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STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR  
**STRUCTURE ANCHOR UNITS**  
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO  
RAIL ON BRIDGE - SUB REGIONAL TIER

SHEET 2 OF 7  
**862d03**

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**NOTE:**  
\*\*POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.  
\*THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT.  
-SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.  
-MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).  
-LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.  
-SEE SHEET 5 FOR POST SECTIONS 1 THRU 9.

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SHEET 3 OF 7  
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Diagram showing the cross-section of the Thrie Beam for posts 1 through 6. The beam has a total width of 7'-0" and a height of 4'-2". It features a central gutter or approach slab with a width of 2'-9" and a shoulder berm on either side, each 4" wide. The beam is supported by a 1" thick base. The Thrie Beam Guardrail is shown on top of the beam.

SECTION OF THRIE BEAM  
POSTS 1 THRU 6

Diagram showing the cross-section of the Thrie Beam for post 7. The beam has a total width of 6'-0" and a height of 3'-2". It features a central gutter or approach slab with a width of 2'-9" and a shoulder berm on either side, each 4" wide. The beam is supported by a 1" thick base. The Thrie Beam Guardrail is shown on top of the beam.

SECTION OF THRIE  
BEAM POST 7

Diagram showing the cross-section of the WTR Beam for post 8. The beam has a total width of 6'-0" and a height of 3'-5". It features a central gutter or approach slab with a width of 2'-6 3/8" and a shoulder berm on either side, each 1'-11" wide. The beam is supported by a 13/16" thick base. The WTR Section is shown on top of the beam.

SECTION OF WTR  
BEAM POST 8

Diagram showing the cross-section of the 'W' Beam for post 9. The beam has a total width of 6'-0" and a height of 3'-5". It features a central gutter or approach slab with a width of 2'-6" and a shoulder berm on either side, each 1'-11" wide. The beam is supported by a 1" thick base. The 12" Guardrail is shown on top of the beam.

SECTION OF 'W'  
BEAM POST 9

Diagram showing the longitudinal section of the Thrie Beam. The beam has a total length of 1'-8" and a height of 3 1/4". It features a central gutter or approach slab with a width of 6 3/8" and a shoulder berm on either side, each 1 1/8" wide. The beam is supported by a 2 3/8" thick base. The Thrie Beam Section is shown on top of the beam.

THRIE-BEAM  
SECTION

Diagram showing the cross-section of the WTR Beam for post 8. The beam has a total width of 2'-6" and a height of 3 1/4". It features a central gutter or approach slab with a width of 2'-6" and a shoulder berm on either side, each 1'-11" wide. The beam is supported by a 13/16" thick base. The WTR Section is shown on top of the beam.

SECTION OF WTR  
BEAM POST 8

Diagram showing the elevation view of the WTR Section. The beam has a total width of 20" and a height of 12". It features a central gutter or approach slab with a width of 6'-3" and a shoulder berm on either side, each 1'-11" wide. The beam is supported by a 13/16" thick base. The WTR Section is shown on top of the beam.

WTR SECTION  
ELEVATION VIEW

Diagram showing the cross-section of the Thrie Beam Offset Block. The block has a total width of 3 1/8" and a height of 8". It features a central gutter or approach slab with a width of 1'-6" and a shoulder berm on either side, each 7 9/8" wide. The block is supported by a 3/4" thick base. The Thrie Beam Offset Block is shown on top of the beam.

THRIE BEAM  
OFFSET BLOCK

Diagram showing the cross-section of the Structure Anchor Units. The units have a total width of 8" and a height of 6". They feature a central gutter or approach slab with a width of 7 9/8" and a shoulder berm on either side, each 7 1/4" wide. The units are supported by a 3/4" thick base. The Structure Anchor Units are shown on top of the beam.

THRIE BEAM  
LINE POST

NOTE: THE MID POST AND OFFSET BLOCK OF THE WTR SECTION WILL REQUIRE SPECIAL BOLT HOLE DRILLING IN THE THRIE BEAM OFFSET BLOCK AND LINE POST.

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