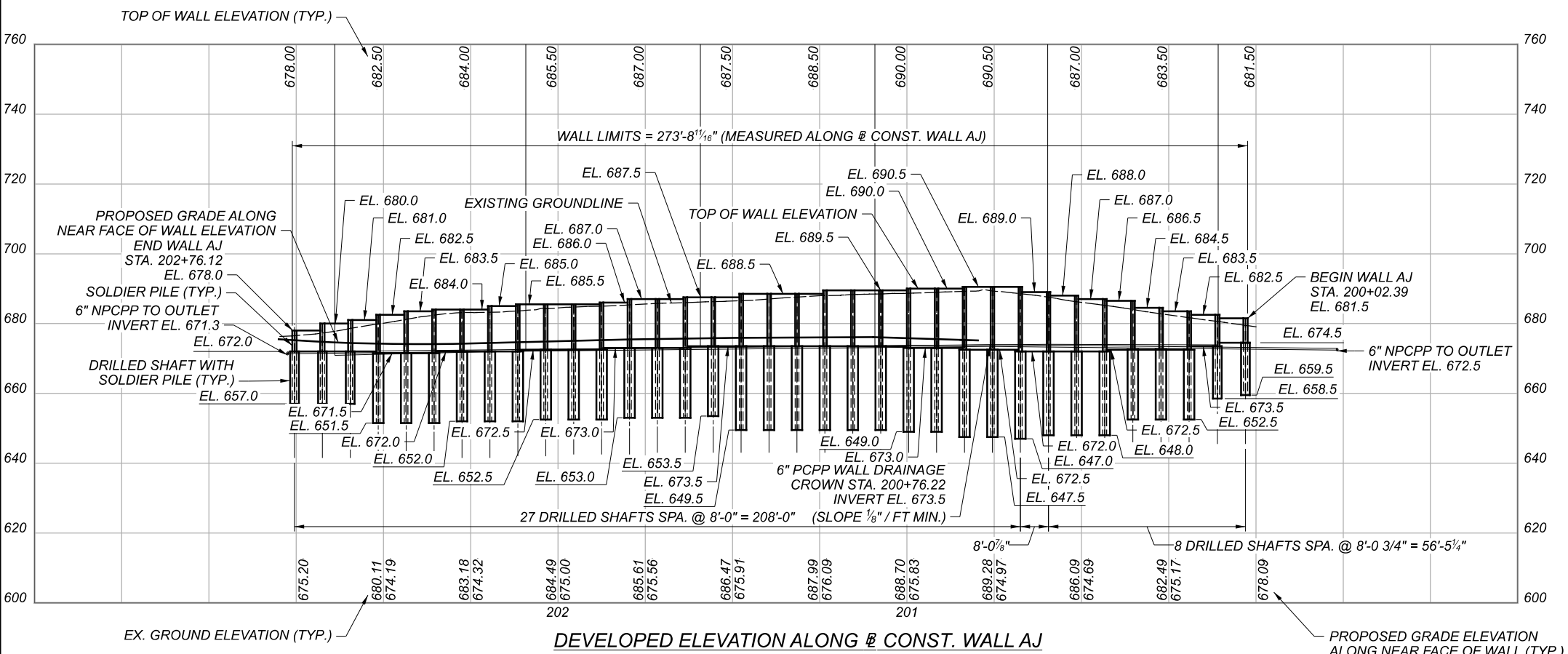


PLAN



DEVELOPED ELEVATION ALONG @ CONST. WALL AJ

**BENCHMARK DATA**

BM #59 STA. 110+66.50, ELEV. 660.15, OFFSET 184.89' RT.,  
 MAG NAIL SET AT NOSE OF CONCRETE DRAINAGE CHANNEL IN GRASS  
 MEDIAN BETWEEN EAST 14TH STREET AND COMMUNITY COLLEGE AVE.  
 BM #68 STA. 96+41.58 ELEV. 678.92, OFFSET 309.86' LT.,  
 CUT CROSS ON NORTHEAST BOLT OF TRAFFIC SIGNAL POLE AT  
 SOUTHWEST CORNER OF E. 14TH AND ORANGE AVENUE.  
 FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLAN  
 SHEET 3 / 2338

**NOTES**

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR WALL CROSS SECTIONS, SEE SHEETS 733 TO 735 / 2338
3. STATION AND WALL OFFSETS SHOWN AT FRONT FACE OF WALL.

**LEGEND**

- ⊕ HISTORIC BORING LOCATIONS
- ⊙ PROJECT BORING LOCATIONS
- CONST. = CONSTRUCTION
- EOP = EDGE OF PAVEMENT
- EOS = EDGE OF SHOULDER

WALL PLAN AND PROFILE  
 WALL AJ  
 ALONG SOUTH SIDE OF RAMP IJ3

SFN	N/A
DESIGN AGENCY	
DESIGNER/CHECKER	MKB / YC
REVIEWER	LPC 7/06/22
PROJECT ID	82382
SUBSET	1 / 8
SHEET	1074 / 2338

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS:

F-1.1 REVISED 7/19/2013  
DM-1.1 REVISED 7/17/2020

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800 DATED 5/02/2022

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS", 9TH EDITION, ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020 (DATED 01-21-22).

DESIGN DATA:

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (PRECAST LAGGING)  
CONCRETE CLASS QC5 - COMPRESSIVE STRENGTH 4.0 KSI (DRILLED SHAFTS)  
REINFORCING STEEL / WELDED WIRE REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI  
STEEL SOLDIER PILES - ASTM A572 - YIELD STRENGTH 50 KSI

SEQUENCE OF CONSTRUCTION

CONSTRUCT WALL AJ DURING MOT PHASE 9.

SEE MAINTENANCE OF TRAFFIC NOTES FOR ADDITIONAL PHASES AND INFORMATION.

ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN  
ITEM 524 - DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR SOLDIER PILE AND LAGGING WALLS. THE DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES INSTEAD OF REINFORCING STEEL CAGES. THE SOLDIER PILES EXTEND ABOVE THE TOP OF THE DRILLED SHAFT. FURNISH AND INSTALL THE DRILLED SHAFTS IN ACCORDANCE WITH C&MS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

EXCAVATE THE HOLE FOR THE DRILLED SHAFT WITHIN 1½ INCHES OF THE PLAN LOCATION. PLACE THE SOLDIER PILE WITHIN THE HOLE SO IT IS VERTICAL AND NOT INCLINED MORE THAN 1 INCH BETWEEN TOP TO BOTTOM. PLACE THE SOLDIER PILE SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF THE ROW OF DRILLED SHAFTS. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS QC 5 CONCRETE ACCORDING TO C&MS 511. PLACE CONCRETE TO THE ELEVATION FOR THE TOP OF THE DRILLED SHAFT. THE CONTRACTOR MAY PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF WATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE SOLDIER PILE IS ACCEPTABLE.

CHECK THE POSITION, THE VERTICAL ALIGNMENT AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY AFTER CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES. IF SHOWN ON THE PLANS, FILL THE HOLE ABOVE THE BOTTOM OF THE LAGGING TO THE EXISTING GROUND SURFACE WITH ITEM C&MS 613 LOW STRENGTH MORTAR BACKFILL (LSM).

REMOVE CONCRETE AND LSM AS NECESSARY FROM AROUND THE SOLDIER PILE IN ORDER TO PLACE THE LAGGING. PLACE LAGGING SO THAT THE SOLDIER PILE FLANGE OVERLAPS THE END OF THE LAGGING BY AT LEAST 3 INCHES AT BOTH ENDS OF THE LAGGING. WAIT AT LEAST 12 HOURS AFTER PLACING CONCRETE BEFORE PLACING LAGGING.

SEQUENCE OF INSTALLATION: THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48-HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THESE CRITERIA IS PERMISSIBLE.

PROTECTION OF UNATTENDED OPEN SHAFTS: CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN. NO DRILLED SHAFT EXCAVATION SHALL BE LEFT UN-POURED OVERNIGHT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS AND PLACE LAGGING. ANY TEMPORARY GRADING, EXCAVATION, EMBANKMENT, AGGREGATE, DRAINAGE, SHEETING, ETC. NEEDED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE DRILLED SHAFTS. THE COST OF ANY EXCAVATION AND SUBSEQUENT REPLACEMENT OF EMBANKMENT (PER ITEM 203 EMBANKMENT) SHALL BE INCLUDED IN THE VARIOUS BID ITEMS FOR THE DRILLED SHAFTS AND LAGGING, UNLESS SEPARATELY ITEMIZED. NO SEPARATE PAYMENT WILL BE MADE.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE DRILLED SHAFTS ABOVE BEDROCK, AS PER PLAN, ALONG THE AXIS OF THE DRILLED SHAFT FROM THE EXISTING GROUND SURFACE TO THE TOP OF BEDROCK, AS DETERMINED BY THE ENGINEER. THE DEPARTMENT WILL MEASURE DRILLED SHAFTS INTO BEDROCK, AS PER PLAN, ALONG THE AXIS OF THE DRILLED SHAFT FROM TOP OF BEDROCK TO THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER.

PAYMENT IS FULL COMPENSATION FOR CONSTRUCTING THE DRILLED SHAFTS, INCLUDING FURNISHING AND PLACING CONCRETE AND LSM, REMOVAL OF CONCRETE OR LSM FROM AROUND THE SOLDIER PILE IN ORDER TO PLACE LAGGING.

ITEM 610 - RETAINING WALL, MISC.: PRECAST CONCRETE LAGGING

THIS WORK CONSISTS OF FURNISHING AND PLACING PRECAST REINFORCED CONCRETE PANELS BETWEEN THE SOLDIER PILES TO FUNCTION AS LAGGING FOR THE RETAINING WALL. PROVIDE PRECAST CONCRETE LAGGING FROM A PRECAST CONCRETE MANUFACTURER CERTIFIED ACCORDING TO SUPPLEMENT 1073. PROVIDE CLASS QC1 CONCRETE ACCORDING TO C&MS 499. PROVIDE EPOXY COATED REINFORCING STEEL ACCORDING TO C&MS 709.00. IN LIEU OF EPOXY COATING, A CORROSION INHIBITING CONCRETE ADMIXTURE MAY BE USED AT THE SPECIFIED DOSAGE RATE. A QUALIFIED PRODUCT LIST OF CORROSION INHIBITING ADMIXTURES IS ON FILE AT THE LABORATORY. MANUFACTURERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR MAY AFFECT THE STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE MANUFACTURER'S CHOICE TO USE ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING ALL DESIGN REQUIREMENTS. DO NOT ALLOW THE DIMENSIONS OF THE LAGGING OR LOCATION OF THE REINFORCING STEEL TO VARY BY MORE THAN ¼-INCH. CAST THREADED INSERTS INTO THE TOP OF EACH PANEL FOR LIFTING AND PLACEMENT.

FINISH THE FACES OF THE PRECAST CONCRETE LAGGING PANELS THAT WILL NOT BE EXPOSED TO A UNIFORM SURFACE, FREE OF OPEN POCKETS OF AGGREGATE. \*FINISH THE EXPOSED FACE OF THE PANELS TO A SMOOTH SURFACE. SEAL THE FRONT (EXPOSED) FACE AND SIDES OF EACH CONCRETE PANEL WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY URETHANE). THE COLOR OF THE URETHANE SHALL BE SHERWIN WILLIAMS ALPACA 7022 OR APPROVED EQUAL.

PERMANENTLY MARK EACH PRECAST CONCRETE LAGGING PANEL TO INDICATE WHICH FACE WILL BE PLACED AGAINST THE SOIL. PLACE THE PANEL BETWEEN THE FLANGES OF THE SOLDIER PILES AND BEARING AGAINST THE FLANGES ON THE EXPOSED SIDE OF THE WALL SO THAT THE SOLDIER PILE FLANGE OVERLAPS THE END OF THE LAGGING BY AT LEAST ONE INCH MORE THAN THE CONCRETE COVER OVER THE REINFORCING STEEL AT BOTH ENDS OF THE LAGGING.

HANDLE, STORE, AND SHIP THE PRECAST CONCRETE LAGGING PANELS TO AVOID CHIPPING, CRACKING AND FRACTURING THE PANELS. SUPPORT THE PANELS ON FIRM BLOCKING WHILE STORING AND SHIPPING. DO NOT SHIP PANELS UNTIL CONCRETE HAS ATTAINED THE REQUIRED COMPRESSIVE STRENGTH. SUBMIT SHIPMENT DOCUMENTATION TO THE ENGINEER AS THE PANELS ARE DELIVERED TO THE PROJECT, INCLUDING THE PRECASTER'S RECORD OF FINAL INSPECTION, THE MEASUREMENTS AND TOLERANCES, STRENGTH, AND DIMENSIONS OF EACH PANEL, ALONG WITH THE TE-24 SHIPPING DOCUMENT.

INSPECT ALL PRECAST CONCRETE LAGGING PANELS AND REJECT PANELS HAVING ANY OF THE FOLLOWING:

1. DEFECTS THAT INDICATE IMPERFECT MOLDING.
2. DEFECTS THAT INDICATE HONEYCOMBED OR OPEN TEXTURE CONCRETE.
3. DEFECTS IN THE PHYSICAL CHARACTERISTICS OF THE CONCRETE, OR DAMAGE TO THE AESTHETIC SURFACE TREATMENTS.
4. CONCRETE CHIPS OR SPALLS THAT ARE LARGER THAN 4 INCHES WIDE OR 2 INCHES DEEP. REPAIR ALL CHIPS AND SPALLS THAT ARE SMALLER.
5. STAINED FORM FACES, DUE TO FORM OIL, CURING OR OTHER CONTAMINANTS.
6. SIGNS OF AGGREGATE SEGREGATION.
7. CRACKS WIDER THAN 0.01 INCH OR PENETRATING MORE THAN 1 INCH OR LONGER THAN 20 PERCENT OF THE LENGTH OF THE FACE CONTAINING THE CRACK.
8. PANELS THAT DO NOT MEET THE SPECIFIED DIMENSIONAL TOLERANCES.
9. UNUSABLE LIFTING INSERTS.
10. EXPOSED REINFORCING STEEL.
11. INSUFFICIENT CONCRETE COMPRESSIVE STRENGTH.

EITHER REPLACE DAMAGED PRECAST CONCRETE LAGGING PANELS OR DOCUMENT THE DAMAGE AND PROPOSE TO THE ENGINEER A REPAIR METHOD FOR THE DAMAGED PANEL. PROVIDE ACCEPTABLE REPLACEMENT PANELS FOR ANY THAT ARE REJECTED. WHEN INSTALLING THE PRECAST CONCRETE LAGGING PANELS, PLACE HARDWOOD WEDGES NEAR THE TOP AND BOTTOM ON EACH SIDE TO HOLD THE LAGGING PANELS AGAINST THE FRONT INSIDE FLANGE OF THE STEEL PILES.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIAL REQUIRED TO FABRICATE, TRANSPORT, AND INSTALL THE PRECAST REINFORCED CONCRETE PANELS SHALL BE MADE AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR ITEM 610 - RETAINING WALL, MISC.: PRECAST CONCRETE LAGGING.

ITEM 507 - STEEL PILES, MISC.: HP16x121, FURNISHED  
ITEM 507 - STEEL PILES, MISC.: W24x131, FURNISHED  
ITEM 507 - STEEL PILES, MISC.: W24x192, FURNISHED  
ITEM 507 - STEEL PILES, MISC.: W24x229, FURNISHED

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50 IN ACCORDANCE WITH C&MS 711.01. GALVANIZE SOLDIER PILES AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH C&MS 711.02. DO NOT FIELD WELD OR SPLICE STEEL SOLDIER PILES.

THE DEPARTMENT WILL MEASURE SOLDIER PILES ALONG THE AXIS OF THE SOLDIER PILE FROM THE TOP OF WALL ELEVATION TO THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR SOLDIER PILES AT THE CONTRACT UNIT PRICE PER FOOT FOR ITEM 507, STEEL PILES, MISC.: HP16x121, FURNISHED, ITEM 507, STEEL PILES, MISC.: W24x131, FURNISHED, AND ITEM 507, STEEL PILES, MISC.: W24x192, FURNISHED.

CUY-90-16.28 (CCG3A)

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WALL GENERAL NOTES (1 OF 2)  
WALL AJ  
ALONG SOUTH SIDE OF RAMP IJ3

SFN	N/A
DESIGN AGENCY	
<b>Michael Baker</b> INTERNATIONAL	
DESIGNER	MKB
CHECKER	YC
REVIEWER	LPC 7/06/22
PROJECT ID	82382
SUBSET	TOTAL
2	8
SHEET	TOTAL
1075	2338

**ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)**

APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO SUPPLEMENT 1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. PROVIDE A COATING THAT MEETS THE REQUIREMENTS LISTED BELOW. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

- A. THE MATERIAL SHALL BE A SINGLE COMPONENT, RTV (ROOM TEMPERATURE VULCANIZED), NEUTRAL MOISTURE CURE, PERMANENT (NON-SACRIFICIAL), TYPE III (WATER CLEANABLE) POLYSILOXANE (SILICONE) ANTI-GRAFFITI COATING, FREE OF ANY WAXES, EPOXIES, OR POLYURETHANE COMPONENTS.
- B. THE COATING SHALL BE A ONE COAT SYSTEM (NO PRIMER) CAPABLE OF BEING SPRAY APPLIED TO A DRY FILM THICKNESS OF 15 MILS (375 MICRONS) WITHOUT RUNS OR SAGS (MULTIPLE COAT APPLICATION ACCEPTABLE FOR BRUSH/ROLLER USAGE AND PRIMER USAGE ACCEPTABLE FOR SPECIALTY SUBSTRATES SUCH AS GALVANIZED METAL).
- C. THE COATING SHALL EMIT LESS THAN 300 G/L (2.5 POUNDS PER GALLON) OF VOLATILE ORGANIZE COMPOUNDS (EPA METHOD 24).
- D. THE COATING SHALL MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:
  - 1. CLEANABILITY LEVEL 1 (GRAFFITI COMPLETELY REMOVED WITH COLD WATER POWER WASH) AS PER ASTM D7089 WITH LOW PRESSURE (1200 PSI) COLD WATER WASH AFTER 2000 HOURS ACCELERATED UV-CONDENSATION EXPOSURE IN ACCORDANCE WITH ASTM D4587.
  - 2. GRAFFITI RESISTANCE LESS THAN 7.5 AS PER ASTM D6578 AFTER 2000 HOURS ACCELERATED UV-CONDENSATION EXPOSURE IN ACCORDANCE WITH ASTM 4578.
  - 3. NO SIGNS OF GRAFFITI OR GRAFFITI STAINING AND MUST BE INTACT AND EXHIBIT NO SIGNS OF STREAKING, CRACKING, PINHOLING, DISCOLORING, OR OTHER VISIBLE COATING DEGRADATION UPON CASUAL OBSERVATION WHEN TESTED IN ACCORDANCE WITH TXDOT TEX 890-B, TYPE III METHOD.
  - 4. BREATHABILITY OF 10 PERMS (+/- 3) PER ASTM D1653 USING "WET CUP METHOD".
  - 5. ELONGATION AT BREAK GREATER THAN 100% AS PER ASTM D412 (USING DIE "D").
  - 6. ADHESION RATING OF "8 - DIFFICULT TO REMOVE" AS PER ASTM D6677 (ADHESION BY KNIFE).

**ITEM 511- CONCRETE, MISC.: CLASS QCI CONCRETE FOR RAISED PANEL SEAT**

PROVIDE LEVEL CAST-IN-PLACE SEATS FOR LEVEL INSTALLATION OF THE BOTTOM ROW OF LAGGING. SEATS SHALL BE PLACED AS SHOWN IN THE PLANS ON SOUND CONCRETE FROM THE SOLDIER PILE DRILLED SHAFT.

THE CONTRACTOR IS PERMITTED TO USE A PRECAST ALTERNATIVE SUBJECT TO APPROVAL OF THE ENGINEER.

**PLAN ABBREVIATIONS:**

- ABUT. = ABUTMENT
- APPR. = APPROACH
- B = BOTTOM
- ⊕ = BASELINE
- B.F. = BACK FACE
- BM = BENCHMARK
- BOT. OR BTM. = BOTTOM
- Ⓢ = CENTERLINE
- C/C = CENTER TO CENTER
- C.I.P. = CAST-IN-PLACE
- C.J. = CONSTRUCTION JOINT
- CLR. = CLEAR
- CMS = CONSTRUCTION AND MATERIAL SPECIFICATIONS
- CONC. = CONCRETE
- CONST. = CONSTRUCTION
- DIA. = DIAMETER
- DIM. = DIMENSION
- DTBD = DISPOSITION TO BE DETERMINED
- DWG. = DRAWING
- EB = EASTBOUND
- E.F. = EACH FACE
- EL. OR ELEV. = ELEVATION
- EQ. = EQUAL
- EST. = ESTIMATED
- EX. = EXISTING
- F.A. = FORWARD ABUTMENT
- F/F = FACE TO FACE
- F.F. = FRONT FACE
- FT. = FOOT OR FEET
- FTG. = FOOTING
- FWD. = FORWARD
- IN. = INCH
- JT. = JOINT
- LT. = LEFT
- MAX. = MAXIMUM
- MIN. = MINIMUM
- MISC. = MISCELLANEOUS
- N = NORTH
- NB = NORTHBOUND
- NO. = NUMBER
- N.P.C.P.P. = NON-PERFORATED CORRUGATED PLASTIC PIPE
- OHWM = ORDINARY HIGH WATER MARK
- O/O = OUT TO OUT
- P.C.P.P. = PERFORATED CORRUGATED PLASTIC PIPE
- P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
- PROP. = PROPOSED
- PSF = POUNDS PER SQUARE FOOT
- R.A. = REAR ABUTMENT
- S = SOUTH
- SB = SOUTHBOUND
- SER. = SERIES
- SHLDR = SHOULDER
- SPA. = SPACE OR SPACES
- STA. = STATION
- STD. = STANDARD
- STR = STRAIGHT
- T = TOP
- T&B = TOP & BOTTOM
- TBR = TO BE REMOVED
- TBRBO = TO BE RELOCATED BY OTHERS
- TEMP. = TEMPORARY
- TYP. = TYPICAL
- U.N.O. = UNLESS NOTED OTHERWISE
- VAR. = VARIES
- WB = WESTBOUND
- WWR = WELDED WIRE REINFORCEMENT

**SECTION/DETAIL/VIEW CALLOUTS**



(SEE SECTION A ON SHEET 10)



(SECTION A CUT FROM SHEET 9)

CUY-90-16.28

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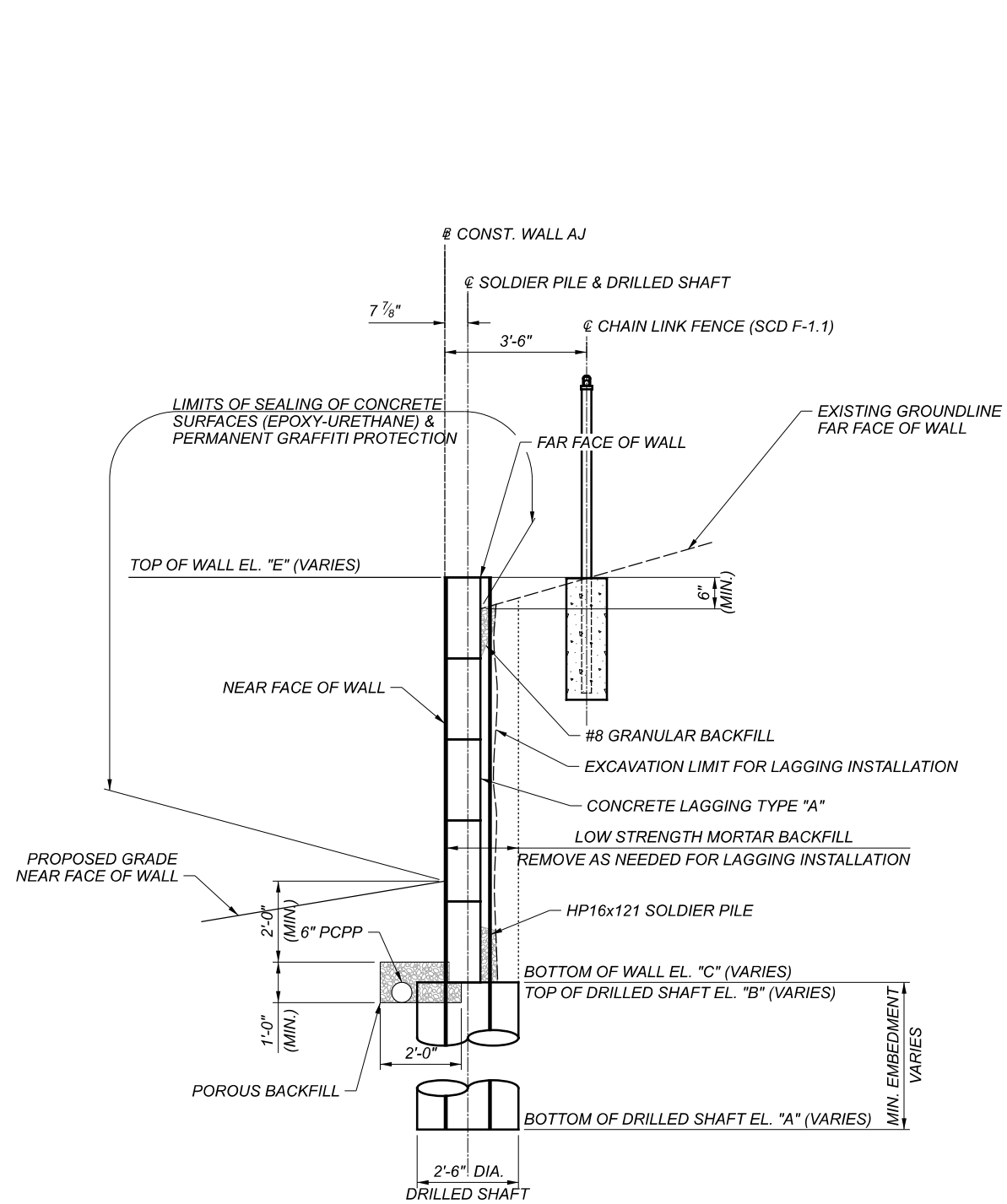
WALL GENERAL NOTES (2 OF 2)  
WALL AJ  
ALONG SOUTH SIDE OF RAMP IJ3

SFN	N/A
DESIGN AGENCY	
<b>Michael Baker INTERNATIONAL</b>	
DESIGNER	CHECKER
MKB	YC
REVIEWER	
LPC 7/06/22	
PROJECT ID	
82382	
SUBSET	TOTAL
3	8
SHEET	TOTAL
1076	2338

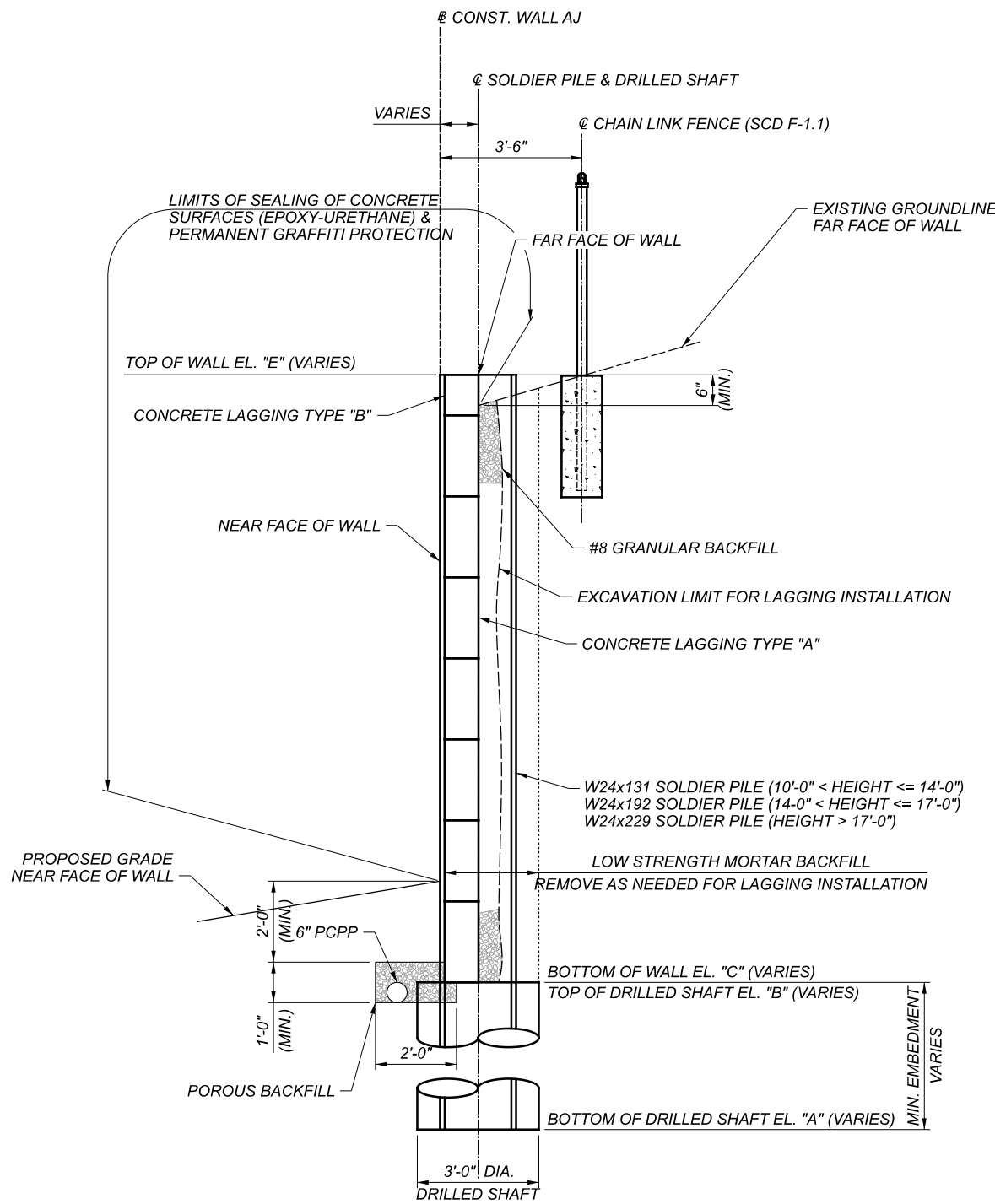
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507	00400	114	FT	STEEL PILES, MISC.: HP16x121, FURNISHED					
507	00400	527	FT	STEEL PILES, MISC.: W24x131, FURNISHED					
507	00400	439	FT	STEEL PILES, MISC.: W24x192, FURNISHED					
507	00400	130	FT	STEEL PILES, MISC.: W24x229, FURNISHED					
511	81300	11	EACH	CONCRETE, MISC.: CLASS QC1 CONCRETE FOR RAISED PANEL SEAT					P.3
512	10100	3,957	SF	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)					
512	10001	3,957	SF	SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)					
516	42000	386	EACH	ELASTOMERIC BEARING PAD, MISC.: 6"x10"x3/8" THICK					P.8
518	40000	270	FT	6" PERFORATED CORRUGATED PLASTIC PIPE					
518	40010	100	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS					
524	94603	75	FT	DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN					P.2
524	94703	659	FT	DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK, AS PER PLAN					P.2
607	20000	270	FT	FENCE, TYPE CL					
530	51010	2,975	SF	RETAINING WALL, MISC.: PRECAST CONCRETE LAGGING					P.2
611	99710	2	FT	PRECAST REINFORCED CONCRETE OUTLET					

ESTIMATED QUANTITIES  
 WALL AJ  
 ALONG SOUTH SIDE OF RAMP IJ3

SFN	N/A
DESIGN AGENCY	
<b>Michael Baker</b> INTERNATIONAL	
DESIGNER	CHECKER
MKB	YC
REVIEWER	
LPC	7/06/22
PROJECT ID	
82382	
SUBSET	TOTAL
4	8
SHEET	TOTAL
1077	2338

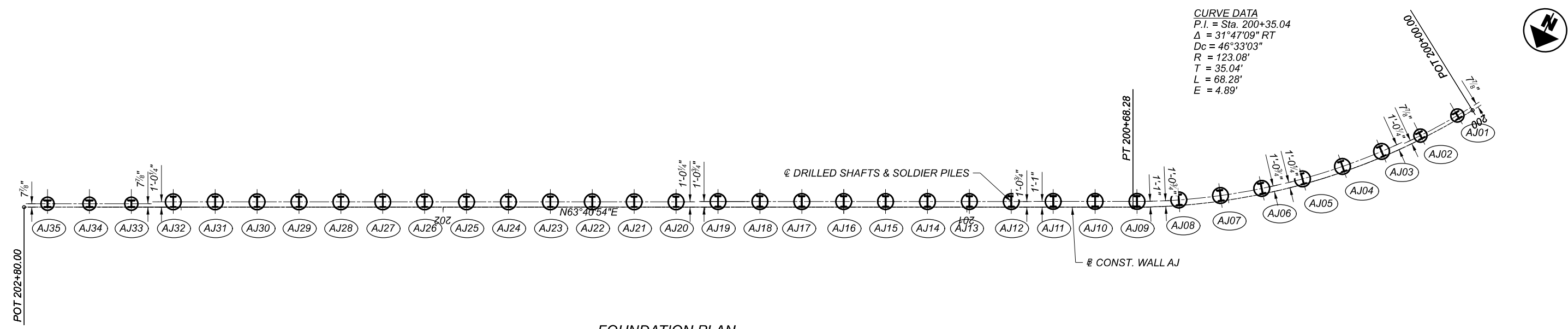


**SOLDIER PILE AND LAGGING WALL TYP. SECTION 1**  
 WALL HEIGHT LESS THAN OR EQUAL TO 10'-0"



**SOLDIER PILE AND LAGGING WALL TYP. SECTION 2**  
 WALL HEIGHT GREATER THAN 10'-0"

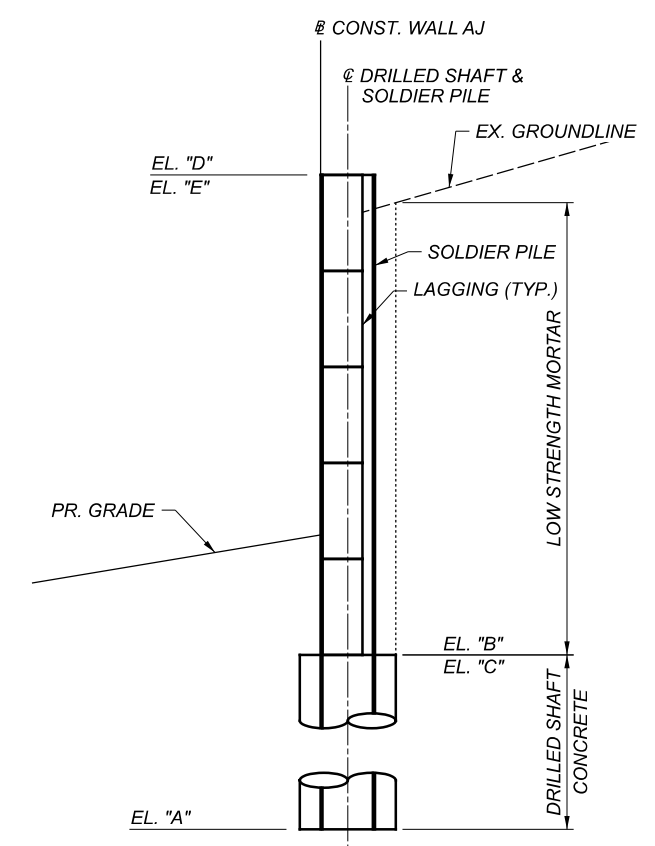
SFN	N/A
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	LPC 7/06/22
PROJECT ID	82382
SUBSET	5
TOTAL	8
SHEET	1078
TOTAL	2338



**CURVE DATA**  
 P.I. = Sta. 200+35.04  
 $\Delta = 31^{\circ}47'09''$  RT  
 $D_c = 46^{\circ}33'03''$   
 $R = 123.08'$   
 $T = 35.04'$   
 $L = 68.28'$   
 $E = 4.89'$

FOUNDATION PLAN

WALL AJ DRILLED SHAFT & SOLDIER PILE SCHEDULE													
DESIGNATION	STATION BASELINE WALL AJ	CENTERLINE OFFSET FROM BASELINE WALL AJ (FT.)	DIAMETER (IN.)	SHEAR STUDS (YES/NO)	BOTTOM OF DRILLED SHAFT EL. "A"	TOP OF SHAFT CONCRETE EL. "B"	CONCRETE SHAFT LENGTH (FT.)	BOTTOM OF WALL EL. "C"	TOP OF SOLDIER PILE EL. "D"	TOP OF WALL EL. "E"	ESTIMATED LENGTH OF SOLDIER PILE (FT.)	HEIGHT OF LAGGING (FT.)	SOLDIER PILE SIZE
AJ01	200+03.00	0.656 RT	30	NO	659.5	674.5	15.0	674.5	681.5	681.5	22.0	7.0	HP16x121
AJ02	200+11.06	0.656 RT	30	NO	658.5	673.5	15.0	673.5	682.5	682.5	24.0	9.0	HP16x121
AJ03	200+19.13	1.021 RT	36	NO	652.5	672.5	20.0	672.5	683.5	683.5	31.0	11.0	W24x131
AJ04	200+27.19	1.021 RT	36	NO	652.5	672.5	20.0	672.5	684.5	684.5	32.0	12.0	W24x131
AJ05	200+35.25	1.021 RT	36	NO	652.5	672.5	20.0	672.5	686.5	686.5	34.0	14.0	W24x131
AJ06	200+43.32	1.063 RT	36	NO	648.0	672.0	24.0	672.0	687.0	687.0	39.0	15.0	W24x192
AJ07	200+51.38	1.063 RT	36	NO	648.0	672.0	24.0	672.0	688.0	688.0	40.0	16.0	W24x192
AJ08	200+59.44	1.063 RT	36	NO	648.0	672.0	24.0	672.0	689.0	689.0	41.0	17.0	W24x192
AJ09	200+67.51	1.084 RT	36	NO	647.0	672.0	25.0	672.0	690.5	690.5	43.5	18.0	W24x229
AJ10	200+75.51	1.084 RT	36	NO	647.5	672.5	25.0	672.5	690.5	690.5	43.0	18.0	W24x229
AJ11	200+83.51	1.084 RT	36	NO	647.5	672.5	25.0	672.5	690.5	690.5	43.0	18.0	W24x229
AJ12	200+91.51	1.063 RT	36	NO	649.0	673.0	24.0	673.0	690.0	690.0	41.0	17.0	W24x192
AJ13	200+99.51	1.063 RT	36	NO	649.0	673.0	24.0	673.0	690.0	690.0	41.0	17.0	W24x192
AJ14	201+07.51	1.063 RT	36	NO	649.5	673.5	24.0	673.5	689.5	689.5	40.0	16.0	W24x192
AJ15	201+15.51	1.063 RT	36	NO	649.5	673.5	24.0	673.5	689.5	689.5	40.0	16.0	W24x192
AJ16	201+23.51	1.063 RT	36	NO	649.5	673.5	24.0	673.5	689.5	689.5	40.0	16.0	W24x192
AJ17	201+31.51	1.063 RT	36	NO	649.5	673.5	24.0	673.5	688.5	688.5	39.0	15.0	W24x192
AJ18	201+39.51	1.063 RT	36	NO	649.5	673.5	24.0	673.5	688.5	688.5	39.0	15.0	W24x192
AJ19	201+47.51	1.063 RT	36	NO	649.5	673.5	24.0	673.5	688.5	688.5	39.0	15.0	W24x192
AJ20	201+55.51	1.021 RT	36	NO	653.5	673.5	20.0	673.5	687.5	687.5	34.0	14.0	W24x131
AJ21	201+63.51	1.021 RT	36	NO	653.0	673.0	20.0	673.0	687.5	687.5	34.5	14.0	W24x131
AJ22	201+71.51	1.021 RT	36	NO	653.0	673.0	20.0	673.0	687.0	687.0	34.0	14.0	W24x131
AJ23	201+79.51	1.021 RT	36	NO	653.0	673.0	20.0	673.0	687.0	687.0	34.0	14.0	W24x131
AJ24	201+87.51	1.021 RT	36	NO	652.5	672.5	20.0	672.5	686.0	686.0	33.5	13.0	W24x131
AJ25	201+95.51	1.021 RT	36	NO	652.5	672.5	20.0	672.5	685.5	685.5	33.0	13.0	W24x131
AJ26	202+03.51	1.021 RT	36	NO	652.5	672.5	20.0	672.5	685.5	685.5	33.0	13.0	W24x131
AJ27	202+11.51	1.021 RT	36	NO	652.0	672.0	20.0	672.0	685.5	685.5	33.5	13.0	W24x131
AJ28	202+19.51	1.021 RT	36	NO	652.0	672.0	20.0	672.0	685.0	685.0	33.0	13.0	W24x131
AJ29	202+27.51	1.021 RT	36	NO	652.0	672.0	20.0	672.0	684.0	684.0	32.0	12.0	W24x131
AJ30	202+35.51	1.021 RT	36	NO	651.5	671.5	20.0	671.5	684.0	684.0	32.5	12.0	W24x131
AJ31	202+43.51	1.021 RT	36	NO	651.5	671.5	20.0	671.5	683.5	683.5	32.0	12.0	W24x131
AJ32	202+51.51	1.021 RT	36	NO	651.5	671.5	20.0	671.5	682.5	682.5	31.0	11.0	W24x131
AJ33	202+59.51	0.656 RT	30	NO	657.0	672.0	15.0	672.0	681.0	681.0	24.0	9.0	HP16x121
AJ34	202+67.51	0.656 RT	30	NO	657.0	672.0	15.0	672.0	680.0	680.0	23.0	8.0	HP16x121
AJ35	202+68.51	0.656 RT	30	NO	657.0	672.0	15.0	672.0	678.0	678.0	21.0	6.0	HP16x121



**DRILLED SHAFT & SOLDIER PILE SCHEMATIC**

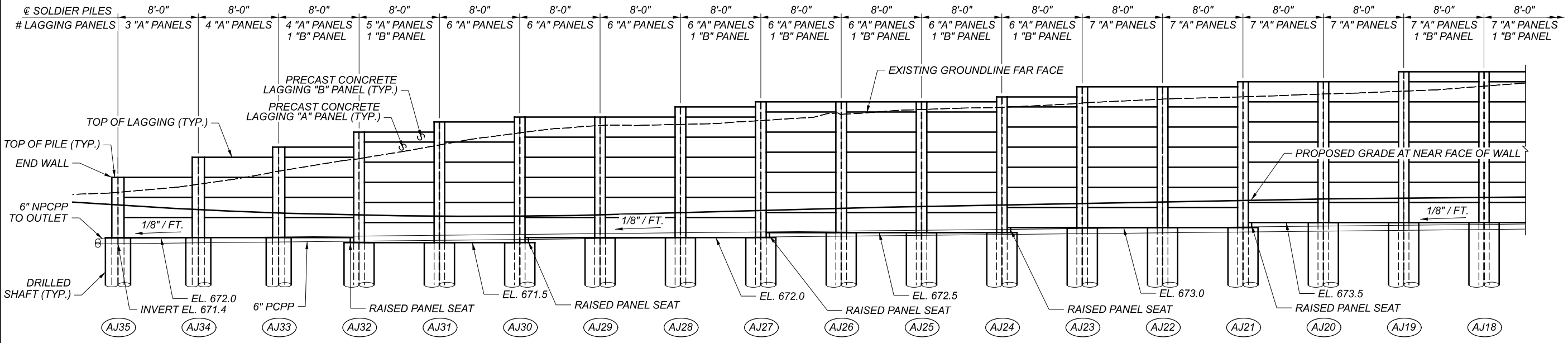
LEGEND:  
 # - DENOTES SOLDIER PILE NUMBER

FOUNDATION PLAN  
 WALL AJ  
 ALONG SOUTH SIDE OF RAMP IJ3

SFN	N/A
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER/CHECKER	MKB / YC
REVIEWER	LPC 7/06/22
PROJECT ID	82382
SUBSET	6 / 8
SHEET	1079 / 2338

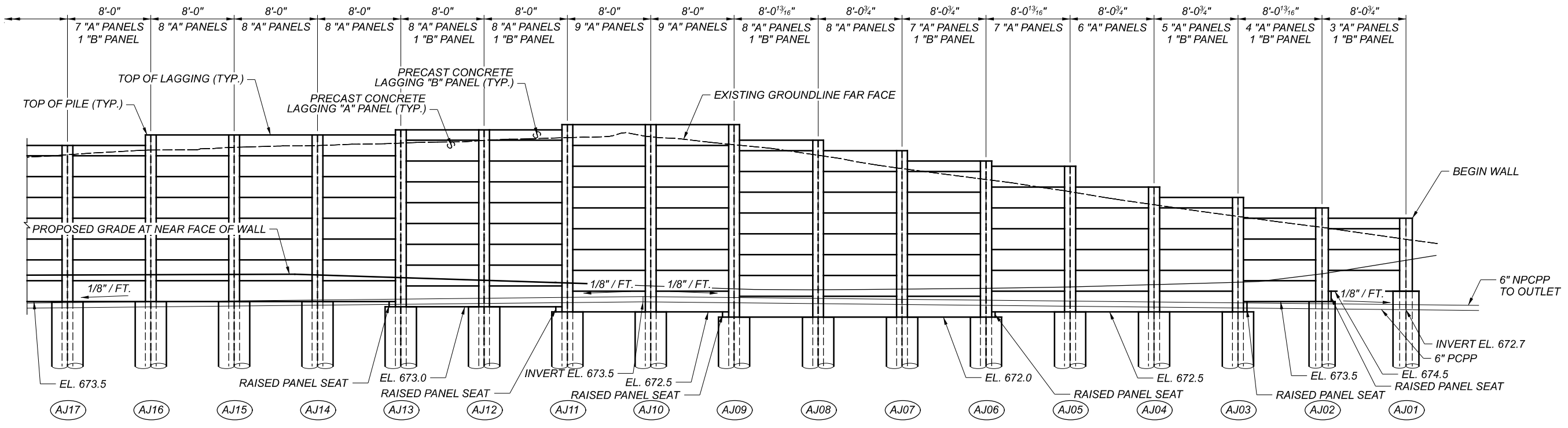
CUY-90-16.28 (CCG3A)

MODEL: Untitled Sheet PAPER SIZE: 17x11 (in.) DATE: 7/6/2022 TIME: 2:41:31 PM USER: Maltner  
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**ELEVATION**

(DIMENSIONS GIVEN ALONG @ CONST. WALL AJ)



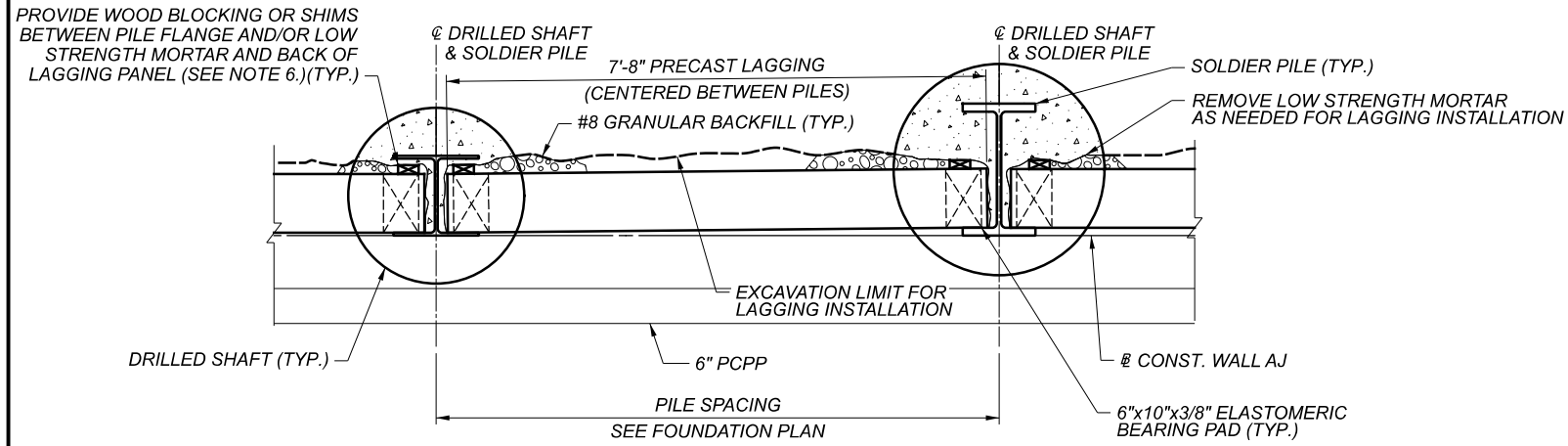
**ELEVATION**

(DIMENSIONS GIVEN ALONG @ CONST. WALL AJ)

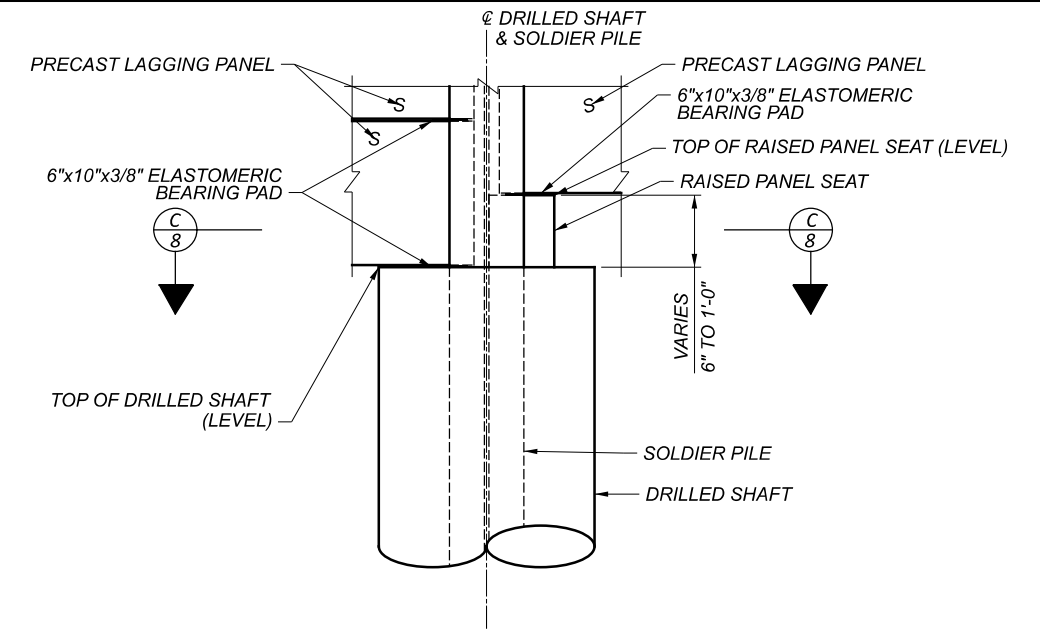
**LEGEND:**  
 # - DENOTES SOLDIER PILE NUMBER

**WALL ELEVATION**  
**WALL AJ**  
**ALONG SOUTH SIDE OF RAMP IJ3**

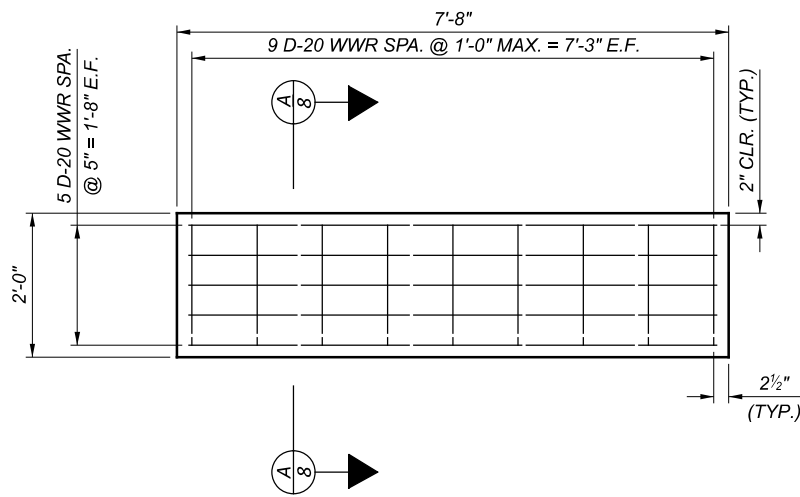
SFN	N/A
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	MKB
CHECKER	YC
REVIEWER	LPC
DATE	7/06/22
PROJECT ID	82382
SUBSET	7
TOTAL	8
SHEET	1080
TOTAL	2338



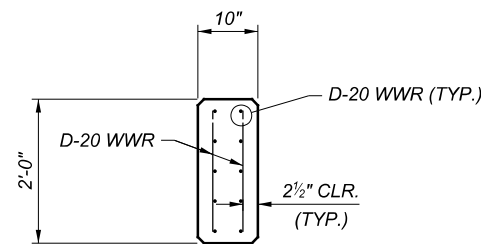
TYPICAL PLAN



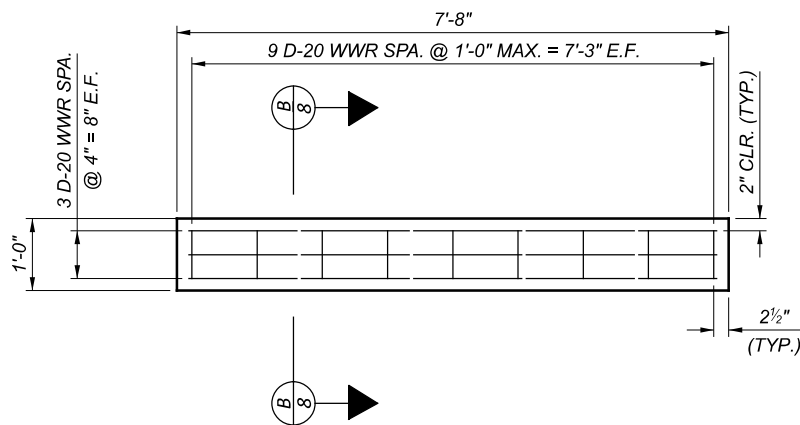
RAISED PANEL SEAT DETAIL  
 LOW STRENGTH MORTAR NOT SHOWN FOR CLARITY



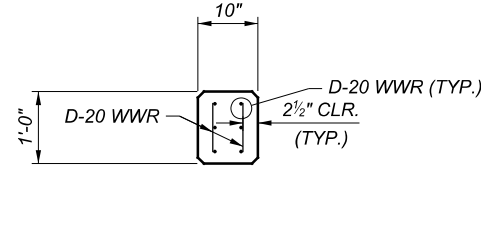
TYPE "A" PRECAST LAGGING ELEVATION



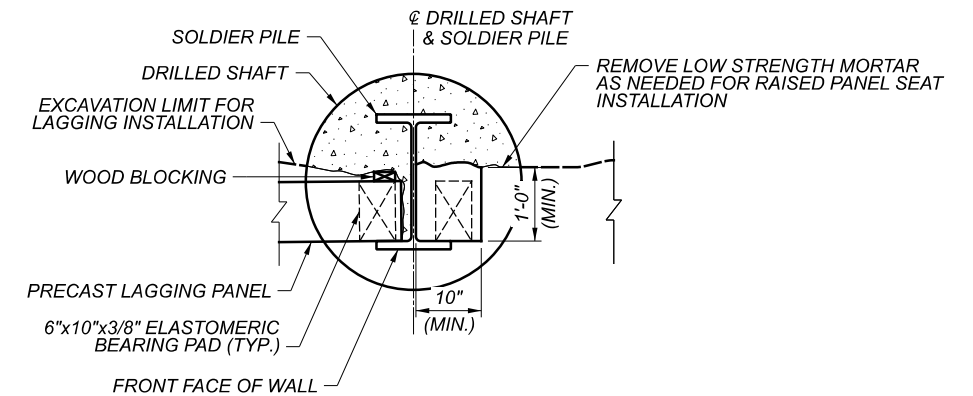
SECTION A



TYPE "B" PRECAST LAGGING ELEVATION



SECTION B



SECTION C

NOTES:

- ELASTOMERIC BEARING PADS SHALL BE PROVIDED AT ALL BOTTOM PANELS BETWEEN THE PANEL AND TOP OF CONCRETE DRILLED SHAFT AND/OR RAISED PANEL SEAT. THEY SHALL ALSO BE PROVIDED AT EACH END OF EACH PANEL BETWEEN PANELS.
- ELASTOMERIC BEARING PADS SHALL BE NEOPRENE ELASTOMERIC PADS HAVING DUROMETER HARDNESS OF 55 ± 5, HIGH DENSITY POLYETHYLENE PADS WITH A MINIMUM DENSITY OF 59 LB/FT<sup>3</sup> (0.946 G/CM<sup>3</sup>) OR EQUIVALENT. SUPPLY CERTIFIED TEST DATA TO THE ENGINEER UPON DELIVERY OF THE MATERIAL TO THE PROJECT. BEARING PADS WILL BE PAID FOR UNDER ITEM 516 ELASTOMERIC BEARING PAD, MISC.: 6"x10"x 3/8" THICK.
- REINFORCEMENT IN PRECAST LAGGING PANELS SHALL INCLUDED WITH ITEM 610 - RETAINING WALL MISC.: PRECAST CONCRETE LAGGING FOR PAYMENT.
- PROVIDE 1" x 1" CHAMFER AT EXPOSED TOP AND BOTTOM OF LAGGING PANELS.
- CENTER LAGGING PANELS BETWEEN PILE WEBS.
- CONTRACTOR HAS THE OPTION TO REMOVE LOW STRENGTH MORTAR AS NEEDED FOR LAGGING INSTALLATION. USE WOOD BLOCKING AND/OR SHIMS TO ENSURE LAGGING PANEL REMAINS FLUSH AGAINST BACK OF SOLDIER PILE FLANGE AT THE FRONT FACE OF WALL.

SFN	N/A
DESIGN AGENCY	
DESIGNER	MKB
CHECKER	YC
REVIEWER	LPC
DATE	7/06/22
PROJECT ID	82382
SUBSET	8
TOTAL	8
SHEET	1081
TOTAL	2338