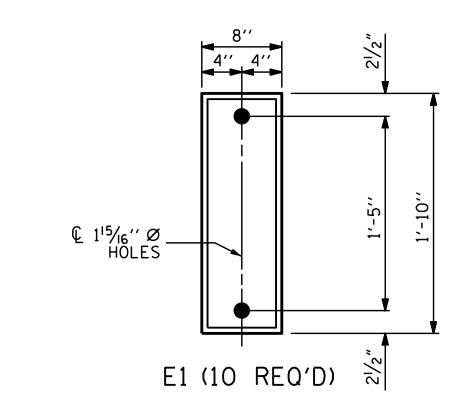


TYPICAL SECTION OF ELASTOMERIC BEARINGS



PLAN VIEW OF ELASTOMERIC BEARING

## TYPE I

| 3" 25%" | 5" 5"                      | 213/16"  | 5" 5"                   | 15/6"   | 5" 5"                     |          |
|---------|----------------------------|--|-------------------------|---|---------------------------|----------|
| 1′-8″   | 7                          | © 1 <sup>15</sup> / <sub>16</sub> '' Ø<br>HOLES ———————————————————————————————————— | 7                       | © 1 <sup>15</sup> / <sub>16</sub> '' Ø<br>HOLES — | 7_                        | 2′-2″    |
| "       | P1<br>(FIXED)<br>P1 (6 REQ |  | P2<br>(FIXED)<br>(4 REQ | – –<br>('D) P3                                    | P3<br>(FIXED)<br>5 (2 REQ | -<br>′D) |

SOLE PLATE DETAILS ("P")

## MAXIMUM ALLOWABLE SERVICE LOADS D.L.+L.L.(NO IMPACT)

| TYPE I   | 140 k |
|----------|-------|
| TYPE II  | 180 k |
| TYPE III | 255 k |
| <b>.</b> | 11    |

## 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 BÜRRED 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.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FOLLOWING PROCEDURE, WHICH MAY BE REQUIRED BY THE ENGINEER, TO RESET ELASTOMERIC BEARINGS DUE TO GIRDER TRANSLATION AND END ROTATION:

1. ONCE THE DECK HAS CURED, THE GIRDERS SHALL BE JACKED AND THE ELASTOMERIC BEARING SLOTS CENTERED AS NEARLY AS PRACTICAL ABOUT THE BEARING STIFFENER. THIS OPERATION SHALL BE PERFORMED AT APPROXIMATELY

THE CONTRACTOR MAY PROPOSE ALTERNATE METHODS, PROVIDED DETAILS ARE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

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.

NEW 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. 15BPR.56 BEAUFORT \_ COUNTY 060028 STATION:



P. Korey Newton

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD

ELASTOMERIC BEARING —— DETAILS ——

(STEEL SUPERSTRUCTURE) (SPAN 25)

**REVISIONS** 01/27/2022 DATE: BY: BY: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DATE : 11/29/21

MAA/GM

AAC/MAA

MAA/THC

DATE : 1/14/22

ASSEMBLED BY : M.K. BEARD

CHECKED BY : ARB 11/87

CHECKED BY : D. SHACKELFORD

DRAWN BY : JMB 11/87 REV. 10/1/11

DATE:

SHEET NO.

S3-75

TOTAL SHEETS