EMERGENCY OPERATIONS FLOODWALL STRUCTURES

Updated 25 February 2000

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INNER HARBOR NAVIGATIONAL CANAL TO PARIS ROAD

HURRICANE PROTECTION LEVEE - CITRUS BACK LEVEE
(Station 510+20 to Station 582+96)
PLANS FOR LEVEE AND FLOODWALL
Orleans Parish, Louisiana
File Number H-8-24405; Spec Number DACW-29-68-B-0172
Structures Branch Stick File Number 21

SHEET #	DRAWING TITLE
0	Title Sheet
File:	H-8-24405-00
1	Location Plan, Vicinity Map and Index to Drawings
File:	H-8-24405-01
2	Plan and Profile - Stations 510+20 to 582+96 = 11+13 W/L
File:	H-8-24405-02
3	Levee Design Sections
File:	H-8-24405-03
4	Log of Soil Borings
File:	H-8-24405-04
5	Floodwall Alignment
File:	H-8-24405-05 D R A W I N G S 05A & 05B N O T S C A N N E D
6	Floodwall Alignment
File:	H-8-24405-06
7	Floodwall Profile
File:	H-8-24405-07
8	Steel Sheet Piling Layout and Reference Markers
File:	H-8-24405-08
9	Typical Floodwall and Detail Sections
File:	H-8-24405-09 D R A W I N G S 09A & 09B N O T S C A N N E D
10	Wall at Discharge Pipes - Monolith 10
File	H-8-24405-10
A	Soil Boring Legend
File	H-8-24405-A D R A W I N G N O T S C A N N E D

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY

LAKE PONTCHARTRAIN BARRIER PLAN

ORLEANS PARISH, LA.

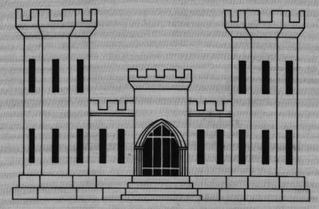
CITRUS BACK LEVEE

INNER HARBOR NAVIGATION CANAL TO PARIS ROAD

STA. 196+16.6 TO STA. 431+00

PLANS FOR

LEVEE AND FLOODWALL



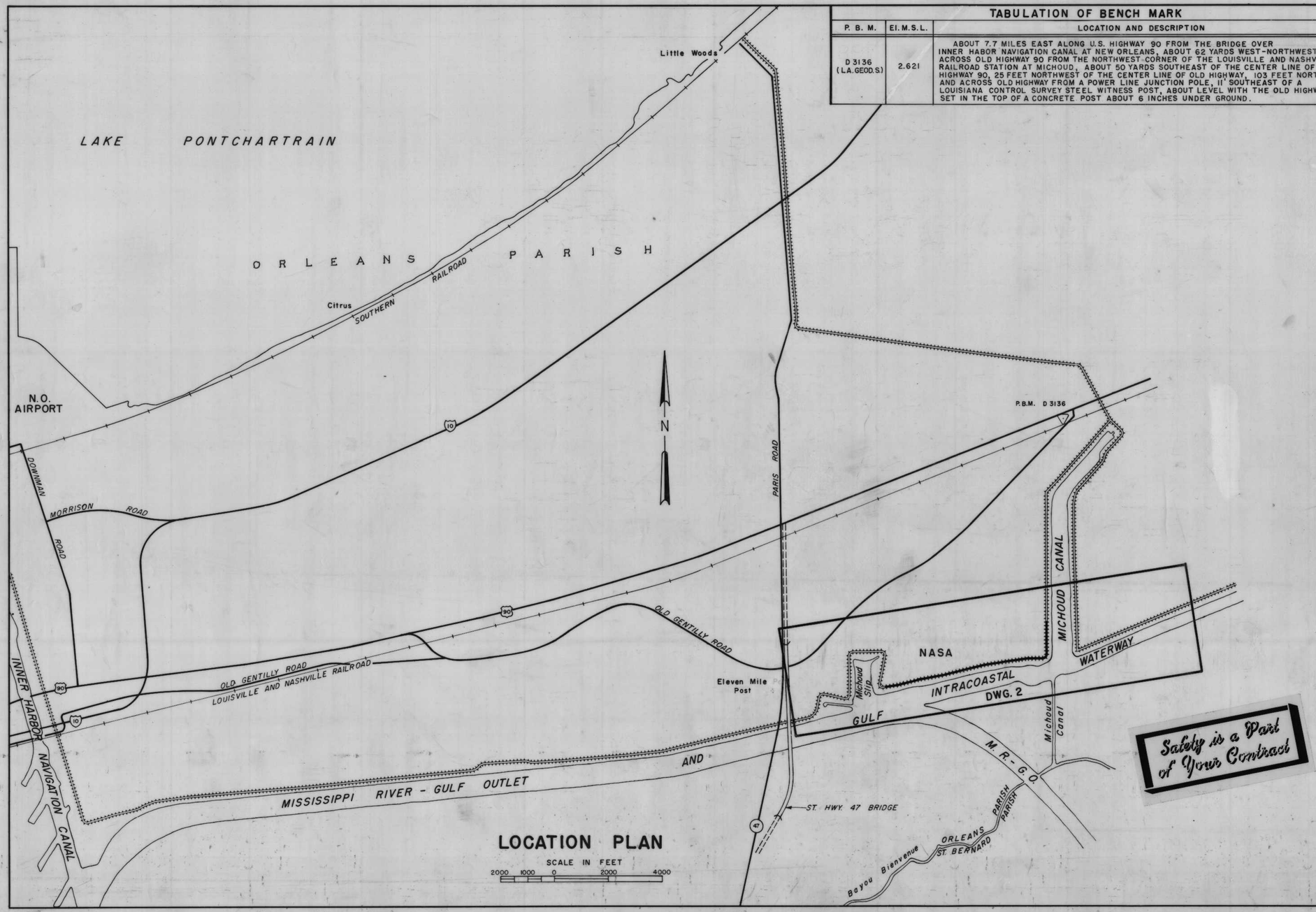
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS, LA.

CORPS OF ENGINEERS

1968

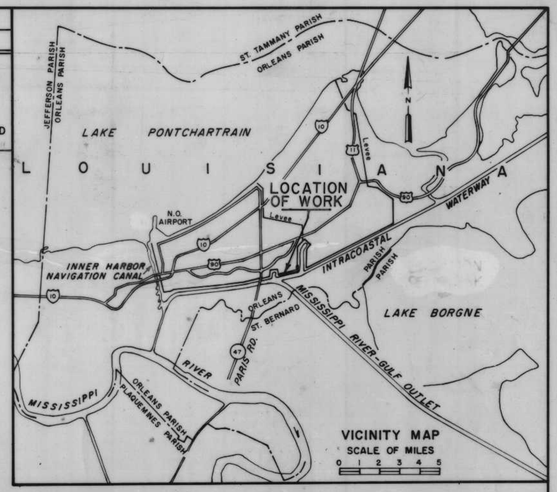
TABULATION OF BENCH MARK

P. B. M.	EI. M.S.L.	LOCATION AND DESCRIPTION
D 3136 (L.A.GEOD.S.)	2.621	ABOUT 7.7 MILES EAST ALONG U.S. HIGHWAY 90 FROM THE BRIDGE OVER INNER HABOR NAVIGATION CANAL AT NEW ORLEANS, ABOUT 62 YARDS WEST-NORTHWEST AND ACROSS OLD HIGHWAY 90 FROM THE NORTHWEST CORNER OF THE LOUISVILLE AND NASHVILLE RAILROAD STATION AT MICHOUD, ABOUT 50 YARDS SOUTHEAST OF THE CENTER LINE OF NEW HIGHWAY 90, 25 FEET NORTHWEST OF THE CENTER LINE OF OLD HIGHWAY, 103 FEET NORTH AND ACROSS OLD HIGHWAY FROM A POWER LINE JUNCTION POLE, 11' SOUTHEAST OF A LOUISIANA CONTROL SURVEY STEEL WITNESS POST, ABOUT LEVEL WITH THE OLD HIGHWAY AND SET IN THE TOP OF A CONCRETE POST ABOUT 6 INCHES UNDER GROUND.



LOCATION PLAN

SCALE IN FEET
2000 1000 0 2000 4000



INDEX TO DRAWINGS

Safety is a Part of Your Contract

DRAWN BY: G.P.M.	TRACED BY: G.P.M.	CHECKED BY: W.E.T.

SUBMITTED: R. J. Brandli, CHIEF, DESIGN BRANCH
DATE: JUNE 1968
APPROVED: Henry J. Hoffman, CHIEF, ENGINEERING DIVISION
APPROVED: Norris J. Bowen, COLONEL, C. OF E. DISTRICT ENGINEER

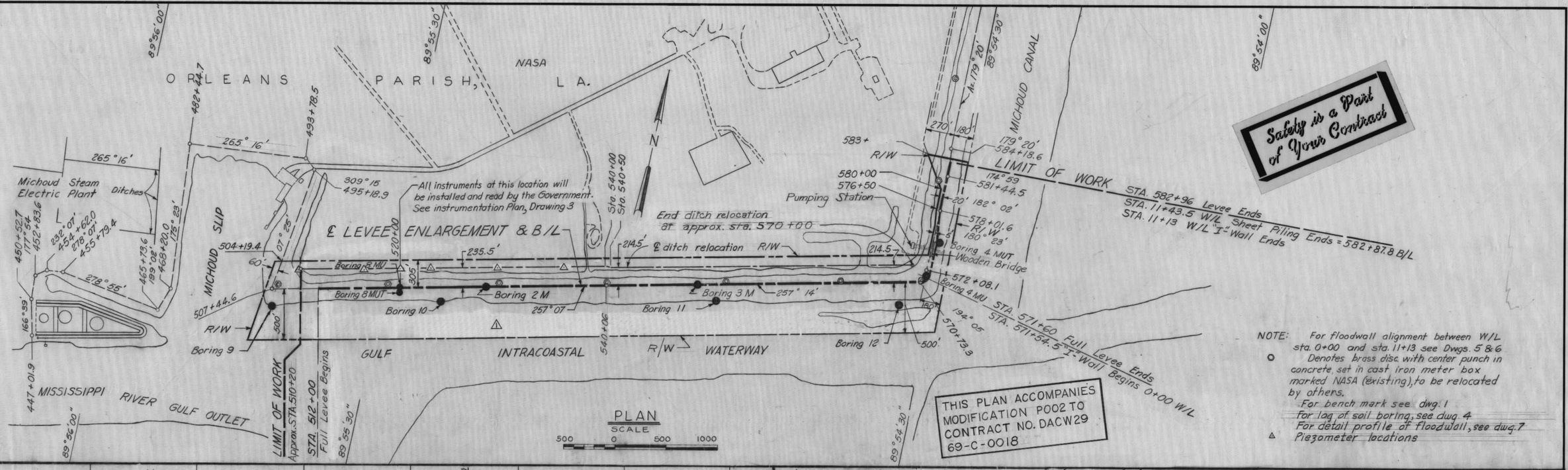
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LA.

LAKE PONTCHARTRAIN, LA. AND VICINITY
LAKE PONTCHARTRAIN BARRIER PLAN
HURRICANE PROTECTION LEVEE
CITRUS BACK LEVEE
STA. 510+20 TO STA. 582+96

CODE IDENT. NO. | SIZE | FILE NO. H-8-24405

SCALE: AS SHOWN | SPEC. NO. DACW 29-68-B-0172 | DWG. NO. 1 OF 10

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)



PLAN

SCALE 500 0 500 1000

THIS PLAN ACCOMPANIES MODIFICATION P002 TO CONTRACT NO. DACW29 69-C-0018

NOTE: For floodwall alignment between W/L sta. 0+00 and sta. 11+13 see Dwgs. 5 & 6

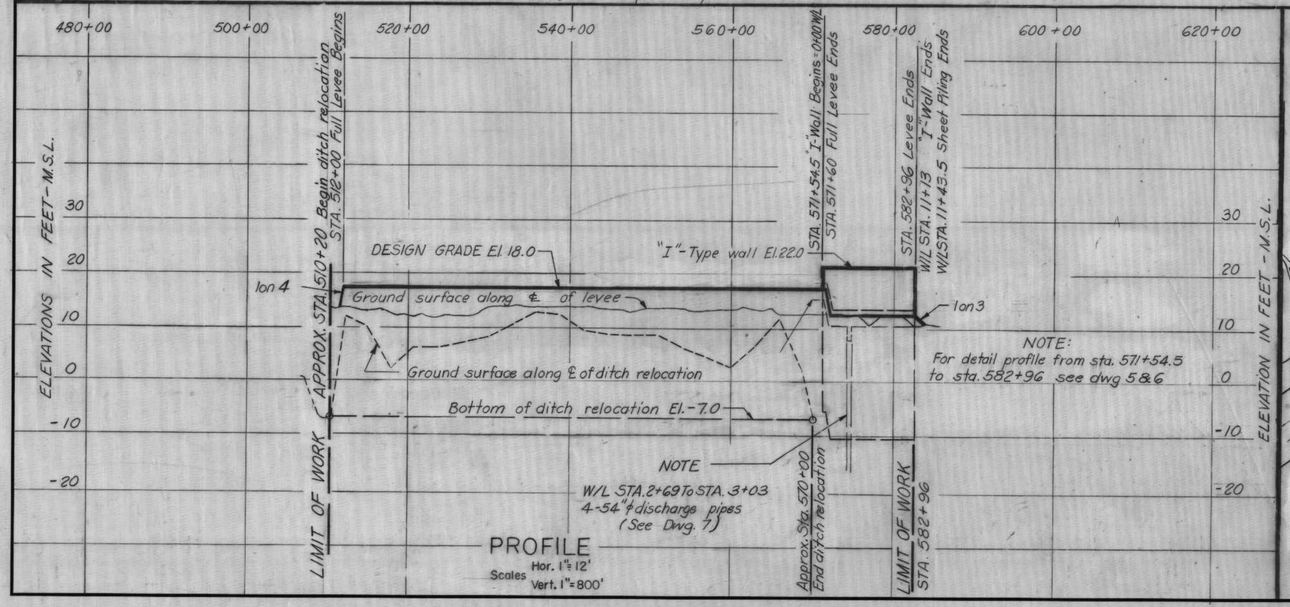
○ Denotes brass disc with center punch in concrete, set in cast iron meter box marked NASA (existing), to be relocated by others.

For bench mark see dwg. 1

For log of soil boring, see dwg. 4

For detail profile of floodwall, see dwg. 7

△ Piezometer locations

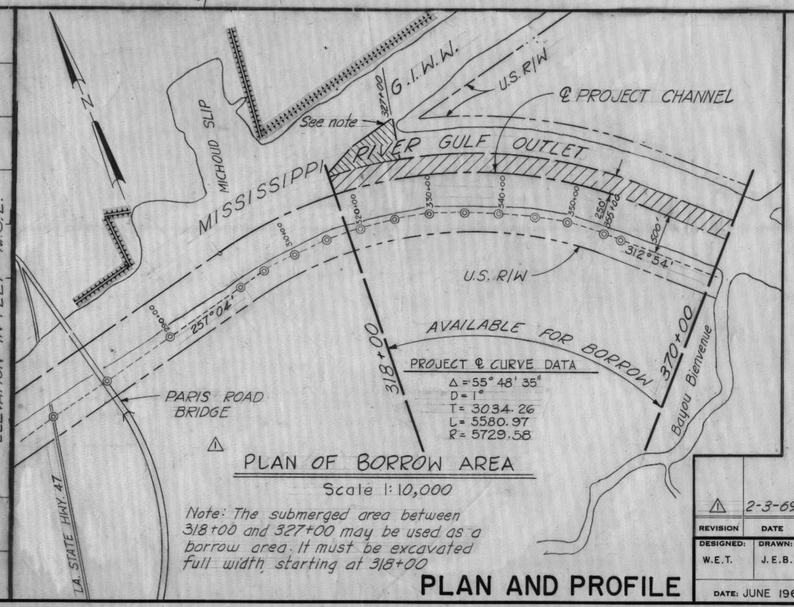


NOTE: For detail profile from sta. 571+54.5 to sta. 582+96 see dwg 5&6

NOTE W/L STA. 2+69 TO STA. 3+03 4-54" ϕ discharge pipes (See Dwg. 7)

PROFILE

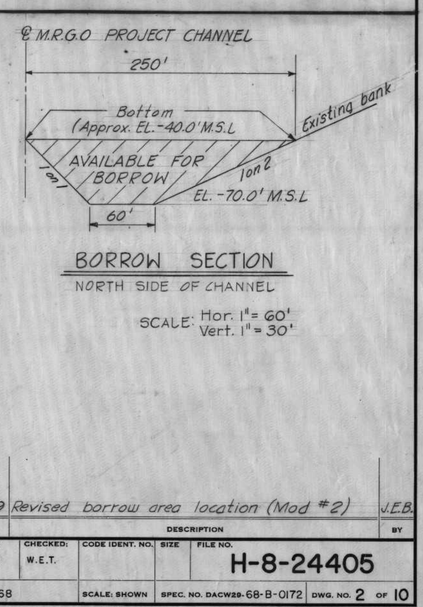
Scales Hor. 1"=12' Vert. 1"=800'



△ PLAN OF BORROW AREA

Scale 1:10,000

Note: The submerged area between 318+00 and 327+00 may be used as a borrow area. It must be excavated full width starting at 318+00



BORROW SECTION

NORTH SIDE OF CHANNEL

SCALE: Hor. 1"= 60' Vert. 1"= 30'

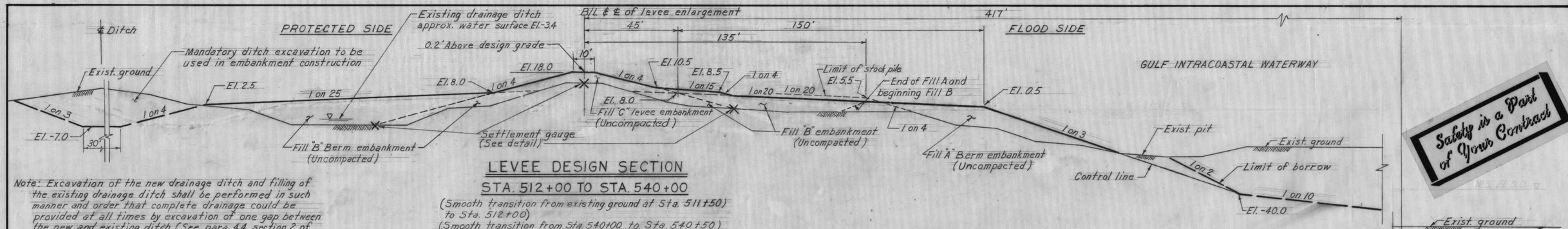
PLAN AND PROFILE

REVISION	DATE	DESCRIPTION	BY
△	2-3-69	Revised borrow area location (Mod #2)	J.E.B.

DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
W.E.T.	J.E.B.	W.E.T.			H-8-24405

DATE: JUNE 1968 | SCALE: SHOWN | SPEC. NO. DACW29-68-B-0172 | DWG. NO. 2 OF 10

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)

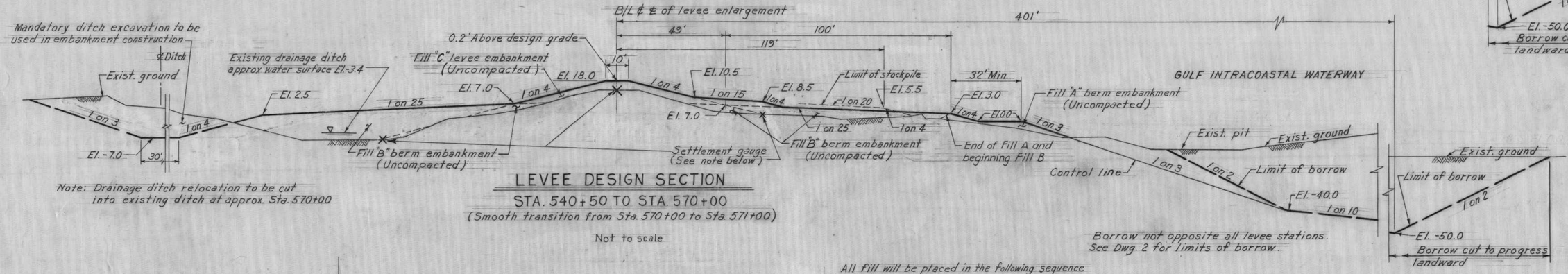


Note: Excavation of the new drainage ditch and filling of the existing drainage ditch shall be performed in such manner and order that complete drainage could be provided at all times by excavation of one gap between the new and existing ditch. (See para. 4.4, section 2 of specifications.)

LEVEE DESIGN SECTION
STA. 512+00 TO STA. 540+00

(Smooth transition from existing ground at Sta. 511+50) to Sta. 512+00)
(Smooth transition from Sta. 540+00 to Sta. 540+50)

Not to scale



Note: Drainage ditch relocation to be cut into existing ditch at approx. Sta. 570+00

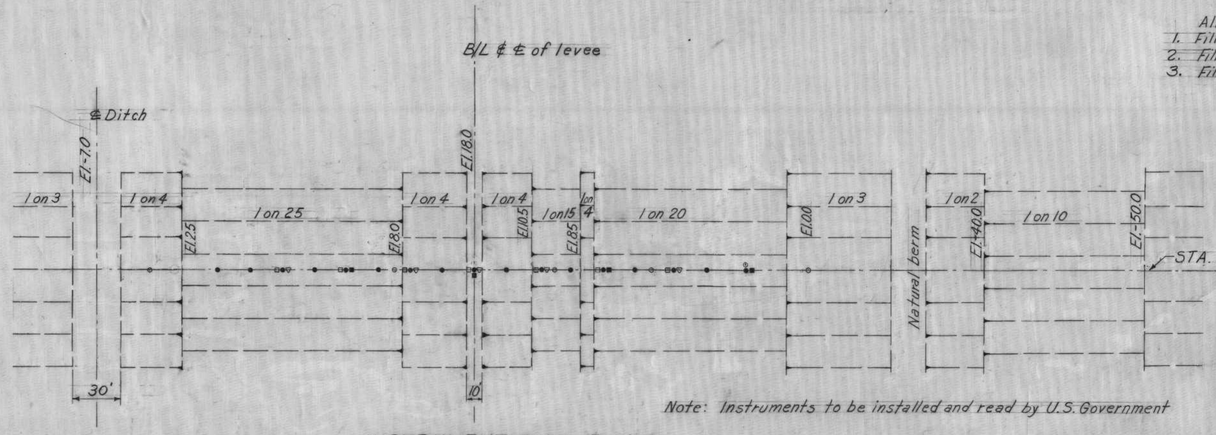
LEVEE DESIGN SECTION
STA. 540+50 TO STA. 570+00

(Smooth transition from Sta. 570+00 to Sta. 571+00)

Not to scale

Borrow not opposite all levee stations. See Dwg. 2 for limits of borrow.

All fill will be placed in the following sequence
1. Fill "A" (Uncompacted)
2. Fill "B" (Uncompacted)
3. Fill "C" (Uncompacted)



INSTRUMENTATION PLAN
STA 520+00

Note: Instruments to be installed and read by U.S. Government

LEGEND
- • Settlement reference hubs on levee section
- ■ Settlement reference plugs in levee and foundations
- ▽ Open-type piezometers
- ⊙ Plastic tube slope inclinometers
- □ Settlement gauges on exist. ground surface (See detail)
- ⊙ Staff gauge

Note: Should the contractor desire payment for placing additional fill due to foundation settlement during construction, he shall furnish and install settlement gauges at the locations shown on the Design Section in conformance with the provisions of paragraph 12 section 3 of the specifications.

The settlement measurement range for each settlement gauge shall be for a distance of 200 feet in each direction from each settlement gauge measured along the centerline of the levee, except where settlement gauges are placed at less than 400 foot intervals, in which case, the settlement measurement range shall be to a point 1/2 the distance between settlement gauges.

SETTLEMENT GAUGE

REVISION	DATE	DESCRIPTION	BY

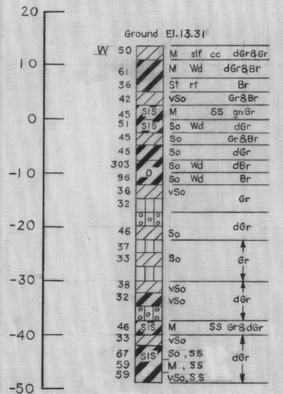
DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
R.P.L.	G.P.M.	B.S.			H-8-24405

DATE: JUNE 1968 | SCALE: SHOWN | SPEC. NO. DACW29-68-B-0172 | DWG. NO. 3 OF 10

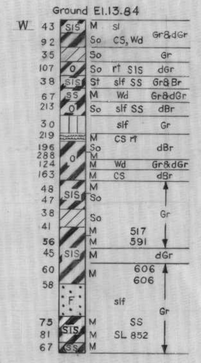
LEVEE DESIGN SECTIONS

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)

2-M
STA. 528+34
6' F.S. B/L
30 Dec. 1965

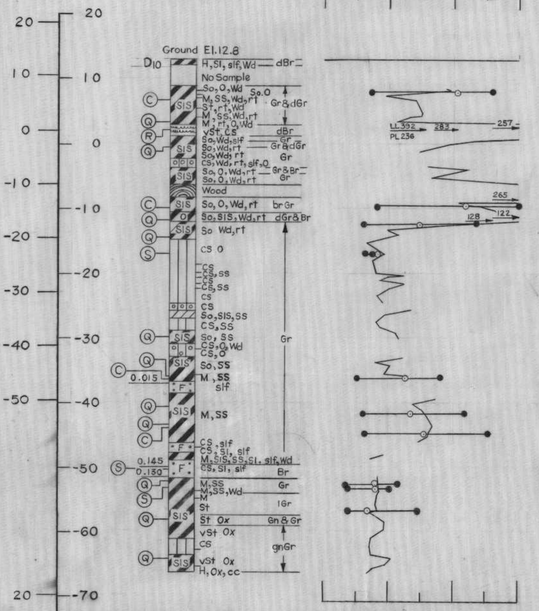


3-M
STA. 548+95
5' F.S. ℄ Levee
7 Jan 1966



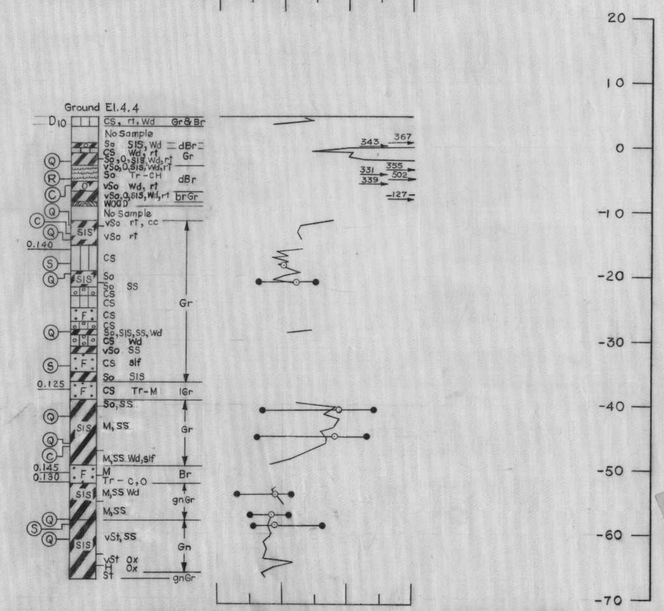
8-MU
STA. 520+00
℄ Levee
22-28 Nov. 1967

WATER CONTENT, "W"
(Percent dry weight)



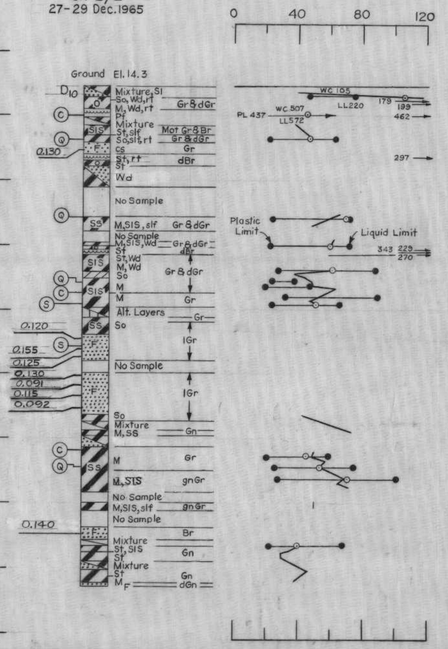
8-MUT
STA. 520+00
38' F.S. ℄ Levee
20-21 Nov. 1967

WATER CONTENT "W"
(Percent dry weight)



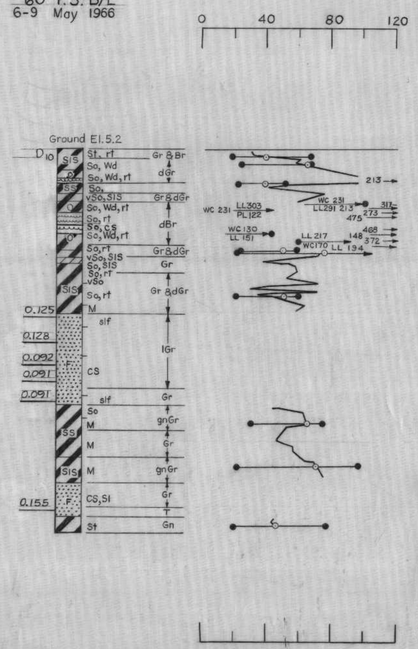
4-MU
STA. 571+45
On B/L
27-29 Dec. 1965

WATER CONTENT, "W"
(Percent dry weight)

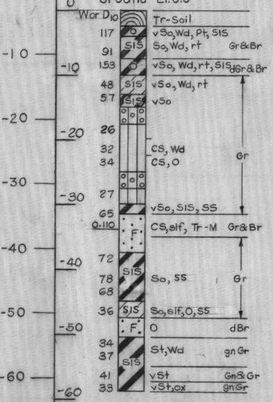


4-MUT
STA. 575+15
60' F.S. B/L
6-9 May 1966

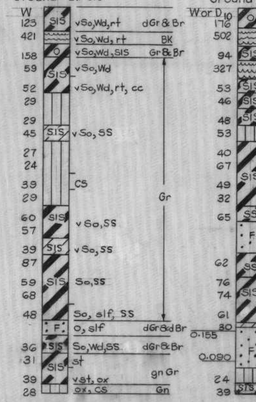
WATER CONTENT, "W"
(Percent dry weight)



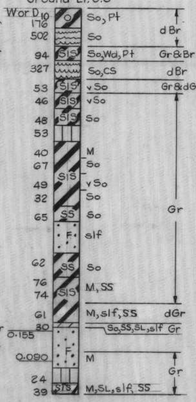
NO. 9
STA. 507+44
168' F.S. B/L
21 Dec. 1967



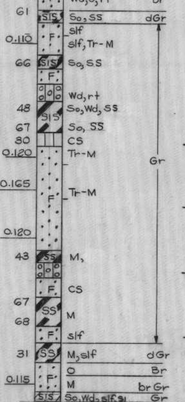
NO. 10
STA. 524+00
135' FS B/L
20 Dec. 1967



NO. 11
STA. 551+00
156' F.S. B/L
19 Dec. 1967



NO. 12
STA. 569+00
250' F.S. B/L
2 Jan. 1968



BORINGS ADJACENT TO BORROW AREA

NOTES:

For soil boring legend see Dwg. File No. H-2-21800.
All elevations are expressed in feet and refer to mean sea level.
General type borings were taken with a 1⅜" I.D. core barrel sampler.
Undisturbed borings taken with a 5" dia. steel tube piston type sampler.

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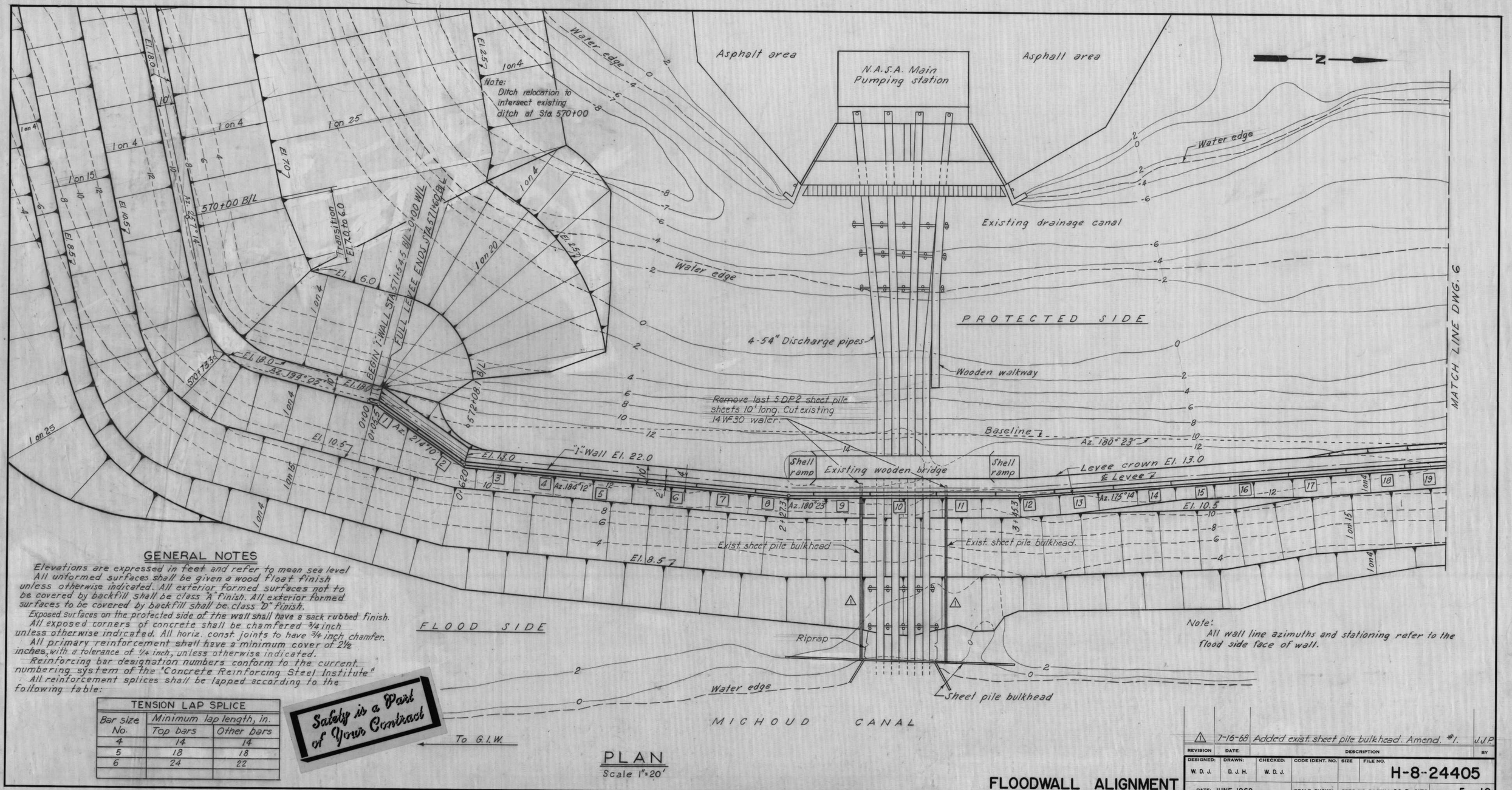
REVISION	DATE	DESCRIPTION	BY

DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
K. J. C.	S. O. M.	E. B. K.			H-8-24405
DATE: JUNE 1968			SCALE: SHOWN	SPEC. NO. DACW29-68-B-0172	DWG. NO. 4 OF 10

LOG OF SOIL BORINGS

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)



GENERAL NOTES

Elevations are expressed in feet and refer to mean sea level
All unformed surfaces shall be given a wood float finish unless otherwise indicated. All exterior formed surfaces not to be covered by backfill shall be class "A" finish. All exterior formed surfaces to be covered by backfill shall be class "D" finish.
Exposed surfaces on the protected side of the wall shall have a sack rubbed finish.
All exposed corners of concrete shall be chamfered 3/4 inch unless otherwise indicated. All horiz. const. joints to have 3/4 inch chamfer.
All primary reinforcement shall have a minimum cover of 2½ inches with a tolerance of ½ inch, unless otherwise indicated.
Reinforcing bar designation numbers conform to the current numbering system of the "Concrete Reinforcing Steel Institute"
All reinforcement splices shall be lapped according to the following table:

TENSION LAP SPLICE		
Bar size No.	Minimum lap length, in.	
	Top bars	Other bars
4	14	14
5	18	18
6	24	22

Safety is a Part of Your Contract

Note: All wall line azimuths and stationing refer to the flood side face of wall.

PLAN
Scale 1"=20'

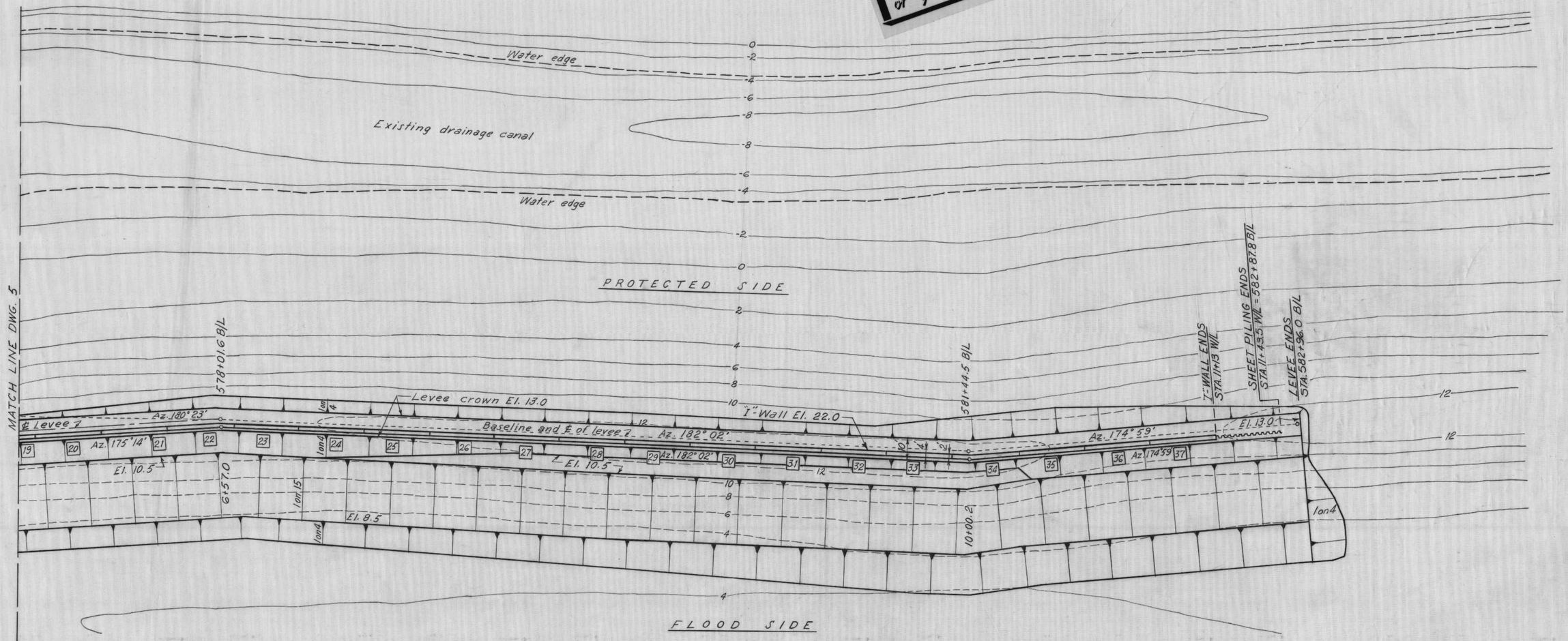
FLOODWALL ALIGNMENT

REVISION	DATE	DESCRIPTION	BY
1	7-16-68	Added exist. sheet pile bulkhead. Amend. #1.	J.J.P.

DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
W. D. J.	D. J. H.	W. D. J.			H-8-24405
DATE: JUNE 1968		SCALE: SHOWN	SPEC. NO. DACW29-68-B-0172	DWG. NO. 5	OF 10

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)

Safety is a Part of Your Contract



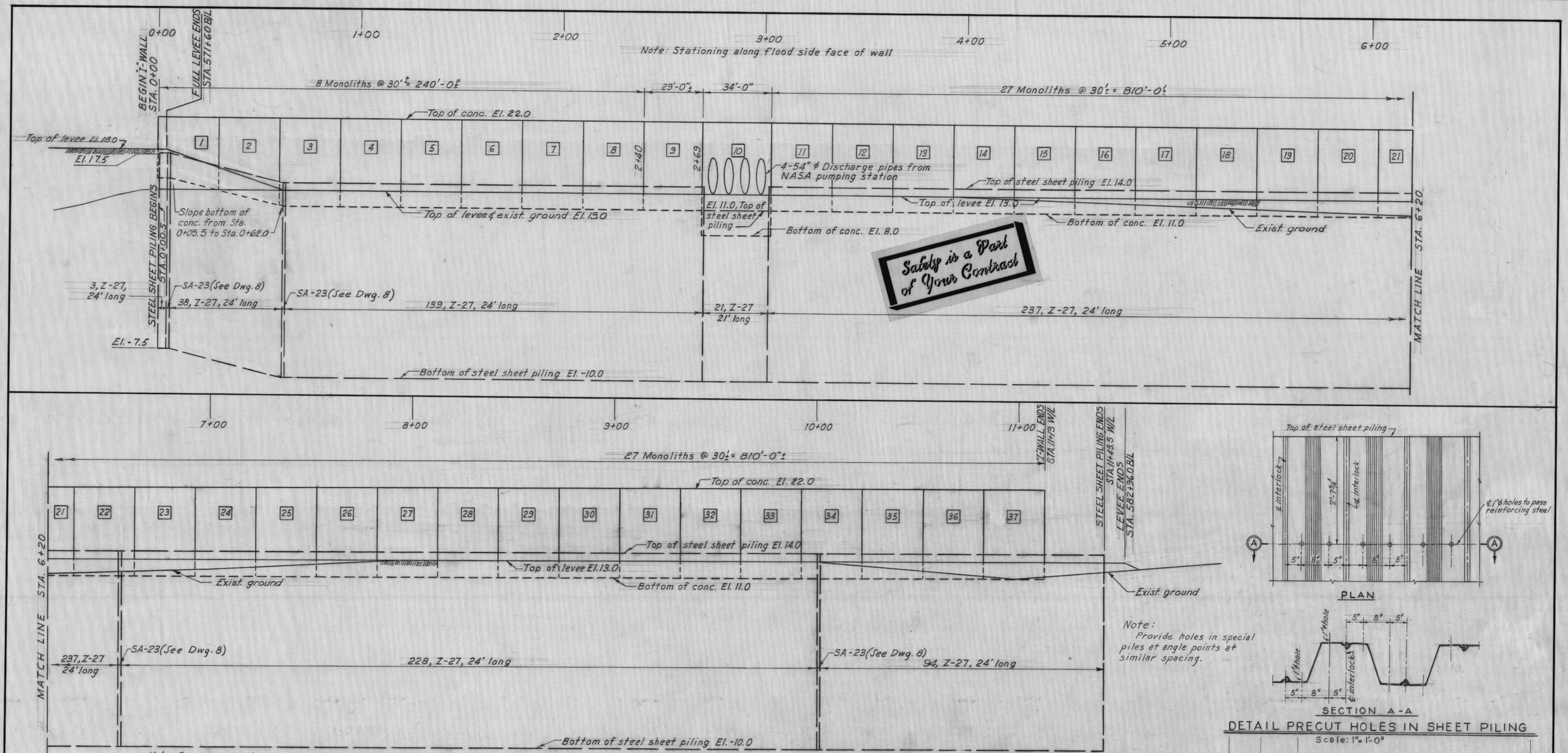
PLAN
Scale 1"=20'

REVISION	DATE	DESCRIPTION	BY

DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
W. D. J.	D. J. H.	W. D. J.			H-8-24405
DATE: JUNE 1968			SCALE: SHOWN	SPEC. NO. DACW29-68-B-0172	DWG. NO. 6 OF 10

FLOODWALL ALIGNMENT

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)



Note: For general notes see Dwg. 5.
For detail of discharge pipes see Dwg. 10.
Lengths of monoliths, except for monolith 10, will be adjusted in the field so that the monolith joints fall on the centerlines of sheet pile interlocks.
For settlement reference marker details and schedule, see Dwg. 8.

PROFILE

Scale: Hor. 1"= 20'
Vert. 1"= 5'

Note: Provide holes in special piles at angle points at similar spacing.

DETAIL PRECUT HOLES IN SHEET PILING

Scale: 1"= 1'-0"

REVISION	DATE	DESCRIPTION	BY

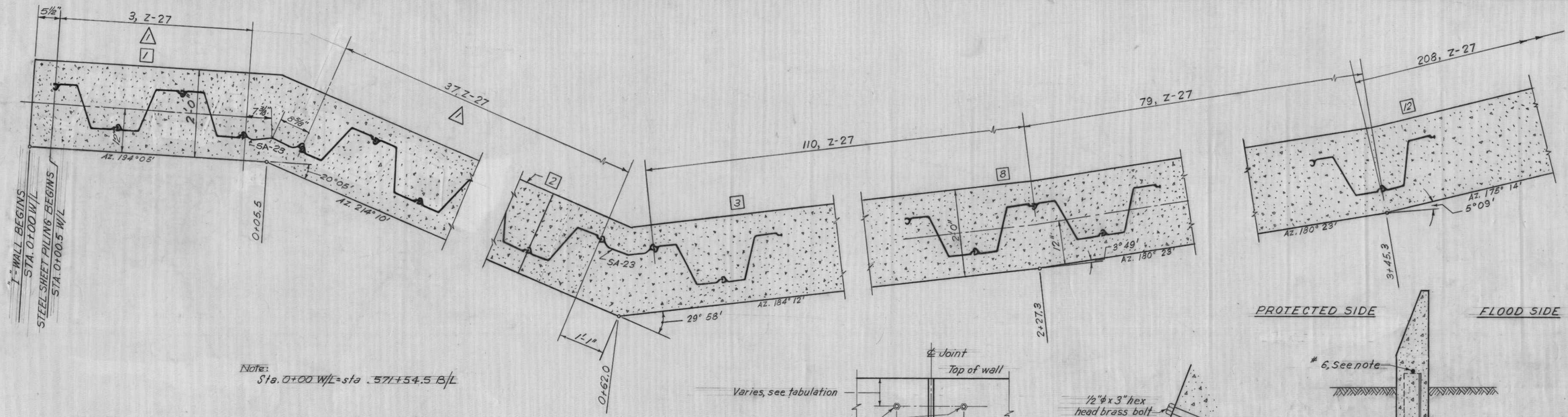
DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
W. D. J.	D. J. H.	W. D. J.			H-8-24405

DATE: JUNE 1968 | SCALE: SHOWN | SPEC. NO. DACW29-68-B-0172 | DWG. NO. 7 OF 10

FLOODWALL PROFILE

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)

Dietzgen N. O. 127 "Draftex"



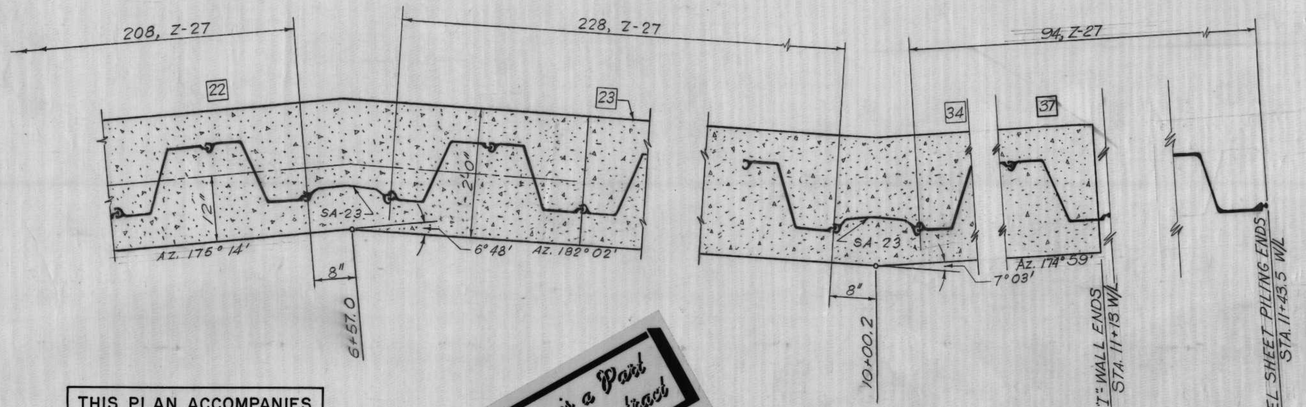
Note:
Sta. 0+00 W/L = sta. 571+54.5 B/L

ELEVATION TYPICAL REFERENCE MARKER

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

REFERENCE MARKER

Note:
No. 6 reinf. rod welded to the top of each sheet pile. Flexible jumpers shall be installed at the monolith joints, formed in an 8" dia. loop, and welded or brazed to adjacent sheet piles 3" below the bottom of the concrete.



STEEL SHEET PILING LAYOUT

Scale: 1" = 1'-0"

THIS PLAN ACCOMPANIES MODIFICATION P001 TO CONTRACT NO. DACW29-69-C-0018.

Safety is a Part of Your Contract

SETTLEMENT REFERENCE MARKER SCHEDULE

BOLT NO.	APPROX. W/L STATION	DISTANCE BELOW TOP OF WALL	BOLT NO.	APPROX. W/L STATION	DISTANCE BELOW TOP OF WALL
33-S	0+01	1'	45-S	4+24	4'
34-S	0+59		46-S	5+42	
35-S	0+61		47-S	5+44	
36-S	1+19		48-S	6+62	
37-S	1+21		49-S	6+64	
38-S	1+79		50-S	7+82	
39-S	1+81	4'	51-S	7+84	
40-S	2+68		52-S	9+02	
41-S	2+70		53-S	9+04	
42-S	3+02		54-S	10+22	
43-S	3+04		55-S	10+24	
44-S	4+22		56-S	11+12	

CORROSION PROTECTION

Scale: 3/8" = 1'-0"

Note:
For general notes see Dwg. 5

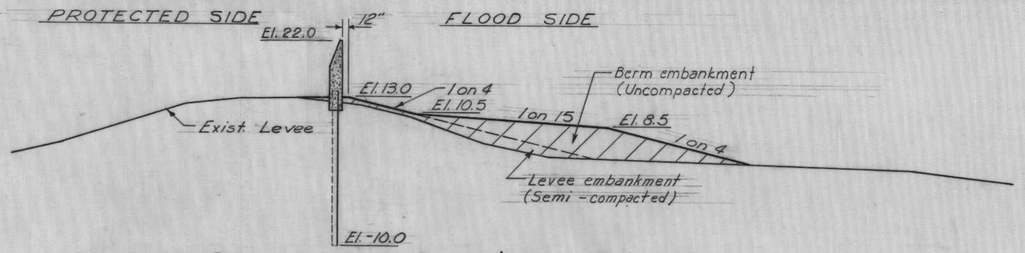
REVISION	DATE	DESCRIPTION	BY
1	9-10-68	Revised steel sheet piling. Mod. #1	B.H.D.

DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
W. D. J.	E. J. C.	W. D. J.			H-8 24405

DATE: JUNE 1968 | SCALE: SHOWN | SPEC. NO. DACW29-68-B-0172 | DWG. NO. 8 OF 10

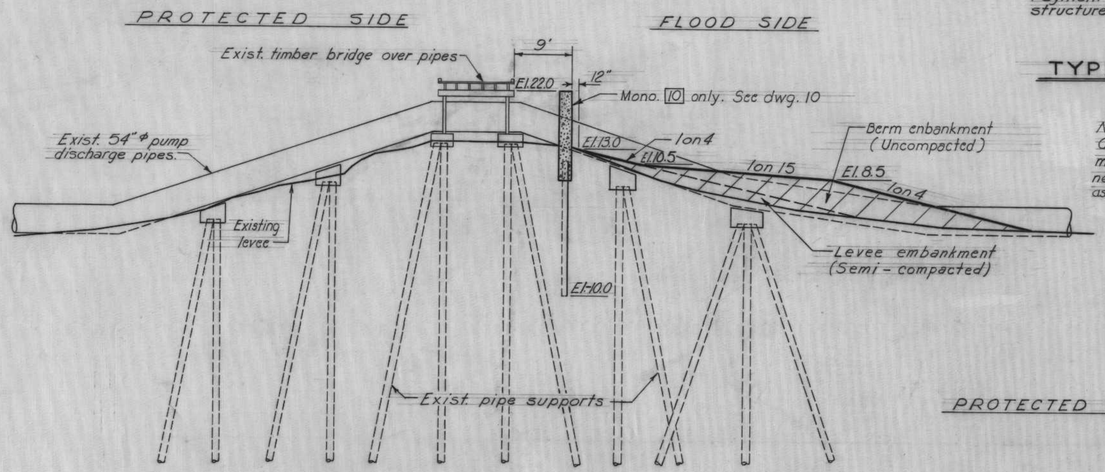
STEEL SHEET PILING LAYOUT AND REFERENCE MARKERS

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)

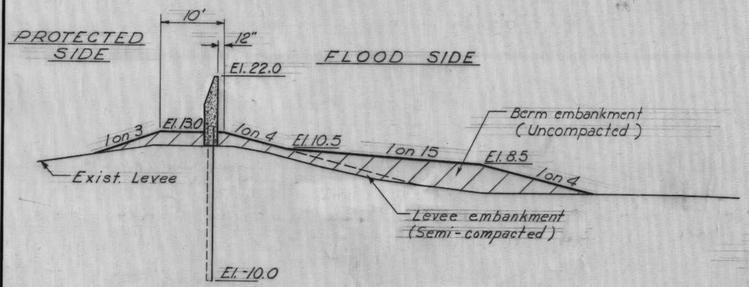


WALL LINE STA. 0+62 TO 2+69 & 3+03 TO 4+90

FOR TRANSITION FROM W/L STA. 0+05.5 TO 0+62.0 SEE DWGS. 5 & 7

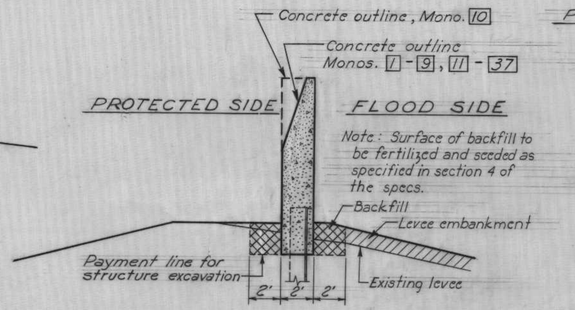


WALL LINE STA. 2+69 TO 3+03



WALL LINE STA. 4+90 TO 11+13

I WALL ENDS AT W/L STA. 11+13
SHEET PILING ENDS W/L STA. 11+43.5
LEVEE ENDS AT B/L STA. 582+96

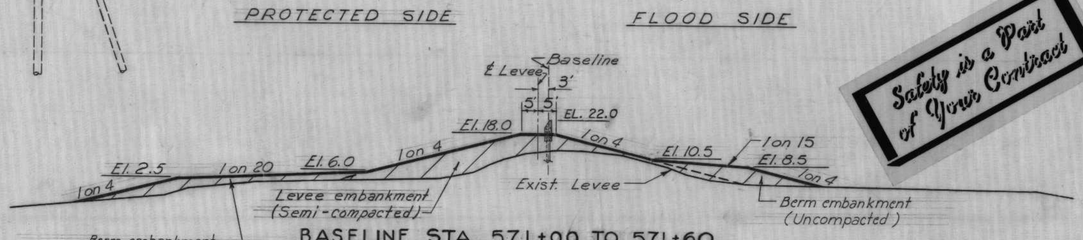


TYPICAL STRUCTURE EXCAVATION

Scale: 1/4"=1'-0"

Note: △
Construction joints 1'-6" from top of "I" wall may be optionally deleted. The chamfer nevertheless, shall be cast into the concrete as shown on drawing.

THIS PLAN ACCOMPANIES MODIFICATION P003 TO CONTRACT NO. DACW29-69-C-0018



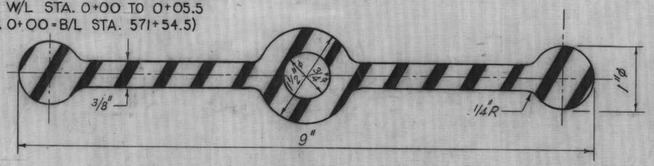
BASELINE STA. 571+00 TO 571+60

FULL LEVEE STA. 571+00 TO 571+60
I WALL W/L STA. 0+00 TO 0+05.5
(W/L STA. 0+00 = B/L STA. 571+54.5)

Notes:
For general notes see Dwg. 5
No adjacent flood-side borrow permitted for the earthwork shown on the floodwall sections hereon. Borrow material to be obtained from the borrow area designated on Dwg. No. 2 and hauled or barged in place.

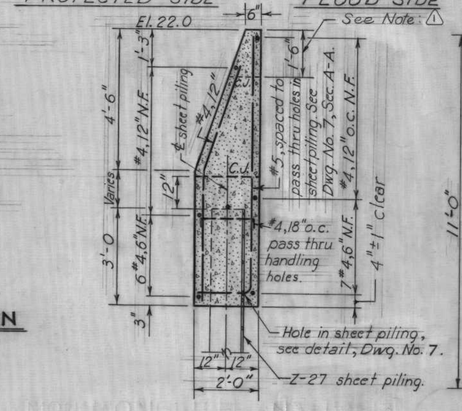
TYPICAL SECTIONS

Scale: 1" = 10'



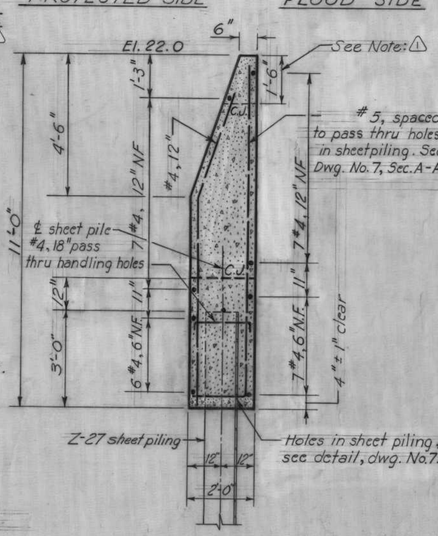
WATERSTOP

Scale: Full Size



MONOLITHS 1-3

Note: For Mono. 10 see dwg. 10.
The wall form shall not be constructed above the top construction joint until after the lower lift has been placed.



MONOLITHS 4-9 AND 11-37

TYPICAL WALL SECTIONS

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

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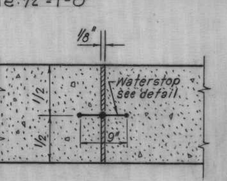
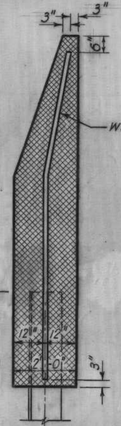


SECTION

Top of sheet piling



TYPICAL MONOLITH JOINT

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

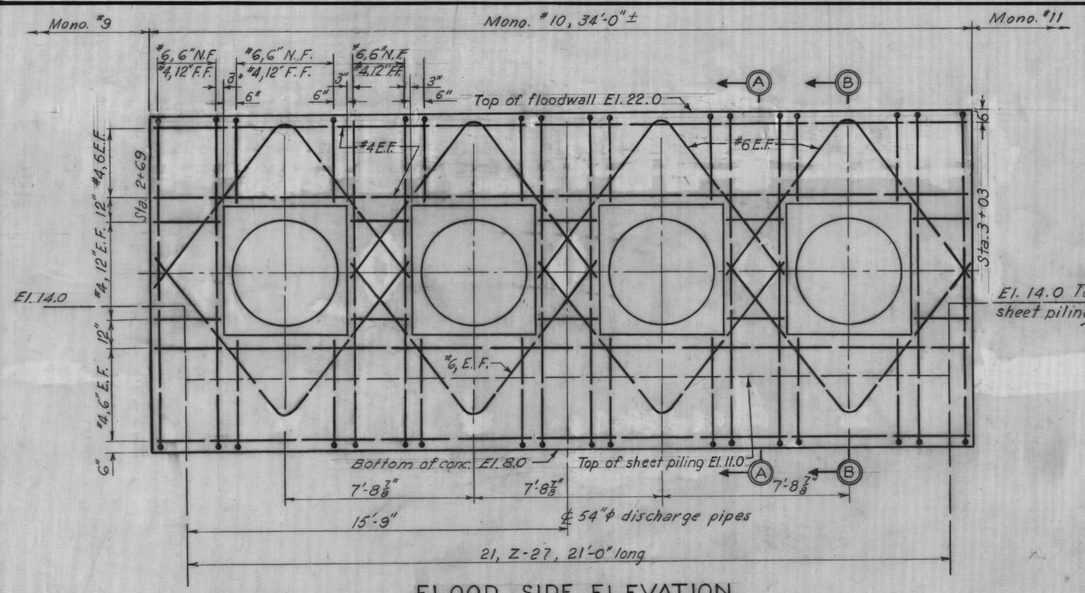
REVISION	DATE	DESCRIPTION	BY
△	4-28-69	Added note (Mod. No. 3)	W.D.J.

DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
W. D. J.	J. J. P.	W. D. J.			H-8-24405

DATE: JUNE 1968 | SCALE: SHOWN | SPEC. NO. DACW29-68-B-0172 | DWG. NO. 9 OF 10

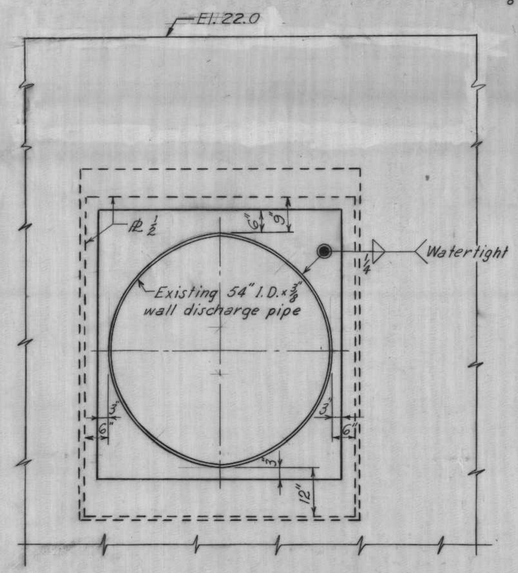
TYPICAL FLOODWALL AND DETAIL SECTIONS

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)



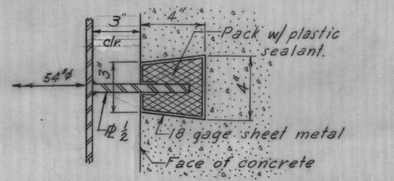
FLOOD SIDE ELEVATION

Scale 3/8" = 1'-0"

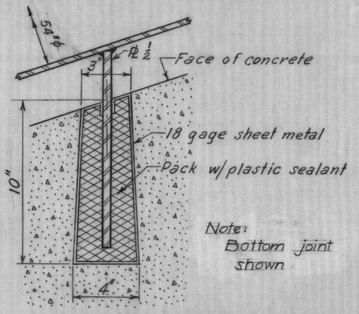


ELEVATION OF 54" I.D. PIPE THRU I-WALL

Scale 3/4" = 1'-0"

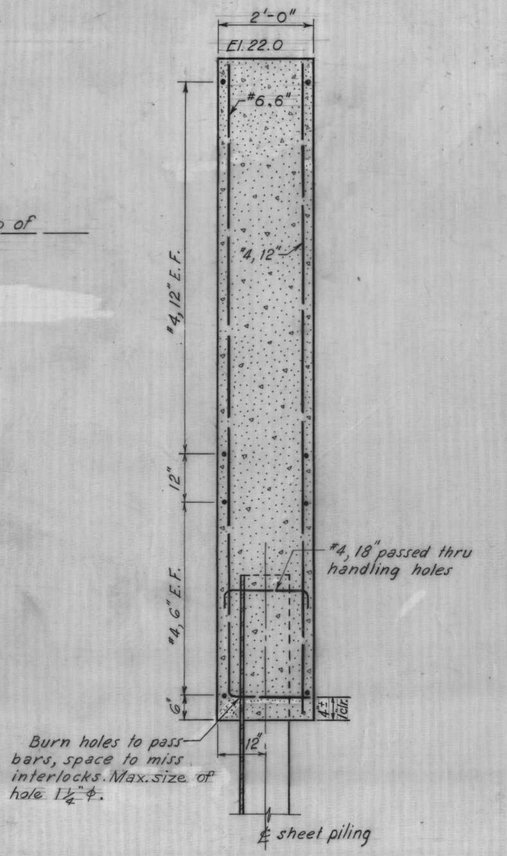


DETAIL OF SIDE SLIP JOINT



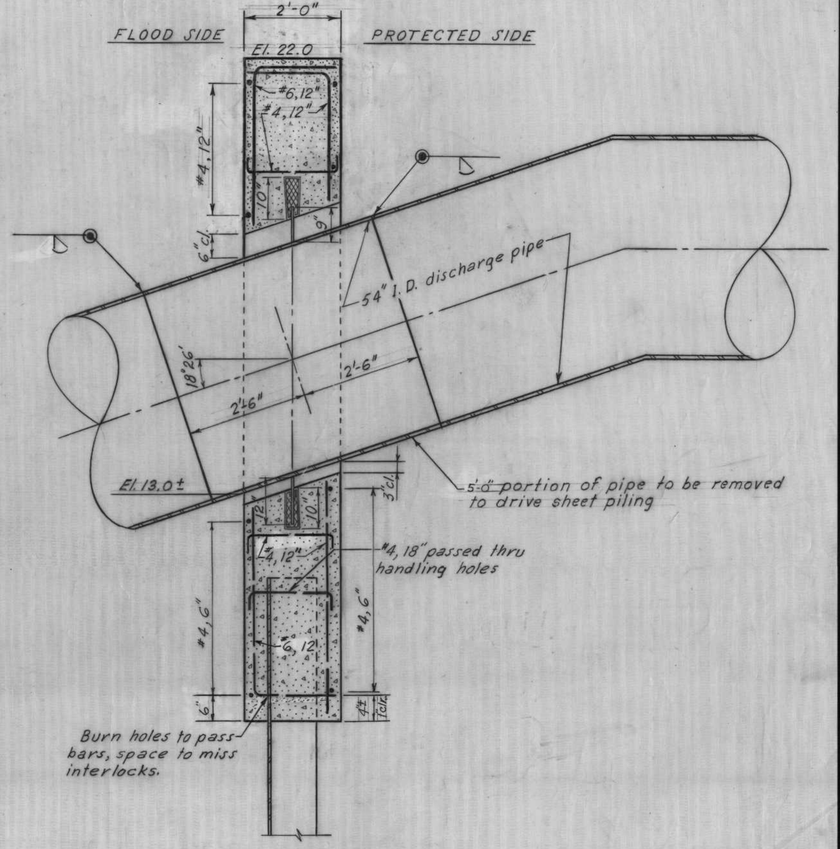
DETAIL OF TOP AND BOTTOM SLIP JOINT

Scale 3" = 1'-0"



SECTION A-A

Scale 3/4" = 1'-0"



SECTION B-B

Scale 3/4" = 1'-0"

Note:
For general notes see Dwg. 5.

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WALL AT DISCHARGE PIPES—MONOLITH 10

REVISION	DATE	DESCRIPTION	BY

DESIGNED:	DRAWN:	CHECKED:	CODE IDENT. NO.	SIZE	FILE NO.
W. D. J.	D. J. H.	W. D. J.			H-8-24405

DATE: JUNE 1968	SCALE: SHOWN	SPEC. NO. DACW29-68-B-0172	DWG. NO. 10 OF 10

CITRUS BACK LEVEE (MICHOUD SLIP TO MICHOUD CANAL)