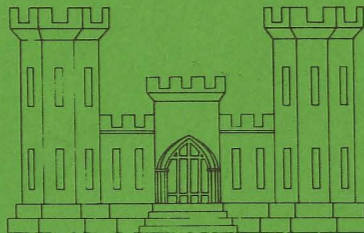


FLOOD CONTROL
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES

ITEM M-100.0-L
NASHVILLE-NAPOLEON AVE.
FLOODWALL

ORLEANS PARISH, LOUISIANA
RELOCATION OF FACILITIES
DESIGN MEMORANDUM NO. 52



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

JUNE 1977

-DYNIX

Serial No. 28

TC
7
.07
DM52
1977

Dup

NEW ORLEANS DISTRICT LIBRARY



3 1593 0004974 1

LMVED-TD (NOD 25 Aug 77) 1st Ind
SUBJECT: Flood Control, Mississippi River and Tributaries, Mississippi
River Levees, Item M-100.0-L, Nashville-Napoleon Avenue
Floodwall, Orleans Parish, Louisiana, Relocation of Facilities,
Design Memorandum No. 52

DA, Mississippi River Commission, Corps of Engineers, Vicksburg,
Miss. 39180 14 Sep 77

TO: District Engineer, New Orleans, ATTN: LMNED-MR

1. Approved, subject to comments in Incl 2.
2. We note that many of the relocations covered herein will be accomplished by the floodwall Contractor, and the plans and specifications for the floodwall have been approved and advertised. The relocations design memorandums should have been submitted sufficiently in advance of submission of the plans and specifications to permit adequate time to resolve review comments prior to advertisement of this item of work.

FOR THE PRESIDENT OF THE COMMISSION:

1 Incl
wd Incl 1
Added 1 incl
2. MRC cmts

for Robert J Kaufman
R. H. RESTA
Chief, Engineering Division

CF w 7 cy Incl 1 & 2:
DAEN-CWE-BB

14 September 1977

DEPARTMENT OF THE ARMY
MISSISSIPPI RIVER COMMISSION, CORPS OF ENGINEERS
VICKSBURG, MISSISSIPPI 39180

FC/MR&T, Mississippi River Levees, Item M-100.0-L,
Nashville-Napoleon Avenue Floodwall, Orleans Parish,
Louisiana, Relocation of Facilities, Design Memorandum No. 52

1. Pertinent data.

a. Page A, Purpose. This paragraph should be revised along the following lines: "The purpose of the floodwall is to provide authorized flood protection from the project flood to the New Orleans Area."

b. Page B, Description, second sentence. We do not decide to construct a floodwall in lieu of a levee due solely to limitations of available rights-of-way. The determination must be based on the lowest overall costs to the project after consideration is given to engineering, environmental, and other pertinent matters.

2. Page 2, para 3. The Flood Control Act of 23 April 1934, (PL 171, 73d Congress) is erroneously cited as the authority for the relocation. Authority should be Flood Control Act of 15 May 1928, (PL 391, 70th Congress). The 1934 act only authorizes reimbursement.

3. Para 4c(4), page 20, and Plate 2. Paragraph 4c(4) states that Item E-2 is an intercom-speaker line, while Plate 2 shows it as a powerline. This discrepancy should be resolved.

4. Para 5e, page 23. This paragraph should be revised to state that these facilities will be acquired by the project sponsor.

5. Para 7d, page 25, last sentence. The part of this sentence following "facilities" should be deleted.

6. Para 13, page 51, and para 14, page 65. The estimate of utilities relocations shown in the PB-3, approved 1 Jun 77, is \$656,000, and not \$356,000 as shown in para 13. This discrepancy should be resolved and para 14c revised accordingly as necessary.

7. Appendix I, Attorney's Reports.

a. Item D, page 3. This should be revised to read as follows:

"The I.E.P. is a Louisiana Corporation. The facility listed in Section d of Exhibit A is located pursuant to the approval of the Dock Board. This approval does not convey any interest in the right-of-way for this facility. Therefore, the cost of removal or relocation of this facility is not the obligation of the Government."

b. Second paragraph, page 6, line 8. The last part of this sentence, after the comma, should be revised to read as follows: ". . . will be acquired by the project sponsor as part of the real estate acquisition program for the subject project."

c. Para 2, page 6. This paragraph states that the Government is obligated to relocate all of the facilities listed in Exhibit A, excepting I.E.P. listed under Section d of Exhibit A and A.G.C. listed under Section h. Determination being made that all facilities have been accounted for either with or without compensable interest, it follows that the paragraph entitled "Relocation of Facilities Owned by Governmental Agencies" should be deleted in its entirety.



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160

IN REPLY REFER TO
LMNED-MR

25 August 1977

SUBJECT: Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-100.0-L, Nashville-Napoleon Avenue Floodwall, Orleans Parish, Louisiana, Relocation of Facilities, Design Memorandum No. 52

President
Mississippi River Commission
ATTN: LMVED-TD

1. The subject design memorandum is submitted herewith for review in accordance with the provisions of ER 1110-2-1150 dated 19 June 1970.
2. Reference is made to the discussion of this matter in NOD on 18 August 1977, involving Messrs. Resta and Chatry, and to the draft version of the subject design memorandum furnished to Mr. Resta on that date. In accordance with this discussion we have advertised the project this date. Request that the review of this design memorandum be expedited to meet a scheduled bid opening date of 20 September 1977.
3. Approval of the subject design memorandum is recommended.

1 Incl (11 cys)
DM No. 52

A handwritten signature in black ink, appearing to read "Early J. Rush III".

EARLY J. RUSH III
Colonel, CE
District Engineer

FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES

MISSISSIPPI RIVER LEVEES

ITEM M-100.0-L

NASHVILLE-NAPOLEON AVENUE FLOODWALL

ORLEANS PARISH, LOUISIANA

RELOCATION OF FACILITIES

DESIGN MEMORANDUM NO. 52

STATUS OF DESIGN MEMORANDUMS

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
1	Flood Control, Mississippi River and Tributaries, Item M-25.0-R, Buras Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	23 Nov 70 (A)
2	Flood Control, Mississippi River and Tributaries, Item M-26.0-R, Upper Buras Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	21 Jan 71 (A)
3	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-14.9-R, Commander Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	11 Jun 71 (A)
4	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-10.7-R, Venice Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	6 Apr 71 (A)
5	Lower Red River - South Bank Red River Levees, Item R-117.0-R (1957 Mileage), Levee Enlargement, Rapides-Cotton Bayou Levee, Rapides Parish, Louisiana, Relocation of Facilities	22 Jan 71 (A)
6	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-31.3-R, Tropical Bend Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	30 Mar 71 (A)
7	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-10.4-R, Lower Venice Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	27 Aug 71 (A)

STATUS OF DESIGN MEMORANDUMS (cont'd)

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
8	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-18.9-R, Fort Jackson-Boothville Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	30 Nov 72 (A)
9	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-21.5-R, Childress Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	23 Sep 71 (A)
10	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-23.2-R, Buras-Triumph Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	31 May 73 (A)
11	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-55.3-R, Upper Junior Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	21 Jun 71 (A)
12	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-51.0-L, Gravolet Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	14 Sep 72 (A)
13	Flood Control, Mississippi River and Tributaries, Lower Red River - South Bank Red River Levees, Item R-123.5-R (1957 Mileage), Scott Home-Bertrand Levee Enlargement, Rapides Parish, Louisiana, Relocation of Facilities	15 Sep 72 (A)
14	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-96.9-R, Amelia Street Levee, Jefferson Parish, Louisiana, Relocation of Facilities	31 Aug 71 (A)

STATUS OF DESIGN MEMORANDUMS (cont'd)

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
15	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-41.7-R, Port Sulphur Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	28 Jan 74 (A)
16	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-33.4-R, Nairn Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	22 Dec 75 (A)
17	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-37.7-R, Homeplace Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	5 Jan 73 (A)
18	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-57.7-R, Myrtle Grove Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	31 Jan 73 (A)
19	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-28.0-R, Empire Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	30 Aug 74 (A)
20	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-49.5-R, Woodland Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	24 Aug 73 (A)
21	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-47.2-R, Nolan Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	29 Jun 73 (A)

STATUS OF DESIGN MEMORANDUMS (cont'd)

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
22	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-45.0-R, Socola Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	28 Nov 72 (A)
23	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-75.0-L, Scarsdale Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	7 Dec 73 (A)
24	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-89.5-R, Cutoff Levee Setback, Orleans Parish, Louisiana, Relocation of Facilities	20 Dec 74 (A)
25	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-130.0-L, Gypsy Levee Setback, St. Charles Parish, Louisiana, Relocation of Facilities	30 Dec 74 (A)
26	Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-31.3-L, Cross Bayou Levee Setback, Pointe Coupee Parish, Louisiana, Relocation of Facilities	8 Nov 74 (A)
27	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-39.0-R, Freeport Levee Enlargement, Plaquemines Parish, Louisiana	27 Dec 74 (A)
28	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-30.2-R, Upper Empire Levee Enlargement and Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	30 Apr 75 (A)

STATUS OF DESIGN MEMORANDUMS (cont'd)

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
29	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-63.0-L, Monsecour Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	15 Oct 75 (A)
30	Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-25.5-R, Goudeau Levee Setback, St. Landry Parish, Louisiana, Relocation of Facilities	30 Jun 76 (A)
31	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-320 to 303-R, Fifth Louisiana Levee District Levee Enlargement, Concordia, West Feliciana, and Pointe Coupee Parishes, Louisiana, Relocation of Facilities	30 Jun 75 (A)
32	Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-4.6-L, Legonier Levee Setback, Pointe Coupee Parish, Louisiana, Relocation of Facilities	30 Sep 75 (A)
33	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-35.0-R, Nairn Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	22 Dec 75 (A)
34	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-99.0-L, Louisiana Avenue Floodwall, Orleans Parish, Louisiana, Relocation of Facilities	21 Oct 75 (A)
35	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-144.5-L, Angelina Levee Setback, Saint John the Baptist Parish, Louisiana, Relocation of Facilities	12 Dec 75 (A)

STATUS OF DESIGN MEMORANDUMS (cont'd)

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
36	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-205.0-R, Point Pleasant Levee Setback, Iberville Parish, Louisiana, Relocation of Facilities	Sep 76 (S)
37	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-58.0-L, St. Sophie Levee Enlargement, Plaquemines Parish, Louisiana, Relocation of Facilities	15 Sep 75 (A)
38	Flood Control, Mississippi River and Tributaries, Atchafalaya River Levees, Item A-38.0-L, Holloway Lake Levee Setback, Pointe Coupee Parish, Louisiana, Relocation of Facilities	26 Mar 76 (A)
39	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-90.5-L, Chalmette Slip Levee Enlargement, St. Bernard Parish, Louisiana, Relocation of Facilities	5 May 77 (A)
40	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-95.3-L, Thalia-Poydras Street Floodwall, Orleans Parish, Louisiana, Relocation of Facilities	10 June 76 (A)
41	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-217.5-L, Chariot Levee Setback, East Baton Rouge Parish, Louisiana, Relocation of Facilities	11 June 76 (A)
42	Flood Control, Mississippi River and Tributaries; Mississippi River Levees, Item M-52.6-R and M-52.1-R Junior and Lower Junior Levee Setbacks, Plaquemines Parish, Louisiana, Relocation of Facilities	24 Jan 77 (A)

STATUS OF DESIGN MEMORANDUMS (cont'd)

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
43	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-86.0-R, Stanton Levee Setback, Orleans Parish, Louisiana, Relocation of Facilities	Sept 77 (S)
44	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-215.3-L, Manchac Bend Levee Setback, East Baton Rouge Parish, Louisiana, Relocation of Facilities	23 Dec 76 (A)
45	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-28.5-R, Empire Levee Setback, Plaquemines Parish Louisiana, Relocation of Facilities	Nov 77 (S)
46	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-49.0-R, Woodland Levee Setback, Plaquemines Parish Louisiana, Relocation of Facilities	Nov 77 (S)
47	Flood Control, Mississippi River and Tributaries, Atchafalaya Basin Floodway, New Berwick Floodwall, St. Mary Parish, Louisiana, Relocation of Facilities	Nov 77 (S)
48	Flood Control, Mississippi River and Tributaries, Atchafalaya Basin Floodway, New Morgan City Floodwall, St. Mary Parish, Louisiana, Relocation of Facilities	Nov 77 (S)
49	Flood Control, Mississippi River and Tributaries, Atchafalaya Basin Floodway, New Tiger Island Floodwall, St. Mary Parish, Louisiana, Relocation of Facilities	Nov 77 (S)
50	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-24.8-R, Buras-Triumph Levee Setback, Plaquemines Parish, Louisiana, Relocation of Facilities	Sept 77 (S)

STATUS OF DESIGN MEMORANDUMS (cont'd)

<u>Design Memo No.</u>	<u>Title</u>	<u>Actual (A) or Scheduled (S) Submission Date</u>
51	Flood Control, Mississippi River and Tributaries, East Atchafalaya Basin Protection Levee, Item E-69.0 and E-73.3, Levee Enlargements, St. Martin and Iberville Parishes, Louisiana, Relocation of Louisiana State Route 997	3 June 77 (A)
52	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-100.0-L, Nashville-Napoleon Floodwall, Orleans Parish, Louisiana Relocation of Facilities	77 (S)
53	Flood Control, Mississippi River and Tributaries, Mississippi River Levees, Item M-88.0-R, Algiers Lock Forebay, Levee Enlargement, Orleans Parish, Louisiana, Relocation of Facilities	July 77 (S)

TABLE OF CONTENTS

<u>Paragraph</u>	<u>Title</u>	<u>Page</u>
	PERTINENT DATA	A
1	PURPOSE OF DESIGN MEMORANDUM	1
2	PROJECT AUTHORIZATION	1
	a. Authorization	1
	b. Local Cooperation	2
3	AUTHORITY FOR ACCOMPLISHING RELOCATIONS	2
4	DESCRIPTION OF EXISTING FACILITIES AFFECTED BY THE PROJECT	2
	a. Roads	2
	b. Railroads	4
	c. Utilities	8
5	OWNER'S COMPENSABLE INTEREST	21
	a. General	21
	b. Roads	21
	c. Railroads	22
	d. Utilities	22
	e. Others	23
6	FIELD RECONNAISSANCE AND INVESTIGATION	23
7	CRITERIA FOR RELOCATED FACILITIES	23
	a. Roads	23
	b. Railroads	24
	c. Utilities	25
	d. Others	25
8	DESCRIPTION OF PROPOSED RELOCATIONS	26
	a. Roads	26
	b. Railroads	28
	c. Utilities	32
	d. Others	46
9	PROCEDURE FOR ACCOMPLISHING RELOCATIONS	46
	a. Roads	46
	b. Railroads	46
	c. Utilities	48
	d. Others	49
10	ATTITUDE OF OWNERS	49
11	FACILITIES NOT AFFECTED	50
12	ESTIMATES OF COST	50
13	COMPARISON WITH PRIOR COST ESTIMATES	51
14	JUSTIFICATION FOR COST REVISION	65
15	RECOMMENDATIONS	66

TABLES

<u>No.</u>	<u>Title</u>	<u>Page</u>
1	PERTINENT DATA	C-1
2	ESTIMATE OF COST - CITY OF NEW ORLEANS, ROAD RELOCATIONS	52
3	ESTIMATE OF COST - BOARD OF COMMISSIONERS PORT OF NEW ORLEANS - ROADS	53
4	ESTIMATE OF COST - NEW ORLEANS PUBLIC BELT RAILROAD	54
5	ESTIMATE OF COST - ILLINOIS CENTRAL GULF RAILROAD	56
6	ESTIMATE OF COST - SOUTH CENTRAL BELL TELEPHONE	57
7	ESTIMATE OF COST - NEW ORLEANS PUBLIC SERVICE	59
8	ESTIMATE OF COST - BOARD OC COMMISSIONERS PORT OF NEW ORLEANS	61

PLATES

<u>No.</u>	<u>Title</u>
1	LOCATION MAP
2-16	PROJECT PLAN
17	GATE DETAIL & "I"-WALL SECTIONS (GATE NO. 1)
18	GATE DETAIL & "I"-WALL SECTIONS (GATES No. 2,3&8)
19	GATE DETAIL & "I"-WALL SECTIONS (GATE NO. 4)
20	GATE DETAIL & "I"-WALL SECTIONS (GATE NO. 5)
21	GATE DETAIL & "T"-WALL SECTIONS (GATE NO. 6 & 7)
22	GATE DETAIL & "I"-WALL SECTION (GATE NO. 9)
23	PEDESTRIAN GATE
24	RAILROAD FALSEWORK
25	ROADWAY RAMPS NO. 1 & 2
26	UTILITIES
27	ROAD DETAILS

APPENDIXES

APPENDIX I	ATTORNEY'S REPORT
APPENDIX II	SUMMARY OF RELOCATION COSTS

PERTINENT DATA

Location:

The Nashville-Napoleon Avenue Floodwall, Item M-100.0-L, is located in Orleans Parish, Louisiana, on the east bank of the Mississippi River between levee stations 264+00 and 231+00 (approximate river mile 100.0 above the Head of Passes).

Purpose:

The purpose of the Flood Control, Mississippi River and Tributaries project is to increase MR&T grade and to increase freeboard on the main line Mississippi River levees, thereby increasing flood protection.

Authorization:

The Flood Control Act of 15 May 1928 (Public Law 391, 70th Congress), as amended, provides authorization for the project.

Local Assuring Agency:

The local assuring agency for the Nashville-Napoleon Avenue Floodwall is the Board of Levee Commissioners of the Orleans Levee District.

Description.

The Nashville-Napoleon Avenue Floodwall is a proposed improvement to a reach of the main line levee on the east bank of the Mississippi River in the City of New Orleans, Orleans Parish, Louisiana, at approximate river mile 100.0 above the Head of Passes. Due to limited available rights-of-way within the Port of New Orleans in the subject reach, the decision was made to construct a floodwall. The proposed floodwall alinement results in the least disruption to the facilities located in the subject reach. The proposed improvement consists of constructing 7,329 linear feet of concrete I-wall and 276 linear feet of concrete T-wall with one pedestrian gate, two highway ramps, and nine vehicular gates, of which two are for roads and seven are for railroads. The proposed floodwall will top out at elevation 24.8 m.s.l., the Mississippi River and Tributaries project design grade.

LIST OF EXISTING FACILITIES

Item No.	Owner	Description	Disposition	Location
R-1	Board of Commissioners Port of New Orleans (Dock Board)	12' Roadway	Relocate	Plate 2
R-2	Dock Board	24' Roadway	Relocate	Plate 6
R-3	City of New Orleans	Dufossat Street	Relocate	Plate 8
R-4	City of New Orleans	Napoleon Avenue	Relocate	Plate 15
R-5	Dock Board	24' Roadway	Relocate	Plate 16
RR-1	New Orleans Public Belt Railroad (NOPB RR)	Railroad track	Relocate	Plate 2
RR-2	NOPB RR	Railroad track	Relocate	Plate 2
RR-3	NOPB RR	Railroad track	Relocate	Plates 2 & 3
RR-4	NOPB RR	Railroad track	Relocate	Plate 6
RR-5	NOPB RR	Railroad track	Relocate	Plates 7, 8 & 11
RR-6	NOPB RR	Railroad track	Relocate	Plates 8, 11, & 12
RR-7	NOPB RR	Railroad track	Remove	Plates 8 thru 11
RR-8	NOPB RR	Crossover track	Remove	Plate 10
RR-9	NOPB RR	Crossover track	Remove	Plate 11

<u>Item No.</u>	<u>Owner</u>	<u>Description</u>	<u>Disposition</u>	<u>Location</u>
RR-10	NOPB RR	Railroad track	Relocate	Plate 13
RR-11	Illinois Central Gulf Railroad Company	Railroad track	Relocate	Plates 14 & 15
T-1	South Central Bell Telephone (S.C.B.)	Aerial telephone line	Relocate	Plates 6 & 7
T-2	S.C.B.	Buried telephone cable	Relocate	Plate 8
T-3	S.C.B.	Aerial telephone line	Relocate	Plate 10
T-4	S.C.B.	Buried telephone cable	Relocate	Plate 15
T-5	S.C.B.	Buried telephone cable	Relocate	Plate 15
T-6	S.C.B.	Buried telephone cable	Relocate	Plate 15
T-7	S.C.B.	Aerial telephone line	Relocate	Plate 16
T-8	S.C.B.	Aerial telephone line	Relocate	Plate 16
T-9	S.C.B.	Aerial telephone line	Relocate	Plate 16
E-1	New Orleans Public Service Inc. (NOPSI)	Aerial powerline	Relocate	Plate 2
E-2	International Export Packer of Louisiana, Inc.	Aerial powerline	Relocate	Plate 2
E-3	NOPSI	Aerial powerline	Relocate	Plates 4 & 5

Item No.	Owner	Description	Disposition	Location
E-5	NOPSI	Aerial powerline	Relocate	Plate 5
E-6	NOPSI	Aerial powerline	Relocate	Plates 6 & 7
E-7	NOPSI	Aerial powerline	Relocate	Plate 7
E-8	NOPSI	Aerial powerline	Relocate	Plate 7
E-9	NOPSI	Aerial powerline	Relocate	Plates 7 & 8
E-10	NOPSI	Buried powerline	Relocate	Plates 7 & 8
E-11	NOPSI	Aerial powerline	Relocate	Plate 8
E-12	NOPSI	Buried powerline conduit	Relocate	Plate 10
E-13	NOPSI	Aerial powerline	Relocate	Plates 12 & 13
E-14	NOPSI	Aerial powerline	Relocate	Plate 14
E-15	NOPSI	Aerial powerline	Relocate	Plate 15
E-16	NOPSI	Aerial powerline	Relocate	Plates 15 & 16
E-17	NOPSI	Aerial powerline	Relocate	Plate 15
E-18	NOPSI	Aerial powerline	Relocate	Plate 16
G-1	NOPSI	2" Buried gas line	Relocate	Plate 4
G-2	NOPSI	4" Buried gas line	Relocate	Plate 8

<u>Item No.</u>	<u>Owner</u>	<u>Description</u>	<u>Disposition</u>	<u>Location</u>
W-1	Dock Board	8-inch diameter waterline	Relocate	Plate 2
W-2	Dock Board	12-inch diameter waterline	Relocate	Plate 5
W-3	Dock Board	6-inch diameter waterline	Relocate	Plate 7
W-4	Dock Board	12-inch diameter waterline	Relocate	Plate 8
W-5	Dock Board	12-inch diameter waterline	Relocate	Plates 8 thru 11
W-6	Dock Board	(Size unknown)	Relocate	Plate 14
S-1	Dock Board	6-inch diameter sewerline	Relocate	Plate 7
S-2	Dock Board	6-inch diameter sewerline	Relocate	Plate 8
S-3	Dock Board	8-inch diameter sewerline	Relocate	Plate 10
S-4	Dock Board	6-inch diameter sewerline	Relocate	Plate 12
S-5	Dock Board	8-inch diameter sewerline	Relocate	Plate 14
S-6	Dock Board	(Size unknown)	Not affected	Plates 15 & 16
SD-1	Dock Board	12-inch diameter storm drain	Relocate	Plates 2, 3 & 4
SD-2	Dock Board	12-inch diameter storm drain	Relocate	Plate 5
SD-2a	Dock Board	8-inch diameter storm drain	Relocate	Plate 5
SD-3	Dock Board	18-inch diameter storm drain	Relocate	Plate 5
SD-4	Dock Board		Reserved	Plate 6

<u>Item No.</u>	<u>Owner</u>	<u>Description</u>	<u>Disposition</u>	<u>Location</u>
SD-5	Dock Board	30-inch diameter storm drain	Relocate	Plate 7
SD-6	Dock Board	30-inch diameter storm drain	Relocate	Plate 8
SD-7	Dock Board	24-inch diameter storm drain	Relocate	Plate 11
SD-8	Dock Board	30-inch diameter storm drain	Relocate	Plate 12
SD-9	Dock Board	30-inch diameter storm drain	Relocate	Plate 14
SD-10	Dock Board	15-inch diameter storm drain	Relocate	Plate 14
SD-11	Dock Board	8-inch diameter storm drain	Relocate	Plate 14
O-1	Arkansas Grain Corp.	3-inch diameter oil line	Relocate	Plates 11 thru 14
O-2	Arkansas Grain Corp.	2 6-inch diameter oil line	Relocate	Plates 14 thru 16
CR-1	Dock Board	Crane rail	Remove	Plate 9
CR-2	Dock Board	Crane rail	Remove	Plate 11
D-1	Dock Board	Loading dock	Remove	Plates 11 & 12

1. PURPOSE OF DESIGN MEMORANDUM. The purpose of this design memorandum is to present the plans for the relocation and alteration of facilities which will be affected by the construction of item M-100.0-L, Nashville-Napoleon Avenue Floodwall, hereinafter referred to as the Nashville-Napoleon reach. It is being submitted in compliance with Part 3, Section LXXIII, ER 1180-1-1, dated 1 December 1969, and DIVR 1110-2-1, dated 29 January 1968. It establishes the necessity for the relocation of the facilities and the plan of relocation; it establishes the legal obligation of the Federal Government, and where appropriate, it will provide the basis for reimbursing the Orleans Levee District for costs incurred in accomplishing the relocations described herein.

2. PROJECT AUTHORIZATION.

a. Authorization. Authority for construction, enlargement, or improvement of main line Mississippi River levees and thereby, for the Nashville-Napoleon Avenue Floodwall project, is contained in the Flood Control Act of 15 May 1928 (Public Law 391, 70th Congress), as amended. Authority for Federal reimbursement of costs to local cooperating agencies incurred in the course of accomplishing the relocation of interfering facilities is contained in the Act of 23 April 1934 (Public Law 171, 73d Congress). Pursuant to the provisions of DIVR 1110-2-1, which implements the Flood Control Act of 1934, the relocation of public roads, highways, railroads,

public utilities, structures, and public pipelines, as required for the construction of main line Mississippi River levees, will be accomplished at Federal expense.

b. Local cooperation. The furnishing of rights-of-way for levee foundations, for levees except for levee setbacks, and for floodwalls on the main stem Mississippi River is an obligation of local interests. (See section 3, Act of 15 May 1928).

3. AUTHORITY FOR ACCOMPLISHING RELOCATIONS. The Flood Control Act of 23 April 1934 (P.L. 171, 73d Congress) provides the authority for accomplishing the relocations. Policy for relocations is provided by DIVR 1110-2-1. The legal obligations of the Federal Government regarding the affected facilities and the extent of authority for the relocations are as established in the attorney's report which is attached as appendix I.

4. DESCRIPTION OF EXISTING FACILITIES AFFECTED BY THE PROJECT.

a. Roads.

(1) The Board of Commissioners of the Port of New Orleans owns the following roadways which will be affected by the project:

(a) Item R-1. This item is a single-lane, 12-foot wide, 6-inch thick asphalt surfaced roadway which runs down the floodwall alinement between wall line stations 2+76 to 3+98 (plate 2). The roadway has 5-foot wide clam shell shoulders in the area affected by the floodwall. Approximately 140 linear feet of the roadway will be affected by the floodwall; the affected portion of roadway is in good condition.

(b) Item R-2. This item is a two-lane, 24-foot wide, 8-inch thick concrete roadway which crosses the floodwall alinement between wall line stations 25+99 and 26+23 (plate 6). The roadway has 6-foot wide natural grass shoulders in the area affected by the floodwall. Approximately 375 linear feet of the roadway will be affected by the floodwall; the affected portion of roadway is in good condition.

(c) Item R-5. This item is a two-lane, 24-foot wide, 8-inch thick concrete roadway which will be the downriver tie-in to the existing flood protection (plate 16). The roadway has 5-foot wide clam shell shoulders in the area affected by the floodwall. Approximately 115 linear feet of the roadway will be affected by the floodwall; the affected portion of roadway is in good condition.

(2) The City of New Orleans owns the following roadways which will be affected by the project:

(a) Item R-3. Dufossat Street (plate 8) is a two-lane 20-foot wide, bituminous surfaced roadway which crosses the floodwall alinement between wall line stations 34+05 and 34+25.

The thickness of the roadway is unknown because it has been resurfaced on numerous occasions. The roadway does not have either curbs or shoulders in the area affected by the floodwall. Approximately 60 linear feet of the roadway will be affected by the floodwall; the affected portion of roadway is in poor condition.

(b) Item R-4. Napoleon Avenue (plate 15) is a two-lane, 33-foot wide, 8-inch thick concrete surfaced roadway where it crosses the floodwall alignment between wall line stations 69+05 and 69+38. The roadway does not have either curbs or shoulders in the area affected by the floodwall. Approximately 60 linear feet of the roadway will be affected by the floodwall; the affected portion of roadway is in good condition.

b. Railroads.

(1) The New Orleans Public Belt Railroad Company (NOPB RR) owns the following railroad tracks which will be affected by the project:

(a) Item RR-1. This item is a single, turnout track consisting of 80 pound, 39-foot rails (dated 1931) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and crushed rock ballast. Approximately 39 linear feet of trackage will be affected by the floodwall construction at wall line station 2+66 (plate 2). The rails, crossties and ballast are in good condition.

(b) Item RR-2. This item is a single, turnout track consisting of 80 pound, 39-foot rails (dated 1931) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and crushed rock ballast. Approximately 39 linear feet of trackage will be affected by the floodwall construction at wall line station 4+18 (plate 2). The rails, crossties and ballast are in good condition.

(c) Item RR-3. This item is a single main line track, consisting of 80 pound, 39-foot rails (dated 1931) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and a combination of clam shell and crushed rock ballast. Approximately 765 linear feet of trackage will be affected by the floodwall construction between wall line station 3+06 and 10+70 (plates 2 & 3). The rails, crossties and ballast are in good condition.

(d) Item RR-4. This item is a single, turnout track consisting of 80 pound, 39-foot rails (dated 1954) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and a combination of clam shell and crushed rock ballast. Approximately 39 linear feet of trackage will be affected by the floodwall construction at wall line station 24+13 (plate 6). The rails, crossties and ballast are in good condition.

(e) Item RR-5. This item is a single, spur track consisting of 80 pound, 39-foot rails (dated 1948) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and a combination of clam shell and crushed rock ballast. Approximately 790 linear feet of

trackage will be affected by the floodwall construction from wall line station 28+17 to 36+06 (plates 7 & 8) and an additional 200 linear feet of trackage will be affected from wall line station 52+25 to 54+25 (plate 11). The rails, crossties and ballast are in poor condition.

(f) Item RR-6. This item is a single yard track consisting of 80-pound, 39-foot rails (dated 1948) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39 foot rail, and a combination of clam shell and crushed rock ballast. Approximately 120 linear feet (39 linear feet at each station) of trackage will be affected by the floodwall construction at wall line stations 35+73, 52+12 and 54+85 (plates 8, 11 & 12). The rails, crossties and ballast are in good condition.

(g) Item RR-7. This item is a single yard track consisting of 80 pound, 39-foot rails (dated 1948) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and a combination of clam shell and crushed rock ballast. Approximately 1900 linear feet of trackage will be affected by the floodwall construction from wall line station 34+50 to 53+50 (plates 8, 9, 10 & 11). The rails, crossties and ballast are in good condition.

(h) Item RR-8. This item is a left hand crossover track consisting of 80 pound, 39-foot rails (dated 1948) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot of rail, and a combination of clam shell and crushed rock ballast. Approximately 150 linear feet of trackage will be affected by the floodwall construction from wall line station 46+40 to 47+90 (plate 10). The rails, crossties and ballast are in good condition.

(i) Item RR-9. This item is a right hand crossover track consisting of 80 pound, 39-foot rails (dated 1948) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and a combination of clam shell and crushed rock ballast. Approximately 150 linear feet of trackage will be affected by the floodwall construction from wall line station 50+20 to 51+80 (plate 11). The rails, crossties and ballast are in good condition.

(j) Item RR-10. This item is a single spur track consisting of 80 pound, 39-foot rails (dated 1948) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and crushed rock ballast. Approximately 39 linear feet of trackage will be affected by the floodwall construction at wall line station 59+58 (plate 13). The rails, crossties and ballast are in good condition.

(2) Item RR-11. The Illinois Central Gulf Railroad Company (ICGRR) owns this item, a single turnout track consisting of 90 pound, 39-foot rails (dated 1970) supported by 7" x 9" x 8.5' treated crossties spaced 23 ties per 39-foot rail, and a combination of clam shell and crushed rock ballast. Approximately 190 linear feet of trackage will be affected by the floodwall construction from wall line station 66+48 to 70+20 (plate 14). The rails, crossties and ballast are in good condition.

c. Utilities.

(1) South Central Bell Telephone Company (SC Bell) owns the following telephone cables which will be affected by this project:

(a) Item T-1a. Item T-1a is a 6 pair, 24 gauge aerial service drop which crosses the floodwall alinement at wall line station 20+50 (plate 5). This facility was installed in 1968 and is in good condition.

(b) Item T-1. Item T-1 is a 200 pair, 26 gauge aerial telephone line supported by timber poles which is alined parallel and adjacent to the floodwall alinement from baseline station 26+75 to wall line station 29+57 and crosses the floodwall alinement at wall line station 26+37 (plates 6 & 7). Approximately 575 feet of cable will be affected by construction of the floodwall. This facility was installed in 1968 and is in good condition.

(c) Item T-2. Item T-2 is a 200 pair, 22 gauge buried telephone cable contained in a 3-inch creosote wood duct, which crosses the floodwall alinement at wall line station 34+16 (plate 8). Approximately 75 linear feet of cable will be affected by the construction of the floodwall. This facility was installed in 1972 and is in good condition.

(d) Item T-3. Item T-3 is a 100 pair, 26 gauge buried telephone cable contained in a 2-inch-diameter wrought iron pipe, which crosses the floodwall alinement at wall line station 49+05 (plate 10). Two additional 2-inch-diameter wrought iron pipes serve as spares at this location. Approximately 440 linear feet of cable will be affected by construction of the floodwall. This facility was installed in 1945 and is in good condition.

(e) Item T-4. Item T-4 is a 300 pair, 26 gauge cable located in a 4-inch-diameter tile duct which cross the floodwall alinement at wall line station 68+46 (plate 15). There are also three 4-inch-diameter tile ducts that serve as spares at this location. Approximately

410 linear feet of cable will be affected by the construction of the floodwall. The 300 pair cable was installed in 1963 and is in good condition.

(f) Item T-5. Item T-5 is a 100 pair, 26 gauge buried telephone cable contained in a 2-in-diameter galvanized iron pipe which parallels the floodwall near the vicinity of Gate No. 9 (plate 15). This cable connects to an above ground pedestal that will be affected by a proposed track realignment (Item RR-11). Approximately 110 linear feet of cable will be affected by the construction of the floodwall. The cable and the pedestal were both installed in 1973 and are in good condition.

(g) Item T-6. Item T-6 represents buried telephone cables, consisting of one 1200 pair, 24 gauge cable; one 900 pair, 22 gauge cable; one 200 pair, 26 gauge cable and one 25 pair, 19 gauge cable located in four 4-inch-diameter PVC pipes which cross the floodwall alignment at wall line station 70+54 (plate 15). There are also eight spare 4-inch-diameter PVC pipes at this location. All twelve pipes are encased in concrete. Approximately 160 linear feet of each cable will be affected by construction of the floodwall. All the above facilities were installed in 1974 and are in good condition.

(h) Item T-7. Item T-7 is a 6 pair, 24 gauge aerial service drop cable contained in plastic insulation, which crosses the floodwall alignment at wall line station 73+45 (plate 16). Approximately 120 linear feet of cable will be affected by the construction of the floodwall. This facility was installed in 1973 and is in good condition.

(1) Item T-8. Item T-8 is a 100 pair, 26 gauge aerial cable contained in plastic insulation, which crosses the floodwall alinement at wall line station 73+50 (plate 16). Approximately 50 linear feet of cable will be affected by the construction of the floodwall. This facility was installed in 1973 and is in good condition.

(j) Item T-9. Item T-9 represents two 100 pair, 26 gauge aerial cables contained in plastic insulation, which run along the floodwall alinement from wall line station 73+50 to 76+05 (plate 16). These cables are fed by a 100 pair, 26 gauge buried cable which originates across Napoleon Avenue and ties into the aerial lines on the NOPSI pole at wall line station 73+50. Approximately 170 linear feet of each aerial cable will be affected by construction of the floodwall. The buried cable will not be affected by the floodwall since NOPSI's poles will remain in place. The aerial cables were installed in 1973 and are in good condition.

(2) New Orleans Public Service, Inc. (NOPSI) owns the following powerlines and gas lines which will be affected by the project:

(a) Item E-1. This facility consists of a 120/240 volt aerial powerline supported by timber poles which crosses the floodwall alinement at wall line station 2+34 (plate 2). Approximately 90 linear feet of this facility will be affected by the floodwall project. This powerline was installed in 1972 and is in good condition. The power pole at wall line station 2+34 will be included as part of Item E-1 and will also be affected by the floodwall project.

(b) Item E-3. Item E-3 is a 120/240 volt aerial distribution line with service drops supported by timber poles, and alined parallel to the floodwall alinement between wall line stations 14+60 and 18+14

(plates 4 and 5). Approximately 450 linear feet of distribution line and three power poles located at wall line stations 14+60 (plate 4), 16+31 and 18+14 (plate 5) will be affected by the floodwall project. This facility was installed in 1972 and is in good condition.

(c) Item E-4. Reserve

(d) Item E-5. Item E-5 is a 24Kv aerial distribution line supported by timber poles and crossing the floodwall alinement at wall line station 21+08 (plate 5). Approximately 260 linear feet of this facility will be affected by the floodwall project. This powerline was installed in 1975 and is in good condition.

(e) Item E-6. Item E-6 is a 24 Kv aerial distribution line supported by timber poles and alined parallel to the floodwall alinement between wall line station 26+37 to 29+57 (plates 6 and 7) and crossing the floodwall alinement at wall line station 26+37. Approximately 600 linear feet of this facility and two power poles located at wall line stations 26+37 (plate 6) and 27+89 (plate 7) will be affected by the floodwall project. This powerline was installed in 1965 and is in good condition.

(f) Item E-7. Item E-7 is a 24 Kv aerial distribution line supported by timber poles. It extends from Bell Castle Street and crosses the floodwall alinement at wall line station 30+67 (plate 7). Approximately 220 linear feet of this facility will be affected by the floodwall project. This powerline was installed in 1959 and is in good condition.

(g) Item E-8. Item E-8 consists of a 13.8 Kv supported by timber poles. It parallels the floodwall alinement from wall line station 30+83 to 31+00 (plate 7) and is affected by the floodwall project due to safety clearance requirements. Approximately 50 linear feet of this facility and two power poles will be affected by the floodwall project. This powerline was installed in 1972 and is in good condition.

(h) Item E-9. Item E-9 consists of various types of powerlines supported by timber poles and alined parallel to the floodwall alinement between wall line station 32+45 and 34+50 (plates 7 and 8). The power pole at wall line station 32+45 (plate 7) is used to support two 13.8 Kv aerial distribution lines. The power pole at wall line station 32+65 (plate 7) is used to support two 13.8 Kv aerial distribution lines and two underground conduits. Two power poles located at wall line stations 33+10 (plate 7) and 33+30 (plate 8) are used to support two 24 Kv aerial distribution lines and one underground conduit each. Finally, the power pole at wall line station 34+50 (plate 8) is used to support two 24Kv aerial distribution lines. All of these facilities were installed in 1972 and are in good condition.

(i) Item E-10. Item E-10 is a 24 Kv electrical underground conduit that parallels the floodwall from wall line station 32+75 to 33+53 (plates 7 and 8). Approximately 80 linear feet of this facility will be affected by the floodwall project. This facility was installed in 1972 and is in good condition.

(j) Item E-11. Item E-11 represents two 24 Kv aerial distribution lines supported by timber poles. It extends from Dufossat Street and crosses the floodwall alinement at wall line station 34+50 (plate 8). Approximately 350 linear feet of this powerline will be affected by the

floodwall project. This facility was installed in 1972 and is in good condition.

(k) Item E-12. Item E-12 consists of two 3-inch buried electrical ducts in a single conduit alined along Lyons Street and crossing the floodwall at wall line station 49+15 (plate 10). Presently, this conduit is unused but may be needed in the future. This facility was installed in 1925 and is in poor condition.

(l) Item E-13. Item E-13 represents two 24 Kv aerial distribution lines supported by timber poles and alined practically parallel to the floodwall alinement between wall line station 57+35 to 61+75 (plates 12 and 13). Approximately 350 linear feet of this facility will be affected by the floodwall project. These powerlines were installed in 1972 and are in good condition.

(m) Item E-14. Item E-14 consists of a 240/480 v service drop supported by timber poles which crosses the floodwall alinement at wall line station 63+72 (plate 14). The power pole at wall line station 63+27 also supports 2 transformers. Approximately 170 linear feet of this facility will be affected by the floodwall project. This service drop was installed in 1973 and is in good condition.

(n) Item E-15. Item E-15 consists of a 24 Kv aerial distribution line supported by timber poles. It extends from Napoleon Avenue and crosses the floodwall alinement at wall line station 70+10 (plate 15). Approximately 250 linear feet of this facility will be affected by the floodwall project. This powerline was installed in 1973 and is in good condition.

(o) Item E-16. Item E-16 consists of a 24 Kv aerial distribution line supported by timber poles and alined parallel to the floodwall alinement between wall line station 70+66 to 76+05 (plates

15 and 16) and crossing the floodwall alinement at wall line station 70+67. Also Item E-16 includes several power poles that support additional electrical equipment and service drops. Approximately 600 linear feet of this facility will be affected by the floodwall project. This facility was installed in 1973 and is in good condition. Listed below by station numbers are the power poles and the electrical equipment they support.

<u>Pole at W/L Station</u>	<u>Additional Equipment</u>
70+66	1 - 24 Kv aerial distribution line (item E-15)
71+44	13.8 Kv aerial distribution line (item E-17)
72+43	1 - 13.8 Kv aerial distribution line 1 - step down transformer
73+50	1 - 120/240 V service drop (Item E-18) 2 - transformers
74+42	3 - 240/480 V aerial secondary wires 2 - transformers
74+73	3 - 240/480 V aerial secondary wires
75+20	3 - 240/480 V aerial secondary wires 1 - 240/480 V service drop

(p) Item E-17. Item E-17 is a 13.8 Kv aerial distribution line supported by timber poles and crossing the floodwall alinement of wall line station 71+44 (plate 15). Approximately 100 linear feet of this facility will be affected by this project. This powerline was installed in 1973 and is in good condition.

(q) Item E-18. Item E-18 is a 120/240 v service drop that crosses the floodwall alinement at wall line station 73+50 (plate 16). Approximately 30 linear feet of this wire will be affected by the floodwall project. This facility was installed in 1973 and is in good condition.

(r) Item G-1. Item G-1 is a 2-inch-diameter steel gas main which crosses the floodwall alinement at wall line station 11+75 (plate 4). Approximately 12 linear feet of pipe will be affected by the floodwalls. This facility was installed in 1944 and is still in excellent condition.

(s) Item G-2. Item G-2 is a 4-inch-diameter steel gas main which crosses the floodwall alinement at wall line station 34+23 (plate 8). Approximately 30 linear feet of pipe will be affected by the floodwall. This facility was installed in 1938 and is still in excellent condition.

(3) Board of Commissioners of the Port of New Orleans (Dock Board) owns the following facilities which will be affected by the project:

(a) Item W-1. Item W-1 is an 8-inch-diameter cast iron waterline which crosses the floodwall alinement at wall line station 3+16 (plate 2). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is still in good condition.

(b) Item W-2. Item W-2 is a 12-inch-diameter cast iron waterline, which crosses the floodwall alinement at wall line station 20+72 (plate 5). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1906 and is still in good condition.

(c) Item W-3. Item W-3 is a 6-inch-diameter cast iron waterline, which crosses the floodwall alinement at wall line station 30+77 (plate 7). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1906 and is still in good condition.

(d) Item W-4. Item W-4 is a 12-inch-diameter cast iron waterline, which crosses the floodwall alinement at wall line station 37+52 (plate 8). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is still in good condition.

(e) Item W-5. Item W-5 is a 12-inch-diameter cast iron waterline alined parallel and adjacent to the railroad track (item RR-7) and crossing the floodwall alinement at wall line stations 52+04 and 53+94 (plate 11). Approximately 12 linear feet of pipe at station 52+04, and 12 linear feet of pipe at station 53+94 will be affected by the floodwall. This facility was installed in 1906 and is in good condition.

(f) Item W-6. Item W-6 is a cast iron waterline, which crosses the floodwall alinement at wall line station 64+29 (plate 14). Its size is unknown. Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(g) Item S-1. Item S-1 is a 6-inch-diameter clay sewerline, which crosses the floodwall alinement at wall line station 30+85 (plate 7). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(h) Item S-2. Item S-2 is a 6-inch-diameter clay sewerline, which crosses the floodwall alinement at wall line station 37+62 (plate 8). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(i) Item S-3. Item S-3 is a 10-inch-diameter cast iron sewerline, which crosses the floodwall alinement at wall line station 44+92 (plate 10). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(j) Item S-4. Item S-4 is a 6-inch-diameter clay sewerline, which crosses the floodwall alinement at wall line station 56+72 (plate 12). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(k) Item S-5. Item S-5 is an 8-inch-diameter cast iron sewerline, which crosses the floodwall alinement at wall line station 65+87 (plate 14). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(l) Item SD-1. Item SD-1 is a 12-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 10+82 (plates 3 & 4). Approximately 45 linear feet of pipe and one drop inlet will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(m) Item SD-2a. Item SD-2a is an 8-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 16+48 (plate 5). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(n) Item SD-2. Item SD-2 is a 12-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 19+48 (plate 5). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(o) Item SD-3. Item SD-3 is an 18-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 20+87 (plate 5). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(p) Item SD-4. Reserved

(q) Item SD-5. Item SD-5 is a 30-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 30+81 (plate 7). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(r) Item SD-6. Item SD-6 is a 30-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 37+72 (plate 8). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(s) Item SD-7. Item SD-7 is a 24-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 49+27 (plate 11). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(t) Item SD-8. Item SD-8 is a 30-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 56+86 (plate 12). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(u) Item SD-9. Item SD-9 is a 30-inch-diameter concrete storm drain, which crosses the floodwall alinement at wall line station 64+36 (plate 14). Approximately 12 linear feet of pipe will be affected by the floodwall. This facility was installed in 1915 and is in good condition.

(v) Item SD-10. Item SD-10 is a 15-inch-diameter corrugated metal storm drain, which crosses the floodwall alinement at wall line station 67+70 (plate 14). Approximately 50 linear feet of pipe will be affected by the floodwall. This facility was installed in 1971 and is in good condition.

(w) Item SD-11. Item SD-11 is an 8-inch diameter concrete storm drain, which crosses the floodwall alinement at wall line station 68+05 (plate 14). Approximately 12 linear feet of pipe and one drop inlet will be affected by the floodwall. The facility was installed in 1971 and is in good condition.

(x) Item CR-1. Item CR-1 is a single crane rail which parallels the floodwall alinement from wall line station 40+48 to 41+98 (plate 9). Approximately 150 linear feet of rail will be affected by the installation of a crossover track caused by the construction of the floodwall. This facility was installed in 1915 and is in poor condition.

(y) Item CR-2. Item CR-2 is a single crain rail which crosses the floodwall alinement at wall line station 52+17 (plate 11). Approximately 60 linear feet of rail will be affected by the construction of the floodwall. The facility was installed in 1915 and is in poor condition.

(z) Item D-1. Item D-1 is a 6-inch thick concrete loading dock supported by timber piles which runs along the floodwall alinement from wall line station 53+75 to 54+45 (plates 11 and 12). The loading dock is elevated three to four feet above natural ground and appears to have been abandoned. This facility was installed in 1920 and is in poor condition.

(4) International Export Packer of Louisiana Inc. owns Item E-2, an intercom speaker line that is strung along an existing fence; it will be dislocated by the construction of the floodwall. It extends along the fence from wall line station 0+00 to station 2+34 (plate 2), at which point it becomes aerial and crosses the floodwall alinement. Approximately 335 linear feet of this facility will be affected by the floodwall project. This speaker line was installed in 1975 and is in good condition.

(5) Arkansas Grain Corporation (Riceland Foods) owns the following pipelines which will be affected by the project:

(a) Item O-1. Item O-1 is a 3-inch-diameter steel oil line which runs along side the floodwall alinement from wall line station 54+98 to 57+78 (plate 12) and from wall line station 63+78 to 65+00 (plate 14). In addition, the oil line crosses the floodwall alinement at wall line stations 54+01, 59+70 and 63+75 (plates 11, 13 & 14). An approximate total of 440 linear feet of pipe will be affected by

the construction of the floodwall. This facility was installed in 1966 and is in good condition.

(b) Item 0-2. Item 0-2 represents two 6-inch-diameter steel oil lines which run along side the floodwall alinement from wall line station 70+90 to 74+86 (plate 15 & 16). In addition, the oil lines cross the floodwall alinement at wall line stations 67+08 and 68+10 (plate 14); wall line stations 68+33 and 70+89 (plate 15) and wall line station 74+89 (plate 16). An approximate total of 1000 linear feet of each pipe will be affected by the construction of the floodwall. This facility was installed in 1966 and is in good condition.

5. OWNER'S COMPENSABLE INTEREST.

a. General. The attorney's report, which considers the compensable interest of the owners of the facilities affected by the proposed project, is attached as appendix I.

b. Roads.

(1) The attorney's report provides that the city of New Orleans, a governmental agency has a compensable interest in items R-3 and R-4. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to pay for the relocation of the roads dislocated by the project. The Federal Government will adjust these roads as a part of the floodwall contract.

(2) The attorney's report provides that the Dock Board, a state agency, has a compensable interest in items R-1, R-2 and R-5. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to pay for the relocation

of the roads dislocated by the project. The Federal Government will relocate all the above roads as a part of the floodwall contract.

c. Railroads. The attorney's report provides that NOPB RR (items RR-1 thru RR-10), and the ICG RR (item RR-11) have a compensable interest in their trackage, which is located outside the existing levee right-of-way. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to reimburse NOPB RR and ICG RR for the relocation of the railroad trackage in which they have a compensable interest, and must relocate as a project requirement. The Federal Government will design and construct the required falsework and will design and place the asphalt required for the gate sill cover; this will be accomplished as a part of the floodwall contract. The balance of the work required on the trackage will be accomplished by the respective owners and will be reimbursed by this district.

d. Utilities

(1) The attorney's report provides that SC Bell (items T-1 thru T-9) and NOPSI (items E-1, E-3, E-5 thru E-18, G-1 and G-2), have a compensable interest in their facilities which are located outside the existing levee right-of-way. In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to reimburse SC Bell and NOPSI for the relocation of the underground and aerial cables and lines in which they have a compensable interest, and must relocate as a project requirement.

(2) The attorney's report provides that the Dock Board has a compensable interest in its facilities (items W-1 thru W-6, S-1 thru S-5, SD-1 thru SD-11, CR-1, CR-2 and D-1). In accordance with the provisions of the attorney's opinion, the Federal Government is authorized and obligated to acquire or relocate the subject facilities. The Federal Government will relocate all the above facilities as a part of the floodwall contract.

e. Others. In accordance with the provisions of the attorney's opinion, the International Export Packer of Louisiana, Inc. facility (item E-2) and the Arkansas Grain Corporation facilities (items O-1 and O-2) are privately owned and will be acquired by the Federal Government as part of the real estate acquisition program.

6. FIELD RECONNAISSANCE AND INVESTIGATION. Field surveys, field inspections, consultations, and correspondence with the affected facility owners and the Orleans Levee District provided the basic information from which this design memorandum and the proposed relocation plans were prepared. This work was accomplished principally by Mr. Lionel J. Gele, Jr. of this district's Relocations Section and by Mr. Carl Guggenhiemer of this district's Structural Design Section.

7. CRITERIA FOR RELOCATED FACILITIES.

a. Roads.- The design criteria for the relocation of R-1 thru R-5, as required at the vehicular ramps and gate openings will be in accordance with the provisions of the "General Specifications and Standard Plans

for Street Paving and Temporary Surfacing of the City of New Orleans, Louisiana," adopted 28 November 1969. The design standards used for the proposed street relocations are the typical design standards used by the City of New Orleans Department of Streets and, therefore, do not result in a betterment. The street alterations will be designed by this district and will be included in the floodwall contract.

b. Railroads. The American Railway Engineering Association (AREA) Manual for Railroad Engineering" and coordination with the NOPB RR and the ICG RR provided the design criteria for the relocation of the subject trackage. The railroad relocations (item RR-1 thru RR-11), provided for by this design memorandum, do not include betterments but do include the placement of asphalt gate sill covering at all railroad gates and the installation of railroad warning signals at gates 1, 2, and 4. The warning devices are required due to the close proximity of the floodwall and railroad tracks preventing motorists from seeing approaching railroad trains. The asphalt gate sill cover is required to provide a smooth gradual transition over the exposed gate sills for safety purposes. In consideration of the fact that the owners will construct portions of the adjustments, during design and during construction, and upon completion of construction, this district will inspect the relocations work to insure that no betterments are involved. If it is determined that an owner's criteria results in a betterment, the betterment at Government's expense will be disallowed by this district. This is in accord with paragraph 73-106 of ER 1180-11, which stipulates that "a substitute facility will be provided which will, as nearly as practicable, serve the owner in the same manner and reasonable as well as does the existing facility.

c. Utilities. The Government will relocate items W-1 thru W-6; S-1 thru S-5; SD-1 thru SD-11 (excluding SD-4); CR-1, CR-2, and D-1 as part of the floodwall contract; this will be accomplished in accordance with the owner's design standards. The owners of the other interfering utilities will accomplish the design and relocation of their facilities (items T-1 thru T-9; E-1 thru E-18 (excluding E-2) to their individual criteria, and in a manner which will eliminate interference with the project. This district will review the construction drawings for these relocations to insure that no betterments are involved. During construction and upon completion of construction, this district will inspect the relocations in the field to insure that no betterments are involved. If it is determined that an owner's criteria results in a betterment, that betterment at Government expense will be disallowed by this district. This is in accord with para. 73-106 of ER 1180-1-1, which stipulates that "a substitute facility will be provided which will, as nearly as practicable, serve the owner in the same manner and reasonably as well as does the existing facility."

d. Others. The owner of item E-2 and the owner of items 0-1 and 0-2 will accomplish the design and relocation of their facilities to their individual criteria and in a manner which eliminates interference with the project. This district will review the construction drawings and inspect the relocation work to insure that the relocated facility crossings will be in accord with Corps of Engineers design criteria for utilities over and through floodwalls. The Federal Government is not obligated to relocate these facilities but will acquire them as a part of the real estate acquisition program.

8. DESCRIPTION OF PROPOSED RELOCATIONS

a. Roads.

(1) Item R-1 (plate 2). Item R-1 will be relocated through gate no. 2 by the floodwall contractor. The relocation will consist of constructing a 12-foot wide roadway for a length of 100 linear feet along a new alinement as shown on plate 2. The floodwall contractor will remove the affected portion of the existing roadway in order to facilitate the driving of the steel sheet piling in the area. The relocated roadway will consist of placing 12-inches of compacted shell and 3½ inches of asphalt concrete. A railroad warning device will be installed by the NOPB RR on both sides of the floodwall gate to warn motor vehicles of approaching trains. These warning devices are required, and are not considered a betterment, as the floodwall will prevent motorists from seeing approaching trains.

(2) Item R-2 (plate 6). Item R-2 will be adjusted by the floodwall contractor. The adjustments will consist of constructing a 24-foot-wide roadway ramp having 7-foot shoulders for a length of 375 linear feet along the existing road alinement. The floodwall contractor will remove the affected portion of the existing roadway and construct a compacted clay blanket up to the ramp design grade (plate 25). Three and one-half inches of asphalt concrete and 12 inches of compacted shell will be placed atop the clay material. The maximum height of the ramp will reach elevation 25.8 m.s.l., approximately one foot above the project design grade. During the construction phase of the roadway ramp the floodwall contractor will provide a temporary bypass road composed of six inches of compacted shell. This bypass road will be removed after completion of the ramp.

(3) Item R-3 (plate 8). Dufossat St. will be adjusted by the floodwall contractor. The adjustments will consist of placing a 3½ inch thick, 20-foot-wide asphalt concrete overlay, on 16 linear feet of Dufossat Street to provide a smooth transition from the top of the proposed gate sill to the existing road. A railroad warning device will be installed by the NOPB RR on the floodside of the floodwall gate to warn motor vehicles of approaching trains. These warning devices are required, and are not considered a betterment, as the floodwall will prevent motorists from seeing approaching trains.

(4) Item R-4 (plate 15). Napoleon Avenue will be adjusted by the floodwall contractor. The adjustment will consist of placing a 3½-inch thick, 28-foot wide asphalt concrete overlay, on 40 linear feet of Napoleon Avenue. During the construction phase of the roadway gate the floodwall contractor will provide a temporary bypass road composed of 6 inches of compacted shell. This bypass road will be removed after completion of the ramp. Also a railroad warning device will be installed by the NOPB RR to warn motor vehicles of approaching trains. These warning devices are required, and are not considered a betterment, as the floodwall will prevent motorists from seeing approaching trains.

(5) Item R-5 (plate 16). Item R-5 will be adjusted by the floodwall contractor. The adjustment will consist of constructing a 24-foot wide roadway ramp having 7 foot shoulders for a length of 125 linear feet along the existing road alinement. The floodwall contractor will remove the affected portion of the existing roadway and construct a compacted clay blanket up to the ramp design grade (plate 25). Three and one-half inches of asphalt concrete and 12 inches of compacted shell will be placed atop the clay material.

The ramp, at its maximum height, will reach elevation 25.8 m.s.l. approximately one foot above the project design grade. During the construction phase of the roadway ramp the floodwall contractor will provide a temporary bypass road composed of 6 inches of compacted shell. This bypass road will be removed after completion of the ramp.

b. Railroads.

(1) Item RR-1 (plate 2). The NOPB RR will remove 39 feet of track at gate no. 1 to facilitate the driving of the steel sheet piles and will replace this trackage with the existing material. The floodwall contractor will construct false work (plate 24) required to maintain continuous rail operations during gate construction. The floodwall contractor will place asphalt concrete, as shown on plate 17, to provide a smooth transition over the floodwall gate sill. Providing an asphalt cover is not considered a betterment, since it is provided as a safety measure for railroad employees. The railroad company will provide inspectors and flagmen during all phases of the gate construction. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost where appropriate.

(2) Item RR-2 (plate 2). The NOPB RR will remove 39 feet of track to facilitate the driving of the steel sheet piles at gate no. 2 and will replace this trackage with existing material. The floodwall contractor will construct the false work (plate 24) required to maintain continuous rail operations during gate construction. The floodwall contractor will place asphalt concrete,

as shown on plate 17, to provide a smooth transition over the floodwall gate sill. Providing an asphalt cover is not considered a betterment, since it is provided as a safety measure for railroad employees. The railroad company will provide inspectors and flagmen during all phases of the gate construction. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage plus removal cost, where appropriate.

(3) Item RR-3 (plate 2 thru 4). The NOPB RR will remove approximately 765 feet of track from wall line station 3+06 to 10+70 to facilitate the construction of the floodwall and will relocate the trackage approximately 10 feet riverward of the existing alignment using the existing materials. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost, where appropriate.

(4) Item RR-4 (plate 6). The NOPB RR will remove 39 feet of track to facilitate the driving of the steel sheet piles and construction of gate no. 3, and will replace this trackage using the existing materials. The floodwall contractor will construct the falsework (plate 24) required to maintain continuous rail operations during gate construction. The floodwall contractor will place asphalt concrete, as shown on plate 17, to provide a smooth transition over the floodwall gate sill. Providing an asphalt cover is not considered a betterment, since it is provided as a safety measure for railroad employees. The railroad company will provide inspectors and flagmen during all phases of the gate construction. The Federal Government will

reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost, where appropriate.

(5) Item RR-5 (Plate 7, 8 & 11) The NOPB RR will remove approximately 800 feet of track from wall line station 28+17 to 36+06 and approximately 200 feet of track from wall line station 52+25 to 54+25 to facilitate the construction of the floodwall. The trackage will not be replaced however, NOPB RR will install a crossover track near wall station 40+52 (plate 9) and rework the remainder of this track. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost, where appropriate.

(6) Item RR-6 (plate 8, 11 & 12). The NOPB RR will remove 39 feet of track at gates no. 5, 6 & 7 to facilitate the driving of the steel sheet piles and will replace this trackage with existing materials. The floodwall contractor will construct the falsework (plate 24) required to maintain continuous rail operations during the gate construction. The floodwall contractor will place asphalt concrete as shown on plate 17, to provide a smooth transition over the floodwall gate sill. Providing an asphalt cover is not considered a betterment, since it is provided as a safety measure for railroad employees. The railroad company will provide inspectors and flagmen during all phases of the gate construction. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal costs, where appropriate.

(7) Item RR-7 (Plate 8, 9, 10 & 11). The NOPB RR will remove approximately 1900 feet of track from wall line station 34+50 to 53+50 to facilitate the construction of the floodwall. This trackage will not be replaced. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost, where appropriate.

(8) Item RR-8 (plate 10). The NOPB RR will remove the left hand crossover, as required, (approximately 150 feet) to facilitate the construction of the floodwall from wall line station 46+40 to 47+90. This trackage will not be replaced. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal costs, where appropriate.

(9) Item RR-9 (Plate 11). The NOPB RR will remove the right hand crossover, as required, (approximately 150 feet) to facilitate the construction of the floodwall from wall line station 50+30 to 51+80. This trackage will not be replaced. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal costs, where appropriate.

(10) Item RR-10 (plate 13). The NOPB RR will remove 39 feet of rail to facilitate the driving of the steel sheet piles and construction of gate no. 8 and will replace the trackage with existing materials. The floodwall contractor will construct the falsework (plate 24) required to maintain continuous rail operations during gate construction. The floodwall contractor will place

asphalt concrete as shown on plate 17, to provide a smooth transition over the floodwall gate sill. Providing an asphalt cover is not considered a betterment since it is provided as a safety measure for railroad employees. The railroad company will provide inspectors and flagmen during all phases of the gate construction. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost, where appropriate.

(11) Item RR-11 (Plate 14 & 15). The ICG RR will remove the turnout, as required, (approximately 190 feet) from wall line station 66+48 to 70+20 to facilitate the construction of the floodwall and will relocate this trackage to a new alignment (as shown on plate 15) using the existing materials. The Federal Government will reimburse 100 percent of the relocation costs incurred by the railroad, minus betterments and salvage, plus removal cost, where appropriate.

c. Utilities.

(1) South Central Bell. South Central Bell will relocate the following facilities in a manner discussed below. The Federal Government will reimburse 100 percent of the relocation cost minus betterments, plus removal cost, where appropriate.

(a) Item T-1a (plate 5). To facilitate the driving of the steel sheet piling, South Central Bell will temporarily shift aside this service drop line at wall line station 20+50. Upon completion of the sheet pile driving, South Central Bell will replace it to the original alignment.

(b) Item T-1 (plates 6 and 7). To facilitate the driving of the steel sheet piling, South Central Bell will remove the affected portion of this aerial facility and install an underground cable approximately one foot off the landward shoulder of the existing concrete roadway. This underground cable will run beneath the proposed ramp and tie back into the unaffected sections of item T-1. The relocated length will include approximately 600 linear feet of 100 pair, 26 gauge cable. The tie-in locations will be NOPSI's poles located near the roadway at sub-base line station 25+75 and wall line station 29+55.

(c) Item T-2 (plate 8). The floodwall contractor will skip over the location of the South Central Bell existing buried cable. After the floodwall contractor provides a sleeve through the wall adjacent to the existing alignment, South Central Bell will place a 4-inch diameter steel casing through the wall to contain a 200 pair, 22 gauge cable. The relocated length will include approximately 10 feet of steel casing and 60 linear feet of 200 pair, 22 gauge cable. Upon completion of the relocation, the floodwall contractor will drive the sheet piles through the abandoned South Central Bell facility.

(d) Item T-3 (plate 10). The floodwall contractor will skip over the location of the South Central Bell existing buried cable. After the floodwall contractor provides a sleeve through the wall adjacent to the existing alignment, South Central Bell will place a 10-inch diameter steel casing through the wall to contain three

2-inch diameter wrought iron pipe ducts and a 100 pair, 26 gauge cable. The relocated length will include approximately 10 feet of steel casing, 45 feet of wrought iron pipe and 440 linear feet of cable. Upon completion of the relocation, the floodwall contractor will drive the sheet piles through the abandoned South Central Bell facility.

(e) Item T-4 (plate 15). The floodwall contractor will skip over the location of the South Central Bell existing buried cable. After the floodwall contractor provides a sleeve through the wall adjacent to the existing alignment, South Central Bell will place an 18-inch diameter steel casing through the wall which will contain four 4-inch diameter plastic ducts and a 300 pair, 26 gauge telephone cable. In addition, South Central Bell will install a manhole over the existing conduit run in order to splice the cables together. The relocated length will include approximately 20 feet of steel casing, 30 feet of each plastic duct and 400 linear feet of 900 pair, 26 gauge cable. The Federal Government will only reimburse South Central Bell for the removal and relocation of the 180 linear feet of 300 pair, 26 gauge cable; the three plastic ducts; the cost of the steel casing, and the installation of the manhole. The increase in the length and the size of the cable are considered betterments. Upon completion of the relocation, the floodwall contractor will drive the sheet piles through the abandoned South Central Bell facility.

(f) Item T-5 (plate 15). To facilitate the relocation of Illinois Central Gulf Railroad Company track (item RR-11) caused by the construction of the floodwall, South Central Bell will relocate

the existing telephone junction box and install new cable parallel to the existing alinement. The present cable will be abandoned in place. The relocated length will include approximately 110 linear feet of 100 pair, 26 gauge cable.

(g) Item T-6 (plate 15). The floodwall contractor will skip over the location of the South Central Bell existing buried cable. After the floodwall contractor provides a sleeve through the wall adjacent to the existing alinement, South Central Bell will place a 30-inch diameter steel casing through the wall to contain twelve 4-inch diameter plastic ducts; one 1200 pair, 24 gauge cable; one 900 pair, 22 gauge cable; one 200 pair, 26 gauge cable; and one 25 pair, 19 gauge cable. In addition, South Central Bell will install a manhole over the existing conduit run in order to splice the cables together. The relocated length will include approximately 30 feet of steel casing and 170 linear feet of plastic ducts and cables. The new alinement will run from the existing manhole near gate no. 9 to the relocated manhole in the center of Napoleon Avenue near wall line station 71+20. Upon completion of the relocation, the floodwall contractor will drive the sheet piles through the abandoned South Central Bell facilities.

(h) Item T-7 thru T-9 (plate 16). To facilitate the driving of the steel sheet piling along Napoleon Avenue, South Central Bell will completely rework their distribution system for items T-7, T-8 and T-9. South Central Bell will place approximately 250 linear feet of underground cable underneath ramp no. 2 between two NOPSI power poles. At the power pole on the landside of ramp

no. 2, the underground cable will become aerial and temporarily strung along the relocated power poles of item E-16. This aerial line will measure approximately 200 linear feet and will consist of 100 pair, 26 gauge cable. Upon completion of the floodwall, South Central Bell will reroute the aerial line but will not alter the relocated underground cable.

(2) NOPSI.

The following relocation plans proposed by NOPSI were based on the assumption that pile driving would commence at Nashville Avenue and proceed downriver to Napoleon Avenue. The Federal Government will reimburse NOPSI 100 percent of all relocation costs, minus depreciation, salvage, and betterments, plus removal cost, where appropriate.

(a) Item E-1 (plate 2). To facilitate the driving of the steel sheet piling at wall line station 2+34, NOPSI will first install a temporary bypass line needed to maintain uninterrupted service to customers and then remove 100 linear feet of the existing facility. Upon completion of the sheet pile driving across wall line station 2+34, NOPSI will replace the existing line with the same materials and remove the bypass line. The bypass line will consist of approximately 130 linear feet of 120/240 V service drop lines and one power pole. The relocated aerial crossing will be in accord with Corps of Engineers design criteria for utilities over floodwalls.

(b) Item E-3 (plates 4 and 5). NOPSI will temporarily relocate the facility, which parallels the floodwall alignment between wall line station 14+60 and 18+14, to an alignment across the

adjacent 24 foot concrete roadway. In order to maintain uninterrupted service to their customers, NOPSI will provide a secondary source of power originating from Bell Castle Street by installing approximately 360 linear feet of 24Kv powerline and splicing into that system downriver. Upon completion of driving the sheet piles in the area, NOPSI will replace the existing facility approximately 12 feet from the floodwall.

(c) Item E-4. Reserved.

(d) Item E-5 (plate 5). To facilitate the driving of the steel sheet piling at wall line station 21+08, NOPSI will first install a bypass line needed to maintain continuous service and then remove approximately 260 linear feet of the existing facility. Upon completion of the sheet pile driving across wall line station 21+08, NOPSI will replace the existing line with the same materials and remove the bypass line. The bypass line will consist of approximately 200 linear feet of 24Kv primary lines and one power pole. The relocated aerial crossing will be in accord with Corps of Engineers design criteria for utilities over floodwalls.

(e) Item E-6 (plates 6 and 7). To facilitate the driving of the steel sheet piling between wall line station 26+28 to 30+81, NOPSI will remove approximately 600 linear feet of this facility. Upon completion of the sheet pile driving, NOPSI will replace it with the materials removed. The relocated aerial crossing will be in accord with Corps of Engineers design criteria for utilities over floodwalls.

(f) Item E-7 (plate 7). To facilitate the driving of the steel sheet piling in the vicinity of wall line station 30+67, NOPSI will remove 220 linear feet of this facility. Upon completion of the sheet pile driving, NOPSI will replace it with materials removed. The customers normally serviced by this primary line, will have power provided by secondary sources from Jefferson Street and Dufossat Street. The relocated aerial crossing will be in accord with Corps of Engineers design criteria for utilities over floodwalls.

(g) Item E-8 (plate 7). To facilitate the driving of the steel sheet piling between wall line station 30+83 to 31+00, NOPSI will temporarily rework the electric system affected and relocate only the power cables and cross arms. The power poles located at wall line stations 30+90 and 31+00 will remain in place. NOPSI will install a head guy wire at the primary level to act as a safety barrier within this area. Upon completion of the sheet pile driving, NOPSI will replace it with materials used.

(h) Item E-9 (plates 7 and 8). NOPSI will relocate this facility which parallels the floodwall alinement between wall line stations 32+45 to 34+50, to an alinement approximately 25 feet riverward of the existing facility. Approximately 350 linear feet of 13.8 Kv primary lines and five power poles will be installed as a temporary facility. Only the power poles of the existing facility will remain in place during pile driving operations. Upon completion of the sheet pile driving, NOPSI will replace it with materials removed.

(i) Item E-10 (plates and 7 and 8). To facilitate the driving of the steel sheet piling between wall line stations 32+75 to 33+53, NOPSI will relocate the underground facility by extending the cable underground directly from the transformers to the relocated poles of item E-9. Approximately 150 linear feet of underground electrical conduit will be involved in this relocation.

(j) Item E-11 (plate 8). To facilitate the driving of the steel sheet piling at wall line station 34+50, NOPSI will first install a temporary bypass line needed to maintain uninterrupted service to customers and then remove approximately 350 linear feet of the existing facility. Upon completion of the sheet pile driving across wall line station 34+50, NOPSI will replace the existing line with the same materials and remove the bypass line. The bypass line will consist of approximately 350 linear feet of two 24 Kv primary circuits. The relocated aerial crossing will be in accord with Corps of Engineers design criteria for utilities over floodwalls.

(k) Item E-12 (plate 10). The floodwall contractor will drive the steel sheet pile through the unused conduit and install a sleeve along the existing alinement. NOPSI will place an 18-inch diameter pipe with four 5-inch PVC conduits inside the floodwall sleeve and plug the pipe on both sides of the floodwall until needed.

(l) Item E-13 (plates 12 and 13). NOPSI will relocate this facility, which parallels the floodwall alinement between wall line stations 57+35 and 61+75, to an alinement approximately 24 feet riverward of the floodwall alinement. Upon completion of the driving

of the sheet piling, NOPSI will replace 380 linear feet of 24 Kv powerlines, using the materials removed.

(m) Item E-14 (plate 14). To facilitate the driving of the steel sheet piling at wall line station 63+72, NOPSI will first permanently relocate the facility to a new alinement and then remove the existing facility. The relocation work involved will include the removal of 60 linear feet of 240/480 V service drop and one power pole containing a transformer and the installation of 60 linear feet of 240/480 V service drop, three power poles and one transformer. The relocated aerial crossing will be in accord with Corps of Engineers design criteria for utilities over floodwalls.

(n) Items E-15 thru E-18 (plates 15 and 16). To facilitate the driving of the steel sheet piling along Napoleon Avenue between wall line stations 70+10 and 76+05, NOPSI will relocate these facilities as one system since items E-15, E-17 and E-18 branch off of the primary line designated as item E-16. This relocation will consist of the removal of approximately 1500 linear feet of various types and sizes of powerlines, two power poles near wall line stations 70+35 and 74+76, crossarms on the remaining power poles and five transformers. NOPSI will temporarily relocate these facilities by realining item E-16 away from the floodwall alinement and connecting items E-15, E-17 and E-18 to the relocated poles. The quantities of materials to be installed for the temporary relocation of these facilities include 1600 linear feet of powerlines, seven power poles and two transformers. Upon completion of the floodwall construction,

NOPSI will replace these facilities to their existing alignment with the materials used. The relocated aerial crossings will be in accord with Corps of Engineers design criteria for utilities over floodwalls.

(o) Item G-1 (plate 4). NOPSI will temporarily install a bypass line and remove a short section of the existing 2-inch diameter facility near wall line station 11+75. Upon completion of the sheet pile driving a new section of 2-inch diameter gas pipe will be installed through the wall sleeve and the temporary bypass line removed. The relocated facility will consist of 12 feet of steel pipe.

(p) Item G-2 (plate 8). NOPSI will temporarily install a bypass line and remove a short section of the existing 4-inch diameter facility near wall line station 34+23. Upon completion of the sheet pile driving a new section of 4-inch diameter gas pipe will be installed through the wall sleeve and the temporary bypass line removed. The relocated facility will consist of 12 feet of steel pipe.

(3) Dock Board. The floodwall contractor will relocate all Dock Board's waterlines, sewerlines and storm drainage facilities, and install sleeves for all Dock Board's facilities. The cast iron waterlines will be relocated, using cast iron pipe. The clay sewerlines and concrete storm drains will be relocated using the same material, except that concrete pipe will be used at the point where they pass through the floodwall. All sewerlines and storm drains will have a gate valve installed on the protected side to prevent flood waters from entering the protected areas through these facilities. The valves will be installed in either valve boxes or manholes.

(a) Item W-1 (plate 2). The floodwall contractor will relocate 12 feet of this 8-inch-diameter cast iron waterline through the floodwall on the existing waterline alinement.

(b) Item W-2 (plate 5). The floodwall contractor will relocate 12 feet of this 12-inch-diameter cast iron waterline through the floodwall on the existing waterline alinement.

(c) Item W-3 (plate 7). The floodwall contractor will relocate 12 feet of this 6-inch-diameter cast iron waterline through the floodwall on the existing waterline alinement.

(d) Item W-4 (plate 8). The floodwall contractor will relocate 12 feet of this 12-inch-diameter cast iron waterline through the floodwall on the existing waterline alinement.

(e) Item W-5 (plate 11). The floodwall contractor will relocate 12 feet of this 12-inch-diameter cast iron waterline through the floodwall on the existing waterline alinement at wall line station 52+04. In addition, the floodwall contractor will relocate 12 feet of the 12-inch-diameter cast iron waterline through the floodwall on the existing waterline alinement at wall line station 53+94.

(f) Item W-6 (plate 14). The floodwall contractor will relocate 12 feet of this cast iron waterline through the floodwall on the existing waterline alinement. The diameter of the pipe is unknown.

(g) Item S-1 (plate 7). The floodwall contractor will relocate this 6-inch-diameter sewerline through the floodwall on the existing waterline alinement; the relocated facility will consist of 12 feet of concrete pipe and a gate valve installed in a manhole.

(h) Item S-2 (plate 8). The floodwall contractor will relocate this 6-inch-diameter sewerline through the floodwall on the existing sewerline alignment; the relocated facility will consist of 12 feet of concrete pipe and a gate valve installed in a manhole.

(i) Item S-3 (plate 10). The floodwall contractor will relocate this 10-inch-diameter sewerline through the floodwall on the existing sewerline alignment; the relocated facility will consist of 12 feet of cast iron pipe and a gate valve installed in a manhole.

(j) Item S-4 (plate 12). The floodwall contractor will relocate this 6-inch-diameter sewerline through the floodwall on the existing sewerline alignment; the relocated facility will consist of 12 feet of concrete pipe and a gate valve installed in a manhole.

(k) Item S-5 (plate 14). The floodwall contractor will relocate this 8-inch-diameter sewerline through the floodwall on the existing sewerline alignment; the relocated facility will consist of 12 feet of cast iron pipe and a gate valve installed in a valve box.

(l) Item SD-1 (plates 3&4). The floodwall contractor will remove 40 feet of this 12-inch diameter storm drain and one drop inlet; the relocated facility will consist of the installation of a drop inlet on the protected side of the floodwall.

(m) Item SD-2a (plate 5). The floodwall contractor will remove approximately 12 feet of this 8-inch diameter storm drain, as required by the construction of the floodwall. This facility will drain into a proposed ditch on the protected side of the floodwall.

(n) Item SD-2 (plate 5). The floodwall contractor will remove approximately 12 feet of this 12-inch diameter storm drain, as required by the construction of the floodwall. This facility will drain into a proposed ditch on the protected side of the floodwall.

(o) Item SD-3 (plate 5). The floodwall contractor will relocate this 18-inch-diameter storm drain through the floodwall on the existing storm drain alignment; the relocated facility will consist of 12 feet of concrete pipe, a drop-inlet and a gate valve installed in a valve box.

(p) Item SD-4 (plate 6). Reserved.

(q) Item SD-5 (plate 7). The floodwall contractor will relocate this 30-inch diameter storm drain through the floodwall on the existing storm drain alignment; the relocated facility will consist of 12 feet of concrete pipe and a gate valve installed in a valve box.

(r) Item SD-6 (plate 8). The floodwall contractor will relocate this 30-inch diameter storm drain through the floodwall on the existing storm drain alignment; the relocated facility will consist of 12 feet of concrete pipe and a gate valve installed in a valve box.

(s) Item SD-7 (plate 11). The floodwall contractor will relocate this 24-inch diameter storm drain through the floodwall on the existing storm drain alignment; the relocated pipe will consist of 12 feet of concrete pipe and a gate valve installed in a valve box.

(t) Item SD-8 (plate 12). The floodwall contractor will relocate this 30-inch diameter storm drain through the floodwall on the existing storm drain alignment; the relocated facility will consist of 12 feet of concrete pipe and a gate valve installed in a valve box.

(u) Item SD-9 (plate 14). The floodwall contractor will relocate this 30-inch diameter storm drain through the floodwall on the existing storm drain alignment; the relocated facility will consist of 12 feet of concrete pipe and a gate valve installed in a valve box.

(v) Item SD-10 (plate 14). The floodwall contractor will relocate this 15-inch diameter storm drain outside the floodwall alignment; the relocated facility will consist of 50 feet of metal pipe.

(w) Item SD-11 (plate 14). The floodwall contractor will relocate this 8-inch diameter storm drain through the floodwall on the existing storm drain alignment; the relocated facility will consist of 12 feet of concrete pipe, one manhole and a gate valve installed in a valve box.

(x) Item CR-1 (plate 9). The floodwall contractor will remove 150 feet of this facility, as required for NOPB RR to install a crossover track caused by the construction of the floodwall. This facility will not be replaced and the remaining portion will be abandoned in place by owner.

(y) Item CR-2 (plate 11). The floodwall contractor will remove 60 feet of this facility, as required to construct the floodwall. This facility will not be replaced and the remaining portion will be abandoned in place by owner.

(z) Item D-1 (plate 11). The floodwall contractor will remove the loading dock and timber piles as required to construct the floodwall. This facility will not be replaced.

d. Others. Items E-2, O-1 and O-2 will be relocated by the owners in a manner which will eliminate interference with the Nashville-Napoleon Avenue Floodwall project.

9. PROCEDURE FOR ACCOMPLISHING RELOCATIONS

a. Roads. This district will prepare the detailed plans and specifications for the relocation of R-1, R-2, R-3 (Dufossat St.) R-4 (Napoleon Ave.) and R-5 and will accomplish the adjustments in accordance with this design memorandum, and in conjunction with the floodwall construction contract. The City of New Orleans Street Department and the Dock Board will review and approve the design of the roadways. No new road right-of-way will be required.

b. Railroads. The NOPB RR and the ICG RR will prepare detailed plans and specifications for the relocation of their trackage (items RR-1 thru RR-11) and will accomplish the relocations in accordance with this design memorandum, and in conjunction with the floodwall construction contract, except for the false work. All relocation

plans will be reviewed by this district to determine if they are compatible with floodwall plans. This district will prepare the detailed plans and specifications for the construction of the false work required for the relocation of items RR-1 thru RR-11. The construction will be accomplished in accordance with this design memorandum and in conjunction with the floodwall construction contract. The false work plans will be reviewed and approved by the railroad companies. All railroad relocation work will be closely coordinated between the railroad companies and the floodwall contractor. The Orleans Levee District, as the local assuring agency, will be requested to accomplish the railroad relocations, except for the false work described herein in accordance with this design memorandum and subject to reimbursement of allowable cost not to exceed a given dollar amount. The dollar limit provided will be based on the approved design memorandum; however, reimbursement will be based on actual cost (less betterments and salvage and plus removal cost, as applicable). Upon completion of the relocations for which reimbursements are to be made, the Orleans Levee District will furnish a reimbursement assembly to this district consisting of: A copy of any contracts (including plans and specifications) covering work performed by others or itemized billings for labor and materials if the work were performed by the owner, and a copy of all canceled checks covering related payments. Further, all records related to the reimbursement request will be subject to audit by the Government and original time cards or payrolls, material

records, and accounts for all charges and expenditures for which reimbursement will be claimed from the Government will be available at all reasonable times for Government inspection. Finally, as far as practicable, separate records will be maintained for all items and accounts constituting the basis of information from which the reimbursement assembly is prepared.

c. Utilities.

(1) South Central Bell Telephone Company and New Orleans Public Service, Inc., will prepare detailed plans and specifications for the relocation of their facilities (items T-1a thru T-9, E-1, E-3 thru E-18, and will accomplish the relocations in accordance with this design memorandum and in conjunction with the floodwall construction contract. These relocation plans will be reviewed by this district to determine if the plans are compatible with the floodwall plans. All telephone and electric facility relocations will be closely coordinated between the facility owners and the floodwall construction contractor. The Orleans Levee District, as the local assuring agency, will be requested to effect the utility relocations described herein in accordance with the approved design memorandum and subject to reimbursement of actual cost not to exceed a given dollar amount. The dollar limit provided will be based on the approved design memorandum; however, reimbursements will be based on actual cost (less depreciation, salvage and betterments, and plus removal cost, as applicable). Upon completion of the relocation, the Orleans Levee District will furnish a reimbursement assembly to this district consisting of: A copy of any contracts (including plans and specifications) covering work performed

by others or itemized billings for labor and materials if the work was performed by the owner, and a copy of all canceled checks covering related payments. Further, all records related to the reimbursement request will be subject to audit by the Government and original time cards or payrolls, material records, and accounts for all charges and expenditures for which reimbursement will be claimed from the Government will be available at all reasonable times for Government inspection. Finally, so far as practicable, the owner will maintain separate records for all items and accounts constituting the basis of information from which the reimbursement assembly is prepared.

(2) This district will prepare detailed plans and specifications for the relocation or abandonment of the Dock Board's facilities (items W-1 thru W-6, S-1 thru S-6, SD-1 thru SD-11, CR-1, CR-2 and D-1), and will accomplish the construction in accordance with the design memorandum and in conjunction with the floodwall construction. The relocation plans for all the facilities will be reviewed and approved by the Dock Board.

d. Others. The relocation of items E-2, O-1 and O-2 as necessitated by the Nashville-Napoleon Avenue Floodwall project will be accomplished by the affected owners.

10. ATTITUDE OF OWNERS.

Except for the ICG RR, all affected facility owners have responded satisfactorily to all requests for informations and have indicated their willingness to cooperate in matters pertaining to the project. The ICG RR objected to expending significant engineering

expense on the project prior to written assurance that such expense will be reimbursed by the government. Upon receiving this assurance we do not anticipate further difficulties with ICG RR.

11. FACILITIES NOT AFFECTED. The New Orleans Public Belt Railroad Company owns trackage on both sides of the proposed floodwall throughout the entire reach, which will not be affected by the floodwall project. The City of New Orleans owns Nashville Avenue (plate 2), which will not be affected by the floodwall project. The Dock Board owns item S-6 (plate 16) which is located parallel to the floodwall alignment along Napoleon Avenue and which will not be affected by the floodwall project. The New Orleans Public Service, Inc. owns several electric lines that are relatively close to the floodwall alignment which will not be affected by the project. However, in those areas the floodwall contractor will be required to work with extreme caution.

12. ESTIMATE OF COST. Estimates of cost for accomplishing the proposed relocations have been prepared in accordance with the policy set forth in ER 1180-1-1 and with the previously noted exception of ICG RR, are based on plans for relocation, as proposed by or agreed to by the affected owners. These estimates are presented in tables 2 through 6. A relocation cost summary is attached as appendix II.

13. COMPARISON WITH PRIOR COST ESTIMATES. The current working estimate of cost is summarized under the uniform cost classification for comparison with the latest approved cost estimate. The latest approved cost estimate is the Project Cost Estimate (PB-3) for the Mississippi River Levees project, New Orleans District, bearing an effective date of 1 October 1977, as approved 1 June 1977 (for construction funds). Since the PB-3 contains the relocation cost estimates for the entire Mississippi River Levees project, the funds included for item M-100.0-L, Nashville-Napoleon Street Floodwall, have been broken out as follows for a suitable comparison.

Mississippi River Levees - Construction

<u>Cost Acct. No.</u>		<u>Latest PB-3 (\$1,000's)</u>	<u>Current Working Estimate (\$1,000's)</u>	<u>Difference From PB-3 (\$1,000's)</u>
02	Relocations			
0.1	Roads	36.0	110.0	+74.0
0.4	Railroads	384.0	415.0	+31.0
0.7	Utilities	356.0	407.0	+51.0
30	E&D	47.0	47.0	0.0
31	S&A	<u>47.0</u>	<u>47.0</u>	<u>0.0</u>
	Total	870.0	1,026.0	156.0

TABLE 2 - ESTIMATE OF COST
 CITY OF NEW ORLEANS - ROADS
 (JUNE 1977 PRICE LEVELS)

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost (\$)	Amount (\$)
02	Relocations				
0.1	Roads				
	Item R-3 (Dufossat St.)	Lump Sum (LS)	LS	900	900
	Item R-4 (Napoleon Ave.)	LS	LS	3,100	3,100
	Bypass Road for Item R-4	LS	LS	2,000	2,000
	RELOCATION COST				<u>6,000</u>
	Contingencies (25%±)				<u>2,000</u>
	Subtotal				8,000 ¹
30	E&D (6%±)				500
31	S&A (6%±)				<u>500</u>
	Total				9,000

¹ No removal cost because removal is incidental to the floodwall construction. No betterments and no new right-of-way required.

TABLE 3 - ESTIMATE OF COST
 BOARD OF COMMISSIONERS
 PORT OF NEW ORLEANS - ROADS
 (June 1977 Price Levels)

Cost Acct No.	Description	Unit	Quantity	Lump Sum Cost \$	Amount \$
02	Relocations				
0.1	Roads				
	Item R-1	Lump Sum(LS)	LS	2,600	2,600
	Item R-2 (Ramp No. 1)	LS	LS	52,000	52,000
	Bypass Road for Item R-2	LS	LS	8,400	8,400
	Item R-5 (Ramp No. 2)	LS	LS	14,200	14,200
	Bypass Road for Item R-5	LS	LS	4,000	<u>4,000</u>
	RELOCATION COST				81,200
	Contingencies (25%+)				<u>20,800</u>
	Subtotal				102,000 ^{1, 2}
30	E&D (6% +)				6,250
31	S&A (6% +)				<u>6,250</u>
	TOTAL				114,000

¹No removal cost because removal is incidental to the floodwall construction. No betterments and no new right-of-way required.

²This work is included in the floodwall contract.

TABLE 4 - ESTIMATE OF COST
 NEW ORLEANS PUBLIC BELT RAILROAD
 (June 1977 Price Levels)

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost (\$)	Amount (\$)
02	Relocation				
0.4	Railroads				
	Item RR-1	Feet	39	16,600	16,600 ¹
	Item RR-2	Feet	39	16,600	16,600 ¹
	Item RR-3	Feet	550	13,000	13,000
	Item RR-4	Feet	39	16,600	16,600 ¹
	Item RR-5	Feet	150	17,000	17,000 ²
	Item RR-6	Feet	3-39	16,600	49,800 ³
	Item RR-10	Feet	39	16,600	<u>16,600¹</u>
	Relocation Cost				134,200
	Removal Cost				
	Item RR-1	Feet	39	1,000	1,000
	Item RR-2	Feet	39	1,000	1,000
	Item RR-3	Feet	765	5,000	5,000
	Item RR-4	Feet	39	1,000	1,000
	Item RR-5	Feet	800	6,000	6,000

TABLE 4 - ESTIMATE OF COST
NEW ORLEANS PUBLIC BELT RAILROAD
(June 1977 Price Levels)

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost (\$)	Amount (\$)
	Item RR-6	Feet	3-39	1,000	3,000 ⁴
	Item RR-7	Feet	1900	17,500	17,500
	Item RR-8	Feet	150	4,000	4,000
	Item RR-9	Feet	150	4,000	4,000
	Item RR-10	Feet	39	1,000	<u>1,000</u>
	Removal Cost				<u>43,500</u>
	Subtotal				189,700
	Warning Devices				<u>96,000⁵</u>
	Subtotal				285,700
	Less Salvage				<u>900</u>
	Subtotal				284,800
	Contingencies (25±)				<u>71,200</u>
	Subtotal				356,000
30	E&D (6±)				13,000
31	S&A (6±)				<u>13,000</u>
	TOTAL				\$382,000

1 Includes \$15,000 for falsework.

2 Includes installation of a crossover track (150 feet for a total of \$5,000) and reworking of existing track (400 feet for a total of \$12,000).

3 Includes cost of installation and falsework for three locations (\$4,800 for installation and \$45,000 for falsework).

4 Includes removal at three locations.

5 Warning devices for gates 1, 2, 3 and 4 (3 systems at \$32,000 each)

TABLE 5 - ESTIMATE OF COST
ILLINOIS CENTRAL GULF RAILROAD
(June 1977 Price Levels)

Cost Acct.				Lump Sum	
No.	Description	Unit	Quantity	Cost (\$)	Amount (\$)
02	Relocation				
04	Railroads				
	Item RR-11	Feet	190		
	Relocation Cost				12,000
	Removal Cost				<u>3,000</u>
	Subtotal				15,000
	Warning Devices				<u>32,000¹</u>
	Subtotal				47,000
	Contingencies (25±)				<u>12,000</u>
	Subtotal				59,000 ^{2, 3}
30	E&D (6%±)				3,500
31	S&A (6%±)				<u>3,500</u>
	TOTAL				66,000

¹ Warning devices for Napoleon Avenue.

² No salvage because materials to be reused.

³ No betterments.

TABLE 6
ESTIMATE OF COST
SOUTH CENTRAL BELL TELEPHONE COMPANY
(1977 Price Levels)

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost	Amount (\$)
02	Relocations				
	Utilities & Structures				
	Item T-1A	LS	LS		50
	Item T-1	LS	LS		2100
	Item T-2	LS	LS		2300
	Item T-3	LS	LS		1500
	Item T-4	LS	LS		12100
	Item T-5	LS	LS		800
	Item T-6	LS	LS		21000
	Item T-7	LS	LS		1300
	Item T-8	LS	LS		0
	Item T-9				<u>1650</u>
	Relocation Cost				42800
	Removal Cost				
	Item T-1A	LS	LS		50
50	Item T-1	LS	LS		300
	Item T-2	LS	LS		100
	Item T-3	LS	LS		400
	Item T-4	LS	LS		650
	Item T-5	LS	LS		50

TABLE 6
ESTIMATE OF COST
SOUTH CENTRAL BELL TELEPHONE COMPANY
(1977 Price Levels)

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost (\$)	Amount (\$)
	Item T-6	LS	LS		1550
	Item T-7	LS	LS		400
	Item T-9	LS	LS		<u>200</u>
	Removal Cost				3700
	Subtotal				46500
	Less Cost of Betterments				1750 ¹
	Subtotal				<u>44750</u>
	Contingencies (25%±)				11250
	Subtotal				<u>56000²</u>
	E&D (6%±)				3500
	S&A (6%± ⁶)				<u>3500</u>
	TOTAL				63000

¹ Includes cost differentials in placing 200 pair cable rather than 100 pair cable for item T-3 (\$300 and 440 linear feet of 900 pair cable rather than 175 feet of 300 pair cable for item T-4 (\$1,450).

² No depreciation based on ECI 73-209.3, change 21 dated 20 February 1974.

TABLE 7
ESTIMATE OF COST
NEW ORLEANS PUBLIC SERVICE, INC.
(June 1977 Price Levels)

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost (\$)	Amount (\$)
02	Relocations				
0.7	Utilities & Structures				
	Phase I	Lump Sum (LS)	LS	10,500	10,500
	Item E-1				
	Item E-3				
	Item E-4				
	Item E-5				
	Item E-6				
	Item E-7				
	Phase II	LS	LS	22,000	22,000
	Item E-8				
	Item E-9				
	Item E-11				
	Phase III	LS	LS	5,000	5,000
	Item E-13				
	Item E-14				
	Phase IV	LS	LS	21,000	21,000
	Item 15				
	Item 16				
	Item 17				
	Item 18				
	Phase V	LS	LS	10,500	10,500
	Item E-10				
	Phase VI	LS	LS	4,500	<u>4,500</u>
	Item E-11				
	Relocation Cost				73,500

TABLE 7
ESTIMATE OF COST
NEW ORLEANS PUBLIC SERVICE, INC.
(June 1977 Price Levels)

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost (\$)	Amount (\$)
	Removal Cost				
	Phase I	LS	LS	5,300	5,300
	Item E-1				
	Item E-3				
	Item E-4				
	Item E-5				
	Item E-6				
	Item E-7				
	Phase II	LS	LS	8,700	8,700
	Item E-8				
	Item E-9				
	Item E-11				
	Phase III	LS	LS	2,500	2,500
	Item E-13				
	Item E-14				
	Phase IV	LS	LS	10,000	<u>10,000</u>
	Item E-15				
	Item E-16				
	Item E-17				
	Item E-18				
	Removal Cost				26,500
	Subtotal				100,000
	Contingencies (25%±)				<u>25,000</u>
	Subtotal				125,000 ^{1,2,3}
	E&D (6%±)				7,500
	S&A (6%±)				7,500
					<u>140,000</u>

¹ No betterments.

² Material removed and not reused has zero salvage value.

³ No depreciation based on ECI 73-209.3, Change 21 dated 20 February 1974.

TABLE 8
ESTIMATE OF COST
BOARD OF COMMISSIONERS
PORT OF NEW ORLEANS
(June 1977 Price Levels)

Cost Acct No.	Description	Unit	Quantity	Lump Sum Cost \$	Amount \$
02	Relocations				
0.7	Utilities and Structures				
	Item W-1	Feet	12	3,000	3,000
	Item W-2	Feet	12	2,800	2,800
	Item W-3	Feet	12	1,400	1,400
	Item W-4	Feet	12	2,800	2,800
	Item #-5	Feet	12	5,600	5,600 ¹
	Item W-6	Feet	12	2,800	2,800
	Item S-1	Feet	12	2,200	2,200
	Item S-2	Feet	12	2,200	2,200
	Item S-3	Feet	12	1,700	1,700
	Item S-4	Feet	12	1,500	1,500
	Item S-5	Feet	12	2,700	2,700
	Item SD-1	Feet	40	600	600
	Item SD-3	Feet	12	4,800	4,800
	Item SD-5	Feet	12	25,000	25,000
	Item SD-6	Feet	12	25,000	25,000
	Item SD-7	Feet	12	22,000	22,000
	Item SD-8	Feet	12	25,000	25,000

TABLE 8
 ESTIMATE OF COST
 BOARD OF COMMISSIONERS
 PORT OF NEW ORLEANS
 (June 1977 Price Levels (Cont'd))

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost \$	Amount \$
	Item SD-9	Feet	12	25,000	25,000
	Item SD-10	Feet	50	1,500	1,500
	Item SD-11	Feet	12	1,000	<u>1,000</u>
	RELOCATION COST				158,600
	Removal Cost				
	Item W-1	Feet	12	1,200	1,200
	Item W-2	Feet	12	1,800	1,800
	Item W-3	Feet	12	800	800
	Item W-4	Feet	12	1,800	1,800
	Item W-5	Feet	12	3,600	3,600 ¹
	Item W-6	Feet	12	1,800	1,800
	Item S-1	Feet	12	250	250
	Item S-2	Feet	12	250	250
	Item S-3	Feet	12	150	150
	Item S-4	Feet	12	150	150
	Item S-5	Feet	12	300	300
	Item SD-1	Feet	40	600	600
	Item SD-2a	Feet	12	150	150

TABLE 8
 ESTIMATE OF COST
 BOARD OF COMMISSIONERS
 PORT OF NEW ORLEANS
 (June 1977 Price Levels (Cont'd))

Cost Acct. No.	Description	Unit	Quantity	Lump Sum Cost	Amount
				\$	\$
	Item SD-2	Feet	12	150	150
	Item SD-3	Feet	12	600	600
	Item SD-5	Feet	12	500	500
	Item SD-6	Feet	12	500	500
	Item SD-7	Feet	12	400	400
	Item SD-8	Feet	12	500	500
	Item SD-9	Feet	12	500	500
	Item SD-10	Feet	50	600	600
	Item SD-11	Feet	12	100	100
	Item CR-1	Feet	150	2,250	2,300
	Item CR-2	Feet	60	900	900
	Item D-1	Lump Sum(LS)	LS	2,500	2,500
	REMOVAL COST				<u>22,400</u>
	Subtotal				181,000
	Contingencies (25%+)				<u>45,000</u>
	Subtotal				226,000 ^{2,3,4,5}
30	E&D (6%+)				12,000
31	S&A (6%+)				<u>12,000</u>
	TOTAL				250,000

Footnotes - See page 4

TABLE 8
ESTIMATE OF COST
BOARD OF COMMISSIONERS
PORT OF NEW ORLEANS
(June 1977 Price Levels (Cont'd))

Footnotes:

- ¹ Cost shown relates to relocation work at two locations.
- ² No depreciation based on ECI 73-209, change 21, dated 21 February 1974.
- ³ No betterments.
- ⁴ Clay and concrete pipe removed will be removed and disposed of by the floodwall contractor without consideration of salvage value. The floodwall contractor will reuse cast iron pipe; if the pipe cannot be reused, the pipe will be junked without consideration of salvage.
- ⁵ All above relocation work will be accomplished by the floodwall contractor as part of the Government contract.

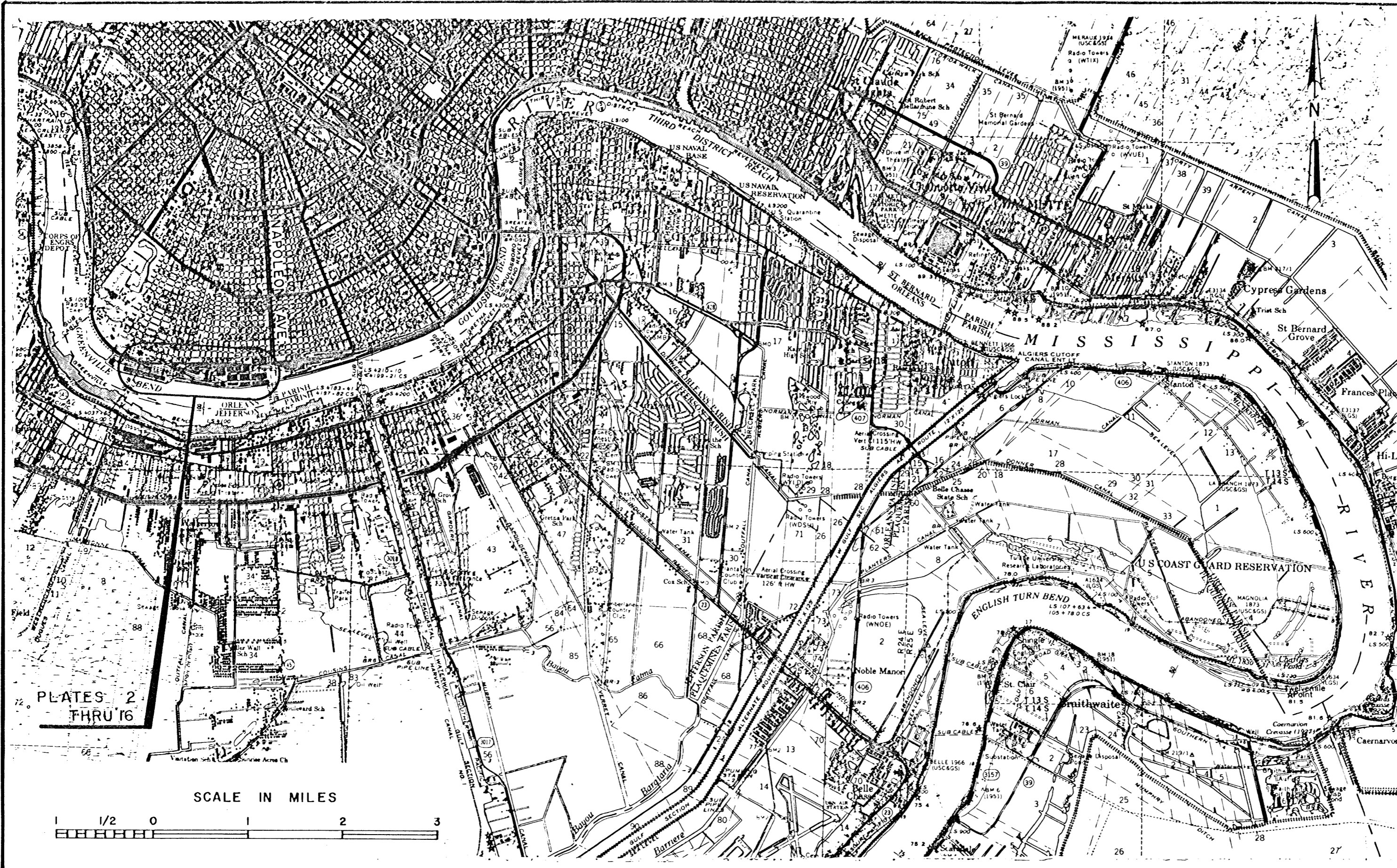
14. JUSTIFICATION FOR COST REVISION.

a. Roads. The PB-3 estimate provided for the relocation of the Dock Board owned roadways (items R-1, R-2 and R-5) and the City of New Orleans owned roadway (item R-4). As a result of continued coordination with local interest in an effort to obtain an alinement acceptable to the Board of Commissioners Port of New Orleans and the Board of Levee Commissioners of the Orleans Levee District, a revised alinement was developed. The revised alinement contains the addition of a gate across Dufossat Street (item R-3) and the enlargement of ramp sizes for items R-2 and R-5 resulting in the estimate increased cost.

b. Railroad. The PB-3 estimate provided for railroad warning devices for gates 1, 2 and 9 but did not include a warning device for gate 4 across Dufossat Street.

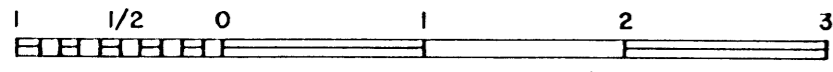
c. Utilities. The PB-3 estimate for the relocation of utilities was based on a preliminary floodwall alinement without detail inspection and knowledge of pipeline sizes. As a result of continued investigation with utility owners items SD-5, 6, 8 and 9 were found to be unexpectedly large storm drains (30-inch) requiring costly gates valves resulting in estimated increased cost.

15. RECOMMENDATIONS. It is recommended that this design memorandum be approved as the basis for reimbursing the Orleans Levee District for costs incurred in accomplishing the railroad and utility relocations herein described.



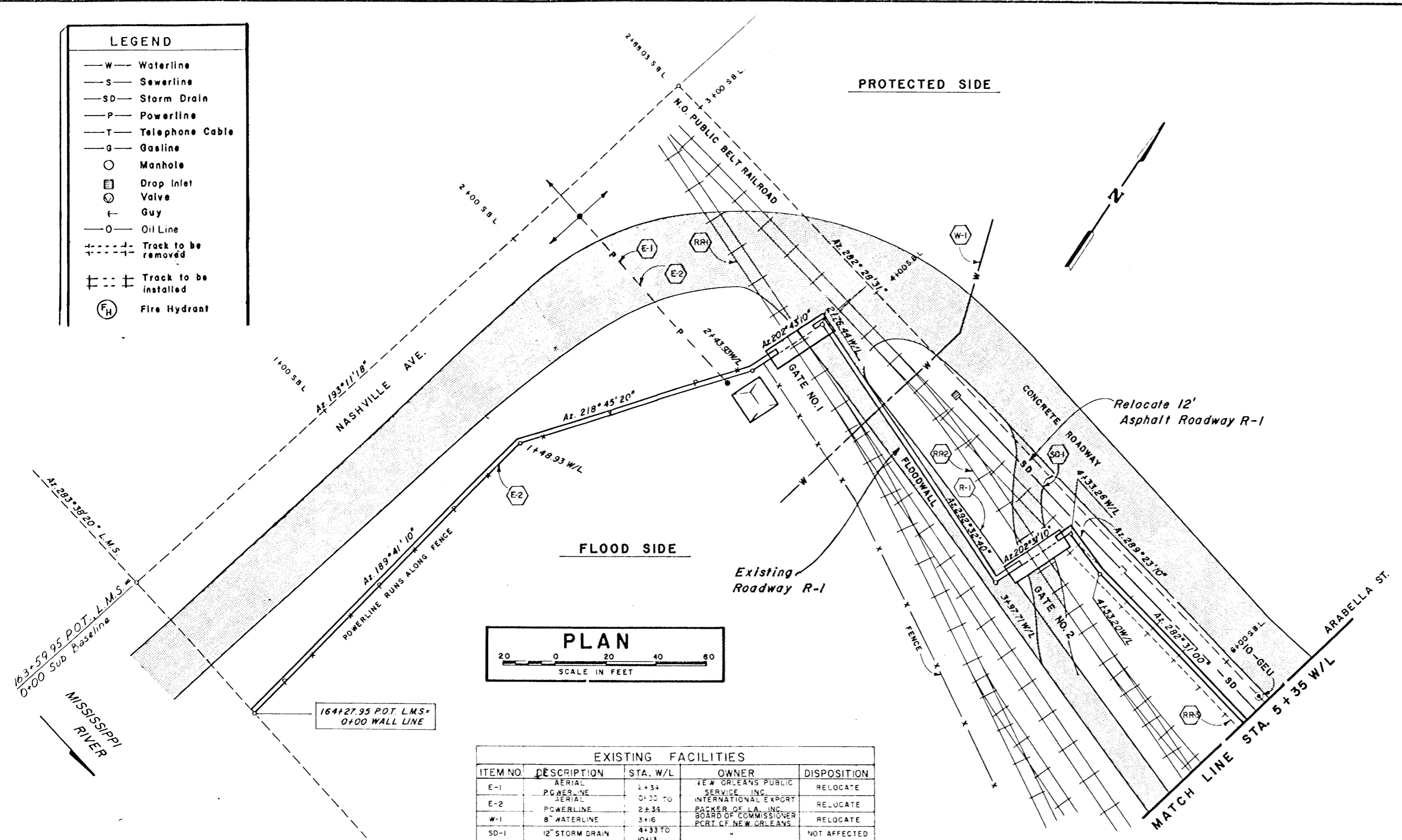
PLATES 2
THRU 16

SCALE IN MILES



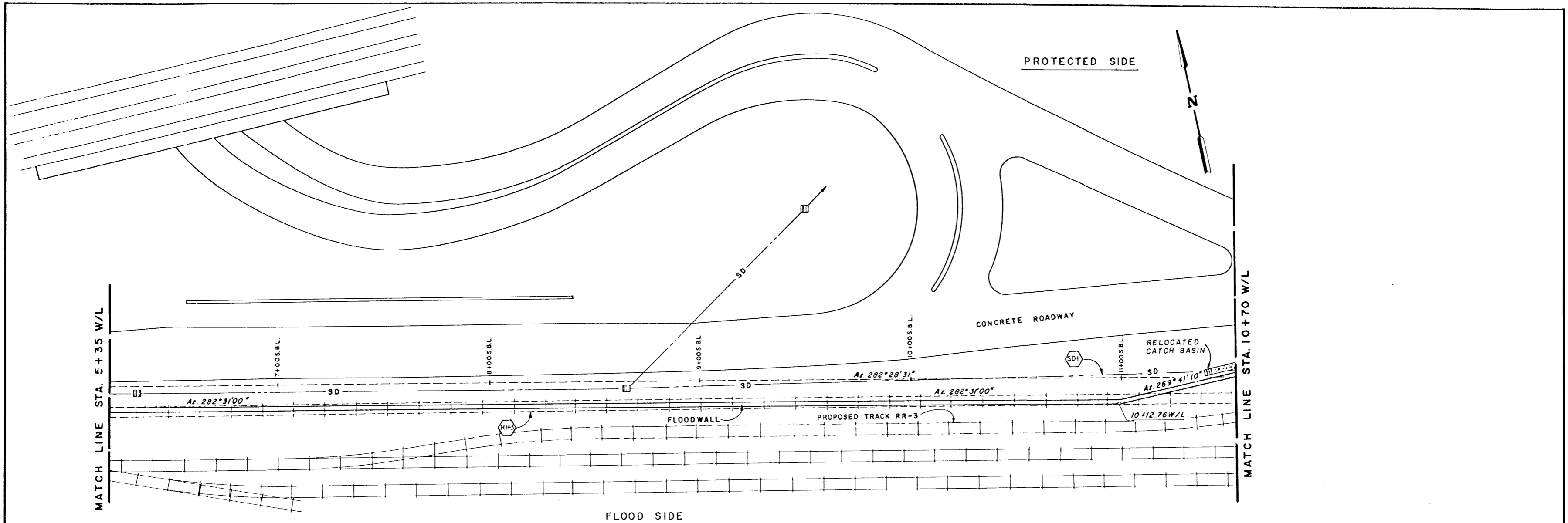
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0-L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
LOCATION MAP
U. S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
JUNE 1977 FILE NO. H-2-28128

LEGEND	
—W—	Waterline
—S—	Sewerline
—SD—	Storm Drain
—P—	Powerline
—T—	Telephone Cable
—G—	Gasline
○	Manhole
⊞	Drop Inlet
⊙	Valve
+	Guy
—O—	Oil Line
- - - - -	Track to be removed
- - - - -	Track to be installed
⊕	Fire Hydrant



EXISTING FACILITIES				
ITEM NO.	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
E-1	AERIAL POWERLINE	2+34	NEW ORLEANS PUBLIC SERVICE INC.	RELOCATE
E-2	AERIAL POWERLINE	0+00 TO 2+34	INTERNATIONAL EXPORT PACER OF LA. INC. BOARD OF COMMISSIONER PORT OF NEW ORLEANS	RELOCATE
W-1	8" WATERLINE	3+16	"	RELOCATE
SD-1	12" STORM DRAIN	4+33 TO 10+13	"	NOT AFFECTED
R-1	12" ASPHALT ROADWAY	2+76 TO 3+28	"	RELOCATE
RR-1	RAILROAD TRACK	2+60	NEW ORLEANS PUBLIC BELT RR CO.	RELOCATE
RR-2	RAILROAD TRACK	4+18	"	RELOCATE
RR-3	RAILROAD TRACK	3+06 TO 10+70	"	RELOCATE

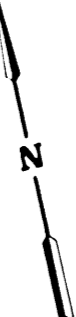
MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0-L
NASHVILLE-NAPOLÉON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
 PROJECT PLAN
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS



MISSISSIPPI RIVER

FLOOD SIDE

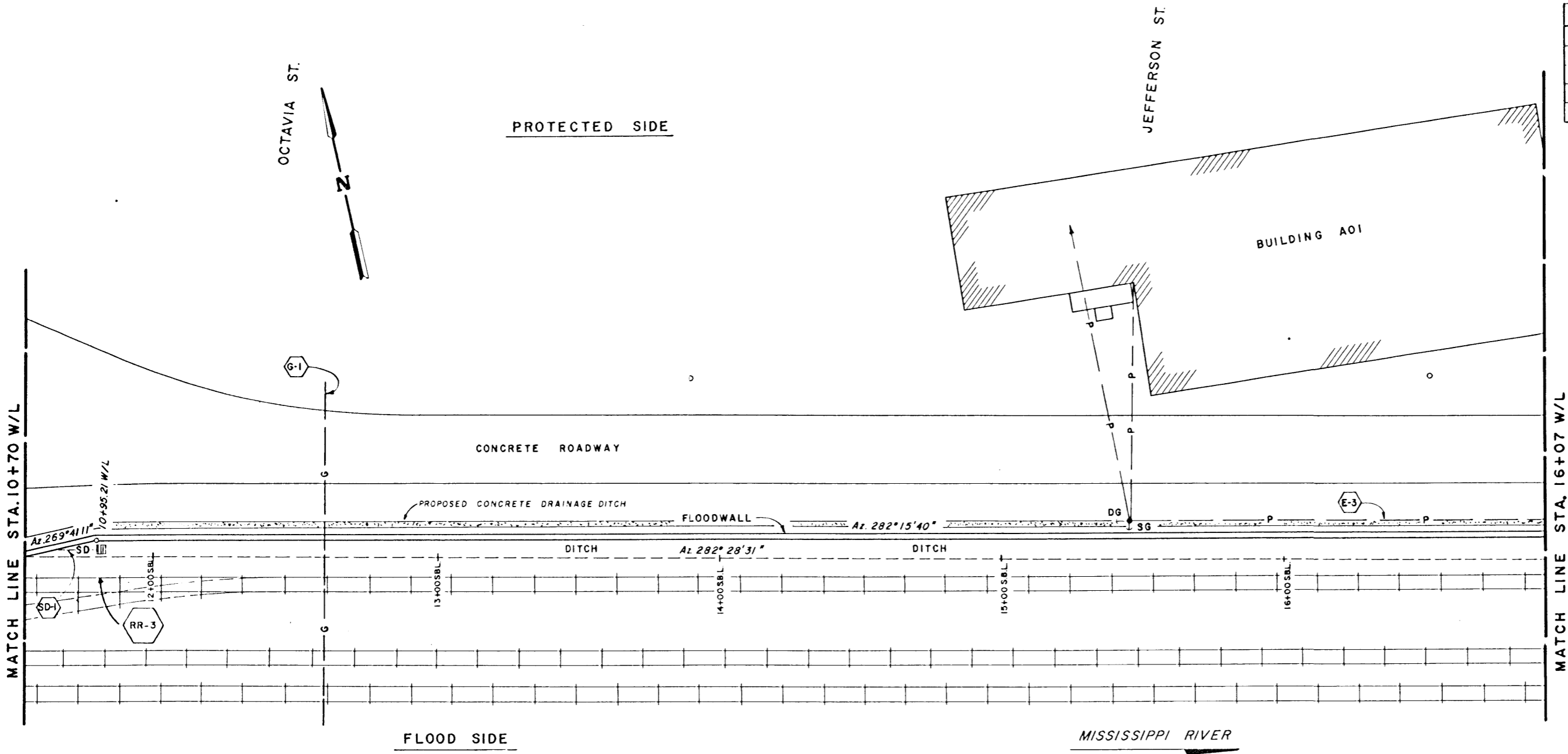
PROTECTED SIDE



EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
SD-1	12" STORM DRAIN	10+82	BOARD OF COMMISSIONERS OF THE PORT OF NEW ORLEANS	RELOCATE
RR-3	RAILROAD TRACK	3+06 to 10+70	NEW ORLEANS PUBLIC BELT RAILROAD CO.	RELOCATE

MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0-L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
**RELOCATION OF FACILITIES
 PROJECT PLAN**
 US ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

JUNE 1977 FILE NO. H-2-28128



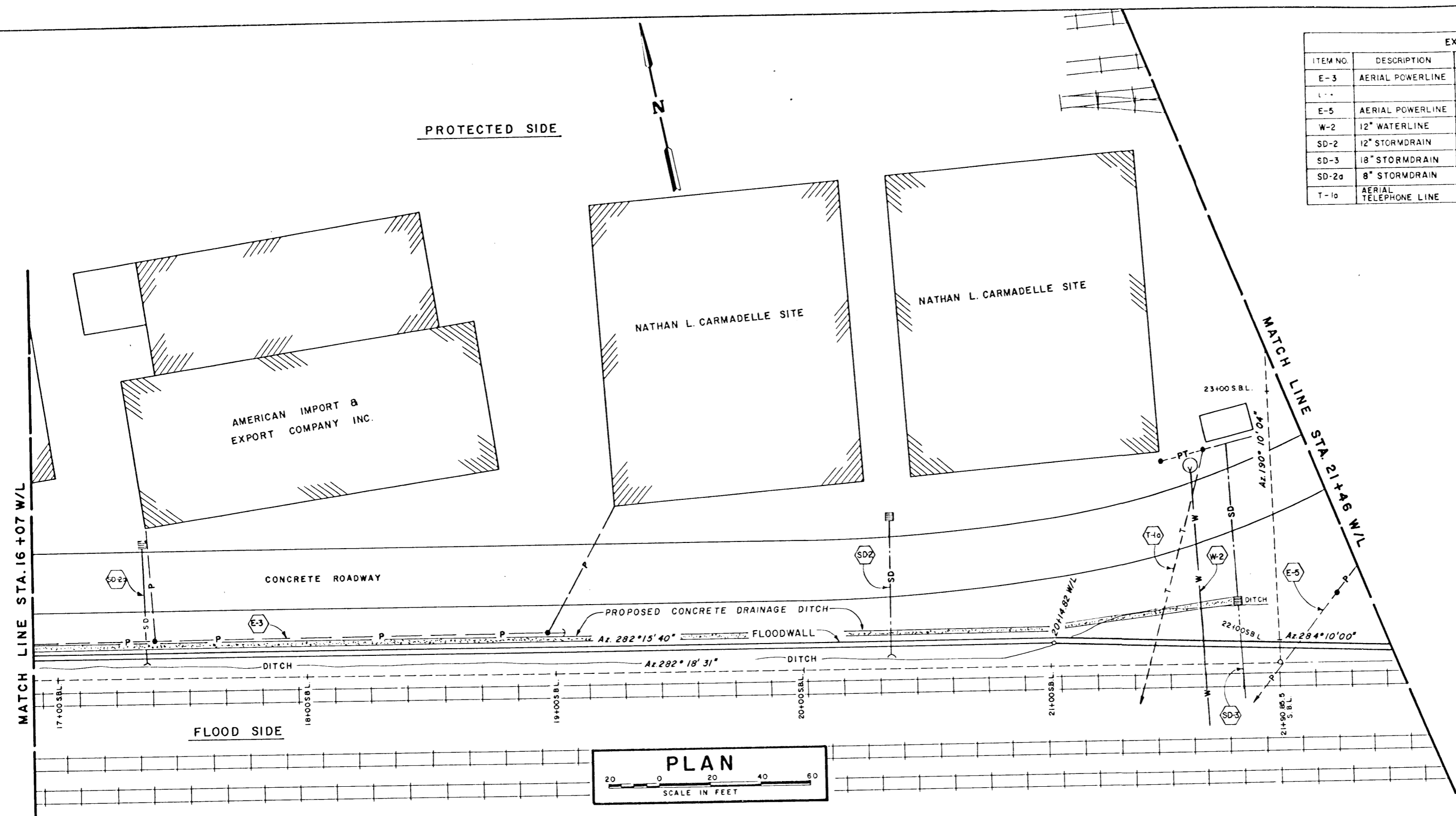
EXISTING FACILITIES				
ITEM NO.	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
SD-1	12" STORMCRAIN	10+82	BOARD OF COMMISSIONERS OF PORT OF N. O.	RELOCATE
G-1	2" GAS	11+75	NEW ORLEANS PUBLIC SERVICE INC.	RELOCATE
E-3	AERIAL POWERLINE	14+60 TO 18+14	NEW ORLEANS PUBLIC SERVICE INC.	RELOCATE
RR-3	RAILROAD TRACK	3+06 TO 10+70	NEW ORLEANS PUBLIC BELT	RELOCATE



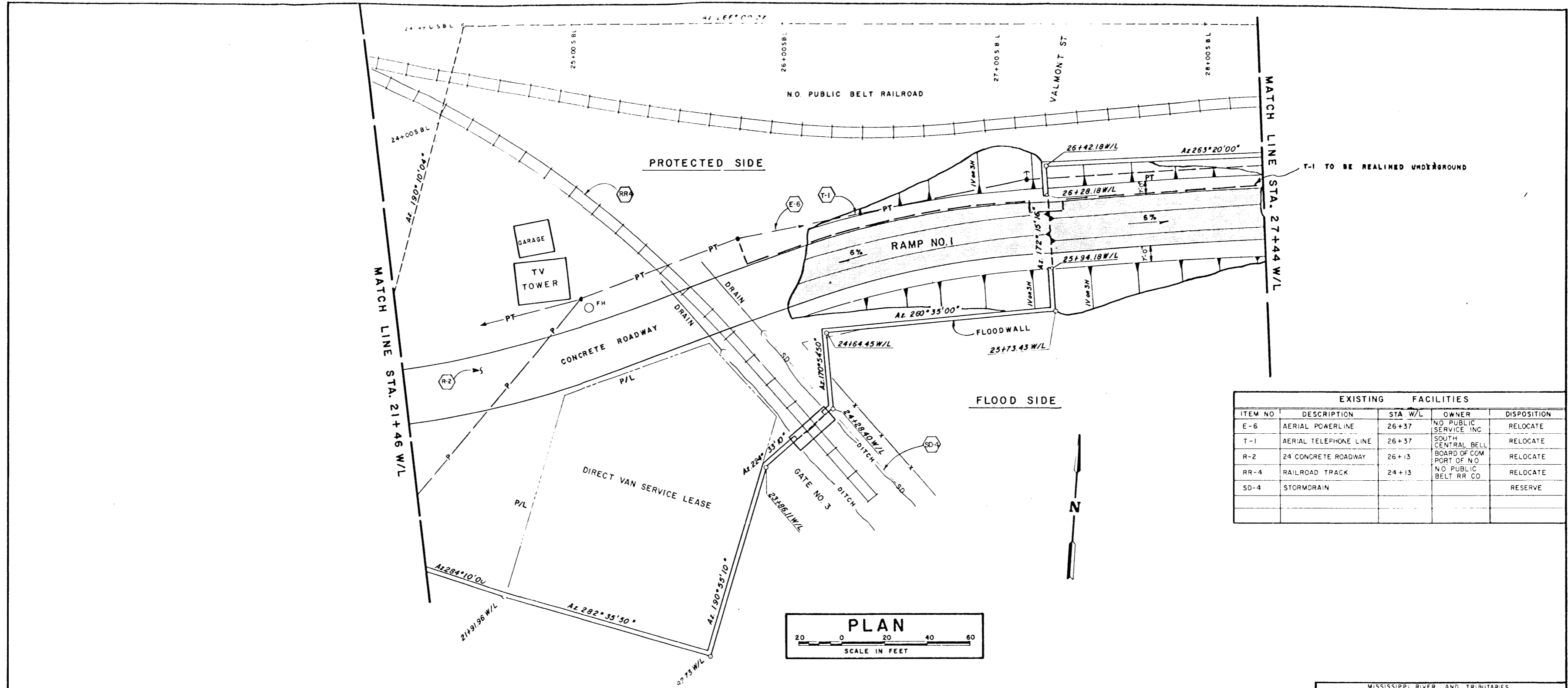
MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0 - L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
PROJECT PLAN
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

JUNE 1977 FILE NO. H-2-28128

EXISTING FACILITIES				
ITEM NO.	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
E-3	AERIAL POWERLINE	14+60 TO 18+14	N.O. PUBLIC SERVICE INC.	RELOCATE
E-5	AERIAL POWERLINE	21+08	N.O. PUBLIC SERVICE INC.	RELOCATE
W-2	12" WATERLINE	20+72	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE
SD-2	12" STORMDRAIN	19+48	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE
SD-3	18" STORMDRAIN	20+87	"	RELOCATE
SD-2a	8" STORMDRAIN	16+48	"	RELOCATE
T-1a	AERIAL TELEPHONE LINE	20+50	SOUTH CENTRAL BELL	RELOCATE



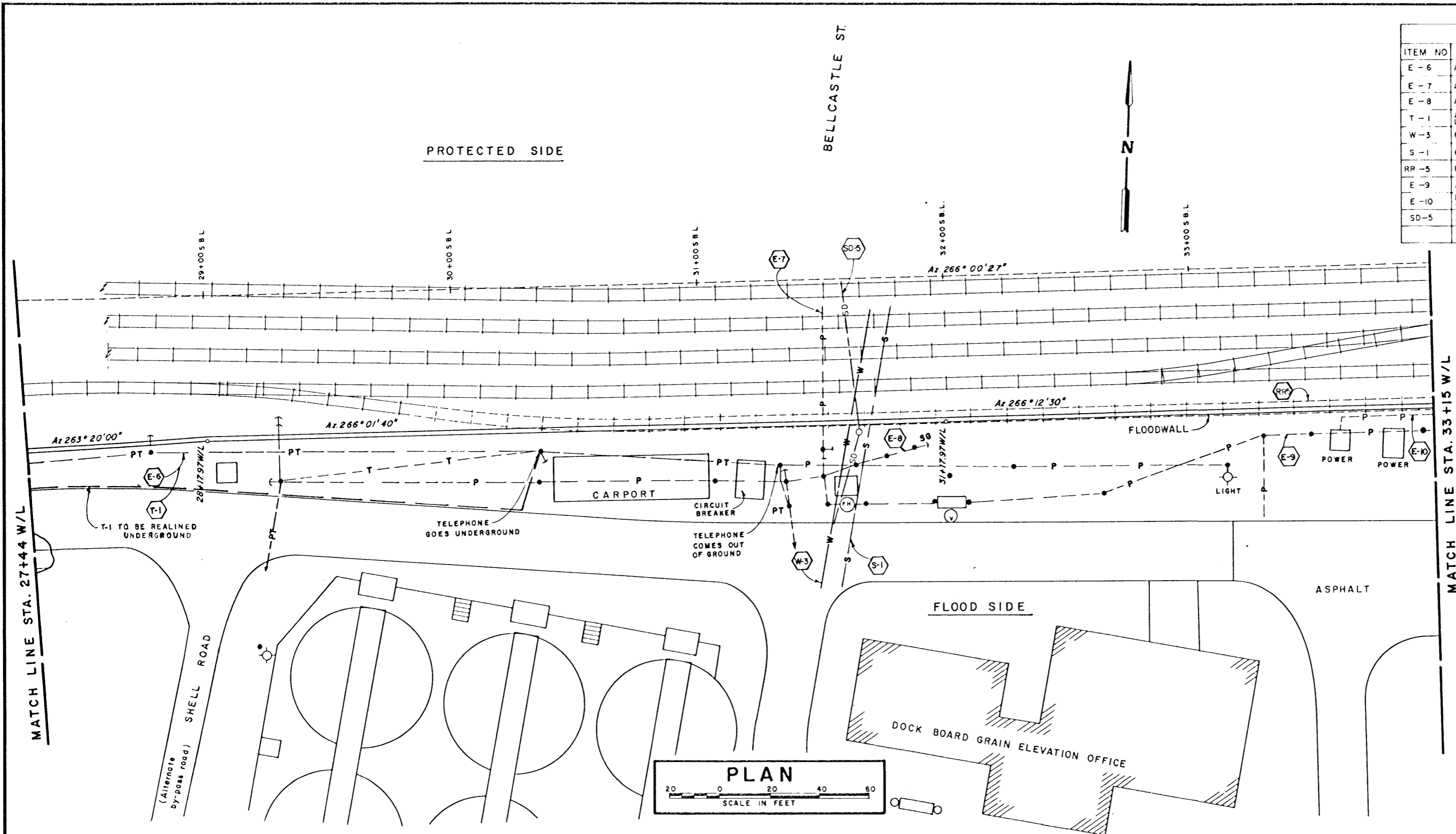
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVES
ITEM M-100.0-L
NASHVILLE-NAPOLÉON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
**RELOCATION OF FACILITIES
PROJECT PLAN**
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
JUNE 1977



EXISTING FACILITIES				
ITEM NO.	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
E-6	AERIAL POWERLINE	26+37	NO PUBLIC SERVICE INC	RELOCATE
T-1	AERIAL TELEPHONE LINE	26+37	SOUTH CENTRAL BELL	RELOCATE
R-2	24' CONCRETE ROADWAY	26+13	BOARD OF COM PORT OF NO	RELOCATE
RR-4	RAILROAD TRACK	24+13	NO PUBLIC BELT RR CO	RELOCATE
SD-4	STORMDRAIN			RESERVE

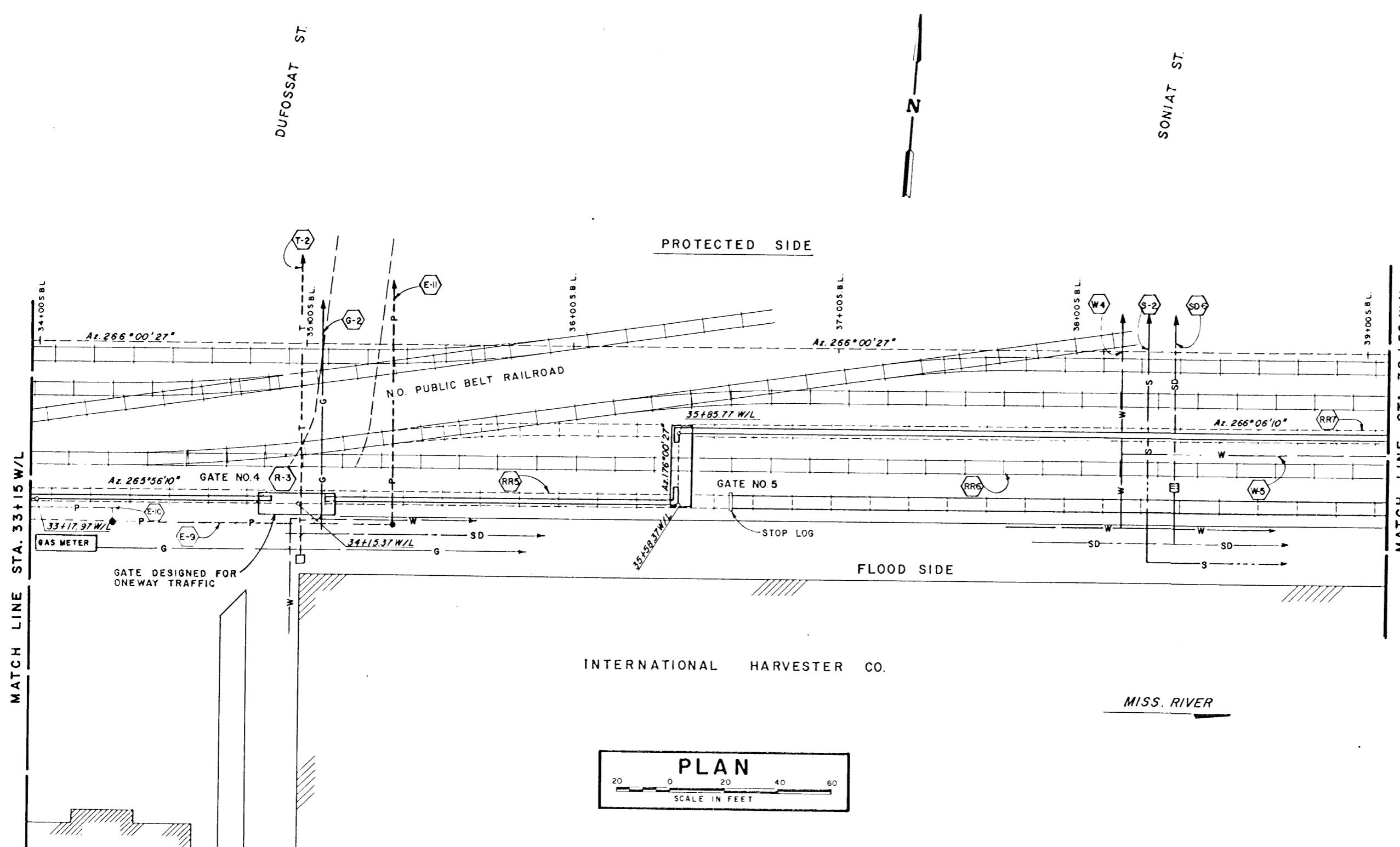
MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0-L
NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
PROJECT PLAN
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA W/L	OWNER	DISPOSITION
E-6	AERIAL POWERLINE	26+37 to 29+57	NEW ORLEANS PUBLIC SERVICE INC	RELOCATE
E-7	AERIAL POWERLINE	30+67	"	RELOCATE
E-8	AERIAL POWERLINE	30+83 to 31+00	"	RELOCATE
T-1	AERIAL TELEPHONE LINE	26+37 to 29+57	SOUTH CENTRAL BELL	RELOCATE
W-3	6" WATER LINE	30+77	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE
S-1	6" SEWERLINE	30+85	"	RELOCATE
RR-5	RAILROAD TRACK	28+17 to 36+06	NEW ORLEANS PUBLIC BELT RR CO	RELOCATE
E-9	AERIAL POWERLINE	32+45 to 34+50	N O P S I	RELOCATE
E-10	BURIED POWER CONDUIT	32+75 to 33+53	N O P S I	RELOCATE
SD-5	30" STORMDRAIN	30+81	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE



MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0-L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO.52
**RELOCATION OF FACILITIES
PROJECT PLAN**
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS

JUNE 1977 FILE NO. H-2-28128



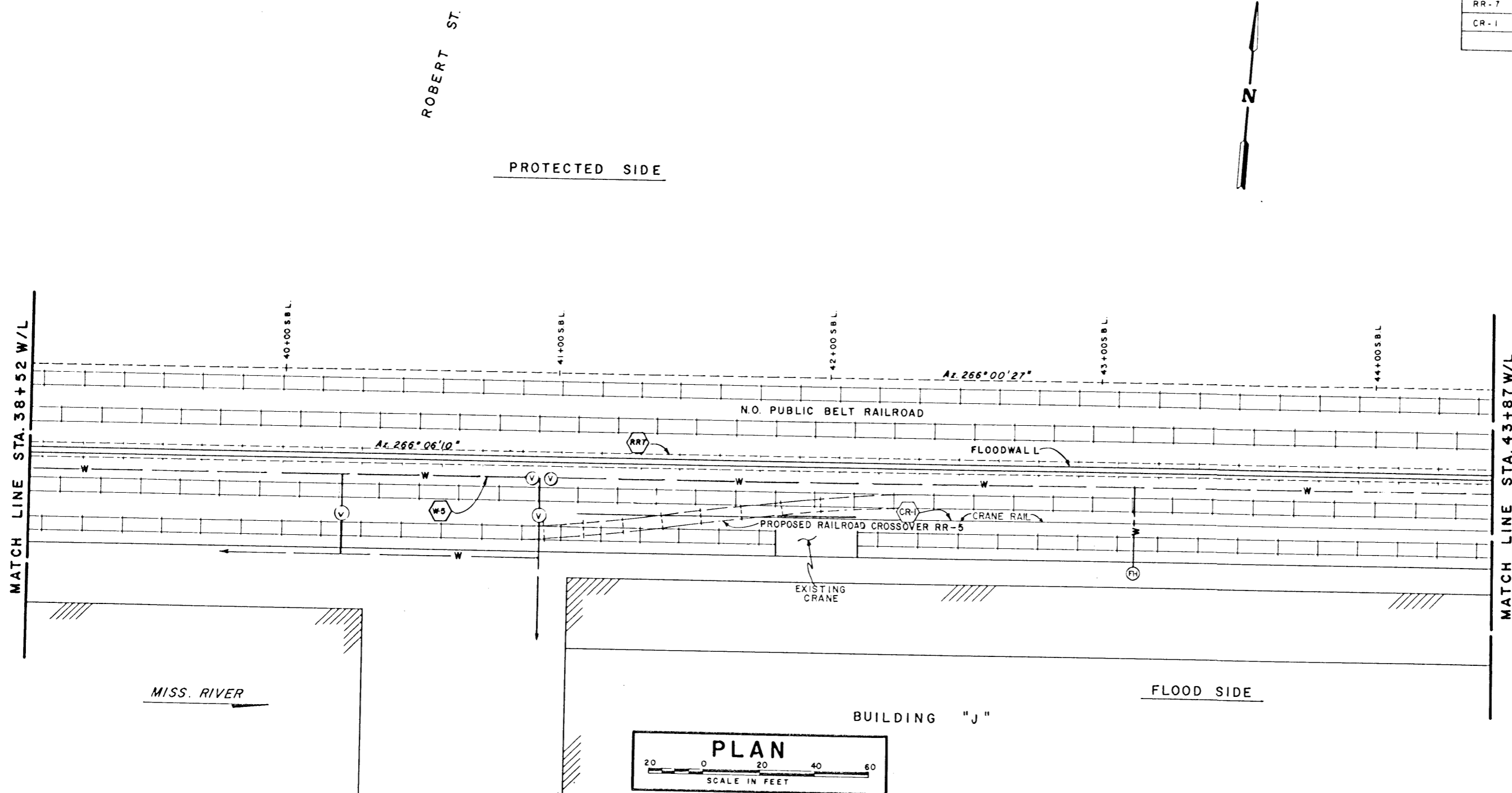
EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
E-9	AERIAL POWERLINE	32+45 TO 34+50	NO PUBLIC SERVICE INC.	RELOCATE
E-10	BURIED POWER CONDUCTORS	32+75 TO 35+53	"	RELOCATE
E-11	AERIAL POWERLINE	34+50	"	RELOCATE
G-2	4" GAS LINE	34+23	"	RELOCATE
T-2	BURIED TELEPHONE CABLE	34+16	SOUTH CENTRAL BELL	RELOCATE
SD-6	30" STORM DRAIN	37+72	BOARD OF COMMISSIONERS PORT OF NEW ORLEANS	RELOCATE
W-4	12" WATERLINE	37+52	"	RELOCATE
W-5	12" WATERLINE	37+52 TO 51+58	"	NOT AFFECTED
S-2	6" SEWERLINE	37+62	"	RELOCATE
R-3	DUFOSSAT ST.	34+15	CITY OF NEW ORLEANS	RELOCATE
RR-5	RAILROAD TRACK	28+17 TO 36+06	NO PUBLIC BELT RR CO	RELOCATE
RR-6	RAILROAD TRACK	35+73	"	RELOCATE
RR-7	RAILROAD TRACK	34+50 TO 53+50	"	RELOCATE

MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVELS
 ITEM M-100.0 -L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
PROJECT PLAN
 US ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

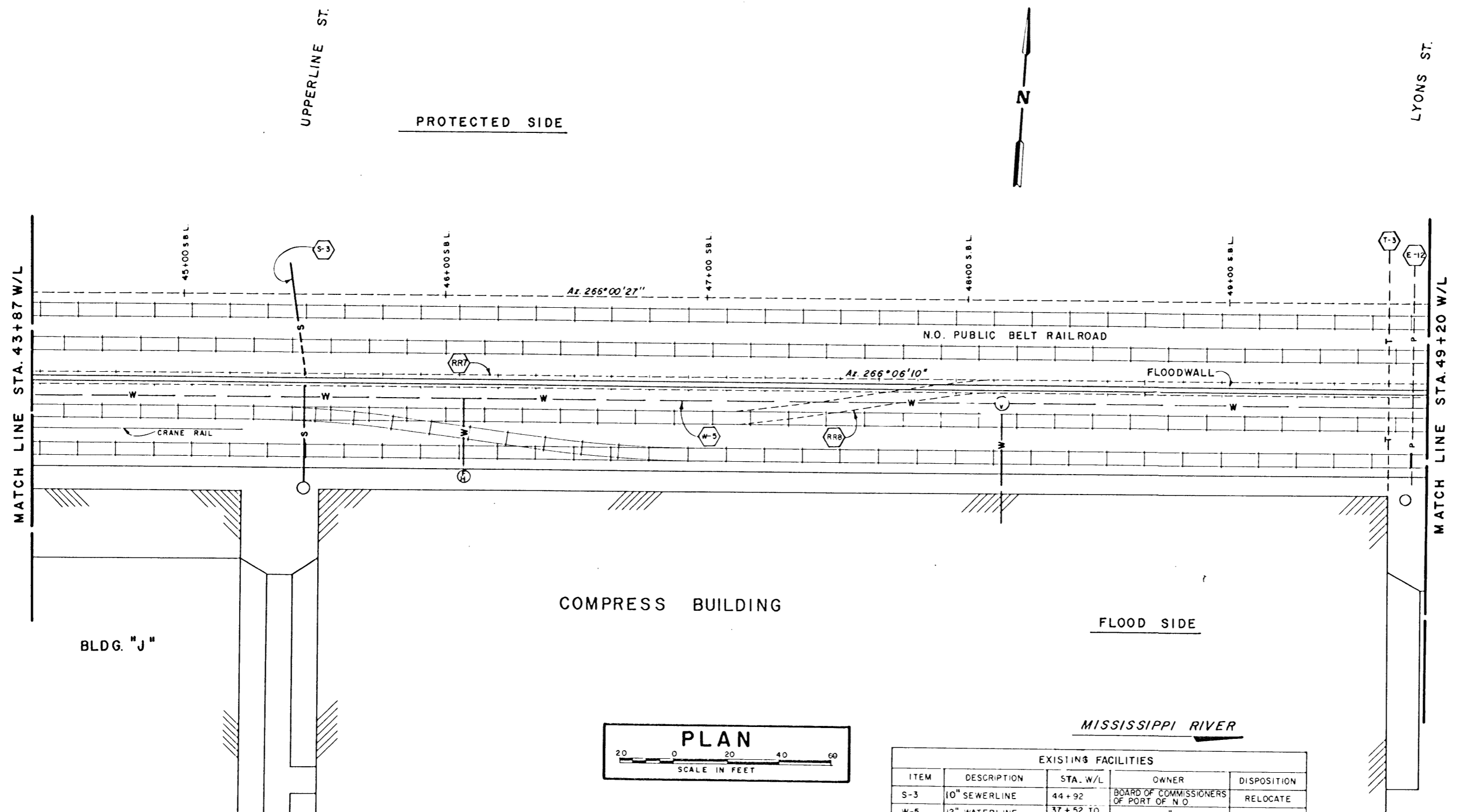
JUNE 1977

FILE NO. H-2-28128

EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA W/L	OWNER	DISPOSITION
W-5	12" WATERLINE	37+52 TO 51+58	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	NOT AFFECTED
RR-7	RAILROAD TRACK	34+50 TO 53+50	NEW ORLEANS PUBLIC BELT RR CO	REMOVE
CR-1	CRANE RAIL	40+48 TO 41+98	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	REMOVE



MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0 -L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
PROJECT PLAN
US ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
JUNE 1977
FILE NO. H-2-28128



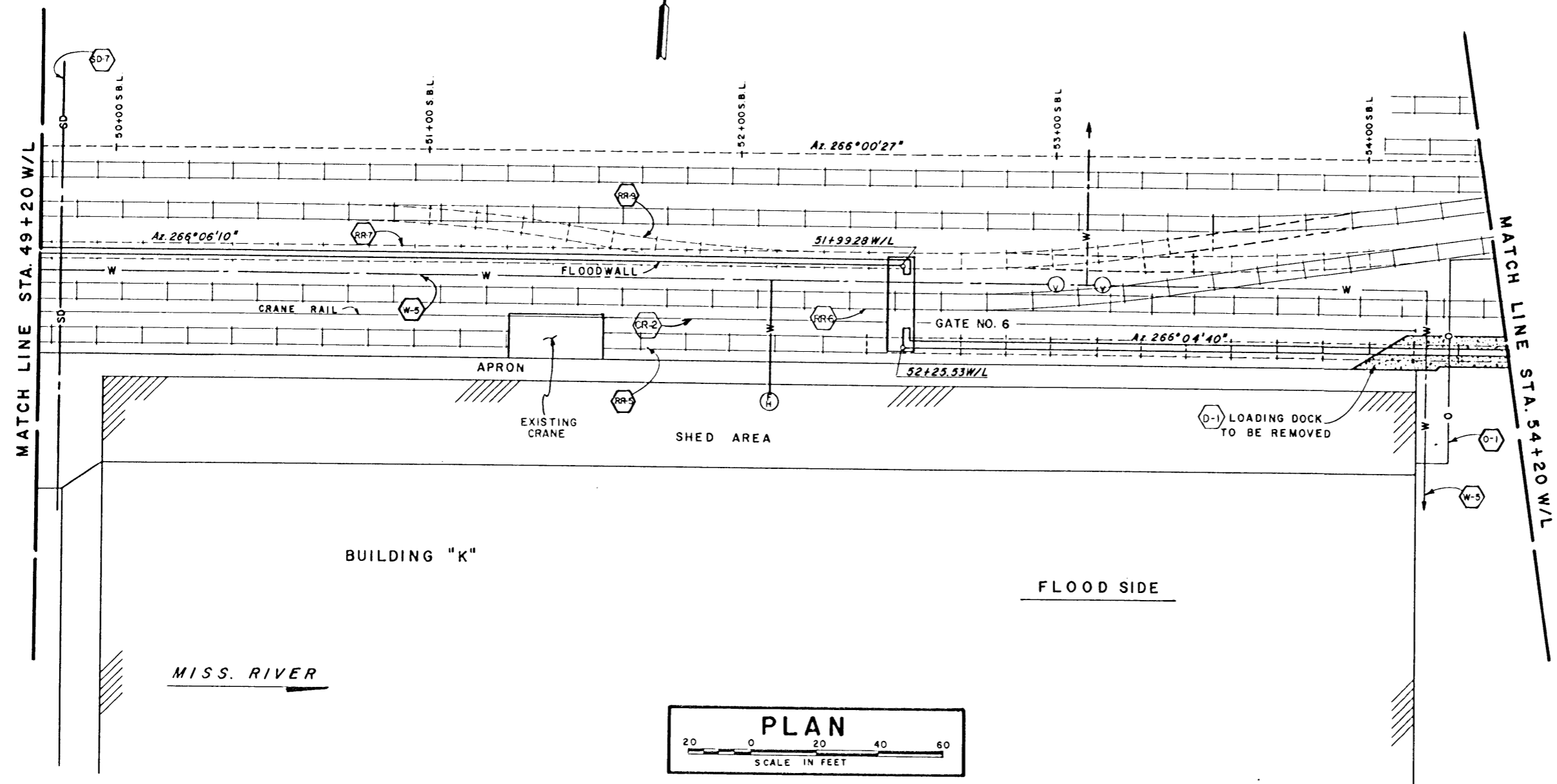
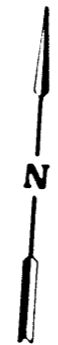
EXISTING FACILITIES				
ITEM	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
S-3	10" SEWERLINE	44+92	BOARD OF COMMISSIONERS OF PORT OF N.O.	RELOCATE
W-5	12" WATERLINE	37+52 TO 51+58	"	NOT AFFECTED
E-12	BURIED POWER CONDUCTORS	49+15	N.O. PUBLIC SERVICE INC.	ABANDONED
T-3	AERIAL TELEPHONE LINE	49+05	SOUTH CENTRAL BELL	RELOCATE
RR-7	RAILROAD TRACK	34+50 TO 53+50	NEW ORLEANS PUBLIC BELT RR CO.	REMOVE
RR-8	RR CROSSOVER TRACK	46+40 TO 47+90	"	REMOVE

MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0-L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
PROJECT PLAN
 US ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

JUNE 1977 FILE NO. H-2-28128

LYONS ST.

PROTECTED SIDE



EXISTING FACILITIES				
ITEM NO.	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
SD-7	24" STORM DRAIN	49+27	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE
W-5	12" WATERLINE	37+52 TO 51+58	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	NOT AFFECTED
		52+04 B TO 53+94		RELOCATE
D-1	LOADING DOCK	53+75 TO 54+45	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	REMOVE
O-1	3" OIL LINE	54+01	ARKANSAS GRAIN CORP (ICELAND)	RELOCATE
RR-5	RAILROAD TRACK	52+25 TO 54+25	NEW ORLEANS PUBLIC BELT RR CO	REMOVE
RR-6	RAILROAD TRACK	52+12	NEW ORLEANS PUBLIC BELT RR CO	RELOCATE
RR-7	RAILROAD TRACK	34+50 TO 53+50	NEW ORLEANS PUBLIC BELT RR CO	REMOVE
RR-9	RR CROSSOVER TRACK	50+20 TO 51+80	NEW ORLEANS PUBLIC BELT RR CO	REMOVE
CR-2	CRANE RAIL	52+17	NEW ORLEANS PUBLIC BELT RR CO	REMOVE

BUILDING "K"

FLOOD SIDE

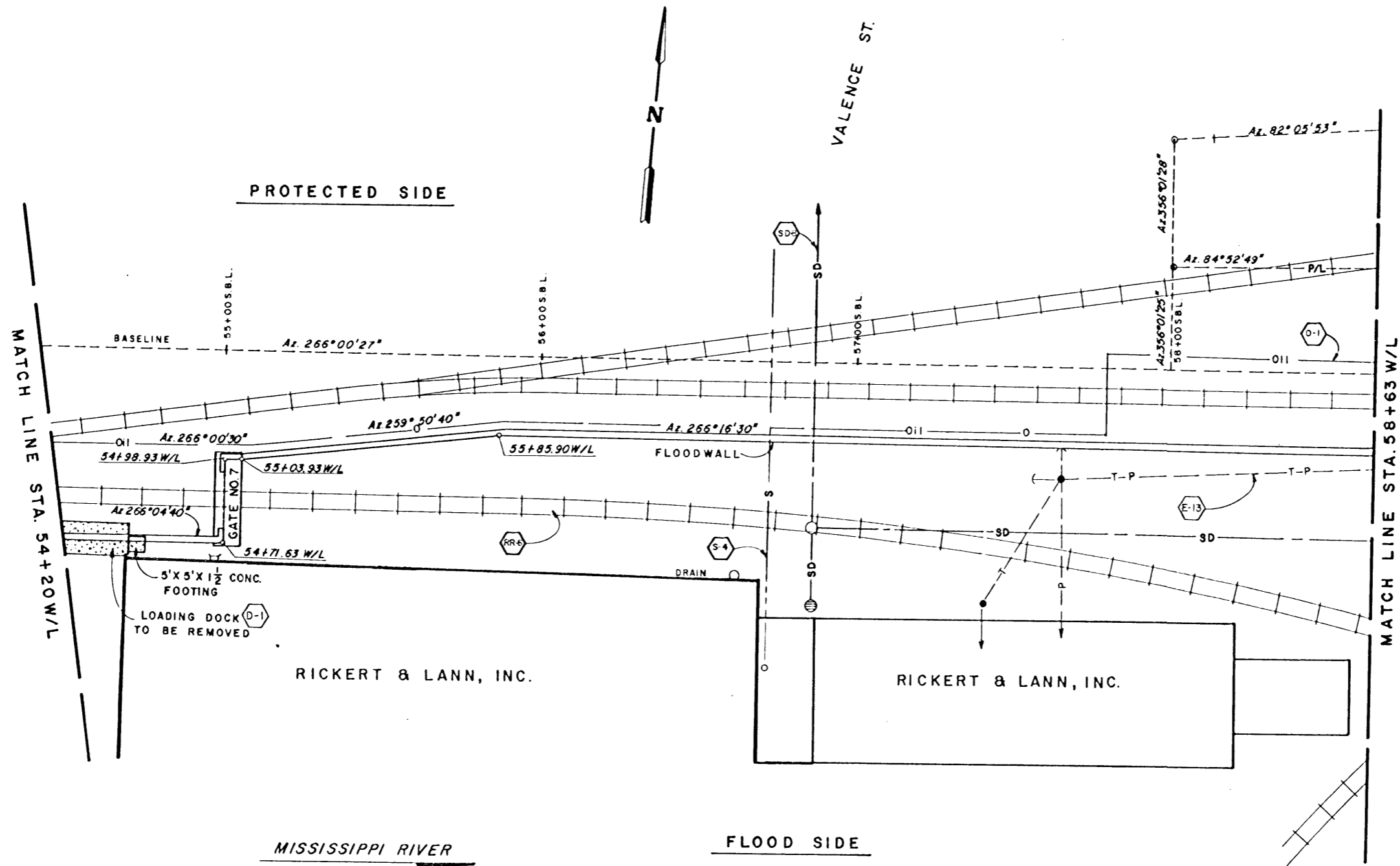
MISS. RIVER



MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0 -L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
PROJECT PLAN
 US ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

JUNE 1977

FILE NO. H-2-28128



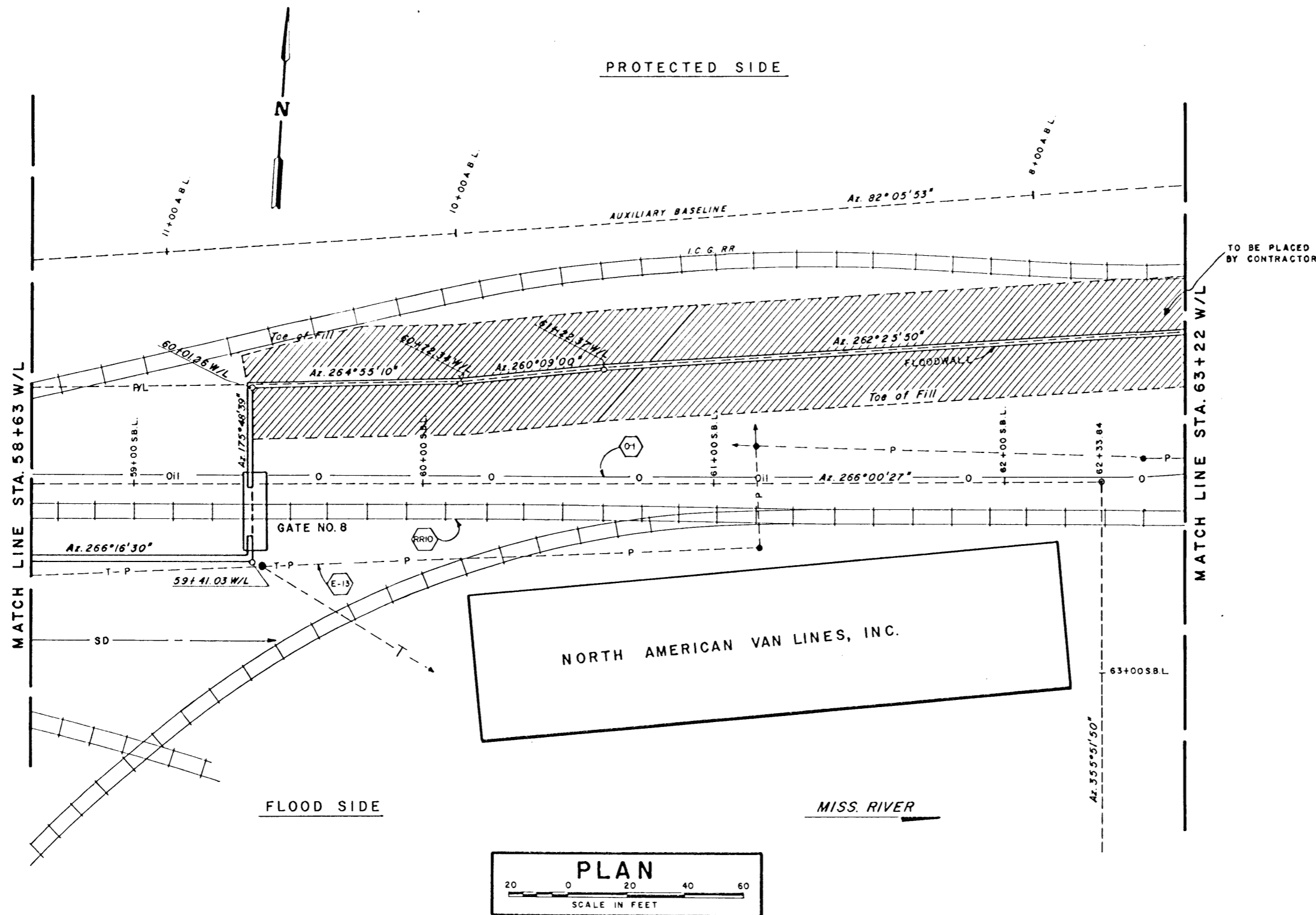
EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA W/L	OWNER	DISPOSITION
D-1	LOADING DOCK	53+75 TO 54+45	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	REMOVE
S-4	6" SEWERLINE	56+72	"	RELOCATE
SD-8	30" STORM DRAIN	56+86	"	RELOCATE
O-1	3" OIL LINE	54+98 TO 57+78	ARKANSAS GRAIN CORP. (RICELAND)	RELOCATE
E-13	AERIAL POWERLINE	57+35 TO 61+75	NEW ORLEANS PUBLIC SERVICE INC.	RELOCATE
RR-6	RAILROAD TRACK	54+85	NEW ORLEANS PUBLIC BELT RR CO.	RELOCATE



MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0 -L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
PROJECT PLAN
US ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS

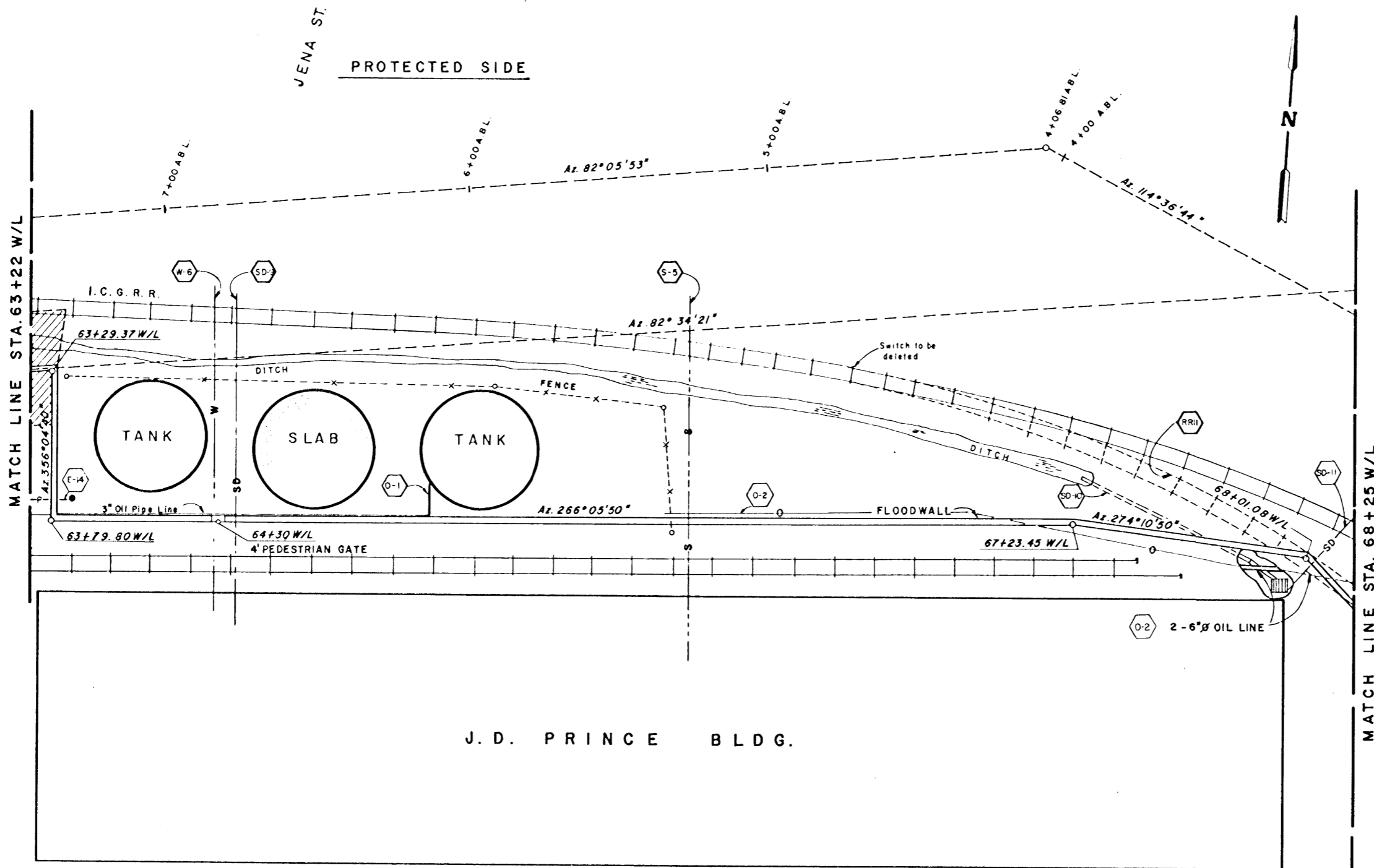
JUNE 1977

FILE NO. H-2-28128



EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA W/L	OWNER	DISPOSITION
E-13	AERIAL POWERLINE	57+35 TO 61+75	NEW ORLEANS PUBLIC SERVICE INC.	RELOCATE
O-1	3" OIL LINE	59+70	ARKANSAS GRAIN CORP (RUGELAND)	RELOCATE
RR-10	RAILROAD TRACK	59+58	NEW ORLEANS PUBLIC BELT RR CO.	RELOCATE

MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0-L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
**RELOCATION OF FACILITIES
 PROJECT PLAN**
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS



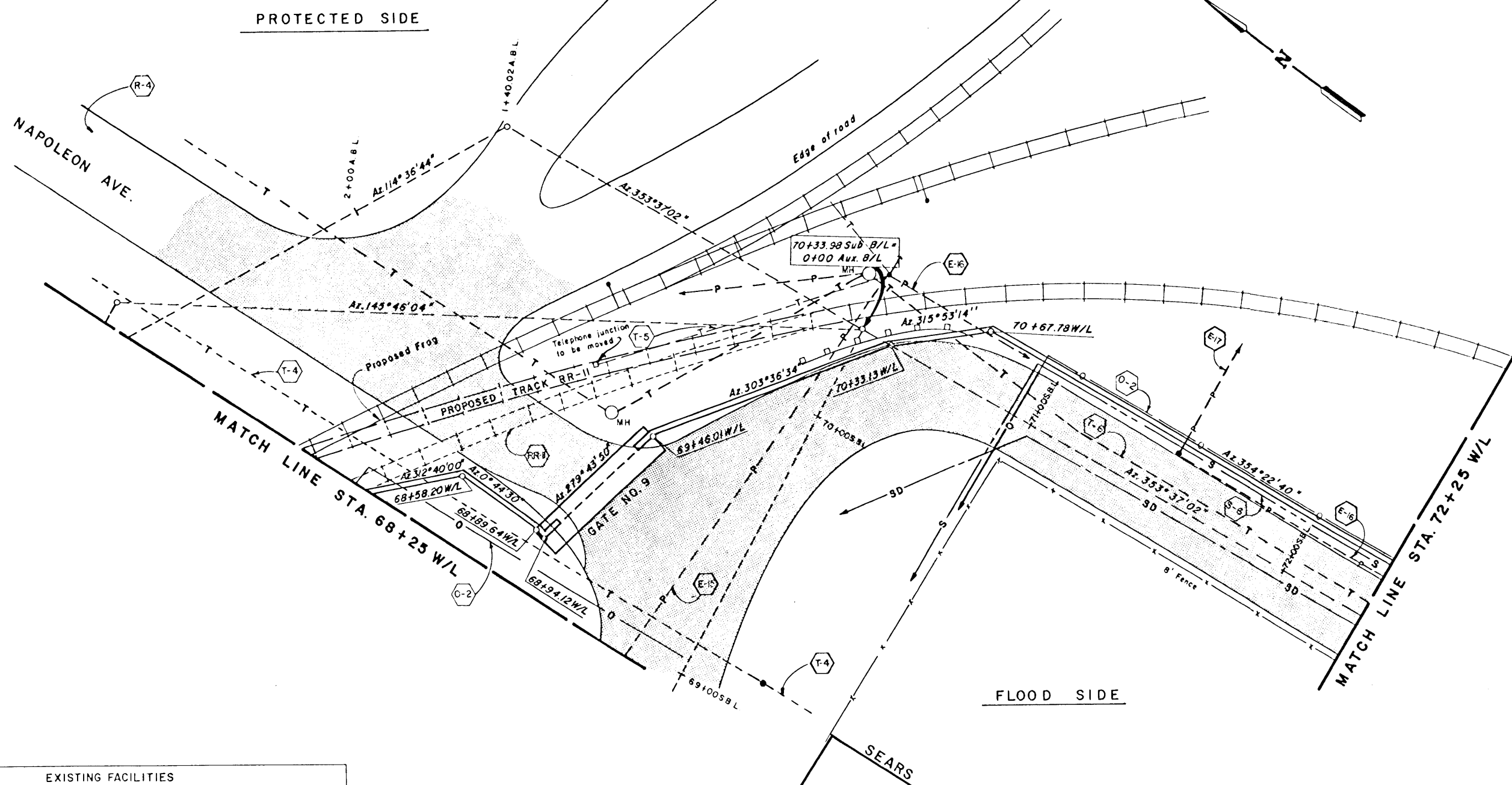
EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
E-14	AIRIAL POWERLINE	63+72	NEW ORLEANS PUBLIC SERVICE	RELOCATE
W-6	WATERLINE	64+29	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE
S-5	8" SEWERLINE	65+87	"	RELOCATE
SD-9	50" STORM DRAIN	64+36	"	RELOCATE
SD-10	5" STORM DRAIN	67+70	"	RELOCATE
O-1	3" OIL LINE	63+78, 65+00	ARKANSAS GRAIN CORP (TRICELAND)	RELOCATE
O-2	2-6" OIL LINES	67+08, 68+10	"	RELOCATE
RR-11	RAILROAD TRACK	66+48, 70+20	I. C. B. RR	RELOCATE
SD-11	8" STORM DRAIN	68+05	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE

FLOOD SIDE



MISS. RIVER

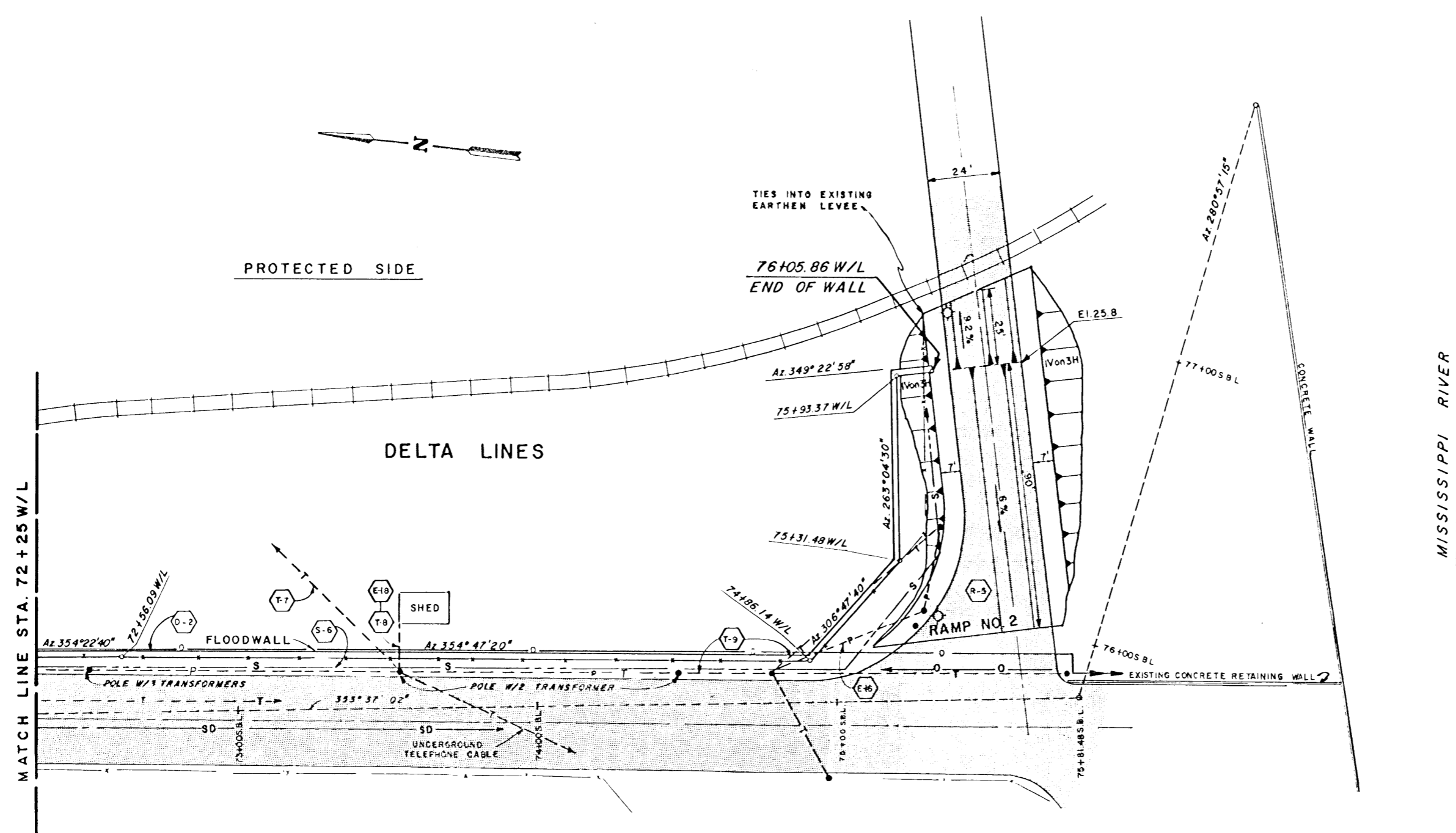
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0 -L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
**RELOCATION OF FACILITIES
PROJECT PLAN**
US ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
JUNE 1977 FILE NO. H-2-28128



EXISTING FACILITIES				
ITEM NO.	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
E-15	AERIAL POWERLINE	70+10	NEW ORLEANS PUBLIC SERVICE INC.	RELOCATE
E-16	AERIAL POWERLINE	70+66 TO 76+05	"	RELOCATE
E-17	AERIAL POWERLINE	71+44	"	RELOCATE
S-6	SEWERLINE	70+86 TO 76+05	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	NOT AFFECTED
O-2	2-6" OIL LINES	68+33, 70+90	ARKANSAS GRAIN CORP. (RICELAND)	RELOCATE
R-4	NAPOLEON AVE.	69+20	CITY OF NEW ORLEANS	RELOCATE
RR-II	RAILROAD TRACK	66+48 TO 70+20	ICG RR	RELOCATE
T-4	UNDERGROUND TELEPHONE CABLE	68+46	SOUTH CENTRAL BELL	RELOCATE
T-5	UNDERGROUND TELEPHONE CABLE		"	RELOCATE
T-6	UNDERGROUND TELEPHONE CABLE	70+54	"	RELOCATE



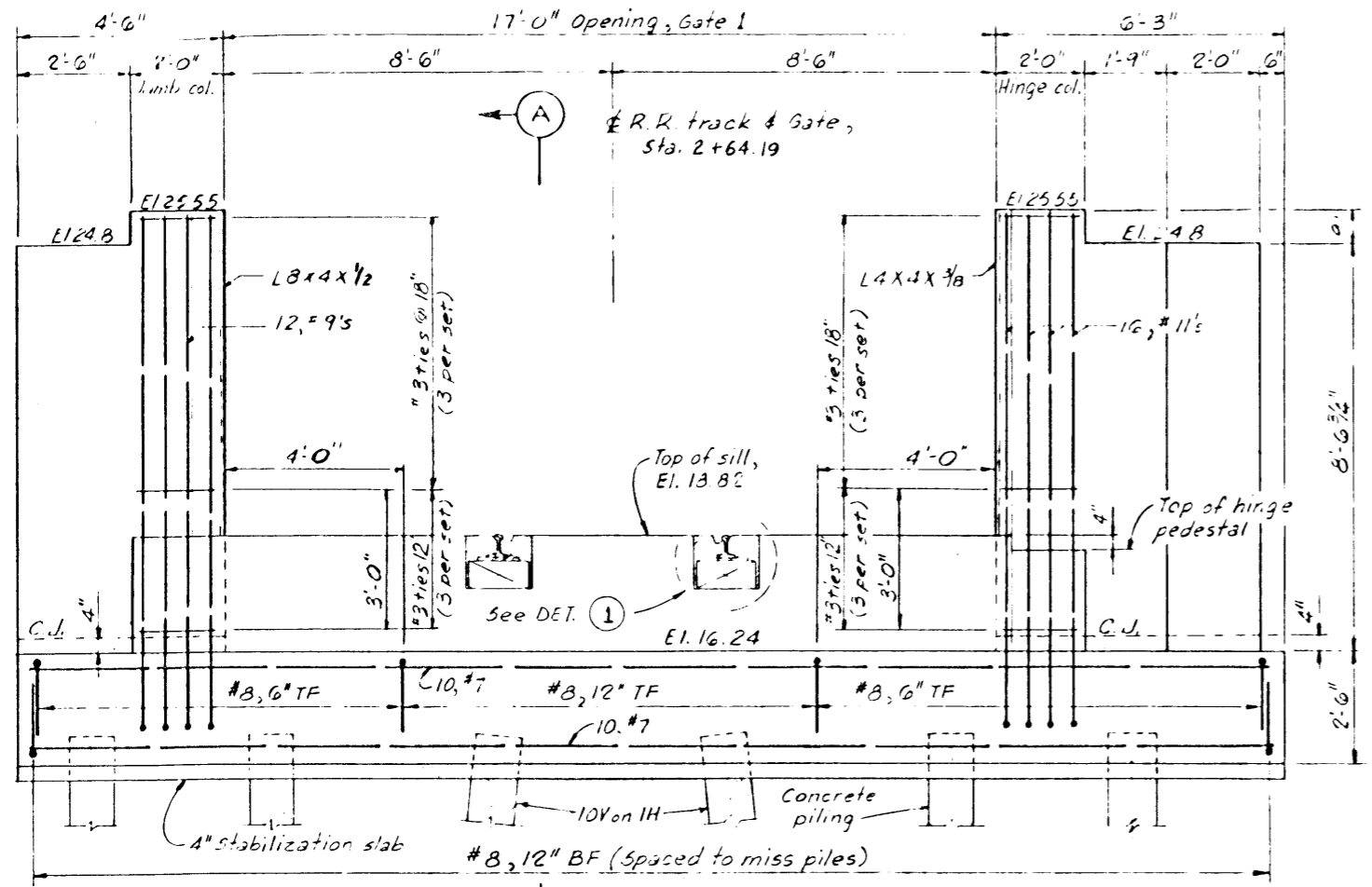
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0 - L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO.52
RELOCATION OF FACILITIES
PROJECT PLAN
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
JUNE 1977 FILE NO. H-2-28128



EXISTING FACILITIES				
ITEM NO	DESCRIPTION	STA. W/L	OWNER	DISPOSITION
E-16	AERIAL POWERLINE	72+25	NO PUBLIC SERVICE INC	RELOCATE
E-18	AERIAL POWERLINE	73+50	NO PUBLIC SERVICE INC	RELOCATE
S-6	8" SEWERLINE	70+86 TO 76+55	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	NOT AFFECTED
O-2	2-6" OIL LINES	70+90 TO 74+50	ARKANSAS GRAIN CO. (RICE LAND)	RELOCATE
R-5	24' ROADWAY	76+05	BOARD OF COMMISSIONERS OF PORT OF NEW ORLEANS	RELOCATE
T-7	AERIAL TELEPHONE LINE	73+45	SOUTH CENTRAL BELL	RELOCATE
T-8	AERIAL TELEPHONE LINE	73+50	SOUTH CENTRAL BELL	RELOCATE
T-9	AERIAL TELEPHONE LINE	73+50 TO 76+55	SOUTH CENTRAL BELL	RELOCATE



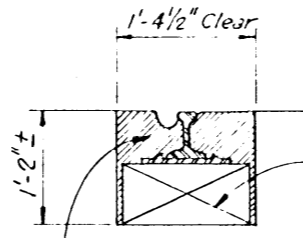
MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-100.0-L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
**RELOCATION OF FACILITIES
 PROJECT PLAN**
 US ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS
 JUNE 1977 FILE NO. H-2-28128



FLOOD SIDE ELEVATION

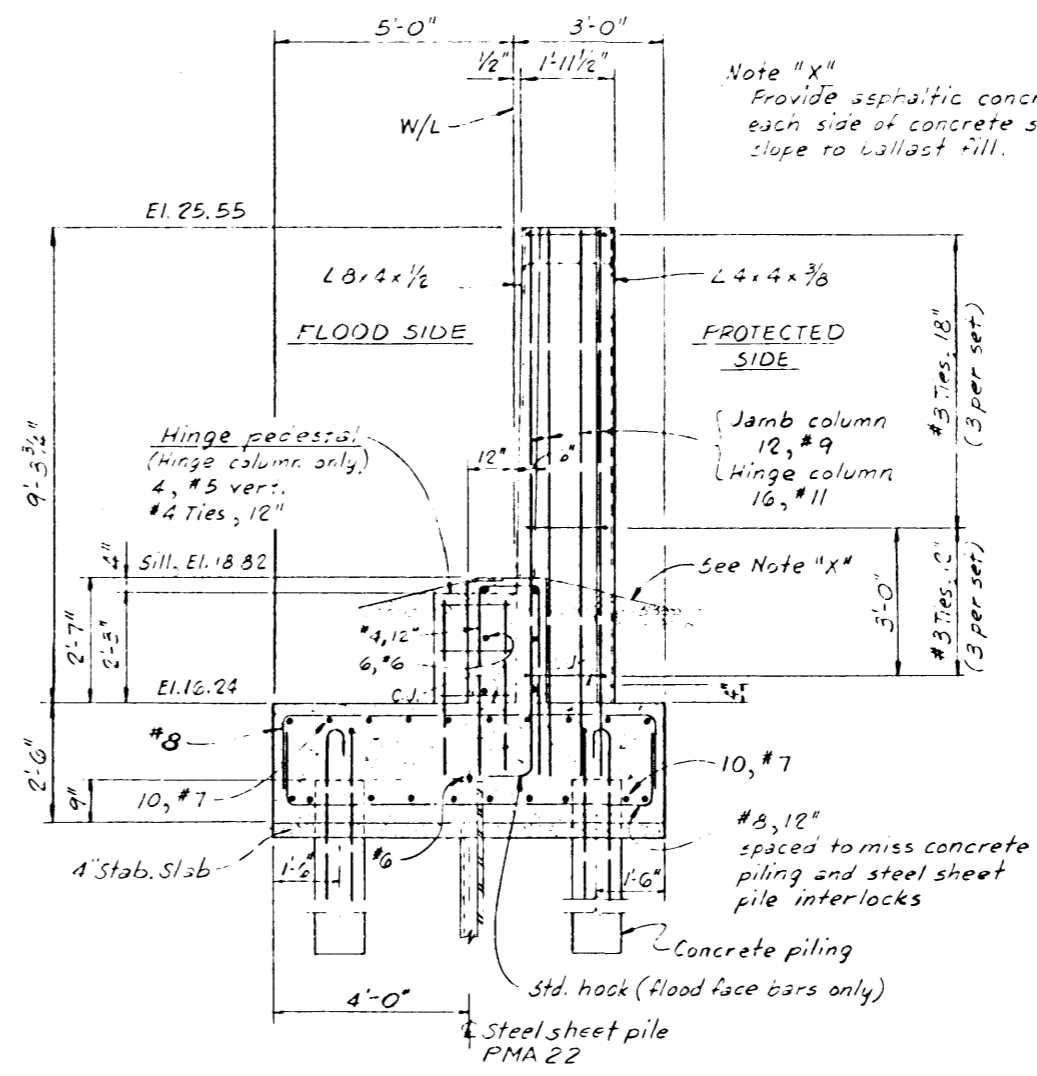
GATE NO. 1 - ITEM RR-1, W/L - STA. 2+64.19

Fill sill void with asphaltic concrete pavement, type 1 base - course as described in "Standard Specifications For Roads and Bridges" published by the State of Louisiana Department of Highways.



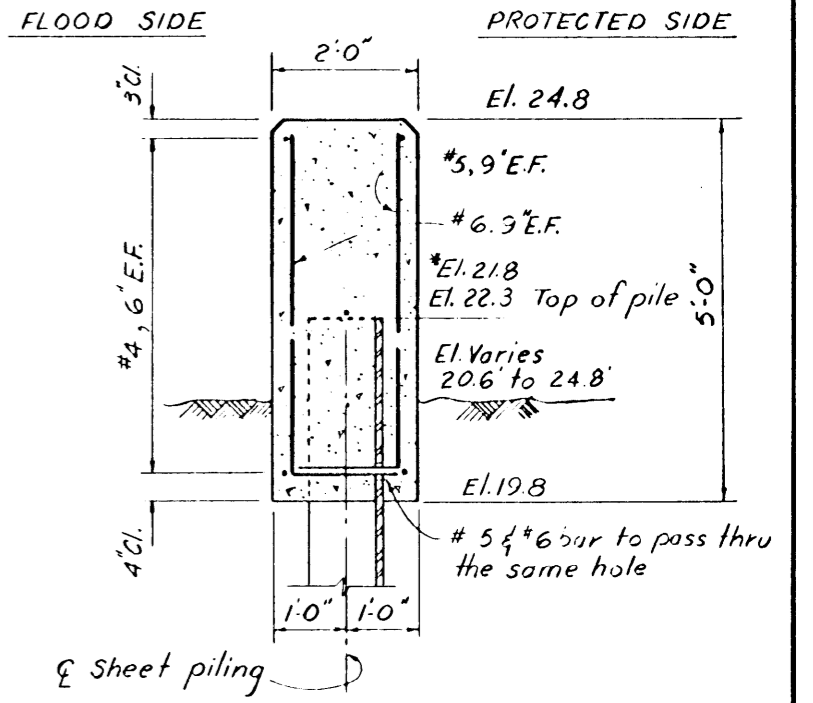
DETAIL 1

16" Wide timber filler block cut to fit as shown in Plan, and pressure treated with creosote coal tar solution to 12 pound retention by the gauge method according to AWP standard C1-6.



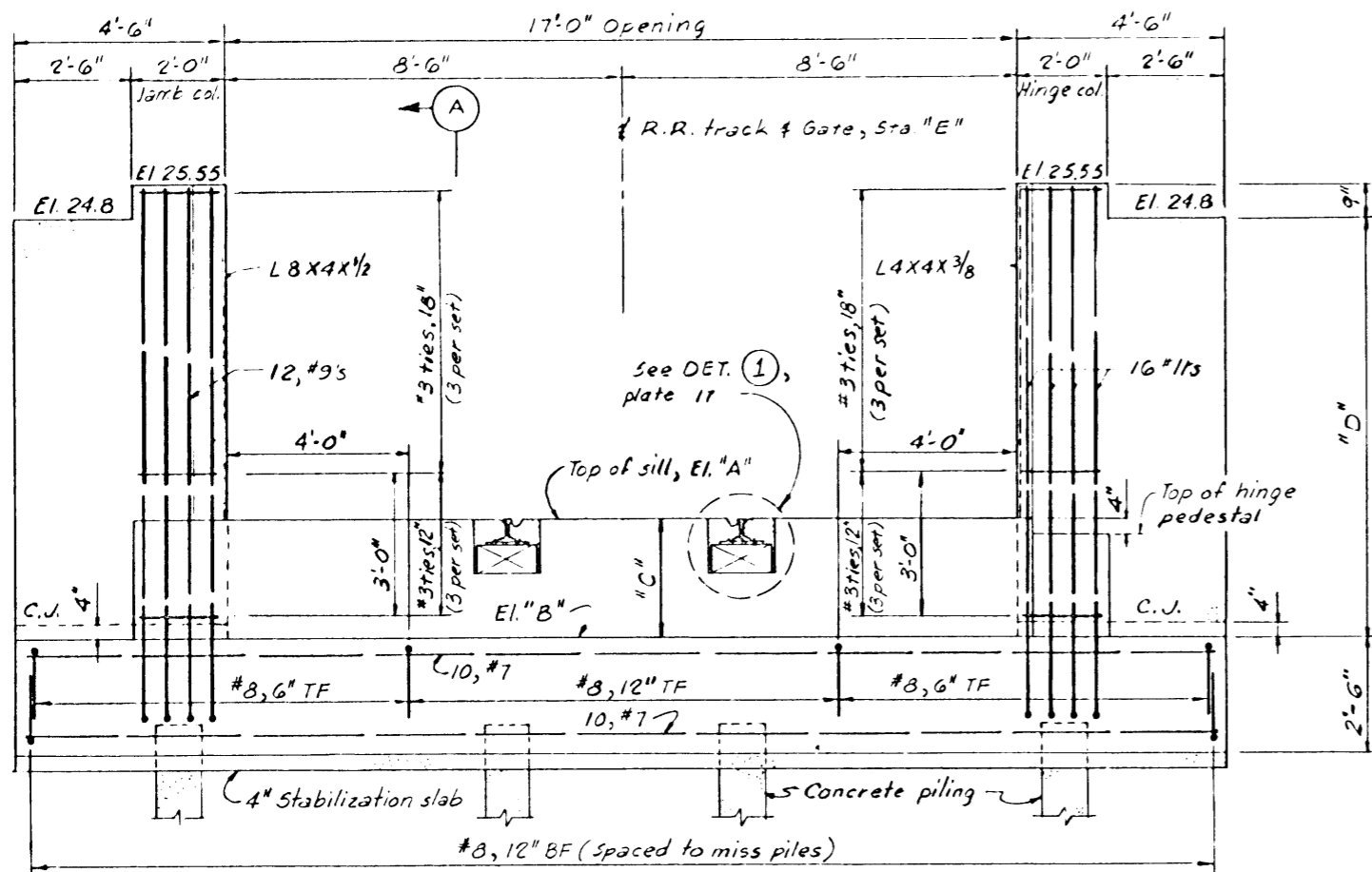
SECTION A

Note "X"
Provide asphaltic concrete pavement each side of concrete sill with a 1V on 4H slope to ballast fill.



TYPICAL I-WALL SECTION
STA. 0+00W/L TO STA. 0+60W/L
* STA. 0+60W/L TO STA. 1+20W/L

NOT TO SCALE
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-1000 - L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
GATE DETAIL & "I" - WALL SECTION
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS

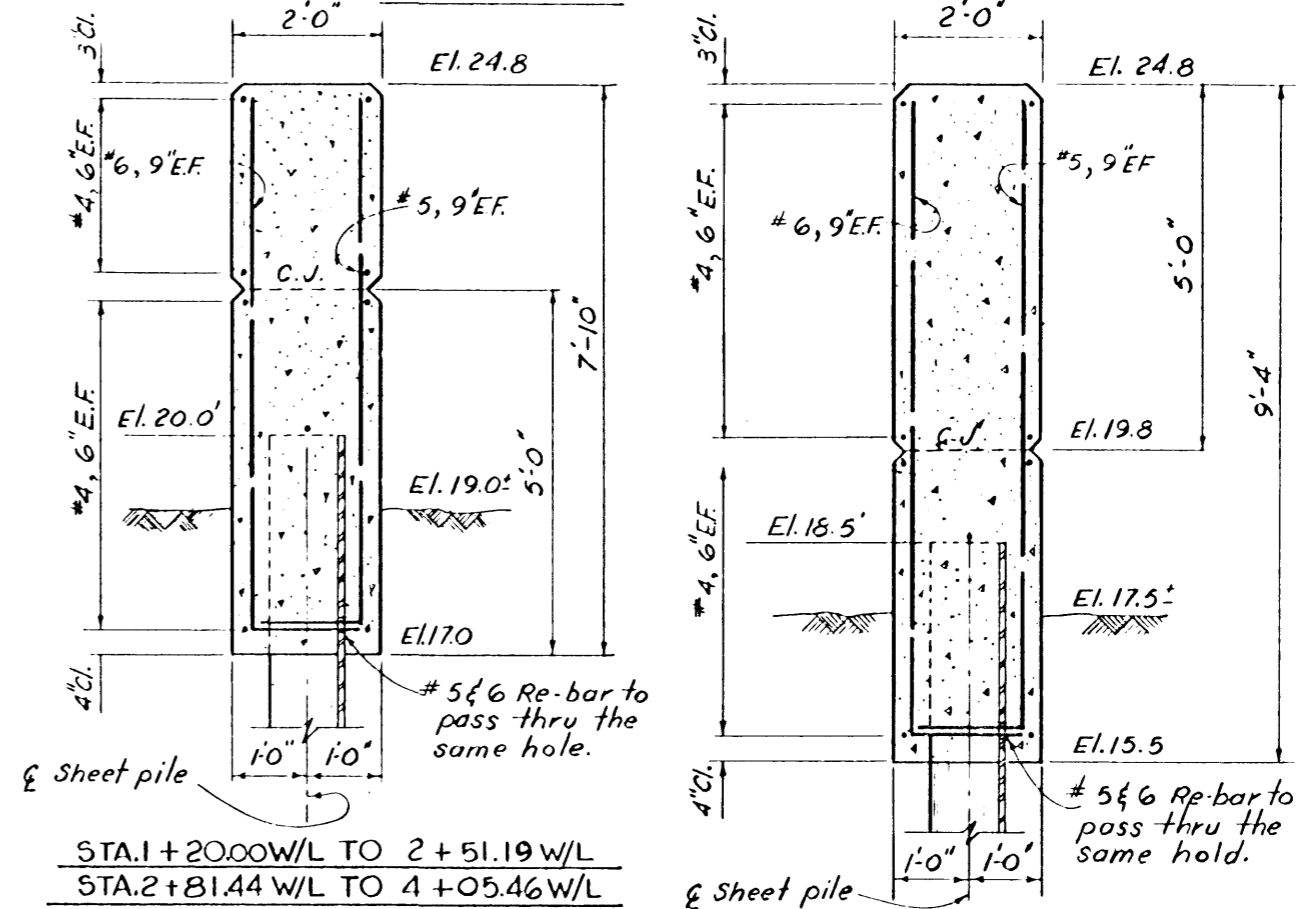


See plate 17 ← A

FLOOD SIDE ELEVATION

GATES 2 AND 8 - SHOWN
GATE 3 - OPP. HAND

FLOOD SIDE PROTECTED SIDE



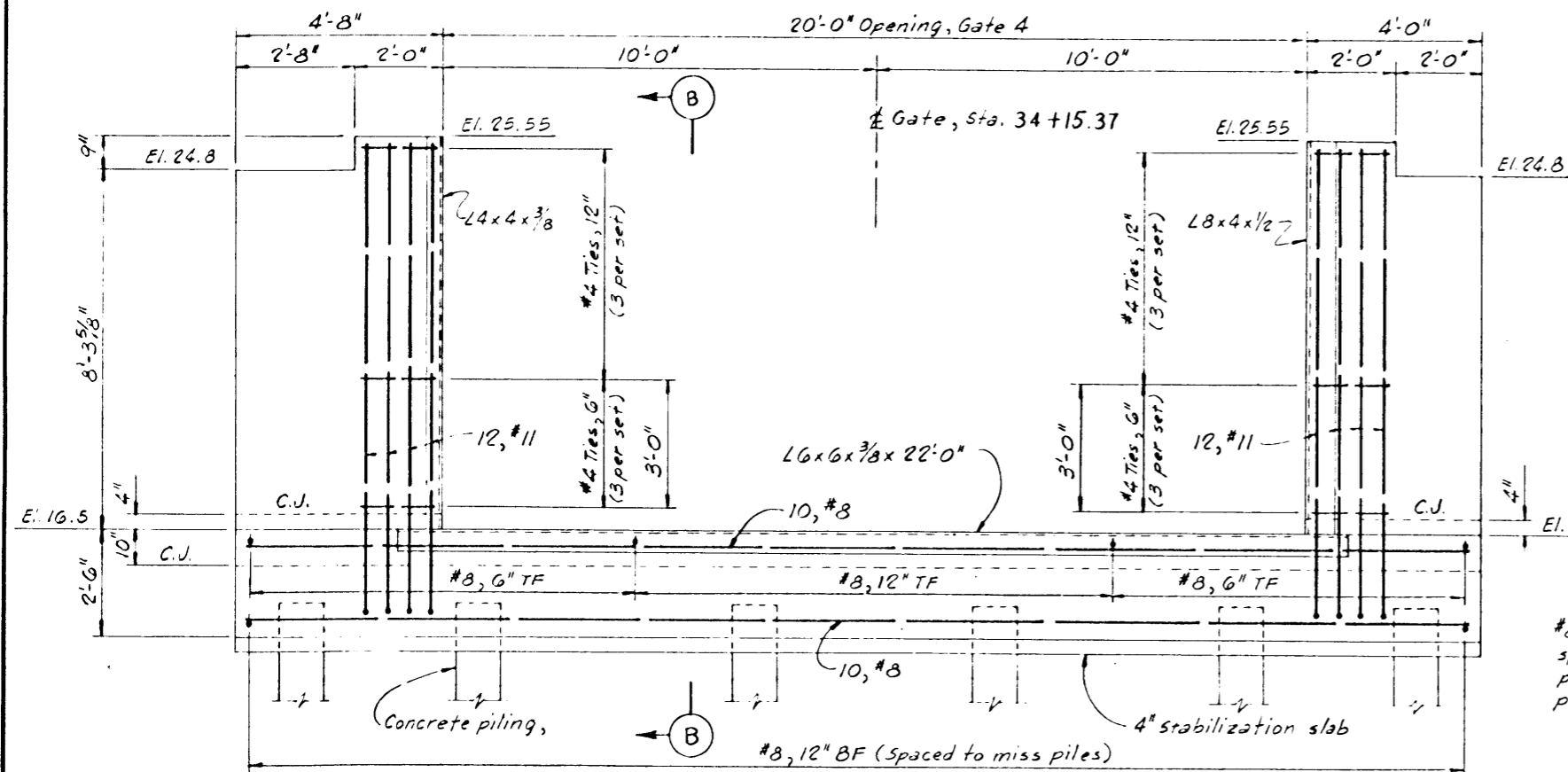
STA. 1+20.00 W/L TO 2+51.19 W/L
STA. 2+81.44 W/L TO 4+05.46 W/L

STA. 4+31.46 W/L TO 24+01.90 W/L
STA. 24+27.90 W/L TO 25+94.18 W/L

TYPICAL I-WALL SECTIONS

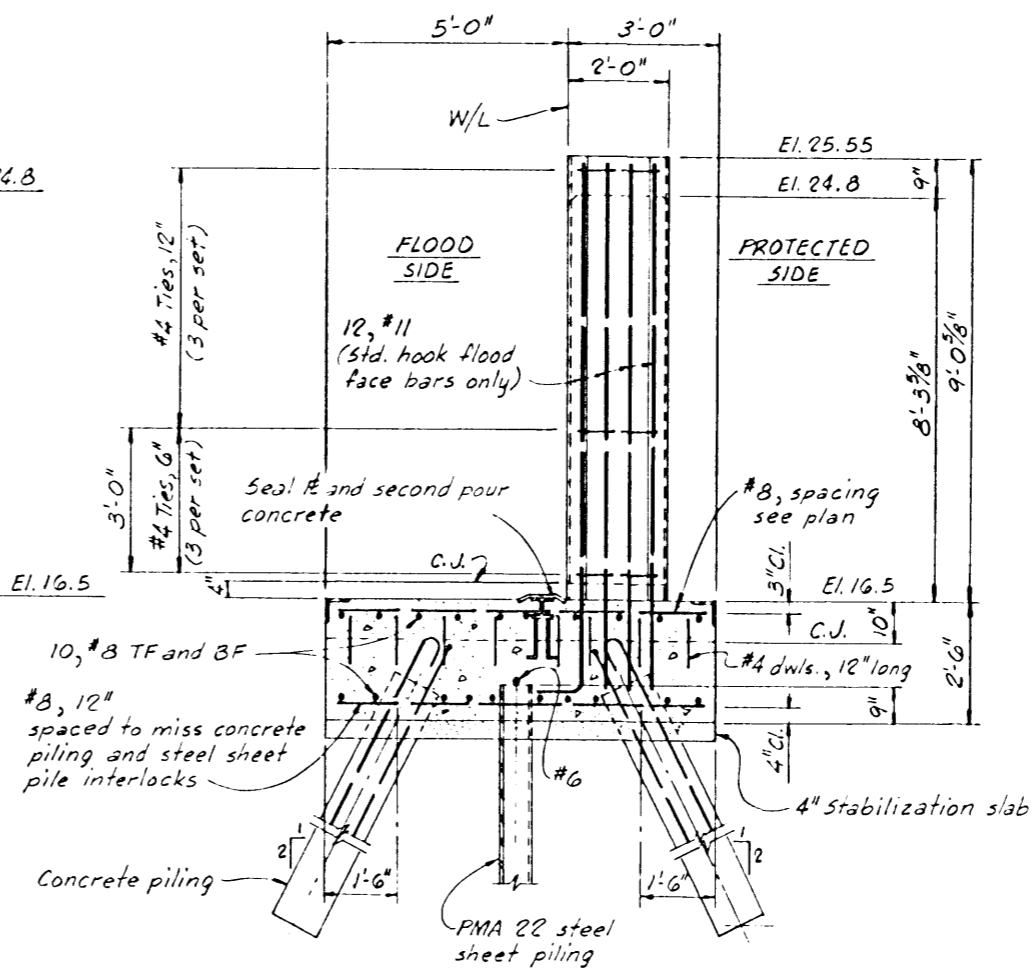
GATE SCHEDULE						
GATE NO.	MONOLITH NO.	ELEVATIONS		DIMENSIONS		STATIONS
		"A"	"B"	"C"	"D"	
2	16	18.40	15.83	2'-6 7/8"	8'-11 5/8"	4+18.46 W/L
3	85	17.82	15.25	2'-6 7/8"	9'-6 5/8"	24+14.90 W/L
8	206	16.33	13.76	2'-6 7/8"	11'-0 1/2"	59+58.83 W/L

NOT TO SCALE
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-1000 - L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
GATE DETAIL & "I" - WALL SECTIONS
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS

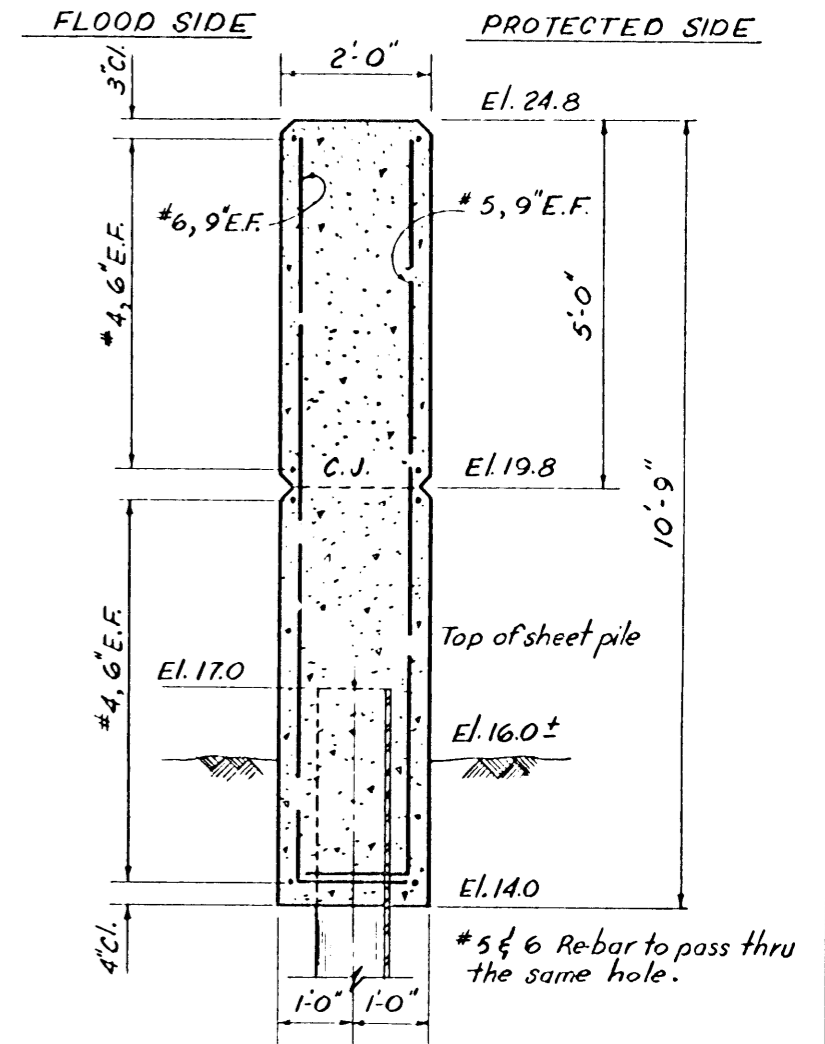


FLOOD SIDE ELEVATION

GATE NO. 4 - ITEM, R-3 DUFOSSAT ST., W/L STA. 34+15.37



SECTION (B)



STA. 26+28.18 W/L TO 34+00.70 W/L
 STA. 34+29.37 W/L TO 35+55.37 W/L
 STA. 35+90.77 W/L TO 48+00.00 W/L

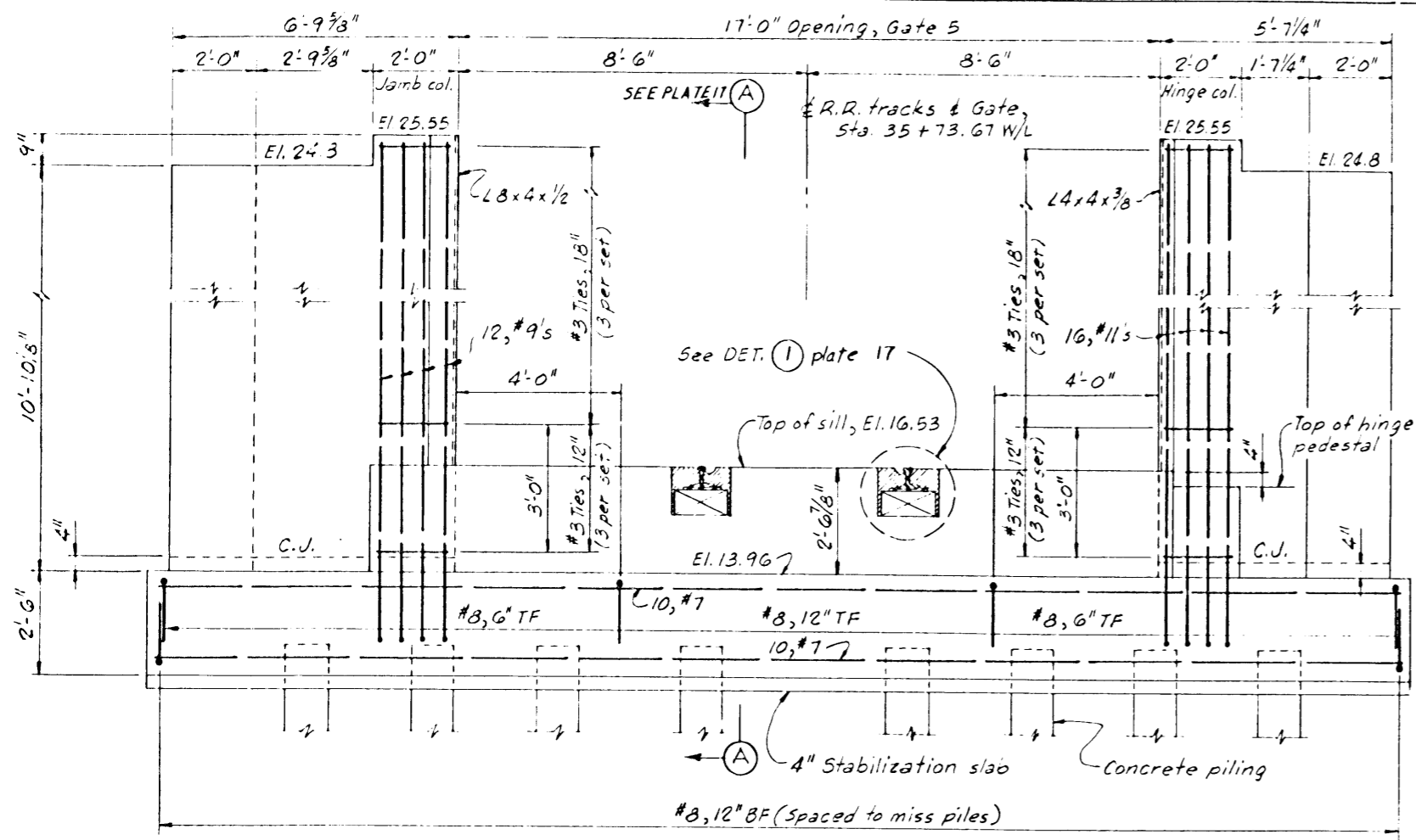
TYPICAL I-WALL SECTION

NOT TO SCALE

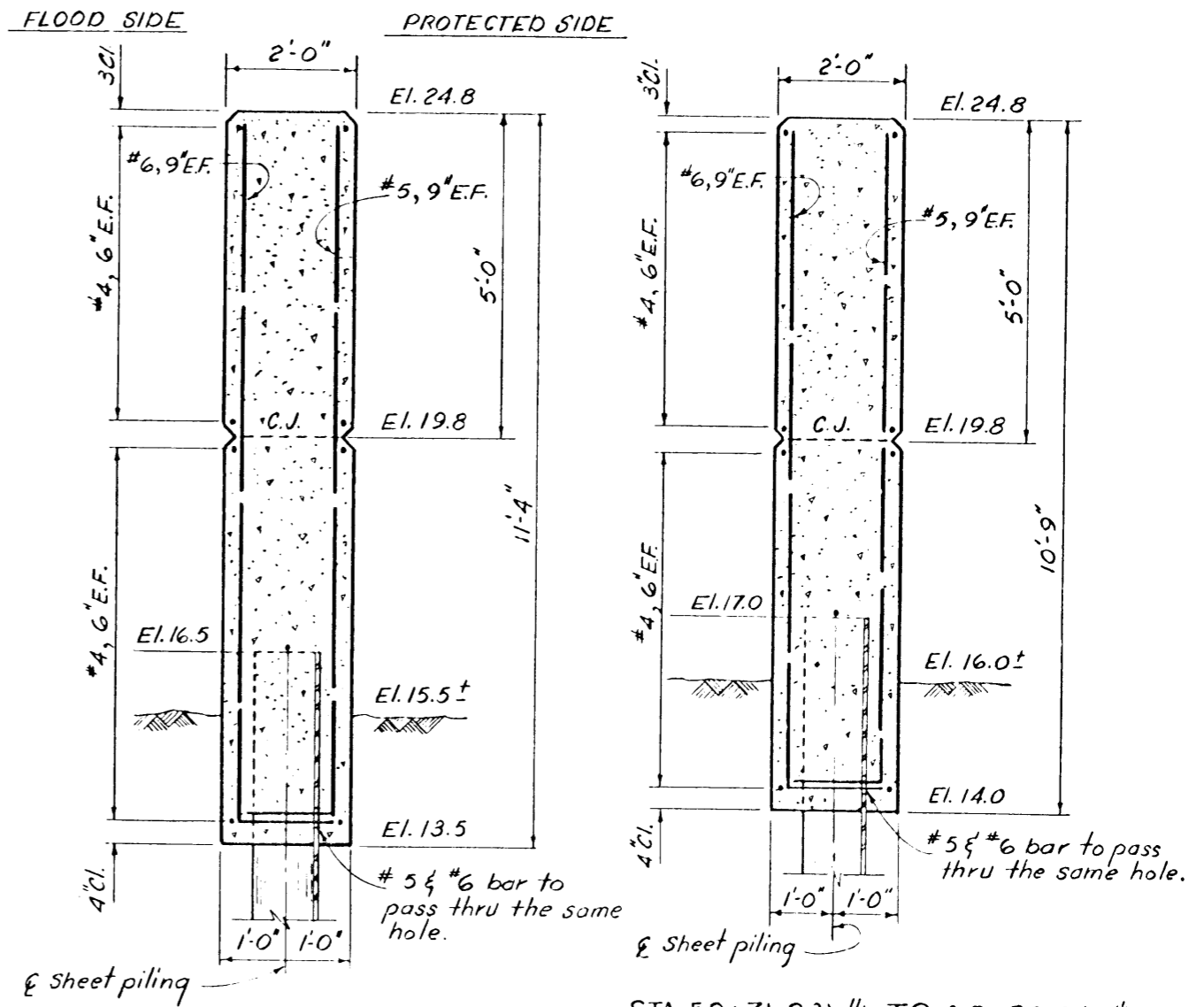
MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-1000 - L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
 GATE DETAIL & "I" WALL SECTION
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

JUNE 1977

FILE NO. H-2-28128



FLOOD SIDE ELEVATION
GATE NO. 5 - ITEM RR-6, W/L STA. 35+73.67

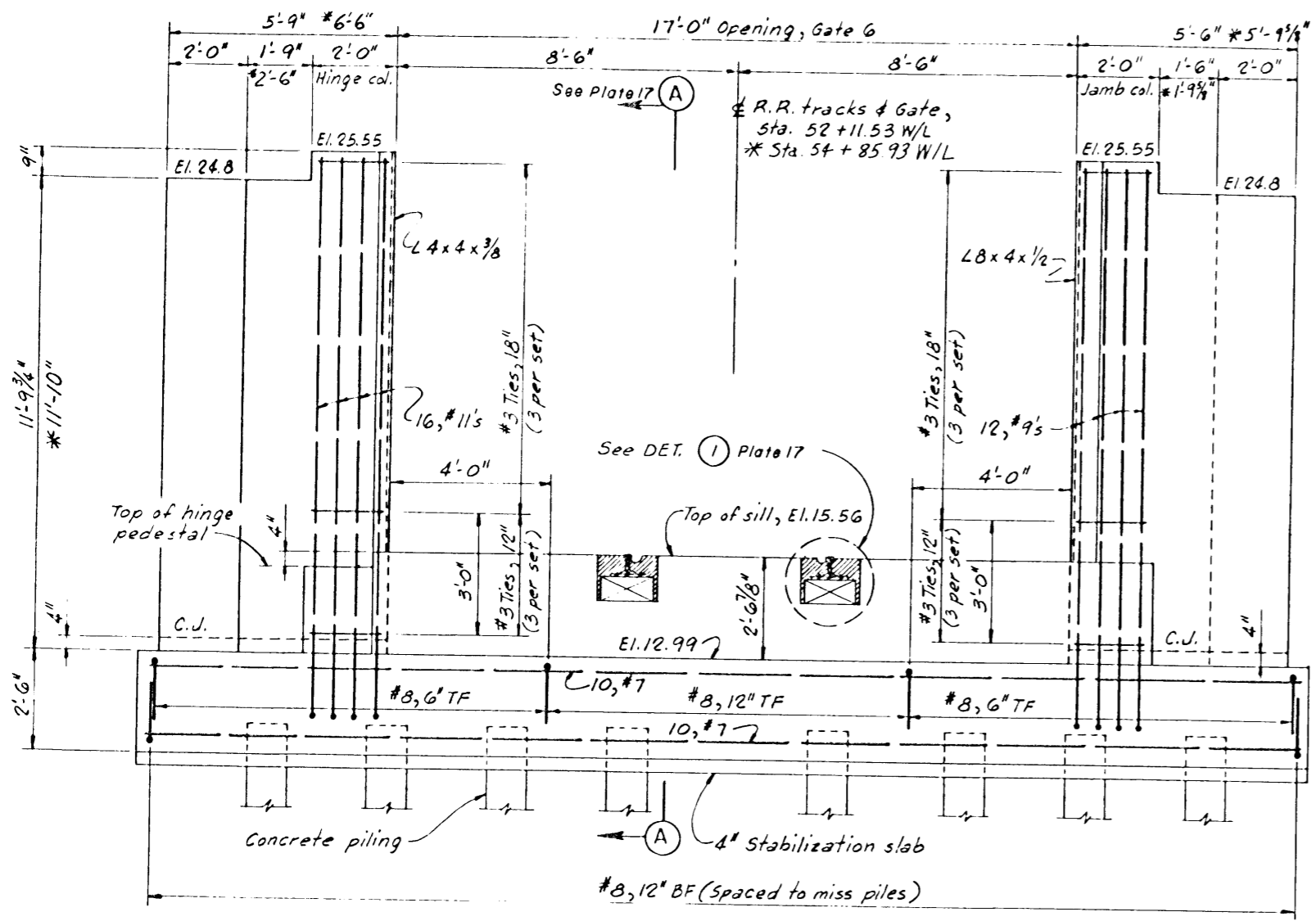


STA. 48+00.00 W/L TO 51+94.28 W/L
STA. 52+28.53 W/L TO 54+68.63 W/L
STA. 55+03.93 W/L TO 59+45.83 W/L

STA. 59+71.83 W/L TO 68+89.64 W/L

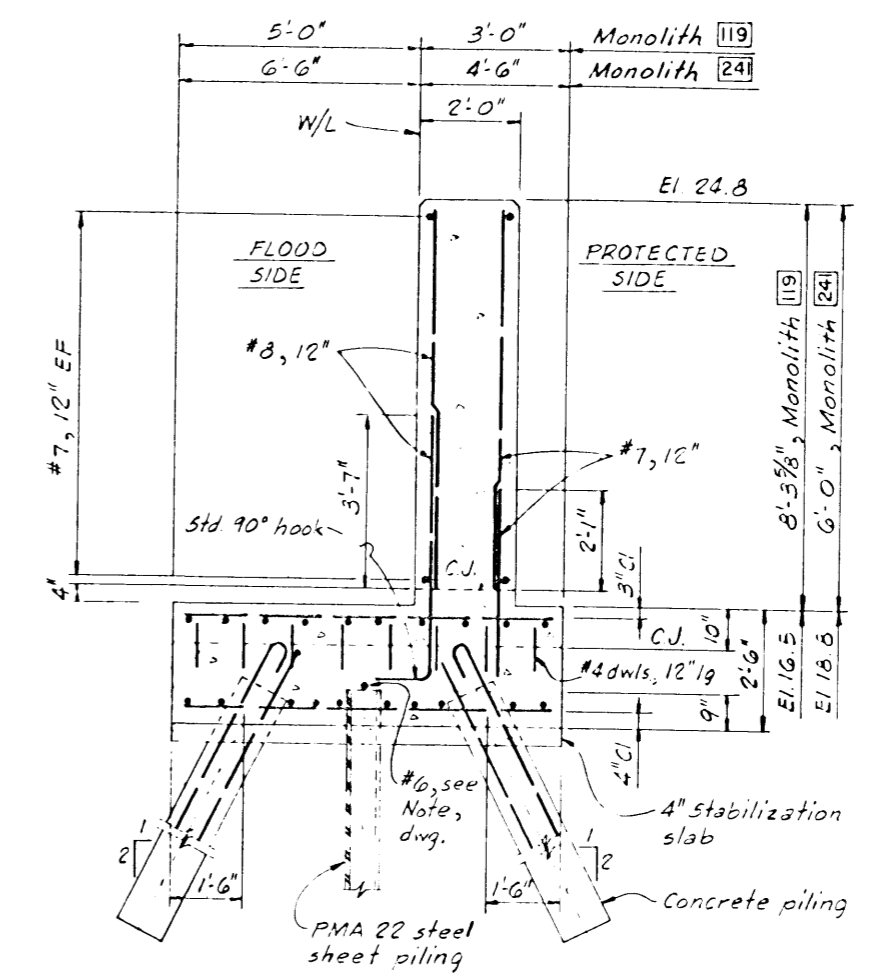
TYPICAL I-WALL SECTION

NOT TO SCALE
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-1000 - L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
GATE DETAIL & "I" - WALL SECTIONS
U S ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS
JUNE 1977
FILE NO. H-2-28128



FLOOD SIDE ELEVATION

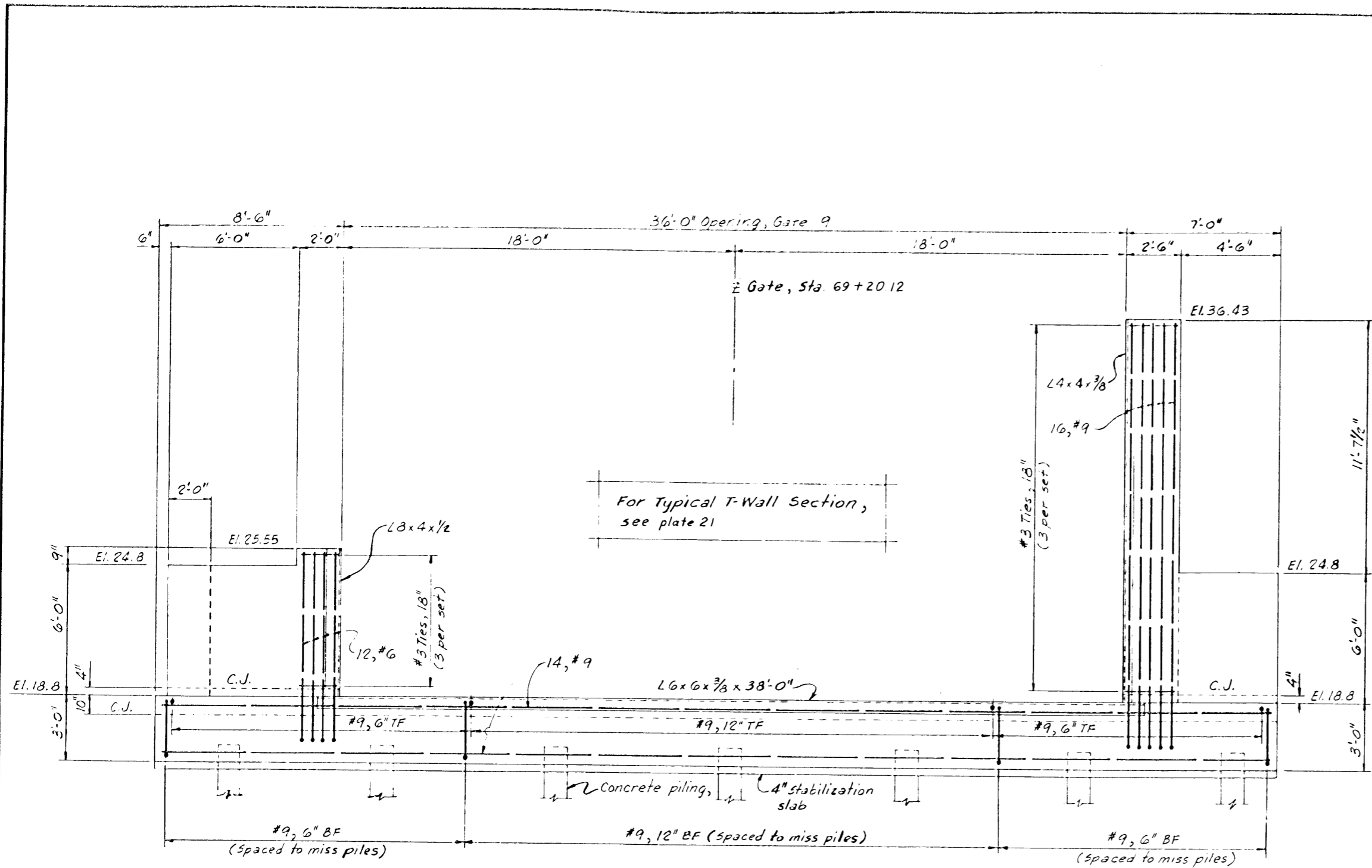
GATE NO. 6 - ITEM RR-6, W/L STA. 52+11.53 (SHOWN)
 * GATE NO. 7 - ITEM RR-6, W/L STA. 54+85.93 (OPP. & SIMILAR)



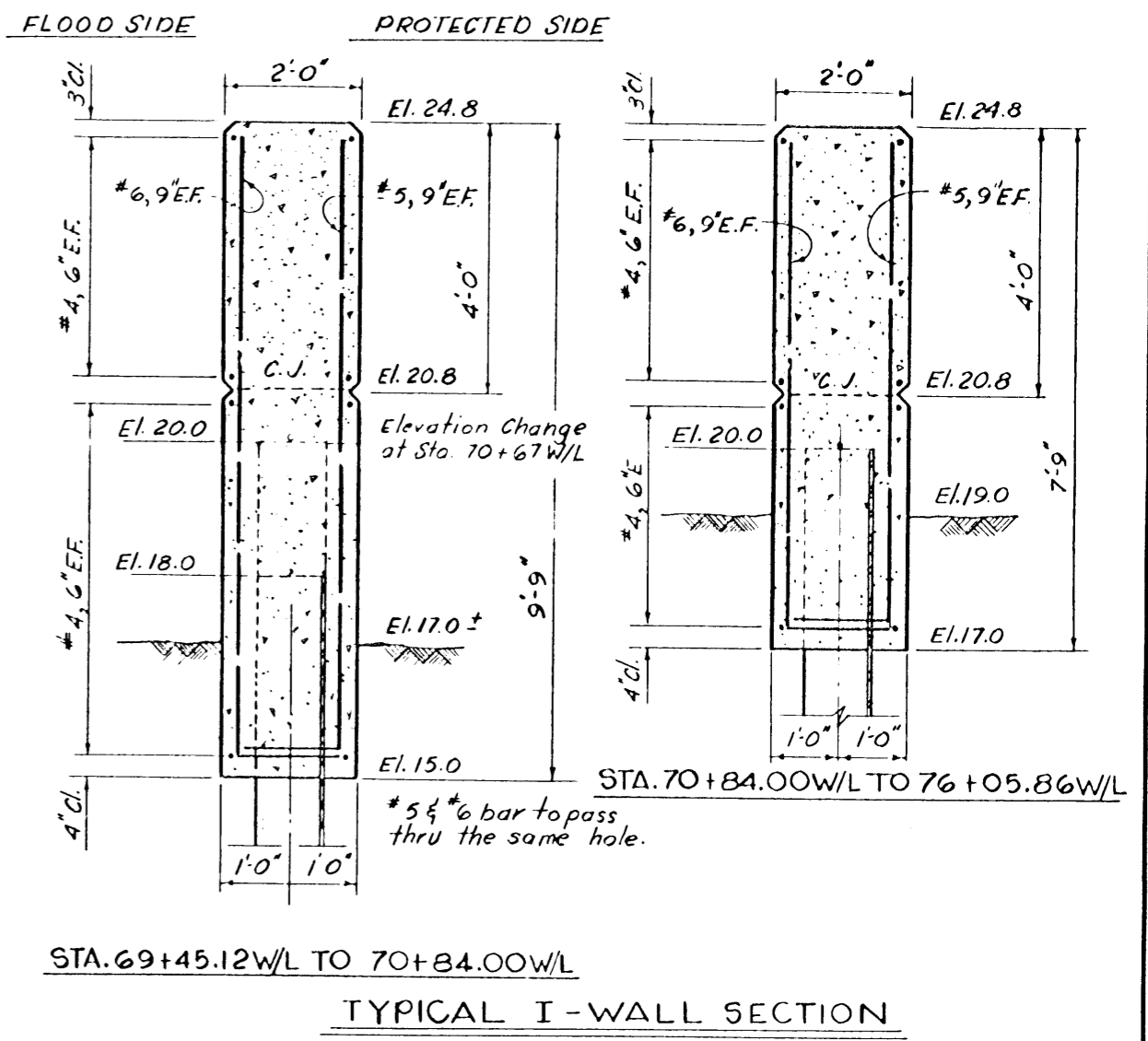
MONOLITH	STATION
119	34+00.70 W/L TO 34+29.37 W/L
24	68+89.64 W/L TO 69+45.12 W/L

TYPICAL T-WALL SECTION

NOT TO SCALE
 MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-1000 - L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
 GATE DETAIL & "T"-WALL SECTIONS
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS

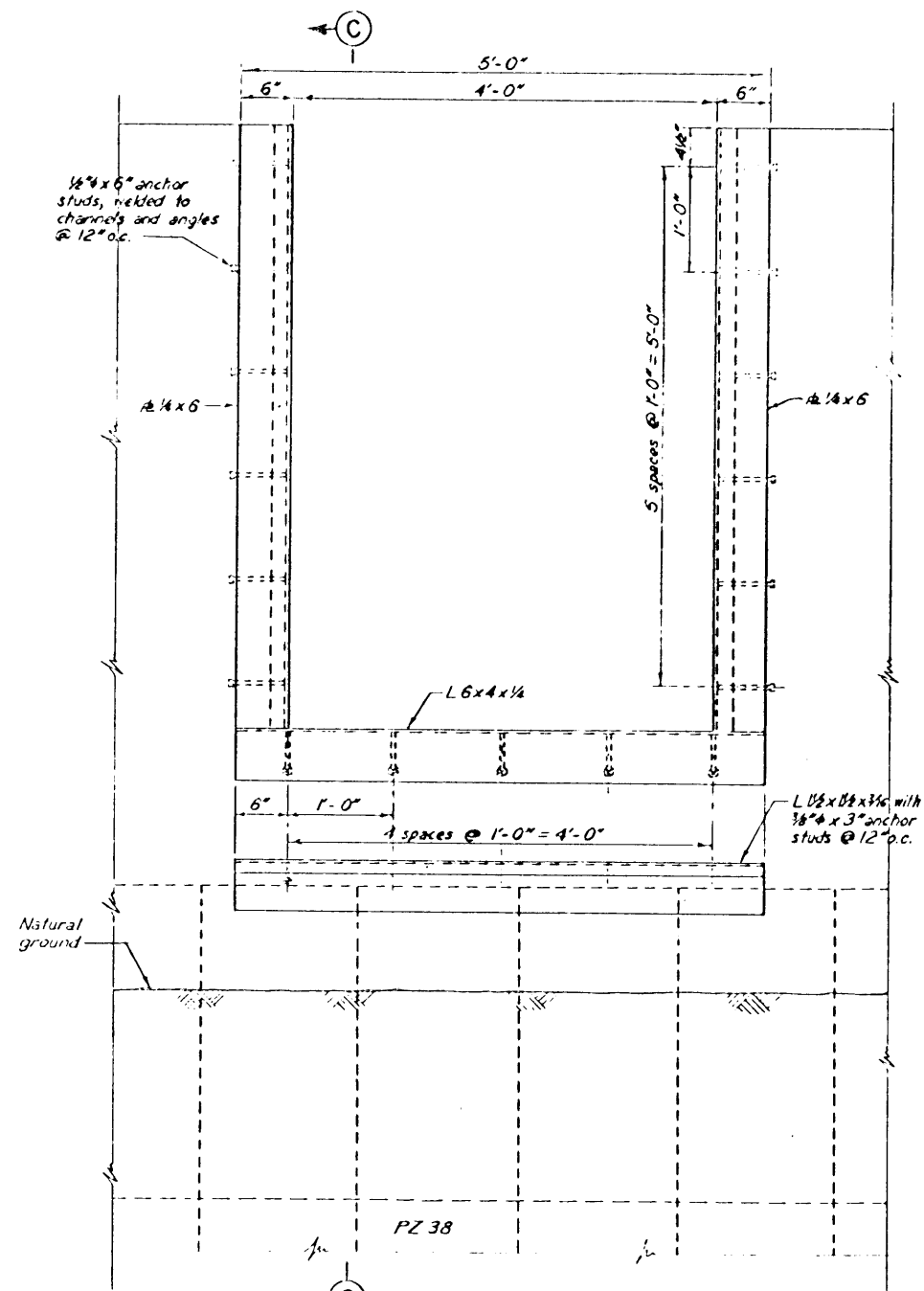


FLOOD SIDE ELEVATION
 GATE NO. 9 - ITEM R-4 NAPOLEON AVE. W/L STA 69 + 20 12

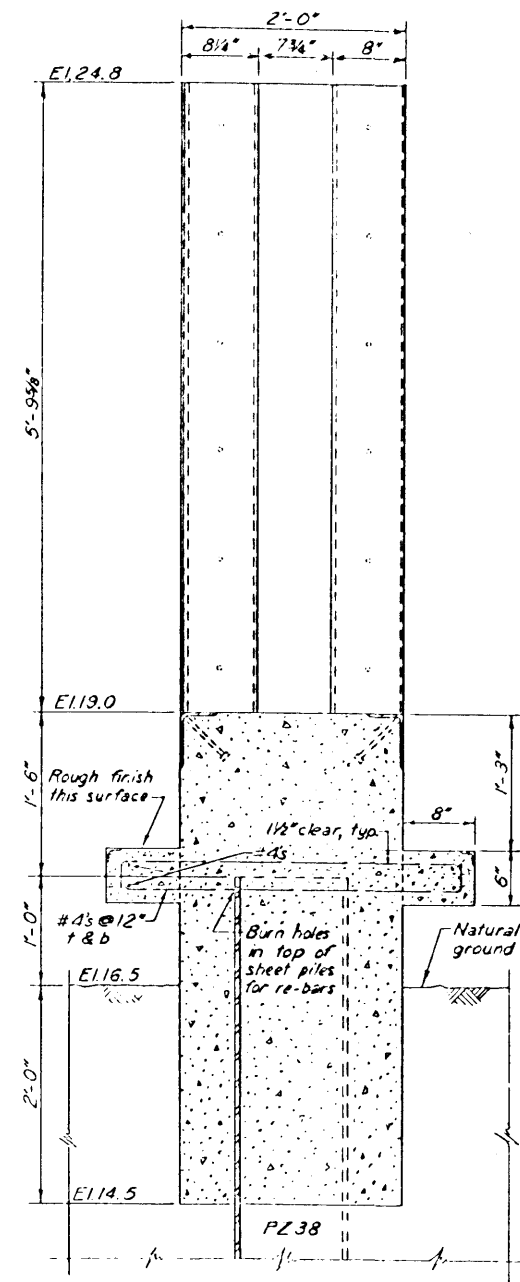


TYPICAL I-WALL SECTION
 STA. 69+45.12 W/L TO 70+84.00 W/L
 STA. 70+84.00 W/L TO 76+05.86 W/L

NOT TO SCALE
 MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-1000 - L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
 GATE DETAIL & "I"-WALL SECTIONS
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS
 JUNE 1977 FILE NO. H-2-28128



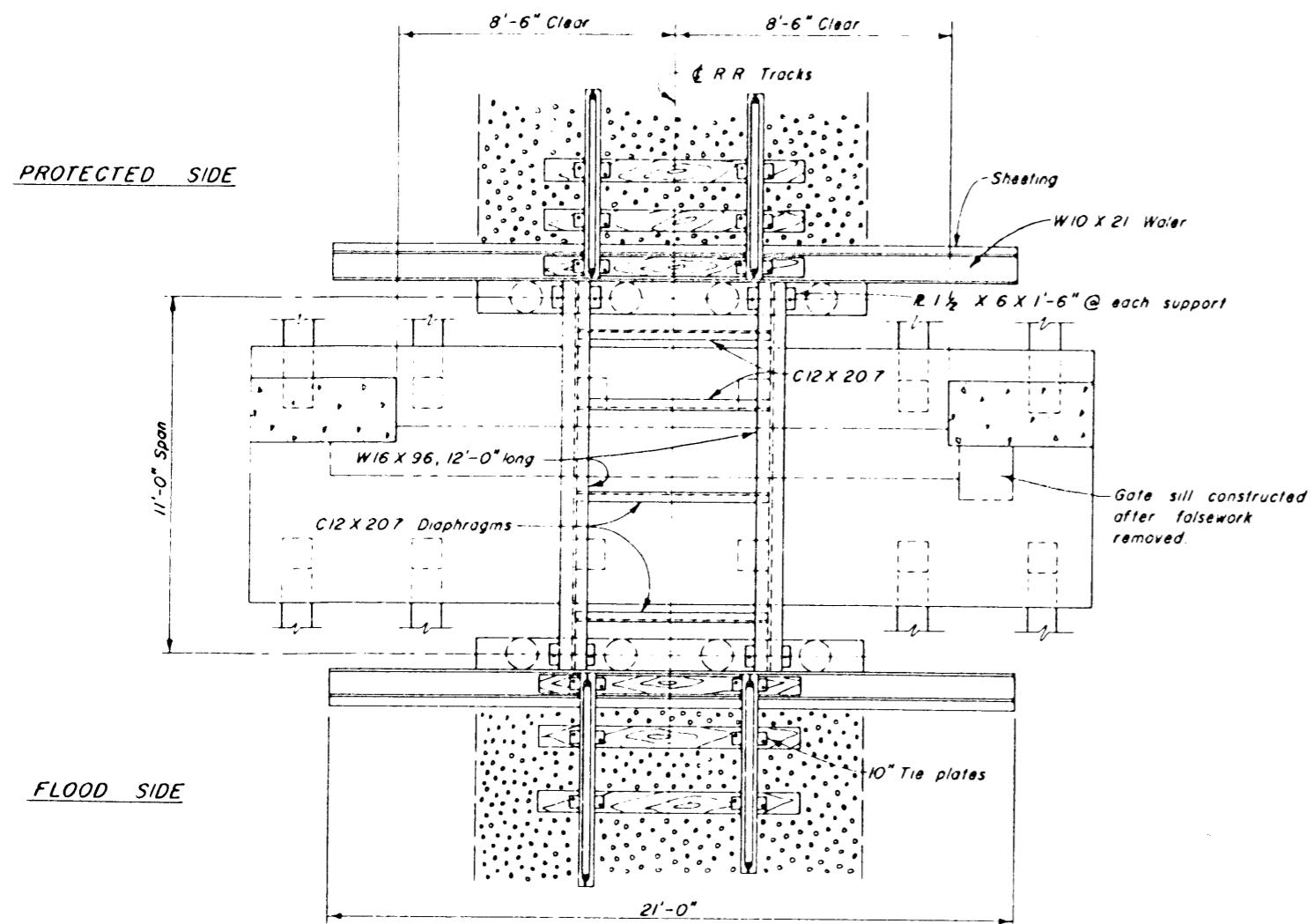
FLOOD SIDE ELEVATION
PEDESTRIAN GATE W/L STA. 64+30



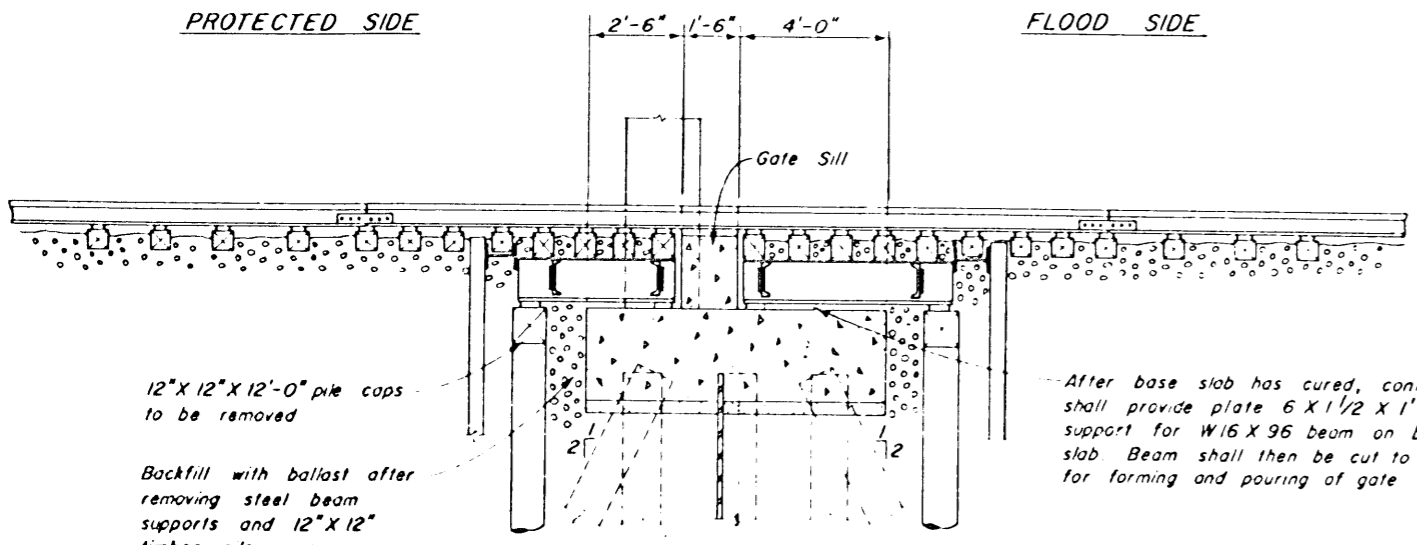
SECTION (C)

NOTE:
For reinforcing steel, except where shown,
see Typical I-wall Sec., Plate 20.

NOT TO SCALE
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-1000 - L
NASHVILLE-NAPOLÉON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
GATE DETAIL
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS



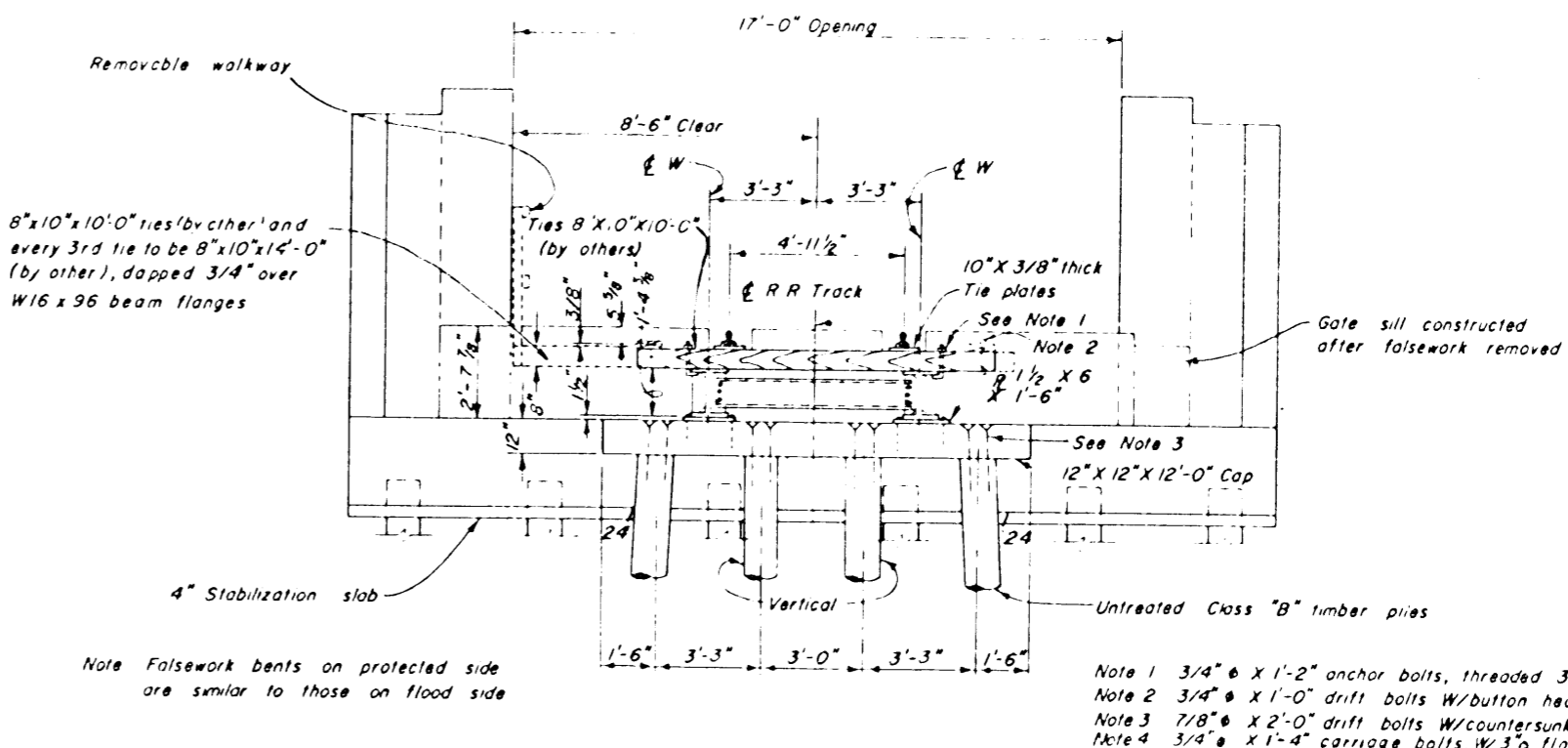
PLAN - FALSEWORK



SECTION (FALSEWORK REMOVED)

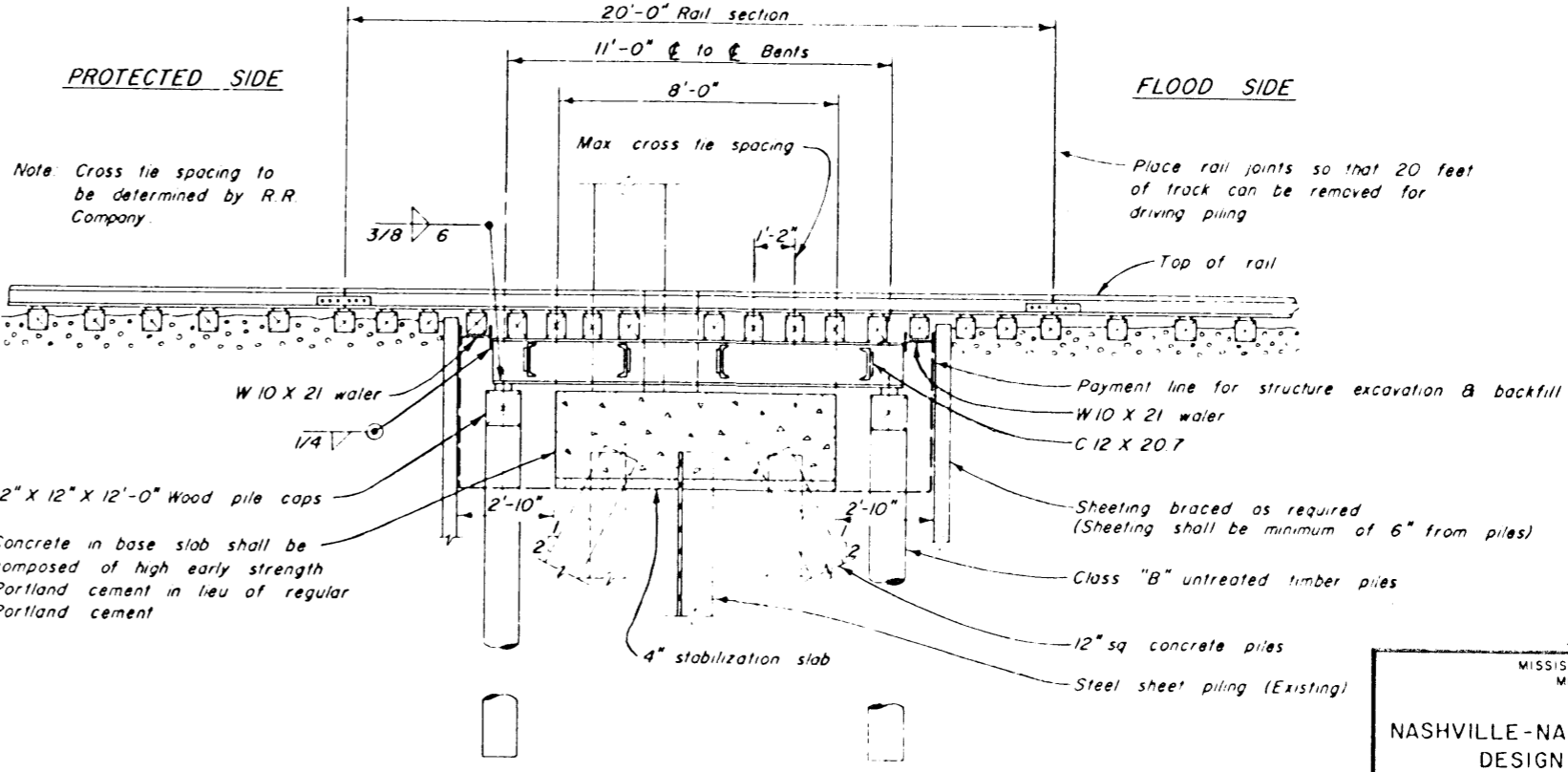
After base slab has cured, contractor shall provide plate 6 X 1 1/2 X 1'-6" support for W16 X 96 beam on base slab. Beam shall then be cut to allow for forming and pouring of gate sill.

Note Concrete in gate sill shall be composed of high early strength Portland cement in lieu of regular Portland cement.



FLOOD SIDE ELEVATION - FALSEWORK BENTS

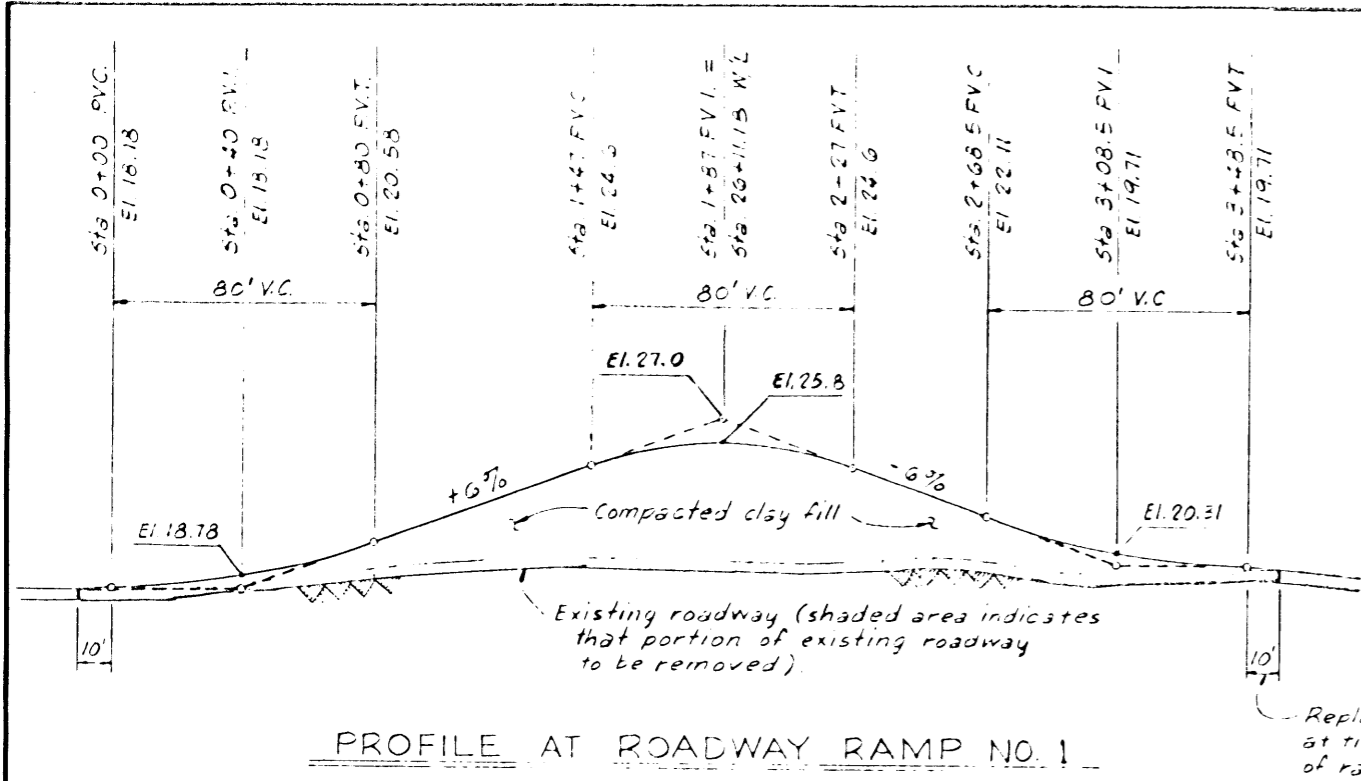
Note 1 3/4" Ø X 1'-2" anchor bolts, threaded 3" W/3" Ø flat washer
 Note 2 3/4" Ø X 1'-0" drift bolts W/button head and wedge point
 Note 3 7/8" Ø X 2'-0" drift bolts W/countersunk head and wedge point
 Note 4 3/4" Ø X 1'-4" carriage bolts, W/3" Ø flat washers



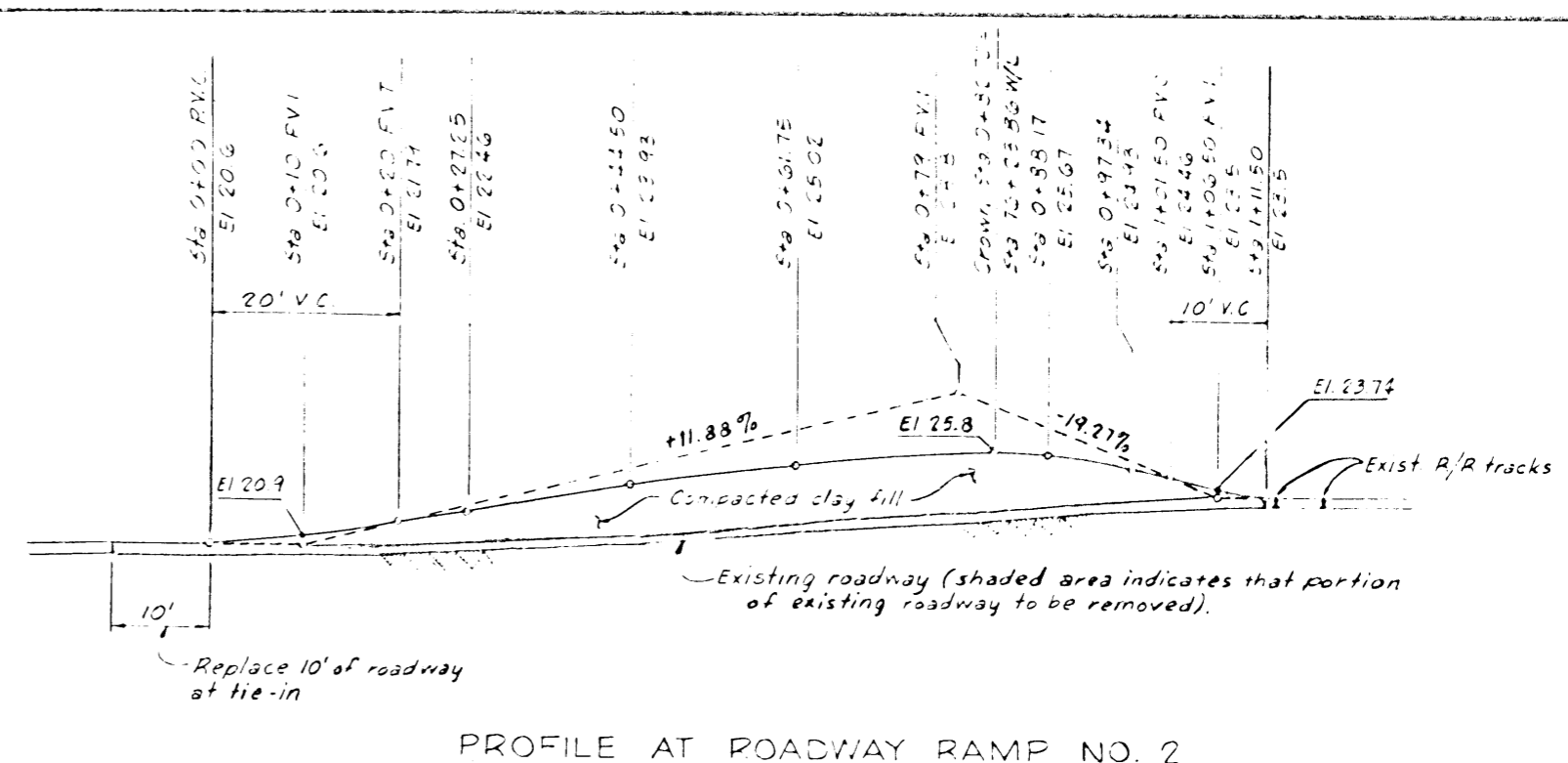
SECTION (FALSEWORK SPAN)

NOT TO SCALE

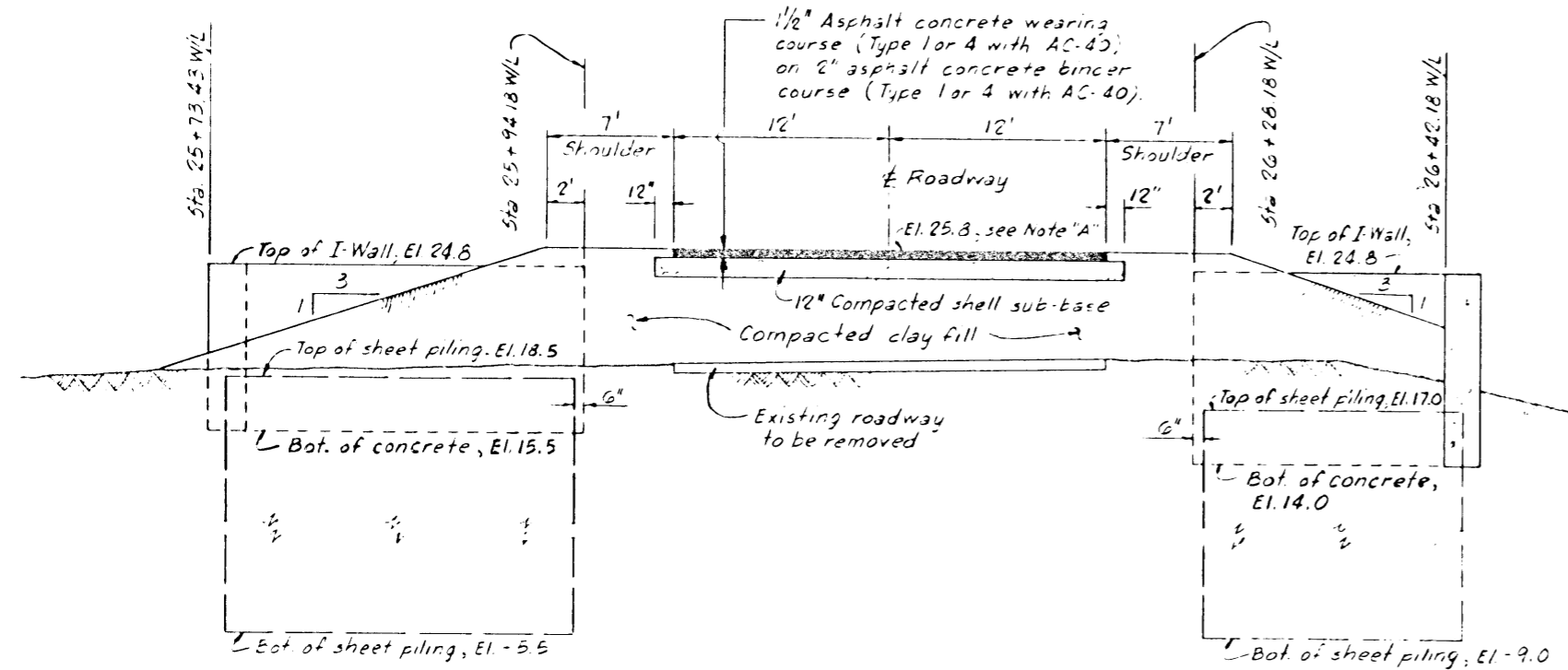
MISSISSIPPI RIVER AND TRIBUTARIES
 MISSISSIPPI RIVER LEVEES
 ITEM M-1000 - L
 NASHVILLE-NAPOLEON AVE. FLOODWALL
 DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
RAILROAD FALSEWORK
 U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
 CORPS OF ENGINEERS



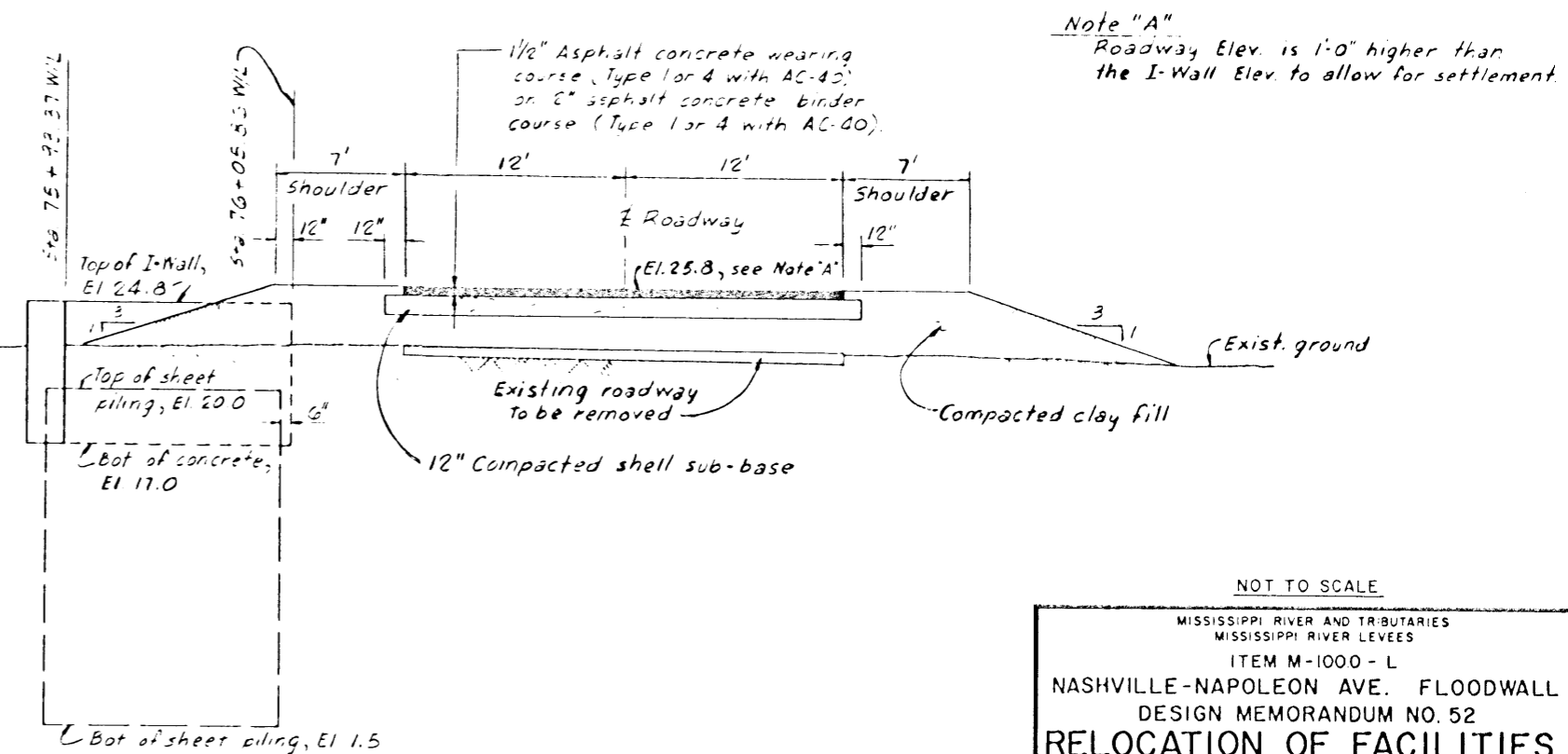
PROFILE AT ROADWAY RAMP NO. 1



PROFILE AT ROADWAY RAMP NO. 2



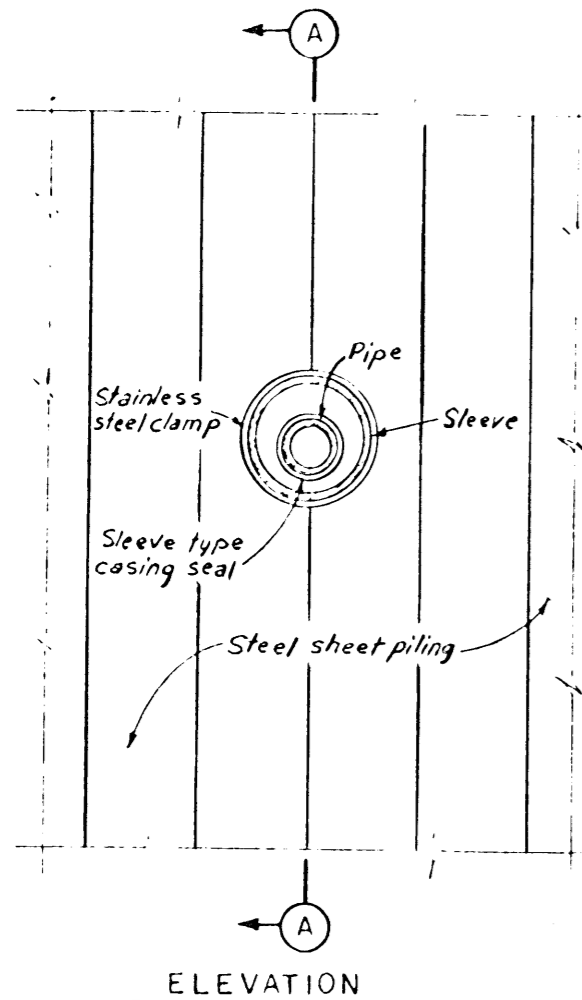
SECTION THRU ROADWAY RAMP NO. 1



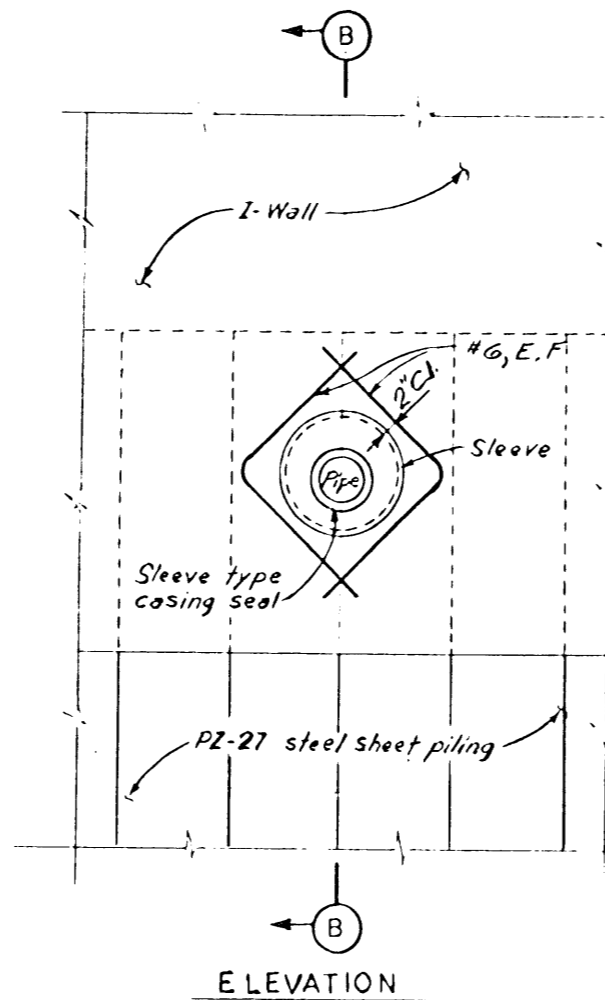
SECTION THRU ROADWAY RAMP NO. 2

Note "A"
Roadway Elev. is 1'-0" higher than the I-Wall Elev. to allow for settlement

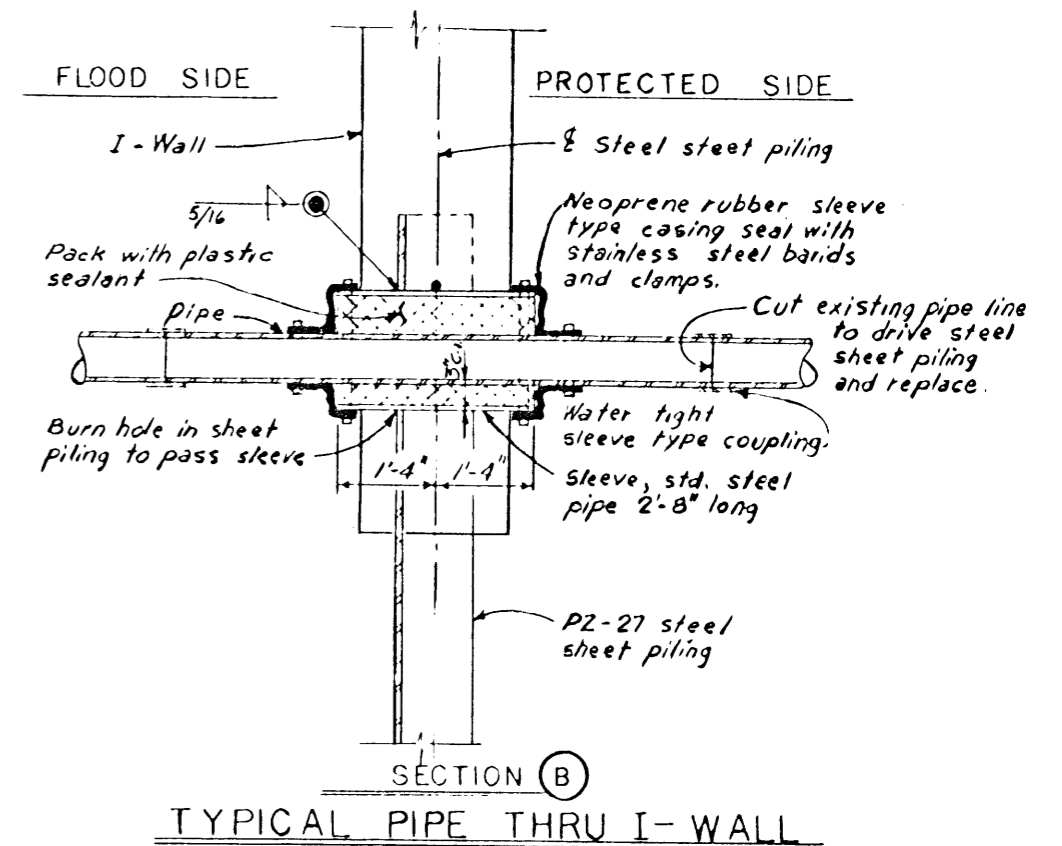
NOT TO SCALE
MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-1000 - L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
RELOCATION OF FACILITIES
ROADWAY RAMPS NO. 1&2
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS



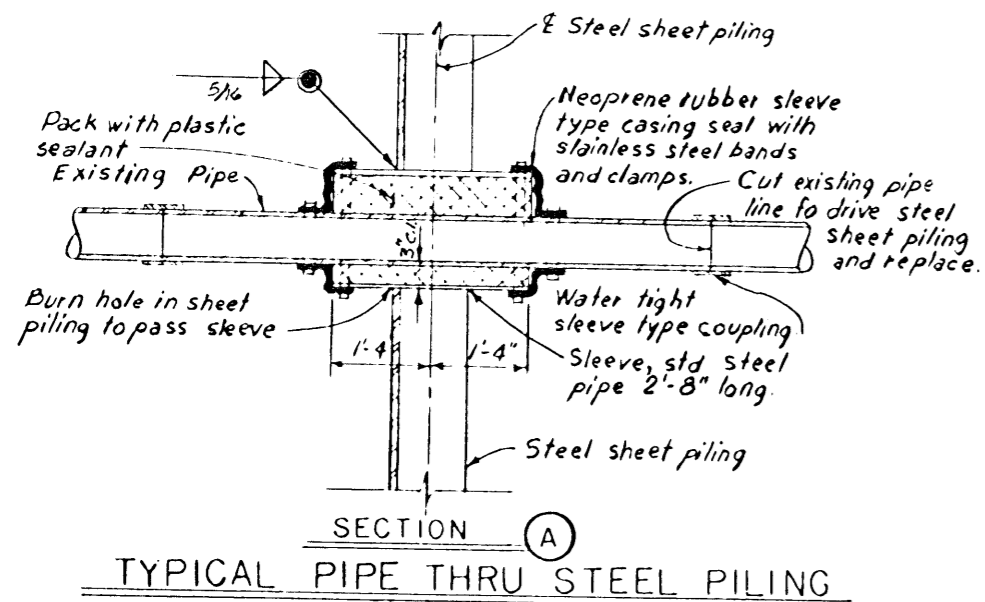
ELEVATION



ELEVATION



SECTION B
TYPICAL PIPE THRU I-WALL



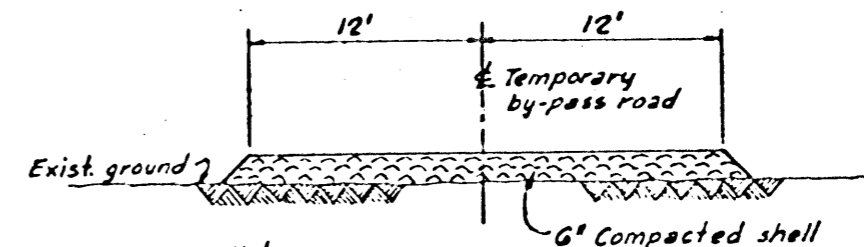
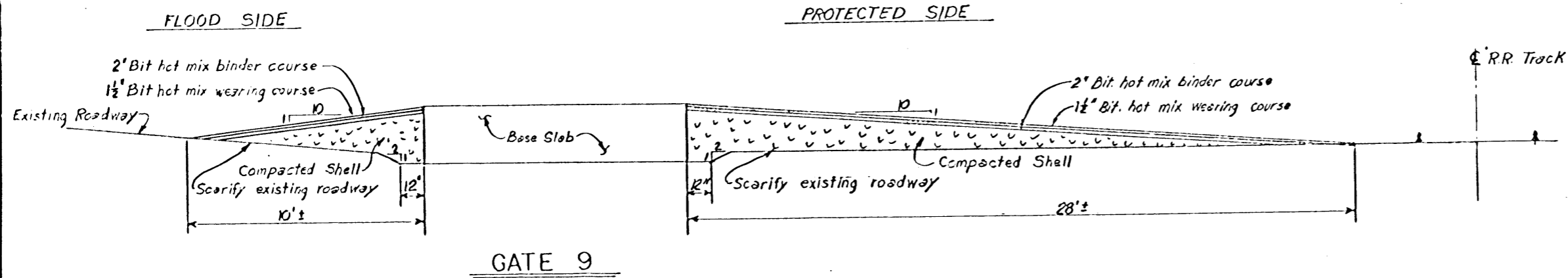
SECTION A
TYPICAL PIPE THRU STEEL PILING

NOT TO SCALE

MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-1000 - L
NASHVILLE-NAPOLEON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
**RELOCATION OF FACILITIES
UTILITIES**
U. S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS

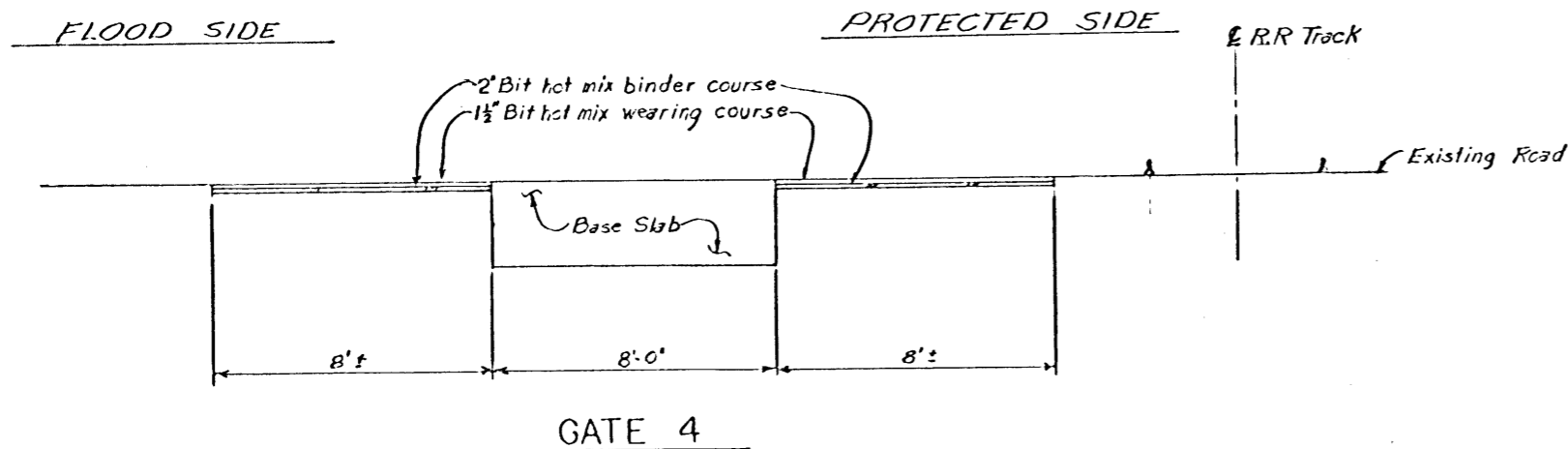
JUNE 1977

FILE NO. H-2-28128

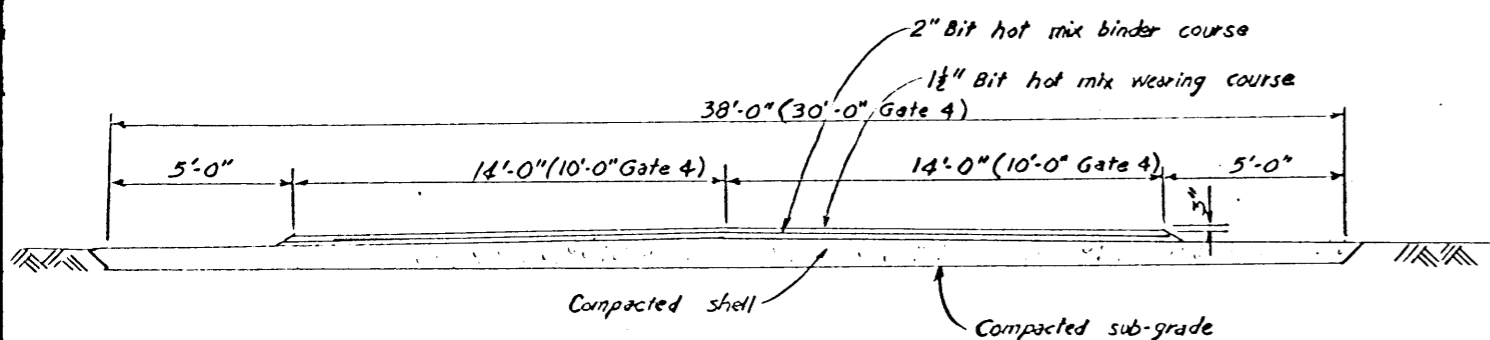


Note
Temporary by-pass road for Ramp No. 1, Ramp No. 2 and Gate No. 9.

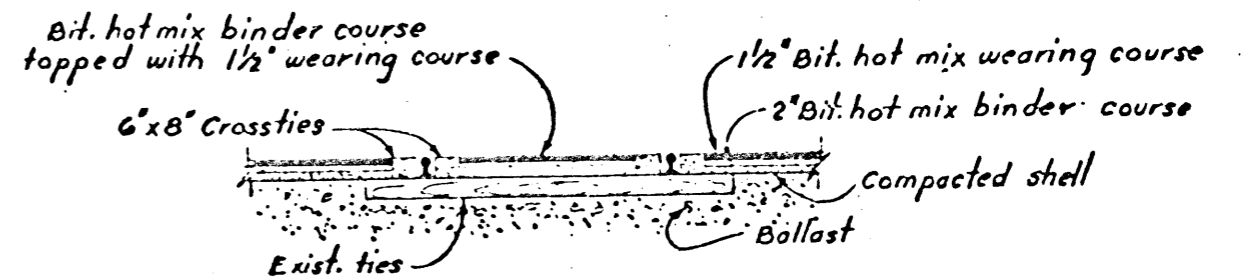
TYPICAL CROSS SECTION
TEMPORARY BY-PASS ROAD



DETAILS FOR RESTORING ROADWAY



TYPICAL SECTION THRU ROADWAY



SECTION THRU R/R TRACKS AND
12' ROADWAY AT GATE 2

NOT TO SCALE

MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-1000 - L
NASHVILLE-NAPOLÉON AVE. FLOODWALL
DESIGN MEMORANDUM NO. 52
**RELOCATION OF FACILITIES
ROAD DETAIL**
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
CORPS OF ENGINEERS

JUNE 1977

FILE NO. H-2-28128

FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0-L
NASHVILLE-NAPOLEON AVENUE FLOODWALL
ORLEANS PARISH, LOUISIANA
RELOCATION OF FACILITIES
DESIGN MEMORANDUM NO. 52

APPENDIX I
ATTORNEY'S REPORTS

ATTORNEY'S INVESTIGATION AND
REPORT OF COMPENSABLE INTEREST

Nashville-Napoleon Avenue Floodwall

Item M-100.0-L

This investigation and report is made in accordance with DIVR 1110-2-2 (see also DIVR 1110-2-1, 29 January 1968) and ER 1180-1-1, Section 73, Part 2, 73-203 and 73-204 on the facilities listed on Exhibit "A" attached hereto and by this mention made a part hereof, which will be affected by the subject floodwall.

All of the facilities listed on Exhibit "A" are indicated on map file No. H-2-28128, plates 2 thru 16 of 16, styled Mississippi River and Tributaries, Mississippi River Levees, Item M-100.0-L, Nashville-Napoleon Ave. Floodwall, Design Memorandum No. 52, Relocation of Facilities, Location Map U.S. Army Engineer District, New Orleans, Corps of Engineers.

COMPENSABLE INTEREST

a.

The Board of Commissioners of the
Port of New Orleans (Dock Board)

The Dock Board is an agency of the State of Louisiana, and owns, operates and maintains all of the facilities listed under section a. of Exhibit "A".

In the case of Hartwig Moss, Inc. Agency v. Board of Commissioners of the Port of New Orleans, 206 La. 395, 19 So 2d 178, the Court said: "It has been repeatedly held by this court that the Board of Commissioners of the Port of New Orleans, ordinarily referred to as the Dock Board, is a state agency." Duffy v. City of New Orleans, 49 La. Ann. 114, 21 So. 179.

Article 34:21 of the Louisiana Revised Statutes provides, inter alia: "The board of commissioners shall regulate the commerce and traffic of the port and harbor of New Orleans in such manner as may, in its judgment, be best for the development thereof. It shall be the duty of the board to have charge of, and administer the public wharves. . . ; to construct new wharves when necessary; . . . to provide light, water, police protection, and any other services for such wharves, . . . as it may deem advisable; . . ."

Article RS 34:23 of the Louisiana Revised Statutes provides, inter alia: "The board of commissioners may acquire by purchase, or by expropriation in accordance with the expropriation laws, any property, wharves, or landing necessary for the benefit of the commerce of the port and harbor of New Orleans . . ."

The Dock Board acquired the land, in, on, and over which subject facilities are located, in fee by deed from the various grantors listed in Exhibit "B" attached hereto and by this mention made a part hereof. All of the deeds listed in Exhibit "B" are spread upon the public records of the Parish of Orleans, State of Louisiana.

b.

South Central Bell Company (S.C.B.)

S.C.B. owns, operates and maintains the facilities listed in section b. of Exhibit "A".

S.C.B. has previously furnished this office certificates of the Secretary of State, dated 19 August 1970, showing that the S.C.B., a Delaware Corporation, has filed a copy of its Articles of Incorporation in his office and has qualified to do business in the State of Louisiana. The S.C.B. is considered to be a public utility, and has the right of eminent domain, see Louisiana Revised Statutes, Title 45, Sec. 781, and Title 19, Sec. 2(8).

S.C.B. has not furnished any evidence that the rights-of-way for its facilities listed under section b. of Exhibit "A" were purchased from the fee owner. However, a corporation with the right of eminent domain possesses a vested right in the right-of-way to be relocated, even without conventional negotiation for an acquisition of such required servitudes, as was decreed in a long line of decisions by the Louisiana Supreme Court, St. Julien v. Morgan's Louisiana & T.R. Co., 35th La. 924; Tate v. Town of Ville Platte, 44 So 2d 360. This type of servitude is commonly referred to as the doctrine of "Unopposed Occupancy" or "Unopposed Use."

The S.C.B. has a compensable interest in all of its facilities listed under section b. of Exhibit "A".

c.

New Orleans Public Service, Inc. (NOPSI)

NOPSI, a Louisiana corporation, domiciled in the City of New Orleans, is a privately owned public utility, with the right of expropriation, LSA-RS 19:2(9).

NOPSI has not furnished any evidence that the right-of-way for its facilities listed under section c. of Exhibit "A" were purchased from the fee owner. However, none are required because NOPSI has acquired a compensable interest in and to the rights-of-way for these facilities through the "Doctrine of Unopposed Occupancy." See b. supra for an explanation of this "Doctrine."

d.

International Export Packer of Louisiana, Inc, (I.E.P.)

The I.E.P, is a Louisiana Corporation. The facility listed in section d. of Exhibit "A" is located pursuant to the approval of the Dock Board. Although this approval does not convey any interest in the right-of-way for this facility, its removal or relocation will be caused by the floodwall and not for the convenience of the Dock Board; therefore, the cost of removal or relocation of this facility is the obligation of the Government.

e.

New Orleans Public Belt Railroad Company (N.O.P.B.R.)

The N.O.P.B.R. is owned and operated by the city of New Orleans by and through a commission known as the Public Belt Railroad Commission, as provided under Article 14, Section 25 of the 1921 Louisiana State Constitution, made statutory by Article 14, Section 16 of the 1974 Louisiana State Constitution.

There is no record as to how N.O.P.B.R. acquired the right-of-way for its facilities listed under section e. of Exhibit "A".

The courts of Louisiana have generally held that where railroads have not conventionally, or by condemnation, acquired fee title to the strip of land upon which their roadbed is constructed and must rely upon prescription (limitation) or effect of law as a basis of their title to such land, they will be considered to have so acquired NOT a fee title, but only what is actually required to construct and operate the railroad thereon and across a mere right-of-way servitude (easement). Louisiana Civil Code Article 765, "Acquisitive prescription of continuous apparent servitudes, and of roads," found under Section 2, "how servitudes are acquired" of Chapter 4, "of conventional or voluntary servitudes," Title IV, "of Predial Servitudes or Servitudes of Land," of Book II, "of Things and of Different Modification of Ownership" provides: "Continuous and apparent servitudes may be acquired by title, or by possession of ten (10) years . . ." The acquisition and use of a railroad right-of-way . . . a continuous and apparent servitude . . . , has, however, been excepted from reliance upon said Article 765, and distinguished in its application to a railroad company, having the power of eminent domain, as

does subject railroad. In a leading case on this subject, the Supreme Court of the State of Louisiana held the following:

"Where a railway company, with the consent or acquisition of the owner, has built a public service road upon his land, through consent or acquiescence of the owner of the land be not spread upon the public records, neither he nor those who claim under him can recover the land, free of the servitude so acquired by the railway company, or interfere with such company in its operation of the road so built; the remedy being an action in damages for the value of the land occupied as a right-of-way for the road and for injury to the adjacent land." Webster Sand, Gravel and Const. Co. v. Vicksburg, S&PR Co., 129 La. 1096, 57 So. 529.

In view of the foregoing, N.O.P.B.R. has a compensable interest in its facilities listed in Exhibit "A".

f.

Illinois Central-Gulf Railroad Company (I.C.G.R.)

There is no record as to how the I.C.G.R. acquired the right-of-way for its facility listed under section f. of Exhibit "A". The same statutes and case law applied in e. supra applies in this instance. Therefore, the I.C.G.R. has a compensable interest in its facility listed in Exhibit "A".

g.

City of New Orleans (N.O.)

N.O. is a municipal corporation of the State of Louisiana,

N.O. holds, in trust for the public, fee title, not merely an easement or servitudes to its streets, and it may, pursuant to LSA-RS 52:2 and LSA-RS 33:4717, upon a two-thirds vote of the City Council, revoke the destination or dedication of such property and sell at private sale, exchange or otherwise convey to the United States, the State of Louisiana or any department or agency of either, such property needed for public use.

N.O. fee title in its streets have been repeatedly recognized by the Louisiana Supreme Court, together with its right to alienate such interest therein.

The street listed herein and now in its modern form, has been in place and in use by the people of N.O. for well over 80 years without formal conveyance and acquisition.

In almost every instance in N.O., public streets are acquired by dedication and not by purchase.

In the case of President, Recorder and Trustees of City of Cincinnati v. Lessee of White, 1832, 6 Pet. 431, 8 L.Ed. 452, the Supreme Court of the United States announced the principle that dedication of use was valid without the necessity of a grant for charitable, religious and public grantee to whom a fee could be conveyed, recognizing that such dedications constitute the "leaving open" of property for common and public use and for the convenience and accommodation of the inhabitants of a municipality. The Court therein also pronounced the doctrine that there is no particular form necessary to a dedication of land to public use. All that is required is the assent of the owner of the land, and the fact of its being used for the purpose intended.

The land strips designated as extensions of existing public streets across Leake Avenue and across the fee-owned land of the Dock Board as shown on Board of Commissioners Port of New Orleans, Louisiana, Property Map Henry Clay to Napoleon Ave. dated 2 March 1934, do not exist, except Nashville Ave., Dufossat, and Napoleon Ave. The said map was revised on 16 June 1958, 1 July 1959, and 5 November 1962, and is recorded in the public records of Orleans Parish, in COB Nos. 633, 643 and 649 added. A check of the Orleans public records and the files and records of the Department of Streets of N.O. revealed that the subject streets except for Nashville Ave., Dufossat St., and Napoleon Ave., were only proposed streets that were never constructed, nor were the proposed streets considered to be dedicated by N.O.

h.

Arkansas Grain Corporation (A.G.C.)

The A.G.C. is an Arkansas Corporation domiciled at Stuttgart, Arkansas, and duly qualified to do business in the State of Louisiana. The A.G.C. owns, operates and maintains the following facilities which will be affected by the subject floodwall:

One 3-inch (vegetable oil) pipeline
Two 6-inch (vegetable oil) pipelines

The subject facilities are located by virtue of an agreement by and between the Board of Commissioners of the Dock Board and the A.G.C. dated 12 July 1966. The agreement, inter alia, granted the A.G.C. servitudes (easements) for the installation of subject facilities.

The subject facilities are listed under section a, of Exhibit "A" as Items 0-1 and 0-2. These items do not belong to the Dock Board as listed in Exhibit "A".

AUTHORITY AND OBLIGATION

Authority for construction, enlargement, or improvement of main line Mississippi River Levees, including berms, is contained in the Act of 15 May 1928 (PL 391, 70th Congress), as amended. The furnishing of rights-of-way for levee foundations and levees on the main stem Mississippi River, except levee setbacks, is an obligation of local interest (see Section 3, Act of 15 May 1928). The replacement or relocation of public roads, highways, railroads, public utilities, and pipelines required for the construction of main line Mississippi River Levees will be accomplished at Federal expense. Reimbursement of costs to local cooperating agencies in perfecting relocation of interfering facilities may be made pursuant to the Act of 23 April 1934 (PL 171, 73d Congress).

The Government is obligated to relocate all of the facilities listed in Exhibit "A", excepting those facilities which are located within the levee right-of-way and further excepting the facilities owned by the following corporations:

- I.E.P. listed under section d. of Exhibit "A".
- A.G.C. listed under section h. herein.

The facilities owned by these corporations, excepting for those facilities located within the existing levee right-of-way, will be acquired as part of the real estate acquisition program for the subject project.

The Fifth Amendment of the United States Constitution provides, inter alia, that private property shall not be taken for public use, without just compensation.

In United States v. Miller, 317 U.S. 369, 63 S. Ct. 276, 87 L. Ed. 336, the Supreme Court has said that "the Fifth Amendment of the Constitution provides that private property shall not be taken for public use without just compensation. Such compensation means the full and perfect equivalent in money of the property taken. The owner is to be put in as good a position pecuniarily as he would have occupied if his property had not been taken."

"Just compensation" is the value of the interest taken; this is not the value to the owner for his particular purposes or to the condemnor for some special use but a so-called "market value." Certain Land in City of Washington, D.C. v. U.S., 355 F 2d 825.

The Government is obligated to relocate the facilities of the Dock Board listed under section a. of Exhibit "A", as the Dock Board is an agency of the State, performing purely "governmental functions" and not

"proprietary functions." Miller (Royal Indemnity Co., Intervenor) v. Board of Com'rs of Port of New Orleans, 199 La. 1071; State ex. rel. Tallant v. Board of Com'rs of The Port of New Orleans, 161 La. 361; C. H. Leavell & Co. v. Board of Com'rs of Port of New Orleans, 424 F. 2d 761.

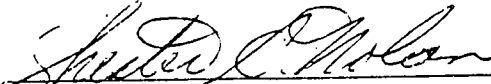
Relocation of Facilities Owned by Governmental Agencies.

Under the provisions of Section 111 of 72 Stat. 303, as amended by Section 309 of 79 Stat. 1094 (33 U.S.C. 633), the Chief of Engineers may, in civil works projects, protect, alter, reconstruct, relocate or replace, any structure or facility owned by an agency of Government (state, county, city or town or any legally created subdivision thereof) and utilized in the performance of a Government function.

ABANDONMENT

To constitute abandonment of personal property by the owner thereof, so as to give another a right to assume title to control of property, there must be an act of abandonment by owner coupled with intention to abandon. Crowell Land and Mineral Corp. v. United States, 114 F. Supp. 31, Powell v. Cox, 92 So. 2d 739. Therefore, the owners of the facilities to be abandoned or already abandoned should be requested to furnish a letter of intent or it should be set forth in a relocation contract as to which facilities have been or will be abandoned.

22 August 1977


CHESTER C. NOLAN, Attorney
Real Estate Division
U.S. Army Engineer District
New Orleans

a.

THE BOARD OF COMMISSIONERS OF THE PORT OF NEW ORLEANS

<u>ITEM</u>	<u>SIZE</u>	<u>TYPE</u>	<u>PLATE</u>
W-1	8"	Water	2
W-2	12"	"	5
W-3	6"	"	7
W-4	12"	"	8
W-5	12"	"	11
W-6	(size unknown)	"	14
S-1	6"	Sewer	7
S-2	6"	"	8
S-3	8"	"	10
S-4	6"	"	12
S-5	8"	"	14
S-6	(size unknown)	"	15, 16
SD-1	12"	Storm Drain	2, 3, 4
SD-2	12"	"	5
SD-5	8"	"	8
SD-6	30"	"	8
SD-7	30"	"	11
SD-8	30"	"	12
SD-9	30"	"	14
SD-10	8"	"	14
SD-11	8"	"	14
O-1	3"	Oil	11,12,13,14
O-2	2 - 6"	"	14,15,16
CR-1		Crane Rail	9,10
CR-2		"	11
D-1		Loading Dock	12
R-1	12' wide	Roadway	2
R-2	24' wide	Roadway, Gate No. 4	6
R-5	24' wide	Roadway	16

EXHIBIT "A"

b.

SOUTH CENTRAL BELL COMPANY

<u>ITEM</u>	<u>TYPE</u>	<u>PLATE</u>
T-1	Aerial	6,7
T-2	Buried	8
T-3	Aerial	10
T-4	Buried	15
T-5	"	15
T-6	"	15
T-7	Aerial	16
T-8	"	16
T-9	"	16

c.

NEW ORLEANS PUBLIC SERVICE, INC.

<u>ITEM</u>	<u>TYPE</u>	<u>PLATE</u>
E-1	Powerline	2
E-3	"	4,5
E-4	"	5
E-5	"	5
E-6	"	6,7
E-7	"	7
E-8	"	7
E-9	"	7,8
E-10	"	7,8
E-11	"	8
E-12	"	10
E-13	"	12,13
E-14	"	14
E-15	"	15
E-16	"	15,16
E-17	"	15
E-18	"	16

d.

INTERNATIONAL EXPORT PACKER OF LOUISIANA, INC.

<u>ITEM</u>	<u>TYPE</u>	<u>PLATE</u>
E-2	Powerline	2

e.

NEW ORLEANS PUBLIC BELT RAILROAD COMPANY

<u>ITEM</u>	<u>TYPE</u>	<u>PLATE</u>
RR-1	Railroad Track	2
RR-2	" "	2
RR-3 (Relocate)	" "	2,3
RR-4	" "	6
RR-5 (Remove)	" "	7,8,11
RR-6	" "	8,11,12
RR-7 (Remove)	" "	8 thru 11
RR-8 (Remove)	Crossover Track	10
RR-9 (Remove)	" "	11
RR-10	Railroad Track	13

f.

ILLINOIS CENTRAL-GULF RAILROAD COMPANY

<u>ITEM</u>	<u>TYPE</u>	<u>PLATE</u>
RR-11	Railroad Track	14

g.

THE CITY OF NEW ORLEANS

<u>ITEM</u>	<u>SIZE</u>	<u>NAME</u>	<u>PLATE</u>
R-3	20' wide	Dufossat St.	8
R-4	33' wide	Napoleon Ave.	15

	<u>GRANTOR</u>	<u>DATE OF DEED</u>	<u>RECORDATION</u> <u>COB - FOLIO</u>	
1.	W. Edenborn	June 24, 1919	310	167
2.	Abestone Corp.	January 5, 1954	593	208
3.	Otis Mfg. Co.	July 16, 1915	279	82
4.	N. O. Sand & Gravel Co.	February 13, 1915	270	325
5.	Jahncke Realty Co.	May 22, 1915	272	572
6.	Sigmund Odenheimer	May 21, 1915	275	527
7.	N.O. Furniture Mfg. Co.	May 25, 1915	271	543
8.	Rea N. Shaw	June 12, 1915	270	593
9.	Liquidation of the Jefferson Saw Mill Co., Ltd.	March 26, 1914	267	242
10.	Mrs. M. G. Ziegler, widow of Charles H. Adams	April 3, 1914	269	264
11.	Catholic Society of Religious and Literary Education	March 31, 1914	266	266
12.	John L. Lynch, et al	April 9, 1914	268	266
13.	Sigmund Odenheimer	April 11, 1914	265	254
14.	Miss Florence E. Mathis	April 21, 1914	265	272
15.	T. H. Sampson	April 3, 1914	265	239
16.	Mrs. W. C. Schene, widow of B. J. Brink	April 7, 1914	268	262
17.	Mrs. C. M. Pigrou, widow of Isidore S. Richard	April 9, 1914	266	289
18.	The Lane Cotton Mill Co.	April 11, 1914	266	289
19.	Chicago, St. Louis, and N.O. R.R. Co.	July 19, 1914	268	538
20.	Mrs. W. Schrichter, widow of B. H. Schene	May 29, 1914	269	386

EXHIBIT "B"

FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES
MISSISSIPPI RIVER LEVEES
ITEM M-100.0-L
NASHVILLE-NAPOLEON AVENUE FLOODWALL
ORLEANS PARISH, LOUISIANA
RELOCATION OF FACILITIES
DESIGN MEMORANDUM NO. 52

APPENDIX II
SUMMARY OF RELOCATION COSTS

Summary of Relocation Costs

Roads		\$110,000
City of New Orleans	8,000	
Dock Board	102,000	
Railroads		415,000
NOPB RR	356,000	
ICG RR	59,000	
Utilities		407,000
South Central Bell	56,000	
NOPSIS	125,000	
Dock Board	226,000	
SUBTOTAL		932,000
E&D		47,000
S&A		47,000
TOTAL		1,026,000