

NOTES

FOR SOUND BARRIER WALL, SEE SPECIAL PROVISIONS.

SOUND BARRIER WALL SHALL BE CONSTRUCTED TO THE LINE AND GRADE AS SHOWN ON THE ROADWAY PLANS.

THE BASE OF EACH BOTTOM PANEL SHALL BE FLAT.

PILES, ANGLES, PLATES, AND LAGGING STOPS SHALL BE AASHTO M270 GRADE 50 GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. BOLTS, NUTS, AND WASHERS SHALL ALSO BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. ANY DAMAGE DONE TO GALVANIZATION DUE TO DRILLING, WELDING, OR OTHER OPERATION SHALL BE REPAIRED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ENGINEER WILL VERIFY LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING SHAFTS TO ENSURE SUFFICIENT CLEARANCE IS AVAILABLE.

LAGGING STOPS MAY BE FIELD OR SHOP WELDED TO THE PILE. IN LIEU OF LAGGING STOPS, THE CONTRACTOR MAY USE A NON-SHRINK NON-METALLIC GROUT AS APPROVED BY THE ENGINEER BETWEEN THE FLANGES OF THE STEEL PILES FROM THE TOP OF THE DRILLED PIER CONCRETE TO THE ELEVATION REQUIRED TO SUPPORT THE BOTTOM PANEL.

THE TOP AND BOTTOM OF DRILLED PIER ELEVATIONS SHALL BE ADJUSTED TO MAINTAIN 6" MINIMUM EMBEDMENT OF BOTTOM PANEL.

CONCRETE FOR PANELS SHALL BE CLASS AA. CONCRETE FOR DRILLED PIERS SHALL BE CLASS A.

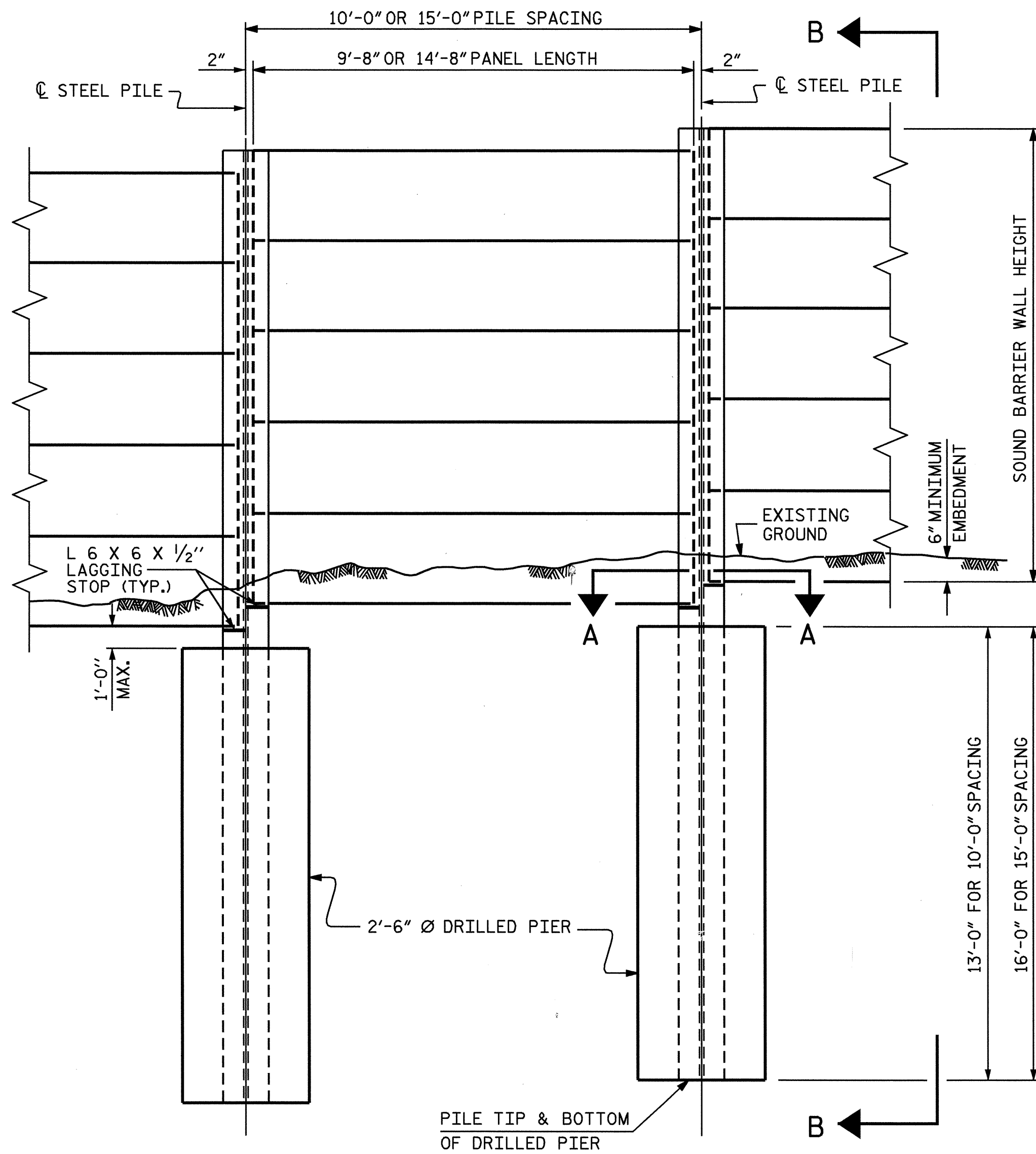
ALL PLATES AND ANGLES USED TO SECURE PANELS SHALL BE 6" IN LENGTH AS MEASURED ALONG THE PILE.

THE CONTRACTOR MAY USE EITHER 'W' PILES OR 'HP' PILES, PROVIDED THEY SATISFY THE MINIMUM PILE SIZE REQUIRED IN THE TABLE. PILES SMALLER THAN W12 OR HP12 ARE NOT PERMITTED. AT TURNS, ONLY W12 OR HP12 PILES ARE PERMITTED IN THE 3'-0" DIAMETER DRILLED PIERS.

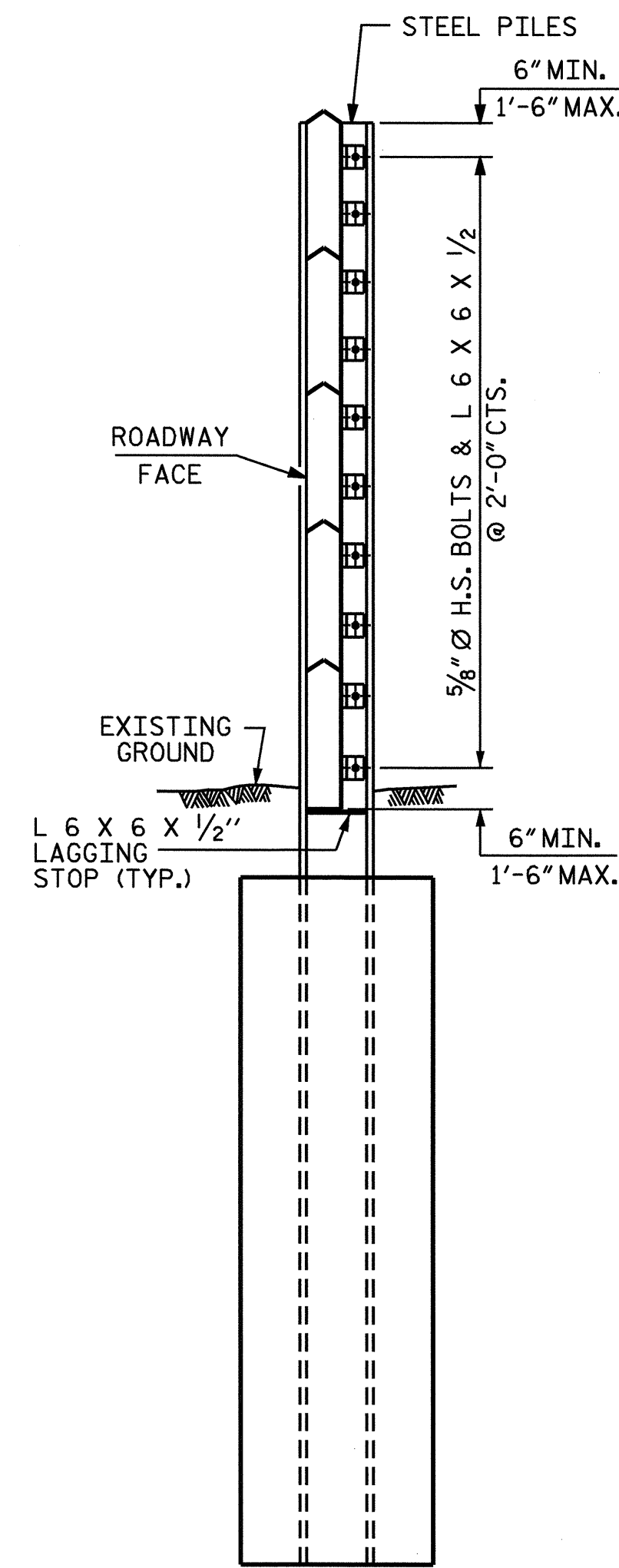
AT THE CONTRACTOR'S OPTION, PILE SPACING MAY BE 10'-0" OR 15'-0".

SPLICING OF PILES IS NOT PERMITTED.

A 15'-0" PILE SPACING IS REQUIRED TO SPAN OVER THE CULVERT LOCATED AT STATION 184+27.00 -L-. A 10'-0" PILE SPACING IS REQUIRED IN THE AREA BETWEEN THE CULVERT AND THE OVERFLOW PIPE.



ELEVATION

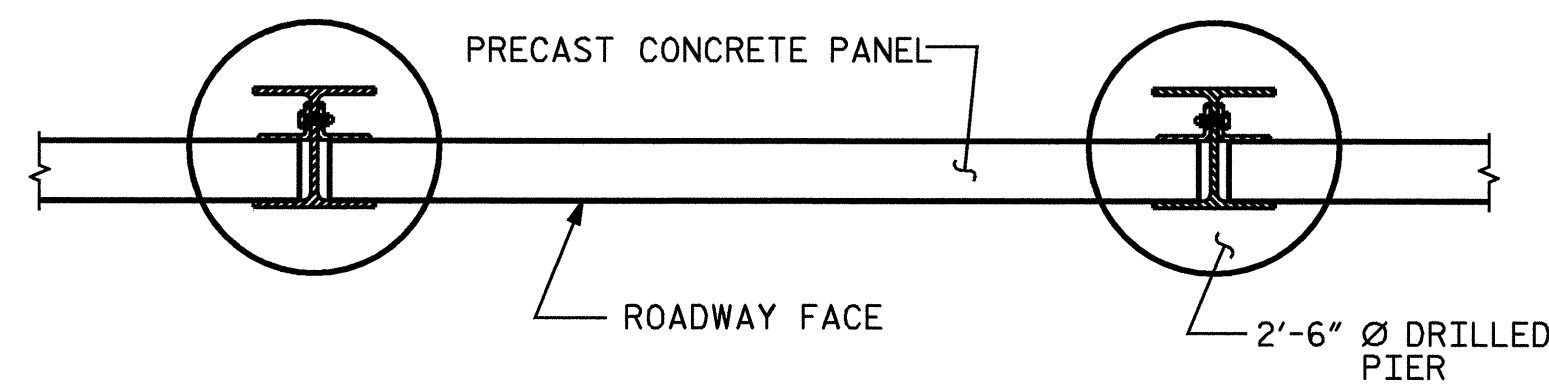


SECTION B-B

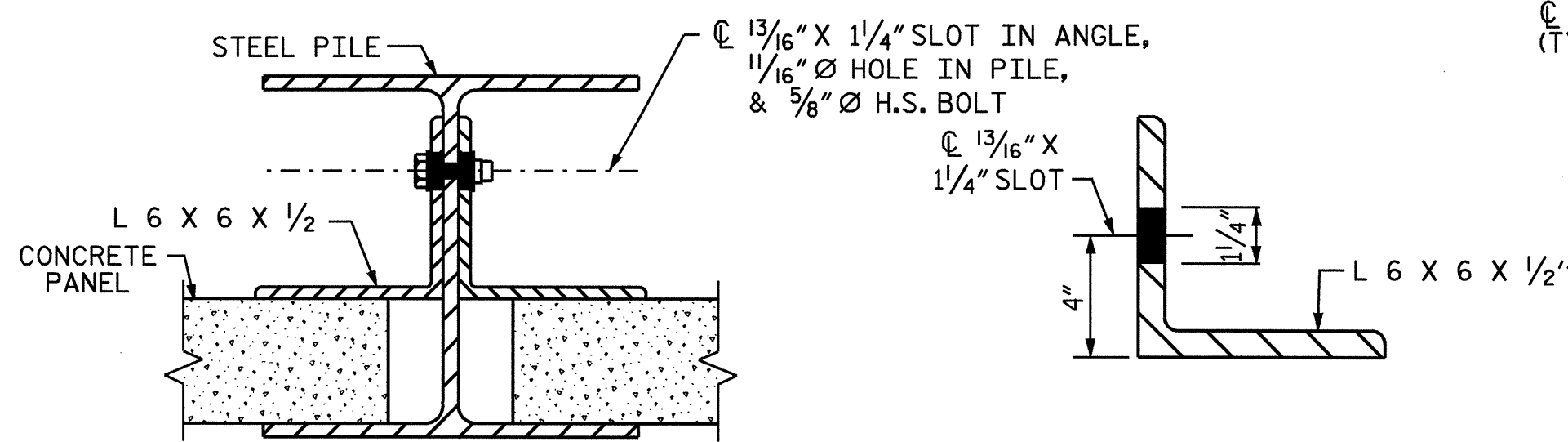
EXPOSURE CATEGORY C

DESIGN WIND PRESSURE =
34 PSF (0' < H ≤ 14'); 42 PSF (14' < H ≤ 29')

PILE SPACING	MAXIMUM WALL HEIGHT (H)	MINIMUM W SIZE STEEL PILES	MINIMUM HP SIZE STEEL PILES
10'	H ≤ 25'	W 12 X 40 W 14 X 48	HP 12 X 53 HP 14 X 73
	25' < H ≤ 29'	W 12 X 53 W 14 X 48	HP 12 X 53 HP 14 X 73
15'	H ≤ 20'	W 12 X 40 W 14 X 48	HP 12 X 53 HP 14 X 73
	20' < H ≤ 25'	W 12 X 58 W 14 X 53	HP 12 X 53 HP 14 X 73
	25' < H ≤ 29'	W 12 X 72 W 14 X 68	HP 12 X 84 HP 14 X 73

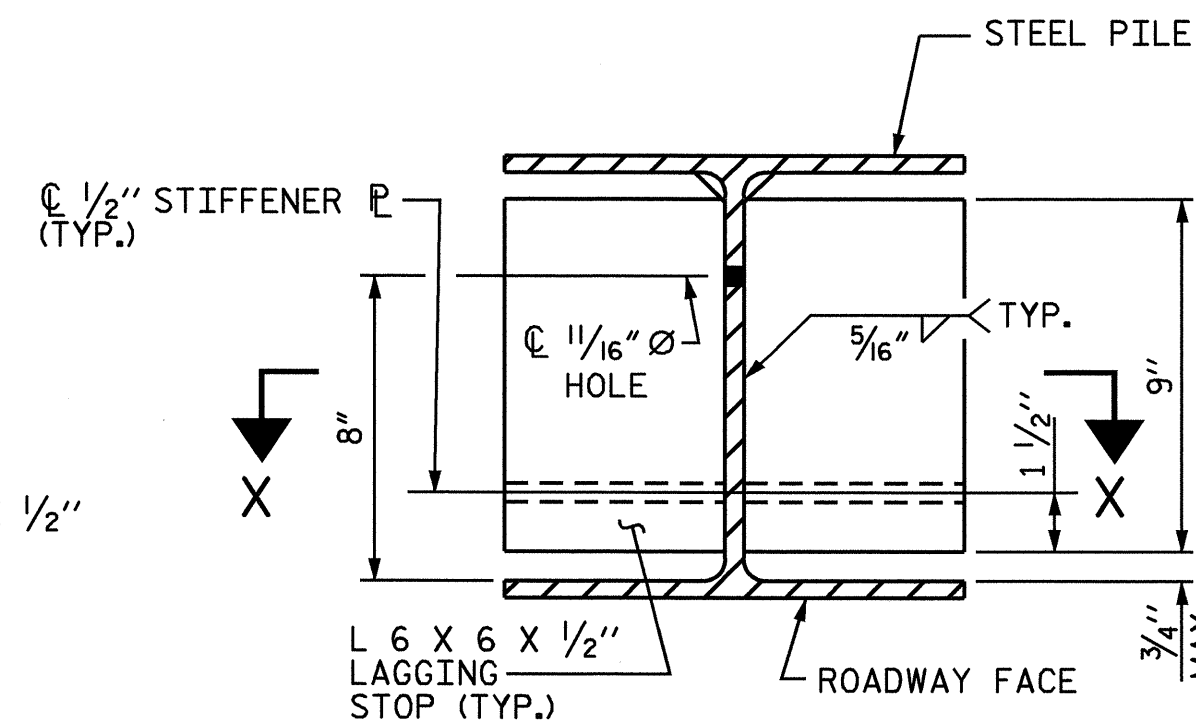


PLAN

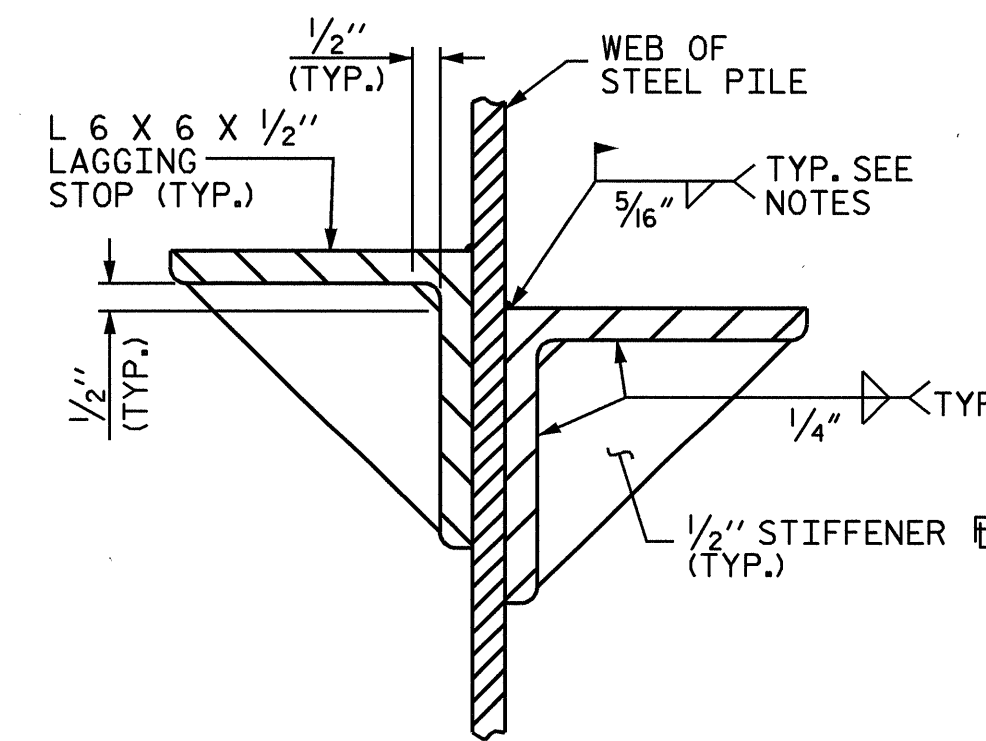


CONNECTION DETAIL

ANGLE DETAIL



SECTION A-A



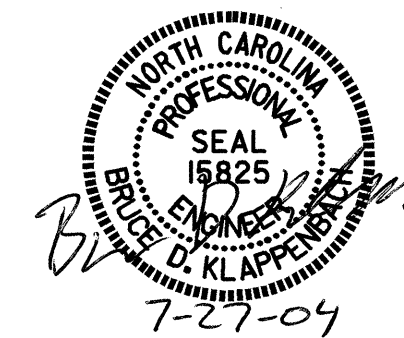
SECTION X-X

PROJECT NO. U-0620
CUMBERLAND COUNTY
STATION: 183+00.00 -L-

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD
SOUND BARRIER WALL



REVISIONS						SHEET NO. 2-X
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			

ASSEMBLED BY : M. G. SHAIKH DATE : 03-24-03
CHECKED BY : B. D. KLAPPENBACH DATE : 12-10-03
DRAWN BY : JAD 5/01
CHECKED BY : RDR 5/01
ADDED: 5/14/01
REV. 7/10/01
REV. 2/4/03
RWW/LES
RWW/CVC