

NOTES:

THE BARRIER RAIL IN EACH SPAN SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT SPAN HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT THE MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

ALL REINFORCING STEEL IN THE CONCRETE BARRIER RAIL SHALL BE EPOXY COATED.

THE D1, D2, D3, S1 AND S2 BARS MAY BE SHIFTED SLIGHTLY AS NECESSARY TO PROVIDE 2" CLEARANCE TO THE 1/2" EXPANSION JOINT AND ALL OPEN JOINTS IN THE BARRIER.

PROVIDE A 4" HIGH X 8" WIDE FORMED DRAINAGE SLOT IN THE LEFT SIDE BARRIER RAIL. THIS SLOT SHALL BE PLACED AT 4'-0" SPACING ALONG THE FULL LENGTH OF THE BRIDGE. PROVIDE 2" MIN. CLR TO THE "S" BARS IN THE BARRIER TO THE SLOT. THE SLOT SHALL BE PLUGGED AT THE COMPLETION OF THE PROJECT AFTER TRAFFIC IS PLACED IN THE PERMANENT CONDITION. SEE SPECIAL PROVISIONS. PLUGGING OF DECK DRAINS IS CONSIDERED INCIDENTAL TO THE COST OF THE "CONCRETE BARRIER RAIL".

SEE CONSTRUCTION SEQUENCE AND TYPICAL SECTION SHEETS FOR ADDITIONAL STAGING INFORMATION.

#5D1 AND #5D2 BARS SHALL BE MACHINE THREADED TO FIT TO COUPLER AND DELIVERED CONNECTED. THREADS SHALL BE GREASED TO PERMIT EASY SEPARATION AFTER INSTALLATION. COUPLERS ARE CONSIDERED INCIDENTAL TO THE COST OF CONCRETE BARRIER RAIL.

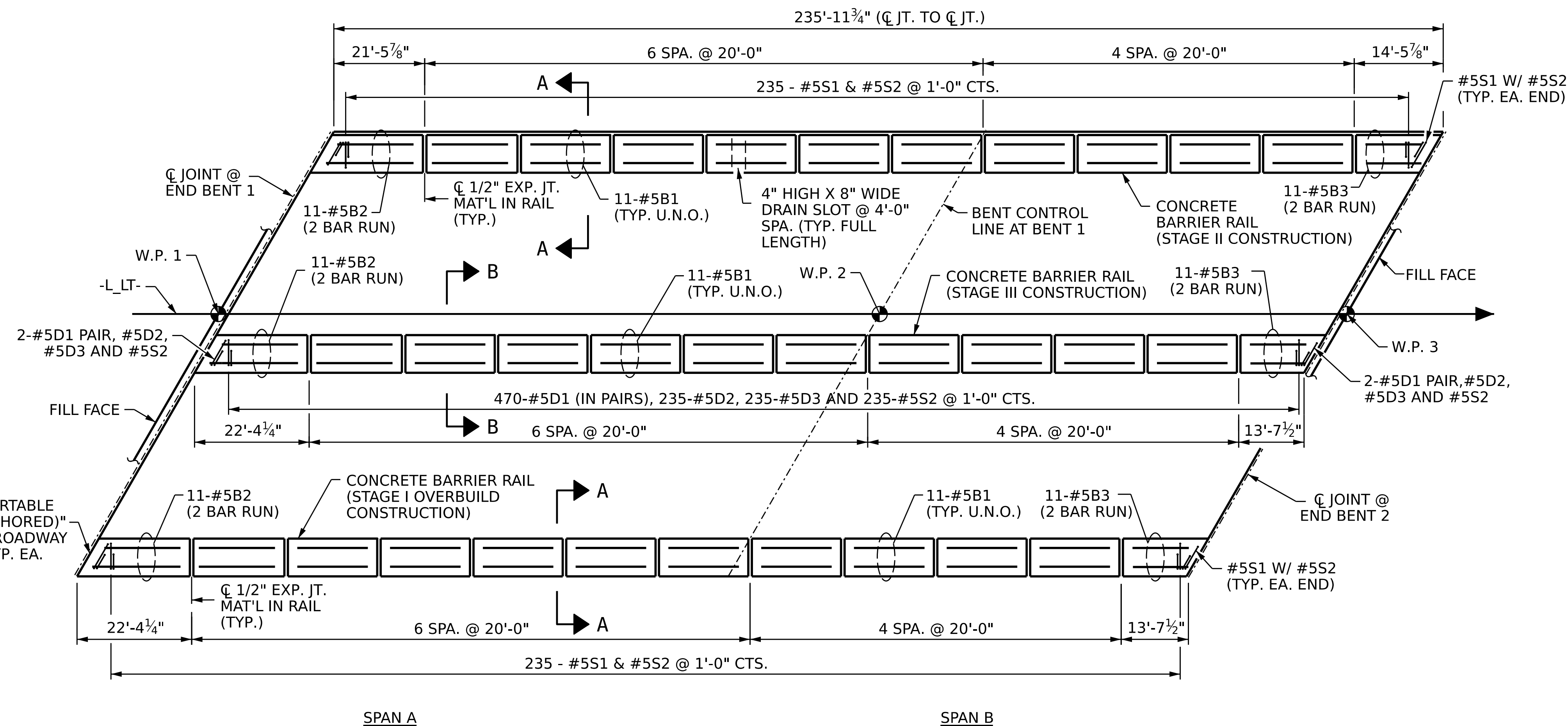
THE #5D1 COUPLED TO #5D2 OR #5D3 SHALL BE PUSHED INTO GREEN CONCRETE AFTER POURING AND SCREEDING THE DECK. THE COUPLER SHALL BE INSTALLED TO BE 3/16" BELOW THE TOP OF THE FINISHED CONCRETE DECK. ONCE DECK HAS CURED, #5D2 AND #5D3 SHALL BE UNTHREADED AND SET ASIDE. A TEMPORARY BOLT SHALL BE INSTALLED IN THE COUPLER AND SEALED TO PREVENT DEBRIS INTRUSION AND PROTECT THE THREADS. SEE DETAIL "D". WHEN CONSTRUCTING CONCRETE MEDIAN BARRIER, REMOVE SEALER AND TEMPORARY BOLT AND THREAD #5D2 AND #5D3 IN TO COUPLER.

PRIOR TO CURING, THE AREA UNDERNEATH THE STAGE III RIGHT CONCRETE BARRIER SHALL BE RAKE FINISHED TO A SURFACE ROUGHNESS OF 3/16".

THE CONTRACTOR MAY SUBMIT ALTERNATIVE DETAILS FOR ANCHORING THE STAGE III CONCRETE BARRIER RAIL INTO THE DECK TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OF THE DECK. ANY ALTERNATIVE METHODS APPROVED FOR CONSTRUCTION SHALL BE AT NO ADDITIONAL COST TO THE DEPARTMENT.

THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS FOR THE D1, D2, D3, AND COUPLER PRIOR TO FABRICATION TO ENSURE PROPER FIT.

FOR SECTIONS AND DETAILS, SEE SHEET 2.



PLAN OF CONCRETE BARRIER RAIL

DISTANCES ARE MEASURED ALONG OUTSIDE FACE OF BARRIER RAIL

PROJECT NO. B-3186 / B-5898

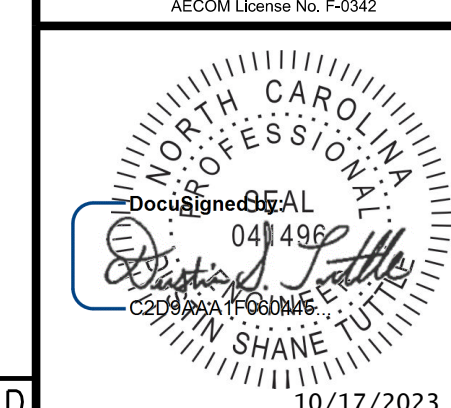
HAYWOOD COUNTY

STATION: 24+70.00 -L_LT-

SHEET 1 OF 2

DRAWN BY : T.E. NEAL DATE : 05/2023
 CHECKED BY : J.C. MORRISON DATE : 06/2023
 DESIGN ENGINEER OF RECORD : D. TUTTLE DATE : 06/2023

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE

CONCRETE BARRIER RAIL
 PLAN VIEW

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S3-25
1			3			TOTAL SHEETS
2			4			50

STD. NO. CBR1