TYPICAL WALL TURN DETAIL

STEEL PILE-

! L 6 X 6 X 1/2 -

ROADWAY-

FACE

CONCRETE ¬

PANEL

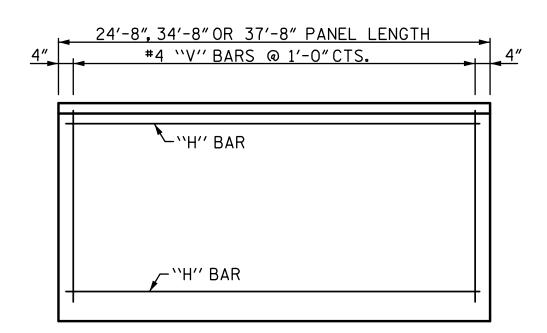
(USE ONLY FOR TURNS 15° OR LESS, CONCAVE TOWARD ROADWAY)

1/4" X 7" —

STEEL PLATE

TYPICAL WALL TURN DETAIL

(FOR GREATER THAN 15° TURNS, CONVEX TOWARD ROADWAY)



FRONT ELEVATION
OF UPPER PRECAST PANELS

(FOR 24'-8", 34'-8" OR 37'-8" PANEL LENGTH)

24'-8", 34'-8" OR 37'-8" PANEL LENGTH

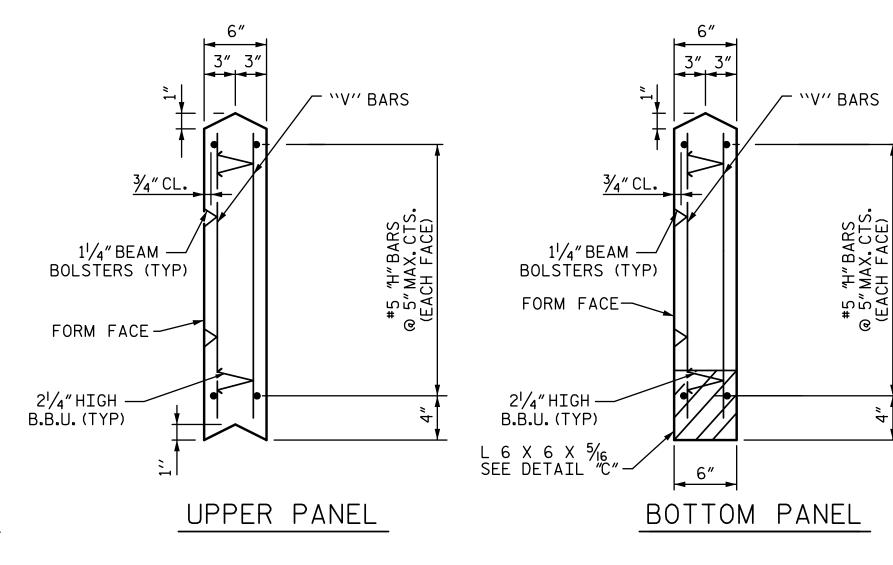
#4 "V" BARS @ 1'-0"CTS.

- "H" BAR

SEE DETAIL "C"

FRONT ELEVATION
OF BOTTOM PRECAST PANEL

(FOR 24'-8", 34'-8" OR 37'-8" PANEL LENGTH)



 $^{-}$ © $^{13}/_{16}$ " X $^{11}/_{4}$ " SLOT IN ANGLE,

 $^{11}/_{16}$ % HOLE IN PILE, $^{13}/_{16}$ X $^{11}/_{4}$ SLOT IN PLATE

/- & ⅓″Ø H.S. BOLT

1/2" THICK

BENT'STEEL PLATE

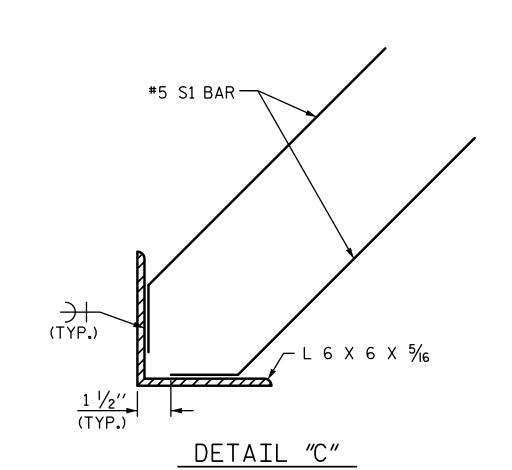
3'-0" Ø HOLE

FOR PILE

EXCAVATION

SECTION THROUGH PRECAST PANELS

(FOR 24'-8", 34'-8" OR 37'-8" PANEL LENGTH)



QUAI	QUANTITIES FOR ONE PRECAST PANEL (FOR 25'-0"PILE SPACING)												
PANEL	CLASS AA	BAR TYPES											
HEIGHT	CONCRETE	HORIZONTAL						VERTICAL					
11220111	C.Y.	NO.	BAR	SIZE	TYPE	LENGTH	WEIGHT (Ib)	NO.	BAR	SIZE	TYPE	LENGTH	WEIGHT (1b)
3′-0″	1.37	14	H1	#5	STR	24'-4"	355	50	V1	#4	STR	2'-8"	89
4'-0"	1.83	18	H2	#5	STR	24'-4"	457	50	V1	#4	STR	3'-8"	122
QUAI	QUANTITIES FOR ONE PRECAST PANEL (FOR 35'-0"PILE SPACING)												
PANEL	CLASS AA	BAR TYPES											
HEIGHT	CONCRETE	HORIZONTAL						VERTICAL					
	C.Y.	NO.	BAR	SIZE	TYPE	LENGTH	WEIGHT (Ib)	NO.	BAR	SIZE	TYPE	LENGTH	WEIGHT (1b)
3′-0″	1.93	14	H1	#5	STR	34'-4"	501	70	V1	#4	STR	2′-8″	125
4'-0"	2.57	18	H2	#5	STR	34'-4"	645	70	V1	#4	STR	3′-8″	171
QUAI	QUANTITIES FOR ONE PRECAST PANEL (FOR 38'-0"PILE SPACING)												
PANEL	CLASS AA	BAR TYPES											
HEIGHT	CONCRETE	HORIZONTAL						VERTICAL					
	C.Y.	NO.	BAR	SIZE	TYPE	LENGTH	WEIGHT (Ib)	NO.	BAR	SIZE	TYPE	LENGTH	WEIGHT (1b)
3′-0″	1.93	14	H1	#5	STR	37′-4″	545	76	V1	#4	STR	2'-8"	135
4'-0"	2.57	18	H2	#5	STR	37′-4″	701	76	V1	#4	STR	3′-8″	186

<i>A</i>	ADDITIONAL BARS FOR ONE BOTTOM PANEL									
NO.	BAR	SIZE	TYPE	LENGTH	WEIGHT	(Ib)				
4	S1	#5	1	1'-6"	6					
	BAR TYPE									
	3" 105%"									

NOTES:

USE STEEL PILES, SUPPORT BEAMS, ANGLES, AND LAGGING STOPS MEETING THE REQUIREMENTS OF AASHTO M270, GRADE 50. GALVANIZE ALL STEEL COMPONENTS INCLUDING PILES, SUPPORT BEAMS, ANGLES, LAGGING STOPS, BOLTS, NUTS, AND WASHERS IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS. REPAIR ANY DAMAGED GALVANIZATION IN ACCORDANCE WITH ARTICLE 1076-7 OF THE STANDARD SPECIFICATIONS.

AT THE CONTRACTOR'S OPTION, USE AN APPROVED NON-SHRINK NON-METALLIC GROUT BETWEEN THE FLANGES OF THE STEEL PILES TO SUPPORT THE BOTTOM PANEL IN LIEU OF LAGGING STOPS.

PROVIDE PLATES AND ANGLES TO SECURE PANELS 6"LONG AS MEASURED ALONG THE STEEL PILE.

DO NOT SPLICE STEEL PILES.

FOR SOUND BARRIER WALL, SEE SPECIAL PROVISIONS.

CONSTRUCT SOUND BARRIER WALL TO LINES AND GRADES SHOWN ON THE ROADWAY PLANS.

PROVIDE PANELS WITH FLAT BOTTOM.

VERIFTY THE LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING HOLES TO ENSURE SUFFICIENT CLEARANCE IS AVAILABLE.

USE CLASS AA FOR PANELS, IN ACCORDANCE WITH ARTICLE 1000-4 OF THE STANDARD SPECIFICATIONS.

FOR SOUND BARRIER WALL STATIONS, OFFSETS AND WALL ENVELOPE, SEE ROADWAY PLANS.

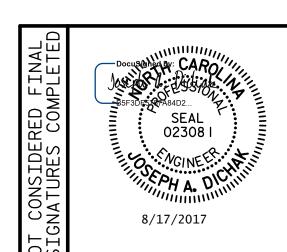
STEEL PILES, SUPPORT BEAMS, ANGLES, LAGGING STOPS, ATTACHMENTS AND OTHER MISCELLANEOUS STEEL ARE INCIDENTAL, AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "SOUND BARRIER WALL".

PROJECT NO. U-4751

NEW HANOVER

STATION: VARIES

SHEET 3 OF 3



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

COUNTY

SOUND BARRIER WALL DETAILS

STV ENGINEERS, INC.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

	SHEET N					
10.	BY:	DATE:	NO.	BY:	DATE:	NW-17
1			8			TOTAL SHEETS
<u>න</u>						17

DRAWN BY: MBC DATE: 5-17 DESIGN ENGINEER OF RECORD: J. DICHAK DATE: 5-17