

Trench Former®

Pre-Engineered Cast In Place
Trench Drain Forming System



MHD® & XHD® Bar Lock Installation Guide



P.O. Box 837 - 259 Murdock Road - Troutman, NC 28166
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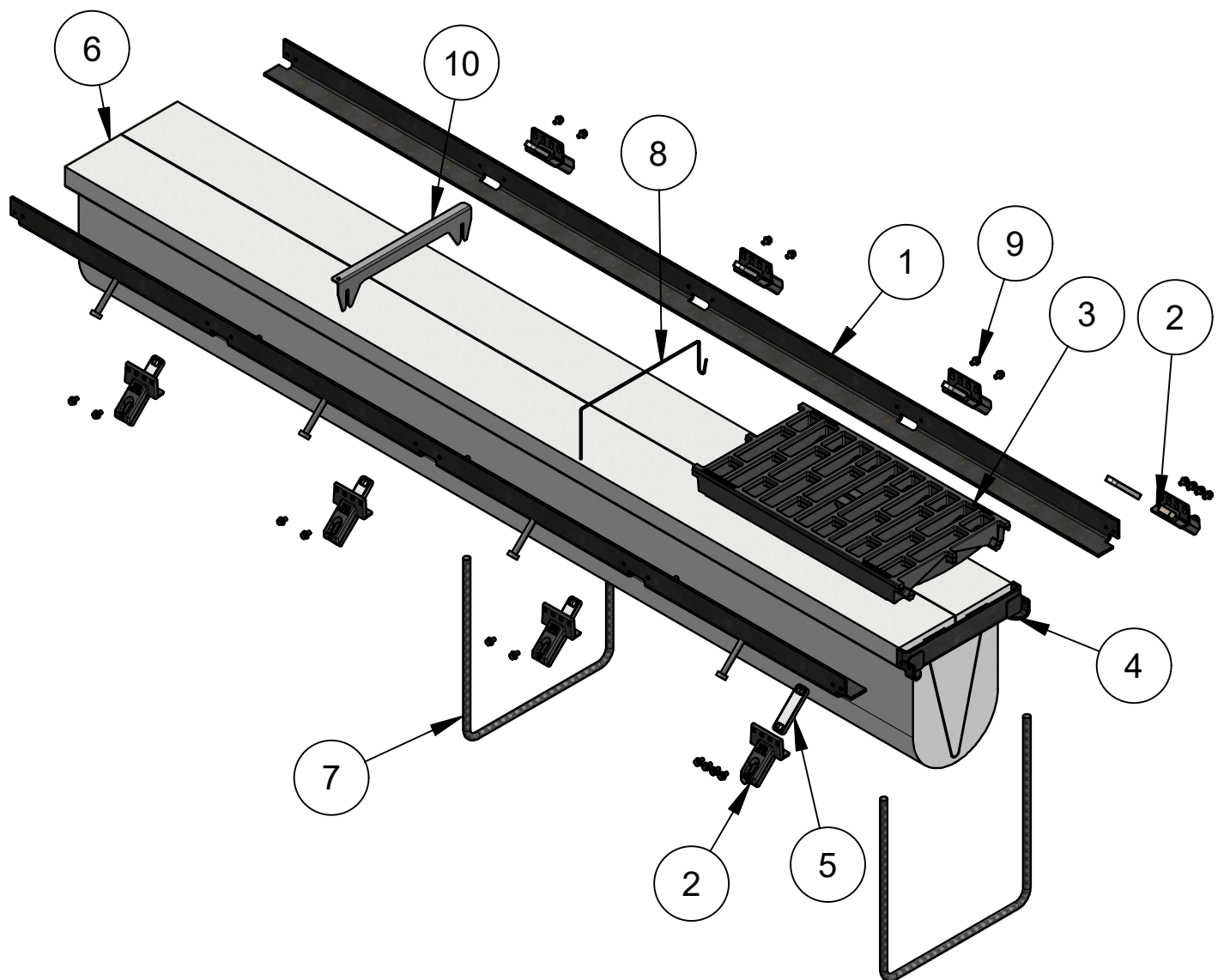
USEFUL OR REQUIRED TOOLS



Some products sold by ABT contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Products sold by ABT may contain these chemicals in a smaller amount than Proposition 65's concern, or not at all, however, we have chosen to issue this warning on all of our products as an act of caution and because our customers have the right to know.

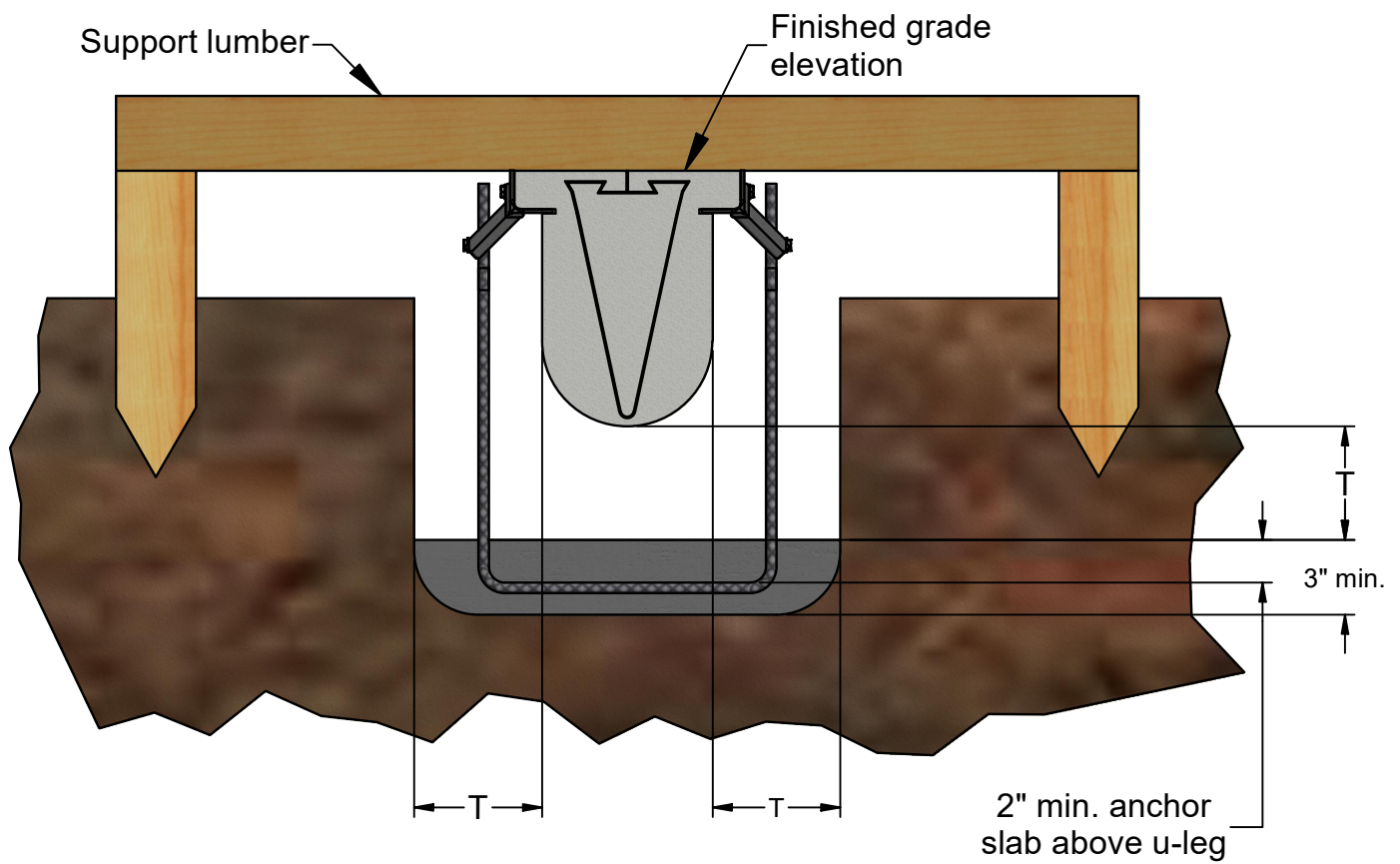
! WARNING: These products can expose you to chemicals such as nickel, lead, chromium, cobalt, styrene, methylene chloride, or silica, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

COMPONENT IDENTIFICATION



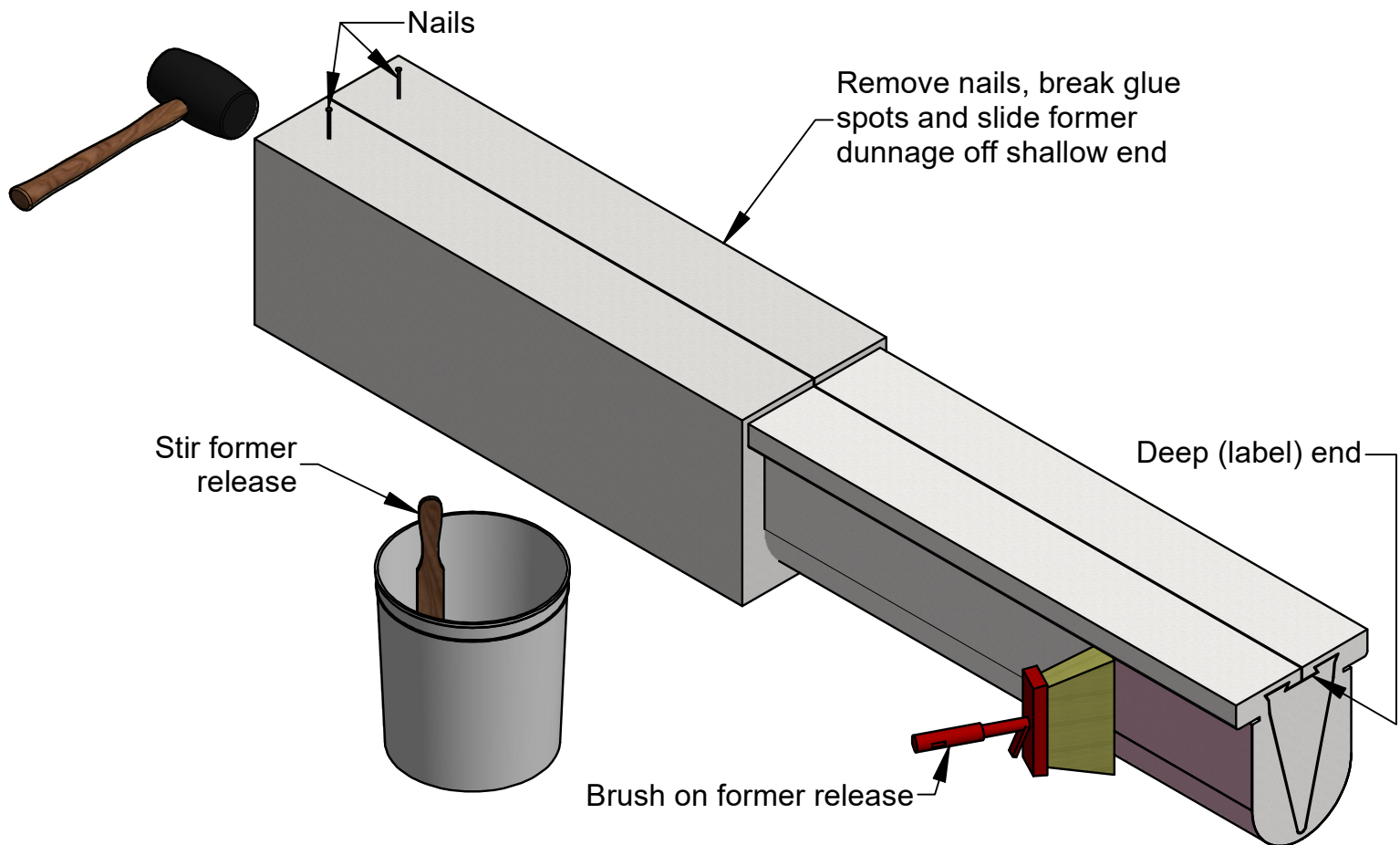
COMPONENTS

ITEM	DESCRIPTION
1	ANGLE FRAME / RAIL
2	1806 BRACKET WITH FOAM HOLE PLUG AND 5/16" SCREW
3	GRATE
4	END RAIL
5	LOCK BAR
6	EPS FORMER
7	REBAR U-LEG
8	CROSS TIE
9	Ø1/4"-20 THREAD FORMING SCREW
10	RAIL SPACER (OPTIONAL UPGRADE)



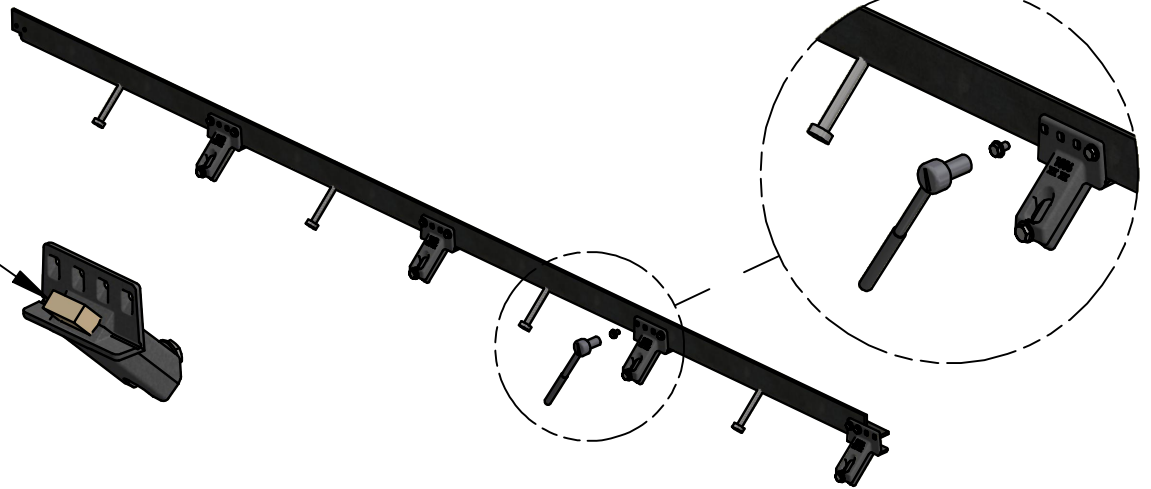
1. EXCAVATION

T = Per structural specifications

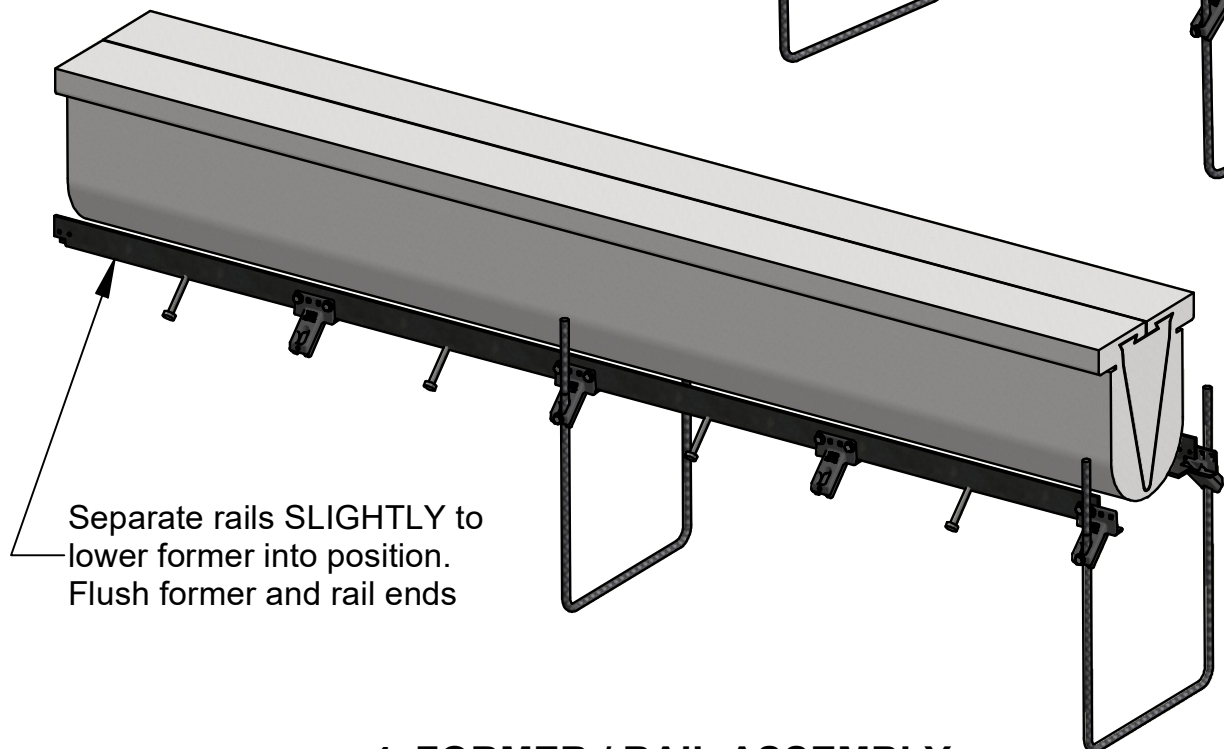
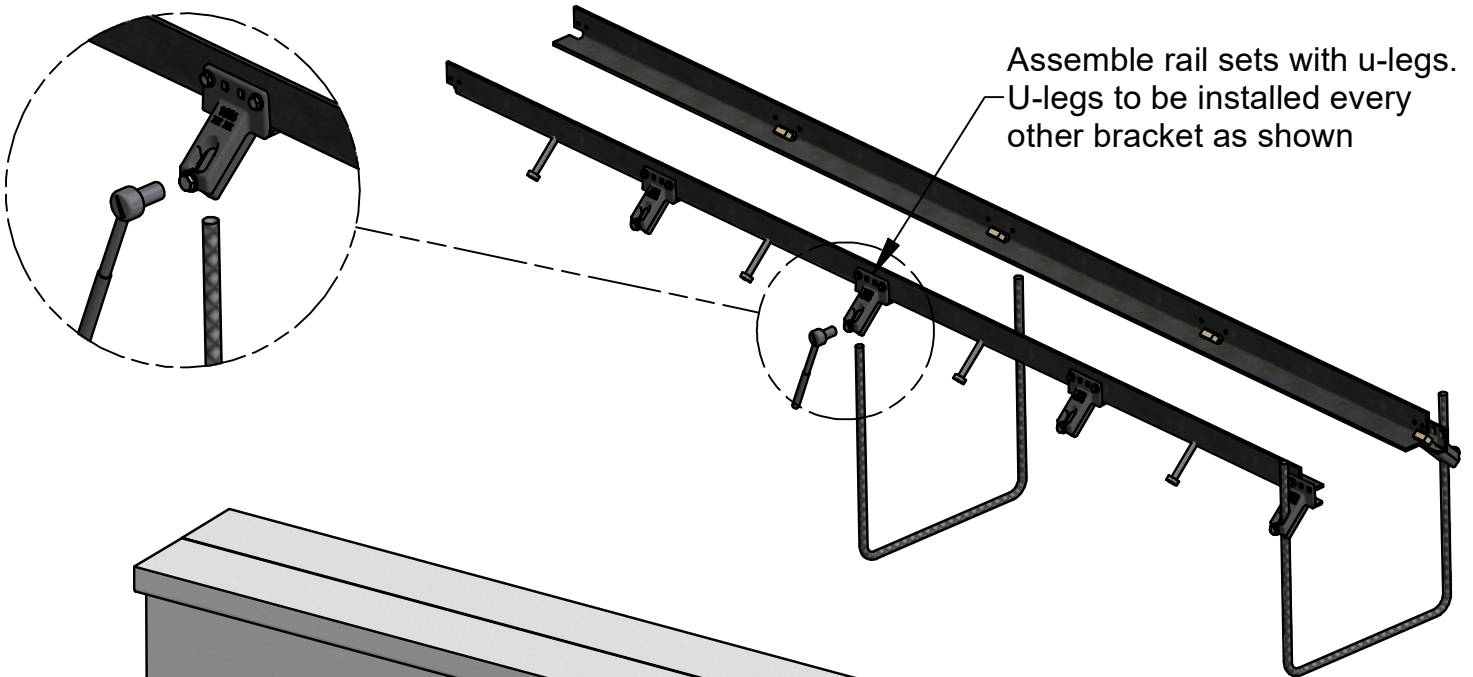


2. FORMER PREPARATION

Verify that foam
plug is in place

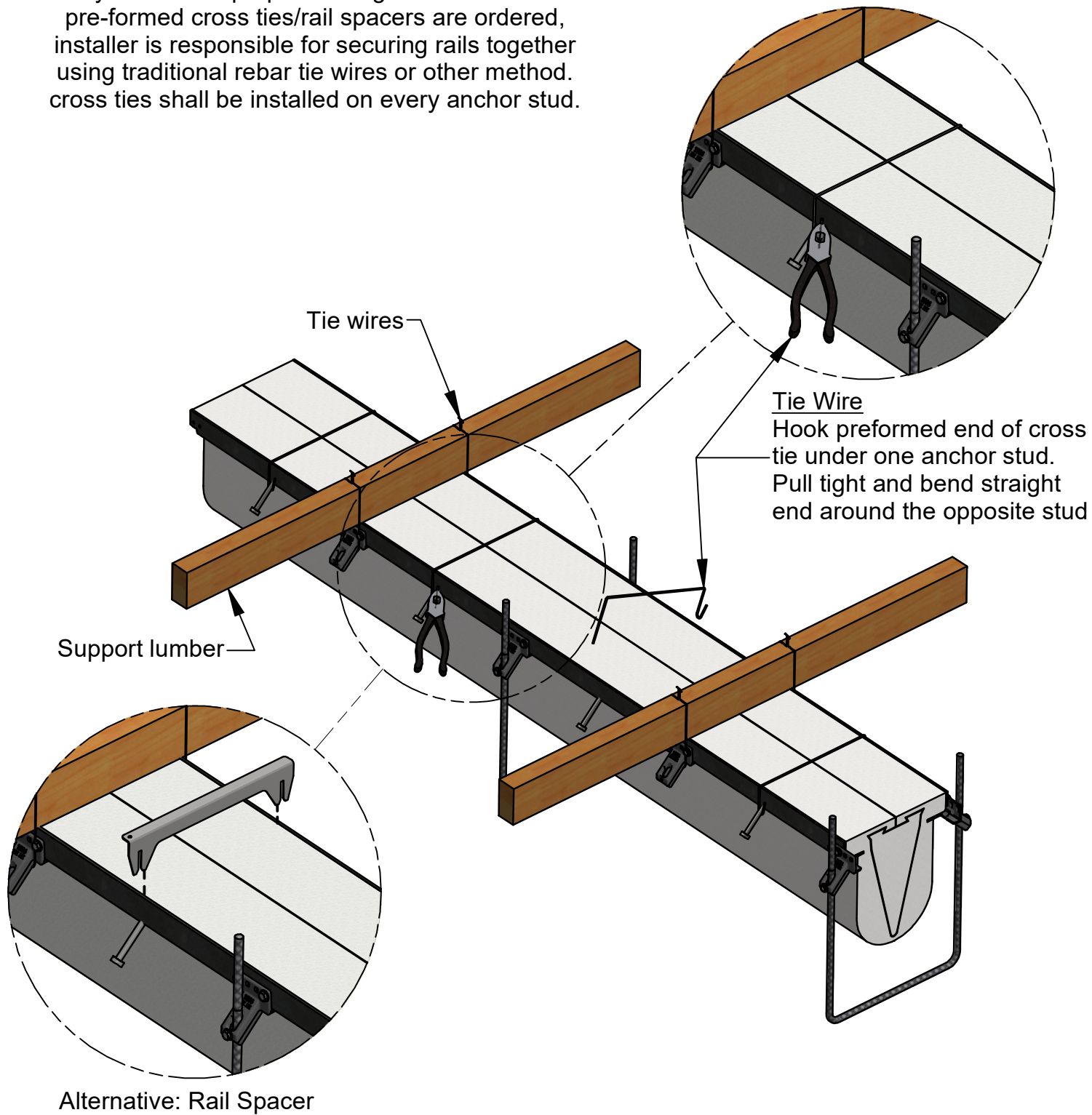


3. BRACKET ASSEMBLY

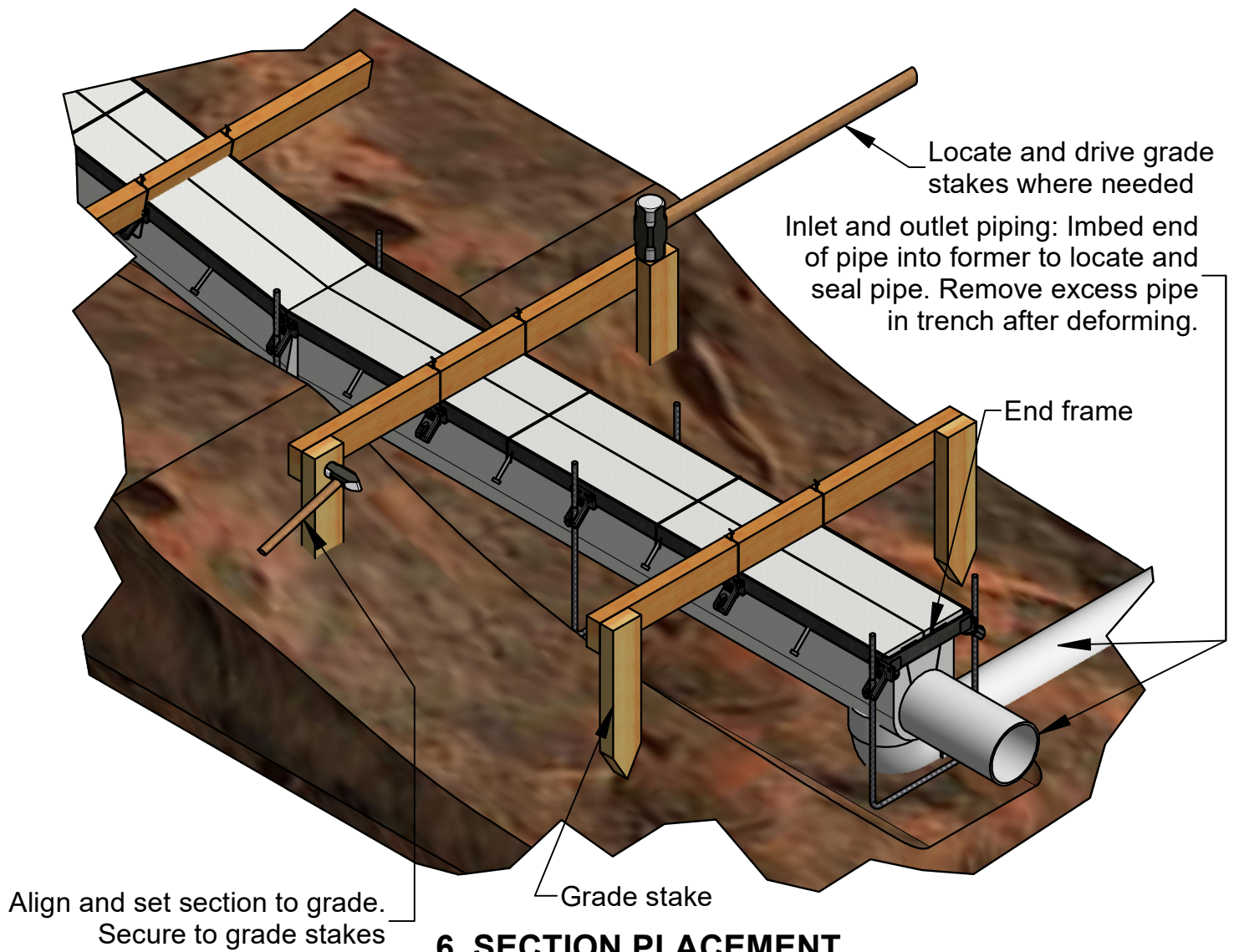


4. FORMER / RAIL ASSEMBLY

WARNING: Failure to use cross ties or rail spacers may result in improper rail alignment. If no ABT pre-formed cross ties/rail spacers are ordered, installer is responsible for securing rails together using traditional rebar tie wires or other method. cross ties shall be installed on every anchor stud.

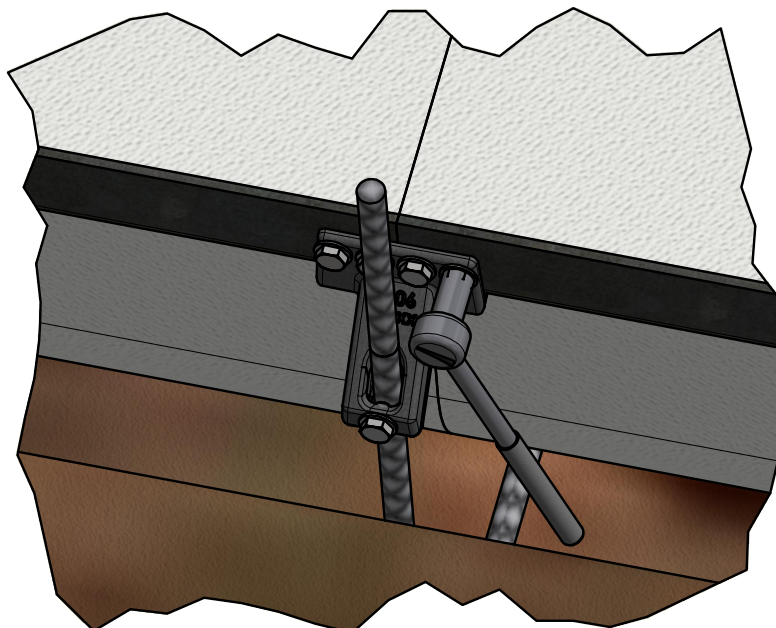


5. SUPPORT LUMBER ATTACH & ALIGNMENT



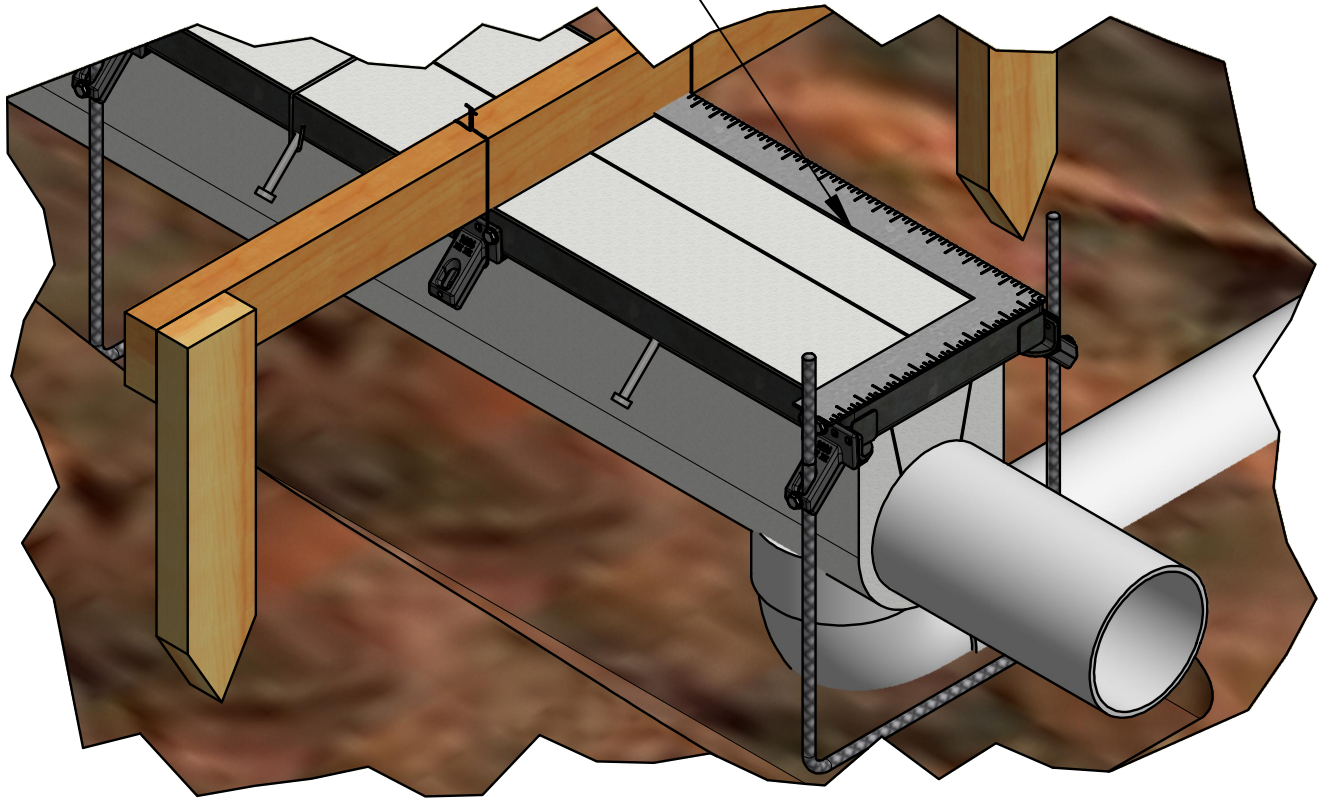
6. SECTION PLACEMENT

Locate and align outlet channel first.
Start at deep end and work to shallow end.

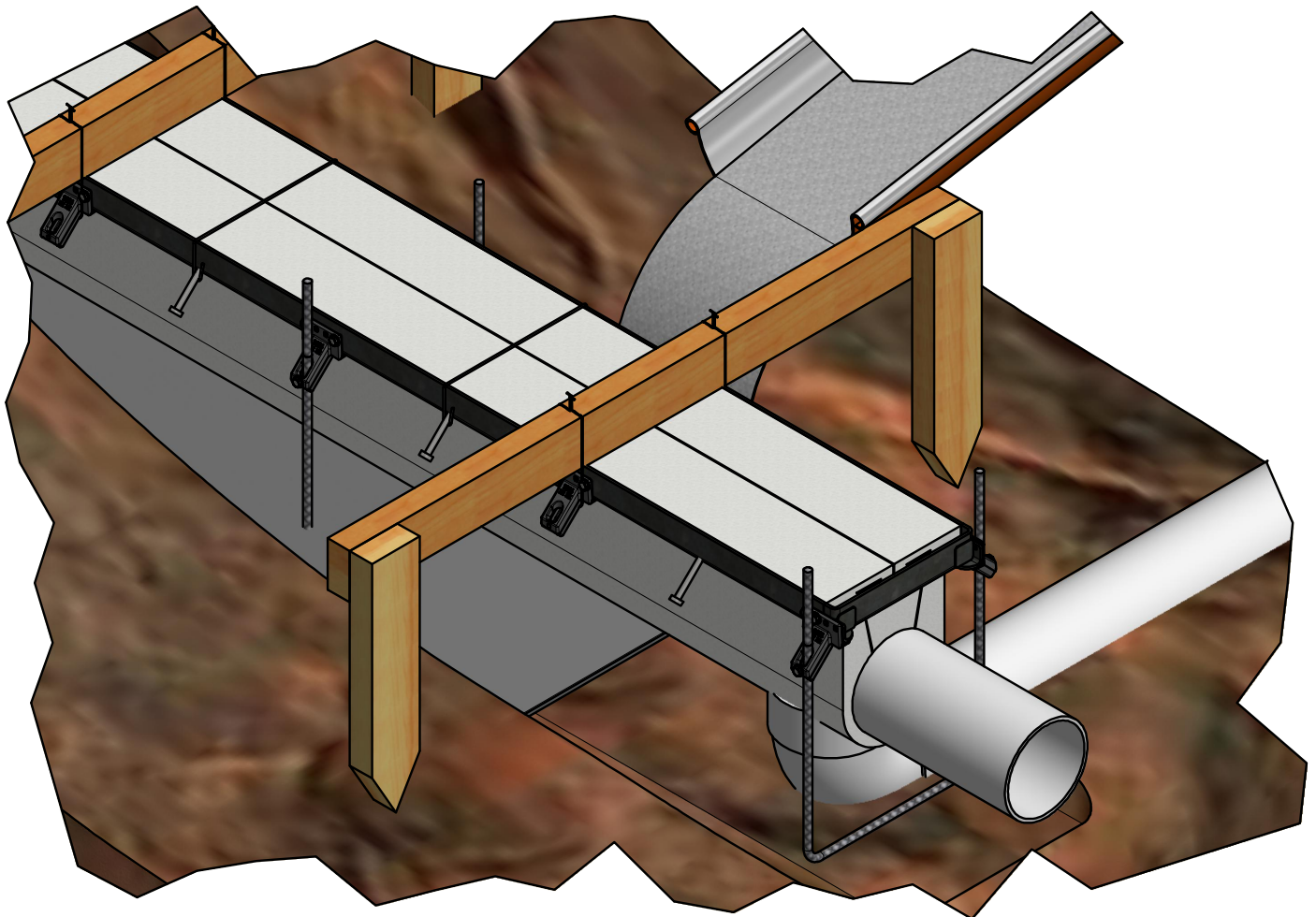


7. RAIL CONNECTION

Verify that ends of rails are square/flush to ensure proper system alignment. Repeat with each section.

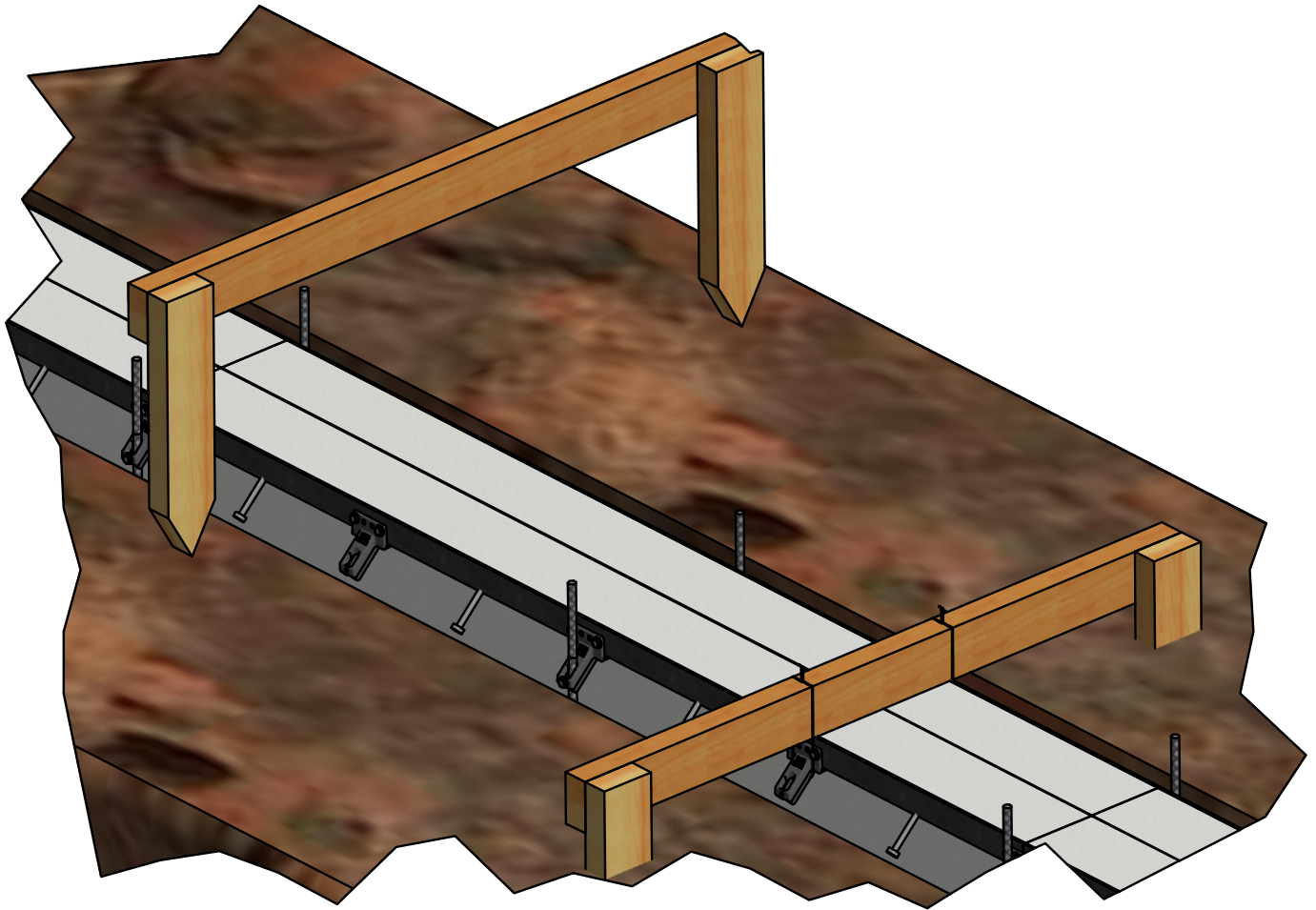


8. TRENCH ALIGNMENT

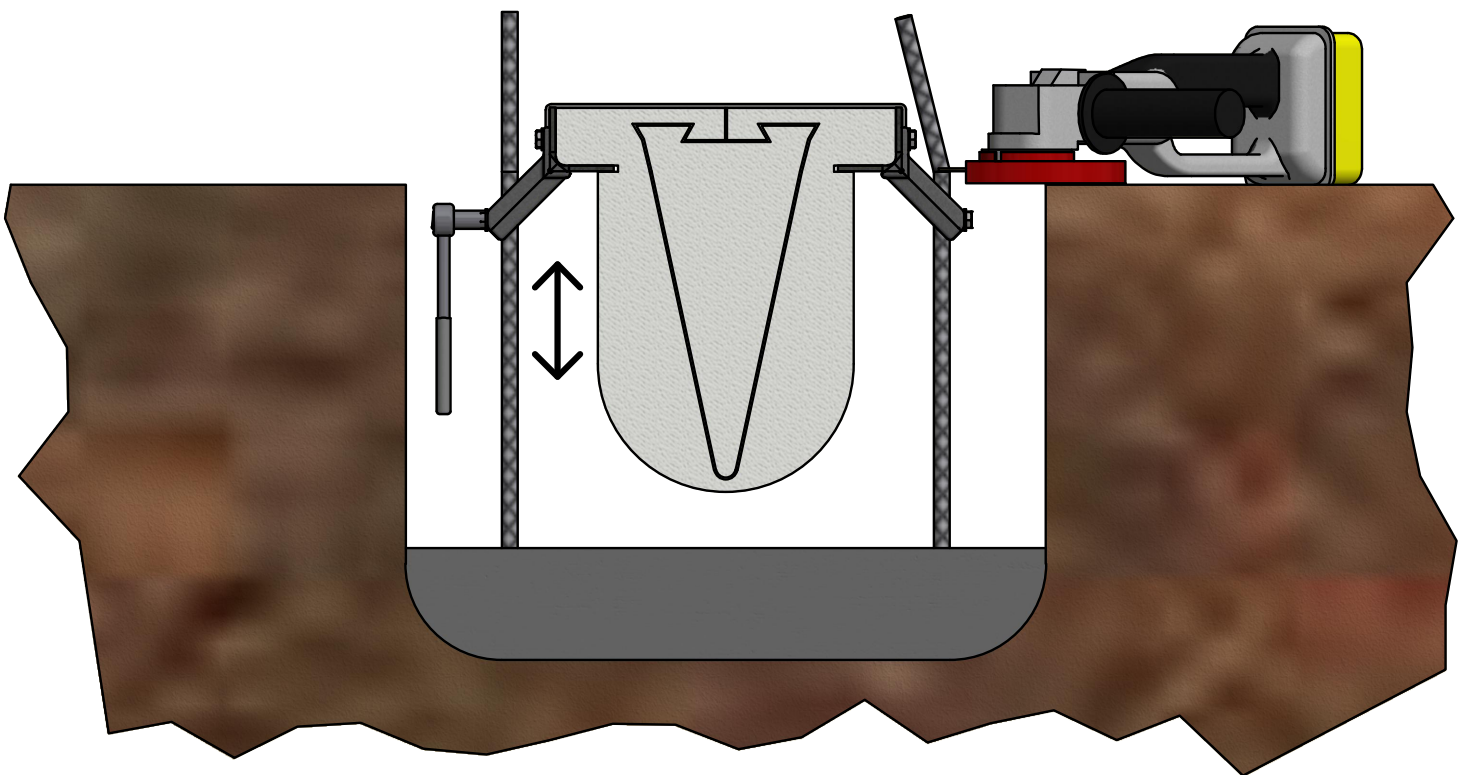


9. PLACE ANCHOR SLAB

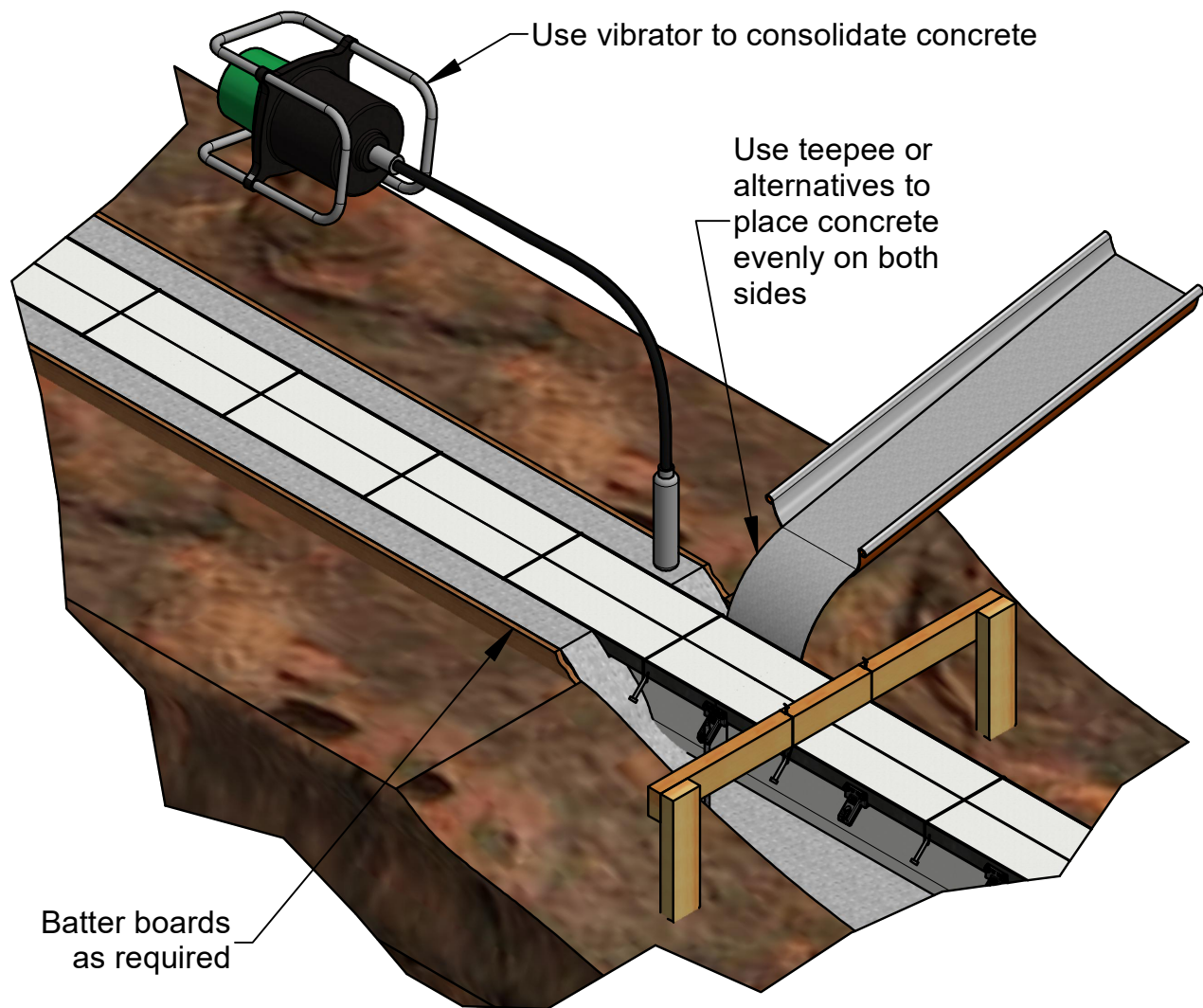
See Step 1 for dimensions



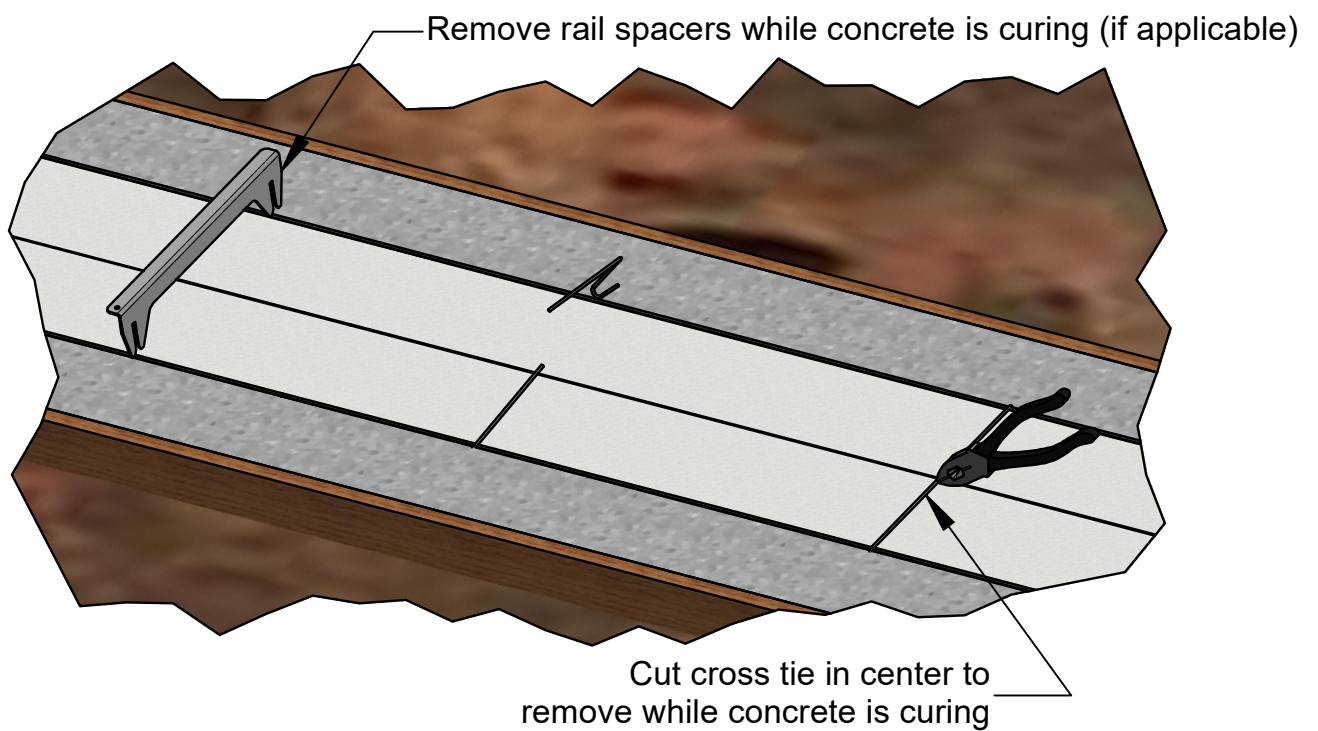
10. REMOVE SUPPORT LUMBER



11. U-LEG ADJUST AND TRIM

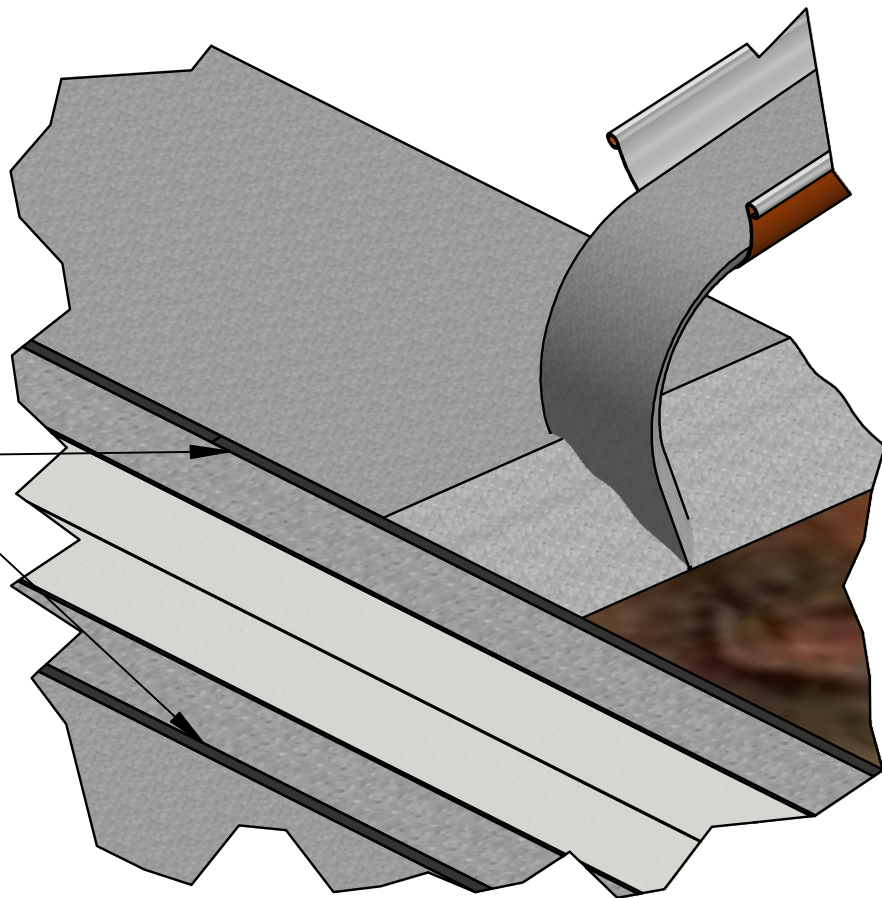


12. ENCAPSULATION CONCRETE PLACEMENT AND CONSOLIDATION



13. CROSS TIE / SPACER REMOVAL

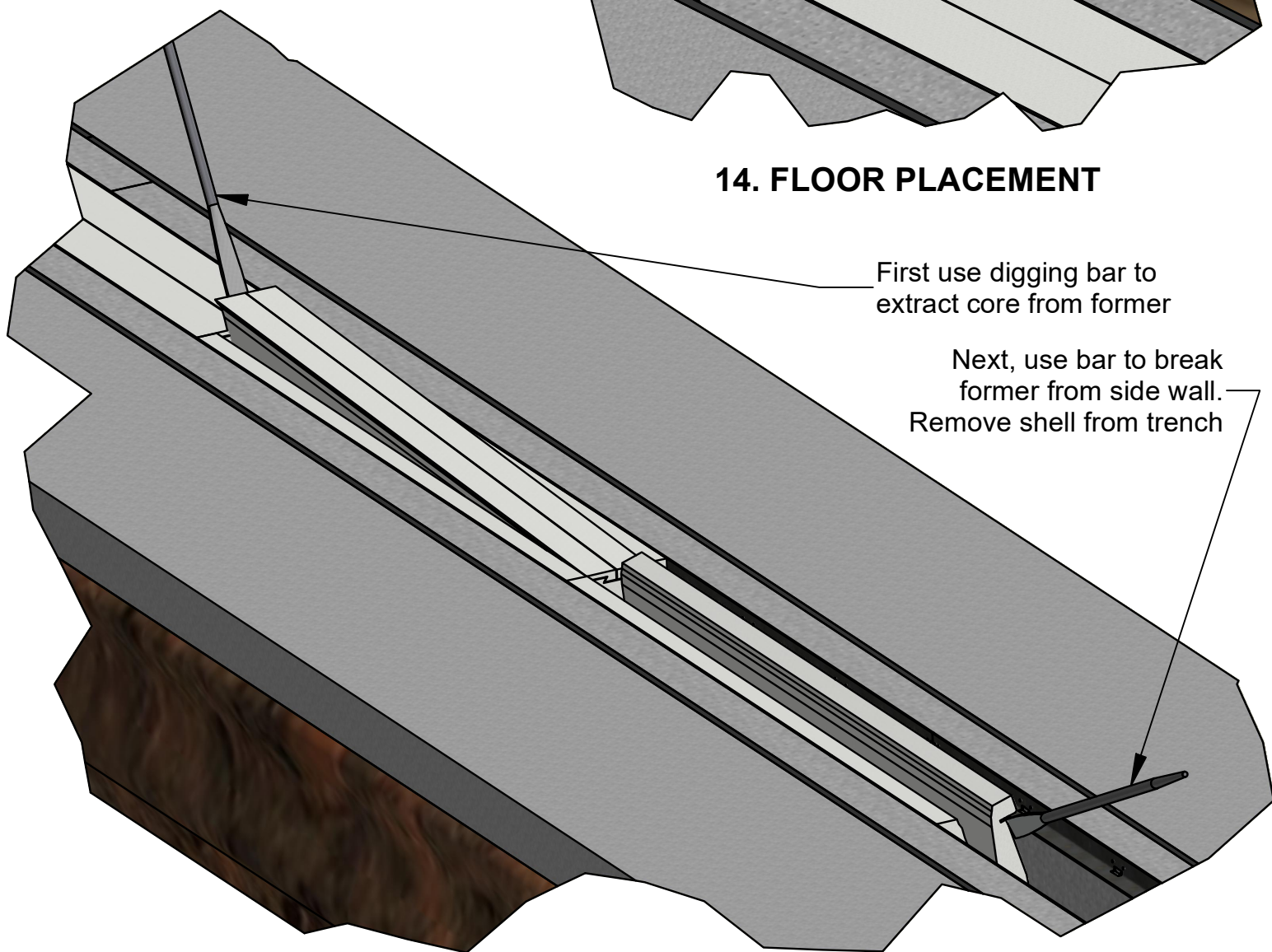
Expansion joint material
per structural specifications



14. FLOOR PLACEMENT

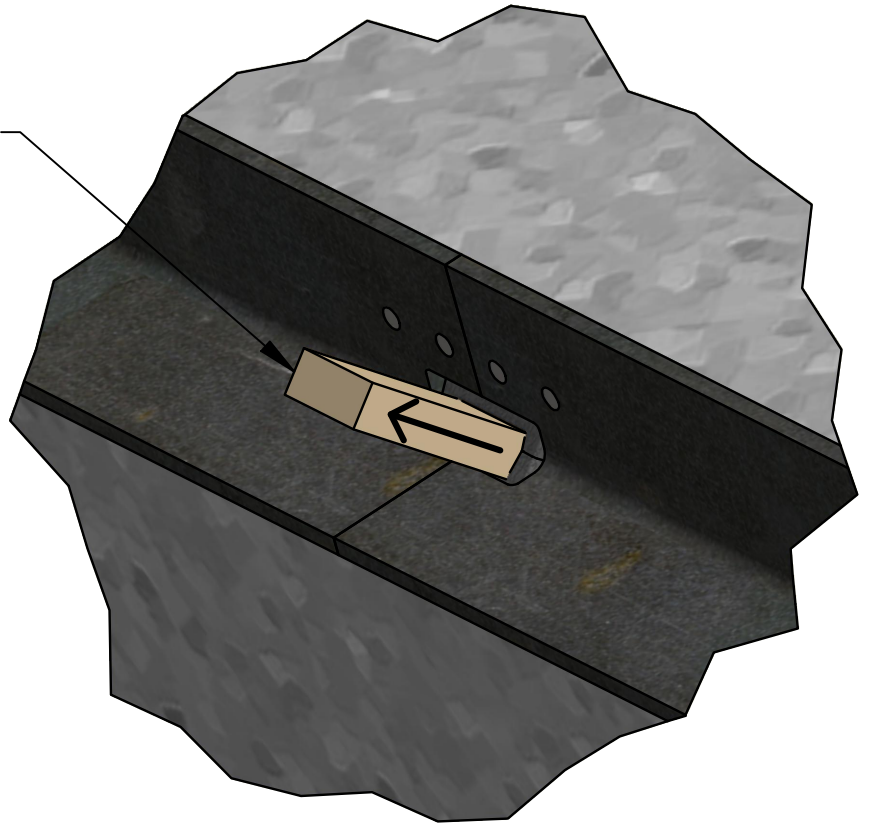
First use digging bar to
extract core from former

Next, use bar to break
former from side wall.
Remove shell from trench

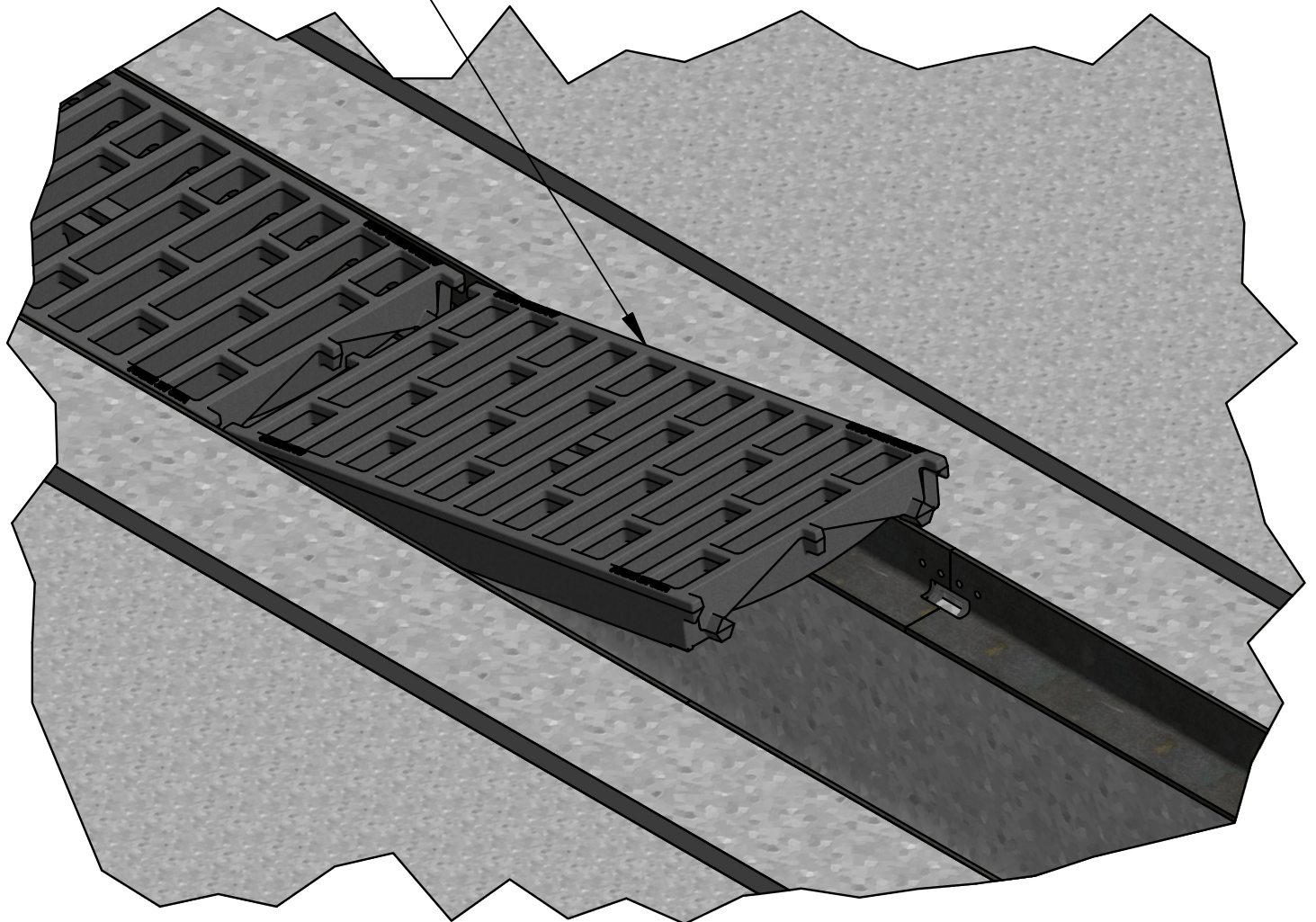


15. FORMER REMOVAL

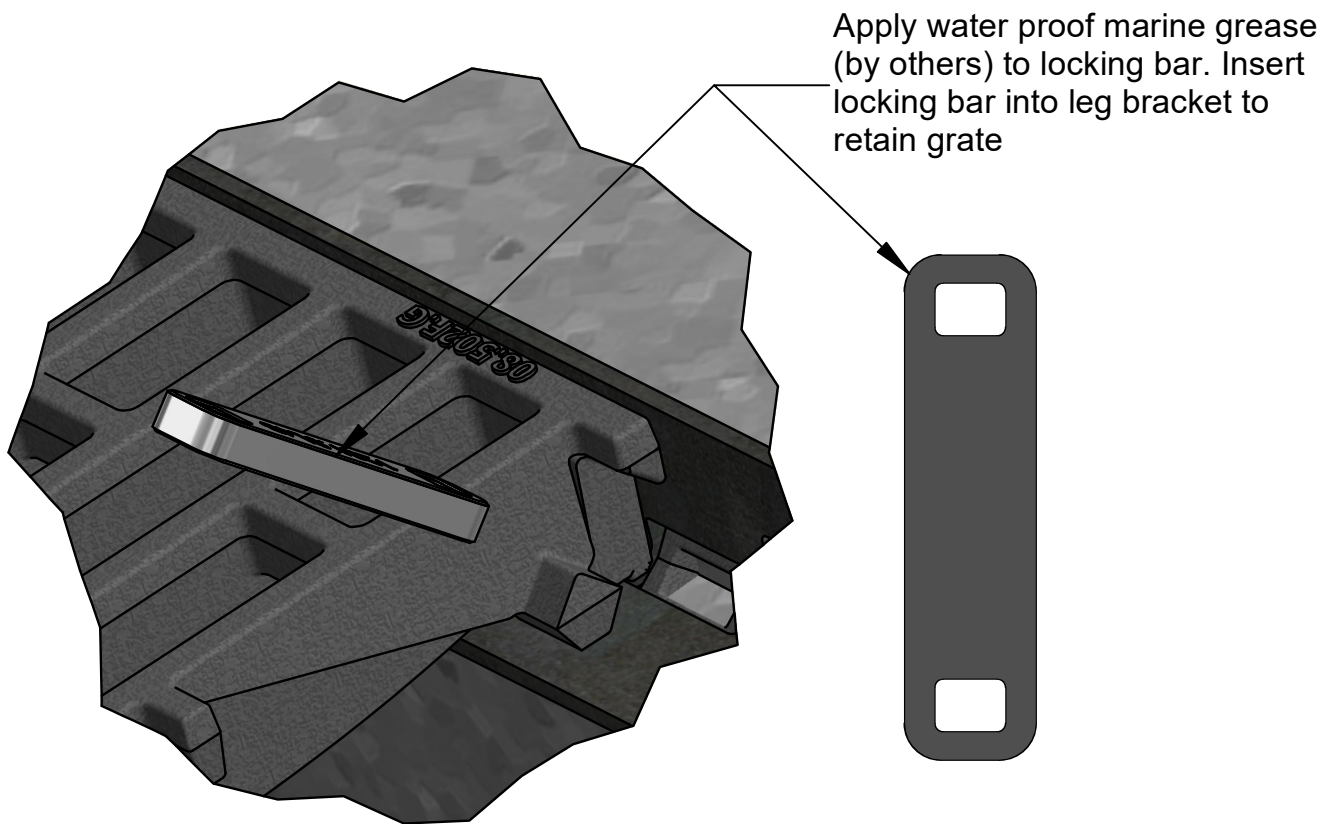
Use cross tie or other tool to remove
foam plug from bracket hole and discard



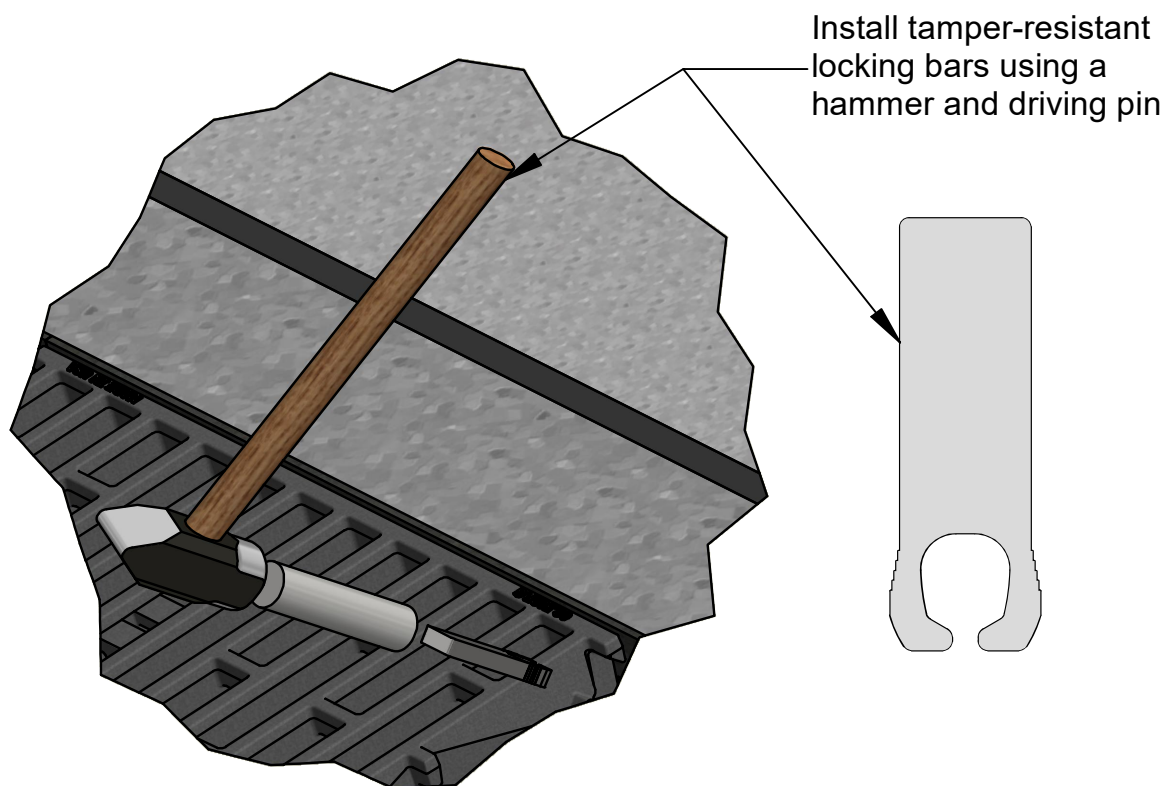
PLACE GRATE INSIDE RAILS



16. GRATE PLACEMENT

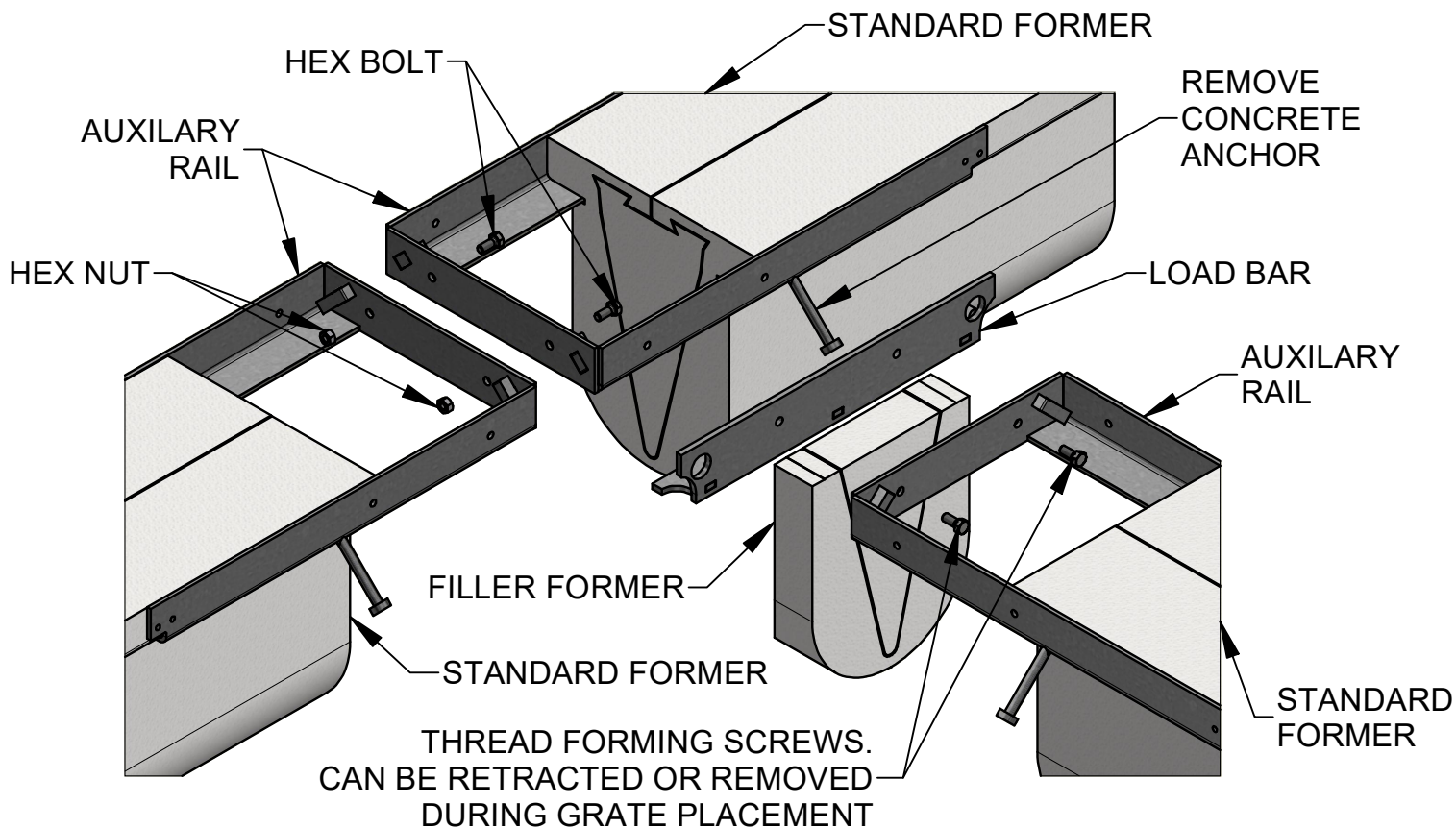


17(a) BAR LOCK INSTALLATION - STANDARD BAR

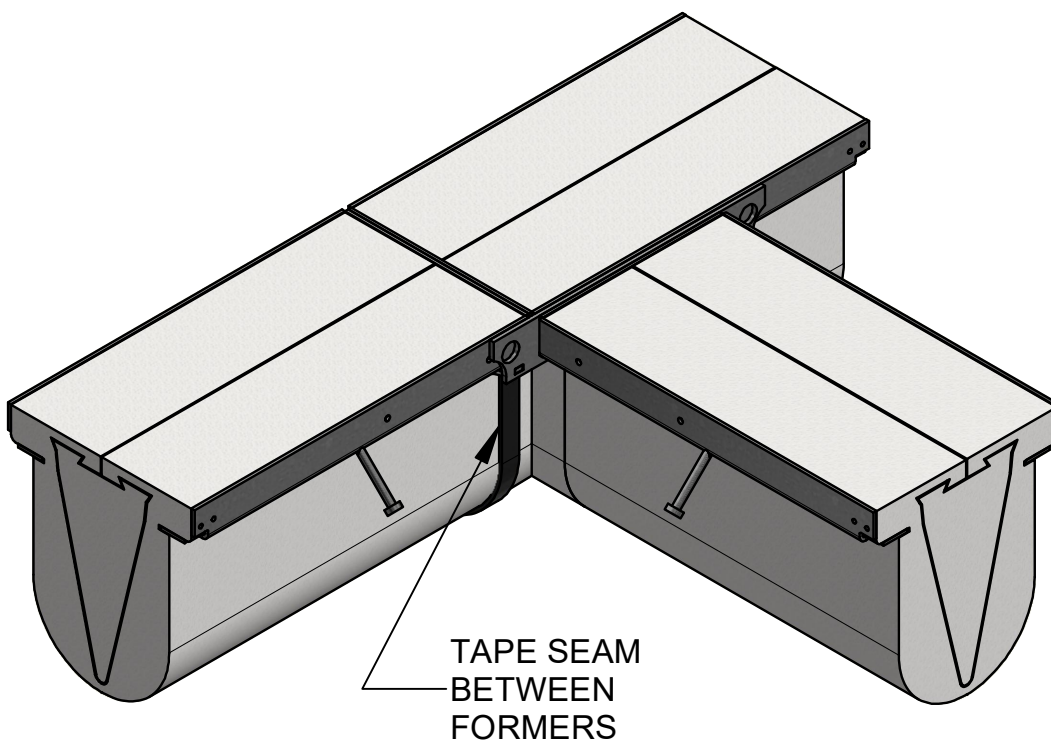


17(b) BAR LOCK INSTALLATION - TAMPER RESISTANT BAR OPTION

AUXILIARY RAIL USAGE - "TEE"

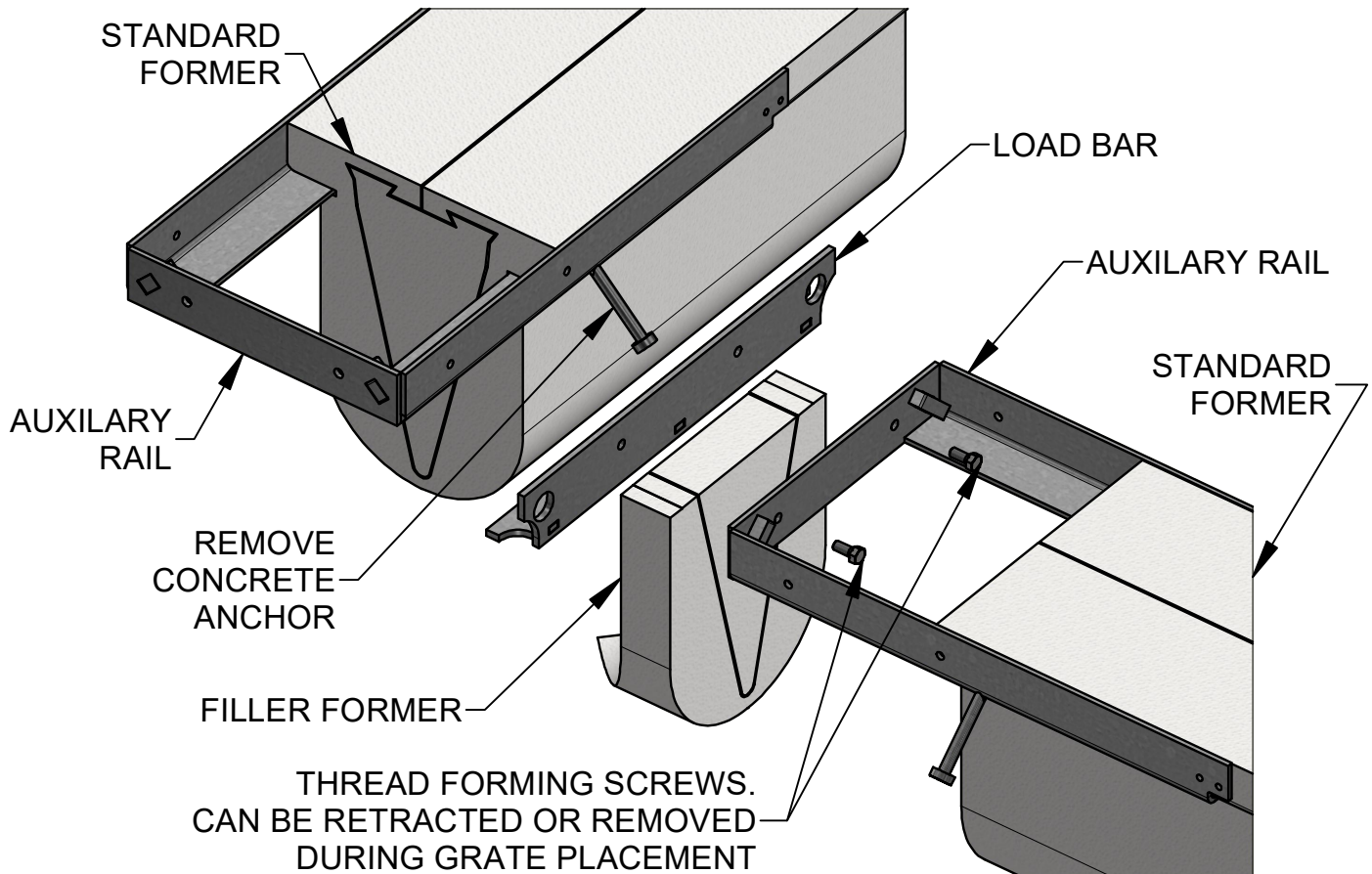


EXPLODED VIEW

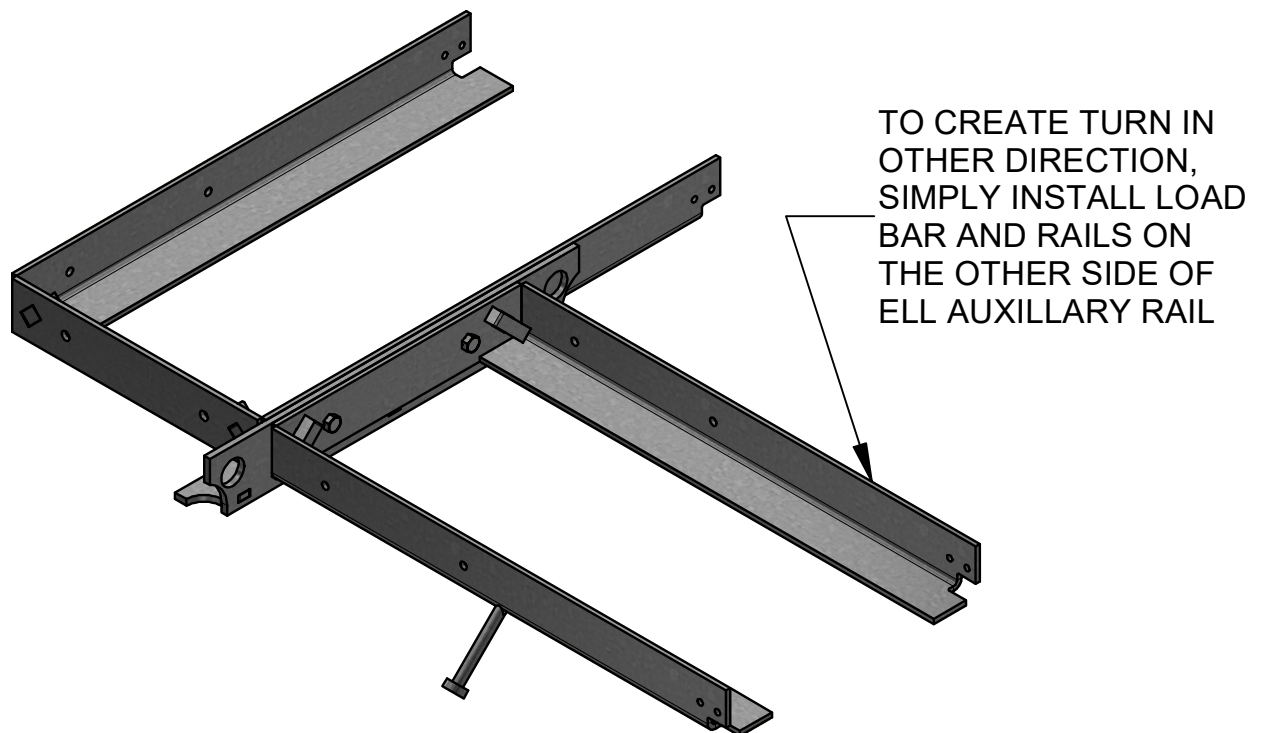


ASSEMBLED VIEW

AUXILIARY RAIL USAGE - "ELL"



EXPLODED VIEW



ASSEMBLED VIEW

AUXILIARY RAIL USAGE - SLOPE AND SWEEPS

WASHER OR OTHER SHIMS
TO CREATE GAP AS
REQUIRED FOR SLOPE

NOTES:

1. COORDINATE BREAK POINT OF SLOPE WITH POSSIBLE LOCATIONS OF AUXILIARY RAILS IN TRENCH RUN.
2. ADD OR REMOVE ESP FOAM AT END OF SECTIONS AT SLOPE BREAK AS REQUIRED.

5/16 UNC
BOLT & NUT

AUX. RAIL (TYP)

RAIL
SPACING

SLOPE BREAK DETAIL

GAP AS REQUIRED FOR CURVE

AUX. RAIL (TYP)

5/16 UNC BOLT
LENGTH AS REQ'D

5/16 UNC NUT

RAIL
SPACING

WASHER(S) OR OTHER
SPACER REQUIRED

NO GAP

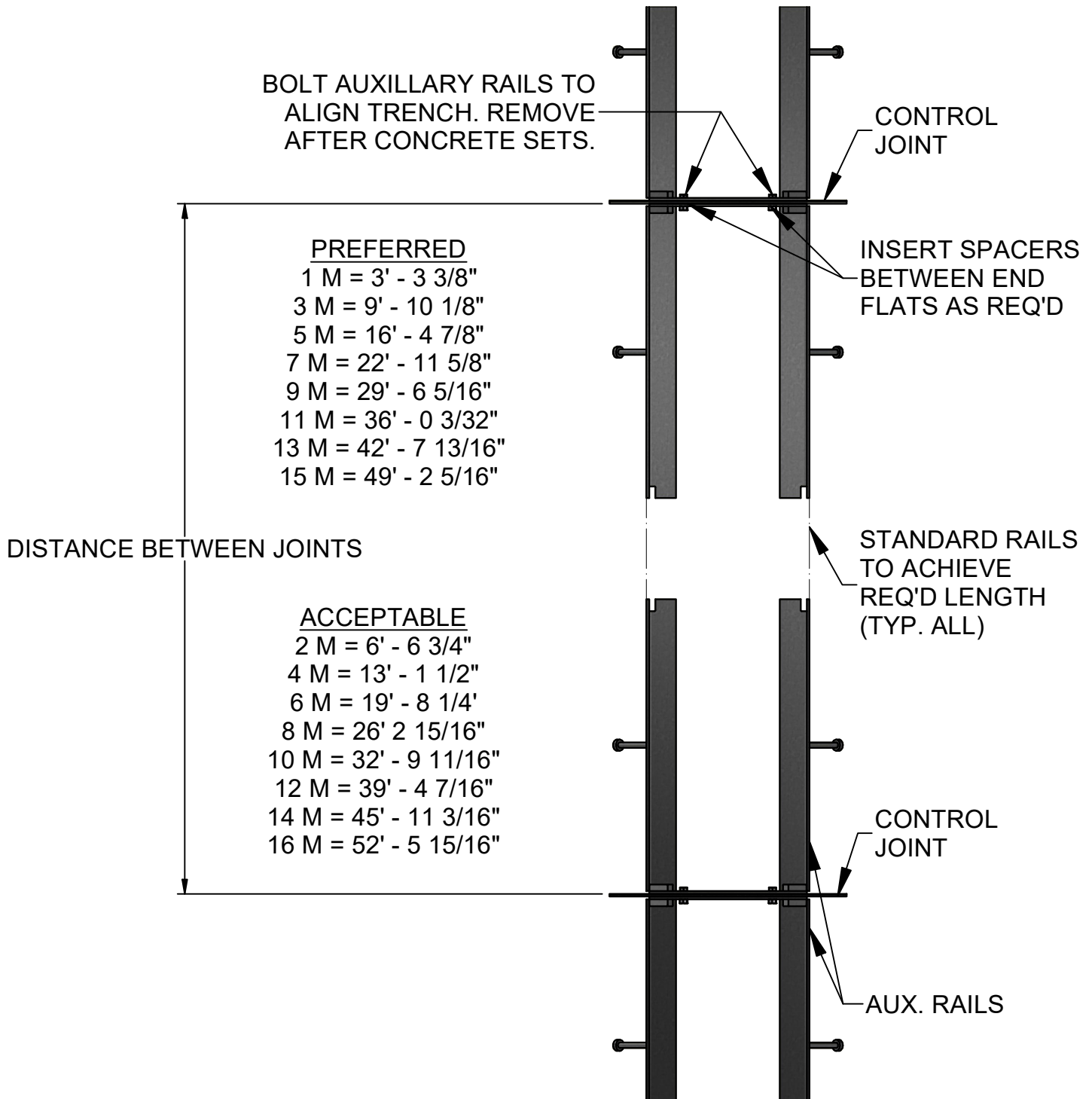
NOTES:

1. INSTALL ANGLE ASSEMBLIES AS OFTEN AS REQUIRED TO PREVENT TRENCH RAILS FROM DEVIATING BEYOND DESIRED AMOUNT FROM TRUE RADIUS.
2. FILL ANY GAP AT END OF FORMER WITH FOAM-IN-PLACE FOAM OR COVER GAP WITH TAPE PRIOR TO FORMER RELEASE APPLICATION.
3. CALCULATE GAP PER ASSEMBLY IS AS FOLLOWS:

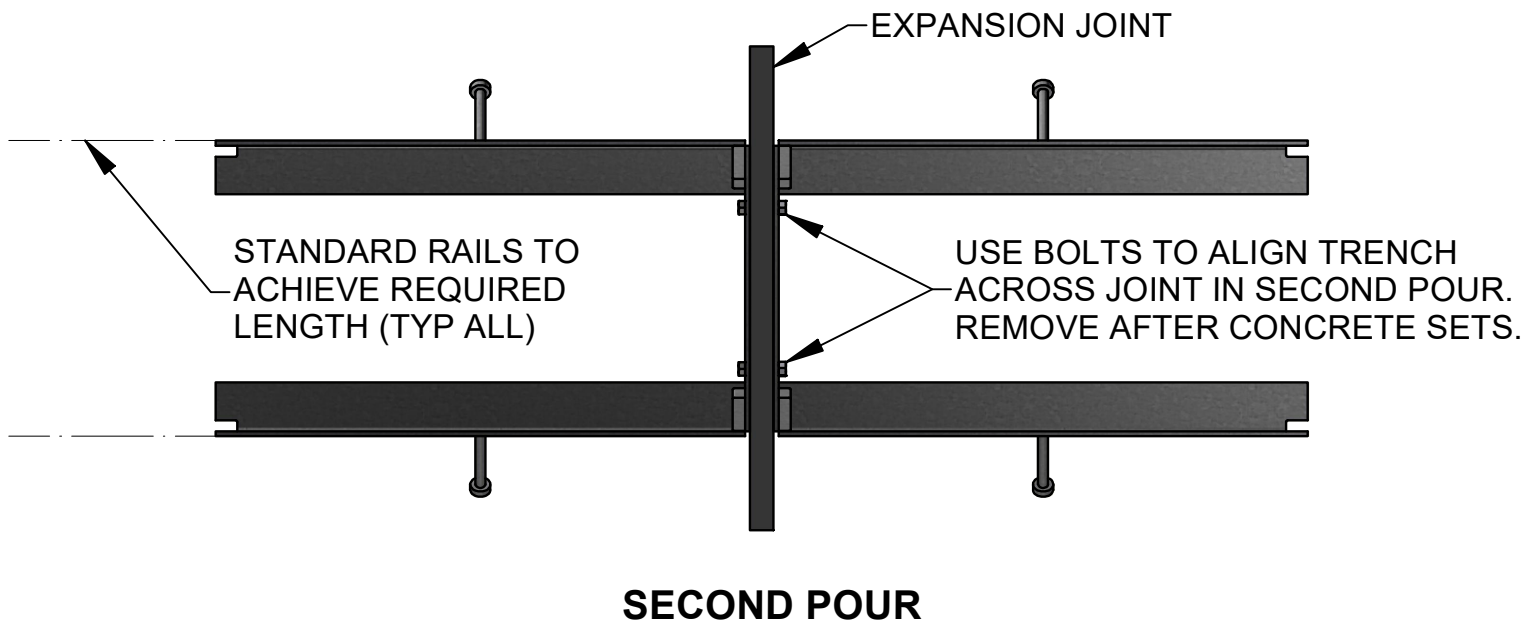
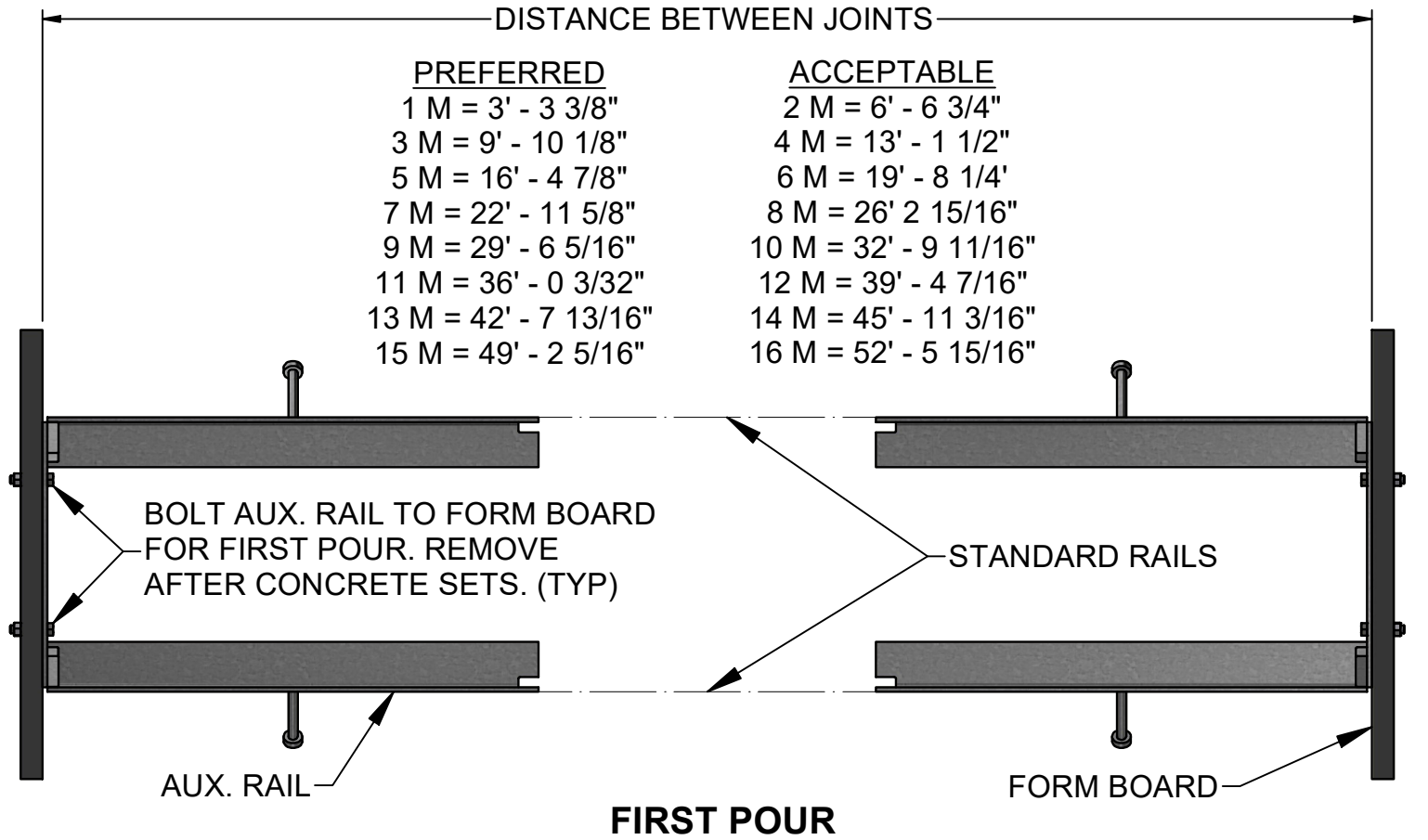
$$\text{GAP (INCH)} = \text{SPACING BETWEEN ANGLE ASSEMBLIES (INCH)} * \text{RAIL SPACING (INCH)} / \text{CURVE RADIUS (INCH)}$$

SWEEP DETAIL

AUXILIARY RAIL USAGE - CONTROL JOINTS



AUXILIARY RAIL USAGE - EXPANSION JOINTS



NOTES



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