

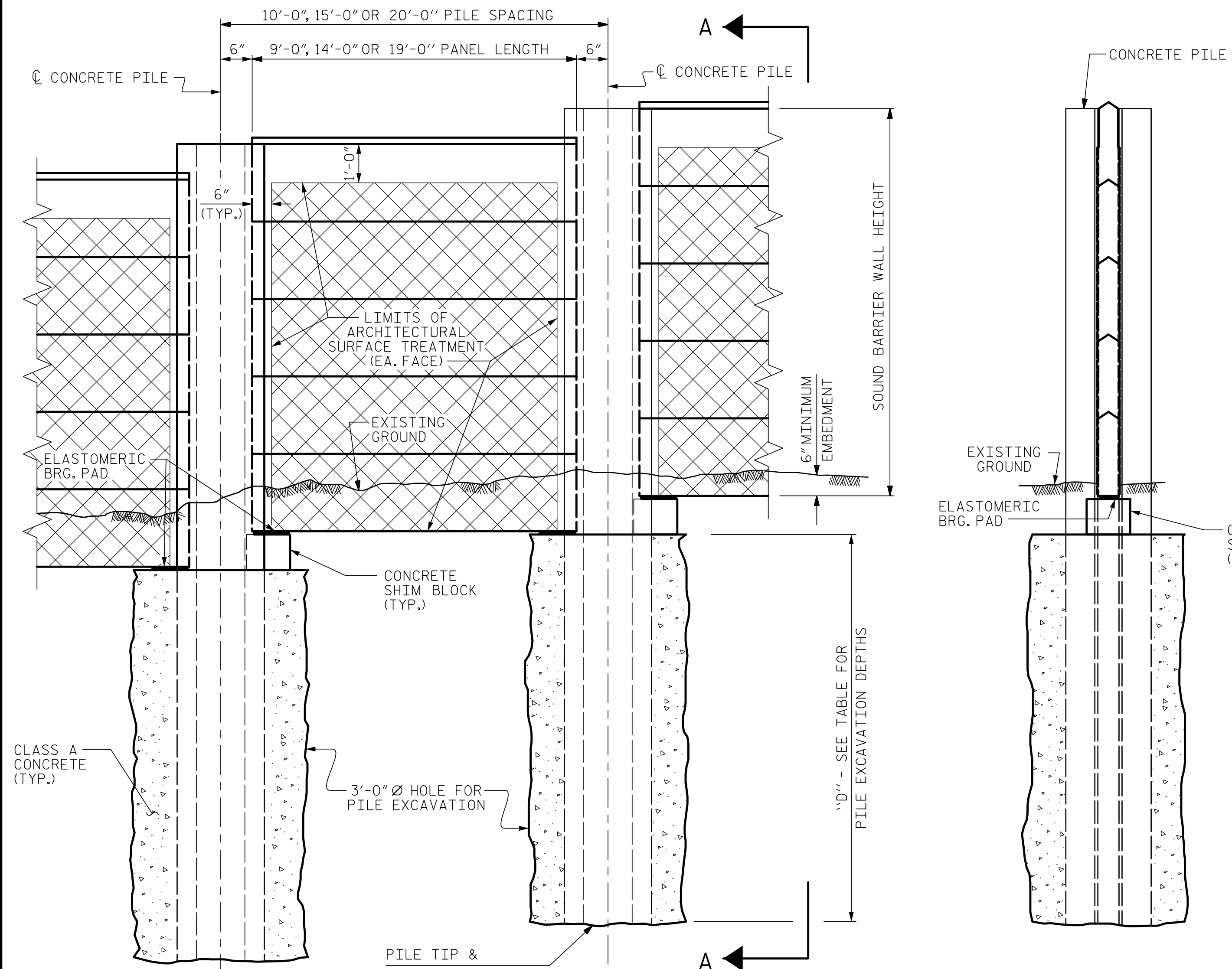
NOTES

- 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.
- 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.
- AT THE CONTRACTOR'S OPTION, CONTINUOUS FLIGHT AUGER PILES MAY BE USED IN LIEU OF PILE EXCAVATION. FOR CONTINUOUS FLIGHT AUGER PILES, SEE SPECIAL PROVISIONS.
- FOR ARCHITECTURAL SURFACE TREATMENT, SEE SOUND BARRIER WALL SPECIAL PROVISIONS.
- AT THE CONTRACTOR'S OPTION, USE 10'-0", 15'-0", OR 20'-0" PILE SPACINGS. STANDARD PRECAST PANELS MAY BE USED WITH THE 10'-0" AND 15'-0" PILE SPACING. FOR 20'-0" PILE SPACING, PANELS DESIGNED AND MANUFACTURED BY A THIRD PARTY VENDOR SHALL BE USED.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

| PILE EXCAVATION DEPTHS "D" | | | | |
|----------------------------|--------------|--|---------------|---------------|
| NOISE WALL #8 | | FROM : STA. 10+00 -NW8- TO : STA. 23+90 -NW8- | | |
| 3'-0" Ø HOLE | PILE SPACING | WALL HEIGHT | | |
| | | H ≤ 15' | 15' < H ≤ 20' | 20' < H ≤ 25' |
| | 10'-0" | 10 | 12 | N/A |
| | 15'-0" | 11 | 13 | N/A |
| 20'-0" | 12 | 15 | N/A | |

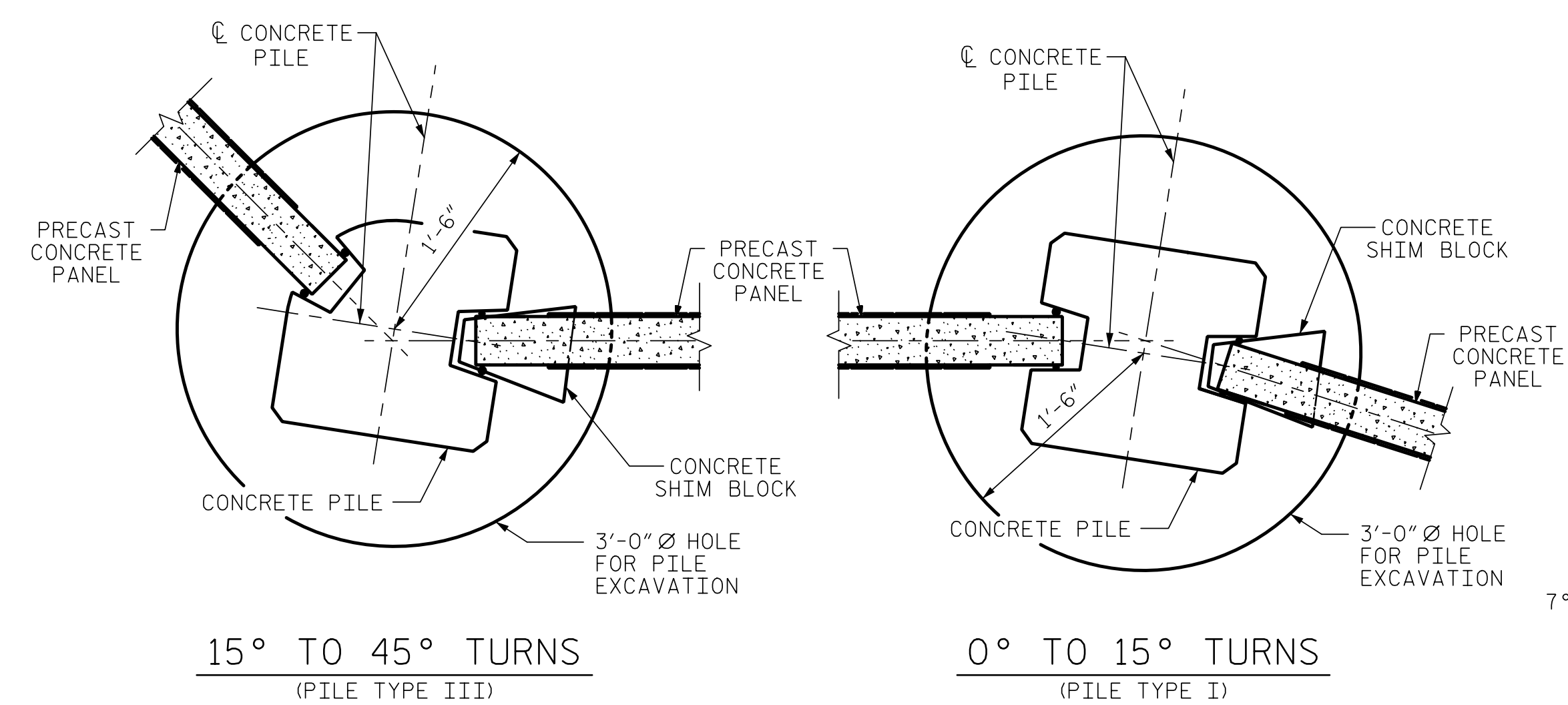
| BILL OF MATERIAL | |
|--|--------------|
| SOUND BARRIER WALL | 24,620 S.F. |
| ARCHITECTURAL SURFACE TREATMENT | 40,240 S.F. |
| QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY. | |
| ARCHITECTURAL SURFACE TREATMENT | |
| TEXTURE OPTION: | ASHLAR STONE |
| STAIN OPTION: | 36270 |

| 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. |
| | 20' < H ≤ 25' | 4 - #10 EA. FACE | #3 @ 1'-4" CTS. | | 15'-0" | H ≤ 20' | 3 - #9 SHORT FACE 4 - #9 LONG FACE |
| 15'-0" | H ≤ 20' | 4 - #9 EA. FACE | #3 @ 1'-4" CTS. | 15'-0" | | 20' < H ≤ 25' | 3 - #11 SHORT FACE 4 - #11 LONG FACE |
| | 20' < H ≤ 25' | 4 - #11 EA. FACE | #3 @ 1'-4" CTS. | | 20'-0" | H ≤ 20' | 3 - #10 SHORT FACE 4 - #10 LONG FACE |
| 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. |
| | 15'-0" | H ≤ 20' | 4 - #6 EA. FACE | | #3 @ 1'-4" CTS. | 15'-0" | H ≤ 20' |
| 20' < H ≤ 25' | | 4 - #7 EA. FACE | #3 @ 1'-4" CTS. | 20'-0" | 20' < H ≤ 25' | | 3 - #11 SHORT FACE 4 - #11 LONG FACE |
| 20'-0" | H ≤ 20' | 4 - #6 EA. FACE | #3 @ 1'-4" CTS. | | 20'-0" | H ≤ 20' | 3 - #10 SHORT FACE 4 - #10 LONG FACE |
| | 20' < H ≤ 25' | 4 - #8 EA. FACE | #3 @ 1'-4" CTS. | | | | |

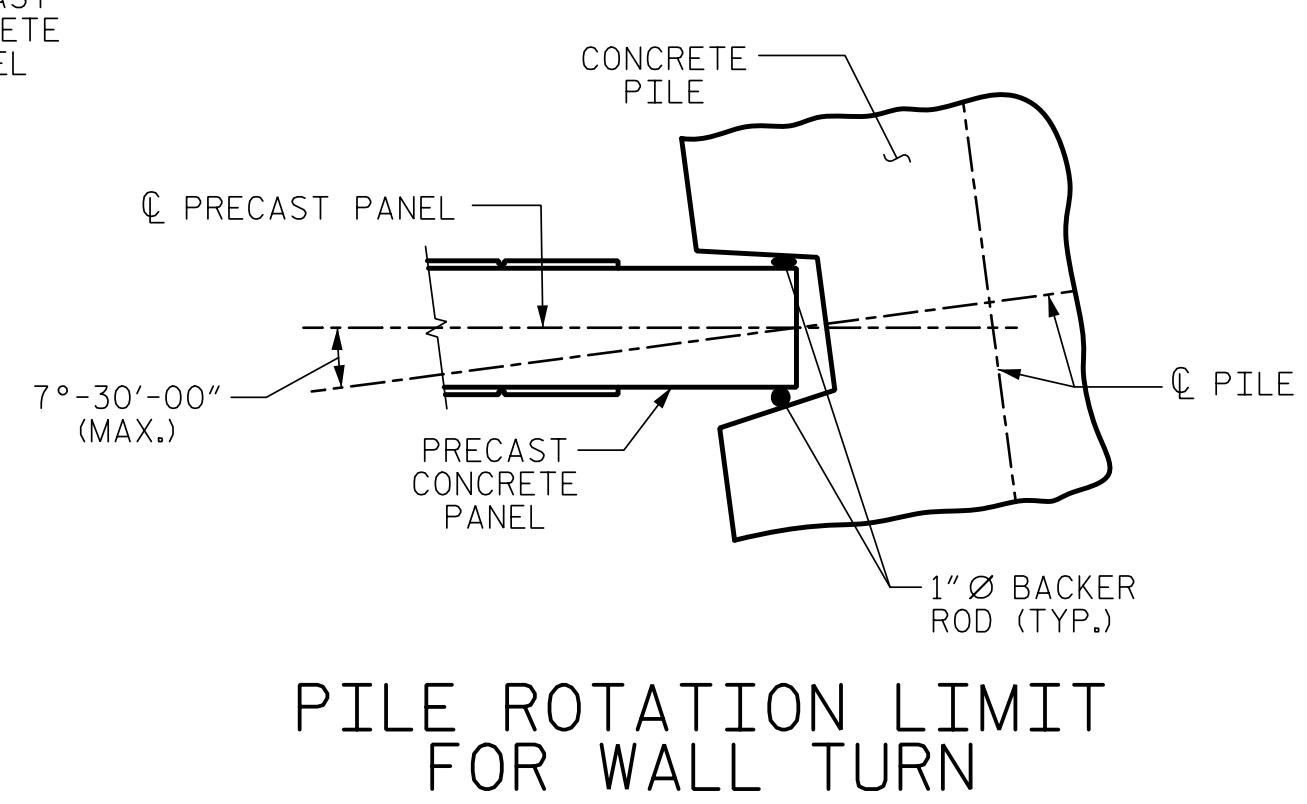


ELEVATION

SECTION A-A



TYPICAL WALL TURN DETAILS



PILE ROTATION LIMIT FOR WALL TURN

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

PROJECT NO. I-5987A
ROBESON COUNTY
 STATION: 10+00.00 -NW8-
 SHEET 2 OF 4

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 SOUND BARRIER WALL
 -NW8-

3/22/2022
 X:\NCDOT\I-5987A\Structures\Noise Wall\Final Plans\DCN\13C_SMU_SBW_2.dgn
 User:zsmith

5/10/2022 | 9:42 AM EDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
 706 HILLSBOROUGH STREET SUITE 200
 RALEIGH, NC 27603
 PH (919) 773-8887
 CORP. LICENSE NO.: C-0275

| REVISIONS | | | | | | SHEET NO. |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | W8-2 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 4 |

| | | | |
|----------------|----------|--------------|---------|
| ASSEMBLED BY : | ZCS | DATE : | 12/21 |
| CHECKED BY : | MGC | DATE : | 1/22 |
| 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 |