

26 June 1998

MEMORANDUM THRU

TC
Area Engineer, New Orleans Area Office
Chief, Construction Division ATTN: Contr Adm Br



FOR Chief, Engineering Division

SUBJECT: Contract No. DACW29-97-C-0029, Lake Pontchartrain, Louisiana and Vicinity, High Level Plan, Hurricane Protection Project, Orleans Avenue Canal Flood Protection, Phase II-A Floodwall, Orleans Parish, Louisiana, Narrative Completion Report

1. The subject contract dated 11 March 1997 was awarded to Maharrey-Houston Construction Company, P. O. Box 70250, Memphis, Tennessee 38107-0250. The Notice to Proceed was issued 8 April 1997, with construction to commence no later than 18 April 1997. The completion date was set for 13 May 1998 with the contract amount being \$2,885,733.99.
2. The contract provided for the construction of approximately 8,352 linear feet of steel reinforced concrete I-wall. In conjunction with the floodwall, 126,001 square feet of steel sheet piling was driven. The contract also required degrading the existing levee, backfilling next to the I-wall, and fertilizing, seeding, and mulching all disturbed areas.
3. There was one subcontractor on the project, Louisiana Erosion Control, 35952 Highway 75, Plaquemines, Louisiana 70764. This subcontractor was responsible for fertilizing, seeding, and mulching.
4. The preconstruction conference was held 8 April 1997 at the New Orleans Area Office. The on-site prework coordination and safety meetings were held 22 April 1997.
5. The contract had 6 major construction phases:
 - a. clearing and grubbing
 - b. structural excavation and backfill
 - c. degrading of the existing levee
 - d. piling, steel sheet, type PZ-22 and PSA-23
 - e. reinforced concrete floodwalls
 - f. fertilizing, seeding, and mulching
6. The contractor began mobilizing equipment to the site 22 April 1997. The office trailer were brought to the site 30 April 1997, and the contractor began constructing the equipment staging areas and safety fence at this time.
7. The first phase of work was clearing and grubbing. The preparatory meeting for this phase was held 20 May 1997 with work commencing the same day. A John Deere 450 dozer and Caterpillar 416 backhoe were used to remove all vegetation and debris from the work areas. This phase of work was ongoing throughout the contract period and was finally completed 22 May 1998.
8. The second phase of work was driving steel sheet piles. The preparatory meeting for this phase was held 28 May 1997 with work commencing 29 May 1997. This phase of work consisted of driving 126,001 square feet of PZ-22 and PSA-23 steel sheet piling. A John Deere 790D backhoe equipped with an approved vibratory hammer was used to drive the piles to the prescribed elevations. All piles were driven plumb and interlocked with the adjoining sheets. Cathodic protection was provided on the sheets by welding #6 rebar to the top of the piles except at the monolith joints where approved bonding cables were installed. This phase of work was completed 12 December 1997.

JUN 30 1998

9. The third phase of work was degrading of the existing levees. The preparatory meeting for this phase was held 20 May 1997 with work commencing 12 June 1997. The levee was degraded as specified. Interim flood protection per the contract drawings was left in place until construction in the area was completed. Degrading of the existing levees was ongoing throughout the contract period and was finally completed 22 May 1998.

10. The fourth phase of work was reinforced concrete floodwall. The preparatory meeting for this phase was held 10 June 1997 with work commencing 17 June 1997. This phase of work consisted of constructing 8,350 linear feet of steel reinforced concrete I-wall. Formwork was a combination of wood and steel with an inner fractured fin molded rubber lining. The forms were checked for proper line and grade prior to concrete placement. Prior to and during each concrete placement, the QC manager with QA representative present performed slump and air tests on the concrete to assure compliance with the contract specifications. Four compression test cylinders were molded for each pour - three were delivered to the Corps of Engineers New Orleans District for testing, and one was sent for testing at an independent lab by the contractor. Once cured, the I-wall was painted with a base coat of thorseal compound followed by two coats of thorseen paint in the color prescribed in the contract specifications. This phase of work was completed 6 May 1998.

11. The fifth phase of work was structural excavation and backfill. The preparatory meeting for this phase was held 19 August 1997 with work commencing 26 August 1997. This phase of work consisted of excavation for sheet pile driving and I-wall construction as well as backfilling against the wall after the proper curing period. Backfill was placed in lifts not greater than 8 inches, and each lift was compacted to 95% compaction. A John Deere 450 dozer and 790 excavator were used in this operation. Structural excavation and backfill was ongoing throughout the project and was finally completed 22 May 1998.

12. Fertilizing, seeding, and mulching was the final phase of work. The preparatory meeting for this phase was held 28 October 1997 with work commencing the same day. This phase consisted of fertilizing, seeding, and mulching all disturbed areas with a fertilizer containing a minimum of 60 pounds nitrogen, 60 pounds phosphorus, and 60 pounds potash per acre. Seed was in the quantities and of the type prescribed for the time of year that the seeding took place. Fertilizing, seeding, and mulching was ongoing throughout the project and was finally completed 21 May 1998.

13. Both the contractor and subcontractor were cooperative in performing their respective work. The contractor's Accident Prevention Program was adequately enforced on the project, and there were no lost time accidents.

14. The personnel working on the project were skilled and performed their duties in a professional manner. The equipment used at the job site was inspected, found to be in good condition, and was maintained throughout the project.

15. All contractor surveying was performed by the contractor's own survey party. All surveys were plotted and submitted to the government with the survey books. The surveys assured contract compliance.

16. Included herewith is a comparison of the initial contract quantities and actual contract quantities. A copy of "As-Built" drawings is also attached.

<u>Item</u>	<u>Description</u>	<u>Contract Qty</u>	<u>Unit Price</u>	<u>Actual Qty</u>	<u>Actual Amt</u>
0001	Mobilization and Demobilization	Lump Sum			48,000.00
0002	Clearing and Grubbing	Lump Sum			41,210.43
0003	Structural Excavation and Backfill	Lump Sum			46,000.00

<u>Item</u>	<u>Description</u>	<u>Contract Qty</u>	<u>Unit Price</u>	<u>Actual Qty</u>	<u>Actual Amt</u>
0004	Degrading Existing Levee	12,430 CY	3.00	12,430 CY	37,290.00
0005	Erosion Control	310 LF	4.00	310 LF	1,240.00
0006	Piling, Steel Sheet Types PZ-22 and PSA-23				
0006A	Materials	125,480 SF	6.58	126,001 SF	829,086.58
0006B	Installation	125,480 SF	4.42	126,001 SF	556,924.42
0006C	Cut Offs - Cut	EA	10.00	4	40.00
0006D	Cut Offs - Material	SF	7.70	45.5	350.35
0007	Reinforced Concrete Floodwalls	Lump Sum			1,312,190.00
0008	Fertilizing, Seeding, and Mulching	Lump Sum			22,000.00
0009	Remove Ramp	Lump Sum			6,500.00

17. There were 11 modifications to the contract. A summary of the four work related contract modifications follows:

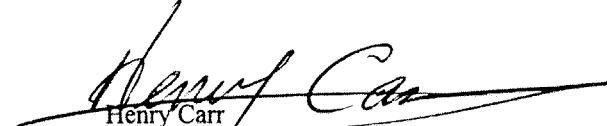
a. A00001, CIN-02, dated 8 July 1997 to increase the limits of levee degrading. This modification gave the contractor permission to advance an additional 800 feet, with Contracting Officer approval, provided that the existing levee is not degraded beyond the limit of the floodside crown.

b. A00002, CIN-03, dated 22 December 1997 to change the geometry of the special I-wall monolith at the 30" water line. This modification impacted the Steel Sheet Piling and Reinforced Concrete Floodwall payment items.

c. A00004, CIN-04, dated 27 March 1998 to remove and dispose of dead trees within the right-of-way. This modification impacted the Clearing and Grubbing payment item.

d. A00005, CIN-05, dated 4 June 1998 to remove the earthen ramp at station 20+40. This modification added Item No. 0009 to the Bid Schedule.

18. The contract was substantially complete 26 May 1998. A final inspection will be scheduled in early July 1998.


 Henry Carr
 Construction Representative
 New Orleans Area Office

CF:

Proj Engr (Lauto)

Const Rep (Carr)

Ofc Engr w/As-Built

CEMVN-CD-Q ~~w/As-Built~~

CEMVN-CT

CEMVN-ED-C

CEMVN-CD-B

CEMVN-CD-CS

CEMVN-PP

File

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CEMVN-CD-Q ~~w/As-Built~~

CEMVN-CT

CEMVN-ED-C

CEMVN-CD-B

CEMVN-CD-CS

CEMVN-PP

File

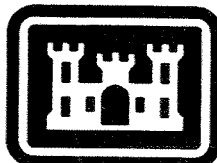
PLANS FOR
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
HIGH LEVEL PLAN
ORLEANS PARISH, LA.

PARALLEL PROTECTION
PHASE II-A
(EAST SIDE) PROTECTION

1996

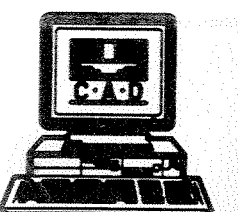
AS BUILT

THE SOLICITATION NUMBER ON THESE DRAWINGS IS
CHANGED FROM DACW29-96-B-0096 TO DACW29-97-B-0026



US Army Corps
of Engineers
New Orleans District

DRAWINGS IN THIS FOLIO
HAVE BEEN REDUCED ONE
HALF THE ORIGINAL SCALE



Safety is a Part
of Your Contract

GENERAL NOTES:

1. AZIMUTHS SHOWN ARE MEASURED CLOCKWISE FROM THE SOUTH.
2. ELEVATIONS ARE IN FEET AND REFER TO NATIONAL GEODETIC VERTICAL DATUM (N.G.V.D.).
3. DIMENSIONS AND/OR ELEVATIONS MARKED THUS (±) ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS IN THE FIELD.
4. DIMENSIONS AND/OR ELEVATIONS MARKED THUS (N.T.S.) ARE NOT SHOWN TO SCALE.
5. DRAWINGS ARE GENERALLY TO SCALE, BUT SHOULD NOT BE SCALED. N.T.S. IS SHOWN ONLY WHERE DRAWING IS OBVIOUSLY OUT OF SCALE.
6. BENCH MARKS AND BASE LINES HAVE BEEN ESTABLISHED AT THE SITE BY THE GOVERNMENT.
7. FOR BORING LOGS, SEE DWG. 27 THRU 31

STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL BE ASTM A36, UNLESS OTHERWISE NOTED.
2. TO PREVENT CORROSION BY MOISTURE BETWEEN STEEL SURFACES IN CONTACT, ALL SUCH CONTACTS SHALL BE SEALED WATERTIGHT BY RUNNING A CONTINUOUS 1/8" FILLET WELD ALONG ALL EDGES OF THE CONTACT, UNLESS OTHERWISE NOTED.
3. ALL WELDING SHALL BE ELECTRIC WELDING. WORKMANSHIP AND TECHNIQUE, WHERE APPLICABLE, SHALL CONFORM TO THE AMERICAN WELDING SOCIETY (SEE SPECS.) STRUCTURAL WELDING CODE.
4. WELDING SYMBOLS SHOWN ARE THOSE ADOPTED BY THE AMERICAN WELDING SOCIETY AND INDICATE ONLY SIZE AND TYPE OF WELDS REQUIRED. DETAILED INFORMATION SHALL BE SHOWN ON THE SHOP DRAWINGS AND SUBMITTED BY THE CONTRACTOR FOR APPROVAL.
5. DIMENSIONS SHOWN OR CALLED FOR ARE THE FINAL DIMENSIONS; ALLOWANCES MUST BE MADE FOR MACHINING.
6. ITEMS MARKED C.R.S. SHALL BE CORROSION RESISTANT STEEL (STAINLESS STEEL), SEE SPECIFICATIONS.

CONCRETE NOTES:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F_c) OF 3000 PSI AT 28 DAYS, 90 DAYS IF POZZOLAN IS USED, UNLESS OTHERWISE NOTED.
2. STABILIZATION SLAB CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F_c) OF 2500 PSI AT 28 DAYS, 90 DAYS IF POZZOLAN IS USED.
3. REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH (F_y) OF 60,000 PSI.
4. REINFORCING SHALL BE SPACED TO MISS RECESSES FOR GATE LATCHES.
5. CONSTRUCTION JOINTS SHALL BE PROVIDED WHERE SHOWN. WHERE NOT SHOWN, CONSTRUCTION JOINTS SHALL BE PLACED AT LOCATIONS LEAST LIKELY TO IMPAIR THE INTEGRITY OF THE CONCRETE STRUCTURE. CONSTRUCTION JOINT LOCATIONS SHALL BE APPROVED BY THE CONTRACTING OFFICER.
6. UNLESS OTHERWISE NOTED, PROVIDE 3/4" CHAMFER AT ALL EXPOSED JOINTS, EDGES, EXTERNAL CORNERS, AND VERTICAL EXPANSION JOINTS.
7. ALL PRIMARY REINFORCEMENT SHALL HAVE A MINIMUM COVER OF 3" UNLESS OTHERWISE NOTED. THE COVER FOR SECONDARY REINFORCEMENT MAY BE REDUCED FROM THE ABOVE BY THE DIAMETER OF THE BAR.
8. ALL BENDS OF REINFORCEMENT AND ALL BAR SPACERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH SP-66, AMERICAN CONCRETE INSTITUTE DETAILING MANUAL - 1980.
9. REINFORCING BAR DESIGNATION NUMBERS CONFORM TO THE NUMBERING SYSTEM OF THE CONCRETE REINFORCING STEEL INSTITUTE.
10. REINFORCING BARS SHALL BE CONTINUOUS AT ALL CORNERS UNLESS OTHERWISE NOTED.
11. REINFORCEMENT, WHERE NECESSARY TO AVOID OPENINGS, PIPES, EMBEDDED ITEMS AND OTHER OBSTRUCTIONS, SHALL BE BENT OR SHIFTED AS DIRECTED BY THE CONTRACTING OFFICER.
12. THE EMBEDMENT AND SPLICE TABLE SHALL BE USED IN DETERMINING LAP SPLICES AND EMBEDMENT LENGTHS WHERE LENGTHS ARE NOT OTHERWISE INDICATED. SPLICE LENGTHS SHALL BE BASED ON THE SMALLER BAR BEING LAPPED. THE CONTRACTOR WILL BE ALLOWED TO MAKE SPLICES IN ADDITION TO THOSE INDICATED IN THE DRAWINGS, WHERE ESSENTIAL TO CONSTRUCTIBILITY, SUBJECT TO APPROVAL BY THE CONTRACTING OFFICER. SPLICES OTHER THAN THOSE SHOWN ON THE DRAWINGS AND OTHER THAN ANY ADDITIONAL SPLICES REQUIRED BY THE CONTRACTING OFFICER, WILL BE AT THE CONTRACTOR'S EXPENSE.
13. ALL EXTERIOR FORMED SURFACES NOT COVERED BY BACKFILL SHALL BE CLASS "A" FINISH AND SURFACES COVERED BY BACKFILL SHALL BE CLASS "D" FINISH, UNLESS OTHERWISE NOTED.

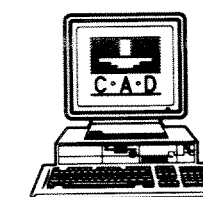
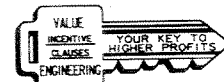
BAR SIZE	BASIC TABLE				ALTERNATE TABLE			
	MINIMUM EMBEDMENT LENGTH, INCHES		MINIMUM LAP LENGTH INCHES		MINIMUM EMBEDMENT LENGTH, INCHES		MINIMUM LAP LENGTH INCHES	
	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER
3	16	12	21	16	16	12	21	16
4	21	16	28	21	21	16	28	21
5	27	21	35	27	27	21	35	27
6	32	25	42	32	32	25	42	32
7	37	29	49	37	37	29	49	37
8	45	35	59	45	43	33	56	43
9	57	44	74	57	48	37	63	48
10	72	56	94	72	58	45	75	58
11	89	68	116	89	71	55	92	71

NOTES:

1. USE THE BASIC TABLE IF ALL OF THE FOLLOWING CONDITIONS ARE MET:
 - A) CENTER TO CENTER BAR SPACING LATERALLY IS AT LEAST 4 BAR DIAMETERS
 - B) CONCRETE COVER IS AT LEAST 2 BAR DIAMETERS, AND
 - C) EDGE DISTANCE TO THE FIRST BAR IN A LAYER IS AT LEAST 2 BAR DIAMETERS.
2. THE ALTERNATE TABLE MAY BE USED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:
 - A) CENTER TO CENTER BAR SPACING LATERALLY IS AT LEAST 6 BAR DIAMETERS
 - B) CONCRETE COVER IS AT LEAST 2 BAR DIAMETERS, AND
 - C) EDGE DISTANCE TO THE FIRST BAR IN A LAYER IS AT LEAST 2.5 BAR DIAMETERS.
3. IF CONCRETE COVER OR EDGE DISTANCE IS LESS THAN 2 BAR DIAMETERS OR THE CENTER TO CENTER BAR SPACING LATERALLY IS LESS THAN 4 DIAMETERS, SEE ACI 318 FOR APPROPRIATE GUIDANCE.
4. TOP BARS ARE HORIZONTAL BARS AND BARS INCLINED LESS THAN 45 DEGREES WITH RESPECT TO A HORIZONTAL PLANE WHICH ARE PLACED SUCH THAT MORE THAN 12 INCHES OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.
5. THE TABLES SHOWN ABOVE ARE FOR NORMAL WEIGHT CONCRETE AND UNCOATED REINFORCING BARS. IF LIGHTWEIGHT CONCRETE OR EPOXY COATED BARS ARE USED, SEE ACI 318 FOR ADDITIONAL CONSIDERATIONS.

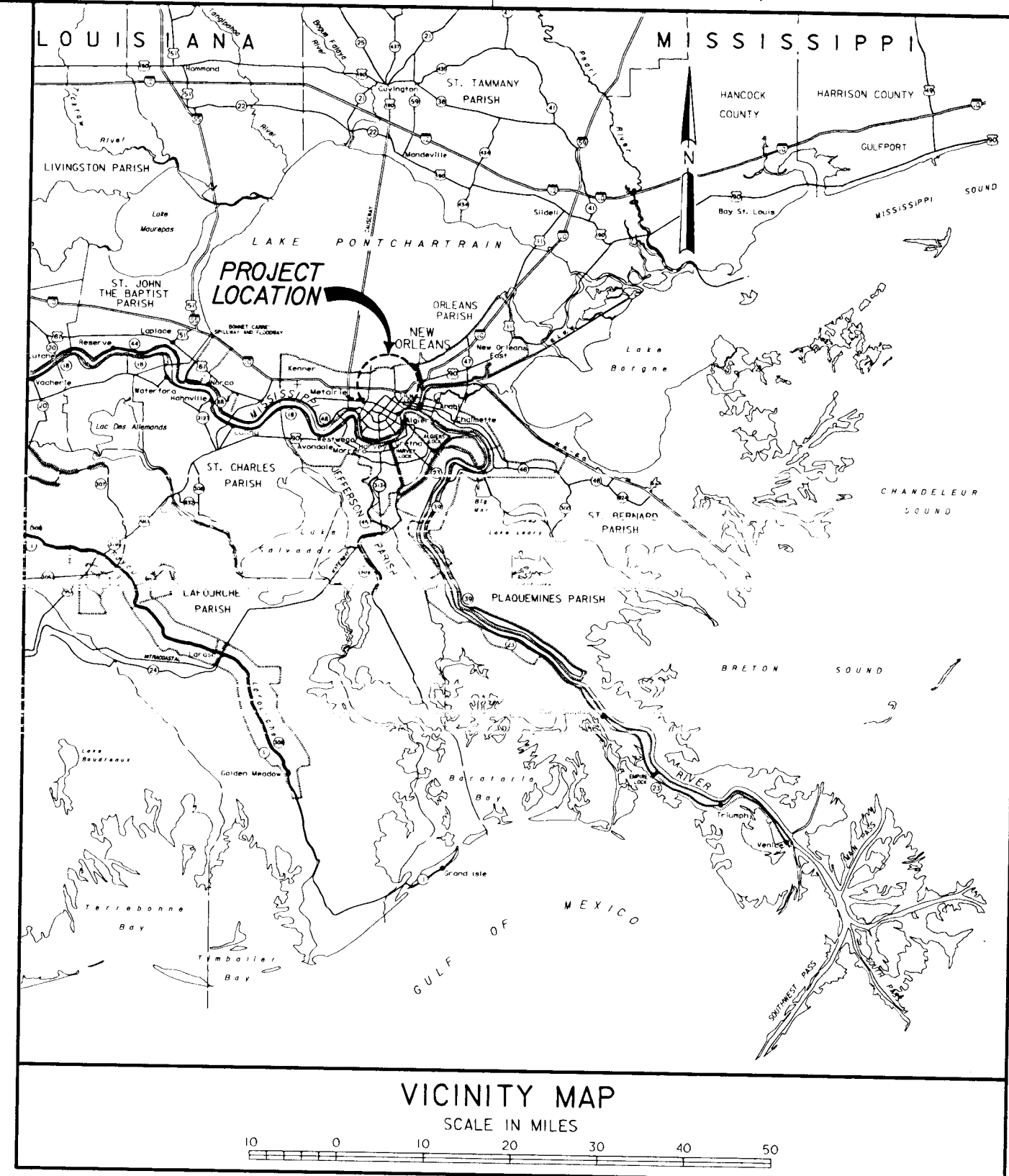
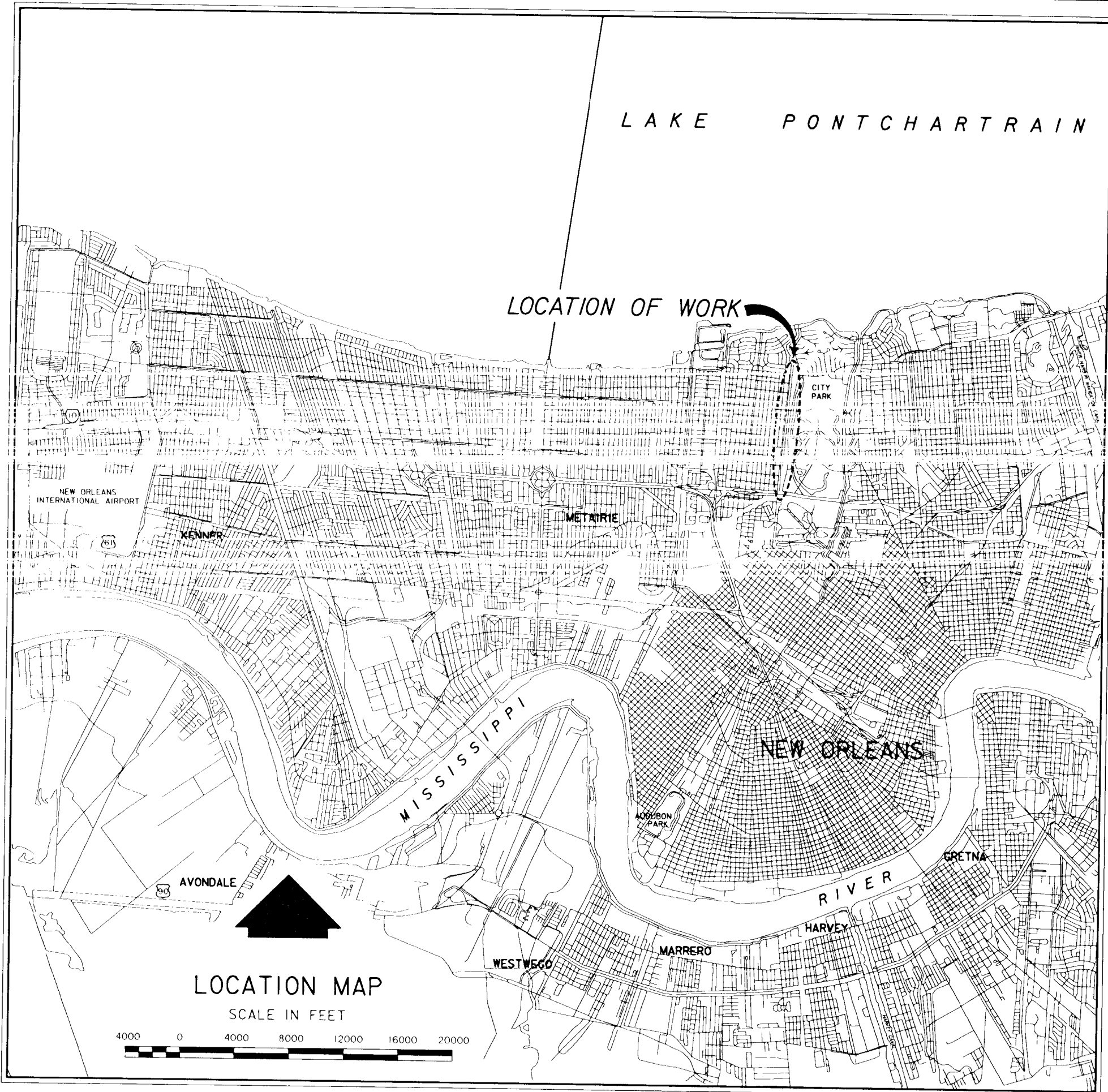
ABBREVIATIONS

- ALT. SP. = ALTERNATE SPACING
- AZ = AZIMUTH
- B/L = BASELINE
- BF = BOTTOM FACE
- BL = BOTTOM LAYER
- C = CENTER
- CB = CATCH BASIN
- C.I. = CAST IRON
- CJ = CONSTRUCTION JOINT
- CL = CLEAR COVER
- C/L OR C = CENTER LINE
- C.R.S. = CORROSION RESISTANT STEEL
- Ø = DIAMETER
- D = DRAIN
- D.I. = DROP INLET
- D.P. = DRAIN PIPE
- D/S = DOWN STREAM
- D.V. = DRAIN VALVE
- D.V. MH. = DRAIN VALVE MANHOLE
- E = ELECTRICAL
- EF = EACH FACE
- EL. = ELEVATION
- ES = EQUALLY SPACED
- F.H. = FIRE HYDRANT
- FF = FAR FACE
- G = GAS
- H.S. = HIGH STRENGTH
- LP = LIGHT POLE
- LS = LIGHT STANDARD
- MH = MANHOLE
- NF = NEAR FACE
- O.C. = ON CENTER
- OPT. = OPTIONAL
- P = POWER
- P.C. = POINT OF CURVATURE
- P.T. = POINT OF TANGENCY
- S = SEWER
- S.F.C. = SPECIAL FABRICATED CONNECTION
- SB/L = SUBBASELINE
- S.C.O. = SEWER CLEANOUT
- STD. HK. = STANDARD HOOK
- STA. = STATION
- T = TELEPHONE
- TD = TRENCH DRAIN
- TF = TOP FACE
- TEL.M.H. = TELEPHONE MANHOLE
- TL = TOP LAYER
- TP = TEST PILE
- U/S = UP STREAM
- W = WATER
- W/L = WALL LINE
- W.M. = WATER METER
- W.V. = WATER VALVE



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA GENERAL NOTES			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 1	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A10.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 2 OF 32

Safety is a Part
of Your Contract



THIS PROJECT WAS DESIGNED BY THE NEW ORLEANS DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEARING ON THESE PROJECT DOCUMENTS ARE WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8125.

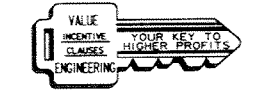
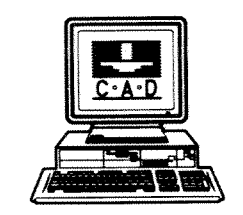
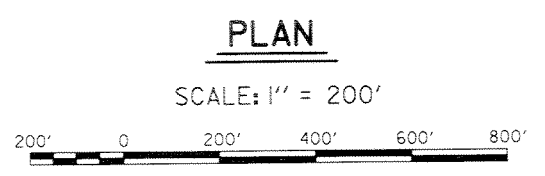
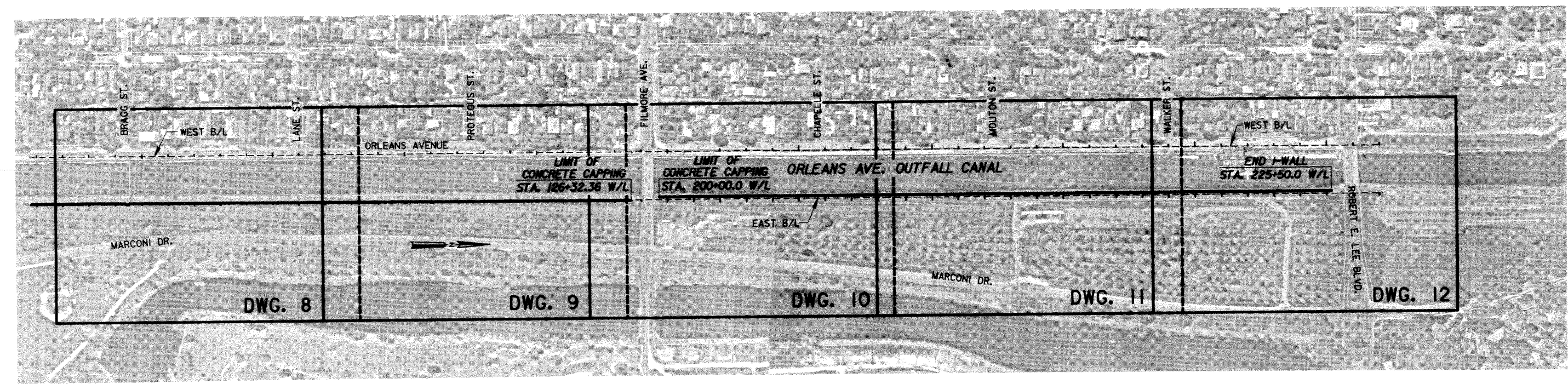
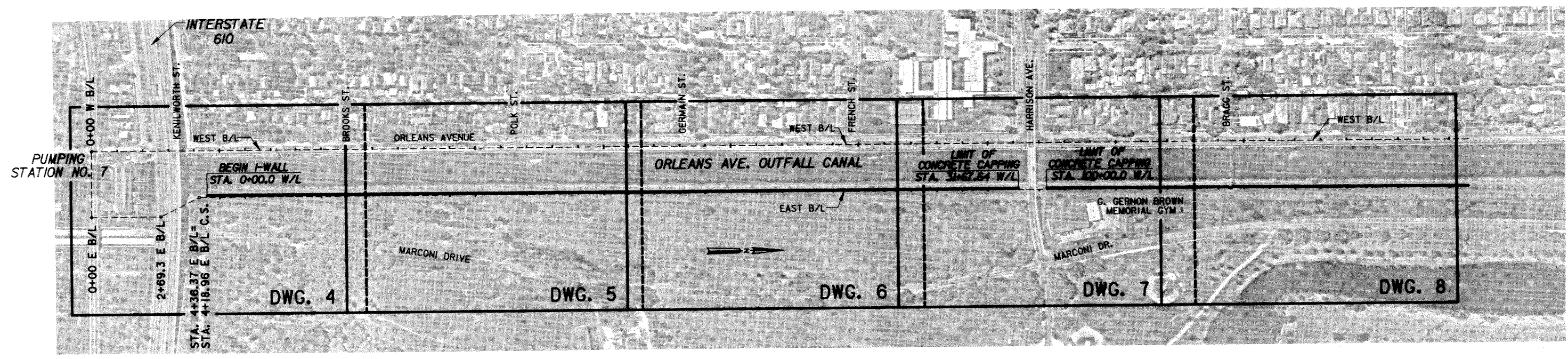



INDEX TO DRAWINGS			
DWG.	TITLE	DWG.	TITLE
1	INDEX, LOCATION AND VICINITY MAP	20	TYPICAL SECTIONS-STA. 103+25 W/L TO STA. 112+70 W/L
2	GENERAL NOTES	21	TYPICAL SECTIONS-STA. 113+20 W/L TO STA. 126+32.36 W/L
3	INDEX OF PLAN DRAWINGS	22	TYPICAL SECTIONS-STA. 200+00 W/L TO STA. 225+50 W/L
4	PLAN-STA. 0+00 W/L TO STA. 5+75 W/L	23	SHEET PILE AND MISCELLANEOUS DETAILS
5	PLAN-STA. 5+75 W/L TO 16+80 W/L	24	1-WALL REINFORCING
6	PLAN-STA. 16+80 W/L TO 27+50 W/L	25	TYPICAL WALL JOINTS
7	PLAN-STA. 27+50 W/L TO STA. 31+67.64 W/L STA. 100+00 W/L STA. 105+00 W/L	26	ARCHITECTURAL WALL TREATMENT
8	PLAN-STA. 105+00 W/L TO STA. 115+20 W/L	27	SOIL BORINGS
9	PLAN-STA. 115+20 W/L TO STA. 125+30 W/L	28	SOIL BORINGS
10	PLAN-STA. 125+30 W/L TO STA. 126+32.36 W/L STA. 200+00 W/L TO STA. 206+60 W/L	29	SOIL BORINGS
11	PLAN-STA. 206+60 W/L TO STA. 219+30 W/L	30	SOIL BORINGS
12	PLAN-STA. 219+30 W/L TO STA. 225+50 W/L	31	SOIL BORINGS
13	PROFILE-STA. 0+00 W/L TO STA. 13+00 W/L	32	SOIL BORING LEGEND
14	PROFILE-STA. 13+00 W/L TO STA. 27+00 W/L		
15	PROFILE-STA. 27+00 W/L TO STA. 31+67.64 W/L STA. 100+00 W/L TO STA. 126+32.36 W/L	ATTACHMENT DRAWINGS	
16	PROFILE-STA. 200+00 W/L TO STA. 225+50 W/L	A1	CROSS SECTIONS - STA. 4+00 E. B/L TO STA. 10+00 E. B/L
17	PLAN AND SECTION VICINITY 30" WATER LINE	A2	CROSS SECTIONS - STA. 11+00 E. B/L TO STA. 17+00 E. B/L
18	30" WATER LINE-SLURRY TRENCH AND SEEPAGE COLLAR DETAILS	A3	CROSS SECTIONS - STA. 18+00 E. B/L TO STA. 24+00 E. B/L
19	TYPICAL SECTIONS-STA. 0+00 W/L TO STA. 31+67.64 W/L STA. 100+00 W/L TO STA. 102+75 W/L	A4	CROSS SECTIONS - STA. 25+00 E. B/L TO STA. 31+00 E. B/L
		A5	CROSS SECTIONS - STA. 32+00 E. B/L TO STA. 38+00 E. B/L
		A6	CROSS SECTIONS - STA. 39+00 E. B/L TO STA. 45+00 E. B/L
		A7	CROSS SECTIONS - STA. 46+00 E. B/L TO STA. 52+00 E. B/L

TABULATION OF BENCH MARKS		
DESIGNATION	DESCRIPTION	ELEVATION
"CHRYSLER RM".	AT NEW ORLEANS, ABOUT 0.45 MILES EAST ALONG LAKESHORE DRIVE FROM JUNCTION OF CANAL BOULEVARD, 125 YARDS NORTHWEST OF THE NORTHWEST CORNER OF LAKESHORE DRIVE BRIDGE OVER ORLEANS CANAL, SET IN THE TOP OF THE CONCRETE SEA WALL ALONG SHORE OF LAKE PONTCHARTRAIN, 33 FEET NORTHEAST OF THE NORTH ONE OF A GROUP OF PALM TREES, 66 FEET WEST OF CHRYSLER STATION DESCRIBED, 270 FEET NORTH OF THE CENTER LINE OF LAKESHORE DRIVE AND ABOUT 2 FEET ABOVE THE LEVEL OF THE DRIVE.	EL. 7.11 N.G.V.D. (1983 EPOCH)

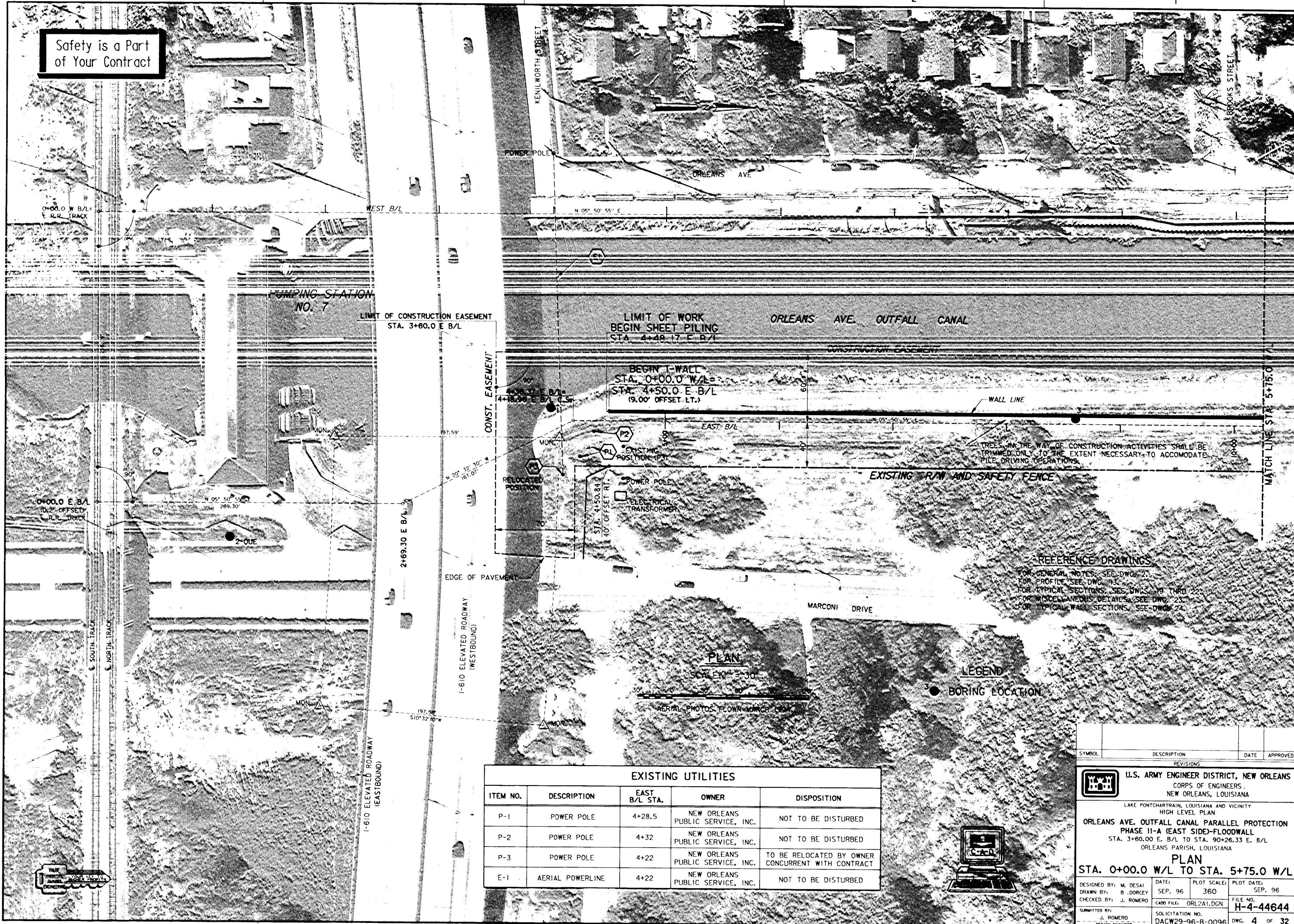
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
INDEX, LOCATION, AND VICINITY MAP			
DESIGNED BY: M. DESAI	SOLICITATION NO. DACW29-96-B-0096	CADD FILE: 4464A08.DGN	
DRAWN BY: B. DORCEY	APPROVED BY:	PLOT DATE: SEP. 96	PLOT SCALE: 4800
CHECKED BY: J. ROMERO	APPROVED BY:	FILE NO. H-4-44644	
DATE: SEP. 96	CHIEF, ENGINEERING DIVISION	DWG. OF 32	
SUBMITTED BY:	APPROVED BY:		
CHIEF, STRUCTURES BRANCH	COLONEL, U.S. DISTRICT ENGINEER		

Safety is a Part of Your Contract



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
INDEX OF PLAN DRAWINGS			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 2400	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A14.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO DESIGN ENGINEER	SOLICITATION NO. DACW29-96-B-0096	DWG. 3 OF 32

Safety is a Part of Your Contract



TREES IN THE WAY OF CONSTRUCTION ACTIVITIES SHALL BE TRIMMED ONLY TO THE EXTENT NECESSARY TO ACCOMMODATE PILE DRIVING OPERATIONS.

REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 21
 FOR PROFILE, SEE DWG. 23
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22
 FOR MISCELLANEOUS DETAILS, SEE DWG. 22
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24

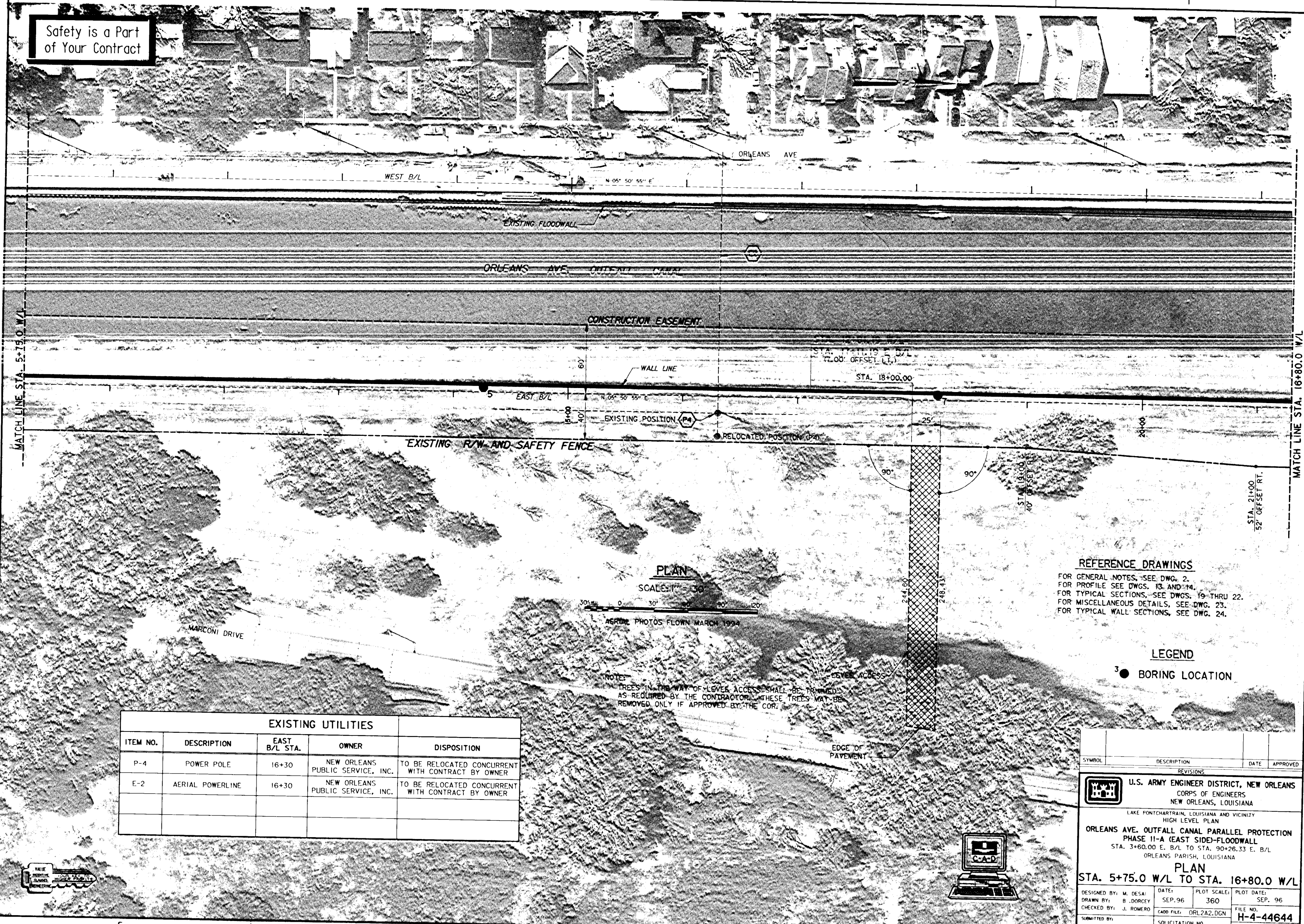
PLAN
 SCALE 1" = 30'

LEGEND
 ● BORING LOCATION

EXISTING UTILITIES				
ITEM NO.	DESCRIPTION	EAST B/L STA.	OWNER	DISPOSITION
P-1	POWER POLE	4+28.5	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED
P-2	POWER POLE	4+32	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED
P-3	POWER POLE	4+22	NEW ORLEANS PUBLIC SERVICE, INC.	TO BE RELOCATED BY OWNER CONCURRENT WITH CONTRACT
E-1	AERIAL POWERLINE	4+22	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE 11-A (EAST SIDE)-FLOODWALL STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
PLAN			
STA. 0+00.0 W/L TO STA. 5+75.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: ORL2A1.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 4 OF 32	
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		

Safety is a Part of Your Contract



PLAN

SCALE: 1" = 30'

AERIAL PHOTOS FLOWN MARCH 1994

NOTE:
TREES IN THE WAY OF LEVEE ACCESS SHALL BE TRIMMED AS REQUIRED BY THE CONTRACTOR. THESE TREES MAY BE REMOVED ONLY IF APPROVED BY THE COR.

REFERENCE DRAWINGS

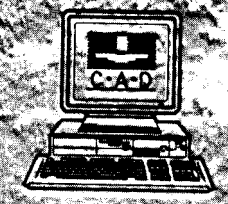
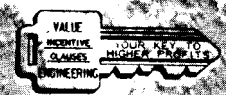
FOR GENERAL NOTES, SEE DWG. 2.
FOR PROFILE SEE DWGS. 13 AND 14.
FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

LEGEND

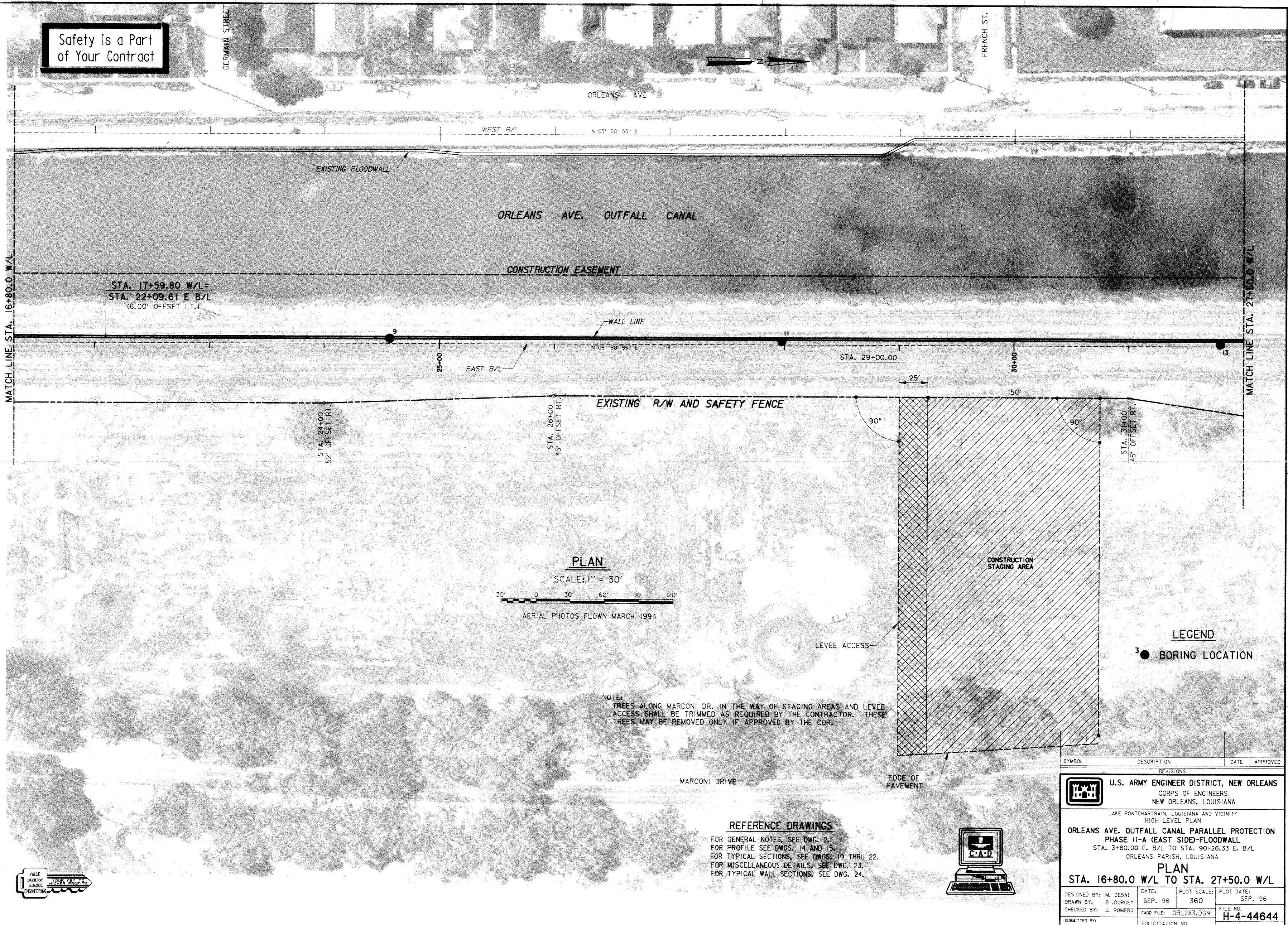
● BORING LOCATION

EXISTING UTILITIES				
ITEM NO.	DESCRIPTION	EAST B/L STA.	OWNER	DISPOSITION
P-4	POWER POLE	16+30	NEW ORLEANS PUBLIC SERVICE, INC.	TO BE RELOCATED CONCURRENT WITH CONTRACT BY OWNER
E-2	AERIAL POWERLINE	16+30	NEW ORLEANS PUBLIC SERVICE, INC.	TO BE RELOCATED CONCURRENT WITH CONTRACT BY OWNER

<p>U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA</p>			
<p>LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN</p>			
<p>ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE)-FLOODWALL STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA</p>			
<p>PLAN STA. 5+75.0 W/L TO STA. 16+80.0 W/L</p>			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: ORL2A2.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 5	OF 32
<p>APPROVED: J. ROMERO, DESIGN ENGINEER</p>			



Safety is a Part of Your Contract



PLAN

SCALE: 1" = 30'



AERIAL PHOTOS FLOWN MARCH 1994

LEGEND
 3 ● BORING LOCATION

NOTE:
 TREES ALONG MARCONI DR. IN THE WAY OF STAGING AREAS AND LEVEE ACCESS SHALL BE TRIMMED AS REQUIRED BY THE CONTRACTOR. THESE TREES MAY BE REMOVED ONLY IF APPROVED BY THE COR.

REFERENCE DRAWINGS

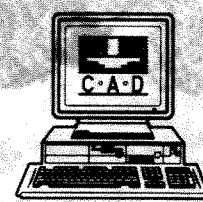
FOR GENERAL NOTES, SEE DWG. 2.
 FOR PROFILE SEE DWGS. 14 AND 15.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

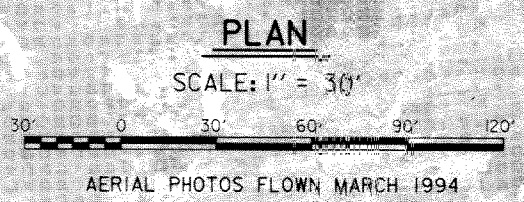
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA
 LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
 HIGH LEVEL PLAN
ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION
PHASE II-A (EAST SIDE)-FLOODWALL
 STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L
 ORLEANS PARISH, LOUISIANA

PLAN
 STA. 16+80.0 W/L TO STA. 27+50.0 W/L

DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: ORL2A3.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 6 OF 32
DESIGN ENGINEER			



Safety is a Part of Your Contract



NOTE:
CONTRACTOR SHALL LOCATE GAS AND SEWER SERVICE LINES FROM HARRISON AVE. TO G. GERMON BROWN GYM PRIOR TO DRIVING SHEET PILING OR DEGRADING LEVEL.

LEGEND
● BORING LOCATION

REFERENCE DRAWINGS
FOR GENERAL NOTES, SEE DWG. 2.
FOR PROFILE SEE DWG. 15.
FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

EXISTING UTILITIES				
ITEM NO.	DESCRIPTION	WEST B/L STA.	OWNER	DISPOSITION
P5	POWER POLE	36+02	NEW ORLEANS PUBLIC SERVICE, INC.	TO BE RELOCATED BY OWNER CONCURRENT WITH CONTRACT
P6	POWER POLE	36+40	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED
T-1	AERIAL TELEPHONE	36+40	SOUTH CENTRAL BELL	NOT TO BE DISTURBED
E3	AERIAL POWERLINE	37+27.5	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED
G1	2" GAS LINE	36+80.5	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED
S1	6" FORCED SEWER LINE	36+81.0	CITY OF NEW ORLEANS N.O.R.D.	NOT TO BE DISTURBED
P7	POWER POLE	35+96.25	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED
T2	UNDERGROUND TELEPHONE	ALONG HARRISON AVE.	SOUTH CENTRAL BELL	NOT TO BE DISTURBED

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

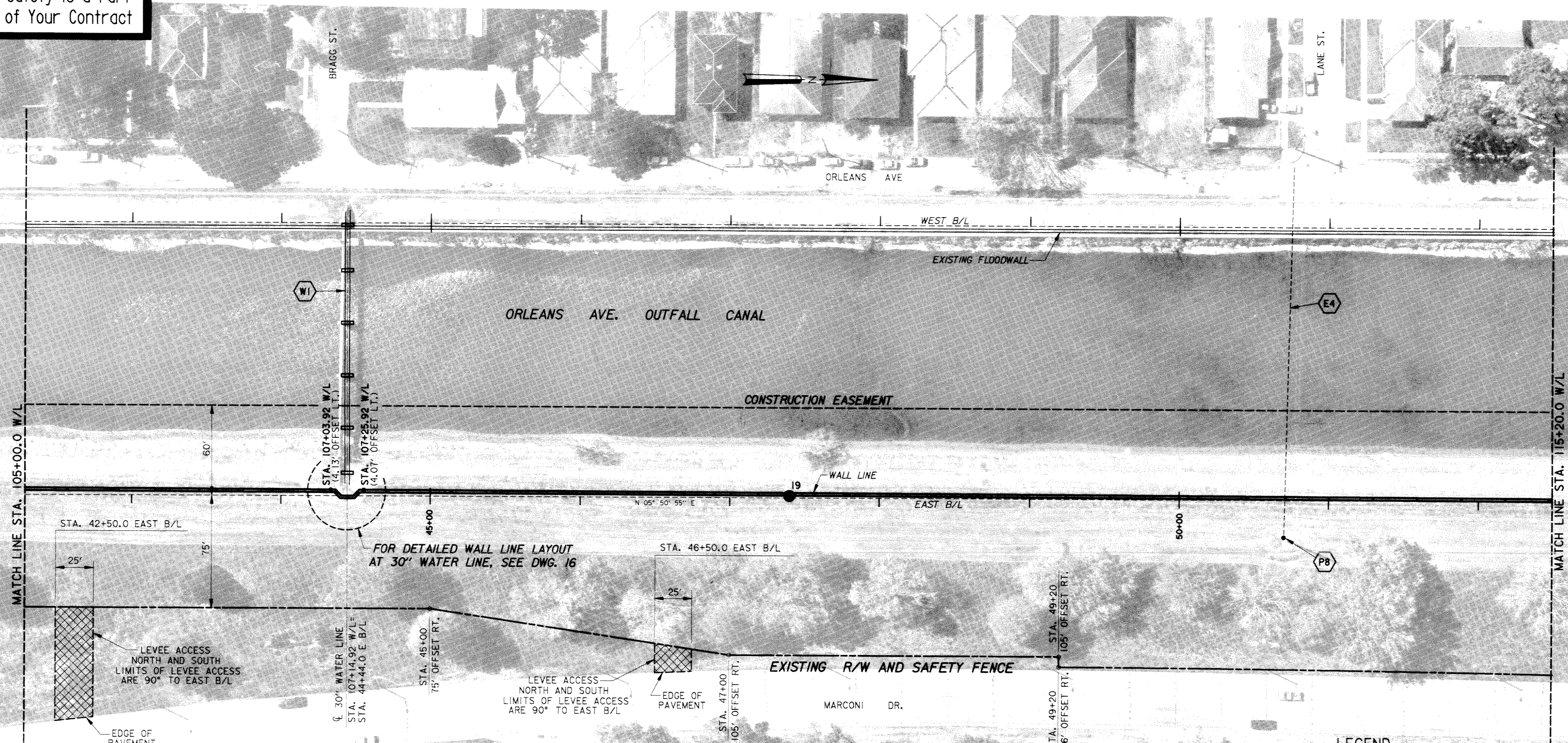
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
HIGH LEVEL PLAN
ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION
PHASE II-A (EAST SIDE)-FLOODWALL
STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L
ORLEANS PARISH, LOUISIANA

PLAN
STA. 27+50.0 W/L TO STA. 31+67.64 W/L
STA. 100+00.0 W/L TO STA. 105+00.0 W/L

DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CHECKED BY: J. ROMERO	CADD FILE: ORL2A4.DGN	FILE NO. H-4-44644
SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 7 OF 32	



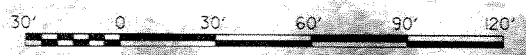
Safety is a Part of Your Contract



NOTE:
TREES IN THE WAY OF LEVEE ACCESS SHALL BE TRIMMED AS REQUIRED BY THE CONTRACTOR. THESE TREES MAY BE REMOVED ONLY IF APPROVED BY THE COR.

PLAN

SCALE: 1" = 30'



AERIAL PHOTOS FLOWN MARCH 1994

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. 2.
FOR PROFILE SEE DWG. 15.
FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

EXISTING UTILITIES				
ITEM NO.	DESCRIPTION	WEST B/L STA.	OWNER	DISPOSITION
W1	30" WATER LINE	44+44.0	NEW ORLEANS S. & W. B.	NOT TO BE DISTURBED
E4	AERIAL POWERLINE	50+75.0	NEW ORLEANS PUBLIC SERVICE, INC.	TO BE RELOCATED CONCURRENT WITH CONTRACT BY OWNER
P8	POWER POLE	50+70	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED

LEGEND

● BORING LOCATION

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

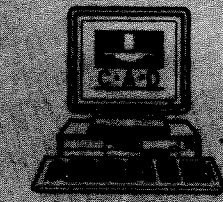
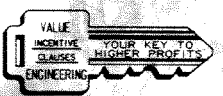
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
HIGH LEVEL PLAN

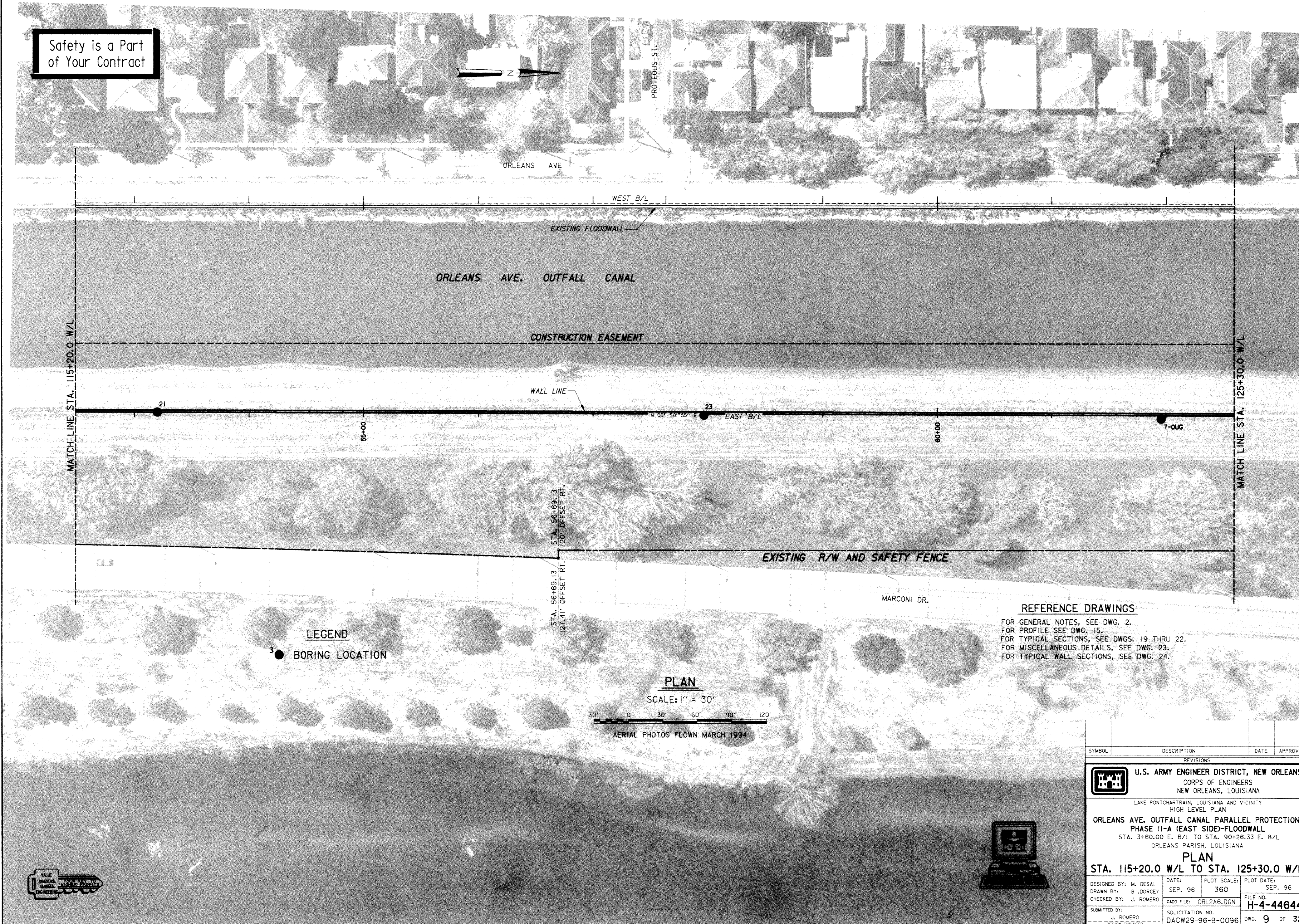
ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION
PHASE II-A (EAST SIDE)-FLOODWALL
STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L
ORLEANS PARISH, LOUISIANA

PLAN
STA. 105+00.0 W/L TO STA. 115+20.0 W/L

DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: ORL2A5.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 8 OF 32
DESIGN ENGINEER			



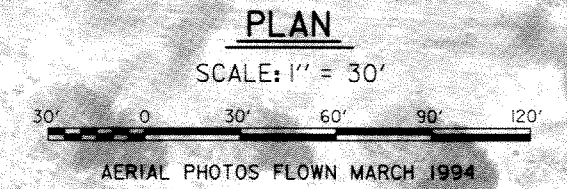
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MATCH LINE STA. 115+20.0 W/L

MATCH LINE STA. 125+30.0 W/L

LEGEND
 ● BORING LOCATION



REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 2.
 FOR PROFILE SEE DWG. 15.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

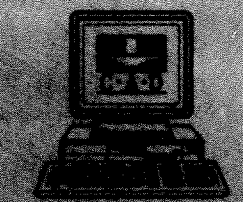
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
 HIGH LEVEL PLAN

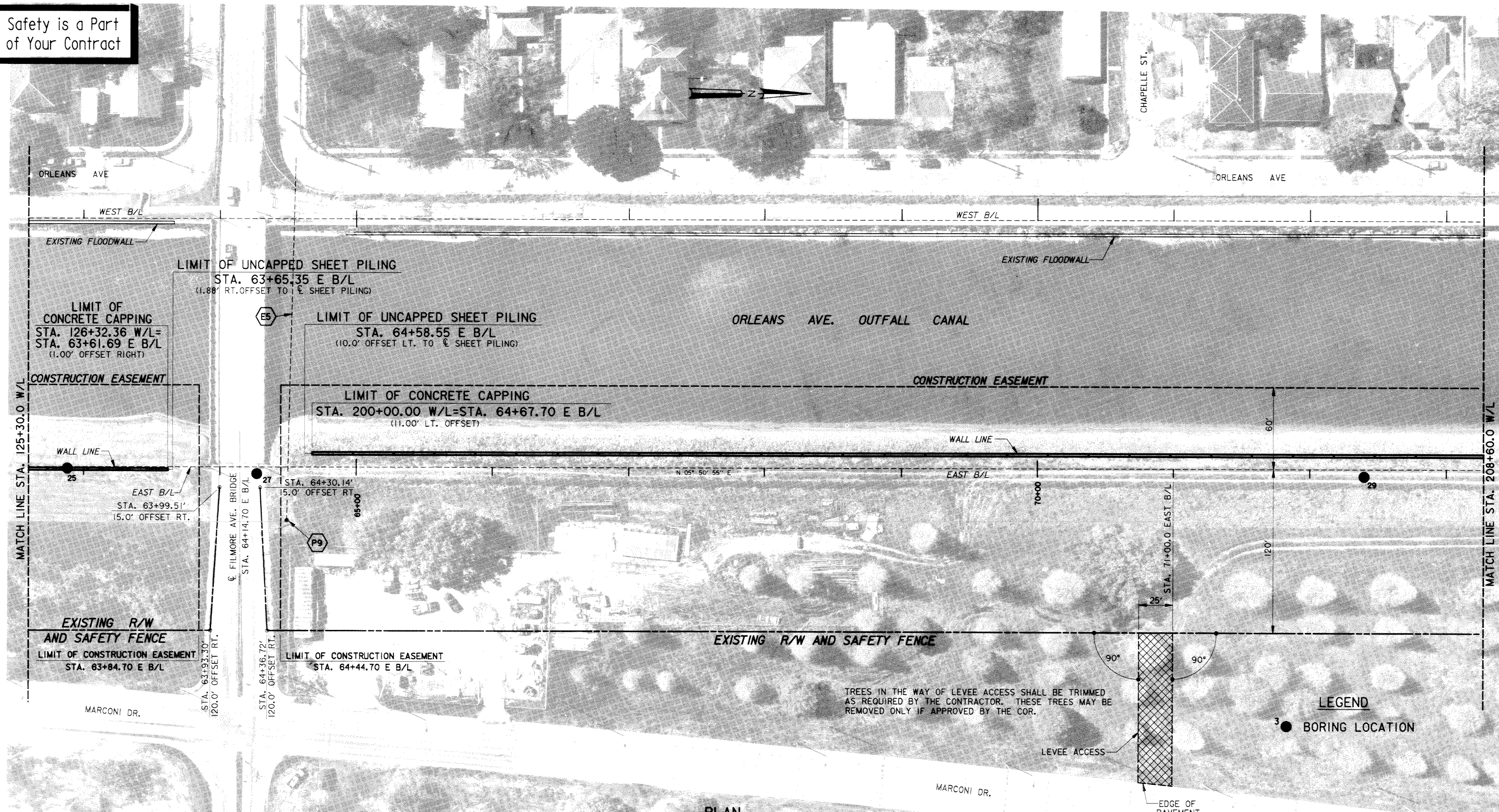
ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION
 PHASE II-A (EAST SIDE)-FLOODWALL
 STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L
 ORLEANS PARISH, LOUISIANA

PLAN
 STA. 115+20.0 W/L TO STA. 125+30.0 W/L

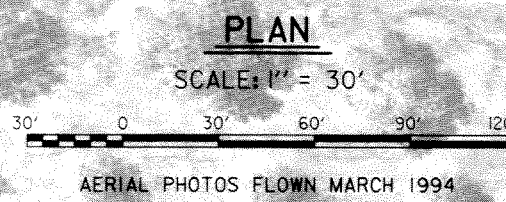
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DRAWN BY: B. DORCEY	CADD FILE: ORL2A6.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACH29-96-B-0096	DWG. 9 OF 32



Safety is a Part of Your Contract

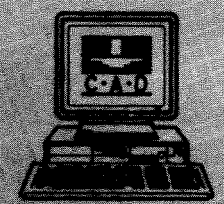


EXISTING UTILITIES				
ITEM NO.	DESCRIPTION	WEST B/L STA.	OWNER	DISPOSITION
E5	AERIAL POWERLINE	64+49	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED
P9	POWER POLE	64+49	NEW ORLEANS PUBLIC SERVICE, INC.	NOT TO BE DISTURBED



REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 2.
 FOR PROFILE SEE DWGS. 15 AND 16.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE)-FLOODWALL STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA PLAN STA. 125+30.0 W/L TO STA. 126+32.36 W/L STA. 200+00.0 W/L TO STA. 208+60.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: ORL2A7.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 10 OF 32



Safety is a Part of Your Contract

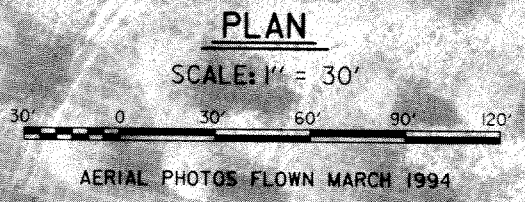


MATCH LINE STA. 208+60.0 W/L

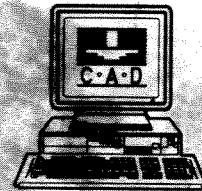
MATCH LINE STA. 219+30.0 W/L

LEGEND
 ● BORING LOCATION

REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 2.
 FOR PROFILE SEE DWG. 16.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.



NOTE:
 TREES ALONG MARCONI DR. IN THE WAY OF STAGING AREAS AND LEVEE ACCESS SHALL BE TRIMMED AS REQUIRED BY THE CONTRACTOR. THESE TREES MAY BE REMOVED ONLY IF APPROVED BY THE COR.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE)-FLOODWALL STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA PLAN STA. 208+60.0 W/L TO STA. 219+30.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: ORL2A8.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 11 OF 32	
SUBMITTED BY: J. ROMERO, DESIGN ENGINEER			

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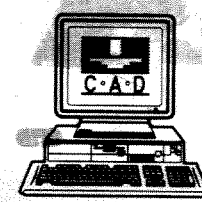
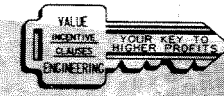
REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 2.
 FOR PROFILE SEE DWG. 16.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

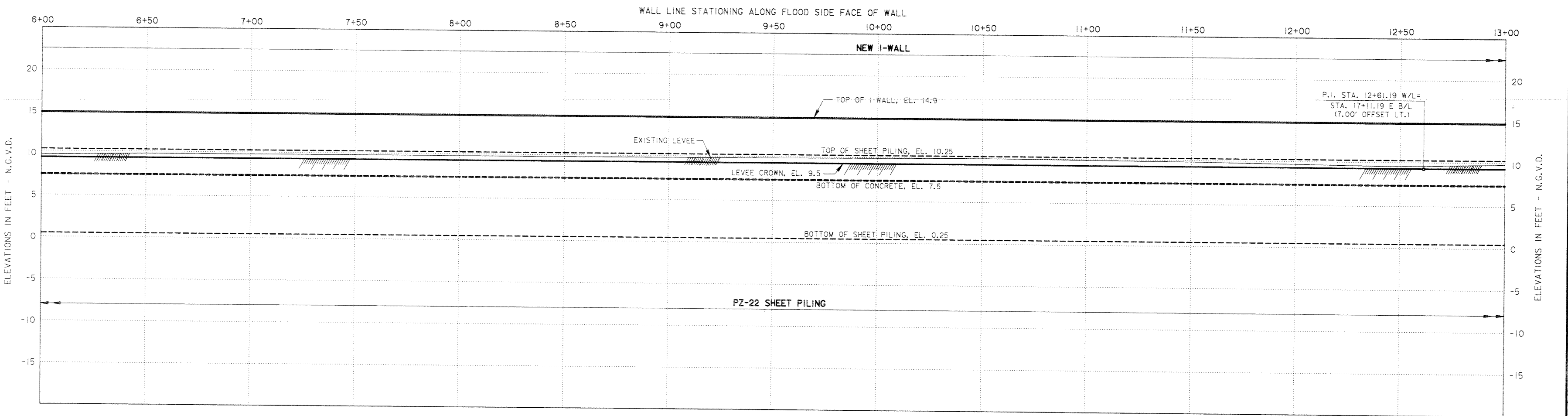
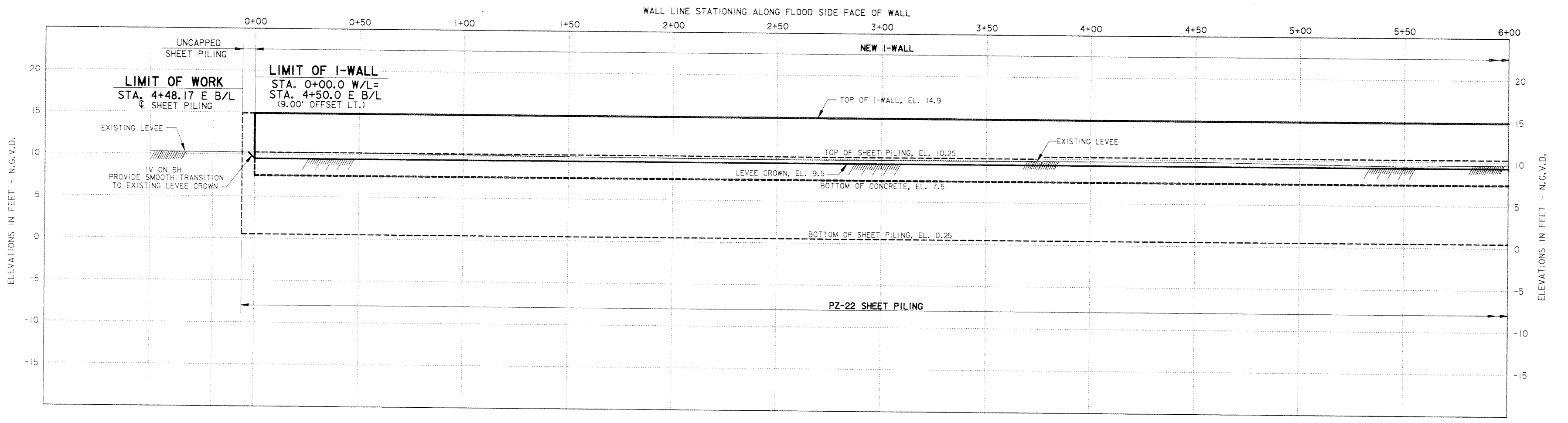
LEGEND
 3 ● BORING LOCATION

PLAN
 SCALE: 1" = 30'
 AERIAL PHOTOS FLOWN MARCH 1994

NOTE:
 TREES IN THE WAY OF LEVEE ACCESS SHALL BE TRIMMED AS REQUIRED BY THE CONTRACTOR. THESE TREES MAY BE REMOVED ONLY IF APPROVED BY THE COR.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE)-FLOODWALL STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA PLAN STA. 219+30.0 W/L TO STA. 225+50.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP 96	PLOT SCALE: 360	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: ORL2A9.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 12	OF 32
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		

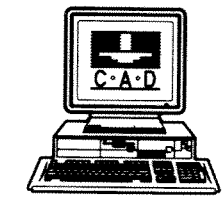
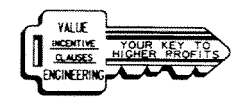




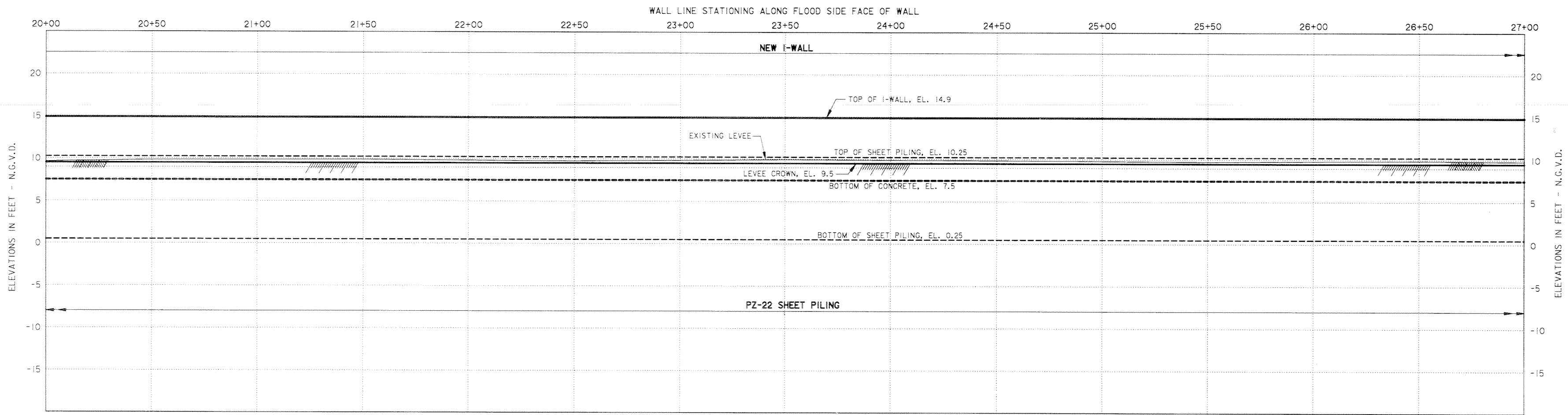
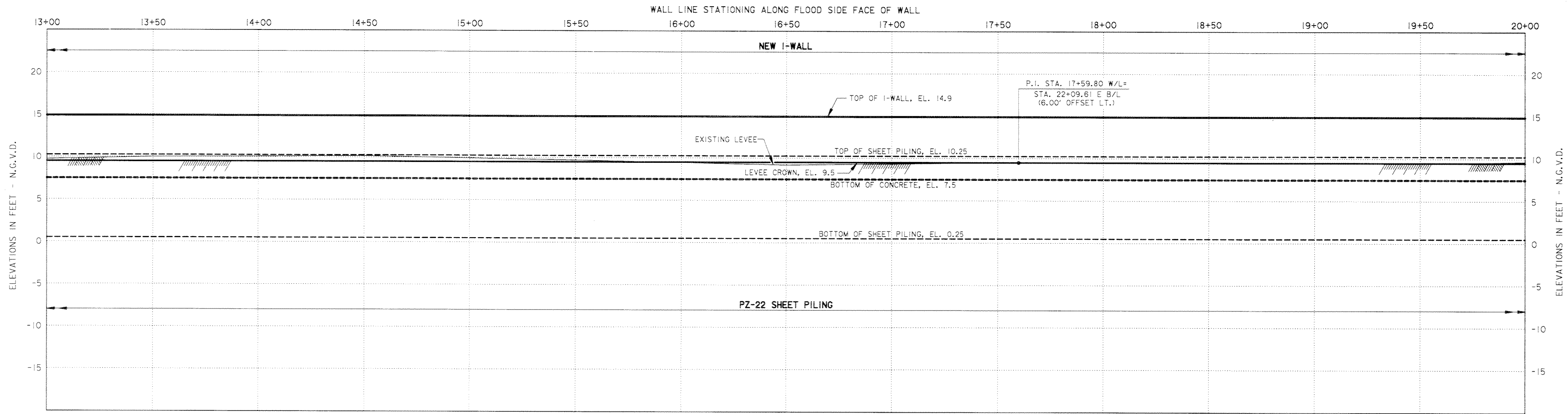
PROFILE
 SCALE: HOR. 1" = 20'
 VERT. 1" = 5'

REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 2.
 FOR PLAN SEE DWGS. 4 AND 5.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

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SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA PROFILE STA. 0+00.0 W/L TO 13+00.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 2APRO1.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 13 OF 32

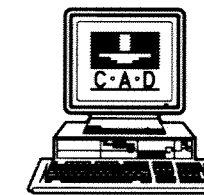


PROFILE

SCALE: HOR. 1" = 20'
VERT. 1" = 5'

REFERENCE DRAWINGS

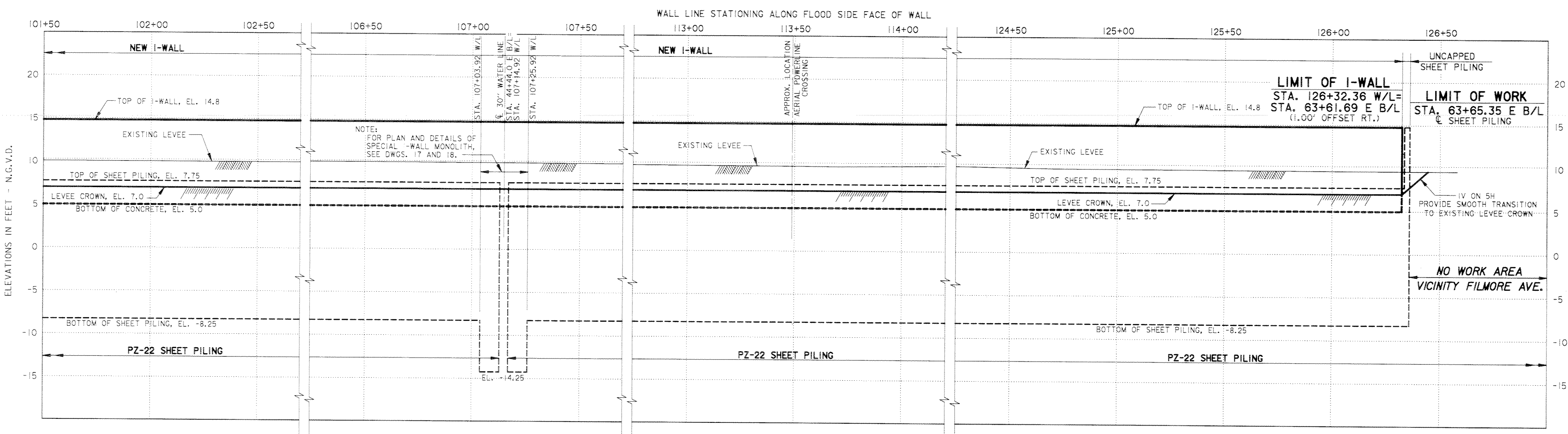
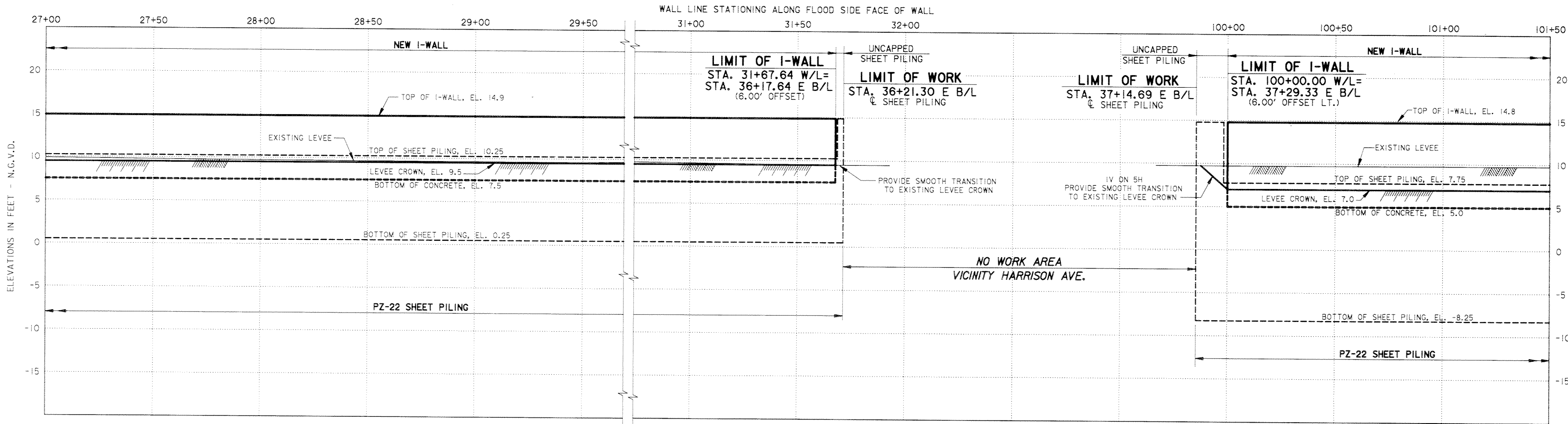
FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN SEE DWGS. 5 AND 6.
FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.



Safety is a Part of Your Contract



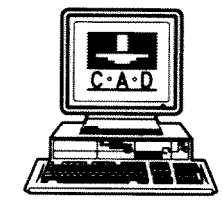
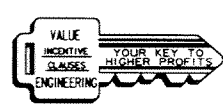
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
PROFILE STA. 13+00.0 W/L TO 27+00.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 2APRO2.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 14 OF 32	
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		



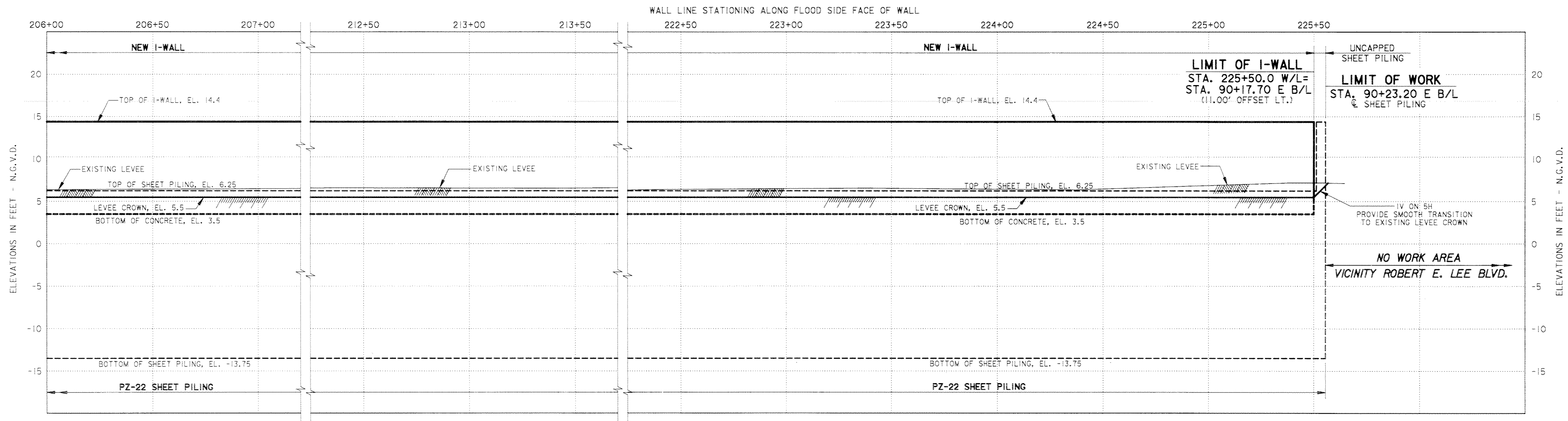
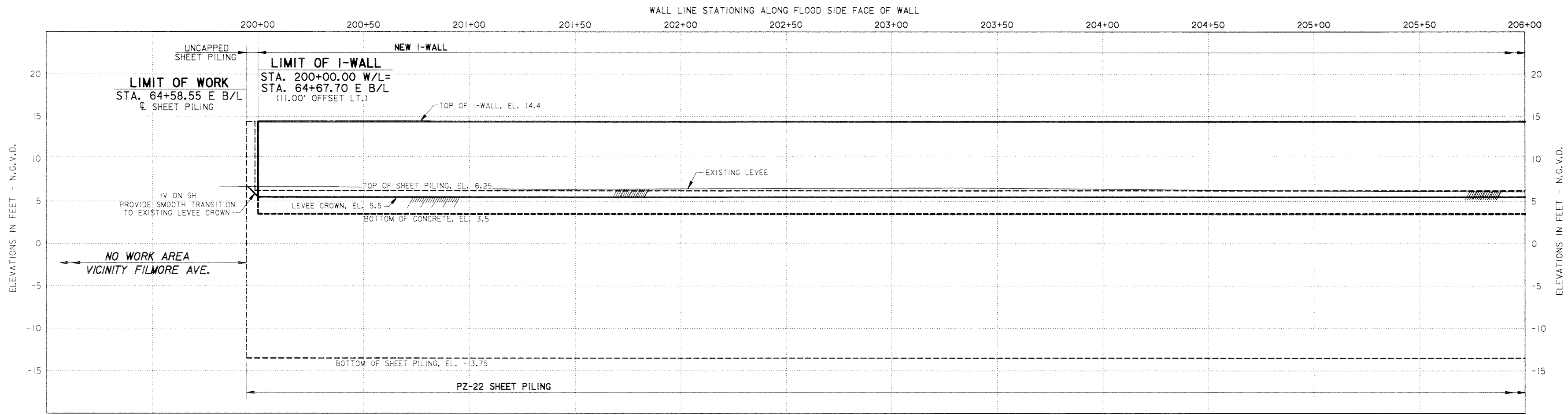
PROFILE PROFILE
 SCALE: HOR. 1" = 20'
 VERT. 1" = 5'

REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 2.
 FOR PLAN SEE DWGS. 6 THRU 10.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

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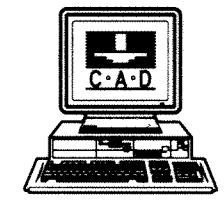
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA PROFILE STA. 27+00.0 W/L TO 31+67.64 W/L STA. 100+00.0 W/L TO 126+32.36 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 2APRO3.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 15	OF 32
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		




PROFILE
 SCALE: HOR. 1" = 20'
 VERT. 1" = 5'

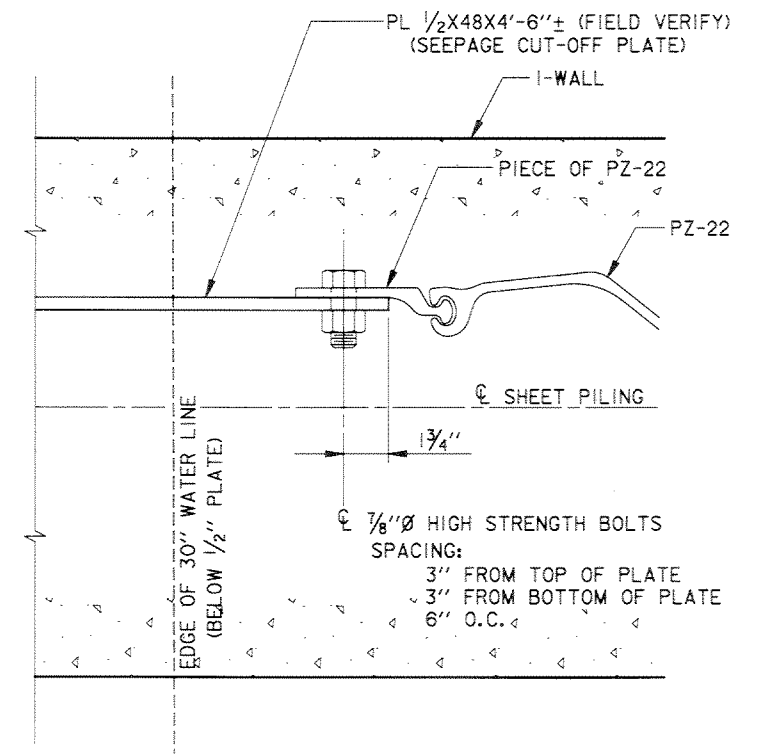
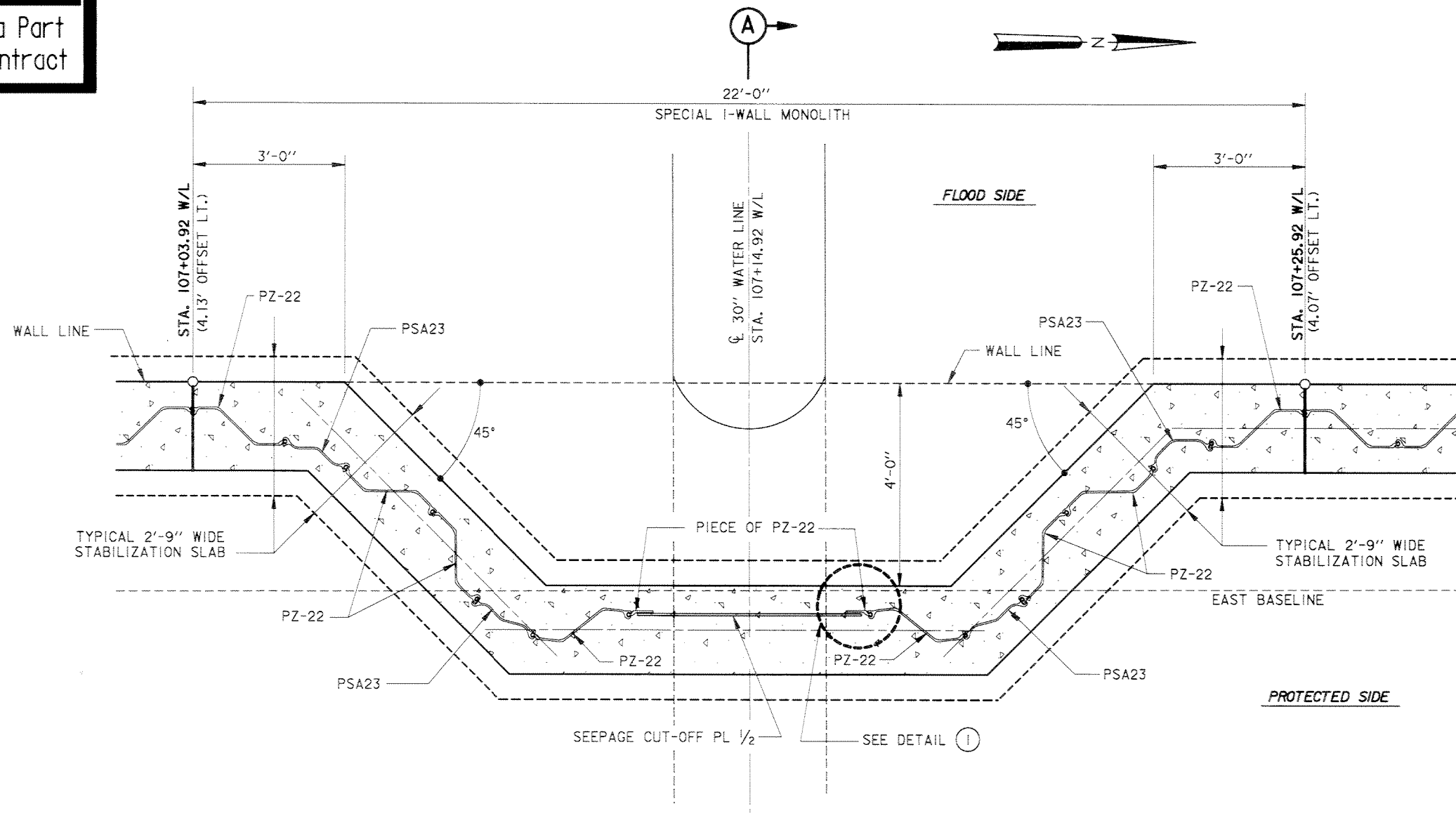
REFERENCE DRAWINGS
 FOR GENERAL NOTES, SEE DWG. 2.
 FOR PLAN SEE DWGS. 10, 11, AND 12.
 FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

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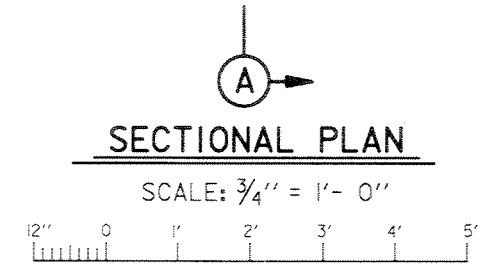


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
PROFILE			
STA. 200+00.0 W/L TO 225+50.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 2APRO4.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 16 OF 32

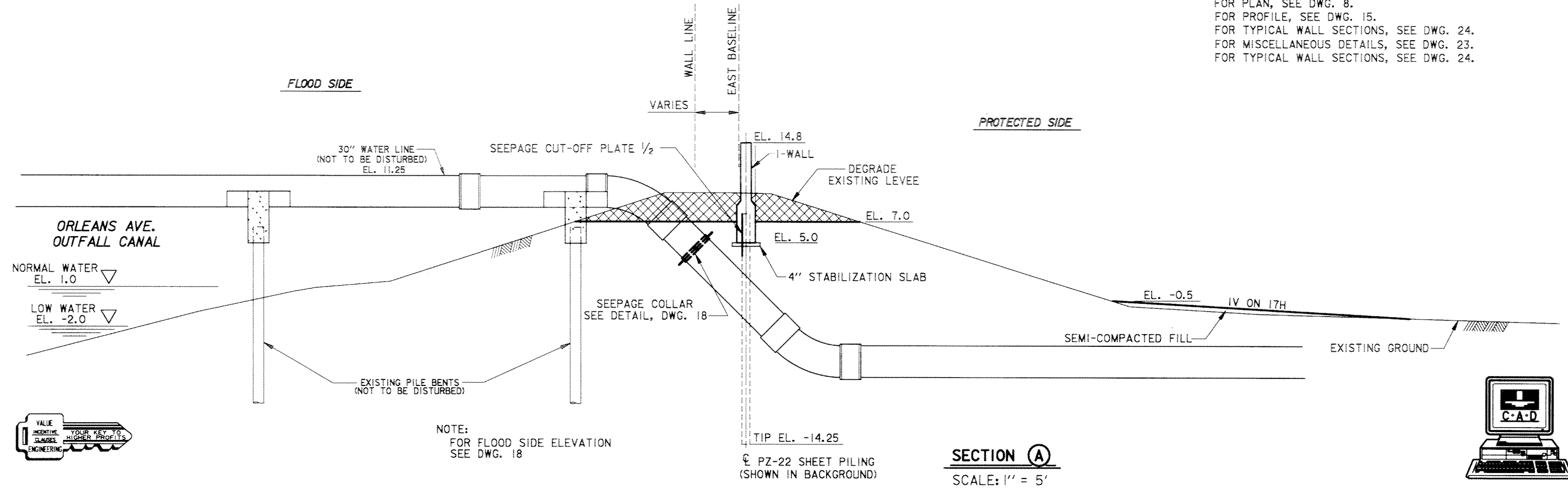
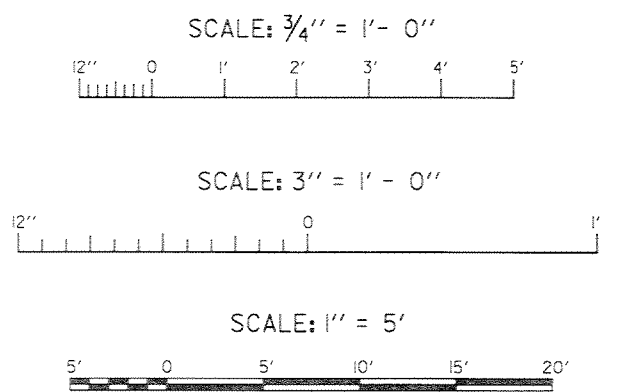
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DETAIL I
SCALE: 3" = 1' - 0"
OPPOSITE SIDE SIMILAR



REFERENCE DRAWINGS
FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN, SEE DWG. 8.
FOR PROFILE, SEE DWG. 15.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

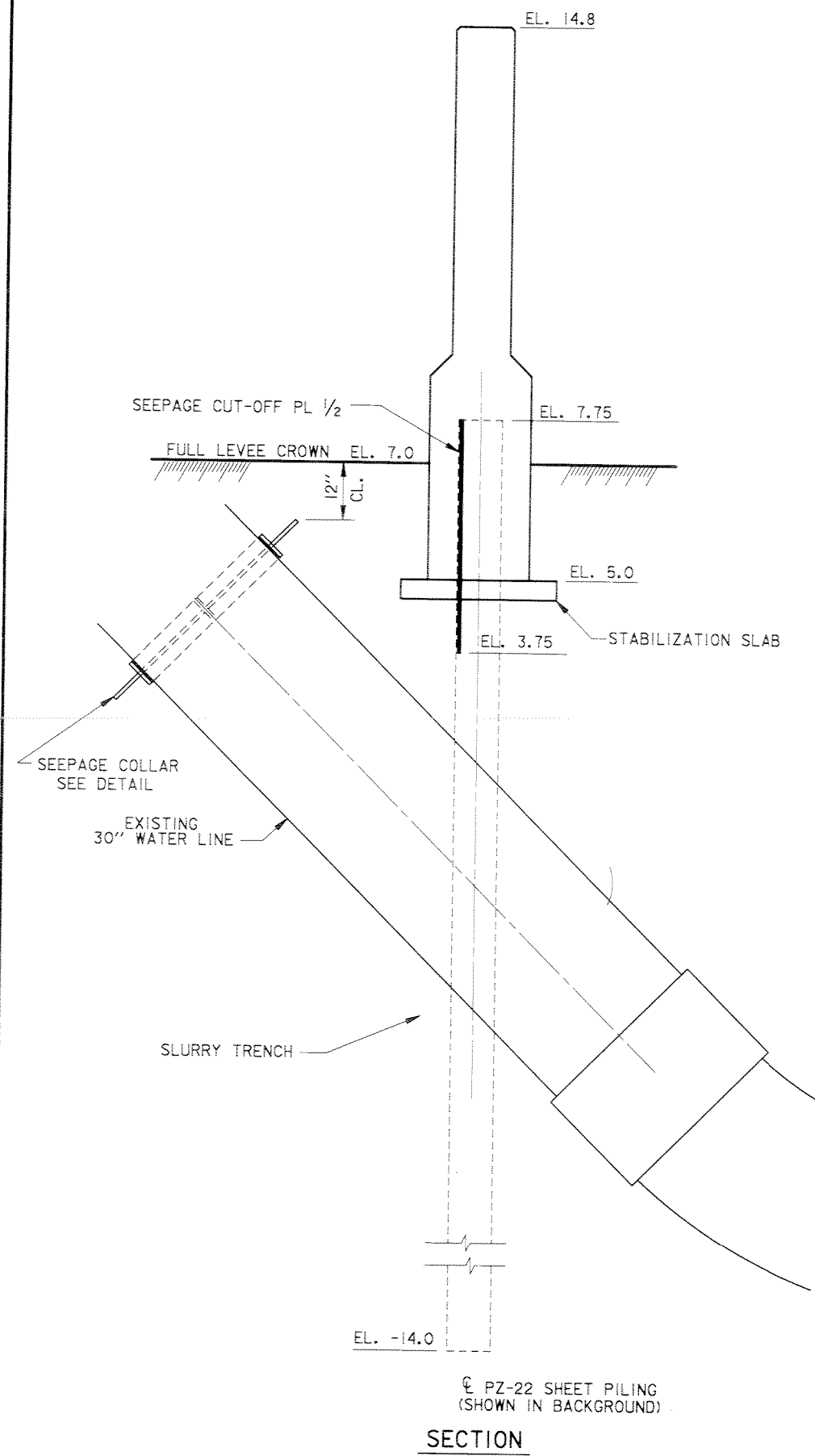


NOTE:
FOR FLOOD SIDE ELEVATION
SEE DWG. 18

SECTION A
SCALE: 1" = 5'

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
PLAN AND SECTION VICINITY 30" WATER LINE			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A06.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 17 OF 32
VALUE ENGINEERING	YOUR KEY TO HIGHER PRODUCTION		

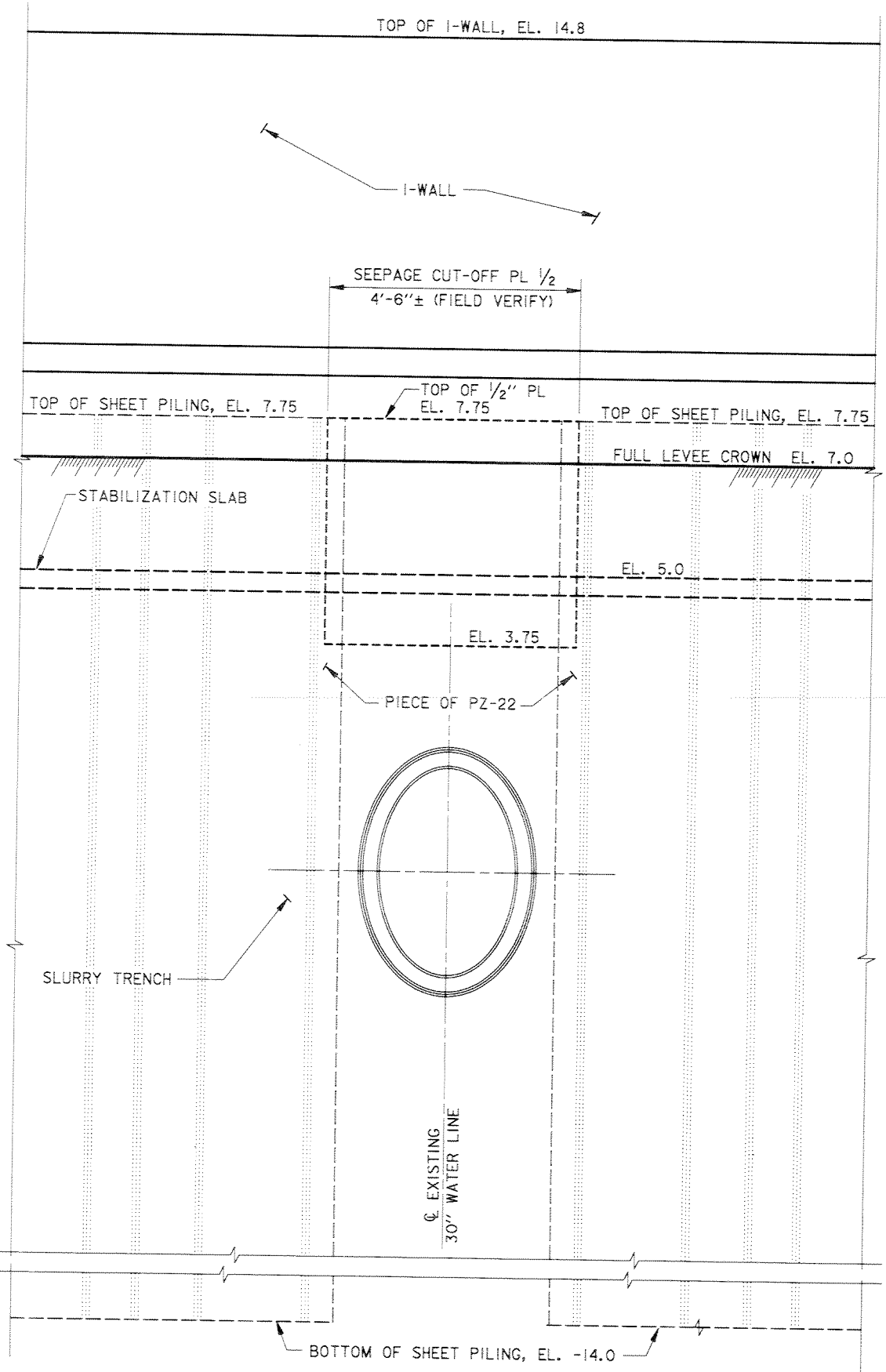
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SECTION

SLURRY TRENCH DETAIL

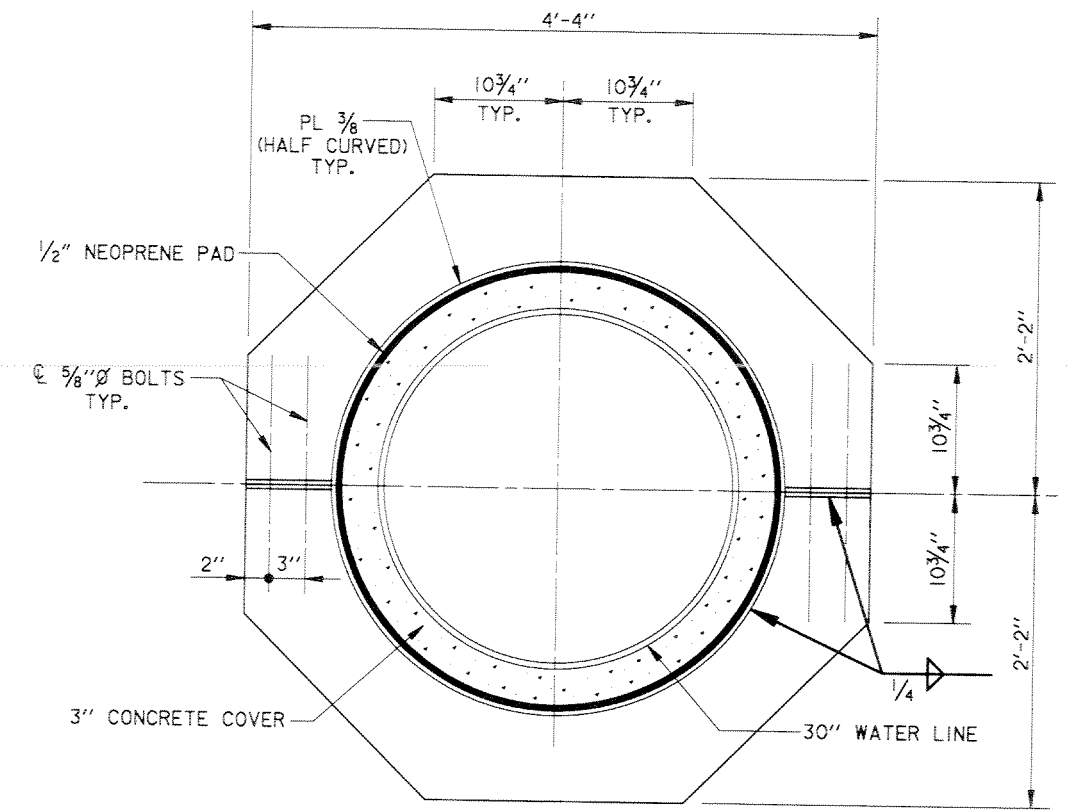
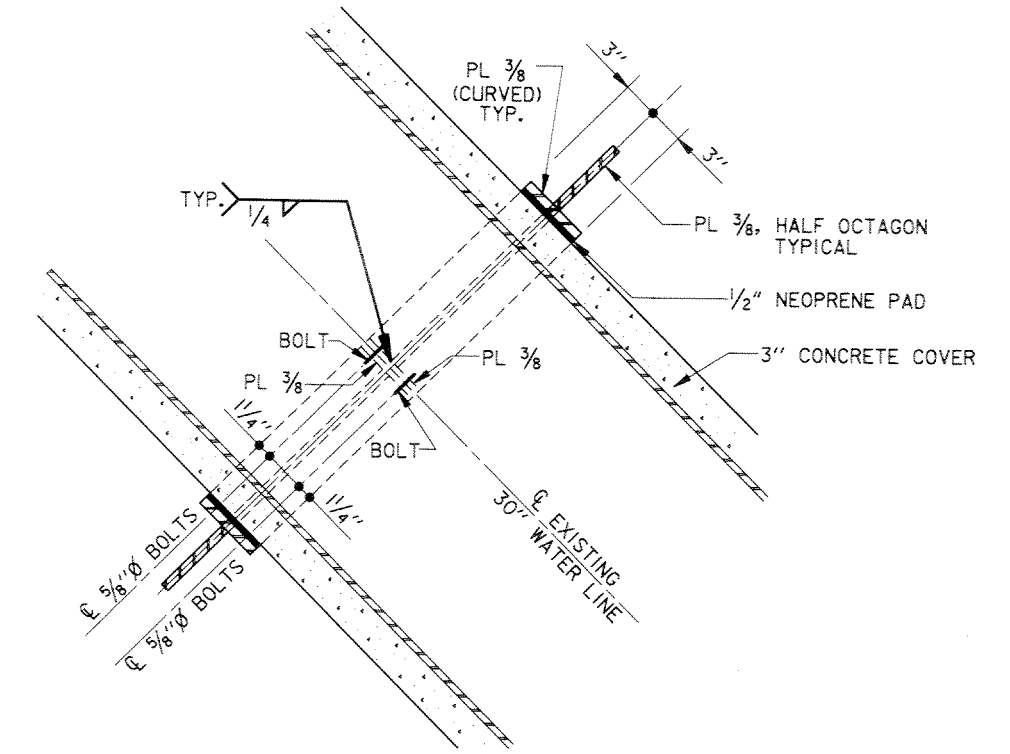
SCALE: 3/4" = 1' - 0"



FLOOD SIDE ELEVATION

REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN, SEE DWG. 8.
FOR PROFILE, SEE DWG. 15.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
FOR TYPICAL SECTIONS, SEE DWGS. 19 THRU 22.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.



SEEPAGE COLLAR DETAIL

SCALE: 1 1/2" = 1' - 0"

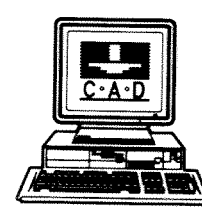
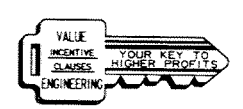
NOTE:
CONTRACTOR SHALL FIELD VERIFY OUTSIDE DIMENSION OF PIPE AND CONCRETE COVER PRIOR TO FABRICATING SEEPAGE COLLAR.
SEEPAGE COLLAR SHALL BE FABRICATED IN HALF.

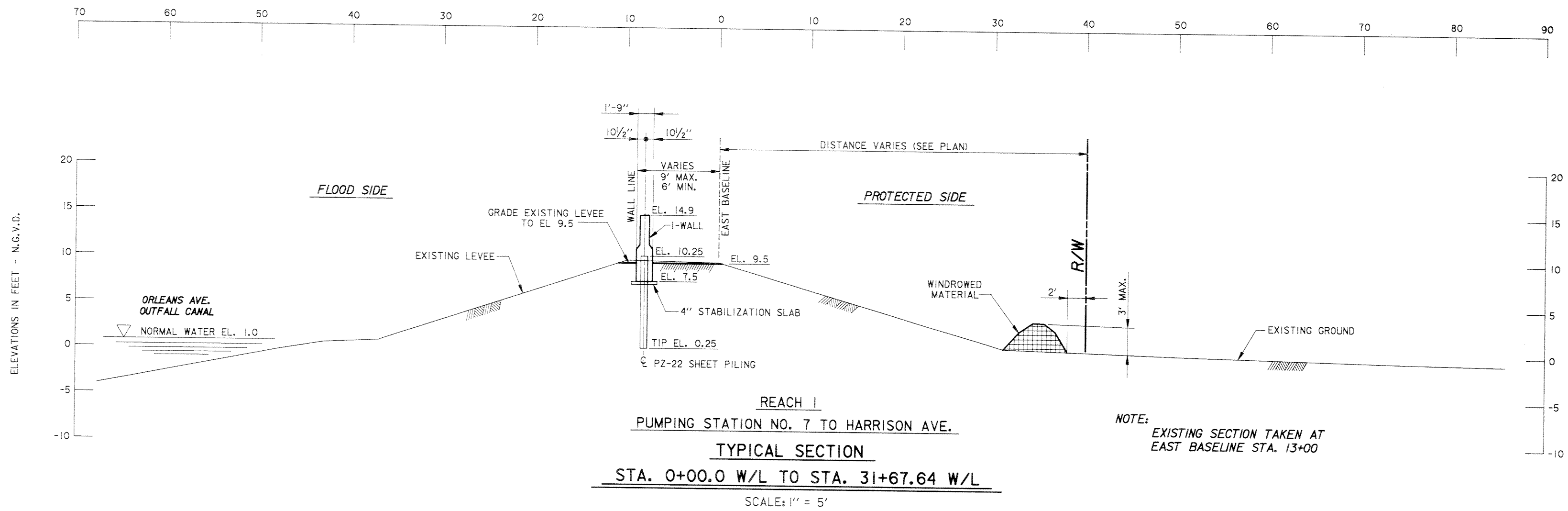
NOTE:
OCTAGON SHAPED SEEPAGE COLLAR NOT SHOWN FOR CLARITY. SEE DETAIL

SCALE: 3/4" = 1' - 0"

SCALE: 1 1/2" = 1' - 0"

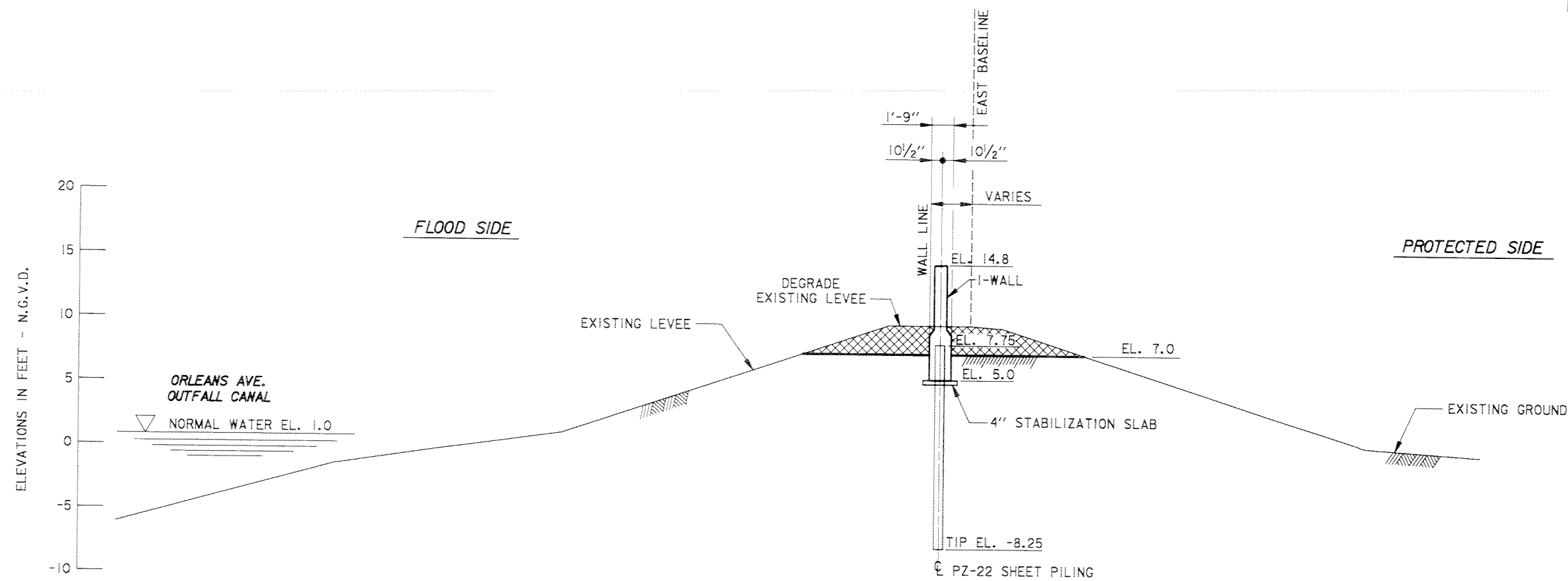
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA 30" WATER LINE SLURRY TRENCH AND SEEPAGE COLLAR DETAILS			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 16	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A07.DGN	FILE NO.	H-4-44644
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 18 OF 32





REACH 1
PUMPING STATION NO. 7 TO HARRISON AVE.
TYPICAL SECTION
STA. 0+00.0 W/L TO STA. 31+67.64 W/L
SCALE: 1" = 5'

NOTE:
EXISTING SECTION TAKEN AT
EAST BASELINE STA. 13+00

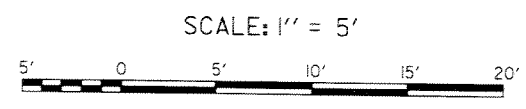



REACH 2
HARRISON AVE. TO FILMORE AVE.
TYPICAL SECTION
STA. 100+00.0 W/L TO STA. 102+75.0 W/L
SCALE: 1" = 5'

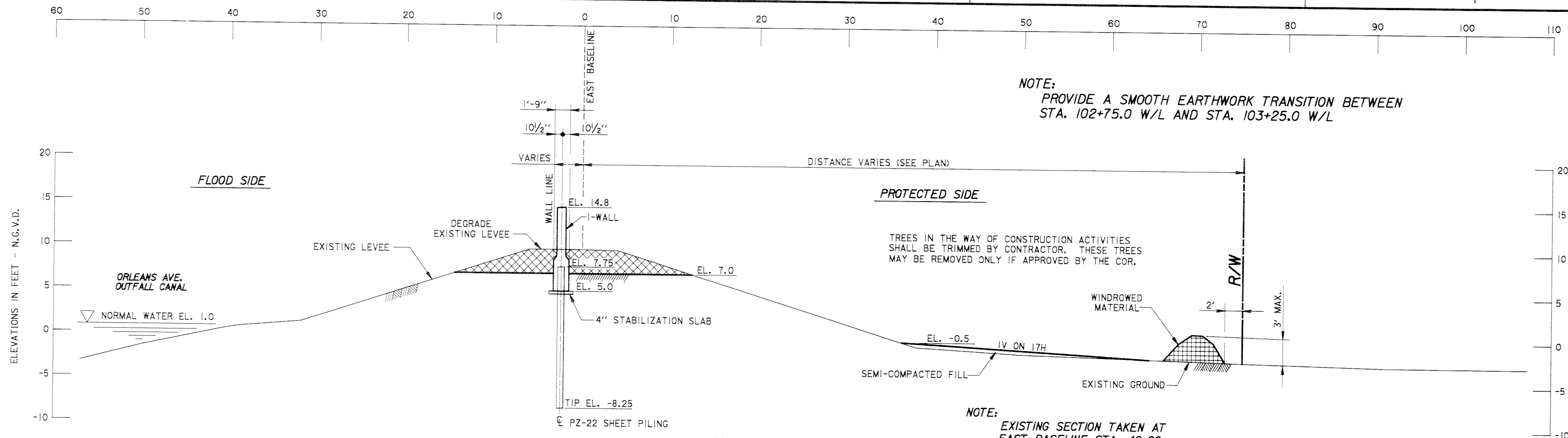
NOTE:
EXISTING SECTION TAKEN AT
EAST BASELINE STA. 39+00

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REFERENCE DRAWINGS
FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
FOR ARCHITECTURAL WALL TREATMENT, SEE DWG. 26.

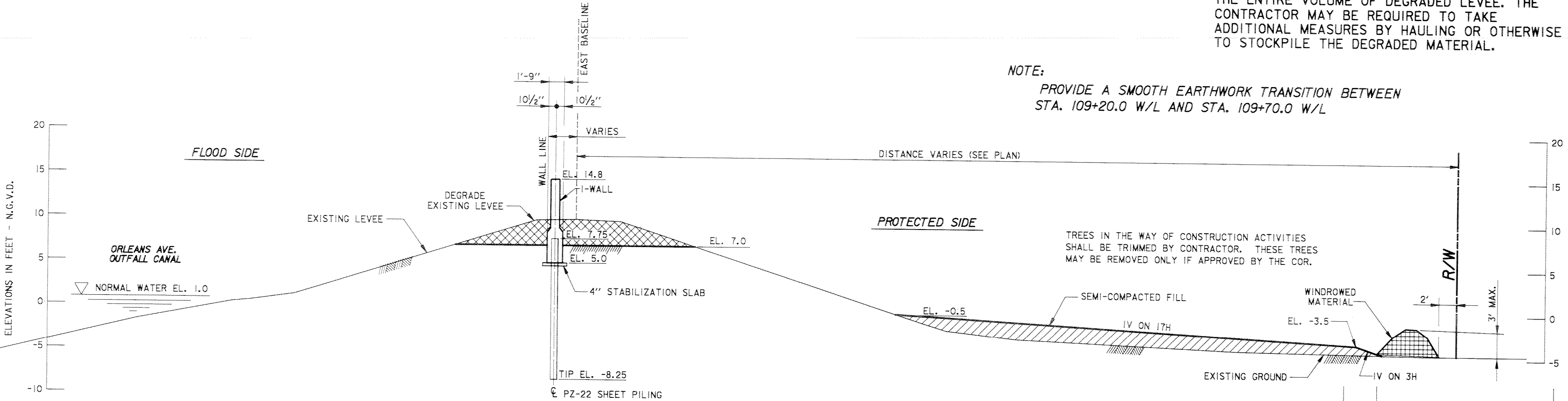


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA TYPICAL SECTIONS STA. 0+00.0 W/L TO STA. 31+67.64 W/L STA. 100+00.0 W/L TO STA. 102+75.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A02.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 19 OF 32



REACH 2
HARRISON AVE. TO FILMORE AVE.
TYPICAL SECTION
STA. 103+25.0 W/L TO STA. 109+20.0 W/L
SCALE: 1" = 5'

NOTE:
THE AVAILABLE ADJACENT STOCKPILE SECTION MAY NOT BE OF SUFFICIENT SIZE TO ACCOMMODATE THE ENTIRE VOLUME OF DEGRADED LEVEE. THE CONTRACTOR MAY BE REQUIRED TO TAKE ADDITIONAL MEASURES BY HAULING OR OTHERWISE TO STOCKPILE THE DEGRADED MATERIAL.



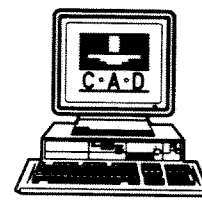
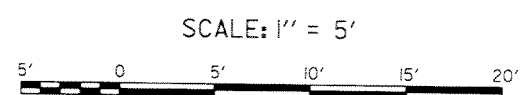
REACH 2
HARRISON AVE. TO FILMORE AVE.
TYPICAL SECTION
STA. 109+70.0 W/L TO STA. 112+70.0 W/L
SCALE: 1" = 5'

NOTE:
EXISTING SECTION TAKEN AT EAST BASELINE STA. 48+00

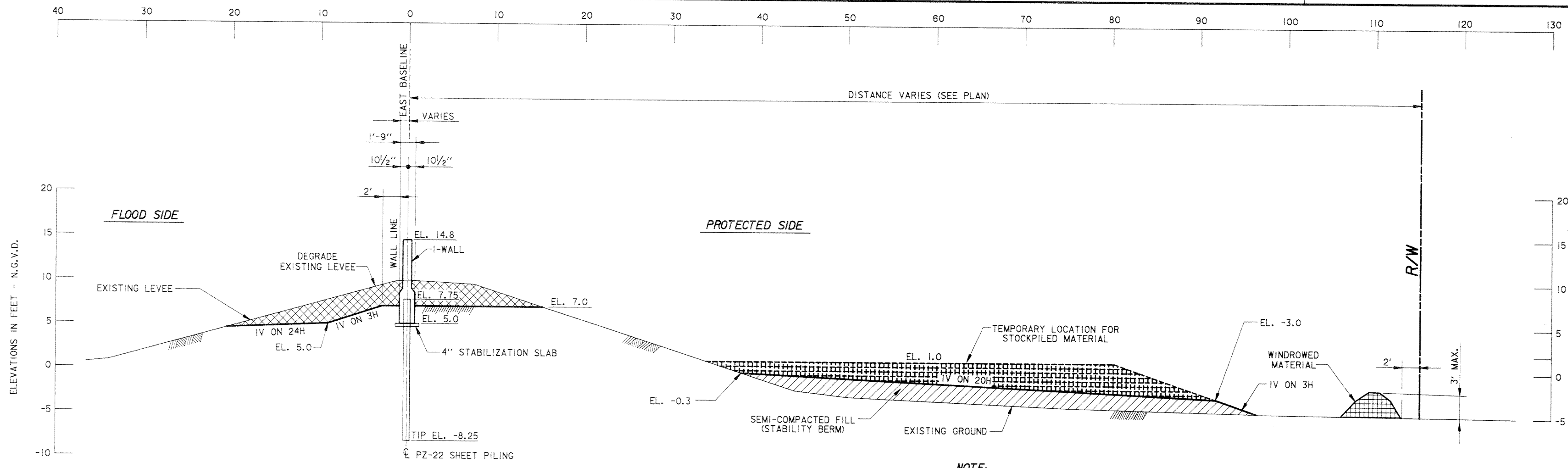
NOTE:
PROVIDE A SMOOTH EARTHWORK TRANSITION BETWEEN STA. 112+70.0 W/L AND STA. 113+20.0 W/L

REFERENCE DRAWINGS
FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
FOR ARCHITECTURAL WALL TREATMENT, SEE DWG. 26.

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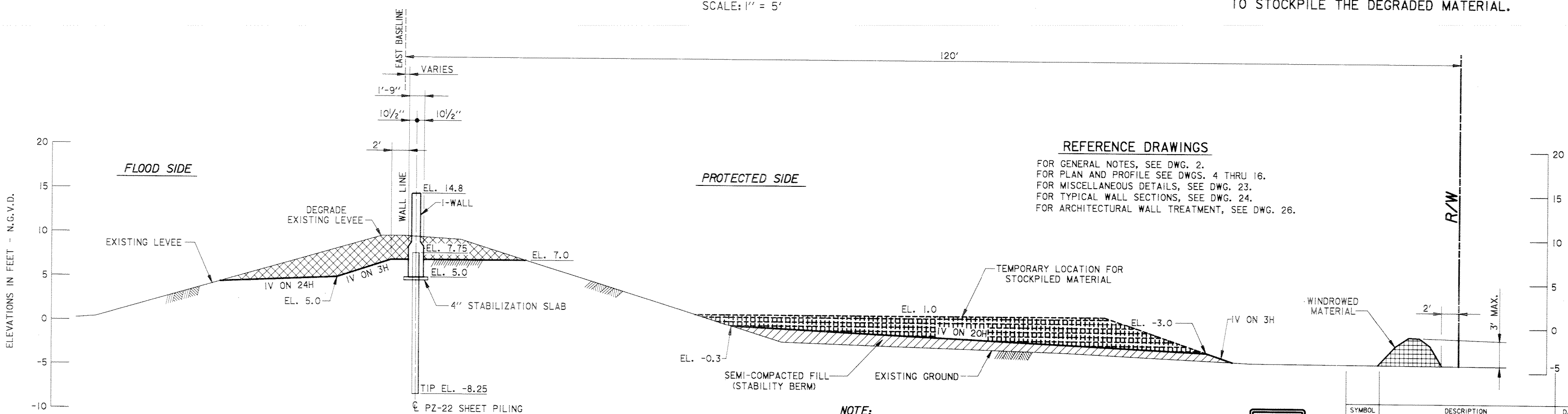
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA TYPICAL SECTIONS STA. 103+25.0 W/L TO STA. 112+70.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A04.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 20	OF 32
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		



REACH 2
HARRISON AVE. TO FILMORE AVE.
TYPICAL SECTION
STA. 113+20.0 W/L TO STA. 122+56.30 W/L
SCALE: 1" = 5'

NOTE:
EXISTING SECTION TAKEN AT
EAST BASELINE STA. 51+00

NOTE:
THE AVAILABLE ADJACENT STOCKPILE SECTION
MAY NOT BE OF SUFFICIENT SIZE TO ACCOMMODATE
THE ENTIRE VOLUME OF DEGRADED LEVEE. THE
CONTRACTOR MAY BE REQUIRED TO TAKE
ADDITIONAL MEASURES BY HAULING OR OTHERWISE
TO STOCKPILE THE DEGRADED MATERIAL.

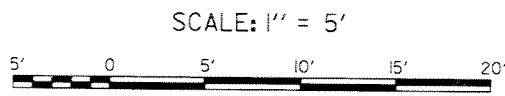
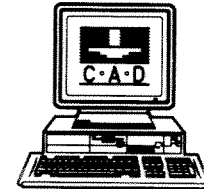


REACH 2
HARRISON AVE. TO FILMORE AVE.
TYPICAL SECTION
STA. 122+56.30 W/L TO STA. 126+32.36 W/L
SCALE: 1" = 5'

NOTE:
EXISTING SECTION TAKEN AT
EAST BASELINE STA. 61+00

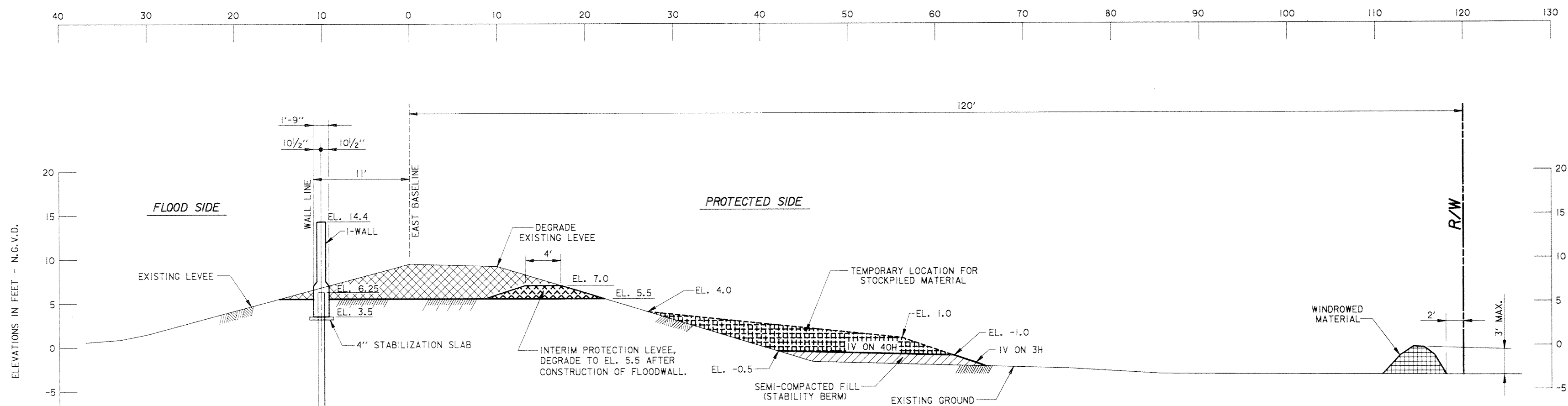
REFERENCE DRAWINGS
FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
FOR ARCHITECTURAL WALL TREATMENT, SEE DWG. 26.

Safety is a Part
of Your Contract



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
TYPICAL SECTIONS STA. 113+20.0 W/L TO STA. 126+32.36 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A03.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 21	OF 32
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		

Safety is a Part of Your Contract



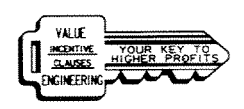
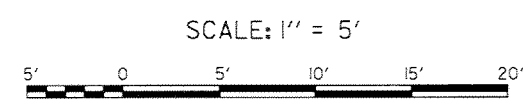
NOTE:
EXISTING SECTION TAKEN AT
EAST BASELINE STA. 78+00


NOTE:
THE AVAILABLE ADJACENT STOCKPILE SECTION
MAY NOT BE OF SUFFICIENT SIZE TO ACCOMMODATE
THE ENTIRE VOLUME OF DEGRADED LEVEE. THE
CONTRACTOR MAY BE REQUIRED TO TAKE
ADDITIONAL MEASURES BY HAULING OR OTHERWISE
TO STOCKPILE THE DEGRADED MATERIAL.

REACH 3
FILMORE AVE. TO ROBERT E. LEE BLVD.
TYPICAL SECTION
STA. 200+00.0 W/L TO STA. 225+50.0 W/L
SCALE: 1" = 5'

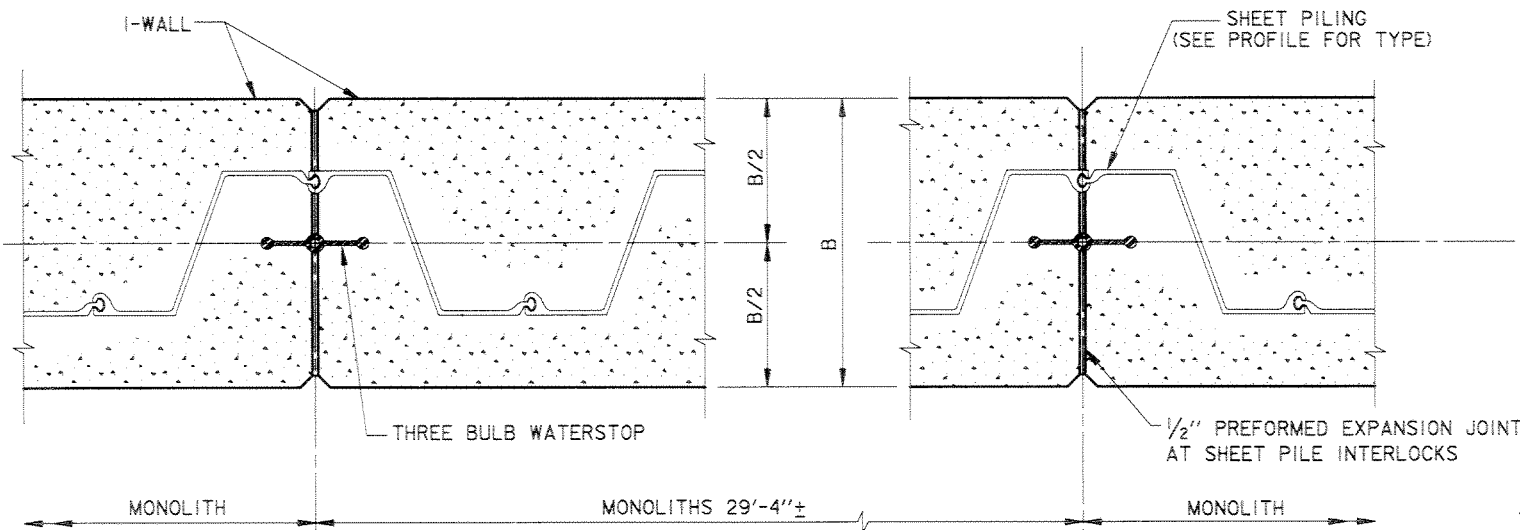
REFERENCE DRAWINGS

- FOR GENERAL NOTES, SEE DWG. 2.
- FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
- FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
- FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
- FOR ARCHITECTURAL WALL TREATMENT, SEE DWG. 26.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA TYPICAL SECTION STA. 200+00.0 W/L TO STA. 225+50.0 W/L			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A05.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 22 OF 32	
SUBMITTED BY: J. ROMERO DESIGN ENGINEER			

Safety is a Part of Your Contract

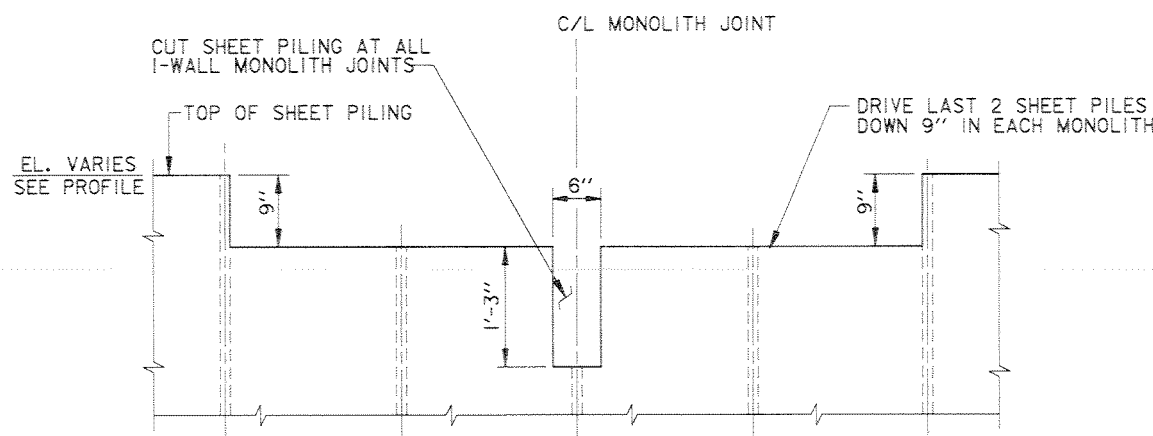


TYPICAL MONOLITH AT SHEET PILE INTERLOCKS

SCALE: 1 1/2" = 1' - 0"

NOTE:

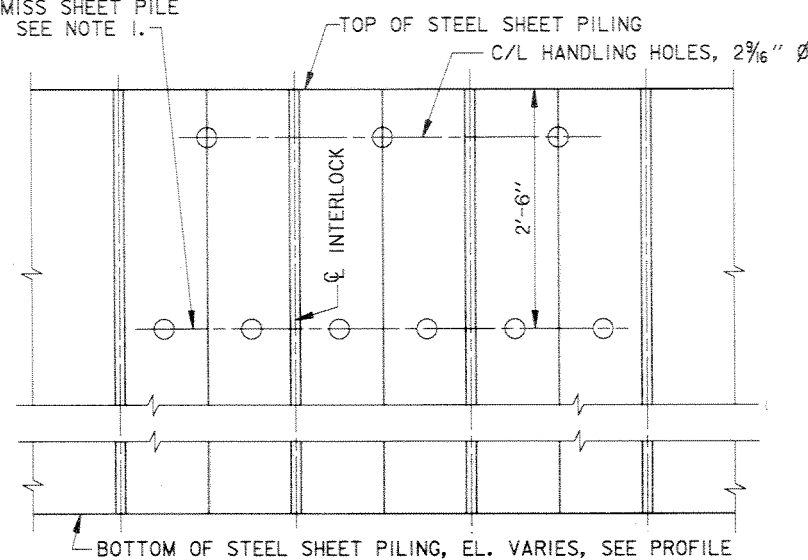
I-WALL MONOLITHS SHALL END AT THE CENTER OF THE NEAREST SHEET PILE INTERLOCK.



SHEET PILING DETAILS I-WALL MONOLITH JOINTS

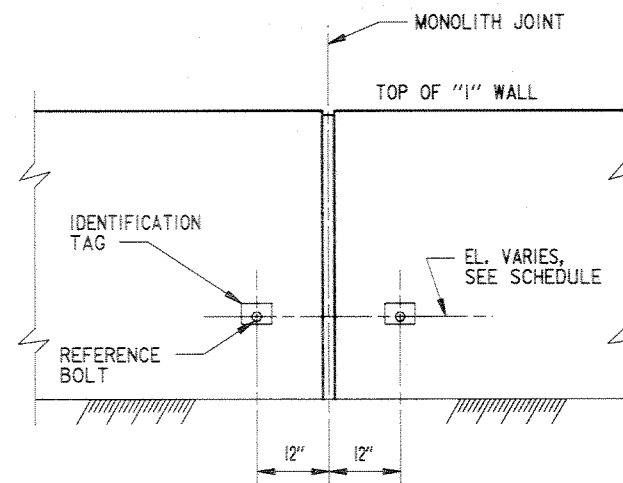
SCALE: 1" = 1' - 0"

C/L OF HOLES TO PASS REINFORCING STEEL, 12" O.C. SPACED TO MISS SHEET PILE INTERLOCKS, SEE NOTE 1.



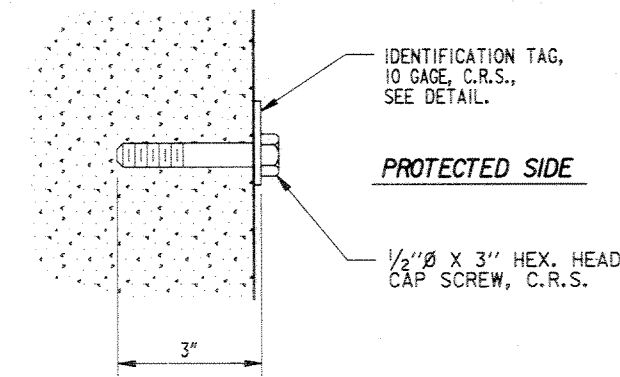
DETAILS OF HOLES IN SHEET PILING

SCALE: 1" = 1' - 0"



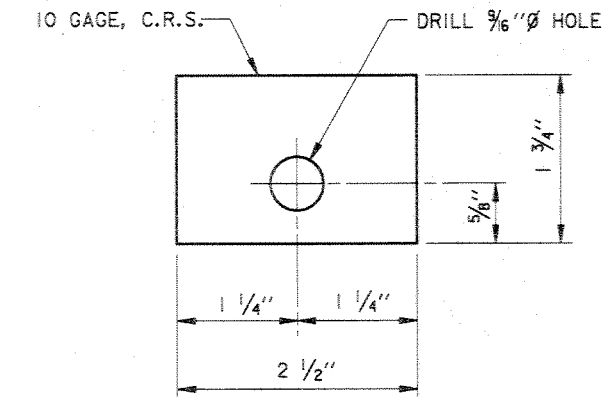
TYPICAL ELEVATION OF SETTLEMENT REFERENCE MARKER

SCALE: 3/4" = 1' - 0"



REFERENCE BOLT

SCALE: 6" = 1' - 0"



IDENTIFICATION TAG

SCALE: 12" = 1' - 0"

SETTLEMENT REFERENCE MARKER (S.R.M.) SCHEDULE

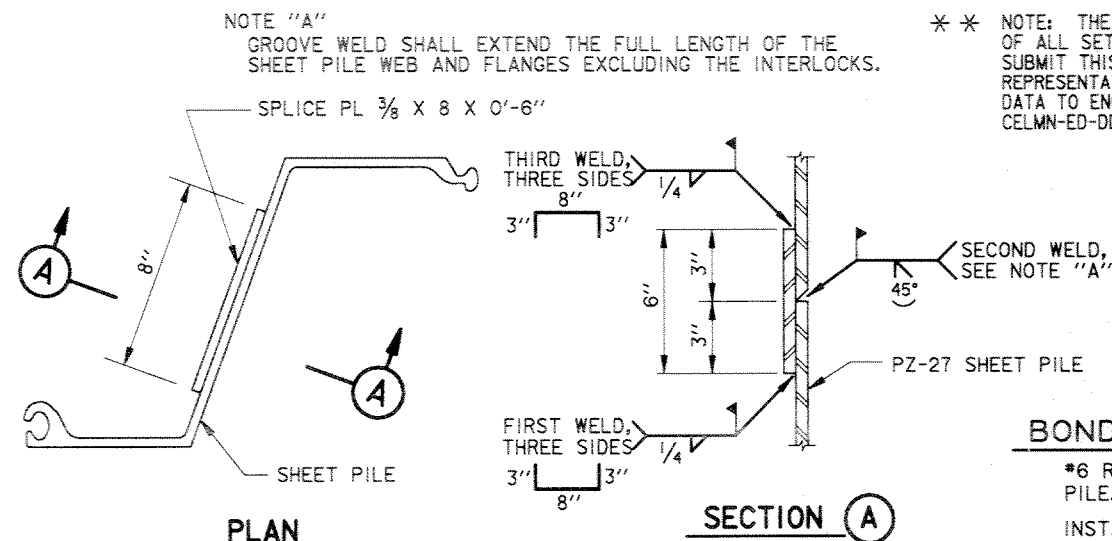
S.R.M. NO.	W/L STATION * (C MONOLITH JOINT)	ELEVATION **
1	0+00.0	10.25
2 & 3	2+93.33	10.25
4 & 5	5+86.66	10.25
6 & 7	8+79.99	10.25
8 & 9	11+73.32	10.25
10 & 11	14+66.65	10.25
12 & 13	17+59.98	10.25
14 & 15	20+53.31	10.25
16 & 17	23+46.64	10.25
18 & 19	26+39.97	10.25
20 & 21	29+33.30	10.25
22	31+67.64	10.25
23	100+00.0	8.0
24 & 25	102+93.33	8.0
26 & 27	105+86.66	8.0
28 & 29	108+79.99	8.0
30 & 31	111+73.32	8.0
32 & 33	114+66.65	8.0
34 & 35	117+59.98	8.0
36 & 37	120+53.31	8.0
38 & 39	123+46.64	8.0
40	126+39.97	8.0
41	200+00.0	6.5
42 & 43	202+93.33	6.5
44 & 45	205+86.66	6.5
46 & 47	208+79.99	6.5
48 & 49	211+73.32	6.5
50 & 51	214+66.65	6.5
52 & 53	217+59.98	6.5
54 & 55	220+53.31	6.5
56 & 57	223+46.64	6.5
58	225+00.0	6.5

SHEET PILE NOTES

- HOLES CUT IN STEEL SHEET PILING FOR PASSING REINFORCING BARS SHALL NOT EXCEED 2" Ø. WHERE HOLES FALL WITHIN THE WEB OF THE STEEL SHEET PILE, THE HOLE SHALL BE SLOTTED 4" HORIZONTALLY TO ACCOMMODATE PASSING THE REINFORCING BARS.
- ANY SUBSTITUTIONS SHALL BE SUBMITTED TO THE CONTRACTING OFFICER REPRESENTATIVE FOR APPROVAL.
- STEEL SHEET PILE SURFACE PREPARATION AND PAINTING SHALL BE IN ACCORDANCE WITH SECTION 9A OF THE SPECIFICATIONS.

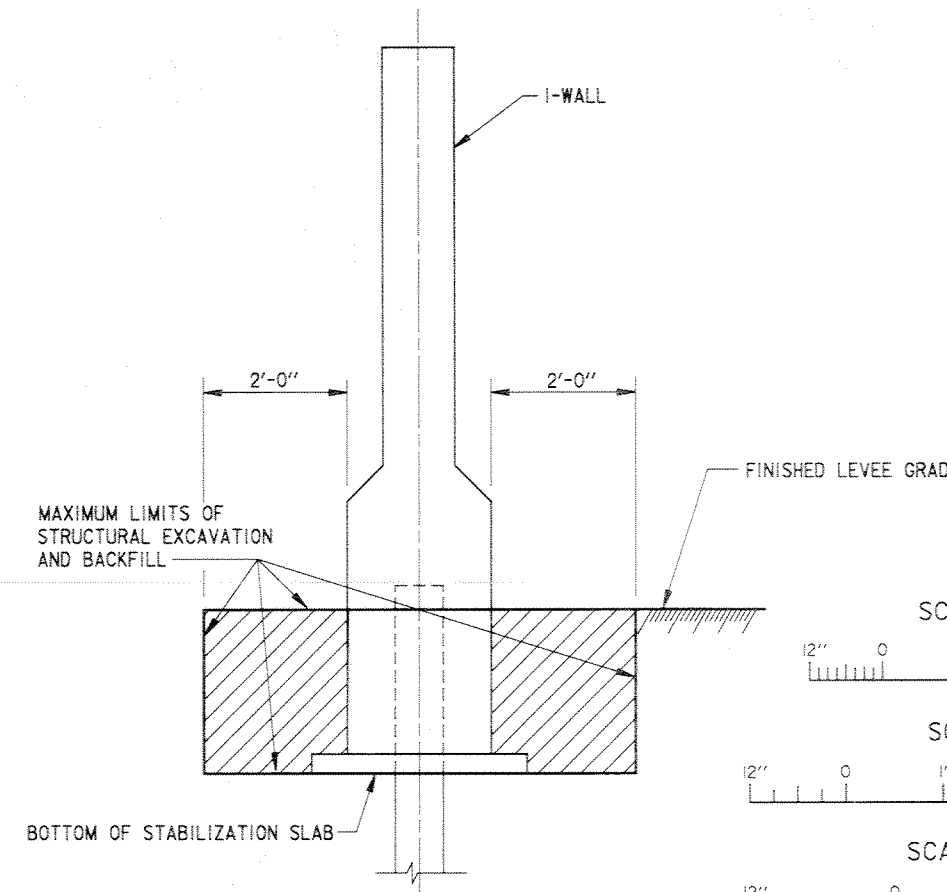
* W/L STATIONS ARE APPROXIMATE. LOCATE REFERENCE BOLTS AT NEAREST W/L STATION TO THOSE SHOWN.

** NOTE: THE CONTRACTOR SHALL TAKE FINAL ELEVATIONS OF ALL SETTLEMENT REFERENCE MARKERS AND SHALL SUBMIT THIS DATA TO THE CONTRACTING OFFICER REPRESENTATIVE (COR). THE COR WILL FURNISH THIS DATA TO ENGINEERING DIVISION, ATTENTION OF: CELMN-ED-DD.



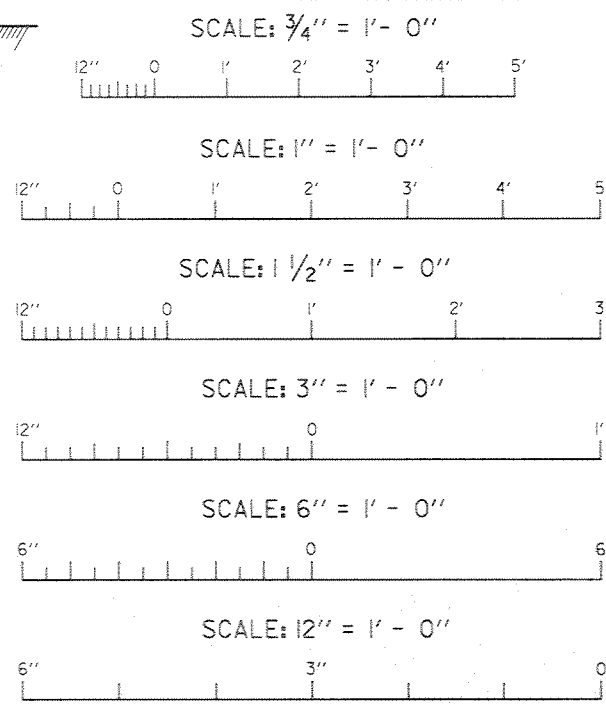
SHEET PILE SPlice DETAIL

SCALE: 3" = 1' - 0"



TYPICAL SECTION LIMITS OF STRUCTURAL EXCAVATION AND BACKFILL

N.T.S.



REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
FOR ARCHITECTURAL WALL TREATMENT, SEE DWG. 26.

BONDING NOTE:

*#6 REINFORCING BAR TO BE WELDED TO THE TOP OF EACH STEEL SHEET PILE. *#6 REINFORCING BAR SHALL NOT EXTEND ACROSS THE MONOLITH JOINT. INSTALL BOND CABLE AT ALL I-WALL JOINTS. BOND CABLES SHALL HAVE AN 8" DIAMETER LOOP TO ALLOW FOR STRESSES. BOND CABLES SHALL BE WELDED AS SPECIFIED TO ADJACENT STEEL PILES 7" BELOW BOTTOM OF CONCRETE CAP FOR I-WALL JOINTS. WELDED CONNECTIONS SHALL BE COATED WITH SPLICING EPOXY TO OBTAIN MOISTURE PROOF JOINT. SEE SPECIFICATIONS.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

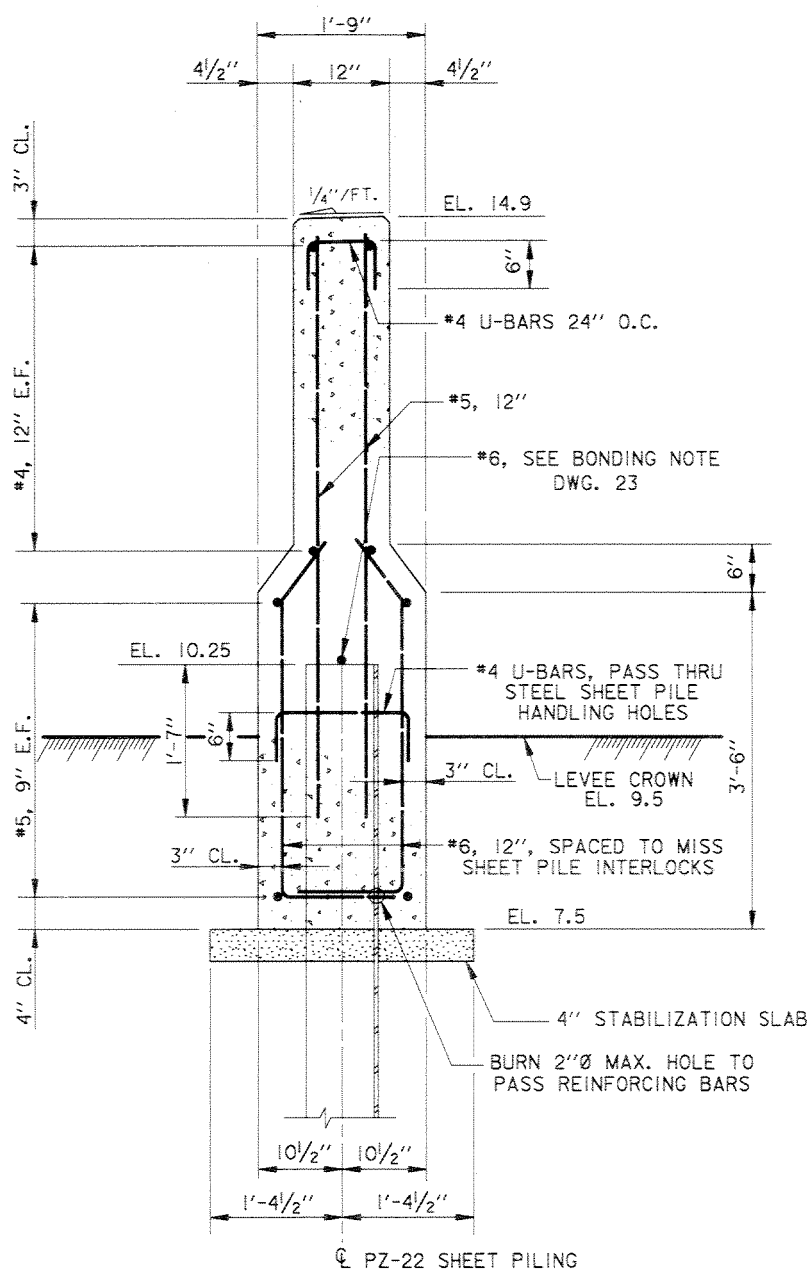
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY
HIGH LEVEL PLAN
ORLEANS AVE. OUTFALL CANAL
PARALLEL PROTECTION
PHASE II-A (EAST SIDE FLOODWALL)
STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L
ORLEANS PARISH, LOUISIANA

SHEET PILE AND MISCELLANEOUS DETAILS

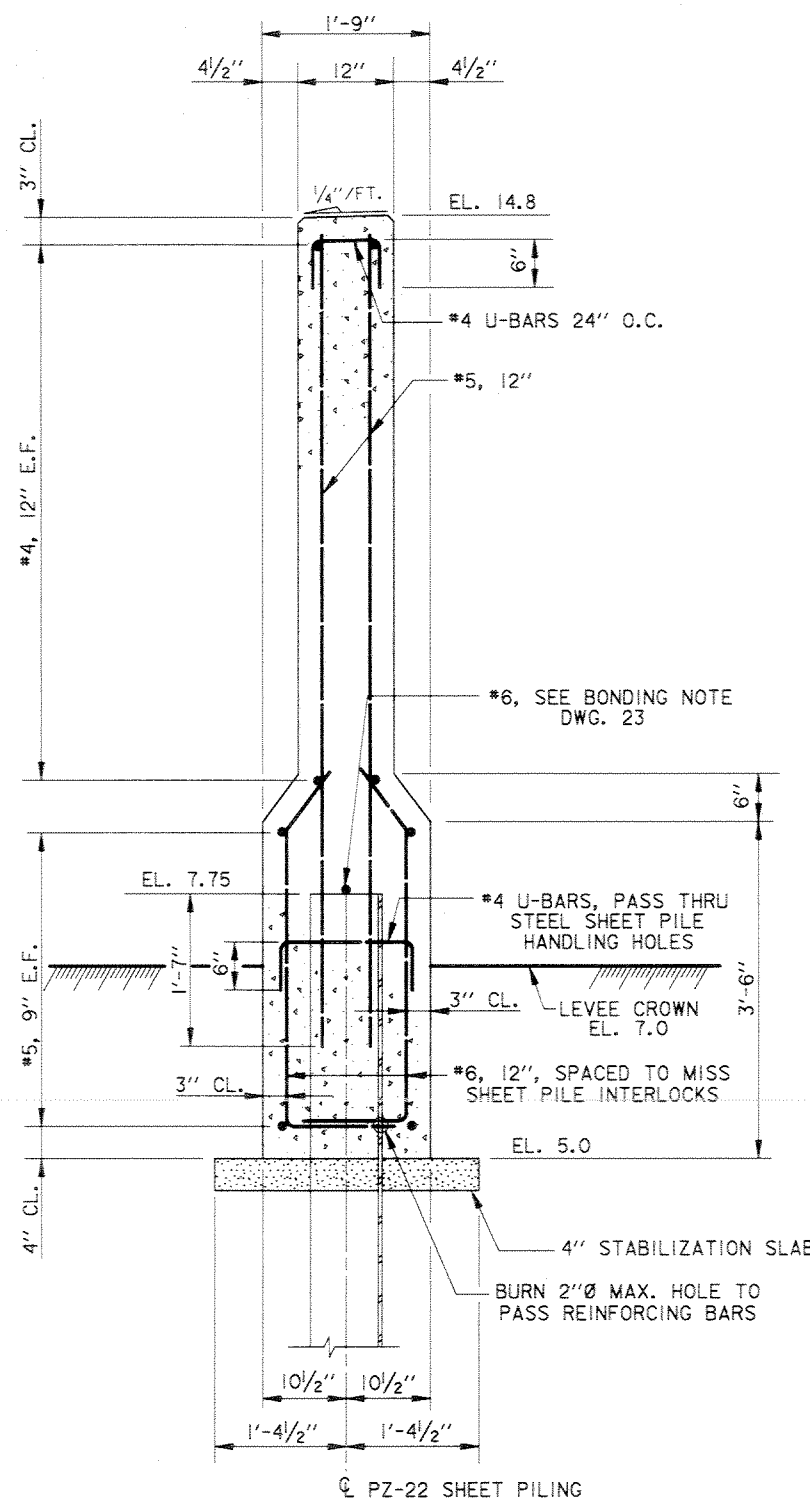
DESIGNED BY:	DATE:	PLOT SCALE:	PLOT DATE:
M. DESAI	SEP. 96	4	SEP. 96
DRAWN BY:	FILE NO.		
B. DORCEY	H-4-44644		
CHECKED BY:	SOLICITATION NO.		
J. ROMERO	DACH29-96-B-0096		
SUBMITTED BY:		DWG. 23 OF 32	
J. ROMERO			
DESIGN ENGINEER			



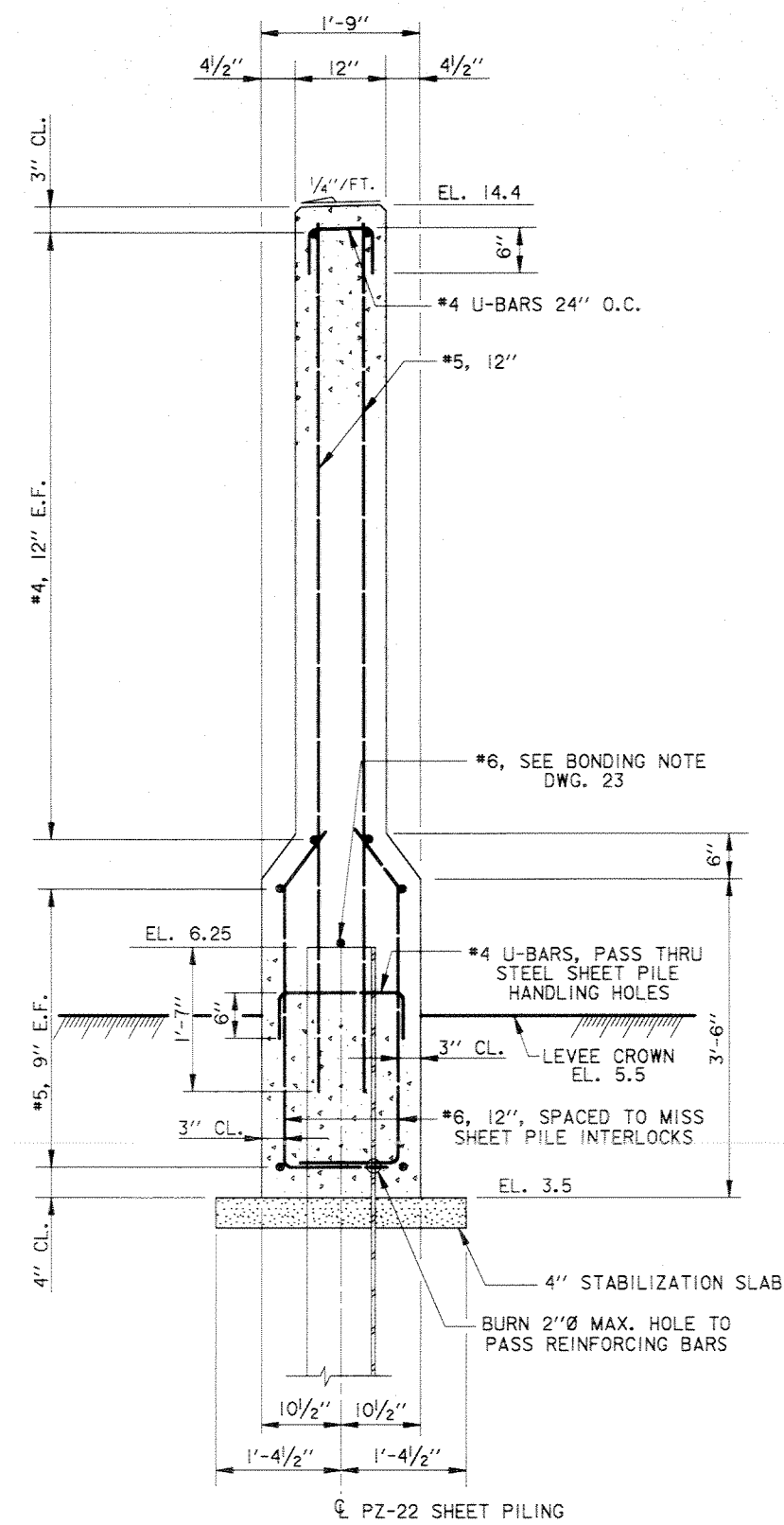
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REACH 1
PUMPING STATION NO. 7 TO HARRISON AVE.
STA. 0+00.0 W/L TO STA. 31+67.64 W/L
 SCALE: 1" = 1'- 0"



REACH 2
HARRISON AVE. TO FILMORE AVE.
STA. 100+00.0 W/L TO STA. 126+32.36 W/L
 SCALE: 1" = 1'- 0"

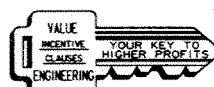
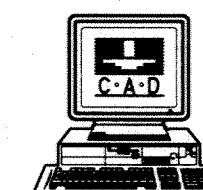
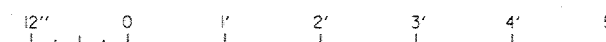


REACH 3
FILMORE AVE. TO ROBERT E. LEE BLVD.
STA. 200+00.0 W/L TO STA. 225+50.0 W/L
 SCALE: 1" = 1'- 0"

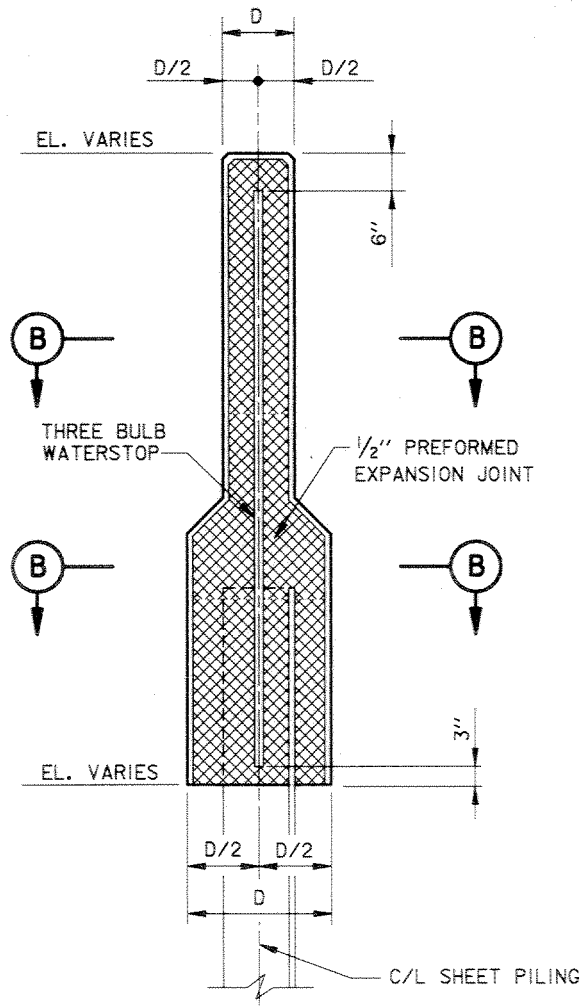
REFERENCE DRAWINGS

FOR GENERAL NOTES, SEE DWG. 2.
 FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
 FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
 FOR ARCHITECTURAL WALL TREATMENT, SEE DWG. 26.

SCALE: 1" = 1'- 0"

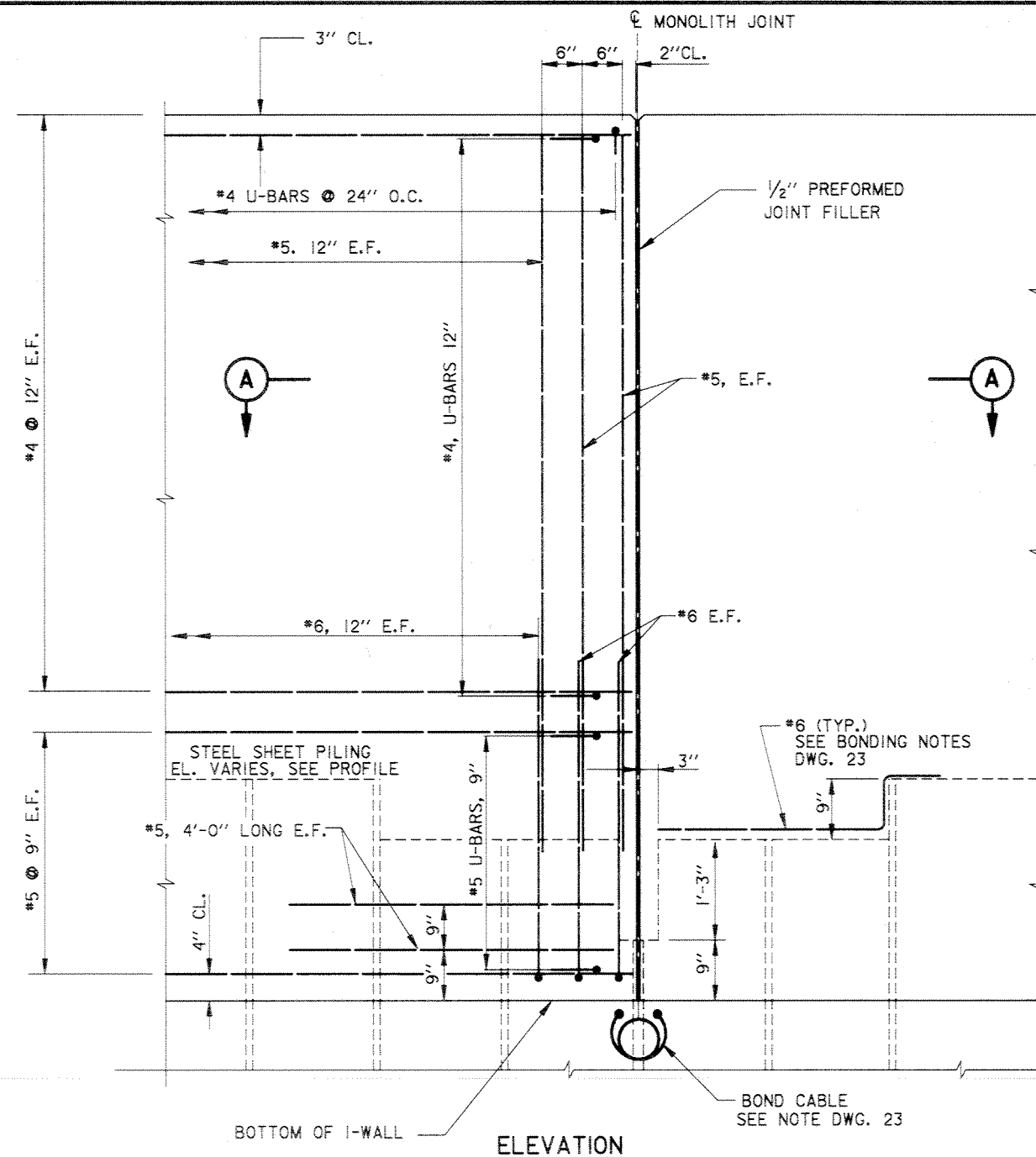


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA I-WALL REINFORCING			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 12	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A01.DGN	FILE NO.	H-4-44644
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0098	DWG.	24 OF 32
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		



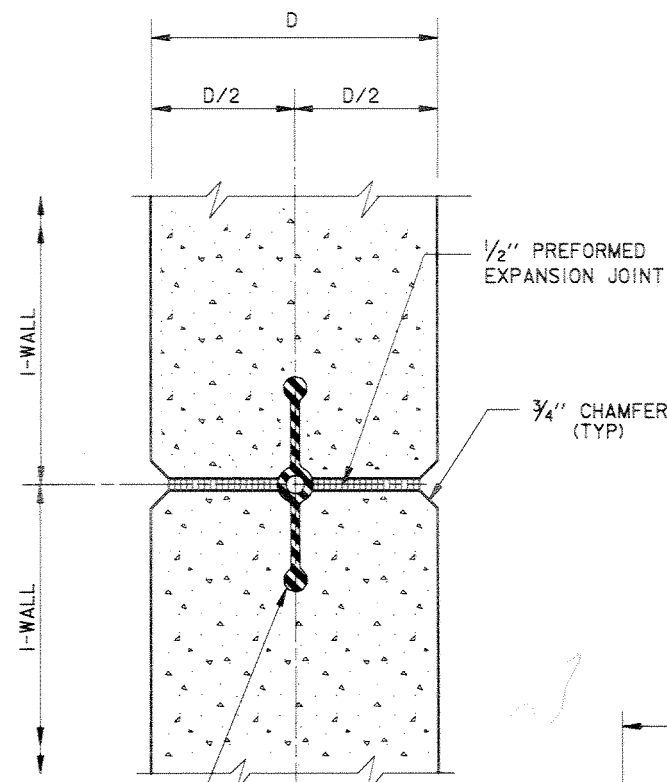
TYPICAL I-WALL JOINT

SCALE: 3/4" = 1' - 0"



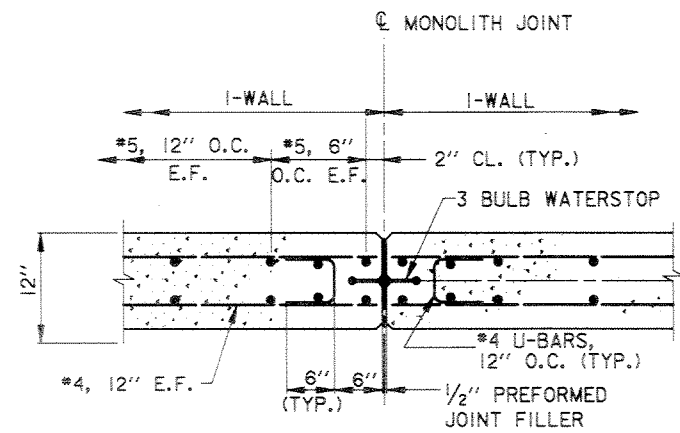
DETAIL OF I-WALL MONOLITH JOINTS

SCALE: 1" = 1' - 0"



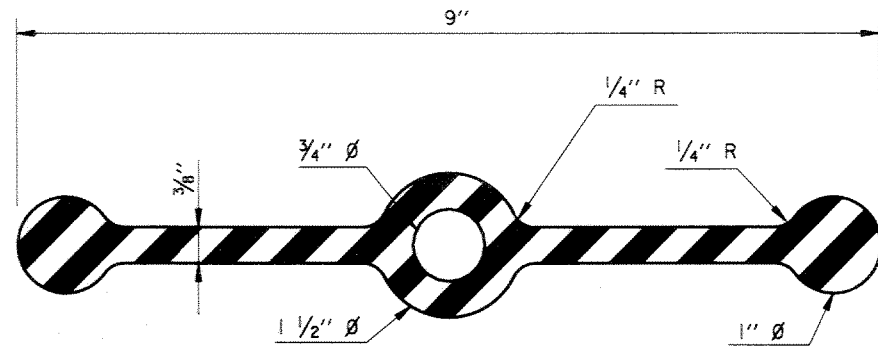
SECTION (B)

SCALE: 3" = 1' - 0"



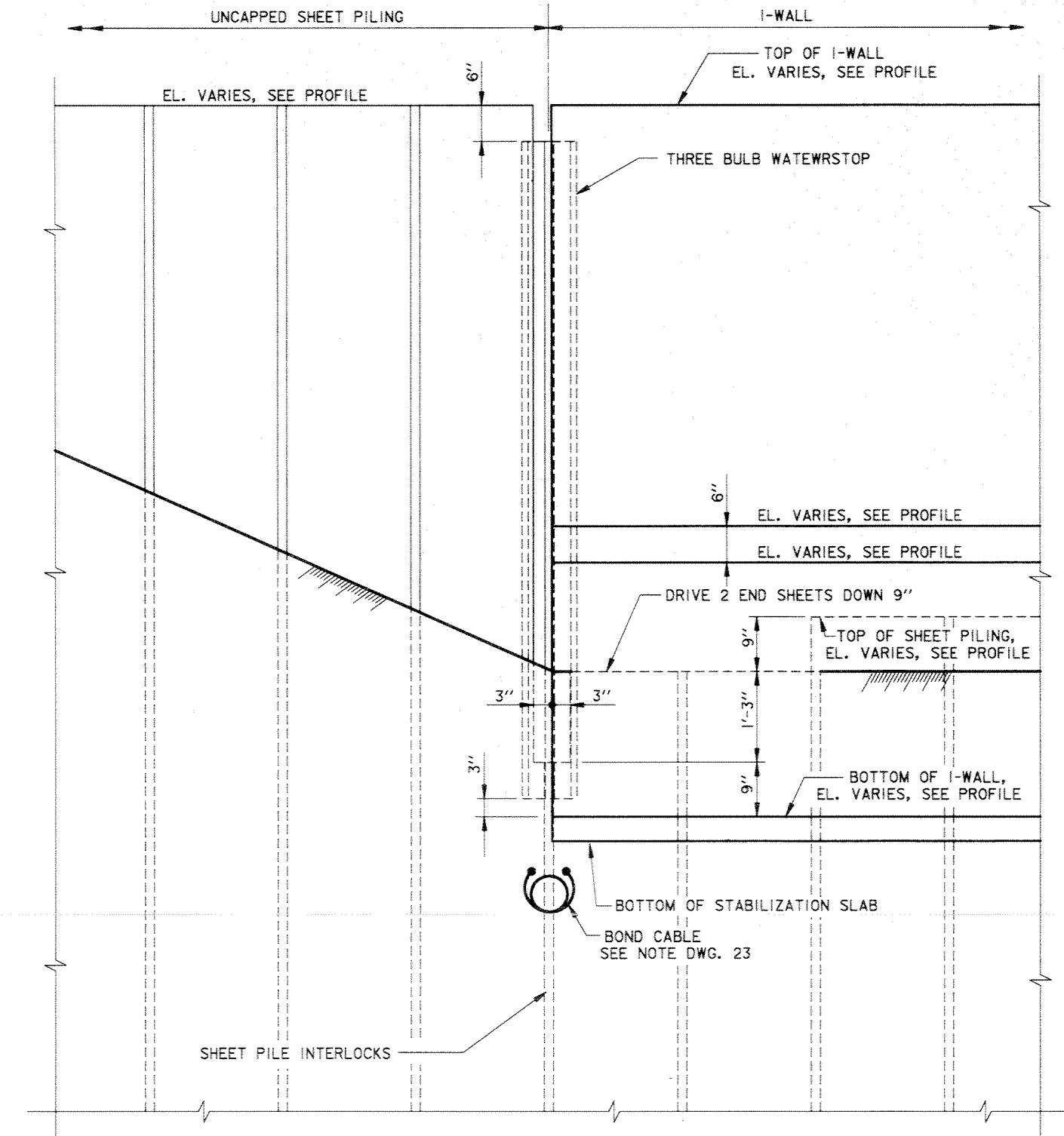
SECTION (A)

SCALE: 1" = 1' - 0"



THREE BULB WATERSTOP

SCALE: 12" = 1' - 0"



FLOOD SIDE ELEVATION

SHOWN STA. 0+00.0 W/L
STA. 100+00.0 W/L
STA. 200+00.0 W/L

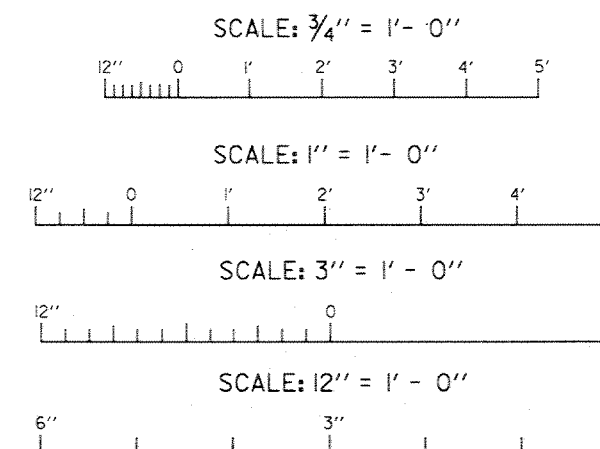
OPPOSITE HAND STA. 31+67.64 W/L
STA. 126+32.36 W/L
STA. 225+50.0 W/L

UNCAPPED SHEET PILING TO I-WALL

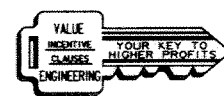
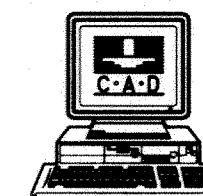
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REFERENCE DRAWINGS

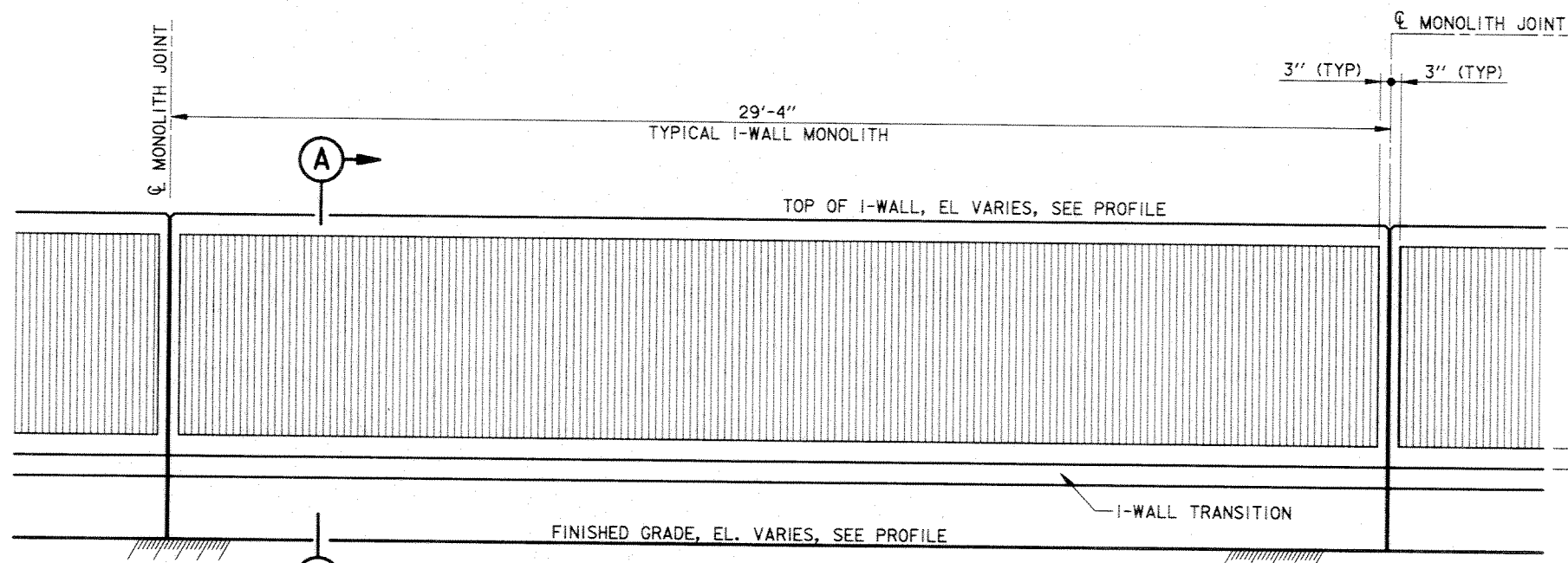
FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.
FOR ARCHITECTURAL WALL TREATMENT, SEE DWG. 26.



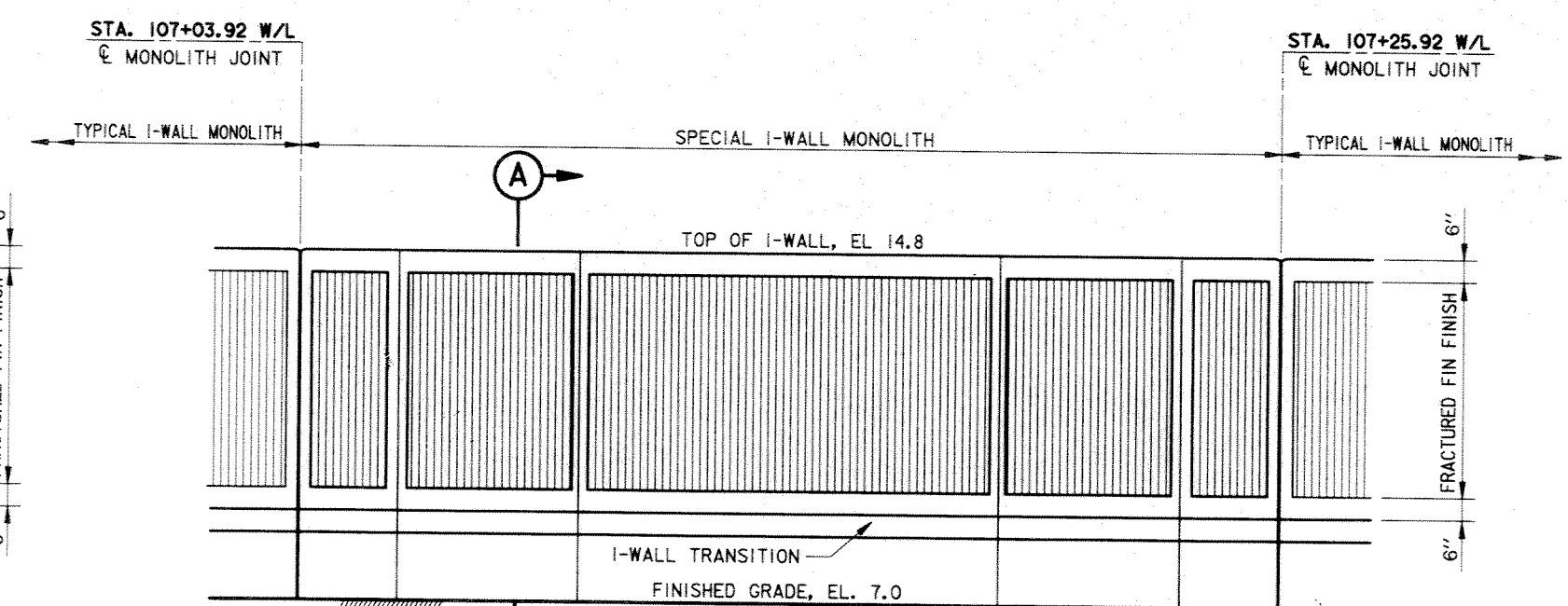
Safety is a Part of Your Contract



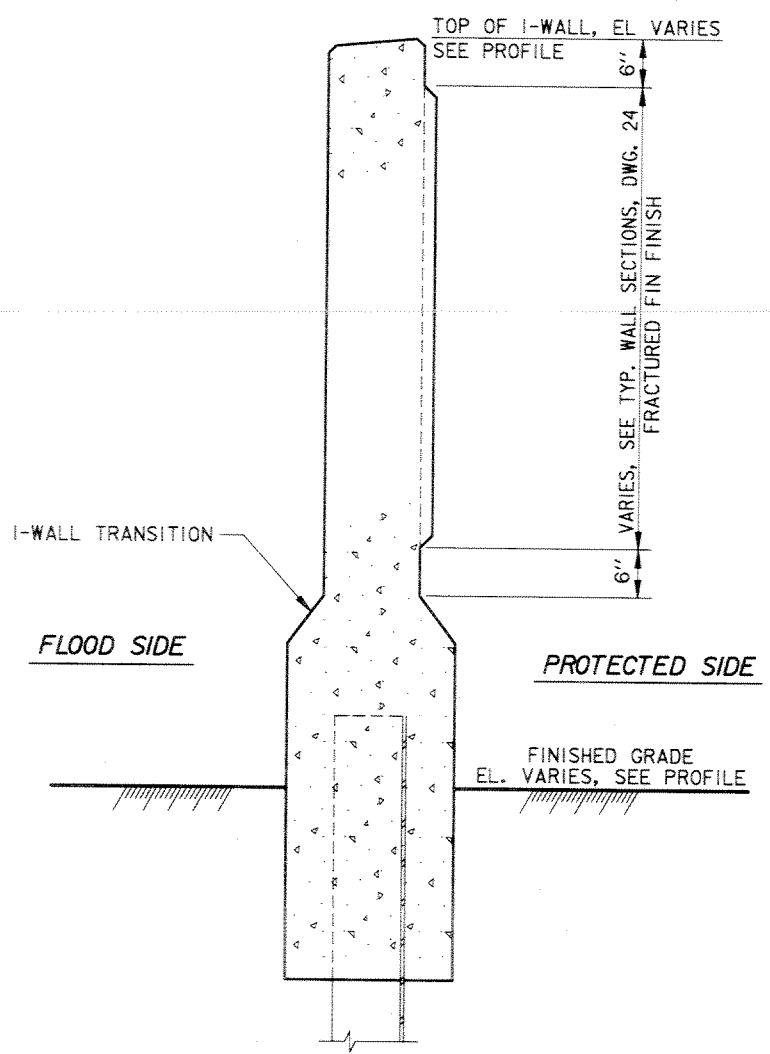
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA TYPICAL WALL JOINTS			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 1	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A11.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 25 OF 32	
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		



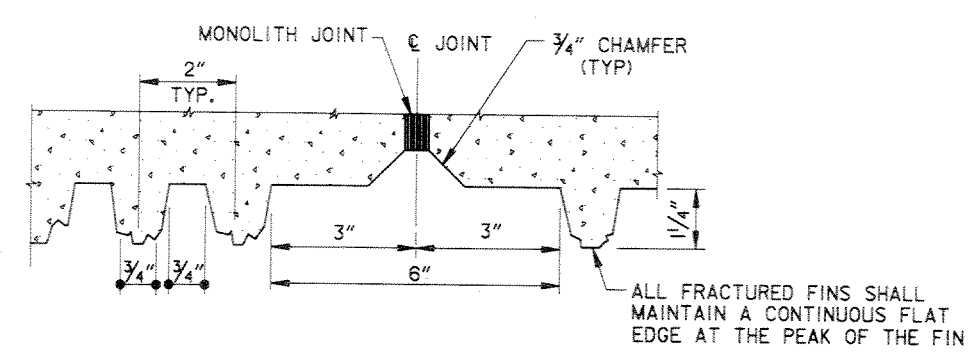
**PROTECTED SIDE ELEVATION
TYPICAL I-WALL MONOLITH**
SCALE: 1/2" = 1'- 0"



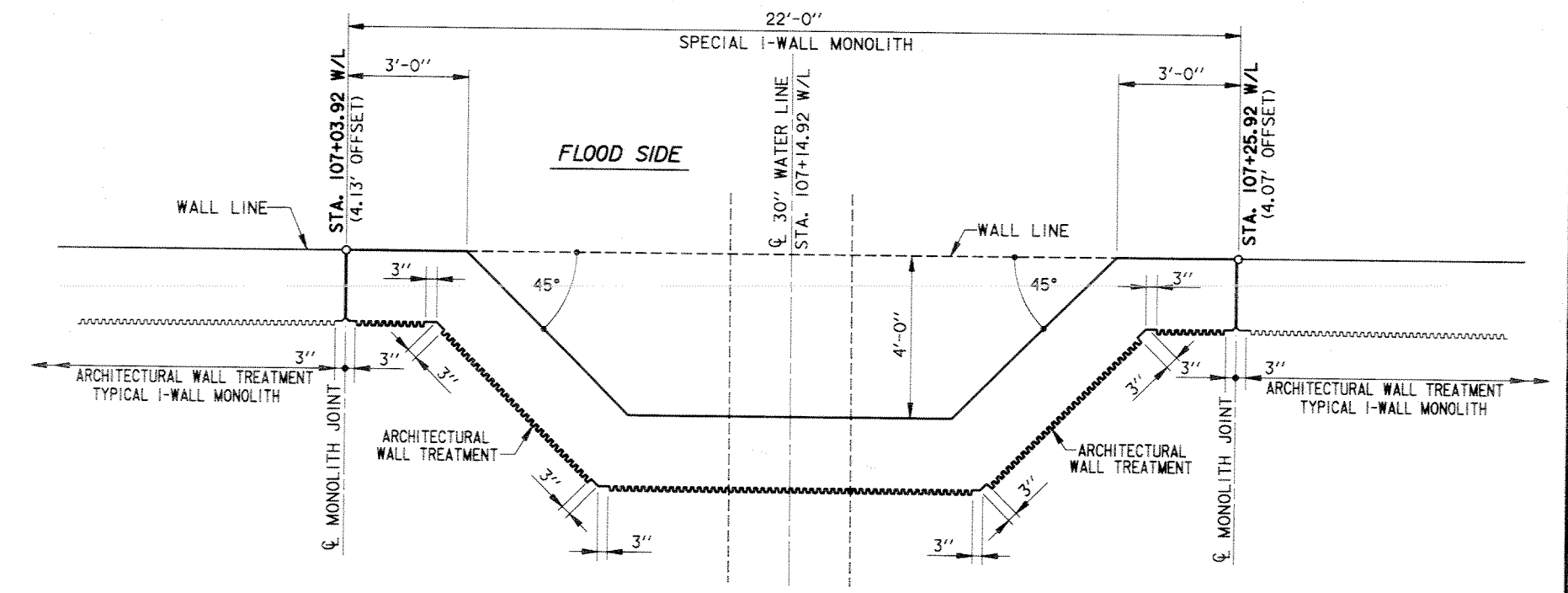
PROTECTED SIDE ELEVATION



SECTION A
SCALE: 1" = 1'- 0"



FRACTURED FIN FINISH AT TYPICAL MONOLITH JOINT
SCALE: 6" = 1'- 0"



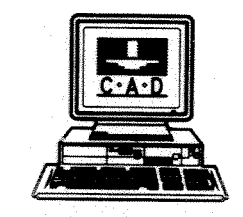
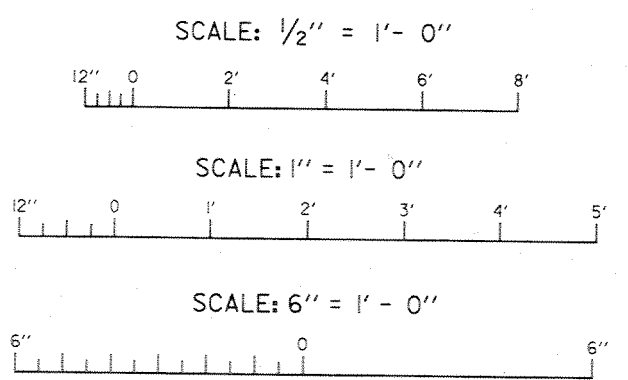
**PLAN LAYOUT
ARCHITECTURAL WALL TREATMENT
SPECIAL I-WALL MONOLITH***
SCALE: 1/2" = 1'- 0"

* SEE BACK OF PAGE FOR CORRECTED INFORMATION

**Safety is a Part
of Your Contract**

- NOTES:
1. ALL FORM TIE BOLTS SHALL OCCUR IN THE VALLEY OF THE CONCRETE WALL RIB TEXTURE. (I.E. BETWEEN ADJACENT RIBS)
 2. CONTRACTOR SHALL MAKE ALL EFFORTS TO MINIMIZE THE OCCURRENCE OF BUTT JOINTS.
 3. CONTRACTOR SHALL SUBMIT FOR PRIOR APPROVAL, DRAWINGS SHOWING THE LOCATION OF ALL BUTT JOINTS IN ALL FORMS USED FOR CONSTRUCTION.

REFERENCE DRAWINGS
FOR GENERAL NOTES, SEE DWG. 2.
FOR PLAN AND PROFILE SEE DWGS. 4 THRU 16.
FOR MISCELLANEOUS DETAILS, SEE DWG. 23.
FOR TYPICAL WALL SECTIONS, SEE DWG. 24.

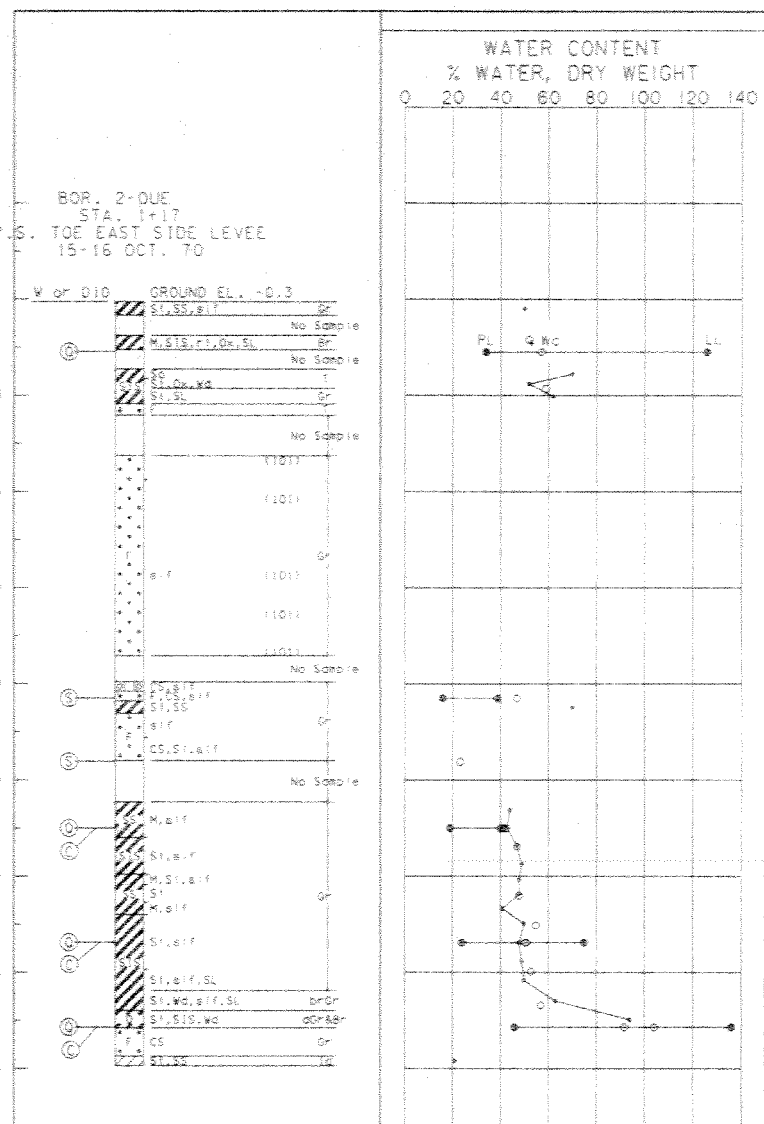


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
ARCHITECTURAL WALL TREATMENT			
DESIGNED BY: M. DESAI	DATE: SEP. 96	PLOT SCALE: 12	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: 44644A13.DGN	FILE NO.	H-4-44644
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. 26 OF 32



Safety is a Part of Your Contract

E.B. STA. 1+17, P.S. TOE



E.B. STA. 4+06, 20' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 1 Soil Technician: A. J. Nayzak Date: 17 September 1983
Ground Elev. 9.94 Datum: NGVD Gr. Water Depth: See Text

Sample No.	Sample Depth From To	DEPTH (ft)	WATER CONTENT (%)	VEHICLE CLASSIFICATION	STANDARD PENETRATION TEST
1	2.0 2.9	0.0 4.0		Stiff tan & gray silty clay w/silt pockets	
2	5.0 5.5	4.0 7.0		Stiff gray & tan clay w/silt pockets & fill	
3	8.0 8.5	7.0 10.0		Medium stiff gray & tan clay w/organic matter	
4	11.0 11.5	10.0 12.5		Soft gray sandy clay w/organic matter	
5	14.0 14.5	12.5 16.0		Medium stiff gray clay w/organic matter & wood	
6	17.0 17.5	16.0 18.5		Medium stiff gray clay w/some organic matter	
7	18.5 20.0	18.5 21.0		Dense gray sand	10 43
8	21.0 22.5	21.0		Very dense gray sand	12 50+10'
9	23.5 25.0			Very dense gray sand	15 50+10'
10	26.0 27.5	28.0		Very dense gray sand	11 50+P'
11	28.5 30.0	28.0		Medium dense gray sand	8 21
12	33.5 35.0	37.5		Very dense gray sand	9 28
13	38.5 40.0	27.5		Dense gray sand w/shell fragments	11 48
14	43.5 45.0			Ditto	10 32
15	48.5 50.0	51.0		Ditto	10 28
16	53.0 53.5	53.0		Medium dense gray sand w/shell fragments & clay layers	5 11
17	58.5 60.0	62.0		Ditto	5 14
18	63.5 65.0	62.0		Medium stiff gray clay w/sand pockets & shell fragments	7 5
19	69.0 69.5			Ditto	
20	74.0 74.5	78.0		Medium stiff gray clay w/sand pockets & shell fragments	
21	79.0 79.5	78.0	84.0	Stiff gray clay w/silt lenses	
22	84.0 84.5	84.0	86.0	Stiff gray clay w/organic matter	
23	89.0 89.5	86.0	92.0	Stiff greenish-gray & tan clay w/sand pockets	
24	94.0 94.5	92.0	96.0	Very stiff greenish-gray & tan clay w/sand pockets	
25	98.0 99.5	96.0	100.0	Compact tan & gray sandy silt	8 26

E.B. STA. 8+61, 5' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 3 Soil Technician: A. J. Nayzak Date: 3 September 1983
Ground Elev. 10.04 Datum: NGVD Gr. Water Depth: See Text

Sample No.	Sample Depth From To	DEPTH (ft)	WATER CONTENT (%)	VEHICLE CLASSIFICATION	STANDARD PENETRATION TEST
1	2.0 3.0	0.0 4.0		Compact tan & gray clayey silt	
2	5.0 6.0	4.0 7.5		Medium stiff gray & tan silty clay w/some organic matter	
3	8.0 9.0	7.5 10.0		Loose dark brown clayey silt w/sand layers & organic matter	
4	11.0 12.5	10.0 11.5		Loose tan sand w/some clay (fill)	
5	14.0 15.0	11.5 16.0		Soft gray clay w/roots	
6	16.0 17.5	16.0 18.0		Very dense gray sand	12 50+10'
7	18.5 20.0	18.0		Dense gray sand	12 35
8	22.0 22.5			Ditto	6 31
9	23.5 25.0	27.5		Ditto	10 42
10	28.5 30.0	27.5 32.5		Medium dense gray sand	5 22
11	33.5 35.0	32.5 38.0		Dense gray sand	10 35
12	38.5 40.0	38.0		Medium dense gray sand w/shell fragments	5 25
13	43.5 45.0			Ditto	8 30
14	48.5 50.0	50.0		Ditto	8 17

E.B. STA. 14+26, 4' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 5 Soil Technician: A. J. Nayzak Date: 10 September 1983
Ground Elev. 9.88 Datum: NGVD Gr. Water Depth: See Text

Sample No.	Sample Depth From To	DEPTH (ft)	WATER CONTENT (%)	VEHICLE CLASSIFICATION	STANDARD PENETRATION TEST
1	2.0 2.5	0.0 2.0		Medium stiff brown & gray fissured clay w/silt pockets	
2	5.0 5.5	3.0 7.0		Very stiff tan & gray clay w/silt pockets	
3	8.0 8.5	7.0 10.0		Medium stiff gray clay w/silt pockets	
4	11.0 11.5	10.0 12.0		Loose tan silty sand w/clay	
5	14.0 14.5	12.0 16.0		Soft gray clay w/organic matter & wood	
6	16.0 17.5	16.0 19.5		Wood w/some clay	4 18
7	19.5 21.0	19.5		Dense gray sand w/shell fragments	8 32
8	22.0 23.5			Ditto	10 35
9	25.0 26.5	28.0		Ditto	12 40
10	28.5 30.0	28.0 31.0		Very dense gray sand	15 50+10'
11	33.5 35.0	31.0		Dense gray sand w/shell fragments	15 37
12	38.5 40.0			Ditto	15 40
13	43.5 45.0			Ditto	14 38
14	48.5 50.0	50.0		Ditto	6 24

E.B. STA. 18+22, 5' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 7 Soil Technician: A. J. Nayzak Date: 31 August 1983
Ground Elev. 9.98 Datum: NGVD Gr. Water Depth: See Text

Sample No.	Sample Depth From To	DEPTH (ft)	WATER CONTENT (%)	VEHICLE CLASSIFICATION	STANDARD PENETRATION TEST
1	2.0 3.0	0.0 4.5		Stiff tan & gray silty clay w/silt pockets	
2	5.0 6.0	4.5 6.0		Stiff gray & tan silty clay w/organic matter	
3	8.0 9.0	6.0 10.5		Medium stiff dark gray clay w/humus & wood	
4	11.0 12.0	10.5 12.0		Very soft gray clay w/organic matter & sand pockets & layers	
		12.0 14.5		Wood	
5	18.5 19.0	14.5 20.0		Extremely soft gray sandy clay w/wood, organic matter & humus	
6	20.0 21.5	20.0 22.0		Dense gray sand w/some organic matter	8 35
7	22.5 24.0	22.0		Dense gray sand	12 38
8	25.0 26.5			Ditto	8 38
9	28.5 30.0			Ditto	15 37
10	33.5 35.0			Ditto	8 35
11	38.5 40.0			Dense gray sand w/shell fragments	12 42
12	43.5 45.0			Ditto	12 45
13	48.5 50.0	50.0		Ditto	12 46

E.B. STA. 24+57, 4.5' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 9 Soil Technician: A. J. Nayzak Date: 16 September 1983
Ground Elev. 9.83 Datum: NGVD Gr. Water Depth: See Text

Sample No.	Sample Depth From To	DEPTH (ft)	WATER CONTENT (%)	VEHICLE CLASSIFICATION	STANDARD PENETRATION TEST
1	2.0 2.5	0.0		Stiff tan & gray clay w/silt & sand pockets	
2	5.0 5.5			Ditto	
3	8.0 8.5	5.0		Ditto	
4	11.0 11.5	9.0 12.5		Medium stiff gray silty clay w/organic matter	
5	14.0 14.5	12.5		Soft gray clay w/organic matter & wood	
6	19.0 19.5	21.0		Ditto	
7	23.0 23.5	21.0 23.5		Soft gray sandy clay w/organic matter & roots	
8	25.5 26.0	25.5 26.5		Dense gray sand w/shell fragments	7 36
9	26.0 27.5	25.5		Medium dense gray sand w/shell fragments	6 26
10	28.5 30.0			Medium dense gray sand w/some organic matter	7 25
11	33.5 35.0			Ditto	5 17
12	38.5 40.0			Ditto	5 13
13	43.5 45.0	46.0		Ditto	5 10
14	48.5 50.0	46.0 50.0		Medium dense gray sand w/shell fragments	4 16

NOTES:

- STANDARD PENETRATION TEST
*NUMBER IN FIRST COLUMN INDICATES NUMBER OF BLOWS OF 140-LB HAMMER DROPPED 30 IN. REQUIRED TO SEAT 2-IN. O.D. SPLITSPOON SAMPLER 6 IN. NUMBER IN SECOND COLUMN INDICATES NUMBER OF BLOWS OF 140-LB. HAMMER DROPPED 30 IN. REQUIRED TO DRIVE 2-IN. O.D. SPLITSPOON SAMPLER 1 FT. AFTER SEATING 6 IN.
- FOR SOIL BORINGS 2-OUE, 4-OUE, 5-OUE, 5-OUG, 6-OUG, 7-OUG, 1-OAW, & 2-OAW SEE LEGEND DRAWING 32.
- FOR EUSTIS ENGINEERING BORINGS FURTHER INFORMATION IS AVAILABLE IN EUSTIS ENGINEERING APPENDICES DATED 19 JUNE 1989 GEOTECHNICAL INVESTIGATION ORLEANS AVENUE OUTFALL CANAL OLB PROJECT NO. 2048-0304 NEW ORLEANS, LOUISIANA.
- WHILE THESE LOGS OF BORINGS ARE CONSIDERED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT ITS RESPECTIVE LOCATION ON THE DATE SHOWN, IT IS NOT WARRANTED THAT IT IS REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

LEGEND FOR BORINGS 1-35



PREDOMINANT TYPE SHOWN HEAVY. MODIFYING TYPE SHOWN LIGHT.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE 11-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LA. SOIL BORINGS			
DESIGNED BY: VOJKOVICH	DATE: SEP 96	PLOT SCALE: 20	PLOT DATE: SEP 96
DRAWN BY: WOODS	CADD FILE: fwoodw.dgn	FILE NO. H-4-44644	
CHECKED BY: RICHARDSON	SUBMITTED BY:	SOLICITATION NO. DACW29-96-B-0096	DWG. 27 OF 32

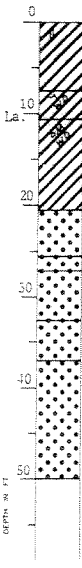
E.B. STA. 27+97, 4' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 11 Soil Technician: A. J. Mayeux Date: 31 August 1985
Ground Elev. 9.83 Datum: NGVD Gr. Water Depth: See Text

Table with columns: Sample No., Sample Depth (From-To), Depth Structure (From-To), Visual Classification, Standard Penetration Test. Rows 1-13 detailing soil layers like 'Stiff tan & gray clay w/silt pockets'.



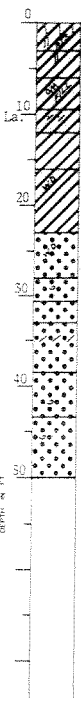
E.B. STA. 31+80, 2' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 13 Soil Technician: R. Ekins Date: 9 September 1985
Ground Elev. 9.83 Datum: NGVD Gr. Water Depth: See Text

Table with columns: Sample No., Sample Depth (From-To), Depth Structure (From-To), Visual Classification, Standard Penetration Test. Rows 1-14 detailing soil layers like 'Medium stiff brown clay w/silt layers'.



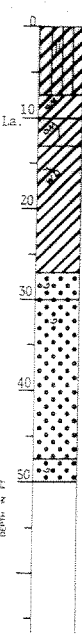
E.B. STA. 37+54, 2' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

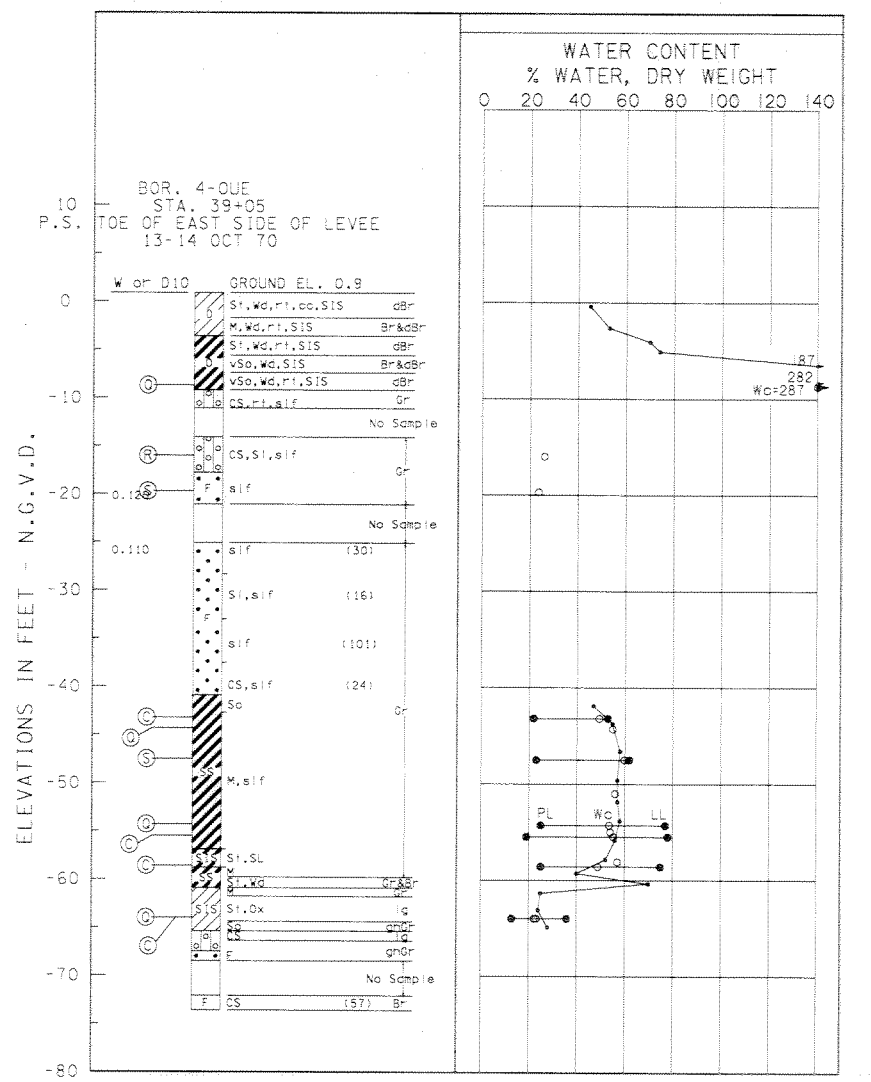
Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 15 Soil Technician: A. J. Mayeux Date: 31 August 1985
Ground Elev. 9.81 Datum: NGVD Gr. Water Depth: See Text

Table with columns: Sample No., Sample Depth (From-To), Depth Structure (From-To), Visual Classification, Standard Penetration Test. Rows 1-13 detailing soil layers like 'Extremely stiff tan & gray silty clay'.



E.B. STA. 39+05, P.S. TOE



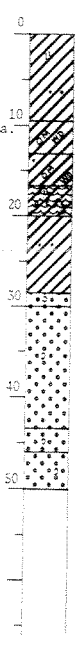
E.B. STA. 41+65, 2' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

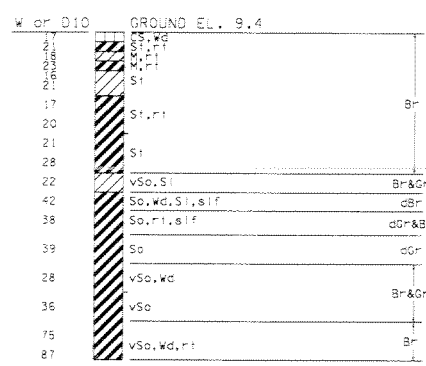
Boring No. 17 Soil Technician: A. J. Mayeux Date: 16 September 1985
Ground Elev. 9.81 Datum: NGVD Gr. Water Depth: See Text

Table with columns: Sample No., Sample Depth (From-To), Depth Structure (From-To), Visual Classification, Standard Penetration Test. Rows 1-14 detailing soil layers like 'Stiff to very stiff tan & gray clay'.



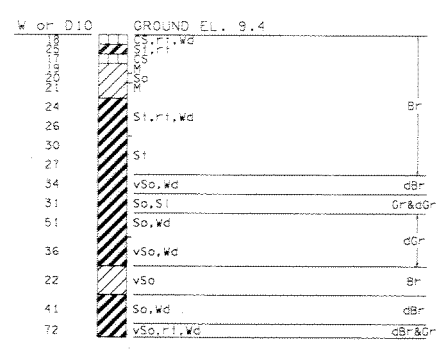
E.B. STA. 44+40, C/L LEVEE

BOR. 1-0AW
STA. 44+40
C/L LEVEE
WATER TABLE DEPTH 16.0 FT.
01MAY96



E.B. STA. 44+50, C/L LEVEE

BOR. 2-0AW
STA. 44+50
C/L LEVEE
WATER TABLE DEPTH 14.0 FT.
02MAY96



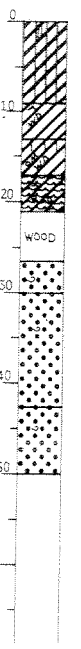
E.B. STA. 47+40, 1.5' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 19 Soil Technician: A. J. Mayeux Date: 28 August 1985
Ground Elev. 10.01 Datum: NGVD Gr. Water Depth: See Text

Table with columns: Sample No., Sample Depth (From-To), Depth Structure (From-To), Visual Classification, Standard Penetration Test. Rows 1-13 detailing soil layers like 'Stiff tan & gray silty clay w/silt pockets'.



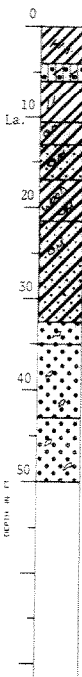
E.B. STA. 53+20, 0.5' LT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 21 Soil Technician: A. J. Mayeux Date: 16 September 1985
Ground Elev. 9.71 Datum: NGVD Gr. Water Depth: See Text

Table with columns: Sample No., Sample Depth (From-To), Depth Structure (From-To), Visual Classification, Standard Penetration Test. Rows 1-13 detailing soil layers like 'Medium stiff gray & tan clay w/clayey sand layers'.



Safety is a Part of Your Contract

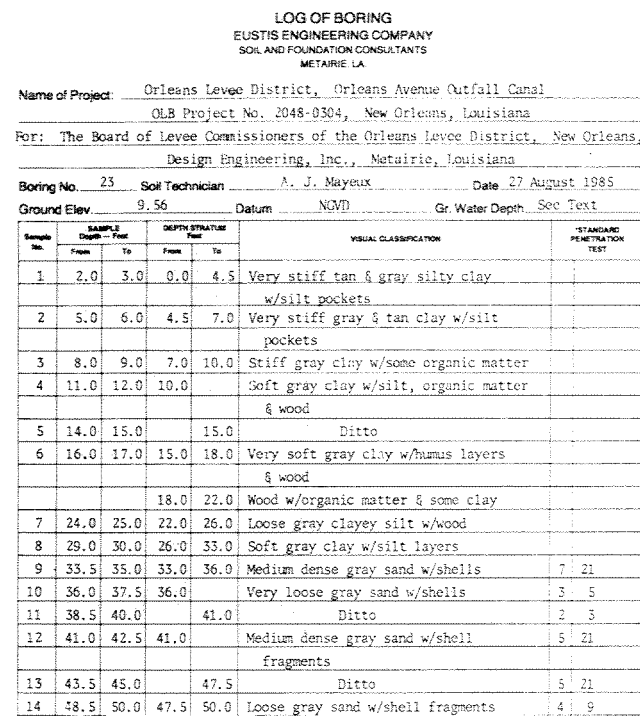
REFER TO NOTES ON DRAWING 27.

Table with columns: SYMBOL, DESCRIPTION, DATE, APPROVED. Includes project details for U.S. Army Engineer District, New Orleans, and drawing information.

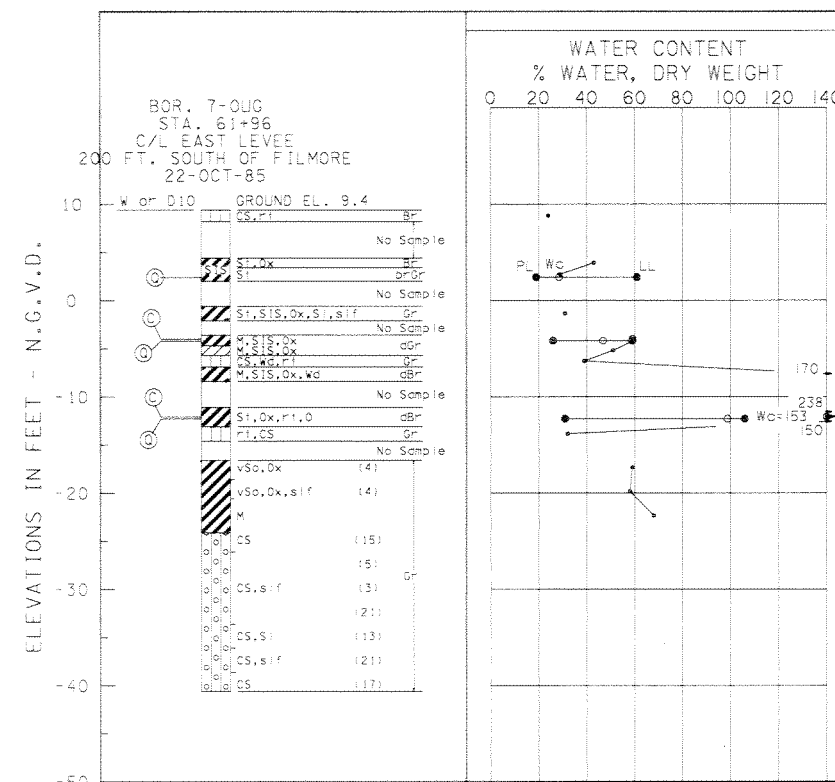


Safety is a Part of Your Contract

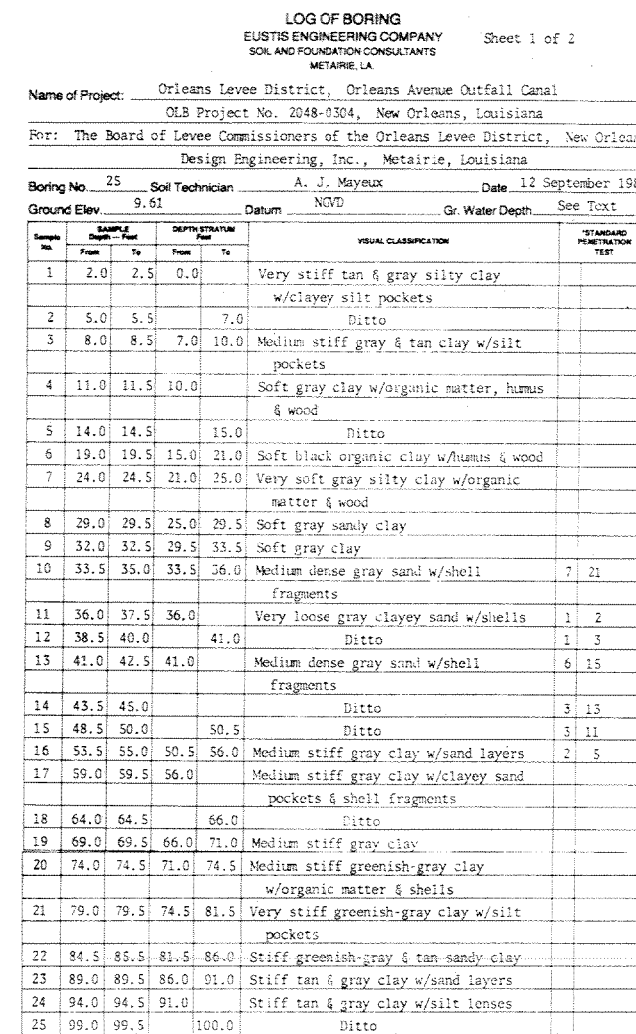
E.B. STA. 57+97, 1' RT.



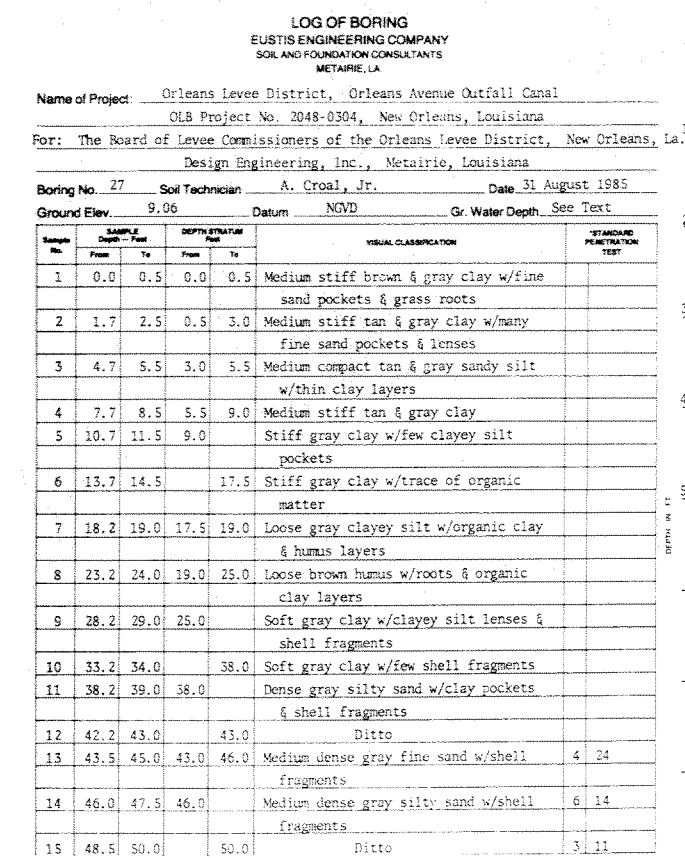
E.B. STA. 61+96, C/L



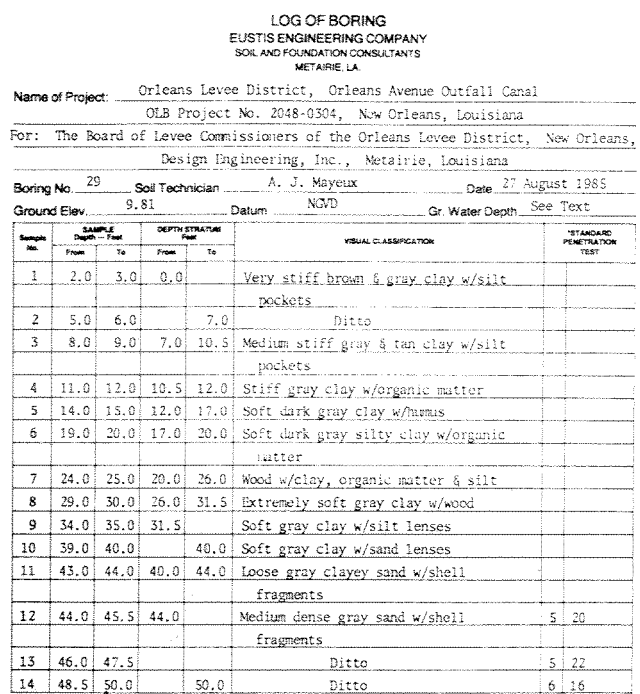
E.B. STA. 62+88, 1.5' RT.



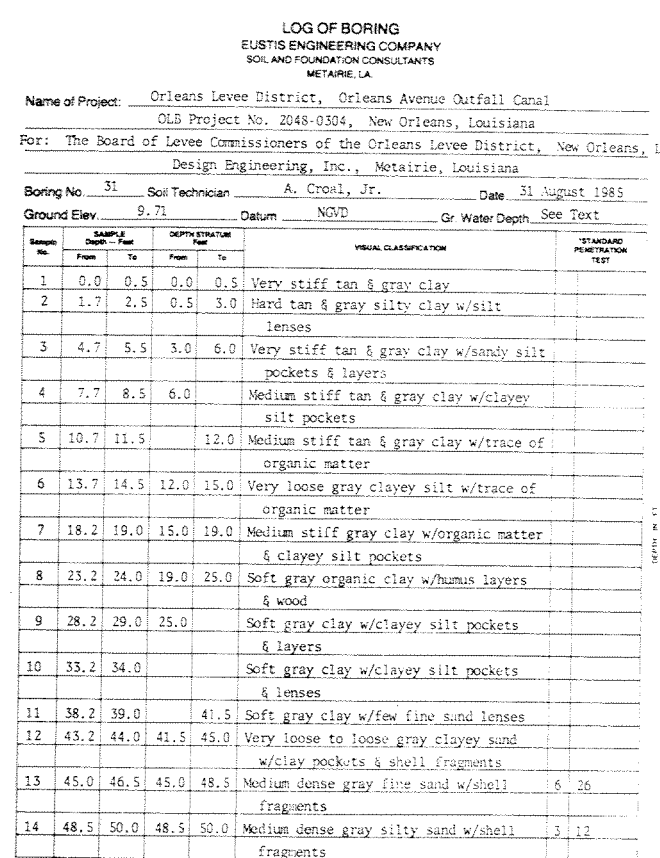
E.B. STA. 64+27, 5' RT.



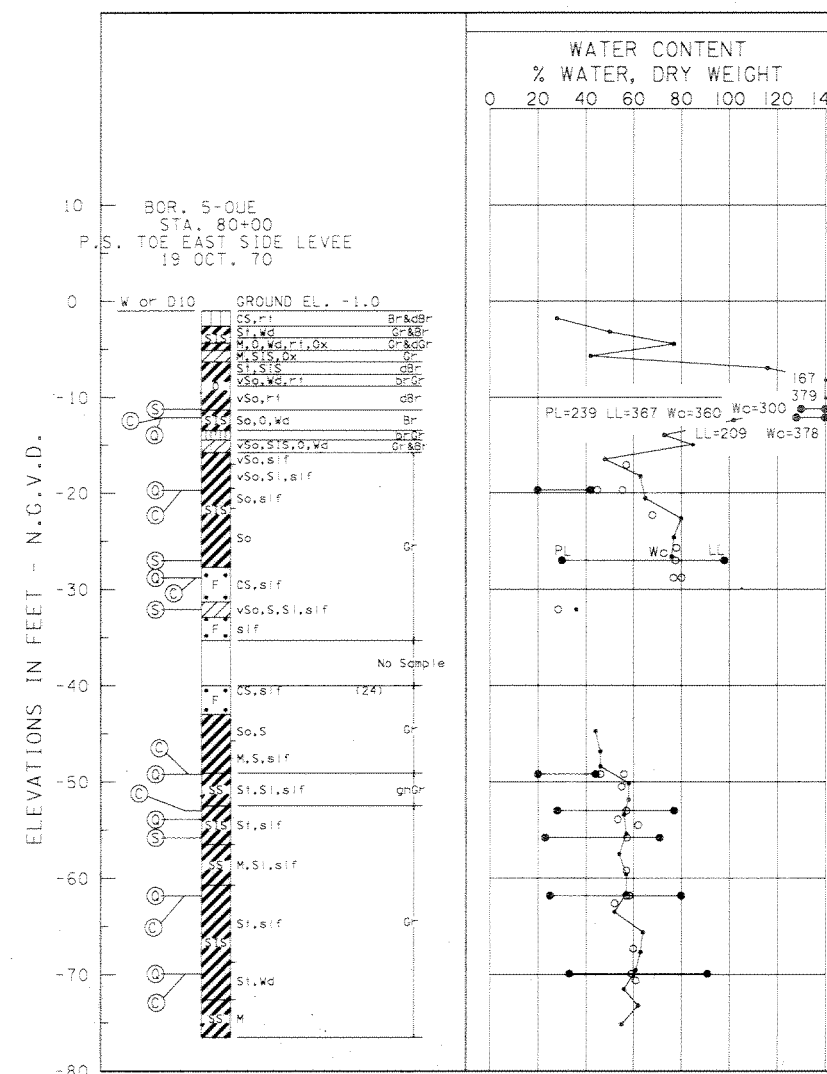
E.B. STA. 72+40, 5' RT.



E.B. STA. 77+27, 5.5' RT.



E.B. STA. 80+00, P.S. TOE



REFER TO NOTES ON DRAWING 27.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LA. SOIL BORINGS			
DESIGNED BY: VOJKOVICH	DATE: SEP 96	PLOT SCALE: 20	PLOT DATE: SEP 96
DRAWN BY: WOODS	CADD FILE: fmoocwo.dgn	FILE NO. H-4-44644	
CHECKED BY: RICHARDSON	SUBMITTED BY: DACW29-96-B-0096	DWG. 29 OF 32	



**Safety is a Part
of Your Contract**

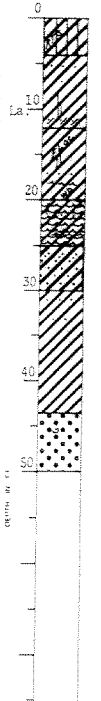
E.B. STA. 82+90, 6' RT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 33 Soil Technician: R. HAKINS Date: 2 August 1985
Ground Elev. 9.25 Datum: NVD Gr. Water Depth: See Text

Sample No.	SAMPLE DEPTH		DEPTH STRATUM		VISUAL CLASSIFICATION	STANDARD PENETRATION TEST
	From	To	From	To		
1	1.5	2.5	0.0	4.0	Hard tan & gray silty clay w/roots	
2	4.5	5.5	4.0		Stiff to very stiff gray & tan clay w/sand layers & lenses	
3	7.5	8.5			Stiff to very stiff gray & tan clay w/silt lenses & pockets	
4	10.5	11.5	12.0		Stiff to very stiff gray & tan clay w/sandy clay & sand layers	
5	13.5	14.5	12.0		Soft to medium stiff dark gray flocculated clay w/silt pockets	
6	18.0	19.0	20.0		Soft to medium stiff dark gray flocculated clay w/sand layers, humus & wood	
7	23.0	24.0	20.0	25.0	Soft brown organic clay w/sand layers & humus	
8	28.0	29.0	25.0	30.0	Medium stiff gray sandy clay w/sand layers	
9	33.0	34.0	30.0		Soft gray clay w/sand layers & pockets	
10	38.0	39.0	43.5		Ditto	7 48
11	43.5	45.0	43.5		Dense gray sand w/few shell fragments	11 44
12	46.0	47.5			Ditto	11 39
13	48.5	50.0	50.0		Ditto	



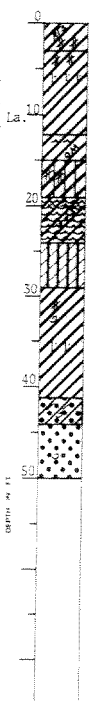
E.B. STA. 87+34, 4.5 RT.

LOG OF BORING
EUSTIS ENGINEERING COMPANY
SOIL AND FOUNDATION CONSULTANTS
METAIRIE, LA.

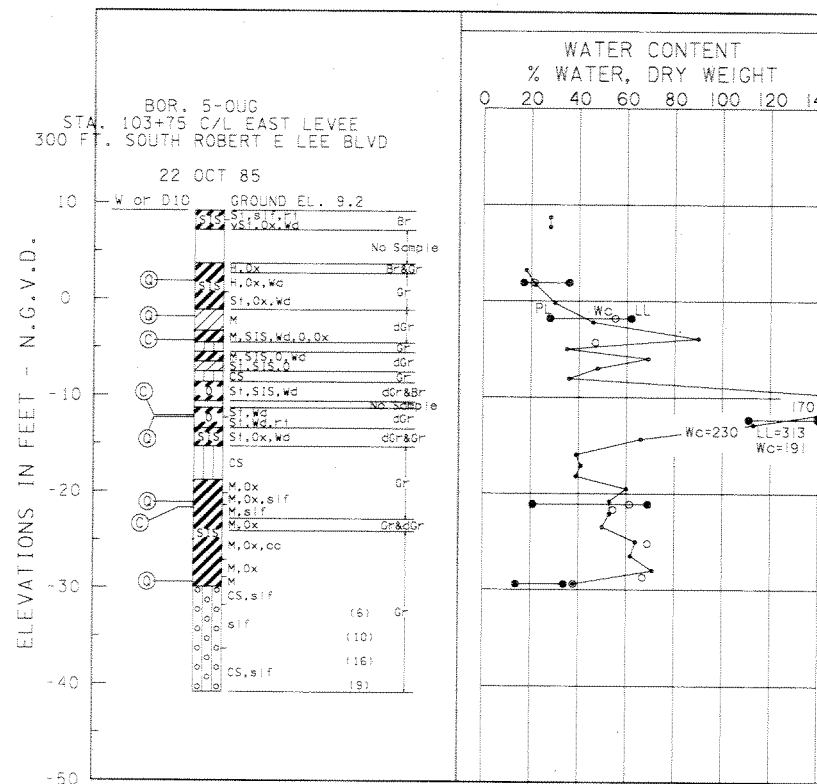
Name of Project: Orleans Levee District, Orleans Avenue Outfall Canal
OLB Project No. 2048-0304, New Orleans, Louisiana
For: The Board of Levee Commissioners of the Orleans Levee District, New Orleans, Louisiana
Design Engineering, Inc., Metairie, Louisiana

Boring No. 35 Soil Technician: A. Croal, Jr. Date: 31 August 1985
Ground Elev. 9.16 Datum: NVD Gr. Water Depth: See Text

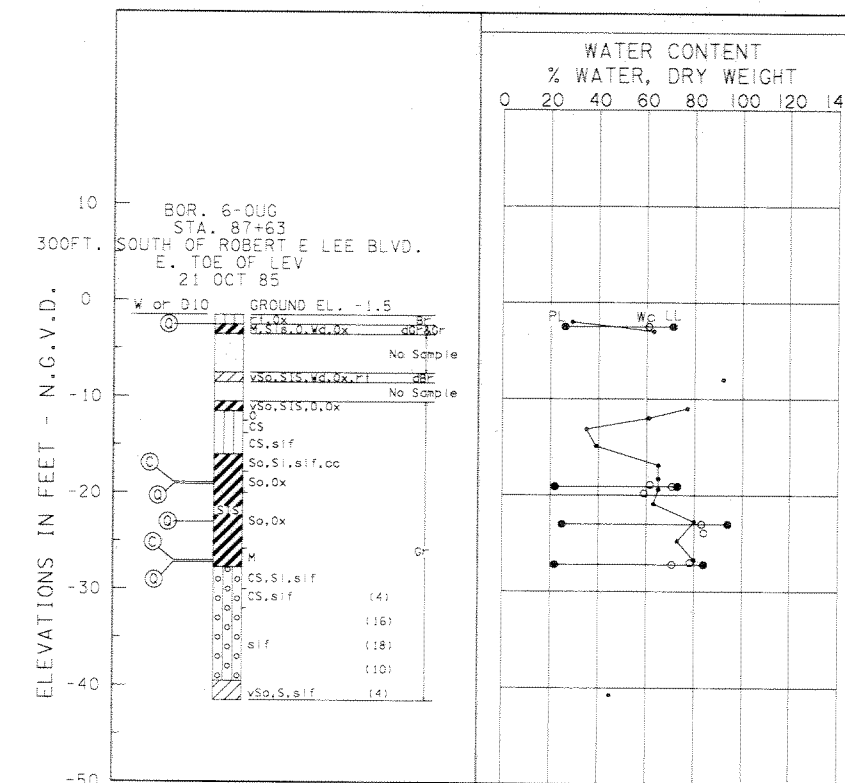
Sample No.	SAMPLE DEPTH		DEPTH STRATUM		VISUAL CLASSIFICATION	STANDARD PENETRATION TEST
	From	To	From	To		
1	0.0	0.5	0.0		Stiff tan & gray clay w/grass roots	
2	1.7	2.5	3.0		Stiff tan & gray clay w/clayey silt pockets	
3	4.7	5.5	3.0		Stiff gray clay w/clayey silt pockets & silty sand layers	
4	7.7	8.5	12.0		Stiff gray clay w/clayey silt pockets	
5	10.7	11.5			Ditto	
6	13.7	14.5	12.0	15.0	Soft dark gray clay w/humus pockets & organic matter	
7	16.2	19.0	15.0	19.0	Soft dark gray silty clay w/clayey silt pockets	
8	23.2	24.0	19.0	24.0	Soft brown & gray organic clay w/humus layers & few roots	
9	28.2	29.0	24.0	29.0	Very loose gray clayey silt	
10	33.2	34.0	29.0		Soft to medium stiff gray clay w/few clayey silt lenses & shells	
11	38.2	39.0	41.0		Soft to medium stiff gray clay w/few silty sand pockets	
12	43.2	44.0	41.0	44.0	Very loose to loose clayey sand w/clay pockets & shell fragments	5 18
13	45.0	46.5	44.0		Medium dense gray fine sand w/shell fragments	
14	48.5	50.0	50.0		Ditto	5 13



E.B. STA. 87+63, C/L



E.B. STA. 87+63, TOE



SUMMARY OF LABORATORY TEST RESULTS

BORING 1

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
2	5.0	Stiff brown & gray clay w/silt pockets	20.5	93.7	112.9	3210*
4	11.0	Soft gray sandy clay w/trace of organic matter	25.2	95.9	120.1	765
6	17.0	Medium stiff gray clay w/roots	56.6	65.7	102.8	1640

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 3

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Compact tan & gray clayey silt	16.9	100.8	117.8	2735*
2	5.0	Medium stiff tan & gray silty clay w/large sandy silt pockets & shells	38.9	72.3	100.5	1405
3	8.0	Loose dark brown clayey silt w/organic matter & sand	21.4	79.6	96.7	535*
5	14.0	Soft gray clay w/sand pockets & roots	43.1	75.4	107.9	830

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 5

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Medium stiff brown & gray fissured clay w/many silt pockets	24.0	89.1	110.5	1085*
2	5.0	Very stiff tan & gray clay w/silt pockets	25.1	98.2	122.9	6295
3	8.0	Medium stiff dark gray clay w/silt pockets	33.8	78.0	104.4	1370*
4	14.0	Soft gray clay w/roots & trace of organic matter	84.5	40.6	91.6	730

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 7

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Stiff tan & gray silty clay w/partings	18.9	----	----	----
3	8.0	Medium stiff dark gray clay w/silty sand layers	40.0	74.0	103.6	1020*
4	11.0	Very soft gray clay w/silty sand layers	50.3	66.1	99.4	495*
5	18.5	Extremely soft gray sandy clay w/roots	44.0	77.7	111.9	115

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 9

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Stiff tan & gray clay w/silt pockets	24.6	95.4	118.9	3545*
3	8.0	Stiff gray & tan clay w/silt pockets	28.6	86.8	111.6	2705*
4	11.0	Medium stiff dark gray silty clay w/trace of organic matter	37.3	74.4	102.2	1265*
5	14.0	Soft gray clay w/organic clay layers & wood	140.6	31.2	75.1	760*
7	23.0	Soft gray sandy clay w/organic matter & roots	35.9	81.3	110.5	760*

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 11

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
2	5.0	Stiff tan & gray clay w/silt pockets	25.0	95.0	118.7	3100*
3	8.0	Medium stiff dark gray clay w/organic matter & sand pockets	50.0	64.1	96.1	1135
4	11.0	Soft gray clay w/silty sand layers	54.5	66.1	102.1	930

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

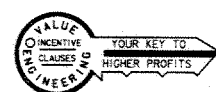
BORING 13

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	1.5	Medium stiff brown clay w/clayey silt pockets	24.1	90.0	111.6	1585*
2	4.5	Very soft tan & gray clay	34.7	78.6	105.8	315
3	7.5	Soft brown clay w/sand pockets & trace of organic matter (fill)	53.6	63.2	97.1	545
4	10.5	Soft dark gray clay w/clayey silt pockets & trace of sand	44.4	72.1	104.2	860
5	13.5	Medium stiff gray clay w/clayey sand pockets	45.4	73.0	106.2	1045

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

REFER TO NOTES ON DRAWING 27.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LA. SOIL BORINGS			
DESIGNED BY: VOJKOVICH	DATE: SEP 96	PLOT SCALE: 20	PLOT DATE: SEP 96
DRAWN BY: WOODS	CADD FILE: fmo00wo.dgn	FILE NO. H-4-44644	
CHECKED BY: RICHARDSON	SOLICITATION NO. DACW29-96-B-0096		
SUBMITTED BY:		DWG. 30 OF 32	



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SUMMARY OF LABORATORY TEST RESULTS

BORING 15

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Extremely stiff tan & gray silty clay	15.5	99.7	115.2	8425*
3	8.0	Medium stiff tan & gray clay w/silt pockets	28.5	86.6	111.3	1520*
4	11.0	Very soft gray clay w/organic matter	52.7	66.4	101.5	410
5	14.0	Soft gray clay w/organic matter & roots	94.1	45.2	87.7	635

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 17

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
2	5.0	Very stiff tan & gray clay w/silt pockets	25.8	96.5	121.4	4965
4	11.0	Soft dark gray clay w/silt pockets	55.2	61.9	96.0	595
5	14.0	Soft gray clay w/organic matter layers & sand pockets	73.6	53.6	93.1	755
6	19.0	Soft brown organic clay w/silt pockets & roots	191.1	25.2	73.4	670
7	24.0	Soft gray clay w/many sand pockets	36.7	81.2	111.0	695

SUMMARY OF LABORATORY TEST RESULTS

BORING 19

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Stiff tan & gray silty clay	21.2	98.7	119.6	3945*
2	5.0	Stiff tan & gray silty clay w/silt pockets & lenses	32.3	83.5	110.5	2725*
3	8.0	Stiff tan & gray silty clay w/silt pockets & lenses	29.5	89.7	116.1	2365*
4	11.0	Very soft dark gray clay w/sand pockets & organic matter	50.7	62.4	94.0	410*
5	14.0	Extremely soft brown & gray clay w/large sand pockets	51.4	67.0	101.4	160
6	19.0	Very soft black organic clay w/humus layers	196.8	24.4	72.5	725

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 21

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Medium stiff gray & tan clay w/clayey sand layers	34.8	82.7	111.5	1000*
3	8.0	Stiff gray & tan clay w/silt pockets	29.5	87.2	113.0	2255
4	11.0	Soft gray clay w/organic matter & trace of sand	52.6	60.5	92.4	515
5	14.0	Medium stiff gray sandy clay w/silty clay layers	25.8	98.7	124.1	1995*
6	19.0	Soft gray clay w/organic matter, roots & wood	117.3	38.7	84.1	585
8	29.0	Medium stiff gray sandy clay w/shell fragments	29.1	93.2	110.4	----

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 23

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Very stiff tan & gray silty clay	14.4	101.2	115.8	6305*
2	5.0	Very stiff gray & tan clay w/silt pockets	25.8	95.7	120.3	5460
3	8.0	Stiff gray clay w/silt pockets	33.3	86.9	115.8	2945
4	11.0	Soft gray clay w/organic matter & silt pockets	45.3	69.0	100.3	500
5	14.0	Soft gray clay w/clayey silt lenses, layers & organic matter	37.8	78.9	108.8	755*
6	16.0	Very soft gray clay w/organic clay layers	97.1	44.4	87.4	490
7	24.0	Loose gray clayey silt w/roots	35.1	82.5	111.4	630
8	29.0	Soft gray clay w/silty sand pockets & shell fragments	53.7	68.4	105.1	735

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 25

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
2	5.0	Very stiff tan & gray silty clay w/clayey silt pockets	25.2	93.3	116.9	4165*
3	8.0	Medium stiff tan & gray clay w/clayey silt pockets	28.2	86.4	110.8	1000*
4	11.0	Soft dark gray silty clay w/organic matter & roots	43.2	61.2	87.6	----
6	19.0	Soft black organic clay w/humus, roots & wood	198.7	24.4	73.0	540
7	24.0	Soft gray silty clay w/much organic matter & wood	76.4	50.3	88.6	500
9	32.0	Soft gray clay w/silt pockets	63.4	61.0	99.6	655
17	59.0	Medium stiff gray clay w/clayey sand pockets & shell fragments	53.8	66.9	102.9	1350
19	69.0	Medium stiff gray clay w/trace of organic matter	50.6	69.3	104.3	1125
21	79.0	Very stiff greenish-gray clay w/clayey silt pockets	19.5	103.7	126.3	4505
23	89.0	Stiff tan & gray clay w/silt pockets	33.3	86.1	114.8	2000*
25	99.0	Stiff greenish-gray & tan clay w/silt lenses	37.9	82.5	113.7	2510

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 27

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
2	1.7	Medium stiff tan & gray clay w/silty sand lenses, layers & roots	22.5	94.4	115.6	1065
3	4.7	Medium compact tan & gray sandy silt w/silty clay layers	22.2	93.6	114.4	1090*
4	7.7	Medium stiff gray & tan clay w/silt pockets	31.3	87.1	114.4	1275
6	13.7	Stiff gray clay w/silt pockets	29.6	90.0	116.6	2145
7	18.2	Loose gray clayey silt	37.2	82.3	113.0	840*
8	23.2	Loose brown humus w/organic clay layers & roots	235.8	19.7	66.0	745
9	28.2	Soft gray clay w/sandy silt pockets & few shell fragments	56.1	65.7	102.5	710
12	42.2	Dense gray silty sand w/trace of clay & few shell fragments	26.6	99.2	125.6	3695*

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 29

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
1	2.0	Very stiff brown & gray clay w/clayey silt pockets & trace of organic matter	24.7	96.4	120.2	4445
3	8.0	Medium stiff gray clay w/clayey silt pockets	25.8	89.8	113.0	1905*
4	11.0	Stiff gray clay w/many clayey silt lenses, layers & pockets	29.0	89.3	115.3	3340*
5	14.0	Soft dark gray clay w/trace of organic matter	50.9	66.0	99.6	720
6	19.0	Soft dark gray silty clay w/organic matter & decayed wood	56.4	60.3	94.4	715
8	29.0	Extremely soft gray clay w/silt pockets, shell fragments & roots	47.3	73.5	108.3	245
10	39.0	Soft gray clay w/silt lenses	69.9	57.7	98.1	835

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 31

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
2	1.7	Hard tan & gray silty clay	12.0	----	----	----
4	7.7	Medium stiff tan & gray clay w/silt pockets	26.9	84.9	107.8	1530*
6	13.7	Very loose gray clayey silt w/trace of organic matter	39.2	76.7	106.8	455*
8	23.2	Soft gray organic clay w/decayed wood & clay layers	161.5	29.1	76.0	655
10	33.2	Soft gray clay w/clayey silt lenses & layers	49.8	70.6	105.7	740
12	43.2	Very loose gray clayey sand w/shell fragments	29.4	93.2	120.6	420*

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

SUMMARY OF LABORATORY TEST RESULTS

BORING 33

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF	Atterberg Limits		
				Dry	Wet		LL	PL	PI
1	1.5	Hard tan & gray silty clay w/roots	12.7	----	----	----	----	----	----
3	7.5	Very stiff gray & tan clay w/silt lenses & pockets	23.5	96.9	119.6	4600*	----	----	----
5	13.5	Soft dark gray flocculated clay w/silt pockets	46.5	70.1	102.7	980	----	----	----
7	23.0	Soft brown organic clay w/silty clay layers	130.1	34.8	80.0	500	118	32	86
9	33.0	Soft gray clay w/clayey silt layers, lenses, pockets & decayed shells	53.1	67.4	103.2	745	----	----	----

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.


SUMMARY OF LABORATORY TEST RESULTS

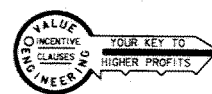
BORING 35

Sample No.	Depth In Feet	Classification	Water Content Percent	Density PCF		Unconfined Compressive Strength PSF
				Dry	Wet	
2	1.7	Stiff tan & gray clay w/clayey silt layers & pockets	26.2	91.9	115.9	2290*
4	7.7	Stiff gray clay w/clayey silt layers & lenses	22.6	95.7	117.5	2440*
5	10.7	Stiff gray clay w/silt lenses & pockets	30.1	89.1	115.9	2560*
7	18.2	Soft dark gray silty clay w/organic matter	70.0	52.8	89.8	640
9	28.2	Very loose gray clayey silt w/silty clay layers	47.0	71.8	105.5	385
11	38.2	Medium stiff gray clay	70.9	57.3	98.0	1105

*Unconsolidated Undrained Triaxial Compression Test - One Specimen; Confined at the approximate overburden pressure.

REFER TO NOTES ON DRAWING 27.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LA. SOIL BORINGS			
DESIGNED BY: VOJKOVICH	DATE: SEP 96	PLOT SCALE: 20	PLOT DATE: SEP 96
DRAWN BY: WOODS	CADD FILE: fmo000.dgn	FILE NO. H-4-44644	
CHECKED BY: RICHARDSON	SUBMITTED BY:	SOLICITATION NO. DACW29-96-B-0096	DWG. 31 OF 32



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UNIFIED SOIL CLASSIFICATION

MAJOR DIVISION	TYPE	LETTER SYM SYMBOL BOL	TYPICAL NAMES		
COARSE - GRAINED SOILS More than half of material is larger than No. 200 sieve size.	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size.	CLEAN GRAVEL (Little or No Fines)	GW	GRAVEL, Well Graded, gravel-sand mixtures, little or no fines	
		GRAVEL WITH FINES (Appreciable Amount of Fines)	GP	GRAVEL, Poorly Graded, gravel-sand mixtures, little or no fines	
		CLEAN SAND (Little or No Fines)	GM	SILTY GRAVEL, gravel-sand-silt mixtures	
		SANDS WITH FINES (Appreciable Amount of Fines)	GC	CLAYEY GRAVEL, gravel-sand-clay mixtures	
		CLEAN SAND (Little or No Fines)	SW	SAND, Well-Graded, gravelly sands	
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size.	SANDS WITH FINES (Appreciable Amount of Fines)	SP	SAND, Poorly-Graded, gravelly sands	
		SILT AND CLAYS (Liquid Limit < 50)	SM	SILTY SAND, sand-silt mixtures	
		SILT AND CLAYS (Liquid Limit < 50)	SC	CLAYEY SAND, sand-clay mixtures	
		FINE - GRAINED SOILS More than half the material is smaller than No. 200 sieve size.	SILT AND CLAYS (Liquid Limit < 50)	ML	SILT & very fine sand, silty or clayey fine sand or clayey silt with slight plasticity
			SILT AND CLAYS (Liquid Limit < 50)	CL	LEAN CLAY, Sandy Clay, Silty Clay, of low to medium plasticity
SILT AND CLAYS (Liquid Limit < 50)	OL		ORGANIC SILTS, and organic silty clays of low plasticity		
HIGHLY ORGANIC SOILS	SILT AND CLAYS (Liquid Limit > 50)	MH	SILT, fine sandy or silty soil with high plasticity		
	SILT AND CLAYS (Liquid Limit > 50)	CH	FAT CLAY, inorganic clay of high plasticity		
	SILT AND CLAYS (Liquid Limit > 50)	OH	ORGANIC CLAYS of medium to high plasticity, organic silts		
WOOD	Wd	WOOD	WOOD		
SHELLS	SI	SHELLS	SHELLS		
NO SAMPLE	NS	No Sample Retrieved	No Sample Retrieved		

NOTE: Soils possessing characteristics of two groups are designated by combinations of group symbols.

NOTES:

FIGURES TO LEFT OF BORING UNDER COLUMN " W OR D₁₀"

Are natural water contents in percent dry weight
When underlined denotes D₁₀ size in mm*

FIGURES TO LEFT OF BORING UNDER COLUMNS " LL" AND " PL"

Are liquid and plastic limits, respectively

SYMBOLS TO LEFT OF BORING

∇ Ground-water surface and date observed
© Denotes location of consolidation test**
Ⓢ Denotes location of consolidated-drained direct shear test**
Ⓡ Denotes location of consolidated-undrained triaxial compression test**
Ⓣ Denotes location of unconsolidated-undrained triaxial compression test**
Ⓟ Denotes location of sample subjected to consolidation test and each of the above three types of shear test**
FW Denotes free water encountered in boring or sample

FIGURES TO RIGHT OF BORING

Are values of cohesion in lbs./sq.ft. from unconfined compression tests

In parenthesis are driving resistances in blows per foot determined with a standard split spoon sampler (1 3/8" I.D., 2" O.D.) and a 140 lb. driving hammer with a 30" drop

Where underlined with a solid line denotes laboratory permeability in centimeters per second of undisturbed sample

Where underlined with a dashed line denotes laboratory permeability in centimeters per second of sample remoulded to the estimated natural void ratio

*The D₁₀ size of a soil is the grain diameter in millimeters of which 10% of the soil is finer, and 90% coarser than D₁₀.

**Results of these tests are available for inspection in the U.S. Army Engineer District Office, if these symbols appear beside the boring logs on the drawings.

DESCRIPTIVE SYMBOLS

COLOR		CONSISTENCY FOR COHESIVE SOILS			MODIFICATIONS	
COLOR	SYMBOL	CONSISTENCY	COHESION IN LBS./SQ.FT. FROM UNCONFINED COMPRESSION TEST	SYMBOL	MODIFICATION	SYMBOL
TAN	T	VERY SOFT	< 250	vSo	Traces	Tr
YELLOW	Y	SOFT	250-500	So	Fine	F
RED	R	MEDIUM	500-1000	M	Medium	M
BLACK	BK	STIFF	1000-2000	St	Coarse	C
GRAY	Gr	VERY STIFF	2000-4000	vSt	Concretions	cc
LIGHT GRAY	lGr	HARD	> 4000	H	Rootlets	rt
DARK GRAY	dGr				Lignite fragments	lg
BROWN	Br				Shale fragments	sh
LIGHT BROWN	lBr				Sandstone fragments	sds
DARK BROWN	dBr				Shell fragments	slf
BROWNISH-GRAY	brGr				Organic matter	O
GRAYISH-BROWN	gyBr				Clay strata or lenses	CS
GREENISH-GRAY	gnGr				Silt strata or lenses	SIS
GRAYISH-GREEN	gyGn				Sand strata or lenses	SS
GREEN	Gn				Sandy	S
BLUE	Bl				Gravelly	G
BLUE-GREEN	BlGn				Boulders	B
WHITE	Wh				Silicified	SL
MOTTLED	Mo				Wood	Wd
					Oxidized	Ox

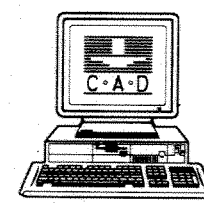
PLASTICITY CHART

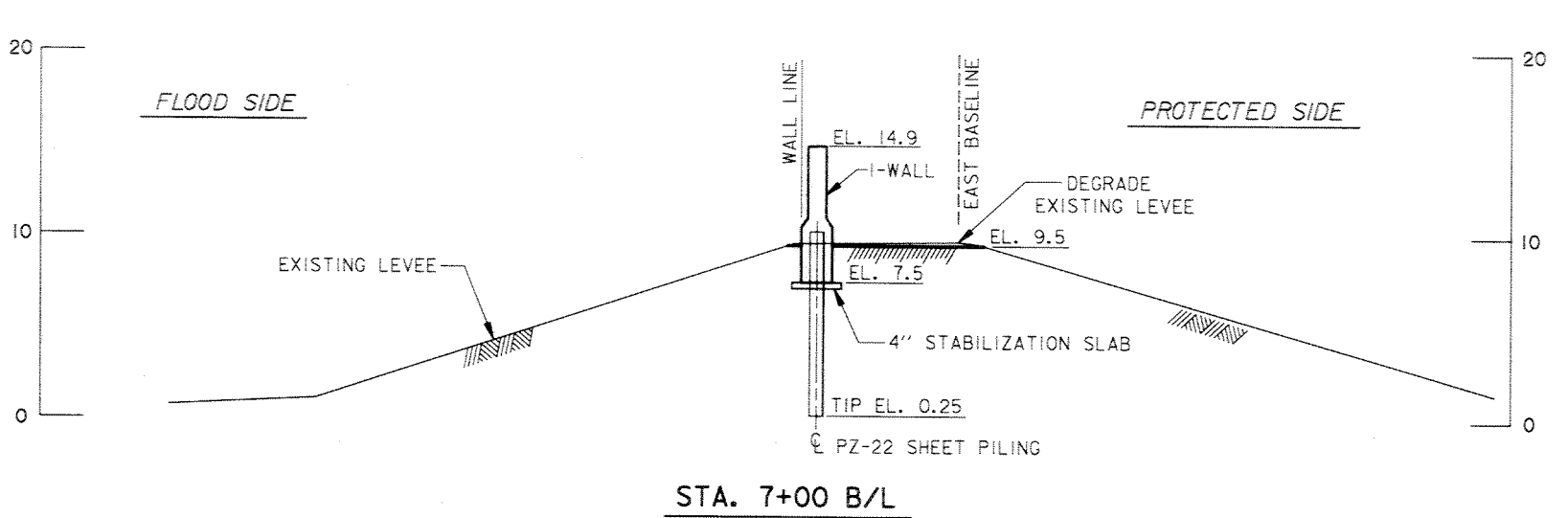
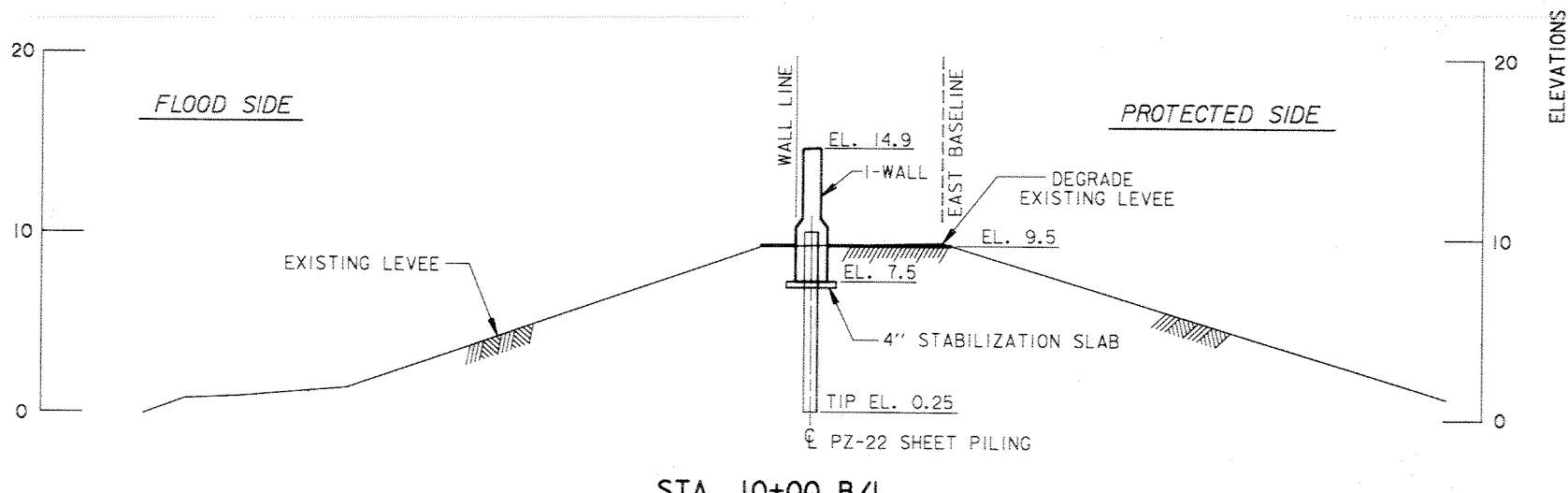
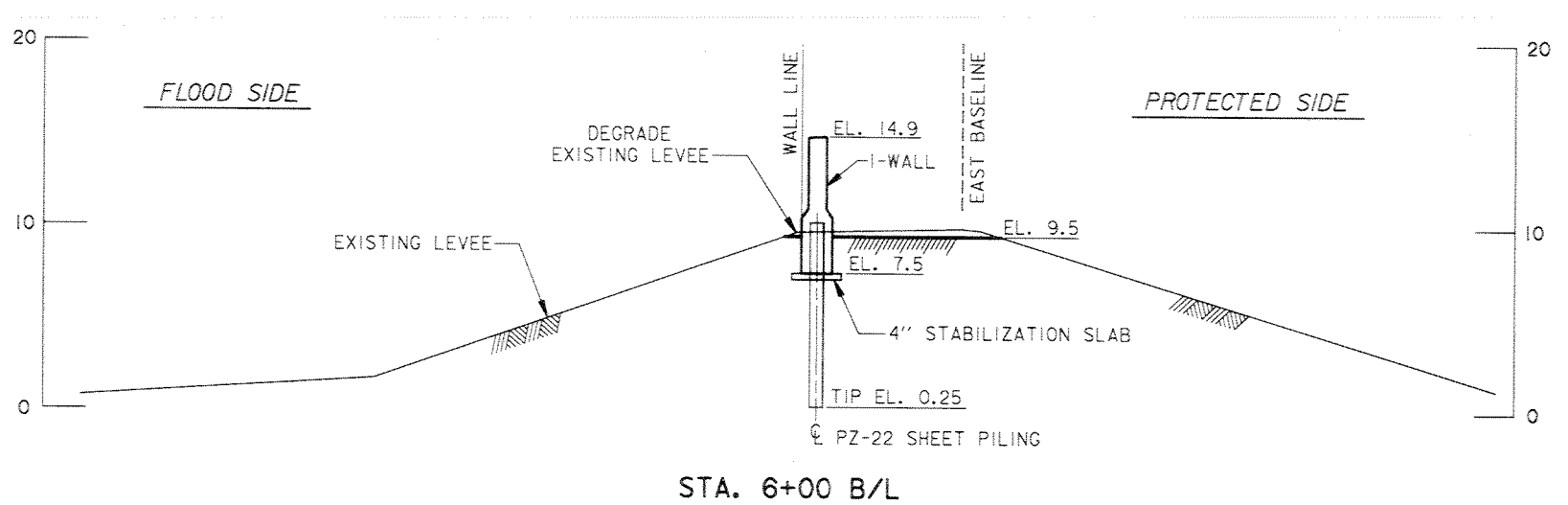
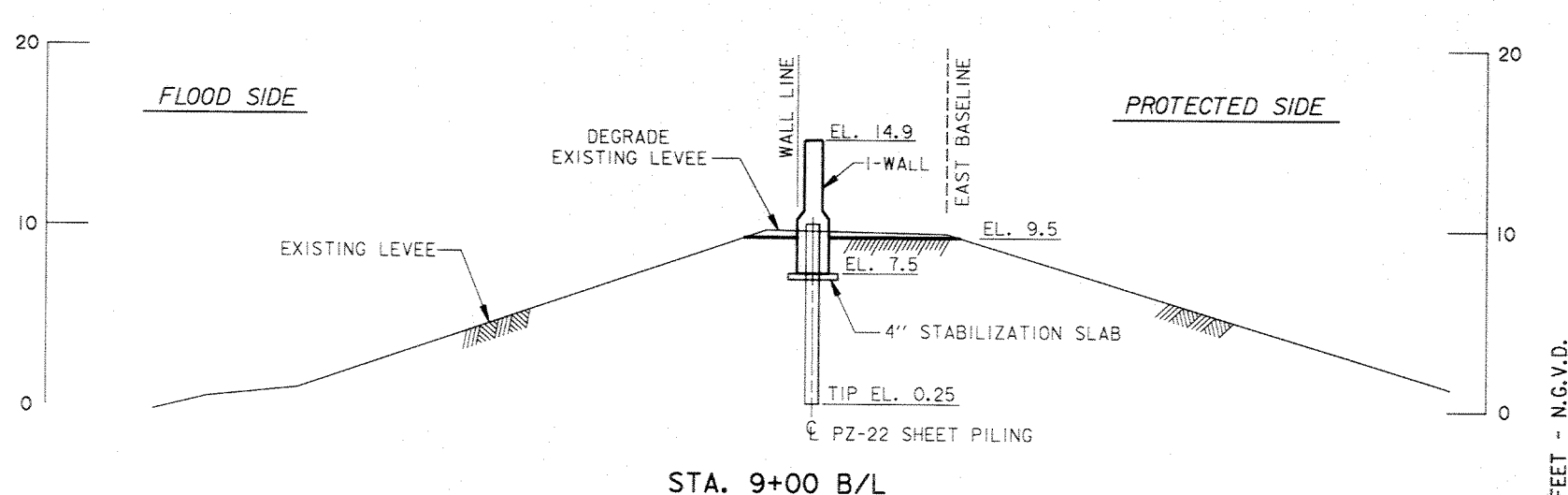
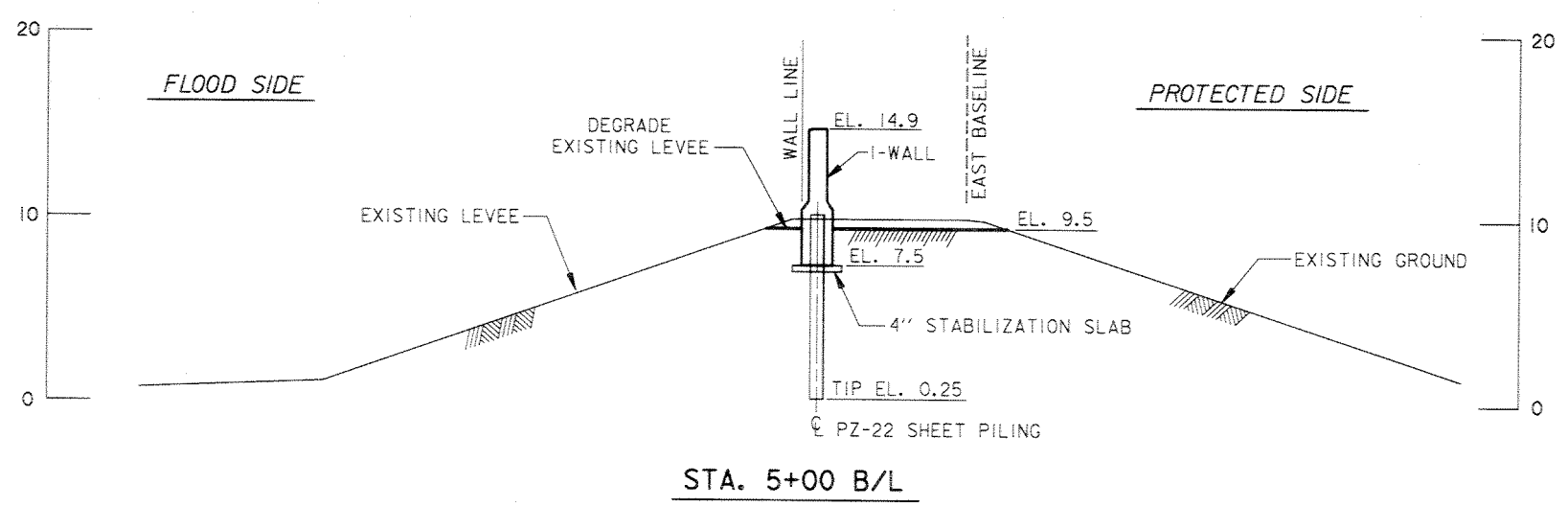
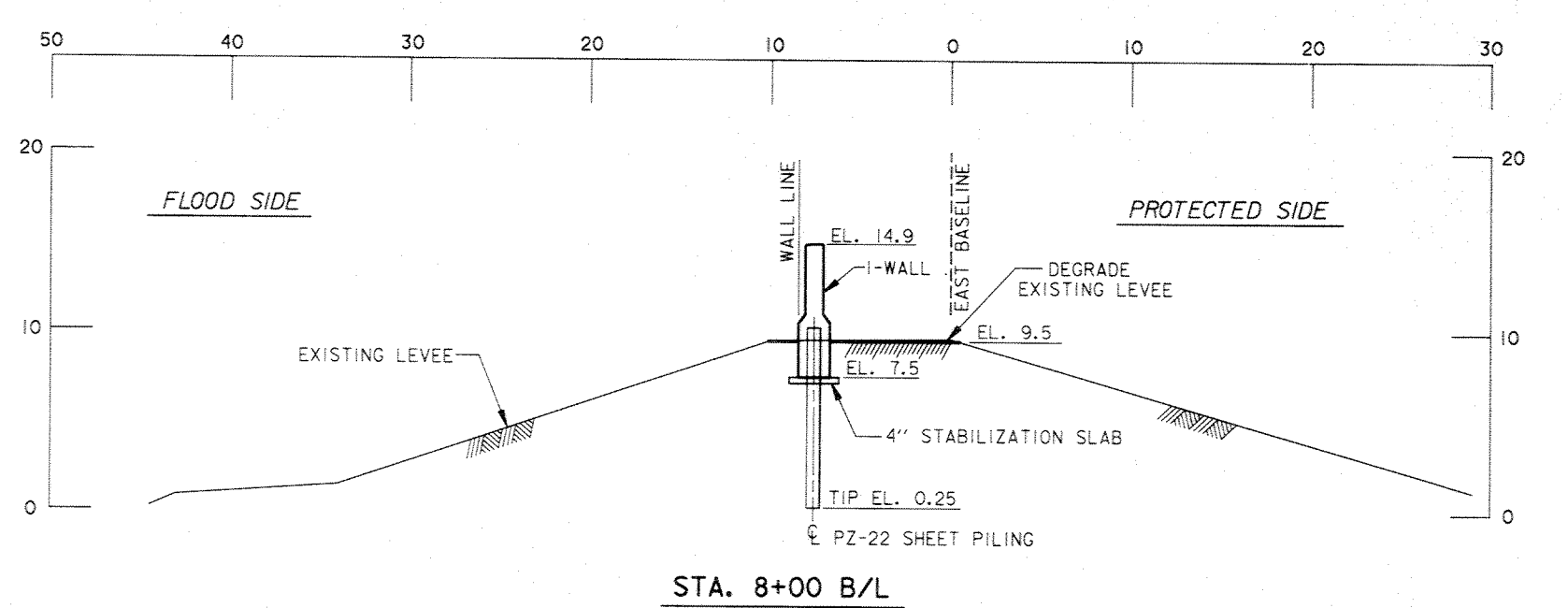
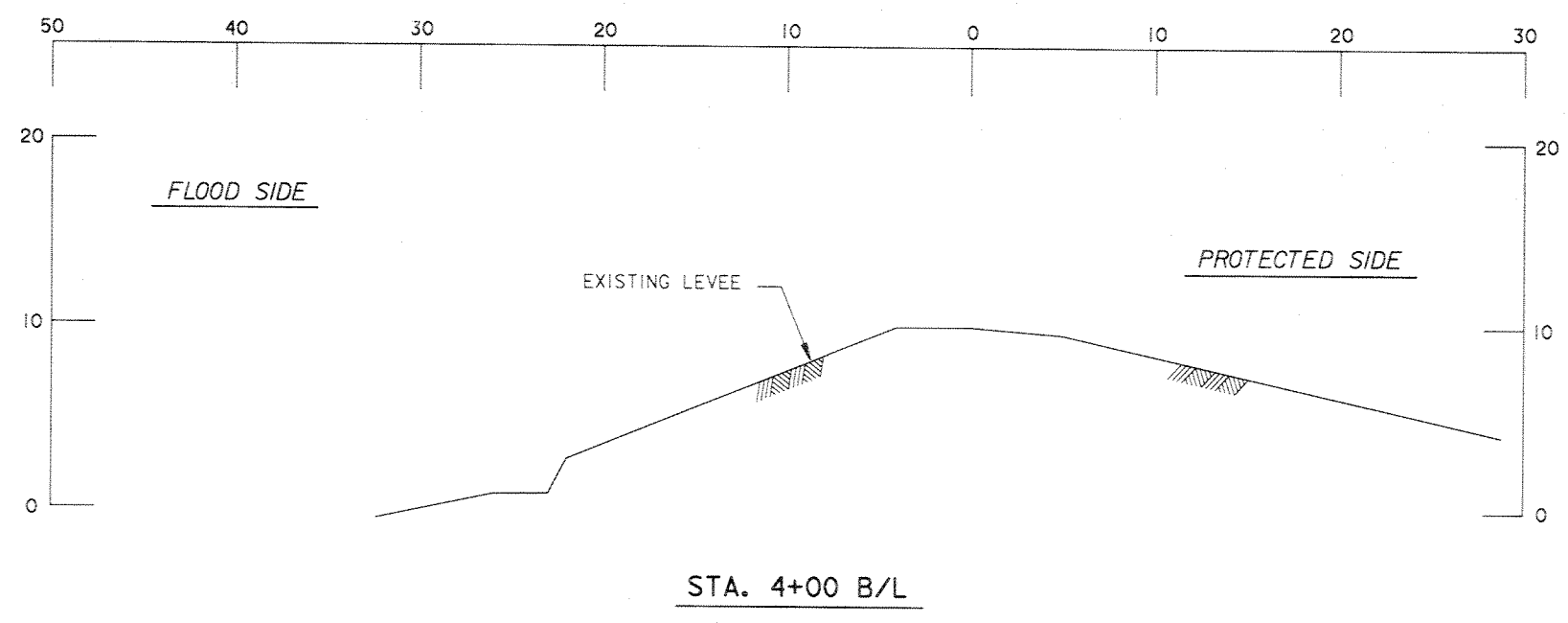
For classification of fine-grained soils in accordance with ASTM D 2487

TYPICAL NOTES:

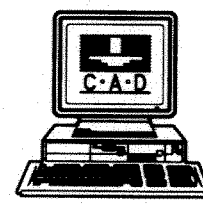
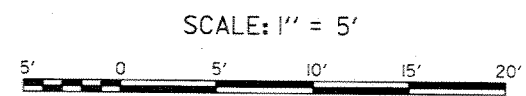
- While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and, if encountered, such variations will not be considered as differing materially within the purview of the contract clause entitled "Differing Site Conditions".
- Ground-water elevations shown on the boring logs represent ground-water surfaces encountered in such borings on the dates shown. Absence of water surface data on certain borings indicates that no ground-water data are available from the boring but does not necessarily mean that ground-water will not be encountered at the locations or within the vertical reaches of such borings.
- Consistency of cohesive soils shown on the boring logs is based on driller's log and visual examination and is approximate, except within those vertical reaches of the borings where shear strengths from unconfined compression tests are shown.
- Unless otherwise noted:
 - Undisturbed borings, indicated by the letter "U", are taken with a 5" I.D. Piston Type Sampler.
 - General type borings are taken with a 1 3/8" I.D. Tube Sampler and/or a 1 3/8" I.D. Split Spoon Sampler.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT; NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LA.			
SOIL BORING LEGEND			
DESIGNED BY: VOJKOVICH	DATE: SEP 96	PLOT SCALE: 1	PLOT DATE: SEP 96
DRAWN BY: WOODS	CHECKED BY: RICHARDSON	CADD FILE: orleansa.dgn	FILE NO. H-4-44644
SUBMITTED BY: X	DESIGN ENGINEER	SOLICITATION NO. DACW29-96-B-0096	DWG. 32 OF 32

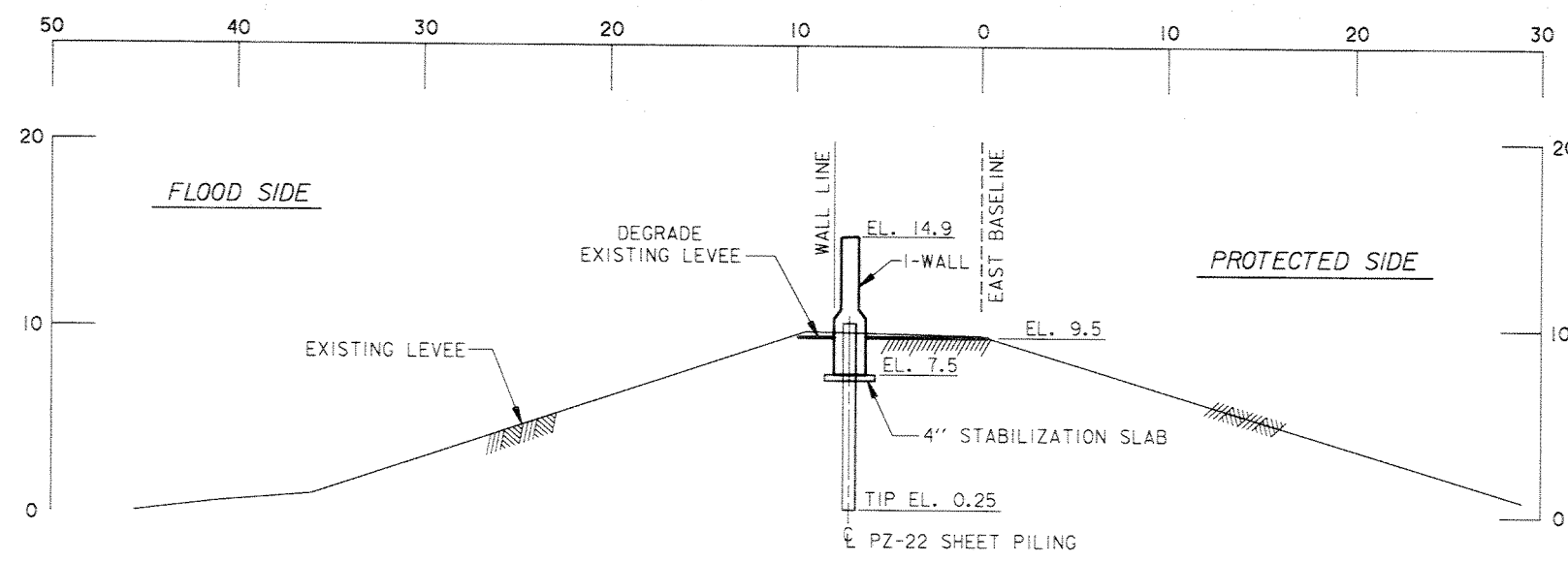




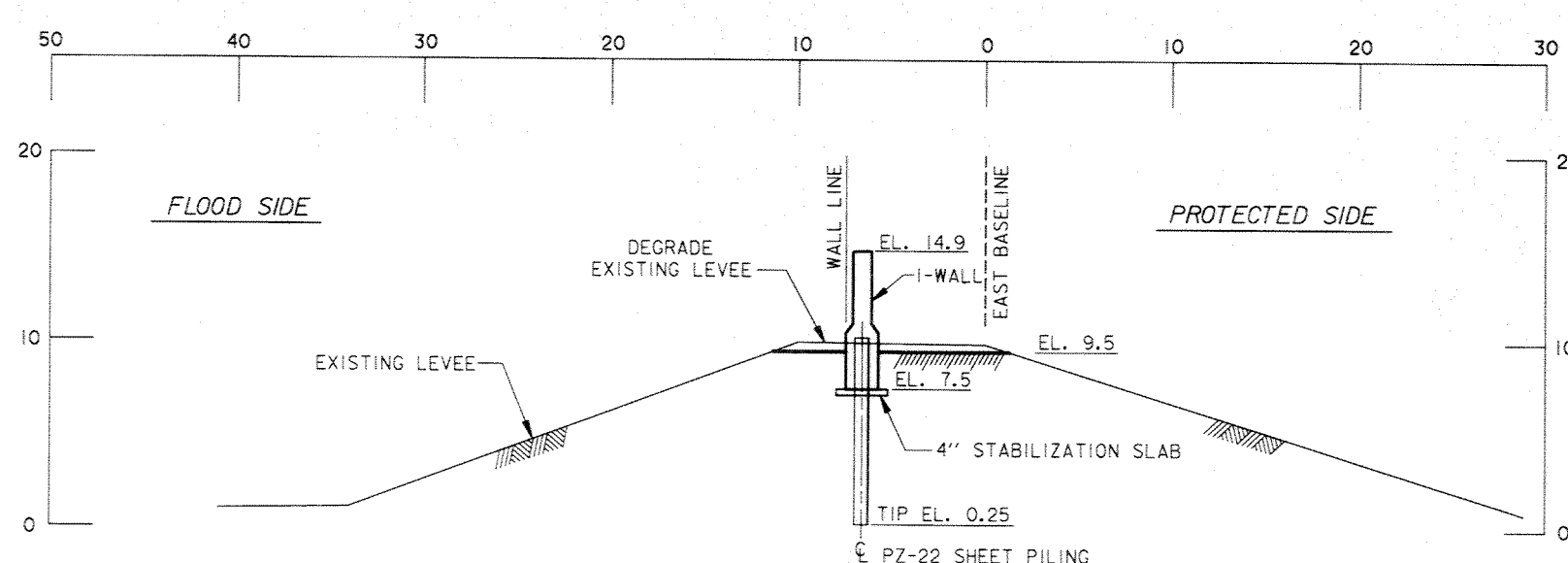
Safety is a Part of Your Contract



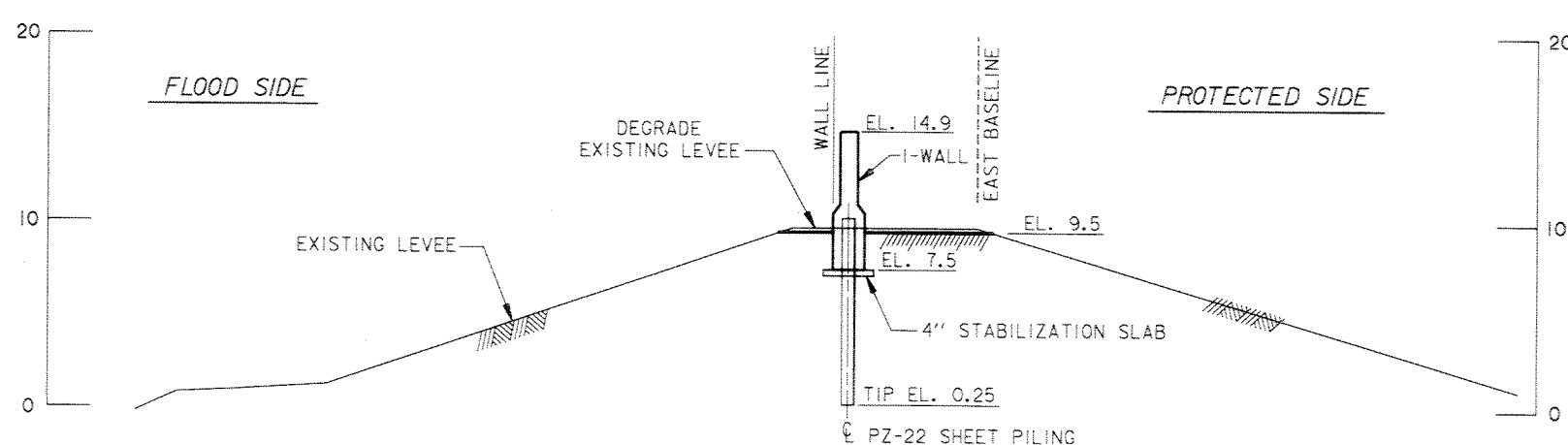
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
CROSS SECTIONS STA. 4+00 E. B/L TO STA. 10+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 120	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT1.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A1	OF A13
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		



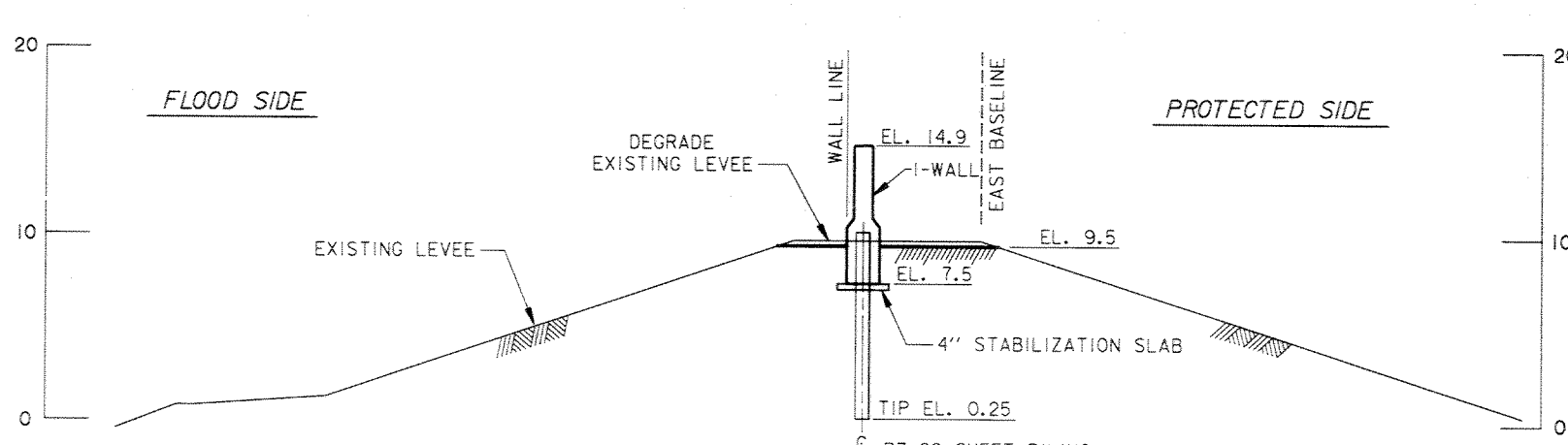
STA. 11+00 B/L



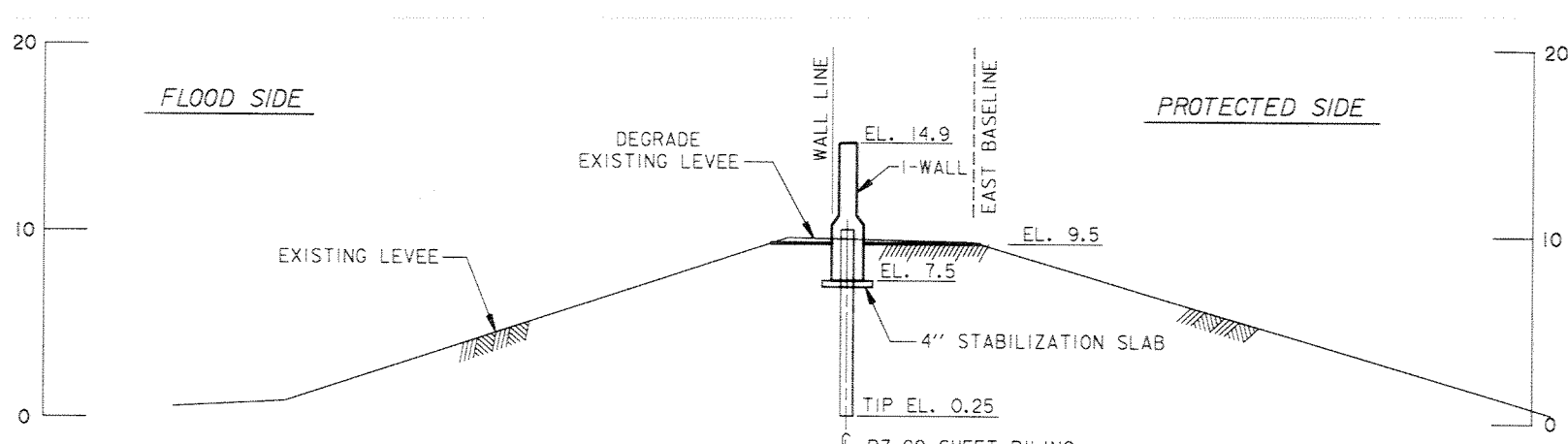
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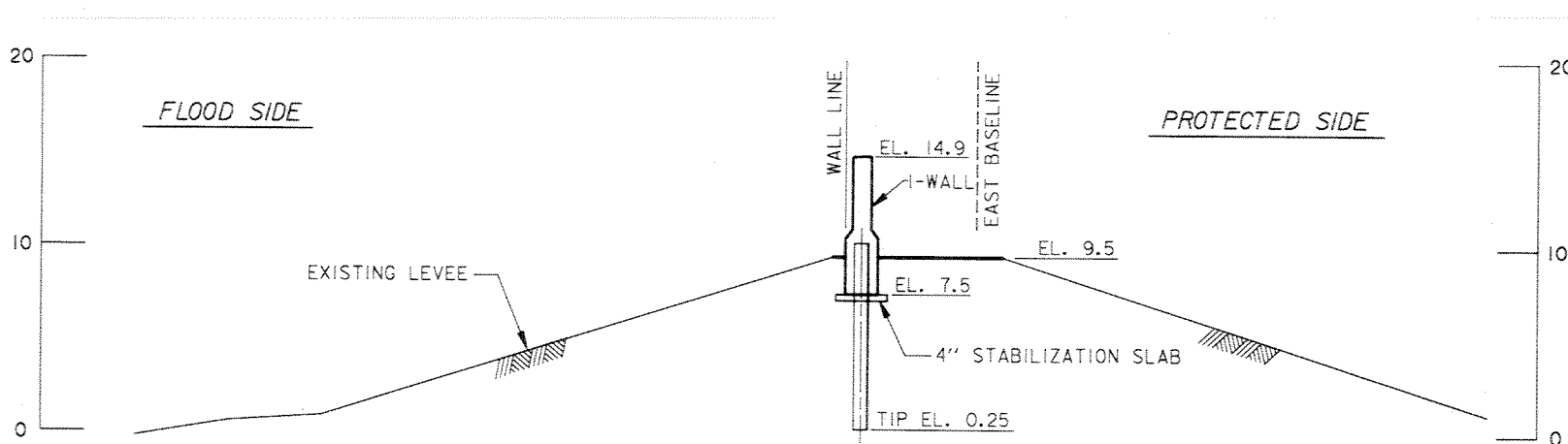
STA. 12+00 B/L



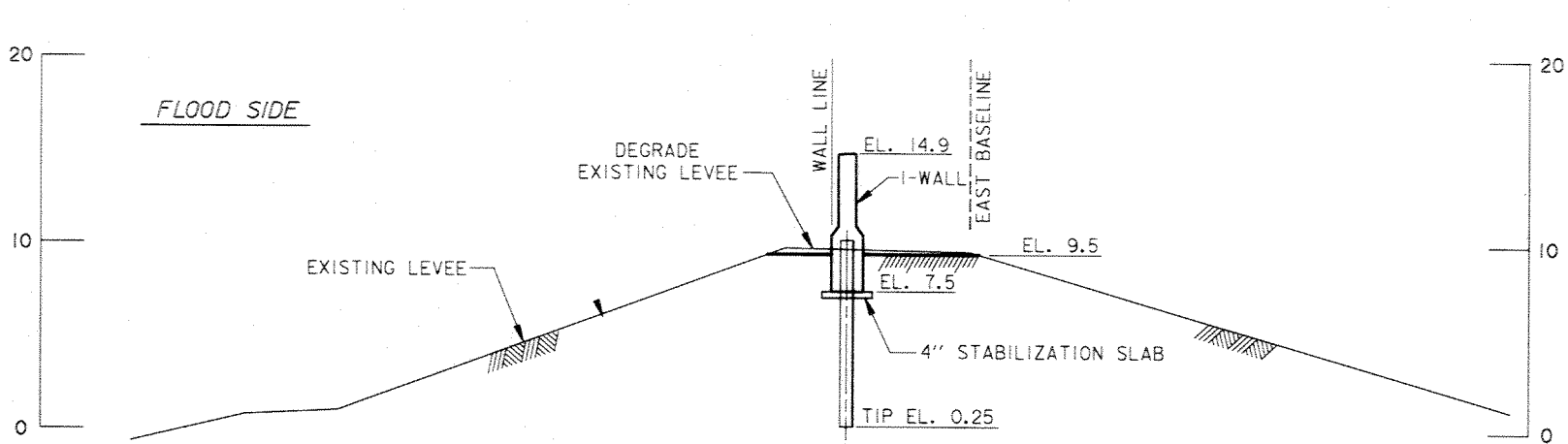
STA. 16+00 B/L



STA. 13+00 B/L

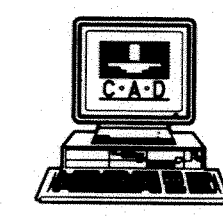
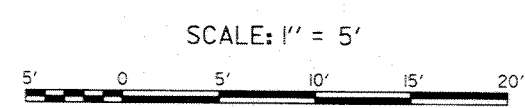



STA. 17+00 B/L

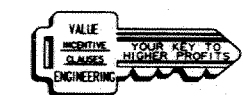


STA. 14+00 B/L

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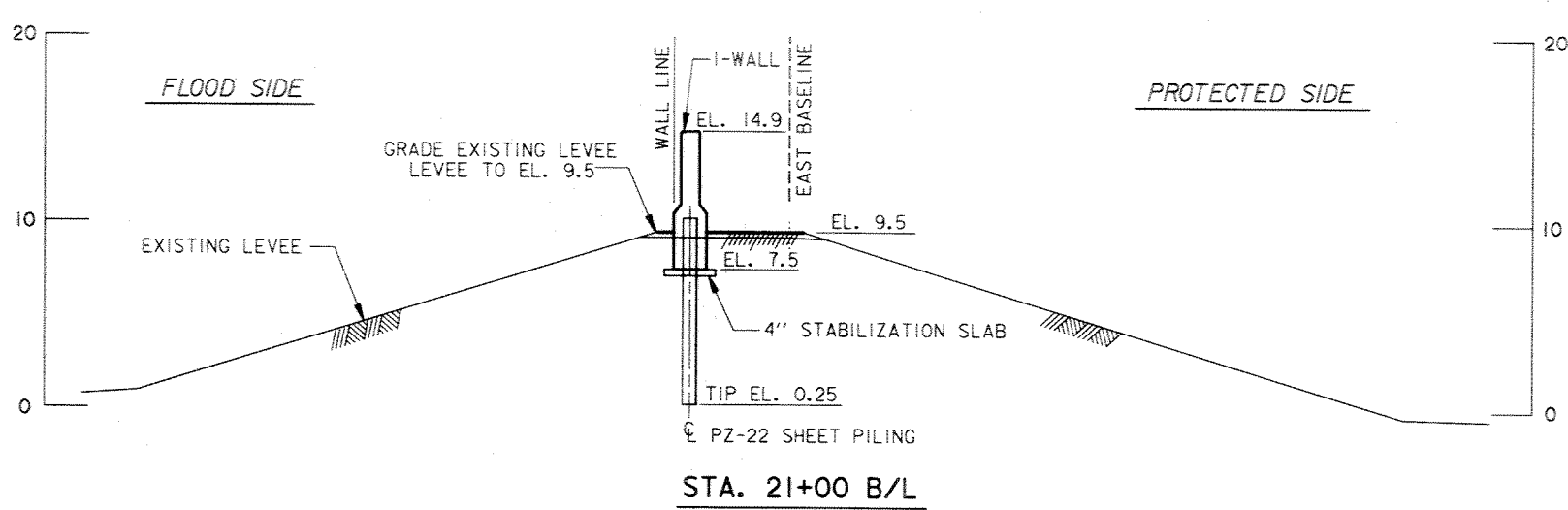
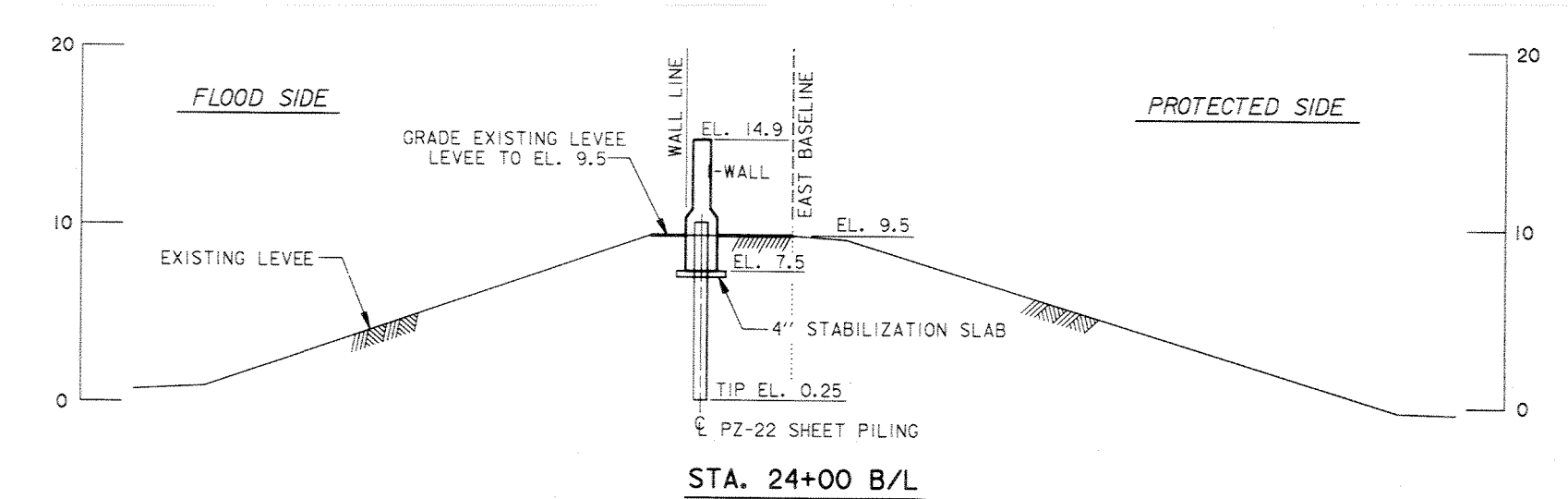
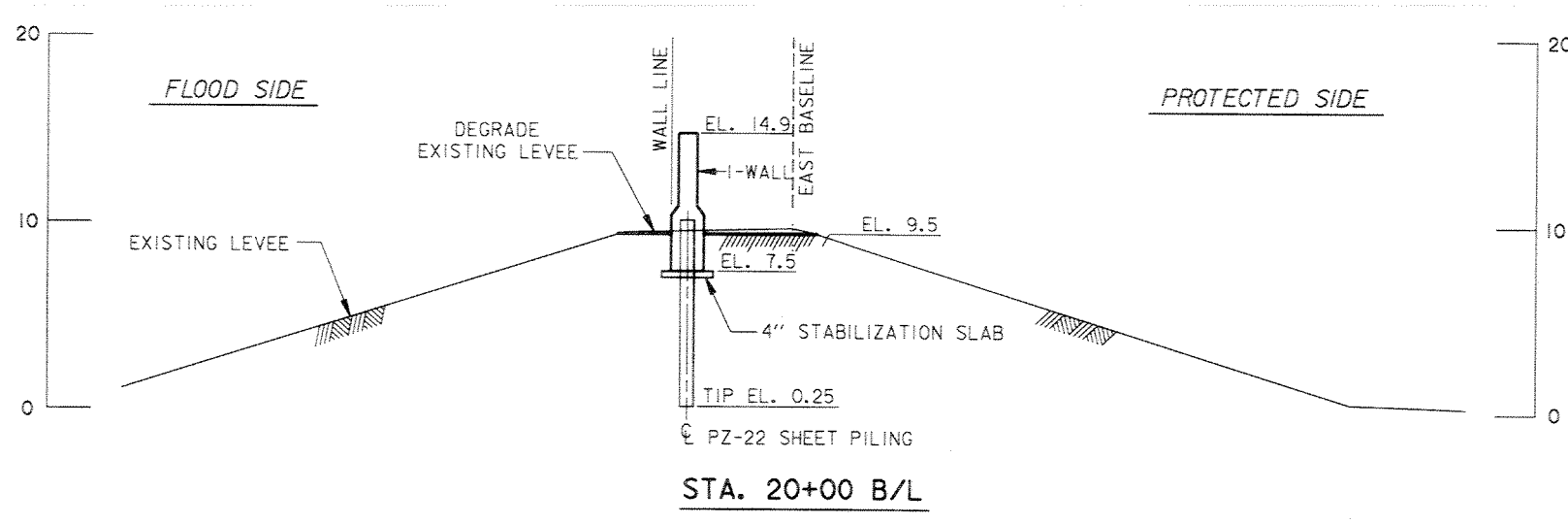
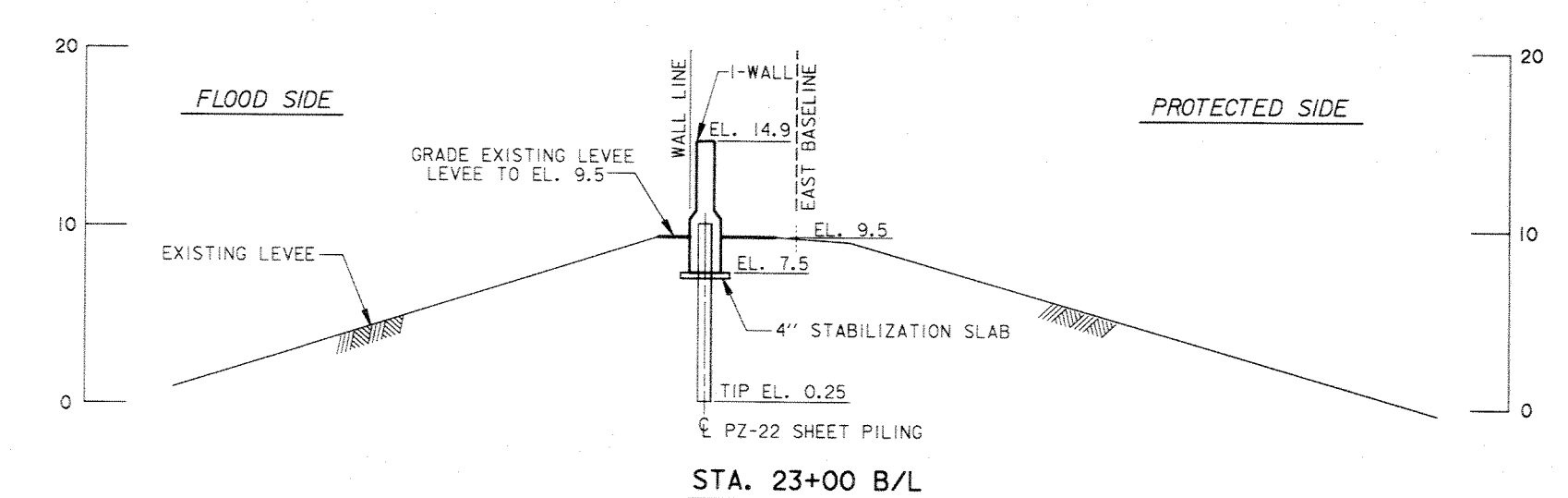
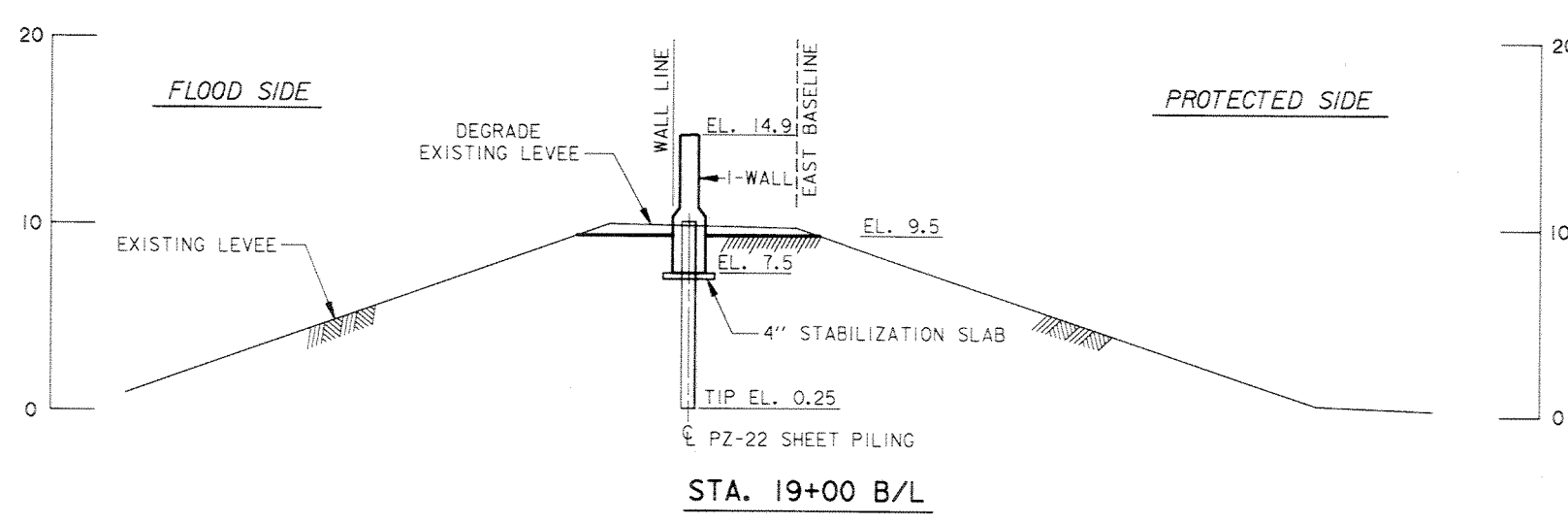
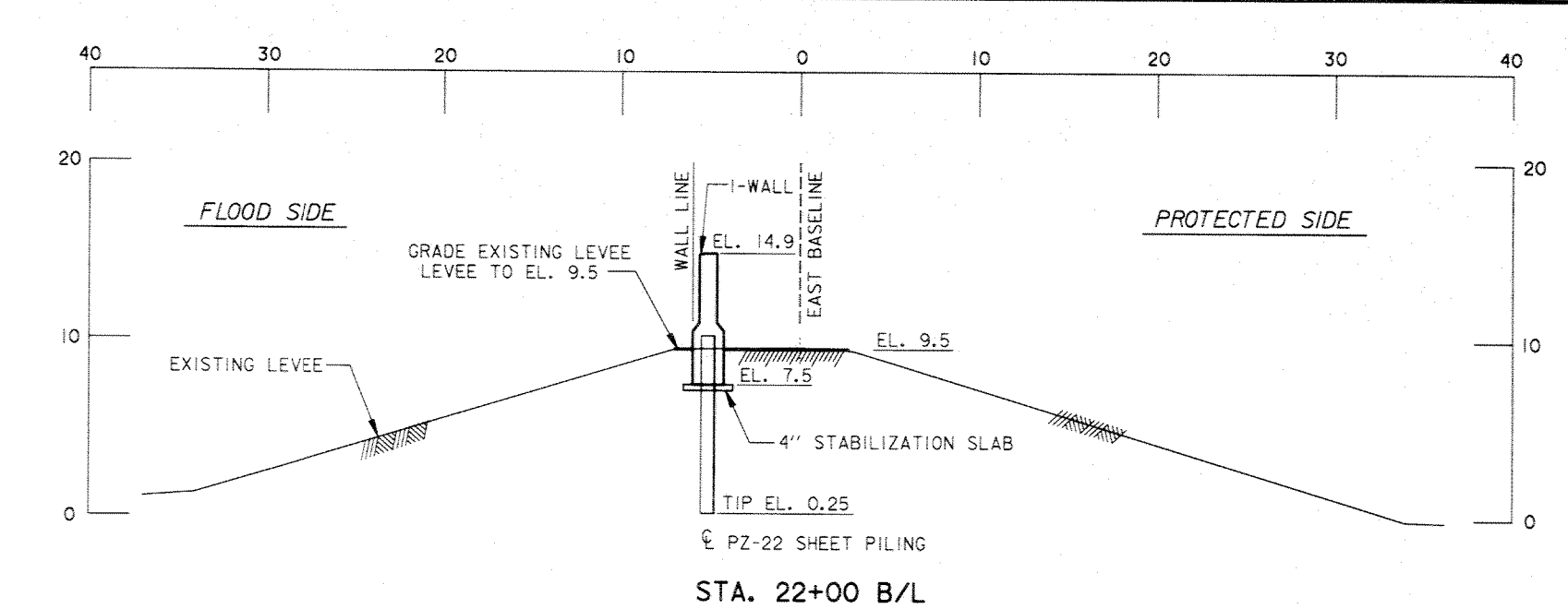
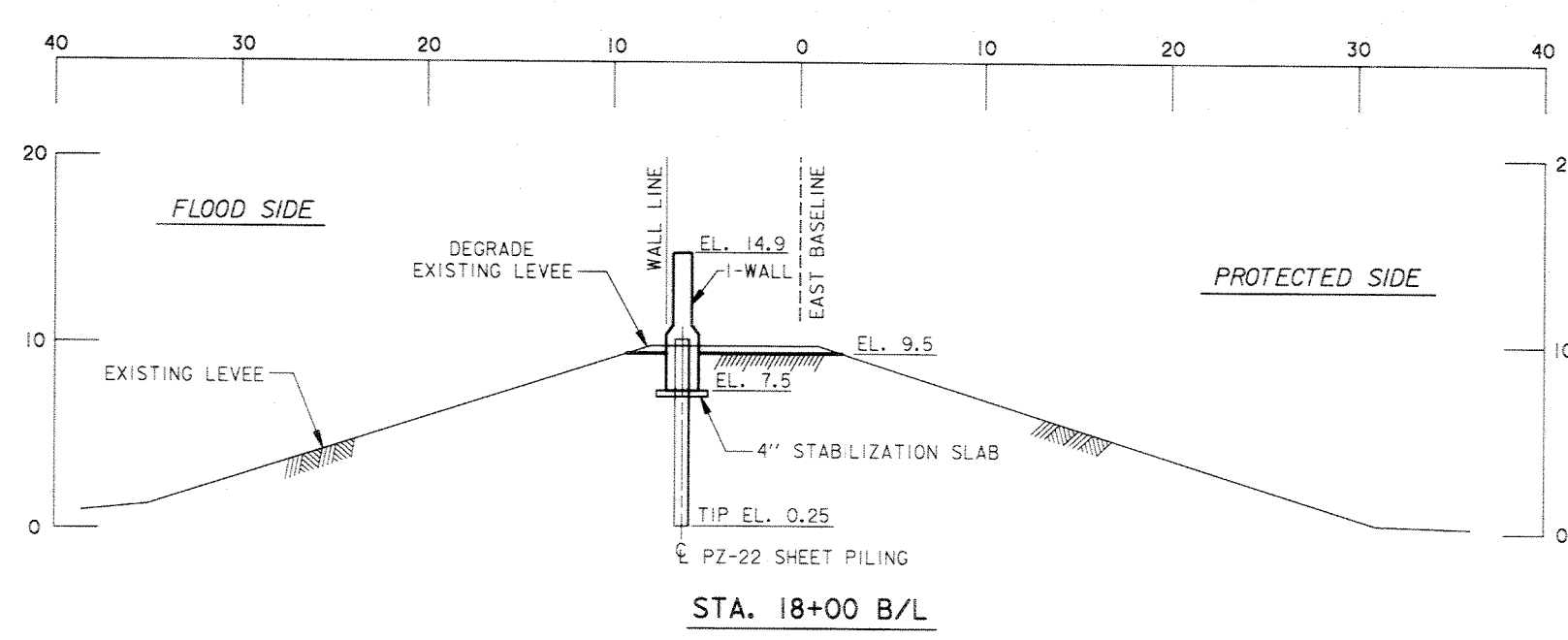


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
CROSS SECTIONS			
STA. 11+00 E. B/L TO STA. 17+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT2.DGN	FILE NO. H-4-4644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0098	DWG. A2 OF A13



ELEVATIONS IN FEET - N.G.V.D.

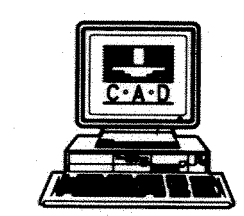
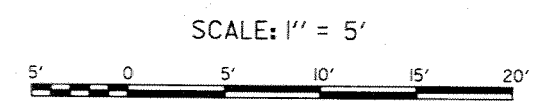
ELEVATIONS IN FEET - N.G.V.D.




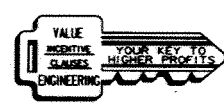
ELEVATIONS IN FEET - N.G.V.D.

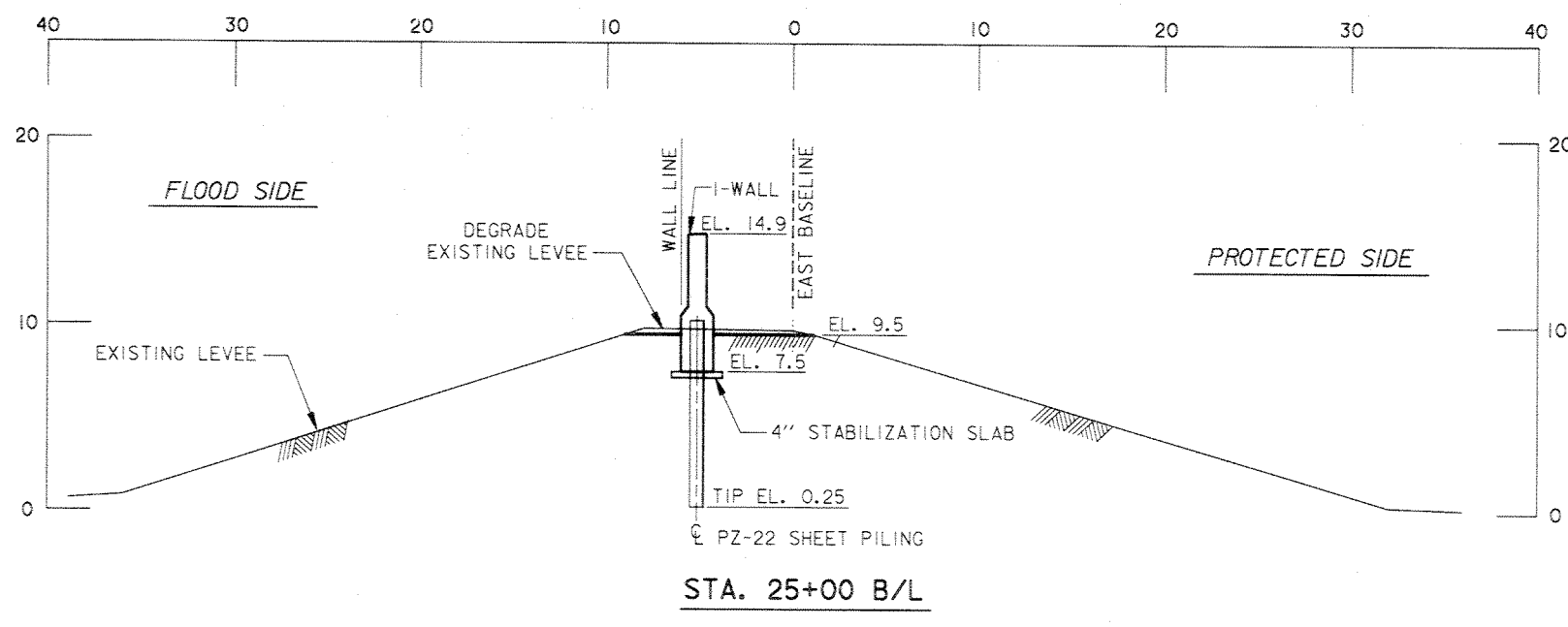
ELEVATIONS IN FEET - N.G.V.D.

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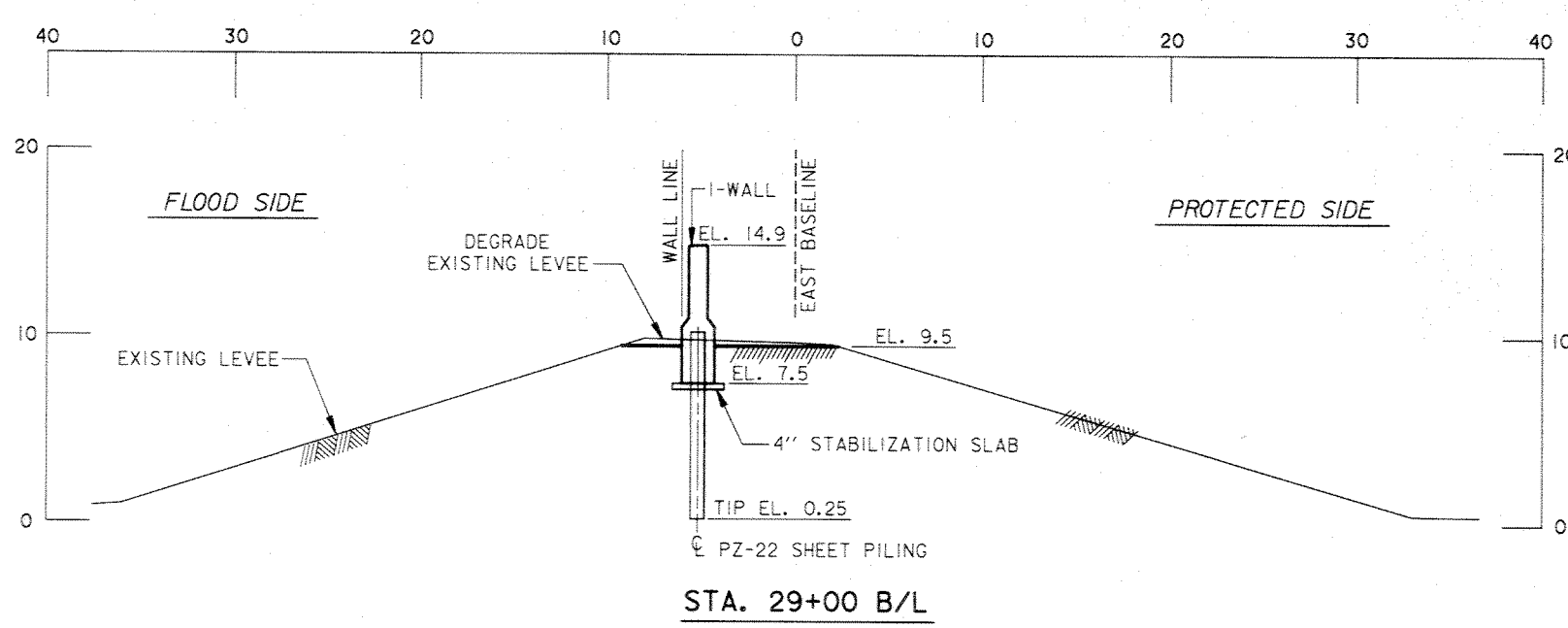


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 18+00 E. B/L TO STA. 24+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT3.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A3 OF A13	
SUBMITTED BY: J. ROMERO, DESIGN ENGINEER			

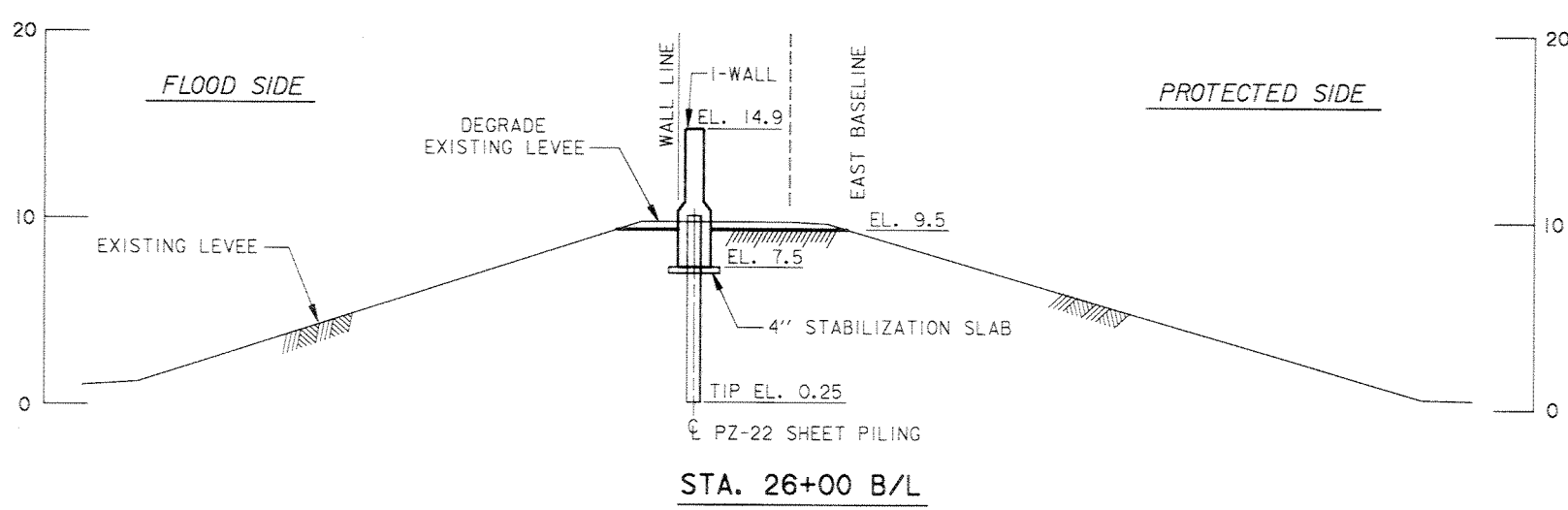




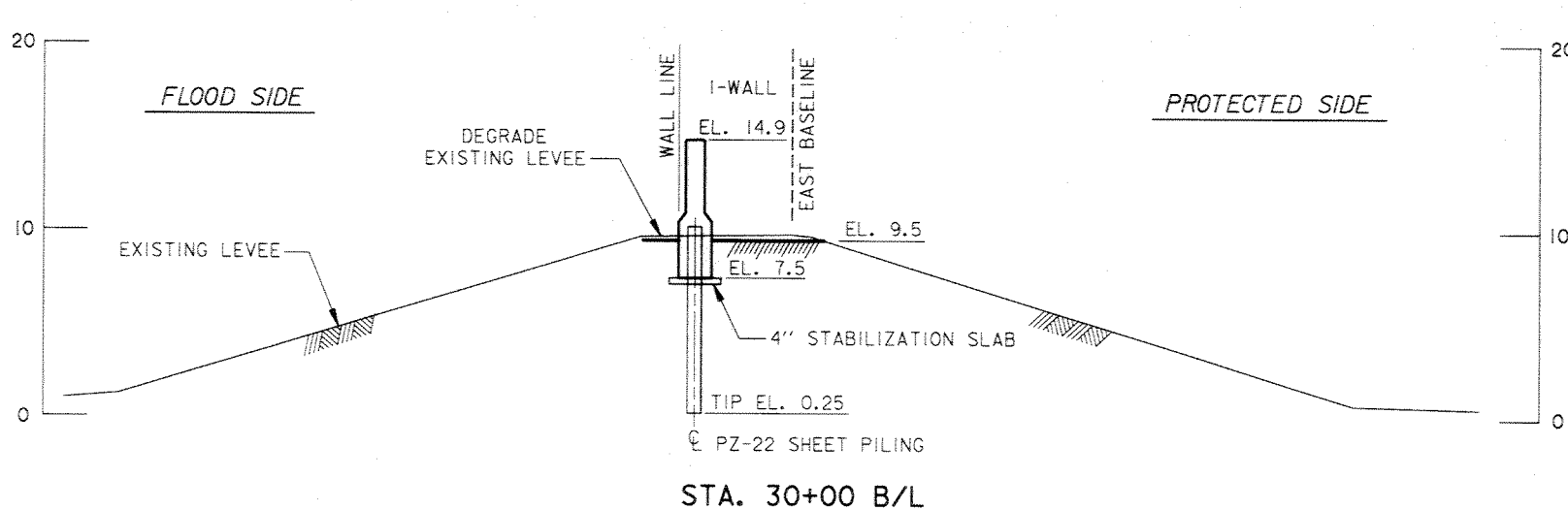
STA. 25+00 B/L



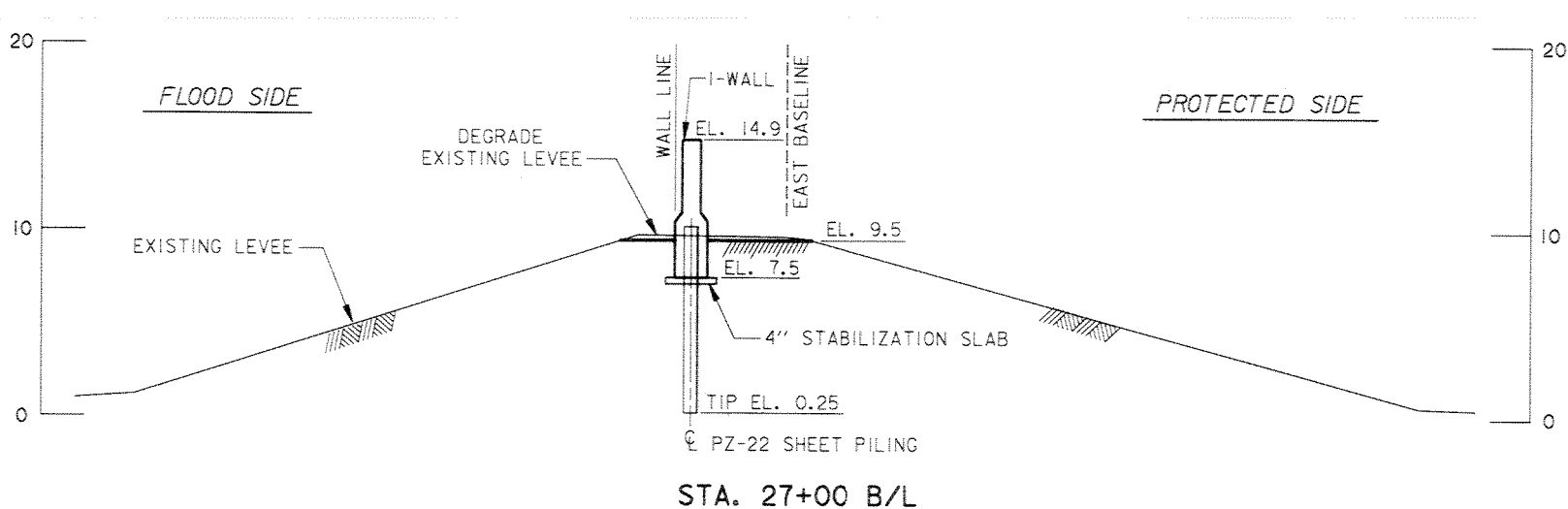
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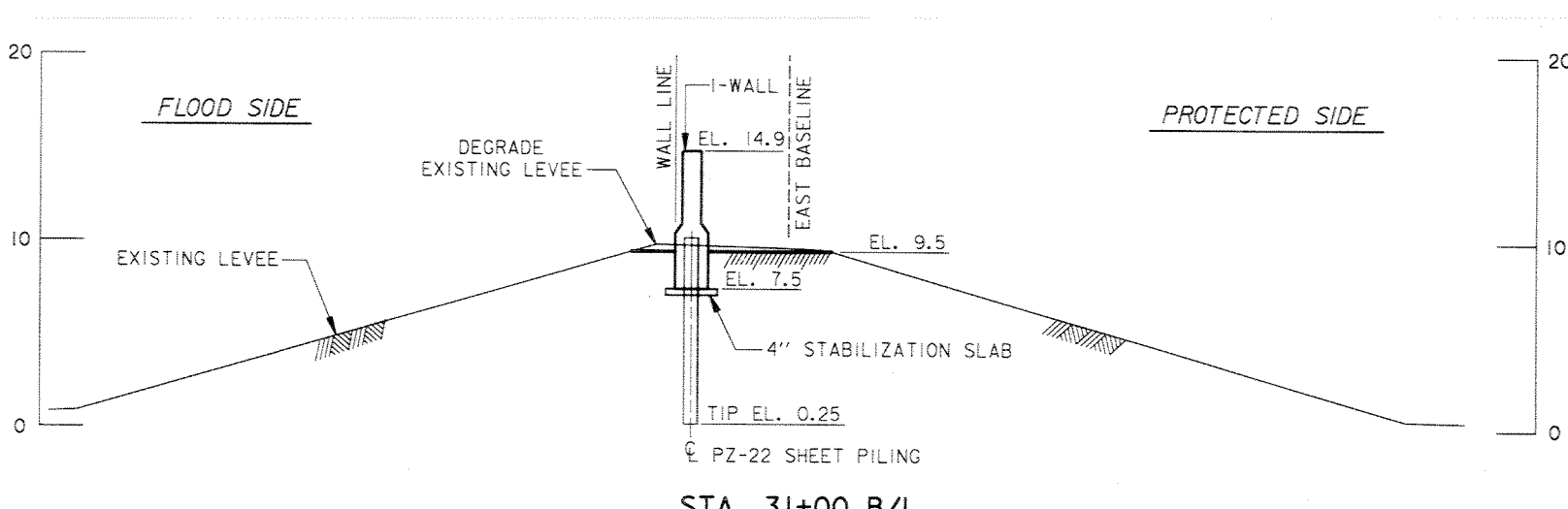
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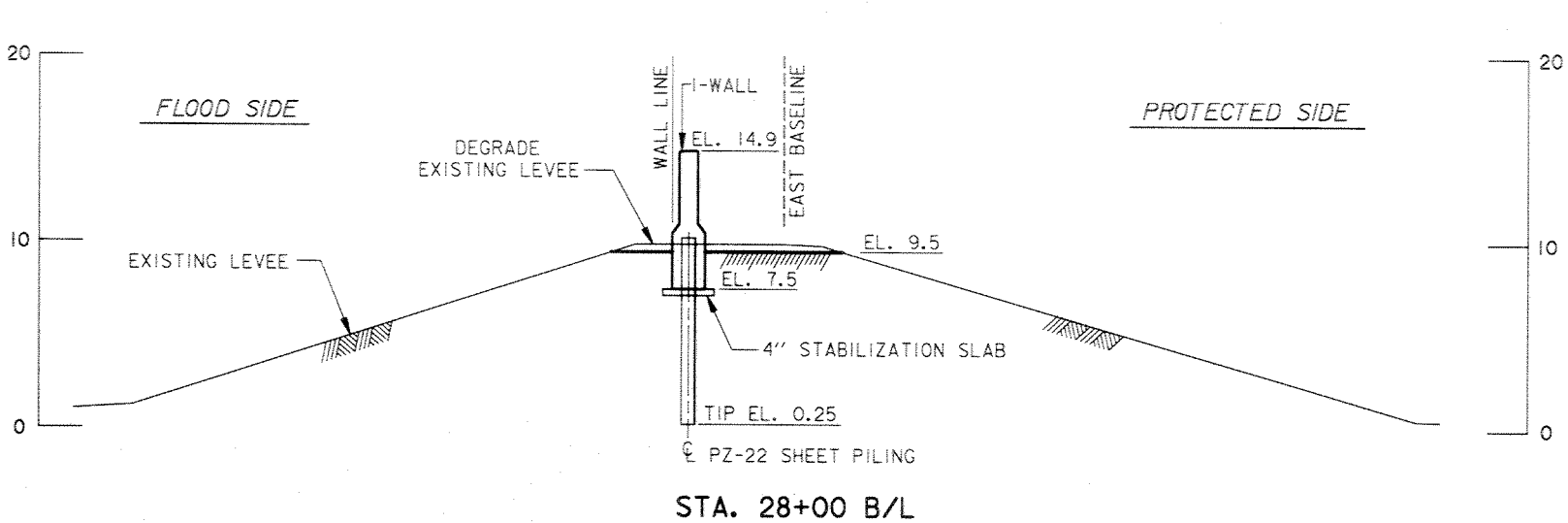
STA. 30+00 B/L



STA. 27+00 B/L

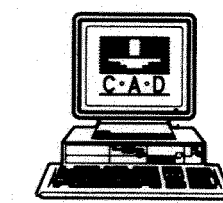
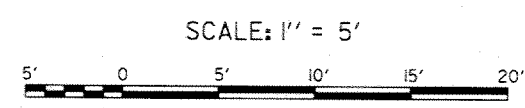


STA. 31+00 B/L



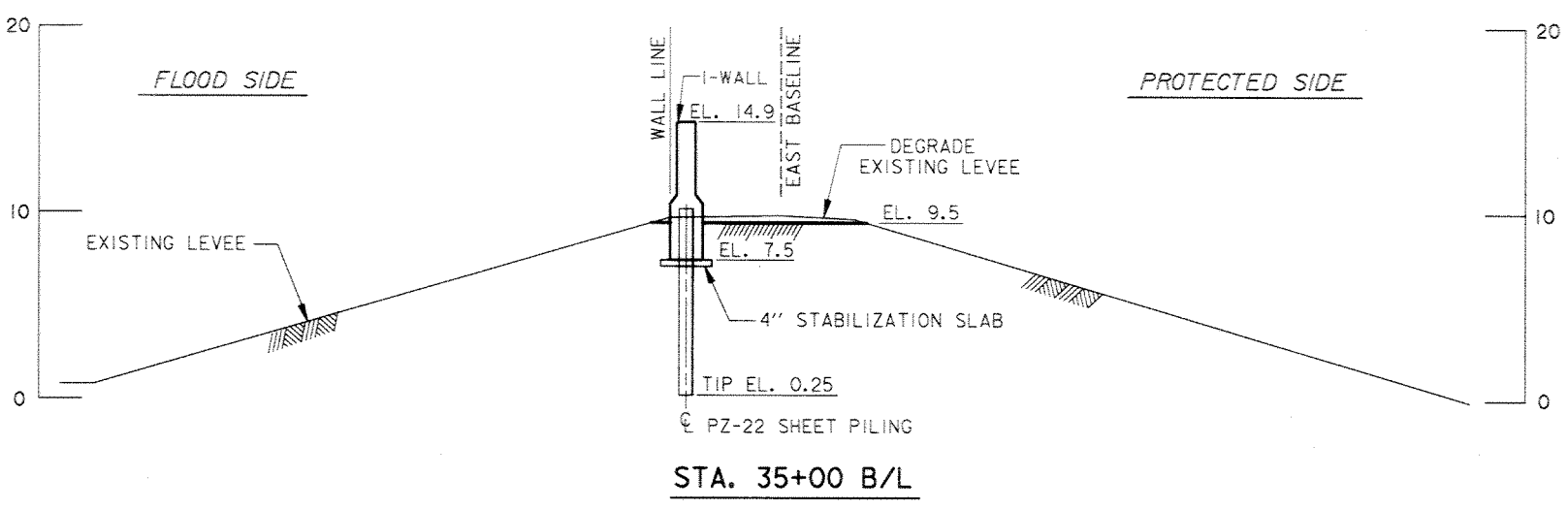
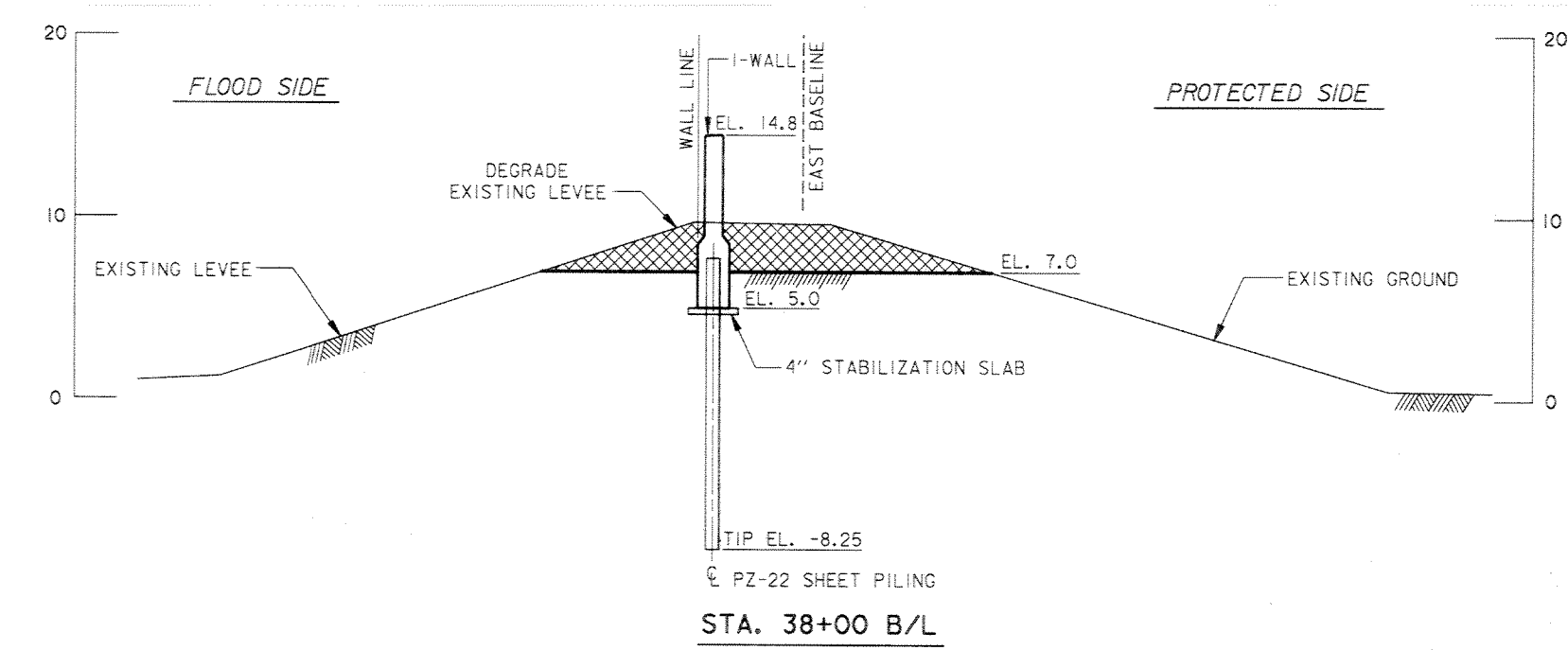
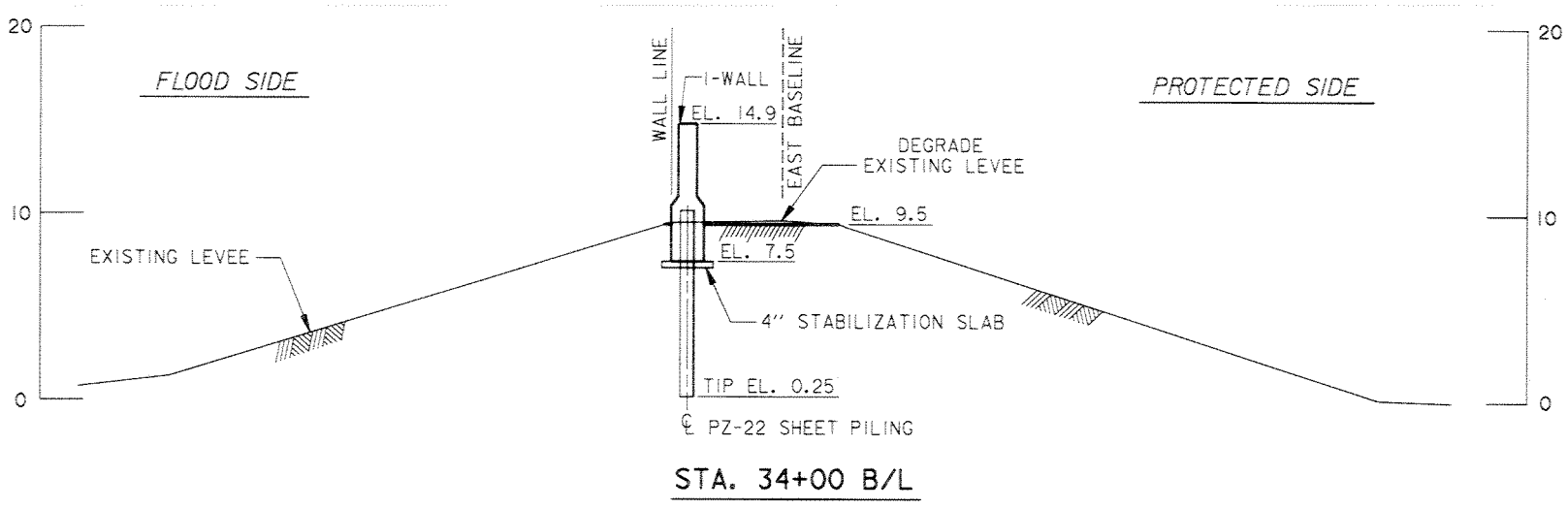
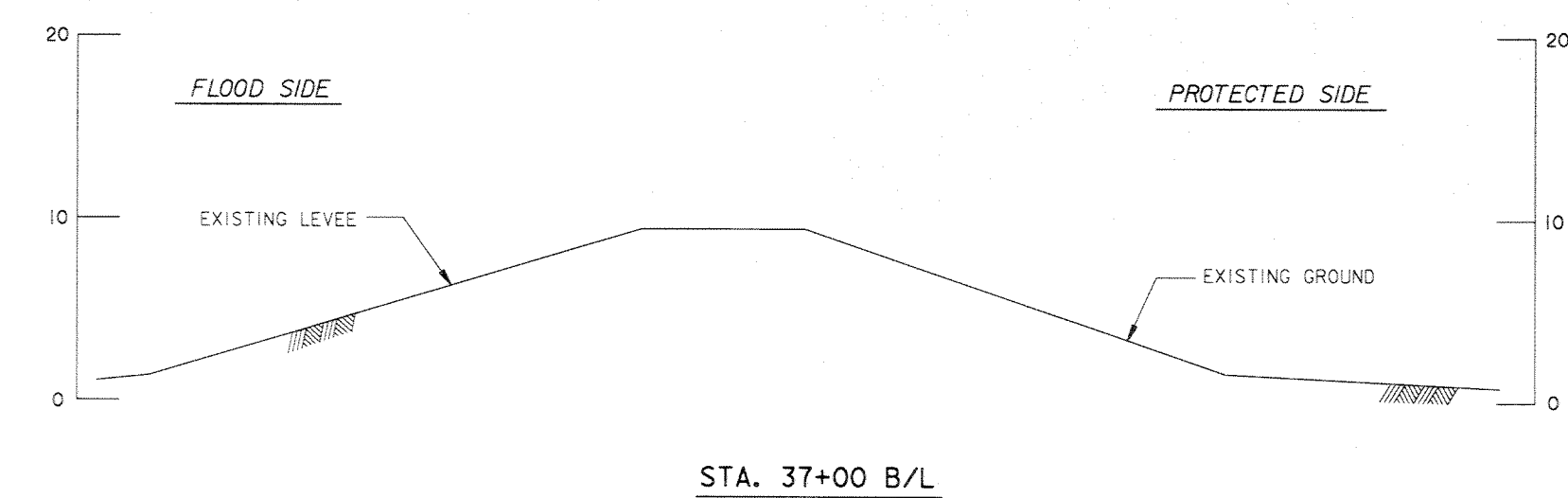
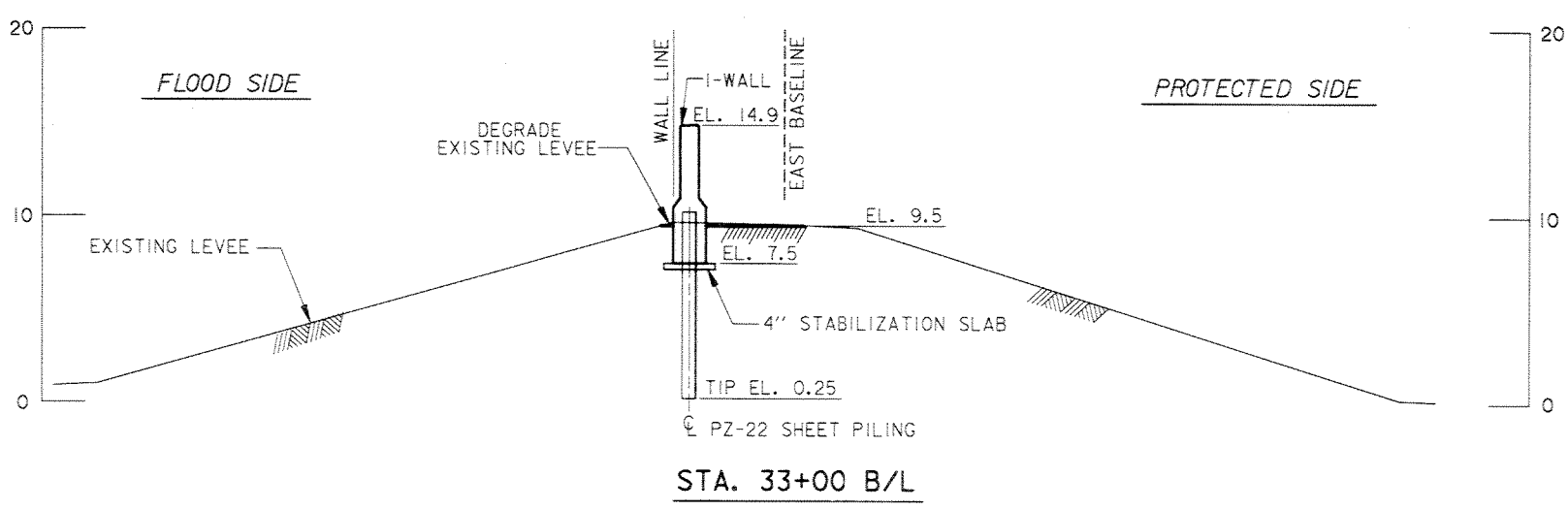
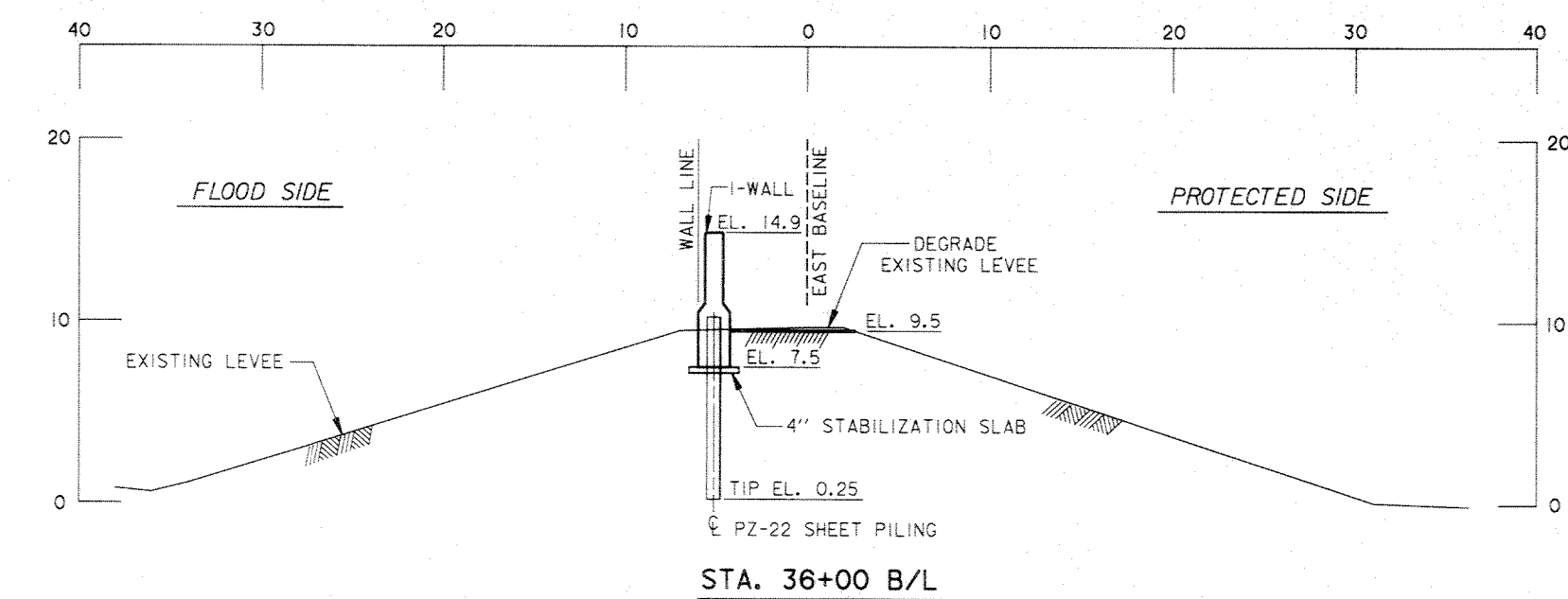
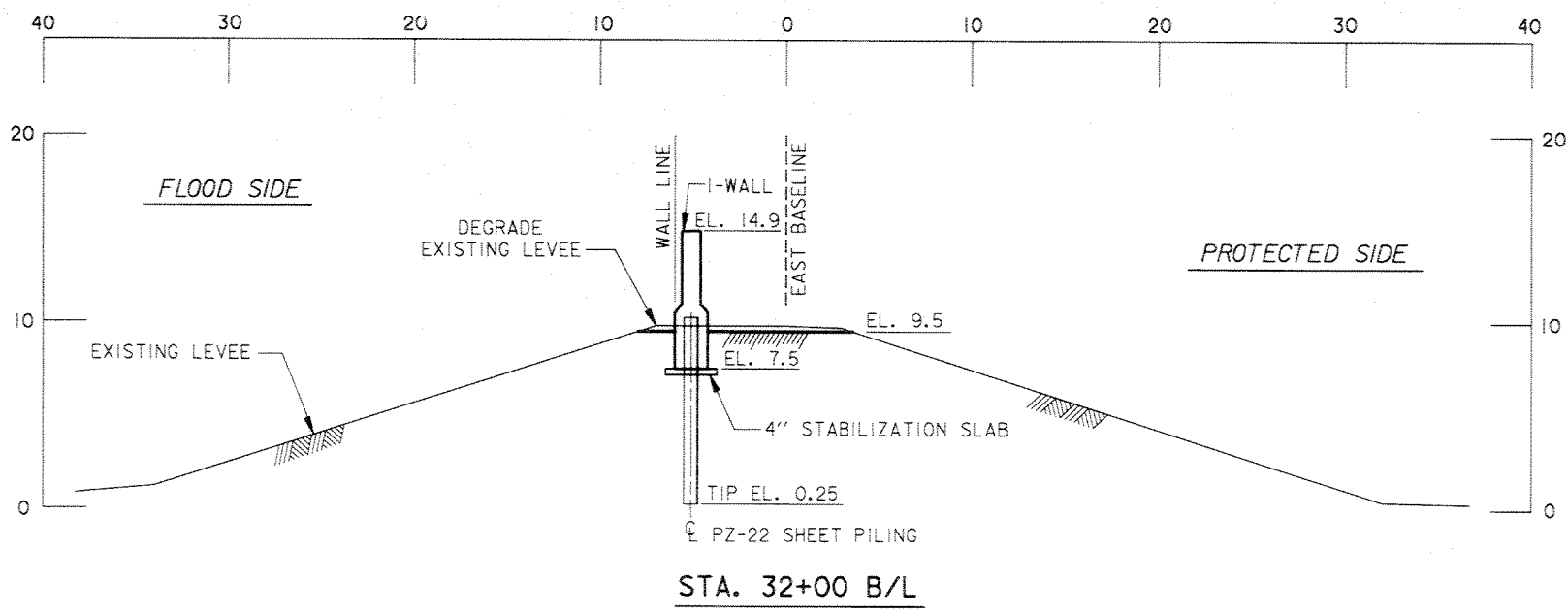
STA. 28+00 B/L

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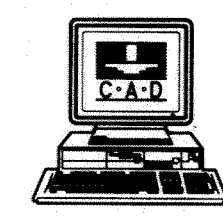
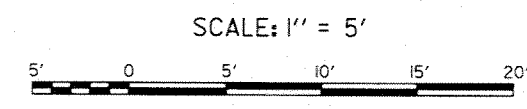



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 25+00 E. B/L TO STA. 31+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 80	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT4.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A4 OF A13





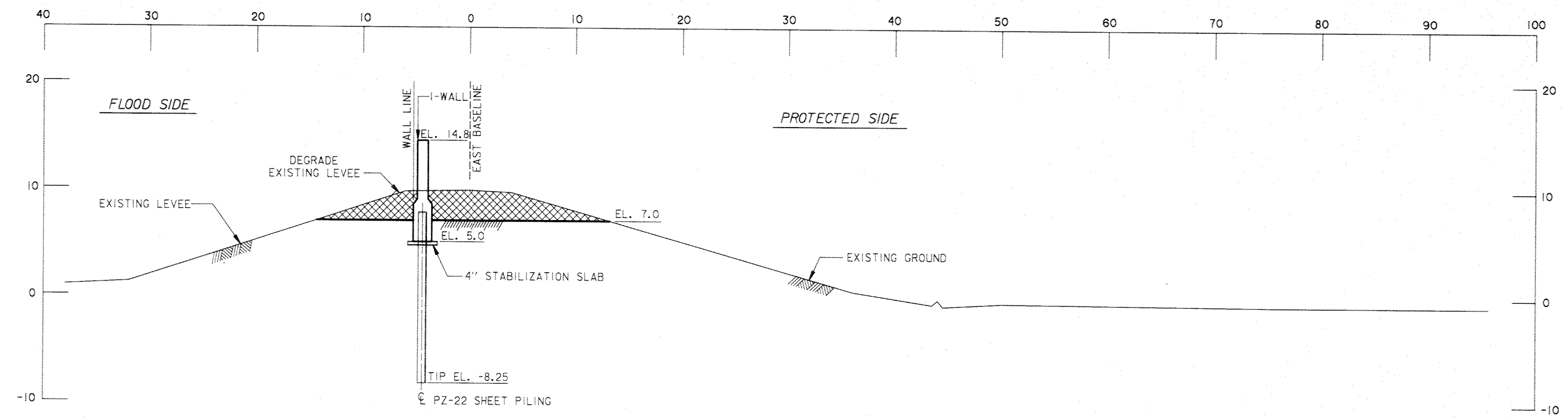
Safety is a Part of Your Contract



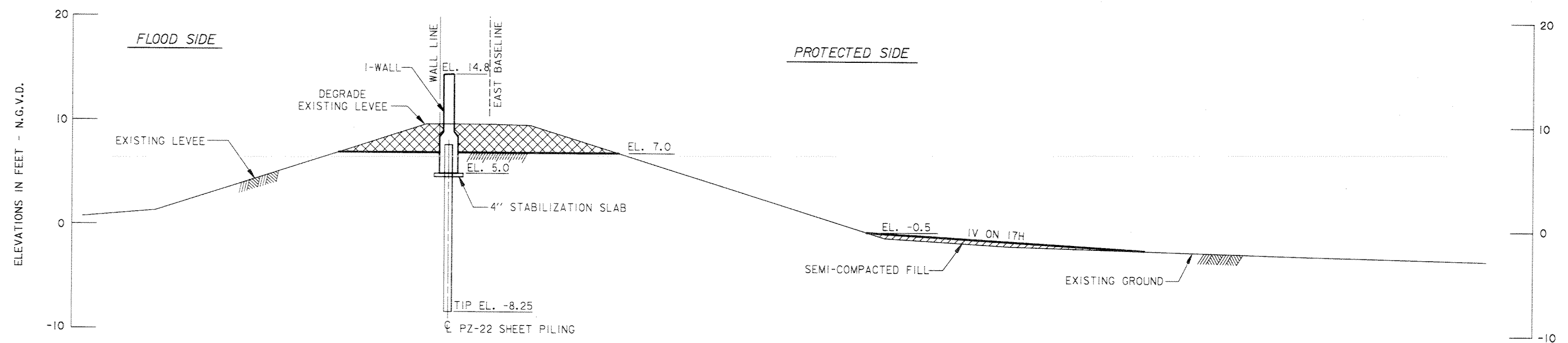
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 32+00 E. B/L TO STA. 38+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECTS.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A5 OF A13



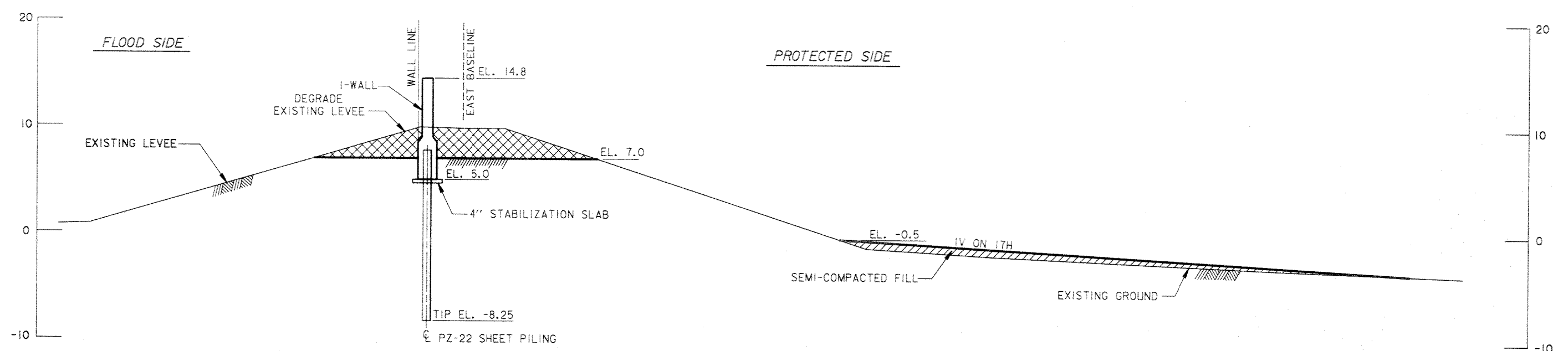
Safety is a Part of Your Contract



STA. 40+00 B/L



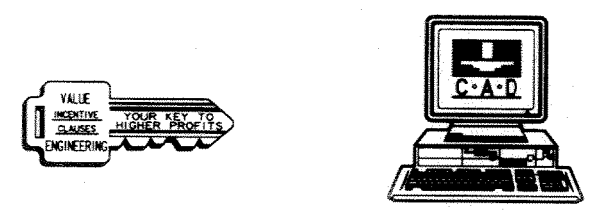
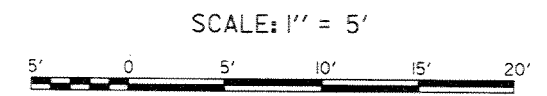
STA. 42+00 B/L



STA. 44+00 B/L

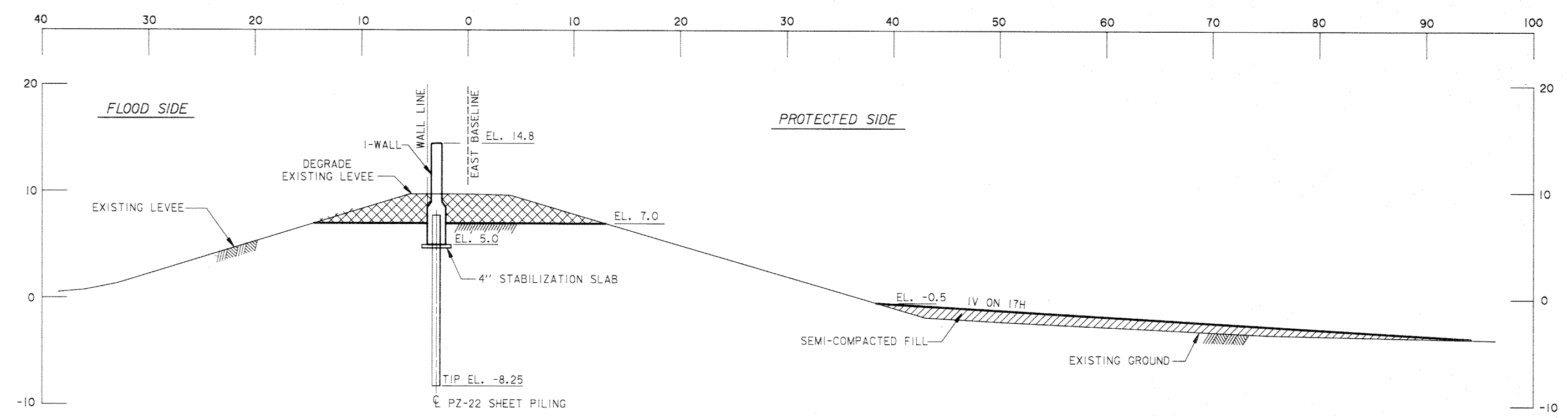
ELEVATIONS IN FEET - N.G.V.D.

ELEVATIONS IN FEET - N.G.V.D.

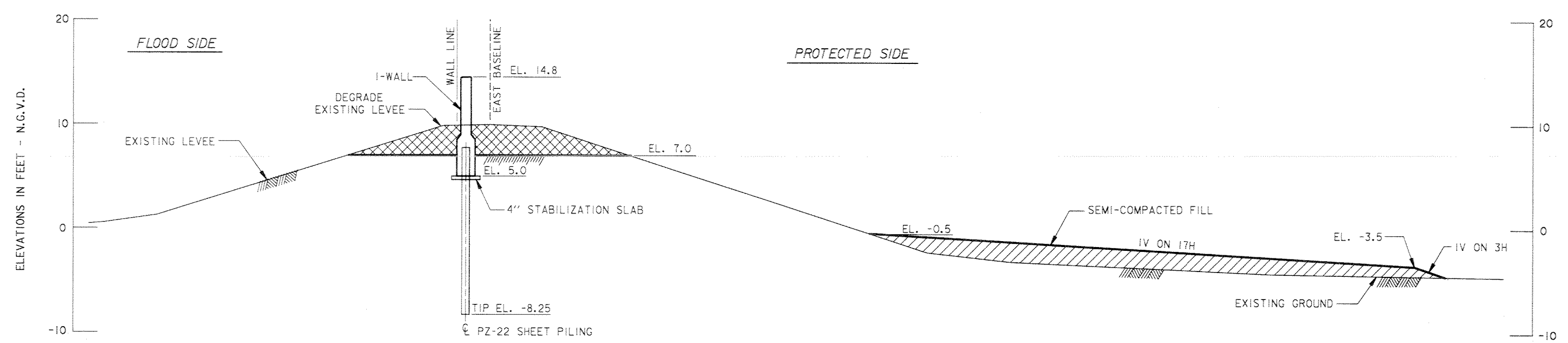


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 40+00 E. B/L TO STA. 46+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT6.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A6	OF A13
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		

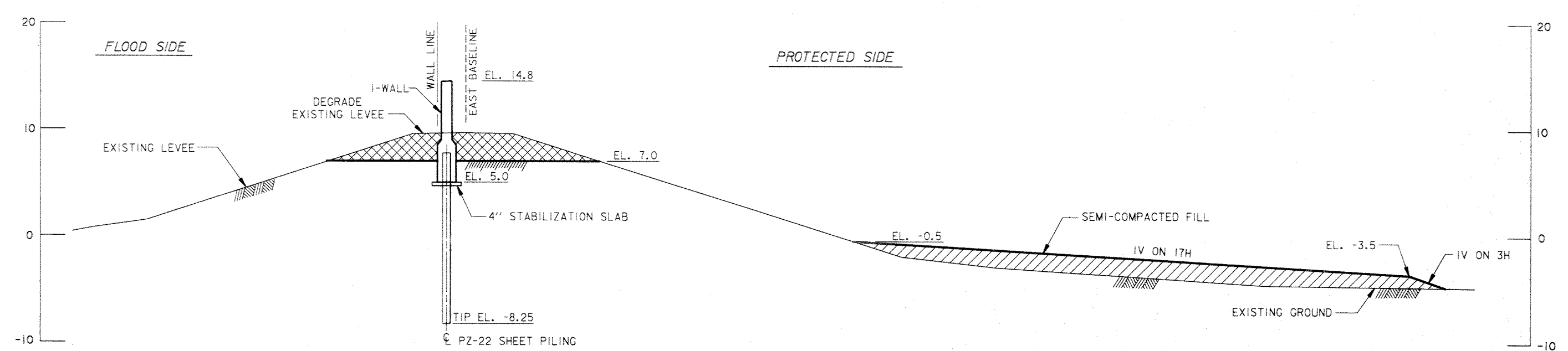
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STA. 46+00 B/L



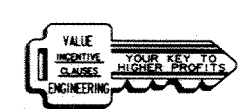
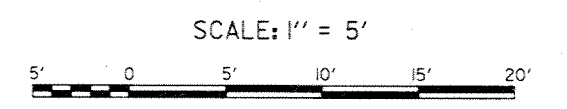
STA. 48+00 B/L



STA. 50+00 B/L

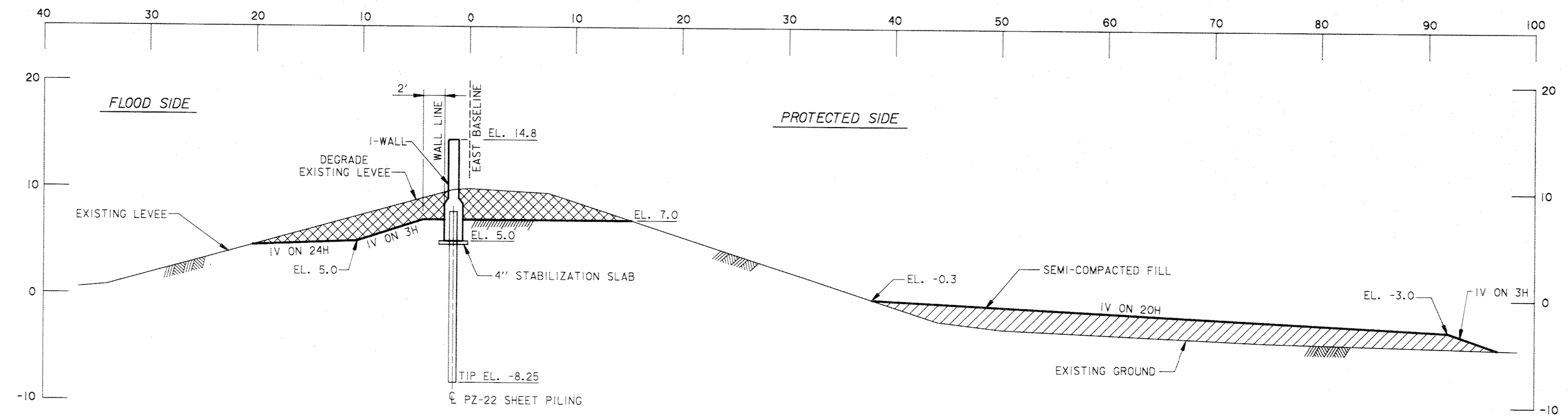
ELEVATIONS IN FEET - N.G.V.D.

ELEVATIONS IN FEET - N.G.V.D.

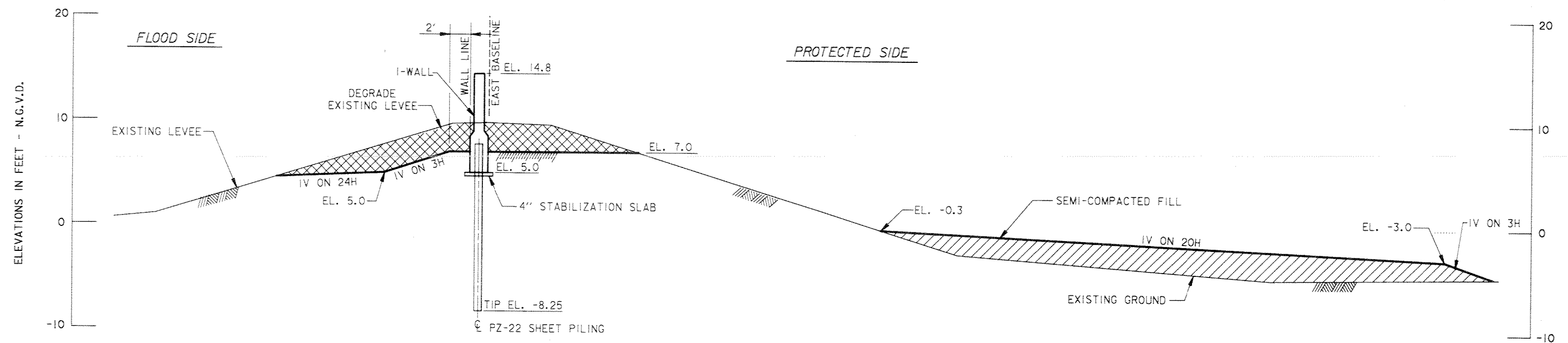


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 46+00 E. B/L TO STA. 50+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT7.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A7 OF A13

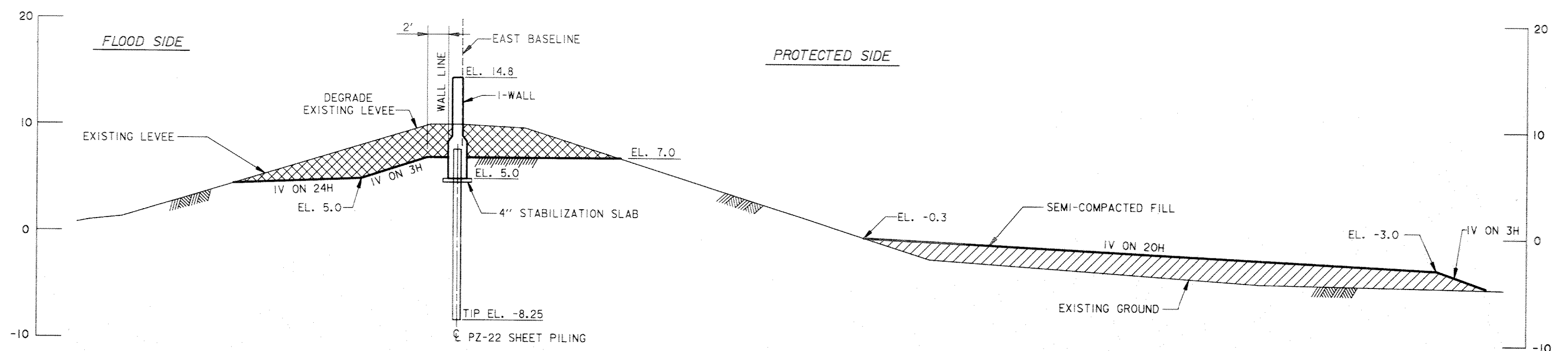
Safety is a Part of Your Contract



STA. 51+00 B/L



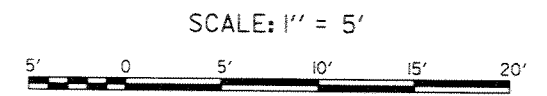
STA. 53+00 B/L



STA. 55+00 B/L

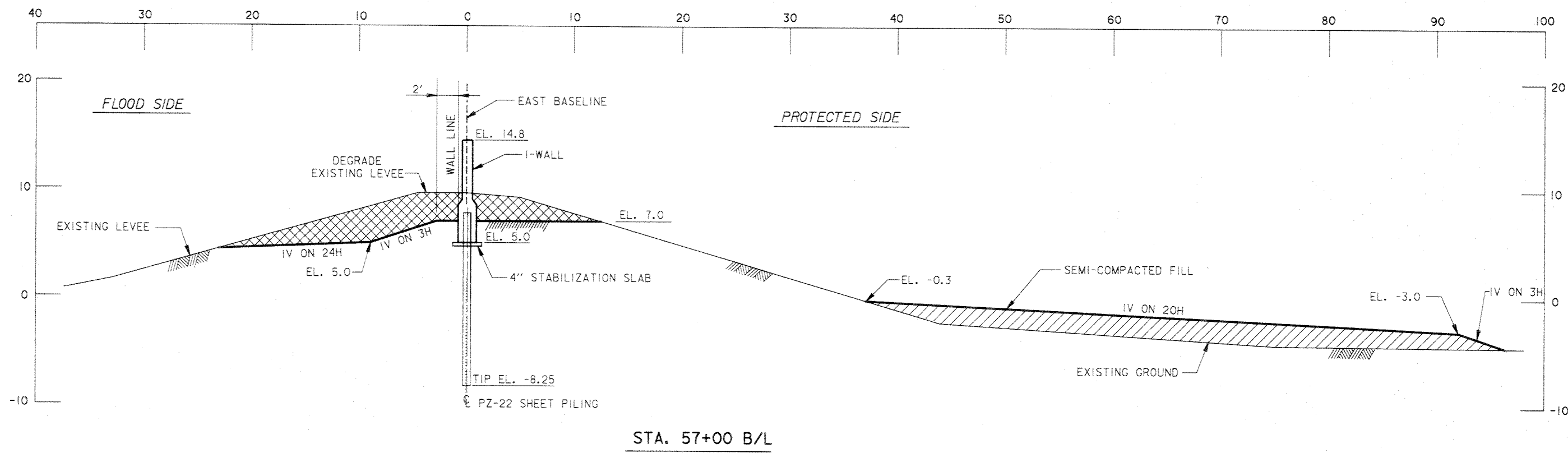
ELEVATIONS IN FEET - N.G.V.D.

ELEVATIONS IN FEET - N.G.V.D.

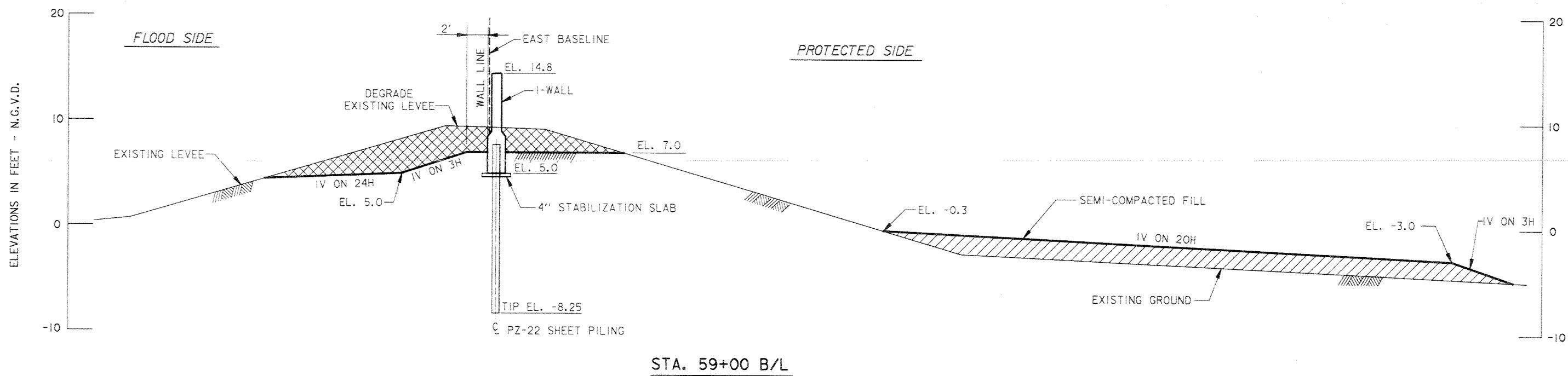


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 51+00 E. B/L TO STA. 55+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CAD FILE: SECT8.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A8	OF A13
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		

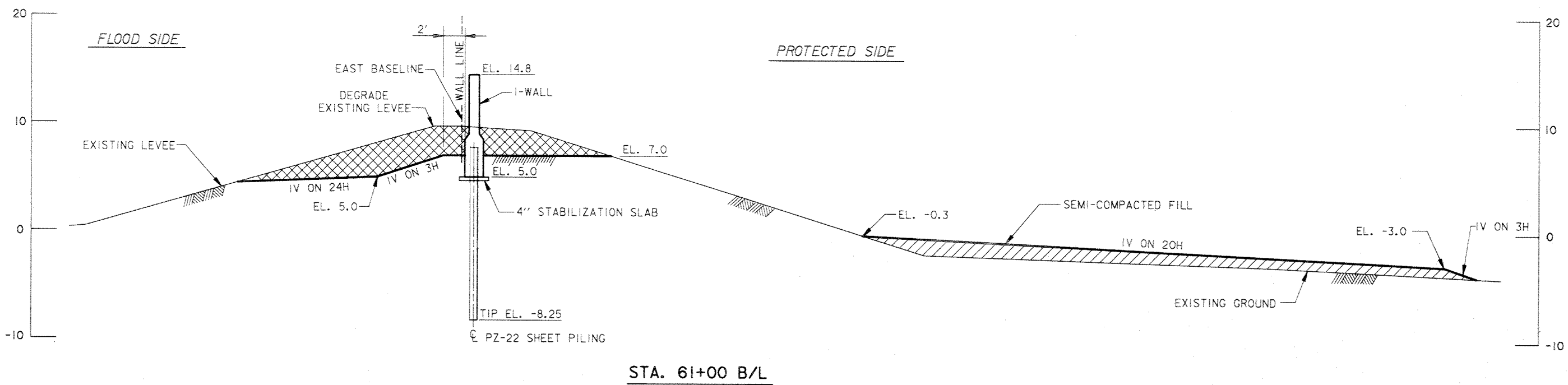
Safety is a Part of Your Contract



STA. 57+00 B/L



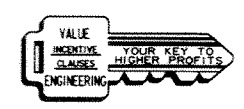
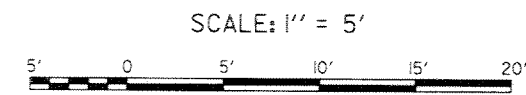
STA. 59+00 B/L




STA. 61+00 B/L

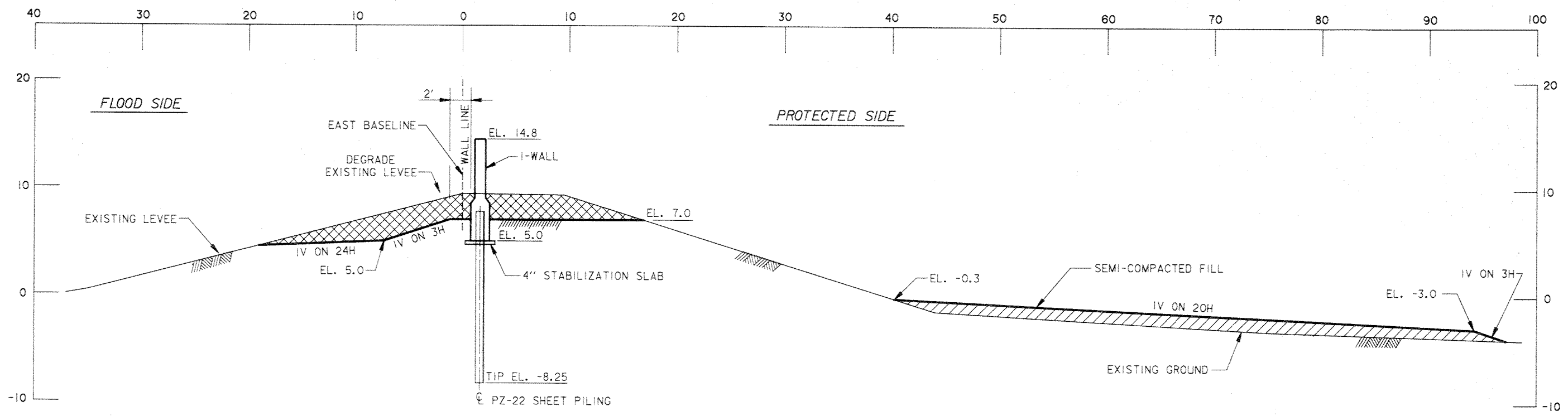
ELEVATIONS IN FEET - N.G.V.D.

ELEVATIONS IN FEET - N.G.V.D.

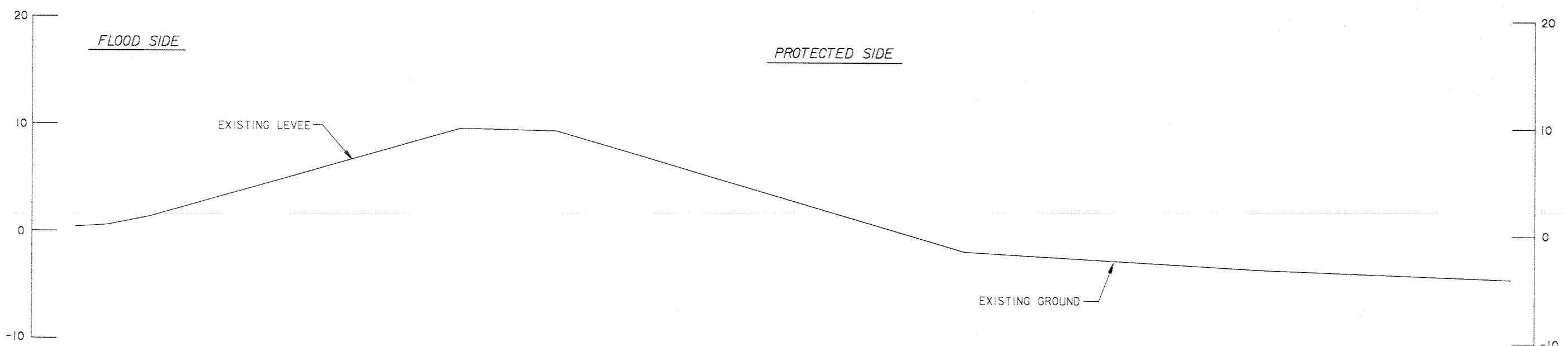


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 57+00 E. B/L TO STA. 61+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT9.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A9 OF A13

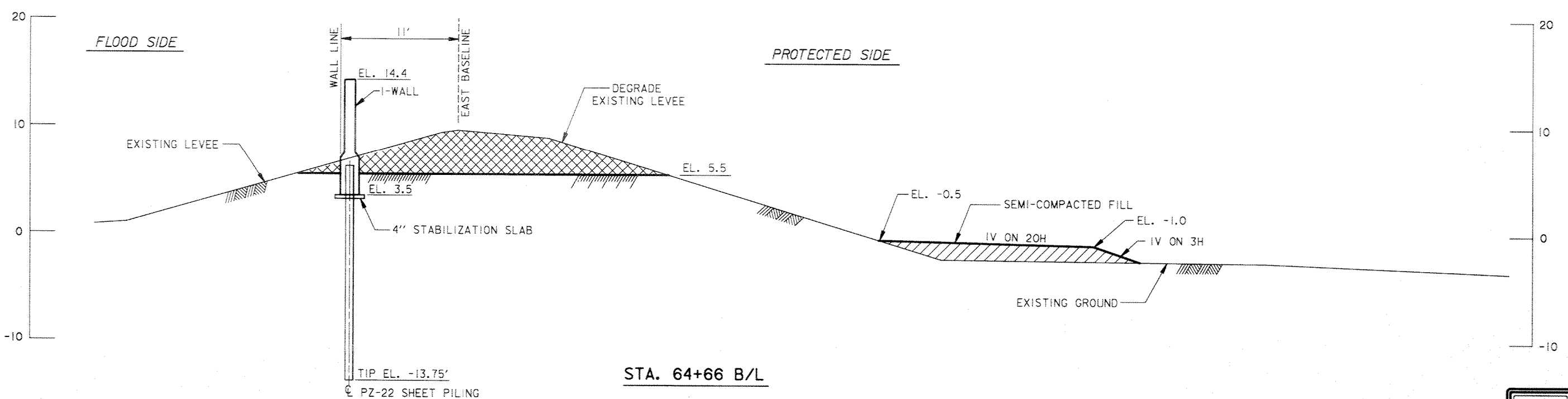
Safety is a Part of Your Contract



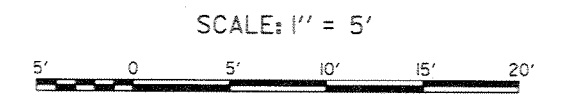
STA. 63+00 B/L




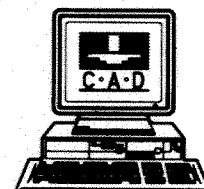
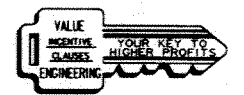
STA. 63+68 B/L



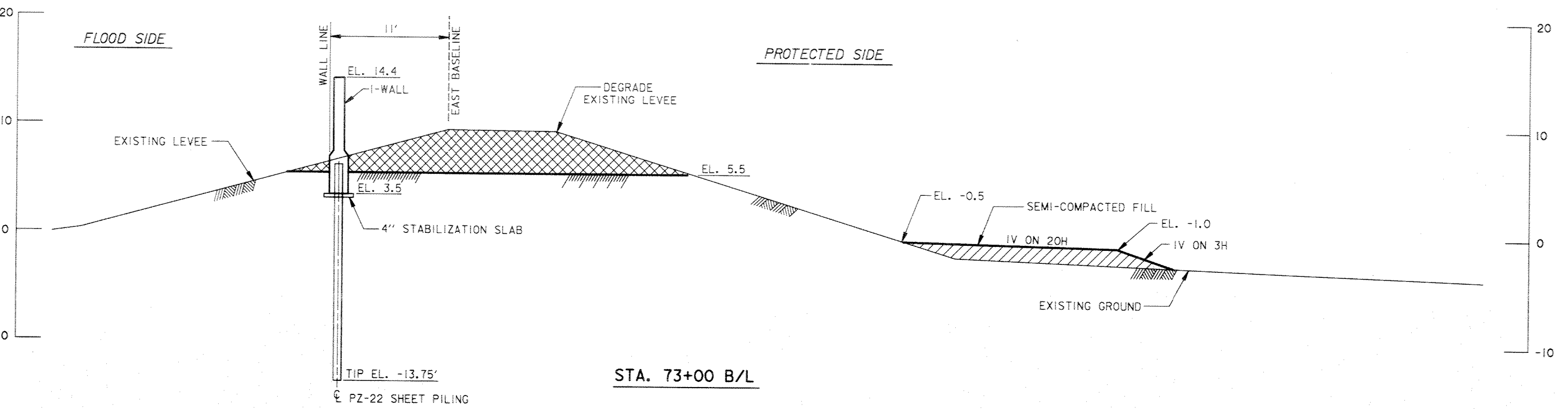
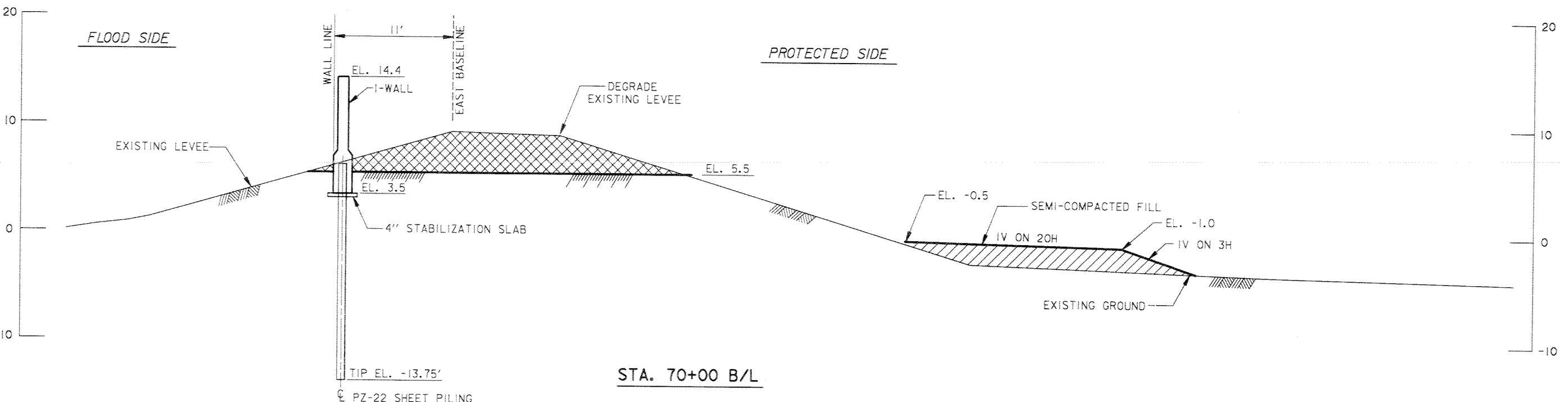
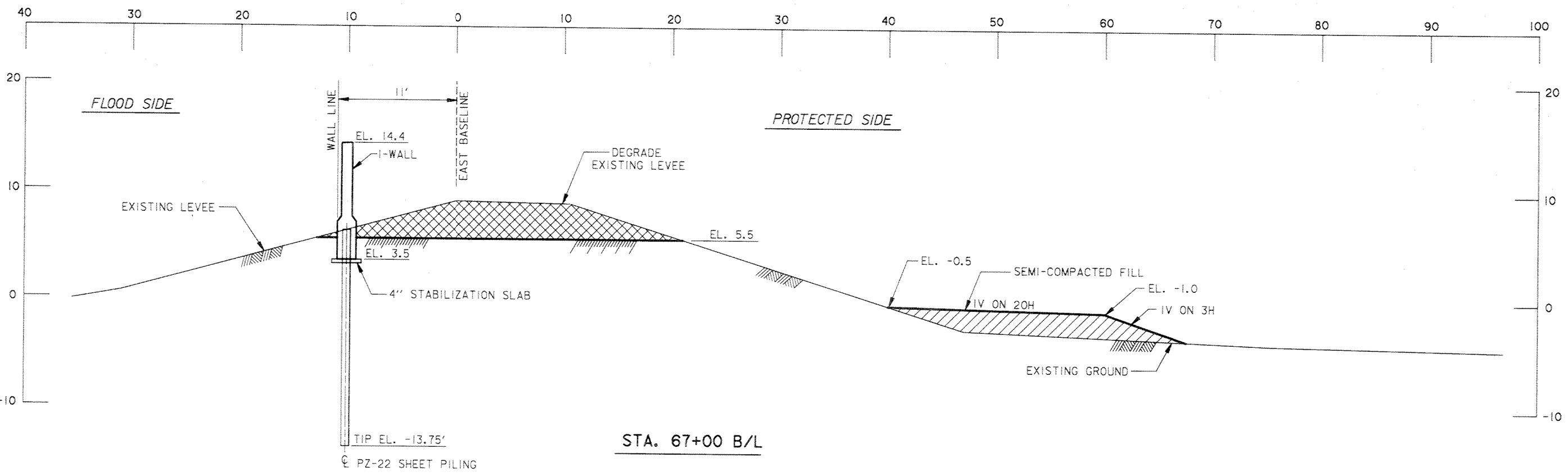
STA. 64+66 B/L



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
CROSS SECTIONS STA. 63+00 E. B/L TO STA. 64+66 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT10.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A10 OF A13	
SUBMITTED BY: J. ROMERO	DESIGN ENGINEER		

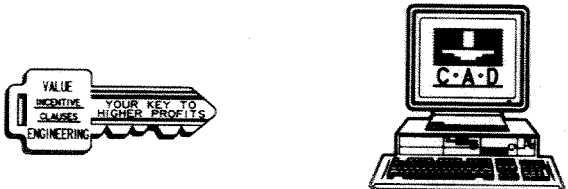
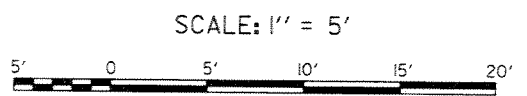


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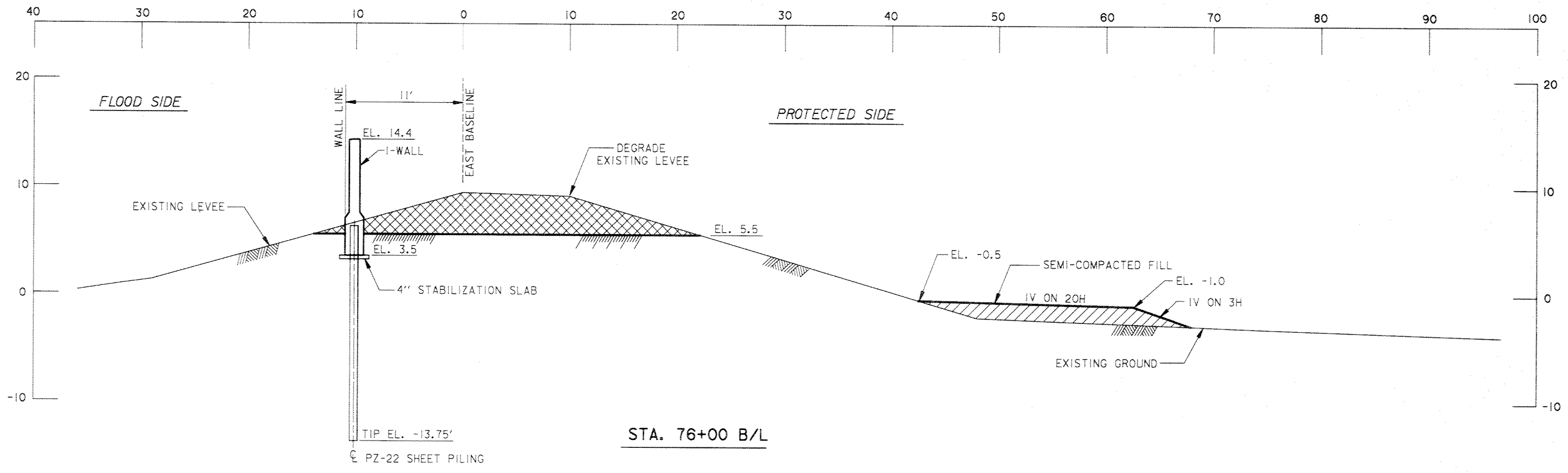
ELEVATIONS IN FEET - N.G.V.D.

ELEVATIONS IN FEET - N.G.V.D.

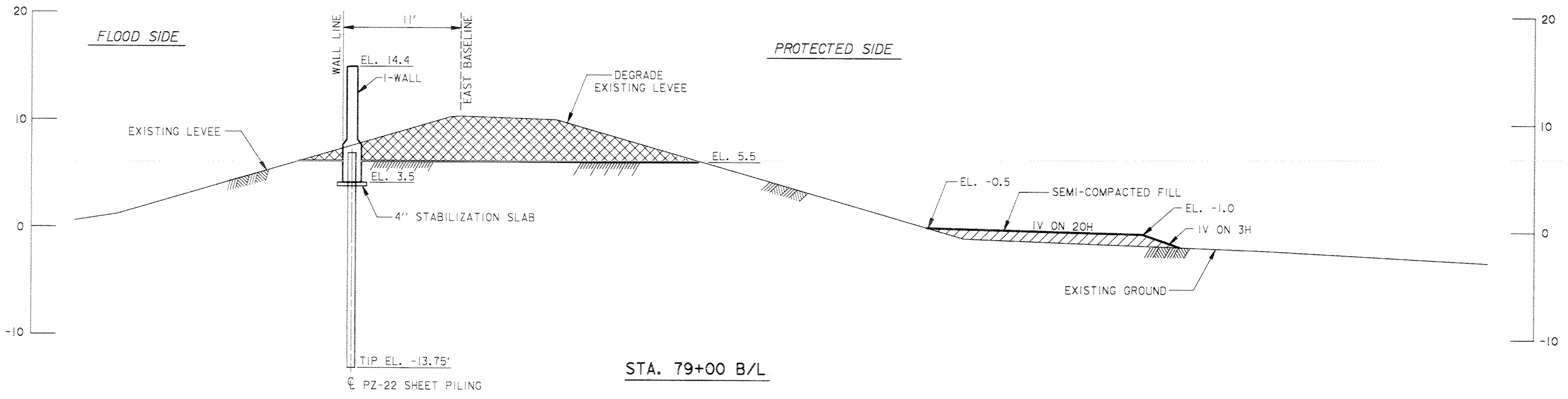


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 67+00 E. B/L TO STA. 73+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT11.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. All of A13

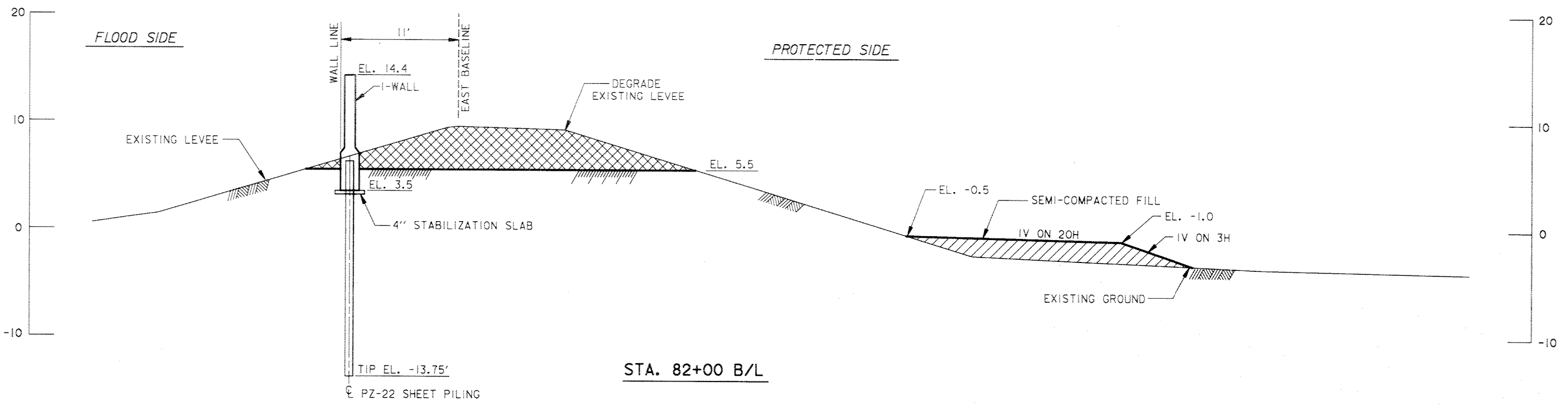
Safety is a Part of Your Contract



STA. 76+00 B/L



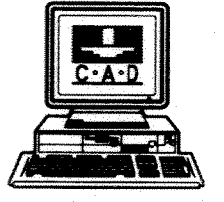
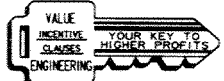
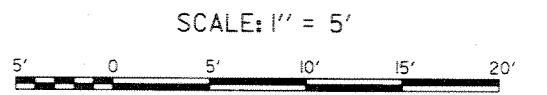
STA. 79+00 B/L



STA. 82+00 B/L

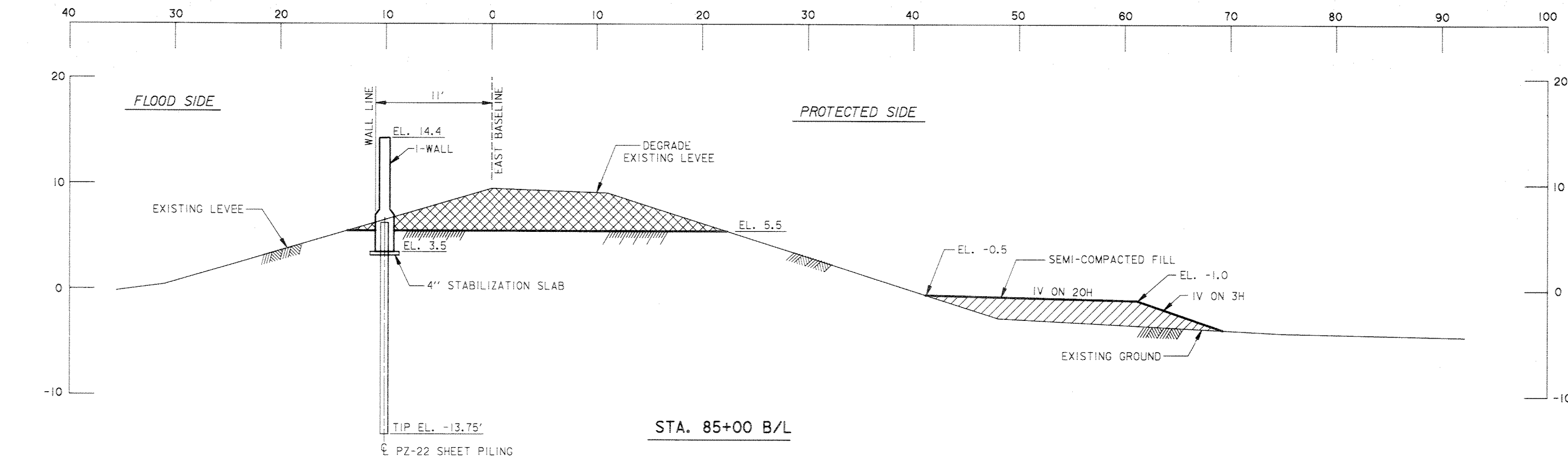
ELEVATIONS IN FEET - N.G.V.D.

ELEVATIONS IN FEET - N.G.V.D.

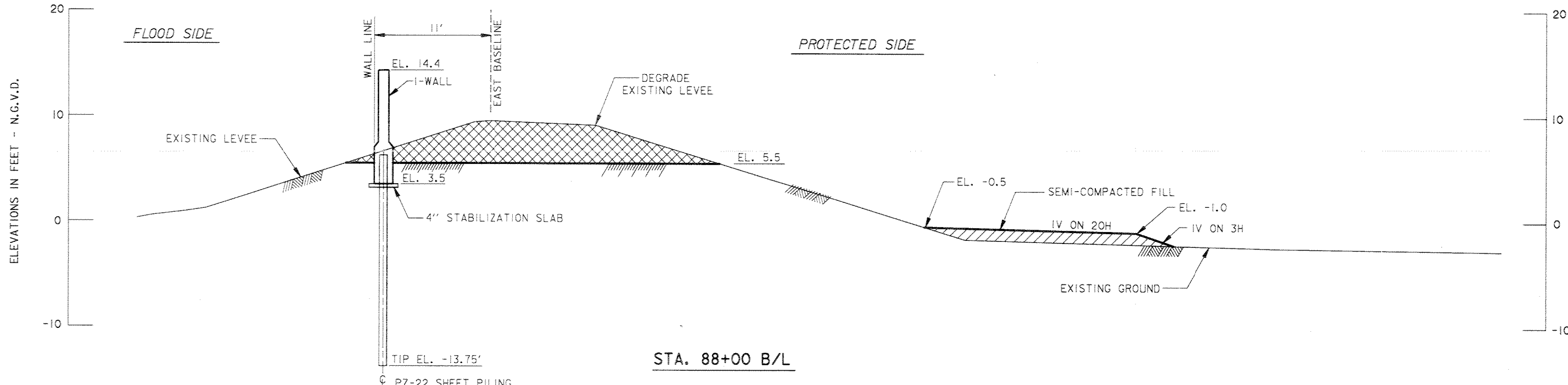


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA CROSS SECTIONS STA. 76+00 E. B/L TO STA. 82+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CADD FILE: SECT12.DGN	FILE NO. H-4-44644	
CHECKED BY: J. ROMERO	SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A12 OF A1

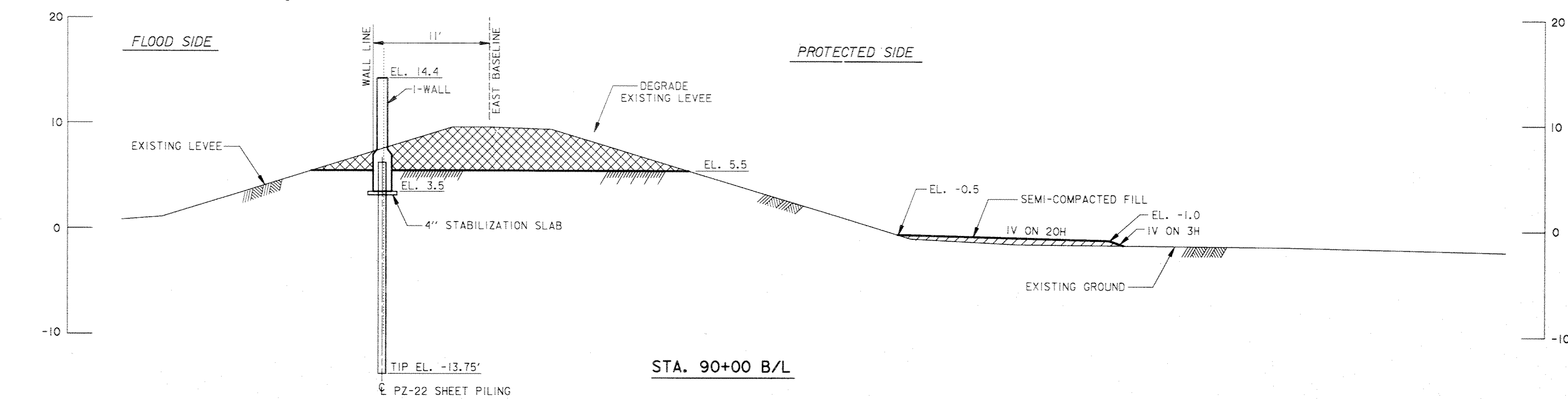
Safety is a Part of Your Contract



STA. 85+00 B/L



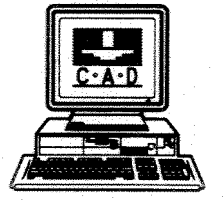
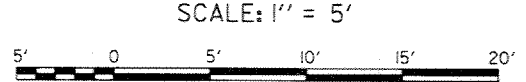
STA. 88+00 B/L



STA. 90+00 B/L

ELEVATIONS IN FEET - N.G.V.D.

ELEVATIONS IN FEET - N.G.V.D.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY HIGH LEVEL PLAN ORLEANS AVE. OUTFALL CANAL PARALLEL PROTECTION PHASE II-A (EAST SIDE FLOODWALL) STA. 3+60.00 E. B/L TO STA. 90+26.33 E. B/L ORLEANS PARISH, LOUISIANA			
CROSS SECTIONS STA. 85+00 E. B/L TO STA. 90+00 E. B/L			
DESIGNED BY: J. ROMERO	DATE: SEP. 96	PLOT SCALE: 60	PLOT DATE: SEP. 96
DRAWN BY: B. DORCEY	CHECKED BY: J. ROMERO	CADD FILE: SECT13.DGN	FILE NO. H-4-44644
SUBMITTED BY: J. ROMERO	SOLICITATION NO. DACW29-96-B-0096	DWG. A13 OF A13	