NOTES

THE BARRIER RAIL IN CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT UNIT HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 20.7 MPa.

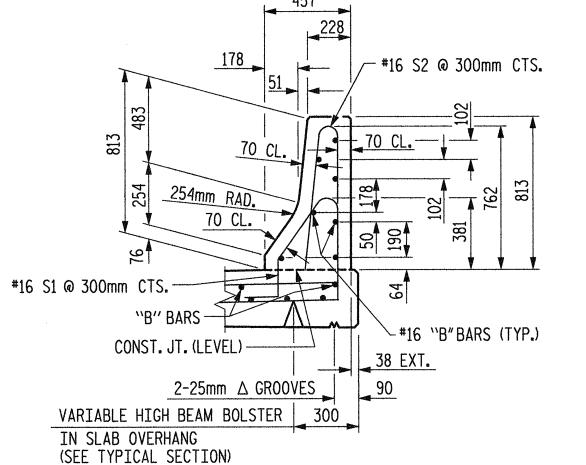
-WHEN COMPRESSION JOINT SEAL OR EVAZOTE JOINT SEAL IS REQUIRED, THE JOINT -IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

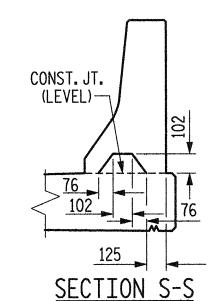
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

-THE #16 S3 AND #16 S4 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR -DOWELS, SEE SPECIAL PROVISIONS. THE YIELD LOAD FOR THE #16 S3 AND #16 S4 BARS IS 82.7 KN. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT -REQUIRED.

VERTICAL GROOVED CONTRACTION JOINTS, 12mm IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND 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 MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 6.1m IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 3.5m IN LENGTH.

THE #16 S1 AND #16 S2 BARS MAY BE SHIFTED SLIGHTLY AS NECESSARY IN ORDER TO MAINTAIN A 50mm CLEARANCE TO THE 13mm EXPANSION JOINT MATERIAL IN THE RAIL.





SECTION S-S AT DAM IN OPEN JOINT (THIS IS TO BE USED ONLY WHEN SLIP FORM IS USED)

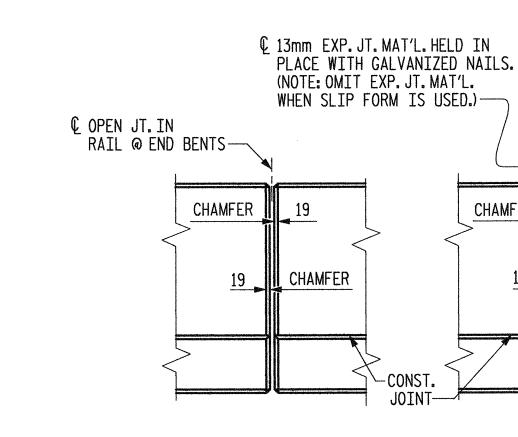
DWG. NO. 25

SECTION THRU RAIL

CHAMFER

CHAMFER

4 S



Plans prepared by: KO & ASSOCIATES, P.C. Consulting Engineers 1011 SCHAUB DR., SUITE #202 RALEIGH, N.C. 27606 For Division of Highways

R-2552AA PROJECT NO. . WAKE-JOHNSTON COUNTY 27+51.601 -I1Y1-STATION:

SHEET 2 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STANDARD

BAR TYPES

ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

14 | 16 | STR | 7540

16 | STR |

14 | 16 | STR | 7040

16 | STR |

STR

STR

STR

STR

STR

STR

16 | STR |

1548 | 16 | 1

1548 | 16 | 2 |

16 84 | 16 | STR

98 | 16 |

16

16

16

84

14

* EPOXY COATED

REINFORCING STEEL

CONCRETE BARRIER RAIL

CLASS AA CONCRETE

NO. | SIZE | TYPE | LENGTH | WEIGHT

1440

1580

7100

7120

7200

7380

6640

6700

6460

7760

7700

7600

3796

164 926

153

155

939

160

144

1019

140

169

837

165

12227 kg

116.3 CU. METER

464.073 METERS

214

203

BAR

* S1

* S2

CONCRETE BARRIER RAIL

SHEET NO. REVISIONS DATE: NO. BY: 2-61 DATE: BY: TOTAL SHEETS

(LEVEL) END VIEW ELEVATION AT EXPANSION JOINTS END OF RAIL DEFAILS FOR ADHESIVE ANCHORING AT SAWED JOINIS BARRIER RAIL DETAILS

ASSEMBLED BY : B.E. LANNING CHECKED BY : J.C. KO DATE : JAN. 2005 REV. 8/16/99 REV. 10/17/00 REV. 5/7/03R RWW/LES RWW/LES RWW/JTE DRAWN BY: ARB 5/87 CHECKED BY : SJD 9/87

STD. No. CBR1SM

DATE : JAN. 2005

<u> PLAN</u>