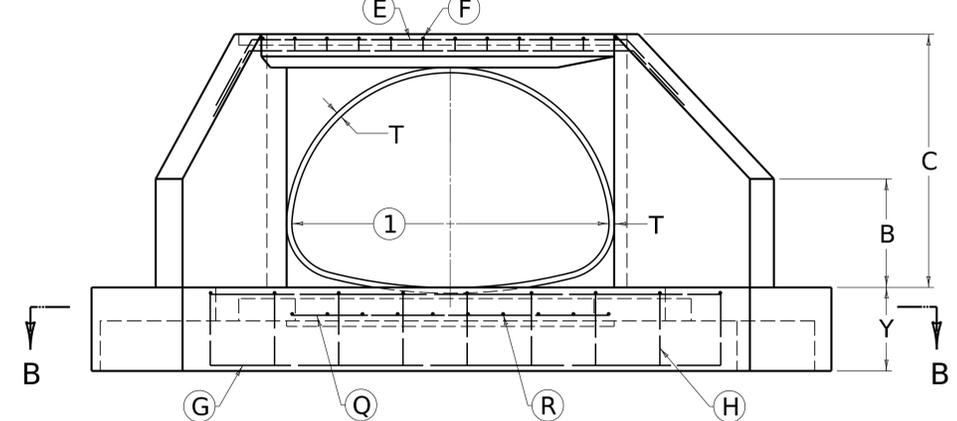
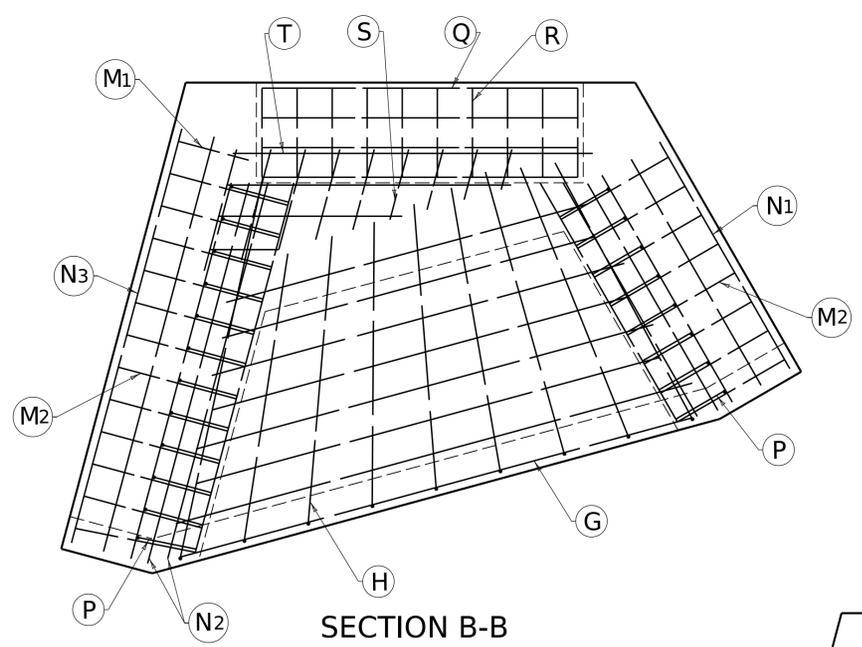


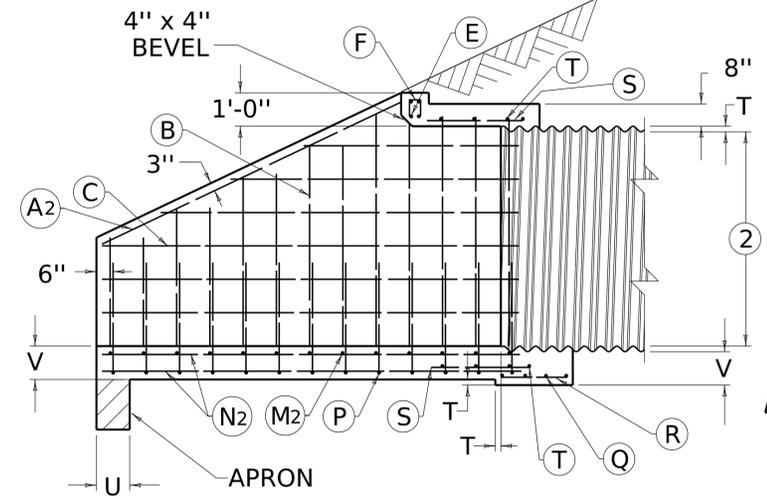
PLAN VIEW WITH PAVING



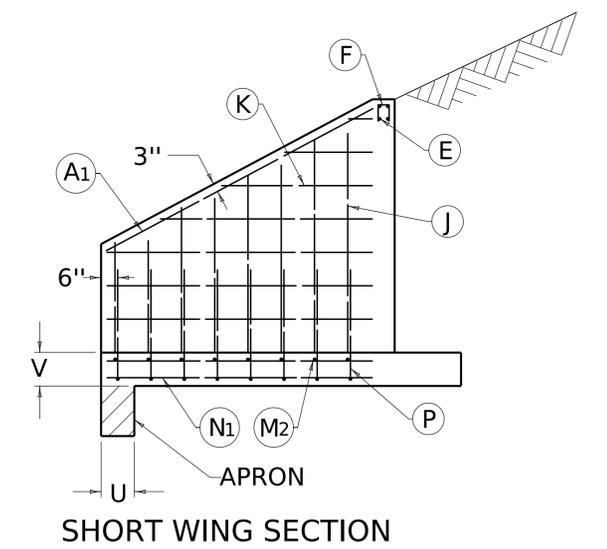
FRONT ELEVATION



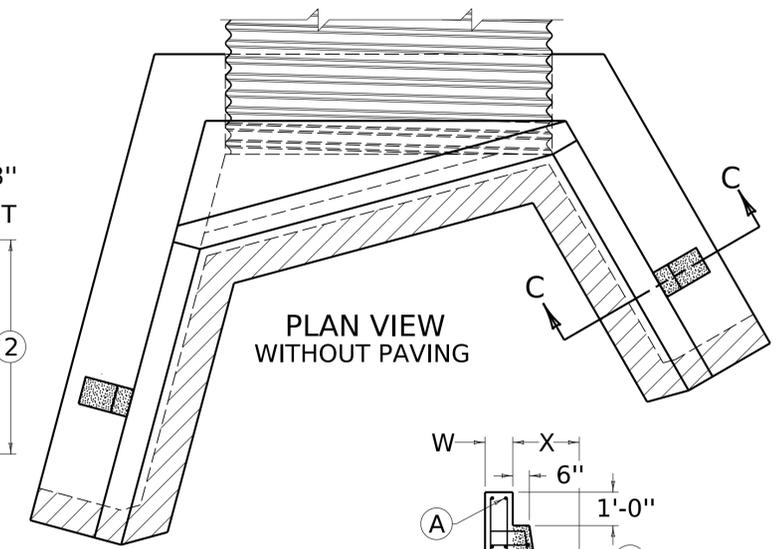
SECTION B-B



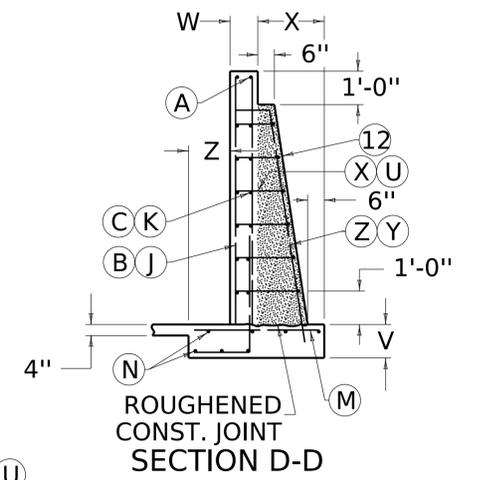
SECTION A-A



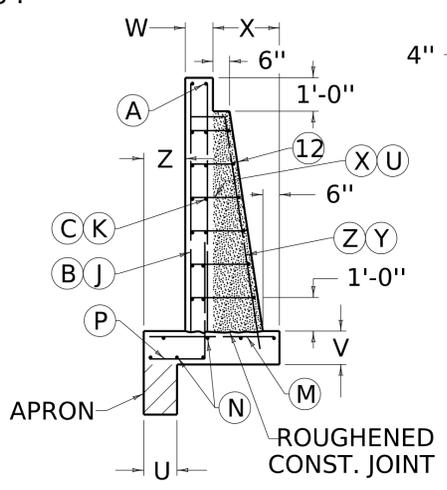
SHORT WING SECTION



PLAN VIEW WITHOUT PAVING



ROUGHENED CONST. JOINT SECTION D-D



SECTION C-C

1. SPAN OF STRUCTURAL PLATE STEEL PIPE ARCH. 2. RISE OF STRUCTURAL PLATE STEEL PIPE ARCH.
3. FOR DIMENSIONS, QUANTITIES, AND BILL OF REINFORCEMENT SEE CURRENT STANDARD DRAWINGS RDH-420 THRU RDH-465 .
4. DIMENSIONS FROM FACE OF CONCRETE TO STEEL SHALL BE 2" CLEAR DISTANCE.
5. ENCIRCLED LETTERS, ○, INDICATE STEEL BAR LOCATIONS.
6. BARS (B, C, G, J, K, M, P, X, U) ARE SPACED 1'-0" O. C. ALL OTHER BARS SHALL BE EVENLY SPACED.
7. BARS (B AND J), (C AND K), (U AND X) ARE PLACED IN ORDER OF INCREASING LENGTH BEGINNING AT THE END OF WING, TOP OF WING AND TOP OF COUNTERFORT RESPECTIVELY.
8. HEADWALLS LOCATED AT EDGE OF SHOULDER SHALL BE PARALLEL TO CENTERLINE OF THE ROAD.
9. ▨ LIMITS OF APRON, ▤ LIMITS OF PAVING, ▩ LIMITS OF COUNTERFORTS
10. THESE HEADWALLS ARE DESIGNED BOTH WITH AND WITHOUT PAVING BETWEEN THE WINGS. (SEE PLANS)
11. WHEN PAVING IS REQUIRED IT SHALL BE SLOPED IN DIRECTION OF FLOW EQUAL TO SLOPE OF BOX. FRONT FACE OF HEADWALL AND ENDS OF WINGS SHALL REMAIN VERTICAL.
12. A COUNTERFORT SHALL BE REQUIRED ON A WING WALL WHEN THE BOX RISE IS 8'-0" OR GREATER AND THE WING WALL IS 15'-0" OR LONGER.
13. WHEN PAVING IS NOT REQUIRED (H) AND (G) BARS SHALL BE ELIMINATED.

(LAYOUT AND STEEL PATTERN)

KENTUCKY DEPARTMENT OF HIGHWAYS

STEEL PIPE ARCH
H-WALLS-15°, 30° & 45° SK
(PIPE RISE 6'-0" OR GREATER)

STANDARD DRAWING NO. RDH-415-02

SUBMITTED _____ DIRECTOR DIVISION OF DESIGN _____ DATE _____
APPROVED _____ STATE HIGHWAY ENGINEER _____ DATE _____