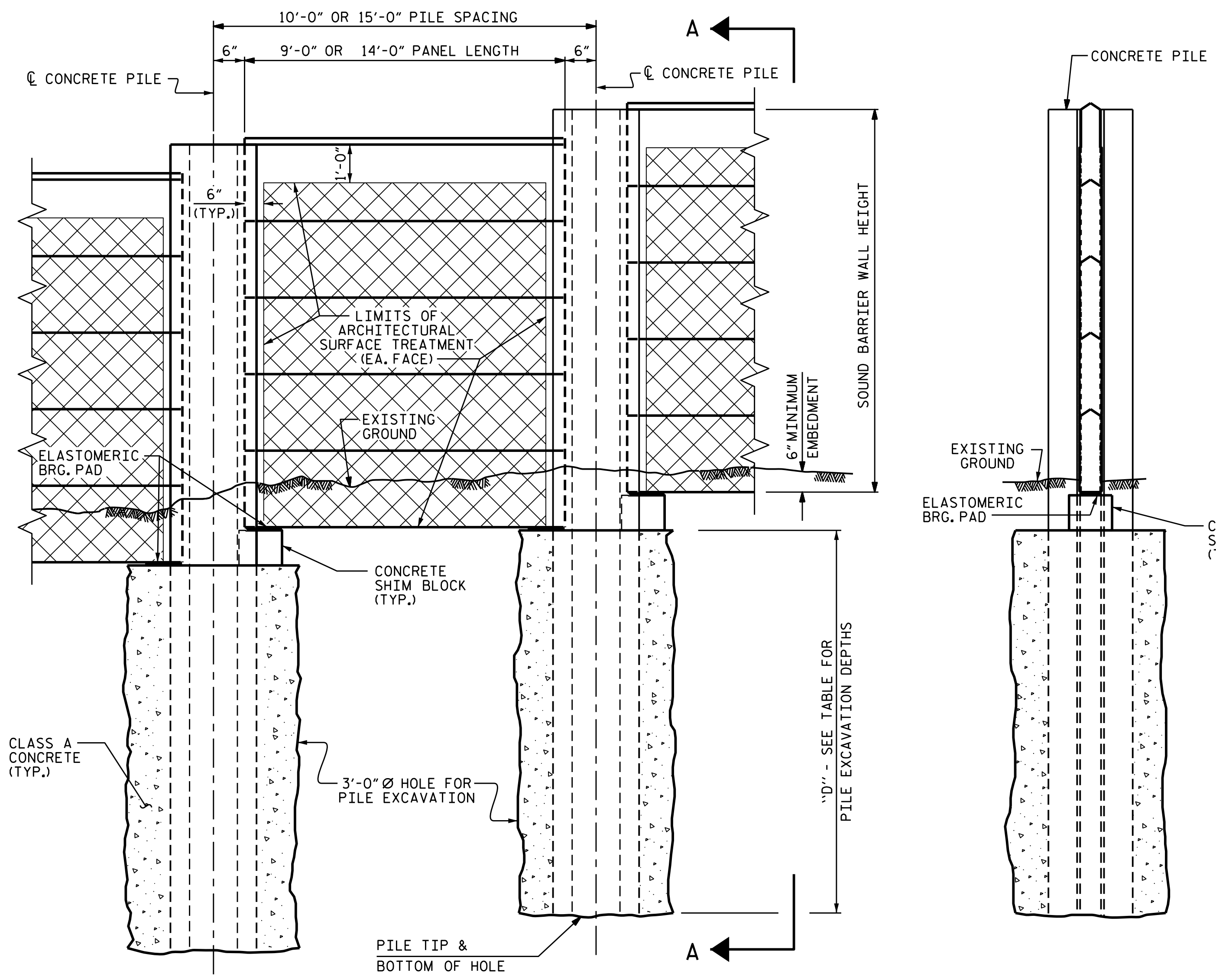


NOTES

- 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.
- AT THE CONTRACTOR'S OPTION, USE 10'-0" OR 15'-0" PILE SPACINGS. STANDARD PRECAST CONCRETE PANELS MAY BE USED WITH THE 10'-0" AND 15'-0" PILE SPACING.
- 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.

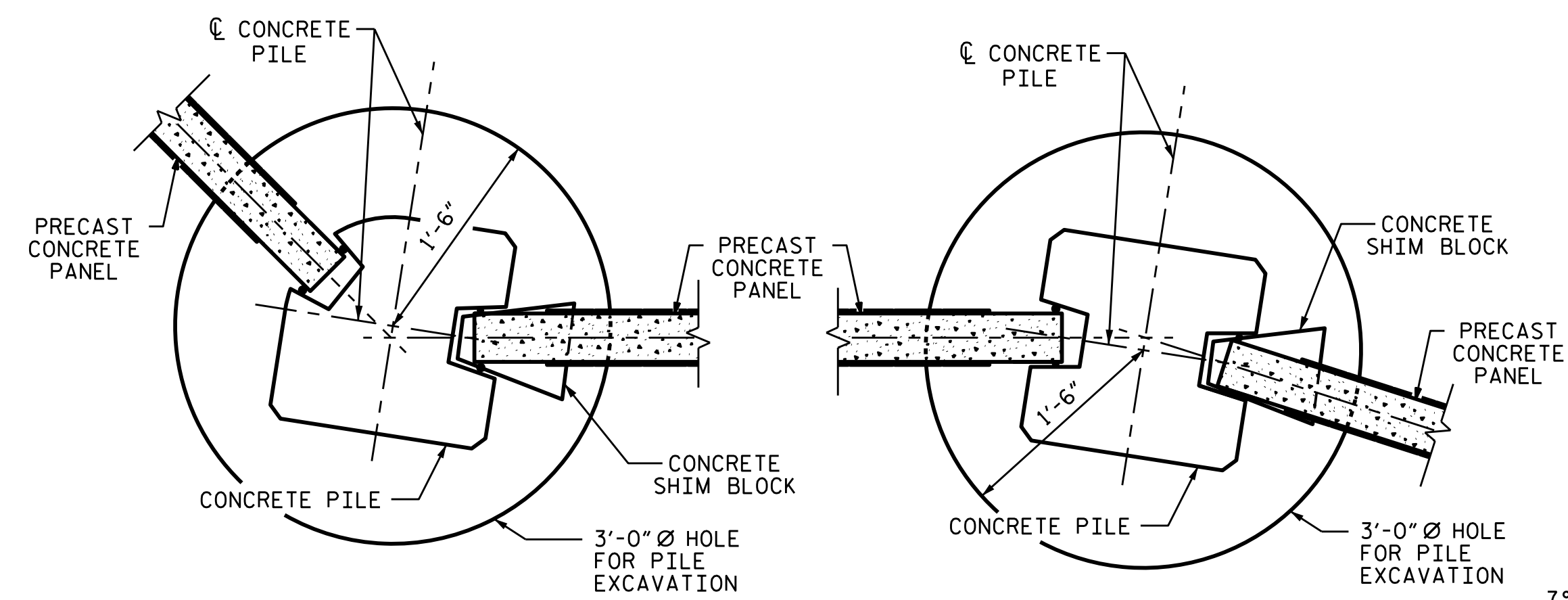
PILE EXCAVATION DEPTHS "D"						
WALL #2A		FROM : STA. 72+09.00 -L- (-NW2A- STA. 10+00.00) TO : STA. 80+75.52 -L- (-NW2A- STA. 19+00.00) : STA. 11+17.65 -Y8-				
3'-0" Ø HOLE	PILE SPACING	WALL HEIGHT				
		H ≤ 9'	9' < H ≤ 11'	11' < H ≤ 14'	14' < H ≤ 17'	17' < H ≤ 20'
10'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	
15'-0"	7'-0"	8'-0"	9'-6"	10'-6"	11'-6"	

PILE REINFORCING STEEL DESIGN WIND PRESSURE = 40 PSF							
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
10'-0"	H ≤ 25'	4 - #8 EA. FACE	#3 @ 1'-4" CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
	H > 25'	4 - #8 EA. FACE	#3 @ 1'-4" CTS.		H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
15'-0"	H ≤ 20'	4 - #8 EA. FACE	#3 @ 1'-4" CTS.	15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
	20' < H ≤ 25'	4 - #10 EA. FACE	#3 @ 1'-4" CTS.		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 1'-4" 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
10'-0"	H ≤ 25'	4 - #6 EA. FACE	#3 @ 1'-4" CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
	H > 25'	4 - #6 EA. FACE	#3 @ 1'-4" CTS.		H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
15'-0"	H ≤ 20'	4 - #6 EA. FACE	#3 @ 1'-4" CTS.	15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
	20' < H ≤ 25'	4 - #7 EA. FACE	#3 @ 1'-4" CTS.		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 1'-4" CTS.

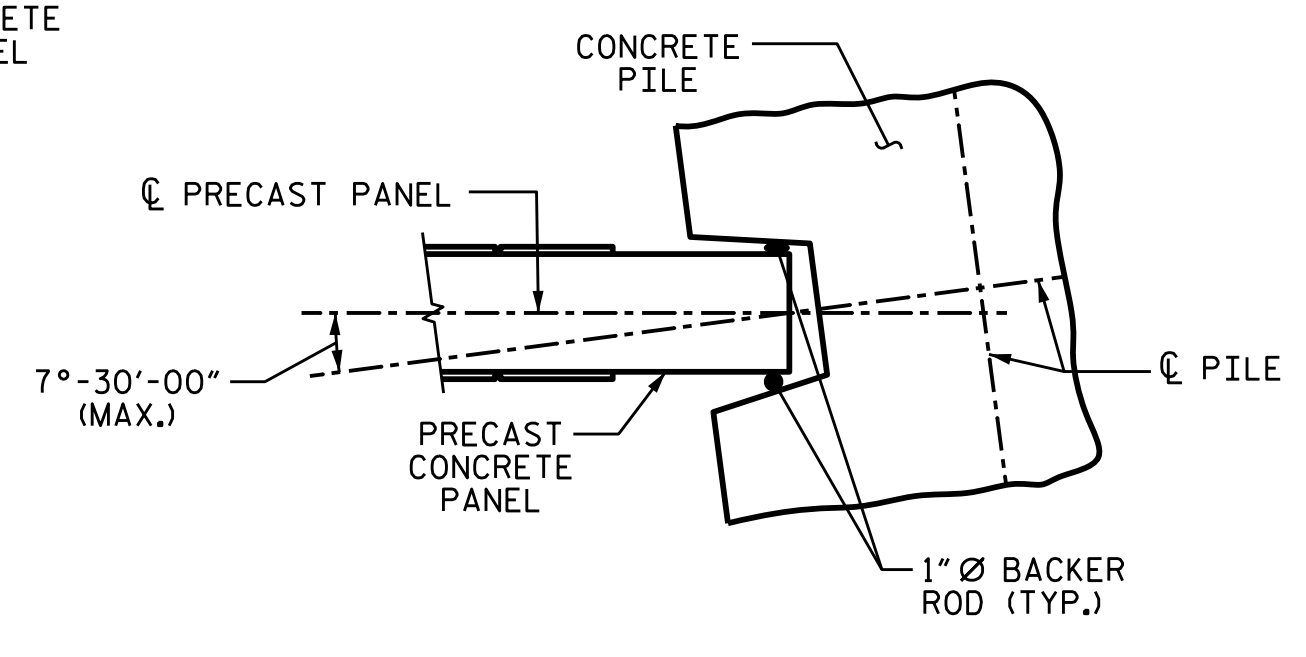


ELEVATION

SECTION A-A



TYPICAL WALL TURN DETAILS



PILE ROTATION LIMIT FOR WALL TURN

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

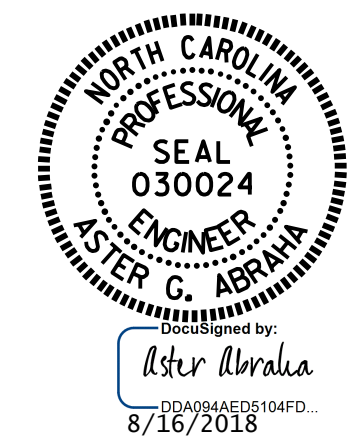
BILL OF MATERIAL	
SOUND BARRIER WALL	12,147 S.F.
ARCHITECTURAL SURFACE TREATMENT	19,474 S.F.
QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.	
ARCHITECTURAL SURFACE TREATMENT	
TEXTURE OPTION:	DRY STACKED STONE
STAIN OPTION:	FED 595 STANDARD STAIN COLOR 33531

PROJECT NO. R-3825B
JOHNSTON COUNTY
 STATION: 72+09.00 -L-

SHEET 1 OF 5

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SOUND BARRIER WALL
 NW2A**



ASSEMBLED BY :	M.M. AHMED	DATE :	07/2018
CHECKED BY :	S. WANCE, P.E.	DATE :	07/2018
DRAWN BY :	MAA 6/11	REV. 9/26/14	MAA/TMG
CHECKED BY :	GM 6/11	REV. 10/17	MAA/THC
		REV. 5/18	MAA/THC

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

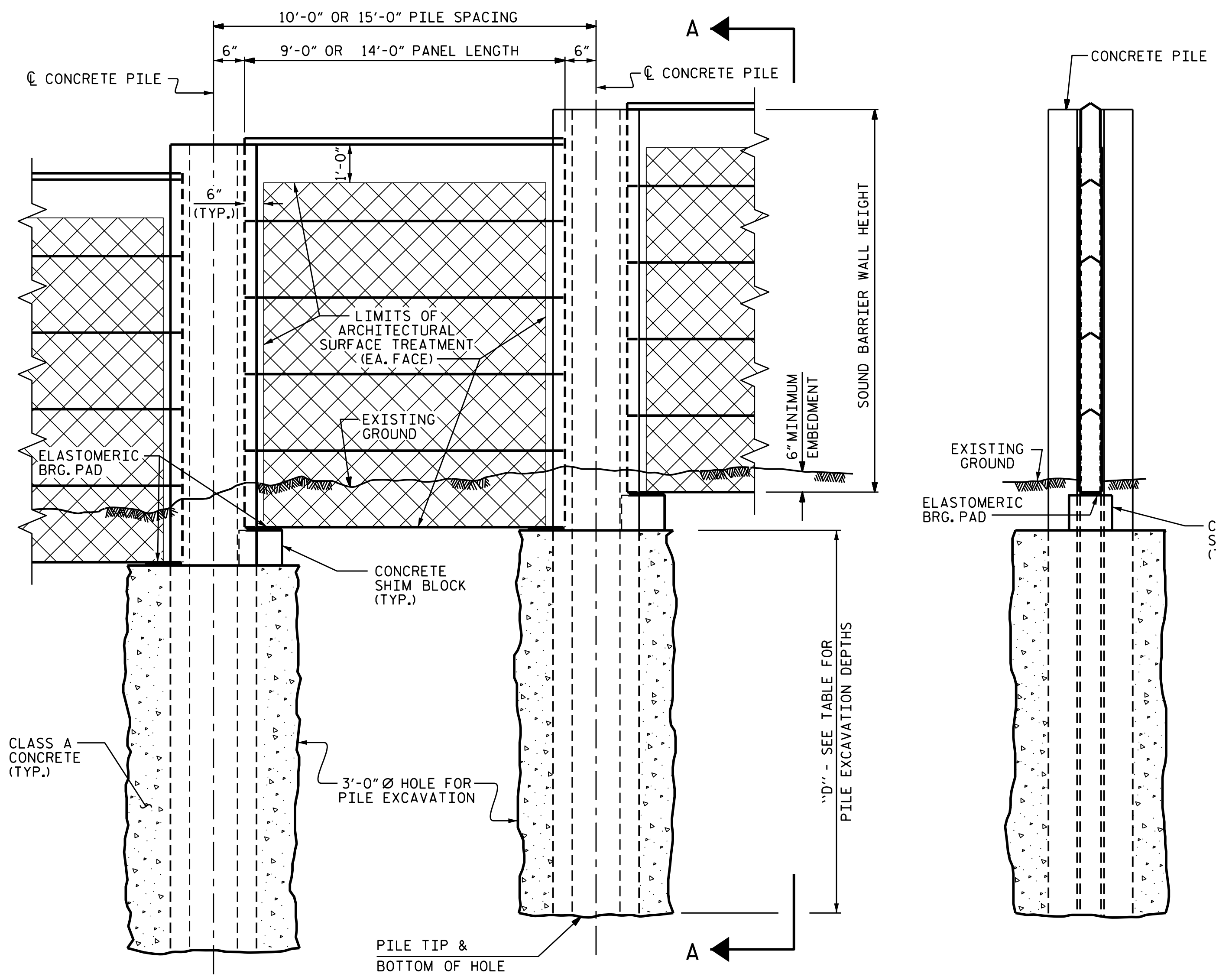
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	NW-1
1			3			TOTAL SHEETS
2			4			5

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.
- AT THE CONTRACTOR'S OPTION, USE 10'-0" OR 15'-0" PILE SPACINGS. STANDARD PRECAST CONCRETE PANELS MAY BE USED WITH THE 10'-0" AND 15'-0" PILE SPACING.
- 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.

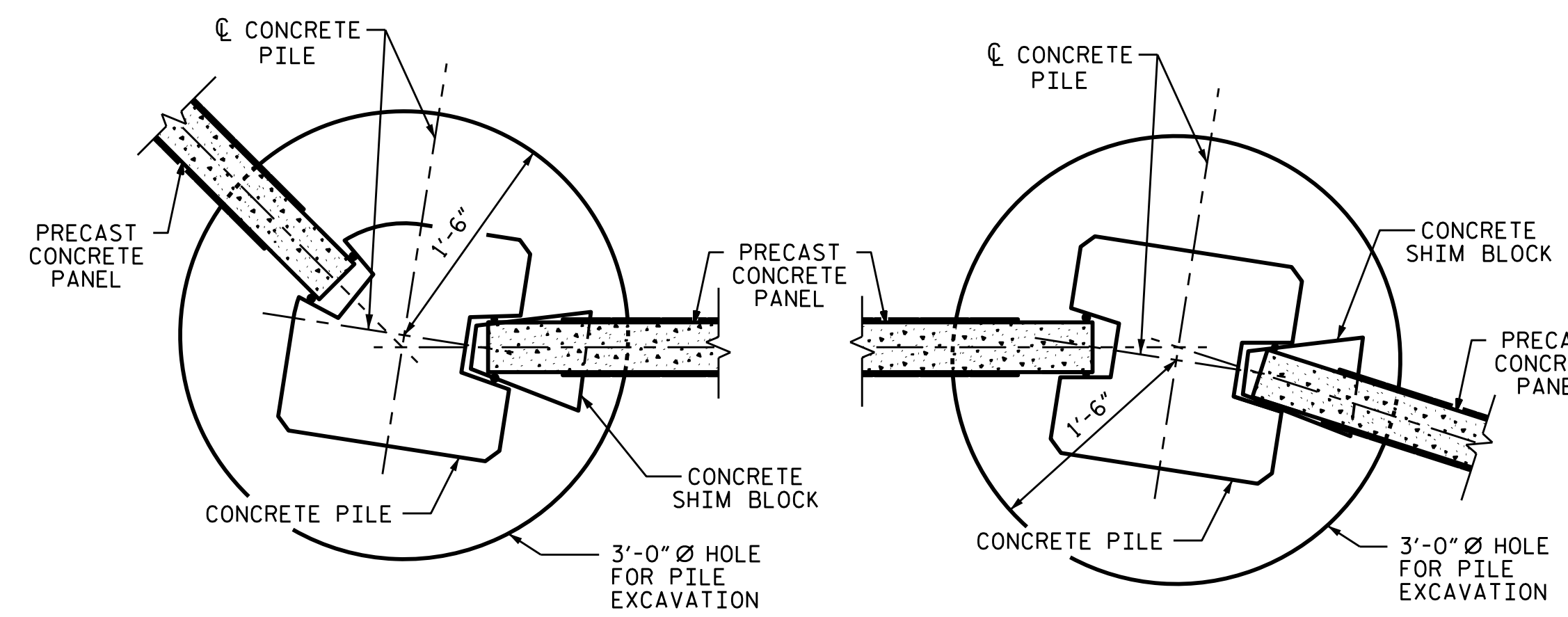
PILE EXCAVATION DEPTHS "D"						
WALL #2		FROM : STA. 82+15.80 -L- (-NW2- STA. 10+00.00) TO : STA. 86+95.14 -L- (-NW2- STA. 14+80.00)				
3'-0" Ø HOLE	PILE SPACING	WALL HEIGHT				
		H ≤ 9'	9' < H ≤ 11'	11' < H ≤ 14'	14' < H ≤ 17'	17' < H ≤ 20'
		10'-0"	6'-0"	7'-0"	8'-0"	9'-0"
15'-0"	7'-0"	8'-0"	9'-6"	10'-6"	11'-6"	

PILE REINFORCING STEEL DESIGN WIND PRESSURE = 40 PSF							
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
10'-0"	H ≤ 25'	4 - #8 EA. FACE	#3 @ 1'-4"CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	H > 25'	4 - #10 EA. FACE	#3 @ 1'-4"CTS.		H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
15'-0"	H ≤ 20'	4 - #8 EA. FACE	#3 @ 1'-4"CTS.	15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	20' < H ≤ 25'	4 - #10 EA. FACE	#3 @ 1'-4"CTS.		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 1'-4"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
10'-0"	H ≤ 25'	4 - #6 EA. FACE	#3 @ 1'-4"CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	H > 25'	4 - #7 EA. FACE	#3 @ 1'-4"CTS.		H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
15'-0"	H ≤ 20'	4 - #6 EA. FACE	#3 @ 1'-4"CTS.	15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	20' < H ≤ 25'	4 - #7 EA. FACE	#3 @ 1'-4"CTS.		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 1'-4"CTS.

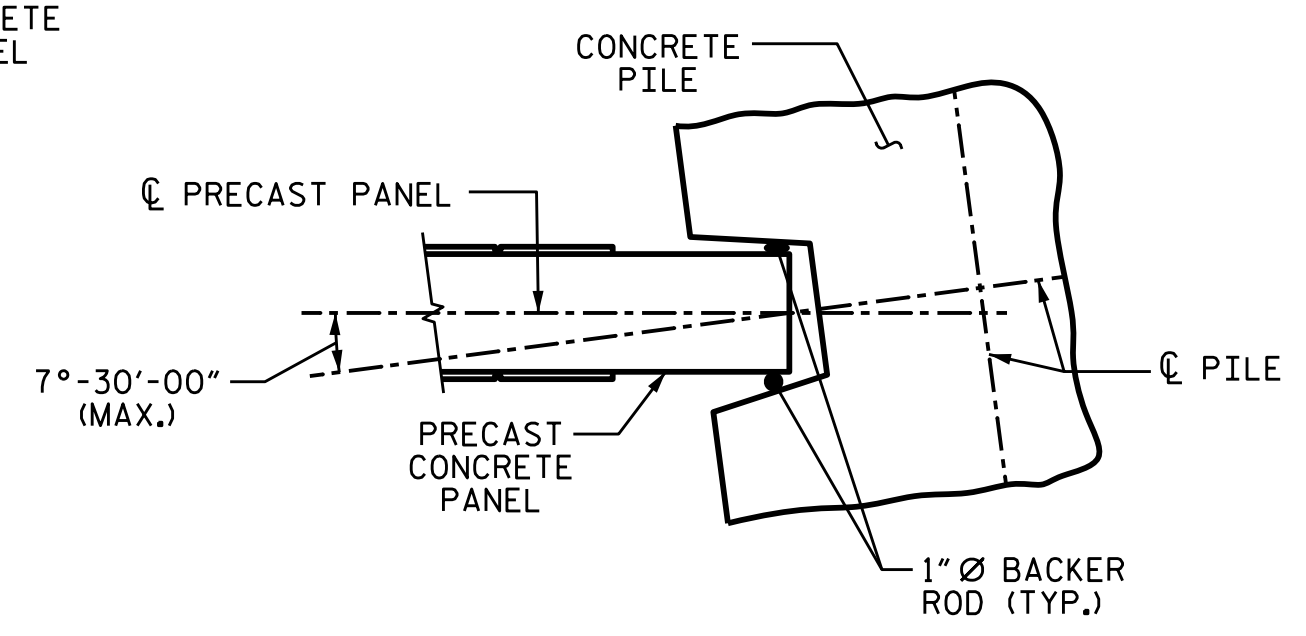


ELEVATION

SECTION A-A



TYPICAL WALL TURN DETAILS



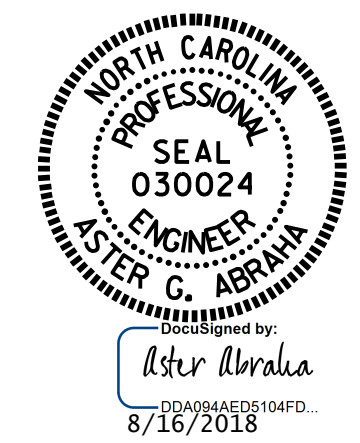
PILE ROTATION LIMIT FOR WALL TURN

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

BILL OF MATERIAL	
SOUND BARRIER WALL	6,822 S.F.
ARCHITECTURAL SURFACE TREATMENT	10,972 S.F.
QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.	
ARCHITECTURAL SURFACE TREATMENT	
TEXTURE OPTION:	DRY STACKED STONE
STAIN OPTION:	FED 595 STANDARD STAIN COLOR 33531

PROJECT NO. R-3825B
JOHNSTON COUNTY
 STATION: 82+15.08 -L-

SHEET 2 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SOUND BARRIER WALL
 NW2**

ASSEMBLED BY :	M.M. AHMED	DATE :	07/2018
CHECKED BY :	S. WANCE, P.E.	DATE :	07/2018
DRAWN BY :	MAA 6/11	REV. 9/26/14	MAA/TMG
CHECKED BY :	GM 6/11	REV. 10/17	MAA/THC
		REV. 5/18	MAA/THC

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

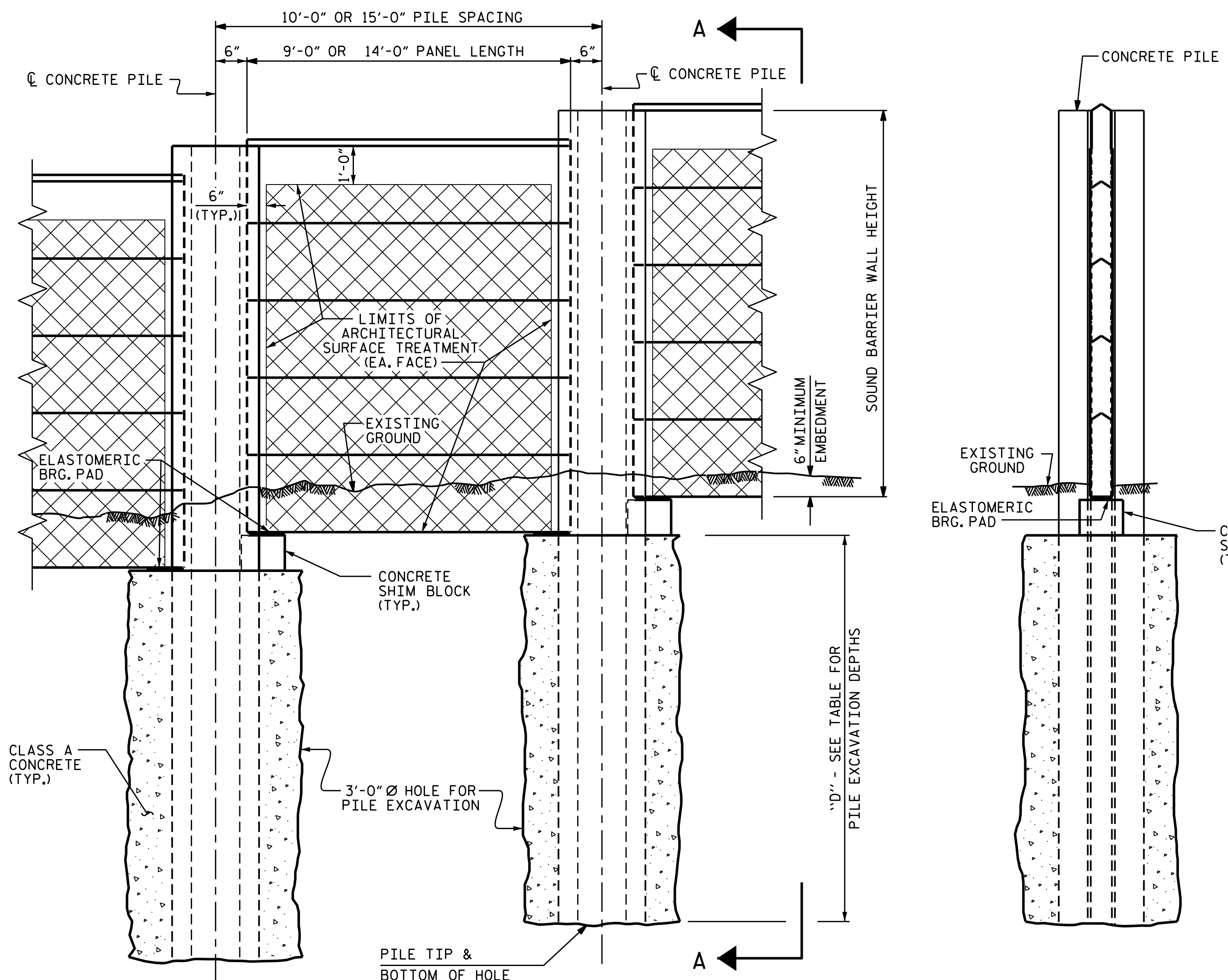
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	NW-2
1			3			TOTAL SHEETS
2			4			5

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.
 AT THE CONTRACTOR'S OPTION, USE 10'-0" OR 15'-0" PILE SPACINGS. STANDARD PRECAST CONCRETE PANELS MAY BE USED WITH THE 10'-0" AND 15'-0" PILE SPACING.
 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.

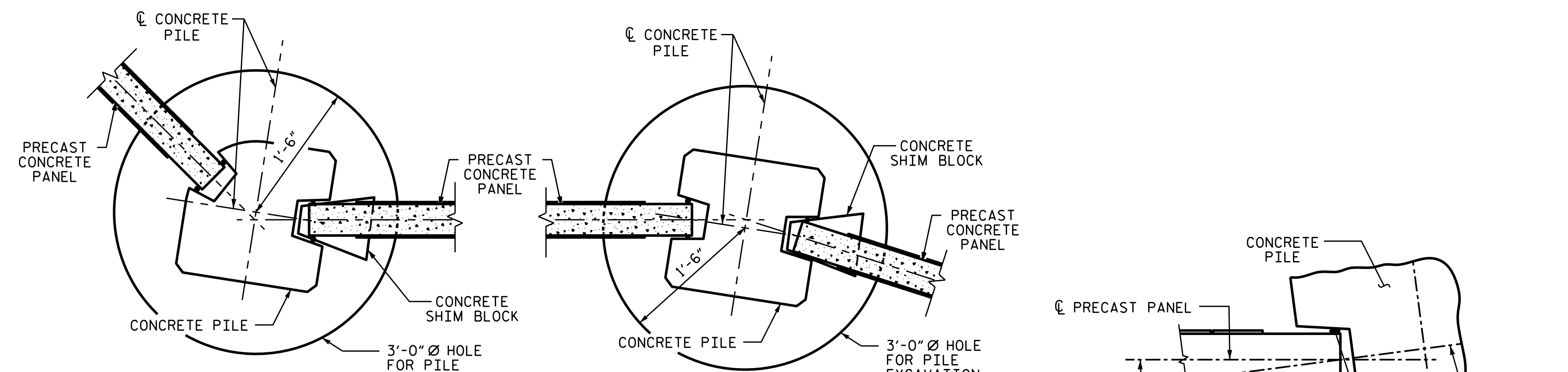
PILE EXCAVATION DEPTHS "D"						
WALL #3		FROM : STA. 102+88.25 -L- (47.5' RT.) TO : STA. 112+78.25 -L- (44.92' RT.)				
3'-0" Ø HOLE	PILE SPACING	WALL HEIGHT				
		H ≤ 9'	9' < H ≤ 11'	11' < H ≤ 14'	14' < H ≤ 17'	17' < H ≤ 20'
		10'-0"	6'-0"	7'-0"	8'-0"	9'-0"
15'-0"	7'-0"	8'-0"	9'-6"	10'-6"	11'-6"	

PILE REINFORCING STEEL DESIGN WIND PRESSURE = 40 PSF							
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
10'-0"	H ≤ 25'	4 - #8 EA. FACE	#3 @ 1'-4"CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	H > 25'	4 - #10 EA. FACE	#3 @ 1'-4"CTS.		H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
15'-0"	H ≤ 20'	4 - #8 EA. FACE	#3 @ 1'-4"CTS.	15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	20' < H ≤ 25'	4 - #10 EA. FACE	#3 @ 1'-4"CTS.		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 1'-4"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
10'-0"	H ≤ 25'	4 - #6 EA. FACE	#3 @ 1'-4"CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	H > 25'	4 - #7 EA. FACE	#3 @ 1'-4"CTS.		H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
15'-0"	H ≤ 20'	4 - #6 EA. FACE	#3 @ 1'-4"CTS.	15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4"CTS.
	20' < H ≤ 25'	4 - #7 EA. FACE	#3 @ 1'-4"CTS.		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE	#3 @ 1'-4"CTS.

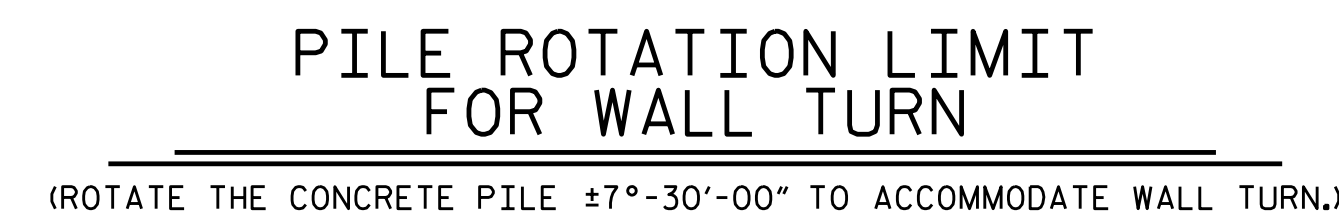


ELEVATION

SECTION A-A



TYPICAL WALL TURN DETAILS



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

BILL OF MATERIAL	
SOUND BARRIER WALL	14,955 S.F.
ARCHITECTURAL SURFACE TREATMENT	24,206 S.F.
QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.	
ARCHITECTURAL SURFACE TREATMENT	
TEXTURE OPTION:	DRY STACK STONE
STAIN OPTION:	FS 595 33531

PROJECT NO. R-3825B
 JOHNSTON COUNTY
 STATION: 102+88.25 -L-
 SHEET 3 OF 5

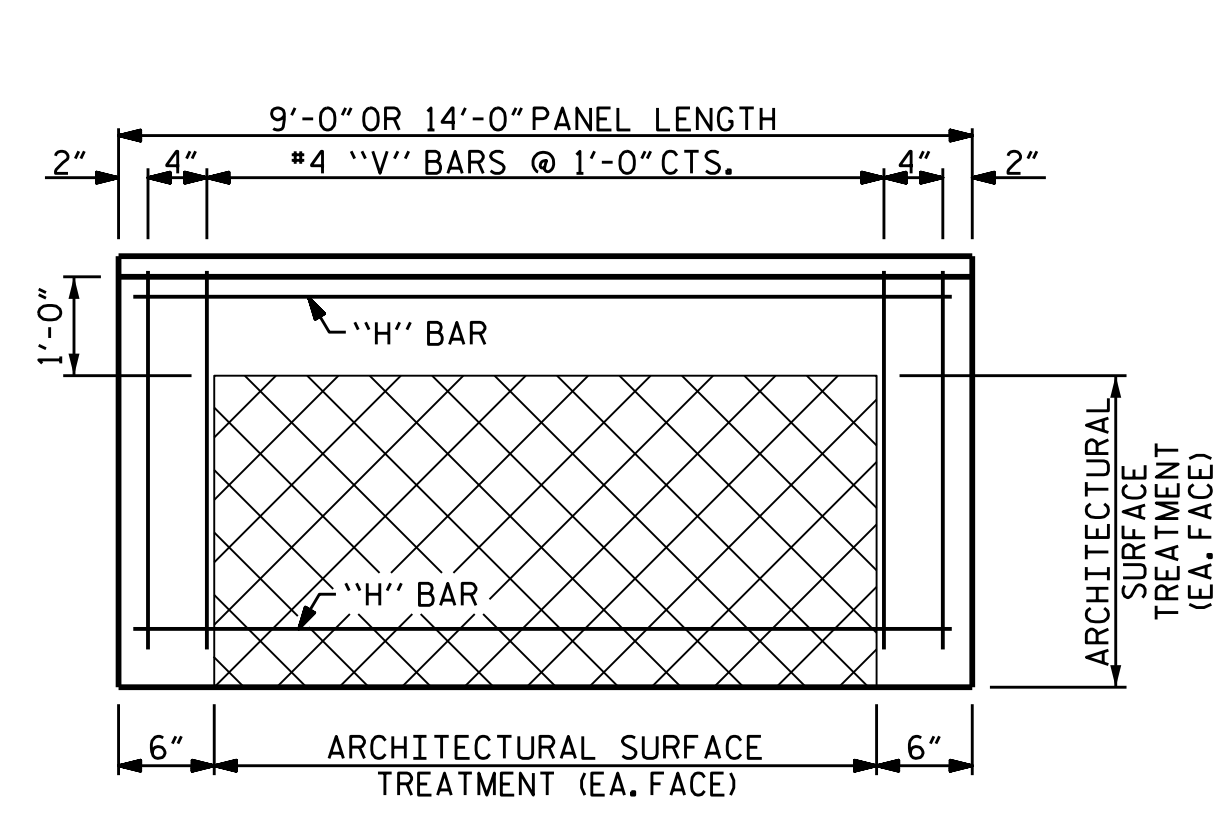


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SOUND BARRIER WALL
 NW3**

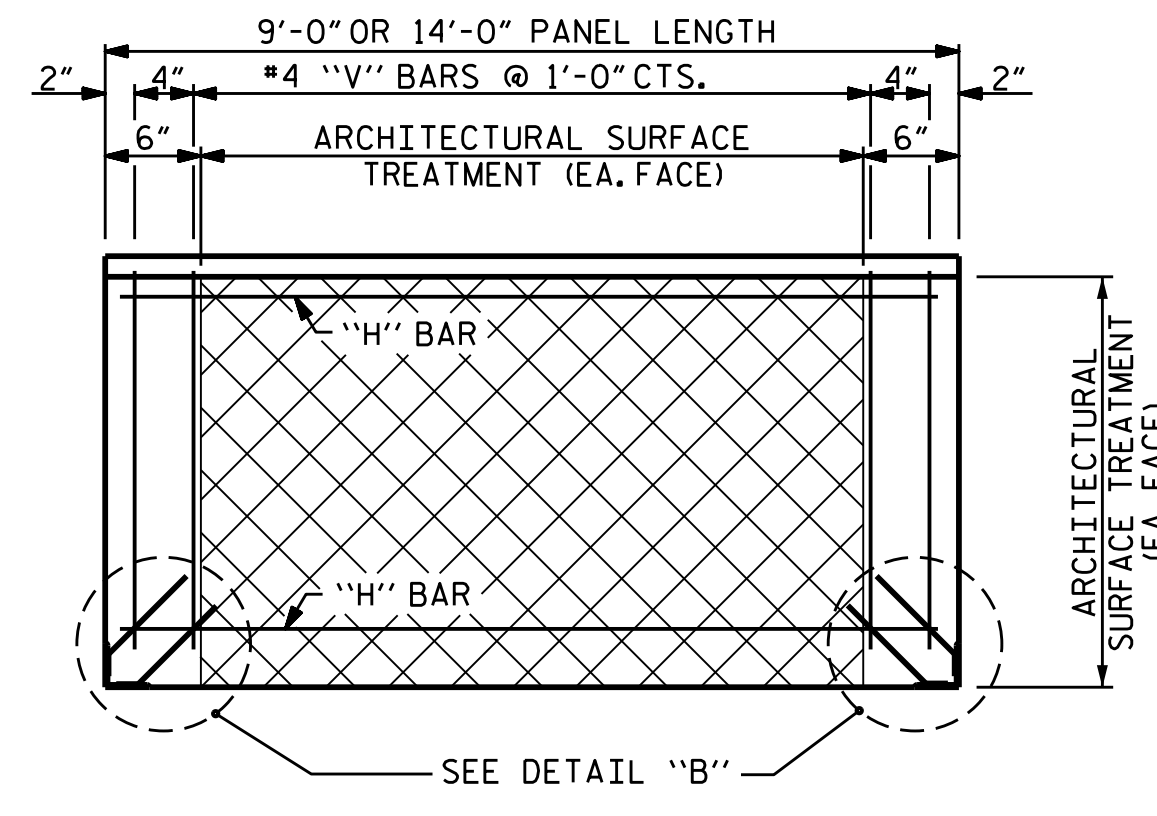
ASSEMBLED BY :	S. WANCE	DATE :	07/2018
CHECKED BY :	M. A. AHMED	DATE :	07/2018
DRAWN BY :	MAA 6/II	REV. 9/26/14	MAA/TMG
CHECKED BY :	GM 6/II	REV. 10/17	MAA/THC
		REV. 5/18	MAA/THC

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

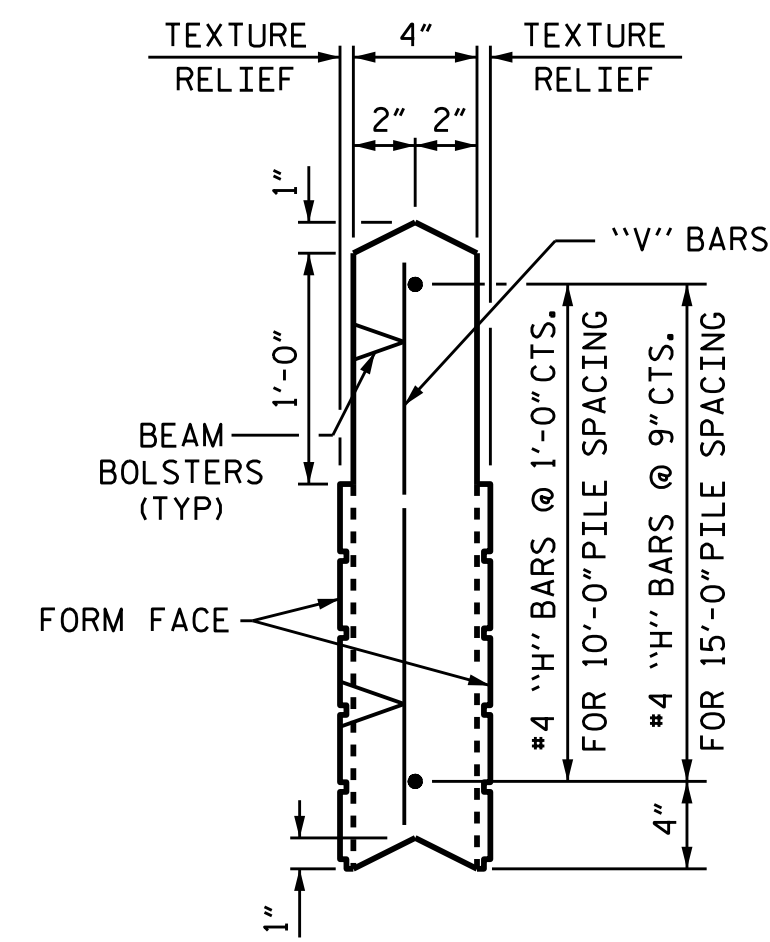
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	NW-3
1			3			TOTAL SHEETS
2			4			5



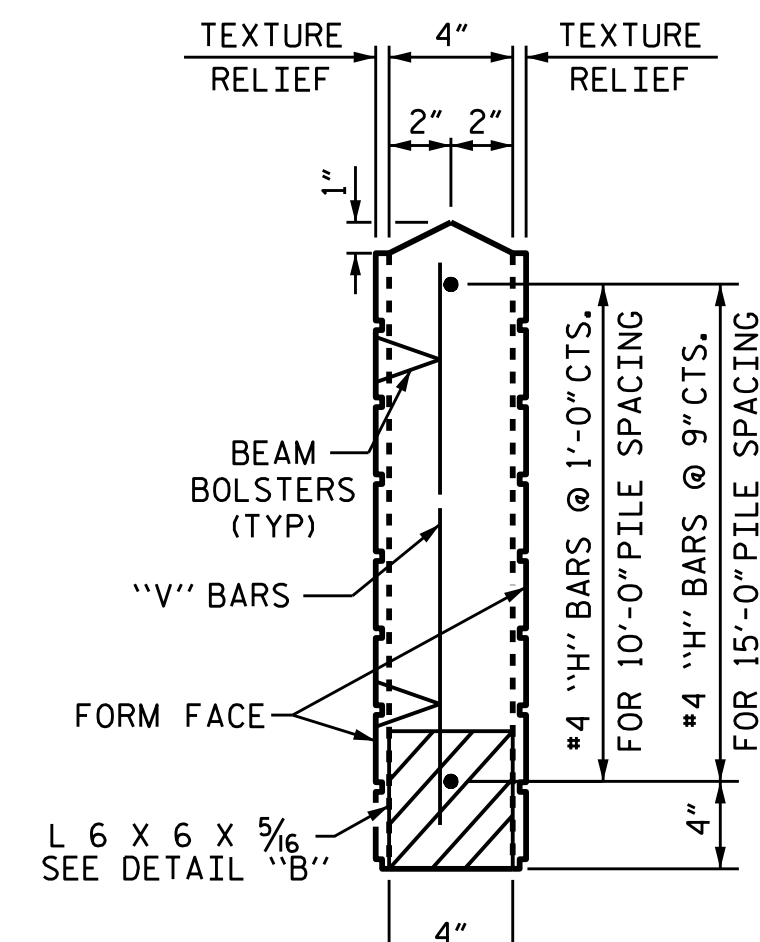
FRONT ELEVATION OF UPPER PRECAST PANEL



FRONT ELEVATION OF BOTTOM PRECAST PANEL

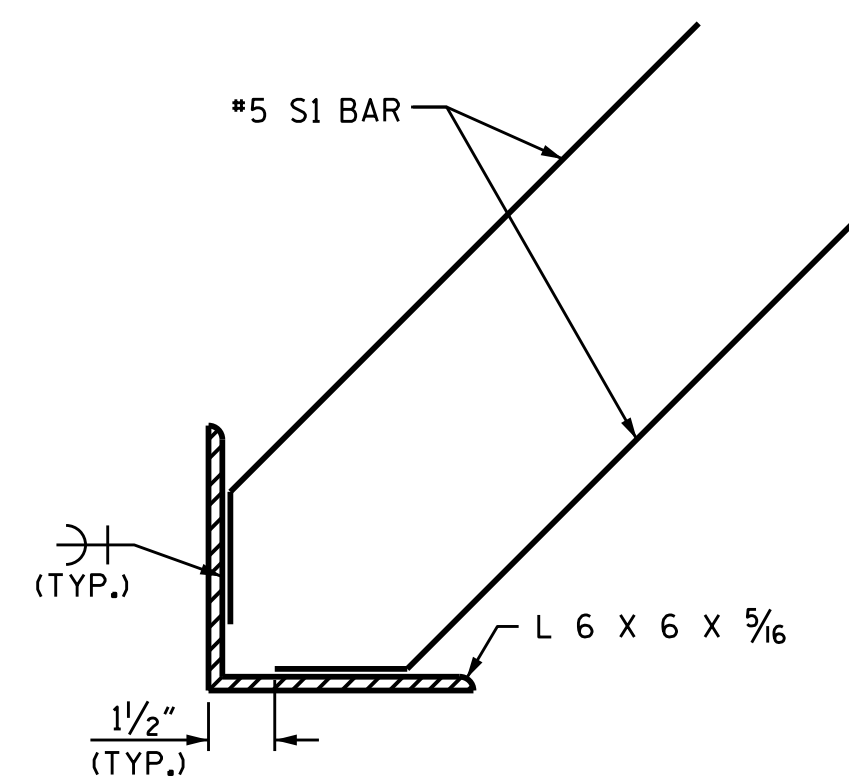


UPPER PANEL



BOTTOM PANEL

SECTION THROUGH PRECAST PANELS



DETAIL "B"

QUANTITIES FOR ONE PRECAST PANEL (FOR 10'-0" PILE SPACING)

PANEL HEIGHT	CLASS AA CONCRETE C.Y.	BAR TYPES									
		HORIZONTAL					VERTICAL				
		NO.	BAR SIZE	TYPE	LENGTH	WEIGHT (lb)	NO.	BAR SIZE	TYPE	LENGTH	WEIGHT (lb)
2'-0"	0.22	3	H1 #4	STR	8'-8"	17	11	V1 #4	STR	1'-8"	12
3'-0"	0.33	4	H2 #4	STR	8'-8"	23	11	V2 #4	STR	2'-8"	20
4'-0"	0.44	5	H3 #4	STR	8'-8"	29	11	V3 #4	STR	3'-8"	27

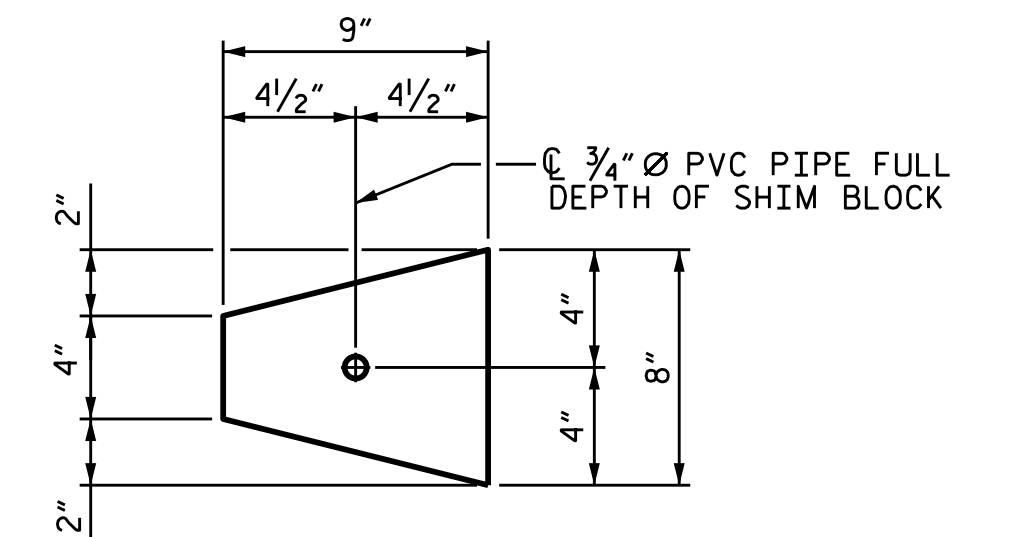
QUANTITIES FOR ONE PRECAST PANEL (FOR 15'-0" PILE SPACING)

PANEL HEIGHT	CLASS AA CONCRETE C.Y.	BAR TYPES									
		HORIZONTAL					VERTICAL				
		NO.	BAR SIZE	TYPE	LENGTH	WEIGHT (lb)	NO.	BAR SIZE	TYPE	LENGTH	WEIGHT (lb)
3'-0"	0.52	5	H1 #4	STR	13'-8"	46	16	V1 #4	STR	2'-8"	29
4'-0"	0.69	6	H2 #4	STR	13'-8"	55	16	V2 #4	STR	3'-8"	39
5'-0"	0.86	7	H3 #4	STR	13'-8"	64	16	V3 #4	STR	4'-8"	50
6'-0"	1.04	8	H4 #4	STR	13'-8"	73	16	V4 #4	STR	5'-8"	61

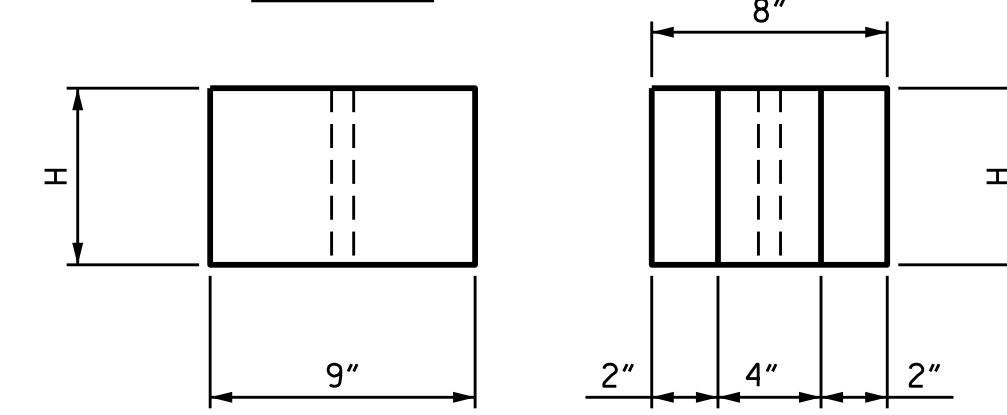
ADDITIONAL BARS FOR ONE BOTTOM PANEL

NO.	BAR SIZE	TYPE	LENGTH	WEIGHT (lb)
4	S1 #5	1	1'-6"	6

BAR TYPE



PLAN

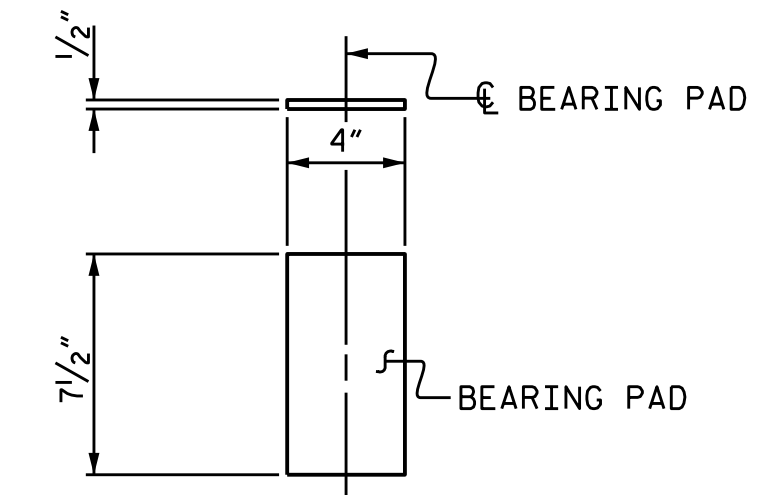


ELEVATION

END

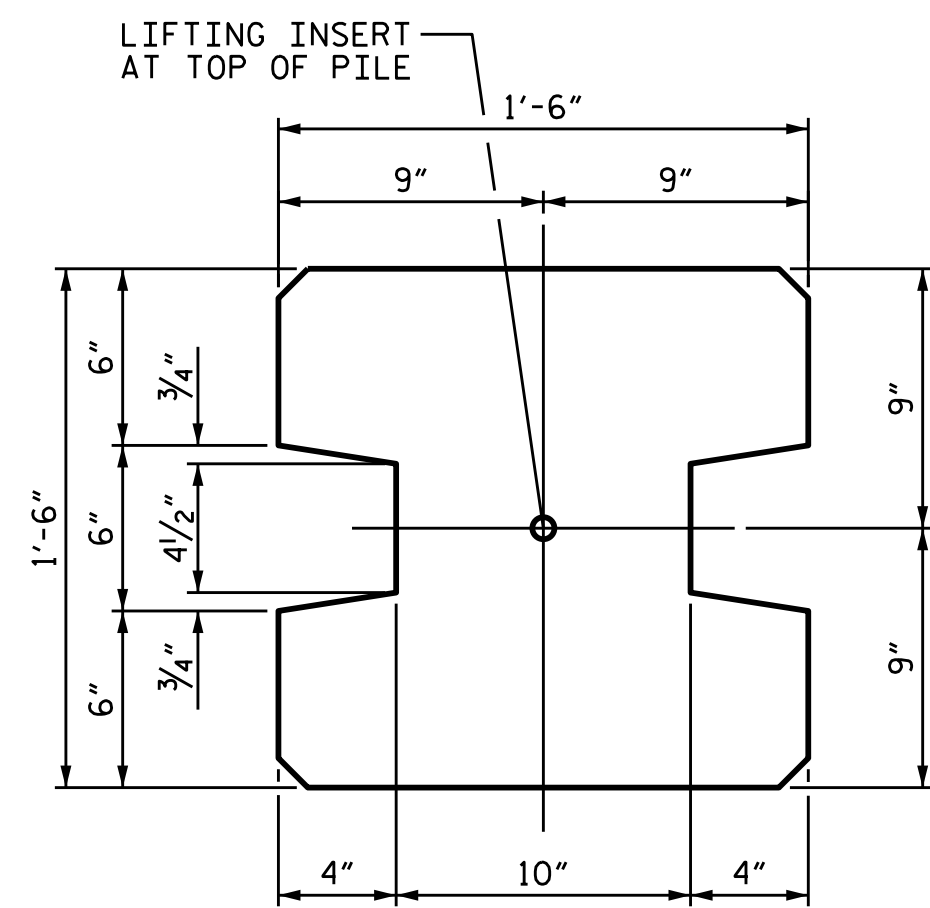
CONCRETE SHIM BLOCK

H = 3', 6" or 1'-0"

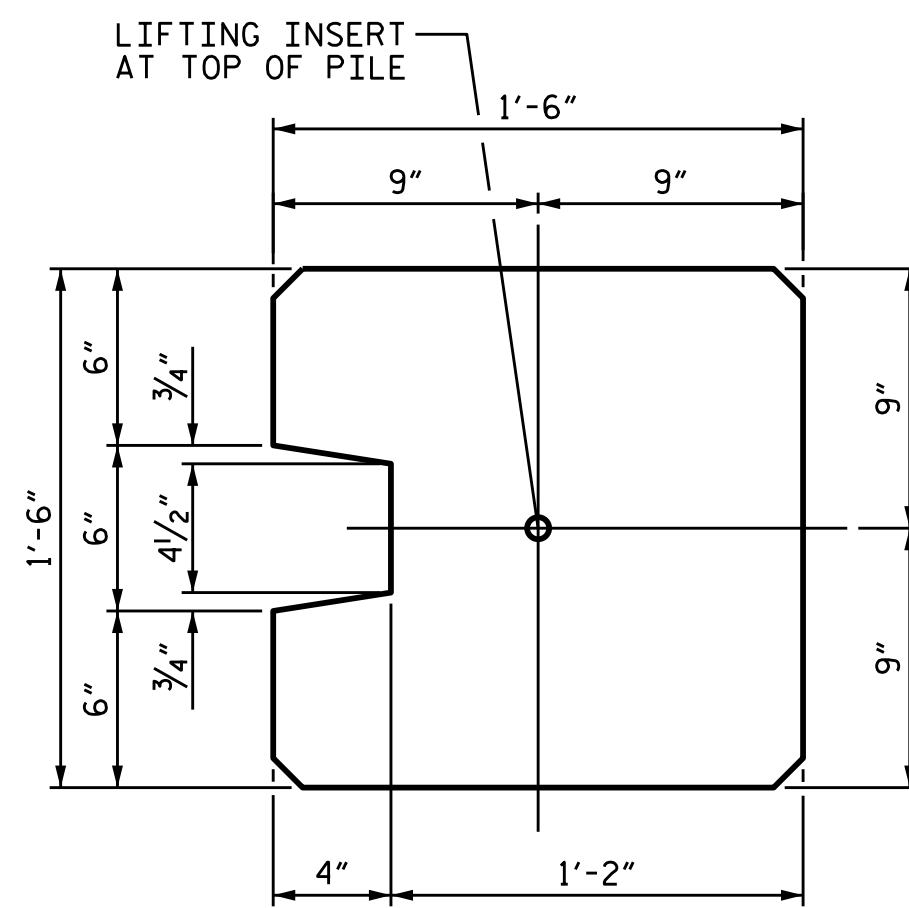


ELASTOMERIC BEARING DETAILS

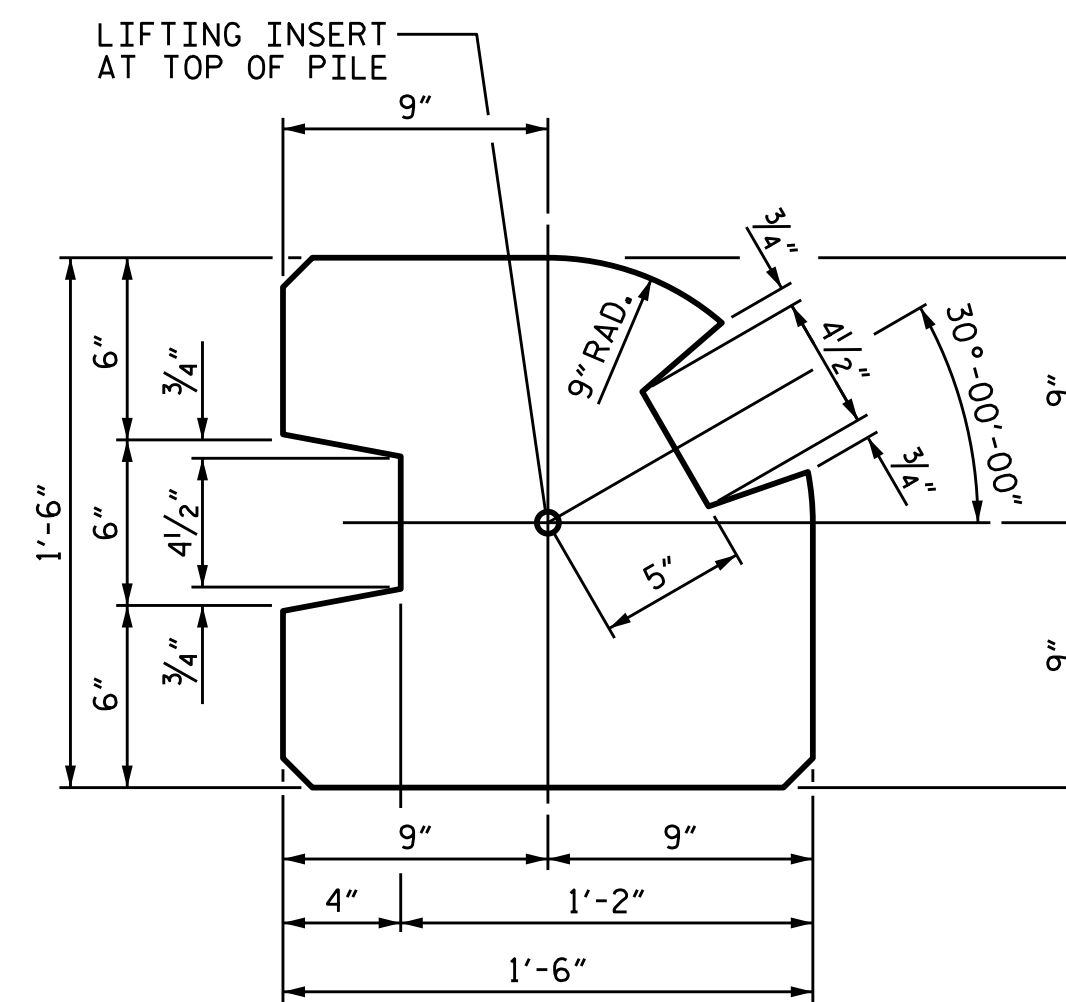
ELASTOMER IN BEARINGS SHALL BE 50 DUROMETER HARDNESS.



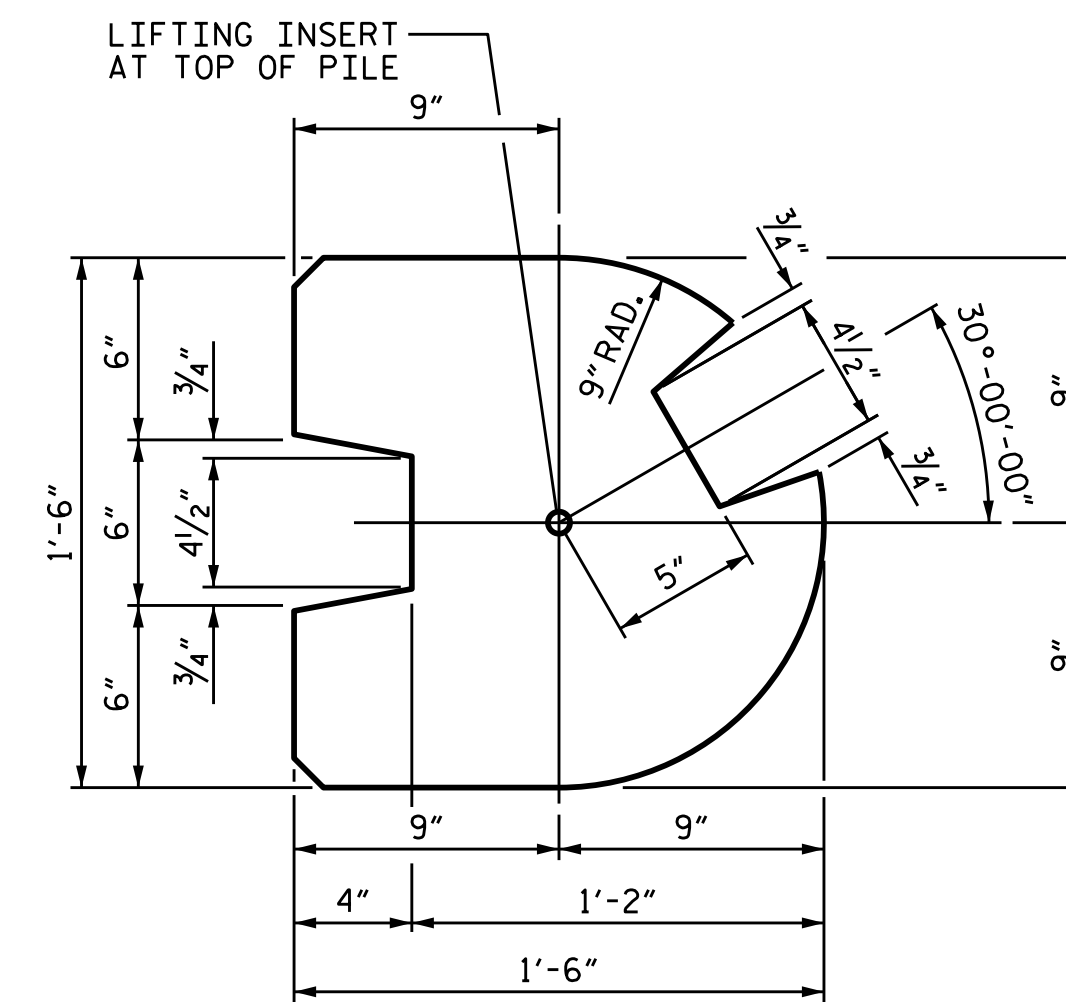
TYPE - I
(AREA = 1.9444 SQ. FT.)



TYPE - II
(AREA = 2.0903 SQ. FT.)



TYPE - III
(AREA = 1.8336 SQ. FT.)



TYPE - III (ALT.)
(AREA = 1.7163 SQ. FT.)

PILE DETAIL

(ALL CORNERS TO BE CHAMFERED 1")

PROJECT NO. R-3825B
JOHNSTON COUNTY
72+09.00 -L-
82+15.00 -L-
STATIONS: 102+88.25 -L-

SHEET 4 OF 5



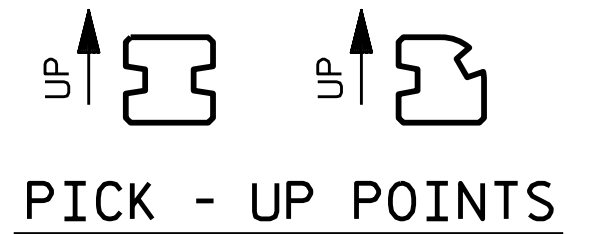
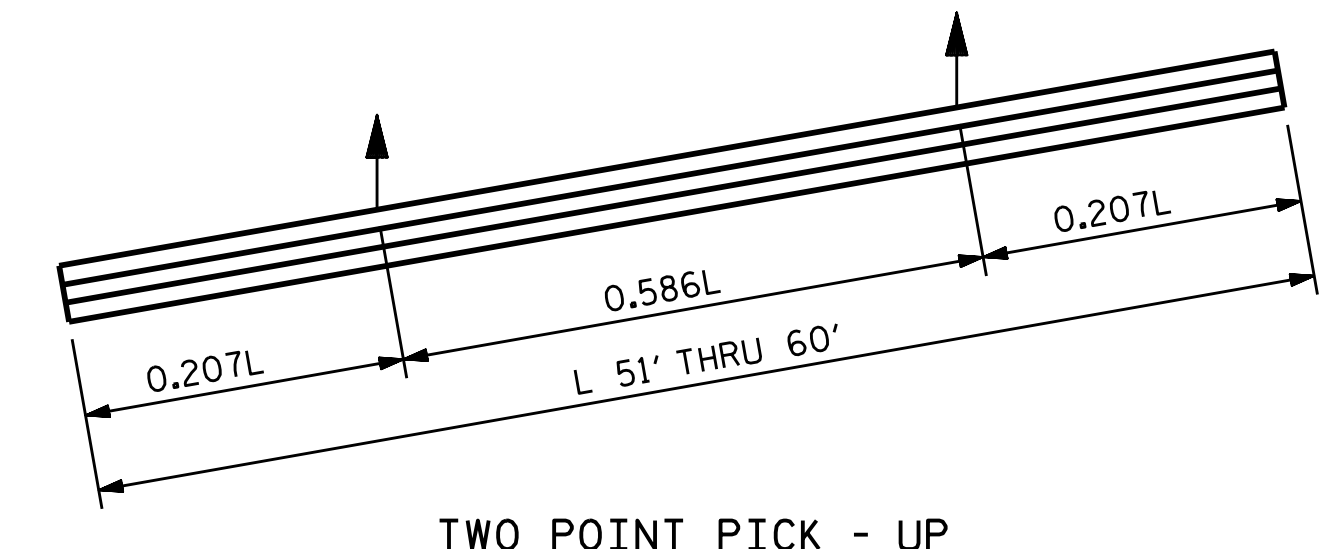
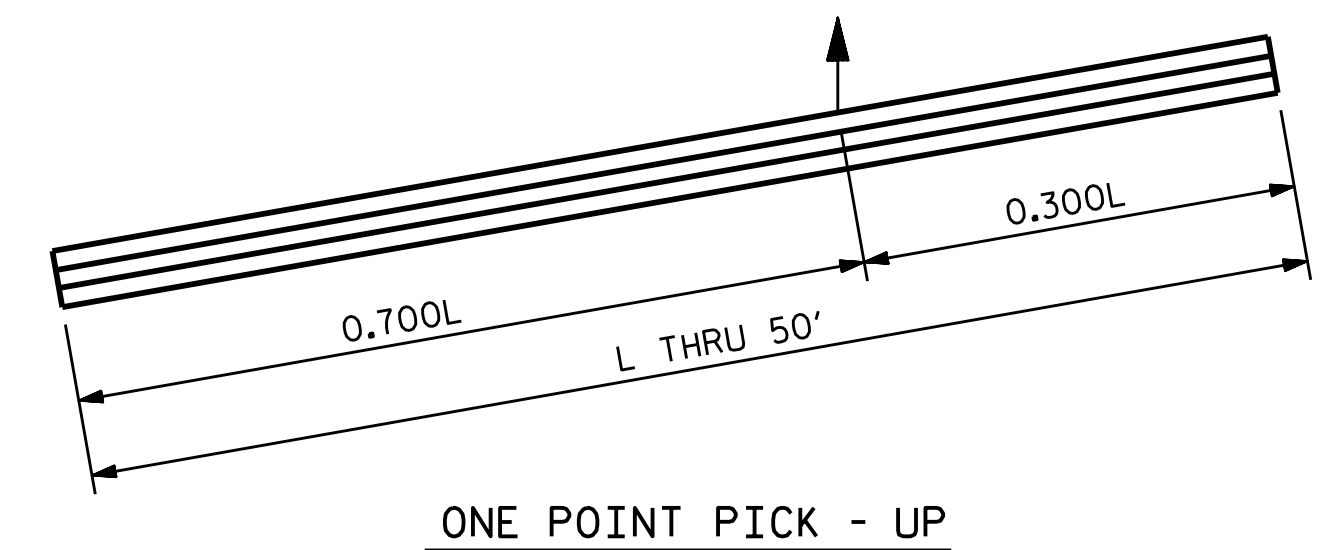
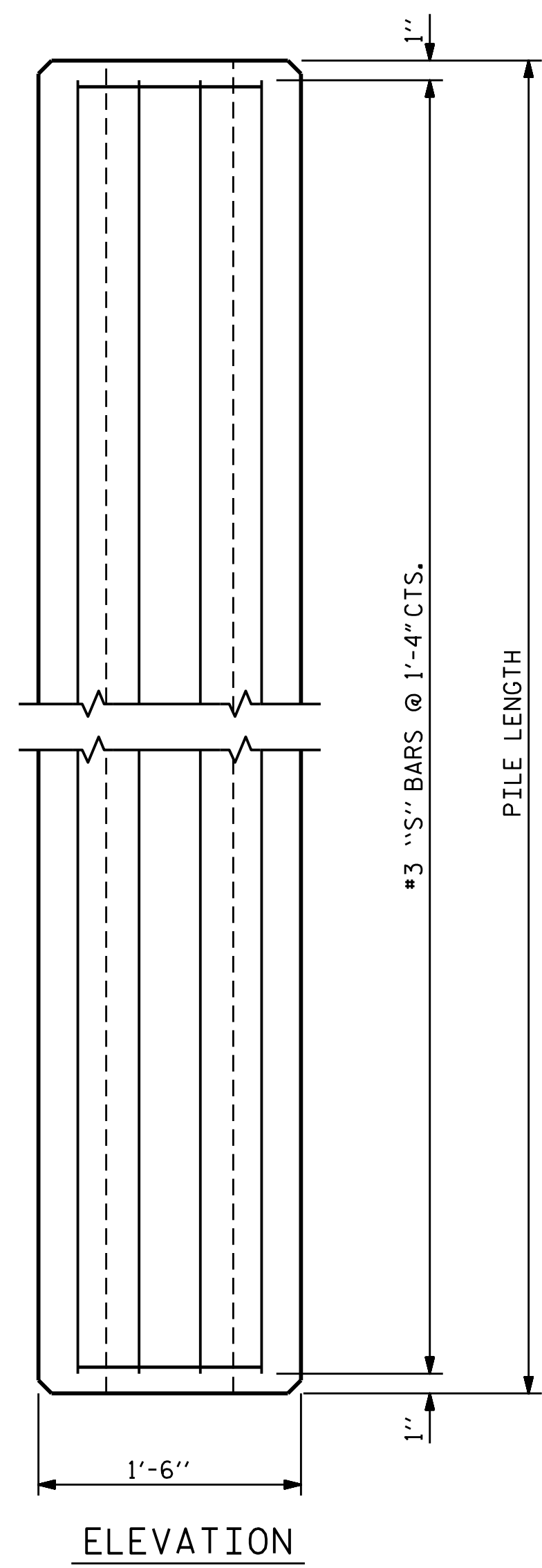
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SOUND BARRIER WALL
DETAILS
NW2A, NW2, AND NW3

ASSEMBLED BY :	S. WANCE	DATE :	07/2018
CHECKED BY :	M. A. AHMED	DATE :	07/2018
DRAWN BY :	MAA 6/II	REV. 1/15/14	RWW/TMG
CHECKED BY :	GM 6/II	REV. 10/17	MAA/THC
		REV. 5/18	MAA/THC

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

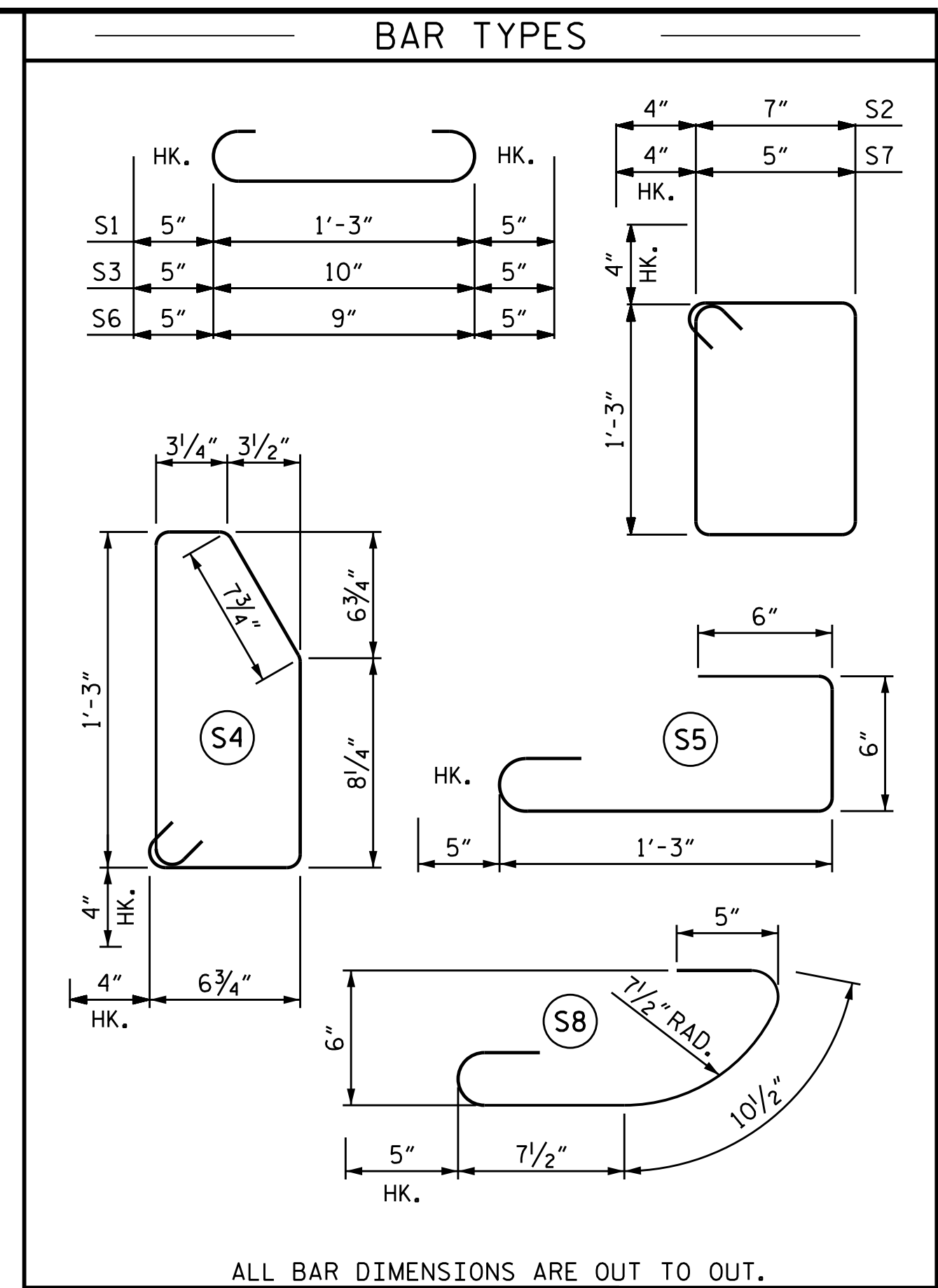
REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	NW-4	
1			3			TOTAL SHEETS	
2			4			5	



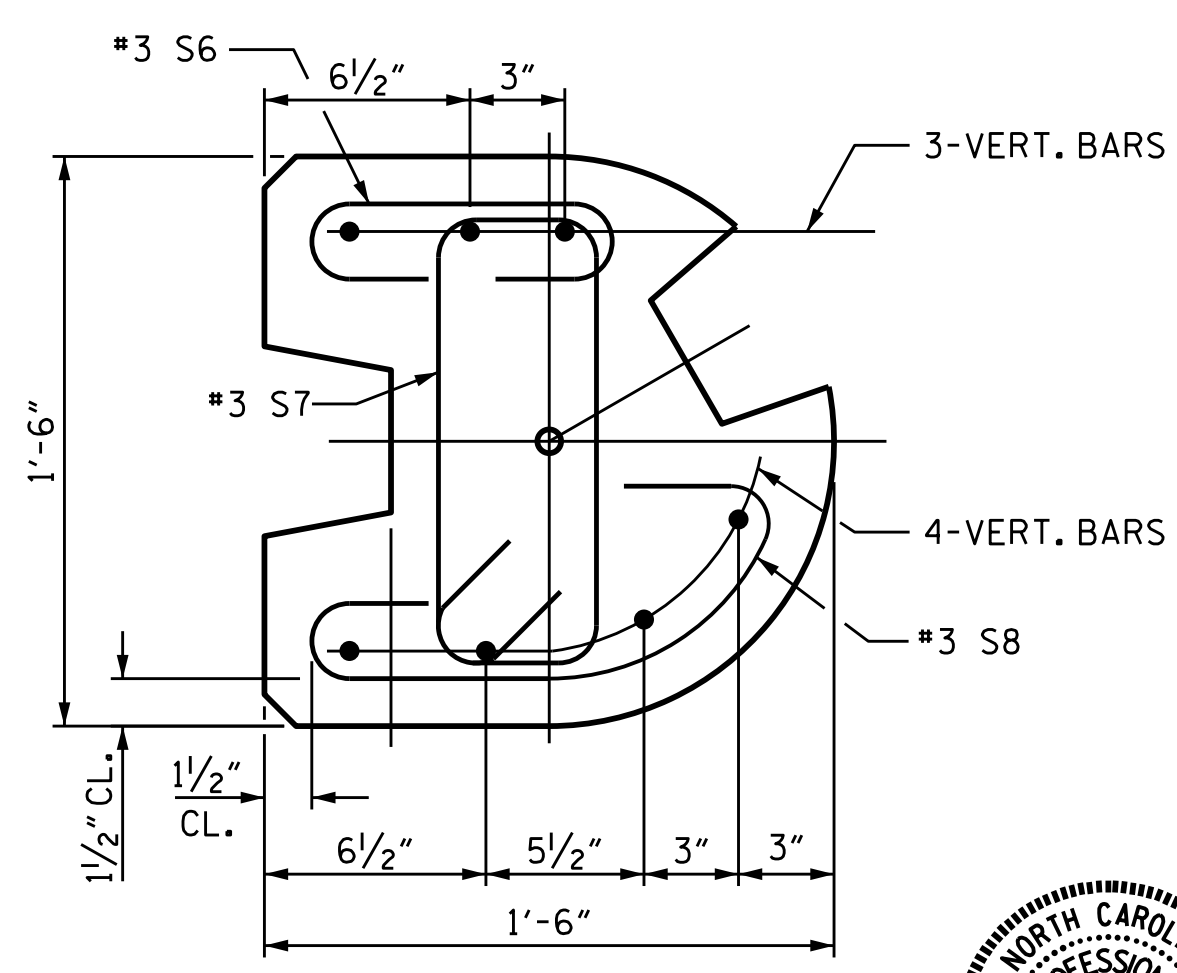
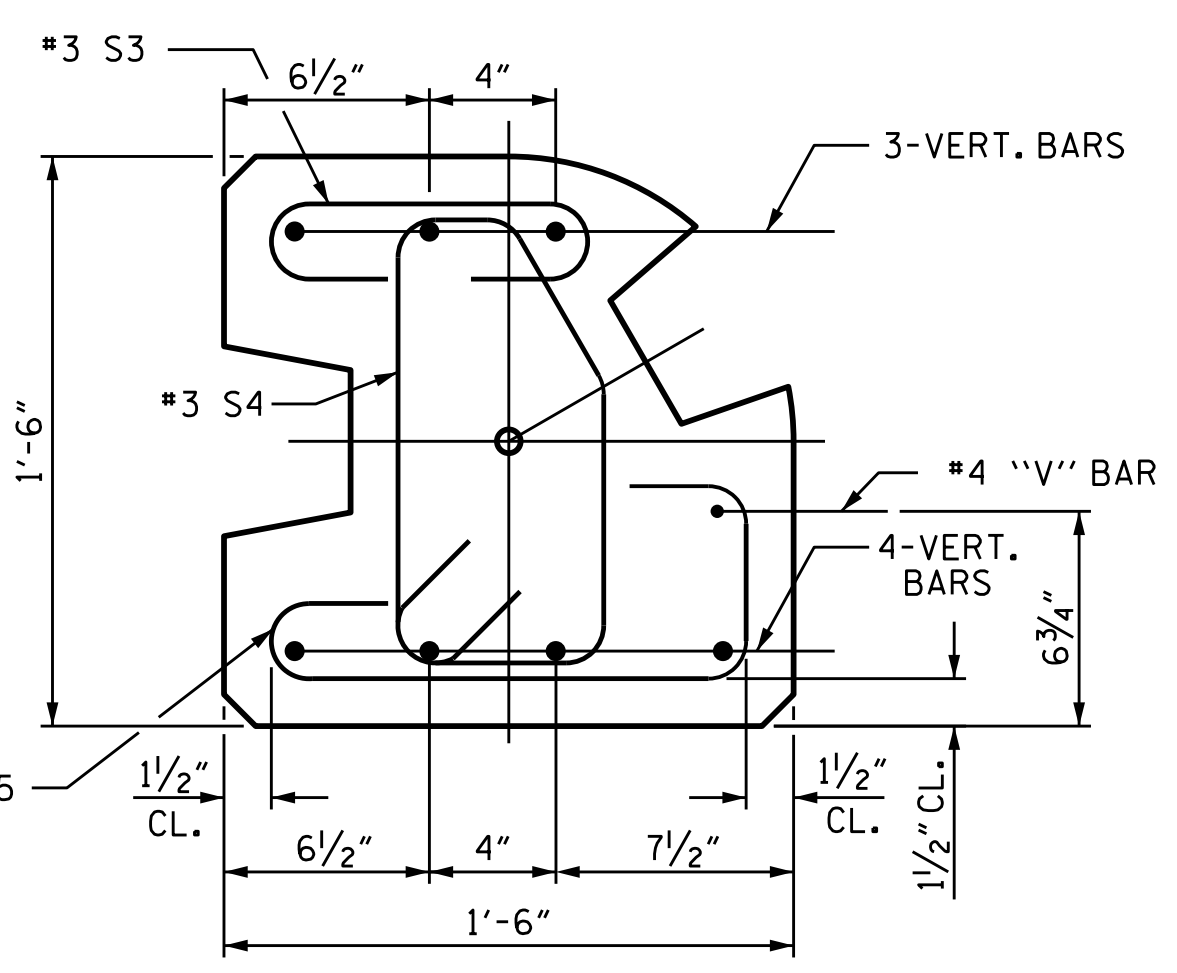
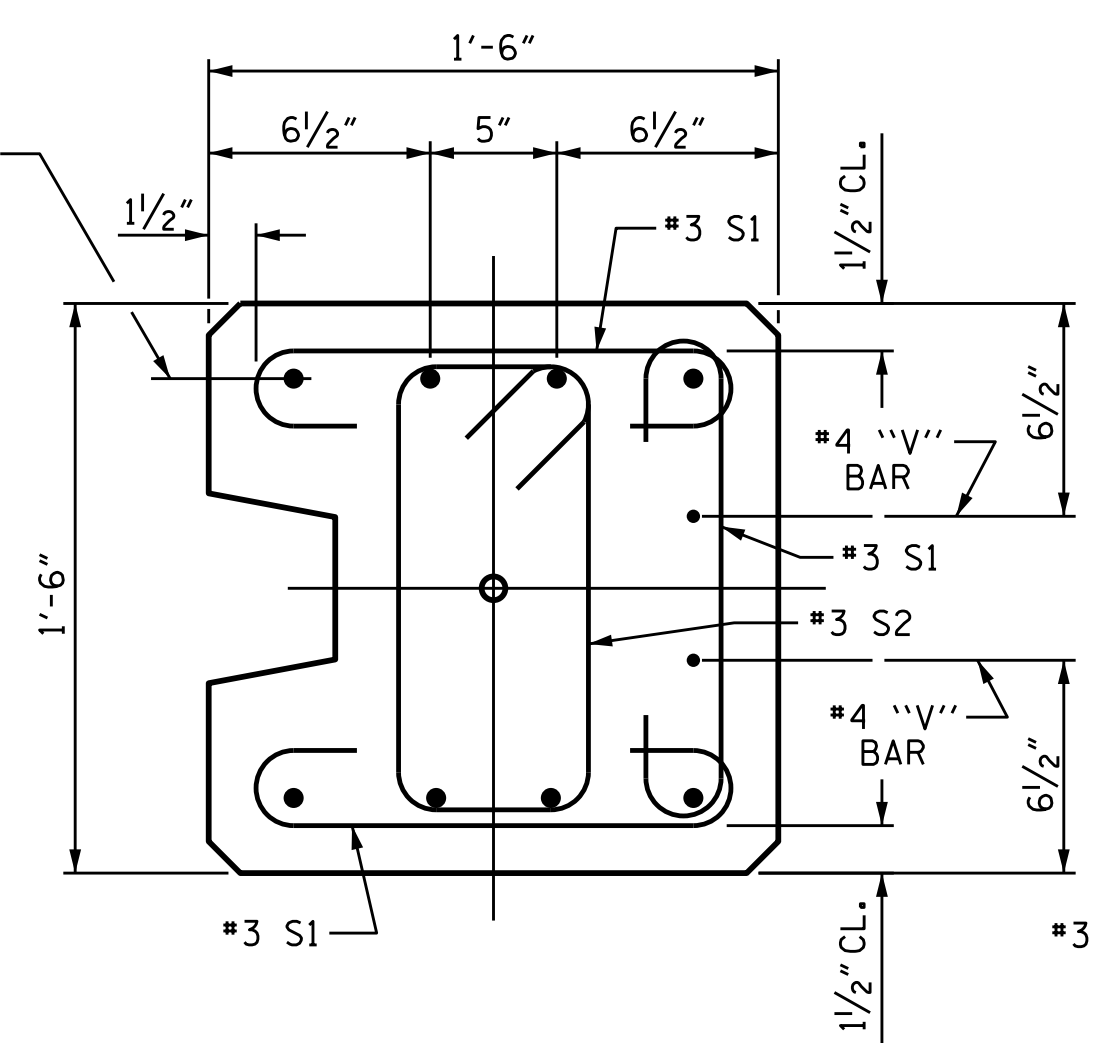
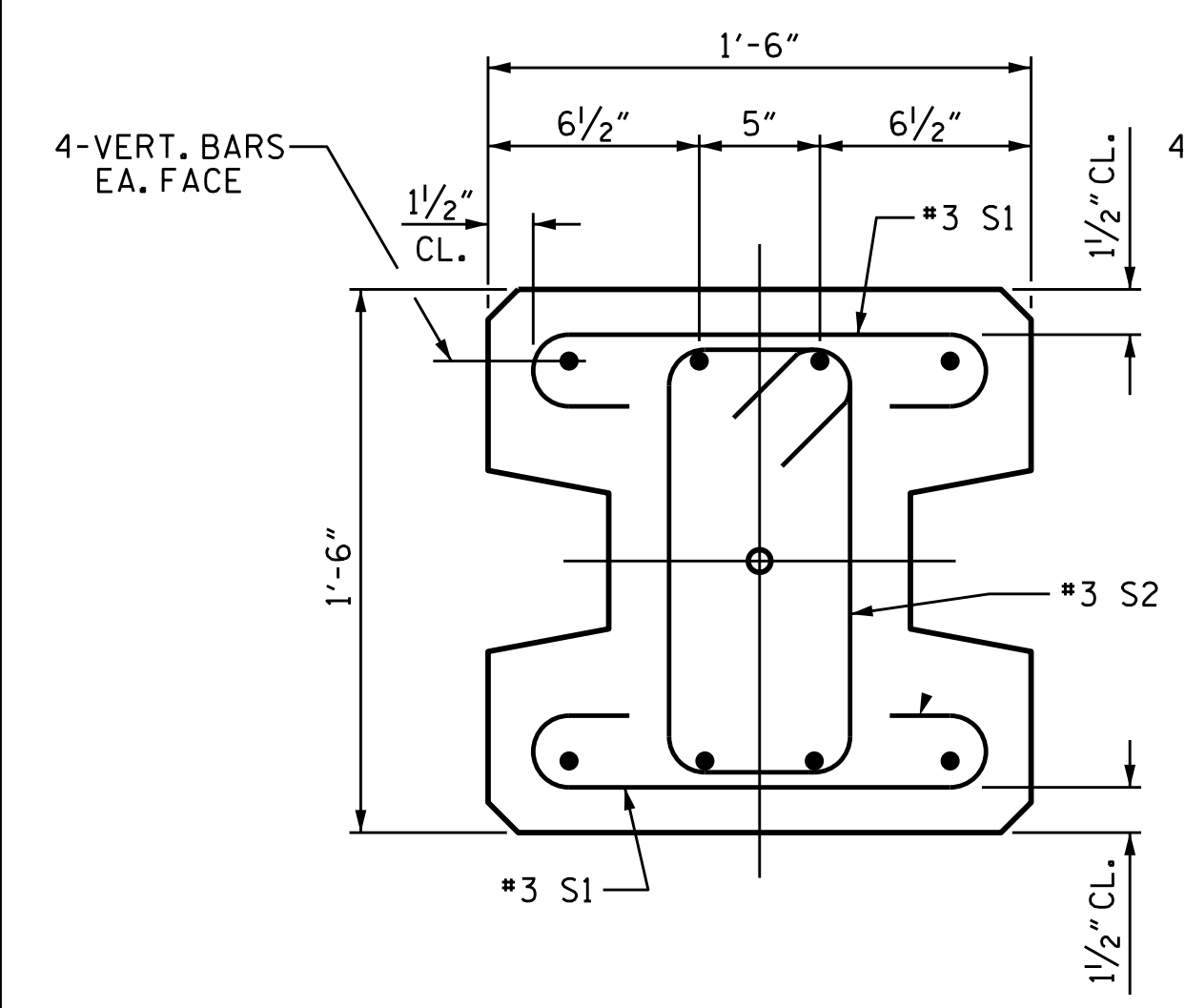
NOTES

CONCRETE DESIGN DATA : $f'_c = 5,000$ PSI
 PROPOSED DEVICES FOR LIFTING PILES, RECESS DETAILS, AND PATCHING MATERIAL SHALL BE DETAILED IN SHOP DRAWINGS. AFTER ATTACHMENTS HAVE BEEN REMOVED, OPENINGS SHALL BE REPAIRED SUCH THAT THE APPEARANCE OF THE PILE IS UNIFORM.
 WHERE CAST-IN-PLACE LIFTING DEVICES ARE NOT USED, PICK-UP POINTS TO BE INDICATED WITH A BLACK MARK 2" WIDE.
 THE SLIP-FORM METHOD OF CASTING PILES WILL NOT BE PERMITTED.
 ALL CORNERS TO BE CHAMFERED 1".

LENGTH	APPROX. PILE WT. TONS	ONE PICK-UP POINT		TWO PICK-UP POINT	
		0.300L	0.700L	0.207L	0.586L
10'-0"	1.56	3'-0"	7'-0"		
15'-0"	2.35	4'-6"	10'-6"		
20'-0"	3.14	6'-0"	14'-0"		
25'-0"	3.93	7'-6"	17'-6"		
30'-0"	4.70	9'-0"	21'-0"		
35'-0"	5.49	10'-6"	24'-6"		
40'-0"	6.28	12'-0"	28'-0"		
45'-0"	7.05	13'-6"	31'-6"		
50'-0"	7.84	15'-0"	35'-0"		
55'-0"	8.63			11'-4 1/2"	32'-3"
60'-0"	9.42			12'-5"	35'-2"



ALL BAR DIMENSIONS ARE OUT TO OUT.

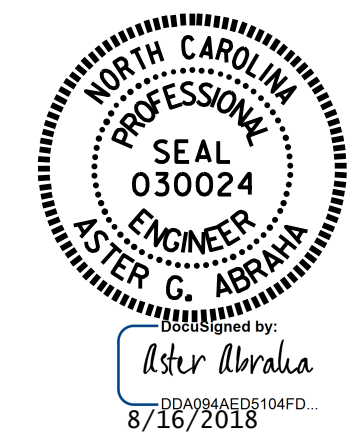


PILE DETAIL

FOR VERTICAL BAR PILE REINFORCING, SEE SHEET 1 OF 3

PROJECT NO. R-3825B
 JOHNSTON COUNTY
 STATIONS: 72+09.00 -L-
 82+15.00 -L-
 102+88.25 -L-

SHEET 5 OF 5



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SOUND BARRIER WALL
 DETAILS
 NW2A, NW2, AND NW3

ASSEMBLED BY :	S. WANCE	DATE :	07/2018
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NO.	REVISIONS			NO.	REVISIONS			SHEET NO.
	BY:	DATE:			BY:	DATE:		
1				3			NW-5	
2				4			TOTAL SHEETS 5	