICATIONS ARTICLE 420-13 (C), EXCEPT THAT THE TEST LOAD SHALL BE 10,000 LBS. TENSION FOR ANCHOR BOLTS.

MINIMUM EMBEDMENT OF ANCHOR BOLT SHALL BE PER MANUFACTURER RECOMMENDATIONS. MINIMUM LENGTH OF ANCHOR BOLT SHALL BE SUFFICIENT FOR EMBEDMENT DEPTH, THICKNESS OF ELASTOMERIC BEARING, SOLE PLATE(S) AND FULL ENGAGEMENT OF ANCHOR BOLT NUT.

> PROJECT NO. B-5981 **DUPLIN** COUNTY 300017 BRIDGE NO. ___



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ELASTOMERIC BEARING DETAILS

(STEEL SUPERSTRUCTURE)

10/24/2023	REVISIONS				SHEET NO.
DOCUMENT NOT CONSIDERED	NO. BY:	DATE: N	0. BY:	DATE:	S2-15
FINAL UNLESS ALL	1	00	3		TOTAL SHEETS
SIGNATURES COMPLETED	2]		31

10/17/2023 R:\Structures\Plans\300017\402_029_B5981_SMU_BG_S2-15_300017.dgn ssandor