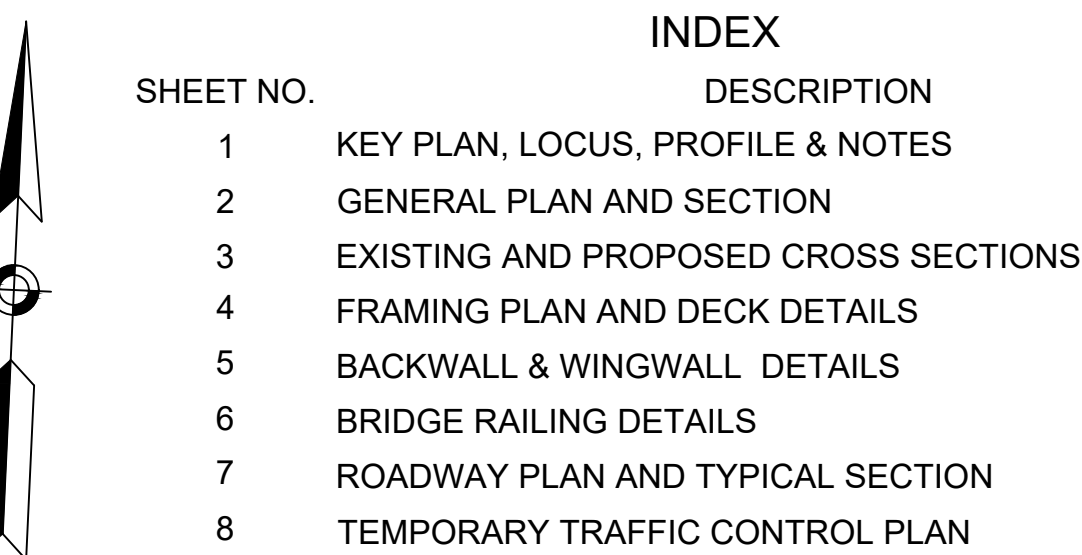




DESIGN:

EXISTING PLANS:

TRAFFIC:

EXISTING CONDITIONS:

UTILITIES:

PLAN REVISIONS:

SCALES:

REINFORCEMENT:

MODIFICATION	CONDITION	#4 BARS	#5 BARS	#6 BARS

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

CONCRETE:

5000 PSI 3/4" 685 HP CEMENT CONCRETE SHALL BE USED FOR DECK AND SAFETY CURB CONCRETE. 5000 PSI 3/8" 710 HP CEMENT CONCRETE SHALL BE USED FOR THE WINGWALL CAPS AND ABUTMENT REPAIRS.

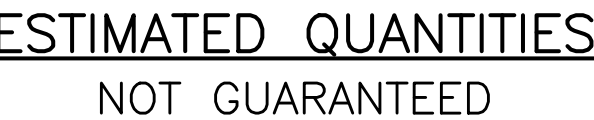
SURVEY:

SURVEY PERFORMED BY A+PLUS CONSTRUCTION SERVICES CORP.,
OF 17 ACCORD PARK DRIVE, UNIT #102, NORWELL, MA,
02061-1629 ON 03/07/2024. COPY OF FILE MAY BE OBTAINED
FROM GILL ENGINEERING ASSOCIATES. THE COORDINATES, IN U.S.
SURVEY FEET, ARE REFERENCED TO THE MASSACHUSETTS
COORDINATE SYSTEM (MCS), MAINLAND ZONE, NAD83(2011) EPOCH
2010. THE ELEVATIONS ARE BASED ON THE NORTH AMERICAN
VERTICAL DATUM (N.A.V.D.) OF 1988(USFT).

BENCH MARK:

BENCH MARK: MAGNETIC NAIL SET 2
NORTHING: 3052959.953
EASTING: 294924.521
ELEVATION: 538.861

BENCH MARK: MAGNETIC NAIL SET 3
NORTHING: 3052943.340
EASTING: 295028.522
ELEVATION: 538.810



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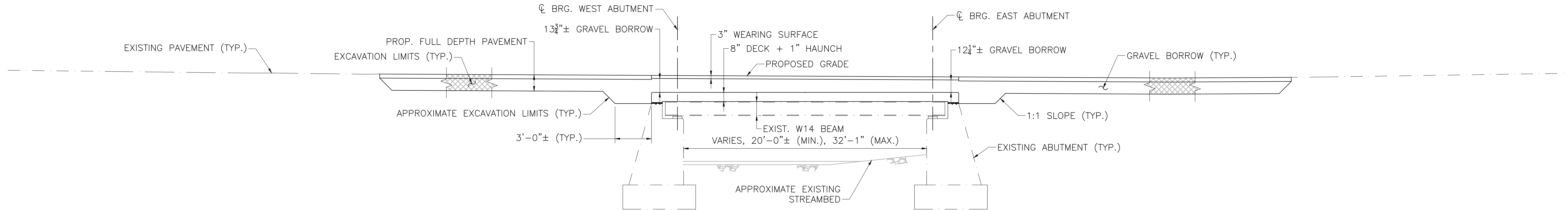
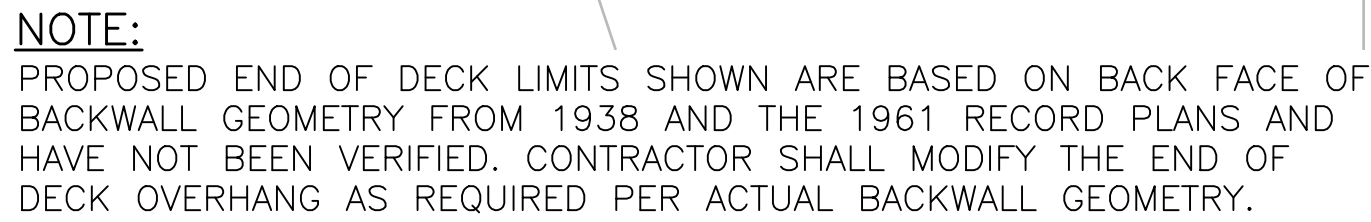
STATE BRIDGE ENGINEER	DATE
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HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 2'

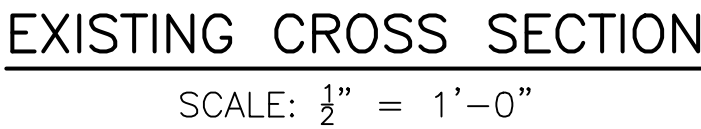
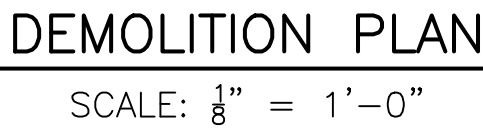
KEY PLAN,
LOCUS,
PROFILE &
NOTES

SHEET 1 OF 8



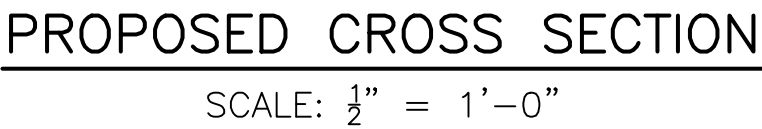
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LEGEND:

	DENOTES LIMITS OF DEMOLITION
	DENOTES LIMITS OF PARTIAL DEMOLITION

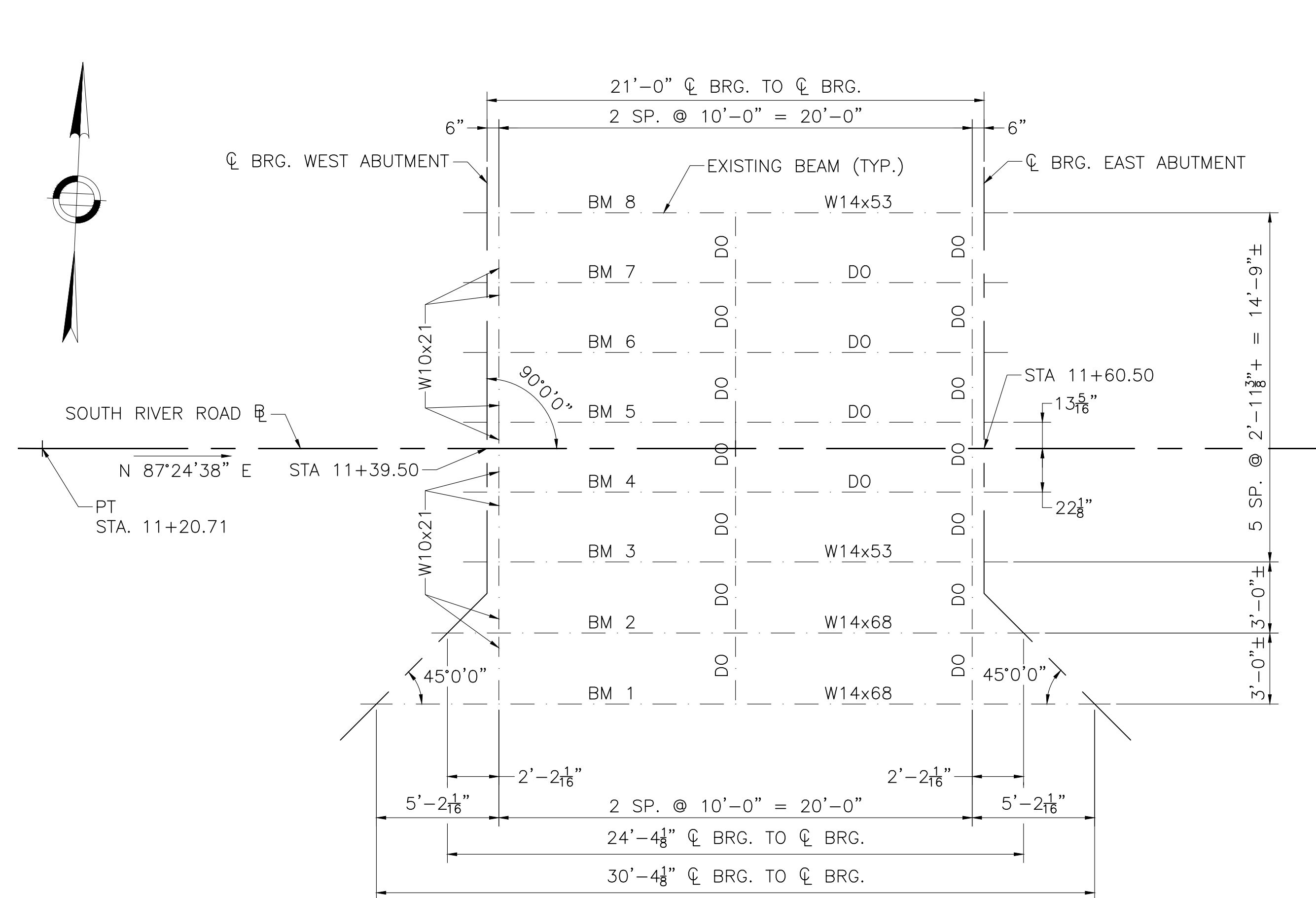


NOTE:
SECTIONS TAKEN LOOKING WEST.

- DEMOLITION NOTES:**
- ALL DEMOLITION WORK SHALL BE DONE IN A SINGLE PHASE.
- FOR ADDITIONAL DEMOLITION REQUIREMENTS SEE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- DEMOLISH ANY MATERIAL INCIDENTAL TO THE PROPOSED CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER.
- ALL DEMOLITION WORK SHALL BE DONE IN CONFORMANCE WITH ALL APPLICABLE FEDERAL STATE AND LOCAL LAWS, REGULATIONS AND PERMITS AND THE JOB SPECIFICATIONS.
- THE CONTRACTOR SHALL SUBMIT HIS PROPOSED DEMOLITION PROCEDURE TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK. SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.

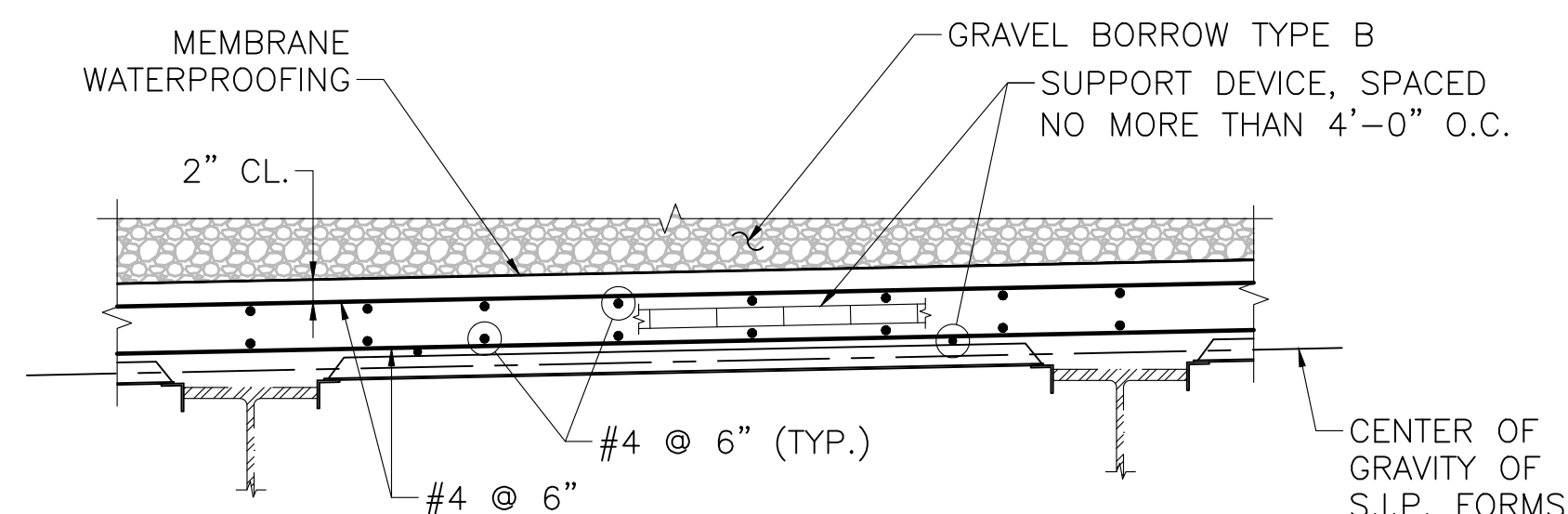
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FRAMING PLAN

SCALE: $\frac{1}{4}" = 1'-0"$

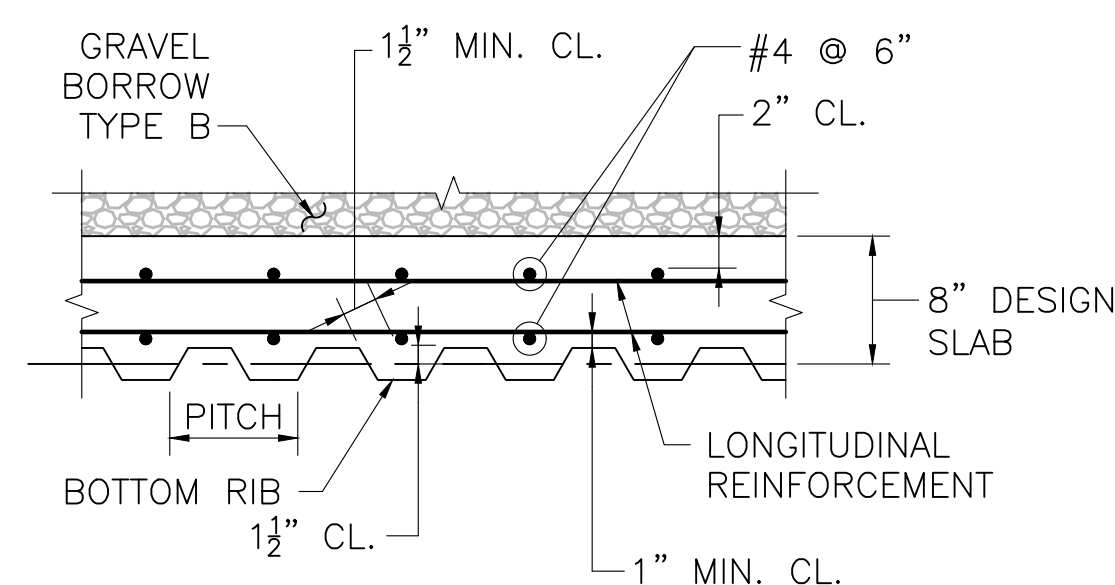


NOTES:

1. LONGITUDINAL REINFORCEMENT SHALL BE PLACED PARALLEL TO THE ℄ OF CONSTRUCTION. TRANSVERSE (PRIMARY) REINFORCEMENT SHALL BE PLACED PERPENDICULAR TO THE ℄ OF CONSTRUCTION.
2. ALL REINFORCEMENT AND SUPPORT DEVICES SHALL BE COATED.
3. THE FINISHED SURFACE OF BRIDGE DECK SHALL BE SMOOTH AND WITHOUT ANY PROJECTIONS THAT COULD PUNCTURE THE MEMBRANE WATERPROOFING OR DEPRESSIONS THAT COULD RETAIN WATER.

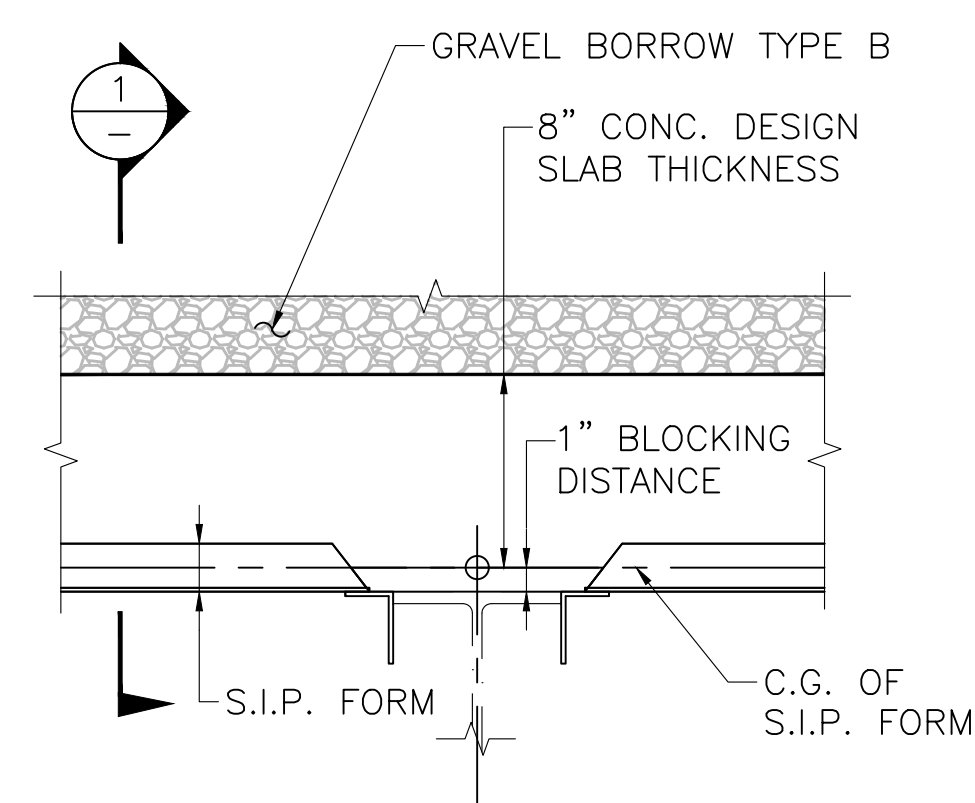
TYPICAL DECK REINFORCEMENT

SCALE: $\frac{3}{4}" = 1'-0"$



SECTION

NOT TO SCALE

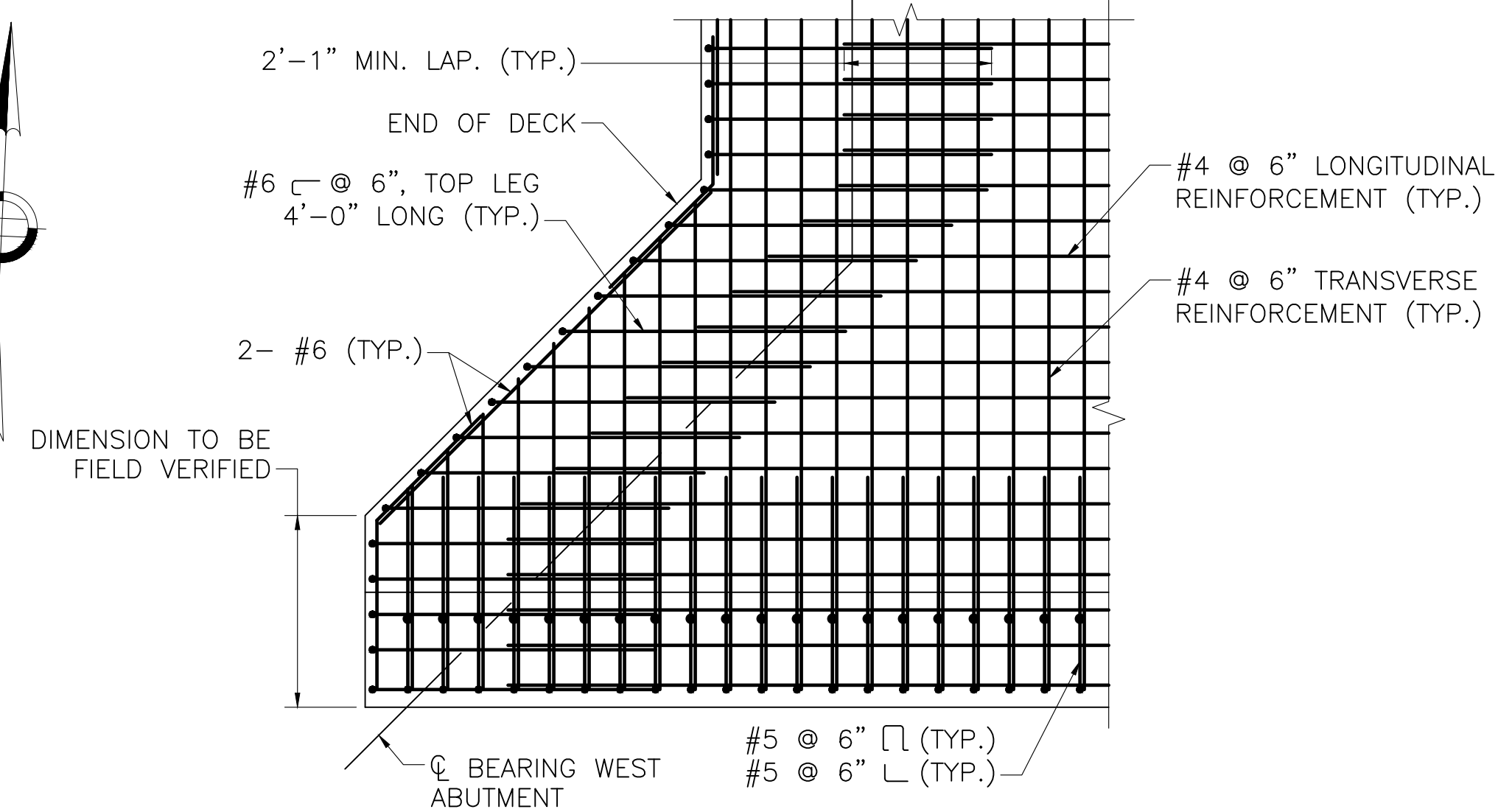


HAUNCH DETAIL

NOT TO SCALE

STAY-IN-PLACE NOTES:

1. FORM ENDS SHALL BE CRIMPED CLOSED IN A TAPERED MANNER. SEPARATE END CLOSURE PIECES WILL NOT BE ALLOWED.
2. SUPPORT ANGLES SHALL BE PLACED IN THE "LEG DOWN" POSITION WHERE POSSIBLE. WHERE "LEG UP" POSITION IS NECESSARY, THE UPPER MOST PORTION OF THE ANGLE SHALL NOT PROJECT MORE THAN 1" ABOVE THE TOP FLANGE OR COVER PLATE. THE CONTRACTOR SHALL HAVE AN ASSORTMENT OF ANGLES OF VARIOUS SIZES AVAILABLE ON THE SITE TO CONFORM TO THIS REQUIREMENT.
3. ALL MAIN STEEL REINFORCEMENT IN THE LOWER MAT SHALL BE CENTERED OVER THE VALLEY OF THE S.I.P. FORM.
4. CONTRACTOR SHALL DESIGN AND DETAIL ALL ELEMENTS OF THE FORMING SYSTEM AND SHALL SUBMIT TO THE ENGINEER FOR APPROVAL.
5. IN CASES WHERE STANDARD 2" OR 3" DEEP S.I.P. FORMS DO NOT SATISFY DESIGN REQUIREMENTS AN ALTERNATIVE FORMING SYSTEM CONSISTING OF DEEPER S.I.P. FORMS OR REMOVABLE FORMS SHALL BE DESIGNED AND DETAILED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. THE DESIGN THICKNESS OF THE SLAB SHALL NOT BE REDUCED.

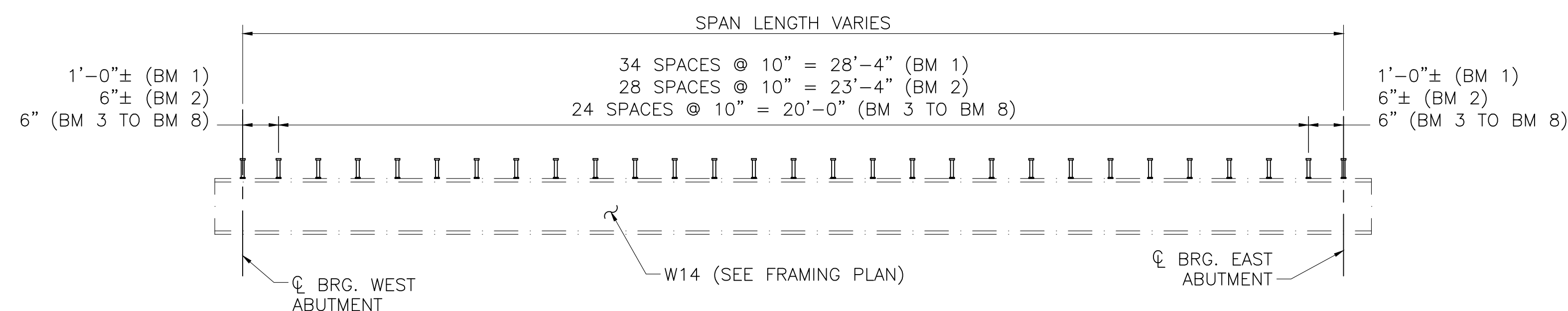


NOTE:

NOTE:
SOUTHWEST CORNER SHOWN. SOUTHEAST CORNER SIMILAR.

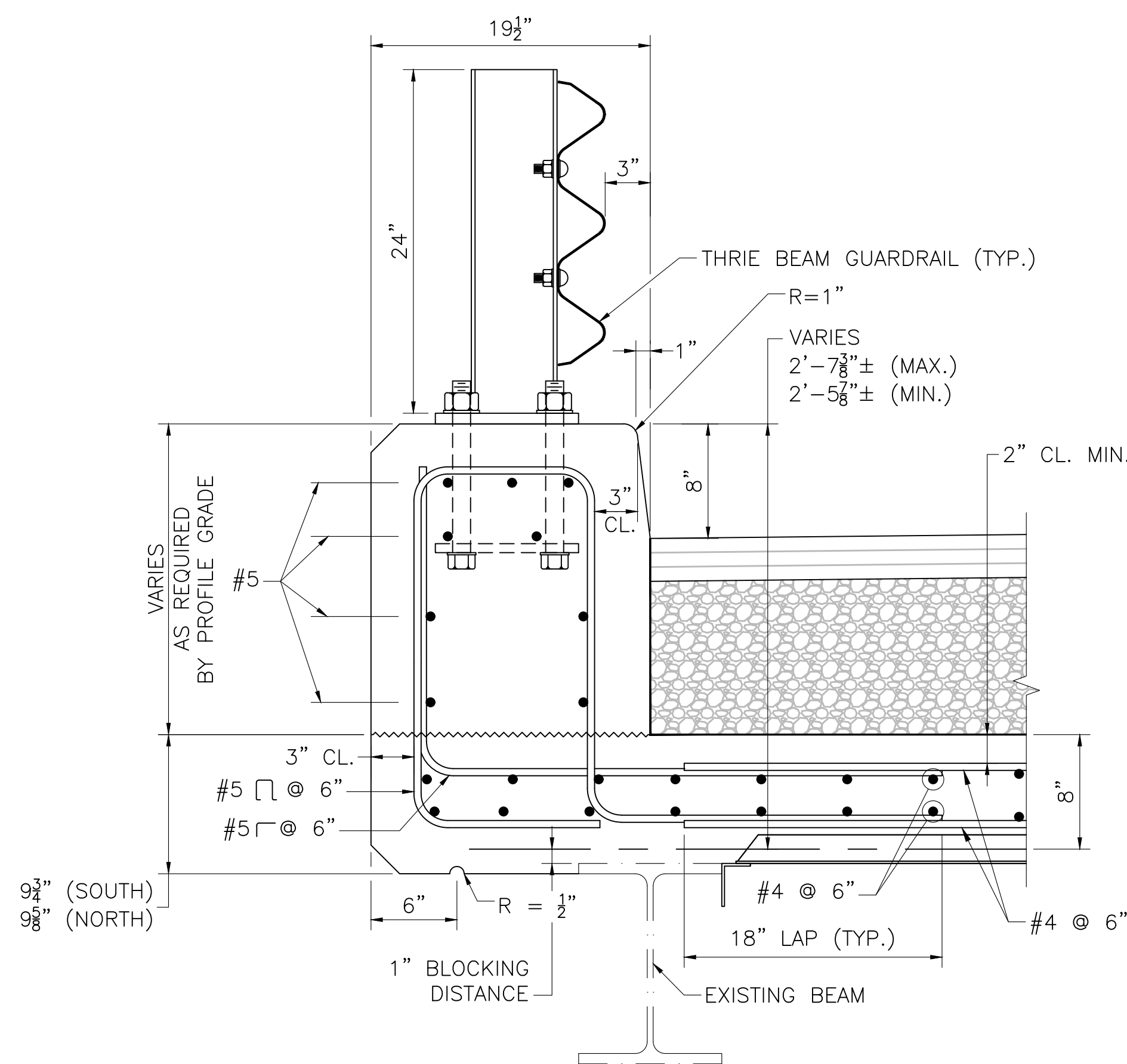
ACUTE CORNER REINFORCEMENT PLAN

SCALE: $\frac{1}{2}" = 1'-0"$



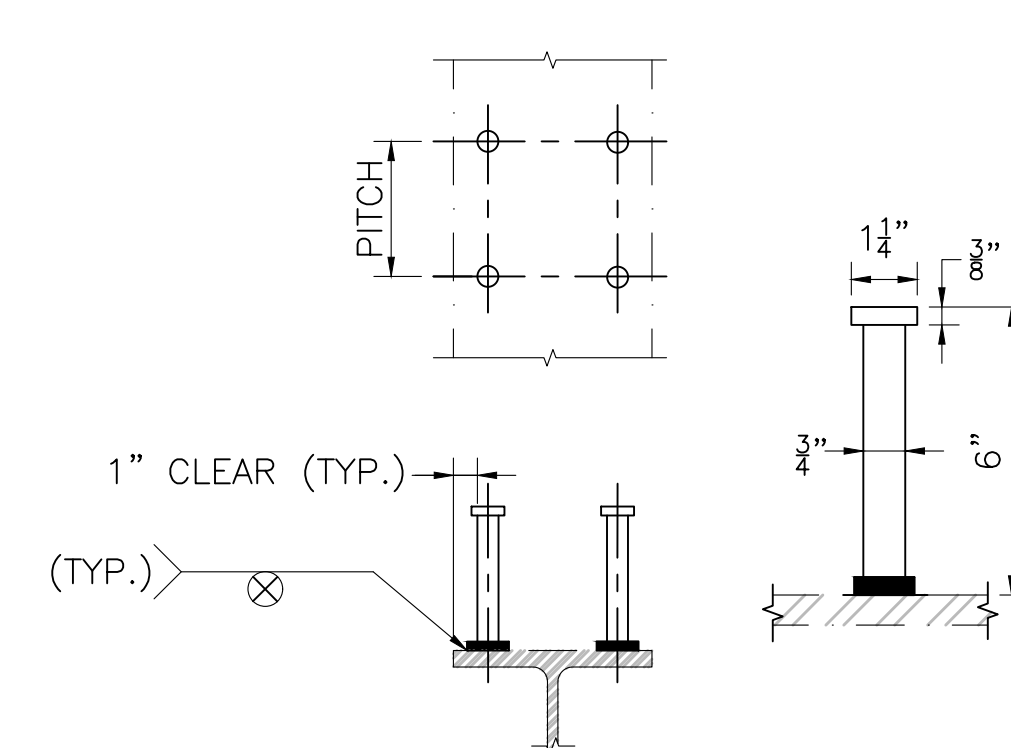
TYPICAL BEAM ELEVATION

NOT TO SCALE



SAFETY CURB REINFORCEMENT DETAIL

SCALE: $1\frac{1}{2}" = 1'-0"$

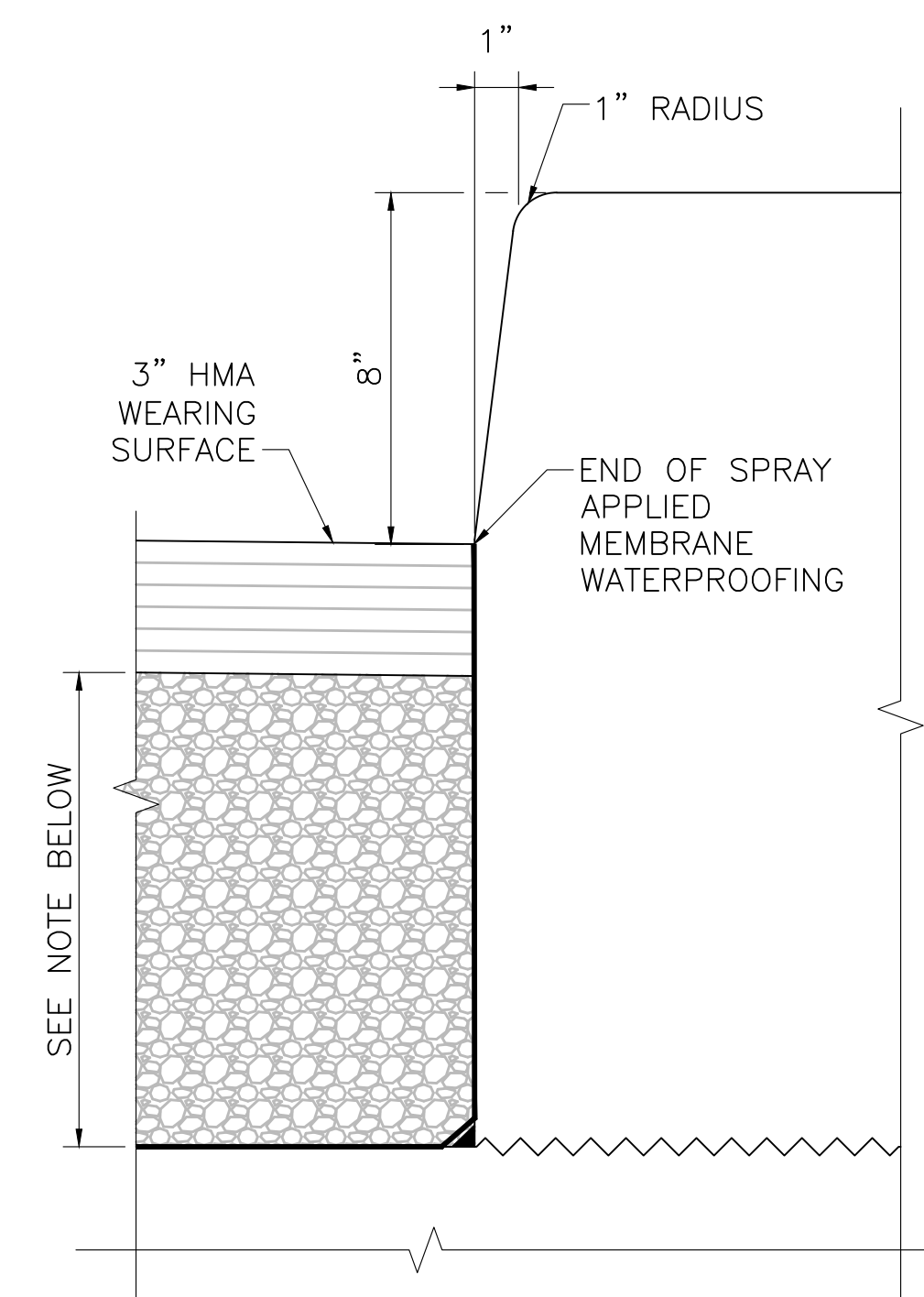


NOTES:

1. GRIND SMOOTH TOP FLANGE AT EACH STUD LOCATION AND APPLY CORROSION MITIGATION SOLUTION AS REQUIRED (TERMARUST OR APPROVED EQUAL).
2. $\frac{7}{8}$ " ϕ STUDS MAY BE SUBSTITUTED FOR $\frac{3}{4}$ " ϕ STUDS BY ADJUSTING THE PITCH TO PROVIDE AN EQUIVALENT CROSS-SECTIONAL AREA PER FOOT.

SHEAR STUD CONNECTORS

NOT TO SCALE



NOTE:

FINE GRADE AND COMPACT GRAVEL BORROW
AS NEEDED TO MEET PROPOSED GRADE.

FACE OF SAFETY CURB DETAIL

SCALE: 3" = 1'-0"

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STATE BRIDGE ENGINEER

DA*



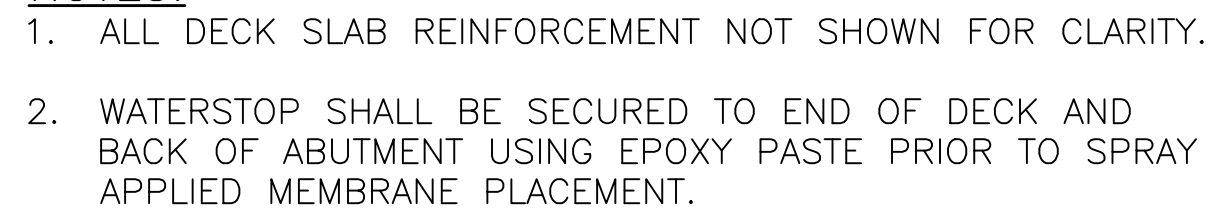
EXISTING DECK THICKNESS AND TOP OF BACKWALL LIMITS SHOWN HAVE NOT BEEN VERIFIED. CONTRACTOR SHALL MODIFY BACKWALL DEMOLITION LIMITS ACCORDINGLY BASED ON ACTUAL DIMENSIONS TO ACCEPT PROPOSED DECK OVERHANG OVER EXISTING BACKWALL.

SCALE: $\frac{3}{4}" = 1'-0"$

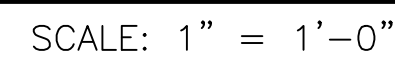


SCALE: $\frac{3}{8}" = 1'-0"$

NORTHWEST WINGWALL SHOWN, NORTHEAST WINGWALL SIMILAR.



SCALE: 1" = 1'-0"



SCALE: $\frac{3}{4}" = 1'-0"$



 DENOTES
DEMOLITION LIMITS

 DENOTES
DEMOLITION LIMITS

SCALE: $\frac{3}{4}" = 1'-0"$



SCALE: $\frac{3}{8}" = 1'-0"$



SCALE: $\frac{3}{4}" = 1'-0"$

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STATE BRIDGE ENGINEER _____ DATE _____

The logo for Gill Engineering, featuring the word "GILL" in a large, bold, sans-serif font, and the word "ENGINEERING" in a smaller, bold, sans-serif font, with a curved line separating the two words.

DATE	DRW BY	CALC BY	APPR BY	DESCRIPTION
12/17/24	DCH	TRS	DSC	ISSUED FOR CHAPTER 85 REVIEW

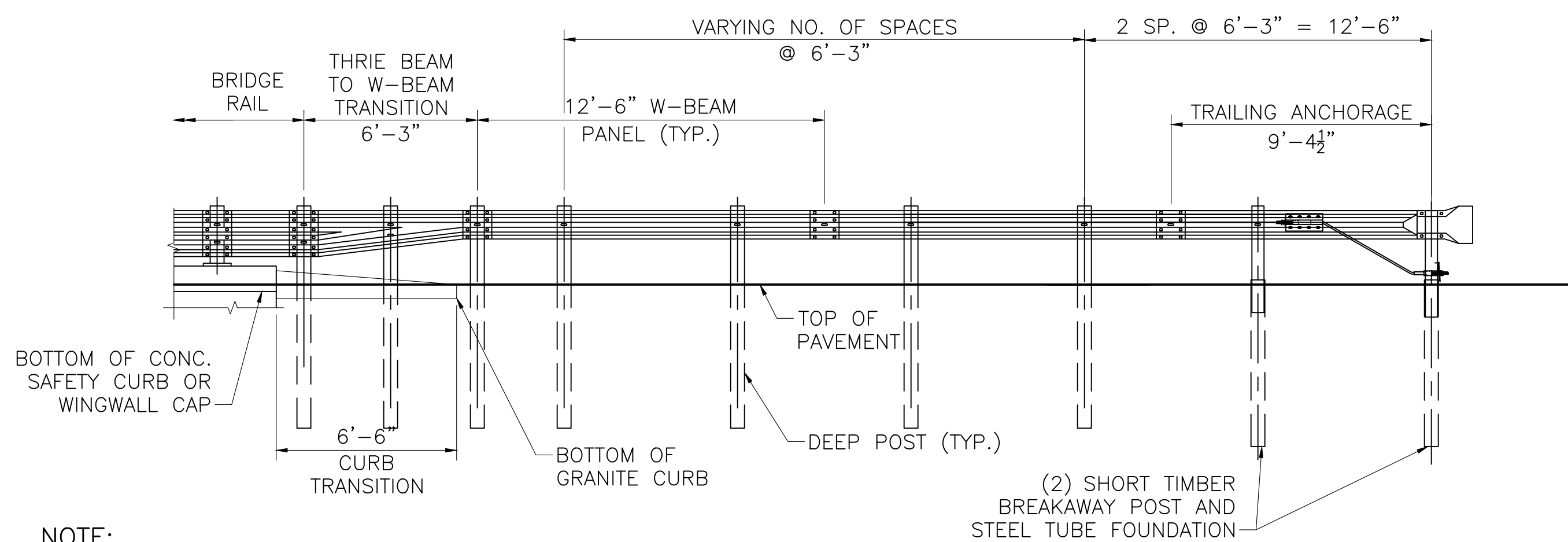
REGISTERED PROFESSIONAL ENGINEER

PROPOSED DECK REPLACEMENT

TOWN OF CHARLEMONT
DECK REPLACEMENT FOR CHARLEMONT
C-05-027 (OET)
SOUTH RIVER ROAD OVER ALBEE BROOK

BACKWALL & WINGWALL DETAILS

SHEET 5 OF 8

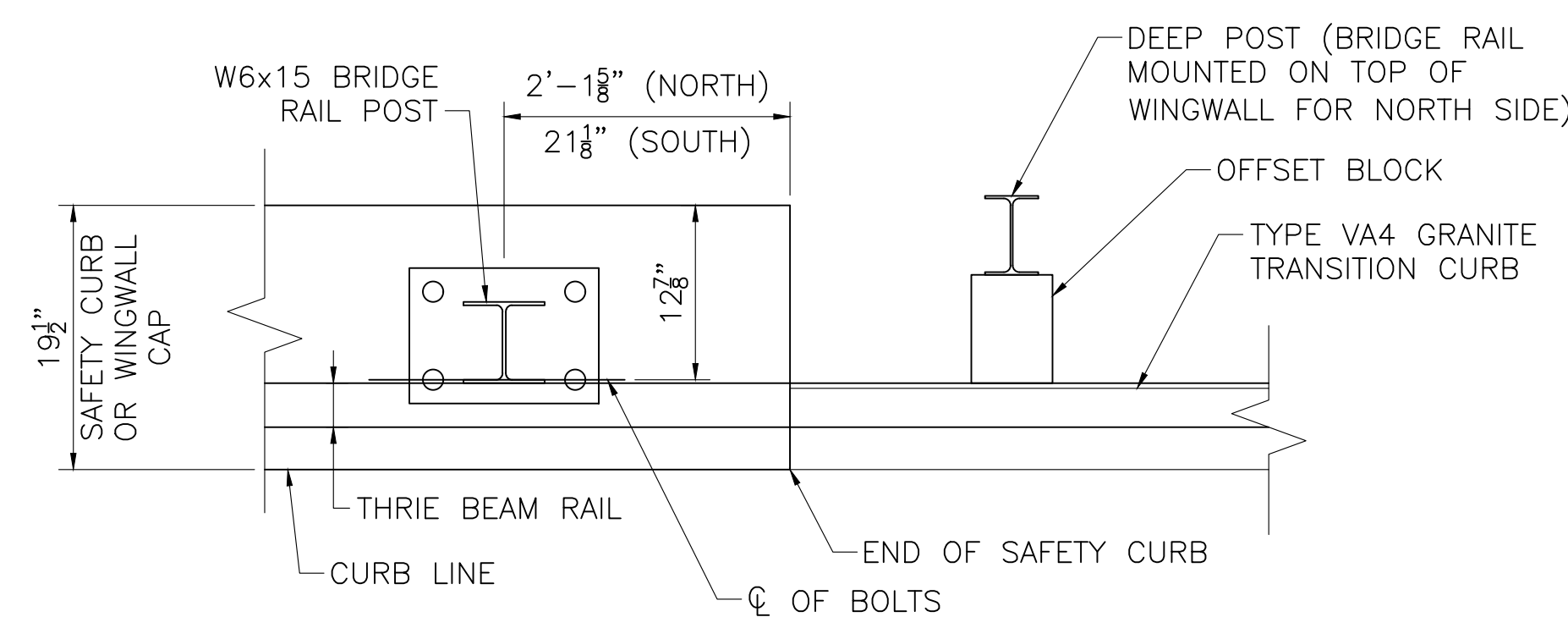


NOTE:
LEVEL BENCH NOT REQUIRED FOR DEEP
POSTS. TAPER FROM BACK OF
GUARDRAIL POST TO NECESSARY GRADE.

NOTE:
NORTHEAST CORNER SHOWN, NORTHWEST AND SOUTHEAST
CORNERS SIMILAR. SEE SHEET 7 FOR SOUTHWEST
GUARDRAIL GEOMETRY.

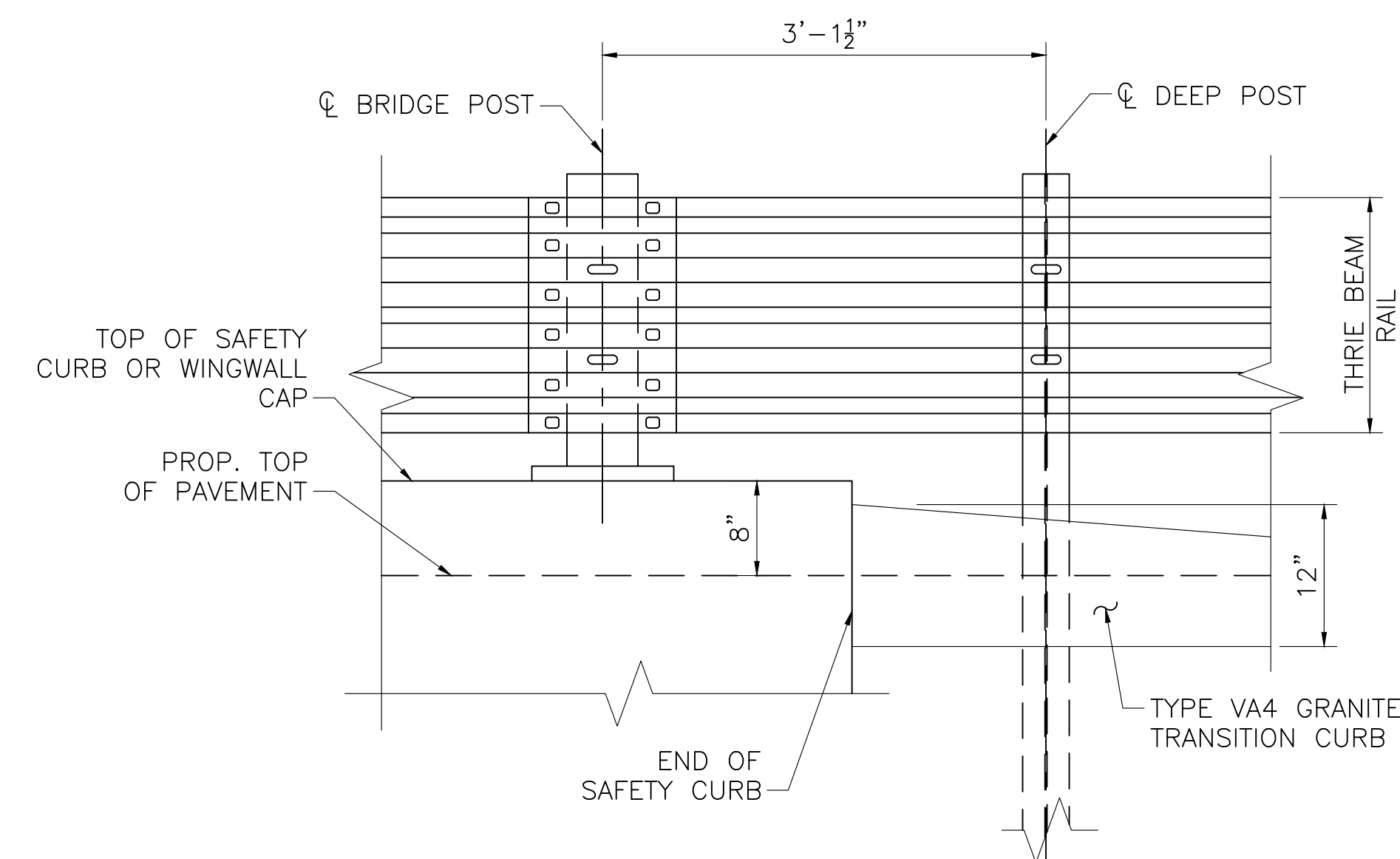
GUARD RAIL APPROACH TRANSITION

SCALE: $\frac{1}{4}" = 1'-0"$



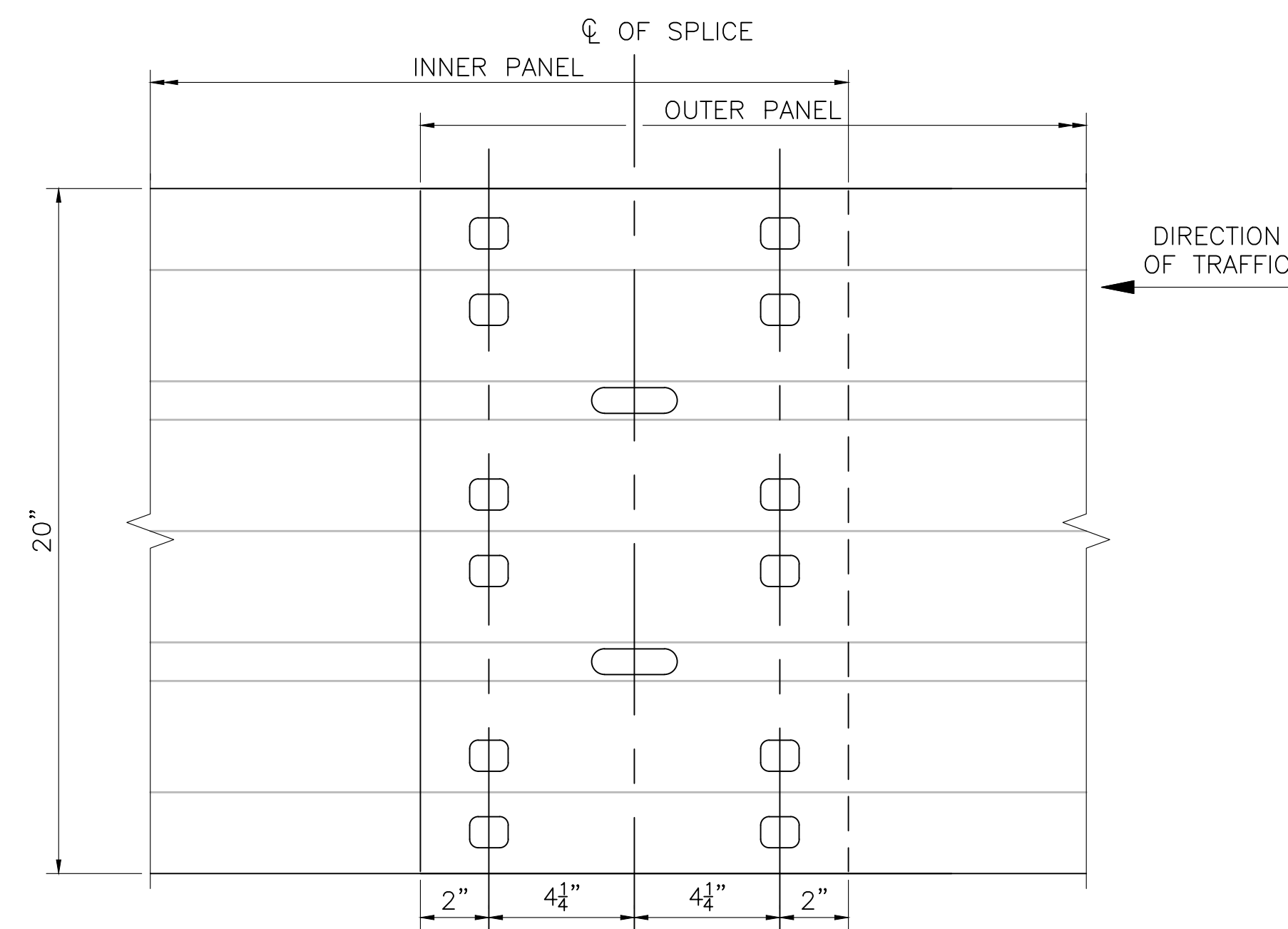
TYPICAL DETAIL END OF SAFETY CURB

SCALE: $1'' = 1'-0''$



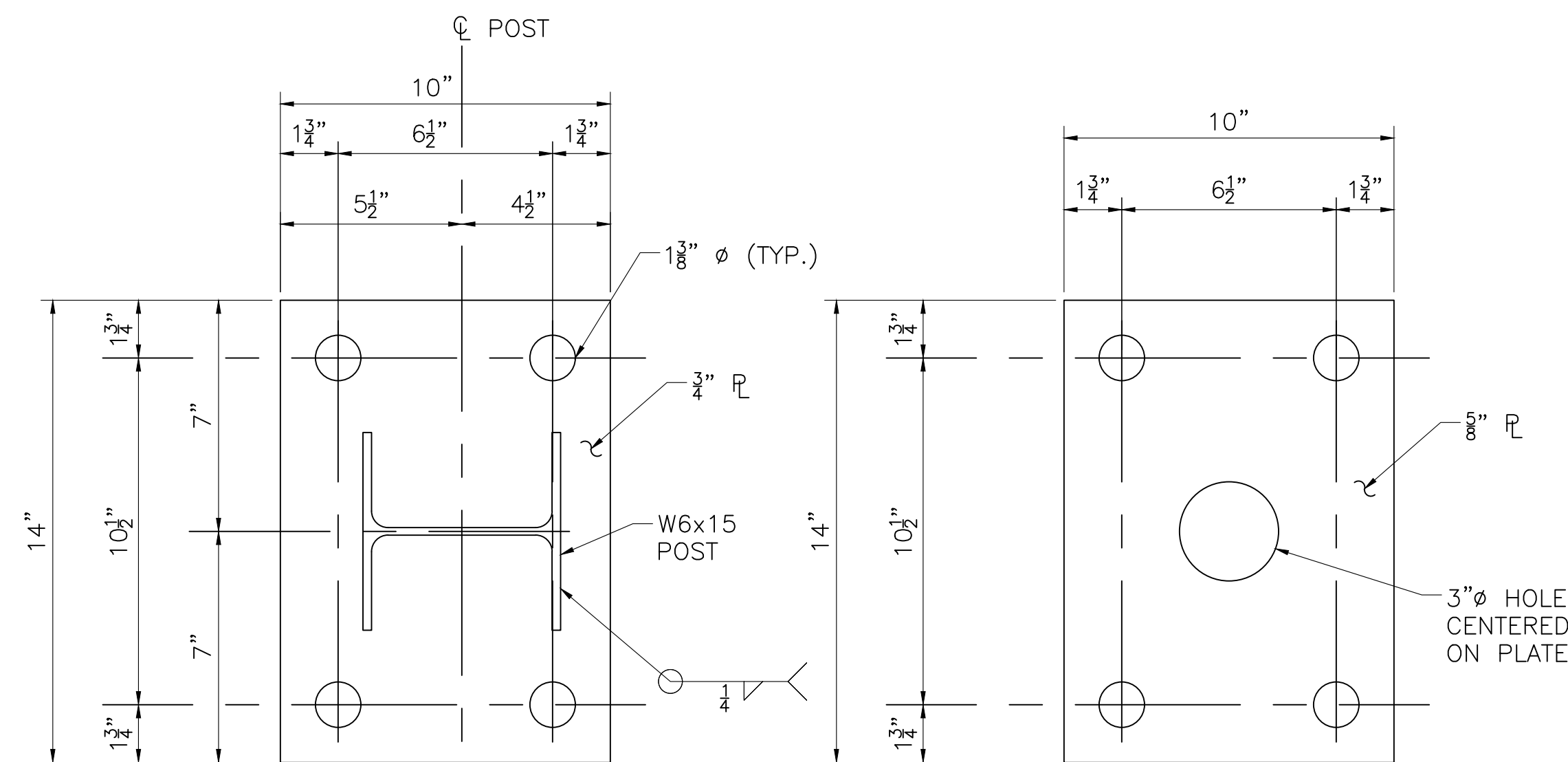
TYPICAL SAFETY CURB DETAIL

SCALE: 1" = 1'-0"



THRIE BEAM RAIL SPLICE ELEVATION

SCALE: 3" = 1'-0"

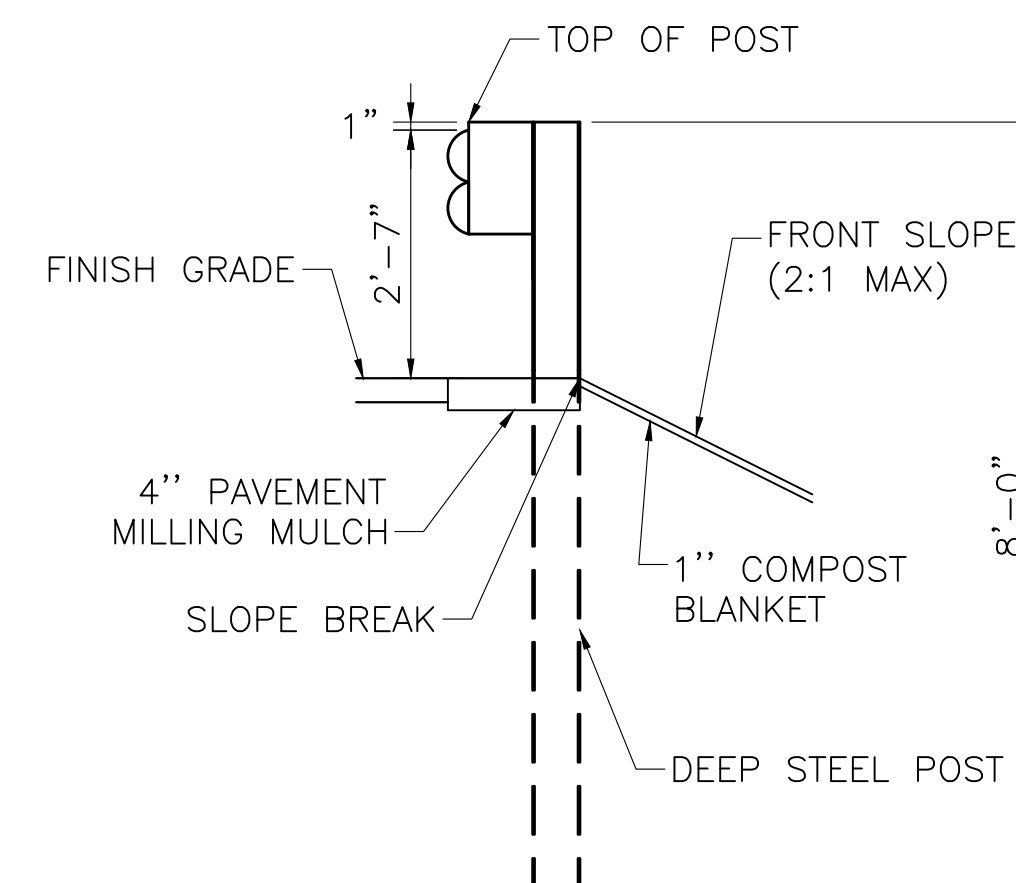


THREE BEAM POST BASE PLATE DETAIL

SCALE: 3" = 1'-0"

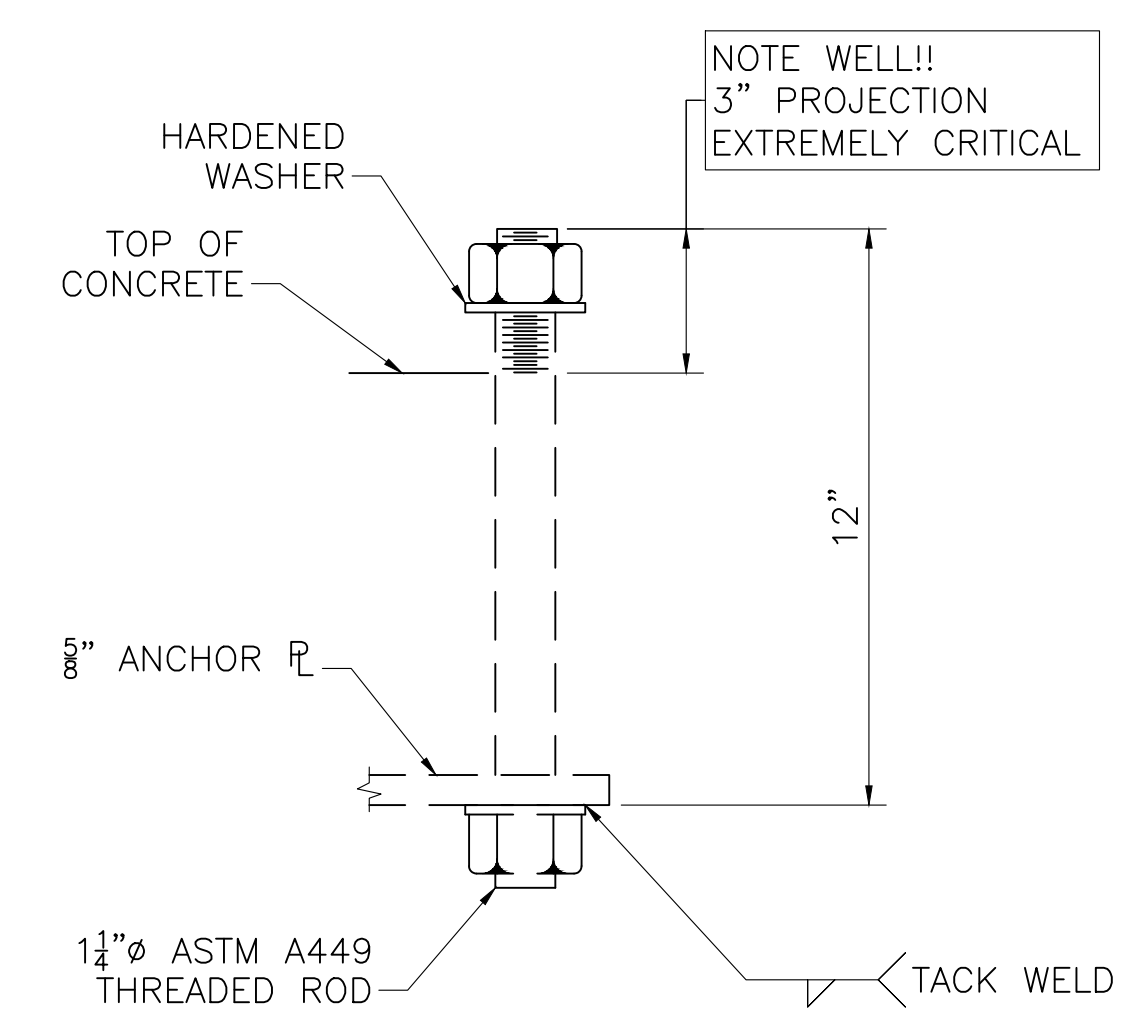
ANCHOR PLATE DETAIL

SCALE: 3" = 1'-0"



DEEP STEEL POST

SCALE: $\frac{1}{2}" = 1'-0"$



ANCHOR BOLT DETAIL

SCALE: 3" = 1'-0"

MATERIALS

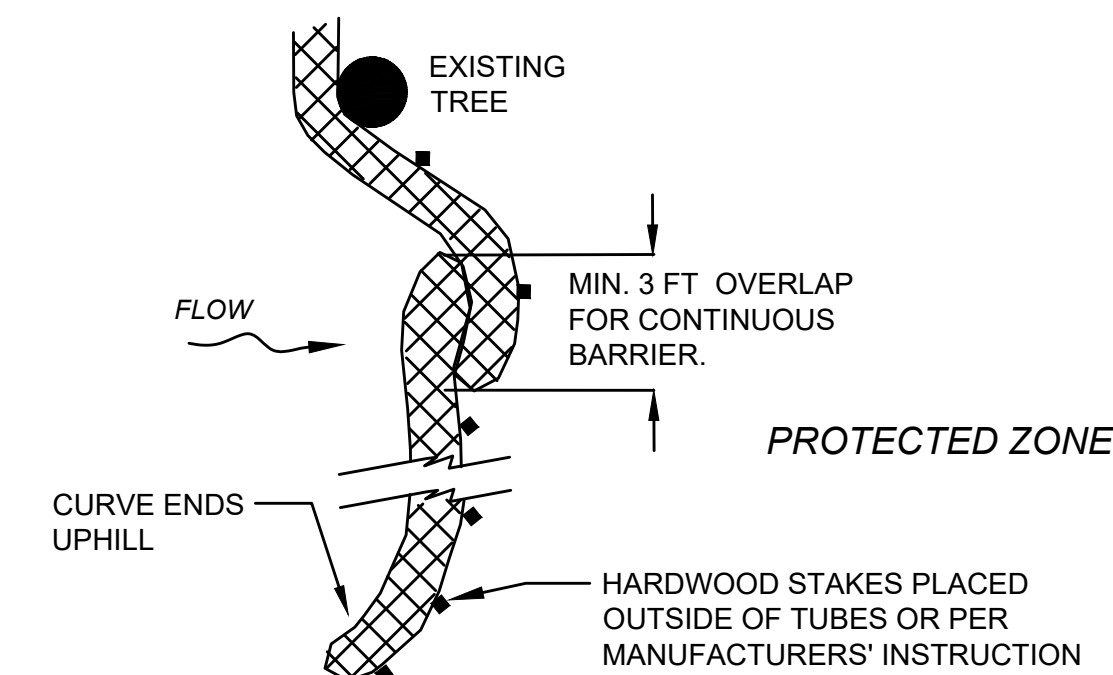
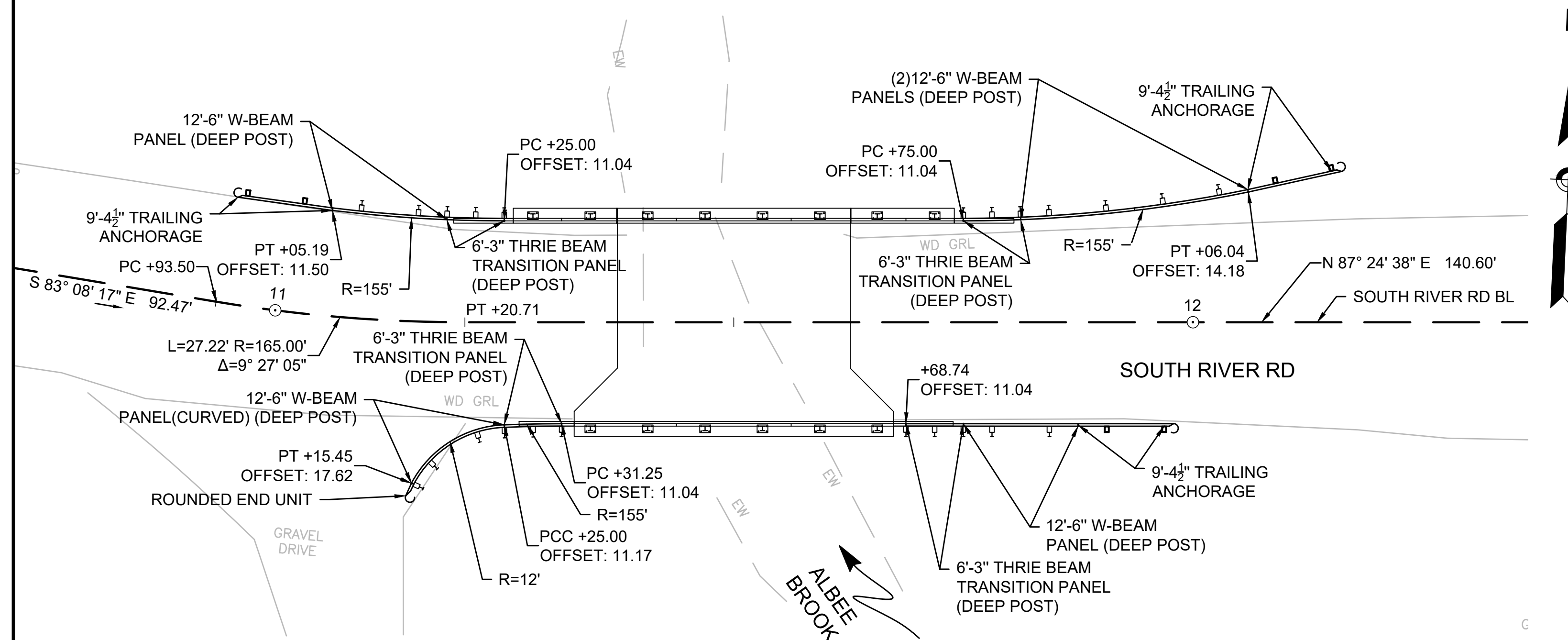
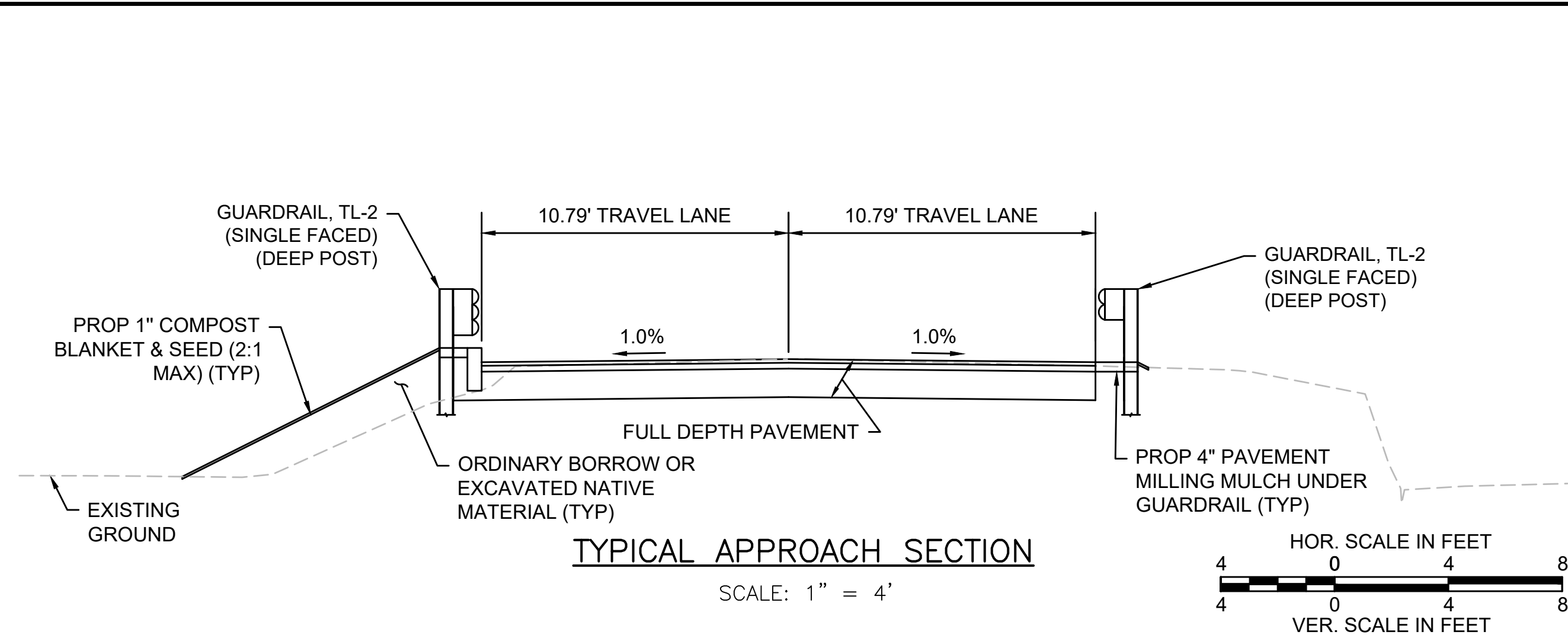
1. RAIL POST, BASE PLATES, AND ANCHOR PLATES SHALL BE AASHTO M270 GRADE 50 GALVANIZED.
2. THRIE BEAM BRIDGE RAIL SHALL BE AASHTO M180, CLASS B (10 GAUGE OR DOUBLE NESTED 12 GAUGE), AND GALVANIZED.
3. ALL BOLTS SHALL BE MECHANICALLY GALVANIZED WITH COMPATIBLE NUTS AND WASHERS UNLESS OTHERWISE NOTED.

GENERAL NOTES:

1. SET POSTS PERPENDICULAR TO TOP OF BRIDGE DECK.
2. ANCHOR BOLTS SHALL BE SET WITH TEMPLATES. THE NUT SECURING THE POST BAST PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL $\frac{1}{8}$ TURN AFTER STEEL IS IN PLACE.
3. WELDING SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AASHTO/AWS D.1.5.
4. PLACE A REFLECTORIZED WASHER IN THE UPPER VALLEY OF EVERY THRIE BEAM POST.

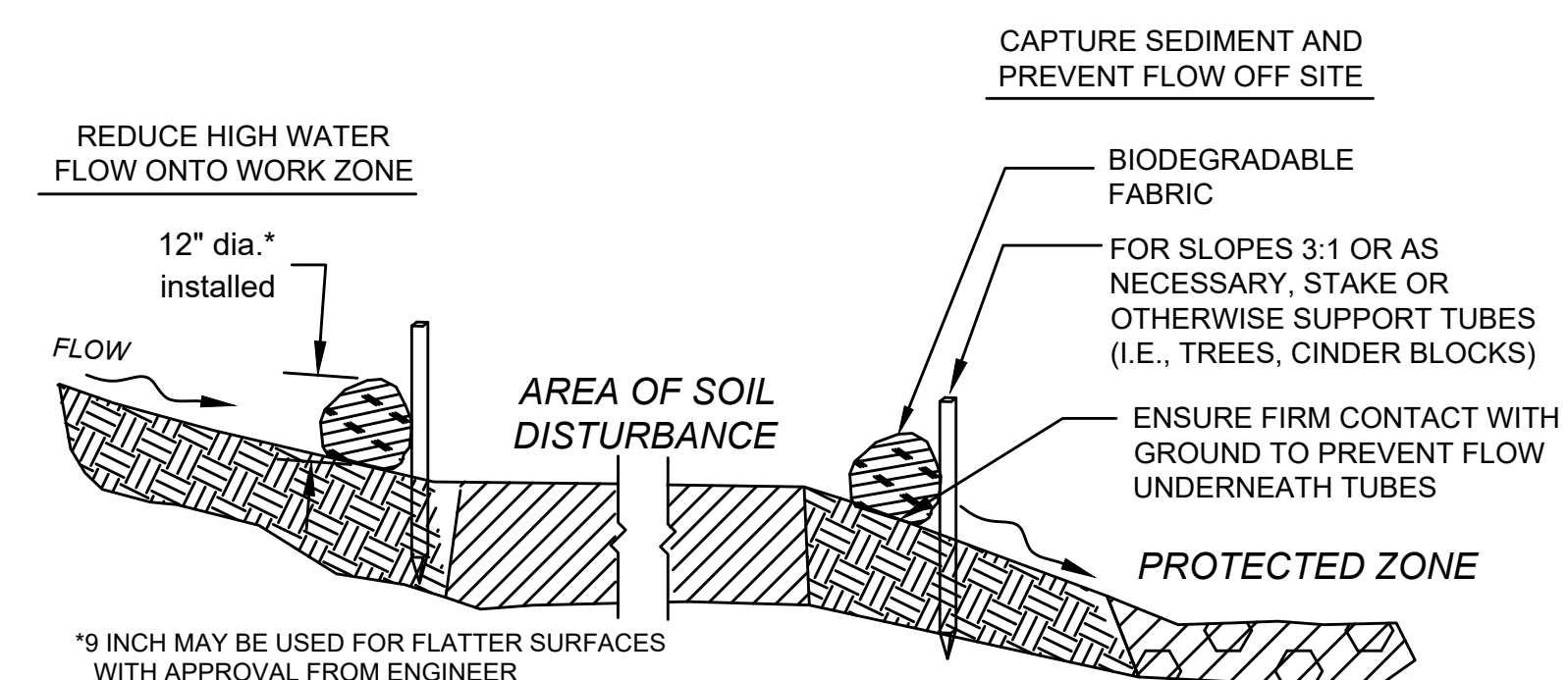
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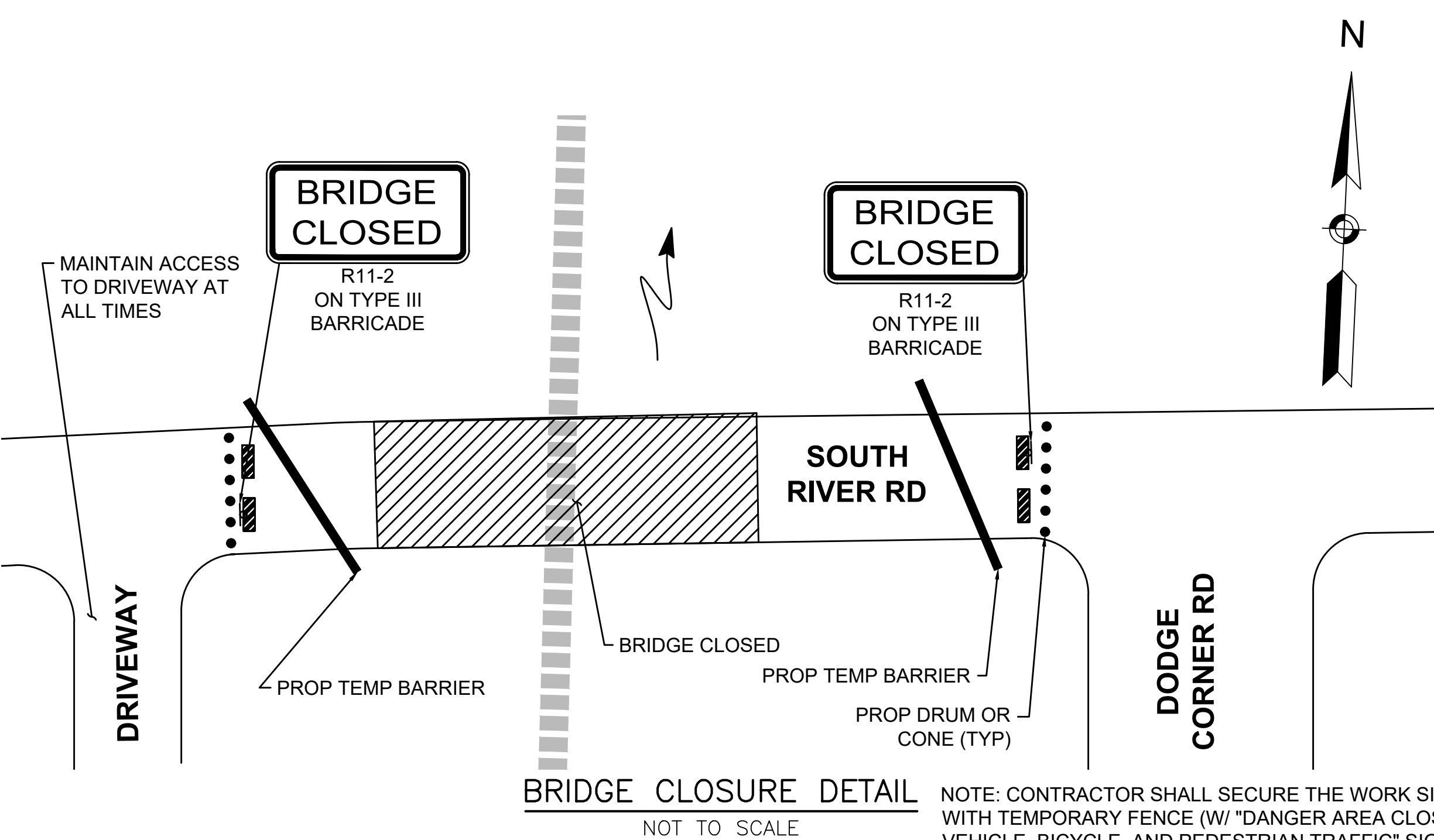
PLACE TUBE AS CLOSE TO LIMIT OF SOIL DISTURBANCE AS POSSIBLE, ALONG CONTOURS, AND PERPENDICULAR TO FLOW.

ADJUST LOCATION AS REQUIRED FOR OPTIMUM EFFECTIVENESS. DO NOT INSTALL IN WATERWAYS.





- TYPE III BARRICADE
- DIRECTION OF TRAFFIC
- WORK ZONE
- SIGN
- DETOUR ROUTE
- TEMPORARY BARRIER
- REFLECTORIZED DRUM OR CONE
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)



NOTE: CONTRACTOR SHALL SECURE THE WORK SITE WITH TEMPORARY FENCE (W/ "DANGER AREA CLOSED TO VEHICLE, BICYCLE, AND PEDESTRIAN TRAFFIC" SIGN)