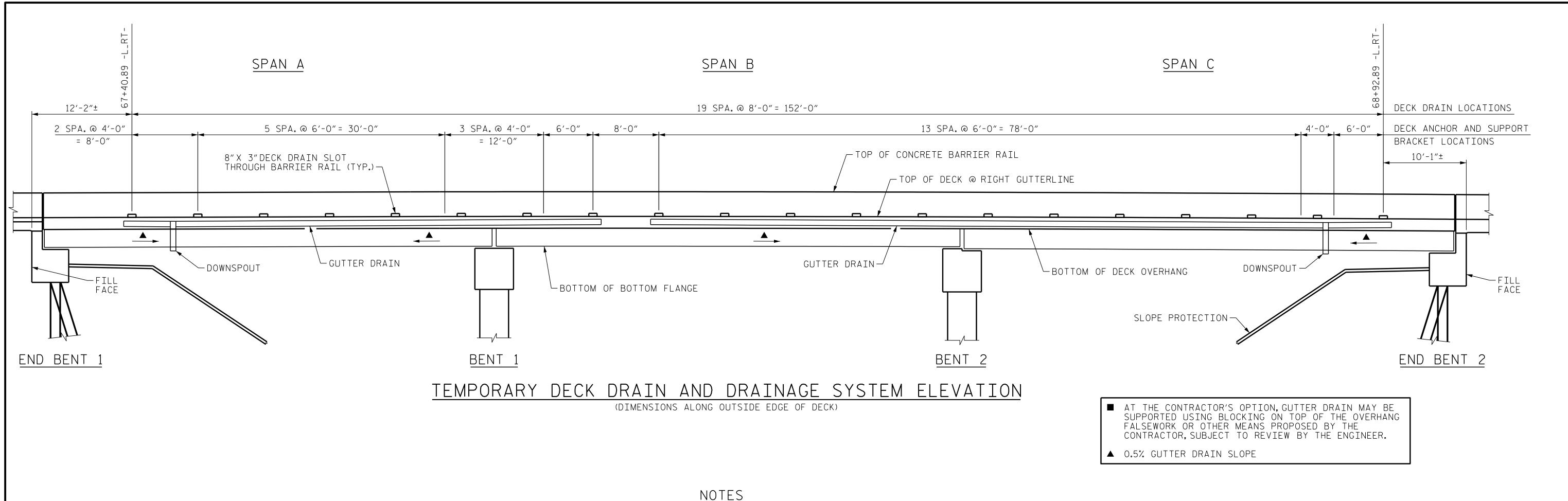
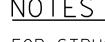




DES BY: E. NOLTING

DES CHK: F. CORDOVA





FOR STRUCTURE DRAINAGE SYSTEM, SEE SPECIAL PROVISIONS.

THE SUPPORT BRACKETS SHALL CONFORM TO AASHTO M270 GRADE 36 STEEL OR APPROVED EQUAL AND SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

GUTTER DRAIN AND DECK DRAINS SHALL BE SHOP FABRICATED FROM GALVANIZED STEEL SHEET CONFORMING TO ASTM A653 STRUCTURAL STEEL (SS) GRADE 33 WITH G165 COATING.

GUTTER DRAIN SHALL BE SPLICED, WHEN NECESSARY, ONLY AT SUPPORT BRACKETS. GUTTER DRAIN SPLICES SHALL BE SEALED WITH JOINT SEALER.

VERTICAL SLOTS ARE PROVIDED IN THE SUPPORT BRACKETS TO ALLOW ADJUSTMENT OF THE GUTTER DRAIN GRADE. THE GUTTER DRAIN GRADE SHALL BE 0.5%.

THE JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE B LOW MODULUS SILICONE SEALANT ACCORDING TO SECTION 1028 OF THE STANDARD SPECIFICATIONS.

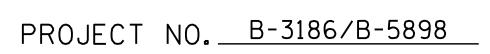
THE $\frac{1}{2}$ % BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M291. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED. AT THE CONTRACTOR'S OPTION, STAINLESS STEEL BOLTS, NUTS AND WASHERS MAY BE USED AS AN ALTERNATE. THEY SHALL CONFORM TO OR EXCEED THE MECHANICAL REQUIREMENTS OF ASTM A307. THE USE OF THIS ALTERNATE SHALL BE APPROVED BY THE ENGINEER.

THE STRUCTURAL CONCRETE ANCHOR ASSEMBLY SHALL CONSIST OF THE FOLLOWING COMPONENTS:

- A. FERRULES SHALL BE MADE FROM STEEL MEETING THE REQUIREMENTS OF AASHTO M169, GRADE 12L14 AND SHALL HAVE A MINIMUM LENGTH OF THREADS OF 11/4" FOR √2″Ø FERRULES.
- B. $2 \frac{1}{2}$ \varnothing X $1\frac{3}{4}$ BOLTS WITH WASHERS.
- C. WIRE STRUT SHOWN IN THE CONCRETE ANCHOR ASSEMBLY DETAIL IS THE MINIMUM ALLOWABLE SIZE AND SHALL HAVE A MINIMUM TENSILE STRENGTH OF 100,000 PSI.
- THE ANCHOR ASSEMBLY SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS FOR THE DRAINAGE SYSTEM, INCLUDING, BUT NOT LIMITED TO, ATTACHMENTS TO THE BRIDGE, DECK DRAINS, GUTTER DRAIN, DOWNSPOUTS AND SUPPORT BRACKETS.

DRAINAGE SYSTEM INSTALLATION AND REMOVAL SHALL BE PAID FOR AS A LUMP SUM UNDER THE PAY ITEM "STRUCTURE DRAINAGE SYSTEM."



COUNTY

DATE:

SO3R-28

TOTAL SHEETS

HAYWOOD

STATION: 68+65.75 ± -L_RT-

SHEET 1 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE TEMPORARY DRAINAGE SYSTEM DETAILS

REVISIONS Eric Molting 1/25/2022 NO. BY: DATE: DOCUMENT NOT CONSIDERED FINAL

SEAL

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

UNLESS ALL SIGNATURES COMPLETED

-DECK DRAIN GUTTERLINE -12 GAUGE ------BRACING SEALER DRAIN ANCHOR ASSEMBLY — : 1/2" Ø BOLT

JOINT SEALER AROUND DECK DRAIN-

DATE : 07/21

_ DATE : 07/21

DWG BY: B. PETERSON

CHK BY: F.CORDOVA

8"WIDE DRAIN BLOCKOUT-

DECK DRAIN DETAIL

DATE : 07/21

_ DATE : 07/21

-SUPPORT BRACKET