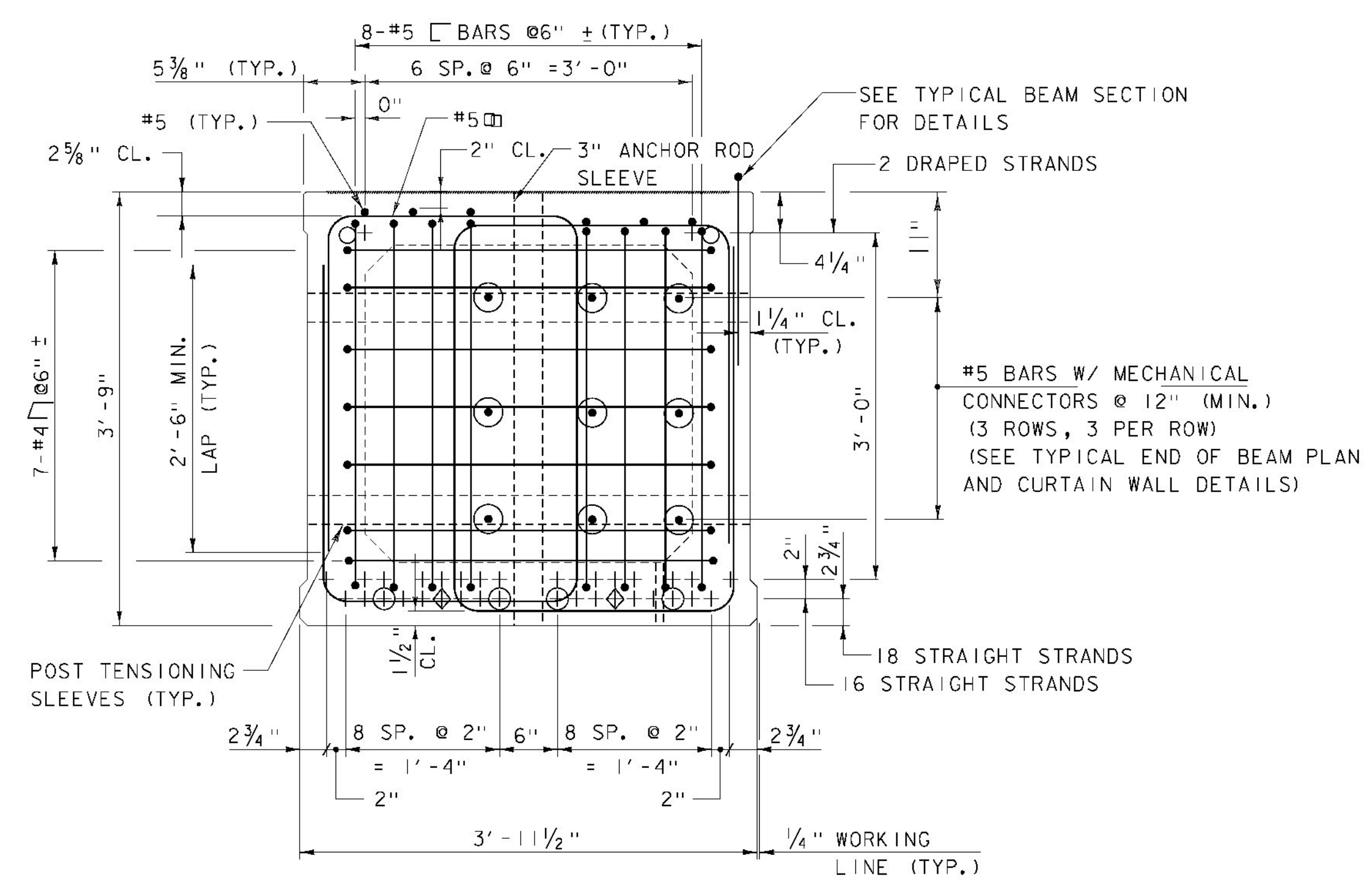
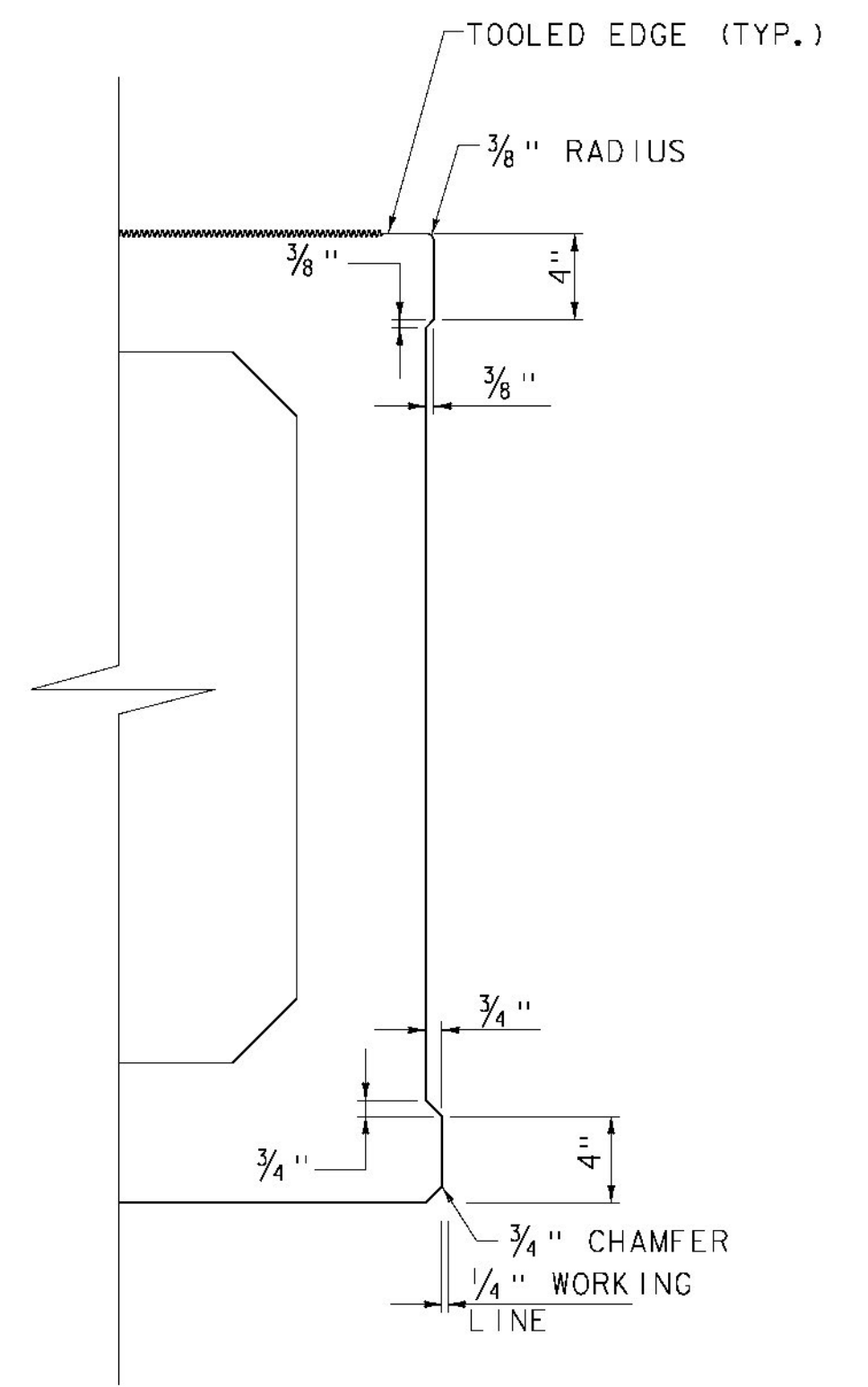


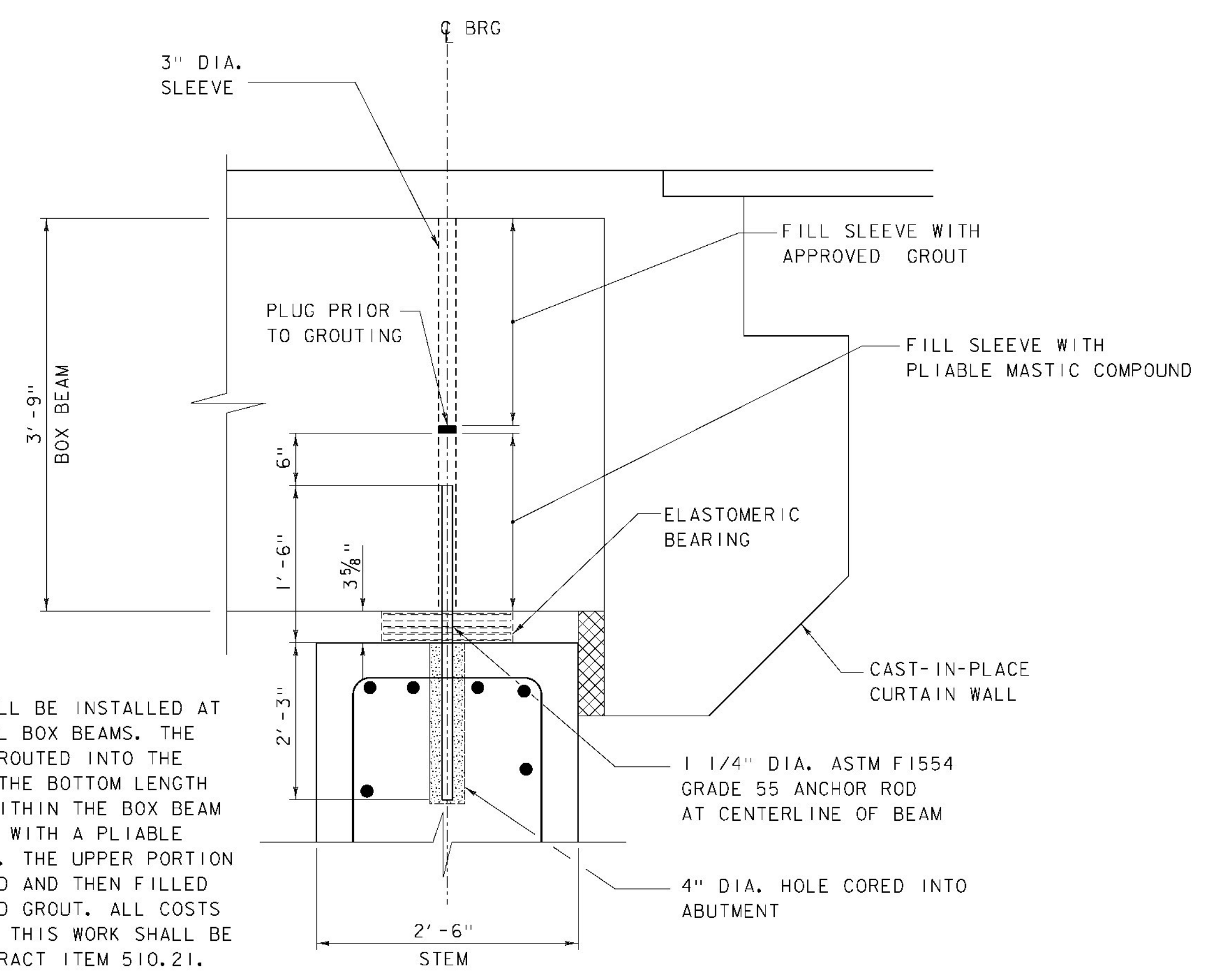
TYPICAL BEAM SECTION
SCALE: 1" = 1'-0"



TYPICAL SECTION AT BEAM END
SCALE: 1" = 1'-0"

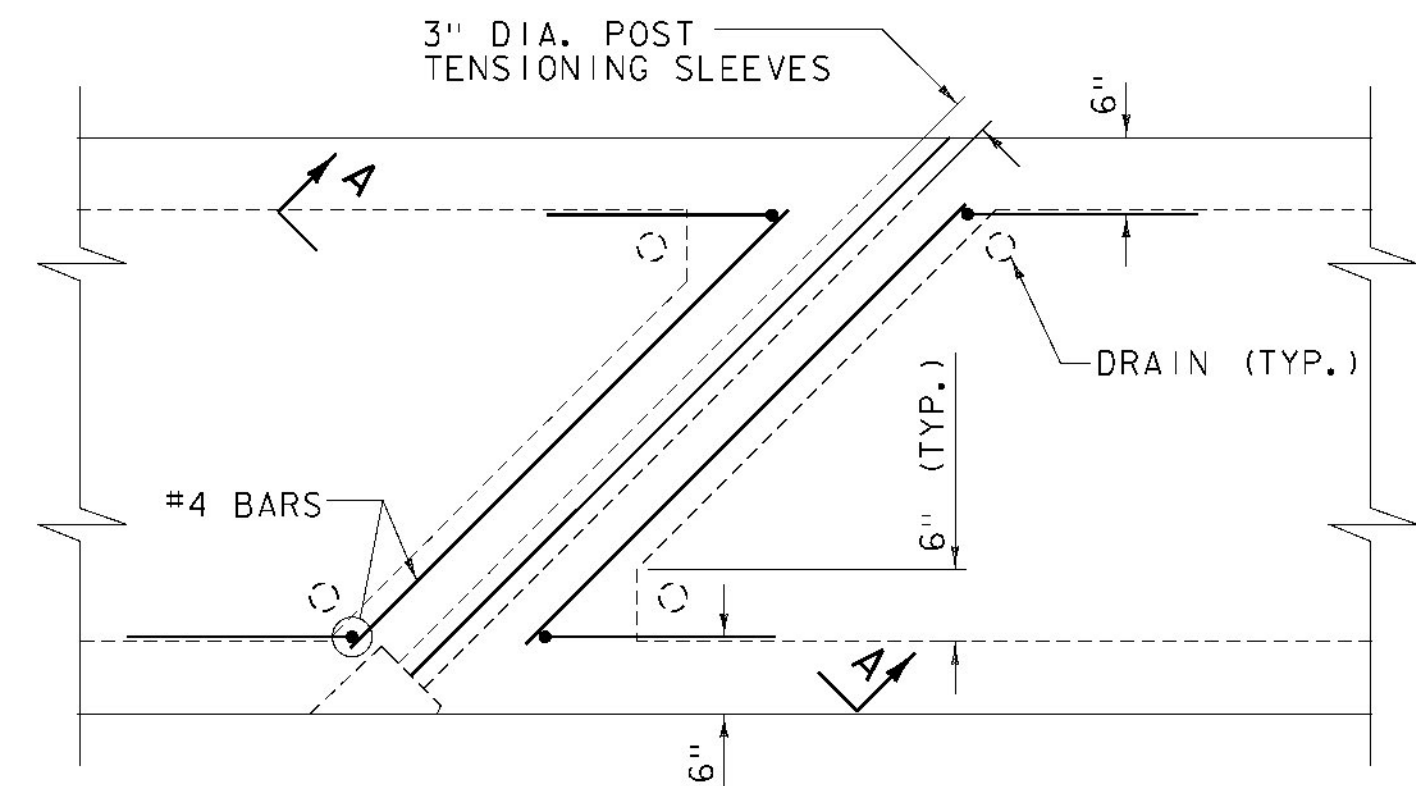


SHEAR KEY DETAIL
SCALE: 1 1/2" = 1'-0"

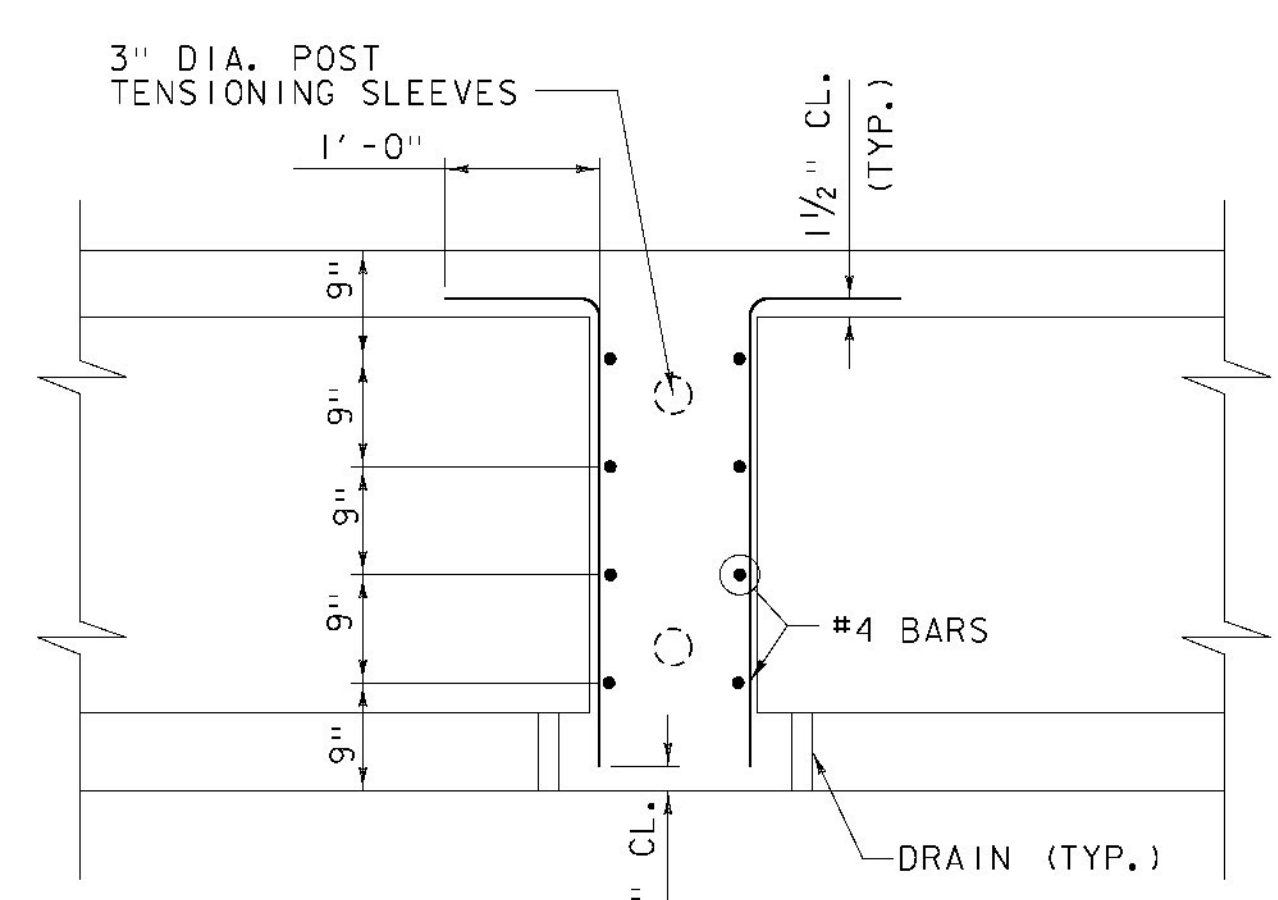


BEAM ANCHOR DETAIL
SCALE: 1" = 1'-0"

NOTE:
ANCHOR RODS SHALL BE INSTALLED AT BOTH ENDS OF ALL BOX BEAMS. THE RODS SHALL BE GROUTED INTO THE ABUTMENT STEM. THE BOTTOM LENGTH OF THE SLEEVE WITHIN THE BOX BEAM SHALL BE FILLED WITH A PLIABLE MASTIC COMPOUND. THE UPPER PORTION SHALL BE PLUGGED AND THEN FILLED WITH AN APPROVED GROUT. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE PAID UNDER CONTRACT ITEM 510.21.



PLAN DIAPHRAGM REINFORCING
SCALE: 3/4" = 1'-0"



SECTION A-A
SCALE: 3/4" = 1'-0"

REINFORCING SHOWN IN THIS DIAPHRAGM REINFORCING PLAN IS IN ADDITION TO THAT SHOWN IN THE TYPICAL BEAM SECTION. REINFORCEMENT SHOWN IN THE TYPICAL BEAM SECTION IS OMITTED HERE FOR CLARITY.

- NOTES:
- + DENOTES STRAIGHT 0.6" DIAMETER PRESTRESSING STRANDS.
 - o DENOTES DRAPED 0.6" DIAMETER PRESTRESSING STRANDS.
 - ⊕ DENOTES DEBONDED STRANDS 5'-0" AT EACH END OF BEAM.
 - ⊕ DENOTES DEBONDED STRANDS 7'-0" AT EACH END OF BEAM.
 - AT EACH END OF BEAM, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH END OF BEAM.
 - 3/4" DIA. DRAIN (NON FERROUS MATERIAL) PLACED AT ALL 4 CORNERS OF EACH VOID. LOCATE TO AVOID PRESTRESSING STRANDS.
 - SEE TYPICAL END OF BEAM PLAN FOR STIRRUP SPACING.
 - HORIZONTAL SHEAR REINFORCEMENT EXTENDING FROM THE TOP OF THE BEAM INTO THE DECK OVERLAY SHALL BE PLACED AS SHOWN IN THE TYPICAL BEAM SECTIONS FOR BEAMS 2 TO 8. BEAM 1 SHALL HAVE AN ADDITIONAL LINE OF HORIZONTAL SHEAR REINFORCEMENT LOCATED SYMMETRICALLY ON THE OTHER SIDE OF THE BEAM.
 - ⊙ DENOTES MECHANICAL CONNECTORS FOR #5 BARS IN END OF BOX BEAM AND CURTAIN WALL.
 - TWO STRAIGHT STRANDS IN TOP OF BOX BEAM SHALL BE TENSIONED TO 2 KIPS EACH.
 - ESTIMATED BEAM WEIGHT = 159,000 LBS (INTERIOR) 163,000 LBS (EXTERIOR).
 - LEG LENGTHS FOR ALL #5 ⊕ #6" IN THE TOP FLANGE OF THE BOX BEAM SHALL BE THE SAME, AND SHALL PROVIDE THE 2'-6" MIN LAP WHERE LAPPED WITH #4 ⊔ FROM THE BOTTOM FLANGE.



PROJECT NAME:	LINCOLN	FILE NAME:	z10j066boxbeam1.dgn	PLOT DATE:	8-DEC-2014
PROJECT NUMBER:	BRF 0188 (8)	PROJECT LEADER:	G.K. DONINGTON	DRAWN BY:	W GERHOLD
		DESIGNED BY:	K JAMES	CHECKED BY:	A STOCKIN
		BOX BEAM DETAILS SHEET 1			SHEET 23 OF 62