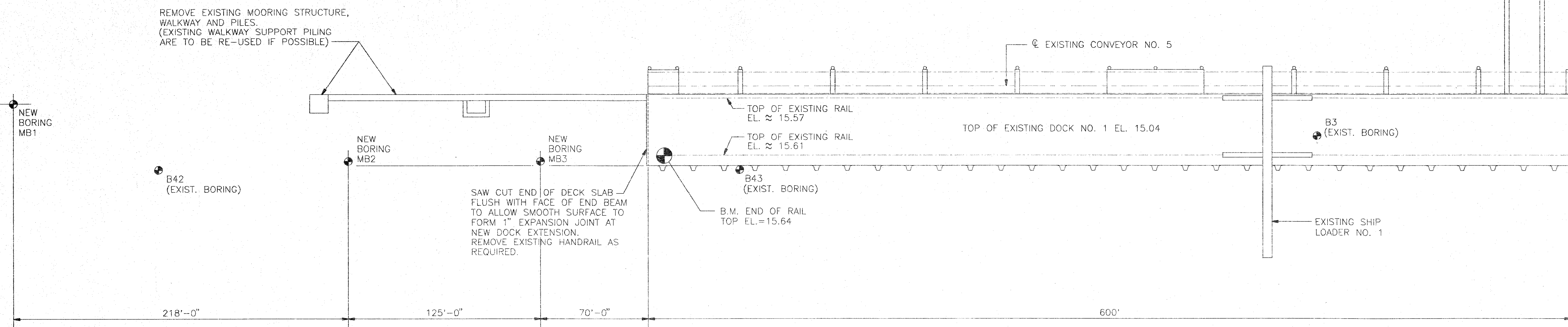


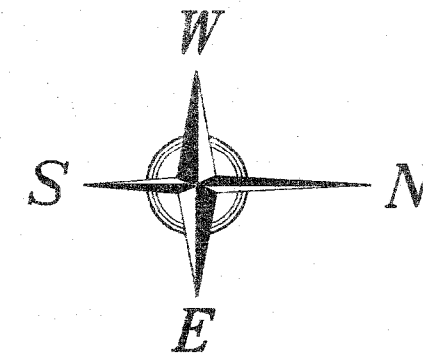
NOTE:
 COORDINATES SHOWN FOR SL-1 AND SL-3 ARE
 ALABAMA STATE PLANE COORDINATE SYSTEM,
 WEST ZONE, NAD 1927.



MOBILE SHIP CHANNEL

EXISTING SITE PLAN

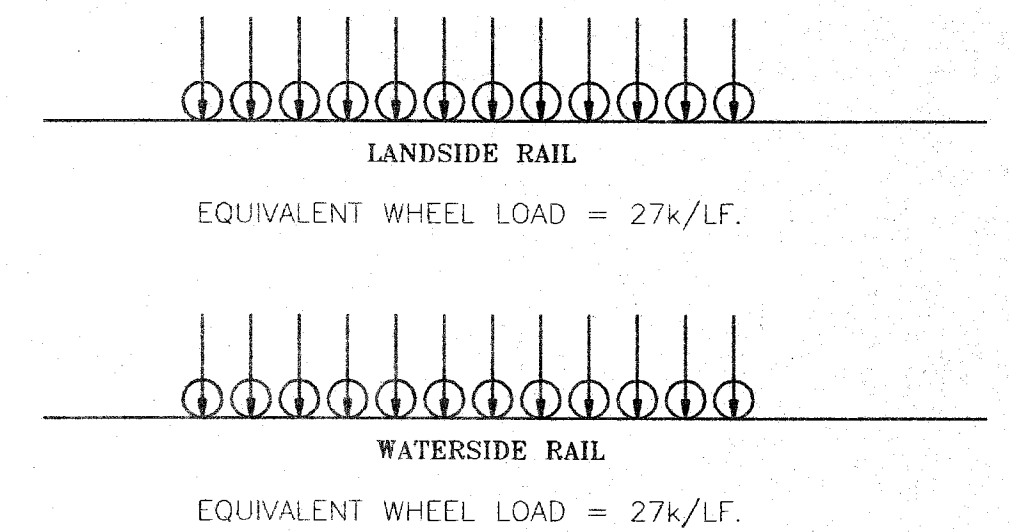
1"=40'



GENERAL NOTES:

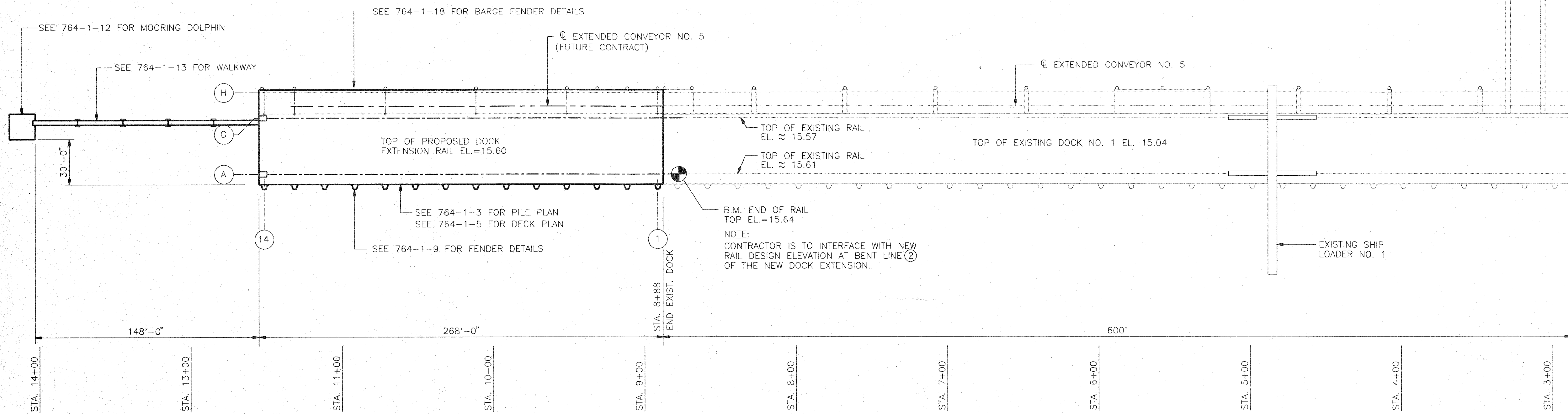
- CONCRETE PILES:**
SEE DWG. NO. 764-1-3 AND 764-1-4.
- CAST-IN-PLACE CONCRETE:**
CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
- REINFORCING STEEL:**
REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 AND SHALL BE DETAILED IN ACCORDANCE WITH ACI STANDARD 318 AND THE CRSI MANUAL OF STANDARD PRACTICE. A MINIMUM OF 2" CONCRETE COVER SHALL BE PROVIDED AT ALL REINFORCING BARS EXCEPT THAT 1 1/2" OF COVER SHALL BE PROVIDED AT CRANE RAIL POCKETS AND OVER CONCRETE PILES.
- CONSTRUCTION JOINTS:**
CONSTRUCTION JOINTS SHALL BE AT MAXIMUM SPACING OF 60 FT. AND SHALL BE LOCATED AS APPROVED BY THE ENGINEER. REINFORCING BAR SPLICES SHALL NOT CROSS CONSTRUCTION JOINTS.

BUCKET UNLOADER WHEEL LOADS



UNIFORM LOADS: 750 PSF

CONCENTRATED LOADS: A MAXIMUM OF 100k DISTRIBUTED OVER A MINIMUM 2 FT. x 2 FT. AREA AND SPACED A MINIMUM OF 9 FT. APART.



MOBILE SHIP CHANNEL

EXTENDED SITE PLAN

1"=40'

CAD: Sww / 764-1
 Plot Date: 9/16/94, 12:00

REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE		ALABAMA
		McDUFFIE TERMINALS 268 FT DOCK EXTENSION
Drawn By: L.W.R. Date: JULY 94 Checked By: P.E.B. Date: 9/19/94		SITE PLANS
Scale: 1"=40'		DRAWING NO. 764-1-1
		0 REV.

BORING NO.: **MB-1** WATER ELEVATION: TIME OF DRILLING: **-34.1 FEET MEAN SEA LEVEL**

SAMPLE NO.	DEPTH (FT)		TYPE	FIELD SOILS CLASSIFICATION	UNIFIED SYMBOL	% RECV	BLOWS/FT		
	FROM	TO					1st	2nd	3rd
1	-34.1	-35.6	X	Very Loose Black SILT	ML	95	W	0	R
2	-39.1	-40.6	X	Very Loose Black SILT, Trace Gray Silty Sand	ML	95	W	0	R
3	-44.1	-45.6	X	Very Loose Black SILT, Trace Gray Silty Sand	ML	90	W	0	R
4	-49.1	-50.6	X	Very Loose Black SILT, Trace Gray Silty Sand	ML	90	W	0	R
5	-57.6	-59.1	X	Firm Tan SAND, Trace Pea Gravel	SP	75	2	6	7
6	-62.6	-64.1	X	Firm Tan SAND, Trace Pea Gravel	SP	75	5	10	10
7	-67.6	-69.1	X	Firm Tan SAND, Trace Pea Gravel	SP	75	3	4	6
8	-72.6	-74.1	X	Dense Gray SAND	SP	80	18	18	19
9	-77.6	-79.1	X	Dense Gray SAND	SP	80	19	21	19
10	-82.6	-84.1	X	Very Dense Gray & Tan SAND, Trace Pea Gravel	SP	80	14	28	30
11	-87.6	-89.1	X	Very Dense Tan SAND, Trace Pea Gravel	SP	80	15	28	27
12	-92.6	-94.1	X	Very Dense Tan Coarse To Medium SAND, Trace Gravel	SP	90	12	21	35
13	-97.6	-99.1	X	Firm Tan Coarse To Medium SAND	SP	80	8	10	13
14	-102.6	-104.1	X	Very Dense Tan Coarse To Medium SAND	SP	75	18	31	25
15	-107.6	-109.1	X	Firm Tan Coarse To Fine SAND, Trace Gravel	SP	80	2	9	15
16	-112.6	-114.1	X	Soft Gray Sandy CLAY (0-1.0')/ Firm Fine Gray SAND	CL SP-SM	95	2	4	21
17	-117.6	-119.1	X	Very Dense Gray Coarse To Fine SAND	SP	75	11	32	50 For 4"
18	-122.6	-124.1	X	Very Dense Gray Coarse To Fine SAND	SP	70	19	26	34
19	-127.6	-129.0	X	Very Dense Gray Coarse To Fine SAND, 1" Lense Pea Gravel	SP	75	24	44	50 For 5"

Notes to Boring: 1. Set 53' Of 4" Casing 2. Boring Located = 415 Feet South of Dock.
 DRILL RIG: Barge Mounted Drill Rig TOTAL % RECOVERY: 82
 DRILL METHOD: _____ NOTE: Number of Blows of 140 lb. Hammer Falling 30" to Drive a 2" O.D. Split Spoon Sampler.
 AUGER: FROM: _____ TO: _____ START: _____ COMPLETE: _____
 MUD: FROM: 0.0 TO: 130.0 DATE: 7-18-94 DATE: 7-19-94
 TIME: 8:30 AM TIME: 11:00 AM

Log Notes:
 1.) Set Five (5) Feet of 4 Inch Steel Casing
 2.) Water Depth at Time of Drilling = -1.5 Feet

BORING NO.: **MB-2** WATER ELEVATION: TIME OF DRILLING: **-39.8 FEET MEAN SEA LEVEL**

SAMPLE NO.	DEPTH (FT)		TYPE	FIELD SOILS CLASSIFICATION	UNIFIED SYMBOL	% RECV	BLOWS/FT		
	FROM	TO					1st	2nd	3rd
1	-39.8	-41.3	X	Very Loose Black SILT	ML	100	W	0	R
2	-44.8	-46.3	X	Very Loose Black SILT	ML	100	W	0	R
3	-49.8	-51.3	X	Very Loose Black SILT	ML	100	W	0	R
4	-56.8	-58.3	X	Firm Gray Fine To Medium SAND, Trace Gravel	SP	75	3	5	11
5	-61.8	-63.3	X	Firm Gray Coarse To Fine SAND, Trace Gravel	SP	55	7	7	10
6	-66.8	-68.3	X	Firm Gray Coarse To Fine SAND	SP	60	3	5	8
7	-71.8	-73.3	X	Firm Gray Coarse To Fine SAND	SP	70	7	8	10
8	-76.8	-78.3	X	Firm Tan Fine SAND, Lense Tan Sandy Clay	SP	50	10	15	17
9	-81.8	-83.3	X	Dense Tan Fine To Coarse SAND	SP	70	14	22	19
10	-86.8	-88.3	X	Dense Tan Fine To Coarse SAND	SP	70	12	16	17
11	-91.8	-93.3	X	Very Dense Tan Fine To Medium SAND	SP	60	13	24	36
12	-96.8	-98.3	X	Stiff Gray CLAY, Trace Organics (Clay Encountered at -94.8)	CH	60	3	4	5
	-99.8	-101.6	X	Attempt Thin Wall Tube, No Recovery		0	PUSH	1.8'	
13	-101.8	-103.3	X	Very Stiff Gray CLAY, Trace Organics	CH	95	6	7	9
14	-106.8	-108.3	X	Very Stiff Gray CLAY, Trace Organics	CH	95	8	6	9
15	-111.8	-113.3	X	Stiff Gray Sandy CLAY, Lenses Fine Sand	CL	80	5	6	8
16	-116.8	-118.3	X	Very Dense Gray Fine To Coarse SAND (Sand Encountered at -114.3)	SP	60	11	22	37
17	-126.8	-128.3	X	Dense Gray Fine To Coarse SAND	SP	75	13	19	19

Notes to Boring: 1. Set 63' Of 4" Casing 2. Boring Located = 195' South of Dock.
 DRILL RIG: Barge Mounted Drill Rig TOTAL % RECOVERY: 71
 DRILL METHOD: _____ NOTE: Number of Blows of 140 lb. Hammer Falling 30" to Drive a 2" O.D. Split Spoon Sampler.
 AUGER: FROM: _____ TO: _____ START: _____ COMPLETE: _____
 MUD: FROM: 0.0 TO: 130.0 DATE: 7-20-94 DATE: 7-21-94
 TIME: 1:30 TIME: 3:30

Log Notes:
 1.) Set Five (5) Feet of 4 Inch Steel Casing
 2.) Water Depth at Time of Drilling = -1.5 Feet

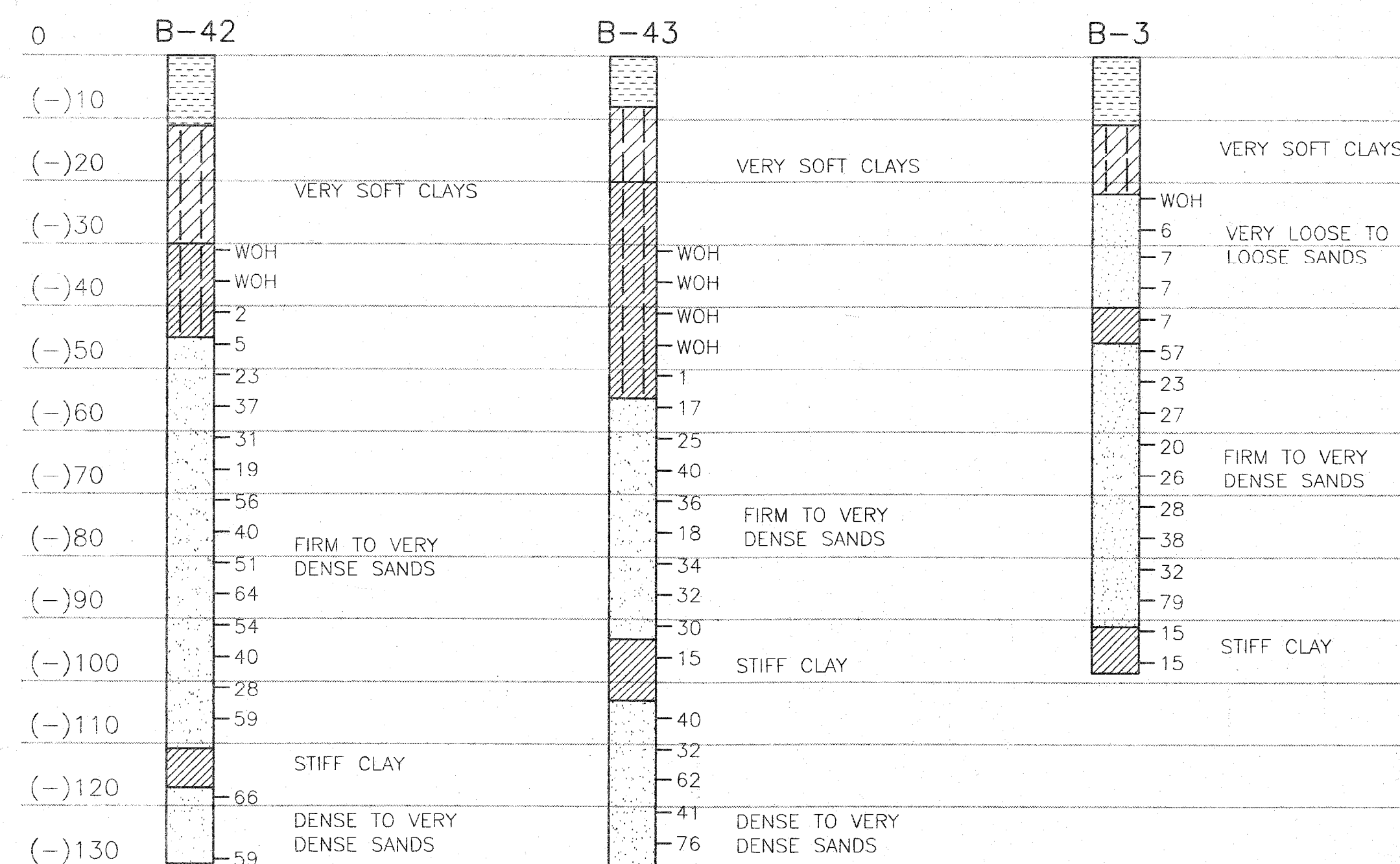
BORING NO.: **MB-3** WATER ELEVATION: TIME OF DRILLING: **-39.5 FEET MEAN SEA LEVEL**

SAMPLE NO.	DEPTH (FT)		TYPE	FIELD SOILS CLASSIFICATION	UNIFIED SYMBOL	% RECV	BLOWS/FT		
	FROM	TO					1st	2nd	3rd
1	-39.5	-41.0	X	Very Loose Black SILT	ML	60	W	0	R
2	-44.5	-46.0	X	Very Loose Black SILT	ML	70	W	0	R
3	-49.5	-51.0	X	Very Loose Black SILT	ML	60	W	0	R
4	-54.5	-56.0	X	WOOD		70	15	7	3
5	-61.5	-63.0	X	Firm Gray Fine To Medium SAND	SP	60	7	9	10
6	-66.5	-68.0	X	Firm Gray Fine To Medium SAND	SP	60	7	11	16
7	-71.5	-73.0	X	Firm Gray Coarse To Fine SAND	SP	75	7	12	17
8	-77.0	-78.5	X	Dense Gray Fine To Coarse SAND	SP	70	8	15	16
9	-82.0	-83.5	X	Firm Gray Fine To Coarse SAND, Trace Pea Gravel	SP	55	7	8	11
10	-87.0	-88.5	X	Dense Gray Fine To Coarse SAND	SP	60	10	16	24
11	-92.0	-93.5	X	Dense Gray & Tan Fine To Coarse SAND, Trace Pea Gravel	SP	70	9	13	20
12	-97.0	-98.5	X	Stiff Gray Sandy CLAY	CL	90	3	5	7
	-102.0	-103.5	X	Attempt Thin Wall Tube, No Recovery		0	PUSH	2'	
	-104.0	-106.0	X	Attempt Thin Wall Tube, No Recovery		0	PUSH	2'	
13	-106.0	-107.5	X	Very Stiff Gray CLAY, Trace Organics	CH	95	4	8	10
14	-112.0	-113.5	X	Stiff Gray Sandy CLAY, Lenses Fine Sand	CL	75	3	5	9
15	-117.0	-118.5	X	Dense Gray Coarse To Medium SAND	SP	80	4	13	19
16	-122.0	-123.5	X	Very Dense Gray Coarse To Medium SAND	SP	50	15	26	28
17	-127.0	-128.5	X	Dense Gray Fine To Medium SAND	SP	65	11	10	24

Notes to Boring: 1. Set 63' Of 4" Casing 2. Boring Located = 70 Feet South of Dock.
 DRILL RIG: Barge Mounted Drill Rig TOTAL % RECOVERY: 61.3
 DRILL METHOD: _____ NOTE: Number of Blows of 140 lb. Hammer Falling 30" to Drive a 2" O.D. Split Spoon Sampler.
 AUGER: FROM: _____ TO: _____ START: _____ COMPLETE: _____
 MUD: FROM: 0.0 TO: 130.0 DATE: 7-19-94 DATE: 7-23-94
 TIME: 11:00 TIME: 1:15

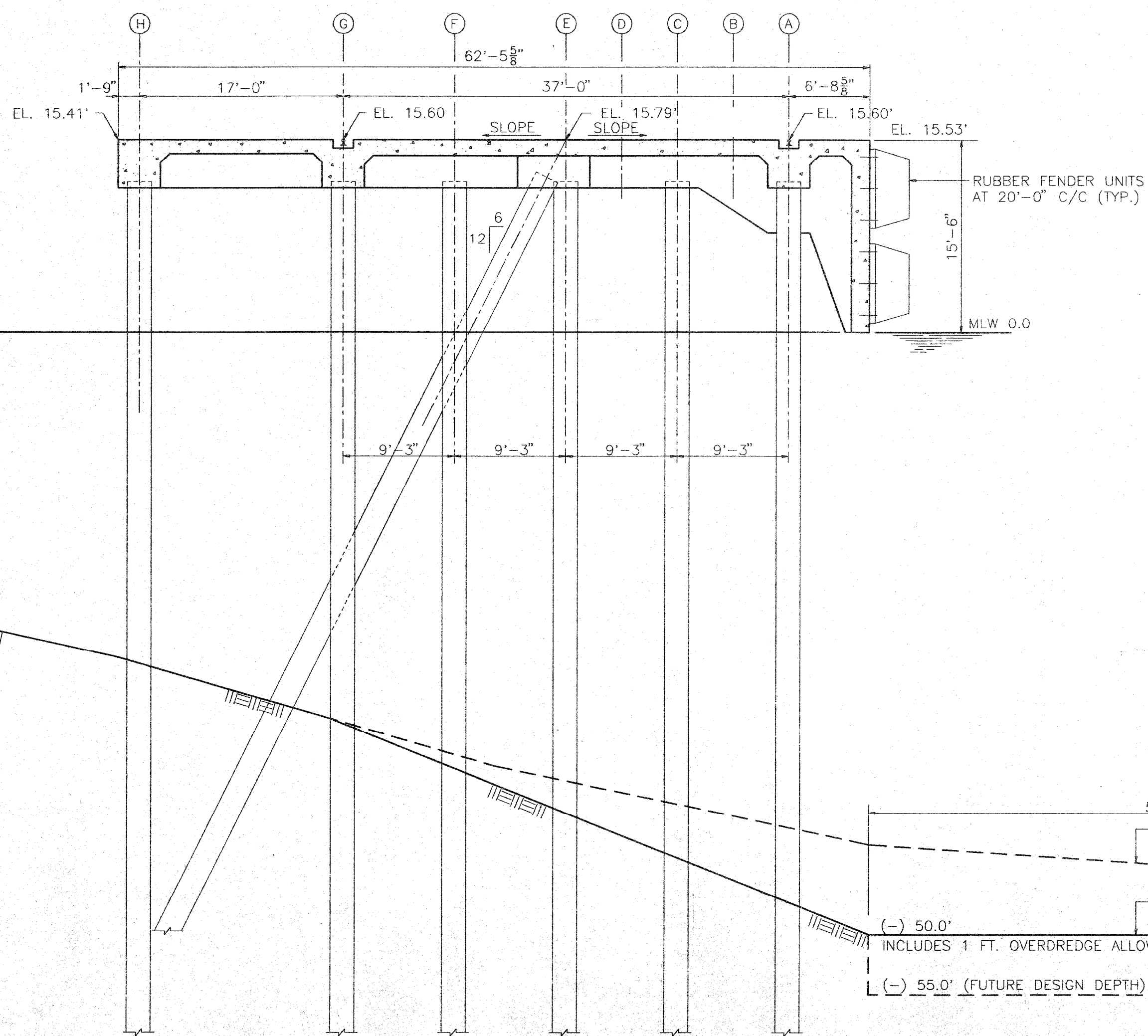
Log Notes:
 1.) Set Five (5) Feet of 4 Inch Steel Casing
 2.) Water Depth at Time of Drilling = -1.5 Feet

CURRENT (1994) SOIL BORINGS



NOTE:
 DATA FROM SUBSURFACE INVESTIGATION AND ANALYSIS BY VESTER J. THOMPSON JR. INC. DATED FEB. 8, 1973.

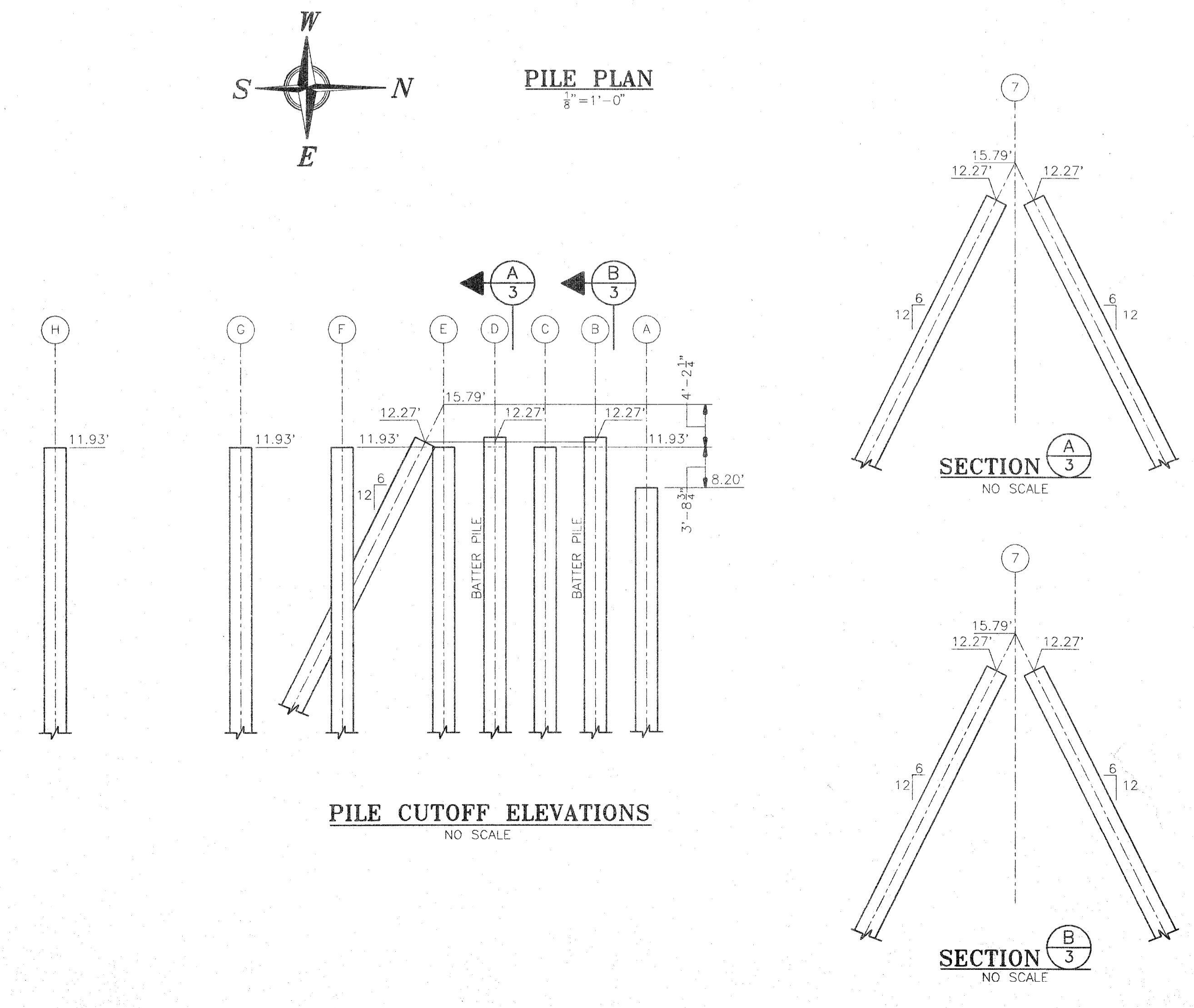
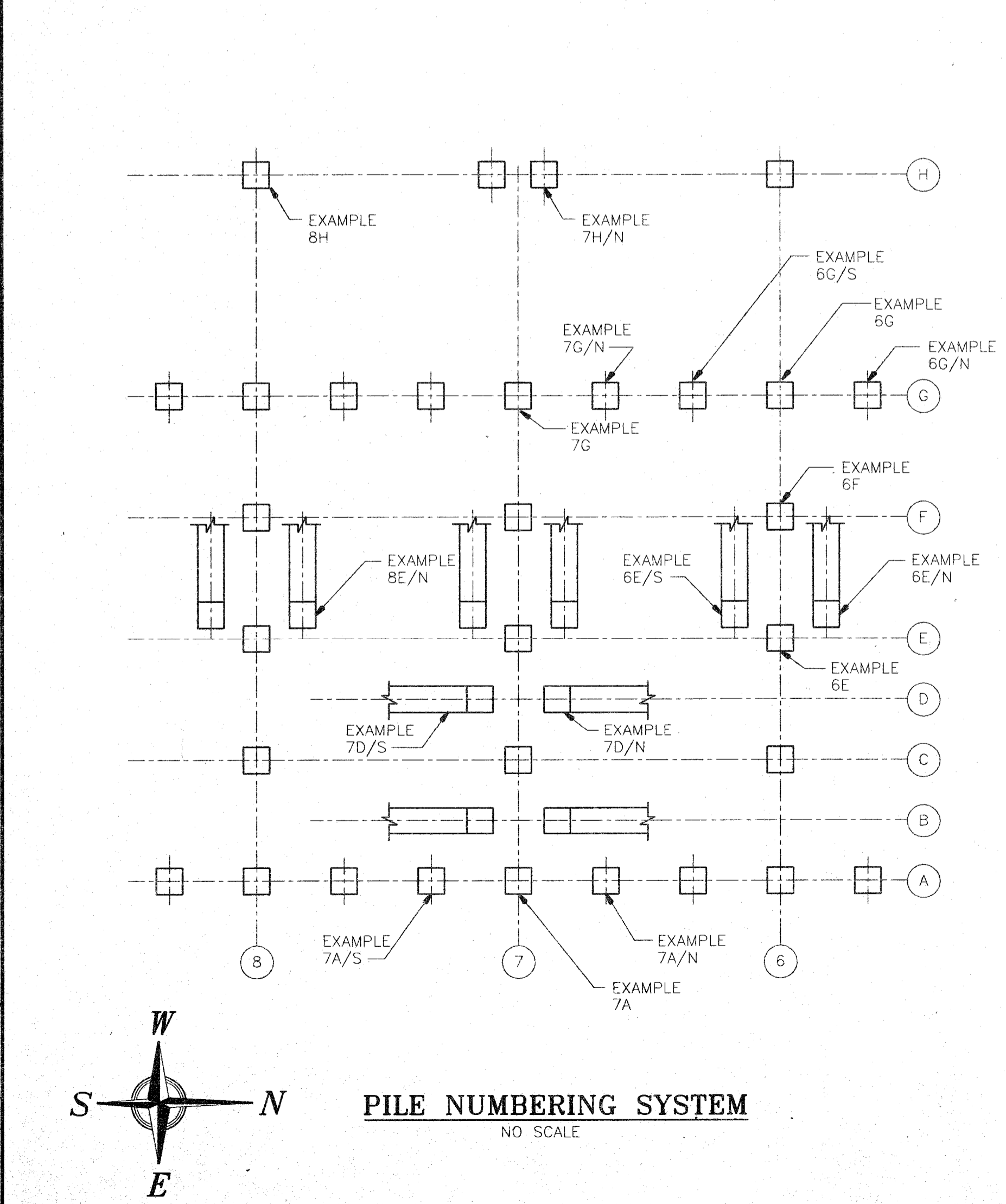
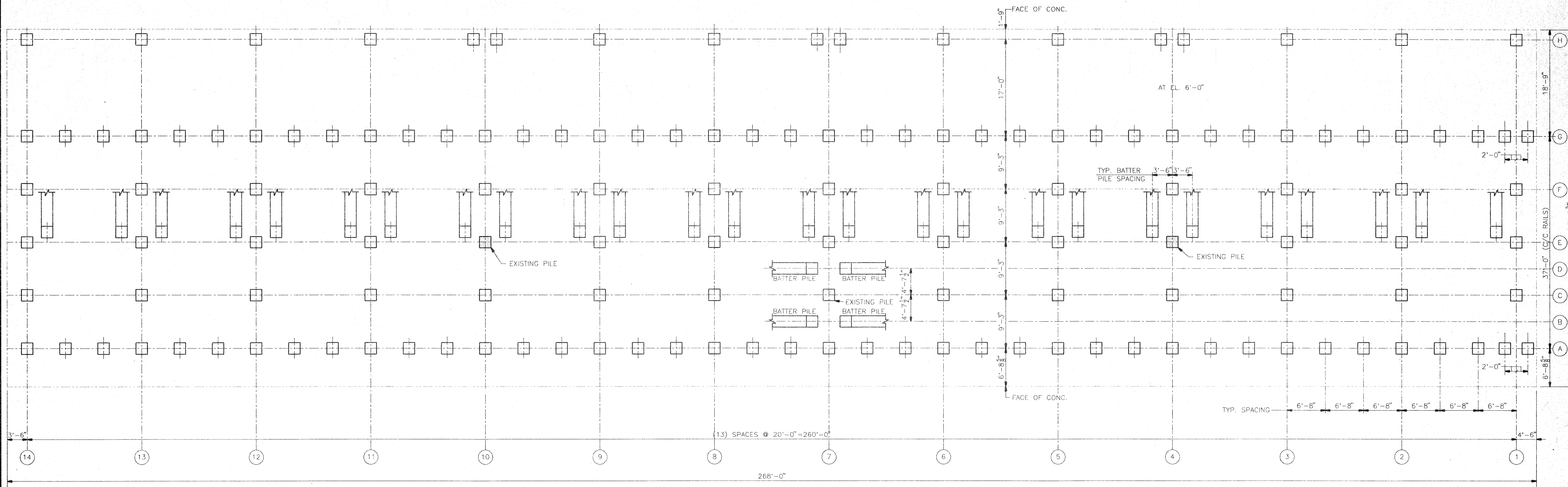
1973 SOIL BORINGS (REFERENCE)



TYPICAL SECTION

1/8" = 1'-0"

REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE		ALABAMA
Gottlieb Barnett Bridges		McDUFFIE TERMINALS
MOBILE		ALABAMA
268 FT. DOCK EXTENSION		TYPICAL SECTION AND SOIL BORINGS
Drawn By: L.W.R.	Date: JULY 94	
Checked By: P.E.B.	Date: 9/19/94	
Scale: NOTED	DRAWING NO. 764-1-2	0 REV

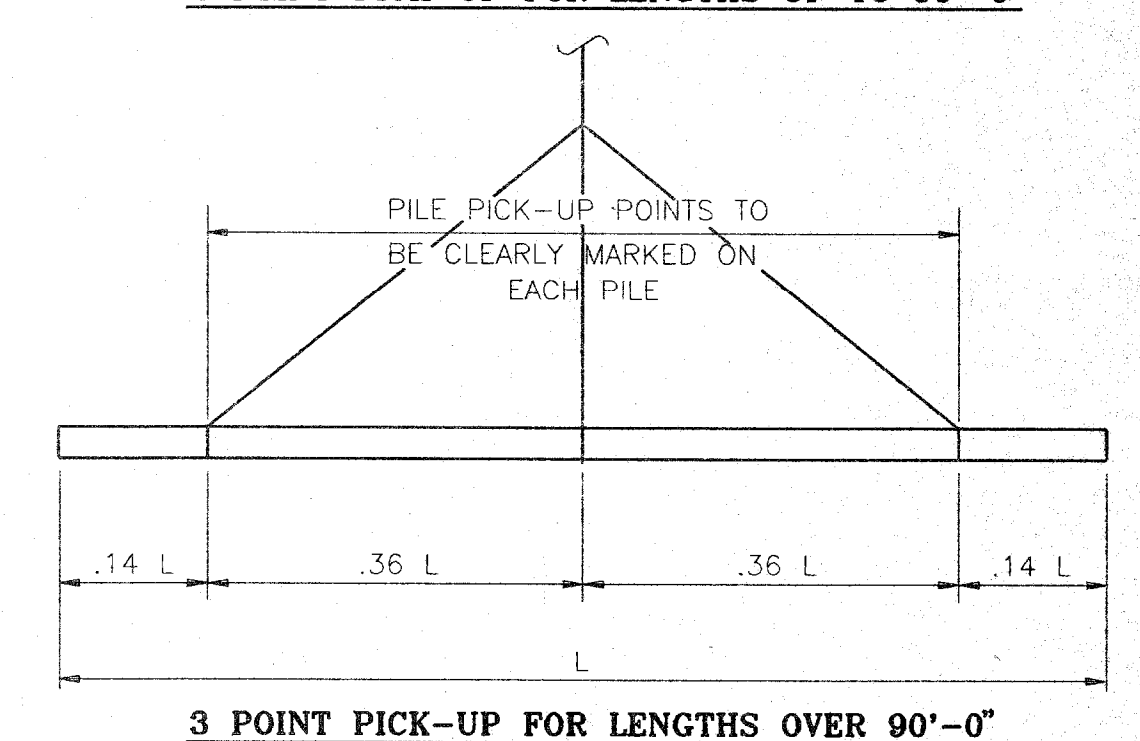
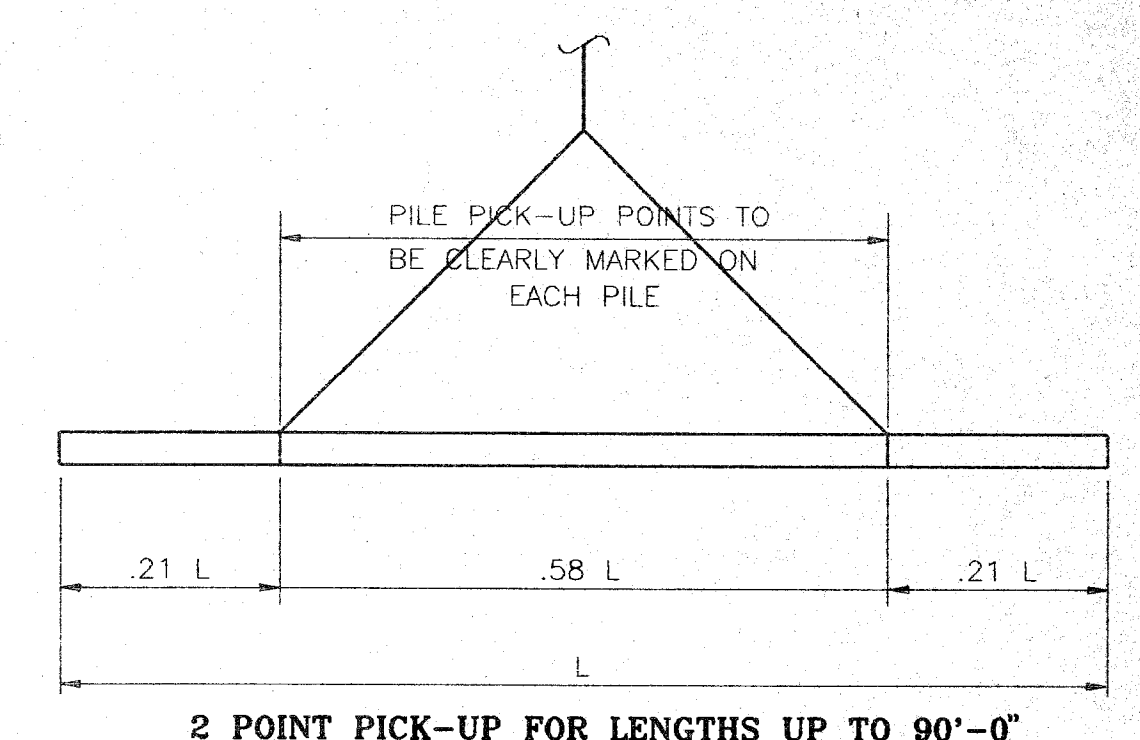
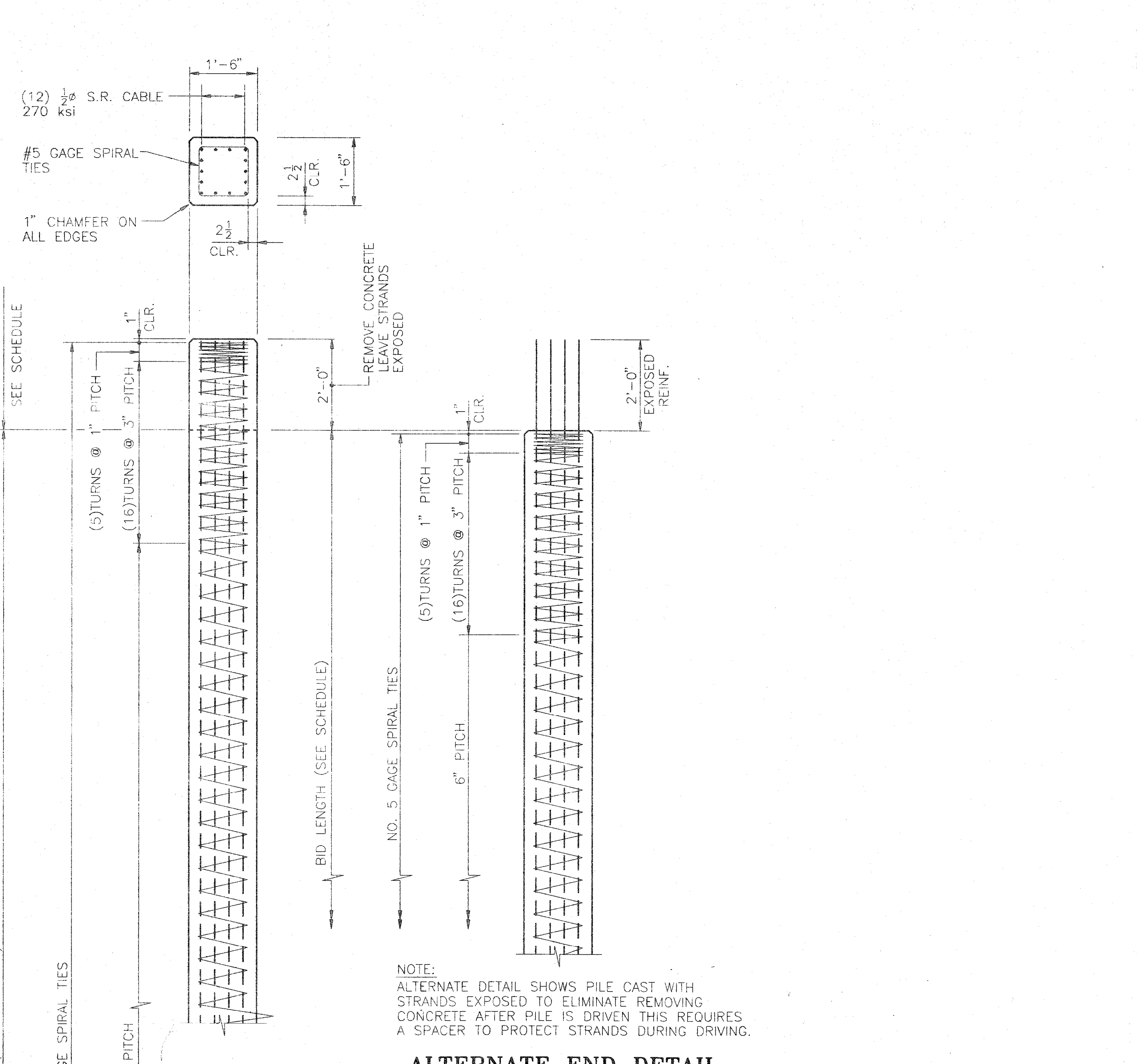
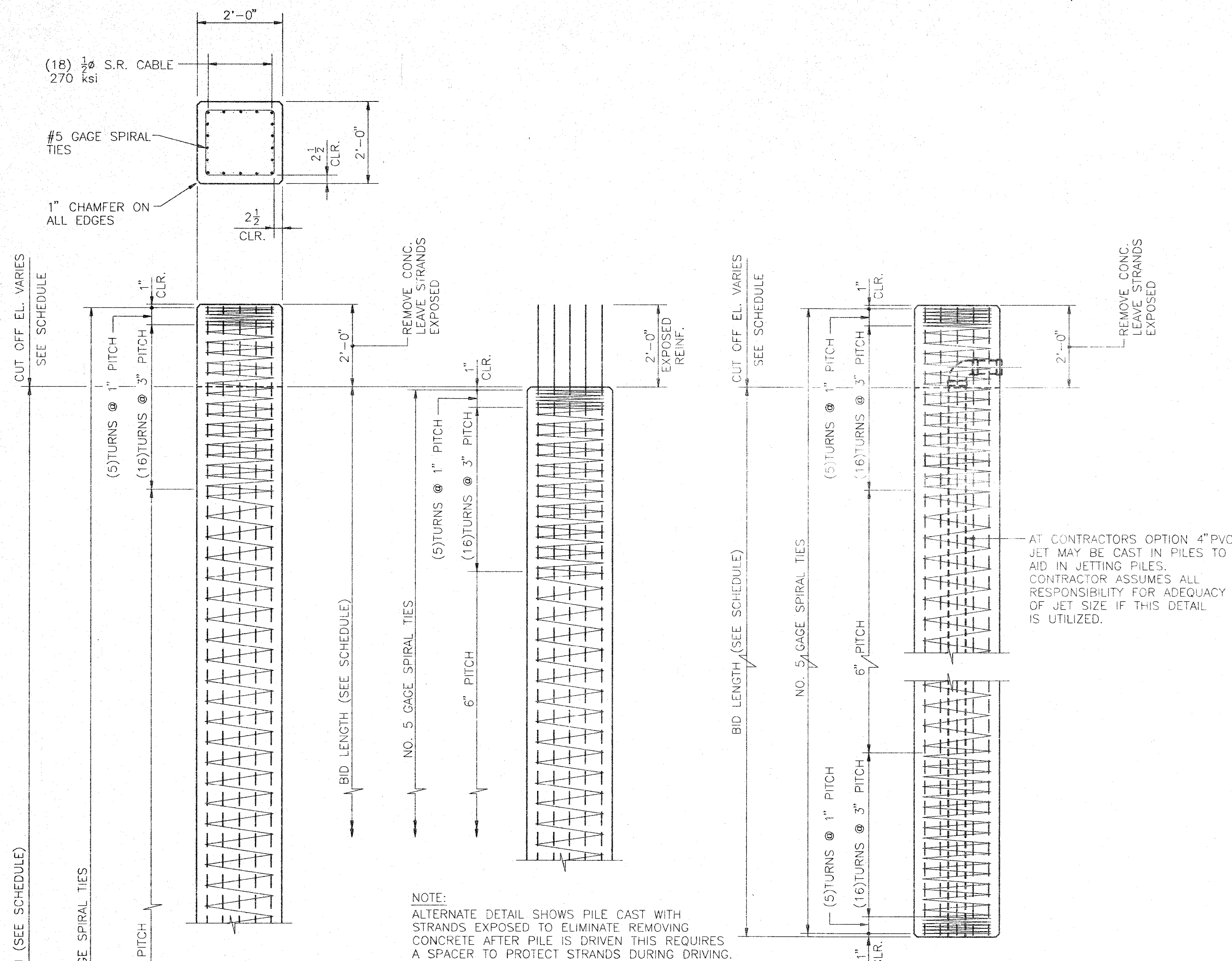


24" PRESTRESSED PILE SCHEDULE (FOR DOCK)						
PILE NO.	BATTER	APPROX. TIP ELEV.	PILE CUT OFF ELEV.	BID LENGTH	NO. OF PILES	TOTAL BID LENGTH
2A THRU 14A	NO	-84	8.20	93	13	1209
1A/S THRU 13A/S	NO	-84	11.93	96	26	2496
2A/N THRU 14A/N	NO	-84	11.93	96	13	1248
7B/N, 7B/S	6 IN 12	-84	12.27	108	2	216
1C THRU 14C	NO	-84	11.93	96	13	1248
7D/N, 7D/S	6 IN 12	-84	12.27	108	2	216
1E THRU 14E	NO	-84	11.93	96	12	1152
1E/S THRU 13E/S	6 IN 12	-84	12.27	108	26	2808
2E/N THRU 14E/N	6 IN 12	-84	12.27	108	26	2808
1F THRU 14F	NO	-84	11.93	96	14	1344
2G THRU 14G	NO	-84	11.93	96	13	1248
1G/S THRU 13G/S	NO	-84	11.93	96	26	2496
2G/N, 4G/N THRU 14G/N	NO	-84	11.93	96	26	2496
1H, 2H, 3H, 5H, 6H, 8H, 9H 11H, 12H, 13H, 14H, 4H/N 4H/S, 7H/N, 7H/S, 10H/N, 10H/S	NO	-84	11.93	96	17	1632
1A/N, 1A/S	NO	-84	8.2	93	2	186
1G/N, 1G/S	NO	-84	11.93	96	2	192
TOTAL					168	16443

NOTE:
REFER TO DRAWINGS NO. 764-1-12 AND 13
FOR WALKWAY AND MOORING DOLPHIN PILES.

REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE ALABAMA		ALABAMA
		McDUFFIE TERMINALS 268 FT. DOCK EXTENSION
Drawn By: L.W.R. Date: JULY 94 Checked By: P.E.B. Date: 9/19/94		PILE PLAN
Scale: NOTED	DRAWING NO.	764-1-3
		0 REV.

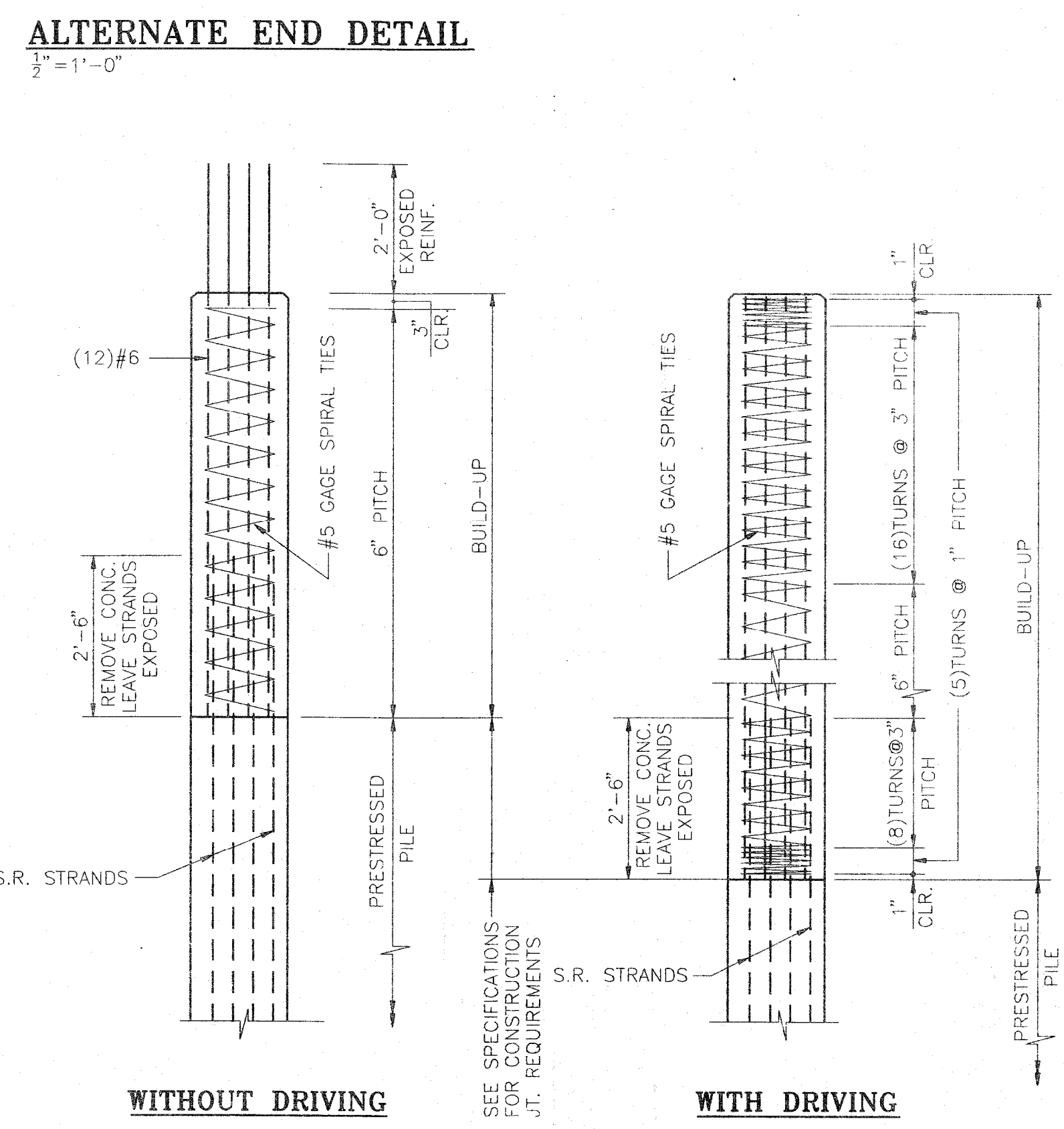
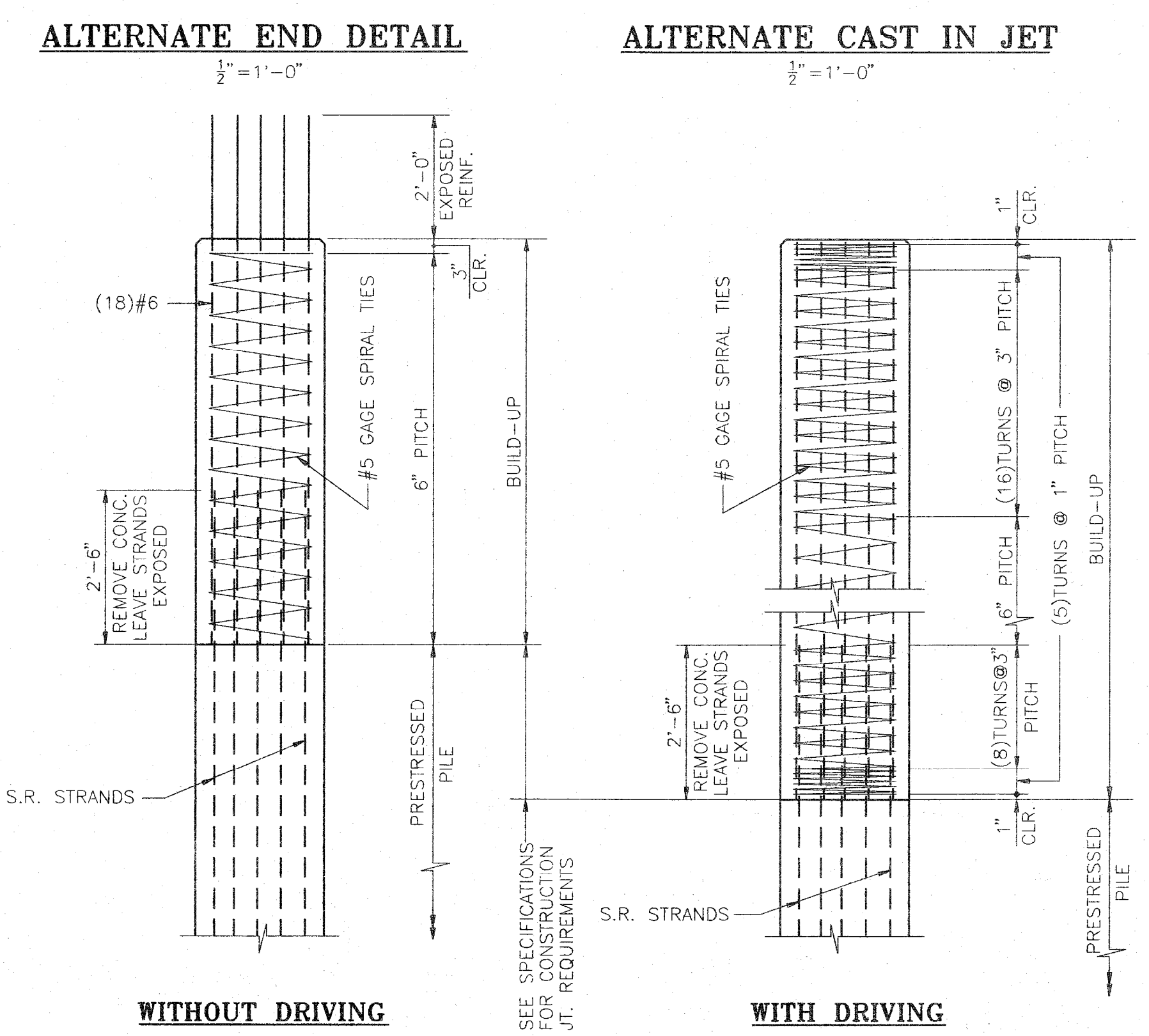
CAD Shw: 764-1-3
 Plot Date: 9/16/94 12:00



NOTE:
L = LENGTH OF PILE
PILE LIFTING DETAIL
NO SCALE

CONCRETE PILE NOTES:

1. PRESTRESSED PILES & PILE BUILD-UPS SHALL CONFORM TO THE REQUIREMENTS OF THE JOINT COMMITTEE OF AASHTO AND PCI FOR PRESTRESSED CONCRETE PILES UNLESS OTHERWISE NOTED OR SPECIFIED.
2. CONCRETE FOR PRESTRESSED PILES & PILE BUILD-UPS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI IN 28 DAYS.
3. PRESTRESSING REINFORCEMENT SHALL CONFORM TO ASTM A416.
4. REINFORCING FOR PILE BUILD-UPS SHALL CONFORM TO ASTM A615 GRADE 60.
5. ALL PILE RECORDS SHALL USE NUMBERING SYSTEM SHOWN ON DWG. 764-3.



24" PRESTRESSED PILE DETAIL
(FOR DOCK AND MOORING DOLPHIN)
1/2" = 1'-0"

18" PRESTRESSED PILE DETAIL
(FOR WALKWAY)
1/2" = 1'-0"

CAD: Sver: 764-1-4
Plot Date: 9/16/94 12:00

REV.	DATE	DESCRIPTION

ALABAMA STATE DOCKS DEPARTMENT

MOBILE ALABAMA

Gottlieb Barnett Bridges

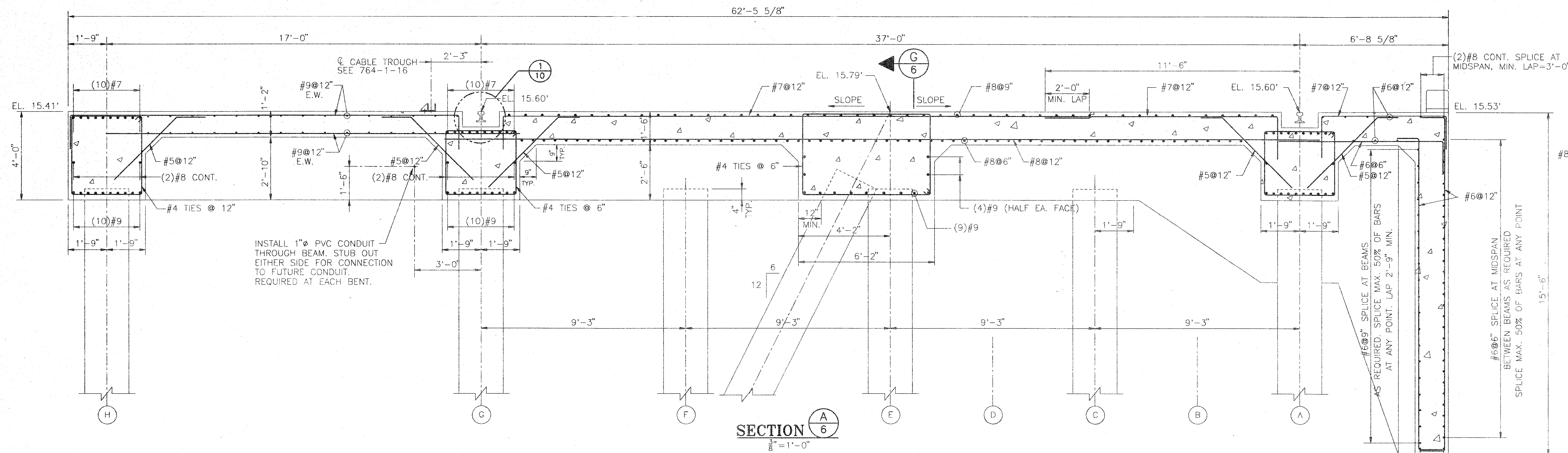
MOBILE ALABAMA

McDUFFIE TERMINALS
268 FT.
DOCK EXTENSION

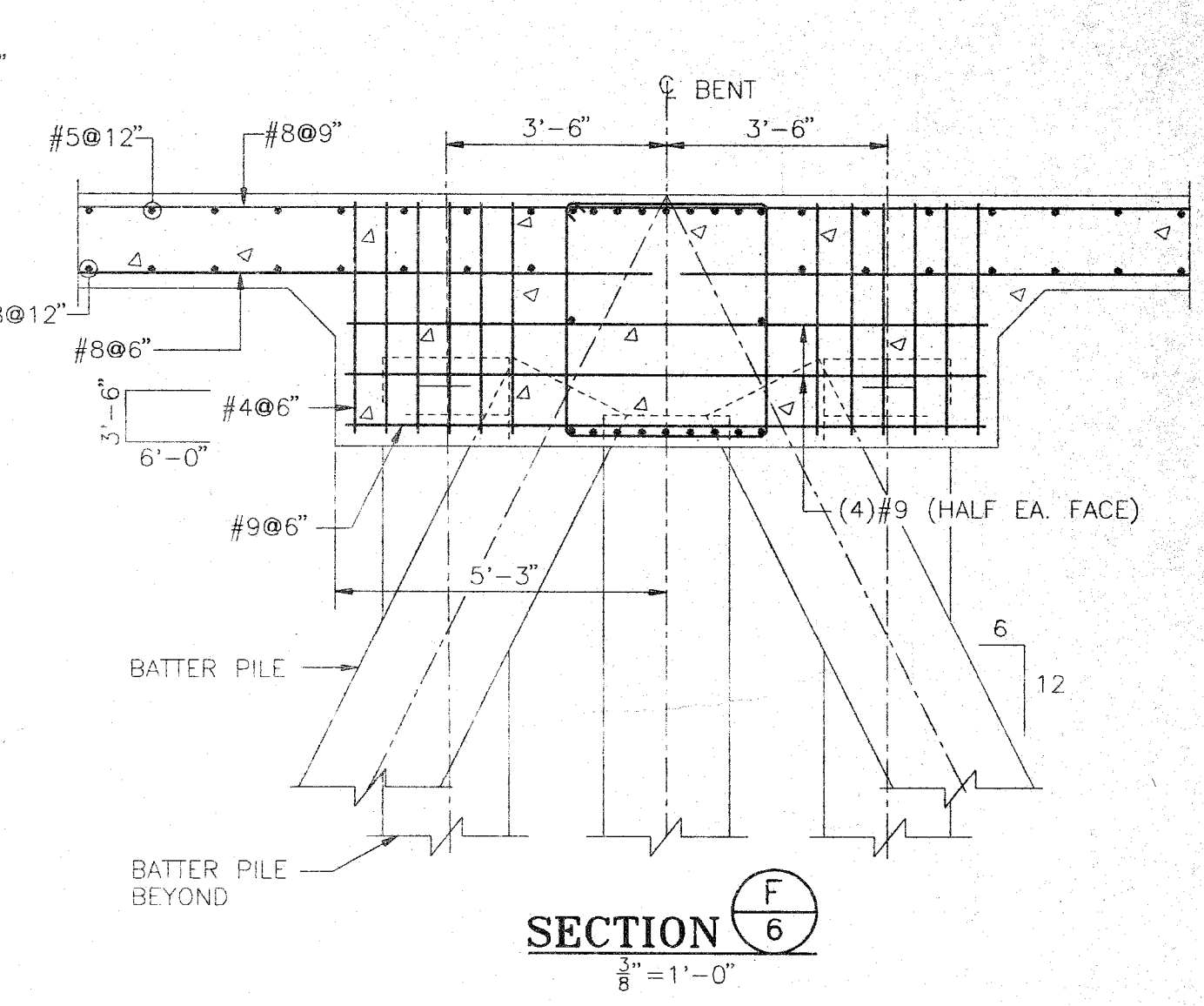
Drawn By: L.W.R. Date: JULY 94
Checked By: P.E.B. Date: 9/19/94

PILE DETAILS

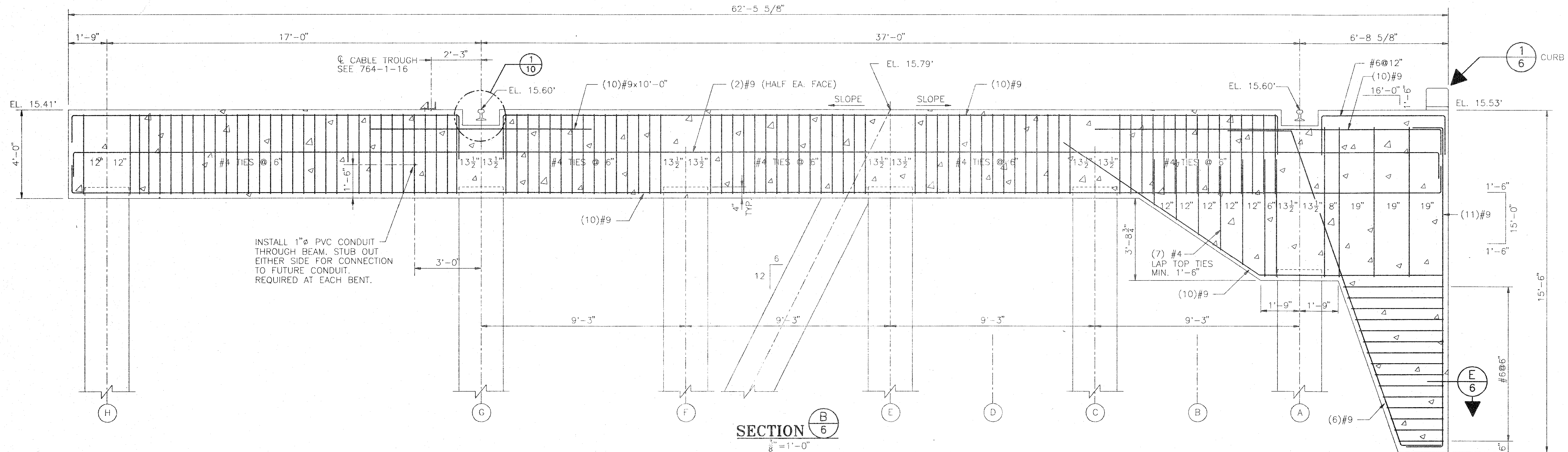
Scale: NOTED DRAWING NO. **764-1-4** 0 REV.



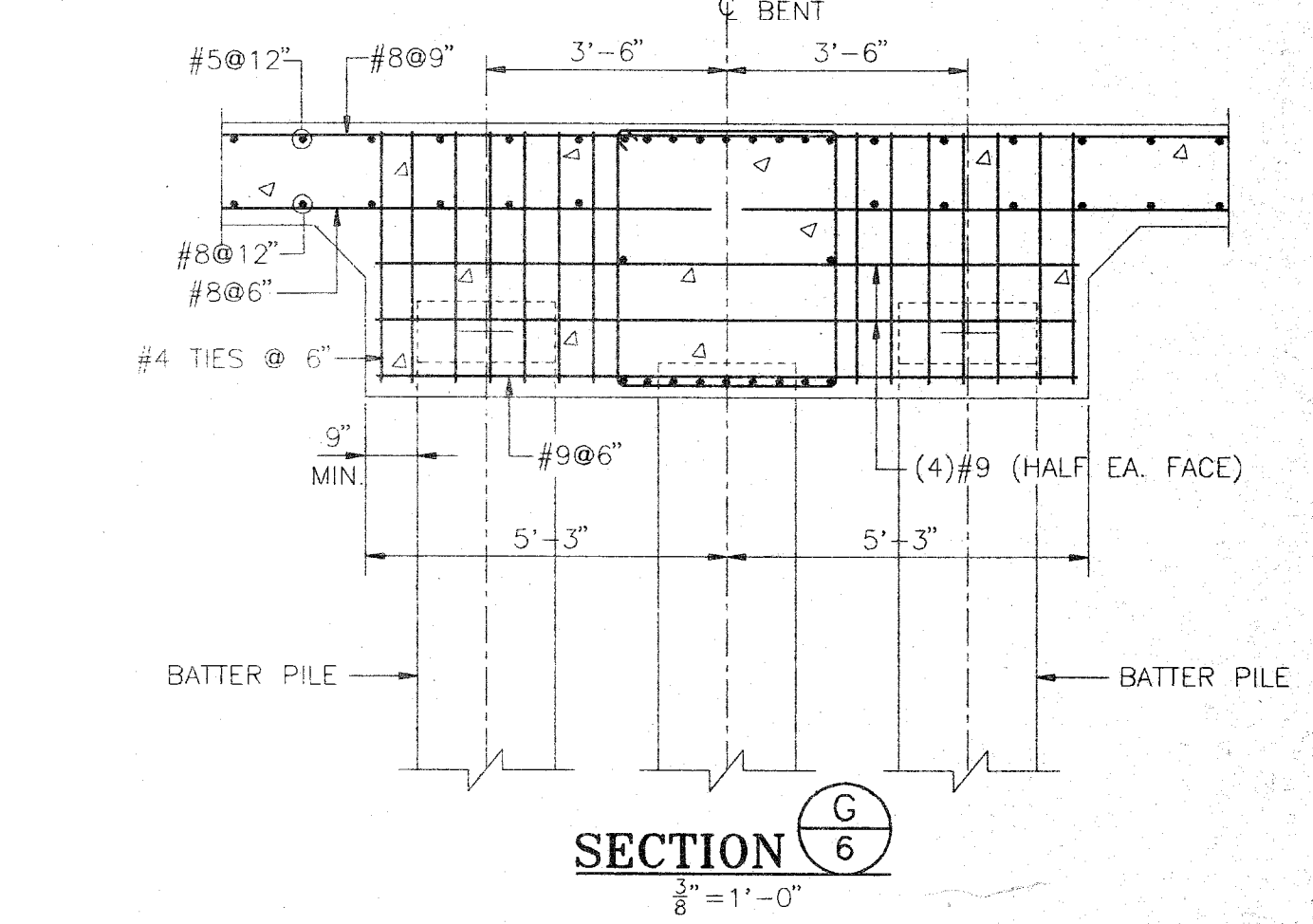
SECTION A/6
3/8" = 1'-0"



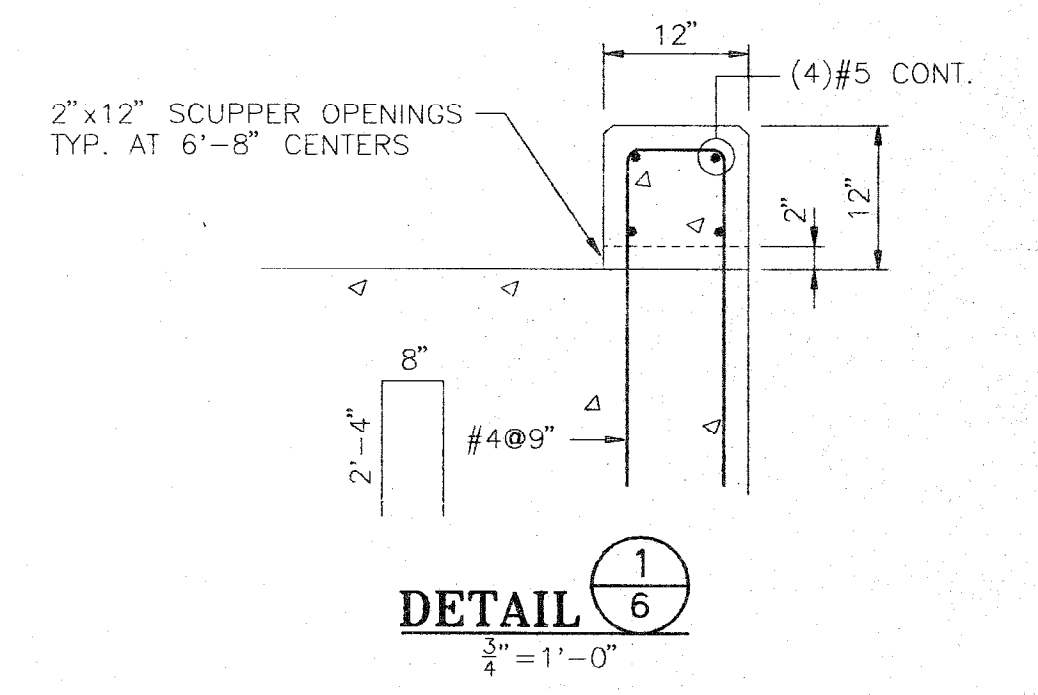
SECTION G/6
3/8" = 1'-0"



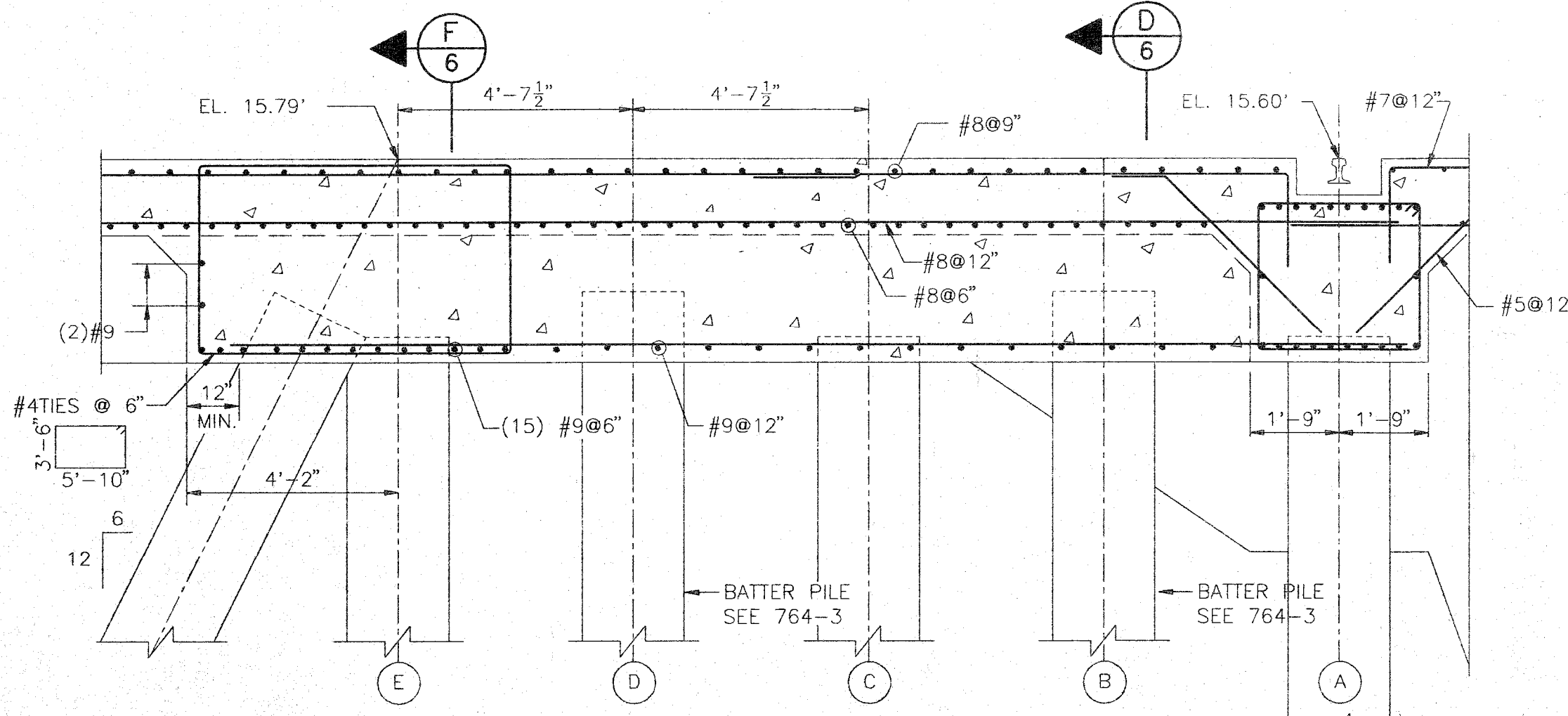
SECTION B/6
3/8" = 1'-0"



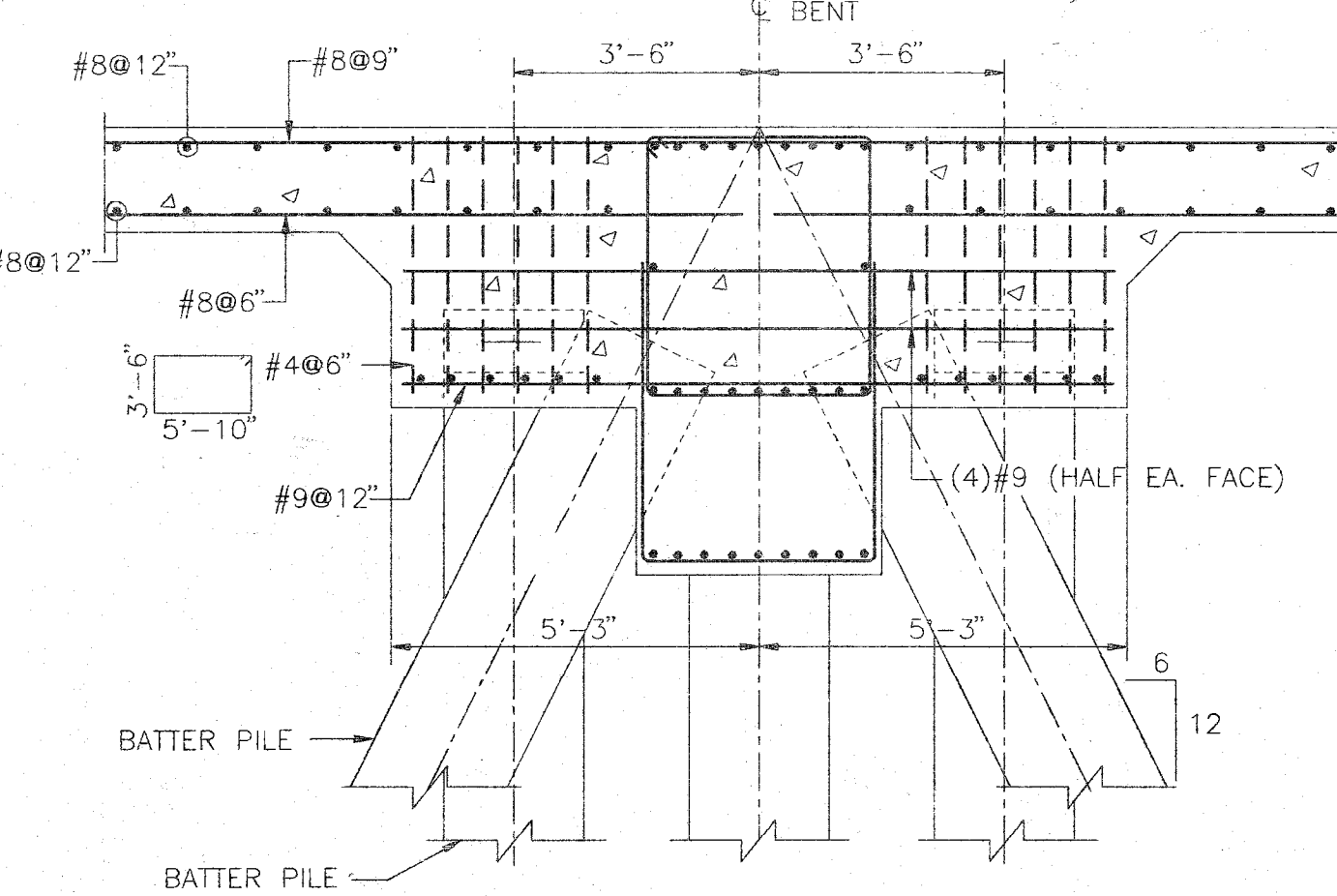
SECTION G/6
3/8" = 1'-0"



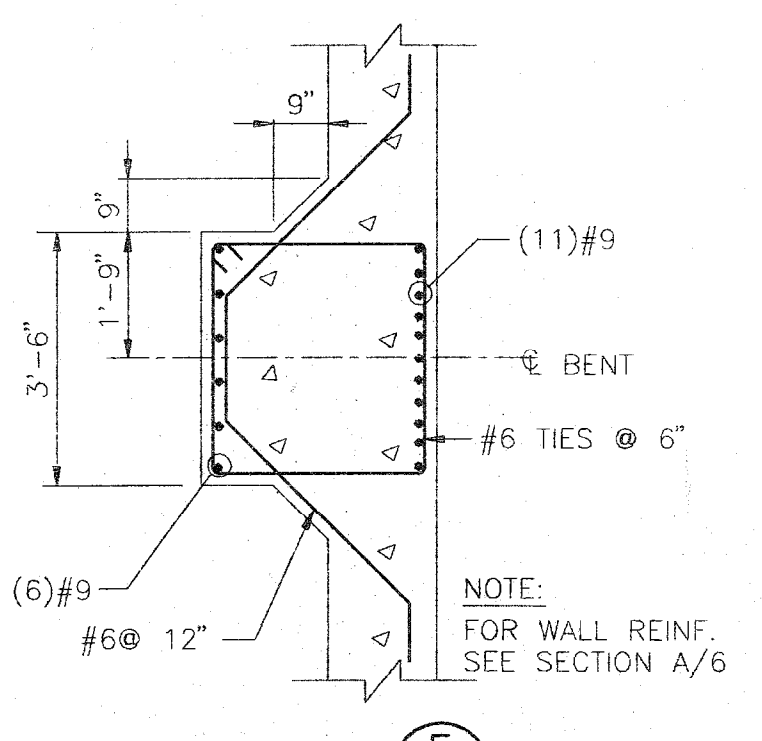
DETAIL 1/6
3/4" = 1'-0"



SECTION C/6
3/8" = 1'-0"



SECTION D/6
3/8" = 1'-0"



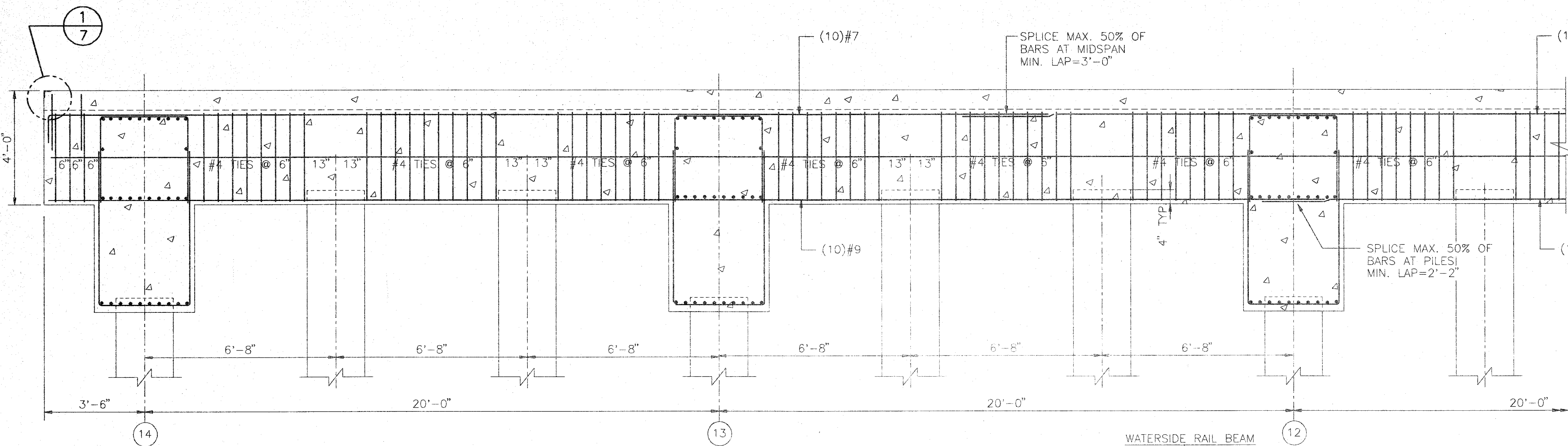
SECTION E/6
3/8" = 1'-0"

NOTE:
REMAINDER OF SECTION IS
SAME AS SECTION A/6

NOTE:
FOR WALL REINF.
SEE SECTION A/6

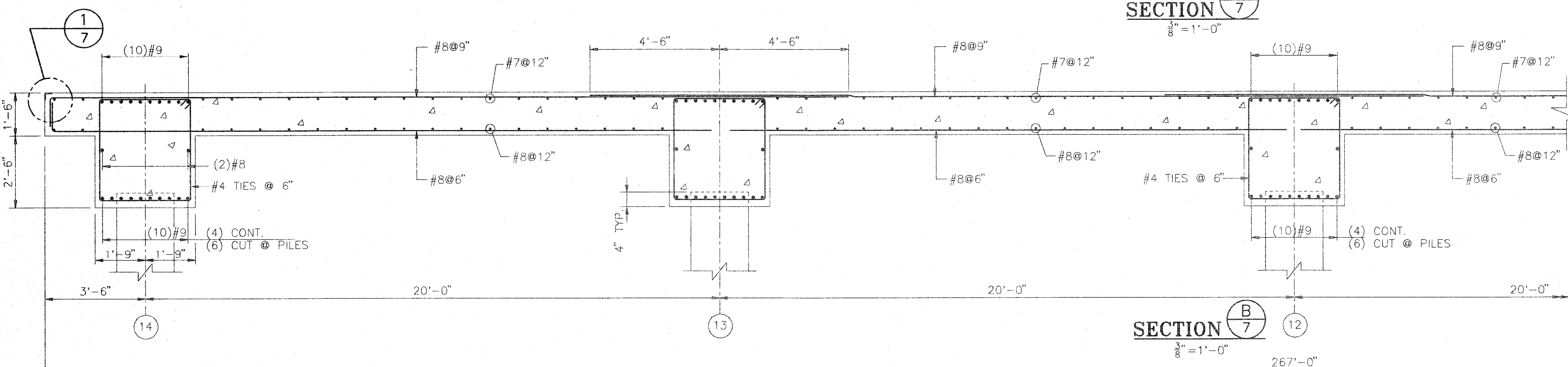
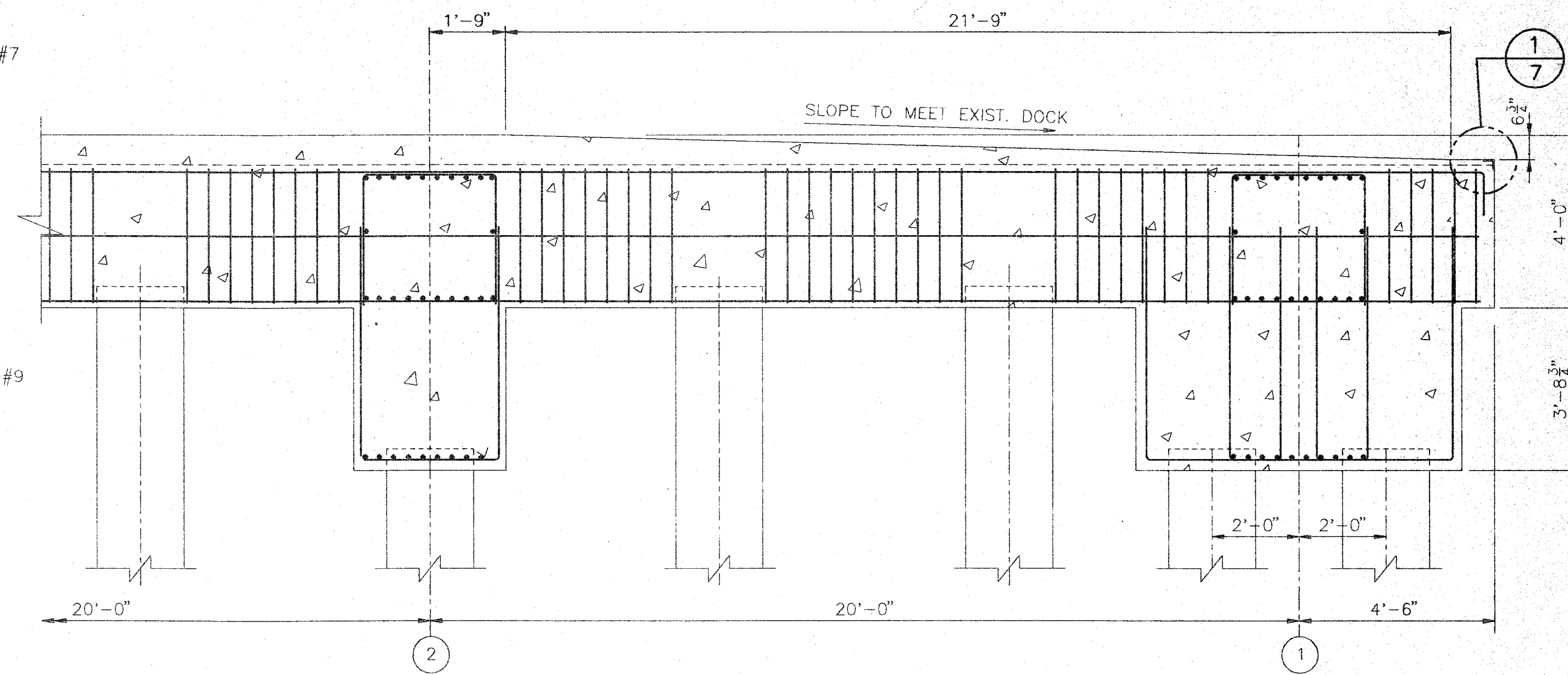
REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE ALABAMA		
		McDUFFIE TERMINALS 268 FT. DOCK EXTENSION
Drawn By: L.W.R. Date: JULY 94 Checked By: P.E.B. Date: 9/19/94		CONCRETE DETAILS
Scale: NOTED	DRAWING NO.	764-1-6

CAD: SWS 764-1-6
 Plot Date: 9/15/94 12:00

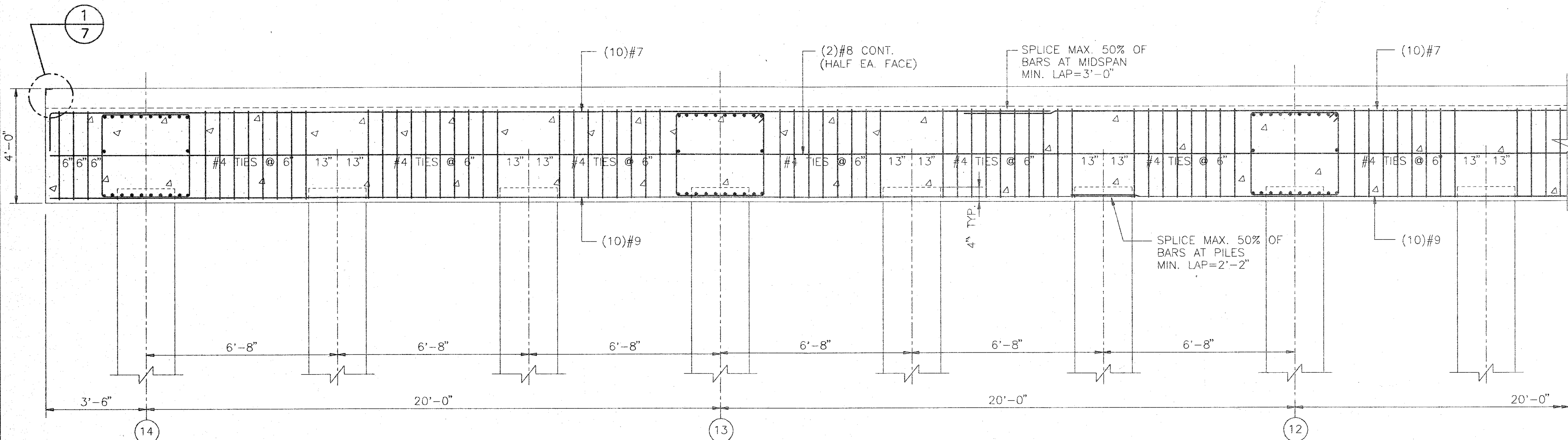
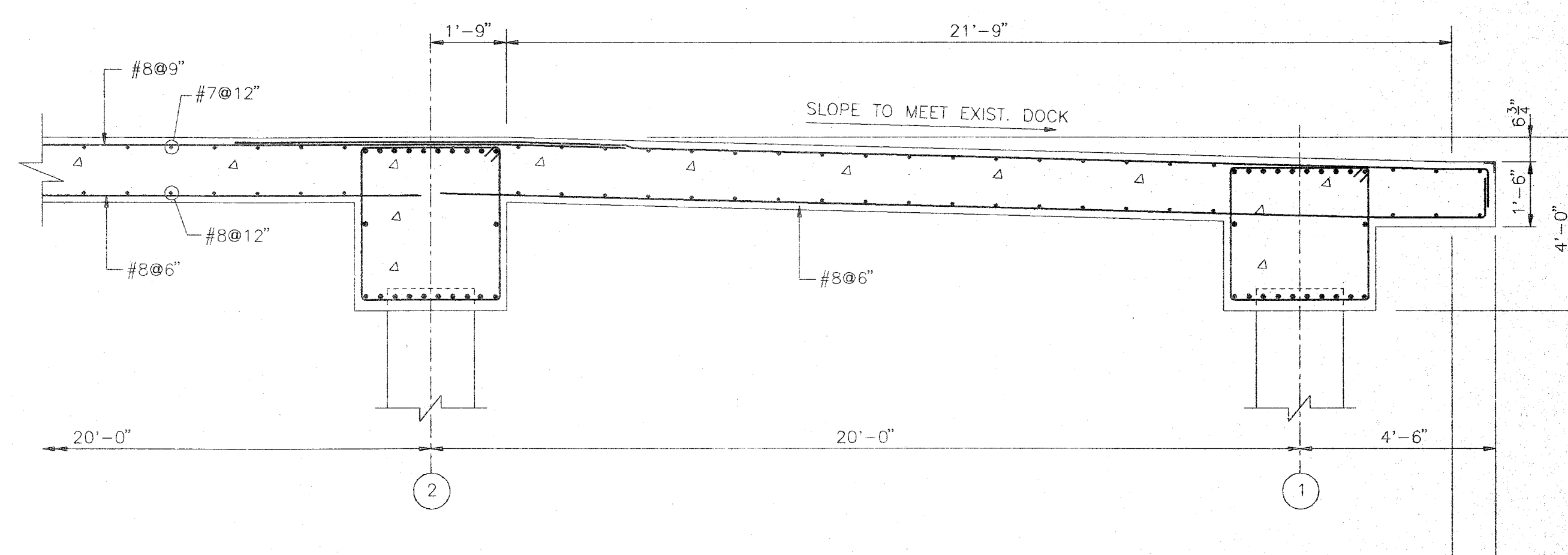


WATERSIDE RAIL BEAM

SECTION A
3/8" = 1'-0"

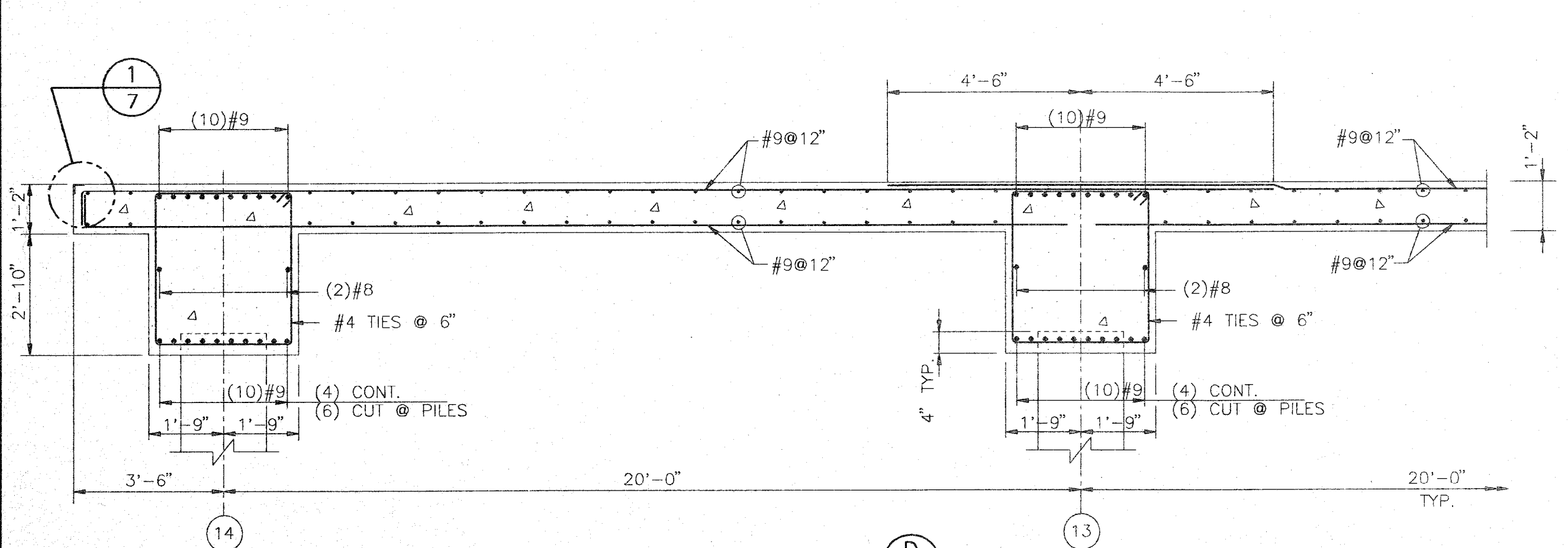
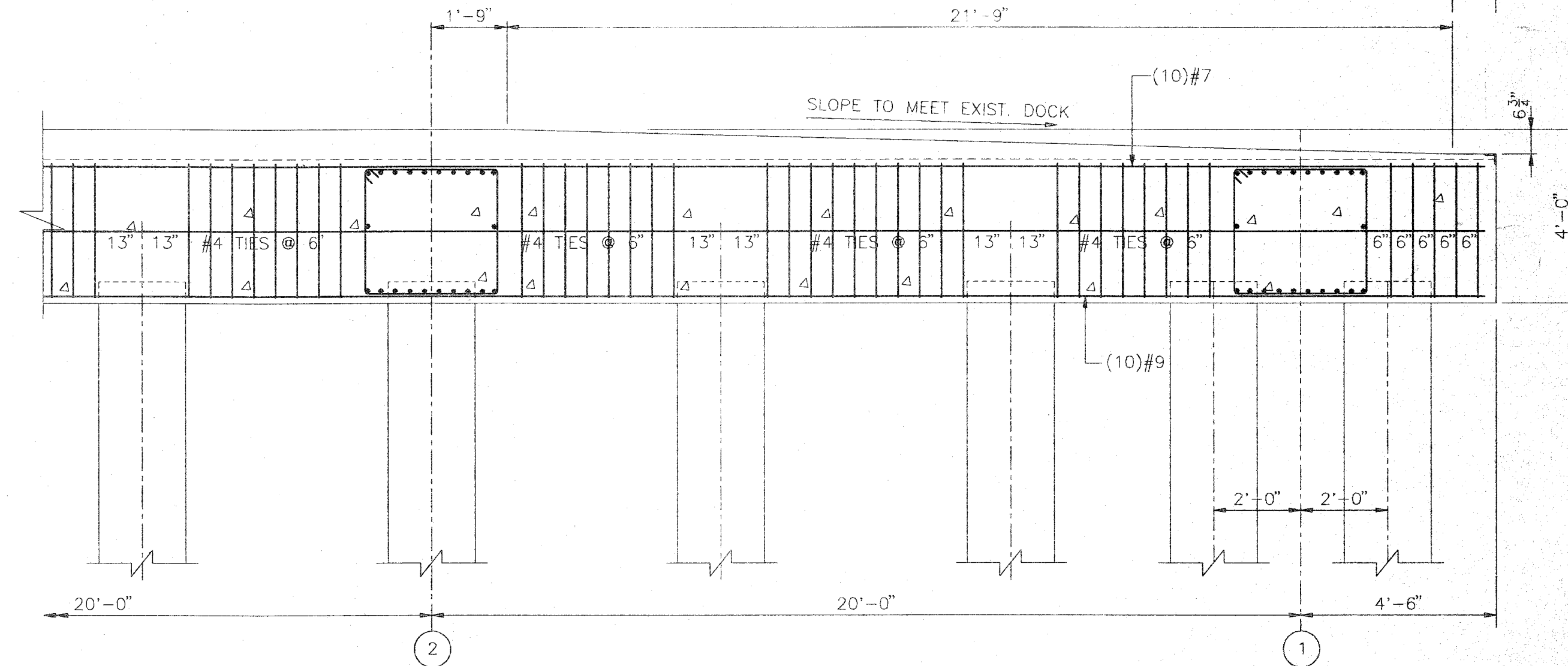


SECTION B
3/8" = 1'-0"

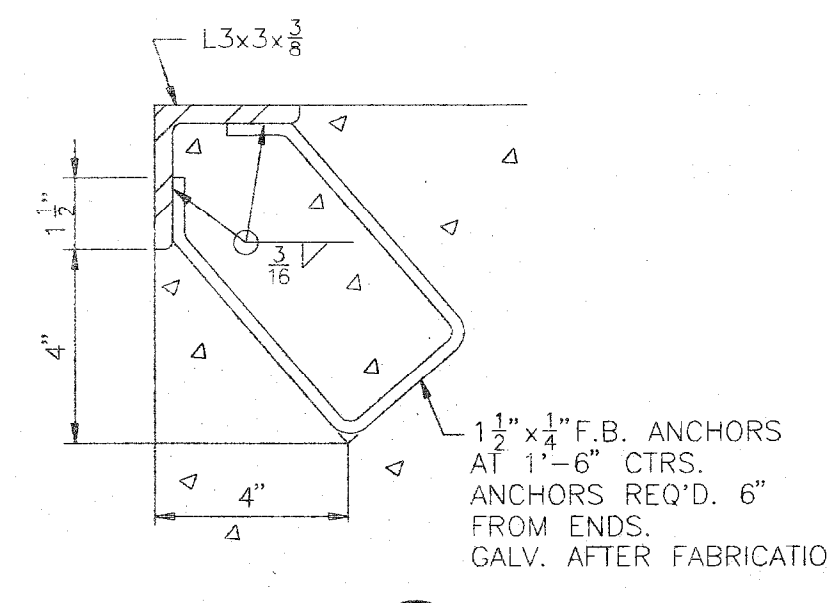


LANDSIDE RAIL BEAM

SECTION C
3/8" = 1'-0"



SECTION D
3/8" = 1'-0"



DETAIL 1
3" = 1'-0"

CAD: 764-1-7
 Plot Date: 9/16/94 12:00

REV.	DATE	DESCRIPTION
ALABAMA STATE DOCKS DEPARTMENT		
MOBILE		ALABAMA
		McDUFFIE TERMINALS 268 FT. DOCK EXTENSION
Drawn By: L.W.R. Date: JULY 94 Checked By: P.E.B. Date: 9/19/94		CONCRETE DETAILS
Scale: NOTED	DRAWING NO.	764-1-7
		0 REV.