

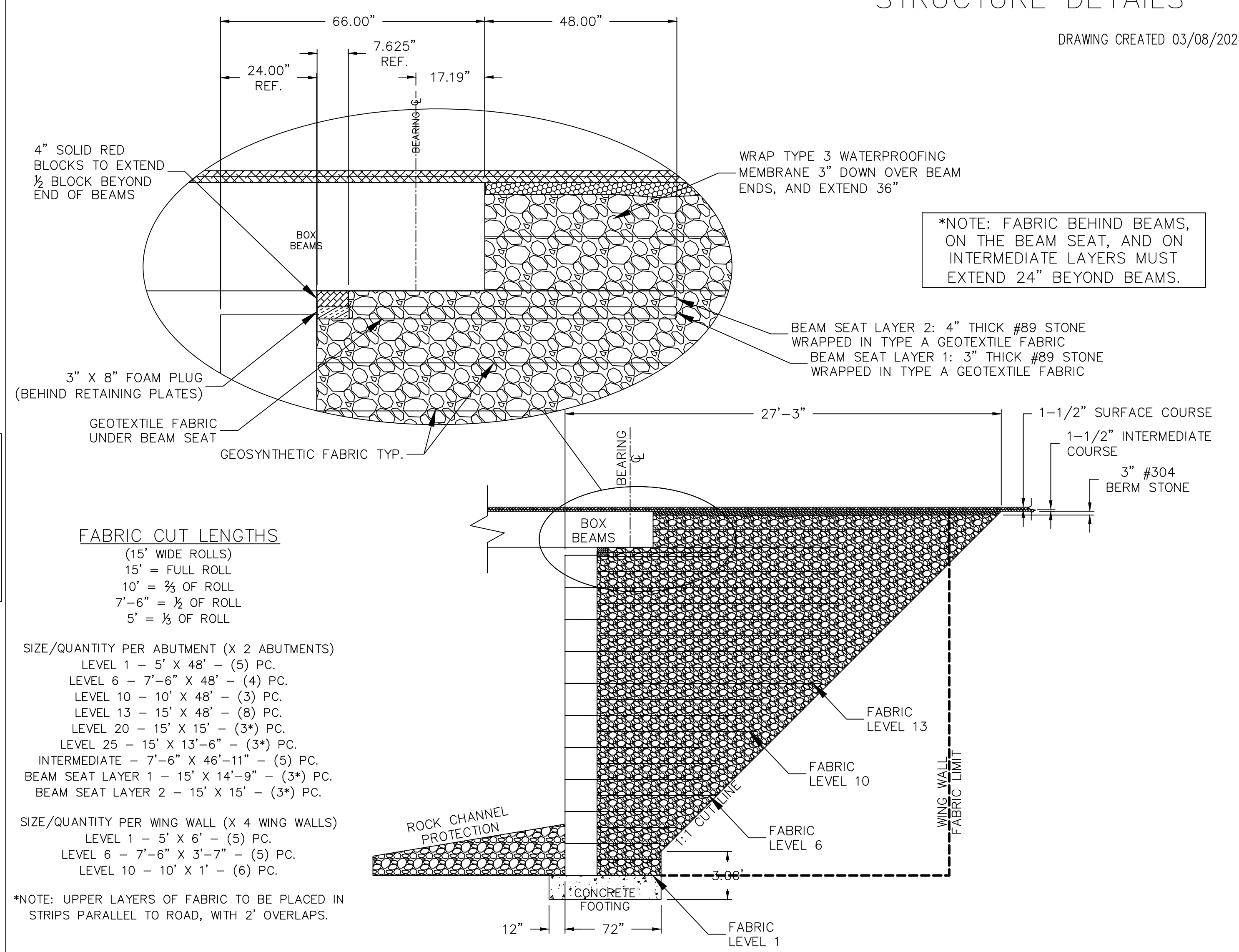
- *NOTES***
- ALL STATIONS & OFFSETS ARE BASED OFF SECTION LINES.
 - EACH FOOTING TO HAVE (2) MATS OF STEEL REINFORCEMENT - UPPER & LOWER.
 - REBAR TO BE ARRANGED W/ EQUAL SPACING & 2" MINIMUM CLEARANCE BETWEEN STEEL & OUTER SURFACES.
 - ALL FOOTINGS ARE TO BE 18" THICK.
 - SEE BEAM DETAIL ON SHEET 2 FOR CORNERS OF BLOCK WALL STATION & OFFSETS.
 - NON-LOCATION DIMENSIONS ARE TYPICAL FOR BOTH SIDES.

#5 REBAR QUANTITIES

PER MAT	863.75' PER MAT
1.) (49) X 6.50'	X (4) MATS
2.) (10) X 25.50'	3455' TOTAL
3.) (6) X 48.38'	X 1.043# PER LIN. FT.
	TOTAL = 3603.57#

CONCRETE FOOTING DETAILS

*NOTE: LOOSE FILL TO 1" ABOVE 4" BLOCKS BEFORE COMPACTION. BEAMS TO REST ON STONE, NOT ON THE 4" BLOCKS.



FABRIC CUT LENGTHS
(15' WIDE ROLLS)

- 15' = FULL ROLL
- 10' = 2/3 OF ROLL
- 7'-6" = 1/2 OF ROLL
- 5' = 1/3 OF ROLL

SIZE/QUANTITY PER ABUTMENT (X 2 ABUTMENTS)

- LEVEL 1 - 5' X 48' - (5) PC.
- LEVEL 6 - 7'-6" X 48' - (4) PC.
- LEVEL 10 - 10' X 48' - (3) PC.
- LEVEL 13 - 15' X 48' - (8) PC.
- LEVEL 20 - 15' X 15' - (3*) PC.
- LEVEL 25 - 15' X 13'-6" - (3*) PC.
- INTERMEDIATE - 7'-6" X 46'-11" - (5) PC.
- BEAM SEAT LAYER 1 - 15' X 14'-9" - (3*) PC.
- BEAM SEAT LAYER 2 - 15' X 15' - (3*) PC.

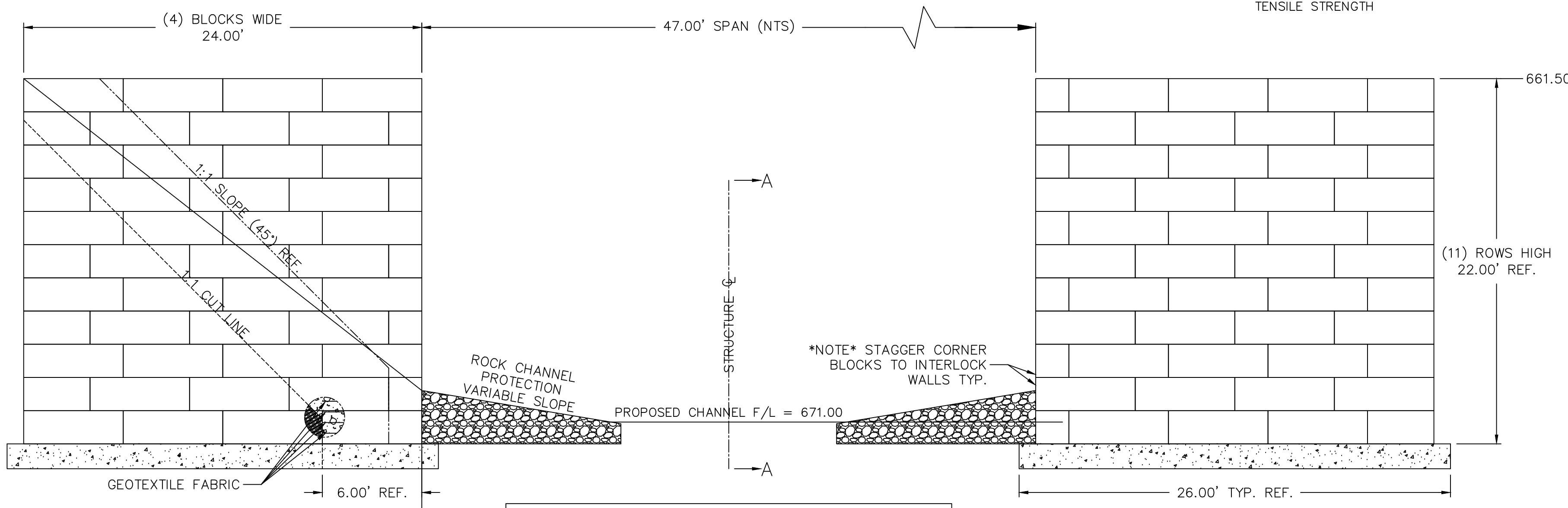
SIZE/QUANTITY PER WING WALL (X 4 WING WALLS)

- LEVEL 1 - 5' X 6' - (5) PC.
- LEVEL 6 - 7'-6" X 3'-7" - (5) PC.
- LEVEL 10 - 10' X 1' - (6) PC.

*NOTE: UPPER LAYERS OF FABRIC TO BE PLACED IN STRIPS PARALLEL TO ROAD, WITH 2' OVERLAPS.

ABUTMENT DETAILS & FABRIC LAYOUT
(VIEW B-B)

- NOTES**
- CMU - CONCRETE MASONRY UNIT
 - GRS - GEOSYNTHETICALLY REINFORCED SOIL
 - GEOTEXTILE FABRIC - WIDE WIDTH, 4800 LBS/FT TENSILE STRENGTH



S.W. WING LOOKING NORTH
N.E. WING LOOKING SOUTH

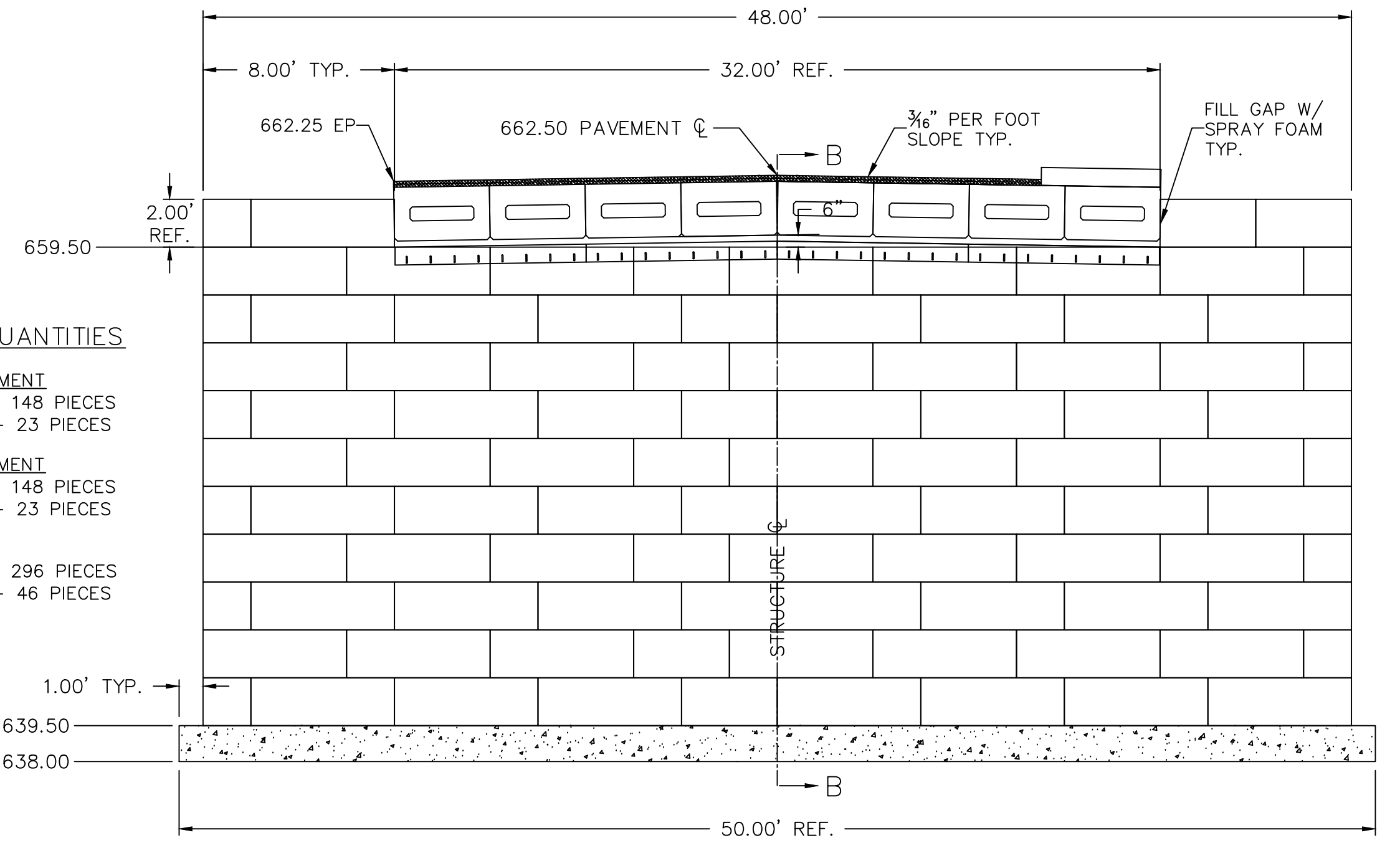
*NOTE: DIMENSIONS ARE TYPICAL FOR BOTH SIDES

WINGWALL & STEEL DETAILS

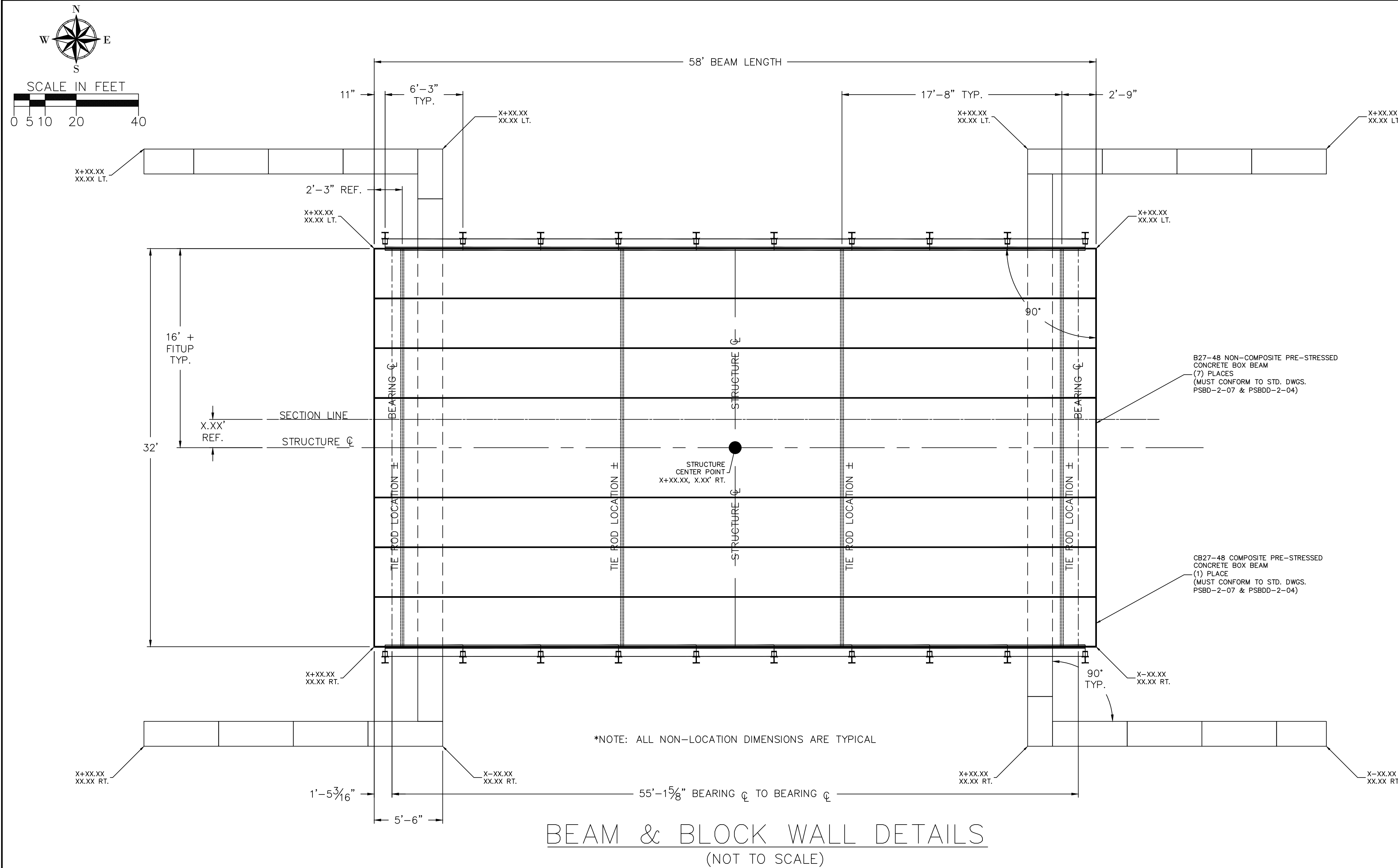
S.E. WING LOOKING NORTH
N.W. WING LOOKING SOUTH

CMU BLOCK QUANTITIES

WEST ABUTMENT	
2'X2'X6' BLOCKS	- 148 PIECES
2'X2'X4' BLOCKS	- 23 PIECES
EAST ABUTMENT	
2'X2'X6' BLOCKS	- 148 PIECES
2'X2'X4' BLOCKS	- 23 PIECES
TOTAL	
2'X2'X6' BLOCKS	- 296 PIECES
2'X2'X4' BLOCKS	- 46 PIECES



ABUTMENT WALL DETAILS
(VIEW A-A)



BEAM & BLOCK WALL DETAILS
(NOT TO SCALE)

NOTES

- TIE ROD LOCATIONS ARE APPROXIMATE.
- DIAPHRAGMS, VOIDS, ETC. ARE NOT SHOWN ON BEAM DETAILS - REFER TO ODOT BOX BEAM DRAWINGS.
- OMIT KEYWAY ON OUTSIDE OF FASCIA BEAMS.
- STRUCTURE DOES NOT UTILIZE DOWELS OR ELASTOMERIC BEARING PADS.

BOX BEAM BAR & STRAND LAYOUT
(NOT TO SCALE)

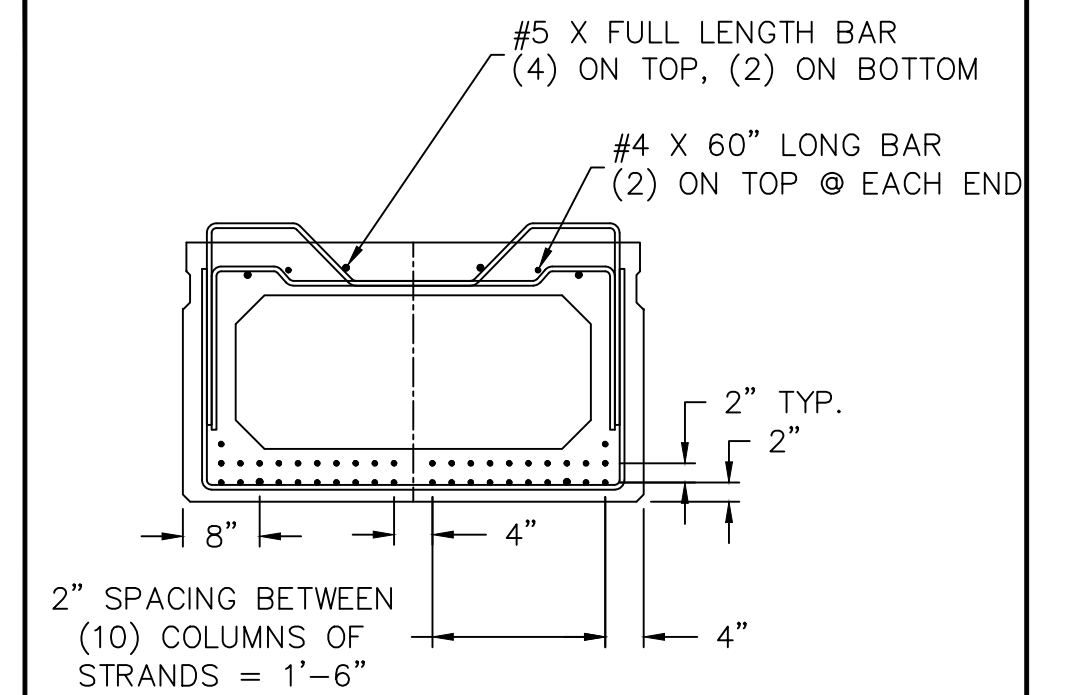
REF STD. DWG. PSBD-2-07 & PSBDD-2-07

LIVE LOADING - HL-93
CONCRETE - MIN. COMPRESSIVE STRENGTH @ 28 DAYS $f'_c = 7$ KSI MIN.
COMPRESSIVE STRENGTH @ TIME OF INITIAL PRESTRESS $f'_{ci} = 5$ KSI
REINFORCING STEEL - GRADE 60; MIN. YIELD STRENGTH = 60 KSI
PRESTRESSED STEEL - ASTM A416 LOW RELAXATION STRANDS, $\phi \frac{1}{2}$ "
 $A_{ps} = 0.167$ SQ. IN. PER STRAND
 $f_{pu} = 270$ KSI
 $E_p = 28,500$ KSI
RELATIVE HUMIDITY, $H = 70\%$
INITIAL STRESS $0.75 F_{pu} = 202.5$ KSI
INITIAL TENSION LOAD = 33.82 KIPS/STRAND

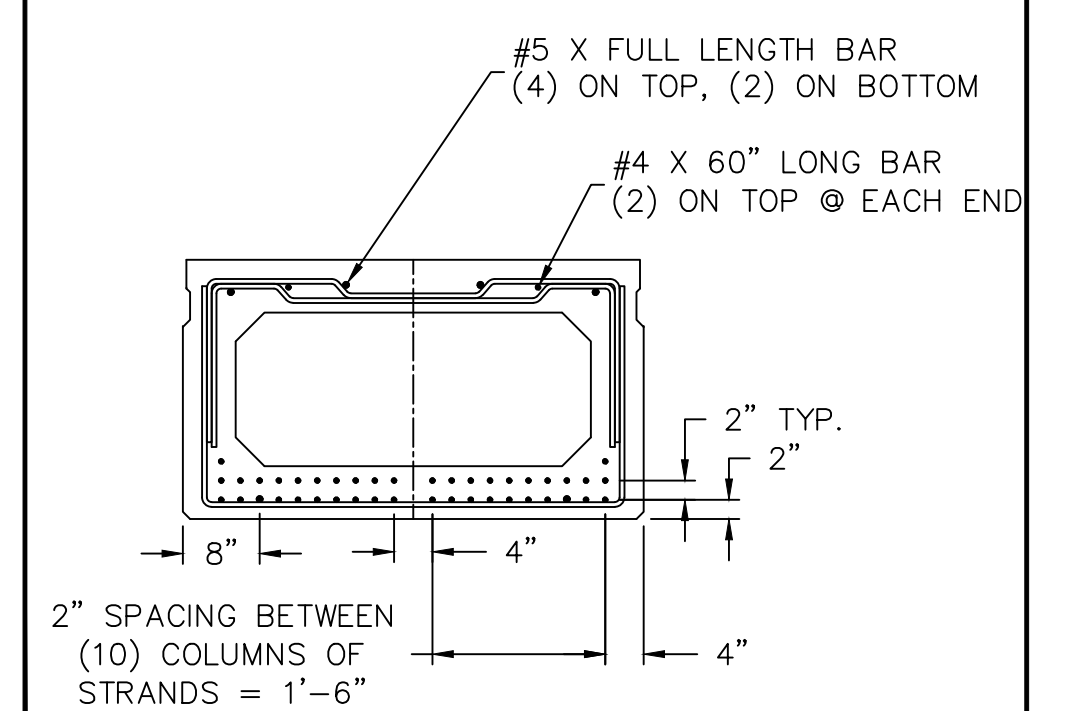
NOTES

- BARS & STRANDS TO BE PLACED AS SHOWN.
- STRANDS TO BE DISTRIBUTED SYMMETRICALLY OVER THE BEAM WIDTH.
- DIMENSIONS SHOWN ARE TYPICAL.

CB27-48 BOX BEAMS

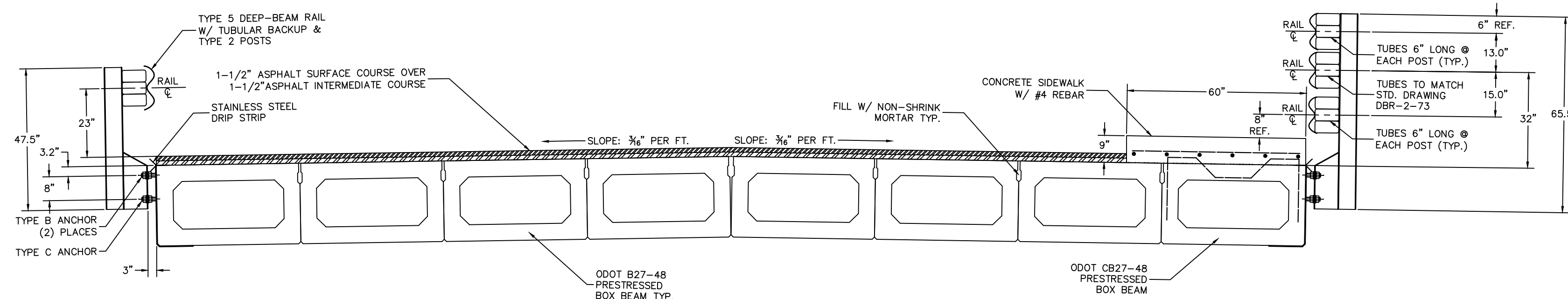


B27-48 BOX BEAMS



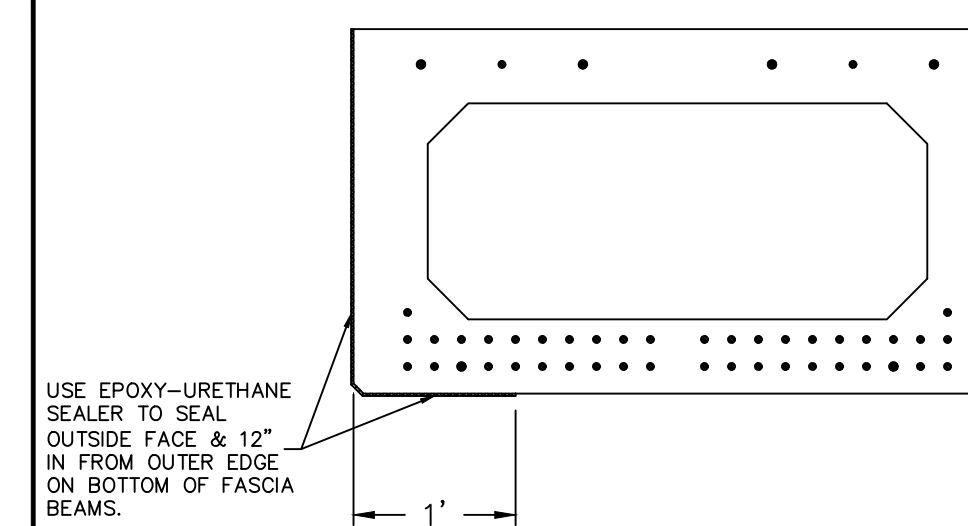
NOTES

- REF. ODOT STD. DRAWINGS DBR-2-73 & DS-1-92.
- MOUNTING DIMENSIONS ARE TYPICAL.



PAVEMENT, GUARDRAIL,
& SIDEWALK DETAILS
(NOT TO SCALE)

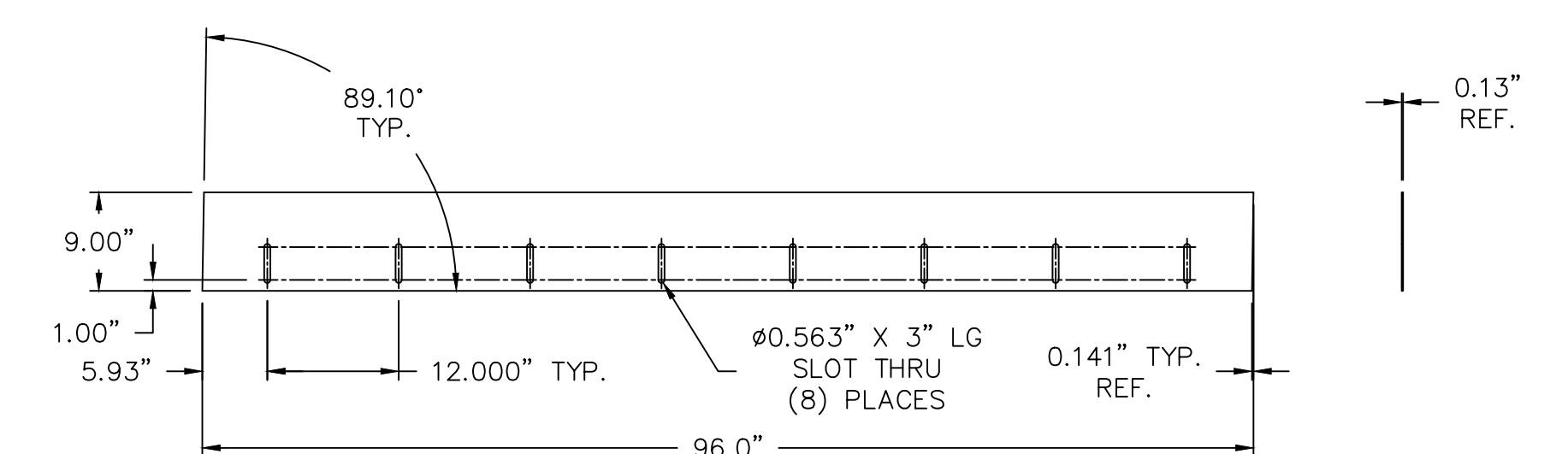
CONCRETE BOX FASCIA BEAMS



SEALING CONCRETE SURFACES
(NOT TO SCALE)

NOTES

- $\frac{1}{8}$ " THICK STAINLESS STEEL
- (4) PIECES REQUIRED PER SIDE = (8) PIECES TOTAL
- ATTACH TO THE BACK SIDE OF CONCRETE BLOCKS USING $\frac{1}{2}$ " TAPCON FASTENERS.
- INSTALL AT 0.9° UPHILL ANGLE TO REACH 3" ABOVE BLOCKS AT THE CENTER OF THE STRUCTURE.



BACKFILL RETENTION PLATE
(NOT TO SCALE - *DIMENSIONS IN INCHES*)