

**PLAN NOTES**

**GENERAL**

DESIGN THE SOUND WALL IN ACCORDANCE WITH CURRENT AASHTO GUIDE SPECIFICATIONS FOR STRUCTURAL DESIGN OF SOUND BARRIERS.

**SURFACE FINISH**

PROVIDE BRUSH CONCRETE / MINNE HAHA BLEND #1201 / OR ASHLAR STONE #12020 TEXTURE ON BOTH SIDES OF THE SOUND WALL, OR AS SPECIFIED ELSEWHERE IN THE PLANS. FORMLINERS USED TO PROVIDE TEXTURE SHALL BE OF ONE PIECE CONSTRUCTION. JOINTS WILL NOT BE PERMITTED IN FORMLINERS. APPLY A CLEAR TYPE II ANTI GRAFFITI COATING TO EXPOSED AGGREGATE SURFACES, PER ITEM 740 "GRAFFITI REMOVAL AND ANTI GRAFFITI COATING". FOR PAINT COLOR SEE DESIGN DETAILS OR AS DIRECTED.

**PRECAST CONCRETE SEGMENTS**

PRECAST SEGMENTS MAY BE CAST FULL HEIGHT. THE WALL MAY BE CAST MONOLITHICALLY WITH THE POST. GROUT SMOOTH SEGMENTALLY PRECAST POST JOINTS.

**STRUCTURAL STEEL**

GALVANIZE EXPOSED STEEL PARTS IN ACCORDANCE WITH THE ITEM 445 "GALVANIZING". PAINT GALVANIZED STEEL PER ITEM 446. GALVANIZED ANCHOR BOLTS MAY REMAIN UNPAINTED.

**LOADING**

DESIGN THE SOUND WALL TO WITHSTAND A MINIMUM WIND SPEED OF 100 MILES PER HOUR, AND DESIGN FOR EXPOSURE B2.

**CONNECTIONS**

DESIGN CONNECTIONS OF THE SOUND WALL TO THE FOUNDATIONS USING A FACTOR OF SAFETY OF TWO (2) AGAINST WIND LOAD ALONE, IN ADDITION TO OTHER LOAD COMBINATIONS SPECIFIED. ENSURE CONNECTIONS UTILIZING THREADED RODS OR ANCHOR BOLTS CONFORM TO THE REQUIREMENTS OF THE ITEM 449 "ANCHOR BOLTS". ENSURE CONNECTIONS UTILIZING POST TENSIONING CONFORM TO THE REQUIREMENTS OF THE ITEM 426 "POST-TENSIONING". NO UNGROUTED TENDONS ARE ALLOWED, EXCEPT PRESTRESSING USED TO TEMPORARILY SECURE THE WALL.

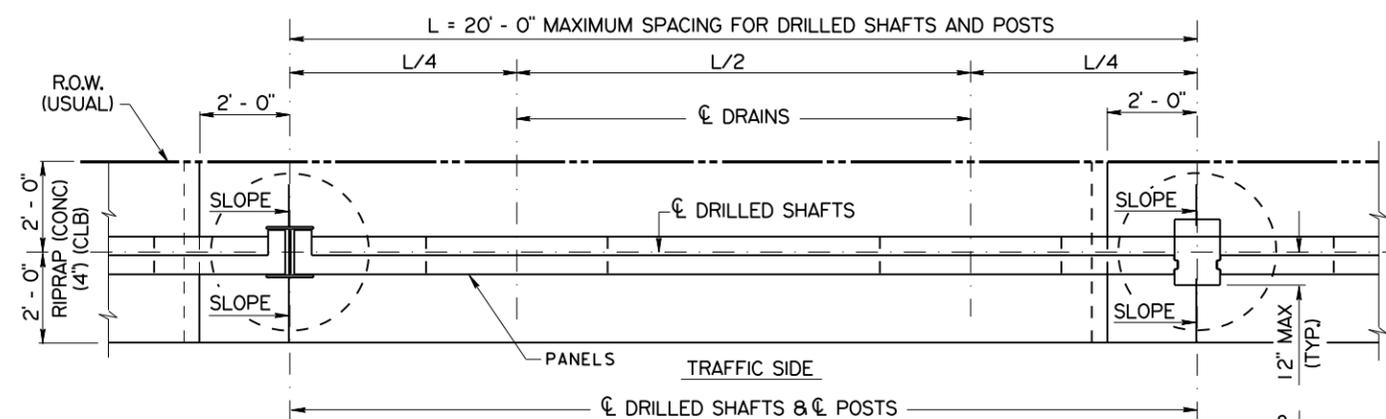
**REINFORCEMENT**

WIRE MESH MAY BE USED IN LIEU OF DEFORMED BARS

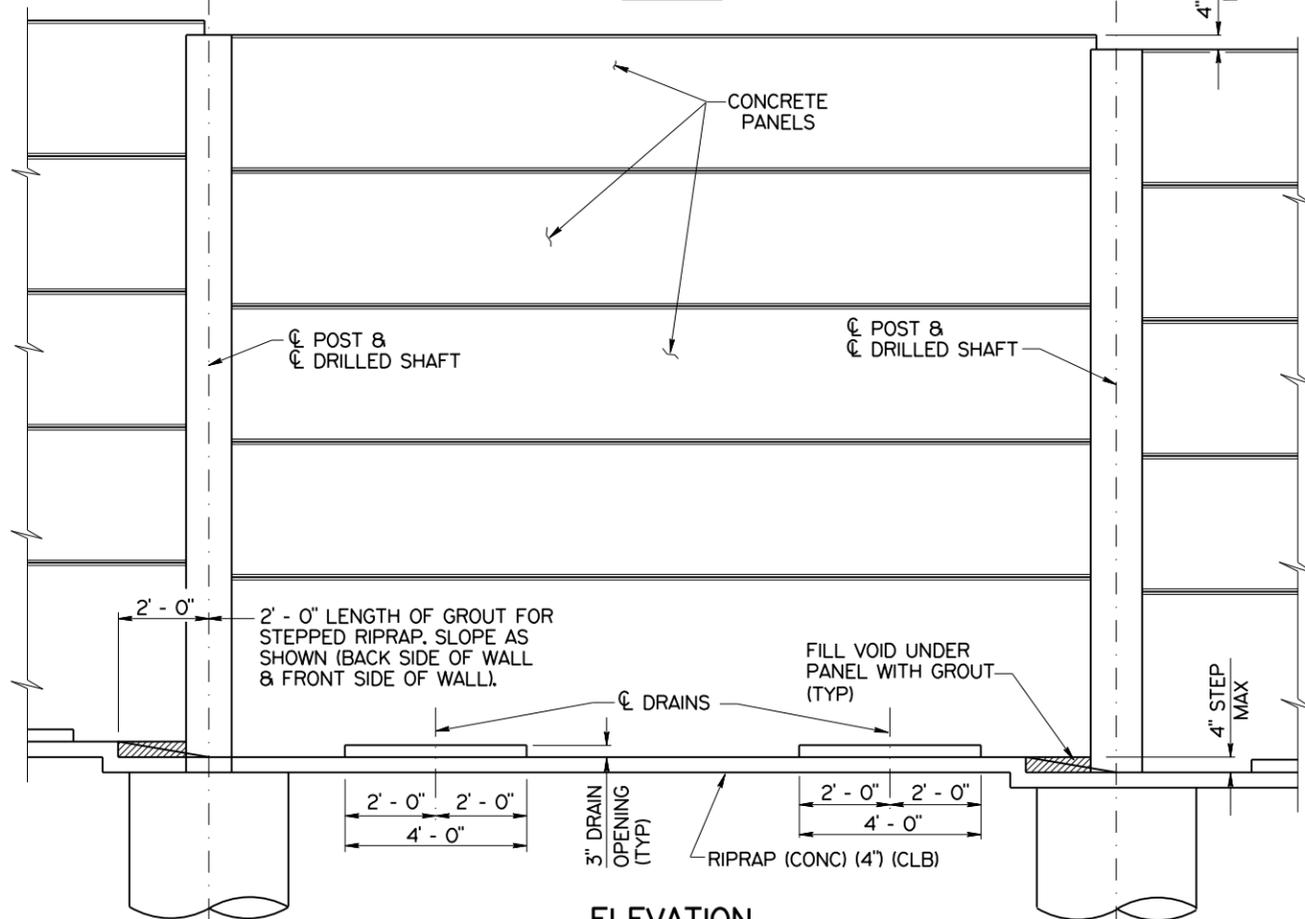
**NOTE TO DESIGNER:**

1. AT EACH STREET INTERSECTION, CAREFULLY EVALUATE THE SOUND BARRIER WALL LOCATION TO ENSURE COMPLIANCE WITH SIGHT DISTANCE REQUIREMENTS AS SPECIFIED IN THE CURRENT AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS.
2. THE MOST DESIRABLE LOCATION FOR A SOUND WALL IS JUST INSIDE THE RIGHT-OF-WAY OR OUTSIDE THE CLEAR ZONE WITH THE FACE OF THE SOUND WALL LOCATED 6' OR MORE FROM THE FACE OF CURB.
3. PROVIDE RIPRAP BETWEEN THE ROW AND BACK OF SOUND BARRIER WALL WHEN PRACTICAL TO REDUCE FUTURE MAINTENANCE. RIPRAP IS PAID FOR UNDER ITEM 432.
4. THE DRILLED SHAFT DESIGN TABLE NEEDS TO BE FILLED IN BY THE DESIGNER. DRILLED SHAFTS ARE PAID FOR UNDER ITEM 416 "DRILLED SHAFTS".
5. THESE SHEETS MUST BE SIGNED AND SEALED BY THE DESIGN ENGINEER.
6. PLACE SOUND WALLS SO AS NOT TO ALTER THE FLOW OF STORM WATER RUNOFF.

DELETE BEFORE SUBMITTAL

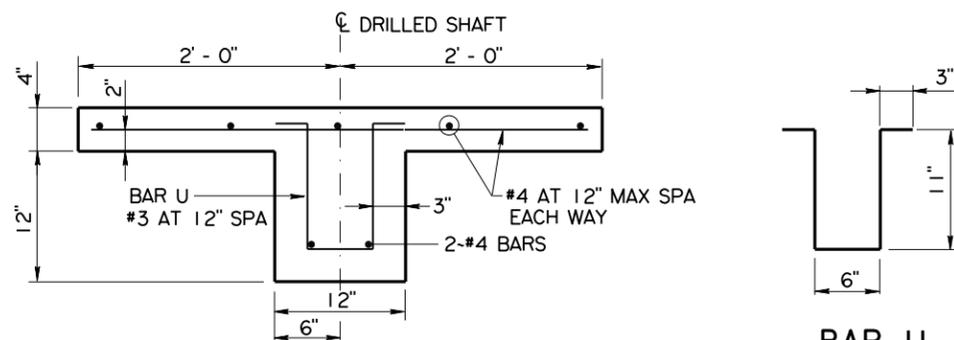


**PLAN**

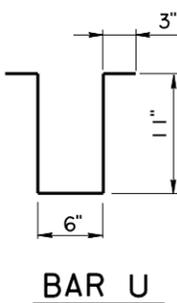


**ELEVATION**

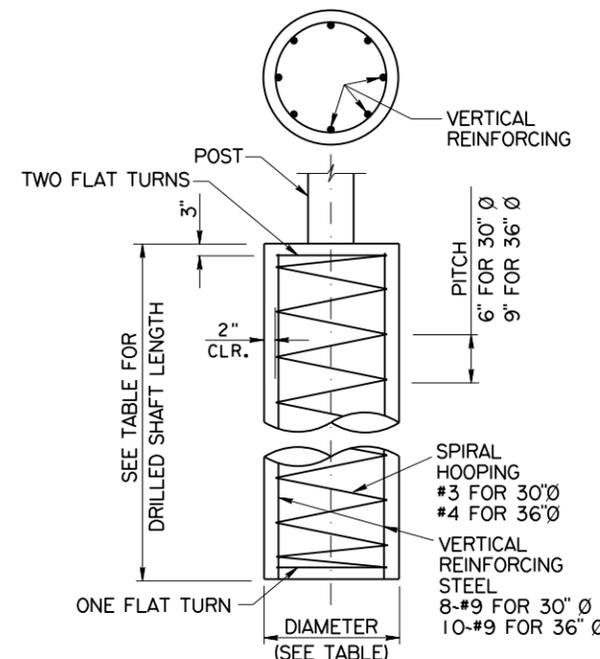
(SHOWN FOR SLOPING OR UNEVEN TERRAIN)



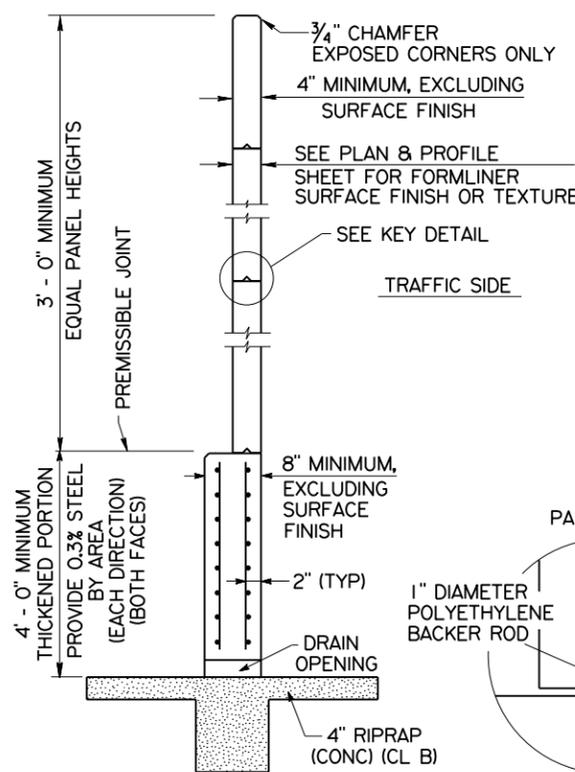
**RIPRAP DETAIL**



**BAR U**



**DRILLED SHAFT DETAIL**



**TYPICAL SECTION**

**KEY DETAIL**  
(TYPICAL HORIZONTAL JOINT)

WALL HEIGHT	DRILLED SHAFT	
	DIAMETER	LENGTH

Texas Department of Transportation  
Houston District Bridge

**SOUND WALL DETAILS**  
(NON GREEN RIBBON)

**SWD-N-GRBN**

FILE: STDJ8.DGN	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT 2014	DISTRICT FED REG	PROJECT NO.	SHEET	
REVISIONS	HOUSTON	6		
REV. 10/2014 Update Bottom Panel Steel Requirements	COUNTY	CONTROL	SECT	JOB HIGHWAY