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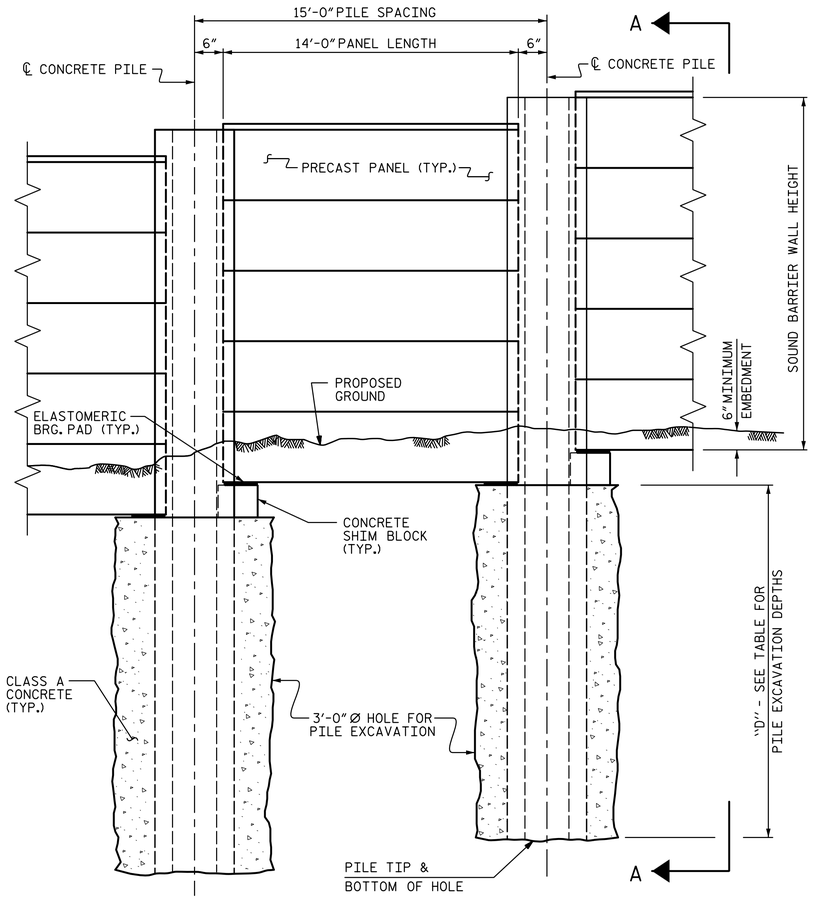
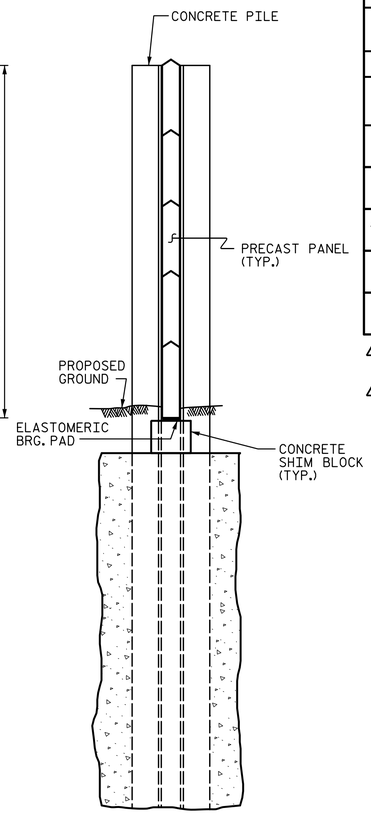


ELEVATION

(DETAIL APPLIES TO 15' PILE SPACING ONLY.
FOR 35' PILE SPACING, SEE SHEET 2 OF 2.)
(CONCRETE BARRIER IN FRONT OF SOUND BARRIER WALL
NOT SHOWN FOR CLARITY, SEE ROADWAY PLANS)



SECTION A-A

(DETAIL APPLIES TO 15' PILE SPACING ONLY.
FOR 35' PILE SPACING, SEE SHEET 2 OF 2.)
(CONCRETE BARRIER IN FRONT OF SOUND BARRIER WALL
NOT SHOWN FOR CLARITY, SEE ROADWAY PLANS)

PILE EXCAVATION DEPTHS "D"

3'-0" Ø HOLE

WALL -NW11- (STA. 10+00 TO 24+75 -NW11-)

STATION	MAX WALL HEIGHT	PILE SPACING	SHAFT DEPTH
STA. 112+67.84 -L- TO STA. 113+03.41 -L-	17'-0"	15'-0"	16'-0"
STA. 113+17.34 -L- TO STA. 117+47.96 -L-	16'-0"	15'-0"	15'-0"
△ STA. 117+62.96 -L- TO STA. 117+97.96 -L-	15'-0"	35'-0"	21'-0"
STA. 118+12.96 -L- TO STA. 119+47.96 -L-	14'-0"	15'-0"	15'-0"
STA. 119+62.96 -L- TO STA. 127+27.96 -L-	14'-0"	15'-0"	13'-0"

△ FOR ELEVATION VIEW AND DETAILS FOR 35' PILE SPACING, SEE SHEET 2 OF 2.

△ FOR STEEL PILE, SUPPORT BEAM, ANGLES, AND LAGGING STOP NOTES, SEE "SOUND BARRIER WALL DETAILS" SHEET 3 OF 3.

NOTES:

FOR SOUND BARRIER WALL, SEE SPECIAL PROVISIONS.

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

PROVIDE PANELS WITH A FLAT BOTTOM.

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

ADJUST PILE EXCAVATION ELEVATIONS TO MAINTAIN 6" MINIMUM EMBEDMENT OF THE BOTTOM PANEL.

USE CLASS AA FOR PANELS AND CLASS A CONCRETE PILE EXCAVATION BACKFILL, IN ACCORDANCE WITH ARTICLE 1000-4 OF THE STANDARD SPECIFICATIONS.

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

PLACE 1" Ø BACKER RODS FULL HEIGHT ON EACH SIDE OF THE PRECAST PANELS. SET AND SEAL THE BACKER ROD IN PLACE WITH SEALANT THAT CONFORMS WITH ARTICLE 1028-3 OF THE STANDARD SPECIFICATIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC BEARING DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEET 1 OF 3.

FOR CONCRETE SHIM BLOCK DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEET 1 OF 3.

FOR PRECAST PANEL DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEET 1 & 3 OF 3.

FOR CONCRETE PILE DETAILS, SEE "SOUND BARRIER WALL DETAILS" SHEETS 1 & 2 OF 3.

AT THE CONTRACTOR'S OPTION, USE CONTINUOUS FLIGHT AUGER PILES IN LIEU OF PILE EXCAVATION FOR SOUND BARRIER WALL FOUNDATION. SEE "CONTINUOUS FLIGHT AUGER PILES FOR SOUND BARRIER WALLS" SPECIAL PROVISION.

THE ARCHITECTURAL CONCRETE SURFACE TREATMENT SHALL MATCH THE APPEARANCE (STONE SIZE AND SHAPE, STONE TEXTURE, PATTERN AND RELIEF) OF NATURAL STONE TO RESEMBLE A DRY STACKED STONE PATTERN WITH FEDERAL STANDARD 595 COLOR * FS30450 STAIN.

EXPOSURE CATEGORY D - PILE REINFORCING STEEL

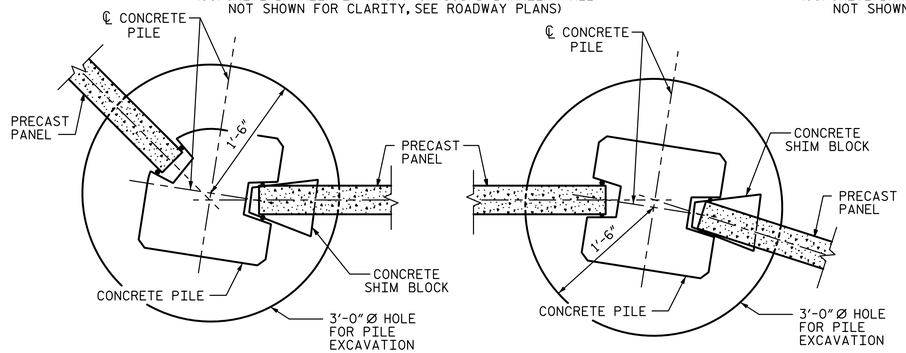
DESIGN WIND PRESSURE = 62 PSF (0' < H ≤ 14'); 71 PSF (14' < H ≤ 25')

PILE TYPE I				PILE TYPE III			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES	PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
15'-0"	H ≤ 15'	4 - #8 EA. FACE	#3 @ 11"CTS.	15'-0"	H ≤ 15'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 11"CTS.
15'-0"	15' < H ≤ 20'	4 - #10 EA. FACE	#3 @ 10"CTS.	15'-0"	15' < H ≤ 20'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 10"CTS.
PILE TYPE II				**PILE TYPE III ALT.**			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES	PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
15'-0"	H ≤ 15'	4 - #6 EA. FACE	#3 @ 11"CTS.	15'-0"	H ≤ 15'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 11"CTS.
15'-0"	15' < H ≤ 20'	4 - #8 EA. FACE	#3 @ 10"CTS.	15'-0"	15' < H ≤ 20'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 10"CTS.

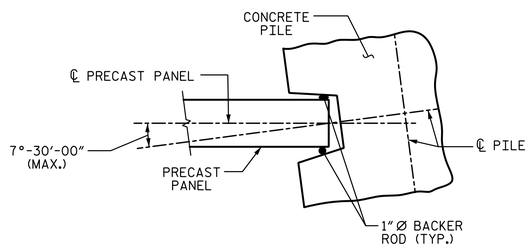
BILL OF MATERIAL -NW11-

SOUND BARRIER WALL	S.F.	20,769
ARCHITECTURAL SURFACE TREATMENT	S.F.	17,383

QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.



TYPICAL WALL TURN DETAILS



PILE ROTATION LIMIT FOR WALL TURN

(ROTATE THE CONCRETE PILE ±7°-30'-00" MAX. TO ACCOMMODATE WALL TURN.)

PROJECT NO. U-4751
NEW HANOVER COUNTY
STATION: 112+67.84 -L- = 10+00.00 -NW11-
SHEET 1 OF 2

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 023081 ENGINEER JOSEPH A. DICHAK
8/17/2017

STV 100 Years
STV ENGINEERS, INC.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SOUND BARRIER WALL
NO. -NW11-

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	NW-8
1			3			TOTAL SHEETS
2			4			17

NW11

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