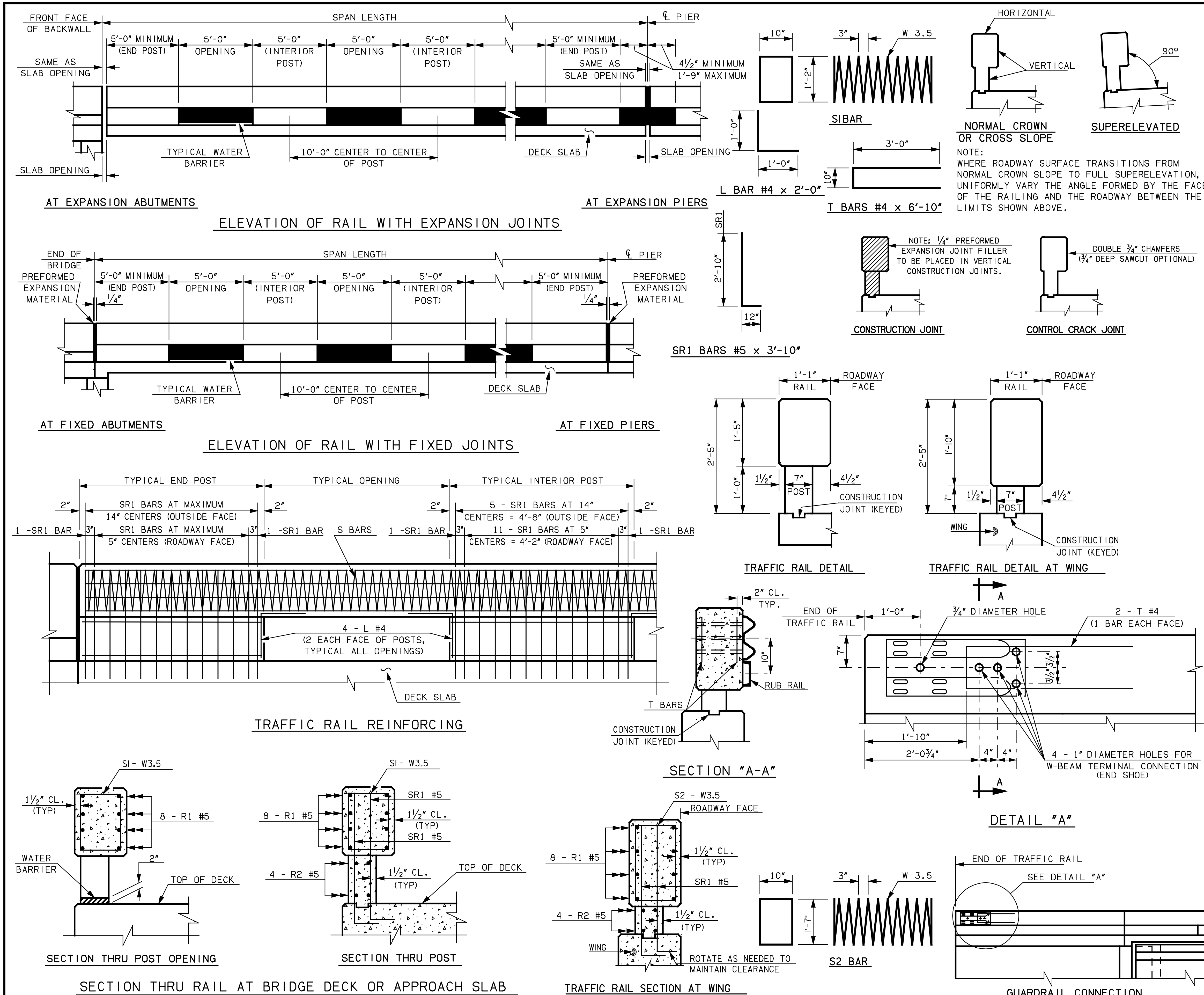

DESCRIPTION	REVISIONS	DATE

CONCRETE RAIL (TR3) NOTES

CONSTRUCT THE CONCRETE RAIL (TR3) TO MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (ENGLISH) AS WELL AS THE FOLLOWING REQUIREMENTS:

S-BARS (SPIRAL BARS):
WHEN TWO OR MORE S-BARS ARE USED IN A CONTINUOUS RAIL SECTION, BUTT THEIR ENDS TOGETHER WITHIN THE CENTER 3'-0" OF A RAIL POST. S-BARS ARE NOT TO BE EPOXY COATED.

CLASS AA CONCRETE:
CLASS AA CONCRETE SHALL BE USED IN THE CONCRETE RAIL (TR3). ALL COSTS OF CONCRETE TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "CONCRETE RAIL (TR3)".

SR-BARS (VERTICAL POST BARS):
PLACE AND TIE ALL SRIBARS BEFORE CONCRETE IS PLACED IN THE DECK SLAB, APPROACH SLABS, OR WINGWALLS AS APPLICABLE. ROTATE HORIZONTAL LEGS OF THE SRIBARS TO MAINTAIN CONCRETE COVER IN WINGWALL APPLICATIONS. ALL REINFORCING STEEL SHALL BE EPOXY COATED REINFORCING STEEL AND SHALL BE PAID FOR IN THE PRICE BID PER LB OF "EPOXY COATED REINFORCING STEEL".

WATER BARRIER:
WATER BARRIERS, AS DETAILED, SHALL BE PROVIDED AT RAIL OPENINGS THAT DRAIN ONTO UNDERCROSSING ROADWAYS AND SIDEWALKS AS SHOWN IN THE PLANS AND AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. PLACE THE CONCRETE FOR THE WATER BARRIER CONCURRENTLY WITH THE PLACEMENT OF THE CONCRETE IN THE POSTS. INCLUDE THE COST OF WATER BARRIERS IN THE PRICE BID FOR "CONCRETE RAIL (TR3)".

CONCRETE RAIL CONSTRUCTION:
CONSTRUCT RAILING WITHIN THE GUIDELINES AS SHOWN IN THE PLACEMENT DETAILS. LAYOUT THE POSTS AS SHOWN IN THE DETAILS ON THIS SHEET UNLESS OTHERWISE SHOWN IN THE PLANS. CONSTRUCT THE OPENINGS SUCH THAT THE END FACE OF THE POST IS PERPENDICULAR TO THE ROADWAY PROFILE GRADE. FOR RAILS ON A HORIZONTAL CURVE, CONSTRUCT THE RAIL TO THE REQUIRED RADIUS.

CONSTRUCTION JOINTS:
PLACE A CONSTRUCTION JOINT AT EACH FIXED ABUTMENT AND FIXED PIER, AND AT OTHER LOCATIONS AS SHOWN IN THE PLANS. PLACE 1/4" THICK PREFORMED EXPANSION MATERIAL IN THE CONSTRUCTION JOINT, SUCH THAT IT COVERS THE ENTIRE AREA OF THE RAIL AND POST IN ACCORDANCE WITH THE DETAILS SHOWN.

EXPANSION JOINTS:
AT EXPANSION JOINTS IN THE DECKSLAB OR APPROACH SLAB, MATCH THE WIDTH OF THE OPENING BETWEEN THE ENDS OF THE RAILING WITH THE OPENING OF THE EXPANSION JOINT. CONSTRUCT THE OPENING BETWEEN THE END POST AND THE EXPANSION JOINT AS SHOWN ON THE PLANS WITHIN THE MAXIMUM AND MINIMUM DIMENSIONS AS SHOWN ON THIS SHEET.

CONTROL CRACK JOINTS:
WHEN PLANS CALL FOR A CONTROL CRACK JOINT PROVIDE DOUBLE 3/4" CHAMFERS OR 3/4" DEEP SAWCUT IN ACCORDANCE WITH THE DETAILS SHOWN. ALL BARS SHALL BE CONTINUOUS THROUGH THE CONTROL CRACK JOINTS.

GUARDRAIL CONNECTION:
FORM OR DRILL HOLES, AS SHOWN, FOR THE CONNECTION OF GUARDRAIL BRIDGE CONNECTION AT THE LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. IT IS THE RESPONSIBILITY OF THE BRIDGE CONTRACTOR TO PROVIDE THE HOLES. THE CONTRACTOR THAT INSTALLS THE GUARDRAIL WILL BE RESPONSIBLE FOR INSTALLING THE GUARDRAIL BRIDGE CONNECTIONS. INCLUDE THE COST OF "T" BARS IN THE PRICE BID FOR "CONCRETE RAIL (TR3)".

BASIS OF PAYMENT	
DESCRIPTION	UNIT
CONCRETE RAIL (TR3)	L.F.

APPROVED BY BRIDGE ENGINEER : [signature] DATE : 2/7/13

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)

CONCRETE RAIL (TR3)

2009 SPECIFICATIONS | TR3-2 | OIE | B-01E