

CEMVN-CD-NO-Q

18 September 2000

MEMORANDUM THRU Area Engineer, NOAO
C/Construction Division ATTN: Contract Admin. Section
FOR C/Engineering Division

SUBJECT: Contract No. DACW29-99-C-0005, Lake Pontchartrain, Louisiana and Vicinity, London Avenue Outfall Canal, Parallel Protection, Floodproofing of Gentilly Boulevard Bridge, Orleans Parish, Louisiana

1. The subject contract dated 21 October 1998 was awarded to C.R. Pittman Construction Co., Inc., 3021 Franklin Avenue, New Orleans, Louisiana 70122. The Notice to Proceed was issued on 27 October 1998 with work scheduled to commence on 06 November 1998. The original completion date was set for 28 October 1999, with the estimated contract amount of \$3,333,000.00.
2. Required work under this contract included the construction of a precast girder bridge on Gentilly Boulevard over the London Avenue outfall canal; demolition of the existing bridge; construction of approach slabs; improvement of Gentilly Boulevard on both sides of the bridge; construction of floodwalls adjacent to the bridge; construction of surface drain lines and drain inlets; and landscaping, site cleaning, fertilizing and seeding.
3. The Preconstruction Conference was held at the New Orleans Area Office on 02 December 1998. Detailed minutes of this meeting are located in the contract files.
4. The Contractor began casting of the prestressed girders at Gulf Coast Prestress in Pass Christian, Mississippi on 02 June 1999. The supplier used a single casting bed with four sets of forms to perform the operation. There were 20 separate placements the final of which took place on 13 August 1999.
5. The Contractor began construction at the project site with the installation of the security fence, mobilization of the office trailers and installation of all traffic signs and barrels. Traffic was maintained in the eastbound direction by detouring down Paris Avenue to Broad Street, across the Florida Avenue Canal at Pumping Station #3 and back to Gentilly Blvd. via Allen Street. Westbound traffic used the same detour route in the opposite direction. Traffic control devices were maintained throughout the contract by Work Zone. The road was closed on 18 February 1999 and was not reopened until 14 August 2000.
6. The Contractor began progressive contract work on 26 February 1999 by milling asphalt from Gentilly Blvd. and demolishing the approach slabs and existing roadways. This was accomplished with a Link Belt 4300 trackhoe outfitted with a 6000# Hydraulic breaker. The roadways and bridge were demolished starting from the west side of the existing bridge and working east. Demolition of the roads and the bridge continued throughout the project until

completion. Concurrent with this demolition, the contractor constructed new roadwork and sub-surface drainage and waterlines. Construction of both roadwork and subsurface items was performed intermittently throughout the project. All roadwork was completed on 26 July 2000. However, construction of subsurface drainage and waterlines was continually delayed and were not entirely completed until 20 December 2000.

7. On 16 March 1999 the Contractor began performance of the required test pile program. The contractor drove two 14" H-piles, TP#1 and TP#2. TP#1 was driven to a tip elevation of -90.0 NGVD while TP#2 was driven to a tip elevation of -100.0 NGVD. The contractor also drove one 30" diameter pipe pile, TP#3, to a tip elevation of -100.0 NGVD. A Manitowoc 3900 crawler crane was used for driving of all piles. The H-piles were driven with the approved Vulcan 06 air hammer while the pipe pile was driven with the approved Delmag Diesel hammer. A load frame was constructed with reaction piles and beams and after the required waiting period, the pile test began on 12 April 1999 with the testing of TP#1. Delta Testing provided load cells and extensometers to load the pile and measure displacement. Testing of TP#1 was completed on 15 April 1999. Following the testing of TP#1, TP#3 was tested. This began on 19 April 1999. On 20 April 1999, during loading of the pile, a weld between the reaction pile and the loading beam broke. As a result, the contractor aborted the testing of TP#3 and repaired the frame. Testing of TP#3 restarted on 21 April 1999 and was completed on 24 April 1999 without further incident. TP#2 was never required to be tested
8. The contractor installed the temporary flood protection on 26 May 1999. This was done in accordance with the approved Flood Protection Plan using a combination of sheetpile and sandbags. The flood protection was maintained at elevation 11.75 NGVD during hurricane season and at elevation 8.75 NGVD at all other times during the contract.
9. On 12 August 1999, the Contractor began driving H-piles and sheet pile in the abutments. This operation was completed on 05 November 1999. Driving of the H-piles was accomplished with a Manitowoc 3900 crawler crane, swinging leads and the approved Vulcan 06 hammer. The sheet pile was driven with the same crane and a MKT 20 Vibro hammer.
10. Concurrent with the demolition of the existing bridge, the Contractor drove the 30" pipe piles for the new bents. This was done with a Manitowoc 3900 crawler crane, pile driving leads and the approved Delmag diesel hammer. On 08 December 1999, the contractor began driving the first pipe piles in bent #1. The pipe pile driving operation continued concurrently with the bridge demolition and was complete on 13 March 2000.
11. Construction of both the abutments and the bent caps began subsequent to pile driving with the placement of forms and re-steel. The Contractor placed the west abutment on 14 December 1999. The east abutment was placed on 03 May 2000. Concurrent with the placement of the abutments, the contractor placed the bent caps. The west bent was placed on 03 February 2000 and the east bent was placed 13 April 2000. Both abutments and bent

caps were placed in full lengths. The abutments were formed with contractor constructed wood forms while the bent caps were formed using pre-fabricated steel forms manufactured by Efcu Co. Concrete was delivered to the forms using a concrete pump truck.

12. The Contractor began work on the new floodwalls by installing new Z-web sheetpile. Installation of the sheet piling was followed by installation of contractor constructed wood forms and re-steel. Construction of new floodwalls began on 16 October 1999 and continued until all new floodwalls were completed on 14 July 2000. The Contractor used a Manitowoc 3900 crane and a MKT 20 Vibro hammer to install the sheetpile and placed 3800 psi concrete in each panel by either a pump truck or a concrete bucket.
13. Construction of the bridge superstructure began with the installation of the precast, pre-stressed girders on 29 March 2000, starting on the west side of the new bridge at span #1 and working east toward span #3. The girders were placed using a Manitowoc 3900 crawler crane. There were 21 girders in each of the three spans for a total of 63 girders to complete placement from abutment A to abutment B. Each girder was set with a 1" Elastomeric bearing pad under it's end and a ½" preformed closed cell polyethylene joint filler material between each girder. After all girders were set and secured with the required Dywidag rods, the Contractor grouted the tension spaces, transverse joints and longitudinal joints. The grout operation began on 27 April 2000. The non-shrink grout was mixed onsite and grouting of all areas was completed on 19 May 2000.
14. The Contractor began construction of the barrier walls on 26 April 2000. The barrier walls were formed using contractor constructed wood forms and a Link Belt crane. The Contractor worked continuously on the barrier walls until completed on 17 June 2000. All concrete was delivered to the barrier wall forms with a concrete bucket.
15. After the barrier walls were complete the Contractor began working on resteel and forming for the 5-inch bridge deck. This work began on 16 June 2000 and the deck slab was completed on 07 July 2000. This was done using concrete pump trucks, Morrison Screeds and Bidwell work decks.
16. On 09 August 2000 the Contractor began the striping of the roads, sodding, painting of the walls and other incidental items. All of these items were completed by 14 August 2000 at which time the bridge was reopened to traffic.
17. On 2 January 2001, the contractor began placement of tremie concrete around the 30-inch diameter pipe piles. This was done by detouring traffic and using a concrete pump trunk and divers. The operation was completed on 3 January 2001.
18. The contractor began performance of several other incidental tasks on 4 January 2001. These tasks included backfilling, grading, sodding and asphalt repair in the areas of the waterline tie-ins and were completed on 3 March 2001.
19. The project was accepted on 14 March 2001.

20. Included herewith is a comparison of contract quantities versus actual quantities. Two copies of the "As-Built" drawings are also included.

ITEM	DESCRIPTION	CONTRACT QUANTITY	UNIT PRICE	ESTIMATED AMOUNT	ACTUAL QUANTITY	ACTUAL AMOUNT
0001	Mobilization & Demobilization	Lump Sum	L.S.	\$260,405.79	100%	\$260,405.79
0002	Traffic Control Installation & Maintenance	Lump Sum	L.S.	\$50,000.00	100%	\$50,000.00
0003	Locating Existing Bridge Footings	Lump Sum	L.S.	\$20,000.00	100%	\$20,000.00
0004	Selective Demolition	Lump Sum	L.S.	\$151,000.00	100%	\$151,000.00
0005	Temporary Flood Protection	Lump Sum	L.S.	\$175,000.00	100%	\$175,000.00
0006	Structural Excavation and Backfill	Lump Sum	L.S.	\$9,500.00	100%	\$9,500.00
0007	Furnish and Deliver Steel H-Piles	2,210.0 LF	\$33.00	\$72,930.00	2,186.4 LF	\$72,151.20
0008	Driving Steel H-Piles	2,210.0 LF	\$5.00	\$11,050.00	2,186.4 LF	\$10,932.00
0009	Furnish and Deliver Steel Pipe Piles	2,222.0 LF	\$101.00	\$224,422.00	2,206.4 LF	\$222,846.40
0010	Driving Steel Pipe Piles	2,222.0 LF	\$12.50	\$27,775.00	2,206.4 LF	\$27,580.00
0011	Furnish and Drive Test Piles	3 EA	\$22,713.21	\$68,139.63	3 EA	\$68,139.63
0012	Pile Load Tests	2 EA	\$2,500	\$5,000.00	2 EA	\$5,000.00
0013	Furnish and Deliver Z-Web Steel Sheet Pile	2,425.0 SF	\$9.50	\$23,037.50	2,185.9 SF	\$20,766.05
0014	Driving Z-Web Steel Sheet Pile	2,450.0 SF	\$1.50	3,637.50	2,185.9 SF	\$3,278.85
0015	Furnish and Deliver Straight Web Steel Sheet Pile	4000.0 SF	\$12.00	\$48,000.00	3,972.1 SF	\$47,665.20

0016	Driving Straight Web Steel Sheet Pile	4000.0 SF	\$1.50	\$6,000.00	3,921.1 SF	\$5,958.15
0017	Asphaltic Concrete Pavement	Lump Sum	L.S.	\$10,000.00	100%	\$10,000.00
0018	Portland Cement Concrete Pavement	Lump Sum	L.S.	\$280,000.00	100%	\$280,000.00
0019	Water Distribution System	Lump Sum	L.S.	\$161,200.00	100%	\$161,200.00
0020	Drainage Structure	Lump Sum	L.S.	\$99,516.58	100%	\$99,516.58
0021	Permanent Pavement Markings, Markers and Signs	Lump Sum	L.S.	\$8,200.00	100%	\$8,200.00
0022	Fertilizing, Seeding and Mulching	Lump Sum	L.S.	\$6,000.00	100%	\$6,000.00
0023	Substructure Concrete	Lump Sum	L.S.	\$376,448.00	100%	\$376,448.00
0024	Superstructure Concrete	Lump Sum	L.S.	\$460,000.00	100%	\$460,000.00
0025	Precast, Prestressed, Concrete Girders	Lump Sum	L.S.	\$599,779.77	100%	\$599,779.77
0026	Miscellaneous Metalwork	Lump Sum	L.S.	\$45,000.00	100%	\$45,000.00
0027	Electrical Feeder Work	Lump Sum	L.S.	\$182,000.00	100%	\$182,000.00
0028	Approach Slabs	Lump Sum	L.S.	\$70,000.00	100%	\$70,000.00
0029	VECP to Allow Extraction and Salvage of Test Piling	Lump Sum	L.S.	\$11,000.01	100%	\$11,000.01
0030	Reconfiguration of Sheetpile Joints at Floodwalls	Lump Sum	L.S.	\$22,523.57	100%	\$22,523.57

0031	Refabrication of Sheetpile Joints at Floodwalls	Lump Sum	L.S.	16,243.63	100%	16,243.63
0032	Additional Removal of Materials Under Bridge	Lump Sum	L.S	\$42,000.00	100%	\$42,000.00

21. There were 37 contract modifications issued and a summary of each follows:

- a. P00001 (CAN-01) – Modified payment block #27.
- b. P00002 (CO-03) – Revised the drainage layout due to interference with gas and water lines.
- c. P00003 (CAN-02) – Incorporated the electronic funds transfer clause.
- d. P00004 (FM-001) – Increased available funds by \$750,000.00.
- e. P00005 (FM-002) – Increased available funds by \$650,000.00.
- f. P00006 (CO-10) – Modified barrier walls at bridge corners.
- g. P00007 (FM-003) – Increased available funds by \$470,000.00.
- h. P00008 (FM-004) – Increased available funds by \$710,586.94 and rectified a variation in estimated quantity of \$1,023.30.
- i. P00009 (FM-005) – Increased available funds by \$162,198.64.
- j. P00010 (CIN 23) – Revised the rate of liquidated damages.
- k. P00011 (FM-006) – Increased available fund by \$46,325.95.
- l. A00001 (CIN 02 & CIN 03) – Provided for an alternate splice method for the 30-inch diameter steel pipe pile (CIN 02) and Provided for substitution of ASTM-A-36 grade steel test H-Piles in lieu of ASTM-A588/A-588M-94 grade steel test H-Piles (CIN 03). Decreased contract amount by \$1,860.36 (CIN 02 = \$1,200.00 and CIN 03 = \$660.32).

- m. A00002 (CIN 01) – Provided for a 6-foot chain link security fence and two 24-foot gates in lieu of the 42-inch high orange safety fence. Increased the contract amount by \$8,447.30.
- n. A00003 (CO-04) – Modified utilities by offsetting the 12-inch diameter waterline, fire hydrant and valve, revised the joint layout and added a driveway and curbing near the intersection of Gentilly Blvd. and Pleasure St.
- o. A00004 (CO-05) – Modified utilities at Northwest and Northeast corner of bridge, provided for removal of asbestos coated waterline, modified bolster blocks and modified I-Wall for penetration of waterline.
- p. A00005 (CIN 09) – Allowed contractor to recover and salvage the test pile and support piles. Decreased contract amount by \$9,000.00.
- q. A00006 (CO-06) – Modified utilities by changing the drain line from 15-inch diameter to 12-inch diameter concrete pipe, added 12-inch diameter C900 pipe in lieu of 15-inch diameter concrete pipe, eliminated plugging of existing drain lines, modified tie-in of new drain lines and modified sidewalks.
- r. A00007 (CAN 03) – Corrected line item 0029, added by A00005.
- s. A00008 (CAN 04) – Corrected line item 0011, modified by A00005.
- t. A00009 (CO-07) – Changed sidewalk and driveway grades and relocated catch basin.
- u. A00010 (CIN 06) – Corrected the survey control points given on the original contract drawings. Increased contract amount by \$1,958.49.
- v. A00011 (CO-08) – Removed 1-inch compressible material from top of sheetpile under abutments and added #4 “U” bars through sheetpile handling holes.
- w. A00012 (CO-09) – Suspended work on floodwall panels #2, #3, #5 and #6.
- x. A00013 (TE-001) – Time extension due to unusually severe weather or high canal stages. Extended contract time by 17 calendar days.
- y. A00014 (CAN 05) – Changed modification number of CIN 06 from A00008 to A00010.
- z. A00015 (TE-003) – Time extension due to supplier delays with pre-cast girders. Extended contract time by 158 calendar days.
- aa. A00016 (CAN 06) – Corrected the project description of CIN 07.

- bb. A00017 (CIN 10) – Definitized CO-06 which modified utilities by changing the drain line from 15-inch diameter to 12-inch diameter concrete pipe, added 12-inch diameter C900 pipe in lieu of 15-inch diameter concrete pipe, eliminated plugging of existing drain lines, modified tie-in of new drain lines and modified sidewalks. Increased contract amount by \$6,286.29.
- cc. A00018 (CIN 15) – Definitized CO-10 which modified barrier walls at bridge corners. Increased contract amount by \$22,523.57.
- dd. A00019 (CIN 14) – Definitized CO-08 which removed 1-inch compressible material from top of sheetpile under abutments and added #4 “U” bars through sheetpile handling holes. Increased contract amount by \$385.29.
- ee. A00020 (CIN 04) – Definitized CO-03 and CO-07 which revised the drainage layout due to interference with gas and water lines (CO-03) and changed sidewalk and driveway grades and relocated catch basin (CO-07). Increased contract amount by \$17,845.00.
- ff. A00021 (CIN 07) – Definitized CO-04 which modified utilities by offsetting the 12-inch diameter waterline, fire hydrant and valve, revised the joint layout and added a driveway and curbing near the intersection of Gentilly Blvd. and Pleasure St. Increased contract amount by \$37,250.00.
- gg. A00022 (CIN 08) – Definitized CO-05 which modified utilities at Northwest and Northeast corner of bridge, provided for removal of asbestos coated waterline, modified bolster blocks and modified I-Wall for penetration of waterline. Increased contract amount by \$68,800.00.
- hh. A00023 (CIN 11) – Provided for repair of waterline damaged while driving sheet pile. Increased contract amount by \$7,150.00.
- ii. A00024 (CIN 16) – Allowed for a construction joint in the bridge deck.
- jj. A00025 (TE-002) - Time extension due to unusually severe weather or high canal stages. Extended contract time by 15 calendar days.
- kk. A00026 (CO-11) – Modified contract to demolish and reconstruct floodwall panel #1 due the approximately 3-inch of settlement.
- ll. A00027 (TE-004) - Time extension due to unusually severe weather or high canal stages. Extended contract time by 3 calendar days.
- mm. A00028 (CIN 19) – Reimbursed the Government for providing the contractor with a cast-in-place girder design to replace a damaged pre-cast girder. Decreased contract by \$5,220.23.

nn. A00029 (CIN 18) – Definitized CO-09 which provided for removal and replacement of damaged waterstop between I-Wall monoliths, re-fabricated a piece of sheetpile for installation of the floodwall and added reinforcing steel at the interior bridge bents. Increased contract amount by \$16,243.63. Increased contract time by 5 calendar days.

oo. A00030 (CIN 23) – Provided for removal of material at canal bottom. Increased contract amount by \$42,000.00. Increased contract time by 91 calendar days.

22. The following is a list of Services, Suppliers and Subcontractors on this project along with their responsibilities:

Services:

- a. Traffic Plan – Urban Systems
- b. Preconstruction Conference Video – Pre Construction Services, Inc.
- c. Moving Service – Security Van Lines
- d. Hauling – Beverly Industries
- e. Diving – Specialty Diving, Inc.
- f. Testing – Delta Testing & Inspection
- g. Electric – Walter J. Barnes Electric Co.
- a. Demolition – A & A Enterprises, Inc.

Suppliers:

- a. Dywidag Rods – Dywidag-Systems
- b. Crushed Concrete – Barriere Construction
- c. Misc. Supplies – Construction Materials
- d. Misc. Supplies – Building Specialties
- e. Geotextile – Industrial Fabrics
- f. Iron Manhole Castings – East Jordan Iron Works/Vulcan Foundry
- g. RCP Pipe – New Orleans Cement Products
- h. Pipe Supplies – F&G Services, Inc.
- i. Pile – PILECO, Inc.
- j. Sand – L. Murphy Trucking Service
- k. Girders – Gulf Coast Pre-Stress, Inc.
- l. Piling – Skyline Steel Corporation
- m. Signs – Workzone, Inc.
- n. Piping (Drainage and Waterline) – Louisiana Utilities Supply Co.
- o. Resteel – Lulich Steel Corporation
- p. Concrete – Carlo Ditta, Inc.
- q. Miscellaneous Iron – Metfab, Inc.

Subcontractors:

- a. Roadway Striping – Pavement Markings, Inc.

- b. Brick Manholes – Steve DiBeneditto & Sons, Inc.
- c. Resteel Tying – Ax Reinforcement
- d. Asphalt – Boh Bros. Construction Co.

22. The contractor submitted an adequate Accident Prevention Program, however, the contractor's onsite quality control personnel rarely implemented it. Multitudes of deficiencies were noted and many of these were not corrected in a timely manner. Safety always took a "Back Seat" to production and completion, and as a result, several minor, but avoidable, accidents occurred during the project.

23. The overall quality of workmanship on the project was unsatisfactory. Although an adequate CQC Plan was prepared and accepted for the project, the contractor's onsite quality control personnel rarely implemented it. Documentation of the control procedures was unsatisfactory, and very little description of the control activities was placed into the CQC reports.

Storage and adequacy of required materials were both marginal, and throughout the duration of the project items were left in the staging area unprotected from both theft and the elements. On several occasions it was brought to the attention of the CQC manager that approved or specified materials were not being used, and on many of these occasions the inadequate materials were not removed.

QC testing on the project was satisfactory, however the contractor's onsite quality control personnel often had to be reminded to arrange for it.

"As-Built" drawings were never maintained at the site, and the contractor's onsite quality control personnel failed to post the finalized modifications to the working copies of the contract drawings. On several occasions this led to an item of work being done in accordance with the original contract requirements when it should have been performed in accordance with the change.

The contractor never maintained a deficiency-tracking log at the site. However, scores of deficiencies were noted and on many of these occasions corrections were not performed in a timely manner.

There were several meetings with the contractor's home office in an attempt to rectify the above problems. However, quality issues plagued the project from start to finish. The contractor's original CQC manager was replaced once during the project, but the replacement did not perform much better than the original.

24. The repeated problems with quality control resulted in many areas of the permanent work being demolished and re-constructed. This frequent re-working of the permanent work adversely affected other phases of the project and impacted the overall timeliness of performance and ultimately delayed completion.

25. Point of contact on this matter is Mr. Glenn Gremillion at 862-1227.

Glenn Gremillion
Project Engineer
New Orleans Area Office

SUBJECT: Narrative Completion Report for Contract No. DACW29-99-C-0005, Lake Pontchartrain, Louisiana and Vicinity, London Avenue Outfall Canal, Parallel Protection, Floodproofing of Gentilly Boulevard Bridge, Orleans Parish, Louisiana

Copies Furnished:

Project Engineer (Gremillion)
Project Inspector (McKinley)
Team Leader (Wagner)
Office Engineer w/as built (Waits)
CEMVN-CD-CD w/as built
CEMVN-CD-C
CEMVN-CD-Q
CEMVN-CT
CEMVN-ED-C
CEMVN-ED-TF
CEMVN-PM

Safety is a Part
of Your Contract

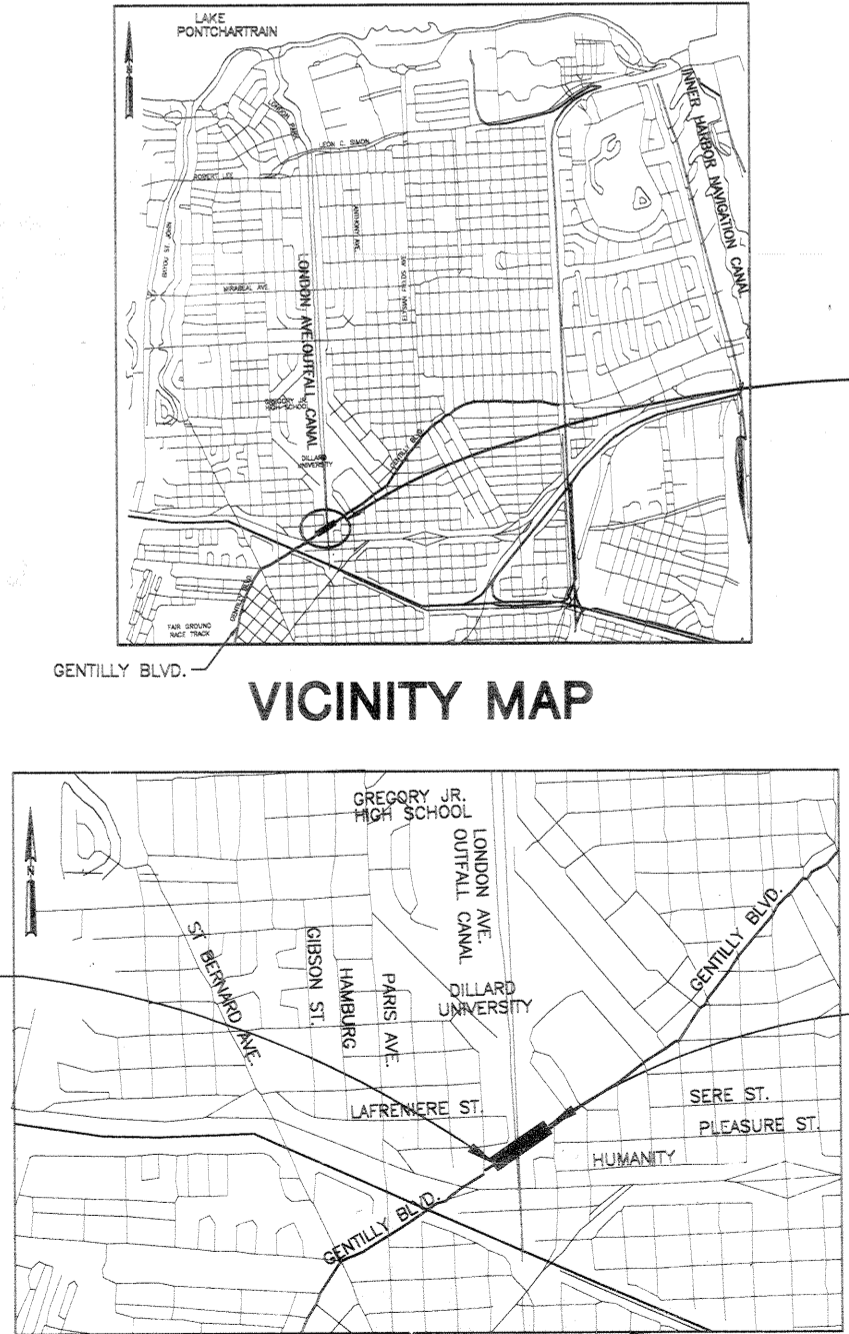
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA FLOODPROOFING LONDON AVENUE OUTFALL CANAL GENTILLY BLVD. BRIDGE

AS BUILT #1
3-Bulb
4' 7" - 6" ~~3-Bulb~~
4' 9" 3-Bulb
990302 00.00*
02:15
05:30
07:30*

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33	ABUTMENT PLAN AND ELEVATION		CLEANOUT FOR HOUSE DRAINS (D-1358)
34	ABUTMENT REINFORCEMENT DETAILS		DETAIL OF STEPS FOR CONCRETE AND BRICK MANHOLES & WALLS (D-1359)
35	ABUTMENT DETAILS		STANDARD MANHOLE GRATING COVER (D-2548)
36	BENT No. 1 PLAN, ELEV. & DETAILS		24" x 30" CLEAR OPENING DROP INLET CATCH BASIN (D-3284)
37	BENT No. 1 REINFORCEMENT DETAILS		SINGLE DRIVE-OVER CATCH BASIN (D-3431-A)
38	BENT No. 2 PLAN, ELEV. & DETAILS		DETAILS OF SEWER & WATER MANHOLE CASTINGS (3143-E-1)
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REFERENCE BENCH MARK		
DESIGNATION	DESCRIPTION	ELEVATION
P 153	AT NEW ORLEANS, ABOUT 0.8 MILES ALONG LAKESHORE DR. FROM THE WEST SIDE OF TRAFFIC CIRCLE AT THE JUNCTION OF ELYSIAN FIELDS AVE., ABOUT 0.55 MILES NE ALONG LAKE TERRACE DR. FROM THE EAST END OF THE LAKESHORE DR. BRIDGE OVER BAYOU SAINT JOHN, THENCE 0.1 MILES EAST ALONG LAKESHORE DR. TO THE BRIDGE ACROSS LONDON AVE. CANAL. SET IN THE TOP OF THE EAST END OF PEDESTRIAN WALK ALONG THE SOUTH SIDE OF THE BRIDGE OVER THE EAST ABUTMENT OF THE BRIDGE, 5 FT. SOUTH OF THE SOUTH CURB OF THE DRIVE, 6 IN. WEST OF THE EAST END OF THE BRIDGE AND ABOUT 1 FT. ABOVE THE DRIVE.	11.270 N.G.V.D. (1964 EPOCH)
U 153	IN NEW ORLEANS, AT 2251 NORTH BROAD AVENUE, 33.7 M (110.6 FT.) SOUTHEAST OF THE SOUTHEAST CORNER OF PUMP STATION 3 AT 2251 NORTH BROAD STREET, 9.7 M (31.8 FT.) SOUTHWEST OF THE NORTHEAST CORNER OF A RETAINING WALL, 6.8 M (22.3 FT.) WEST OF THE NEAR RAIL OF THE SOUTHERN RAILROAD, 5.6 M (18.4 FT.) NORTHEAST OF THE NORTHWEST CORNER OF A FENCE, AND THE MONUMENT PROJECTS 0.2 M (0.7 FT.) ABOVE THE GROUND SURFACE.	10.390 N.G.V.D. (1991 EPOCH)

DESIGN SPEED
25 MPH.



PROJECT LOCATION

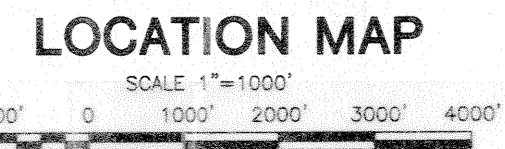
NOTE: THE CONTRACTOR IS ADVISED THAT THE TIME ALLOWED FOR THE COMPLETION OF WORK IS THE SHORTEST REASONABLE CONTRACT DURATION ALLOWED TO COMPLETE THE WORK. THE CONTRACTOR SHALL TAKE ALL ACTIONS NECESSARY (I.E., MULTIPLE SHIFTS, CONCURRENT OPERATIONS, OVERTIME, ETC.) IN ORDER TO ACCOMPLISH THE WORK WITHIN THE SPECIFIED TIME FRAME. FAILURE TO MEET THE SCHEDULE WILL RESULT IN THE GOVERNMENT ASSESSING LIQUIDATED DAMAGES ACCORDINGLY.

THIS PROJECT WAS DESIGNED BY THE FIRM OF LINFIELD, HUNTER & JUNIUS, INC. FOR THE NEW ORLEANS DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEARING ON THESE PROJECT DOCUMENTS ARE WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

BEGIN PROJECT
STA 102+17.60 (NORTH BASELINE)
STA 102+17.60 (SOUTH BASELINE)

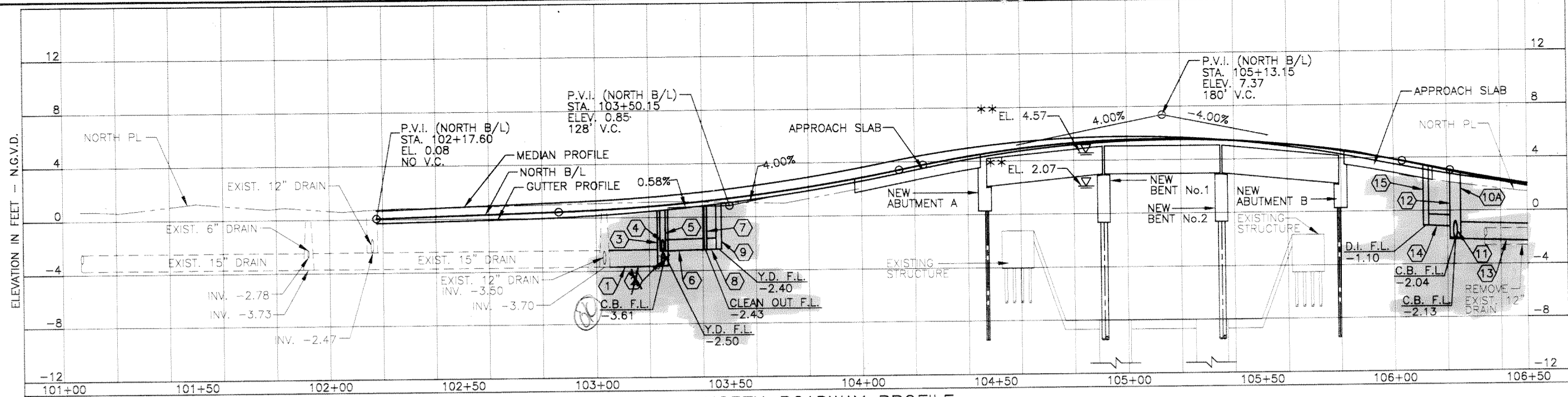
END PROJECT
STA 108+77.00 (NORTH BASELINE)
STA 108+77.00 (SOUTH BASELINE)

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



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

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS			
CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 800 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
TITLE SHEET			
DESIGNED BY: PWB	APPROVED BY: Robert Nguyen	CADD FILE: 447320V.DGN	DATE: 2/20/98
DRAWN BY: RKP	CHECKED BY: AFG	SUBMITTED BY: A. GODDIGN	SOLICITATION NO. H-4-44733
DATE: FEB. 1998	FILE NO.	DWG. 1 OF 67	



- LEGEND OF CONSTRUCTION NOTES**
- 1 4" MOUNTABLE CURB
 - 2 8" BARRIER CURB
 - 2A 5' TRANSITION 8" BARRIER TO 10" BARRIER CURB
 - 3 6" BARRIER CURB
 - 3A 15' TRANSITION 6" BARRIER TO 10" BARRIER CURB
 - 4 4" THICK CONCRETE SIDEWALK
 - 5 5' TRANSITION MOUNT. TO BARRIER CURB
 - 6 EXIST. LIGHT STANDARD TO REMAIN
 - 7 LIGHT STANDARD TO BE RELOCATED BY ENTERGY
 - 8 6" THICK RESIDENTIAL D/W STA. 102+93.48 (19' WIDE, SOUTH SIDE)
 - 9 6" THICK RESIDENTIAL D/W STA. 103+44.98 (11' WIDE, SOUTH SIDE)
 - 10 6" THICK RESIDENTIAL D/W STA. 105+88.16 (19' WIDE, SOUTH SIDE)
 - 11 6" THICK RESIDENTIAL D/W STA. 106+43.89 (13' WIDE, NORTH SIDE)
 - 12 6" THICK RESIDENTIAL D/W STA. 102+31.24 (15' WIDE, NORTH SIDE)
 - 13 8" THICK COMMERCIAL D/W STA. 102+70.94 (32' WIDE, NORTH SIDE)
 - 14 10' TRANSITION TO TIE-IN TO EXISTING

NORTH SIDE VERTICAL CURVE DATA

GUTTER PROFILE - CONT. ON DWG. 5				
P.V.I. NO.	1	2	3	4
P.V.I. STA.	102+17.60	103+42.00	105+17.92	105+86.25
P.V.I. ELEV.	-0.27	+0.26	+7.30	+4.46
V.C. LENGTH	NONE	140'	180'	NONE
g ₁	N/A	+0.43%	+4.00%	N/A
g ₂	+0.43%	+4.00%	-4.00%	-4.25%

* VERTICAL CURVE TRUNCATED AT P.V.I. STA. 105+86.25

MEDIAN PROFILE - CONT. ON DWG. 5

MEDIAN PROFILE - CONT. ON DWG. 5			
P.V.I. NO.	1	2	3
P.V.I. STA.	102+17.60	103+50.28	104+98.25
P.V.I. ELEV.	+0.67	+1.66	+7.58
V.C. LENGTH	NONE	116'	180'
g ₁	N/A	+0.75%	+4.00%
g ₂	+0.75%	+4.00%	-4.00%

** NOTE: NORMAL WATER SURFACE ELEVATION OF LONDON AVE. CANAL RANGES FROM 0.91' N.G.V.D. TO 3.41' N.G.V.D. SINCE THE LONDON AVE. CANAL IS SUBJECT TO TIDAL VARIATIONS OF LAKE PONTCHARTRAIN, THE WATER SURFACE ELEVATIONS ARE SUBJECT TO RISE & FALL WELL ABOVE AND BELOW NORMAL ELEVATIONS GIVEN

- NOTES**
- ADJUST TOPS OF ALL EXISTING MANHOLES, CLEANOUTS, WATER METER BOXES, WITHIN NEWLY PAVED AREA TO NEW GRADE.
 - SEE DWGS. 14 AND 15 FOR GEOMETRIC LAYOUT.
 - SEE DWGS. 23 AND 24 FOR UTILITY RELOCATION PLAN.
 - SEE DWG. 18 FOR DEMOLITION PLAN.
 - SEE DWG. 16 FOR JOINT LAYOUT PLAN.
 - SEE DWG. 17 FOR GRADING PLAN.
 - PROVIDE DEPRESSED CURB AT ALL DRIVEWAYS UNLESS OTHERWISE INDICATED ON PLANS.
 - SEE DWGS. 6 AND 7 FOR DRAINAGE AND PROFILES ON SOUTH SIDE OF GENTILLY BLVD.
 - SEE DWG. 2 FOR GENERAL NOTES AND LEGEND.
 - ALL STORM DRAIN PIPES SHALL BE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

- LEGEND OF CONSTRUCTION NOTES (continued)**
- 04. CATCH BASIN
 - 12. DRAIN CLEANOUT
 - 20. BUILDING CLEANOUT
 - 21. CATCH BASIN
 - 22. WATER METER
 - 23. BUILDING
 - 24. WATER METER
 - 25. BUILDING
 - 26. OAK TREE
 - 27. DRAIN MANHOLE
 - 01. 45' BUILDING
 - 02. 45' POWER POLE
 - 03. 45' CATCH BASIN
 - 04. 45' WATER METER
 - 05. 45' BUILDING
 - 06. 45' SIGN POST
 - 07. 45' DRAIN CLEANOUT
 - 08. 45' DRAIN MANHOLE
 - 09. 45' SIGN POST
 - 10. 45' BUILDING
 - 11. 45' POWER POLE
 - 12. 45' CATCH BASIN
 - 13. 45' WATER METER
 - 14. 45' BUILDING
 - 15. 45' SIGN POST
 - 16. 45' DRAIN CLEANOUT
 - 17. 45' DRAIN MANHOLE
 - 18. 45' SIGN POST
 - 19. 45' BUILDING
 - 20. 45' POWER POLE
 - 21. 45' CATCH BASIN
 - 22. 45' WATER METER
 - 23. 45' BUILDING
 - 24. 45' SIGN POST
 - 25. 45' DRAIN CLEANOUT
 - 26. 45' DRAIN MANHOLE
 - 27. 45' SIGN POST
 - 28. 45' BUILDING
 - 29. 45' POWER POLE
 - 30. 45' CATCH BASIN
 - 31. 45' WATER METER
 - 32. 45' BUILDING
 - 33. 45' SIGN POST
 - 34. 45' DRAIN CLEANOUT
 - 35. 45' DRAIN MANHOLE
 - 36. 45' SIGN POST
 - 37. 45' BUILDING
 - 38. 45' POWER POLE
 - 39. 45' CATCH BASIN
 - 40. 45' WATER METER
 - 41. 45' BUILDING
 - 42. 45' SIGN POST
 - 43. 45' DRAIN CLEANOUT
 - 44. 45' DRAIN MANHOLE
 - 45. 45' SIGN POST

BEGIN ROADWAY CONSTRUCTION STA. 52+50 (PLEASURE ST. B/L)

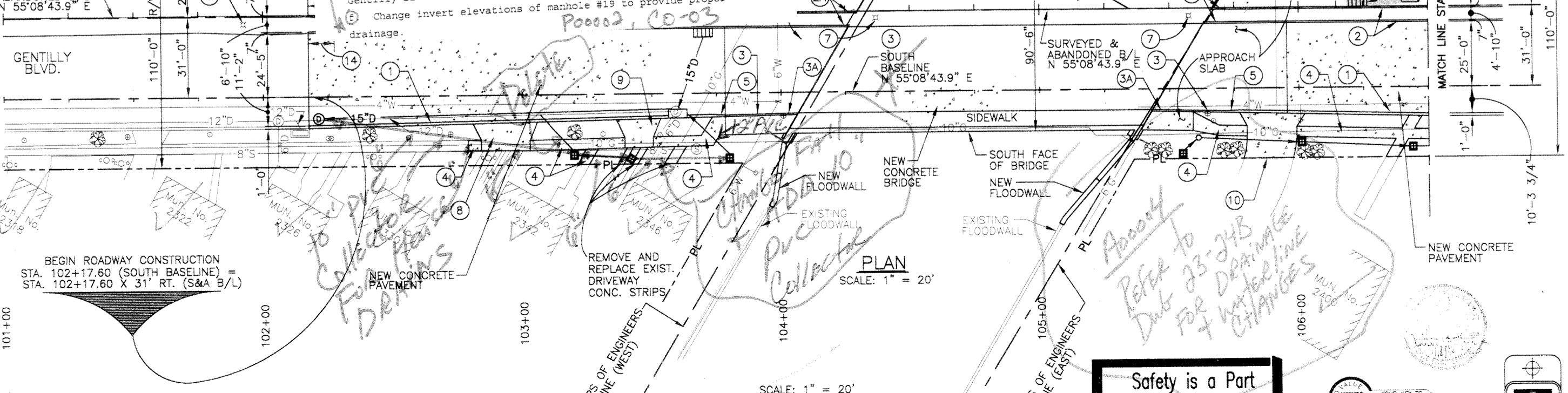
BEGIN ROADWAY CONSTRUCTION STA. 102+17.60 (NORTH BASELINE) = STA. 102+17.60 X 25' LT. (S&A B/L)

BEGIN ROADWAY CONSTRUCTION STA. 102+17.60 (SOUTH BASELINE) = STA. 102+17.60 X 31' RT. (S&A B/L)

Changes to the Contract Drawings: Make pen and ink changes to drawing & of 67 and 6 of 67 File No. H-4-44733, Plot Date 2/20/98 as follows:

- Plug wye at 18B and delete line between 18B and surface drain #25
- Connect surface drains #25, #27 and #23 with 10 inch PVC pipe; flows go from drain #25 to #27 to #23.
- Connect surface drain #23 to manhole #19 with 12 inch PVC pipe.
- Connect house rain drains from 2342 Gentilly Blvd east side and both drains from 2346 Gentilly Blvd to line between surface drain #25, #27 and #23.
- Provide 10 inch PVC collector line between manhole #25 and manhole #18 for house rain drains from 2342 Gentilly Blvd west side to 2330 Gentilly Blvd.
- Change invert elevations of manhole #19 to provide proper drainage.

REFERENCE BENCH MARK:
P153 ELEVATION 11.27' N.G.V.D.
SEE DWG. 1 FOR FULL DESCRIPTION



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

**PLAN & PROFILE
NORTH ROADWAY**

DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: M.E.	CADD FILE: 44732BLK.DWG		FILE NO. H-4-44733
CHECKED BY: S.J.G.	SUBMITTED BY: A. GOODWIN DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 4 OF 67

Safety is a Part of Your Contract

** Change Co-03*

Change to PVC collector for drains

Remove and replace exist. driveway conc. strips

ADD 10" PVC collector

Change to PVC collector for drains

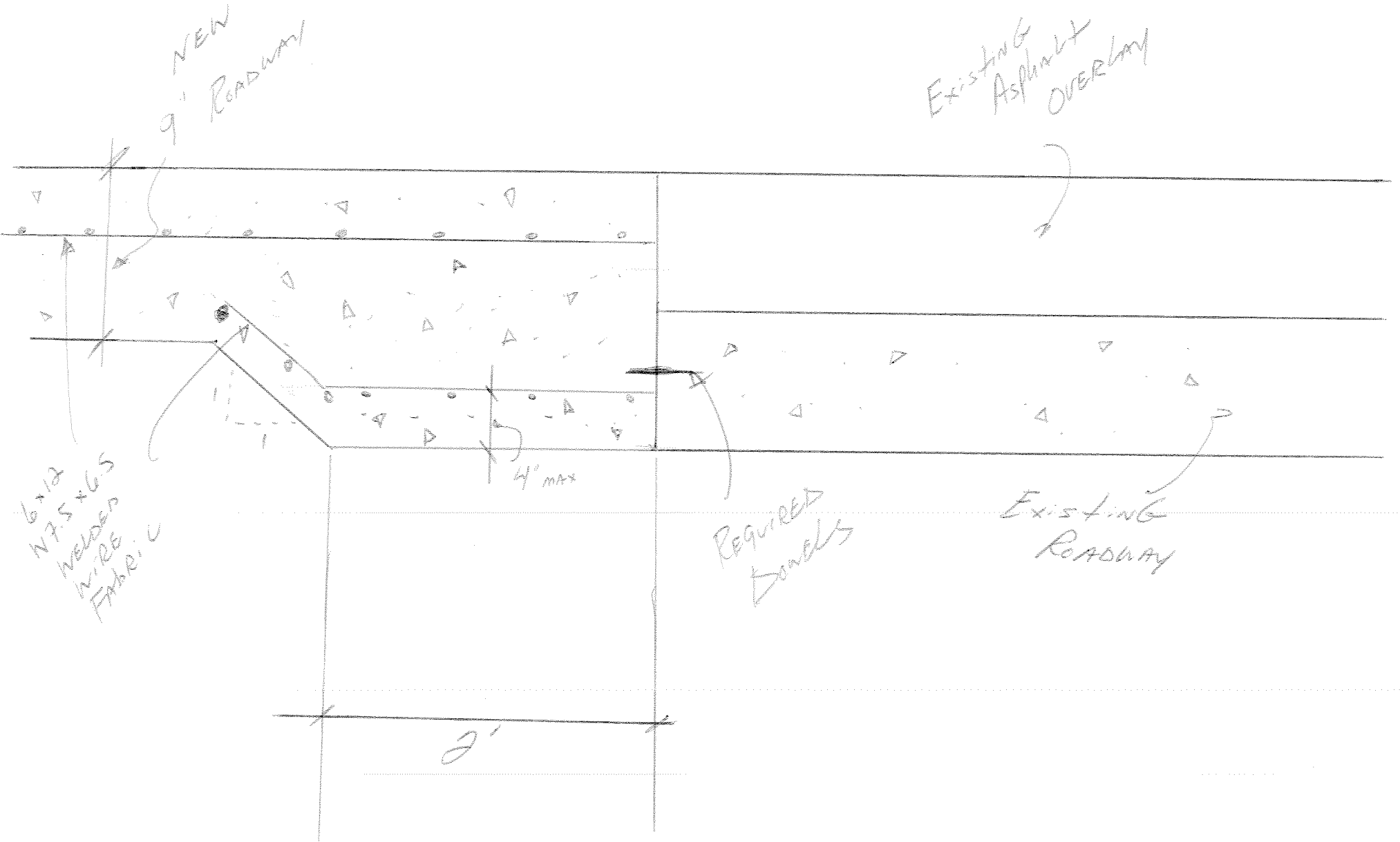
Change to PVC collector for drains

Change to PVC collector for drains

Change to PVC collector for drains

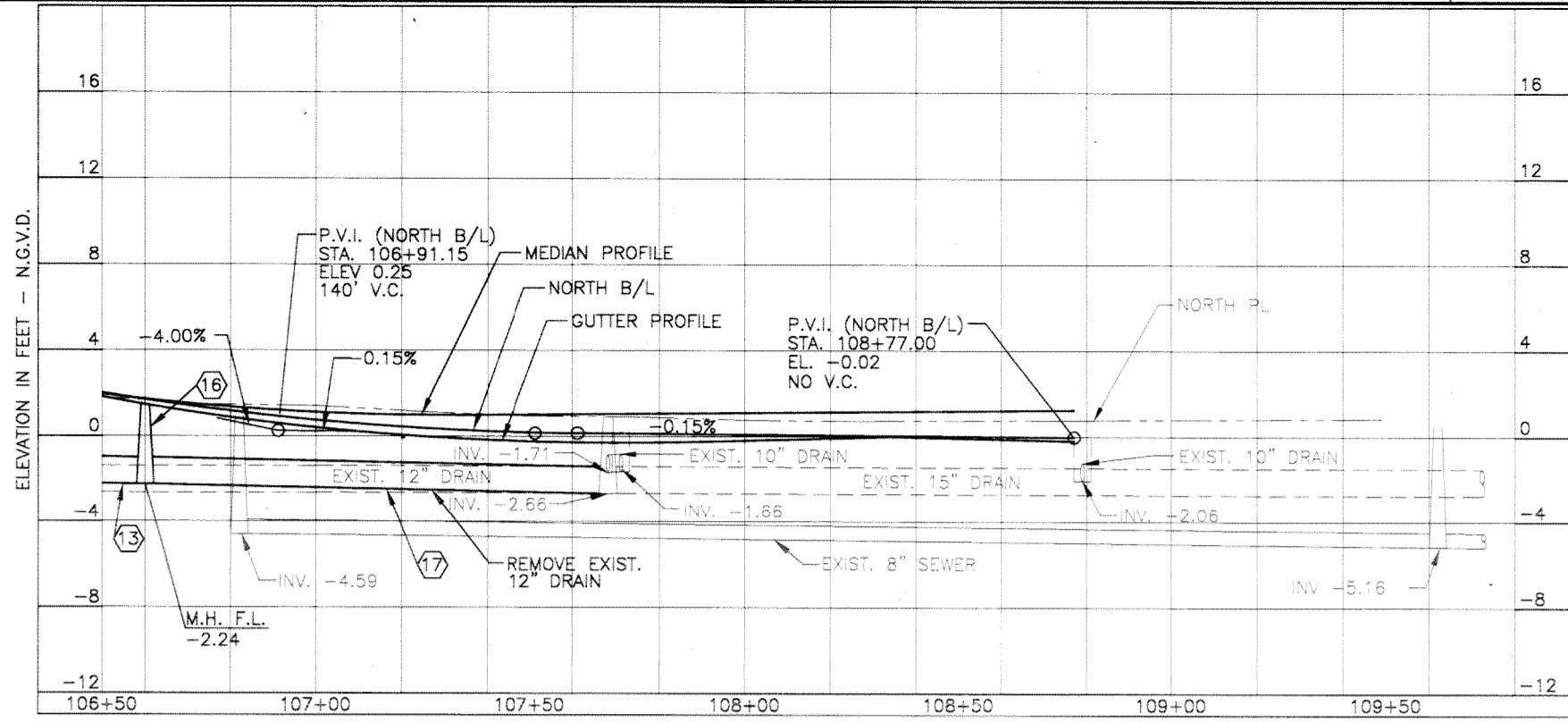
Refer to Dwg #3-24B for drainage & waterline changes

EAST + WEST BOUND LANES EAST OF BRIDGE
Butt Joint Detail to
EXISTING ROAD.



LEGEND OF CONSTRUCTION NOTES

- ① 4" MOUNTABLE CURB
- ② 8" BARRIER CURB
- ③ 6" BARRIER CURB
- ④ 4" THICK CONCRETE SIDEWALK
- ⑤ 5' TRANSITION BARRIER TO MOUNTABLE
- ⑥ EXIST. LIGHT STANDARD TO BE RELOCATED BY ENTERGY
- ⑦ 6" RESIDENTIAL D/W STA. 107+42.41 13.5' WIDE (NORTH SIDE)
- ⑧ 6" RESIDENTIAL D/W STA. 108+07.20 12.5' WIDE (NORTH SIDE)
- ⑨ 6" RESIDENTIAL D/W STA. 108+55.55 19.5' WIDE (NORTH SIDE)
- ⑩ 6" RESIDENTIAL D/W STA. 51+41.91 13' WIDE (LIVE OAK B/L)
- ⑪ TYPE "A" H.C. RAMP



NORTH ROADWAY PROFILE

SEE DWG. 7 FOR SOUTH PROFILE
SCALE: 1" = 20'

NORTH SIDE VERTICAL CURVE DATA

GUTTER PROFILE				
P.V.I. NO.	⑤	⑥	⑦	⑧
P.V.I. STA.	106+80.00	107+60.50	108+35.00	108+77.00
P.V.I. ELEV.	+0.48	-0.40	+0.00	-0.20
V.C. LENGTH	100'	60'	NONE	NONE
g ₁	-4.25%	-1.09%	+0.54%	-0.48%
g ₂	-1.09%	+0.54%	-0.48%	N/A

MEDIAN PROFILE

MEDIAN PROFILE		
P.V.I. NO.	④	⑤
P.V.I. STA.	106+65.98	108+77.00
P.V.I. ELEV.	+0.87	+1.24
V.C. LENGTH	140'	NONE
g ₁	-4.00%	+0.18%
g ₂	+0.18%	N/A

HORIZONTAL CURVE DATA

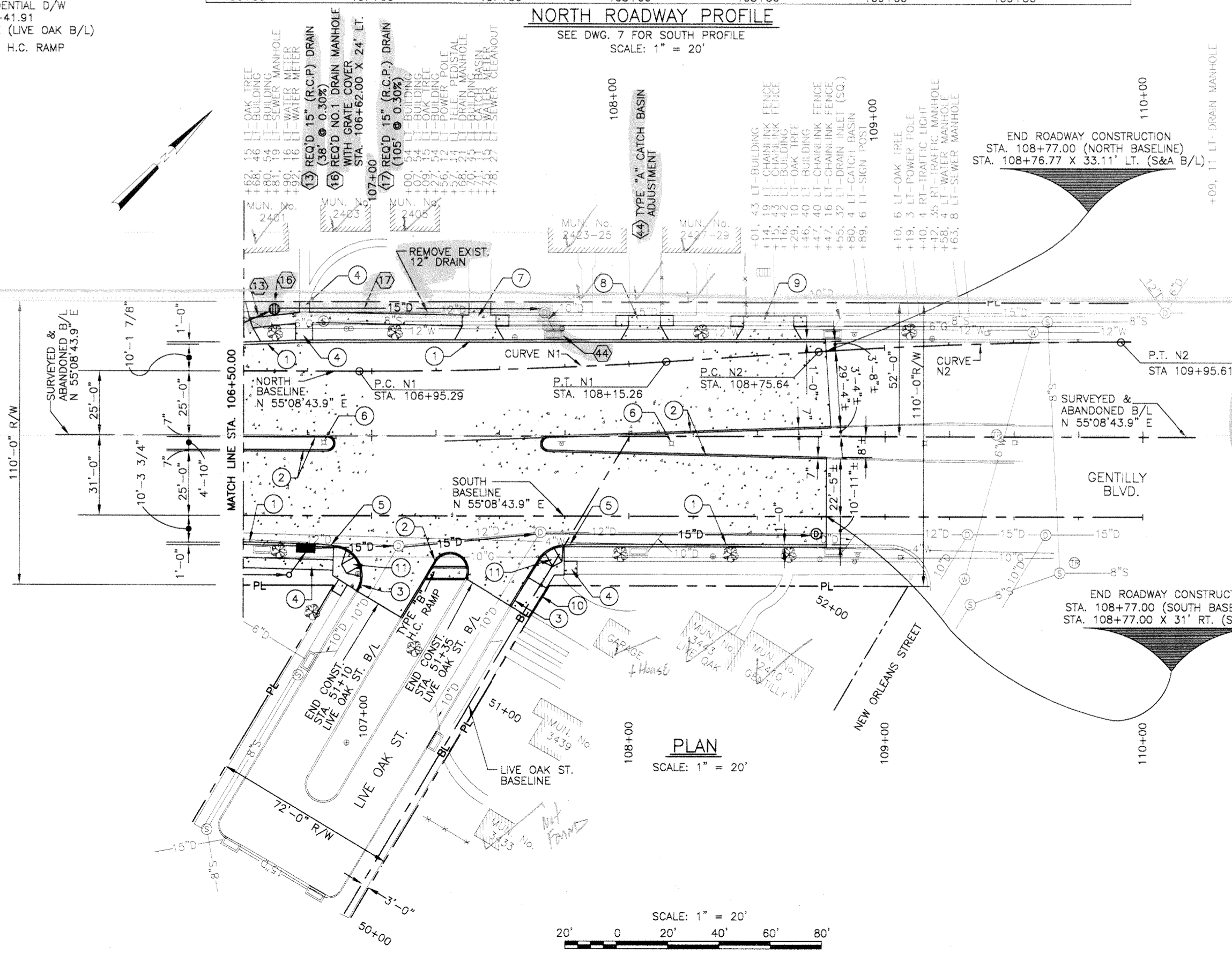
MAJOR CURVE DATA

CURVE No.	CURVE N1	CURVE N2
P.I. STA.	107+55.30	109+35.65
R	1800.00'	1800.00'
L	119.97'	119.97'
Δ	3°49'7.76"	3°49'7.76"
T	60.01'	60.01'
D	3°10'59.16"	3°10'59.16"

NOTES

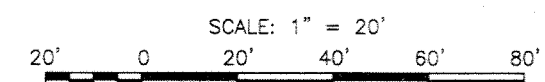
- ADJUST TOPS OF ALL EXISTING MANHOLES, CLEANOUTS, WATER METER BOXES, WITHIN NEWLY PAVED AREA TO NEW GRADE.
- SEE DWGS. 14 AND 15 FOR GEOMETRIC LAYOUT
- SEE DWGS. 23 AND 24 FOR UTILITY RELOCATION PLANS.
- SEE DWG. 18 FOR DEMOLITION PLAN.
- SEE DWG. 16 FOR JOINT LAYOUT PLAN.
- SEE DWG. 17 FOR GRADING PLAN.
- SEE DWGS. 6 AND 7 FOR DRAINAGE ON SOUTH SIDE OF GENTILLY BLVD.
- ALL STORM DRAIN PIPES SHALL BE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.
- PROVIDE DEPRESSED CURBS AT ALL DRIVEWAYS UNLESS OTHERWISE INDICATED.

A00004
Refer to DWG 23-24B for DRAINAGE & WATERLINE CHANGES



PLAN

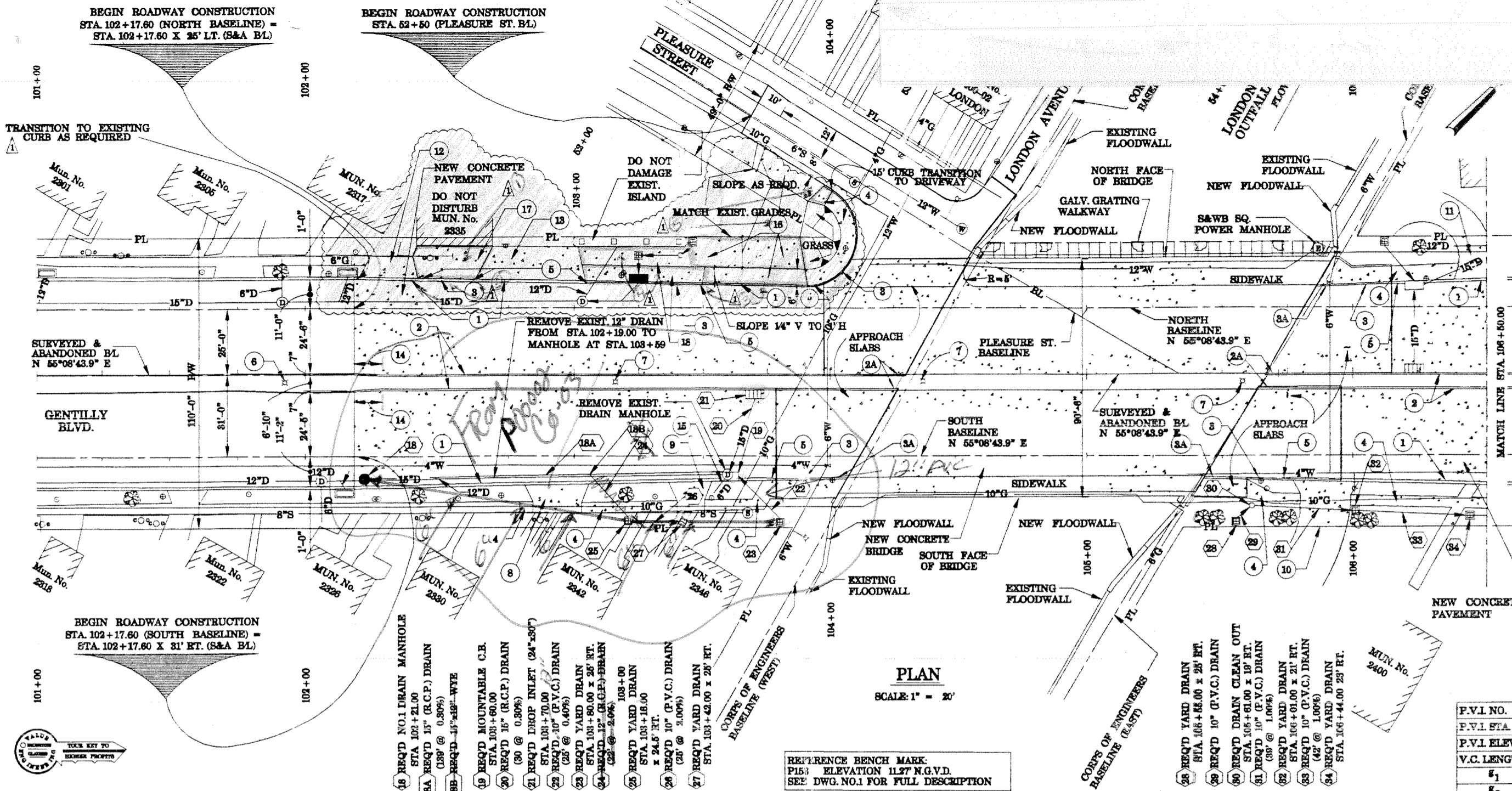
SCALE: 1" = 20'



REFERENCE BENCH MARK:
P153 ELEVATION 11.27' N.G.V.D.
SEE DWG. 1 FOR FULL DESCRIPTION

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA PLAN & PROFILE NORTH ROADWAY			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: W.E.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: S.J.G.	SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 5 OF 67

10003, Co-04



END OF CONSTRUCTION NOTES

- 10 6" THICK RESIDENTIAL DW STA. 106+88.16 (39' WIDE, SOUTH SIDE)
- 11 6" THICK RESIDENTIAL DW STA. 106+43.89 (35' WIDE, NORTH SIDE)
- 12 6" THICK RESIDENTIAL DW STA. 102+81.24 (15' WIDE, NORTH SIDE)
- 13 8" THICK COMMERCIAL DW STA. 102+70.94 (32' WIDE, NORTH SIDE)
- 14 10' TRANSITION TO TIE-IN TO EXISTING
- 15 ATTACH 6" HOUSE CONNECTION TO BACK OF C.B.
- 16 8" THICK COMMERCIAL DW STA. 52+73.14 (25' WIDE, PLEASURE ST.) AND STA. 103+49.49 (39' WIDE, GENTILLY BOULEVARD)
- 17 6" THICK RESIDENTIAL DW STA. 103+44.92 CONCRETE
- 18 8" THICK COMMERCIAL DW CONCRETE

- NOTES
- ADJUST TOPS OF ALL EXISTING MANHOLES, CLEANOUTS, WATER METER BOXES, WITHIN NEWLY PAVED AREA TO NEW GRADE.
 - SEE DWGS. 14 AND 15 FOR GEOMETRIC LAYOUT.
 - SEE DWGS. 23 AND 24 FOR UTILITY RELOCATION PLANS.
 - SEE DWG. 18 FOR DEMOLITION PLAN.
 - SEE DWG. 16 FOR JOINT LAYOUT PLAN.
 - SEE DWG. 17 FOR GRADING PLAN.
 - PROVIDE DEPRESSED CURB AT ALL DRIVEWAYS UNLESS OTHERWISE INDICATED.
 - SEE DWGS. 4 AND 5 FOR DRAINAGE AND PROFILES ON NORTH SIDE OF GENTILLY BLVD.
 - SEE DWG. 2 FOR GENERAL NOTES AND LEGEND.
 - ALL STORM DRAIN PIPES SHALL BE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

SOUTH SIDE VERTICAL CURVE DATA

P.V.I. NO.	(1)	(2)	(3)	(4)	(5)	(6)
P.V.I. STA.	102+17.80	102+75.00	103+55.00	104+06.67	104+75.00	106+48.00
P.V.I. ELEV.	-0.46	-0.20	+1.88	+4.46	+7.30	+0.38
V.C. LENGTH	NONE	80'	80'	NONE	180'	64'
g_1	NA	+0.45%	+2.60%	+5.00%	+4.00%	-4.00%
g_2	+0.45%	+2.60%	+5.00%	NA	-4.00%	+0.38%

VERTICAL CURVE TRUNCATED AT P.V.I. STA. 104+06.67

P.V.I. NO.	(1)	(2)	(3)
P.V.I. STA.	102+17.80	103+36.5'	104+94.67
P.V.I. ELEV.	+0.72	+1.26	+7.58
V.C. LENGTH	NONE	116'	180'
g_1	NA	+0.45%	+4.00%
g_2	+0.45%	+4.00%	-4.00%

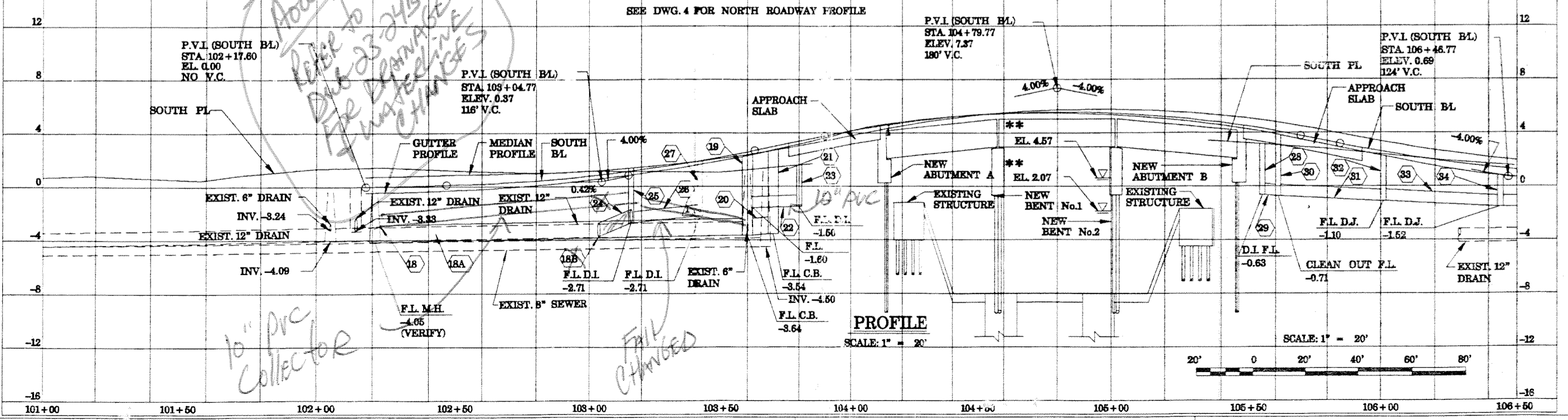
NOTE: NORMAL WATER SURFACE ELEVATION OF LONDON AVE. CANAL RANGES FROM 0.5' N.G.V.D. TO 3.4' N.G.V.D. SINCE THE LONDON AVE. CANAL IS SUBJECT TO TIDAL VARIATIONS OF LAKE PONTCHARTRAIN, THE WATER SURFACE ELEVATIONS ARE SUBJECT TO RISE & FALL WELL ABOVE AND BELOW NORMAL ELEVATIONS GIVEN

NOTE: CONTRACTOR TO FIELD VERIFY TIE-IN DIMENSIONS AND REPORT TO THE C.O. PRIOR TO CONSTRUCTION.

Safety is a Part of Your Contract

- +02, 25 FT. DRAIN CLEANOUT
- +06, 30 FT. BUILDING METER
- +18, 37 FT. BUILDING METER
- +30, 35 FT. OAK TREE
- +39, 34 FT. WOOD FENCE
- +39, 34 FT. DRAIN CLEANOUT
- +42, 32 FT. DRAIN CLEANOUT
- +46, 25 FT. DRAIN CLEANOUT
- +46, 25 FT. OAK TREE
- +46, 25 FT. POWER POLE
- +46, 25 FT. WATER METER
- +46, 25 FT. WATER METER
- +58, 33 FT. BUILDING STAND.
- +03, 33 FT. BUILDING
- +06, 30 FT. DRAIN MANHOLE
- +06, 30 FT. DRAIN MANHOLE
- +06, 30 FT. WATER METER
- +06, 30 FT. BUILDING
- +20, 26 FT. WATER METER
- +41, 15 FT. OAK TREE
- +43, 23 FT. DRAIN CLEANOUT
- +45, 10 FT. BUILDING
- +56, 16 FT. WATER METER
- +64, 46 FT. BUILDING POLE
- +72, 15 FT. POWER POLE
- +87, 24 FT. DRAIN CLEANOUT
- +87, 24 FT. BUILDING STAND.
- +16, 29 FT. LIGHT STAND.
- +16, 29 FT. OAK TREE
- +16, 29 FT. WATER METER
- +31, 15 FT. OAK TREE
- +43, 34 FT. BUILDING
- +43, 34 FT. DRAIN MANHOLE
- +43, 34 FT. WATER METER
- +67, 22 FT. DRAIN MANHOLE
- +67, 22 FT. SHOWER MANHOLE
- +67, 22 FT. FIRE HYDRANT
- +67, 22 FT. WATER VALVE

SOUTH ROADWAY PROFILE



10" PVC Collector

Acoust

Refer to DWG 23-24B for drainage instructions

10" PVC

FILL CHANGED

10003, Co-04

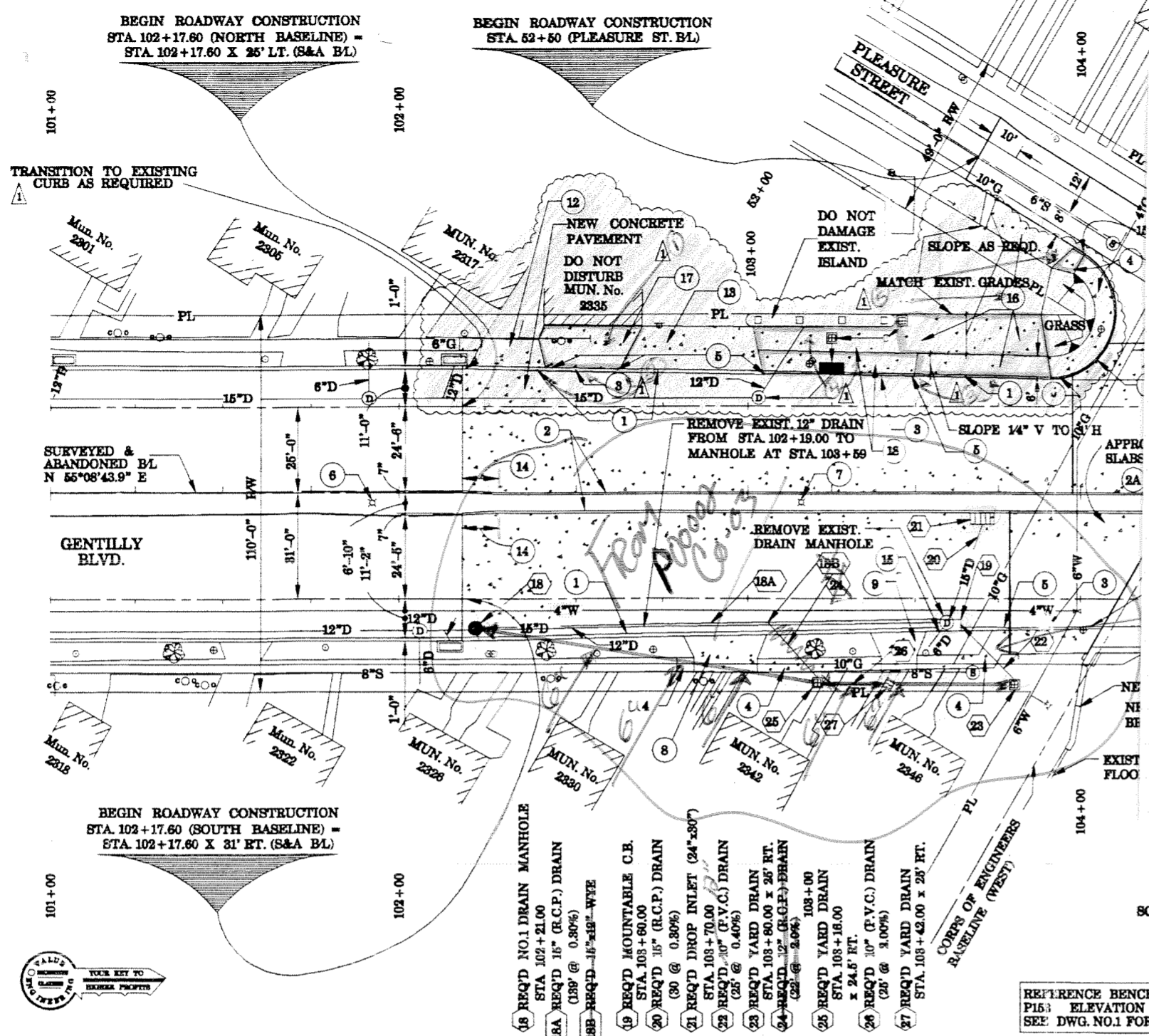
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE ENTICHAIRAIN, LA AND VICINITY
HIGH LEVEL PLAN
FLOODPROOFING OF GENTILLY BLVD BRIDGE
ORLEANS PARISH, LOUISIANA

PLAN & PROFILE SOUTH ROADWAY

DESIGNED BY: C.M.B. DATE: FEB. 1998 PLOT SCALE: 20 PLOT DATE: 2/20/98
DRAWN BY: W.K. CHECKED BY: S.J.G. FILE NO. H-4-44733
SOLICITATION NO. DACW29-98-B-0060 DWG. 6 OF 67

A00003, Co-04



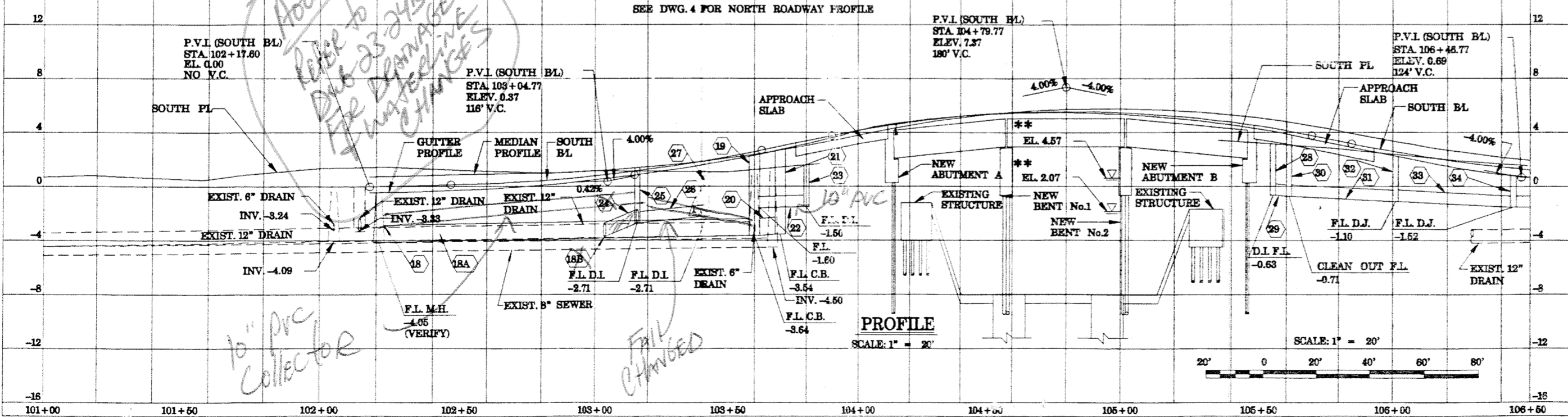
PLAN
SCALE: 1" = 20'

REFERENCE BENCH MARK.
P.I.B.3 ELEVATION 11.27 N.G.V.D.
SEE DWG. NO.1 FOR FULL DESCRIPTION

- +02, 26 RT DRAIN CLEANOUT
- +06, 30 RT BUILDING
- +08, 16 RT WATER METER
- +56, 15 RT-OAK TREE
- +59, 34 RT-WOOD FENCE
- +59, 34 RT-DRAIN CLEANOUT
- +42, 29 RT-WOOD FENCE
- +46, 25 RT-DRAIN CLEANOUT
- +46, 16 RT-WATER METER
- +56, 15 RT-OAK TREE
- +85, 48 FT-FLUOROPOLYMER LIGHT STAND.
- +08, 33 RT-BUILDING
- +06, 09 RT-DRAIN MANHOLE
- +14, 12 RT-CATCH BASIN
- +26, 49 RT-BUILDING
- +26, 16 RT-WATER METER
- +41, 15 RT-OAK TREE
- +42, 23 RT-DRAIN CLEANOUT
- +45, 10 RT-BUILDING
- +56, 16 RT-WATER METER
- +64, 46 RT-BUILDING
- +72, 15 RT-POWER POLE
- +87, 24 RT-DRAIN CLEANOUT
- +16, 28 RT-LIGHT STAND.
- +26, 16 RT-WATER METER
- +51, 15 RT-WATER METER
- +63, 34 RT-BUILDING
- +63, 16 RT-WATER METER
- +65, 47 RT-BUILDING
- +65, 47 RT-SSEWER MANHOLE
- +80, 31 RT-FIRE HYDRANT
- +89, 03 RT-WATER VALVE

A00003
Refer to
Dwg 23-24B
for
DRAINAGE
CHANGES
10" PVC
Collector
FILL
CHANGED

SOUTH ROADWAY PROFILE
SEE DWG. 4 FOR NORTH ROADWAY PROFILE



PROFILE
SCALE: 1" = 20'

- 1 Change 4" thick Concrete Sidewalk to 6" thick Residential Driveway Concrete.
- 2 Change 4" Mountable Curb & New 6" thick Residential Driveway to a 6" Barrier Curb Add two 5' Transitions.
- 3 Change 6" Barrier Curb to 4" Mountable Curb & Add transition.
- 4 Change 4" thick Concrete Sidewalk to 8" thick Commercial Driveway + Add 8" thick Commercial Driveway Between Sidewalk & Island.
- 5 Change 4" thick Concrete Sidewalk to 8" thick Commercial Driveway + Add 8" thick Commercial Driveway Between Sidewalk & Back of Island Add 15' transition between Sidewalk & Driveway + Add 6" Barrier Curb.

LEGEND OF CONSTRUCTION NOTES

- 1 4" MOUNTABLE CURB
- 2 CURB
- 3 8" BARRIER CURB
- 4 ON 6" BARRIER CURB
- 5 CONCRETE
- 6 IN MOUNT TO REMAIN
- 7 TO BE BY ENERGY
- 8 8" THICK COMMERCIAL DW STA. 102+31.24 (15' WIDE, NORTH SIDE)
- 9 8" THICK COMMERCIAL DW STA. 102+70.94 (32' WIDE, NORTH SIDE)
- 10 10' TRANSITION TO TIE-IN TO EXISTING
- 11 ATTACH 6" HOUSE CONNECTION TO BACK OF C.B.
- 12 8" THICK COMMERCIAL DW STA. 52+73.14 (25' WIDE, PLEASURE ST.) AND STA. 103+49.49 (38' WIDE, GENTILLY BOULEVARD)
- 13 6" THICK RESIDENTIAL DW 3+44.96
- 14 8" THICK COMMERCIAL DW CONCRETE

PS OF ALL EXISTING MANHOLES, JTS, WATER METER BOXES, WITHIN PAVED AREA TO NEW GRADE.

14 AND 15 FOR GEOMETRIC

23 AND 24 FOR UTILITY RELOCATION.

8 FOR DEMOLITION PLAN.

6 FOR JOINT LAYOUT PLAN.

7 FOR SHADING PLAN.

EXPRESSED CURB AT ALL DRIVEWAYS OTHERWISE INDICATED.

4 AND 1 FOR DRAINAGE AND S ON NORTH SIDE OF GENTILLY BLVD.

FOR GENERAL NOTES AND LEGEND.

DRAIN PIPES SHALL BE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

SOUTH SIDE VERTICAL CURVE DATA
GUTTER PROFILE (CONT'D IN DWG. 7)

P.V.I. NO.	1	2	3	4	*5	6
P.V.I. STA.	102+17.60	102+75.00	103+55.00	104+06.67	104+75.00	105+48.00
P.V.I. ELEV.	-0.46	-0.20	+1.88	+4.46	+7.30	+0.38
V.C. LENGTH	NONE	80'	80'	NONE	180'	64'
E ₁	NA	+0.45%	+2.80%	+5.00%	+4.00%	-4.00%
E ₂	+0.45%	+2.80%	+5.00%	NA	-4.00%	+0.38%

VERTICAL CURVE TRUNCATED AT P.V.I. STA. 104+06.67
MEDIAN GUTTER (CONT'D IN DWG. 7)

P.V.I. NO.	1	2	3
P.V.I. STA.	102+17.60	103+36.87	104+94.87
P.V.I. ELEV.	+0.72	+1.26	+7.58
V.C. LENGTH	NONE	116'	180'
E ₁	NA	+0.45%	+4.00%
E ₂	+0.45%	+4.00%	-4.00%

** NOTE:

NORMAL WATER SURFACE ELEVATION OF LONDON AVE. CANAL RANGES FROM 0.5' N.G.V.D. TO 3.4' N.G.V.D. SINCE THE LONDON AVE. CANAL IS SUBJECT TO TIDAL VARIATIONS OF LAKE PONTCHARTRAIN, THE WATER SURFACE ELEVATIONS ARE SUBJECT TO RISE & FALL WELL ABOVE AND BELOW NORMAL ELEVATIONS GIVEN

SYMBOL	DESCRIPTION	DATE	APPROVED
▲	SEARS CANVAUSE DRIVEWAY ADDITION	6/2/98	

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

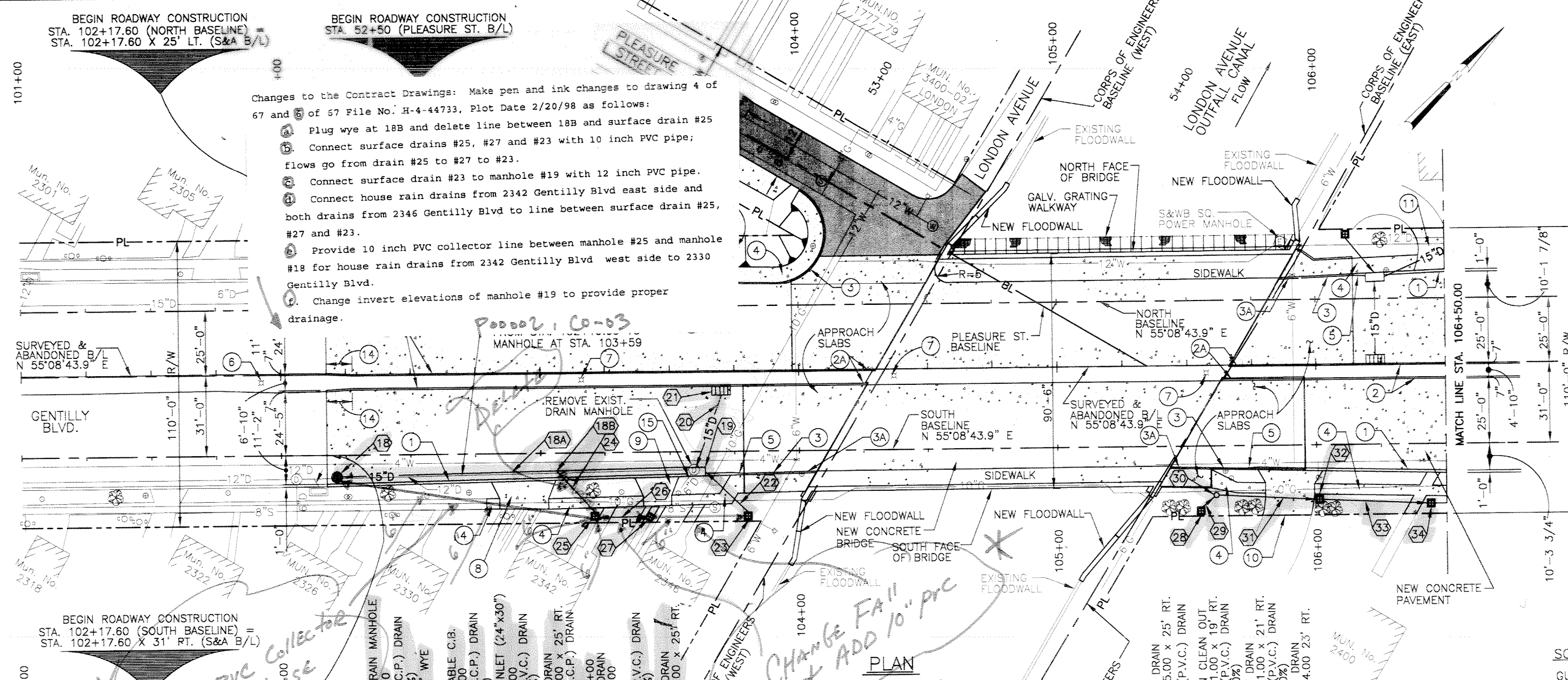
BOARD OF LAYERS COMMISSION
CREATING LAYERS EMPLOYERS AND ARCHITECTS
NEW ORLEANS, LOUISIANA

LINFIELD HUNTER & JUNIOR, INC.
REGISTERED ENGINEERS AND ARCHITECTS
2600 North Canaway Blvd. Suite 300
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OTTLEAL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

PLAN & PROFILE
SOUTH ROADWAY

DESIGNED BY: C.M.B.	DATE: FEB 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: W.E.	CHECKED BY: S.J.G.	FILE NO. H-4-44733	
FORWARDED BY: A. GOODWIN	SOLICITATION NO. DACW29-88-B-0060	DWG. 6 OF 67	



BEGIN ROADWAY CONSTRUCTION
STA. 102+17.60 (NORTH BASELINE) = STA. 102+17.60 X 25' LT. (S&A B/L)

BEGIN ROADWAY CONSTRUCTION
STA. 52+50 (PLEASURE ST. B/L)

Changes to the Contract Drawings: Make pen and ink changes to drawing 4 of 67 and 5 of 57 File No. H-4-44733, Plot Date 2/20/98 as follows:

- Plug wye at 18B and delete line between 18B and surface drain #25
- Connect surface drains #25, #27 and #23 with 10 inch PVC pipe; flows go from drain #25 to #27 to #23.
- Connect surface drain #23 to manhole #19 with 12 inch PVC pipe.
- Connect house rain drains from 2342 Gentilly Blvd east side and both drains from 2346 Gentilly Blvd to line between surface drain #25, #27 and #23.
- Provide 10 inch PVC collector line between manhole #25 and manhole #18 for house rain drains from 2342 Gentilly Blvd west side to 2330 Gentilly Blvd.
- Change invert elevations of manhole #19 to provide proper drainage.

LEGEND OF CONSTRUCTION NOTES

- | | |
|--|--|
| ① 4" MOUNTABLE CURB | ⑨ 6" THICK RESIDENTIAL D/W STA. 103+44.98 (11' WIDE, SOUTH SIDE) |
| ② 8" BARRIER CURB | ⑩ 6" THICK RESIDENTIAL D/W STA. 105+88.16 (19' WIDE, SOUTH SIDE) |
| ③ 5' TRANSITION 8" BARRIER TO 10" BARRIER CURB | ⑪ 6" THICK RESIDENTIAL D/W STA. 106+43.89 (13' WIDE, NORTH SIDE) |
| ④ 6" BARRIER CURB | ⑫ 6" THICK RESIDENTIAL D/W STA. 102+31.24 (15' WIDE, NORTH SIDE) |
| ⑤ 15' TRANSITION 6" BARRIER TO 10" BARRIER CURB | ⑬ 8" THICK COMMERCIAL D/W STA. 102+70.94 (32' WIDE, NORTH SIDE) |
| ⑥ 4" THICK CONCRETE SIDEWALK | ⑭ 10" TRANSITION TO TIE-IN TO EXISTING |
| ⑦ 5' TRANSITION MOUNT. TO BARRIER CURB | ⑮ ATTACH 6" HOUSE CONNECTION TO BACK OF C.B. |
| ⑧ EXIST. LIGHT STANDARD TO REMAIN | ⑯ 8" THICK COMMERCIAL D/W STA. 52+73.14 (25' WIDE, PLEASURE ST.) |
| ⑨ LIGHT STANDARD TO BE RELOCATED BY ENERGY | |
| ⑩ 6" THICK RESIDENTIAL D/W STA. 102+93.48 (19' WIDE, SOUTH SIDE) | |

- NOTES**
- ADJUST TOPS OF ALL EXISTING MANHOLES, CLEANOUTS, WATER METER BOXES, WITHIN NEWLY PAVED AREA TO NEW GRADE.
 - SEE DWGS. 14 AND 15 FOR GEOMETRIC LAYOUT.
 - SEE DWGS. 23 AND 24 FOR UTILITY RELOCATION PLANS.
 - SEE DWG. 18 FOR DEMOLITION PLAN.
 - SEE DWG. 17 FOR GRADING PLAN.
 - PROVIDE DEPRESSED CURB AT ALL DRIVEWAYS UNLESS OTHERWISE INDICATED.
 - SEE DWGS. 4 AND 5 FOR DRAINAGE AND PROFILES ON NORTH SIDE OF GENTILLY BLVD.
 - SEE DWG. 2 FOR GENERAL NOTES AND LEGEND.
 - ALL STORM DRAIN PIPES SHALL BE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

SOUTH SIDE VERTICAL CURVE DATA
GUTTER PROFILE (CONT'D ON DWG. 7)

P.V.I. NO.	①	②	③	*④	⑤	⑥
P.V.I. STA.	102+17.60	102+75.00	103+55.00	104+06.67	104+75.00	106+48.00
P.V.I. ELEV.	-0.46	-0.20	+1.88	+4.46	+7.30	+0.38
V.C. LENGTH	NONE	80'	80'	NONE	180'	64'
g ₁	N/A	+0.45%	+2.60%	+5.00%	+4.00%	-4.00%
g ₂	+0.45%	+2.60%	+5.00%	N/A	-4.00%	+0.38%

*VERTICAL CURVE TRUNCATED AT P.V.I. STA. 104+06.67

MEDIAN GUTTER (CONT'D ON DWG. 7)

P.V.I. NO.	①	②	③
P.V.I. STA.	102+17.60	103+36.67	104+94.67
P.V.I. ELEV.	+0.72	+1.26	+7.58
V.C. LENGTH	NONE	116'	180'
g ₁	N/A	+0.45%	+4.00%
g ₂	+0.45%	+4.00%	-4.00%

**** NOTE:**
NORMAL WATER SURFACE ELEVATION OF LONDON AVE. CANAL RANGES FROM 0.91' N.G.V.D. TO 3.41' N.G.V.D. SINCE THE LONDON AVE. CANAL IS SUBJECT TO TIDAL VARIATIONS OF LAKE PONTCHARTRAIN, THE WATER SURFACE ELEVATIONS ARE SUBJECT TO RISE & FALL WELL ABOVE AND BELOW NORMAL ELEVATIONS GIVEN

PLAN
SCALE: 1" = 20'

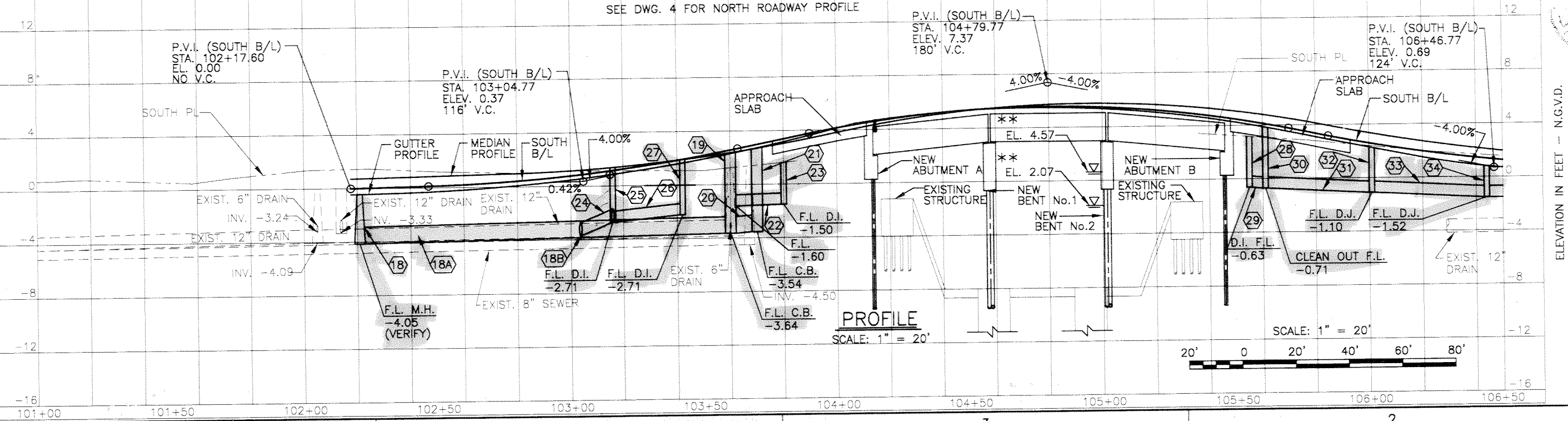
REFERENCE BENCH MARK:
ELEVATION 11.27' N.G.V.D.
SEE DWG. NO.1 FOR FULL DESCRIPTION

NOTE:
CONTRACTOR TO FIELD VERIFY TIE-IN DIMENSIONS AND REPORT TO THE C.O. PRIOR TO CONSTRUCTION.

Safety is a Part of Your Contract

- 25 RT-DRAIN CLEANOUT
- 10 RT-WATER METER
- 18 RT-BUILDING
- 15 RT-OAK TREE
- 34 RT-WOOD FENCE
- 24 RT-DRAIN CLEANOUT
- 29 RT-WOOD FENCE
- 25 RT-DRAIN CLEANOUT
- 15 RT-BOWER POLE
- 14 RT-WATER METER
- 83 RT-BUILDING
- 28 RT-LIGHT STAND.
- 03 RT-BUILDING
- 09 RT-DRAIN MANHOLE
- 12 RT-WATER METER
- 24 RT-BUILDING
- 16 RT-WATER METER
- 41, 15 RT-OAK TREE
- 42, 25 RT-DRAIN CLEANOUT
- 45, 16 RT-WATER METER
- 56, 16 RT-WATER METER
- 54, 45 RT-BUILDING
- 15 RT-POWER POLE
- 87, 28 RT-DRAIN CLEANOUT
- 16, 28 RT-LIGHT STAND.
- 31, 15 RT-OAK TREE
- 15 RT-WATER METER
- 34 RT-BUILDING
- 09 RT-DRAIN MANHOLE
- 24 RT-BUILDING
- 22 RT-SWIRL MANHOLE
- 22 RT-WATER VALVE
- 25 RT-WATER VALVE
- 03 RT-WATER VALVE
- 01, 07 RT-POWER POLE
- 02, 03 RT-FLOODWALL
- 04, 05 RT-GAS LINE
- 06, 08 RT-FLOODWALL
- 09, 10 RT-FLOODWALL
- 11, 12 RT-BRIDGE
- 13, 14 RT-BRIDGE
- 15, 16 RT-BRIDGE
- 17, 18 RT-GAS LINE
- 19, 20 RT-GAS LINE
- 21, 22 RT-GAS LINE
- 23, 24 RT-BRIDGE
- 25, 26 RT-BRIDGE
- 27, 28 RT-BRIDGE
- 29, 30 RT-BRIDGE
- 31, 32 RT-BRIDGE
- 33, 34 RT-BRIDGE
- 35, 36 RT-BRIDGE
- 37, 38 RT-BRIDGE
- 39, 40 RT-BRIDGE
- 41, 42 RT-LIGHT STAND.
- 43, 44 RT-POWER POLE
- 45, 46 RT-WATER METER
- 47, 48 RT-LT-CROSS
- 49, 50 RT-ELECTRIC METER
- 51, 52 RT-WATER VALVE
- 53, 54 RT-WATER VALVE

SOUTH ROADWAY PROFILE
SEE DWG. 4 FOR NORTH ROADWAY PROFILE



PROFILE
SCALE: 1" = 20'

DESIGNED BY: C.M.B.
DRAWN BY: W.E.
CHECKED BY: S.J.G.SUBMITTED BY: A. GOODSON, DESIGN ENGINEER

DATE: FEB. 1998
CADD FILE: 44732B.LXDGN
SOLICITATION NO. DACW29-98-B-0060

PLOT SCALE: 20
PLOT DATE: 2/20/98
FILE NO.: H-4-44733
DWG. 6 OF 67

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

BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd., Suite 200
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

PLAN & PROFILE SOUTH ROADWAY

Safety is a Part of Your Contract

LEGEND OF CONSTRUCTION NOTES

- ① 4" MOUNTABLE CURB
- ② 8" BARRIER CURB
- ③ 6" BARRIER CURB
- ④ 4" THICK CONCRETE SIDEWALK
- ⑤ 5' TRANSITION BARRIER TO MOUNTABLE
- ⑥ EXIST. LIGHT STANDARD TO BE RELOCATED BY ENERGY
- ⑦ 6" RESIDENTIAL D/W STA. 107+42.41 13.5' WIDE (NORTH SIDE)
- ⑧ 6" RESIDENTIAL D/W STA. 108+07.20 12.5' WIDE (NORTH SIDE)
- ⑨ 6" RESIDENTIAL D/W STA. 108+55.55 19.5' WIDE (NORTH SIDE)
- ⑩ 6" RESIDENTIAL D/W STA. 51+41.91 13' WIDE (LIVE OAK B/L)
- ⑪ TYPE "A" H.C. RAMP

SOUTH SIDE VERTICAL CURVE DATA

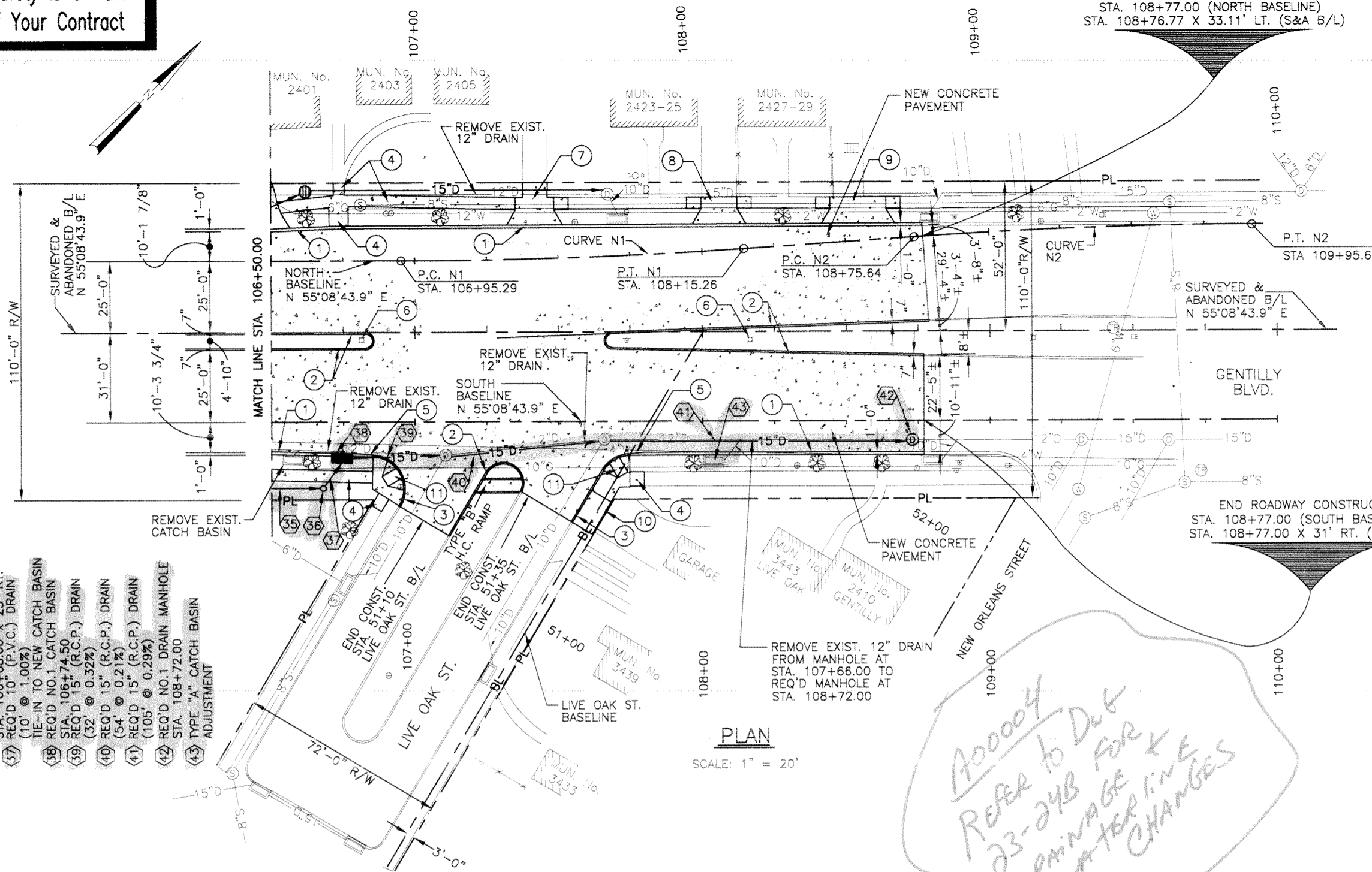
GUTTER PROFILE				
P.V.I. NO.	⑦	⑧	⑨	⑩
P.V.I. STA.	107+30.00	107+91.70	108+42.35	108+77.00
P.V.I. ELEV.	+0.69	+0.15	+0.35	+0.08
V.C. LENGTH	NONE	64'	NONE	NONE
g ₁	+0.38%	-0.88%	+0.40%	-0.76%
g ₂	-0.88%	+0.40%	-0.78%	N/A

MEDIAN GUTTER

MEDIAN GUTTER		
P.V.I. NO.	④	⑤
P.V.I. STA.	106+55.67	108+77.00
P.V.I. ELEV.	+1.14	+1.30
V.C. LENGTH	140'	NONE
g ₁	-4.00%	+0.07%
g ₂	+0.07%	N/A

HORIZONTAL CURVE DATA

MAJOR CURVE DATA		
CURVE No.	CURVE N1	CURVE N2
P.I. STA.	107+55.30	109+35.65
R	1800.00'	1800.00'
L	119.97'	119.97'
Δ	3°49'7.76"	3°49'7.76"
T	60.01'	60.01'
D	3°10'59.16"	3°10'59.16"



PLAN

SCALE: 1" = 20'

*A00004
REFER TO DWG
23-24B FOR
DRAINAGE &
WATERLINE
CHANGES*

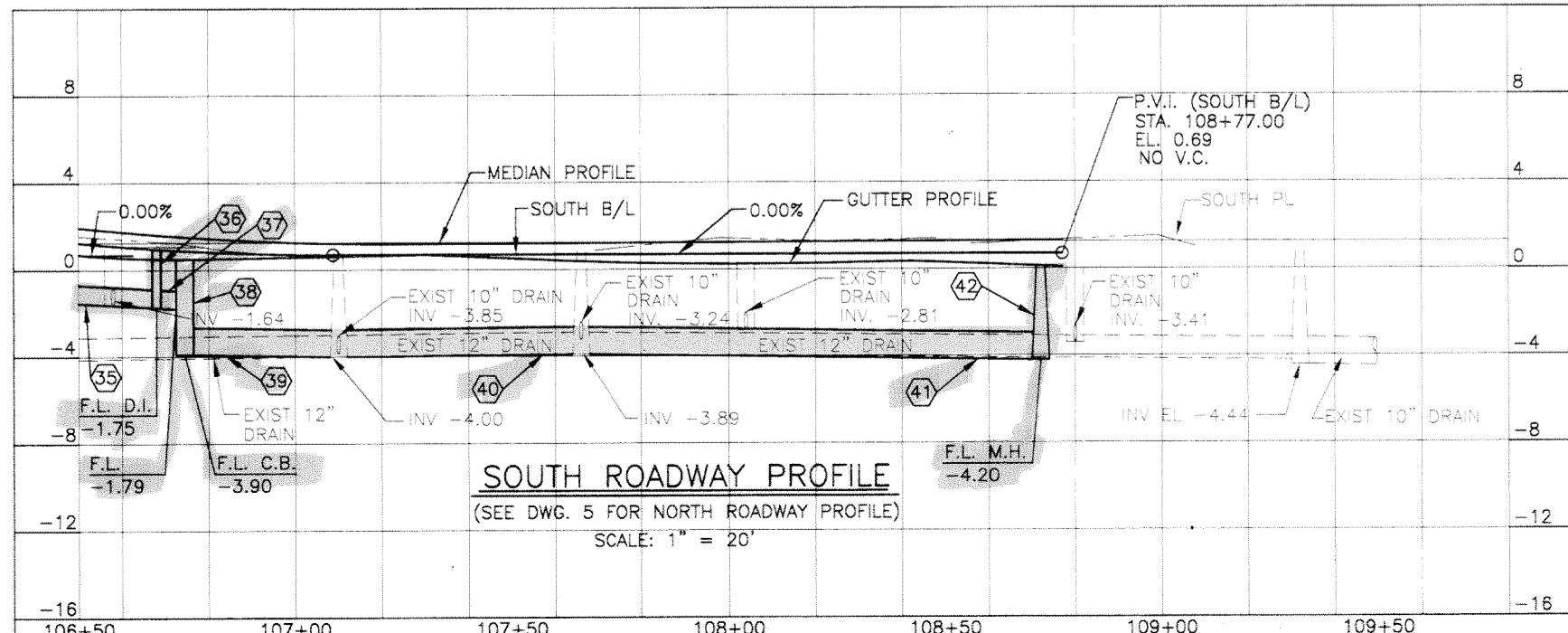
- ③5 REQ'D 10" (P.V.C.) DRAIN (23' @ 1.00%)
- ③6 REQ'D DRAIN CLEAN OUT STA. 106+68.00 X 23' RT.
- ③7 REQ'D 10" (P.V.C.) DRAIN (10' @ 1.00%)
- ③8 TIE-IN TO NEW CATCH BASIN
- ③9 REQ'D NO.1 CATCH BASIN STA. 106+74.50
- ④0 REQ'D 15" (R.C.P.) DRAIN (32' @ 0.32%)
- ④1 REQ'D 15" (R.C.P.) DRAIN (54' @ 0.21%)
- ④2 REQ'D 15" (R.C.P.) DRAIN (105' @ 0.29%)
- ④3 REQ'D NO.1 DRAIN MANHOLE STA. 108+72.00
- ④4 TYPE "A" CATCH BASIN ADJUSTMENT

- ① RT-CATCH BASIN
- ② RT-DRAIN MANHOLE
- ③ RT-CATCH BASIN
- ④ RT-CATCH BASIN
- ⑤ RT-CATCH BASIN
- ⑥ RT-CATCH BASIN
- ⑦ RT-CATCH BASIN
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NOTES

- ADJUST TOPS OF ALL EXISTING MANHOLES, CLEANOUTS, WATER METER BOXES, WITHIN NEWLY PAVED AREA TO NEW GRADE.
- SEE DWGS. 14 AND 15 FOR GEOMETRIC LAYOUT.
- SEE DWGS. 23 & 24 FOR UTILITY RELOCATION.
- SEE DWG. 18 FOR DEMOLITION PLAN.
- SEE DWG. 16 FOR JOINT LAYOUT PLAN.
- SEE DWG. 17 FOR GRADING PLAN.
- SEE DWGS. 4 AND 5 FOR DRAINAGE ON NORTH SIDE OF GENTILLY BLVD.
- PROVIDE DEPRESSED CURBS AT ALL DRIVEWAYS UNLESS OTHERWISE INDICATED.
- SEE DWG. 2 FOR GENERAL NOTES AND LEGEND.
- ALL STORM DRAIN PIPES SHALL BE REINFORCED CONCRETE UNLESS OTHERWISE NOTED.

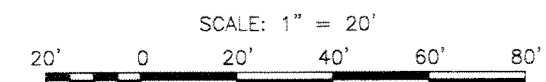
REFERENCE BENCH MARK:
P153 ELEVATION 11.27' N.G.V.D.
SEE DWG NO.1 FOR FULL DESCRIPTION



SOUTH ROADWAY PROFILE

(SEE DWG. 5 FOR NORTH ROADWAY PROFILE)

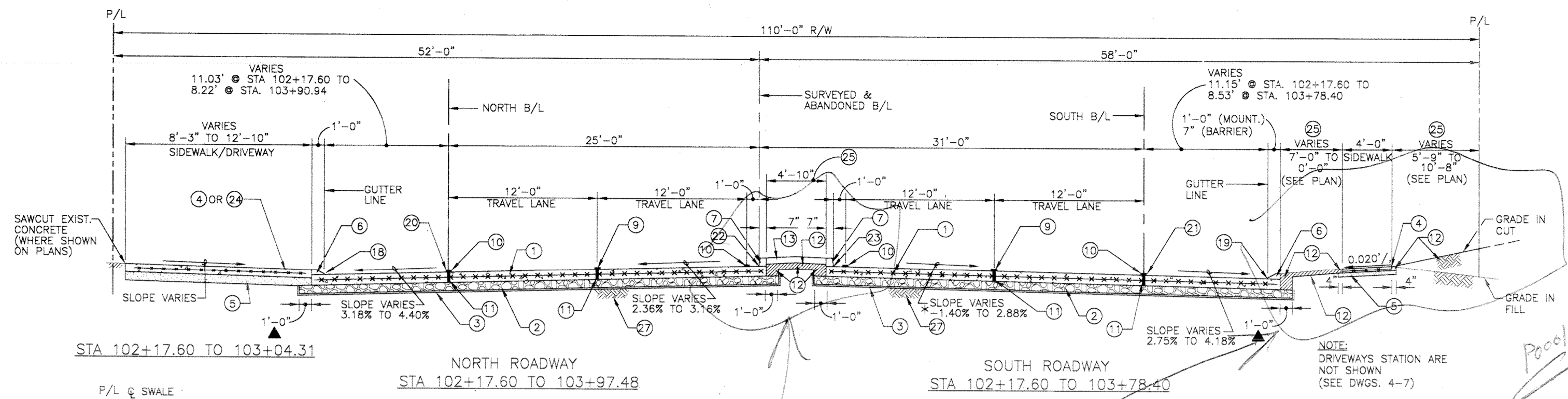
SCALE: 1" = 20'



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN FLOODPROOFING OF LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA PLAN & PROFILE SOUTH ROADWAY			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: W.E.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: S.J.G.	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 7 OF 67



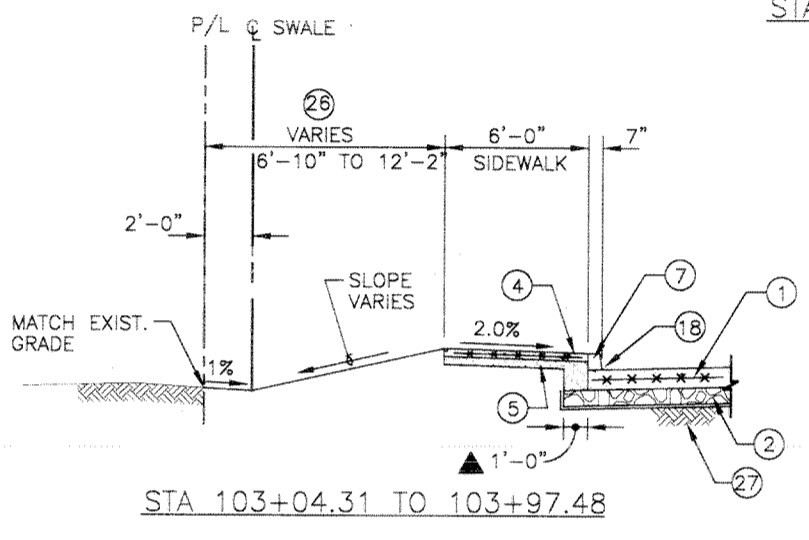
Safety is a Part of Your Contract



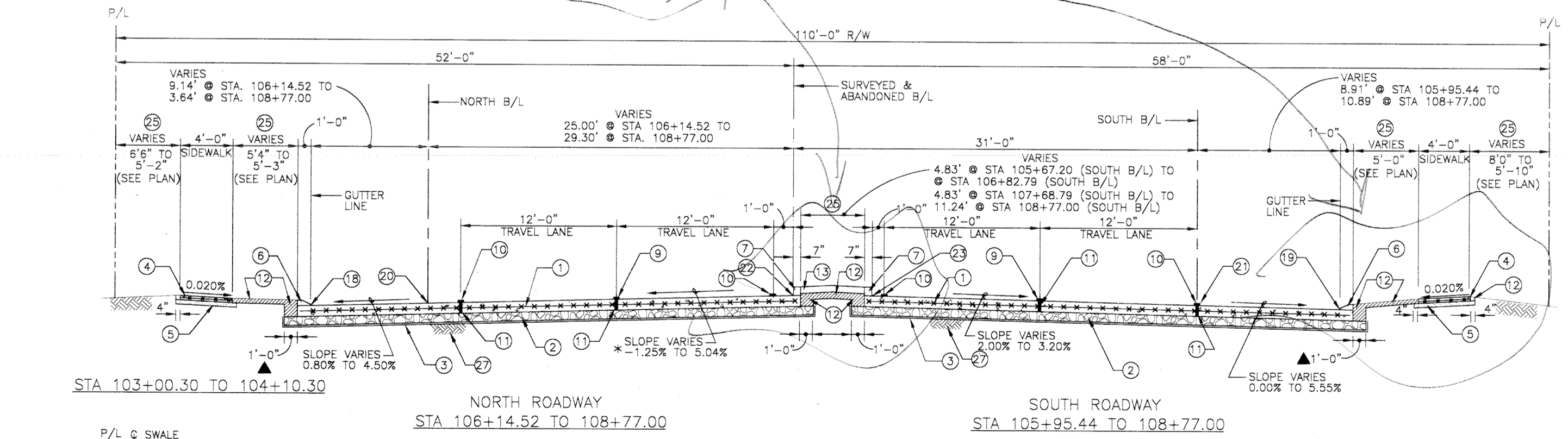
TYPICAL SECTION - GENTILLY BLVD.
STA 102+17.60 TO 103+97.48
 SCALE: 1/4"=1'-0"

* NEGATIVE SLOPE INDICATES ROADWAY SLOPES TOWARDS MEDIAN
 ▲ DELETE ONE FOOT EXTENSION BEHIND CURB WITHIN ALL TREE DRIPLINES

- LEGEND**
- ① 9" CONCRETE WITH 6X12 W7.5XW6.5 WELDED WIRE FABRIC
 - ② 9" CRUSHED STONE BASE COURSE
 - ③ GEOTEXTILE FABRIC
 - ④ 4" CONCRETE SIDEWALK WITH 6x6 W2.9xW2.9 WELDED WIRE FABRIC (WHERE SHOWN ON PLAN)
 - ⑤ 4" GRANULAR BASE (6" UNDER DRIVEWAYS)
 - ⑥ 4" MOUNTABLE CURB
 - ⑦ 8" BARRIER CURB
 - ⑧ 6" BARRIER CURB
 - ⑨ PAVEMENT STRIPING AND REFLECTORIZED MARKERS (SEE STRIPING PLAN)
 - ⑩ PAVEMENT STRIPING (SEE STRIPING PLAN)
 - ⑪ LONGITUDINAL CONSTRUCTION JOINT
 - ⑫ EMBANKMENT AS REQ'D TO ACHIEVE NEW ELEVATIONS. FERTILIZE AND SEED NEW FILL.
 - ⑬ 6" OF TOP SOIL
 - ⑭ 1 1/2" ASPHALT CONCRETE WEARING COURSE
 - ⑮ 4" ASPHALT CONCRETE INTERMEDIATE COURSE
 - ⑯ 2 1/2" ASPHALTIC CONCRETE BINDER COURSE
 - ⑰ RESERVED
 - ⑱ PROFILE GRADE @ NORTH GUTTER
 - ⑲ PROFILE GRADE @ SOUTH GUTTER
 - ⑳ PROFILE GRADE @ NORTH B/L
 - ㉑ PROFILE GRADE @ SOUTH B/L
 - ㉒ PROFILE GRADE @ NORTH MEDIAN
 - ㉓ PROFILE GRADE @ SOUTH MEDIAN
 - ㉔ 6"/8" CONCRETE DRIVEWAY W/ 6x12 W7.9 x W7.9 WELDED WIRE FABRIC (WHERE SHOWN ON PLANS)
 - ㉕ LIMITS OF SEEDING AND FERTILIZING
 - ㉖ SODDING
 - ㉗ SUBGRADE

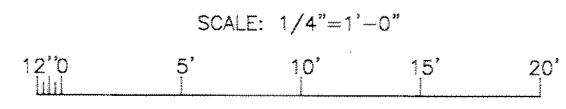
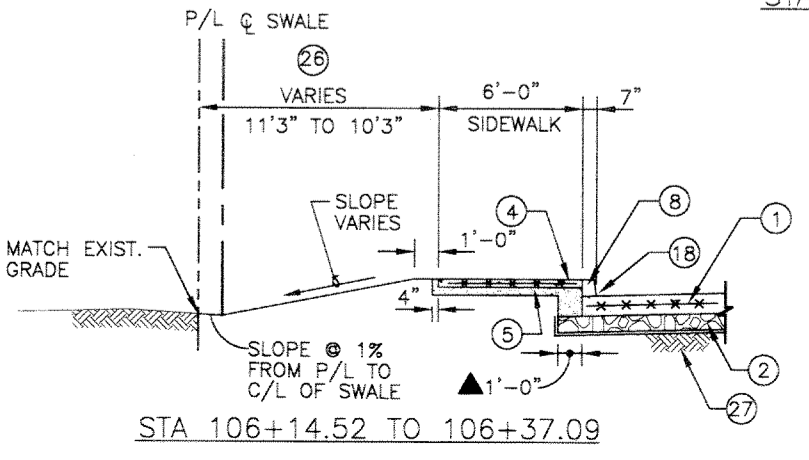


Contractor SODDED ALL AREAS

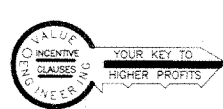


TYPICAL SECTION - GENTILLY BLVD.
STA 105+95.44 TO 108+77.00
 SCALE: 1/4"=1'-0"

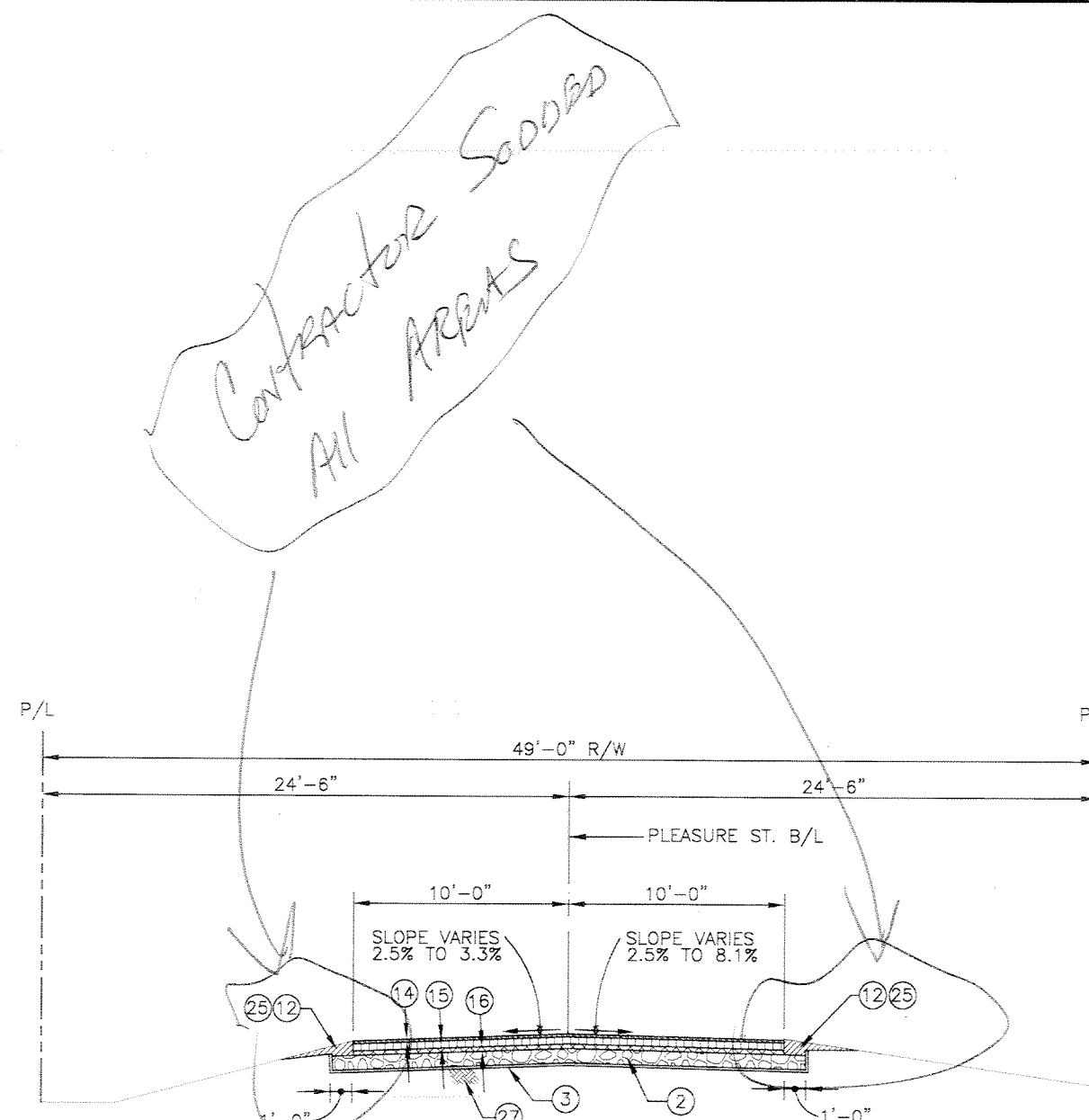
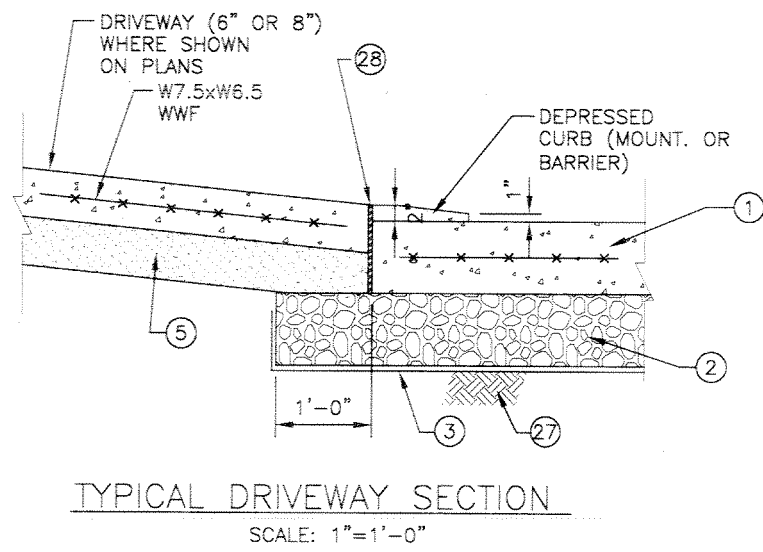
* NEGATIVE SLOPE INDICATES ROADWAY SLOPES TOWARDS MEDIAN
 ▲ DELETE ONE FOOT EXTENSION BEHIND CURB WITHIN ALL TREE DRIPLINES



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 300 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
TYPICAL ROADWAY SECTIONS			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: W.E.	CHECKED BY: S.J.G.	FILE NO. H-4-44733	DWG. 8 OF 67
SUBMITTED BY: A. GOODSON DESIGN ENGINEER		SOLICITATION NO. DACW29-98-B-0060	



Safety is a Part of Your Contract

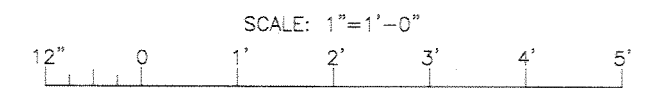
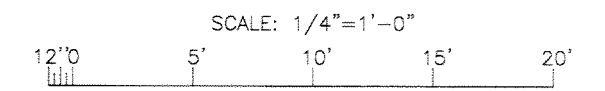


Contractor SODDED ALL AREAS

Pool

LEGEND

- ① 9" CONCRETE WITH 6X12 W7.5xW6.5 WELDED WIRE FABRIC
- ② 9" CRUSHED STONE BASE COURSE
- ③ GEOTEXTILE FABRIC
- ④ 4" CONCRETE SIDEWALK WITH 6X6 W2.9xW2.9 WELDED WIRE FABRIC (WHERE SHOWN ON PLAN)
- ⑤ 4" GRANULAR BASE (6" UNDER DRIVEWAYS)
- ⑥ 4" MOUNTABLE CURB
- ⑦ 8" BARRIER CURB
- ⑧ 6" BARRIER CURB
- ⑨ PAVEMENT STRIPING AND REFLECTORIZED MARKERS (SEE STRIPING PLAN)
- ⑩ PAVEMENT STRIPING (SEE STRIPING PLAN)
- ⑪ LONGITUDINAL CONSTRUCTION JOINT
- ⑫ EMBANKMENT AS REQ'D TO ACHIEVE NEW ELEVATIONS. FERTILIZE AND SEED NEW FILL.
- ⑬ 6" OF TOP SOIL
- ⑭ 1 1/2" ASPHALT CONCRETE WEARING COURSE
- ⑮ 4" ASPHALT INTERMEDIATE WEARING COURSE
- ⑯ 2 1/2" ASPHALTIC CONCRETE BINDER COURSE
- ⑰ RESERVED
- ⑱ PROFILE GRADE @ NORTH GUTTER
- ⑲ PROFILE GRADE @ SOUTH B/L
- ⑳ PROFILE GRADE @ NORTH B/L
- ㉑ PROFILE GRADE @ SOUTH B/L
- ㉒ PROFILE GRADE @ NORTH MEDIAN
- ㉓ PROFILE GRADE @ SOUTH MEDIAN
- ㉔ 6"/8" CONCRETE DRIVEWAY WITH 6x12 W7.9 x W7.9 WELDED WIRE FABRIC (WHERE SHOWN ON PLANS)
- ㉕ LIMITS OF SEEDING AND FERTILIZING
- ㉖ SODDING
- ㉗ SUBGRADE
- ㉘ 1/2" PREFORMED JOINT MATERIAL



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

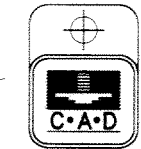
BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNTUS, INC
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

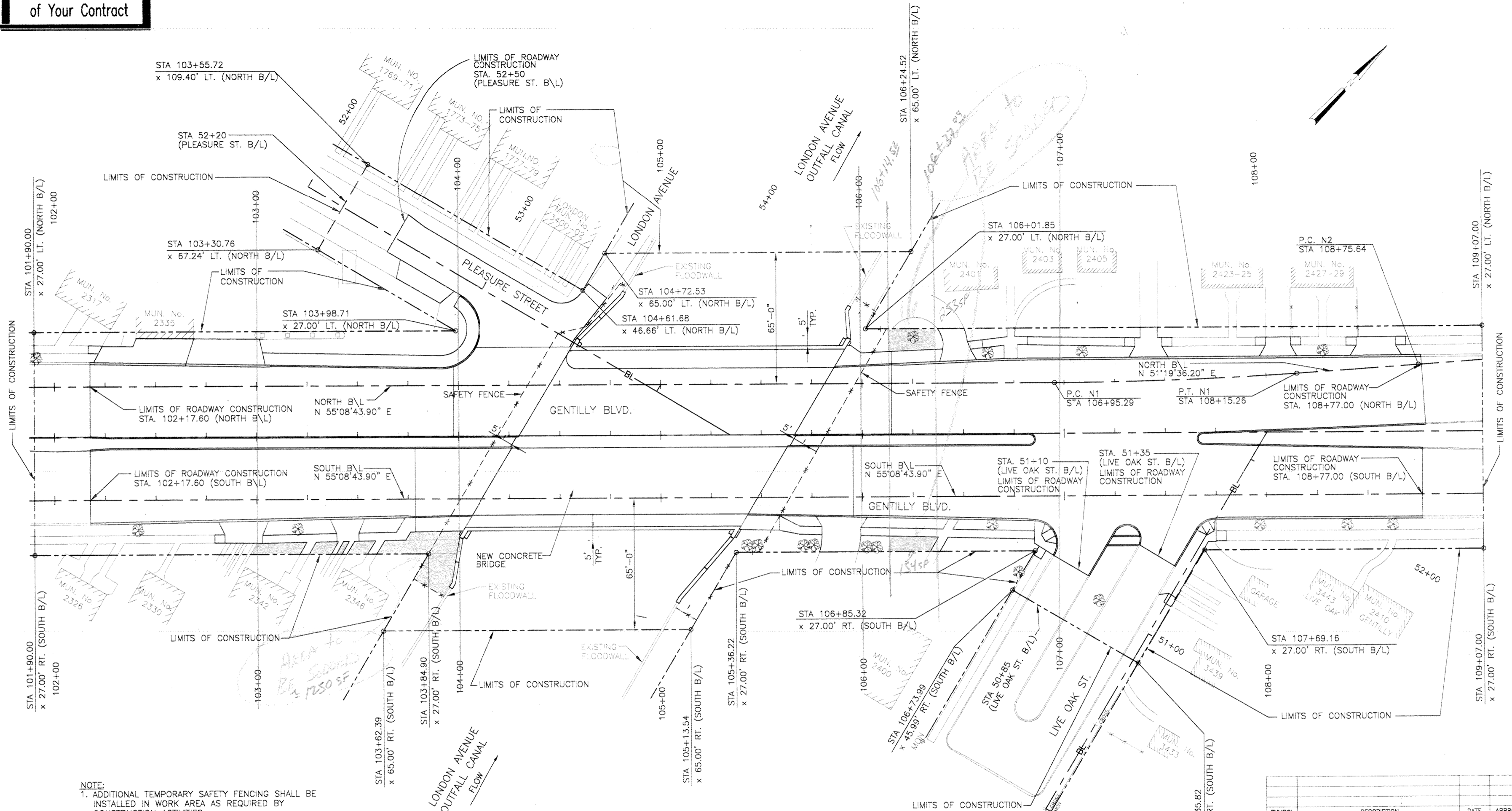
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

TYPICAL ROADWAY SECTIONS

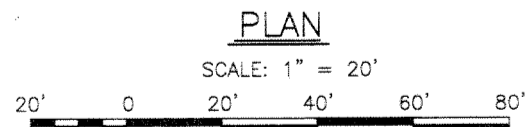
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: W.E.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: S.J.G.	SUBMITTED BY: A. GOODRICH	SOLICITATION NO. DACW29-98-B-0060	DWG. 9 OF 67



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of Your Contract



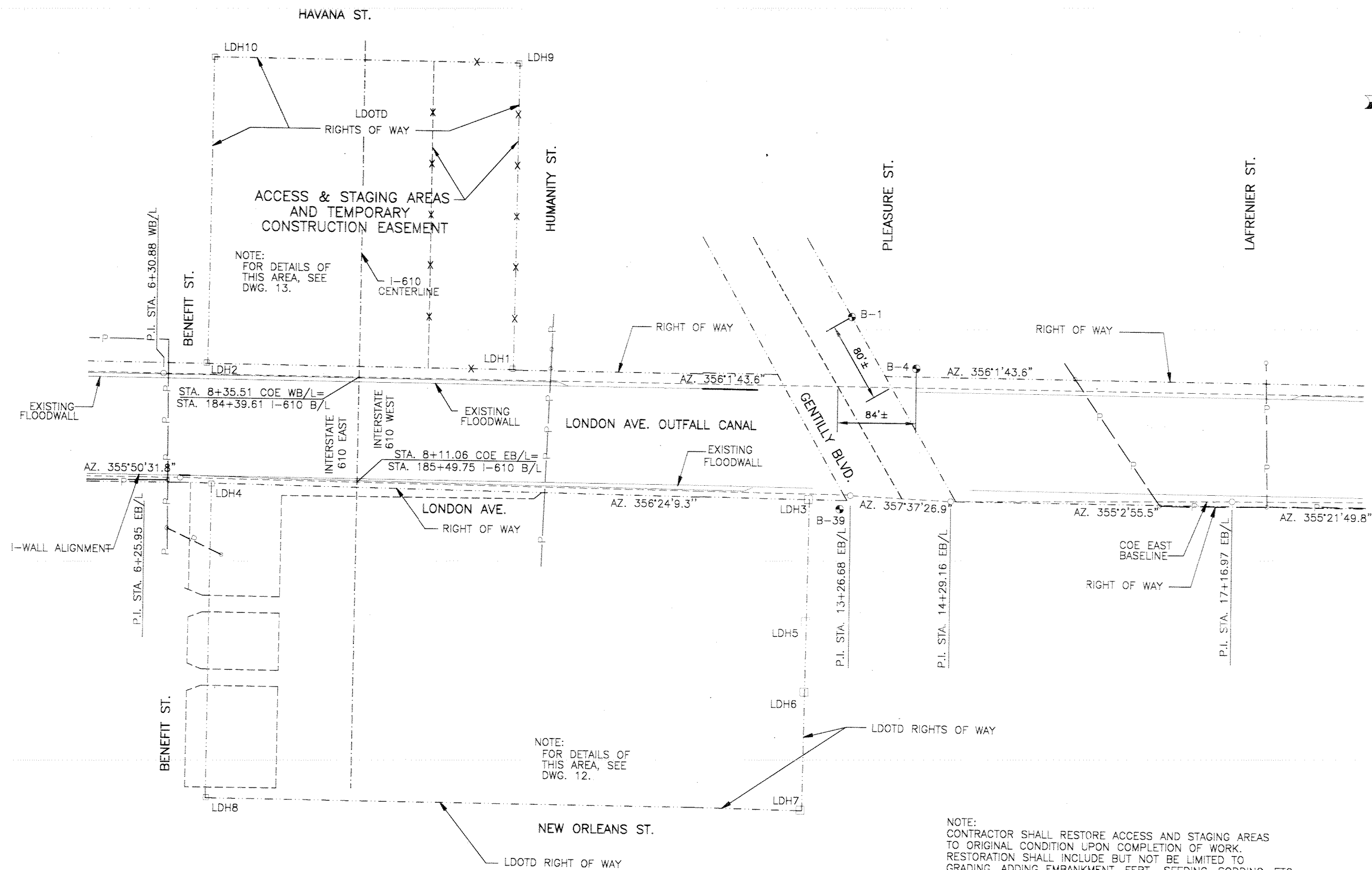
NOTE:
1. ADDITIONAL TEMPORARY SAFETY FENCING SHALL BE INSTALLED IN WORK AREA AS REQUIRED BY CONSTRUCTION ACTIVITIES.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
CONSTRUCTION EASEMENT & RIGHT-OF-WAY PLAN			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: X	SUBMITTED BY: A.GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 10 OF 67
C-A-D DESIGN ENGINEER			

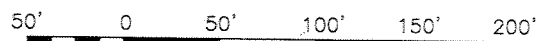


Safety is a Part of Your Contract



PLAN

SCALE: 1" = 50'



LEGEND

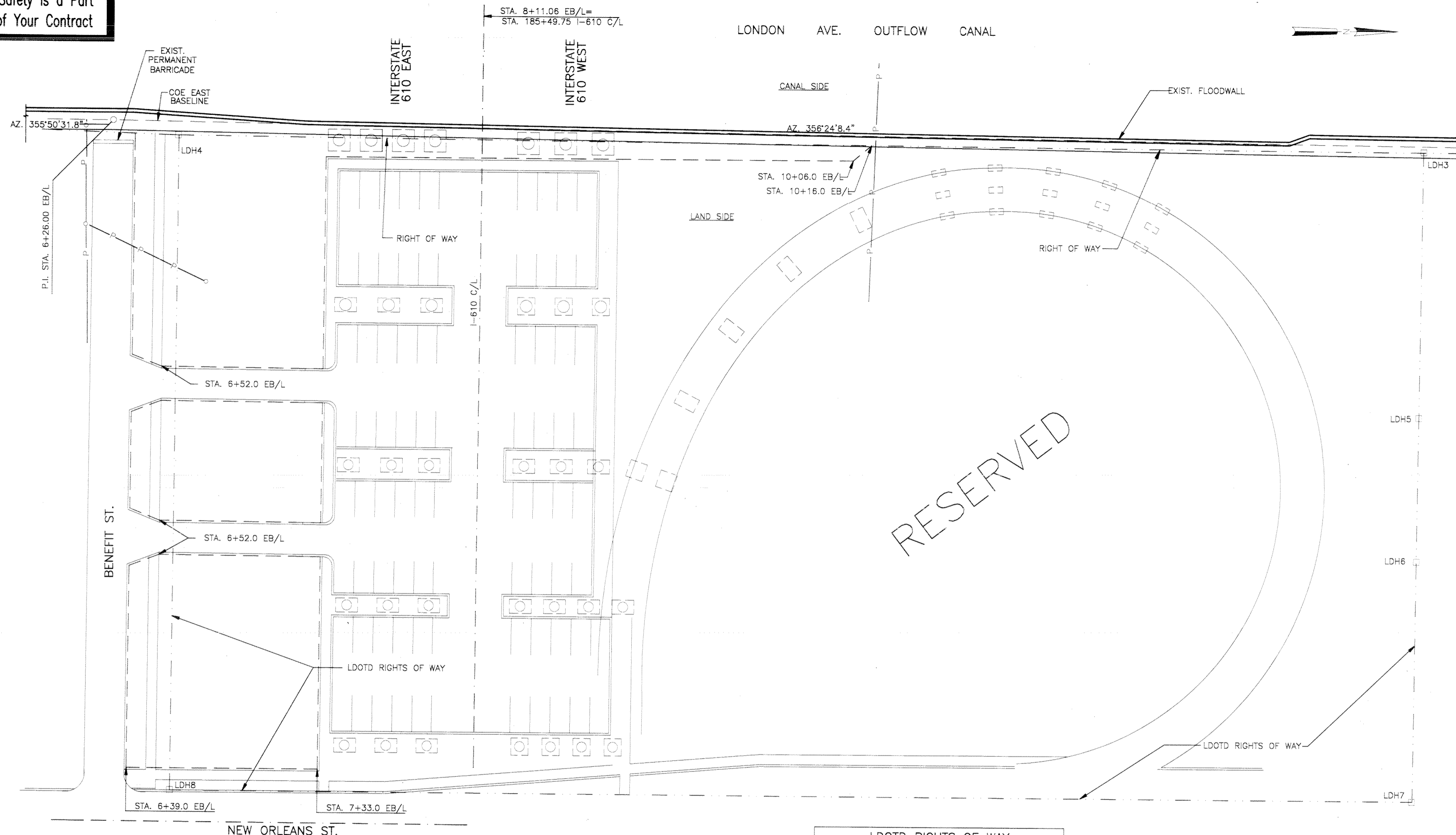
- P-P- AERIAL POWER LINE
- o POWER POLE
- 6 EUSTIS UNDISTURBED BORINGS
- *-X-X- REQ'D SAFETY FENCE

NOTE: CONTRACTOR SHALL RESTORE ACCESS AND STAGING AREAS TO ORIGINAL CONDITION UPON COMPLETION OF WORK. RESTORATION SHALL INCLUDE BUT NOT BE LIMITED TO GRADING, ADDING EMBANKMENT, FERT., SEEDING, SODDING, ETC.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA ACCESS & STAGING AREAS			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 50	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44732R.K.DGN	FILE NO. H-4-44733	
CHECKED BY: A.F.G.	SUBMITTED BY: A.GOODGION DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 11 OF 67

**Safety is a Part
of Your Contract**



LEGEND

- P—P— AERIAL POWER LINE
- POWER POLE
- X— REQ'D SAFETY FENCE

PLAN

SCALE: 1" = 20'



LDOTD RIGHTS OF WAY				
LDOTD MARKERS	COE STATION	DISTANCE FROM COE EB/L	I-610 STATION	DISTANCE FROM I-610 B/L
LDH 3	12+84.42	-2.90*	185+57.0	473.72
LDH 4	6+51.02	-6.84*	185+55.5	160.04
LDH 5	12+84.42	-132.38*	186+85.04	473.51
LDH 6	12+84.42	-204.45*	187+57.11	475.90
LDH 7	12+84.42	-324.23*	188+77.11	475.90
LDH 8	6+51.02	-327.32*	188+76.02	160.04

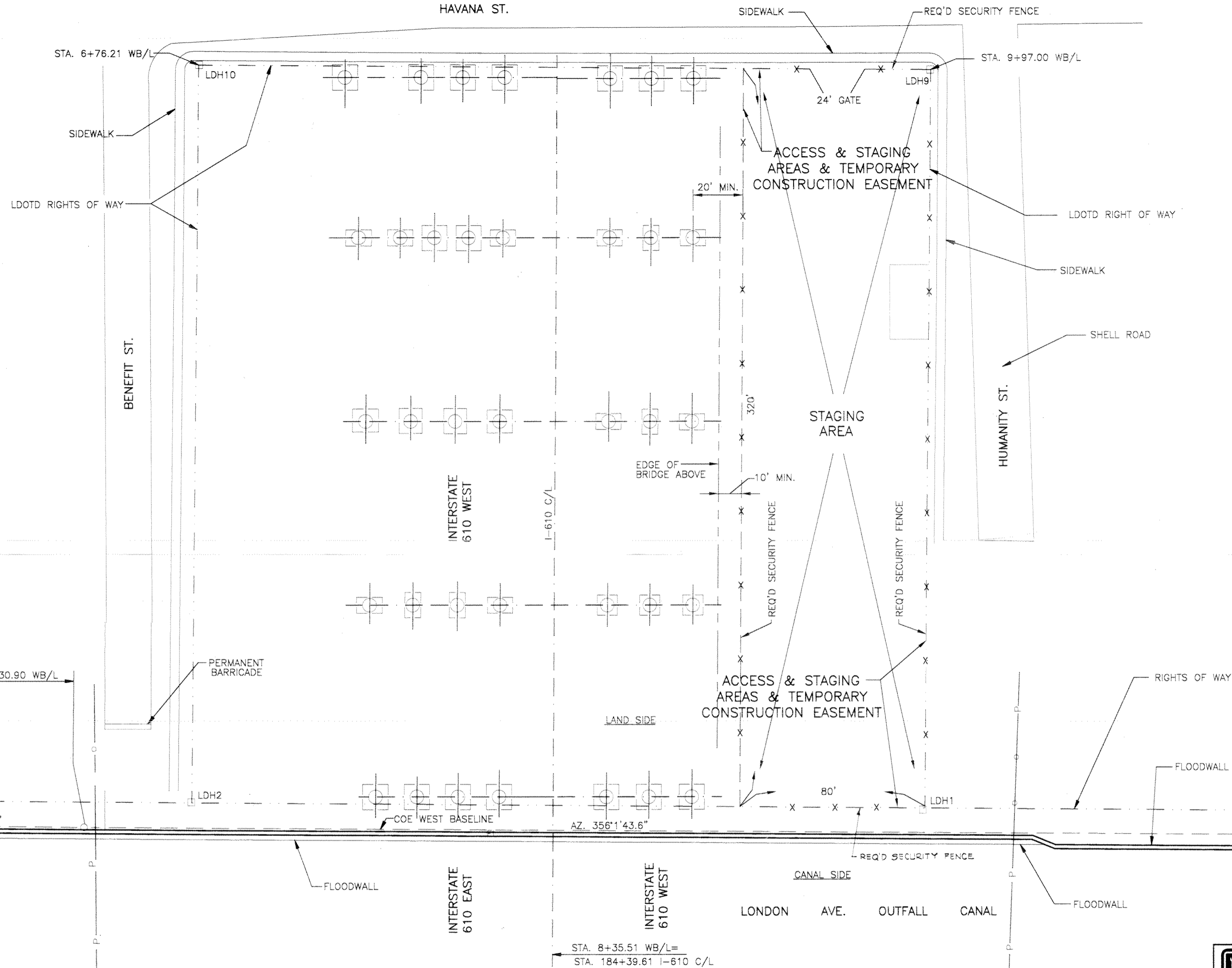
*NOTE: POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

<p>U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA</p>			
<p>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</p>		<p>LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002</p>	
<p>LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFLOW CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA</p>			
<p>RESERVED</p>			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CHECKED BY: X	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY:	SOLICITATION NO. DACW29-98-B-0060	DWG. 12 OF 67	

Safety is a Part of Your Contract



LEGEND

- — — — LDOTD RIGHT-OF-WAY
- P — P — AERIAL POWER LINE
- — — — POWER POLE
- * — * — REQ'D SECURITY FENCE

LDOTD RIGHTS OF WAY					
LDOTD MARKERS	COE STATION	DISTANCE FROM COE WB/L	I-610 STATION	DISTANCE MEASURED FROM I-610 C/L	
LDH 1	9+97.00	-11.9*	184+27.61	161.42	
LDH 2	6+76.21	-12.02*	184+27.61	159.40	
LDH 9	9+97.00	-332.41*	181+07.04	160.42	
LDH 10	6+76.21	-332.71*	181+07.04	160.04	

*NOTE: POSITIVE NUMBERS INDICATE AN OFFSET FROM THE BASELINE TOWARDS THE CANAL.

PLAN

SCALE: 1" = 20'



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

BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

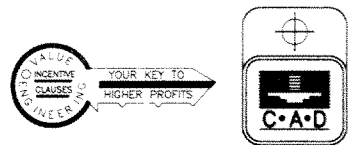
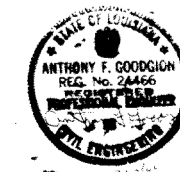
LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd., Suite 200
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

**ACCESS & STAGING AREA
WEST SIDE**

DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CHECKED BY: X	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A.GOODGION DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060		DWG. 13 OF 67

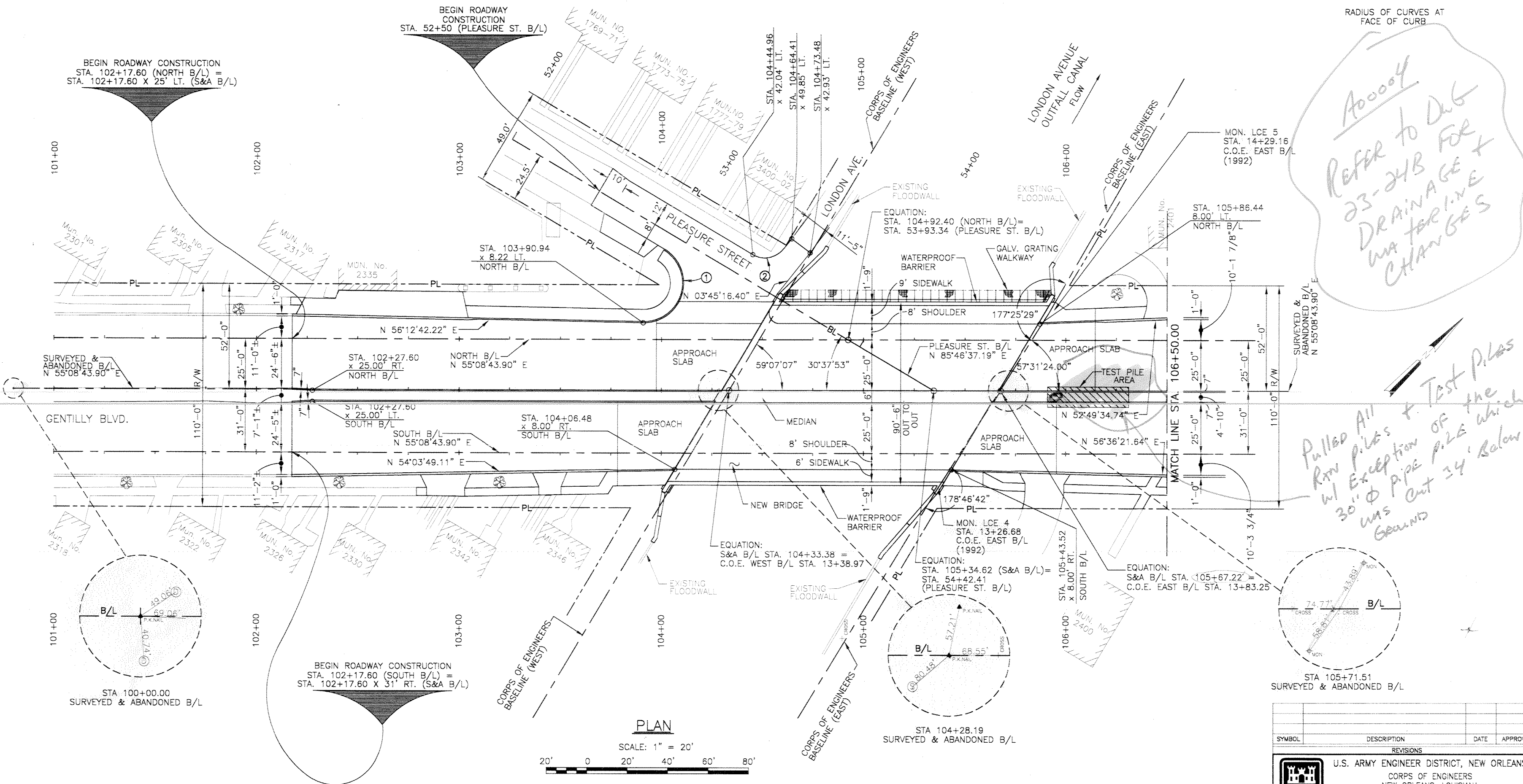
SYMBOL	DESCRIPTION	DATE	APPROVED



Safety is a Part of Your Contract

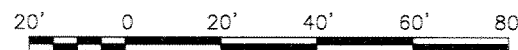
MINOR CURVE DATA		
CURVE No.	①	②
R	19.58'	12.00'
Δ	150°26'05.03"	82°06'39.02"

RADIUS OF CURVES AT FACE OF CURB



PLAN

SCALE: 1" = 20'



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

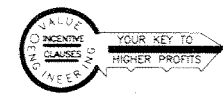
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

BOARD OF LEVEE COMMISSIONERS
 ORLEANS LEVEE DISTRICT
 NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
 HIGH LEVEL PLAN
 LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
 FLOODPROOFING OF
 GENTILLY BLVD. BRIDGE
 ORLEANS PARISH, LOUISIANA

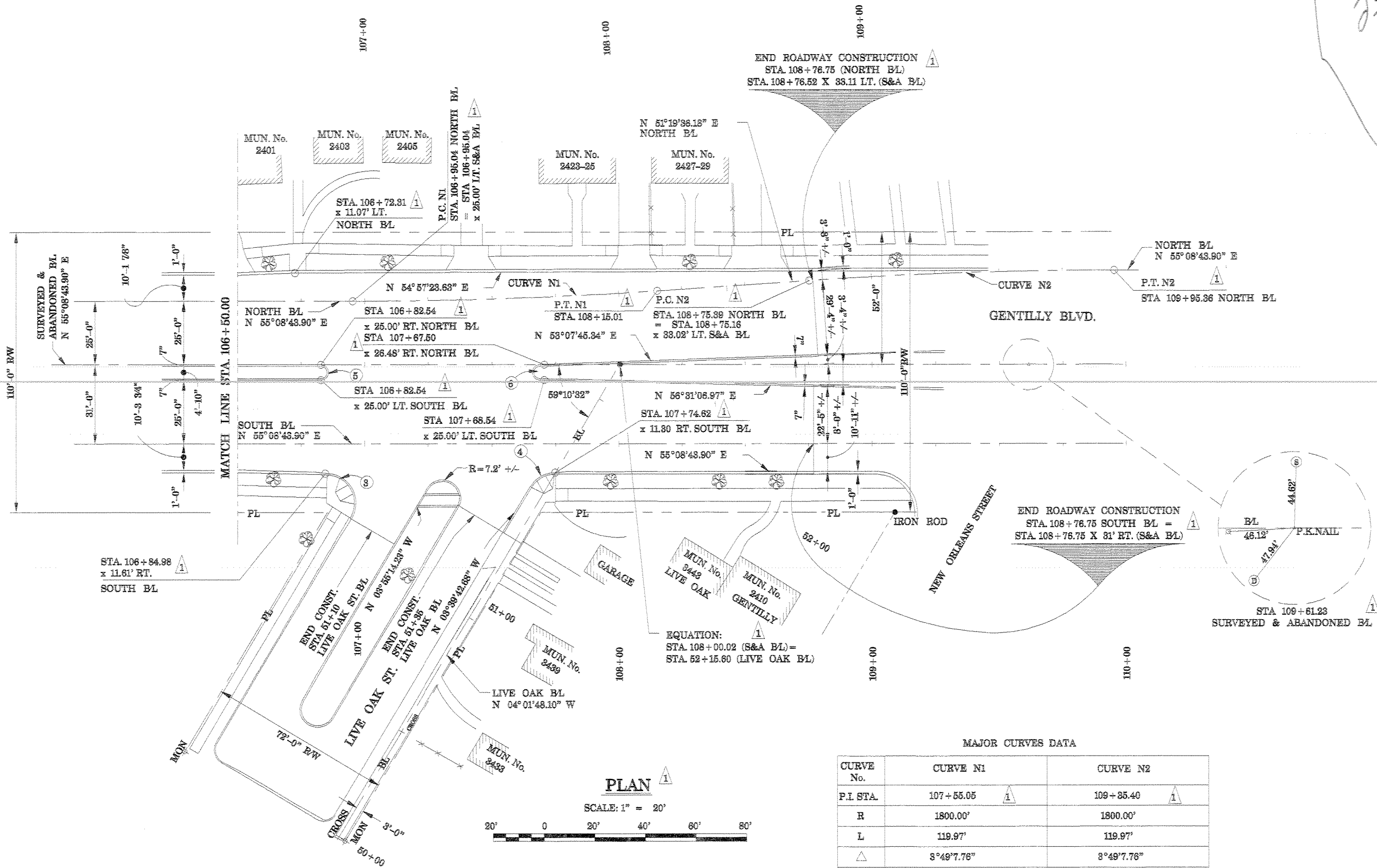
GEOMETRIC LAYOUT

DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CHECKED BY: S.J.G.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A.GOODSON	SOLICITATION NO. DACW29-98-B-0060	DESIGN ENGINEER	DWG. 14 OF 67



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Handwritten note: (A00004) REFER TO Dwg 23-24B FOR DRAINAGE & WATERLINE CHANGES



PLAN

SCALE: 1" = 20'



SURVEY NOTE:

THE CONTROLLING LOCATION POINT FOR THIS WORK IS S&A B/L STA. 105+67.22 (SHOWN ON DRAWING 14). ALL POINTS ON THIS SHEET SHALL BE MEASURED FROM EQUATION STATION S&A B/L STA. 105+67.22 EQUALS COE EAST B/L STA. 13+83.25

MAJOR CURVES DATA

CURVE No.	CURVE N1	CURVE N2
P.I. STA.	107+55.05	109+85.40
R	1800.00'	1800.00'
L	119.97'	119.97'
Δ	3°49'7.76"	3°49'7.76"
T	60.01'	60.01'
D	3°10'59.16"	3°10'59.16"

MINOR CURVES DATA

CURVE No.	③	④	⑤	⑥
R	11.58'	11.58'	3.0'	3.0'
Δ	120°54'16.41"	58°48'28.58"	180°00'00.00"	180°00'00.00"

RADIUS OF CURVES AT FACE OF CURB

SYMBOL	DESCRIPTION	DATE	APPROVED
△	GEOMETRIC REVISION (DUE TO FIELD SURVEY VER.)	4/2/98	DLS

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

BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

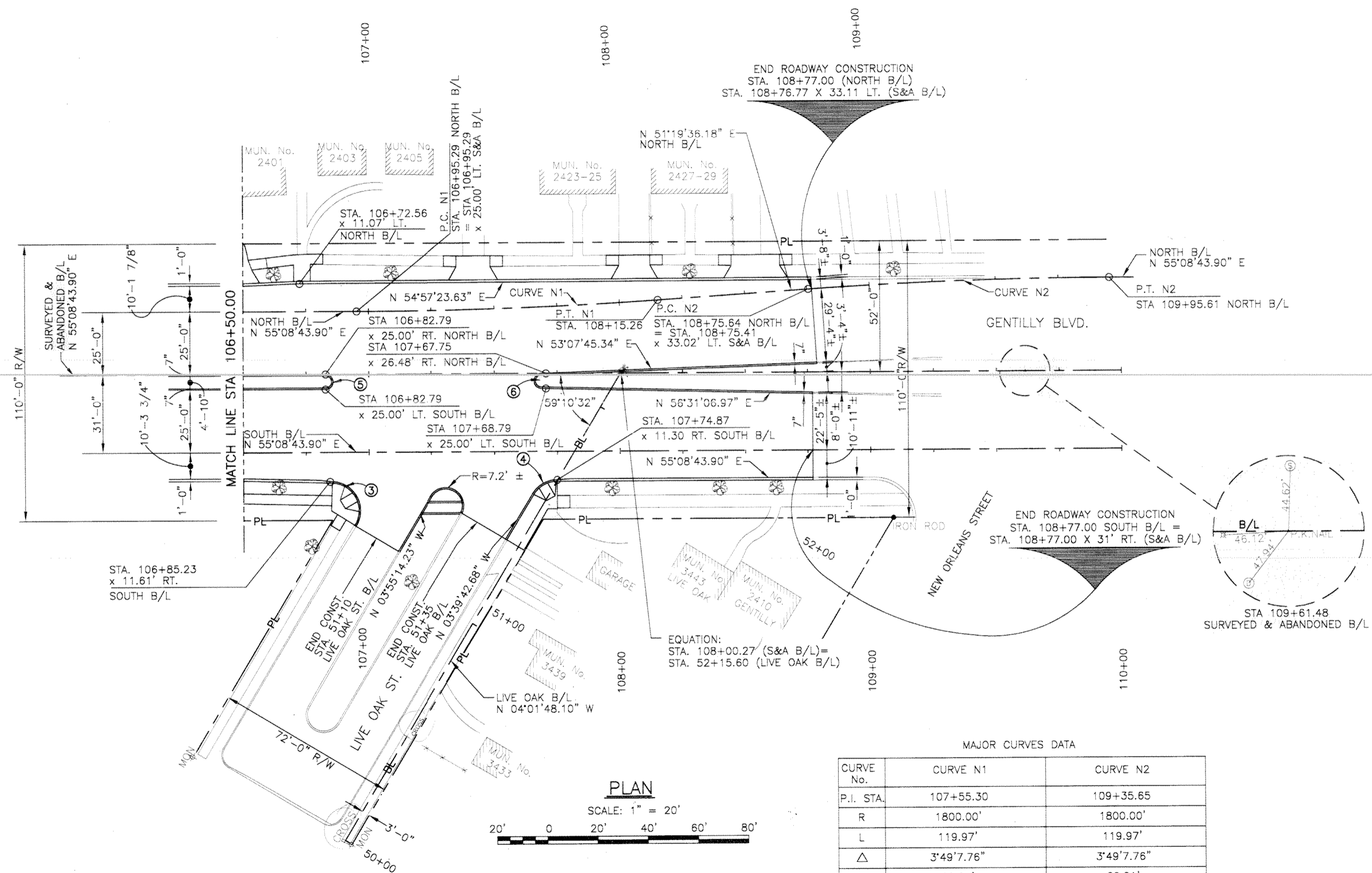
LENFIELD HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
8500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

GEOMETRIC LAYOUT

DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: W.E.	CHECKED BY: S.J.G.	SOLICITATION NO. DACW29-88-B-0060	FILE NO. H-4-44733
SUBMITTED BY: A. GOODGOIN DESIGN ENGINEER			DWG 15 OF 87



Safety is a Part of Your Contract



PLAN

SCALE: 1" = 20'



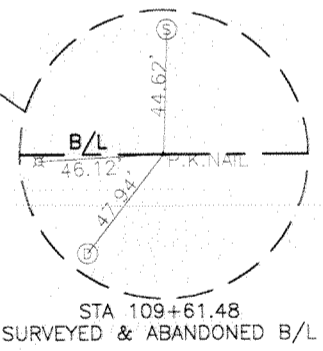
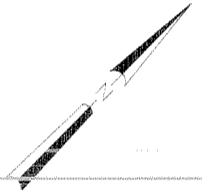
MAJOR CURVES DATA

CURVE No.	CURVE N1	CURVE N2
P.I. STA.	107+55.30	109+35.65
R	1800.00'	1800.00'
L	119.97'	119.97'
Δ	3'49"7.76"	3'49"7.76"
T	60.01'	60.01'
D	3'10"59.16"	3'10"59.16"

MINOR CURVES DATA

CURVE No.	③	④	⑤	⑥
R	11.58'	11.58'	3.0'	3.0'
Δ	120°54'16.41"	58°48'26.58"	180°00'00.00"	180°00'00.00"

RADIUS OF CURVES AT FACE OF CURB



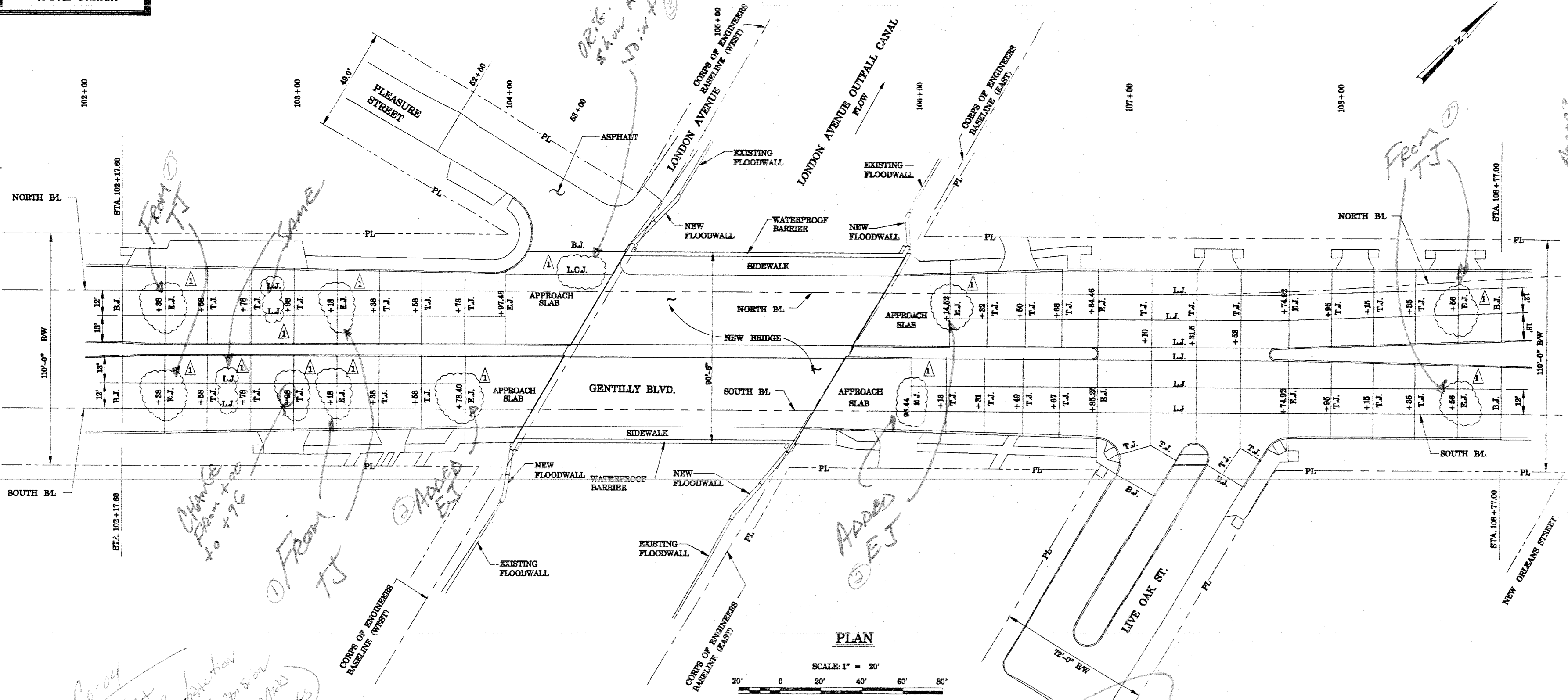
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		 LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 1500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA GEOMETRIC LAYOUT			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: W.E.	CHECKED BY: S.J.G.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODGOIN DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 15 OF 67	



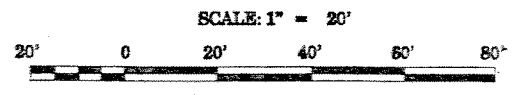
Safety is a Part of Your Contract

A00003, Co-04

A00003



PLAN



- LEGEND**
- E.J. EXPANSION JOINT
 - T.J. TRANSVERSE CONTRACTION JOINT
 - L.J. LONGITUDINAL JOINT
 - B.J. BUTT JOINT
 - L.C.J. LONGITUDINAL CONSTRUCTION JOINT

FOR DETAILS OF JOINTS SEE CITY OF NEW ORLEANS STANDARD DETAIL DWGS. INCLUDED AS PART OF THIS SET OF DRAWING DOCUMENTS.

A00003, Co-04

① CHANGE GEA TRANSVERSE CONTRACTION JOINTS TO EXPANSION JOINTS (SEE STANDARD DRAWINGS (STD 4))

② ADDED 3EA EXPANSION JOINTS

③ ADDED LONGITUDINAL JOINT

* City Required that the contractor Grease All Dowel Baskets

A00004

REFER TO DWG 23-24B FOR DRAINAGE + WATERLINE CHANGES

A00003, Co-04

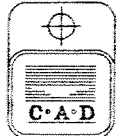
REVISION	DESCRIPTION	DATE	APPROVED
1	EXPANSION JOINT REVISION SUBMITTED BY LEI, Inc. 4/20/98		P.S.T.
2	REVISION BY N.O.DPW IN FIELD (M. BOYCE)		
3	MOD DRAWN TO MEET N.O.DPW INSTRUCTIONS		

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

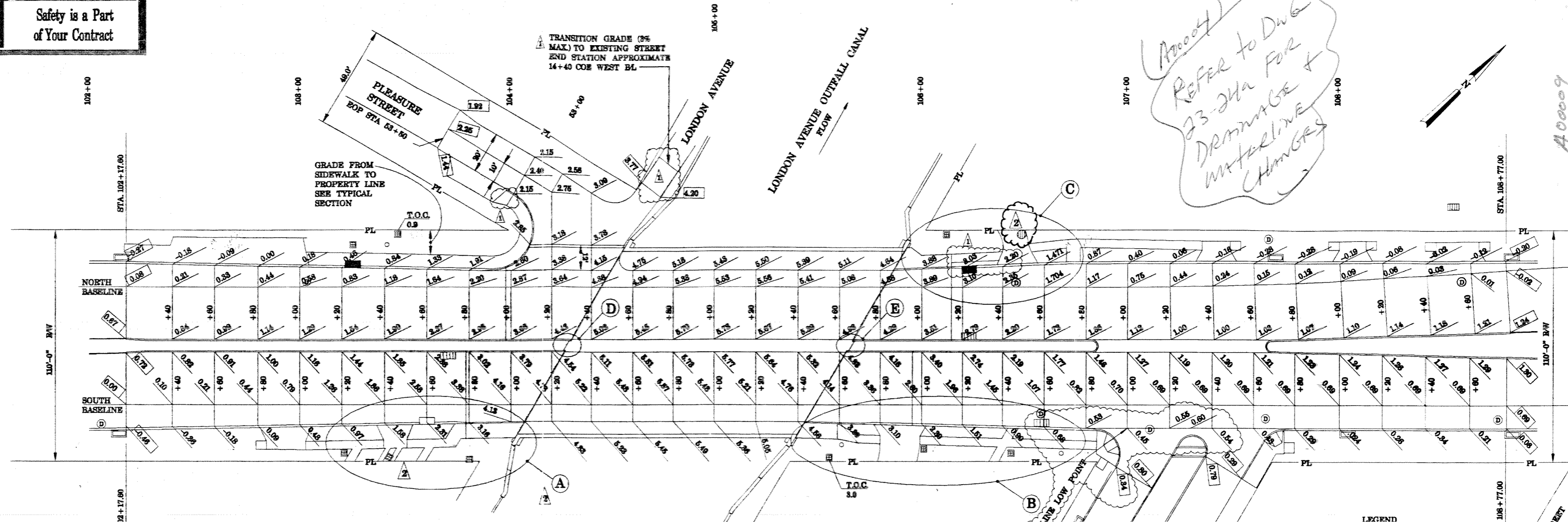
LAKE FORTCHARTRAIN, LA AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

JOINT LAYOUT PLAN

DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20'	PLOT DATE: 2/20/98
DRAWN BY: T.J.B.	CHECKED BY: E.J.G.	FILE NO. H-4-44783	
SUBMITTED BY: A. COOPER	SOLICITATION NO. DACW29-88-B-0060	DWG 16 OF 57	



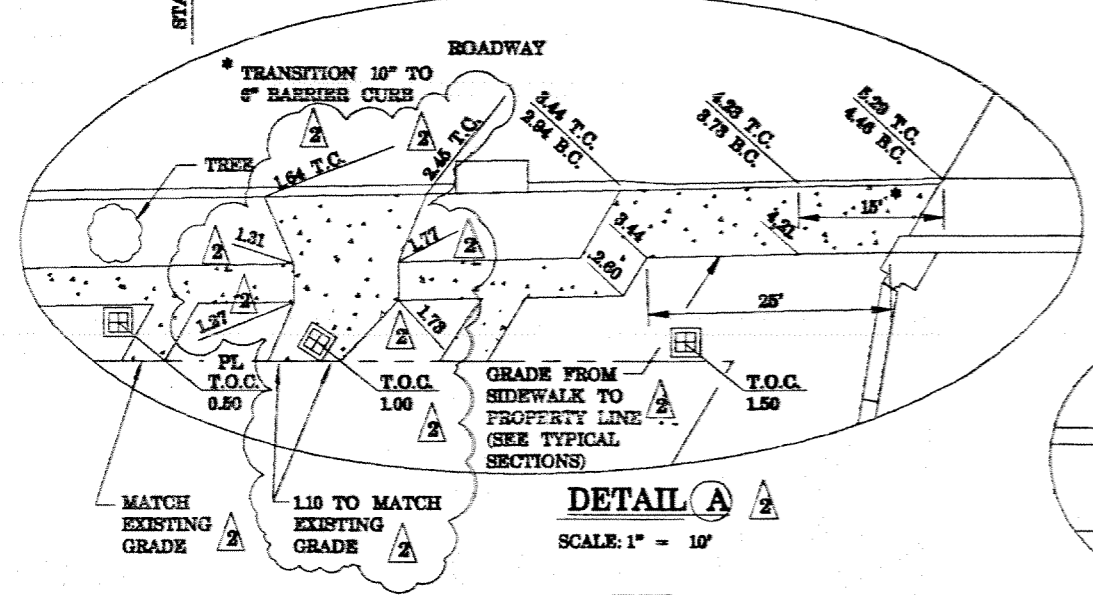
Safety is a Part of Your Contract



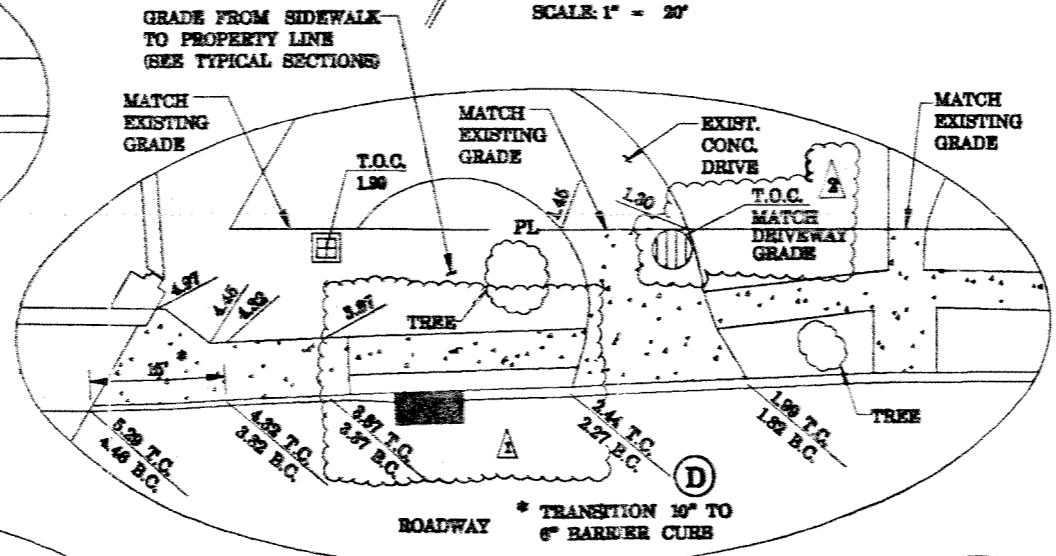
(A0004)
REFER TO DWG 23-21A FOR DRAINAGE & UTILITY CHANGES

PLAN

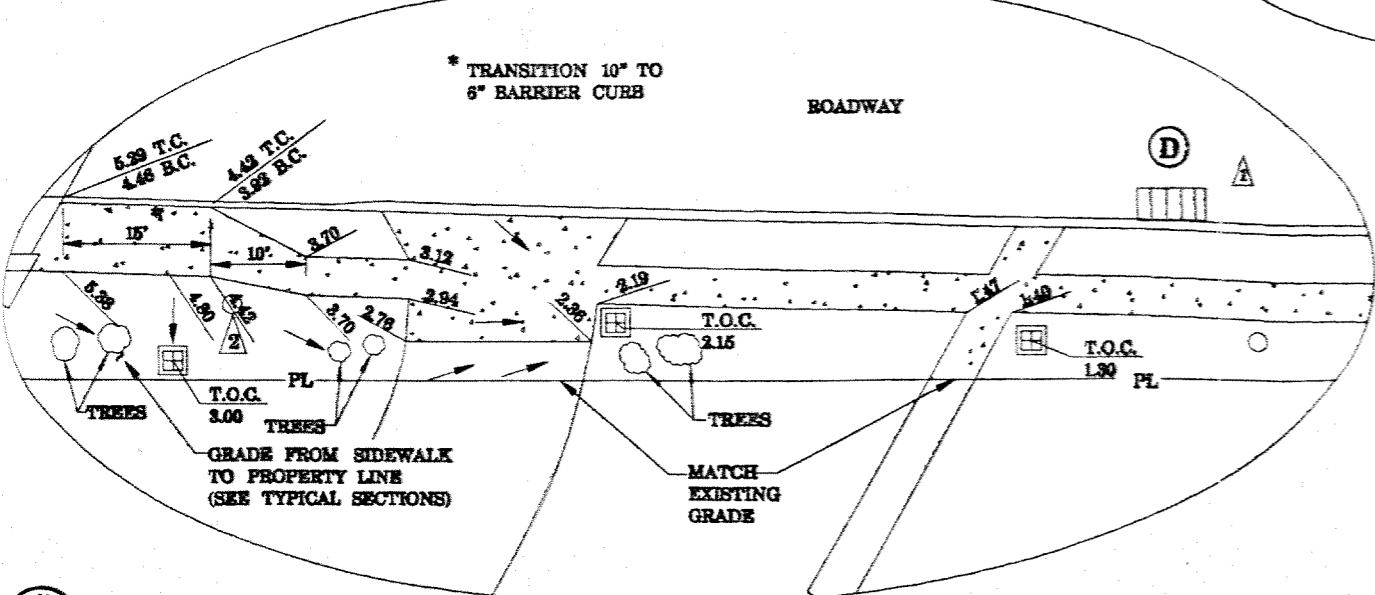
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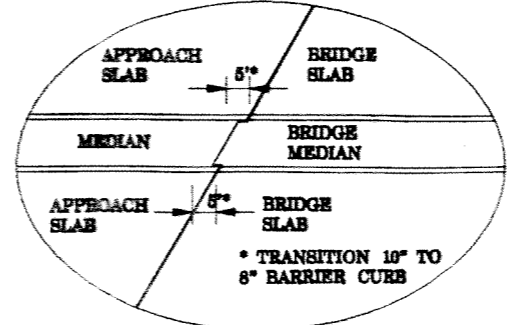
DETAIL A
SCALE: 1" = 10'



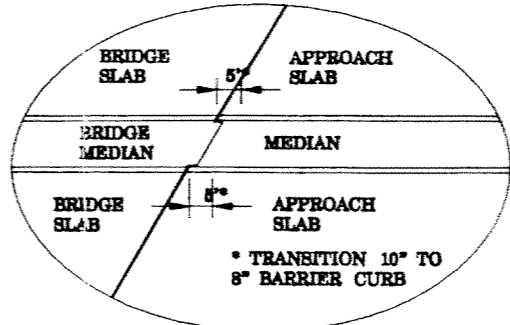
DETAIL C
SCALE: 1" = 10'



DETAIL B
SCALE: 1" = 10'



DETAIL D
SCALE: 1" = 10'



DETAIL E
SCALE: 1" = 10'

LEGEND

- EXISTING GRADE
- PROPOSED FINISHED GRADE ELEVATION
- T.C. TOP OF CURB
- B.C. BOTTOM OF CURB
- T.O.C. TOP OF CASTING
- 3.00 ELEVATION OF YARD DRAIN
- NEW YARD DRAIN
- NEW VERTICAL (No. 1) CATCH BASIN
- NEW MOUNTABLE CATCH BASIN

NOTES

1. VERIFY GRADES AT LOCATIONS OF TIE-INS BETWEEN NEW ROADWAYS AND EXISTING ROADWAYS.
2. CONTRACTOR SHALL VERIFY FINISHED GRADES AS SHOWN FROM PROFILES AND TYPICAL SECTIONS ON DWGS. 4, 5, 6 & 7 PRIOR TO CONSTRUCTION.

SYMBOL	DESCRIPTION	DATE	APPROVED
	GRADE ELEVATIONS	6/28/98	
	GRADE ELEVATIONS	6/24/98	

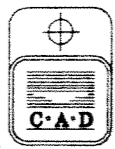
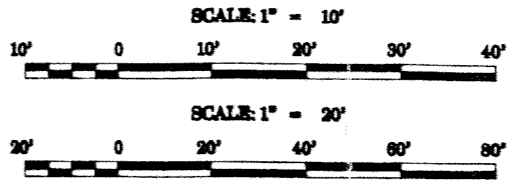
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

BOARD OF LAYERS COMMISSIONERS
ORLEANS LAYERS DISTRICT
NEW ORLEANS, LOUISIANA

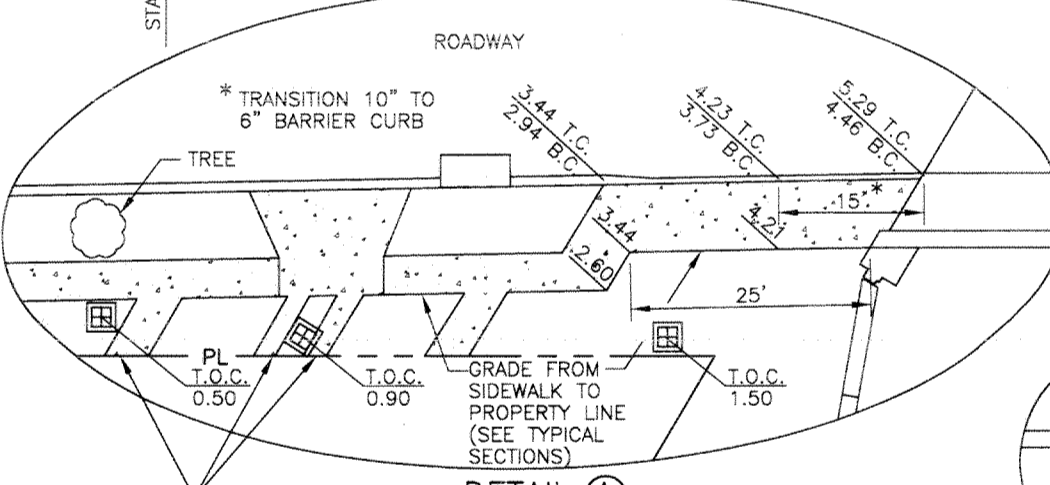
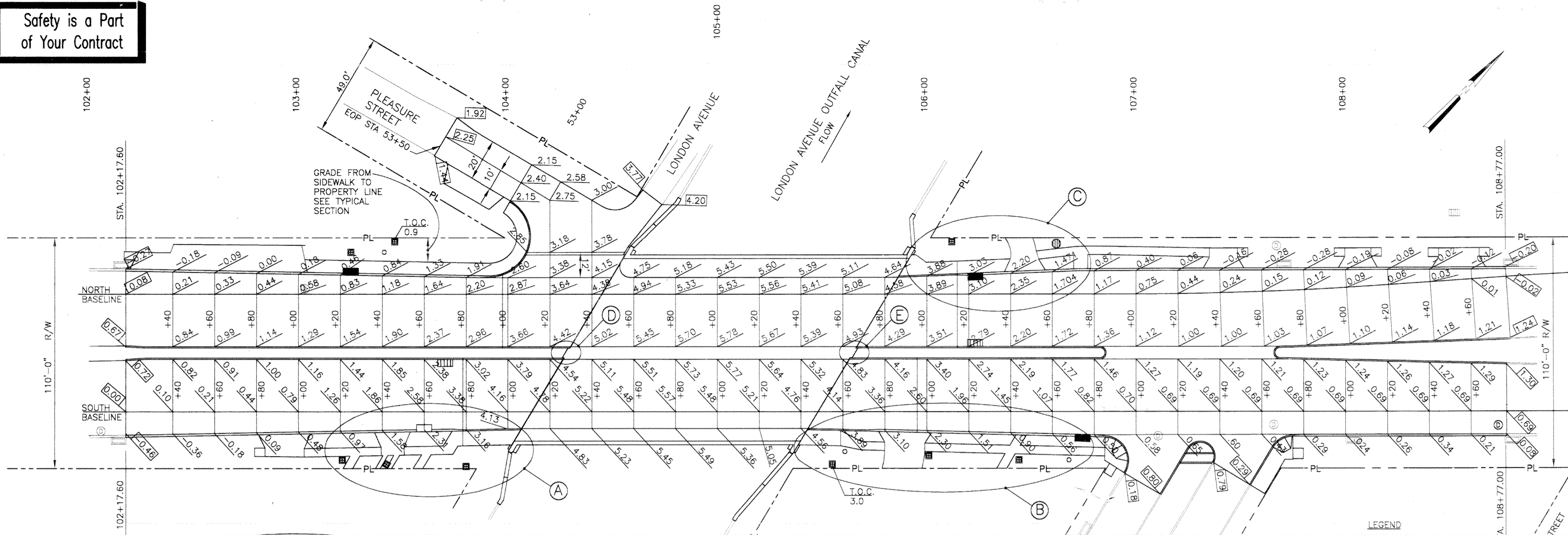
LINFIELD, HUNTER & JUNIOR, INC.
CONSULTING ENGINEERS AND ARCHITECTS
2808 North Canaway Blvd. Suite 200
Metairie, Louisiana 70002

LAKE PORTCHAKAN, LA AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

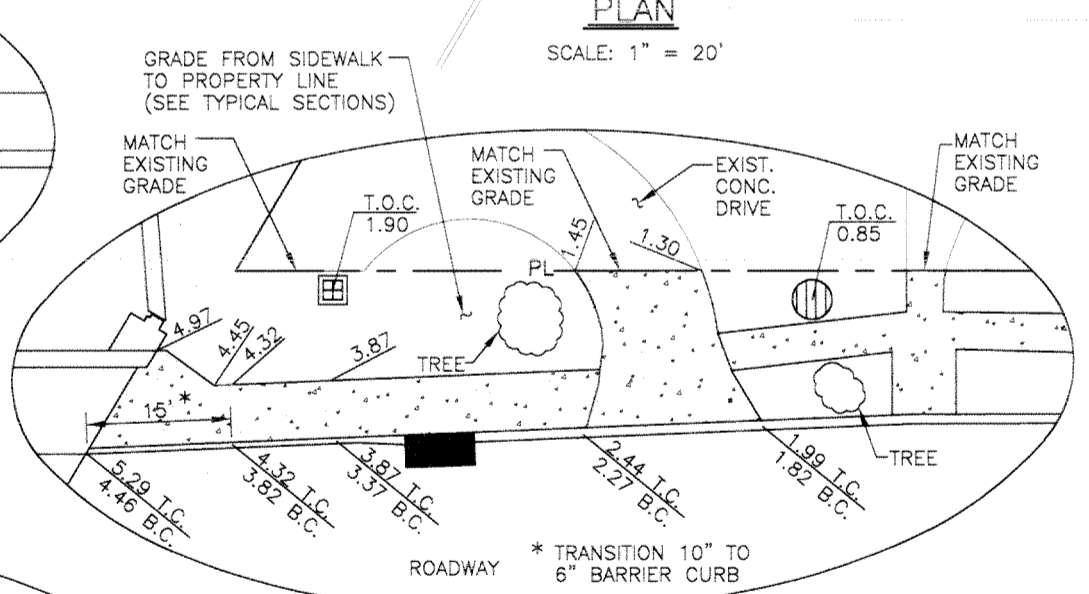
DESIGNED BY:	DATE:	PLOT SCALE:	PLOT DATE:
C.M.R.	FEB. 1998	20	2/20/98
DRAWN BY:	T.P.B.		
CHECKED BY:	S.J.G.		
PROJECT NO.:	SOLICITATION NO.:		FILE NO.:
	DACW79-98-B-0060		H-4-44733
			DWG 17 OF 5



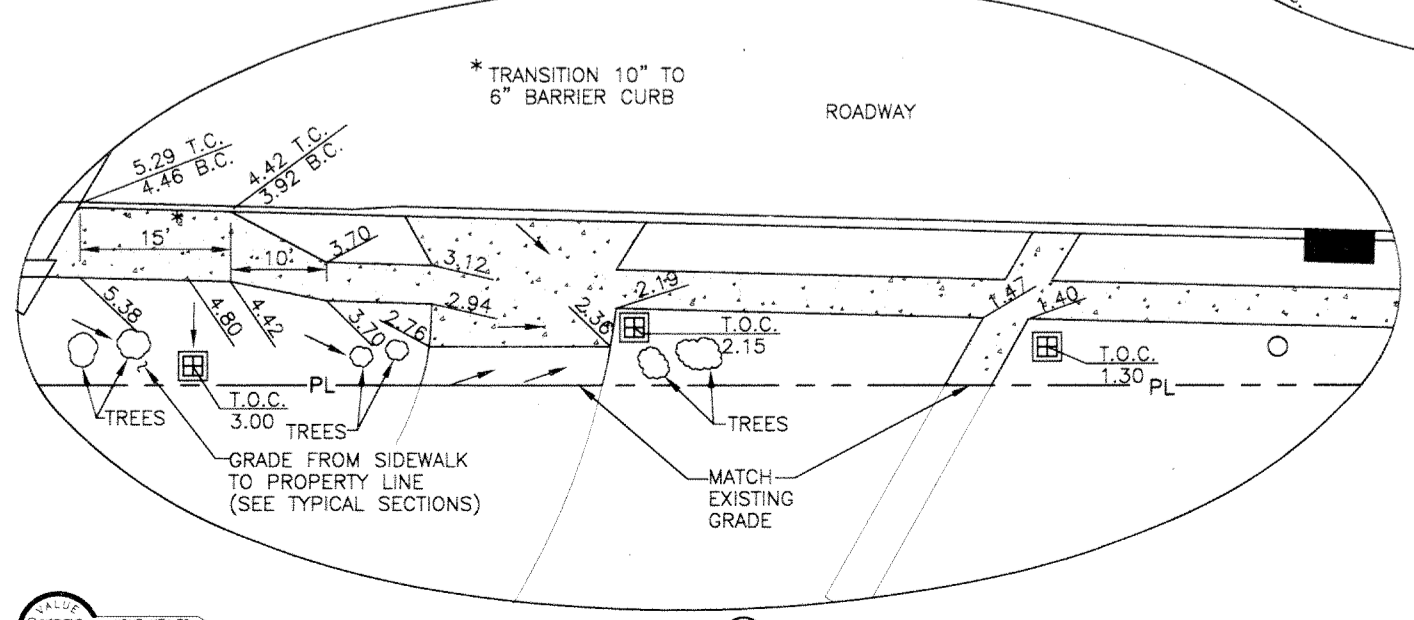
Safety is a Part of Your Contract



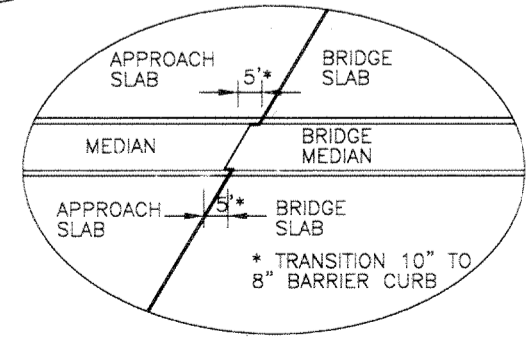
DETAIL A
SCALE: 1" = 10'



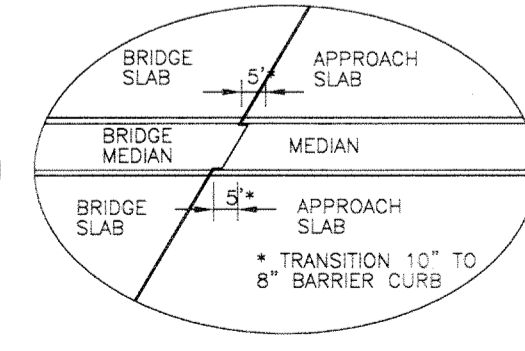
DETAIL C
SCALE: 1" = 10'



DETAIL B
SCALE: 1" = 10'



DETAIL D
SCALE: 1" = 10'



DETAIL E
SCALE: 1" = 10'

- LEGEND**
- EXISTING GRADE
 - PROPOSED FINISHED GRADE ELEVATION
 - T.C. TOP OF CURB
 - B.C. BOTTOM OF CURB
 - T.O.C. TOP OF CASTING ELEVATION OF YARD DRAIN
 - NEW YARD DRAIN
 - NEW VERTICAL (No. 1) CATCH BASIN
 - NEW MOUNTABLE CATCH BASIN
- NOTES**
1. VERIFY GRADES AT LOCATIONS OF TIE-INS BETWEEN NEW ROADWAYS AND EXISTING ROADWAYS.
 2. CONTRACTOR SHALL VERIFY FINISHED GRADES AS SHOWN FROM PROFILES AND TYPICAL SECTIONS ON DWGS. 4, 5, 6 & 7 PRIOR TO CONSTRUCTION.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

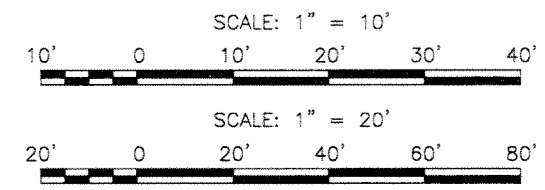
BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

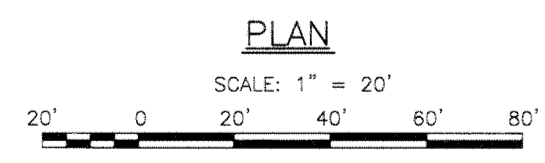
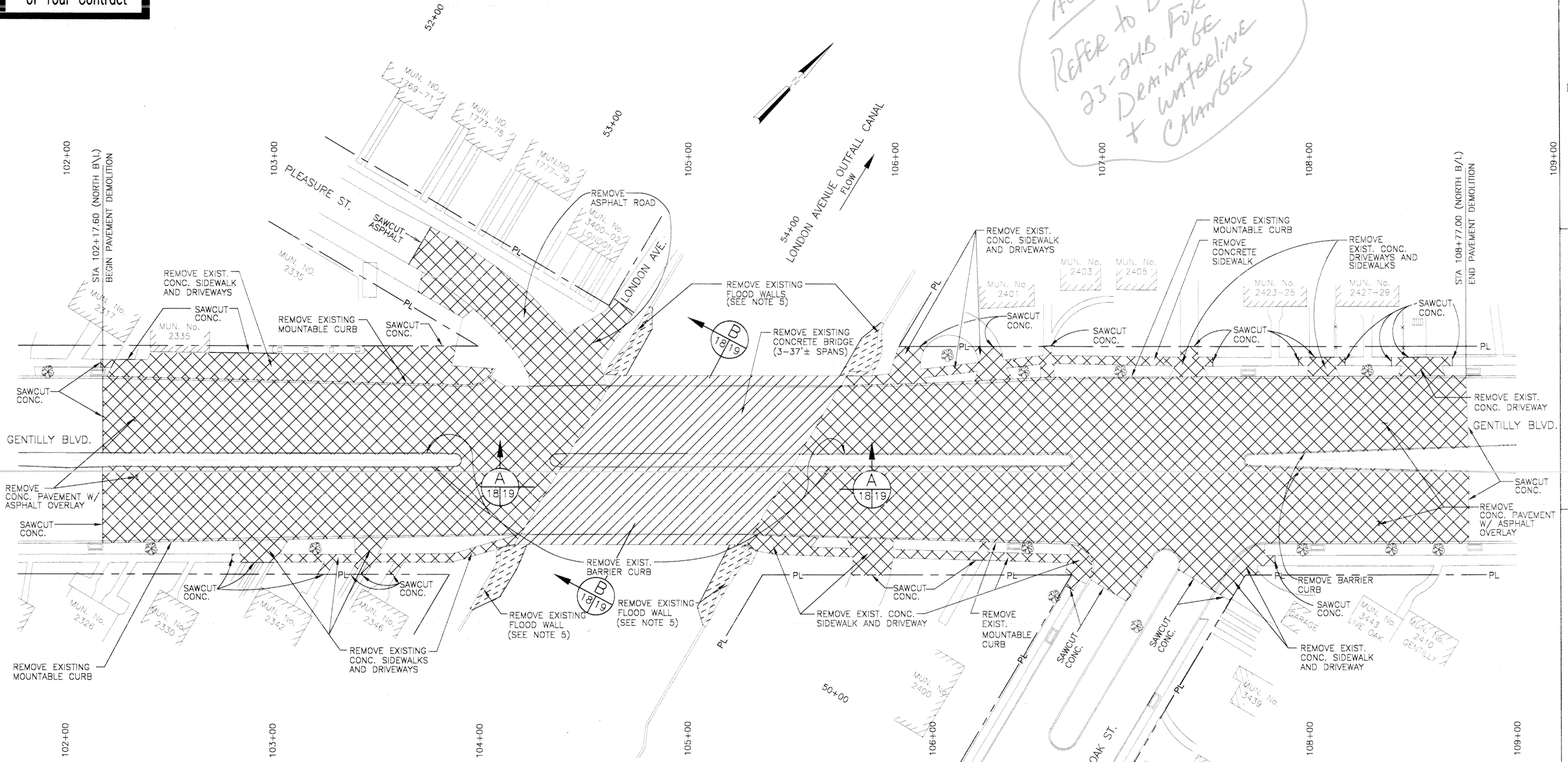
GRAPHICAL GRADE PLAN

DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CHECKED BY: S.J.G.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A.GOODGON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 17 OF 67	



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of Your Contract

A00004
REFER TO DWG
23-248 FOR
DEMINGUE
+ WATERLINE
CHANGES



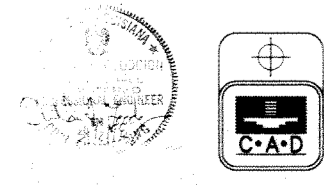
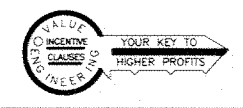
LEGEND

- PAVEMENT, SIDEWALK, AND CURB REMOVAL
- BRIDGE REMOVAL
- CANAL WALL REMOVAL

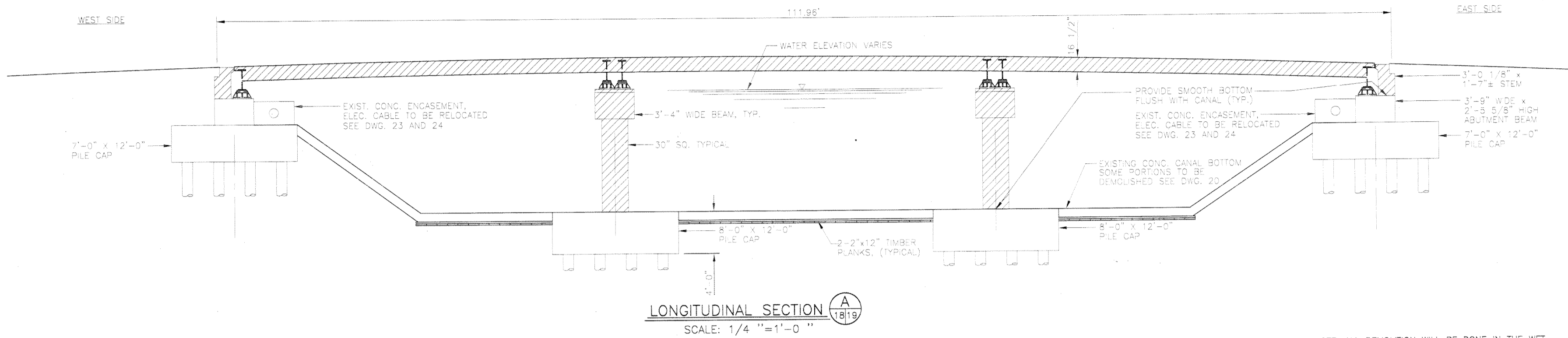
DEMOLITION NOTES

1. REMOVE EXISTING BRIDGE SUPERSTRUCTURE, INTERMEDIATE BENTS AND COLUMNS TO PILE CAPS AT BOTTOM OF CANAL.
2. REMOVE END ABUTMENT STRUCTURES TO THE EXTENT SHOWN ON DWG. 19.
3. SEE DRAWING NO. 20 FOR ADDITIONAL CANAL BOTTOM DEMOLITION.
4. CHIP OUT CONCRETE CANAL BOTTOM AS REQUIRED FOR NEW PILE INSTALLATION. SEE FOUNDATION PLAN DWG. 32
5. REMOVE EXISTING FLOODWALLS AS FOLLOWS:
 - N.E. STA. 14+21.00 TO STA. 14+51.28 (C.O.E. B/L)
 - N.W. STA. 13+86.00 TO STA. 14+24.80 (C.O.E. B/L)
 - S.E. STA. 12+81.64 TO STA. 13+25.00 (C.O.E. B/L)
 - S.W. STA. 12+55.16 TO STA. 12+92.00 (C.O.E. B/L)
6. CONTRACTOR SHALL REMOVE ALL CONCRETE AND SHALL CUT OFF STEEL SHEET PILING 2" BELOW EXISTING GRADE FOR EXISTING FLOODWALLS TO BE REMOVED, EXCEPT FOR EXISTING FLOODWALLS SHEET PILING TO BE PULLED.
7. EXISTING FLOODWALL SHEET PILING TO BE PULLED IS SHOWN ON FOUNDATION PLAN DWG. 32.
8. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION ARE TO REMAIN. PROTECT TREES INCLUDING ROOT SYSTEM. ALL WORK AROUND TREES MUST CONFORM TO THE REQUIREMENTS OF THE PARKWAYS AND PARK COMMISSION.
9. CONCRETE SAW-CUTTING SHALL BE FULL DEPTH

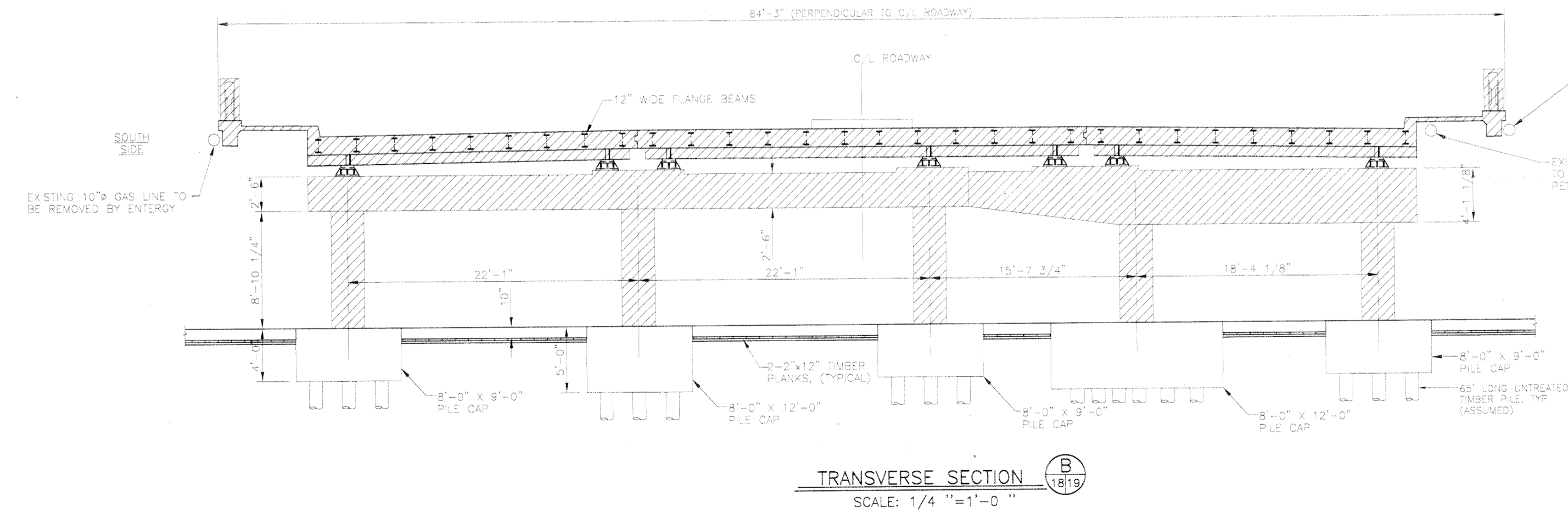
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
DEMOLITION PLAN			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	SOLICITATION NO. DACW29-98-B-0060		FILE NO. H-4-44733
CHECKED BY:	DESIGN ENGINEER		DWG. 18 OF 67



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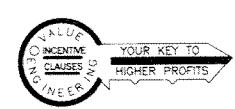
NOTE: ALL DEMOLITION WILL BE DONE IN THE WET. CONTRACTOR SHALL PROVIDE DIVERS AS REQUIRED TO ACCOMPLISH UNDERWATER DEMOLITION. CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF ALL DEBRIS FROM CANAL BOTTOM RESULTING FROM THE BRIDGE DEMOLITION.

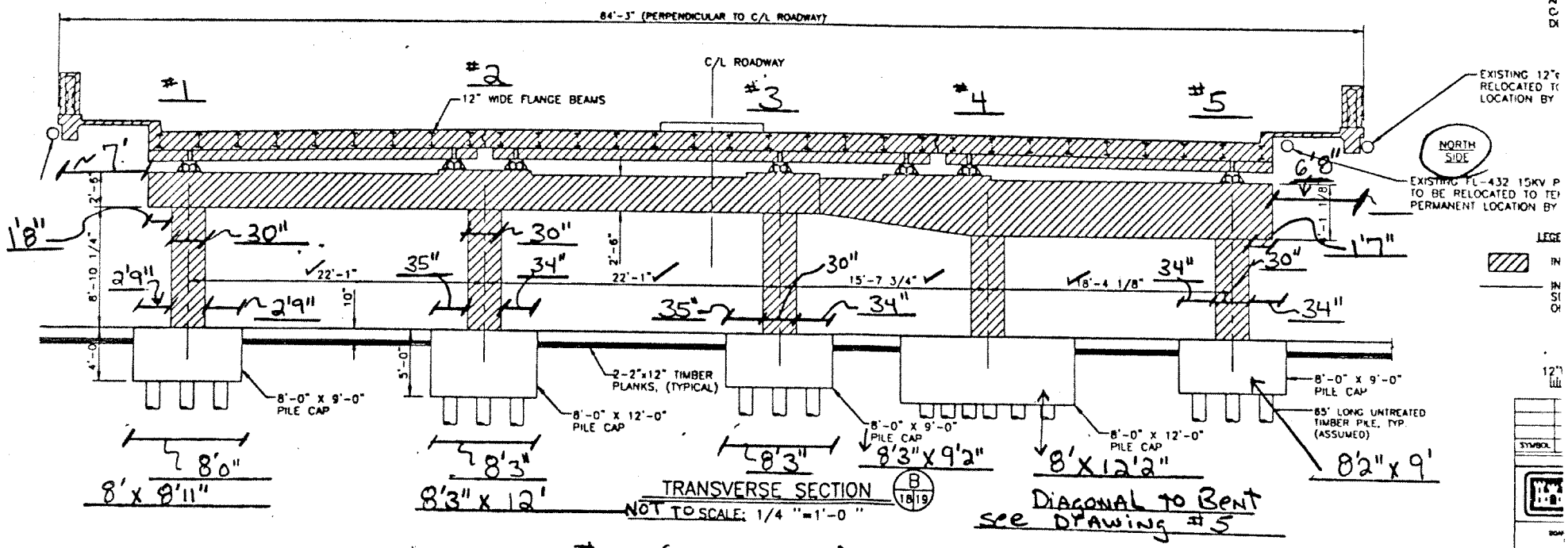
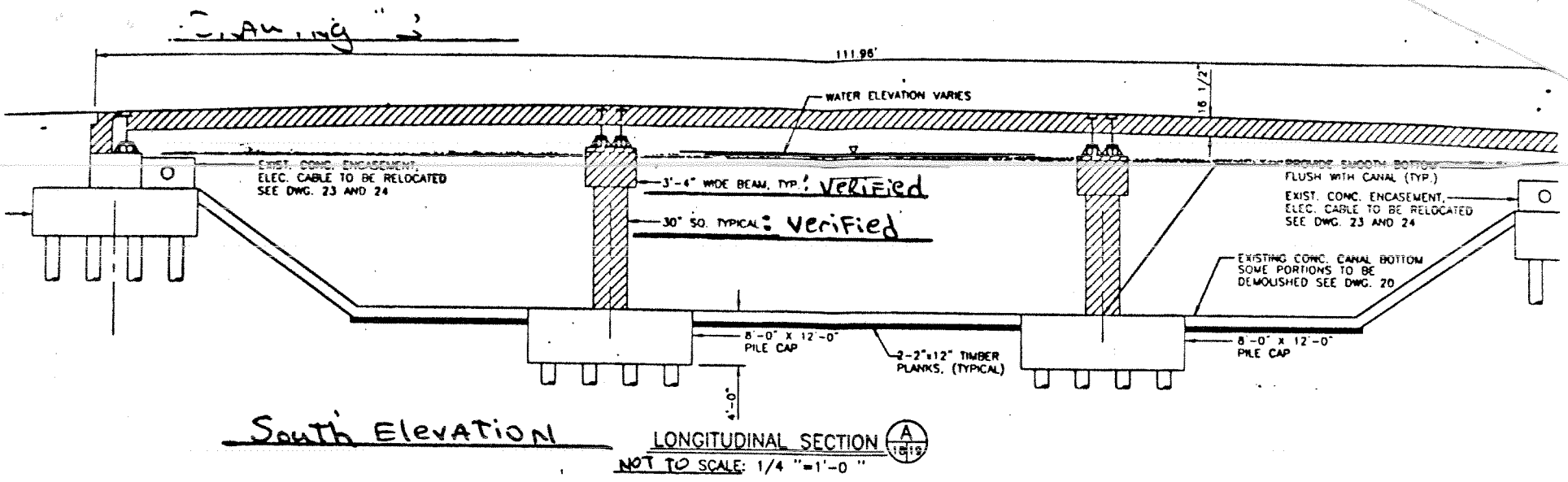


EXISTING 12\"/>

LEGEND
 [Hatched pattern] INDICATES STRUCTURE TO BE REMOVED
 [Solid line] INDICATES EXISTING CONSTRUCTION TO REMAIN SEE CANAL PAVING PLAN DWG. 20 FOR EXTENT OF CANAL BOTTOM DEMOLITION.
 SCALE: 1/4\"/>

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
EXISTING STRUCTURE DEMOLITION			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODGON	SOLICITATION NO. DACW29-98-B-0060	DWG. 19 OF 67





East Elevation of Bent #1 (West Bent)

NOTE ① DISTANCES BETWEEN PILE ARE CORRECT AS PER PLANS

② SIZE OF FOOTINGS ARE WITHIN 2" OF PLAN SPECIFICATIONS

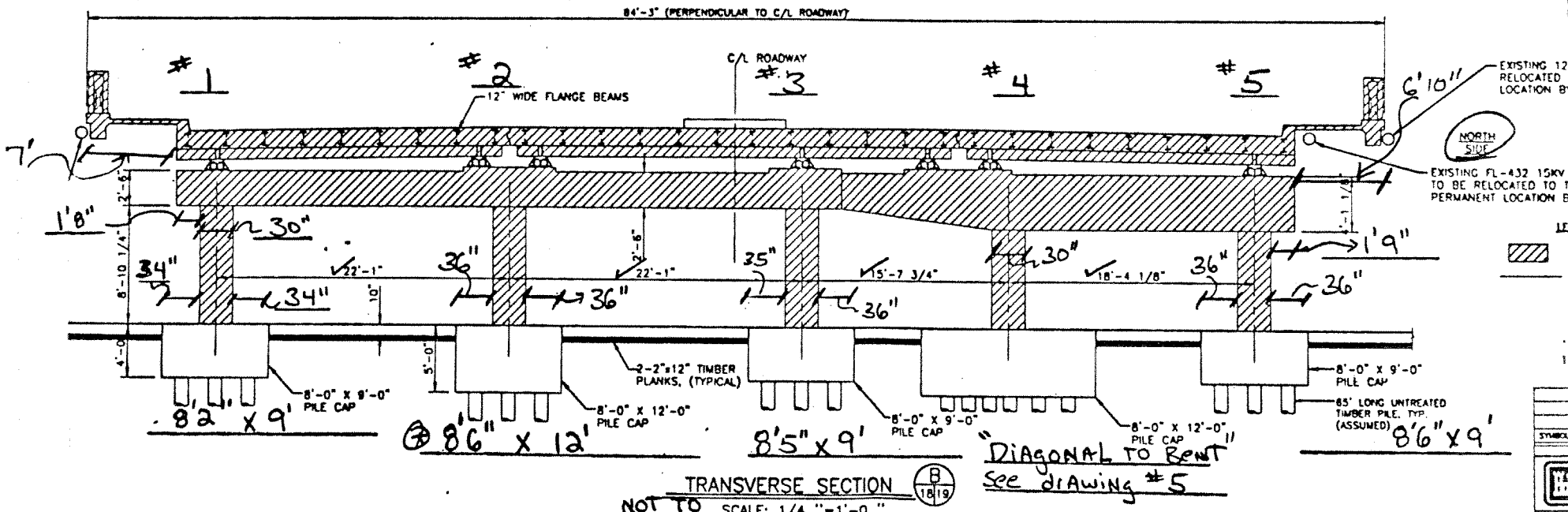
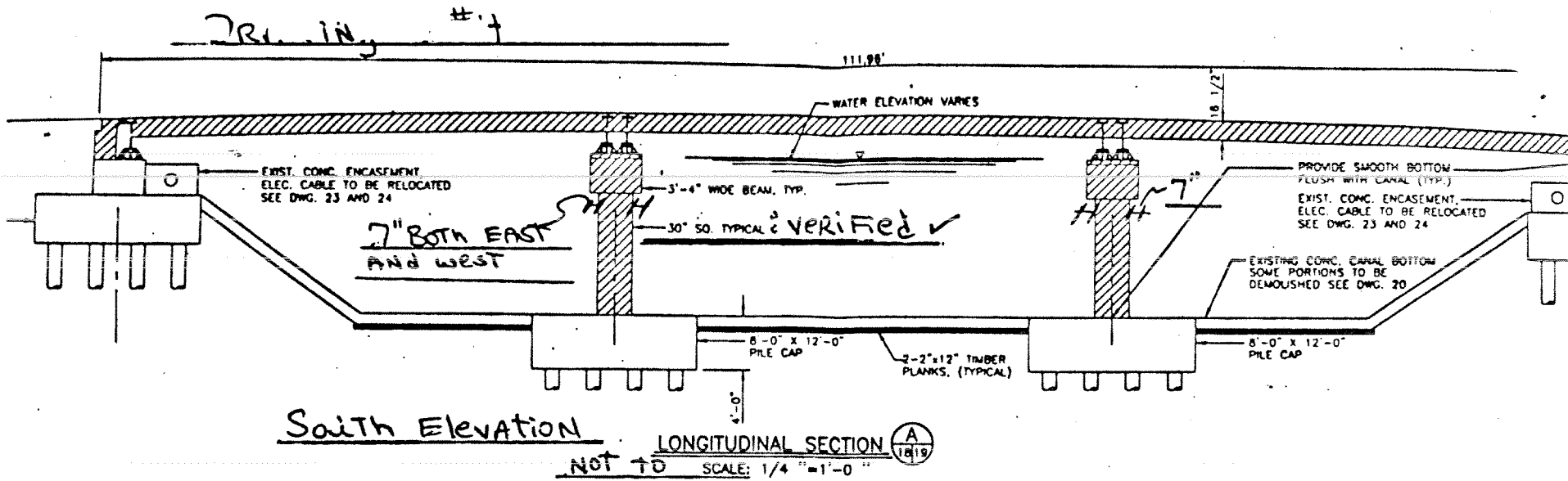
NOTE: A
C
R
D
N
C
D

EXISTING 12" RELOCATED TO LOCATION BY

EXISTING FL-432 15KV P TO BE RELOCATED TO TEMP PERMANENT LOCATION BY

SYMBOL	DESCRIPTION
[Hatched Box]	IN
[Solid Box]	IN
[Dotted Box]	SI
[Empty Box]	OF

EXIS



NOTES: ① Distance Between Pile ARE CORRECT AS PLANS
 ② Width OF FOOTINGS ARE WITHIN 6" OF PLANS

NOTE: A
C
R
D
A
C
C

EXISTING 12" RELOCATED TO PERMANENT LOCATION BY

NORTH SIDE

EXISTING FL-432 15KV TO BE RELOCATED TO PERMANENT LOCATION BY

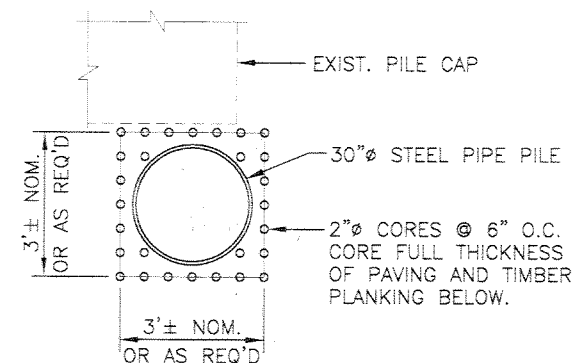
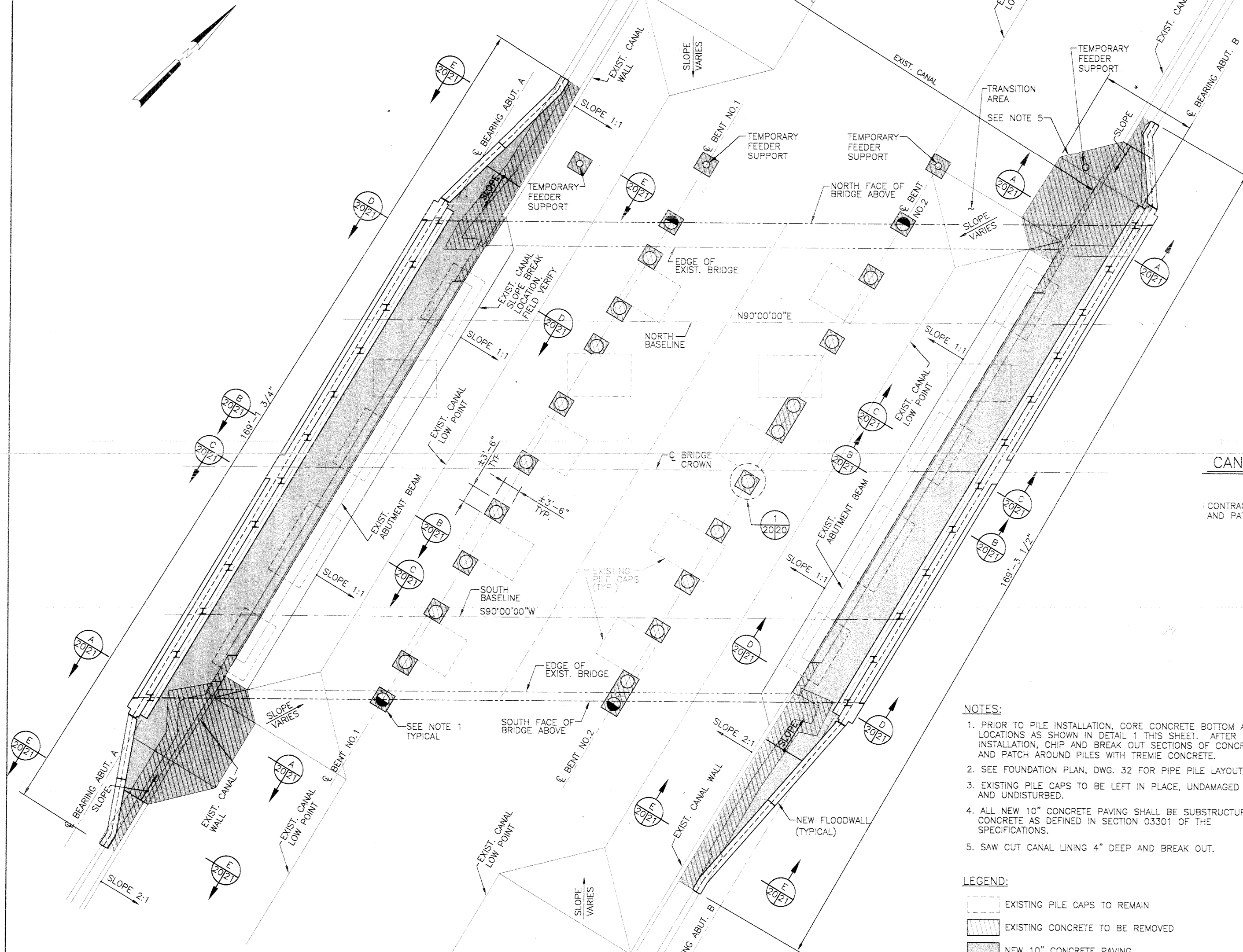
LEG

85' LONG UNTREATED TIMBER PILE, TYP. (ASSUMED)

EXIST

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of Your Contract**

* FIELD VERIFY ACTUAL WIDTH OF CANAL LINING TO BE REMOVED. CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS BETWEEN SLOPE CHANGES.



CANAL LINER DEMOLITION DETAIL

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

CONTRACTOR MAY SUBMIT ALTERNATIVE CONCRETE BOTTOM DEMOLITION AND PATCHING METHOD FOR REVIEW BY THE CONTRACTING OFFICER.

CANAL PAVING PLAN

SCALE: 1/8" = 1'-0"

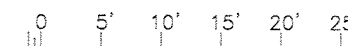
NOTES:

1. PRIOR TO PILE INSTALLATION, CORE CONCRETE BOTTOM AT PILE LOCATIONS AS SHOWN IN DETAIL 1 THIS SHEET. AFTER PILE INSTALLATION, CHIP AND BREAK OUT SECTIONS OF CONCRETE BOTTOM AND PATCH AROUND PILES WITH TREMIE CONCRETE.
2. SEE FOUNDATION PLAN, DWG. 32 FOR PIPE PILE LAYOUT.
3. EXISTING PILE CAPS TO BE LEFT IN PLACE, UNDAMAGED AND UNDISTURBED.
4. ALL NEW 10" CONCRETE PAVING SHALL BE SUBSTRUCTURE CONCRETE AS DEFINED IN SECTION 03301 OF THE SPECIFICATIONS.
5. SAW CUT CANAL LINING 4" DEEP AND BREAK OUT.

LEGEND:

- EXISTING PILE CAPS TO REMAIN
- EXISTING CONCRETE TO BE REMOVED
- NEW 10" CONCRETE PAVING
- 30"Ø 12V ON 1H BATTERED STEEL PIPE PILES (OPEN END) SHADED AREA INDICATES DIRECTION OF BATTER
- 30"Ø STEEL PIPE PILES

SCALE: 1/8" = 1'-0"



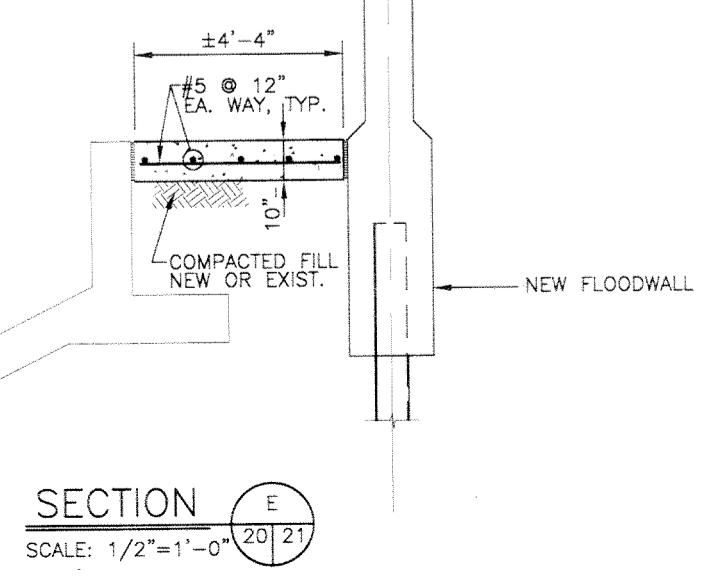
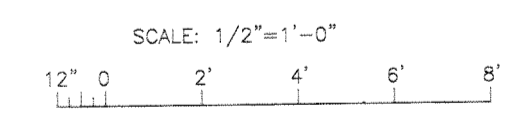
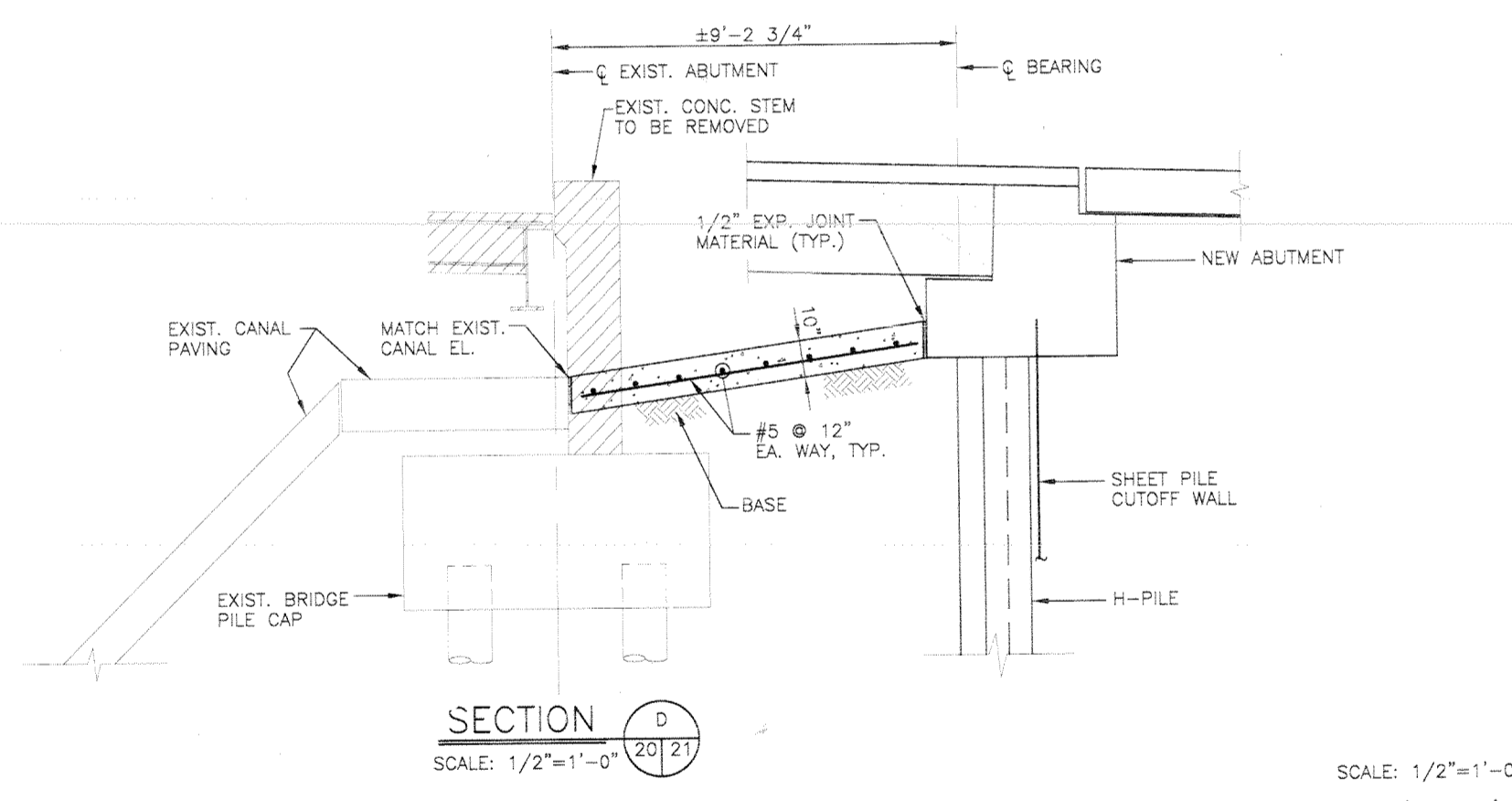
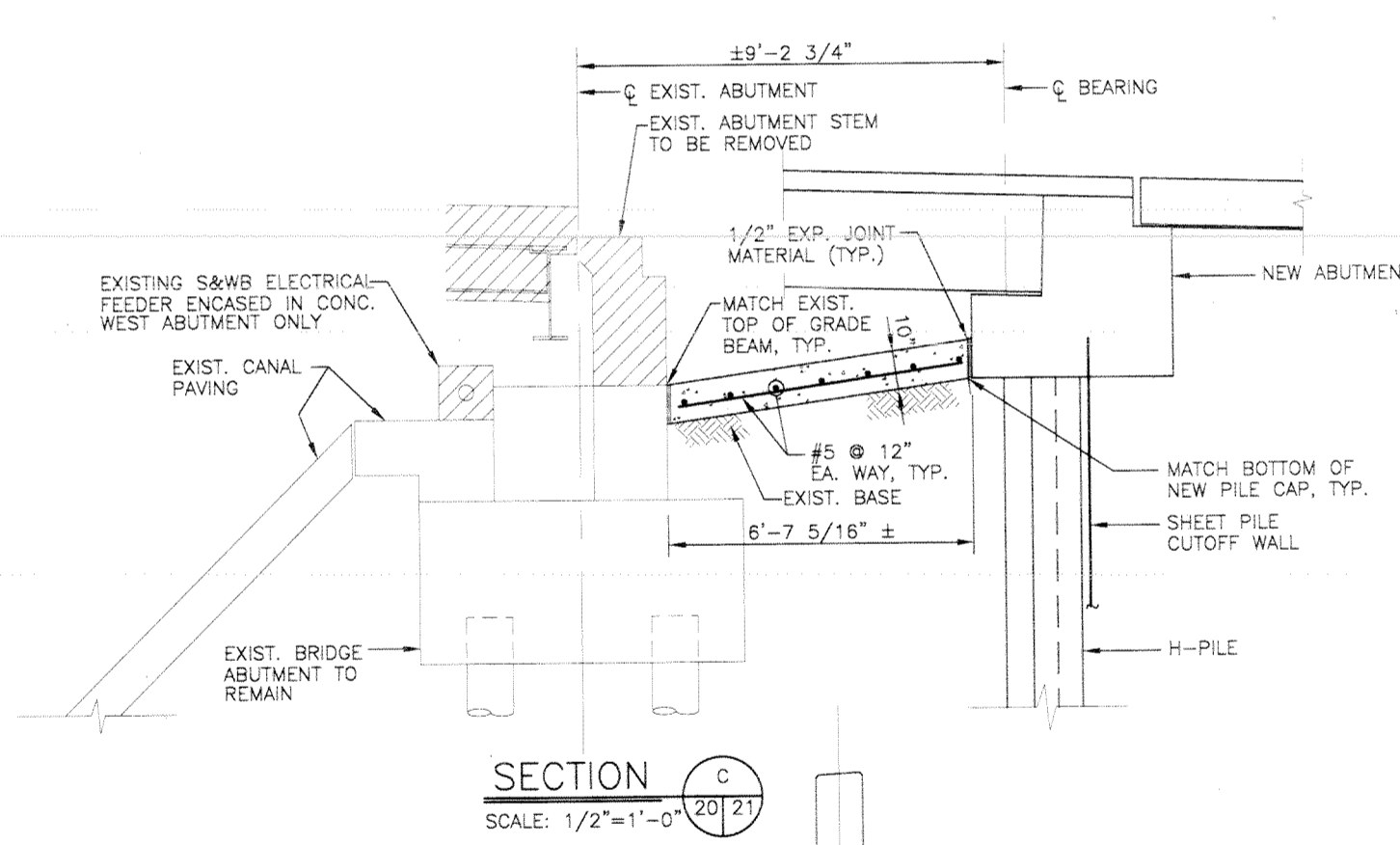
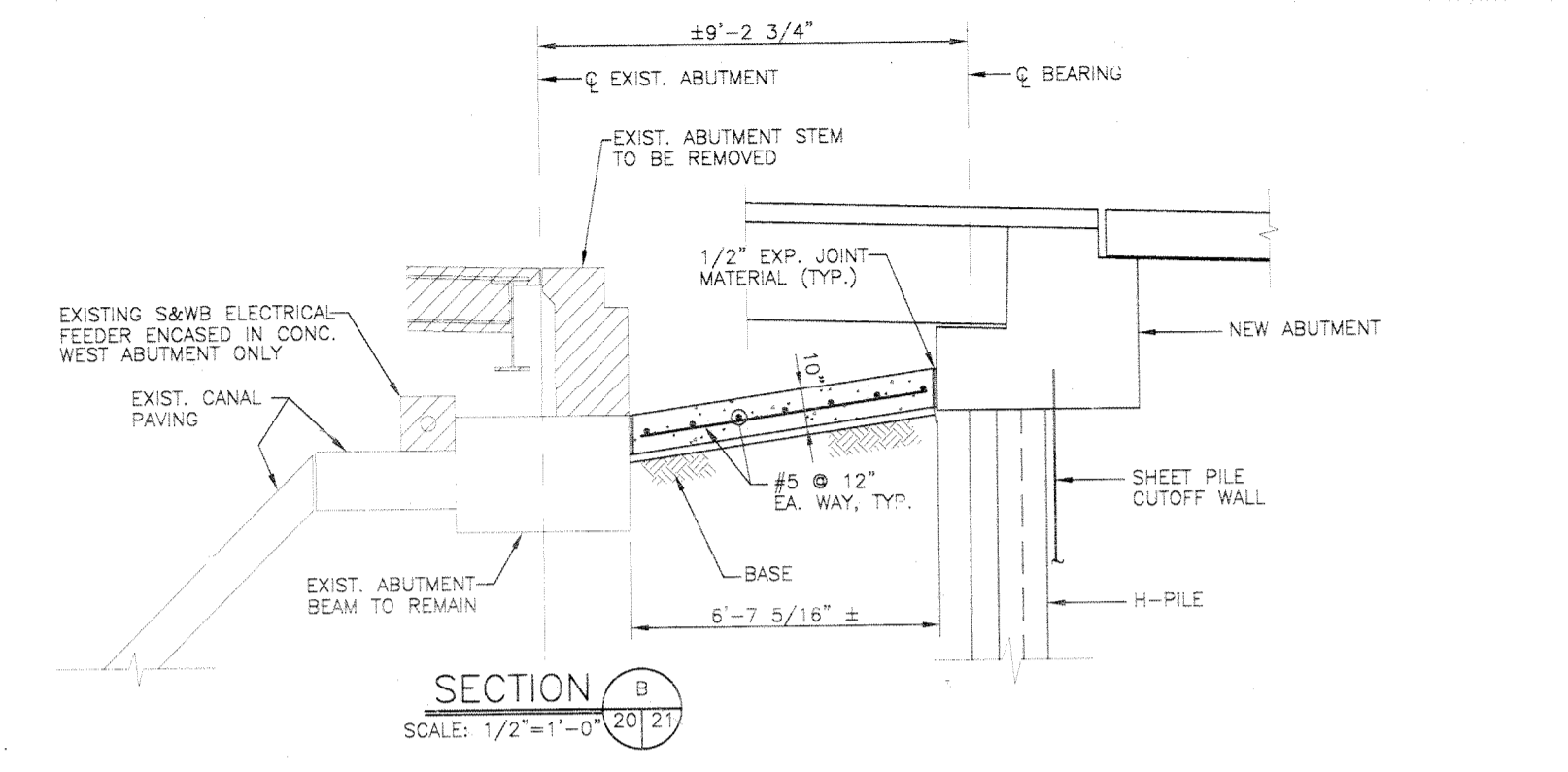
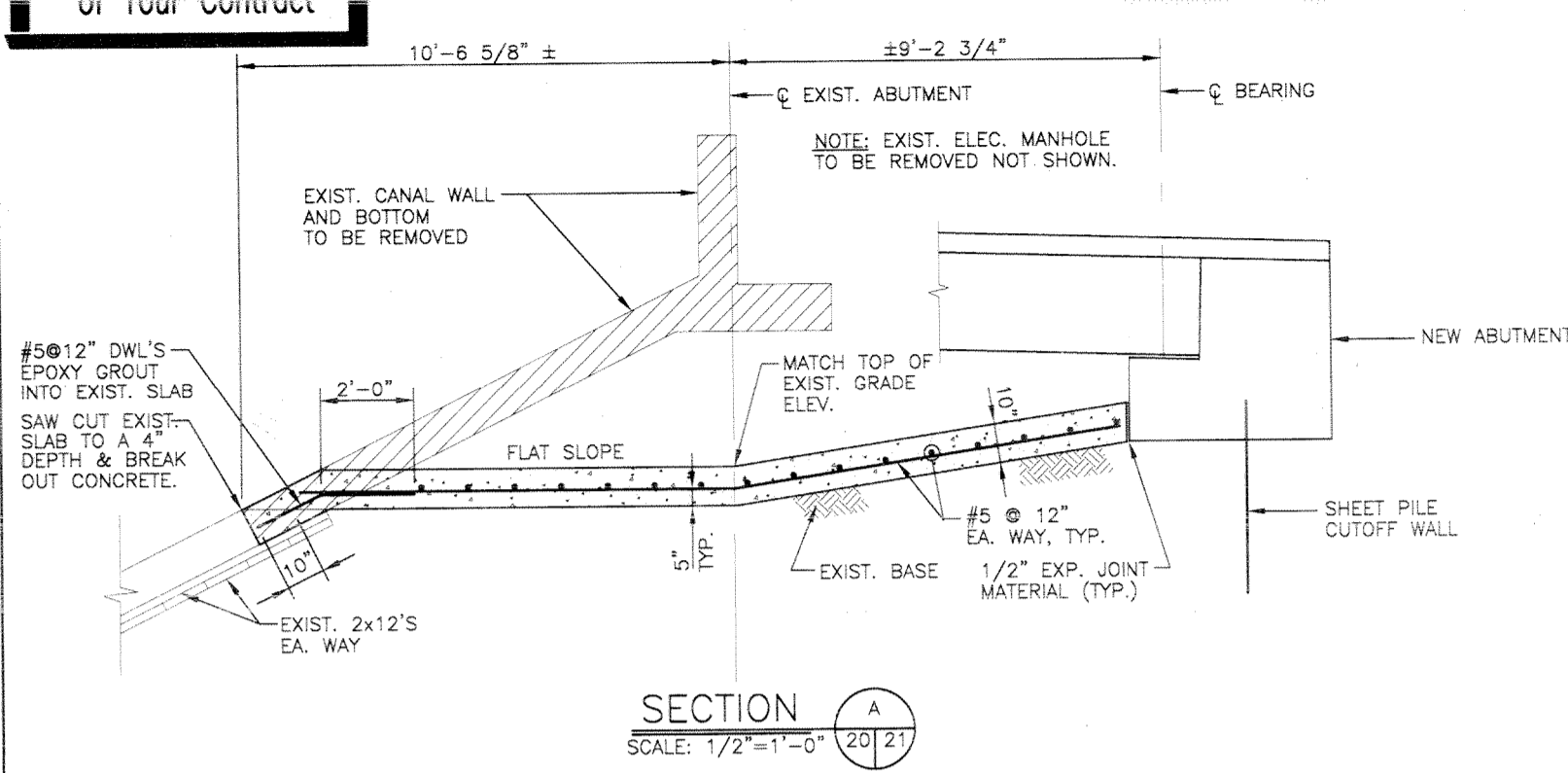
SCALE: 1/2" = 1'-0"



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
CANAL PAVING PLAN			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 96	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 44732BLK.DWG		FILE NO. H-4-44733
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 20 OF 67



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LEGEND

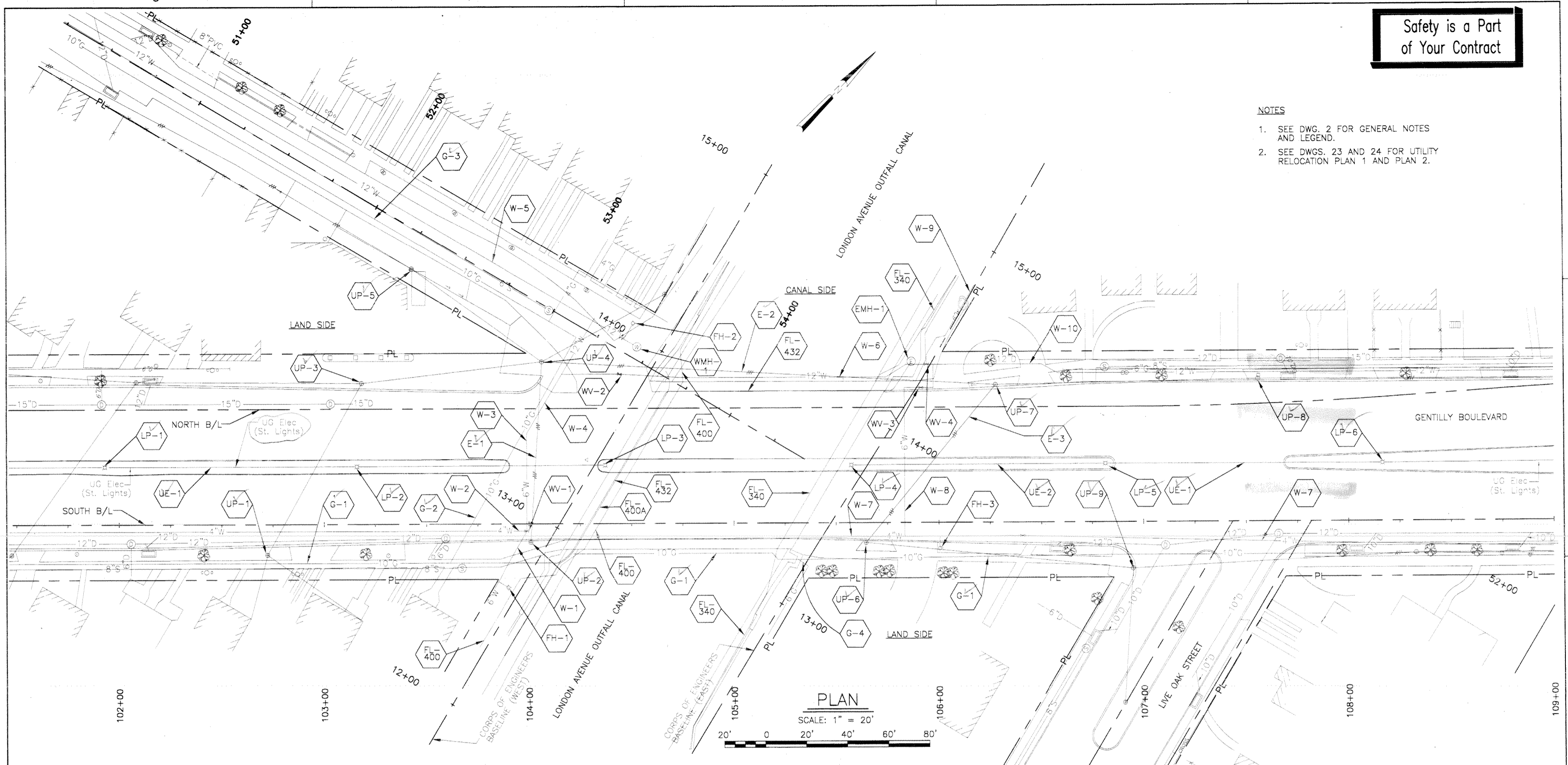
- EXISTING CONC. TO REMAIN
- PROPOSED CONCRETE
- ▨ EXISTING CONST. TO BE REMOVED

NOTE:
ALL CANAL SLABS SHALL BE SUBSTRUCTURE CONCRETE.

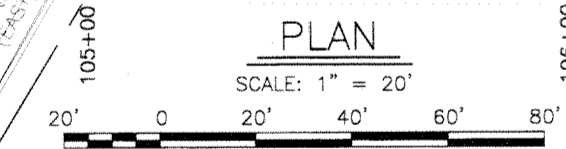
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
CANAL PAVING SECTIONS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 24	PLOT DATE: 2/20/98
DRAWN BY: RKP	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 21 OF 67	



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- NOTES
- SEE DWG. 2 FOR GENERAL NOTES AND LEGEND.
 - SEE DWGS. 23 AND 24 FOR UTILITY RELOCATION PLAN 1 AND PLAN 2.



EXISTING FACILITIES

ITEM	DESCRIPTION	STATION	OWNER	DISPOSITION
FL-340	PRIMARY 25 CYCLE POWER CABLE	12+85 ① - 14+70 ①	S&WB	RBGC
FL-400	PRIMARY 25 CYCLE POWER CABLE	12+36 ② - 14+10 ②	S&WB	RBGC
FL-400A	ABANDONED INACTIVE POWER CABLE	12+80 ② - 13+97 ②	S&WB	RMBGC
FL-432	PRIMARY 25 CYCLE POWER CABLE	12+50 ② - 14+56 ①	S&WB	RBGC
G-1	10" GAS MAIN	103+00 ③ - 106+50 ③	ENERGY	RBE
G-2	10" GAS MAIN	103+61 ④ - 104+23 ④	ENERGY	RBE
G-3	10" GAS MAIN	52+50 ⑤ - 53+16 ⑤	ENERGY	RBE
G-4	6" GAS MAIN	105+31 ④ - 105+36 ④	ENERGY	RBE
W-1	6" WATER MAIN	103+85 ④ - 103+99 ④	S&WB	RMBGC
W-2	4" WATER MAIN	102+21 ④ - 103+99 ④	S&WB	RMBGC
W-3	6" WATER MAIN	103+99 ④	S&WB	RMBGC
W-4	12" WATER MAIN	103+99 ③ - 104+31 ③	S&WB	RMBGC
W-5	12" WATER MAIN	52+50 ⑤ - 53+43 ⑤	S&WB	NA
W-6	12" WATER MAIN	104+16 ③ - 106+00 ③	S&WB	RMBGC
W-7	4" WATER MAIN	105+45 ④ - 108+70 ④	S&WB	RMBGC
W-8	6" WATER MAIN	105+83 ④	S&WB	RMBGC
W-9	6" WATER MAIN	14+37 ① - 14+60 ①	S&WB	NA
W-10	12" WATER MAIN	105+94 ③ - 108+77 ③	S&WB	NA
WV-1	4" WATER VALVE	103+99 ④	S&WB	RMBGC
WV-2	12" WATER VALVE	104+44 ③	S&WB	RMBGC
WV-3	12" WATER VALVE	105+91 ③	S&WB	RMBGC
WV-4	12" WATER VALVE	105+94 ③	S&WB	RMBGC

EXISTING FACILITIES

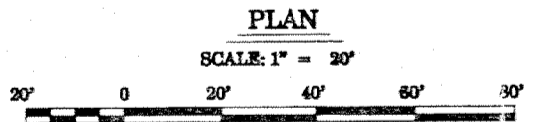
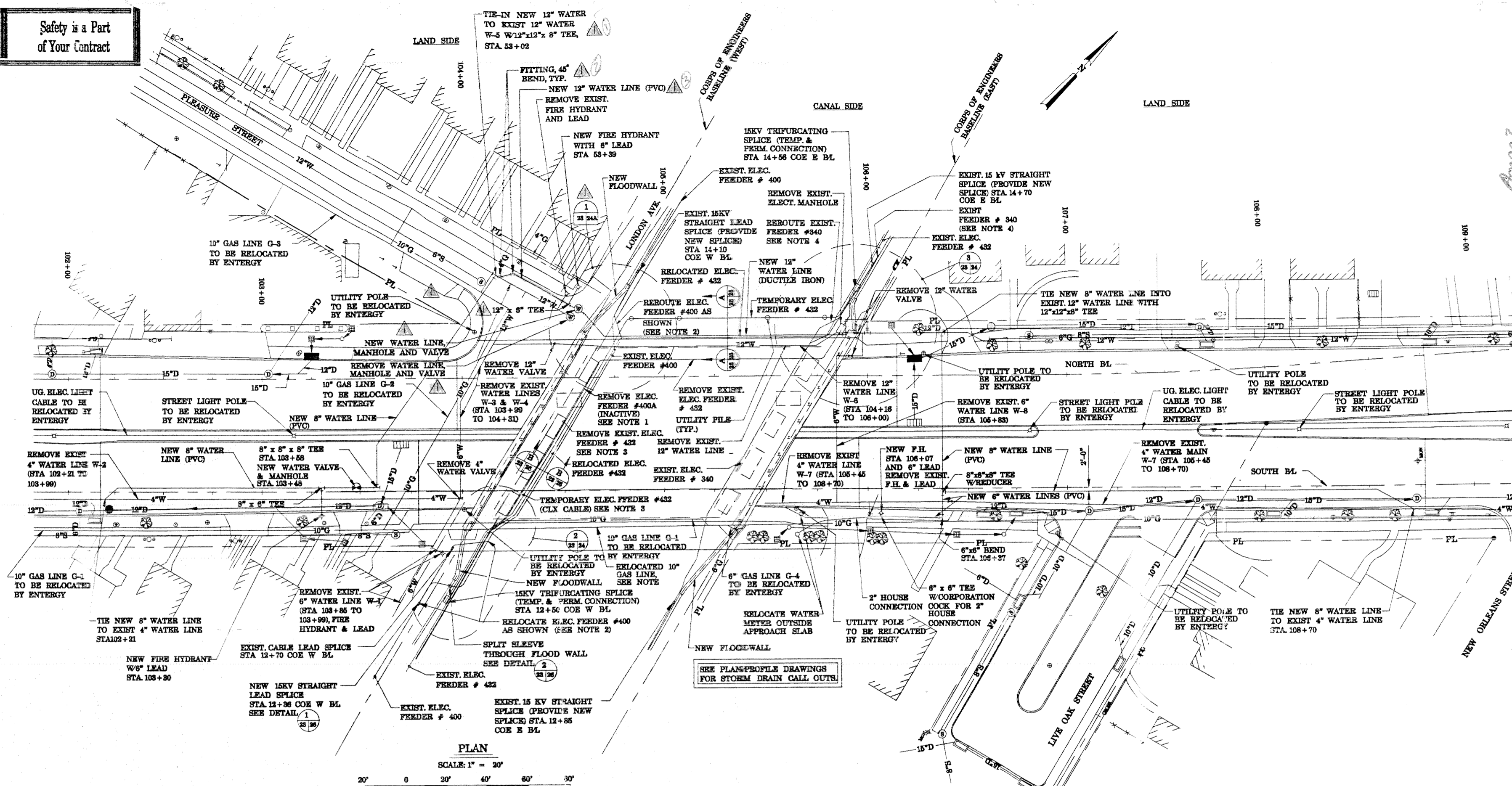
ITEM	DESCRIPTION	STATION	OWNER	DISPOSITION
WMH-1	WATER MANHOLE 1	53+44 ⑤	S&WB	ABGC
LP-1	STREET LIGHT POLE	101+93 ④	ENERGY	NA
LP-2	STREET LIGHT POLE	103+16 ④	ENERGY	RBE
LP-3	STREET LIGHT POLE	104+37 ④	ENERGY	RBE
LP-4	STREET LIGHT POLE	105+58 ④	ENERGY	RBE
LP-5	STREET LIGHT POLE	106+81 ④	ENERGY	RBE
LP-6	STREET LIGHT POLE	108+17 ④	ENERGY	RBE
FH-1	FIRE HYDRANT	103+90 ④	S&WB	RMBGC
FH-2	FIRE HYDRANT	53+37 ⑤	S&WB	RMBGC
FH-3	FIRE HYDRANT	106+01 ④	S&WB	RMBGC
EMH-1	ELECTRIC MANHOLE	105+87 ③	S&WB	RMBGC
UP-1	UTILITY POLE	102+72 ④	ENERGY	NA
UP-2	UTILITY POLE	104+01 ④	ENERGY	RBE
UP-3	UTILITY POLE	103+18 ③	ENERGY	NA
UP-4	UTILITY POLE	104+06 ③	ENERGY	RBE
UP-5	UTILITY POLE	52+30 ⑤	ENERGY	NA
UP-6	UTILITY POLE	105+65 ④	ENERGY	RBE
UP-7	UTILITY POLE	106+28 ③	ENERGY	RBE
UP-8	UTILITY POLE	107+56 ③	ENERGY	RBE
UP-9	UTILITY POLE	107+95 ④	ENERGY	RBE
UE-1	UNDERGROUND ELECT LIGHT CABLE	102+18 ④ - 104+37 ④	ENERGY	RBE
UE-2	UNDERGROUND ELECT LIGHT CABLE	105+58 ④ - 108+77 ④	ENERGY	RBE
E-1	OVERHEAD ELECTRIC POWER CABLE	104+04 ③	ENERGY	RCRCE
E-2	OVERHEAD ELECTRIC POWER CABLE	104+04 ③ - 106+28 ③	ENERGY	RCRCE
E-3	OVERHEAD ELECTRIC POWER CABLE	105+64 ④ - 106+28 ③	ENERGY	RCRCE

LEGEND

- NA - NOT AFFECTED - DO NOT DISTURB
 - RBGC - RELOCATED BY GOVERNMENT CONTRACTOR DURING CONSTRUCTION
 - RMBGC - REMOVED BY GOVERNMENT CONTRACTOR DURING CONSTRUCTION
 - RBE - RELOCATED BY ENTERGY DURING CONSTRUCTION
 - ABGC - ADJUSTED BY GOVERNMENT CONTRACTOR DURING CONSTRUCTION
 - RCRCE - RELOCATE LINE DURING CONSTRUCTION REINSTALL AFTER CONSTRUCTION BY ENTERGY
- ① - CORPS OF ENGINEERS EAST BASELINE
 ② - CORPS OF ENGINEERS WEST BASELINE
 ③ - GENTILLY BOULEVARD NORTH BASELINE
 ④ - GENTILLY BOULEVARD SOUTH BASELINE
 ⑤ - PLEASURE STREET BASELINE
 ⑥ - LIVE OAK STREET BASELINE

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
EXISTING UTILITIES PLAN			
DESIGNED BY: M.K.A.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: SJG	SOLICITATION NO. DACW29-98-B-0060	DWG. 22 OF 67	
SUBMITTED BY: A. GOODSON DESIGN ENGINEER			

Safety is a Part of Your Contract



ELECTRICAL NOTES

1. THE EXISTING INACTIVE FEEDER 400A BETWEEN STA. 12+80 AND STA. 13+97 COE W BL ENCASED IN REINFORCED CONCRETE SHALL BE REMOVED.
2. THE EXISTING FEEDER 400 BETWEEN STA. 12+36 AND STA. 14+10 COE W BL SHALL BE REROUTED AS SHOWN ON BOTH THE NORTH AND SOUTH SIDE OF THE GENTLY BRIDGE. THE EXISTING FEEDER 400 CONSISTS OF A 15 KV, OKOQUARD-ROSEAL, TYPE MV-90, 133% INSULATION LEVEL, 500MCM, 3COND, SHIELDED, LEAD COVERED CABLE INSTALLED IN A FIVE (5) INCH GALV. STEEL CONDUIT. THE EXISTING 500 MCM CABLE SHALL BE REMOVED AND REPLACED. THE EXISTING FIVE (5) INCH GALV. STEEL CONDUIT UNDER THE BRIDGE SHALL BE EXTENDED ON BOTH THE NORTH AND SOUTH SIDE OF THE BRIDGE AS SHOWN. TWO (2) NEW 15 KV STRAIGHT LEAD SPLICES SHALL BE REQUIRED AT STA. 12+36 AND STA. 14+10 COE W BL.
3. THE EXISTING FEEDER 432 BETWEEN STA. 12+50 COE W BL AND STA. 14+56 COE E BL SHALL BE TEMPORARILY REROUTED. THE TEMPORARY FEEDER SHALL CONSIST OF A 15 KV, TYPE MV-105, OKOQUARD, 133% INSULATION LEVEL, #10 AWG, 3COND, CLX CABLE WITH OKOSEAL JACKET. THE FEEDER SHALL BE SECURED ALONG THE CONCRETE CANAL SIDE SLOPE WALL AND ROUTED ACROSS THE CANAL ON THE NORTH SIDE OF BRIDGE (PROVIDE THE NECESSARY BENTS TO SUPPORT CABLE ACROSS CANAL) TO NEW ELECTRICAL BOX AT STA. 14+56 COE E BL. TWO (2) NEW 15 KV SPLICES SHALL BE REQUIRED AT STA. 12+50 AND STA. 14+56. AFTER THE NEW BRIDGE IS COMPLETED, THE NEW PERMANENT FEEDER SHALL BE INSTALLED AS SHOWN. THE NEW FEEDER SHALL CONSIST OF A 15 KV, TYPE MV-105 OKOQUARD-OKOSEAL, 133% INSULATION LEVEL, #10 AWG, SHIELDED, 3-COND. CABLES IN A THREE (3) INCH GALV. S. EEL. CO. DUIT. TWO (2) NEW 15 KV LEAD TRIFURCATING SPLICES SHALL BE REQUIRED AT STA. 12+50 AND STA. 14+56.

4. THE EXISTING FEEDER 340 BETWEEN STA. 12+85 AND STA. 14+70 COE E BL SHALL BE REROUTED AS SHOWN ON THE NORTH SIDE OF THE GENTLY BRIDGE. THE EXISTING FEEDER 340 CONSISTS OF A 15 KV, TYPE MV-90 OKOQUARD-OKOSEAL, 133% INSULATION LEVEL, 500 MCM 3COND, SHIELDED, LEAD COVERED PVC JACKET CABLE INSTALLED IN A FIVE (5) INCH GALV. STEEL CONDUIT. THE EXISTING 500 MCM CABLE SHALL BE REMOVED AND REPLACED. THE EXISTING FIVE (5) INCH CONDUIT UNDER THE BRIDGE SHALL BE EXTENDED ON THE NORTH SIDE OF THE BRIDGE AS SHOWN. TWO (2) NEW 15 KV STRAIGHT LEAD SPLICES SHALL BE REQUIRED AT STA. 12+85 AND STA. 14+70.
5. CONTRACTOR WILL BE GRANTED AN OUTAGE OF SEVENTY-TWO (72) HOURS PER YEAR OF FEEDER 340 AND 400. THIS OUTAGE SHALL INCLUDE REMOVAL OF EXISTING CABLE, ADJUSTMENT OF CONDUIT, INSTALLATION OF NEW CABLE, D.C. HI-PO TEST OF NEW CABLE, SPLICING AND OPERATIONAL TEST OF NEW CABLE. CONTRACTOR WILL BE GRANTED AN OUTAGE OF A NORMAL WORK DAY TO TIE-IN THE TEMPORARY AND RELOCATED ELECTRIC FEEDER 432. CONTRACTOR SHALL BE ALLOWED TO TIE-IN ONLY ONE FEEDER AT A TIME.
6. CONTRACTOR SHALL VERIFY REQUIRED CABLE LENGTHS IN FIELD PRIOR TO CONSTRUCTION.

GAS LINE NOTE

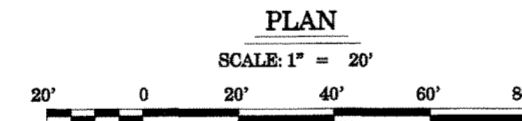
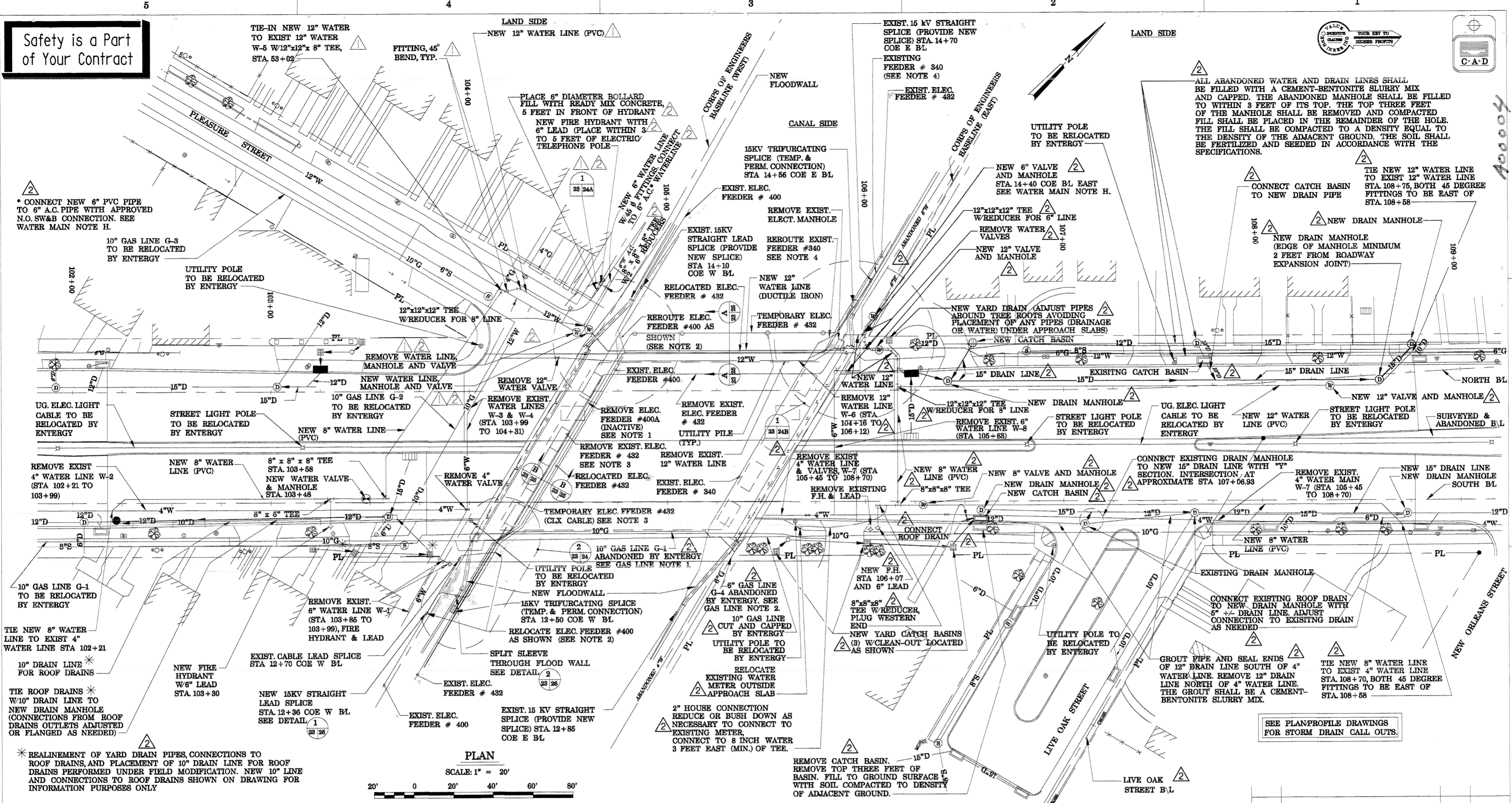
1. 10" GAS LINE SHALL BE INSTALLED THRU OPENINGS IN FLOODWALLS AND THEN ATTACHED TO BARRIER WALL BY ENTERGY. GAS LINE SHALL NOT BE ATTACHED TO PRECAST GRIDDERS UNDER ANY CONDITION.

WATER MAIN NOTES

- A. ALL NEW WATER MAIN PIPES (6" AND 8") SHALL HAVE MINIMUM 3'-6" COVER BETWEEN NEW GUTTER LINE AND TOP OF PIPE.
- B. ALL NEW WATER MAIN PIPES (12" TO 24") SHALL HAVE MINIMUM 4'-0" COVER BETWEEN NEW GUTTER LINE AND TOP OF PIPE.
- C. ALL EXISTING VALVES THAT ARE TO REMAIN AND ARE NOT ENCLOSED IN A MANHOLE SHALL HAVE A NEW MANHOLE CONSTRUCTED AROUND THEM.
- D. ALL EXISTING VALVES THAT ARE NOTED TO BE REMOVED SHALL HAVE VALVES, MANHOLE CASTINGS, AND MANHOLE COVERS REMOVED AND RETURNED TO S&WB CENTRAL YARD (2900 PEOPLES AVE.). ABANDONED WATER MAIN SHALL BE PLUGGED AT THE MANHOLE AND THE ABANDONED MANHOLE FILLED WITH SAND.
- E. ALL EXISTING FIRE HYDRANTS THAT ARE NOTED TO BE REMOVED SHALL BE RETURNED TO S&WB CENTRAL YARD (2900 PEOPLES AVE.).
- F. THE CONTRACTOR SHALL ADJUST THE ELEVATION OF NEW WATER MAINS AS REQUIRED TO AVOID CONFLICTS WITH SEWER HOUSE CONNECTIONS AND OTHER UTILITIES.
- G. ALL WATER SERVICE LINES ALONG WATER MAINS WHICH ARE REPLACED SHALL BE CONNECTED TO THE NEW MAIN.

SYMBOL	DESCRIPTION	DATE	APPROVED
	MODIFIED WATER LINE & VALVE LOC.	5/19/99	FSY
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LAYERS CONSIDERED ORLEANS LAYERS DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3000 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONCHARTRAIN, LA AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
UTILITIES RELOCATION PLAN - 1			
DESIGNED BY: C.M.R.	DATE: FEB. 1998	PLOT SCALE: 20'	PLOT DATE: 2/20/98
DRAWN BY: T.P.B.	CHECKED BY: S.J.G.	CADD FILE: 4473.DWG	FILE NO: H-4-44733
PREPARED BY: A. COOKSON DESIGN ENGINEER	SOLICITATION NO. DAUCW29-98-B-0080	LWC 2C OF 87	

Safety is a Part of Your Contract



ELECTRICAL NOTES

1. THE EXISTING INACTIVE FEEDER 400A BETWEEN STA. 12+80 AND STA. 13+97 COE W BL ENCASED IN REINFORCED CONCRETE SHALL BE REMOVED.
2. THE EXISTING FEEDER 400 BETWEEN STA. 12+36 AND STA. 14+10 COE W BL SHALL BE REROUTED AS SHOWN ON BOTH THE NORTH AND SOUTH SIDE OF THE GENTILLY BRIDGE. THE EXISTING FEEDER 400 CONSISTS OF A 15 KV, OKOGUARD-OKOSEAL, TYPE MV-90, 133% INSULATION LEVEL, 500MCM, 3COND., SHIELDED, LEAD COVERED CABLE INSTALLED IN A FIVE (5) INCH GALV. STEEL CONDUIT. THE EXISTING 500 MCM CABLE SHALL BE REMOVED AND REPLACED. THE EXISTING FIVE (5) INCH GALV. STEEL CONDUIT UNDER THE BRIDGE SHALL BE EXTENDED ON BOTH THE NORTH AND SOUTH SIDE OF THE BRIDGE AS SHOWN. TWO (2) NEW 15 KV STRAIGHT LEAD SPLICES SHALL BE REQUIRED AT STA. 12+36 AND STA. 14+10 COE W BL.
3. THE EXISTING FEEDER 432 BETWEEN STA. 12+50 COE W BL AND STA. 14+56 COE E BL SHALL BE TEMPORARILY REROUTED. THE TEMPORARY FEEDER SHALL CONSIST OF A 15 KV, TYPE MV-105, OKOGUARD, 133% INSULATION LEVEL, #10 AWG, 3COND. CLX CABLE WITH OKOSEAL JACKET. THE FEEDER SHALL BE SECURED ALONG THE CONCRETE CANAL SIDE SLOPE WALL AND ROUTED ACROSS THE CANAL ON THE NORTH SIDE OF BRIDGE (PROVIDE THE NECESSARY BENTS TO SUPPORT CABLE ACROSS CANAL) TO NEW ELECTRICAL BOX AT STA. 14+56 COE E BL. TWO (2) NEW 15 KV SPLICES SHALL BE REQUIRED AT STA. 12+50 AND STA. 14+56. AFTER THE NEW BRIDGE IS COMPLETED, THE NEW PERMANENT FEEDER SHALL BE INSTALLED AS SHOWN. THE NEW FEEDER SHALL CONSIST OF A 15 KV, TYPE MV-105 OKOGUARD-OKOSEAL, 133% INSULATION LEVEL, #10 AWG, SHIELDED, 3-COND. CABLES IN A THREE (3) INCH GALV. STEEL CONDUIT. TWO (2) NEW 15 KV LEAD TRIFURCATING SPLICES SHALL BE REQUIRED AT STA. 12+50 AND STA. 14+56.

4. THE EXISTING FEEDER 340 BETWEEN *STA. 12+85 AND *STA. 14+70 COE E BL SHALL BE REROUTED AS SHOWN ON THE NORTH SIDE OF THE GENTILLY BRIDGE. THE EXISTING FEEDER 340 CONSISTS OF A 15 KV, TYPE MV-90 OKOGUARD-OKOSEAL, 133% INSULATION LEVEL, 500 MCM 3COND., SHIELDED, LEAD COVERED PVC JACKET CABLE INSTALLED IN A FIVE (5) INCH GALV. STEEL CONDUIT. THE EXISTING 500 MCM CABLE SHALL BE REMOVED AND REPLACED. THE EXISTING FIVE (5) INCH CONDUIT UNDER THE BRIDGE SHALL BE EXTENDED ON THE NORTH SIDE OF THE BRIDGE AS SHOWN. TWO (2) NEW 15 KV STRAIGHT LEAD SPLICES SHALL BE REQUIRED AT STA. 12+85 AND STA. 14+70.
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6. CONTRACTOR SHALL VERIFY REQUIRED CABLE LENGTHS IN FIELD PRIOR TO CONSTRUCTION.

GAS LINE NOTE

1. 10\"/>
2. 6\"/>

WATER MAIN NOTES

- A. ALL NEW WATER MAIN PIPES (6\"/>
- B. ALL NEW WATER MAIN PIPES (12\"/>
- C. ALL EXISTING VALVES THAT ARE TO REMAIN AND ARE NOT ENCLOSED IN A MANHOLE SHALL HAVE A NEW MANHOLE CONSTRUCTED AROUND THEM.
- D. ALL EXISTING VALVES THAT ARE NOTED TO BE REMOVED SHALL HAVE VALVES, MANHOLE CASTINGS, AND MANHOLE COVERS REMOVED AND RETURNED TO S&WB CENTRAL YARD (2900 PEOPLES AVE.). ABANDONED WATER MAIN SHALL BE PLUGGED AT THE MANHOLE AND THE ABANDONED MANHOLE FILLED WITH SAND.
- E. ALL EXISTING FIRE HYDRANTS THAT ARE NOTED TO BE REMOVED SHALL BE RETURNED TO S&WB CENTRAL YARD (2900 PEOPLES AVE.).
- F. THE CONTRACTOR SHALL ADJUST THE ELEVATION OF NEW WATER MAINS AS REQUIRED TO AVOID CONFLICTS WITH SEWER HOUSE CONNECTIONS AND OTHER UTILITIES.
- G. ALL WATER SERVICE LINES ALONG WATER MAINS WHICH ARE REPLACED SHALL BE CONNECTED TO THE NEW MAIN.
- H. NEW VALVE SHALL BE PLACED NORTH OF PIPE JUNCTION/COUPLE AT STA. 14+31. ALL OLD PIPE SHALL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 01431, SPECIFICALLY PARAGRAPH 01431-13. A SMALL PORTION OF THE OLD PIPE MAY BE ASBESTOS CEMENT (A.C.) PIPE AND SHOULD BE KEPT WET DURING REMOVAL. ALL REMOVAL PROCEDURES FOR ASBESTOS PIPE SHALL BE PERFORMED IN ACCORDANCE WITH 29 CFR 1926.1101, CLASS III, NON-FRIABLE ASBESTOS WORK.

SYMBOL	DESCRIPTION	DATE	APPROVED
△	ADD/MOD. DRAIN & WATERLINES, VALVE LOCS., BASINS, & MANHOLES, & NE APPROACH SLAB	6/7/99	FSY
△	MODIFIED WATER LINE & VALVE LOC.	5/19/99	FSY

REVISIONS

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

BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

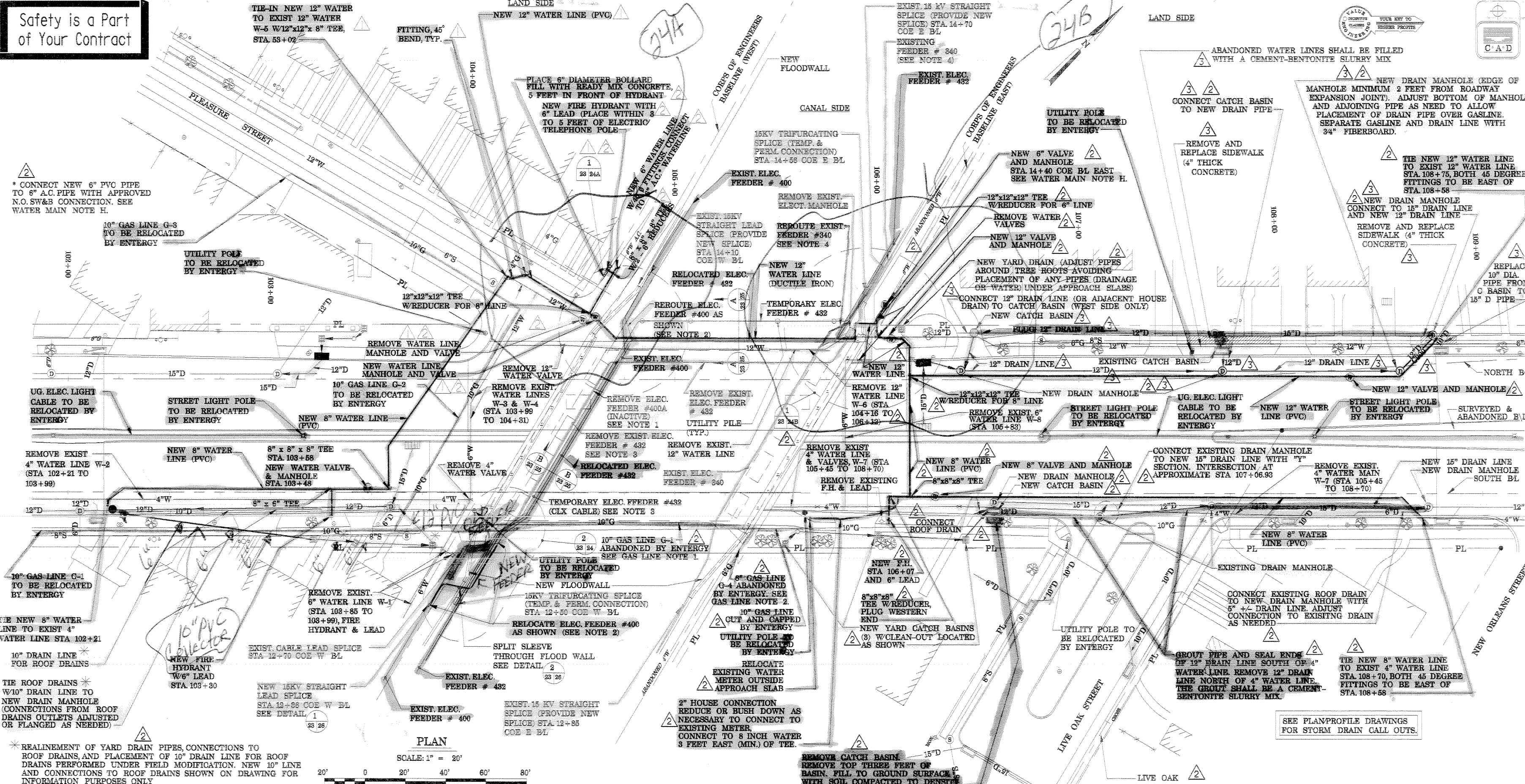
LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

UTILITIES RELOCATION PLAN - 1

DESIGNED BY: C.M.R.	DATE: FEB. 1998	PLOT SCALE: 20	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44733.DWG		FILE NO. H-4-44733
CHECKED BY: S.J.G.	DESIGNER: A. GOODSON	DACW29-98-B-0080	DWG. 25 OF 67

Safety is a Part of Your Contract



* CONNECT NEW 6\"/>

10\"/>

UTILITY POLE TO BE RELOCATED BY ENERGY

12\"/>

REMOVE WATER LINE MANHOLE AND VALVE

10\"/>

REMOVE EXIST. WATER VALVE

REMOVE EXIST. WATER LINES W-3 & W-4 (STA 103+99 TO 104+31)

REMOVE EXIST. WATER VALVE

REMOVE EXIST. WATER VALVE

REMOVE EXIST. WATER VALVE

REMOVE EXIST. WATER VALVE

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REMOVE EXIST. WATER VALVE

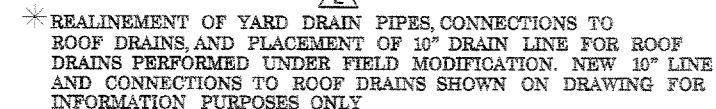
REMOVE EXIST. WATER VALVE

* REALINEMENT OF YARD DRAIN PIPES, CONNECTIONS TO ROOF DRAINS, AND PLACEMENT OF 10\"/>

ELECTRICAL NOTES

1. THE EXISTING INACTIVE FEEDER 400A BETWEEN STA. 12+80 AND STA. 13+97 COE W BL ENCASED IN REINFORCED CONCRETE SHALL BE REMOVED.
2. THE EXISTING FEEDER 400 BETWEEN STA. 12+86 AND STA. 14+10 COE W BL SHALL BE REROUTED AS SHOWN ON BOTH THE NORTH AND SOUTH SIDE OF THE GENTILLY BRIDGE. THE EXISTING FEEDER 400 CONSISTS OF A 15 KV, OKOGUARD-OKOSEAL, TYPE MV-90, 138% INSULATION LEVEL, 500MCM, 3COND., SHIELDED, LEAD COVERED CABLE INSTALLED IN A FIVE (5) INCH GALV. STEEL CONDUIT. THE EXISTING 500 MCM CABLE SHALL BE REMOVED AND REPLACED. THE EXISTING FIVE (5) INCH GALV. STEEL CONDUIT UNDER THE BRIDGE SHALL BE EXTENDED ON BOTH THE NORTH AND SOUTH SIDE OF THE BRIDGE AS SHOWN. TWO (2) NEW 15 KV STRAIGHT LEAD SPLICES SHALL BE REQUIRED AT STA. 12+86 AND STA. 14+10 COE W BL.
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PLAN SCALE: 1" = 20'



4. THE EXISTING FEEDER 340 BETWEEN *STA. 12+85 AND *STA. 14+70 COE E BL SHALL BE REROUTED AS SHOWN ON THE NORTH SIDE OF THE GENTILLY BRIDGE. THE EXISTING FEEDER 340 CONSISTS OF A 15 KV, TYPE MV-90 OKOGUARD-OKOSEAL, 138% INSULATION LEVEL, 500 MCM 3COND., SHIELDED, LEAD COVERED PVC JACKET CABLE INSTALLED IN A FIVE (5) INCH GALV. STEEL CONDUIT. THE EXISTING 500 MCM CABLE SHALL BE REMOVED AND REPLACED. THE EXISTING FIVE (5) INCH CONDUIT UNDER THE BRIDGE SHALL BE EXTENDED ON THE NORTH SIDE OF THE BRIDGE AS SHOWN. TWO (2) NEW 15 KV STRAIGHT LEAD SPLICES SHALL BE REQUIRED AT STA. 12+85 AND STA. 14+70.

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6. CONTRACTOR SHALL VERIFY REQUIRED CABLE LENGTHS IN FIELD PRIOR TO CONSTRUCTION.

GAS LINE NOTE

1. 10\"/>
2. 6\"/>
3. ADJUST DRAIN LINE AND MANHOLE AT APPROX STATION 108+40 - NORTH SIDE OF GENTILLY BLVD. AS NEEDED TO ELIMINATE RELOCATION OF GAS LINE. 12\"/>

WATER MAIN NOTES

- A. ALL NEW WATER MAIN PIPES (6\"/>
- B. ALL NEW WATER MAIN PIPES (12\"/>
- C. ALL EXISTING VALVES THAT ARE TO REMAIN AND ARE NOT ENCLOSED IN A MANHOLE SHALL HAVE A NEW MANHOLE CONSTRUCTED AROUND THEM.
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- E. ALL EXISTING FIRE HYDRANTS THAT ARE NOTED TO BE REMOVED SHALL BE RETURNED TO S&WB CENTRAL YARD (2900 PEOPLES AVE.)
- F. THE CONTRACTOR SHALL ADJUST THE ELEVATION OF NEW WATER MAINS AS REQUIRED TO AVOID CONFLICTS WITH SEWER HOUSE CONNECTIONS AND OTHER UTILITIES.
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- H. NEW VALVE SHALL BE PLACED NORTH OF PIPE JUNCTION/COUPLE AT STA 14+31. ALL OLD PIPE SHALL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 01481, SPECIFICALLY PARAGRAPH 01481-13. A SMALL PORTION OF THE OLD PIPE MAY BE ASBESTOS CEMENT (A.C.) PIPE AND SHOULD BE KEPT WET DURING REMOVAL. ALL REMOVAL PROCEDURES FOR ASBESTOS PIPE SHALL BE PERFORMED IN ACCORDANCE WITH 29 CFR 1926.1101, CLASS III, NON-FRIABLE ASBESTOS WORK.

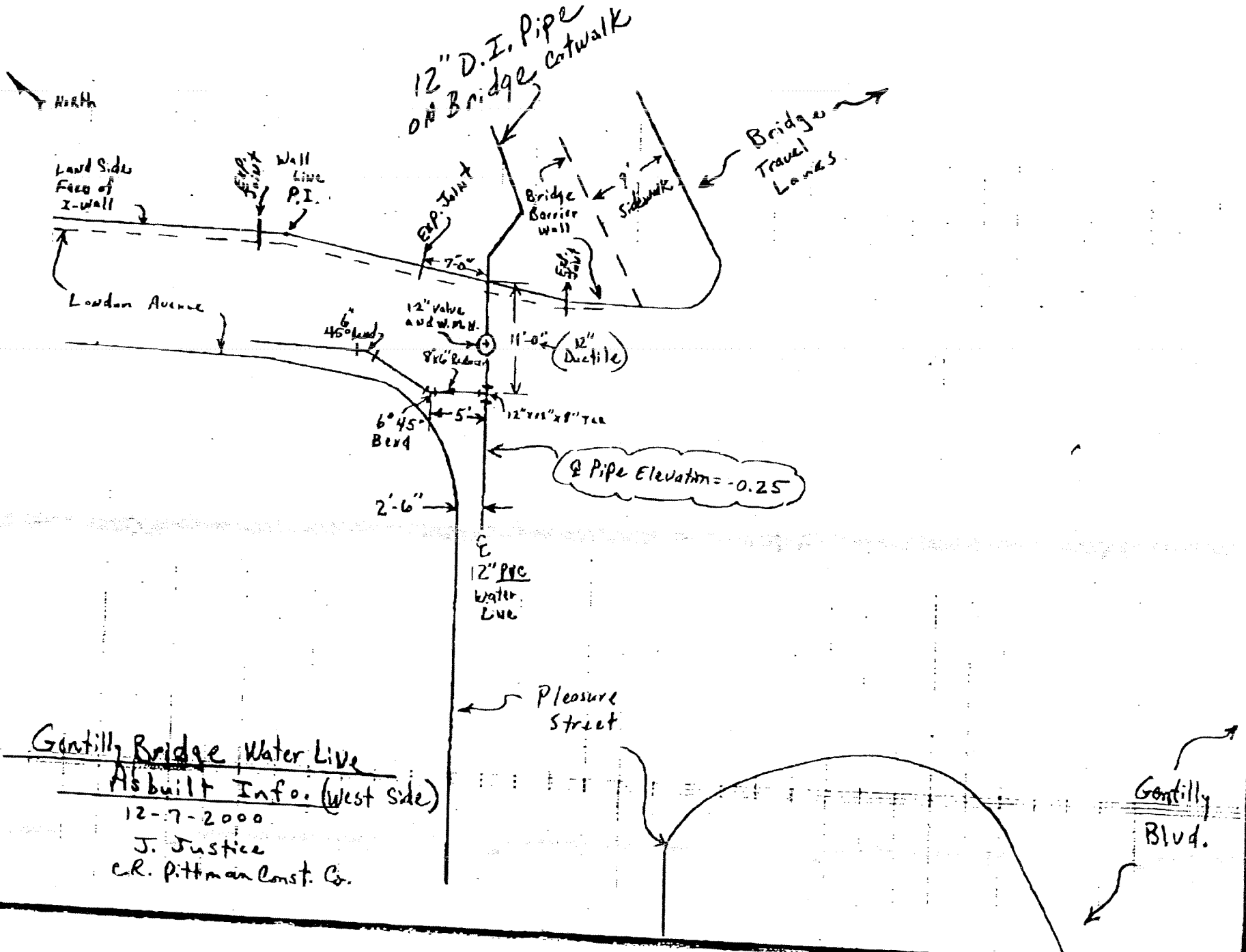
UTILITIES RELOCATION PLAN - 1

SYMBOL	DESCRIPTION	DATE	APPROVED
△	ADD/MOD. DRAIN & WATERLINES & MANHOLES	7/18/99	FSY
△	ADD/MOD. DRAIN & WATERLINES, VALVE LOCS., BASINS, & MANHOLES, & NE APPROACH SLAB	6/7/99	FSY
△	MODIFIED WATER LINE & VALVE LOC.	5/19/99	FSY

DESIGNED BY: C.M.B.
 DRAWN BY: T.F.B.
 CHECKED BY: S.J.G.
 SUBMITTED BY: A. GOODWIN
 DESIGN ENGINEER

DATE: FEB. 1998
 PLOT SCALE: 20
 PLOT DATE: 2/20/98
 FILE NO. H-4-44733
 SOLICITATION NO. DACW79-98-B-0060
 DWG. 23 OF 87

REVISIONS
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA
 LINFIELD, HUNTER & JUNIUS, INC.
 CONSULTING ENGINEERS AND ARCHITECTS
 2800 North Causeway Blvd. Suite 200
 Metairie, Louisiana 70002
 LAKES PONTCHARTRAIN, LA AND VICINITY
 HIGH LEVEL PLAN
 LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
 FLOODPROOFING OF GENTILLY BLVD. BRIDGE
 ORLEANS PARISH, LOUISIANA



Q Pipe Elevation = -0.25

Gentilly Bridge Water Line
 As built Info. (West Side)
 12-7-2000
 J. Justice
 C.R. Pittman Const. Co.

LAND SIDE

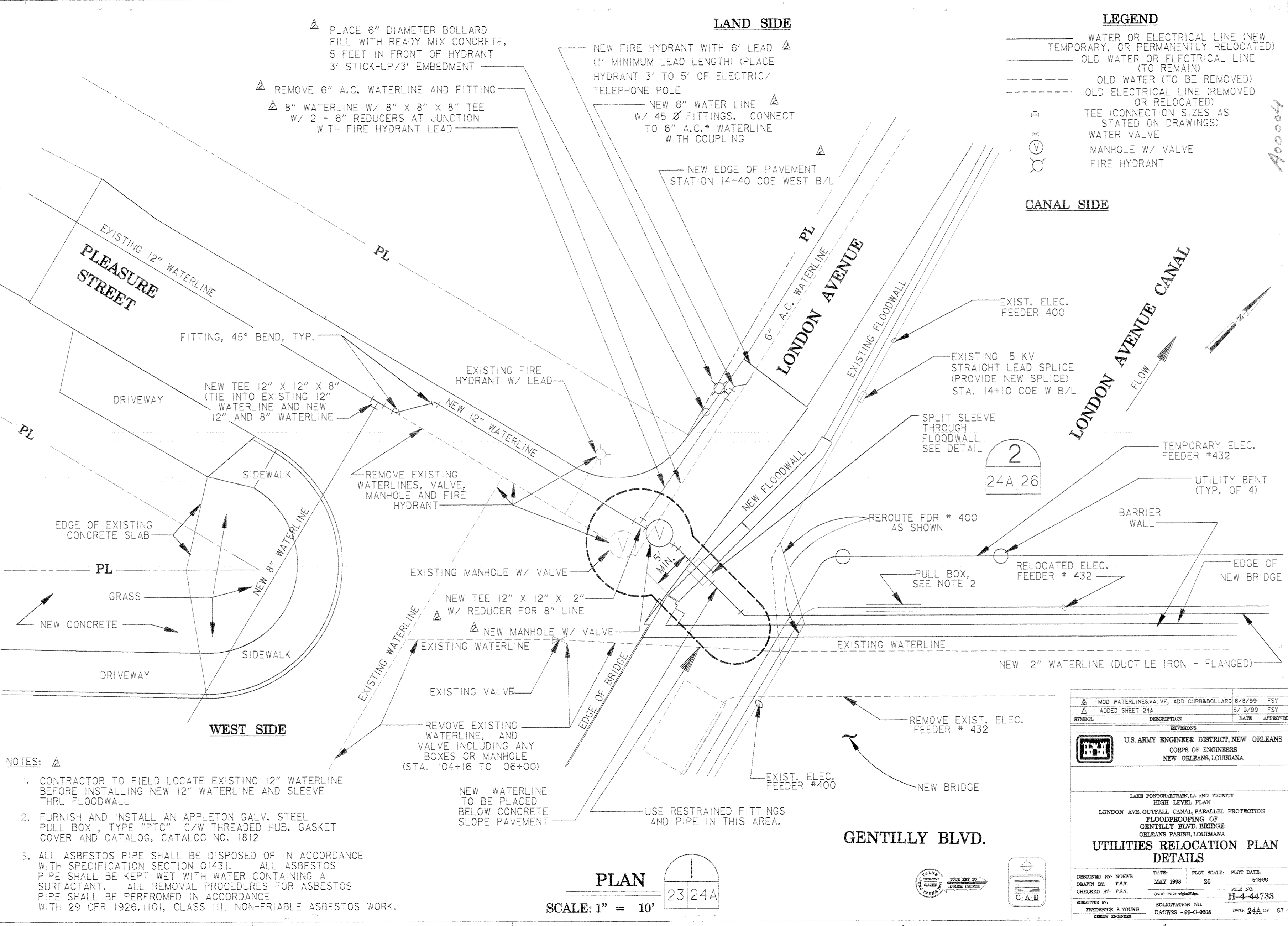
LEGEND

- △ PLACE 6" DIAMETER BOLLARD FILL WITH READY MIX CONCRETE, 5 FEET IN FRONT OF HYDRANT 3' STICK-UP/3' EMBEDMENT
- △ REMOVE 6" A.C. WATERLINE AND FITTING
- △ 8" WATERLINE W/ 8" X 8" X 8" TEE W/ 2 - 6" REDUCERS AT JUNCTION WITH FIRE HYDRANT LEAD

- NEW FIRE HYDRANT WITH 6' LEAD (1' MINIMUM LEAD LENGTH) (PLACE HYDRANT 3' TO 5' OF ELECTRIC/ TELEPHONE POLE)
- NEW 6" WATER LINE W/ 45° FITTINGS. CONNECT TO 6" A.C.* WATERLINE WITH COUPLING

- WATER OR ELECTRICAL LINE (NEW TEMPORARY, OR PERMANENTLY RELOCATED)
- - - OLD WATER OR ELECTRICAL LINE (TO REMAIN)
- - - - - OLD WATER (TO BE REMOVED)
- - - - - OLD ELECTRICAL LINE (REMOVED OR RELOCATED)
- ⊕ TEE (CONNECTION SIZES AS STATED ON DRAWINGS)
- ⊕ WATER VALVE
- ⊕ MANHOLE W/ VALVE
- ⊕ FIRE HYDRANT

CANAL SIDE

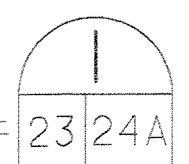


A00004

- NOTES: △
- CONTRACTOR TO FIELD LOCATE EXISTING 12" WATERLINE BEFORE INSTALLING NEW 12" WATERLINE AND SLEEVE THRU FLOODWALL
 - FURNISH AND INSTALL AN APPLETON GALV. STEEL PULL BOX, TYPE "PTC" C/W THREADED HUB. GASKET COVER AND CATALOG, CATALOG NO. 1812
 - ALL ASBESTOS PIPE SHALL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 01431. ALL ASBESTOS PIPE SHALL BE KEPT WET WITH WATER CONTAINING A SURFACTANT. ALL REMOVAL PROCEDURES FOR ASBESTOS PIPE SHALL BE PERFORMED IN ACCORDANCE WITH 29 CFR 1926.1101, CLASS III, NON-FRIABLE ASBESTOS WORK.

PLAN

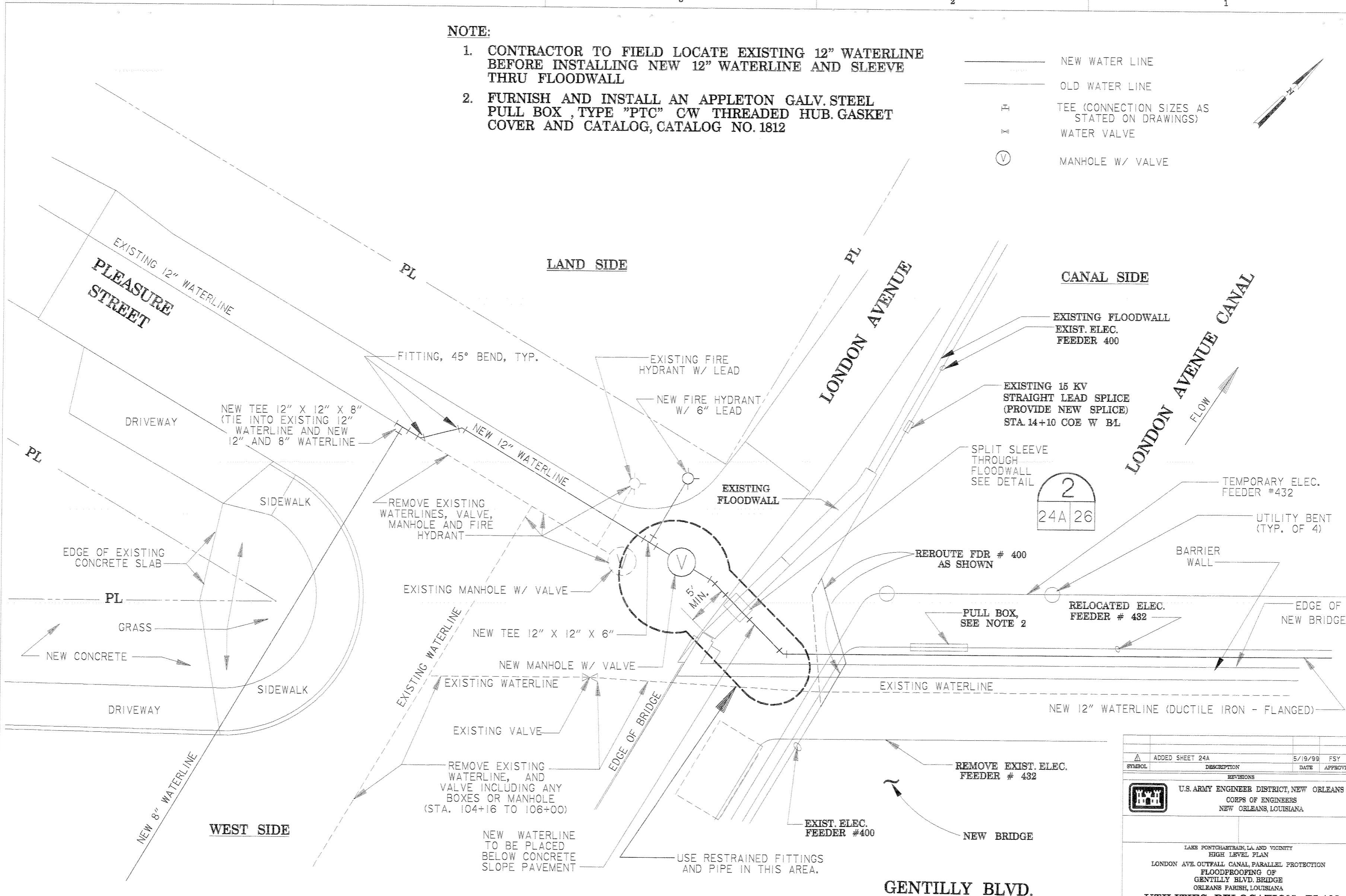
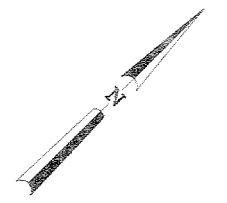
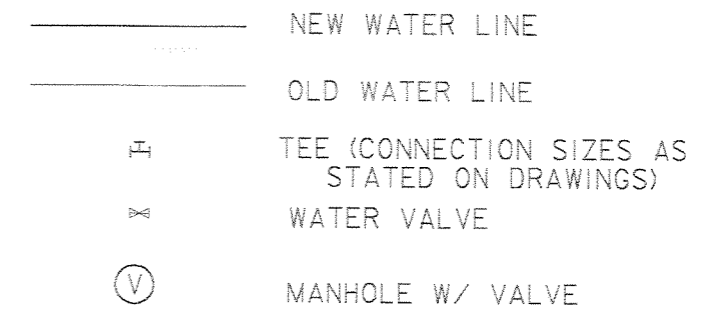
SCALE: 1" = 10'



△	MOD WATERLINE & VALVE, ADD CURB & BOLLARD	6/8/99	FSY
△	ADDED SHEET 24A	5/19/99	FSY
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LA AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA UTILITIES RELOCATION PLAN DETAILS			
DESIGNED BY: NOSWB	DATE: MAY 1998	PLOT SCALE: 20	PLOT DATE: 5/19/99
DRAWN BY: F.S.Y.	CHECKED BY: F.S.Y.	FILE NO. H-4-44733	
SUBMITTED BY: FREDERICK & YOUNG	SOLICITATION NO. DAOW29 - 99-C-0005	DWG. 24A OF 67	

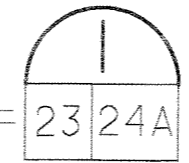
NOTE:

1. CONTRACTOR TO FIELD LOCATE EXISTING 12" WATERLINE BEFORE INSTALLING NEW 12" WATERLINE AND SLEEVE THRU FLOODWALL
2. FURNISH AND INSTALL AN APPLETON GALV. STEEL PULL BOX, TYPE "PTC" CW THREADED HUB. GASKET COVER AND CATALOG, CATALOG NO. 1812

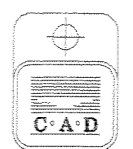


PLAN

SCALE: 1" = 10'



ADDED SHEET 24A	5/19/99	FSY
SYMBOL	DESCRIPTION	DATE APPROVED
REVISIONS		
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA		
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA		
UTILITIES RELOCATION PLAN DETAILS		
DESIGNED BY: NOSWB	DATE: MAY 1998	PLOT SCALE: 20
DRAWN BY: F.S.Y.	CADD FILE: <i>highlevel.dwg</i>	PLOT DATE: 5/19/99
SUBMITTED BY: FREDERICK S. YOUNG DESIGN ENGINEER	SOLICITATION NO. DACW29-89-C-0005	FILE NO. H-4-44733
		DWG. 24A OF 87



REMOVED H₂O LINES & VALVES

~~NEW H₂O LINES & VALVES~~

~~REMOVED DRAIN LINES & CATCH BASINS~~

~~NEW DRAIN LINES & CATCH BASINS~~

~~EXISTING FEEDER # 400~~

~~REROUTED FEEDER # 400~~

~~EXISTING / REROUTED FEEDER # 432~~

TEMPORARY FEEDER # 432

~~EXISTING FEEDER # 340~~

~~REROUTED FEEDER # 340~~

~~FEEDER SPLICES~~

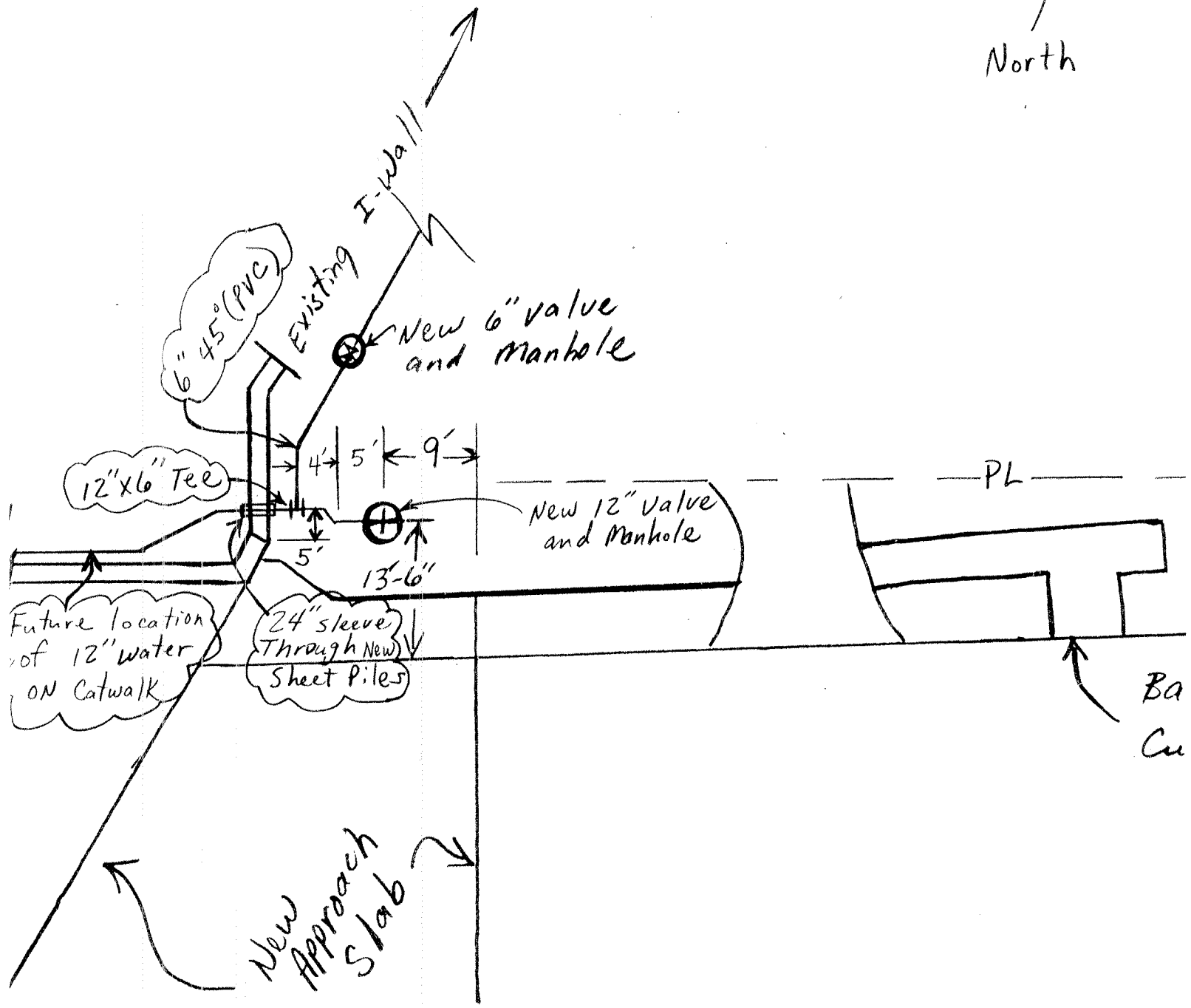
~~REROUTED / ABANDONED GAS LINES~~

~~RELOCATED STREET LIGHTS~~

~~RELOCATED UTILITY POLE~~

Gentilly Blvd. Bridge Job 12" Waterline (East side)

3-27-00

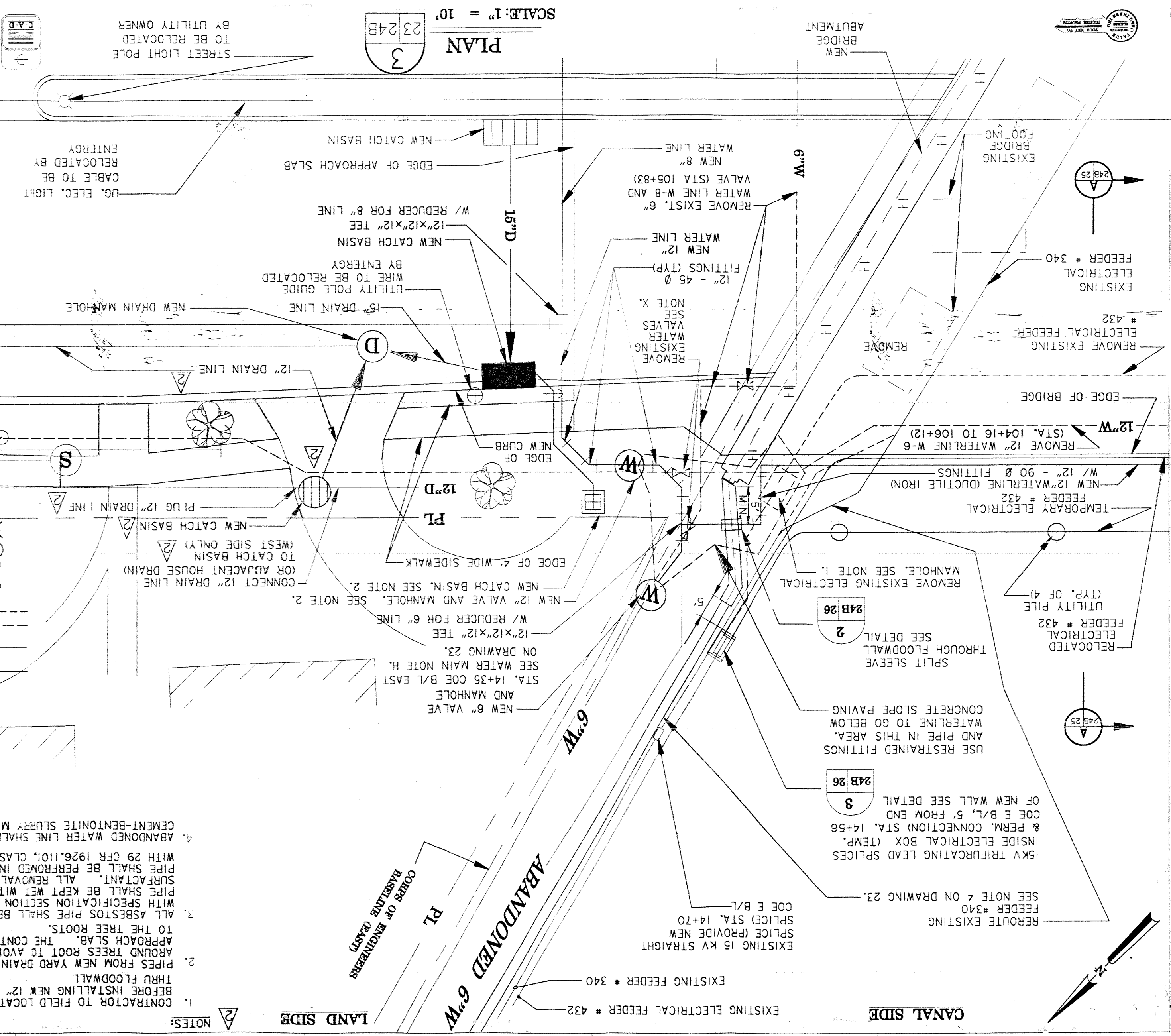


UTILITIES RELOCATION PLAN
 FLOODPROOFING OF
 GENTILITY BLVD. BRIDGE
 ORLANS PARISH, LOUISIANA
 LONDON AVE. OUTFALL CANAL PARALLEL PROTECTION
 HIGH LEVEL PLAN
 LAKE FONTCHAUDRY LA AND VICINITY

DESIGNED BY: NEW ORLEANS DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

DATE: MAY 1996
 DRAWN BY: P.A.T.
 CHECKED BY: P.A.T.
 PROJECT NO.: H-4-44733
 SHEET NO.: 24B OF 67

REVISIONS	DATE	BY
ADJUST/ADD DRAIN LINE	7/16/99	FSY
ADDED SHEET 24B	8/14/99	FSY



LEGEND

WATER OR ELECTRICAL LINE (NEW)
 TEMPORARY, OR PERMANENTLY RELOCATED
 OLD WATER OR ELECTRICAL LINE
 (TO REMAIN)
 OLD WATER (TO BE REMOVED)
 OLD ELECTRICAL LINE (REMOVED)
 OR RELOCATED)
 TEE (CONNECTION SIZES AS
 STATED ON DRAWINGS)
 WATER VALVE
 MANHOLE W/ VALVE
 FIRE HYDRANT

- NOTES:**
- CONTRACTOR TO FIELD LOCATE EXISTING 12" WATERLINE THRU FLOODWALL
 - PIPES FROM NEW YARD DRAIN AND NEW VALVE SHALL BE ADJUSTED AROUND TREE ROOT TO AVOID PLACEMENT OF ANY PIPES UNDER APPROACH SLAB. THE CONTRACTOR SHALL MINIMIZE ANY DAMAGE TO THE TREE ROOTS.
 - ALL ASBESTOS PIPE SHALL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 01431. ALL ASBESTOS SURFACANT. ALL REMOVAL PROCEDURES FOR ASBESTOS PIPE SHALL BE PERFORMED IN ACCORDANCE WITH 29 CFR 1926.1101, CLASS III, NON-FRIABLE ASBESTOS WORK.
 - ABANDONED WATER LINE SHALL BE FILLED WITH A CEMENT-BENTONITE SLURRY MIX AND CAPPED AT ENDS.

100006

DESIGNED BY: NOWWAS	DATE: MAY 1988	PROJECT NO.: 20	PROJECT NAME: FLOOD PROTECTION
CHECKED BY: F.S.Y.	DATE: MAY 1988	PROJECT NO.: 20	PROJECT NAME: FLOOD PROTECTION
PROJECT NO.: H-144793	DATE: MAY 1988	PROJECT NO.: 20	PROJECT NAME: FLOOD PROTECTION
PROJECT NO.: H-144793	DATE: MAY 1988	PROJECT NO.: 20	PROJECT NAME: FLOOD PROTECTION

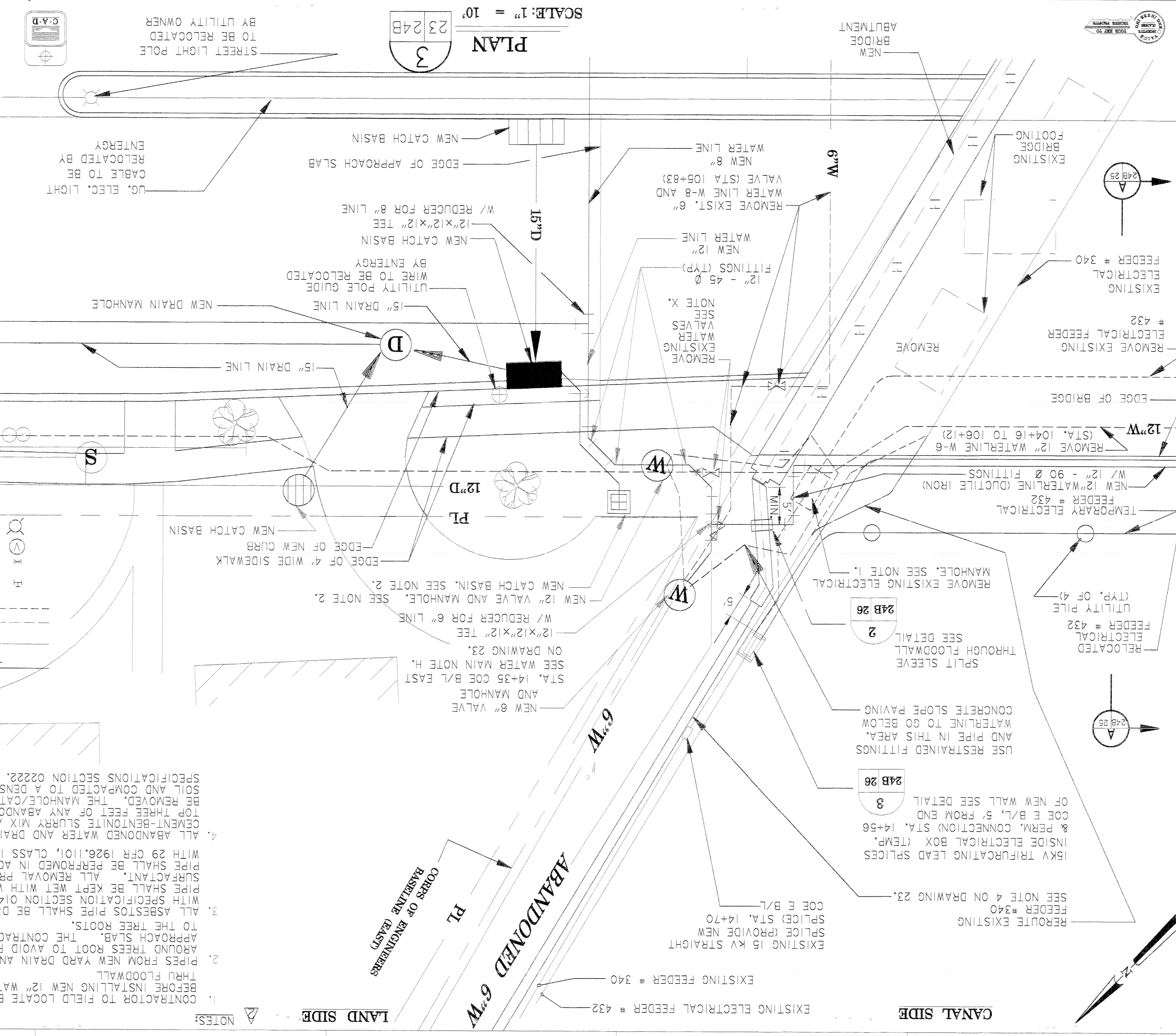
UTILITIES RELOCATION PLAN
 DETAILS
 LAKES PONTCHARTRAIN, LA AND VICINITY
 HIGH LEVEL PLAN
 LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
 FLOODPROOFING OF
 GENTILITY BLVD. BRIDGE
 ORLEANS PARISH, LOUISIANA
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
 CORPS OF ENGINEERS
 NEW ORLEANS, LOUISIANA

SYMBOL	DESCRIPTION	DATE	APPROVED
▲	ADDED SHEET 24B	6/14/99	FSY

LEGEND
 WATER OR ELECTRICAL LINE (NEW)
 TEMPORARY, OR PERMANENTLY RELOCATED
 OLD WATER OR ELECTRICAL LINE
 (TO REMAIN)
 OLD WATER (TO BE REMOVED)
 OLD ELECTRICAL LINE (REMOVED)
 OR RELOCATED
 TEE (CONNECTION SIZES AS
 STATED ON DRAWINGS)
 WATER VALVE
 MANHOLE W/ VALVE
 FIRE HYDRANT

NOTES:
 1. CONTRACTOR TO FIELD LOCATE EXISTING 12" WATERLINE THRU FLOODWALL BEFORE INSTALLING NEW 12" WATERLINE AND SLEEVE
 2. PIPES FROM NEW YARD DRAIN AND NEW VALVE SHALL BE ADJUSTED AROUND TREES ROOT TO AVOID PLACEMENT OF ANY PIPES UNDER APPROACH SLAB. THE CONTRACTOR SHALL MINIMIZE ANY DAMAGE TO THE TREE ROOTS.
 3. ALL ASBESTOS PIPE SHALL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 01431. ALL ASBESTOS PIPE SHALL BE KEPT WET WITH WATER CONTAINING A SURFACTANT. ALL REMOVAL PROCEDURES FOR ASBESTOS PIPE SHALL BE PERFORMED IN ACCORDANCE WITH 29 CFR 1926.1101, CLASS III, NON-FRIABLE ASBESTOS WORK.
 4. ALL ABANDONED WATER AND DRAIN PIPES SHALL BE FILLED WITH A CEMENT-BENTONITE SLURRY MIX AND CARPED AT ENDS. THE TOP THREE FEET OF ANY ABANDONED MANHOLE/CATCH BASIN SHALL BE REMOVED. THE MANHOLE/CATCH BASIN SHALL BE FILLED WITH SOIL AND COMPACTED TO A DENSITY AS REQUIRED BY SPECIFICATIONS SECTION 02222.

APPROVED



1

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DATE: MAY 1988

PROJECT NO.: 20

PROJECT NAME: FLOOD PROTECTION

PROJECT NO.: H-144793

PROJECT NAME: FLOOD PROTECTION

PROJECT NO.: H-144793

PROJECT NAME: FLOOD PROTECTION

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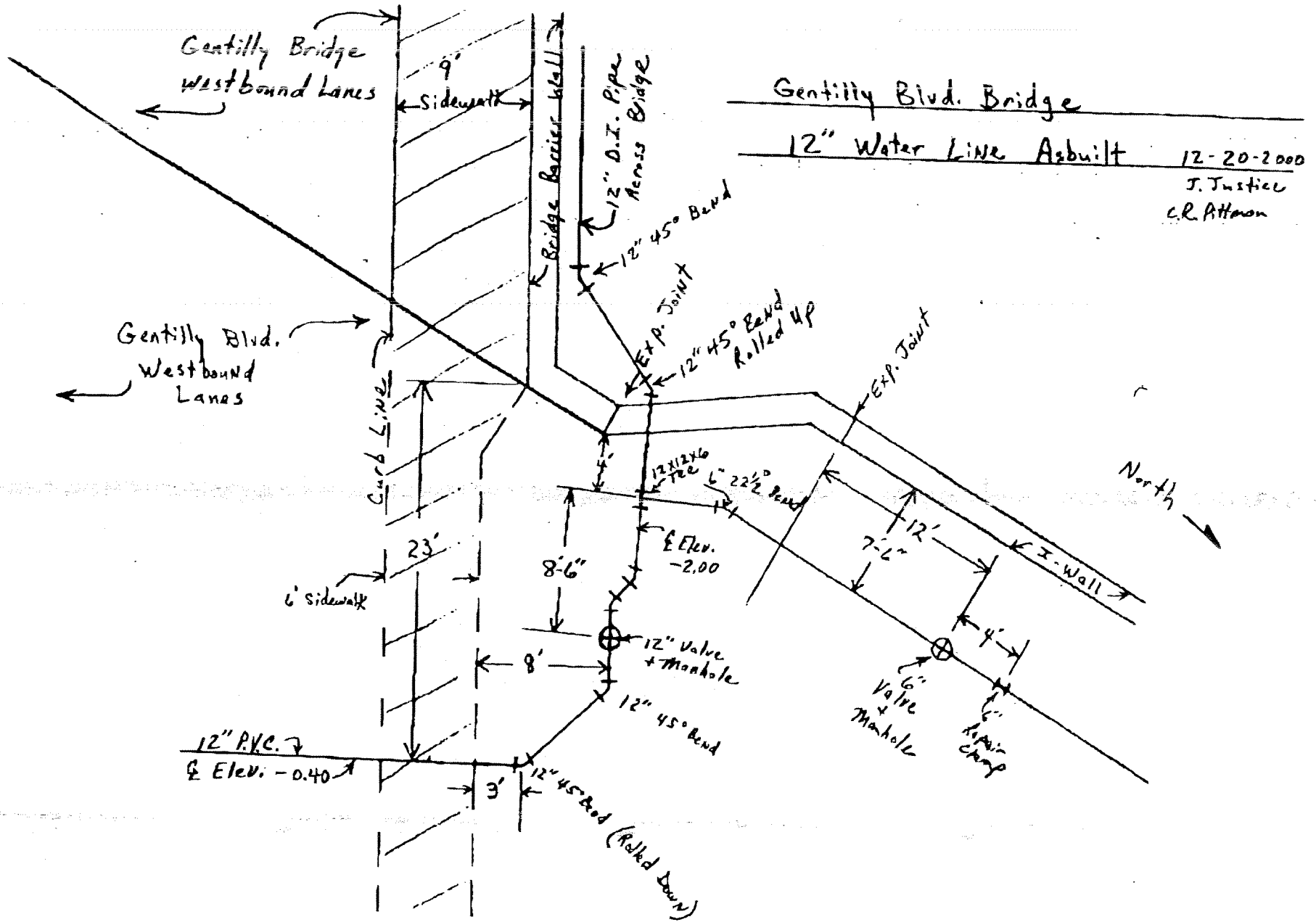
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PROJECT NO.: H-144793

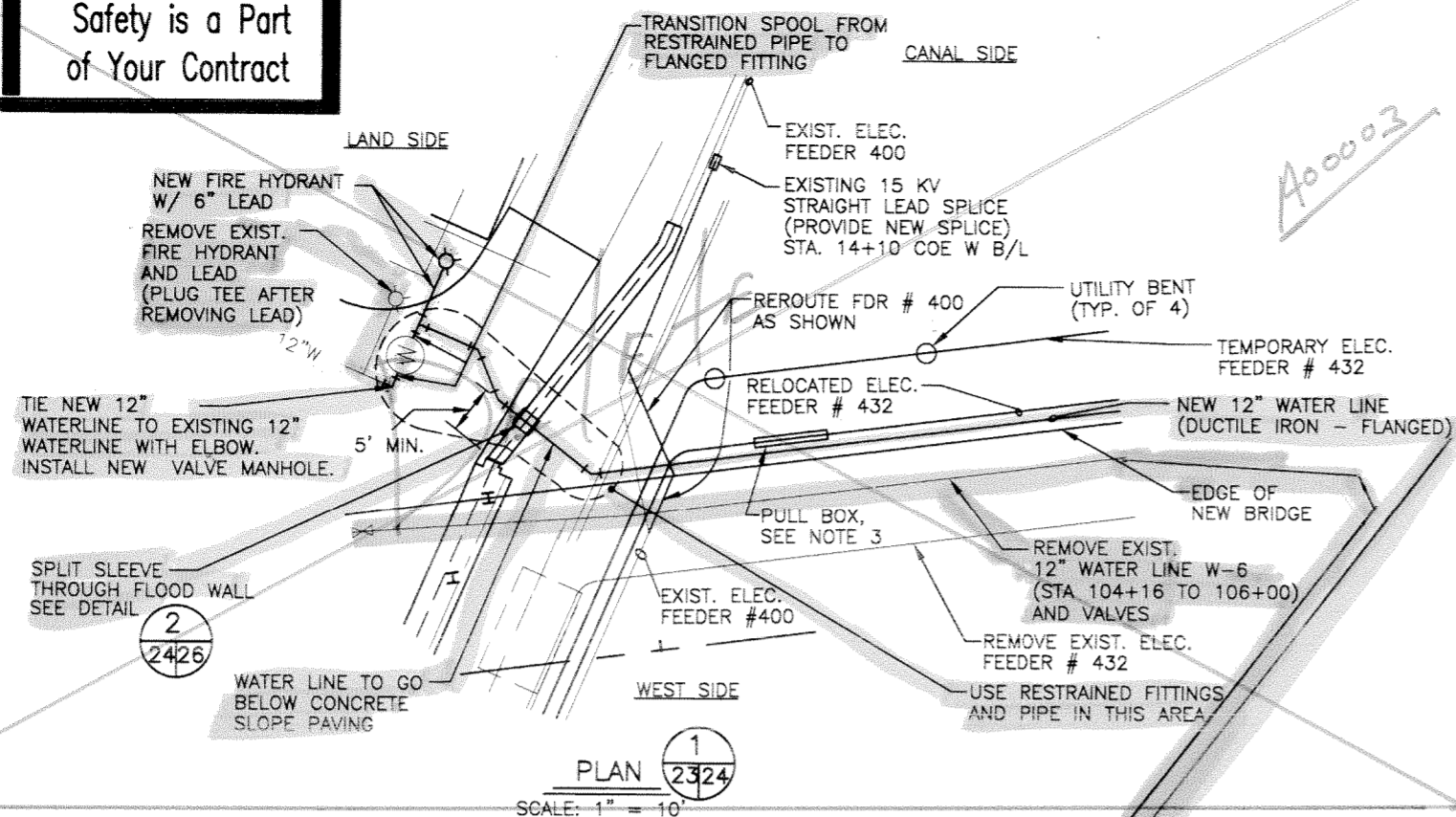
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PROJECT NO.: H-144793

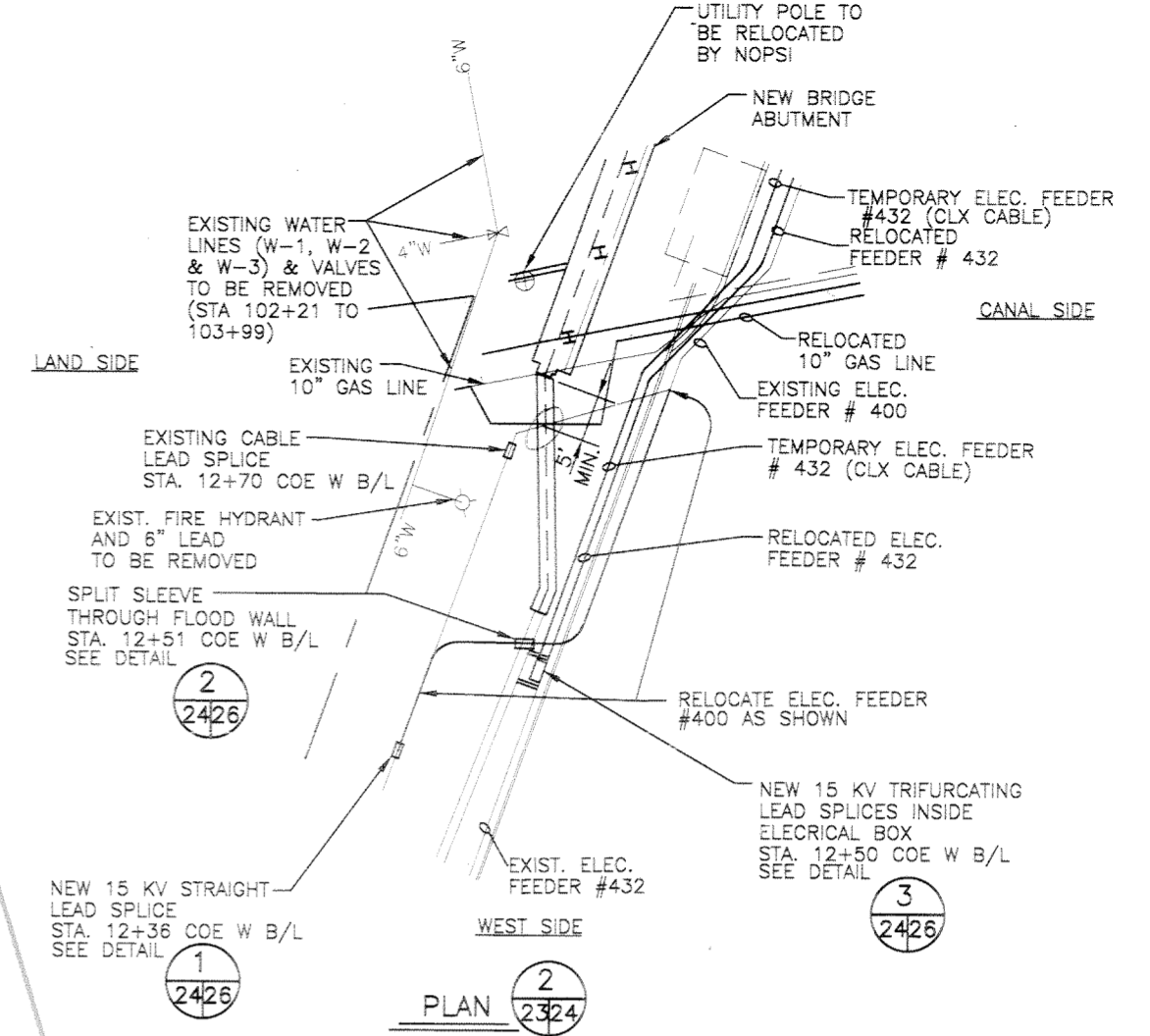
PROJECT NAME: FLOOD PROTECTION



Safety is a Part of Your Contract

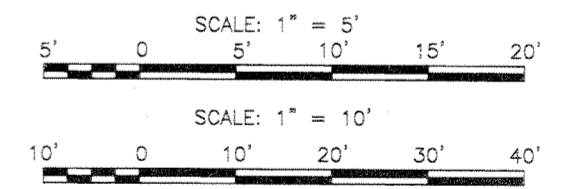


NOTE:
CONTRACTOR TO FIELD LOCATE EXISTING 12" WATERLINE BEFORE INSTALLING NEW 12" WATERLINE AND SLEEVE THRU FLOODWALL.



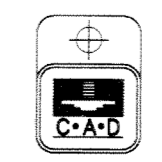
- NOTES:**
- EXISTING S&WB POWER MANHOLE FRAME & COVER SHALL BE RETURNED TO THE S&WB AT ITS CENTRAL YARD, 2900 PEOPLES AVE., NEW ORLEANS, LOUISIANA.
 - CONTRACTOR TO FIELD LOCATE EXISTING ELEC. FEEDER # 400 BEFORE INSTALLING RELOCATED ELEC. FEEDER # 400 AND SLEEVE THRU FLOODWALL.
 - FURNISH AND INSTALL AN APPLETON GALV. STEEL PULL BOX TYPE "PTC" C/W THREADED HUB, GASKET AND COVER, CATALOG NO. 1812.

"4. ALL S&WB ELECTRICAL FEEDER CABLE SHOWN TO BE REROUTED OR RELOCATED SHALL BE REMOVED AND REPLACED WITH NEW CABLE OF THE TYPES AND SIZES SHOWN ON THE DRAWINGS AND IN THE SPECIFICATIONS."



Across Bridge

Across Ditch

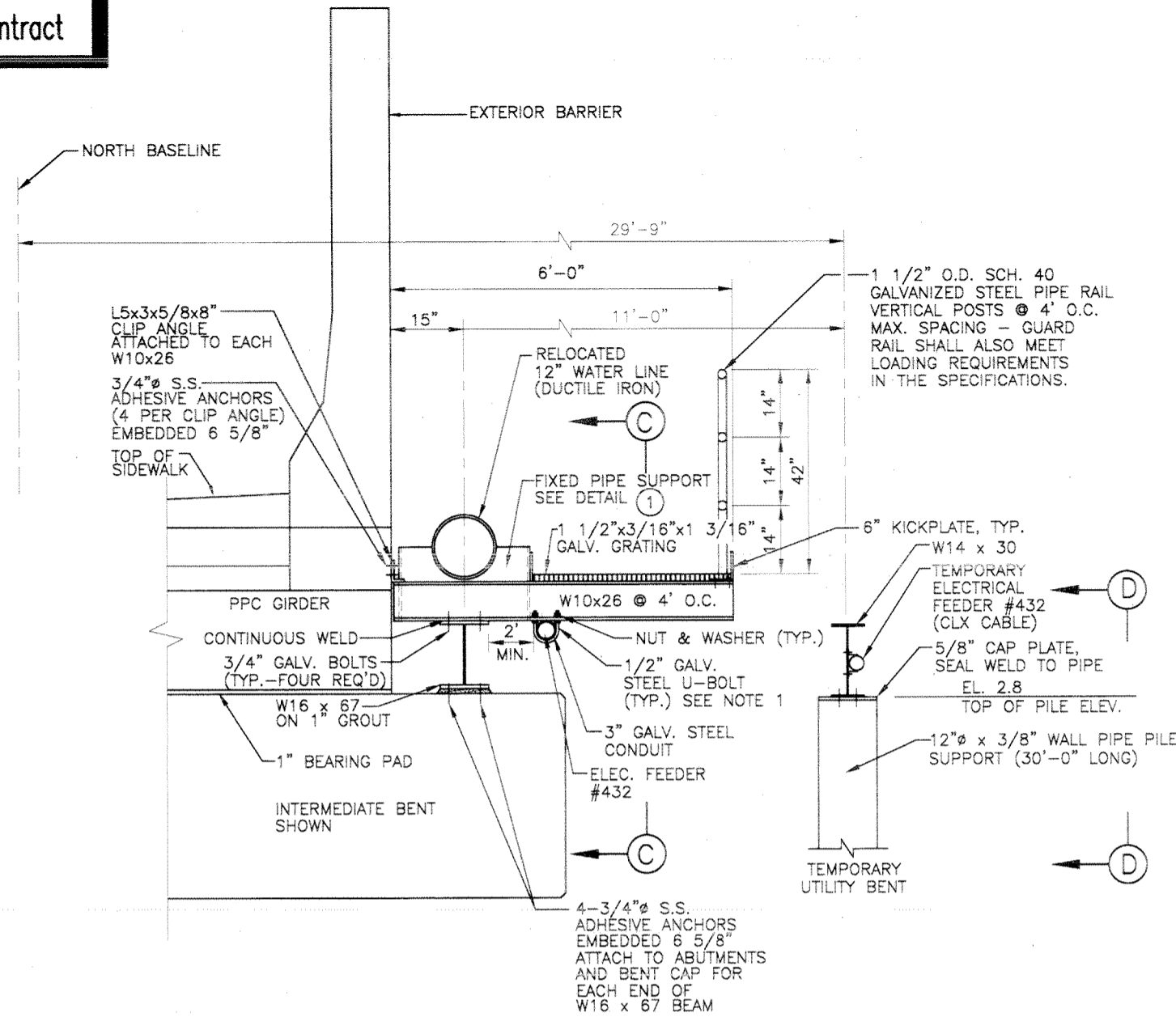


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
UTILITIES RELOCATION PLAN - 2			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 5	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 447328LUC.DGN		FILE NO. H-4-44733
CHECKED BY: AFG	SOLUTION NO. DACW28-98-B-0060		DWG. 24 OF 67
SUBMITTED BY: A. GOODSON, DESIGN ENGINEER			

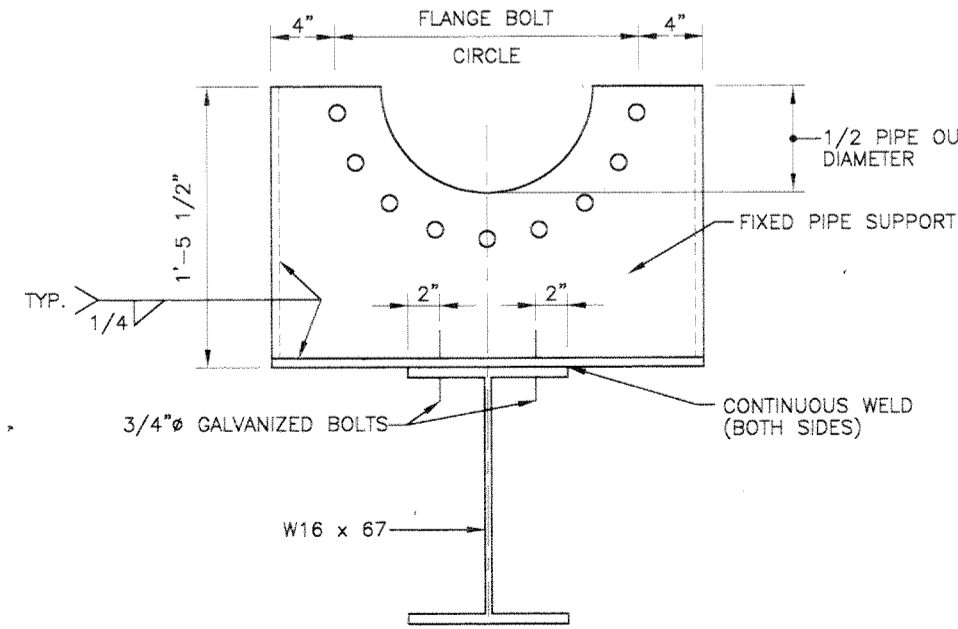
PLAN 3 2324
SCALE: 1" = 5'

NOTE:
CONTRACTOR TO FIELD LOCATE EXISTING 12" WATERLINE BEFORE INSTALLING NEW 12" WATERLINE AND SLEEVE THRU FLOODWALL.

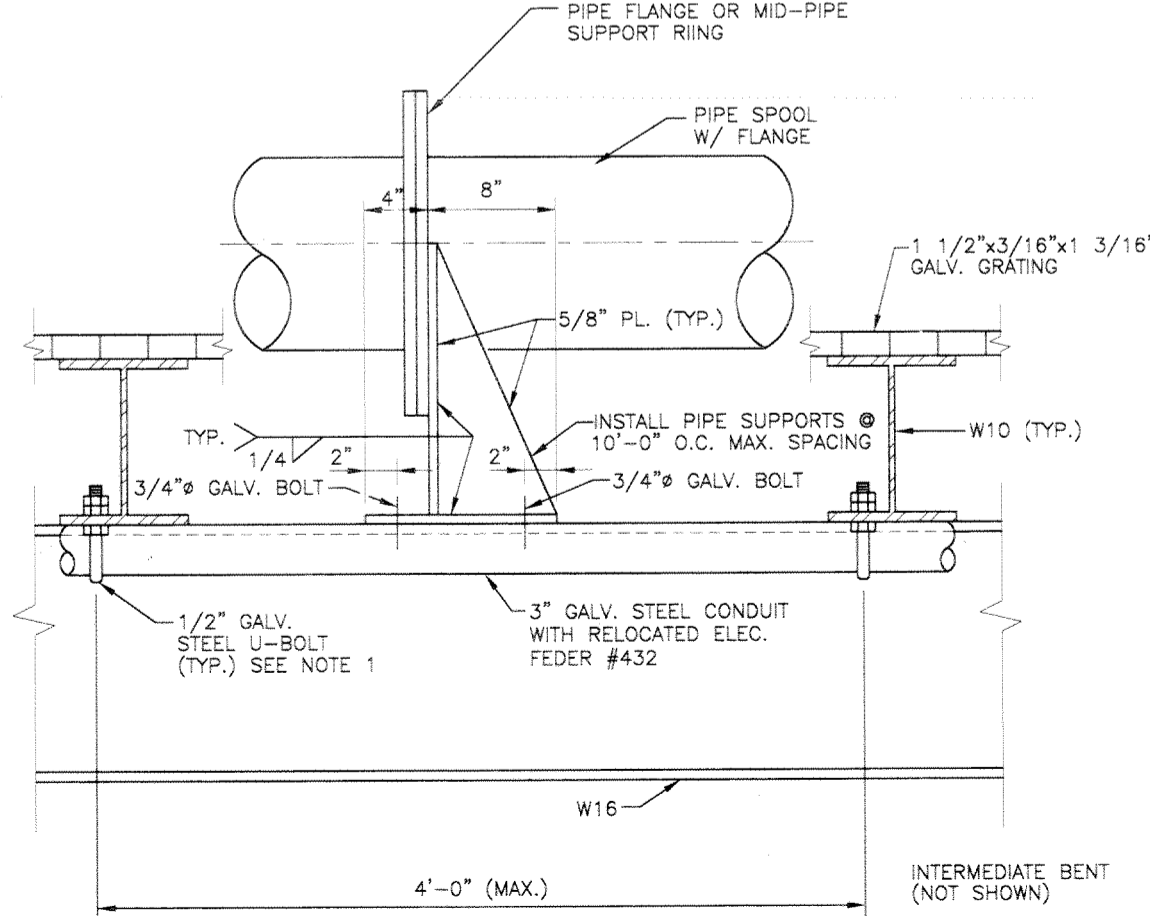
Safety is a Part of Your Contract



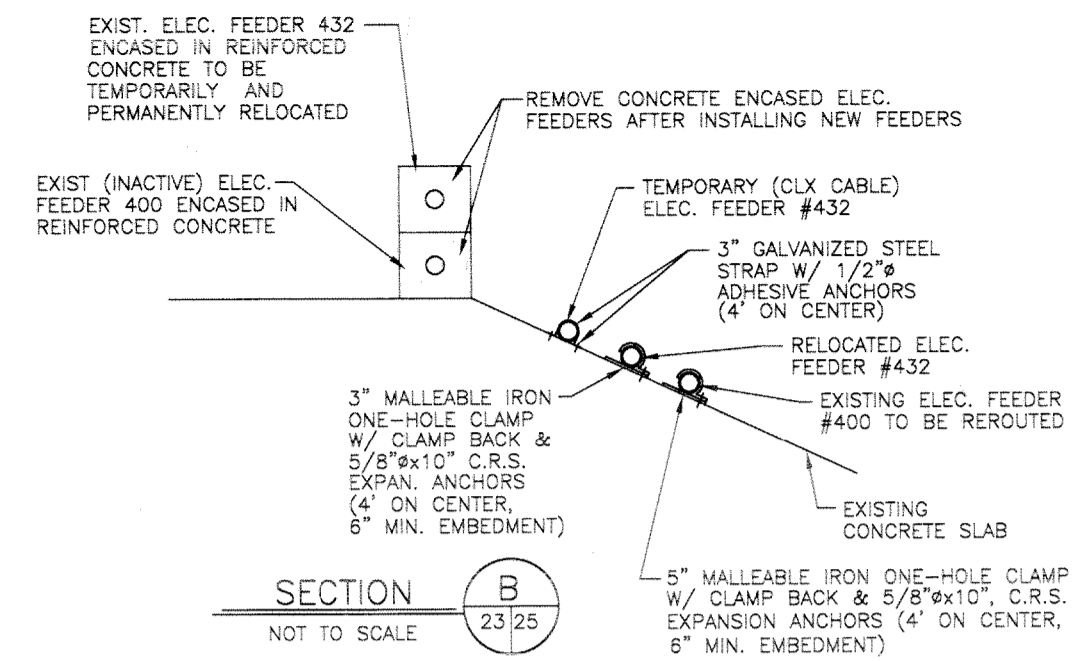
SECTION A
SECTION AT BENTS
(ABUTMENTS SIMILAR)
NOT TO SCALE



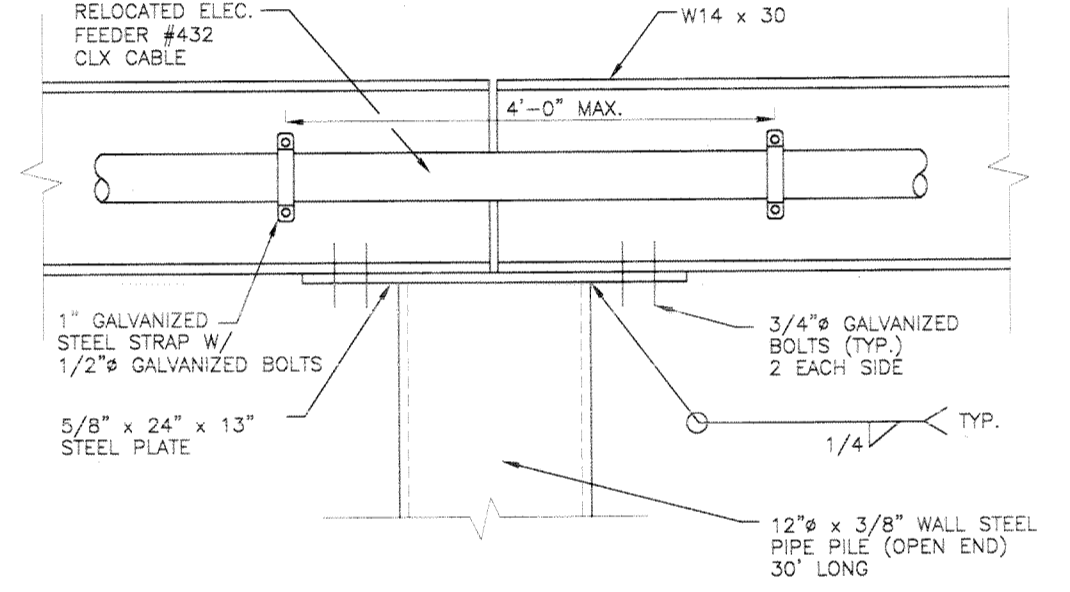
DETAIL 1
NOT TO SCALE



SECTION C
NOT TO SCALE



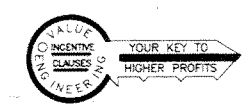
SECTION B
NOT TO SCALE



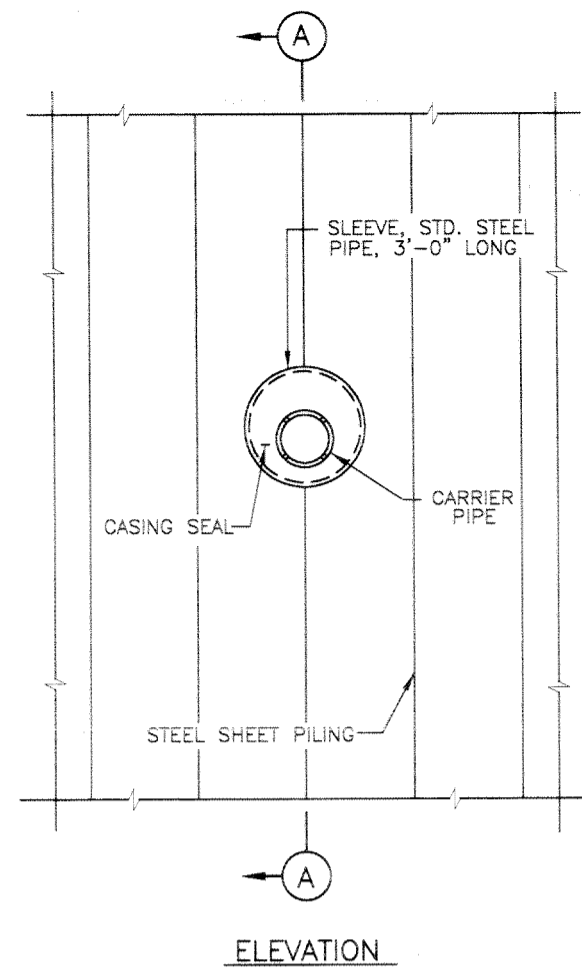
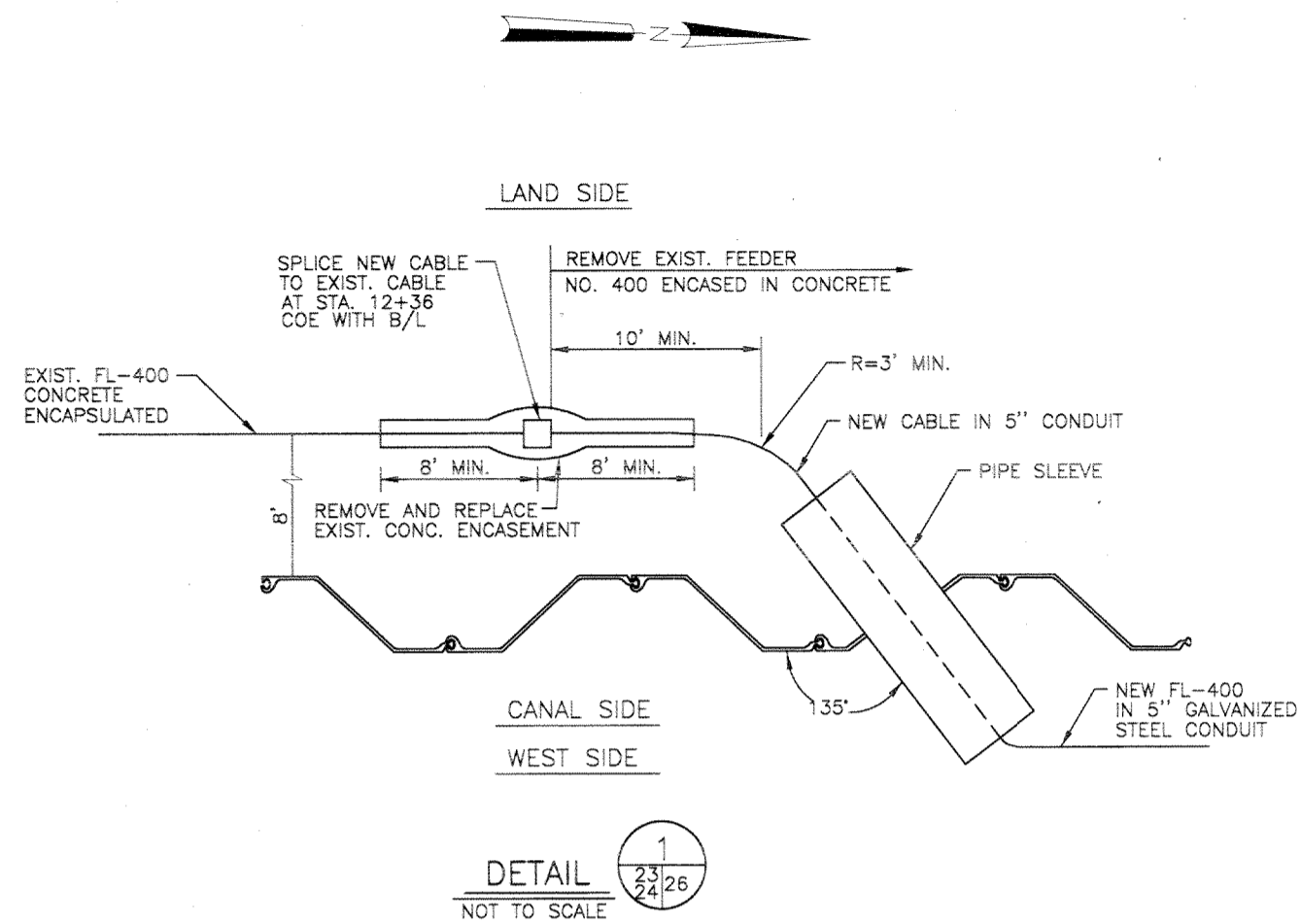
TEMPORARY ELEC. CABLE SUPPORT D
NOT TO SCALE

NOTE:
1. FURNISH AND INSTALL 1/2" GALVANIZED STEEL U-BOLTS, C/W FOUR FLAT WASHERS, TWO LOCK WASHERS, AND SIX NUTS @ 4'-0" O.C. MAX. SPACING.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
UTILITY RELOCATION DETAILS - 1			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 12	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SOLICITATION NO. DACW29-98-B-0060	DWG. 25 OF 67	
SUBMITTED BY: A. GOODSON, DESIGN ENGINEER			

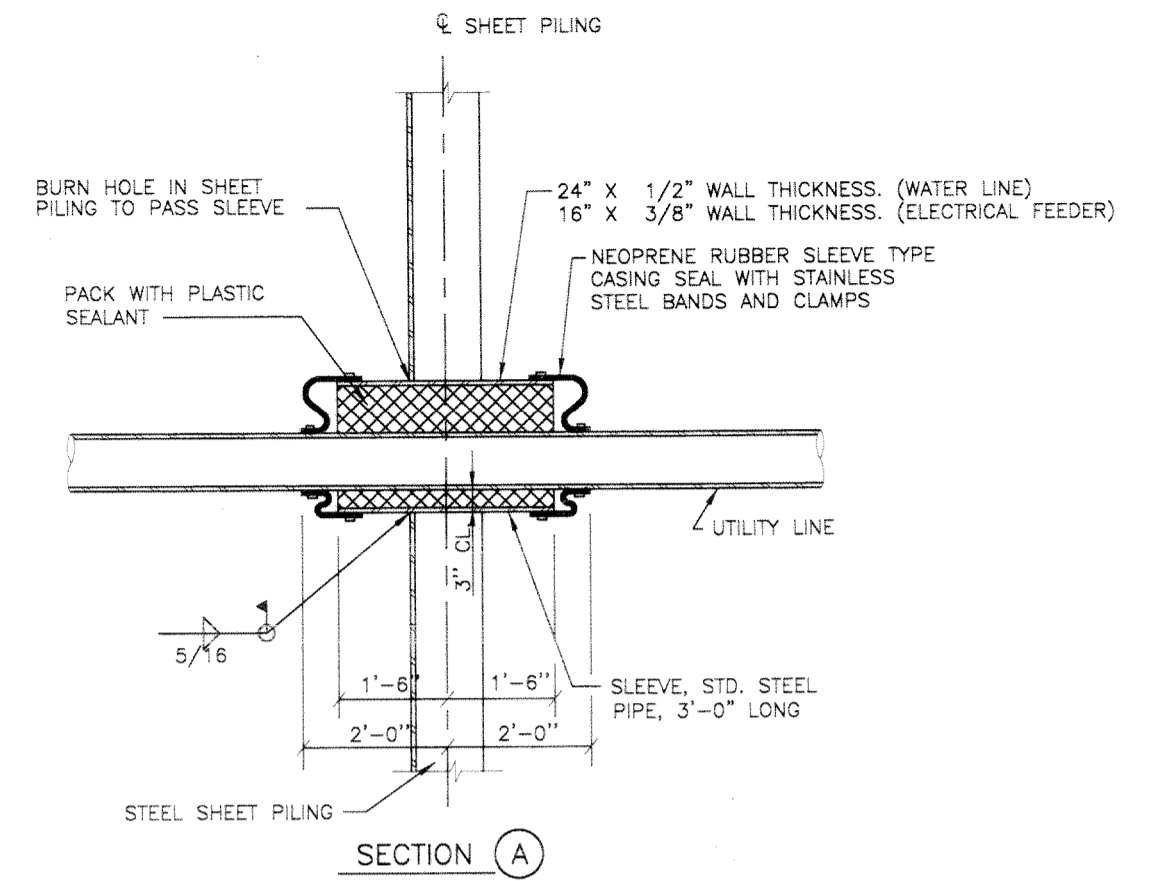


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of Your Contract**

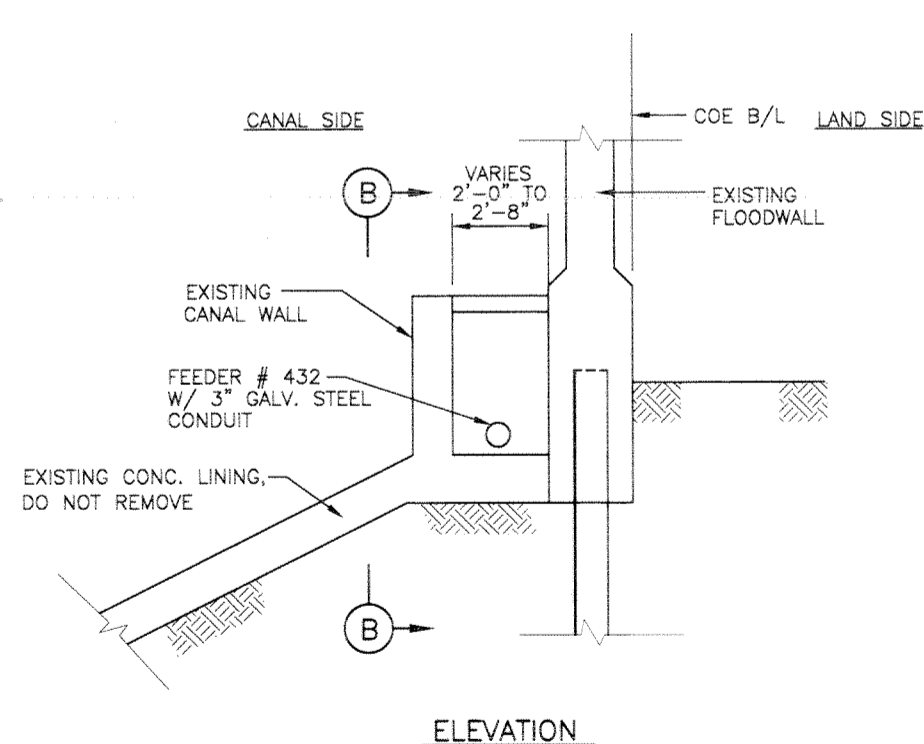


TYPICAL UTILITY LINE THRU STEEL SHEET PILING

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

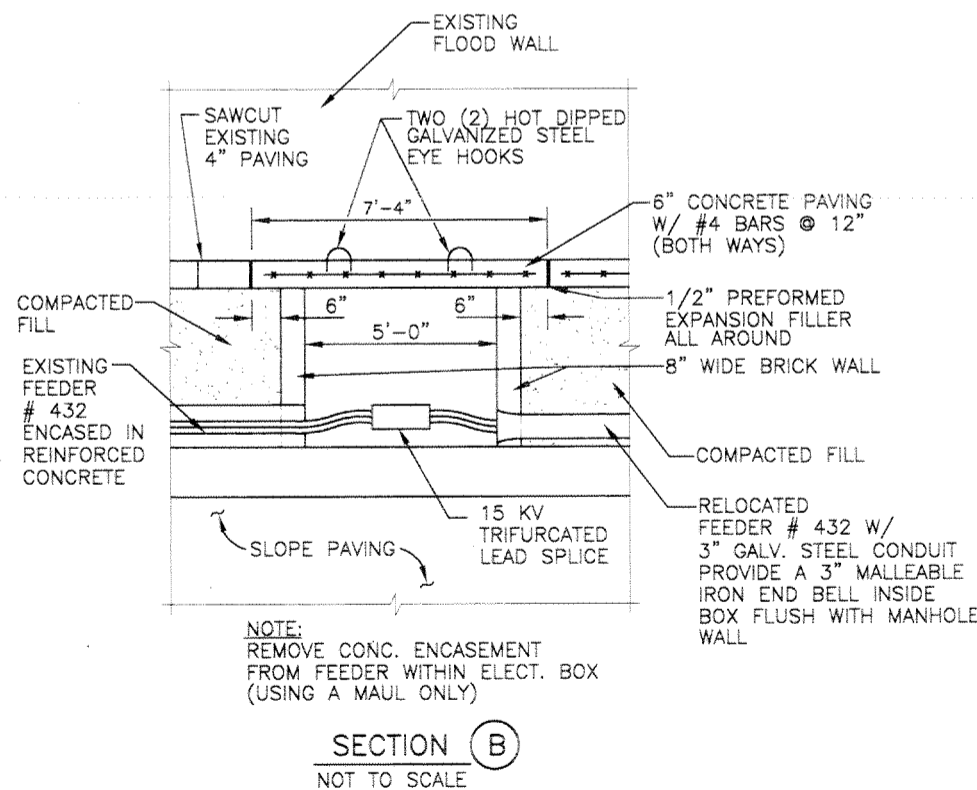


SECTION A



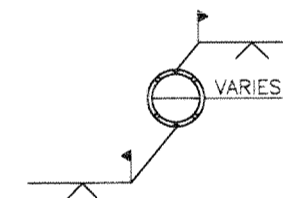
DETAIL OF ELECTRICAL BOX FOR SPLICE AT FEEDER # 432

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



NOTE:
REMOVE CONC. ENCASEMENT FROM FEEDER WITHIN ELECT. BOX (USING A MAUL ONLY)

SECTION B

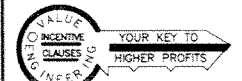


SLEEVE INSTALLATION IN HALVES

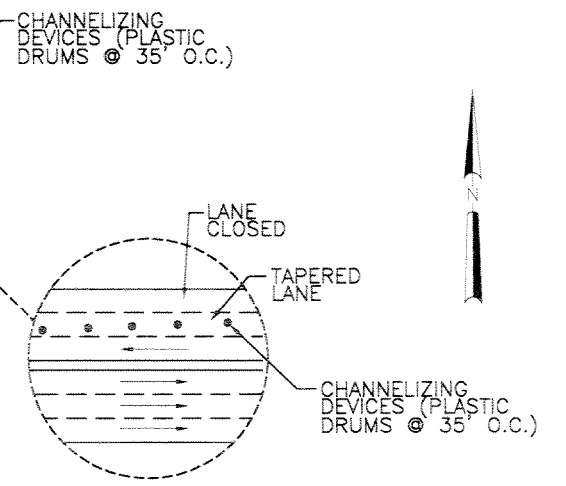
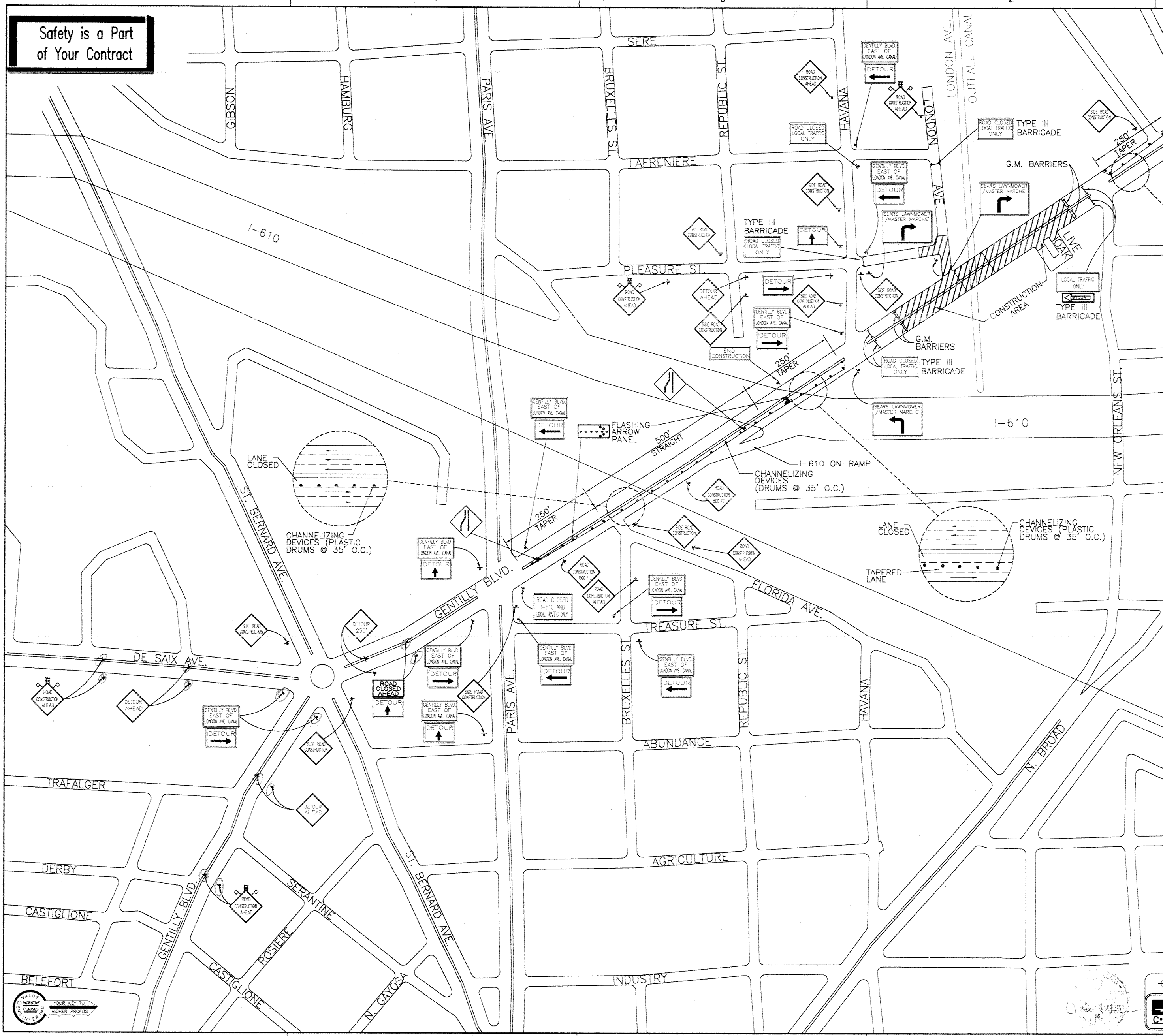
SCALE: 1/2"=1'-0"

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

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
UTILITY RELOCATION DETAILS - 2			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 96	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 447329LJ.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0080	DWG. 26 OF 67

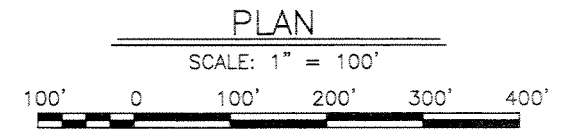


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NOTE: ALL FLASHING ARROW BOARDS SIGNS AND WARNING SIGNS SHALL BE BATTERY OPERATED. GENERATOR POWERED SIGNS WILL NOT BE PERMITTED TO BE USED IN THIS PROJECT.

MATCH LINE - SEE SHEET 28



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

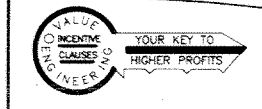
BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LINFIELD HUNTER & JUNTUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

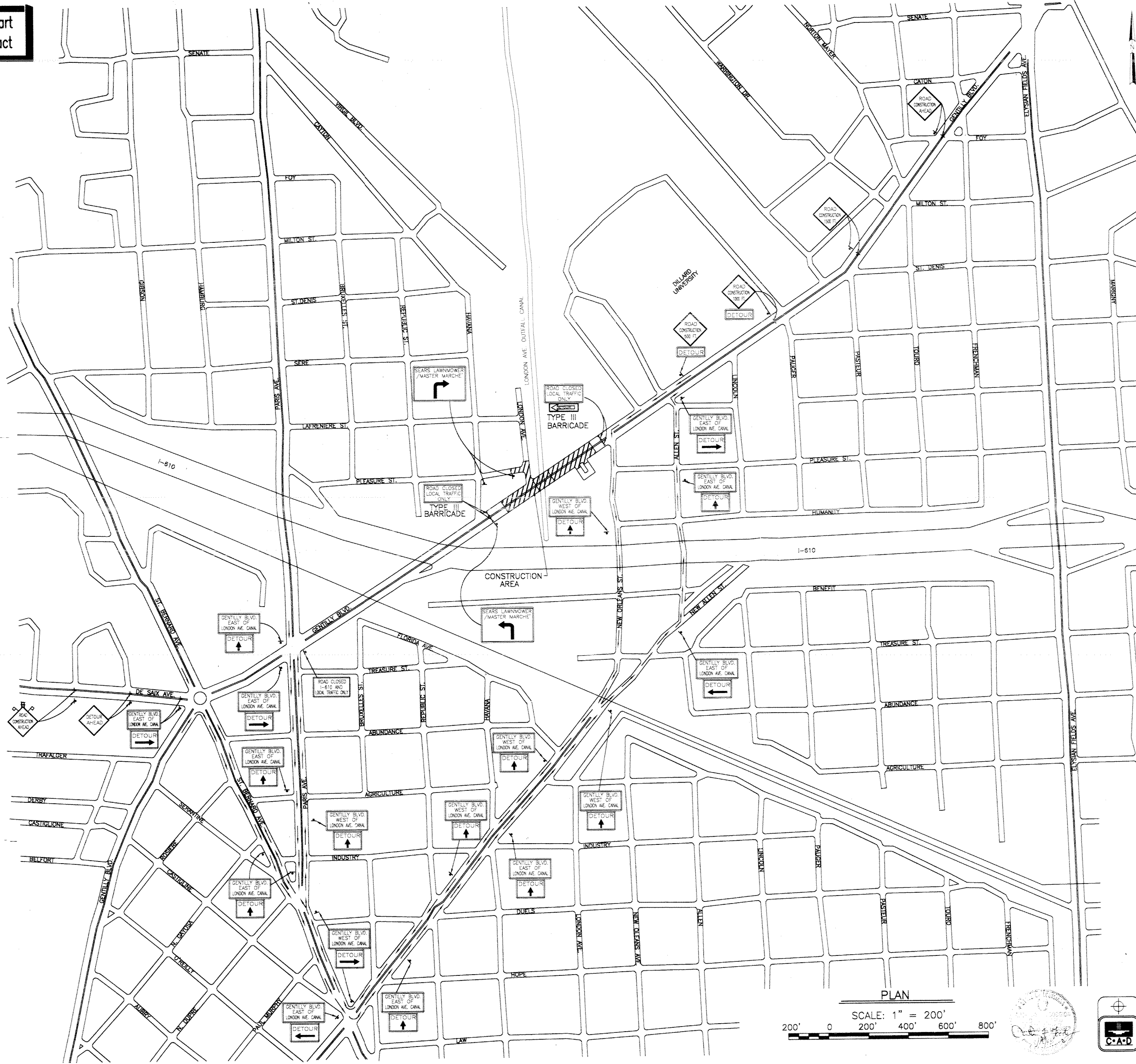
LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

MINIMUM CONSTRUCTION SIGNAGE PLAN - 1

DESIGNED BY: SGJ	DATE: FEB. 1998	PLOT SCALE: 120	PLOT DATE: 2/20/98
DRAWN BY: CMB	CADD FILE: 447328LKDGN	FILE NO. H-4-44733	
CHECKED BY: SGJ	SOLICITATION NO. DACW29-98-B-0060	DWG. 27 OF 67	
SUBMITTED BY: A. GOODSON DESIGN ENGINEER			





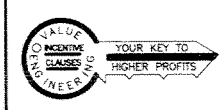
Safety is a Part of Your Contract



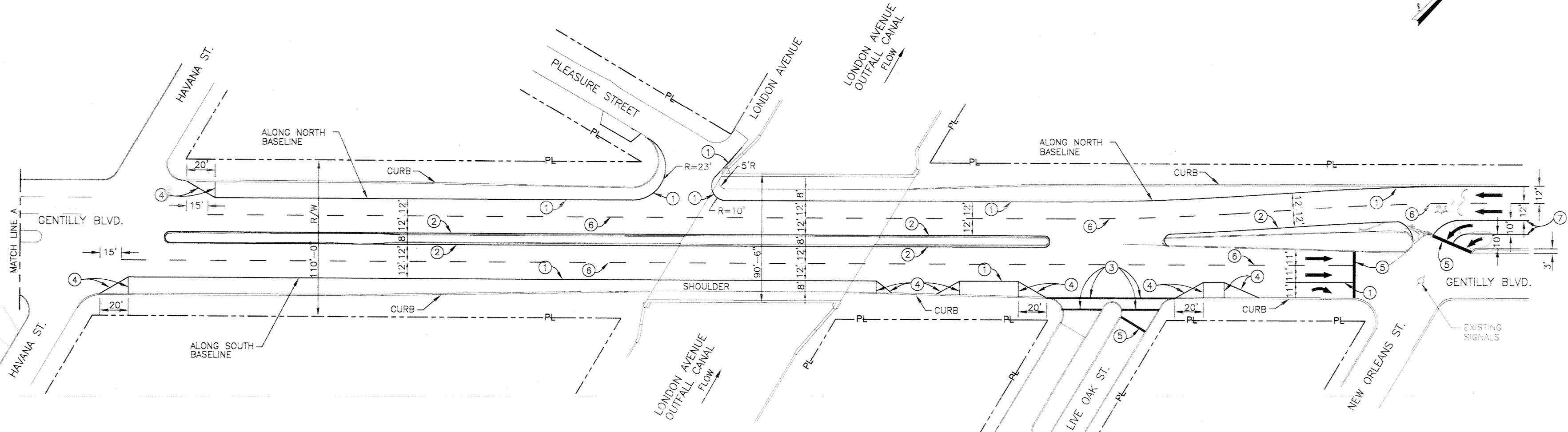
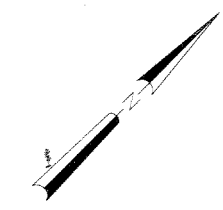
NOTES

1. MINIMUM CONSTRUCTION SIGNING. ANY OTHER SIGNS OR TRAFFIC CONTROL DEVICES INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AT NO ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE BARRICADES, SIGNAGE, ETC. FOR THIS WORK & SHALL IN ALL RESPECTS COMPLY WITH THE TRAFFIC PROVISION REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART VI: U.S. DEPT. OF TRANSPORTATION, FHWA, LATEST EDITION.
3. CONTRACTOR SHALL PROVIDE CONTINUOUS VEHICULAR ACCESS TO ALL BUSINESSES AND RESIDENCES.
4. CHANNELIZING DEVICES AND BARRICADES SHALL BE USED TO MARK ALL CONSTRUCTION AREAS. THESE SHALL BE TYPE III BARRICADES, AND/OR BARRELS, ALL FULLY REFLECTORIZED WITH LIGHTS.
5. ANY TRAFFIC CONTROL DEVICE (SIGN, SIGNAL, MARKING) WHICH EXISTS AS PART OF THE NORMAL PRE-CONSTRUCTION SCHEME, AND THAT DOES NOT APPLY TO AN APPROPRIATE SITUATION, OR IS IN THE WAY OF CONSTRUCTION, SHALL BE COVERED, REMOVED OR RELOCATED BY THE CONTRACTOR UNDER SUPERVISION OF THE DEPT. OF STREETS AND RESTORED TO ORIGINAL CONDITION UPON COMPLETION.
6. ANY TEMPORARY DEVICES NOT APPLYING TO AN APPROPRIATE SITUATION OR NO LONGER REQUIRED SHALL BE COVERED, REMOVED, OR OBLITERATED BY THE CONTRACTOR.
7. ALL EXCAVATION SHALL BE COVERED, BACKFILLED, PROTECTED AND FULLY DELINEATED (SEE NOTE NO. 4) AT NIGHT AND WHEN WORK IS NOT IN PROGRESS. BEFORE REMOVAL OF BARRICADES, SERVICE CUTS MUST BE RESTORED TO SUCH CONDITION TO WITHSTAND VEHICLE AND PEDESTRIAN LOADS.
8. CONTRACTOR SHALL CHECK TRAFFIC CONTROL DEVICES AS A MINIMUM WHEN BEGINNING AND ENDING THE WORK DAY, TO INSURE ADHERENCE TO THE PLANS.
9. FLAGMAN AND/OR NOPD OFFICER CONTROL TO BE PROVIDED AS NEEDED.
10. ANY ADDITIONAL TRAFFIC CONTROL DEVICES WHICH MAY BE REQUIRED AT TIME OF CONSTRUCTION BY THE DEPT. OF STREETS OR THE CONTRACTOR SHALL BE PROVIDED BY THE CONTRACTOR.
11. WHEN SIDEWALKS ARE CLOSED, CONTRACTOR SHALL PROVIDE A CLEAR, SAFE PATHWAY FOR PEDESTRIANS REQUIRED TO WALK THROUGH WORK ZONES OF THEIR PROJECT. BARRICADES (SEE NOTE NO. 4) SHALL SEPARATE PEDESTRIANS FROM MOVING VEHICLES AND EQUIPMENT. DIRECTIONAL SIGNAGE WITH CLEAR LANGUAGE SHALL BE PROVIDED FOR POSITIVE GUIDANCE TO PEDESTRIANS WHEN DETOUR PATHS ARE PROVIDED. ALL PATHWAYS WILL BE 4 FEET IN WIDTH. ALL PEDESTRIAN DIRECTIONAL SIGNS SHALL BE LIGHTED FOR NIGHT USE.
12. ALL "CONSTRUCTION" SIGNS TO HAVE 12 VOLT HIGH INTENSITY FLASHING YELLOW LIGHTS. BARRELS TO HAVE LOW INTENSITY STEADY BURN YELLOW LIGHTS. TYPE III BARRICADES TO HAVE A MIN. OF 2 LOW INTENSITY FLASHING YELLOW LIGHTS.
13. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT.
14. FLASHING ARROW BOARDS SHALL BE BATTERY OPERATED.
15. DETOUR ROUTES MUST BE ADVERTISED IN TIMES-PICAYUNE AT LEAST 1 WEEK BEFORE CLOSURE OF BRIDGE.

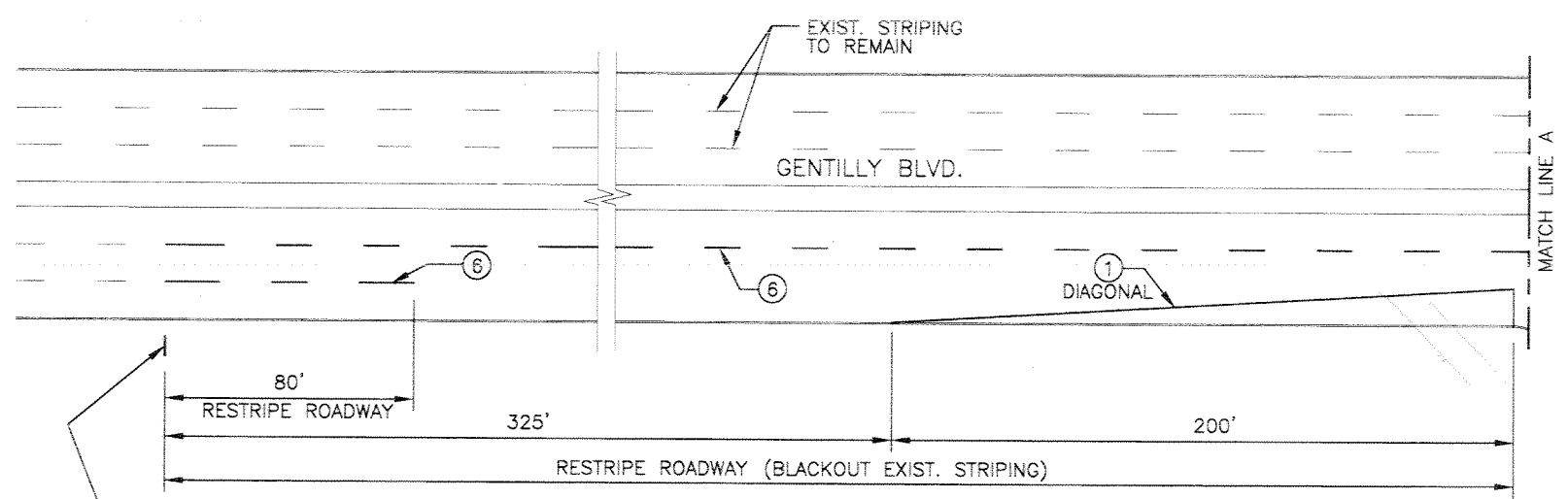
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		 LINFIELD HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
DETOUR SIGNAGE PLAN			
DESIGNED BY: SGJ	DATE: FEB. 1998	PLOT SCALE: 144	PLOT DATE: 2/20/98
DRAWN BY: CMB	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: SGJ	SOLICITATION NO. DACW29-98-B-0060		
SUBMITTED BY: A. GOODSON DESIGN ENGINEER		DWG. 29 OF 67	



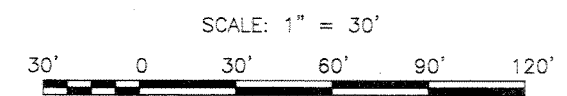
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PART PLAN
SCALE: 1" = 30'



PLAN (CONT.)
SCALE: 1" = 30'



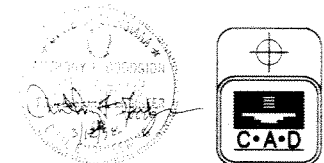
MUTCD W4-2 (36"x36")
LANE REDUCTION TRANSITION
SIGN WITH POST

- LEGEND**
- ① 4" SOLID WHITE LINE
 - ② 4" SOLID YELLOW LINE
 - ③ 6" SOLID WHITE LINE (CROSSWALK LINES)
 - ④ 6" YELLOW LINE (CORNER ZONE)
 - ⑤ 12" SOLID WHITE STOP BAR
LOCATE 4' BEHIND CROSS WALK LINE
 - ⑥ 4" BROKEN WHITE LINE
(15' LINE-25' SKIP PATTERN)
 - ⑦ 8" SOLID WHITE LINE

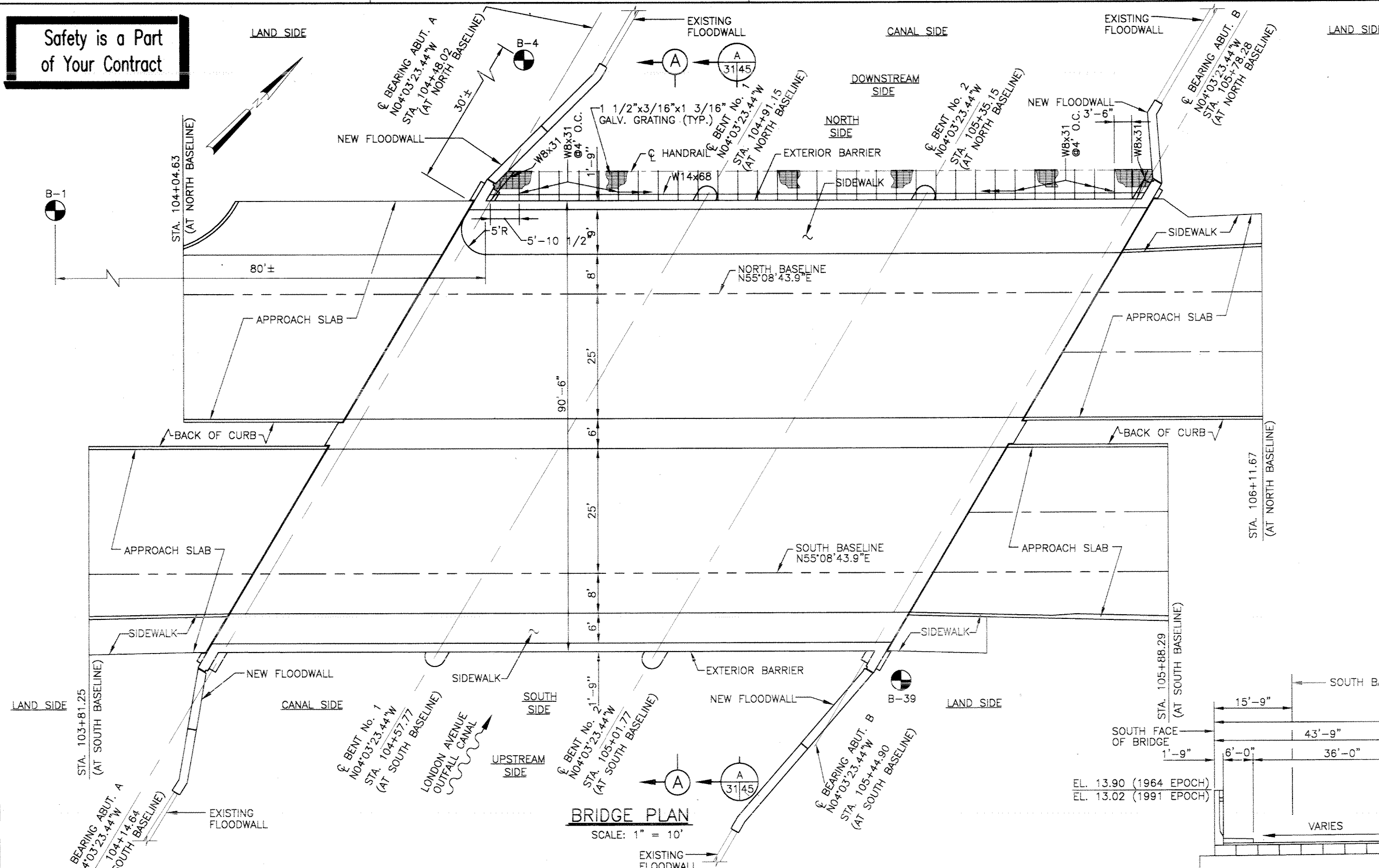
PAINTED ARROWS PER MUTCD
(MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES)

- NOTES**
1. ALL PAVEMENT MARKINGS SHALL BE INSTALLED AS PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD)
 2. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS.
 3. FOR GENERAL NOTES SEE DWG. 2
CONTRACTOR SHALL LOCATE, INVENTORY, REMOVE, AND STORED (IN DESIGNATED STAGING AREAS) ALL EXISTING STREET SIGNS AFFECTED BY PROJECT CONSTRUCTION. SIGNS SHALL BE REPLACED AT COMPLETION OF PROJECT.

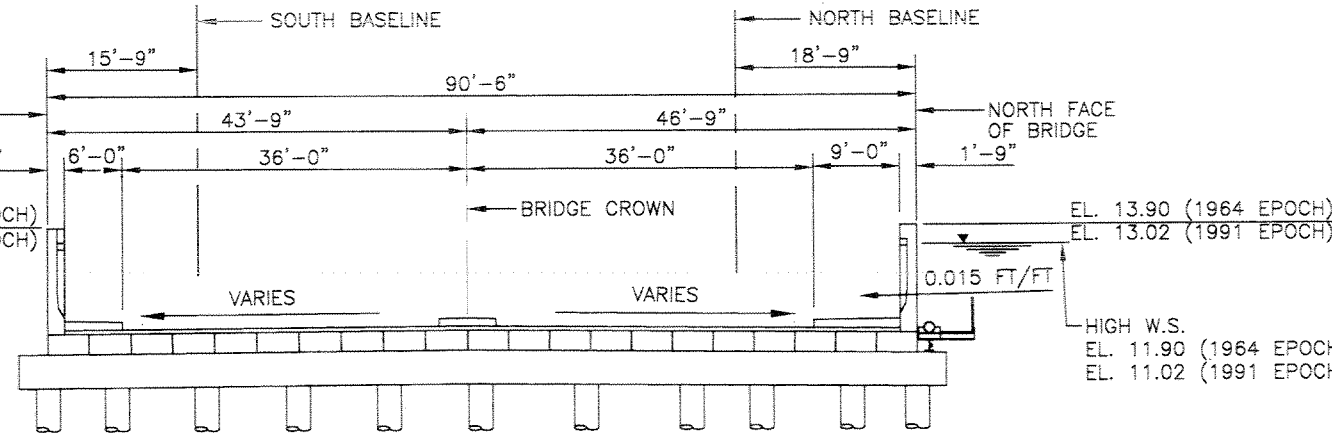
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
PERMANENT PAVEMENT MARKERS			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 30'	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: X	SOLICITATION NO. DACW29-98-B-0060	DWG. 30	OF 67
SUBMITTED BY: A.GOODSON DESIGN ENGINEER			



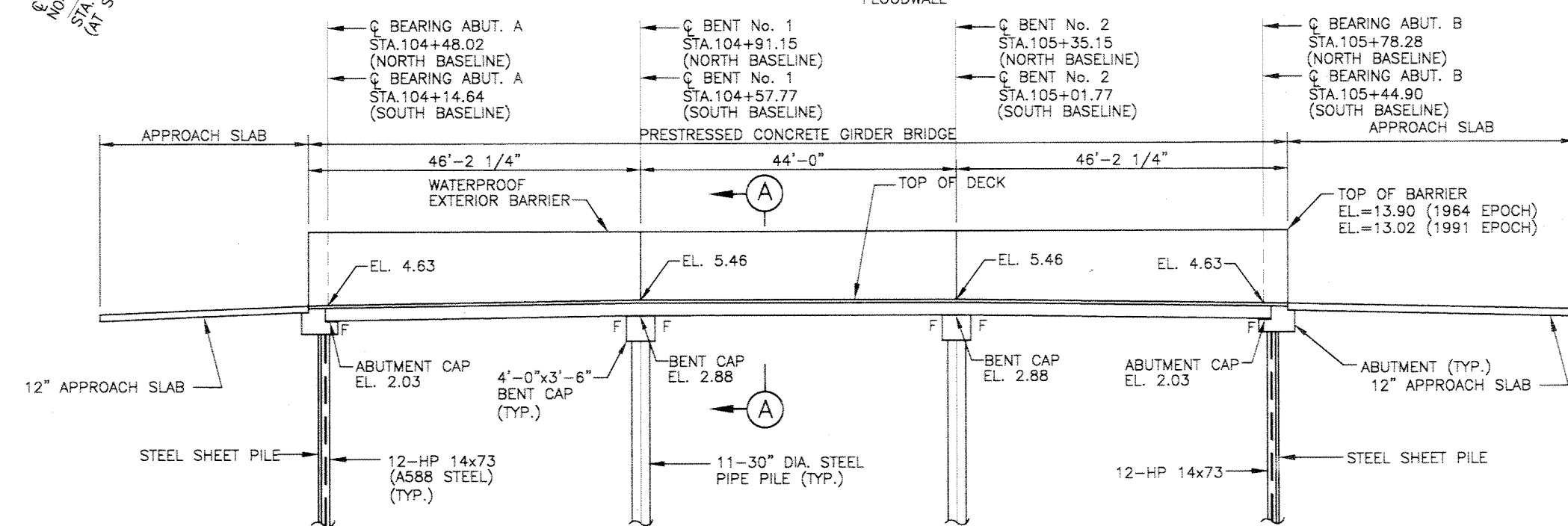
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BRIDGE PLAN
SCALE: 1" = 10'



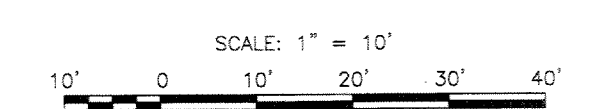
SECTION (A) - BRIDGE SECTION
SCALE: 1" = 10'



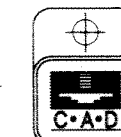
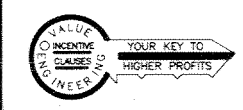
BRIDGE ELEVATION
SCALE: 1" = 10'

F = FIXED END
ALL LENGTHS & ELEVATIONS ARE ALONG NORTH BASELINE.

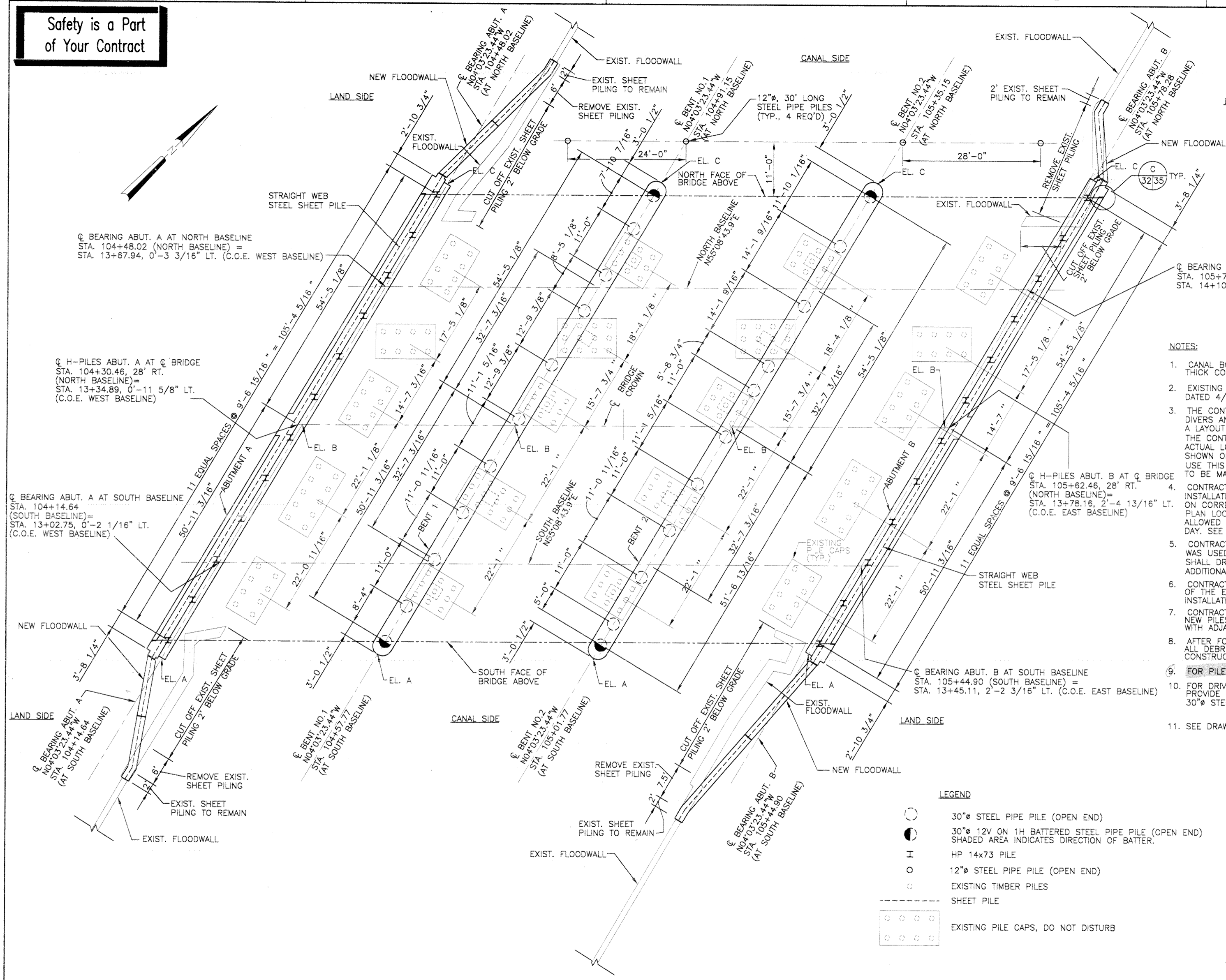
NOTE:
FOR GENERAL NOTES SEE DWG. 3
FOR FLOODWALL LAYOUT AND PLAN SEE DWG. 54
FOR BORING LOGS, SEE DWG. 63
FOR PILE DETAILS, SEE DWG. 51



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
BRIDGE PLAN & ELEVATION			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 10	PLOT DATE: 2/20/98
CHECKED BY: AFG	CADD FILE: 44732BLKDDN	FILE NO. H-4-44733	
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 31 OF 67	



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⊙ BEARING ABUT. A AT NORTH BASELINE
 STA. 104+48.02 (NORTH BASELINE) =
 STA. 13+67.94, 0'-3 3/16" LT. (C.O.E. WEST BASELINE)

⊙ H-PILES ABUT. A AT ⊙ BRIDGE
 STA. 104+30.46, 28' RT.
 (NORTH BASELINE) =
 STA. 13+34.89, 0'-11 5/8" LT.
 (C.O.E. WEST BASELINE)

⊙ BEARING ABUT. A AT SOUTH BASELINE
 STA. 104+14.64
 (SOUTH BASELINE) =
 STA. 13+02.75, 0'-2 1/16" LT.
 (C.O.E. WEST BASELINE)

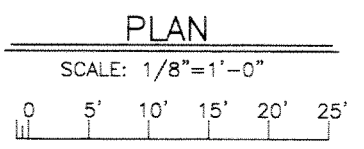
⊙ BEARING ABUT. B AT NORTH BASELINE
 STA. 105+78.28 (NORTH BASELINE) =
 STA. 14+10.28, 4'-1 1/8" LT. (C.O.E. EAST BASELINE)

⊙ H-PILES ABUT. B AT ⊙ BRIDGE
 STA. 105+62.46, 28' RT.
 (NORTH BASELINE) =
 STA. 13+78.16, 2'-4 13/16" LT.
 (C.O.E. EAST BASELINE)

⊙ BEARING ABUT. B AT SOUTH BASELINE
 STA. 105+44.90 (SOUTH BASELINE) =
 STA. 13+45.11, 2'-2 3/16" LT. (C.O.E. EAST BASELINE)

- NOTES:**
- CANAL BOTTOM CONSISTS OF APPROXIMATELY 10 INCH THICK CONCRETE PAVING.
 - EXISTING FOOTING LOCATIONS ARE BASED ON DOTD PLANS DATED 4/35.
 - THE CONTRACTOR SHALL LOCATE EXISTING BRIDGE FOOTINGS USING DIVERS AND/OR SONOGRAPH EQUIPMENT, OR OTHER APPROVED METHODS. A LAYOUT OF EXISTING BRIDGE FOOTINGS SHALL BE SUBMITTED TO THE CONTRACTING OFFICER PRIOR TO PILE INSTALLATION, INDICATING ACTUAL LOCATIONS OF FOOTINGS IN RELATION TO BASELINES SHOWN ON THIS DRAWING. THE CONTRACTING OFFICER SHALL USE THIS INFORMATION TO DETERMINE IF ADJUSTMENTS ARE TO BE MADE TO PILE LOCATIONS.
 - CONTRACTOR SHALL PROVIDE A DRIVING TEMPLATE FOR INSTALLATION OF ALL PILING. AFTER PLACING DRIVING TEMPLATE ON CORRECT ALIGNMENT, CONTRACTOR SHALL STAB PIPE PILES IN PLAN LOCATIONS AS SHOWN. THE CONTRACTOR WILL NOT BE ALLOWED TO STAB MORE PILES THAN CAN BE DRIVEN IN THE SAME DAY. SEE CANAL BOTTOM DEMOLITION DETAIL DWG. 20.
 - CONTRACTOR MAY ENCOUNTER ABANDONED SHEETING WHICH WAS USED TO CONSTRUCT EXISTING FOOTINGS. CONTRACTOR SHALL DRIVE PIPE PILES THROUGH EXISTING SHEETING AT NO ADDITIONAL PAYMENT.
 - CONTRACTOR SHALL CHIP OUT AND REMOVE CONCRETE SECTIONS OF THE EXISTING CONCRETE CANAL BOTTOM PRIOR TO PILE INSTALLATIONS.
 - CONTRACTOR SHALL UNDERWATER TREMIE CONCRETE AROUND NEW PILES. CONCRETE FINISH SHALL BE SMOOTH AND LEVEL WITH ADJACENT CONCRETE CANAL BOTTOM.
 - AFTER FOUNDATION INSTALLATION CONTRACTOR SHALL REMOVE ALL DEBRIS, TRASH, ETC. FROM CANAL BOTTOM IN CONSTRUCTION AREA.
 - FOR PILE DETAILS, SEE DWG. 51
 - FOR DRIVING THROUGH OBSTRUCTIONS THE CONTRACTOR SHALL PROVIDE 1/4" THICKER WALL BY 5' LONG AT TIP END FOR 30" STEEL PIPE PILE.
 - SEE DRAWING 14 FOR LOCATIONS OF TEST PILES.

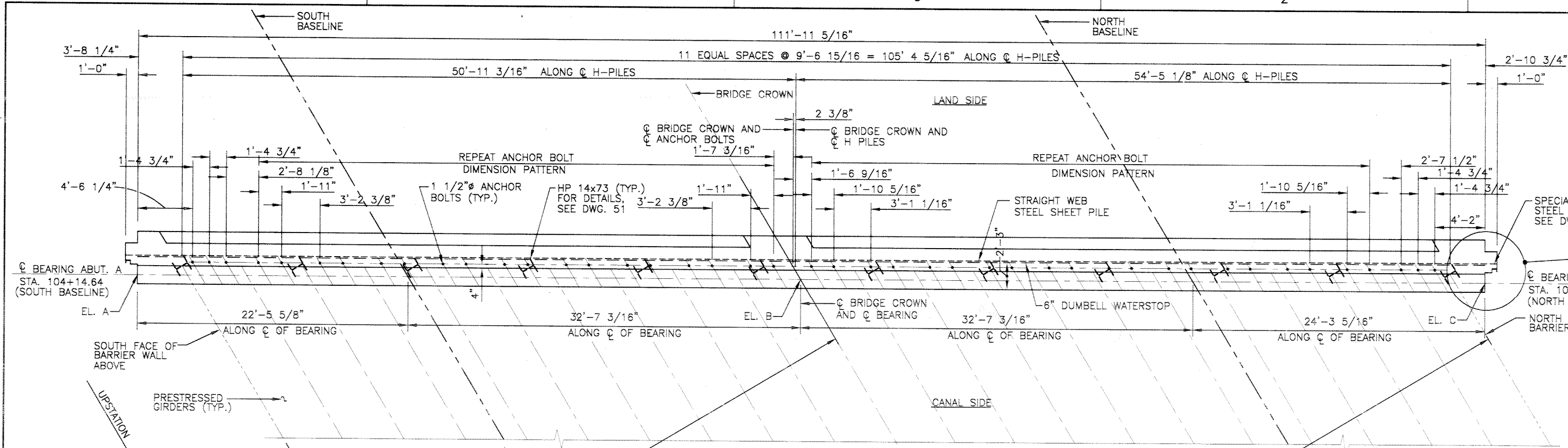
- LEGEND**
- 30" STEEL PIPE PILE (OPEN END)
 - 30" 12V ON 1H BATTERED STEEL PIPE PILE (OPEN END) SHADED AREA INDICATES DIRECTION OF BATTER.
 - I HP 14x73 PILE
 - 12" STEEL PIPE PILE (OPEN END)
 - EXISTING TIMBER PILES
 - SHEET PILE
 - ○ ○ ○ EXISTING PILE CAPS, DO NOT DISTURB



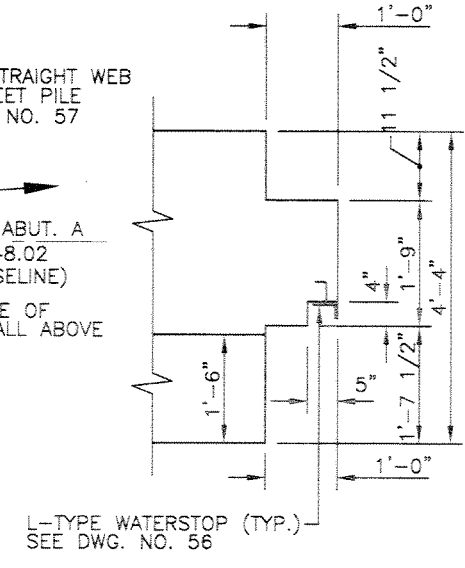
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3300 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
FOUNDATION PLAN			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 96	PLOT DATE: 2/20/98
DRAWN BY: RKP	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 32 OF 67	



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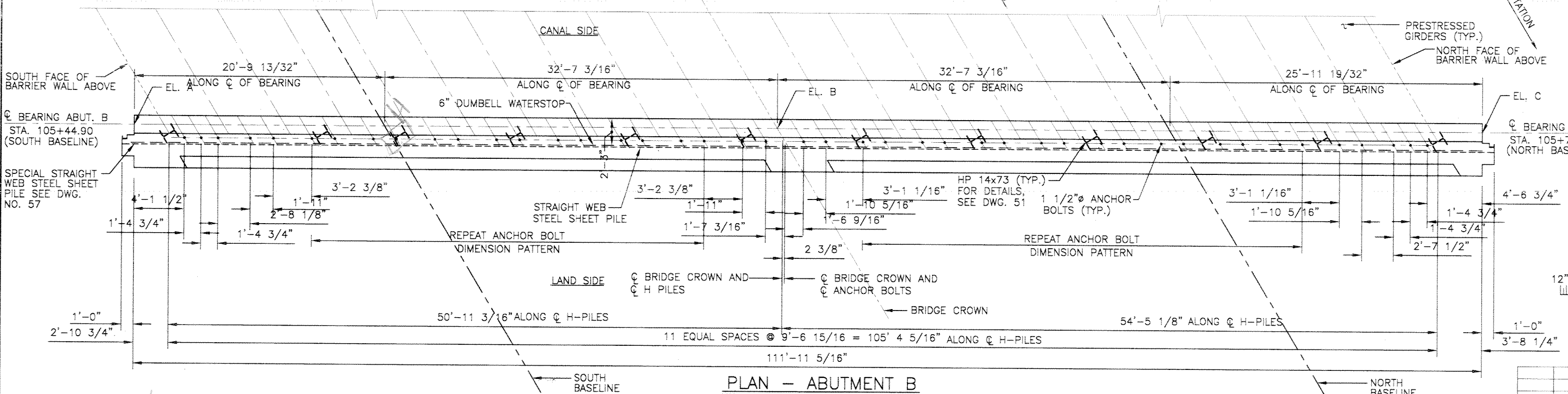
PLAN - ABUTMENT A
SCALE: 1/4" = 1'-0"



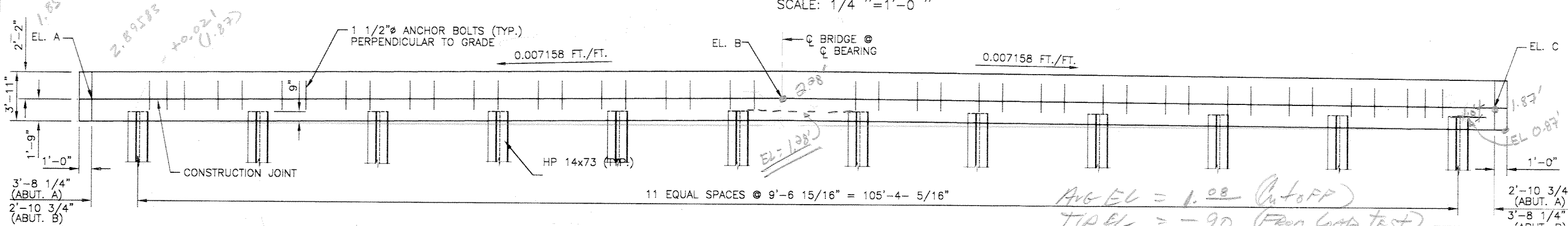
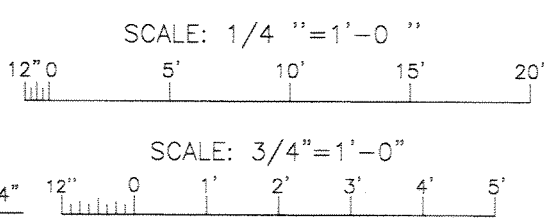
PLAN DETAIL
SCALE: 3/4" = 1'-0"
ABUTMENT EXTENSION

ABUTMENTS A AND B	
LOCATION	ELEVATION
EL. A	1.88
EL. B	2.28
EL. C	1.87

NOTE: ELEVATIONS @ CENTERLINE OF BEARING



PLAN - ABUTMENT B
SCALE: 1/4" = 1'-0"



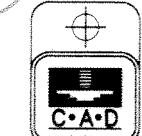
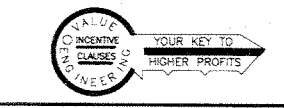
ELEVATION
SCALE: 1/4" = 1'-0"

AVG EL = 1.88 (AutoAPP)
TIP EL = -90 (From Load Test)

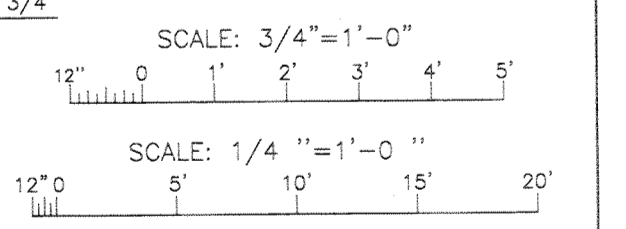
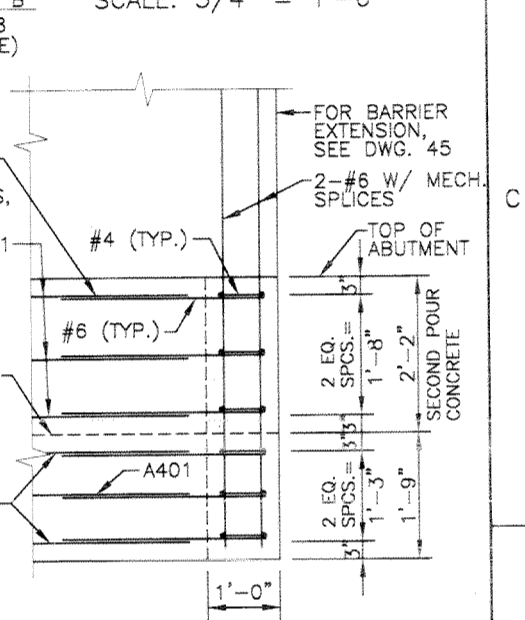
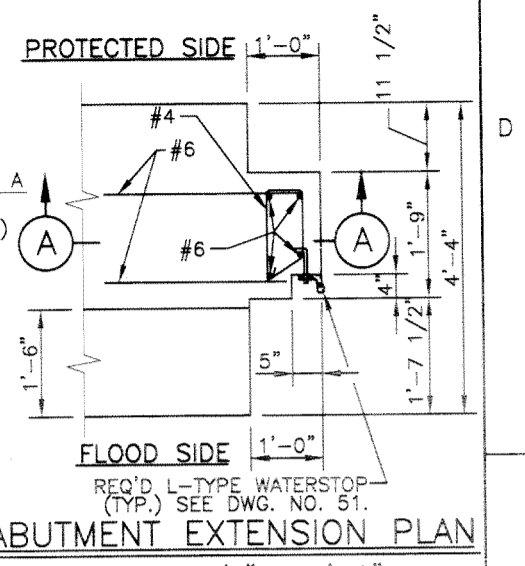
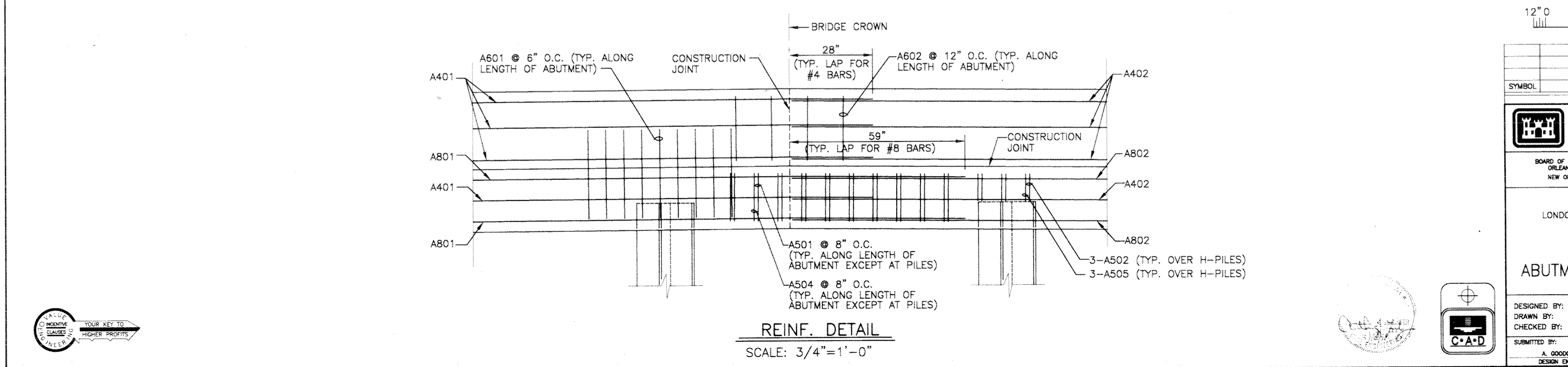
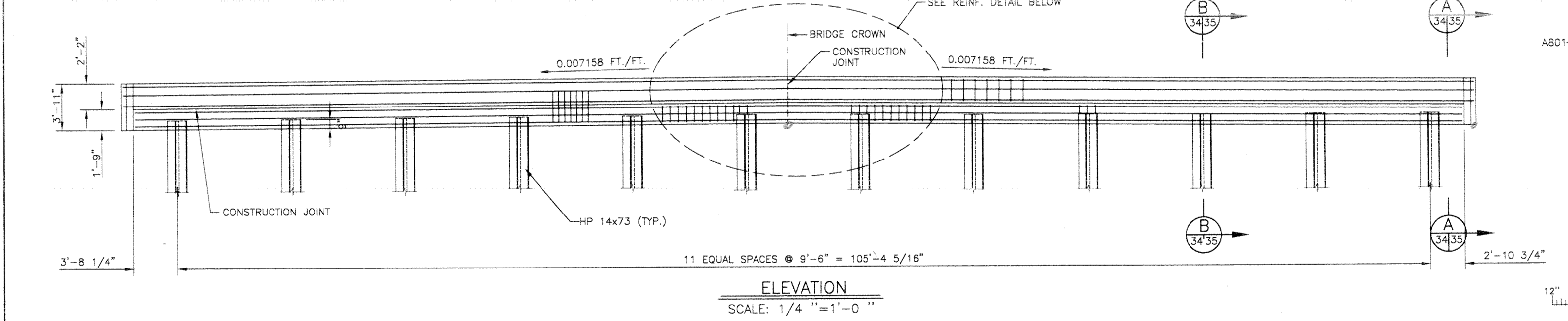
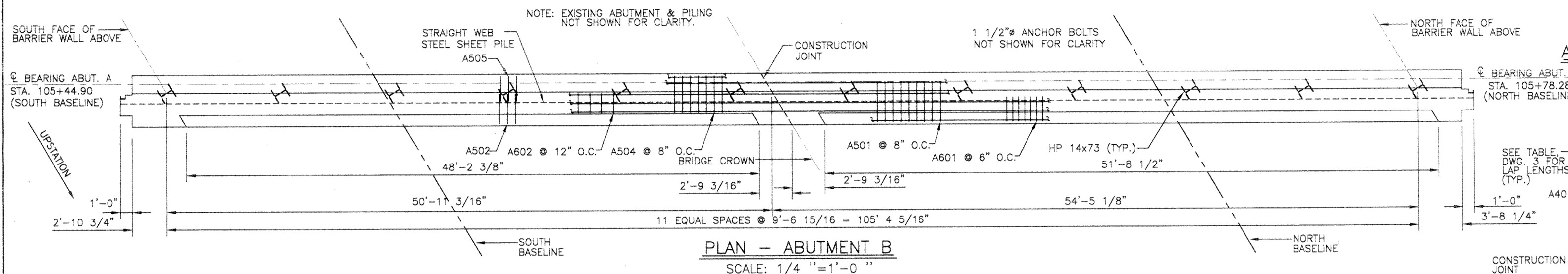
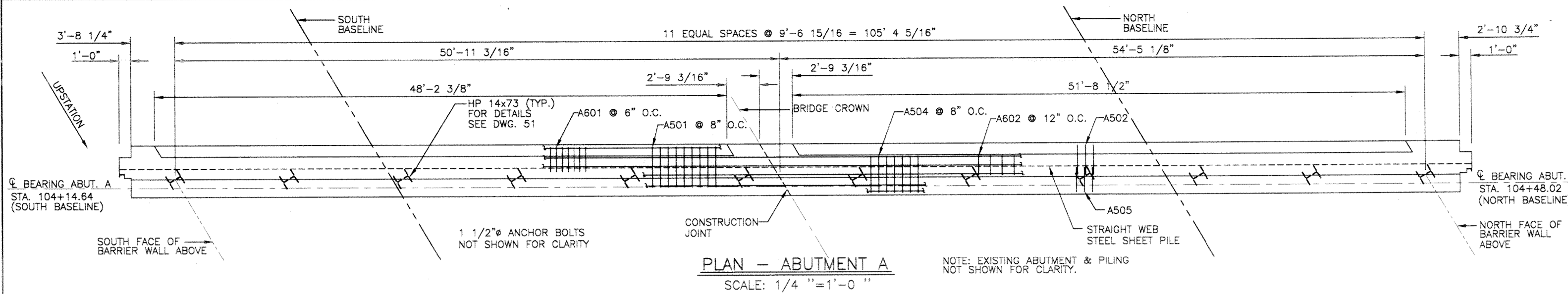
DESIGN PILE LOAD = 79 TONS
EST. PILE TIP ELEV. = -90 N.G.V.D.
EST. PILE LENGTH = 92'
SHEET PILE TIP ELEV. = -17.88 N.G.V.D.

PILE LENGTH = 91.08'

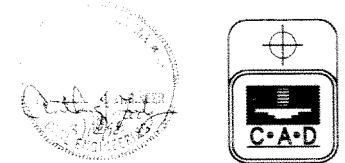
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
ABUTMENT PLAN & ELEVATION			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 33 OF 67



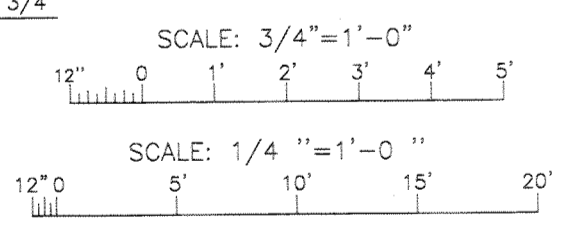
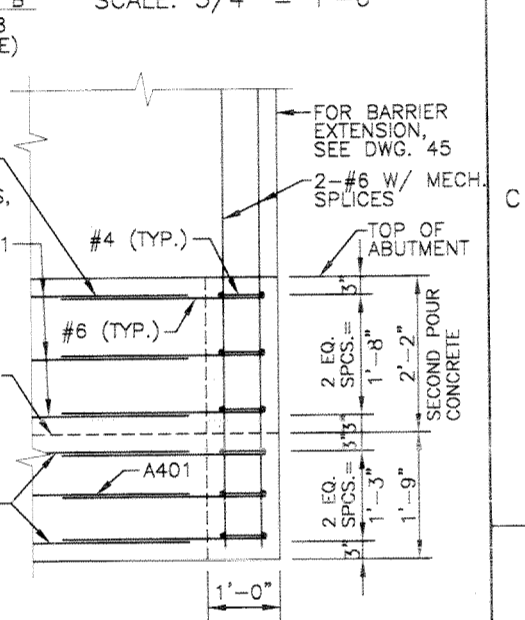
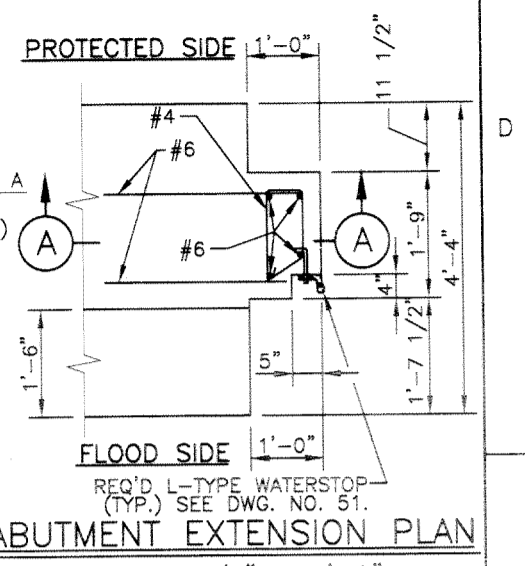
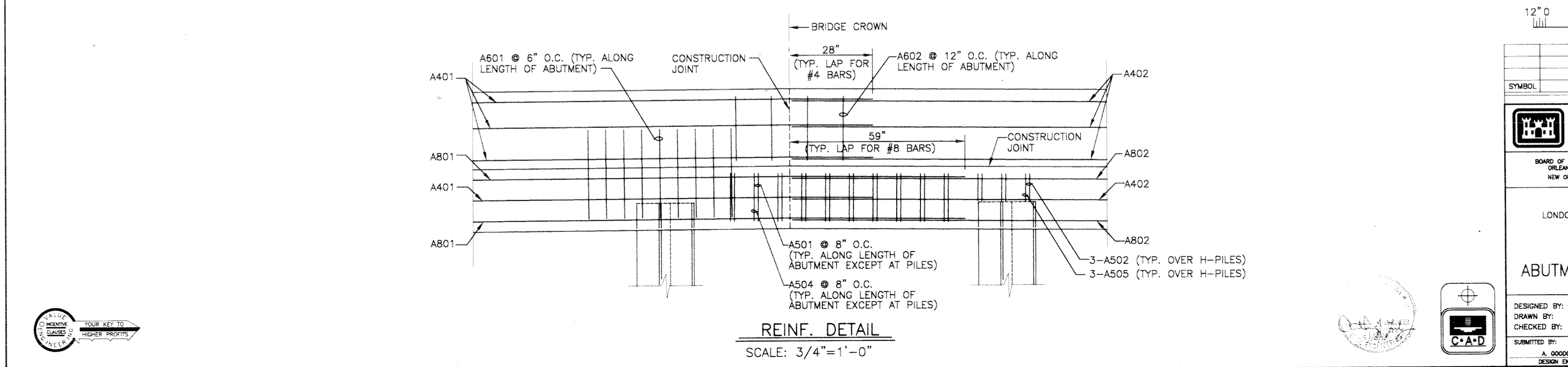
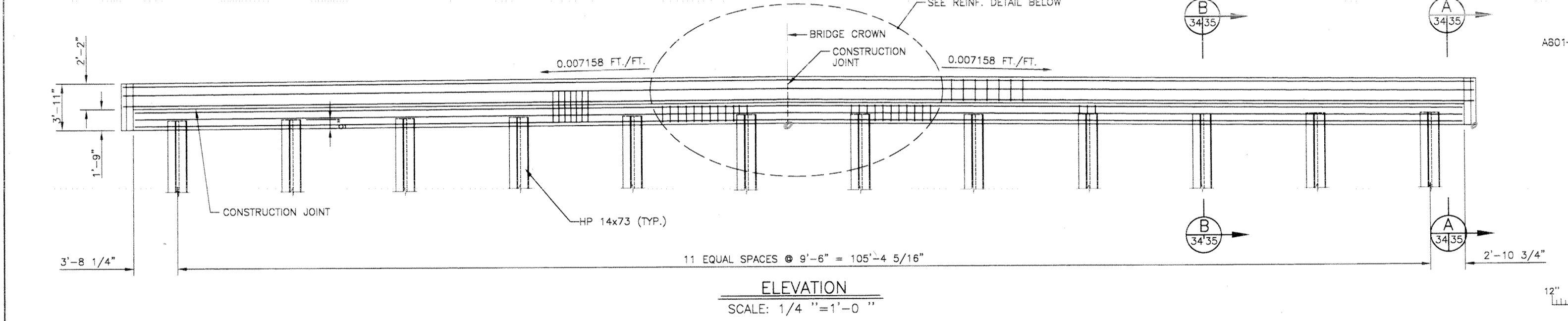
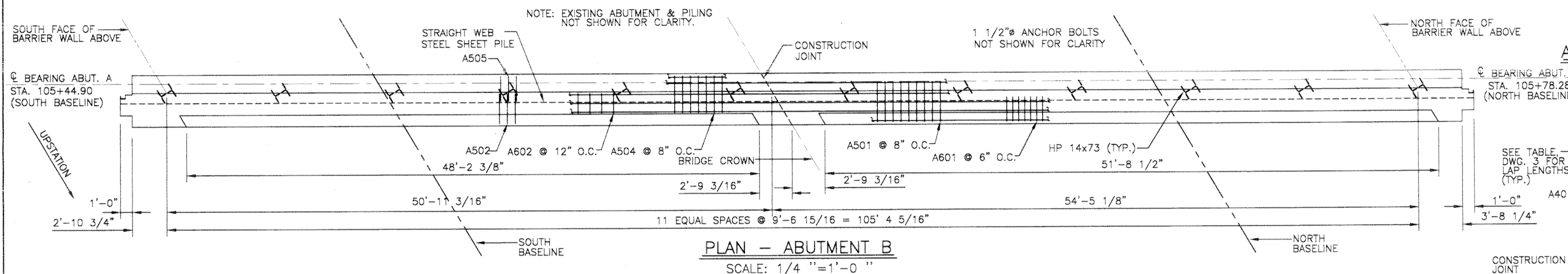
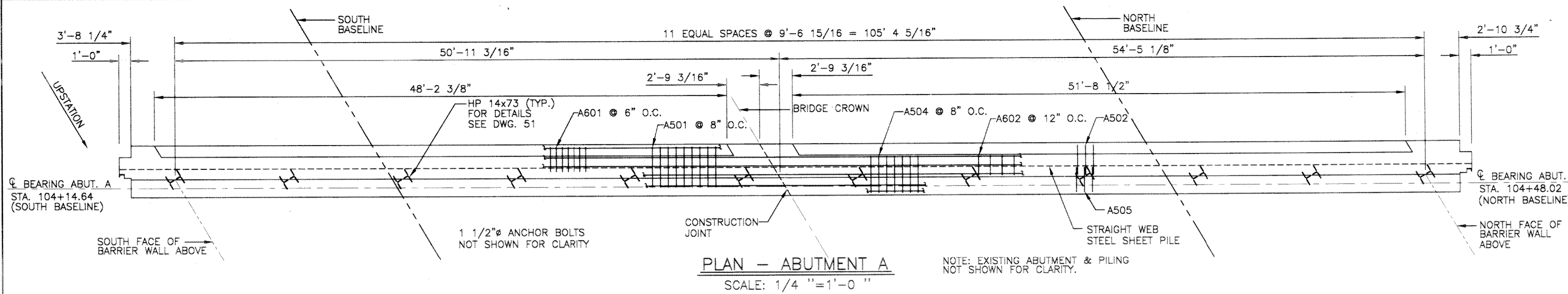
Safety is a Part of Your Contract



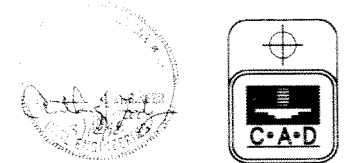
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
ABUTMENT REINFORCEMENT DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 34 OF 67	

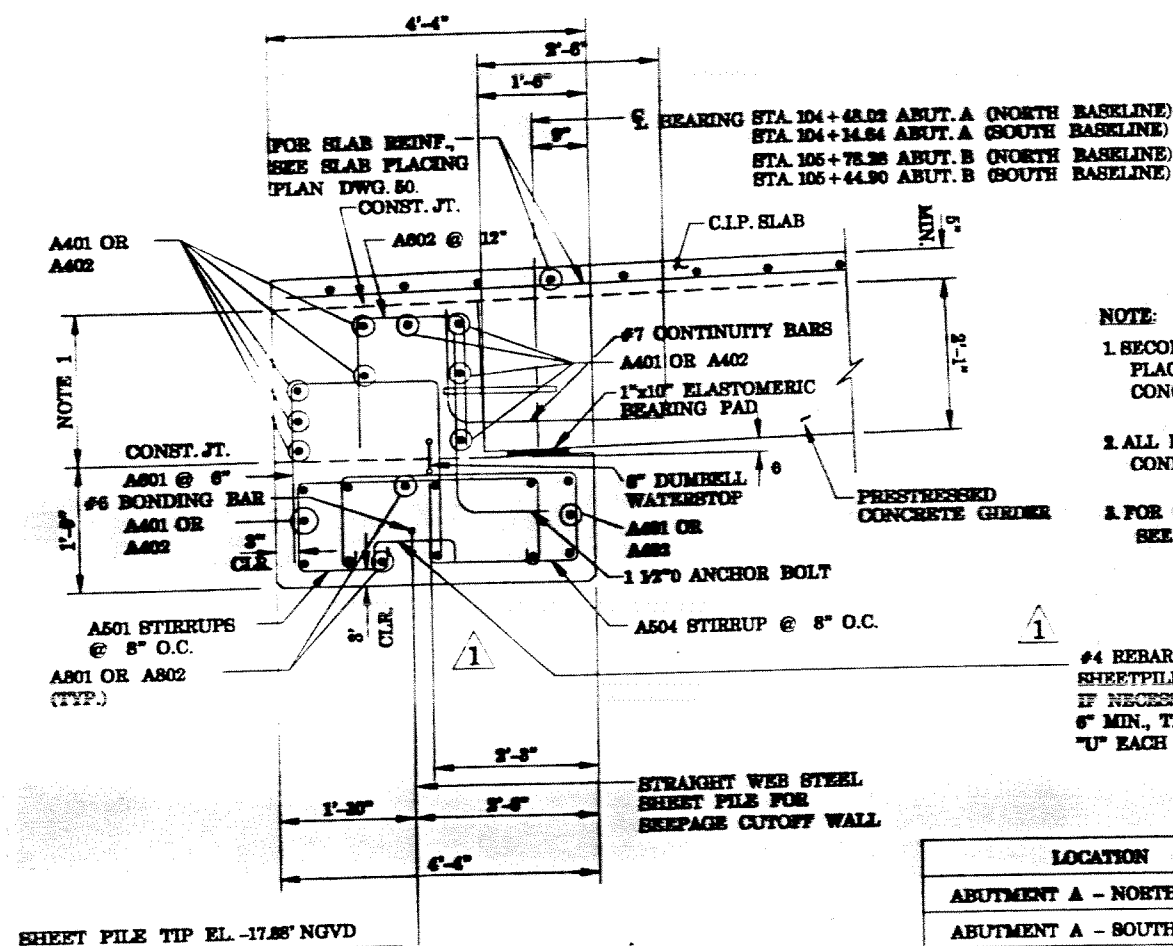


Safety is a Part of Your Contract



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
ABUTMENT REINFORCEMENT DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 34 OF 67	

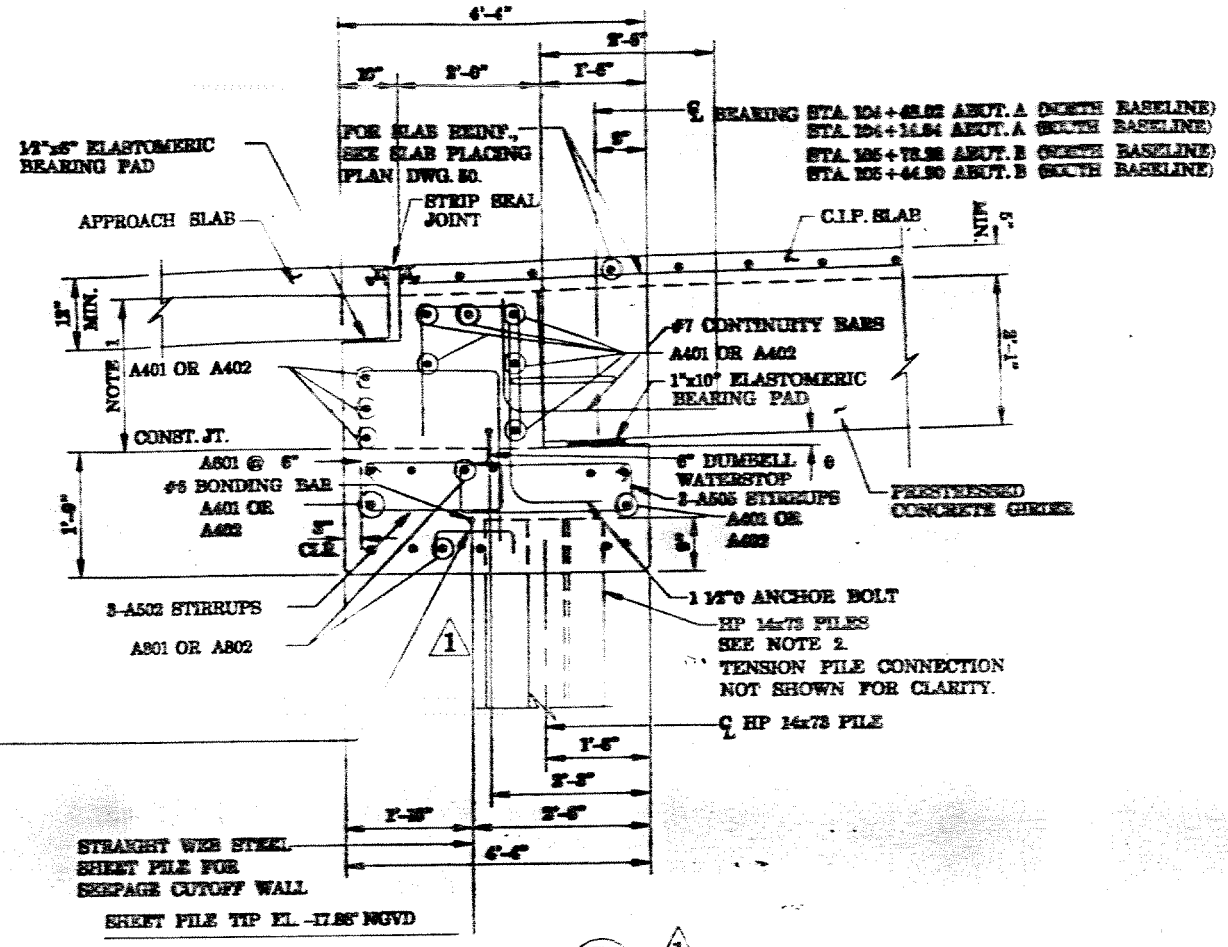




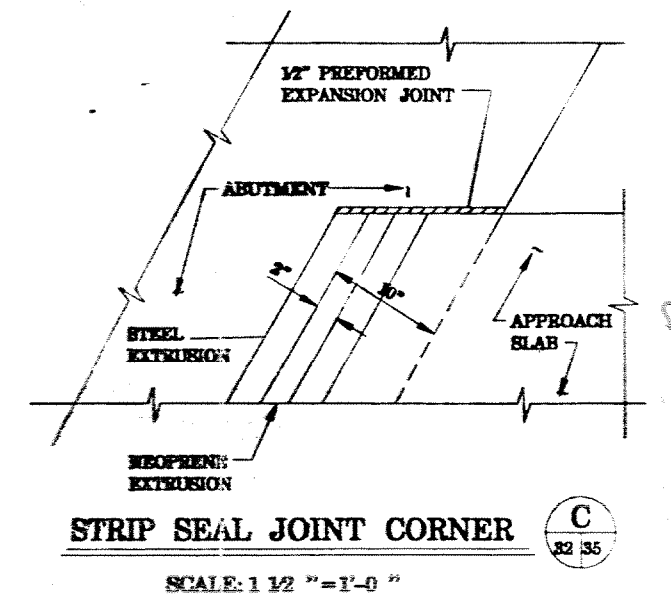
SECTION A
SCALE: 3/4" = 1'-0"

- NOTE:**
1. SECOND POUR CONCRETE SHALL BE PLACED AFTER PRECAST PRESTRESSED CONCRETE GIRDERS ARE IN PLACE.
 2. ALL HP PILES SHALL HAVE TENSION PILE CONNECTIONS AS SHOWN ON DWG. 5.
 3. FOR C ANCHOR BOLT DIMENSIONS, SEE DWG. 48.

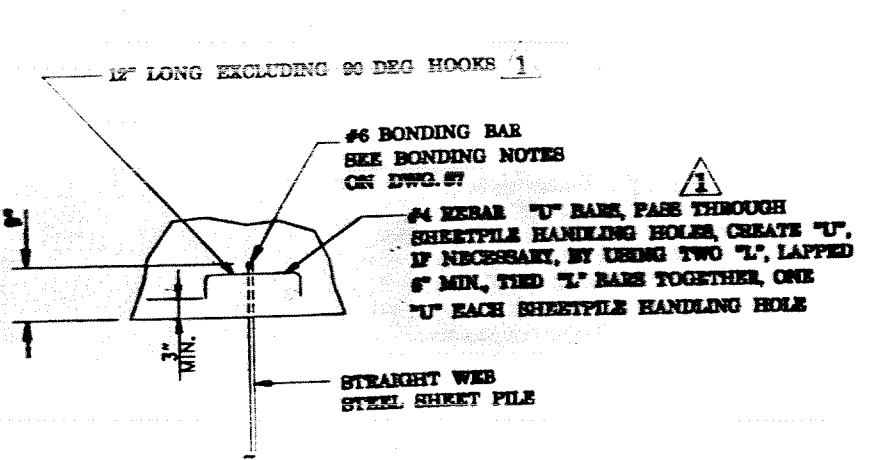
LOCATION	E
ABUTMENT A - NORTH END	1°-33'-19.44"
ABUTMENT A - SOUTH END	1°-04'-00.84"
ABUTMENT B - NORTH END	1°-04'-00.84"
ABUTMENT B - SOUTH END	1°-33'-19.44"



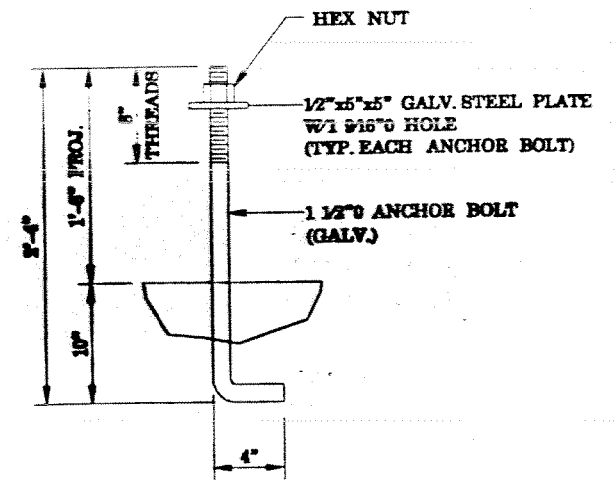
SECTION B
SCALE: 3/4" = 1'-0"



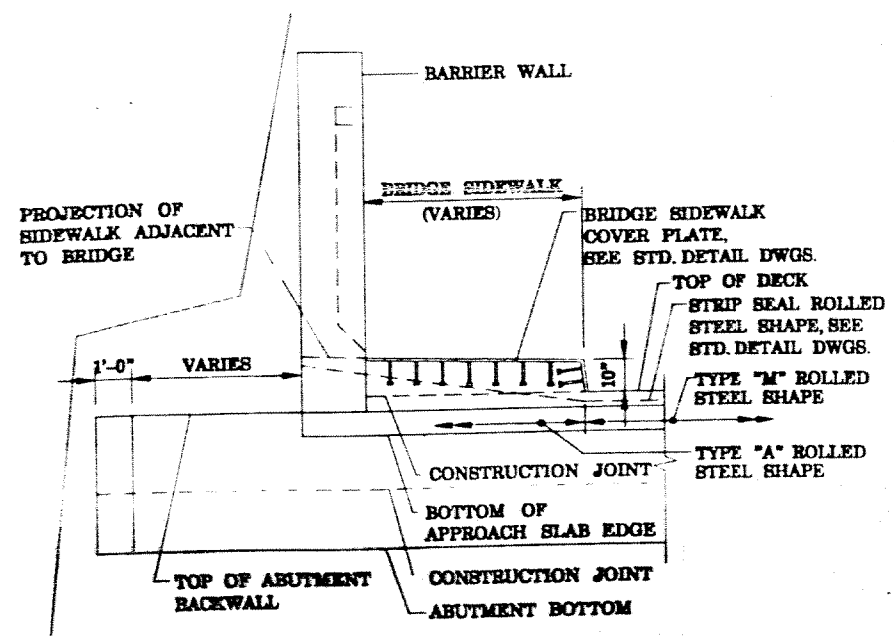
STRIP SEAL JOINT CORNER
SCALE: 1 1/2" = 1'-0"



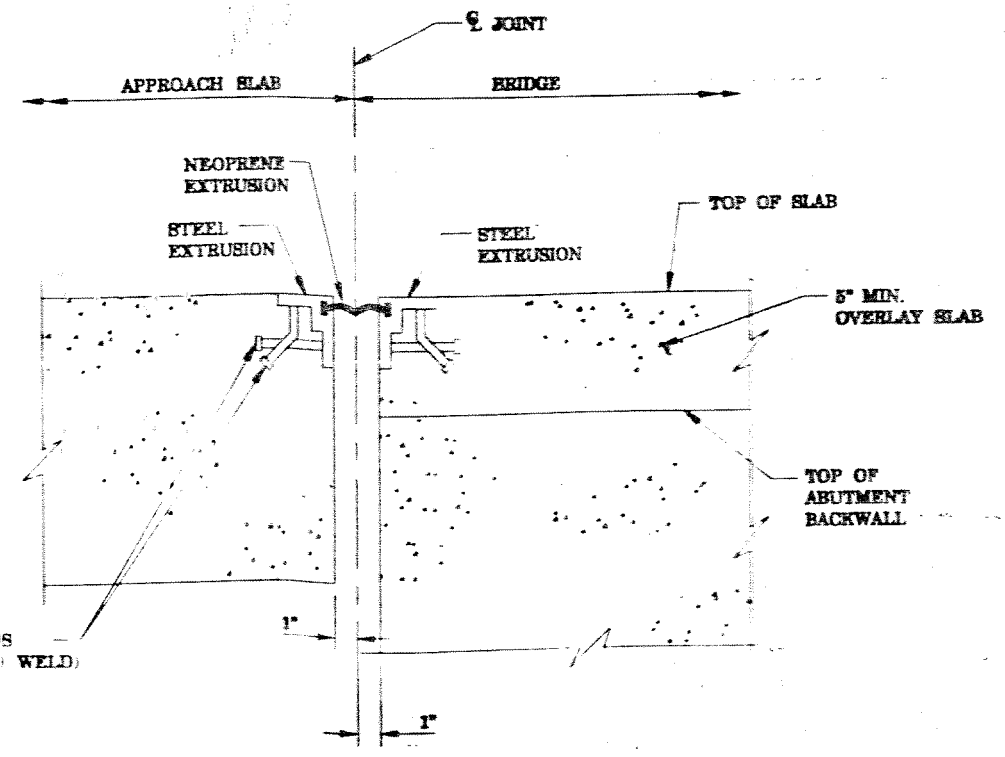
SHEET PILE DETAIL
SCALE: 3/4" = 1'-0"



ANCHOR BOLT DETAIL
SCALE: 1 1/2" = 1'-0"



STRIP SEAL THRU SIDEWALK
SCALE: 3/8" = 1'-0"



STRIP SEAL JOINT DETAIL
SCALE: 3" = 1'-0"

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

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

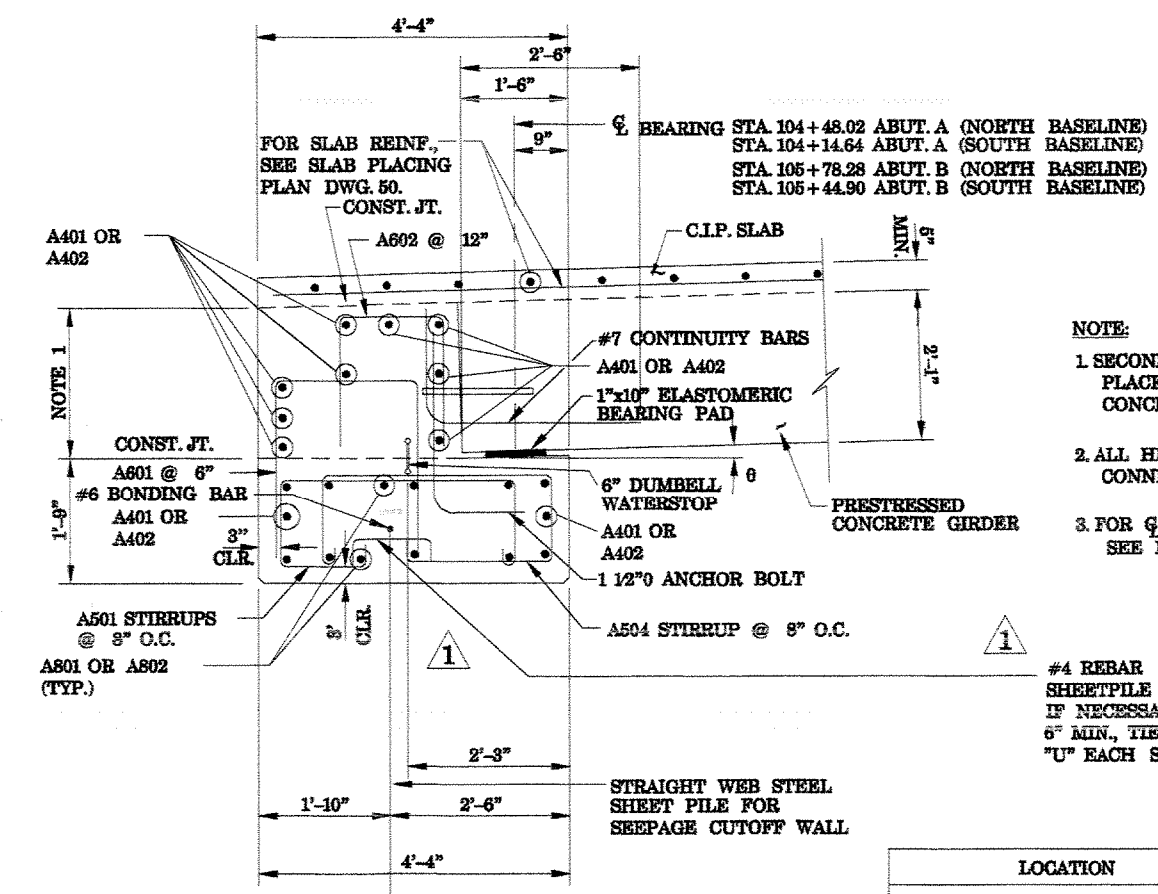
SCALE: 1 1/2" = 1'-0"

SCALE: 3" = 1'-0"

REMOVE 1" COMP. MAT. & ADD #4 \"U\" 10/26/99 F.S.Y.	DATE	APPROVED
REVISIONS U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA		
LAKELAND, HUNTER & JUNIOR, INC. CONSULTING ENGINEERS AND ARCHITECTS 2000 North Causeway Blvd. Suite 202 Metairie, Louisiana 70002		
LAKE FORTCHAPRAUN, LA AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA		
ABUTMENT DETAILS		
DESIGNED BY: PWB	DATE: FEB 1998	PLAT SCALE: 3/8"
DRAWN BY: WAY	CHECKED BY: SPG	PLAT DATE: 9/20/98
QUANTITY BY:	APPROVED BY:	FILE NO: H-4-44733
CONTRACT NO: DA0795 96 B-0060	PROJECT NO: DWG35 OF 67	



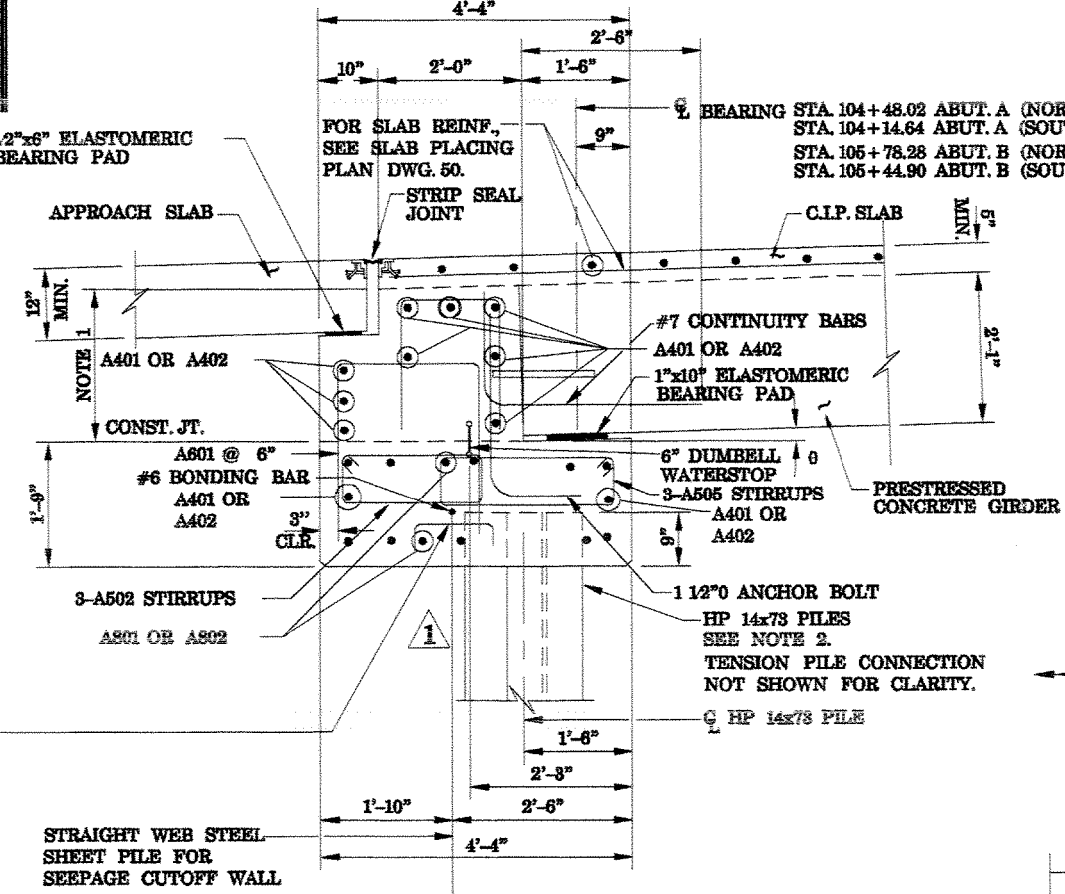
Safety is a Part
of Your Contract



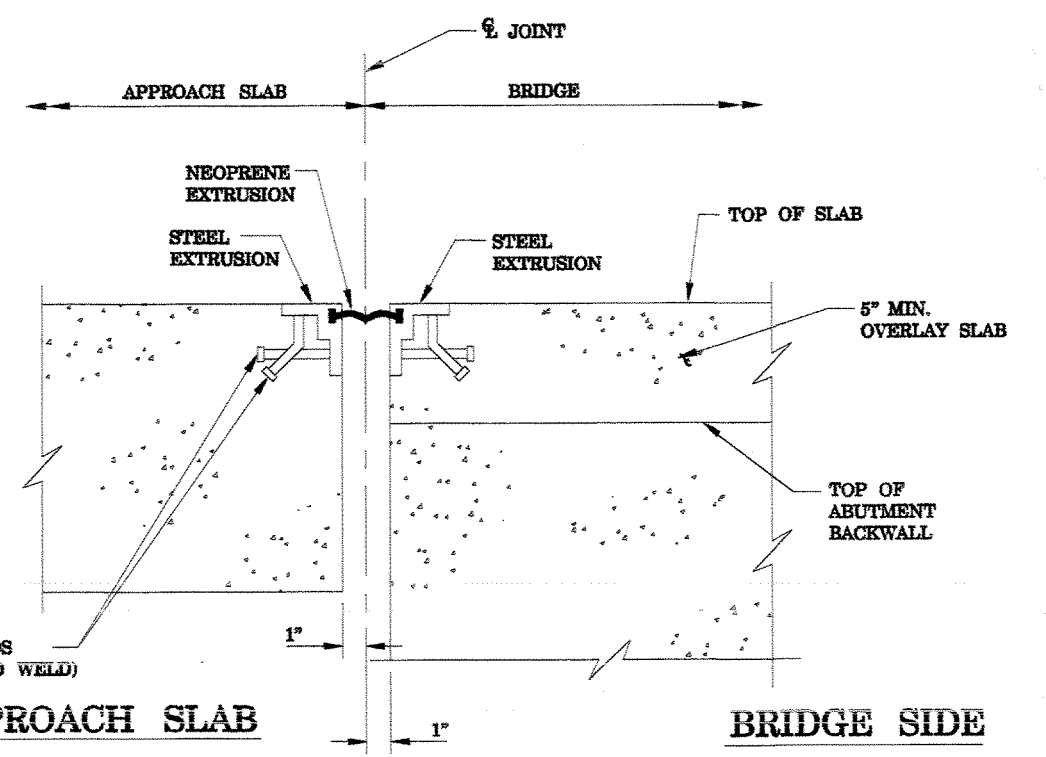
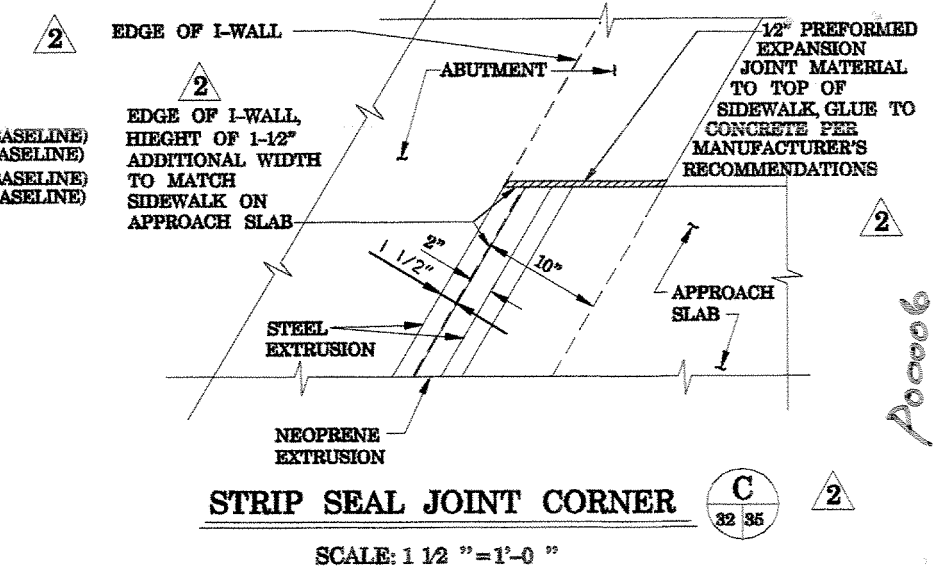
SECTION A
SCALE: 3/4" = 1'-0"

- NOTE:**
1. SECOND POUR CONCRETE SHALL BE PLACED AFTER PRECAST PRESTRESSED CONCRETE GIRDERS ARE IN PLACE.
 2. ALL HP PILES SHALL HAVE TENSION FILE CONNECTIONS AS SHOWN ON DWG. 51.
 3. FOR ϕ ANCHOR BOLT DIMENSIONS, SEE DWG. 48.

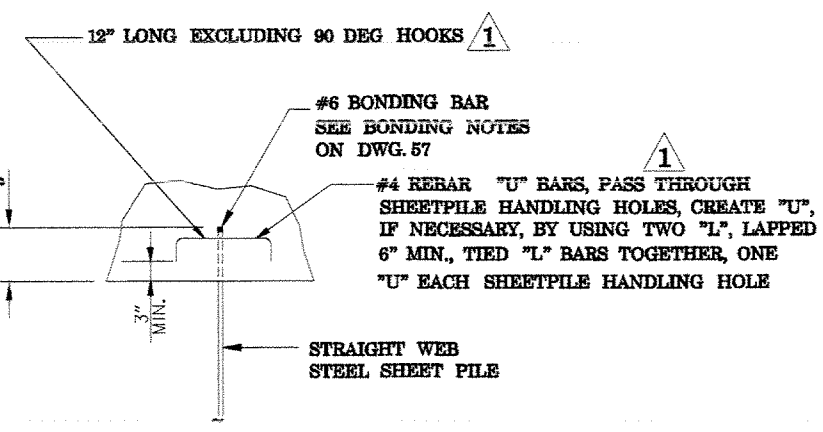
LOCATION	ϕ
ABUTMENT A - NORTH END	1°-33'-19.44"
ABUTMENT A - SOUTH END	1°-04'-00.34"
ABUTMENT B - NORTH END	1°-04'-00.34"
ABUTMENT B - SOUTH END	1°-33'-19.44"



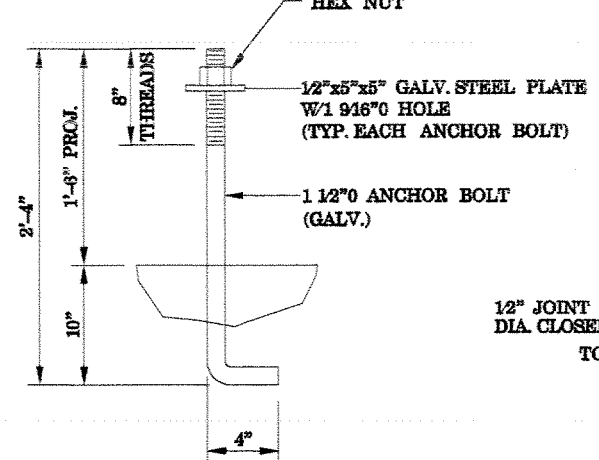
SECTION B
SCALE: 3/4" = 1'-0"



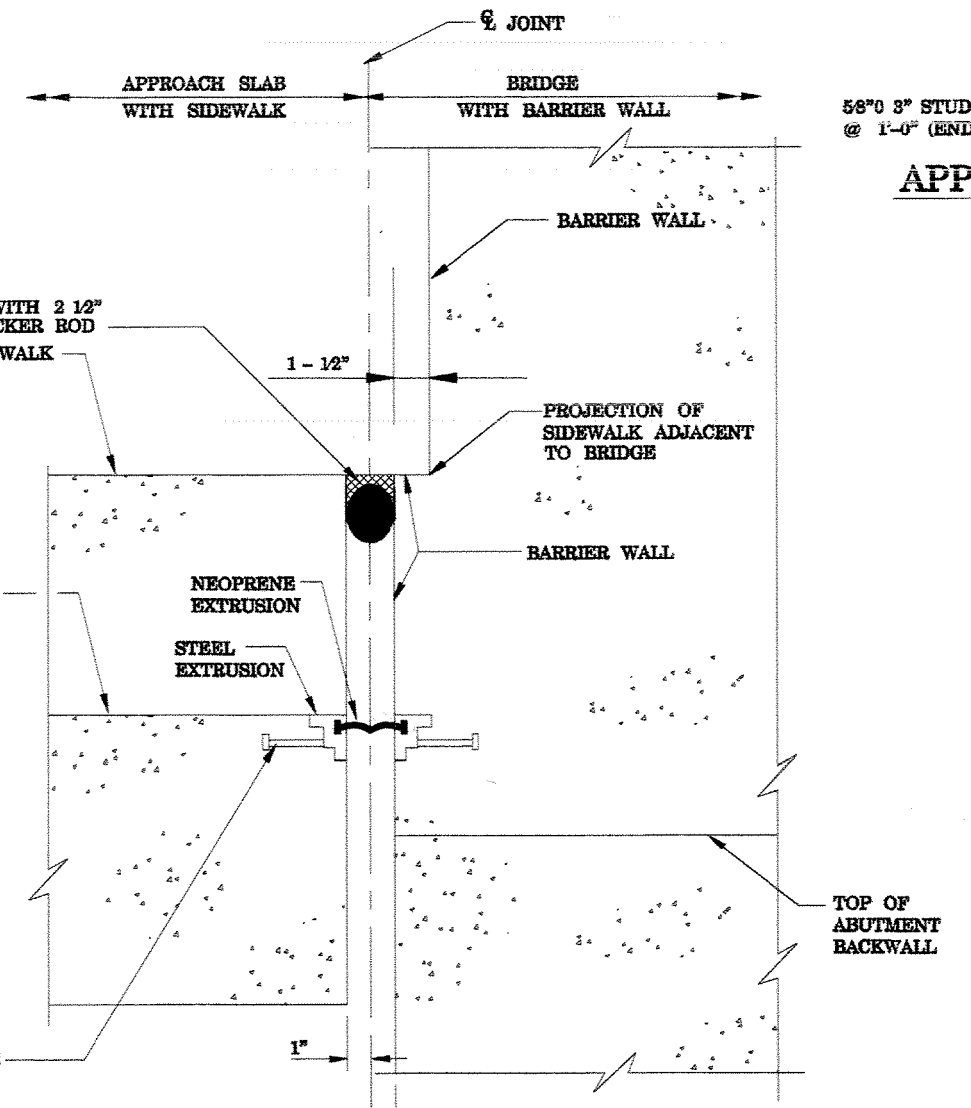
STRIP SEAL JOINT DETAIL (APPROACH SLAB / BRIDGE SLAB INTERFACE)
SCALE: 3" = 1'-0"



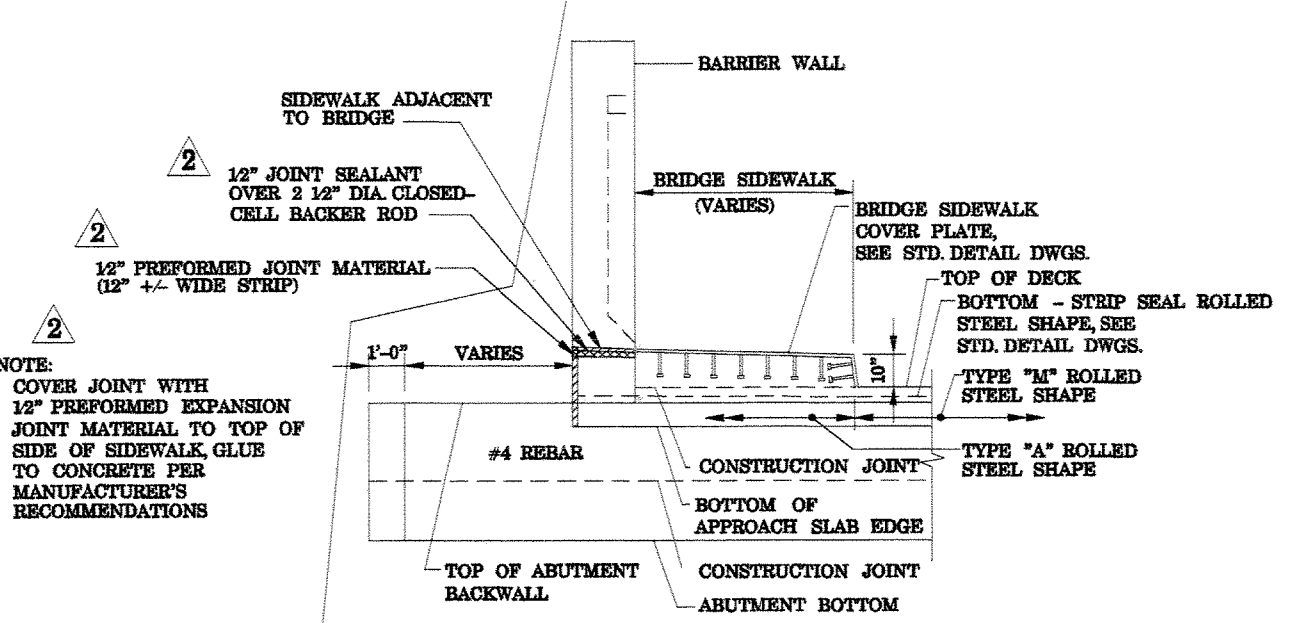
SHEET PILE DETAIL
SCALE: 3/4" = 1'-0"



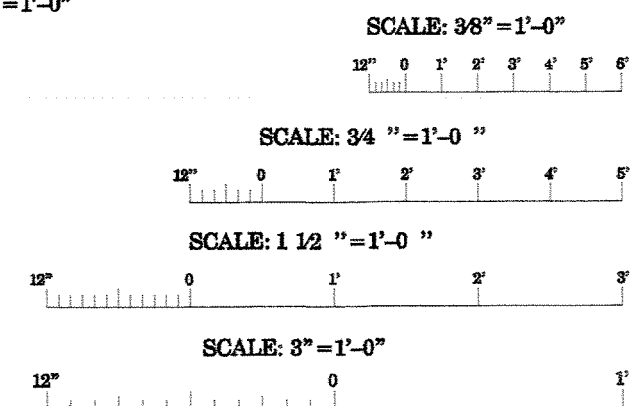
ANCHOR BOLT DETAIL
SCALE: 1 1/2" = 1'-0"



STRIP SEAL JOINT DETAIL (APPROACH SLAB SIDEWALK / BARRIER WALL INTERFACE)
SCALE: 3" = 1'-0"



STRIP SEAL THRU SIDEWALK
SCALE: 3/8" = 1'-0"



SYMBOL	DESCRIPTION	DATE	APPROVED
Δ	ADD CONCRETE TO BARRIER WALL	10/27/99	F.S.Y.
∇	REMOVE 1" COMP. MAT. & ADD #4 "U"	10/26/99	F.S.Y.

REVISIONS

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

BOARD OF LIVES COMMISSIONERS
NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
8500 North Canaway Blvd. Suite 200
Metairie, Louisiana 70002

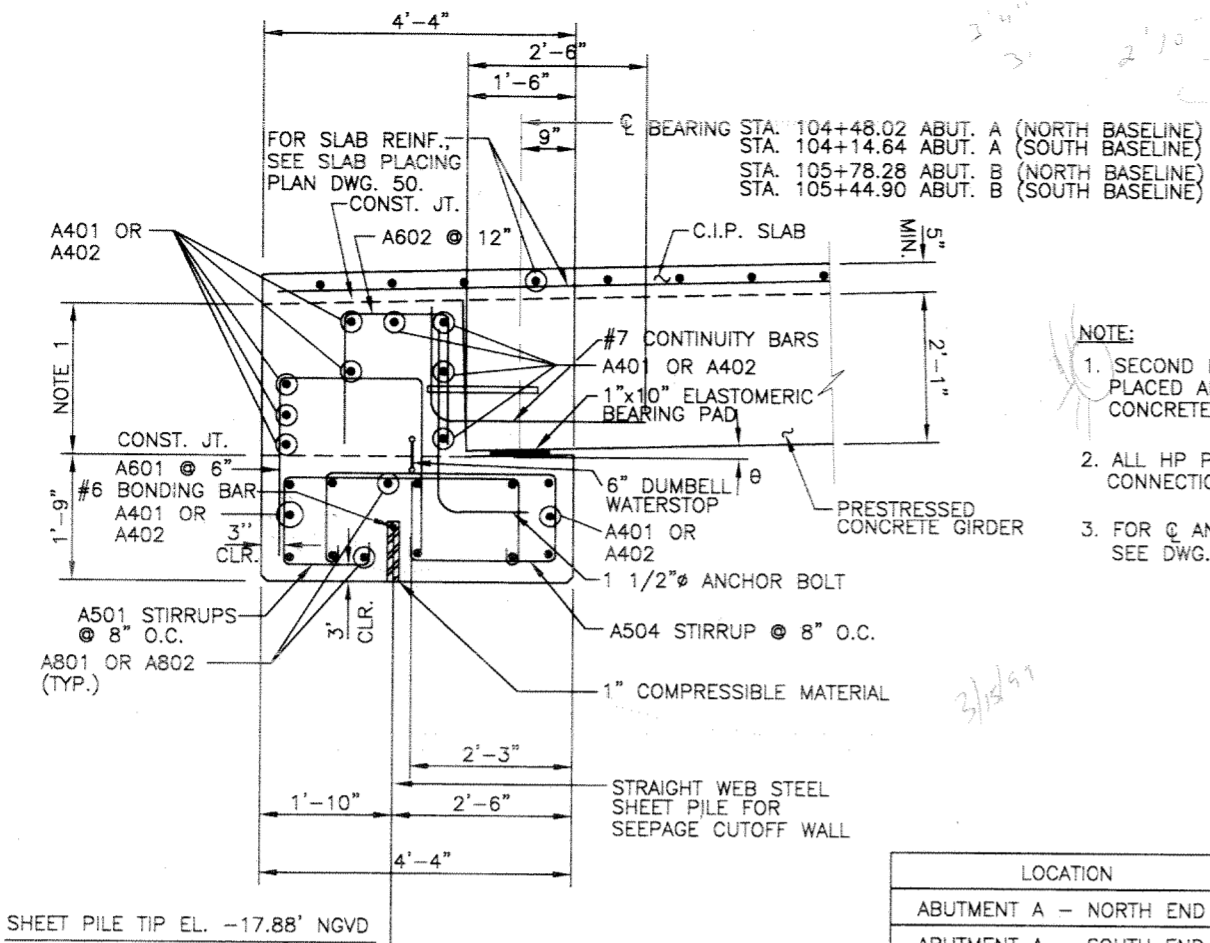
LAKE FORTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

ABUTMENT DETAILS

DESIGNED BY: FWB	DATE: FEB. 1998	PLOT SCALE: 16	PLOT DATE: 2/26/98
DRAWN BY: WAY	CHECKED BY: APG	CADD FILE: DRACW29	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DESIGN ENGINEER	DWG 35 OF 67

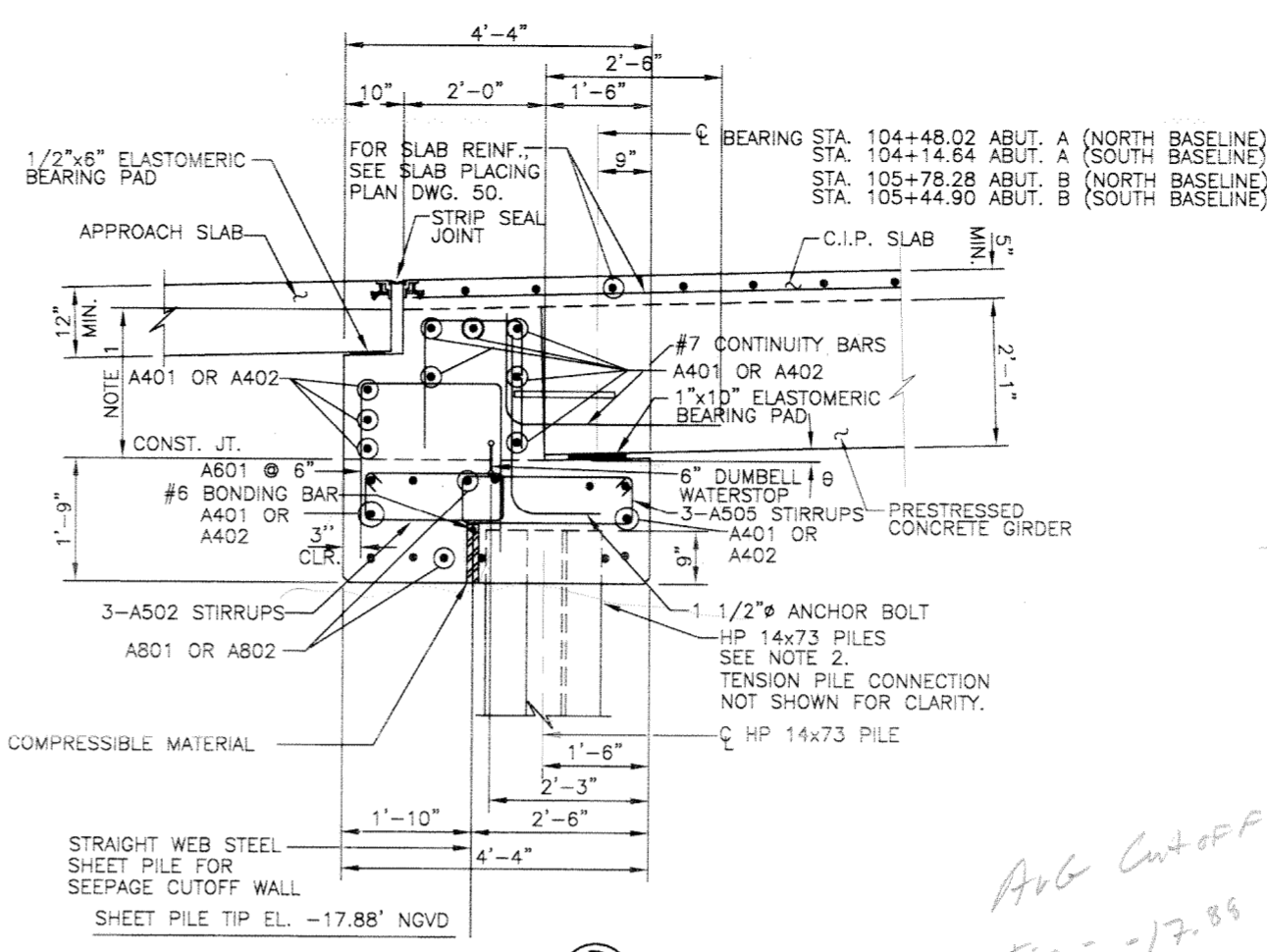


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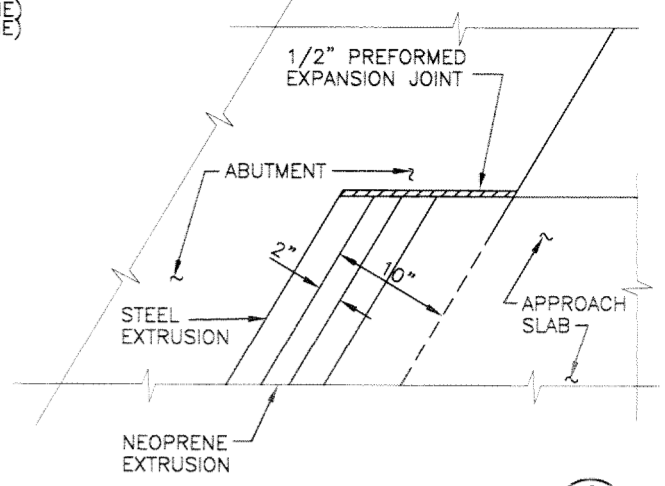


SECTION A
SCALE: 3/4" = 1'-0"

LOCATION	B
ABUTMENT A - NORTH END	1'-33'-19.44"
ABUTMENT A - SOUTH END	1'-04'-00.34"
ABUTMENT B - NORTH END	1'-04'-00.34"
ABUTMENT B - SOUTH END	1'-33'-19.44"

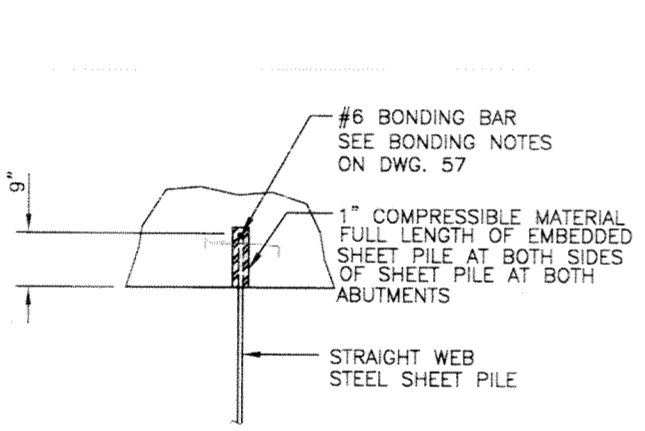


SECTION B
SCALE: 3/4" = 1'-0"

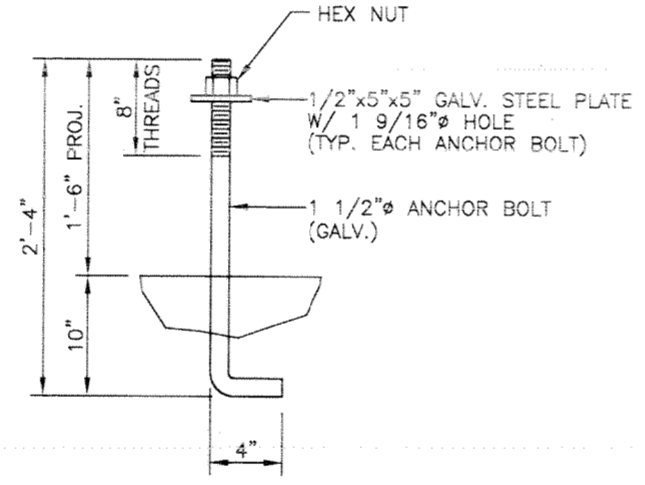


STRIP SEAL JOINT CORNER
SCALE: 1 1/2" = 1'-0"

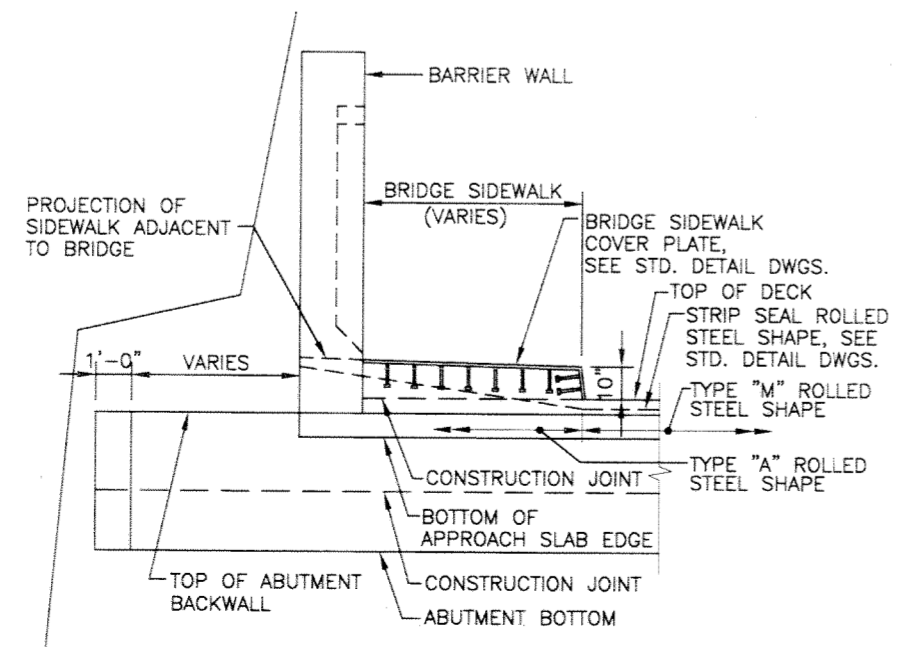
ADD CUTOFF = 1.00'
TIP = -17.88
LENGTH = 19.2 FT



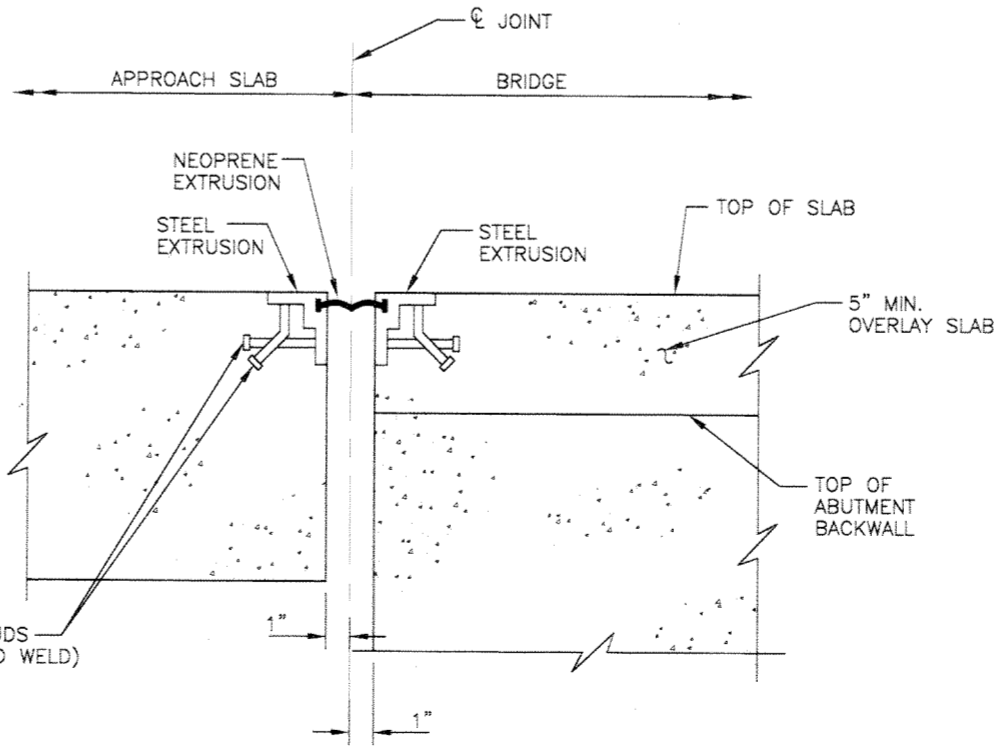
SHEET PILE DETAIL
SCALE: 3/4" = 1'-0"



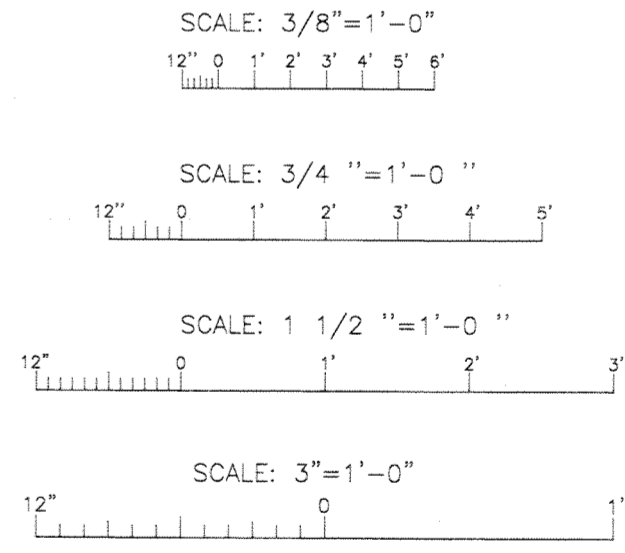
ANCHOR BOLT DETAIL
SCALE: 1 1/2" = 1'-0"



STRIP SEAL THRU SIDEWALK
SCALE: 3/8" = 1'-0"



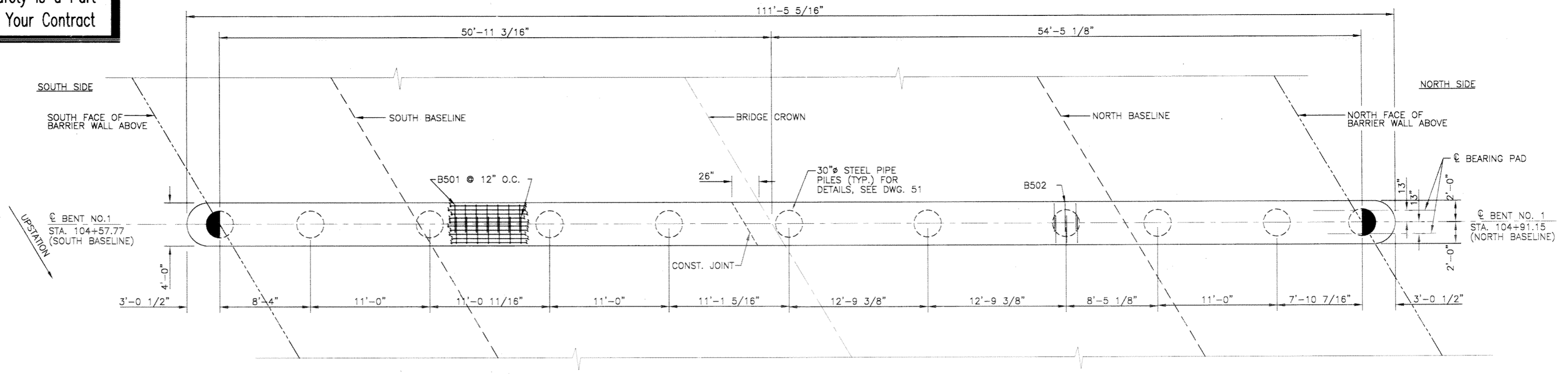
STRIP SEAL JOINT DETAIL
SCALE: 3" = 1'-0"



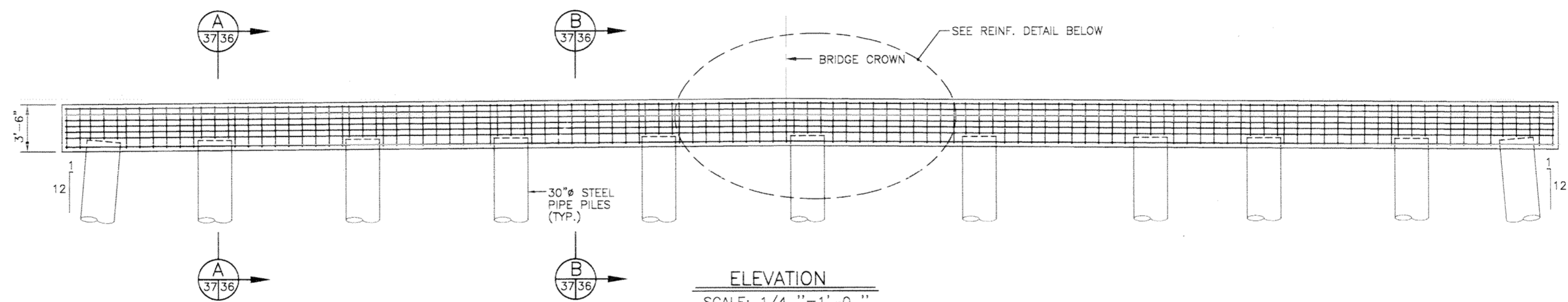
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
ABUTMENT DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 16	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 35 OF 67	



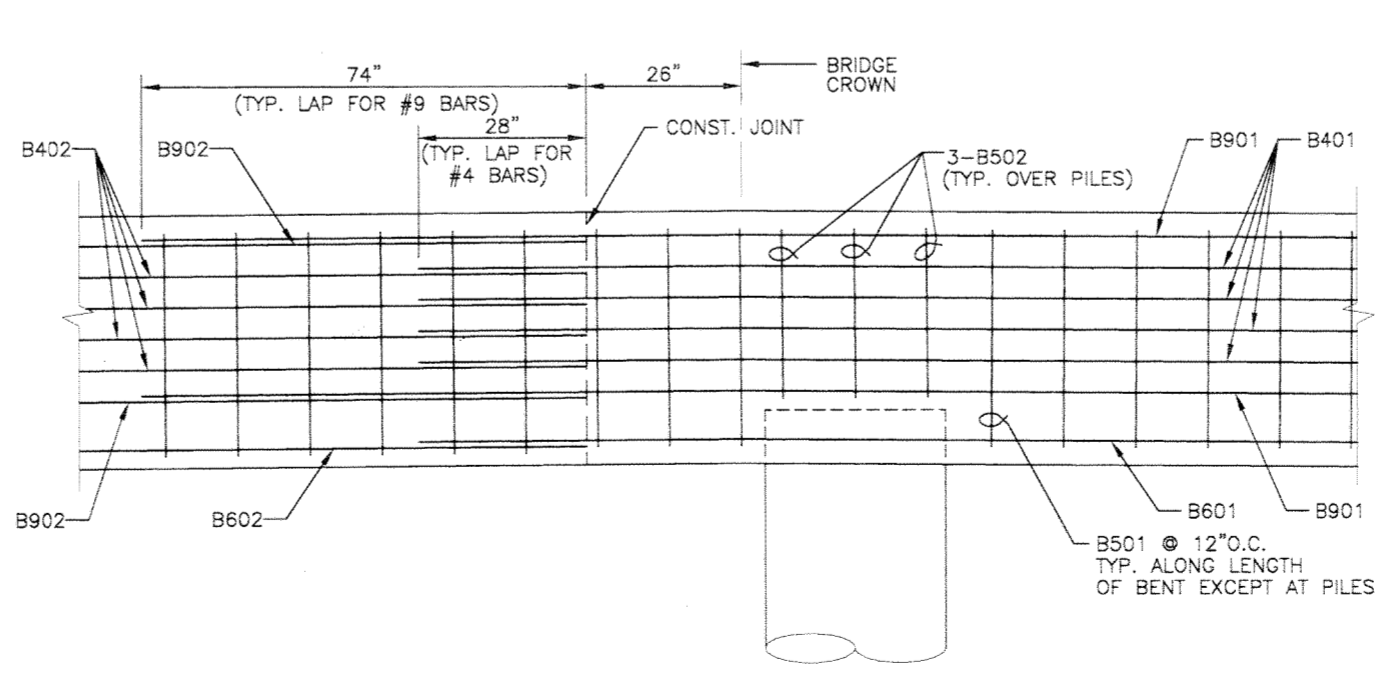
Safety is a Part of Your Contract



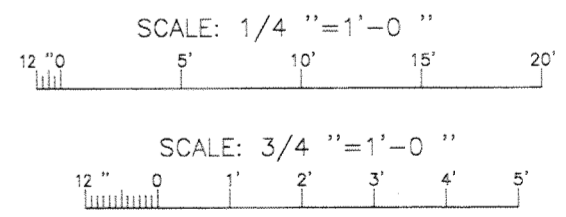
PLAN
SCALE: 1/4" = 1'-0"



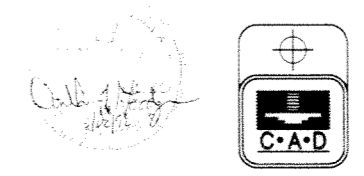
ELEVATION
SCALE: 1/4" = 1'-0"



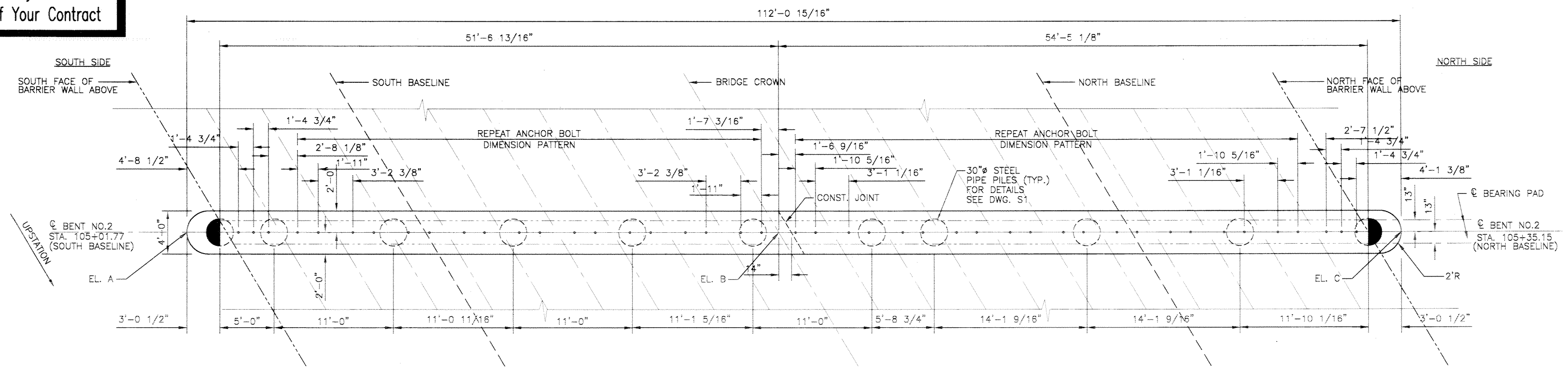
REINF. DETAIL
SCALE: 3/4" = 1'-0"



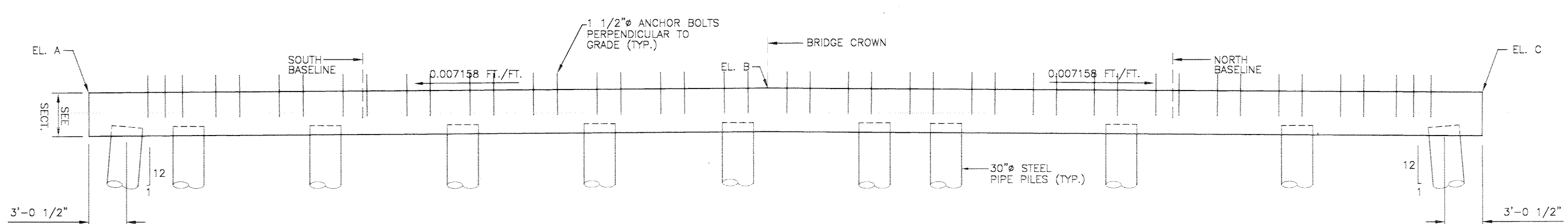
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3300 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA BENT No. 1 REINFORCEMENT DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CADD FILE: 447328LK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 37 OF 67



Safety is a Part of Your Contract



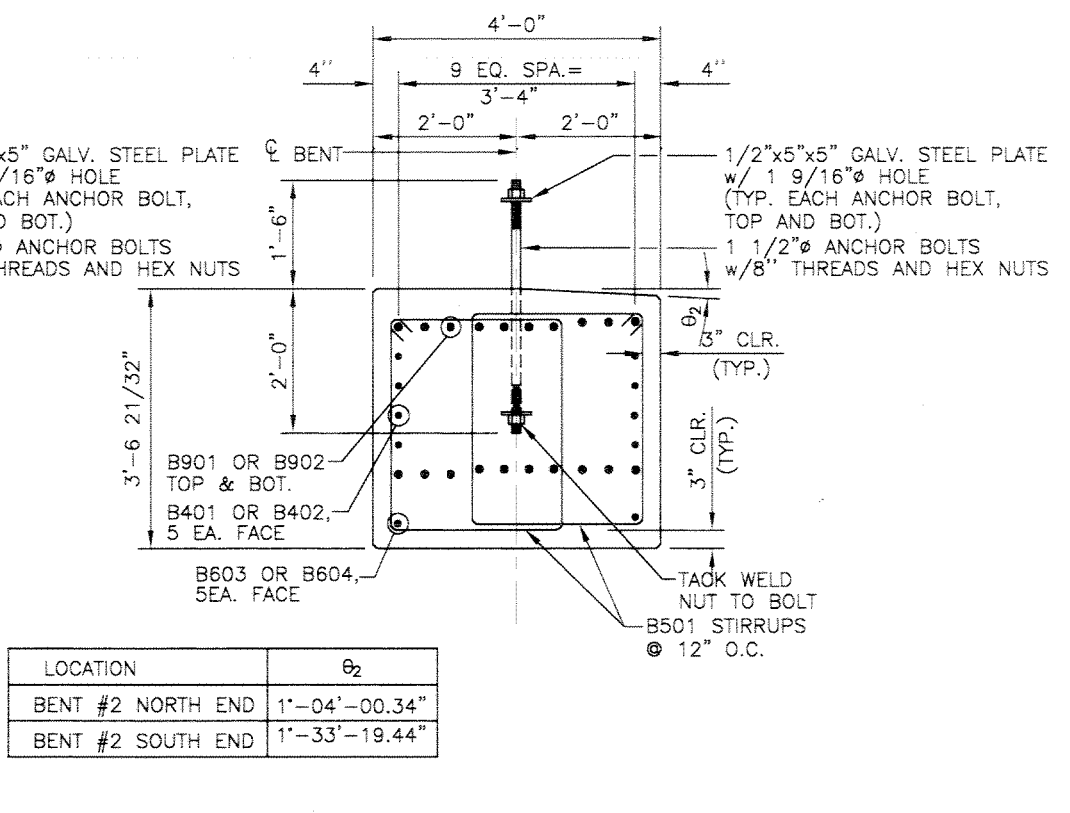
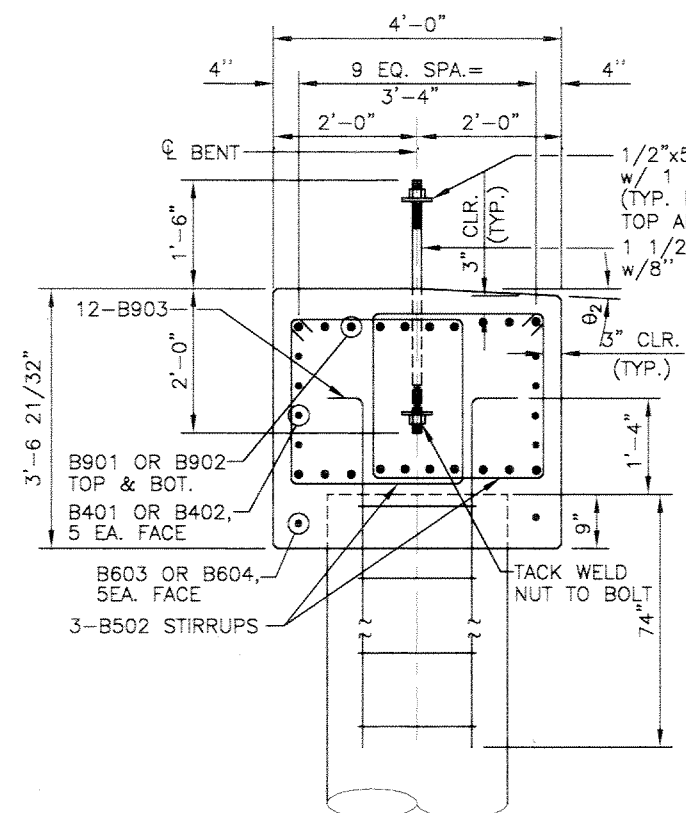
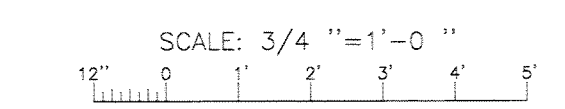
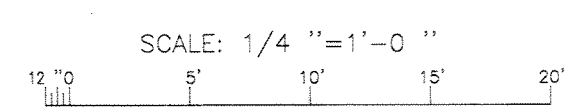
PLAN
SCALE: 1/4" = 1'-0"



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

DESIGN PILE LOAD = 182 TONS
EST. PILE TIP ELEV. = -100 N.G.V.D.
EST. PILE LENGTH = 101'

SEE DWG. 51 FOR PILE INFO.

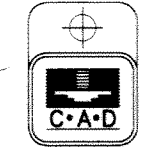
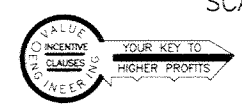


LOCATION	θ ₂
BENT #2 NORTH END	1'-04'-00.34"
BENT #2 SOUTH END	1'-33'-19.44"

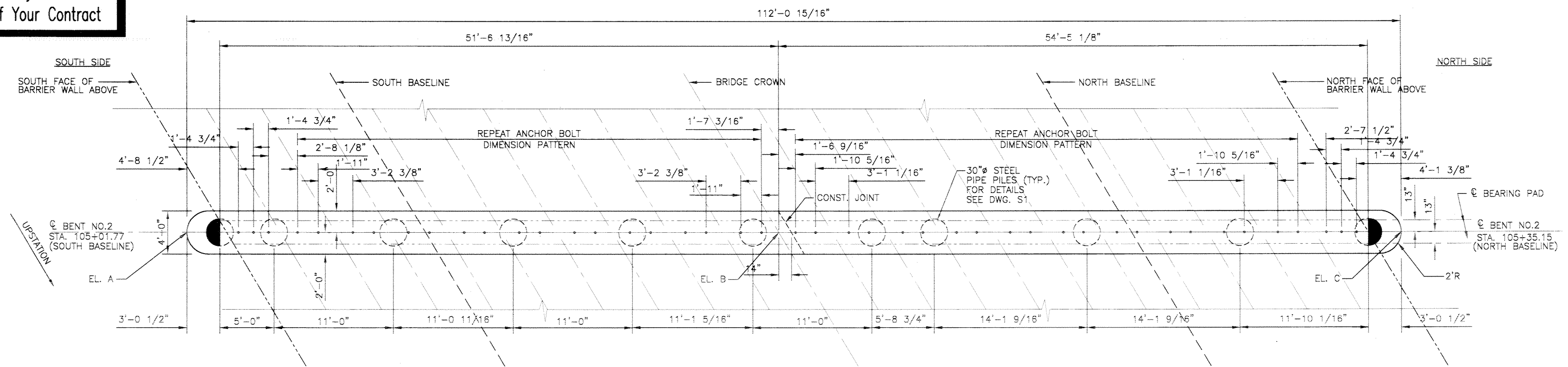
LOCATION	ELEVATION
EL. A	2.73
EL. B	3.12
EL. C	2.70

NOTE: ELEV. @ CENTERLINE OF BENT

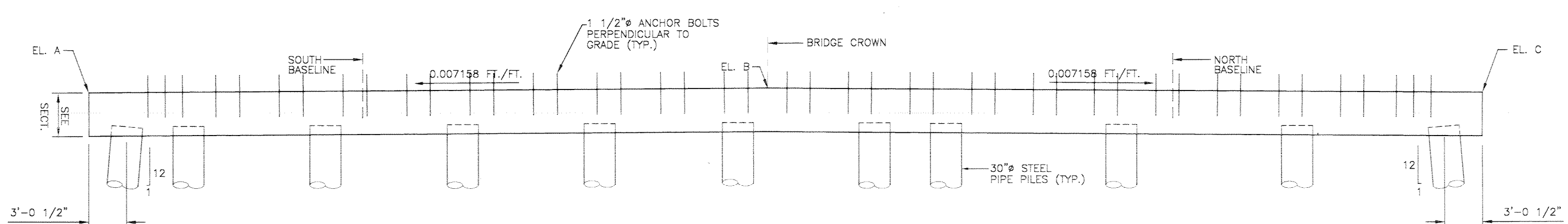
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA BENT No. 2 PLAN, ELEVATION & DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODGION DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 38 OF 67



Safety is a Part of Your Contract



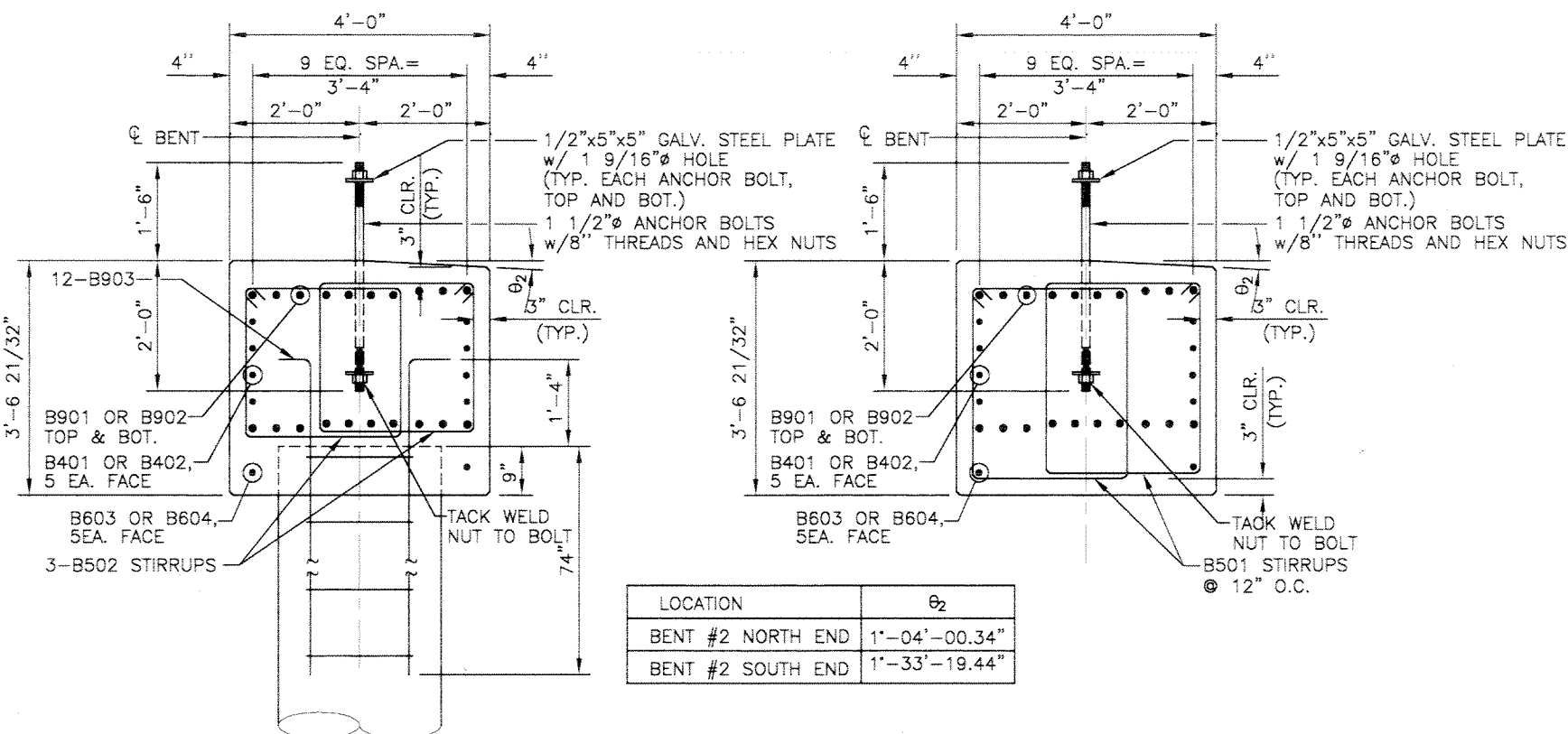
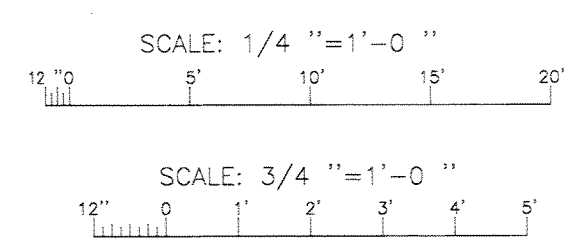
PLAN
 SCALE: 1/4" = 1'-0"



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

DESIGN PILE LOAD = 182 TONS
 EST. PILE TIP ELEV. = -100 N.G.V.D.
 EST. PILE LENGTH = 101'

SEE DWG. 51 FOR PILE INFO.

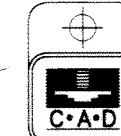
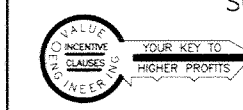


LOCATION	θ ₂
BENT #2 NORTH END	1'-04'-00.34"
BENT #2 SOUTH END	1'-33'-19.44"

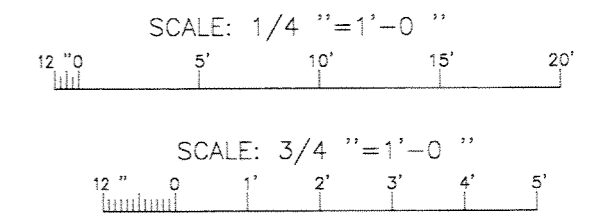
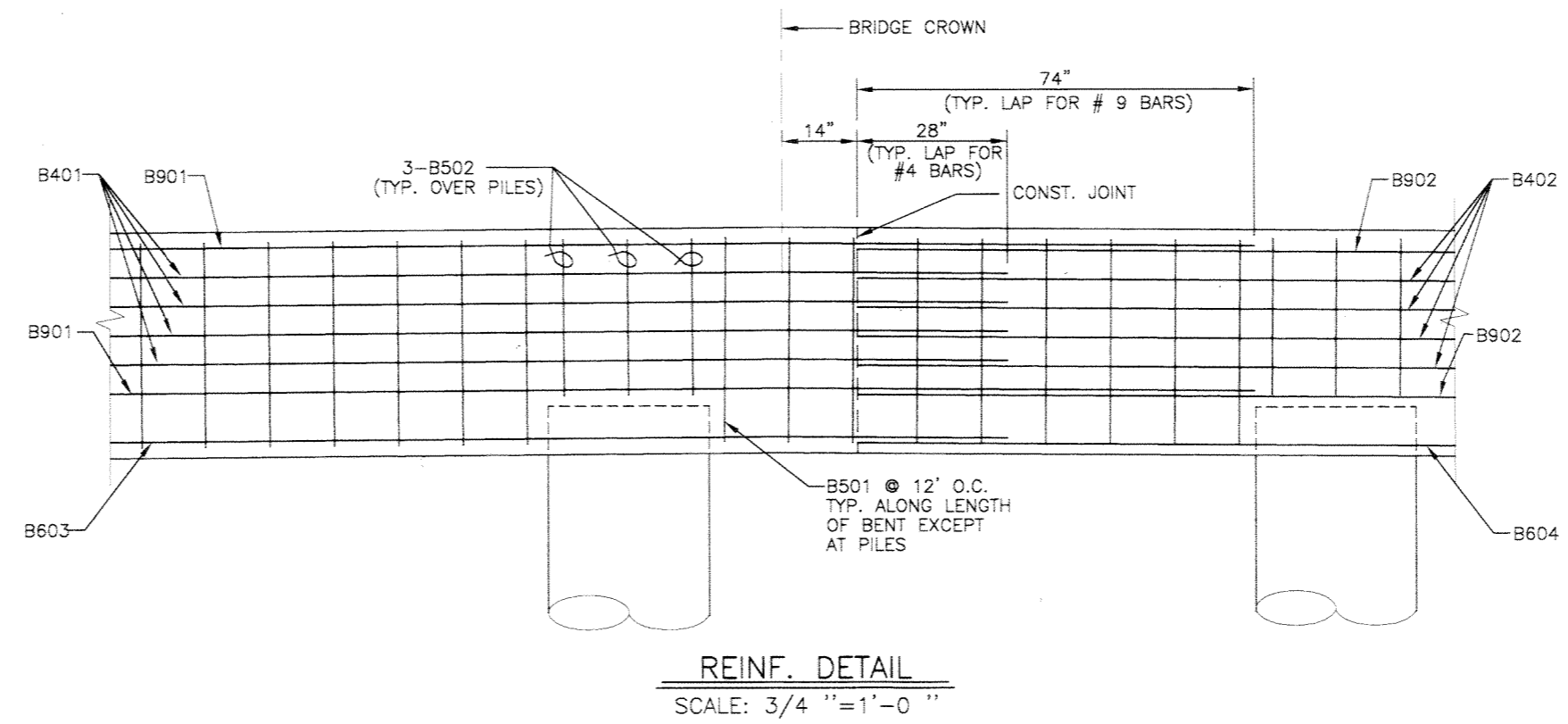
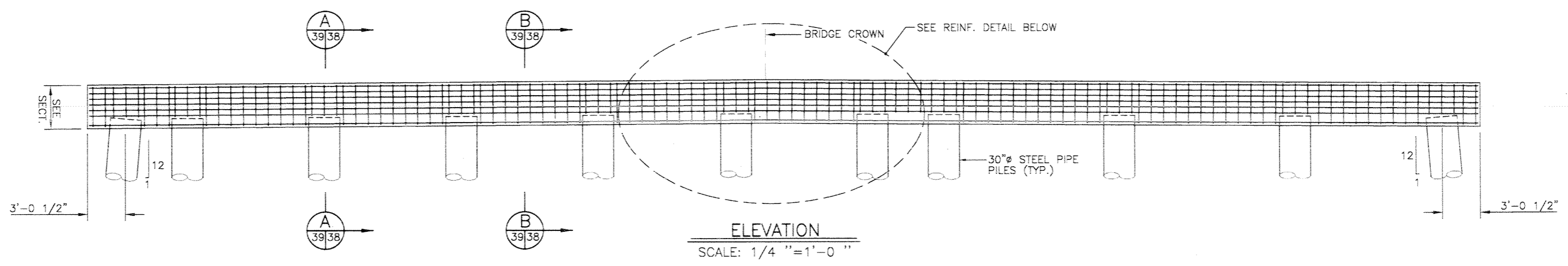
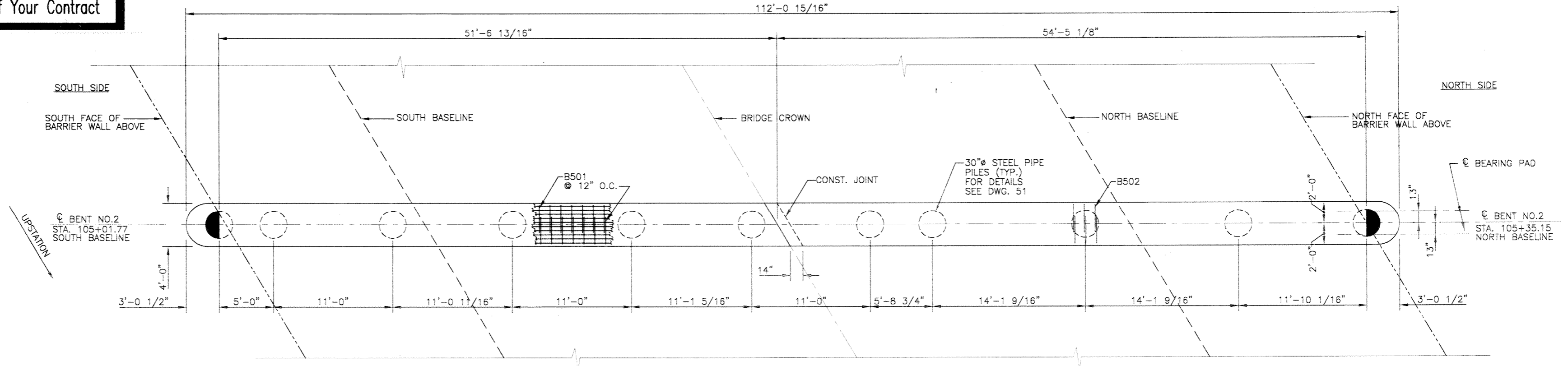
LOCATION	ELEVATION
EL. A	2.73
EL. B	3.12
EL. C	2.70

NOTE: ELEV. @ CENTERLINE OF BENT

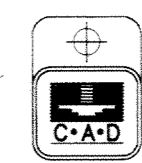
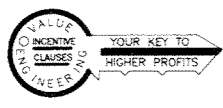
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA BENT No. 2 PLAN, ELEVATION & DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODGION	SOLICITATION NO. DACW29-98-B-0060	DWG. 38 OF 67



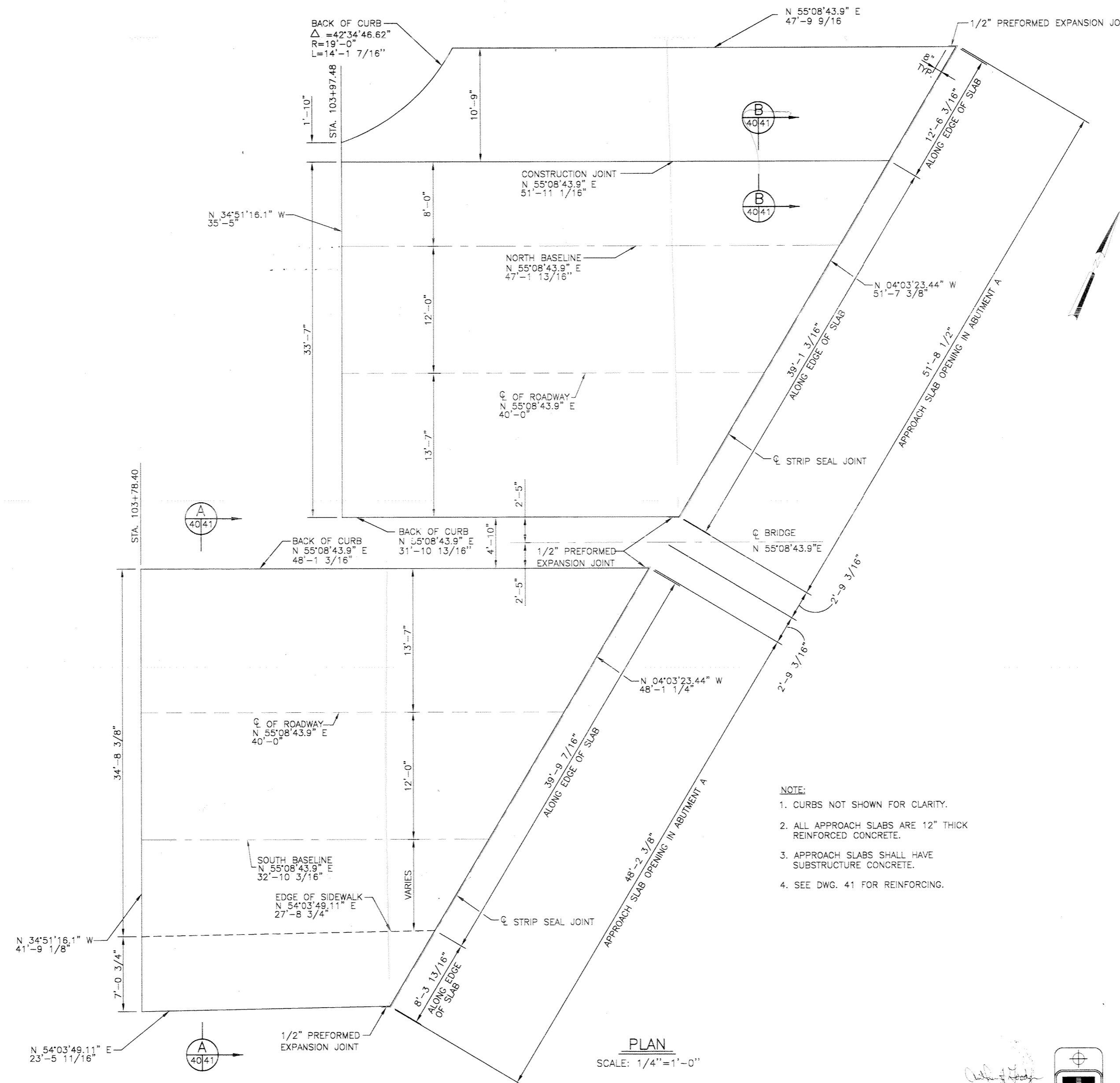
**Safety is a Part
of Your Contract**



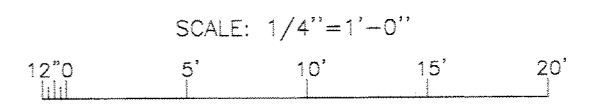
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA BENT No. 2 REINFORCEMENT DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 39 OF 67



Safety is a Part of Your Contract

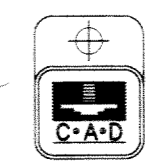


- NOTE:**
1. CURBS NOT SHOWN FOR CLARITY.
 2. ALL APPROACH SLABS ARE 12" THICK REINFORCED CONCRETE.
 3. APPROACH SLABS SHALL HAVE SUBSTRUCTURE CONCRETE.
 4. SEE DWG. 41 FOR REINFORCING.

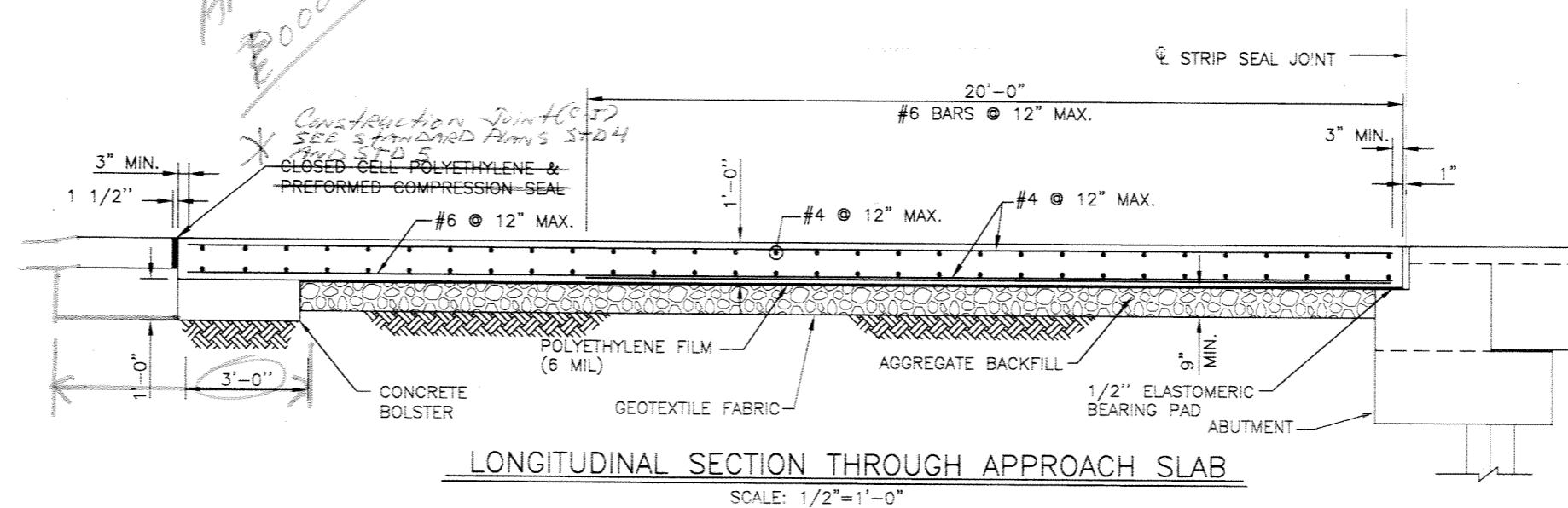


PLAN
SCALE: 1/4" = 1'-0"

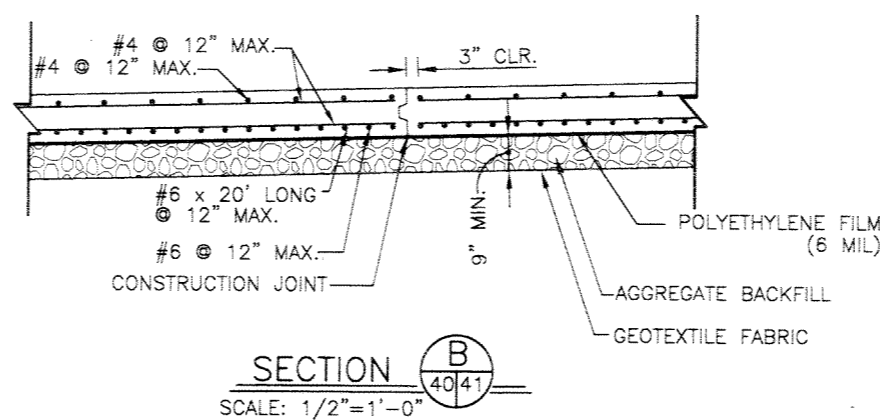
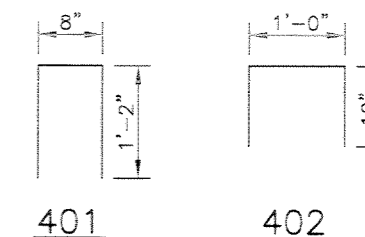
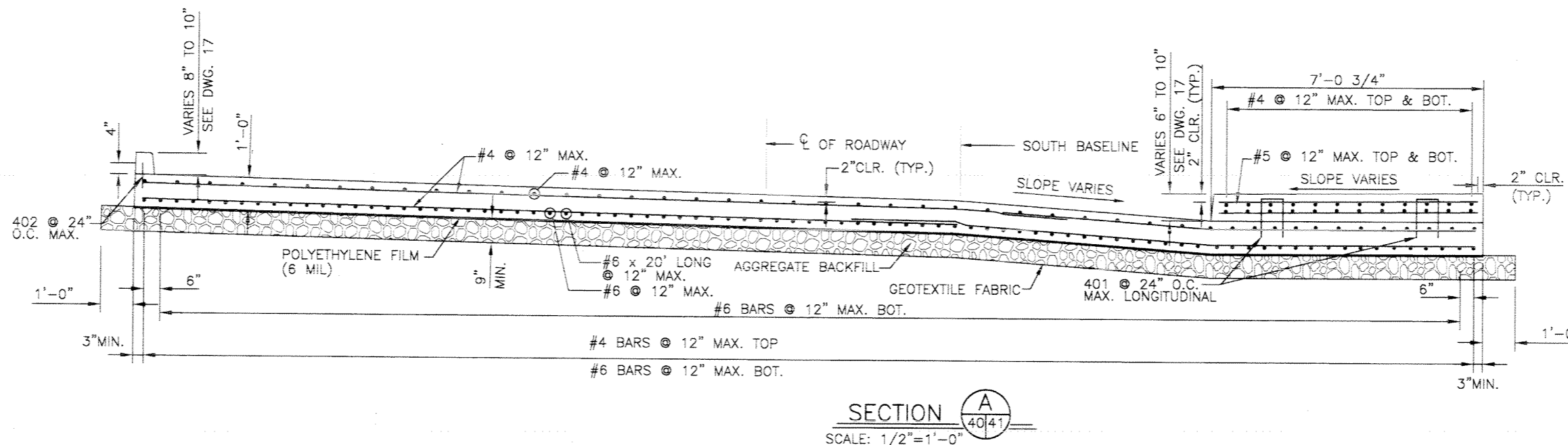
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3300 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
WEST APPROACH SLAB			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 40 OF 67	



Safety is a Part of Your Contract

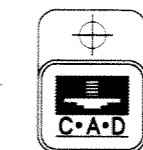


- NOTES
- #4 BARS GREATER THAN 40'-0" REQUIRE (1) 2'-4" LAP SPLICE
 - #5 BARS GREATER THAN 40'-0" REQUIRE (1) 2'-11" LAP SPLICE
 - #6 BARS GREATER THAN 40'-0" REQUIRE (1) 3'-6" LAP SPLICE
 - ALL BARS PLACED AT 12" O.C. MAX.
 - ALL LAP SPLICES TO BE STAGGERED
 - ALL REINFORCING STEEL SHALL BE GRADE 60, UNLESS OTHERWISE NOTED.
 - AGGREGATE BACKFILL LIMITS TO BE 1.0' BEYOND THE OUTER EDGES OF THE APPROACH SLABS. POLYETHYLENE FILM (6 MIL THICKNESS) TO BE INSTALLED BETWEEN THE AGGREGATE BACKFILL AND THE CONCRETE APPROACH SLAB FOR THE ENTIRE LIMITS OF THE AGGREGATE BACKFILL.

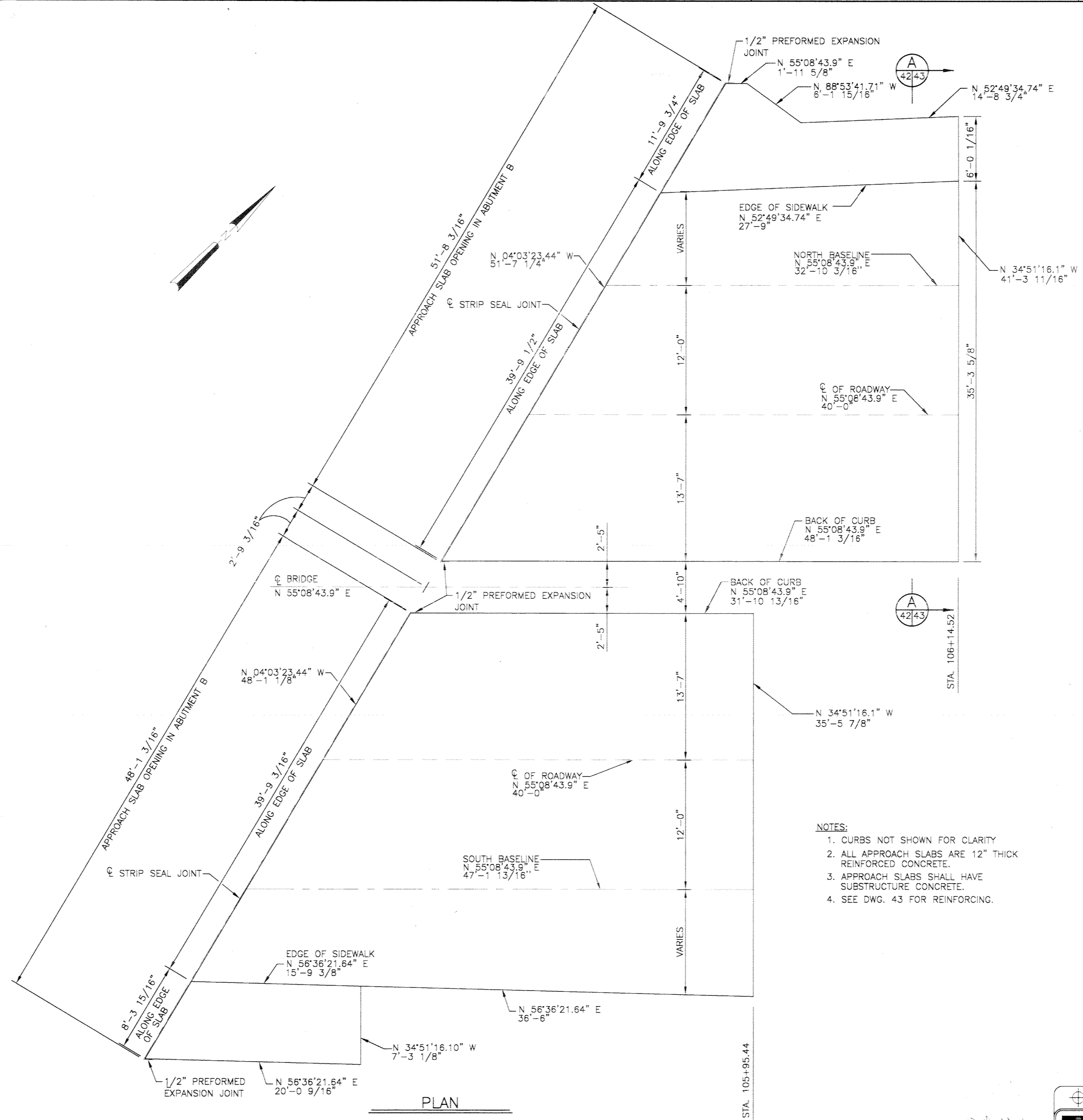


SCALE: 1/2"=1'-0"

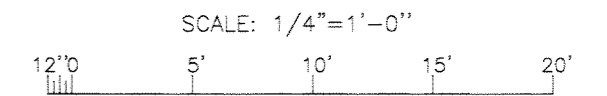
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
WEST APPROACH SLAB DETAILS			
DESIGNED BY: FWS	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 41 OF 67	



Safety is a Part of Your Contract



- NOTES:**
1. CURBS NOT SHOWN FOR CLARITY
 2. ALL APPROACH SLABS ARE 12" THICK REINFORCED CONCRETE.
 3. APPROACH SLABS SHALL HAVE SUBSTRUCTURE CONCRETE.
 4. SEE DWG. 43 FOR REINFORCING.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

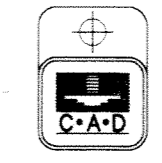
BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNTUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd., Suite 200
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

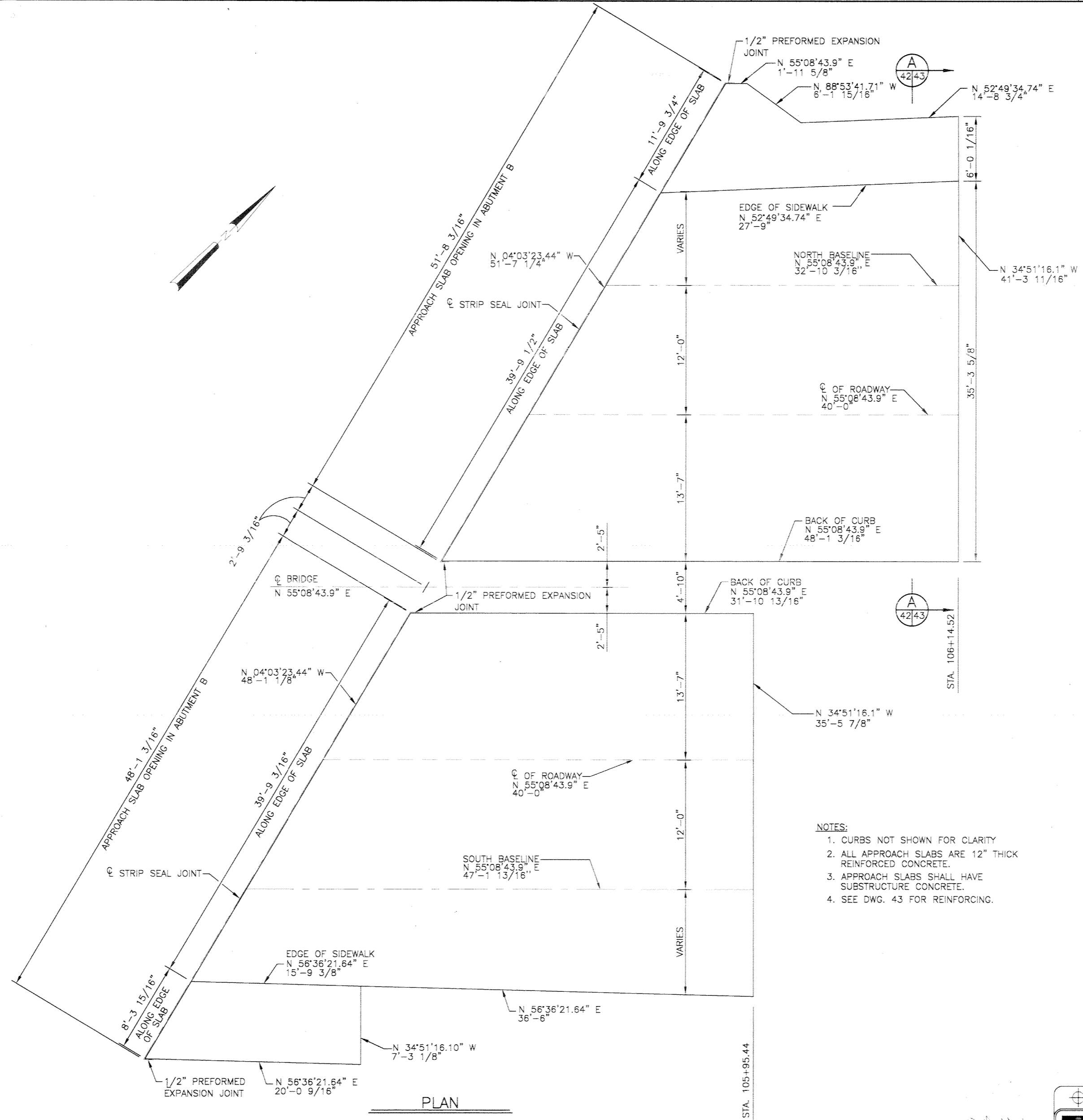
EAST APPROACH SLAB

DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CAAD FILE: 44732BLK.DGN	FILE NO: H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 42 OF 67	

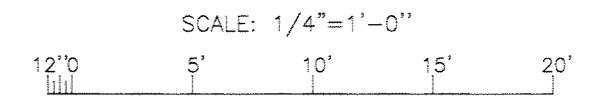


PLAN
SCALE: 1/4" = 1'-0"

Safety is a Part of Your Contract



- NOTES:**
1. CURBS NOT SHOWN FOR CLARITY
 2. ALL APPROACH SLABS ARE 12" THICK REINFORCED CONCRETE.
 3. APPROACH SLABS SHALL HAVE SUBSTRUCTURE CONCRETE.
 4. SEE DWG. 43 FOR REINFORCING.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

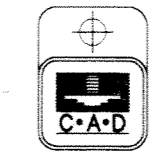
BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNTUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd., Suite 200
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

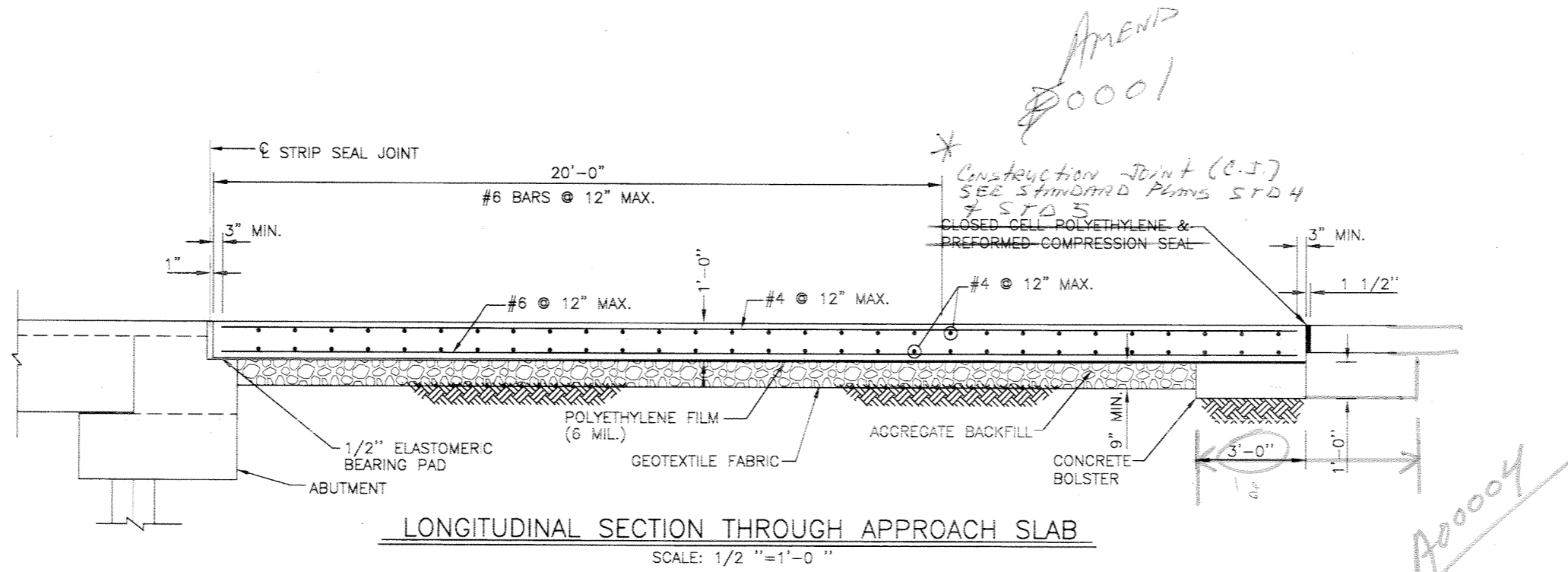
EAST APPROACH SLAB

DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CAAD FILE: 44732BLK.DGN	FILE NO: H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 42 OF 67	

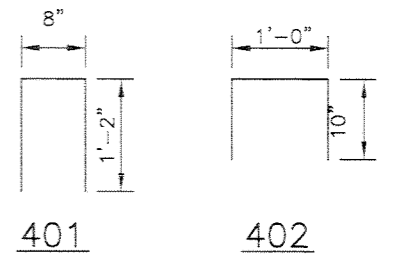
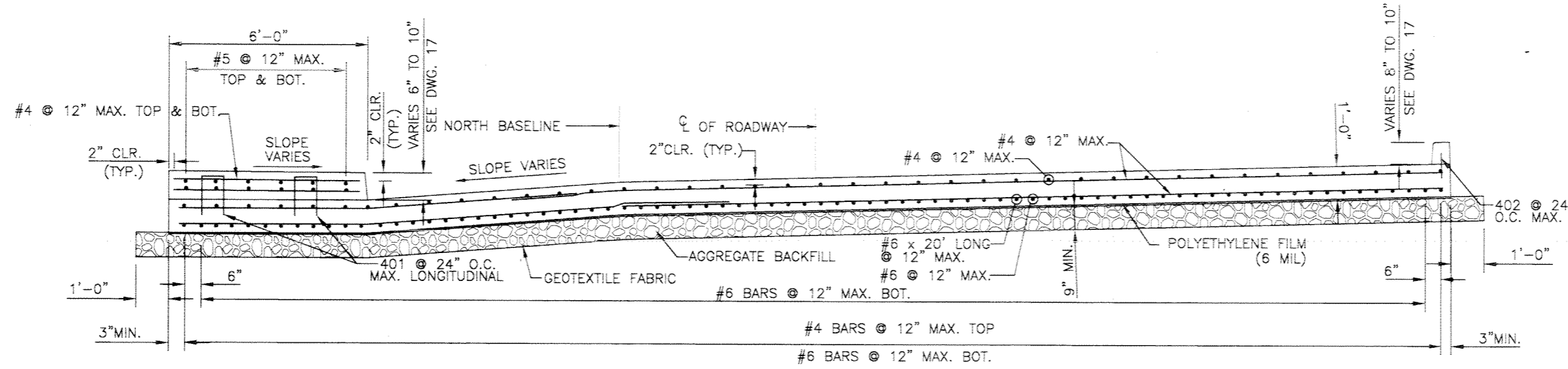


PLAN
SCALE: 1/4" = 1'-0"

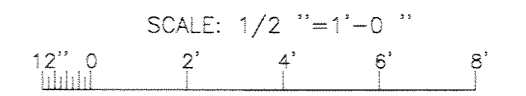
Safety is a Part of Your Contract



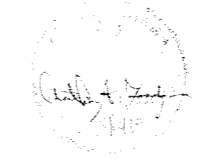
- NOTES
- #4 BARS GREATER THAN 40'-0" REQUIRE (1) 2'-4" LAP SPLICE
 - #5 BARS GREATER THAN 40'-0" REQUIRE (1) 2'-11" LAP SPLICE
 - #6 BARS GREATER THAN 40'-0" REQUIRE (1) 3'-6" LAP SPLICE
 - ALL BARS PLACED AT 12" O.C.
 - ALL LAP SPLICES TO BE STAGGERED
 - ALL REINFORCING STEEL SHALL BE GRADE 60, UNLESS OTHERWISE NOTED.
 - AGGREGATE BACKFILL LIMITS TO BE 1.0' BEYOND THE OUTER EDGES OF THE APPROACH SLABS. POLYETHYLENE FILM (6 MIL. THICKNESS) TO BE INSTALLED BETWEEN THE AGGREGATE BACKFILL AND THE CONCRETE APPROACH SLAB FOR THE ENTIRE LIMITS OF THE AGGREGATE BACKFILL.



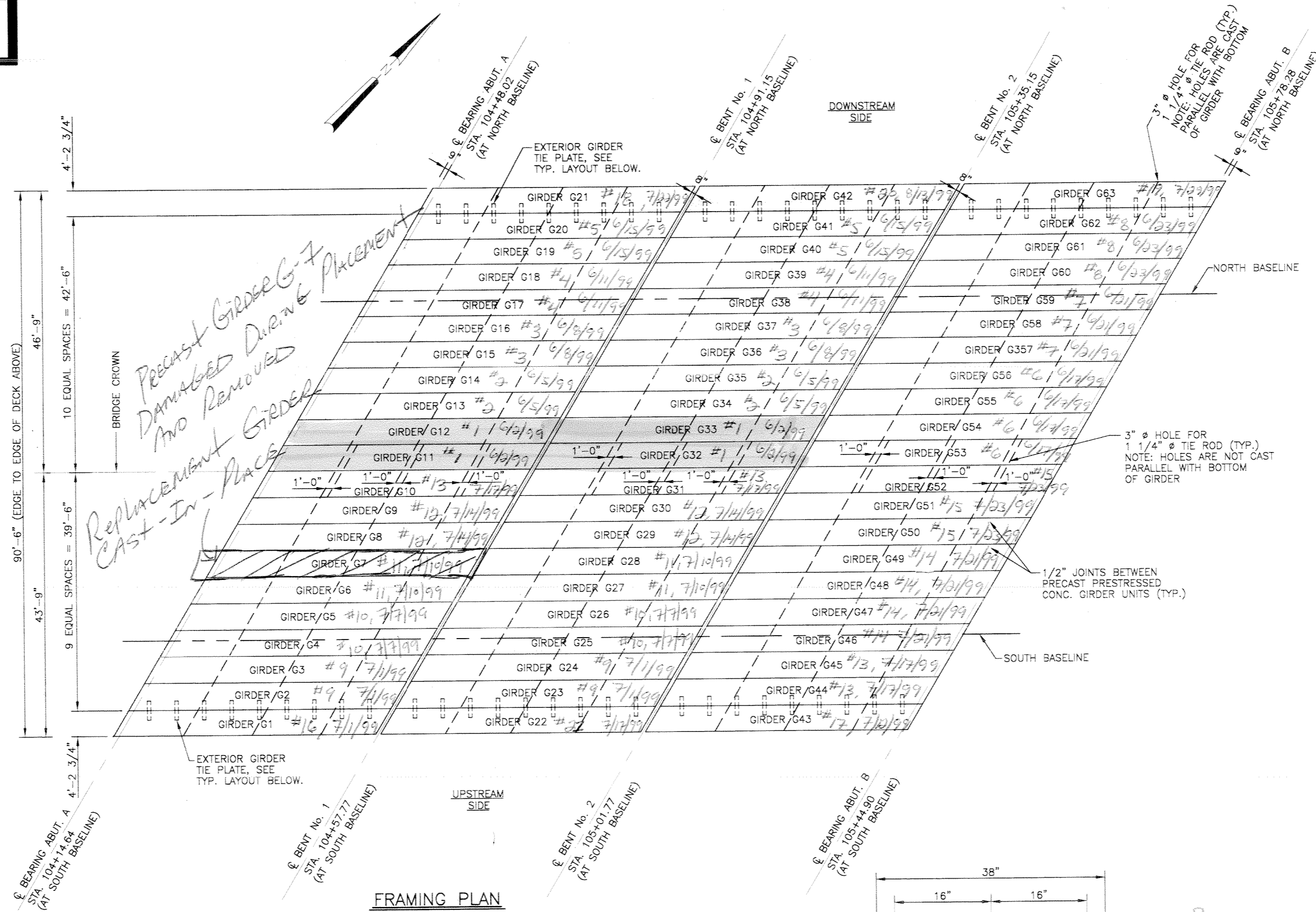
SECTION A 42/43
SCALE: 1/2"=1'-0"



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
<small>BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA</small>		<small>LINFIELD HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002</small>	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
EAST APPROACH SLAB DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WAY	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODRON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 43 OF 67	



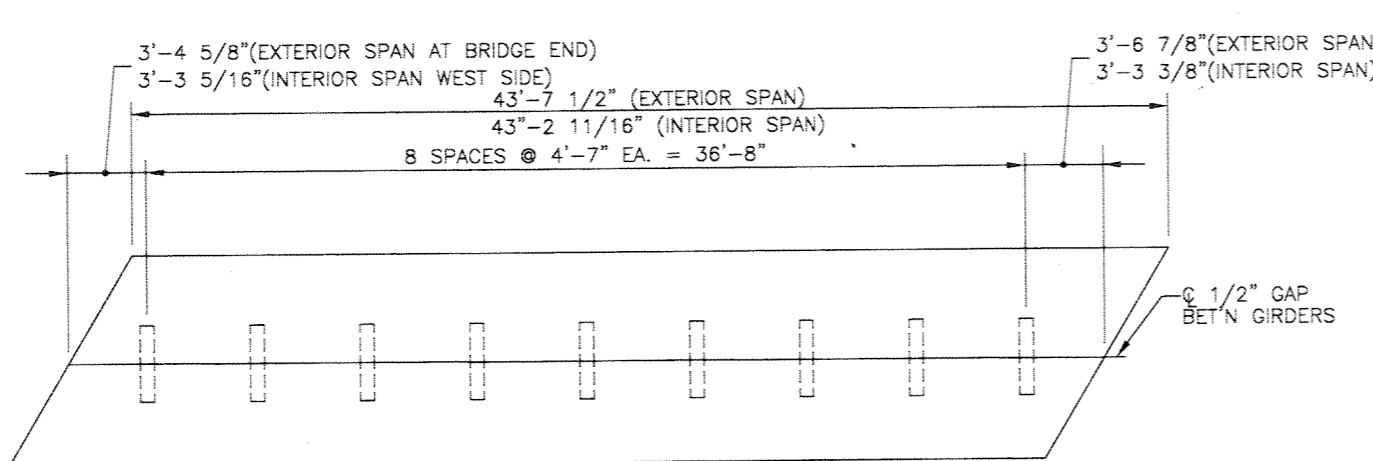
Safety is a Part of Your Contract



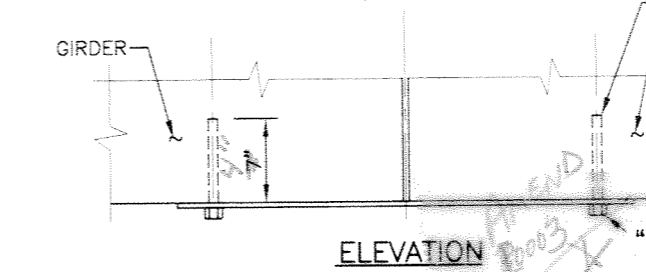
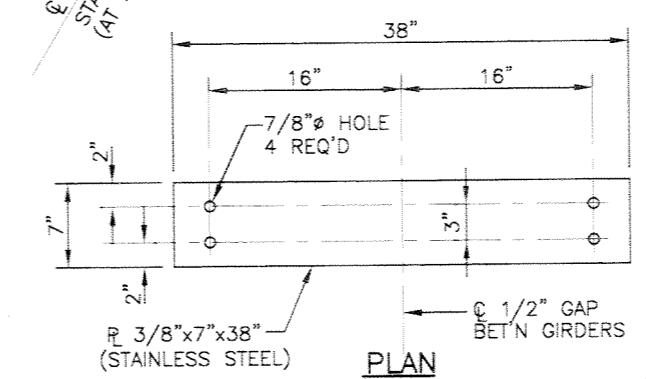
3/80
19
260
1400
2660

19
3
30
27
57
→ 6 splices

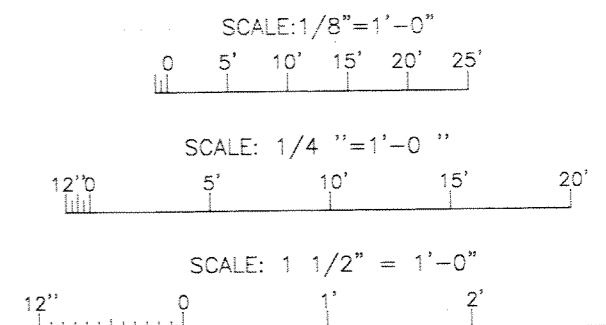
FRAMING PLAN
SCALE: 1/8" = 1'-0"



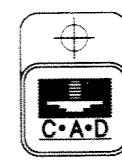
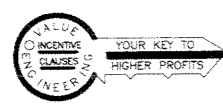
TYPICAL LAYOUT-EXTERIOR GIRDER TIE PLATES
SCALE: 1/4" = 1'-0"



TYPICAL TIE PLATE DETAILS
SCALE: 1 1/2" = 1'-0"

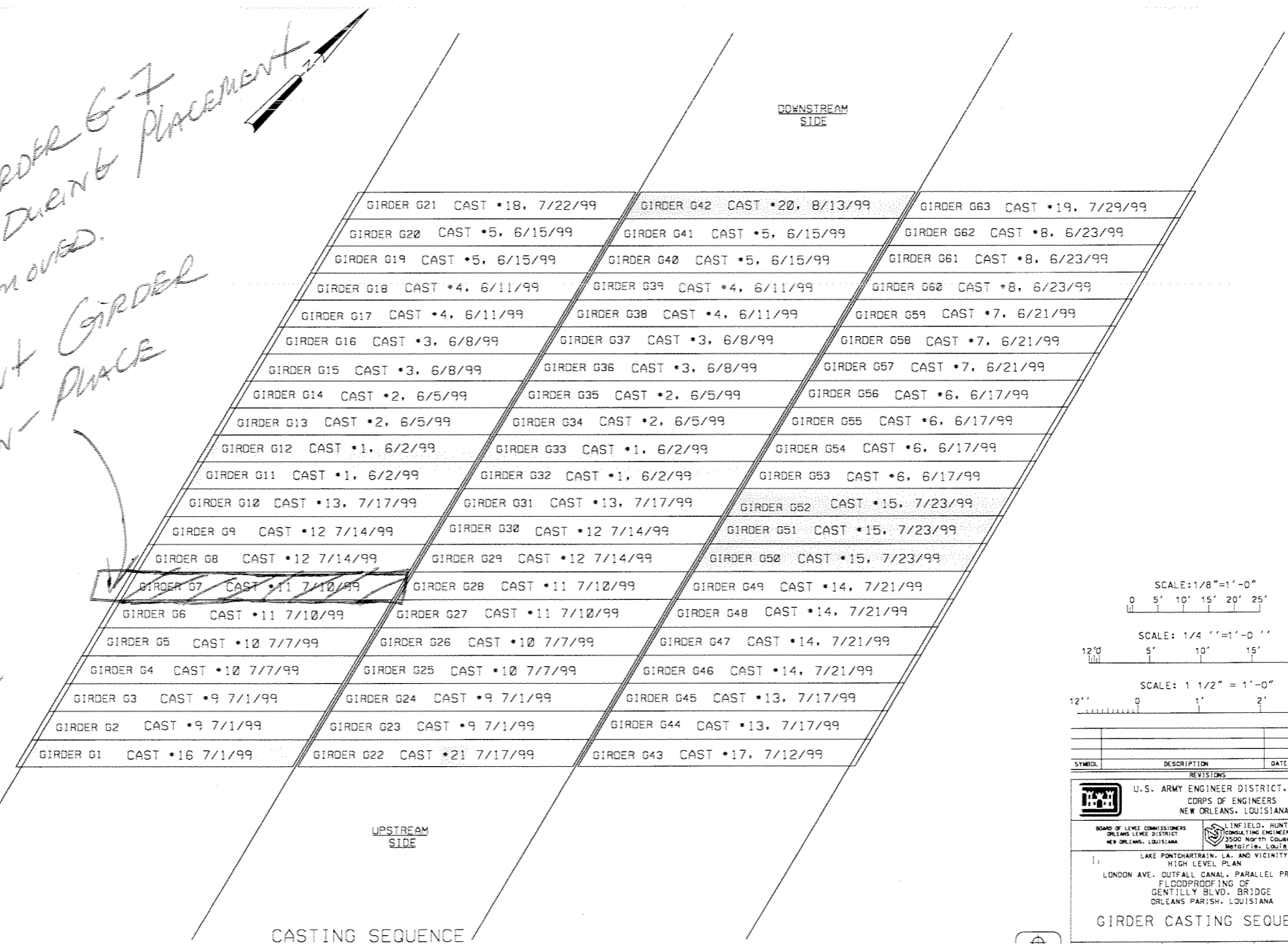


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
BRIDGE FRAMING PLAN			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 96	PLOT DATE: 2/20/98
DRAWN BY: TFB	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SOLICITATION NO. DACW29-98-B-0060		
SUBMITTED BY: A. GOODSON DESIGN ENGINEER		DWG. 44 OF 67	

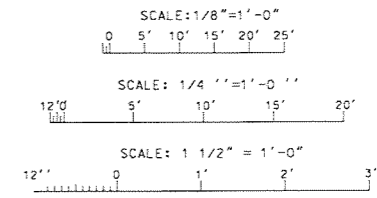


*PRECAST GIRDER 6-7
DAMAGED DURING PLACEMENT
AND REMOVED.
REPLACEMENT GIRDER
CAST-IN-PLACE*

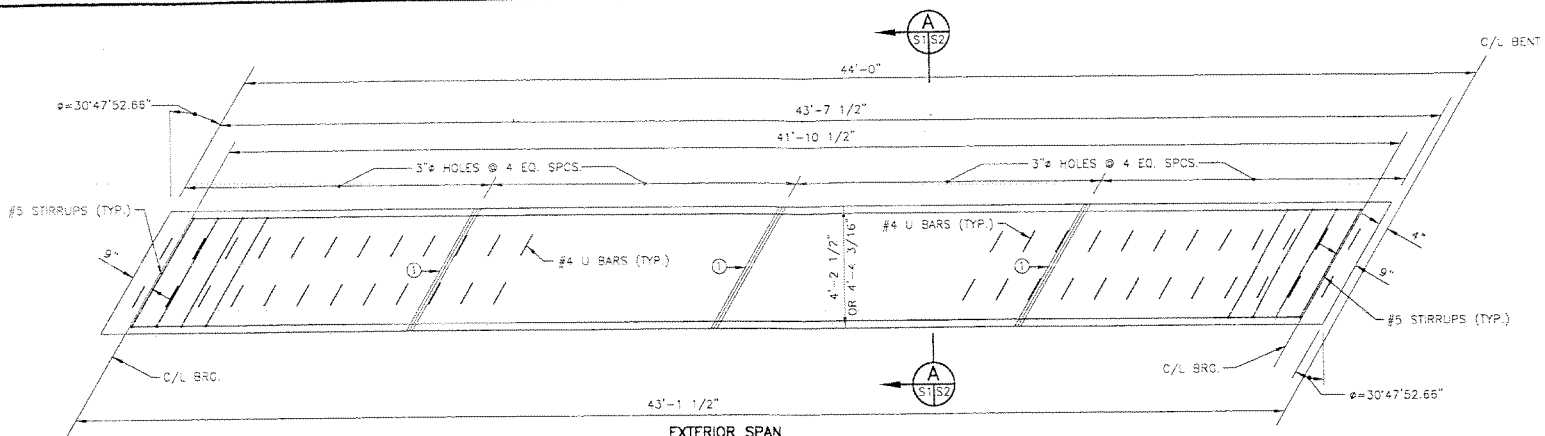
** SEE ATTACHED
DETAIL OF
C-I-P MEMBER*



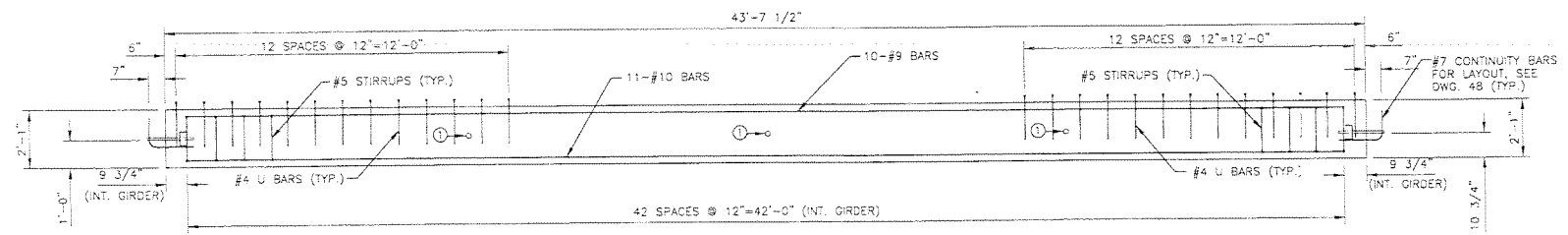
CASTING SEQUENCE
SCALE: 1/8" = 1'-0"



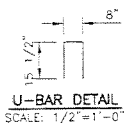
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 2500 NORTH COURSEWAY BLVD. METairie, LOUISIANA 70002	
1: LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
GIRDER CASTING SEQUENCE			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 96	PLOT DATE: 2/20/98
DRAWN BY: TFB	CHECKED BY: AFG	CADD FILE: H44733K.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. COOPER	DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG 44 457



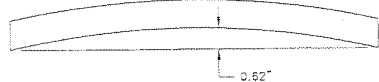
**EXTERIOR SPAN
GIRDER PLAN**
SCALE: 1/2" = 1'-0"



**EXTERIOR SPAN
GIRDER ELEVATION**
SCALE: 1/2" = 1'-0"



U-BAR DETAIL
SCALE: 1/2" = 1'-0"



INITIAL CAST-IN-PLACE CAMBER
NO SCALE

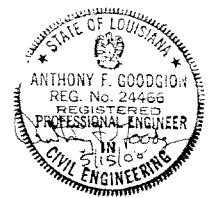
GENTILLY BRIDGE

	GIRDER SERVICE MOMENTS, SHEARS, AND REACTIONS			
	MOMENT (ft. kips)	SHEAR (kips)	REACTION (kips)	
	MIDSPAN	ENDS	ABUT.	BENTS
DL	661.0	62.8	62.8	125.6
LL	211.4	23.0	23.0	46.0
I	59.9	6.6	6.6	13.2
DL+LL+I	932.3	92.4	92.4	184.8
UPUPT	261.7	28.7	19.2	52.7

GIRDER DIMENSIONS

GIRDER NO.	LENGTH	WIDTH
G8	43'-7 1/2"	4'-4 3/16"

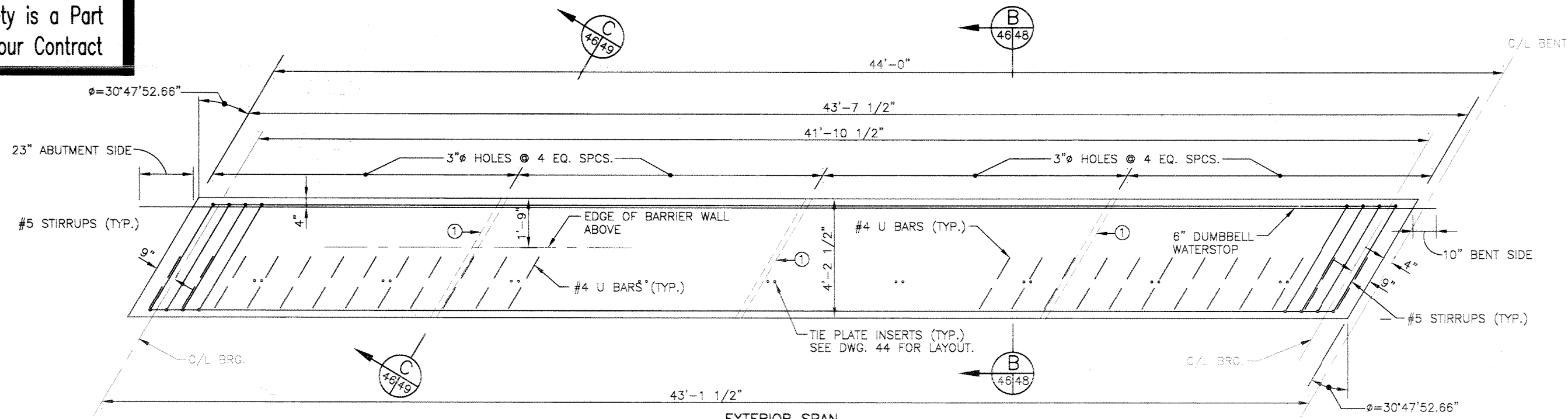
LEGEND
① 3" HOLES CAST PARALLEL WITH GIRDER SIDE SLOPE (TYP. ALL INTERIOR GIRDERS)



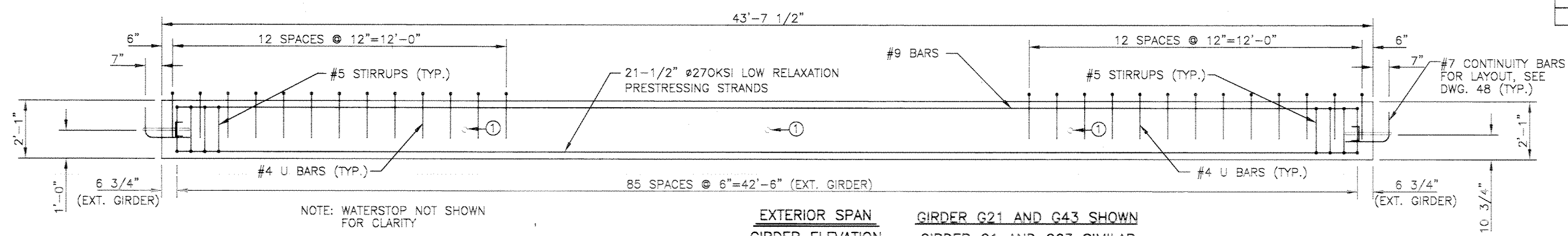
LINFIELD, HUNTER & JUNIUS, INC.
 CONSULTING ENGINEERS AND ARCHITECTS
 3608 18th Street / Suite 200
 Metairie, Louisiana 70002

GENTILLY BLVD. BRIDGE
 CAST-IN-PLACE REPLACEMENT GIRDER
 DRAWN BY: []
 CHECKED BY: []
 IN CHARGE: []
 DATE: 5/15/00
 SHEET: S-1
 OF 2 SHEETS

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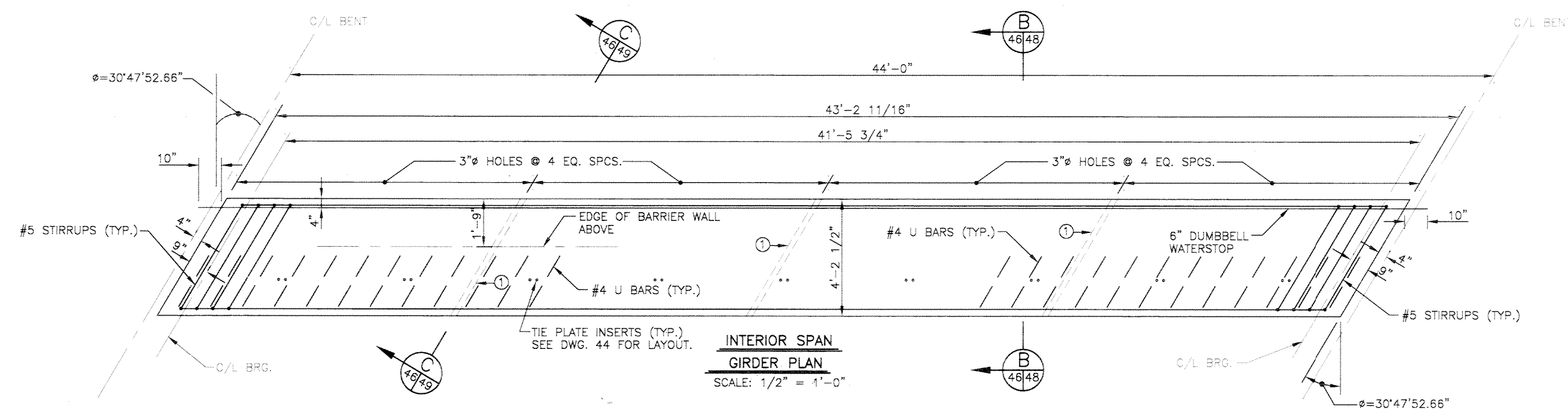


**EXTERIOR SPAN
GIRDER PLAN**
SCALE: 1/2" = 1'-0"

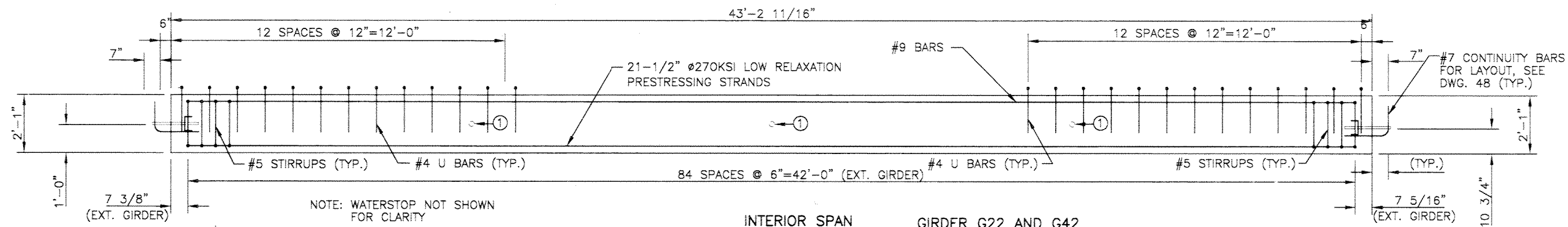


**EXTERIOR SPAN
GIRDER ELEVATION**
SCALE: 1/2" = 1'-0"

**GIRDER G21 AND G43 SHOWN
GIRDER G1 AND G63 SIMILAR**

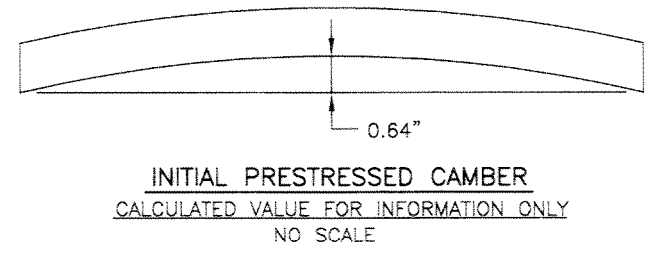
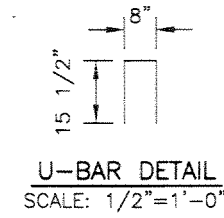


**INTERIOR SPAN
GIRDER PLAN**
SCALE: 1/2" = 1'-0"



**INTERIOR SPAN
GIRDER ELEVATION**
SCALE: 1/2" = 1'-0"

GIRDER G22 AND G42



GENTILLY BRIDGE

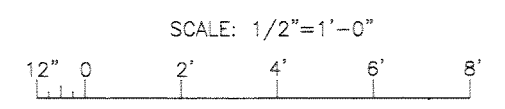
	GIRDER SERVICE MOMENTS, SHEARS, AND REACTIONS			
	MOMENT (ft. kips)	SHEAR (kips)	REACTION (kips)	
	MIDSPAN	ENDS	ABUT.	BENTS
DL	661.0	62.8	62.8	125.6
LL	211.4	23.0	23.0	46.0
I	59.9	6.6	6.6	13.2
DL+LL+I	932.3	92.4	92.4	184.8
UPLIFT	261.7	28.7	19.2	52.7

NOTE:
1). EXTERIOR GIRDERS SHOWN
2). FOR GIRDER FRAMING LAYOUT, SEE DWG. 44.

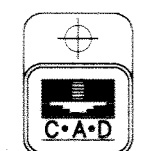
GIRDER DIMENSIONS

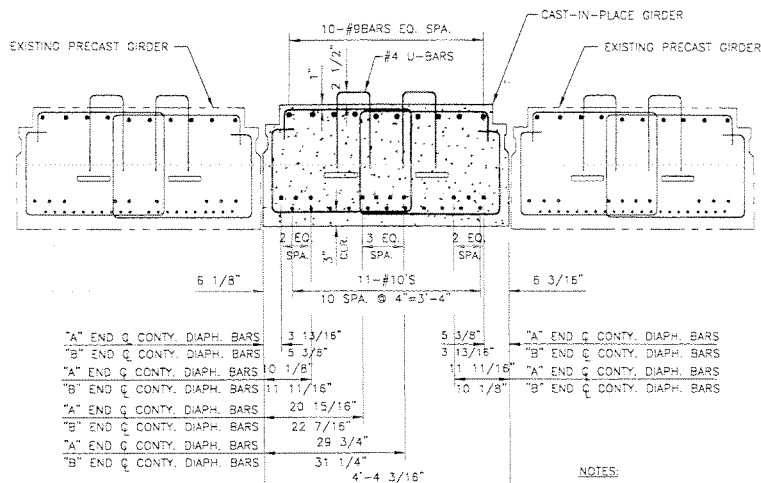
GIRDER NO.	LENGTH	WIDTH
G1, G21, G43, G63	43'-7 1/2"	4'-2 1/2"
G22 AND G42	43'-2 11/16"	4'-2 1/2"

LEGEND
① 3" HOLES CAST PARALLEL WITH GIRDER SIDE SLOPE (TYP. ALL EXTERIOR GIRDERS)



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
PCC EXTERIOR GIRDER DETAILS - 1			
DESIGNED BY: DLB	DATE: FEB. 1998	PLOT SCALE: 24	PLOT DATE: 2/20/98
DRAWN BY: WE	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 46 OF 67



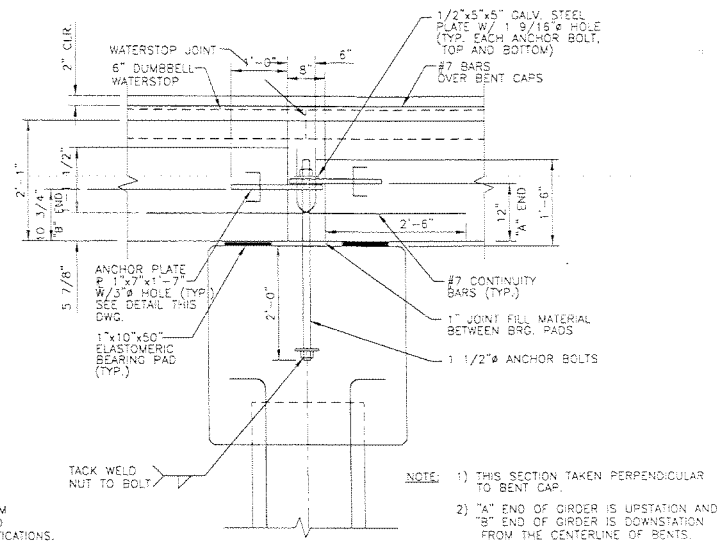


SECTION INTERIOR GIRDER G8
SCALE: 1"=1'-0"

"A" END C. CONTY. DIAPH. BARS	3 13/16"	5 3/8"	"A" END C. CONTY. DIAPH. BARS
"B" END C. CONTY. DIAPH. BARS	5 3/8"	3 13/16"	"B" END C. CONTY. DIAPH. BARS
"A" END C. CONTY. DIAPH. BARS	10 1/8"	11 11/16"	"A" END C. CONTY. DIAPH. BARS
"B" END C. CONTY. DIAPH. BARS	11 11/16"	10 1/8"	"B" END C. CONTY. DIAPH. BARS
"A" END C. CONTY. DIAPH. BARS	20 15/16"		
"B" END C. CONTY. DIAPH. BARS	22 7/16"		
"A" END C. CONTY. DIAPH. BARS	29 3/4"		
"B" END C. CONTY. DIAPH. BARS	31 1/4"		

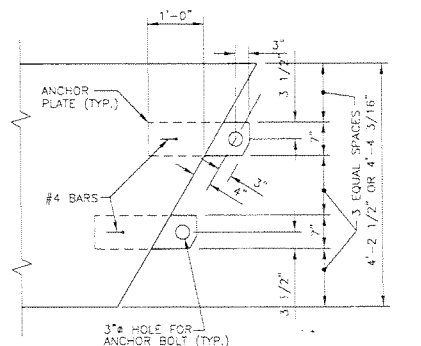
NOTES:

1. CONCRETE SHALL BE NORMAL WEIGHT AND DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI CONFORMING TO AASHTO SPECIFICATIONS - ALSO CONFORM TO PROJECT SPECIFICATIONS.
2. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.
3. REINFORCING STEEL SHALL BE BENT AS SHOWN ON THE DRAWINGS AND SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
4. CONTRACTOR SHALL FORM THE REPLACEMENT GIRDER WITH 0.62" GAMBER ABOVE THE BOTTOMS OF THE ADJACENT GIRDERS. CONTRACTOR SHALL PROVIDE ADEQUATE BOND BREAK BETWEEN THE CAST-IN-PLACE REPLACEMENT GIRDER AND THE ADJACENT GIRDERS.
5. PROVIDE ADEQUATE BOND BREAK BETWEEN THE CAST-IN-PLACE REPLACEMENT GIRDER AND THE ADJACENT GIRDERS.
6. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH F_c OF 5000 PSI FOR REMOVAL OF FORMS.
7. CONFORM TO ALL OTHER PROJECT SPECIFICATIONS.

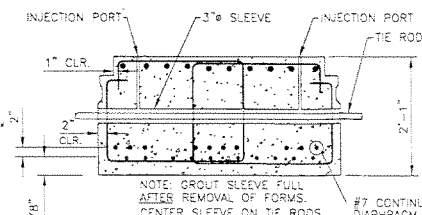


JOINT DETAILS AT BENTS
SCALE: 1"=1'-0"

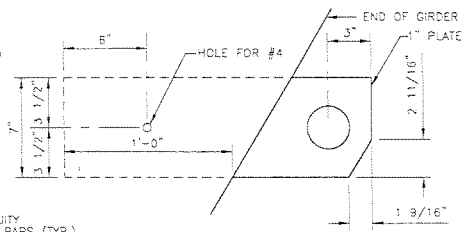
- NOTE:**
- 1) THIS SECTION TAKEN PERPENDICULAR TO BENT CAP.
 - 2) "A" END OF GIRDER IS UPSTATION AND "B" END OF GIRDER IS DOWNSTATION FROM THE CENTERLINE OF BENTS.



INTERIOR GIRDER ANCHOR BOLT PLATE
SCALE: 1"=1'-0"

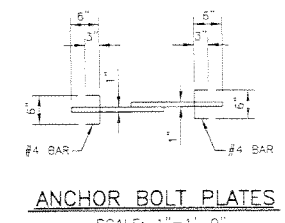


TYPICAL DETAIL AT TIE RODS
SCALE: 1"=1'-0"

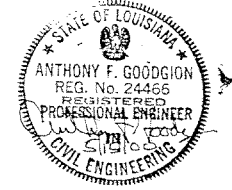


ANCHOR BOLT PLATE DETAIL
SCALE: 3"=1'-0"

NOTE:
#7 CONTINUITY BARS AND ANCHOR BOLT PLATES ARE NOT AT SECTIONS AS CUT BUT ARE SHOWN TO CLARIFY PLACEMENT LOCATION AND DIMENSIONS.



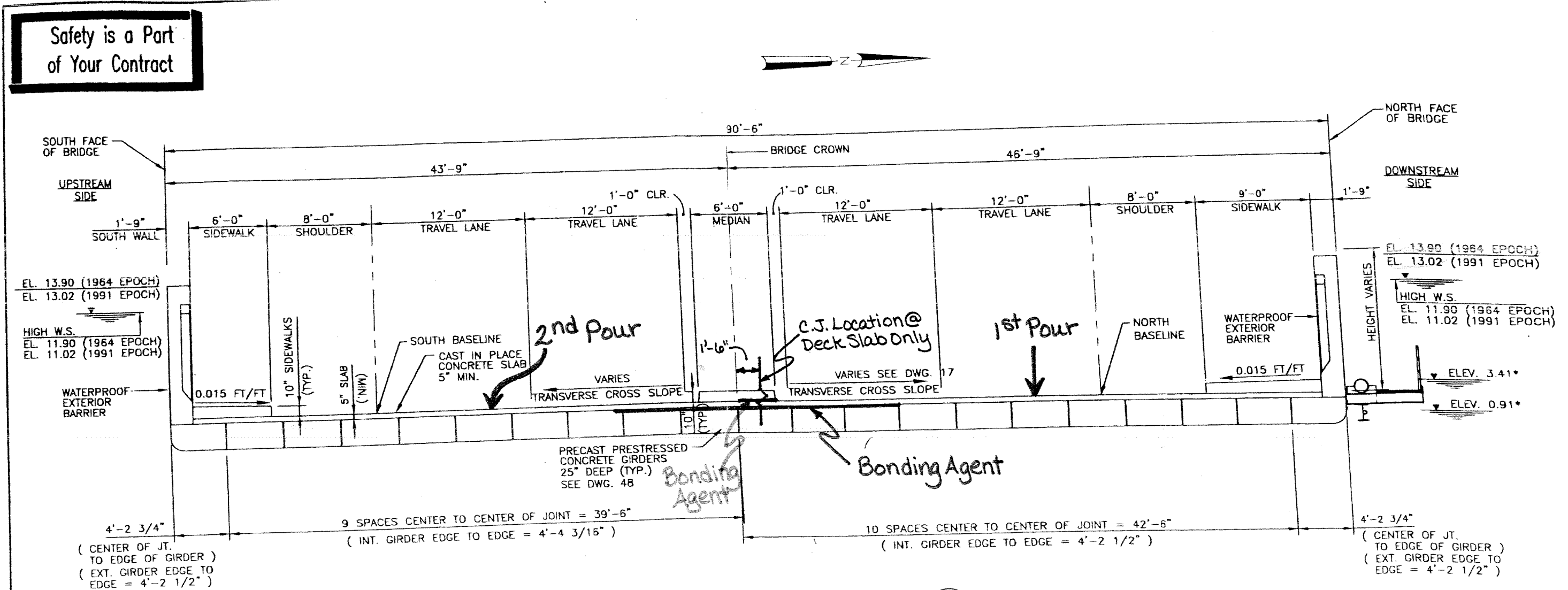
ANCHOR BOLT PLATES
SCALE: 1"=1'-0"



A00024

8 June 2000

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of Your Contract**



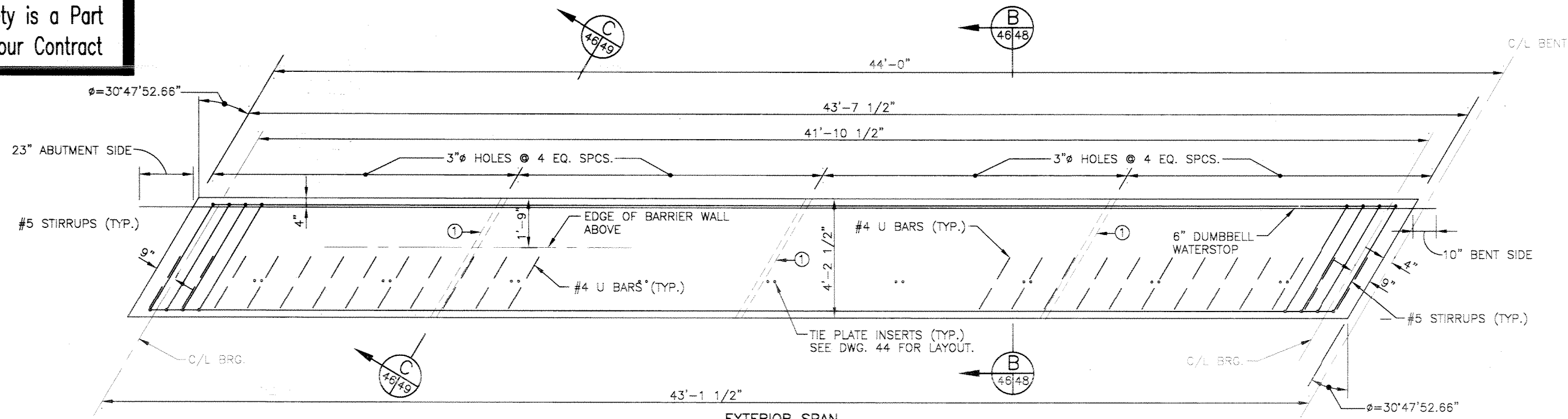
TYPICAL SUPERSTRUCTURE SECTION A
SCALE: 1/4" = 1'-0"

Addition of a Construction Joint will be allowed provided:

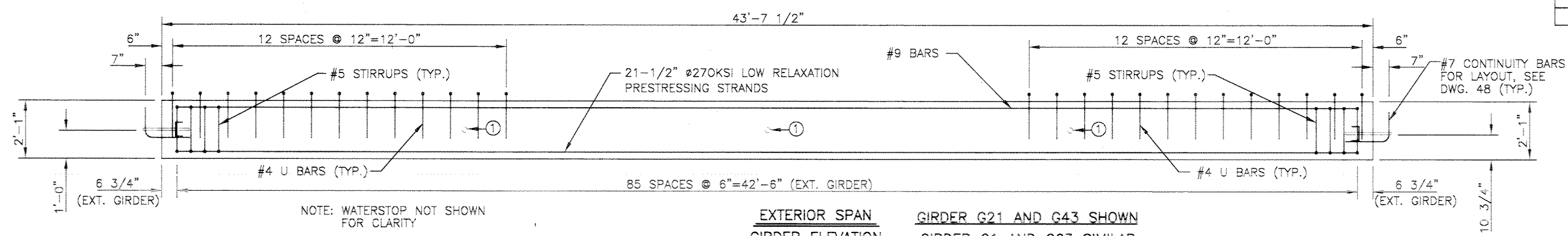
1. A concrete bonding agent shall be placed ten feet on both sides of the joint between the girder/grout/abutment surface and the 5" bridge slab.
2. The joint in the 5" bridge slab shall be treated with the bonding agent. Prior to placement of the bonding agent and the second concrete pour for the 5" bridge slab, the contractor shall ensure that the surface of the construction joint shall be roughened to a minimum 1/4" amplitude. The contractor shall verify these requirements prior to placement of any bridge slab.
3. All bonding agent placements shall be performed in accordance with the manufacturer's recommendations.

SK-99-C-0005-02

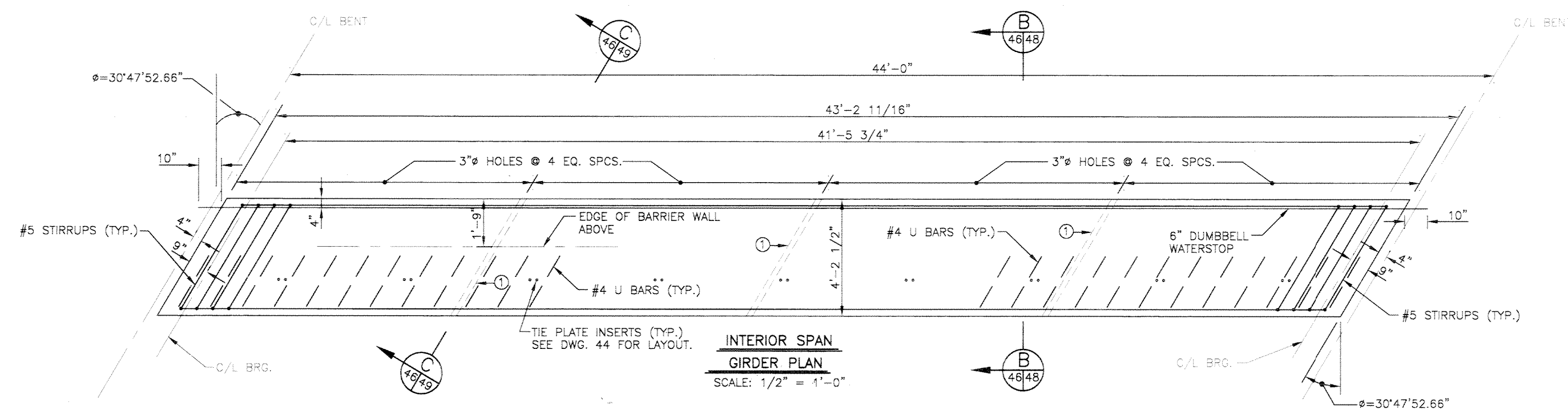
Safety is a Part of Your Contract



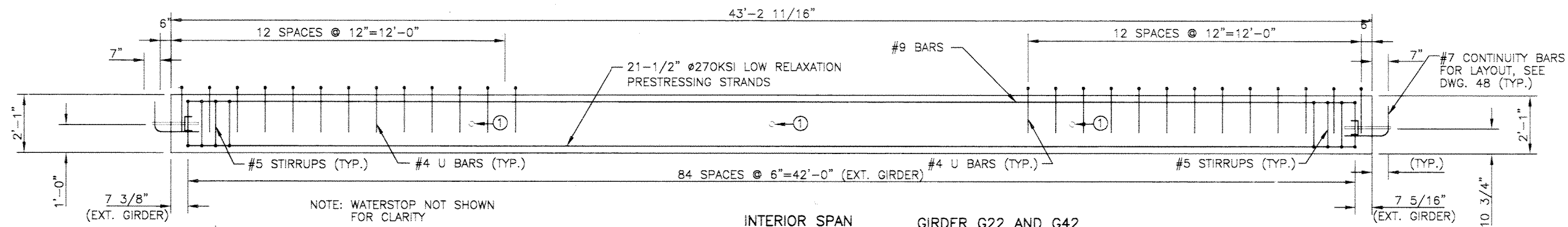
**EXTERIOR SPAN
GIRDER PLAN**
SCALE: 1/2" = 1'-0"



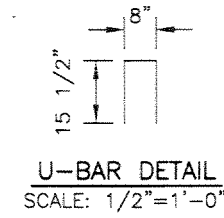
**EXTERIOR SPAN
GIRDER ELEVATION**
SCALE: 1/2" = 1'-0"



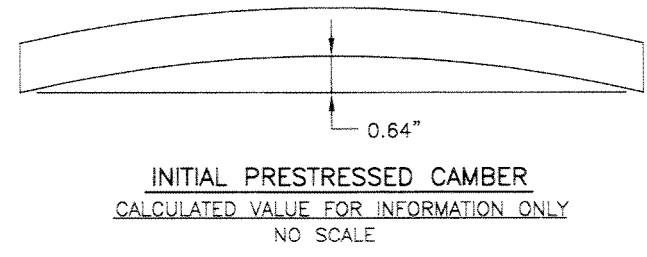
**INTERIOR SPAN
GIRDER PLAN**
SCALE: 1/2" = 1'-0"



**INTERIOR SPAN
GIRDER ELEVATION**
SCALE: 1/2" = 1'-0"



U-BAR DETAIL
SCALE: 1/2" = 1'-0"



INITIAL PRESTRESSED CAMBER
CALCULATED VALUE FOR INFORMATION ONLY
NO SCALE

GENTILLY BRIDGE

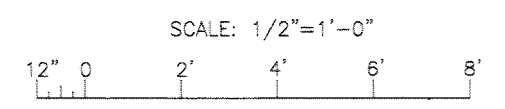
	GIRDER SERVICE MOMENTS, SHEARS, AND REACTIONS		
	MOMENT (ft. kips)	SHEAR (kips)	REACTION (kips)
	MIDSPAN	ENDS	ABUT. BENTS
DL	661.0	62.8	62.8 125.6
LL	211.4	23.0	23.0 46.0
I	59.9	6.6	6.6 13.2
DL+LL+I	932.3	92.4	92.4 184.8
UPLIFT	261.7	28.7	19.2 52.7

NOTE:
1). EXTERIOR GIRDERS SHOWN
2). FOR GIRDER FRAMING LAYOUT, SEE DWG. 44.

GIRDER DIMENSIONS

GIRDER NO.	LENGTH	WIDTH
G1, G21, G43, G63	43'-7 1/2"	4'-2 1/2"
G22 AND G42	43'-2 11/16"	4'-2 1/2"

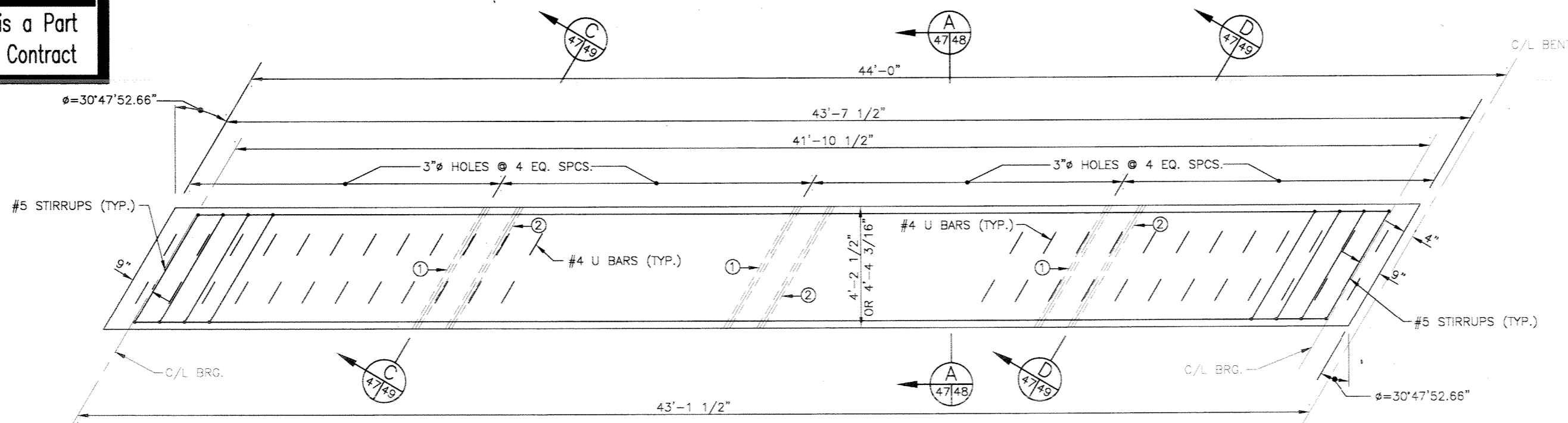
LEGEND
① 3\"/>



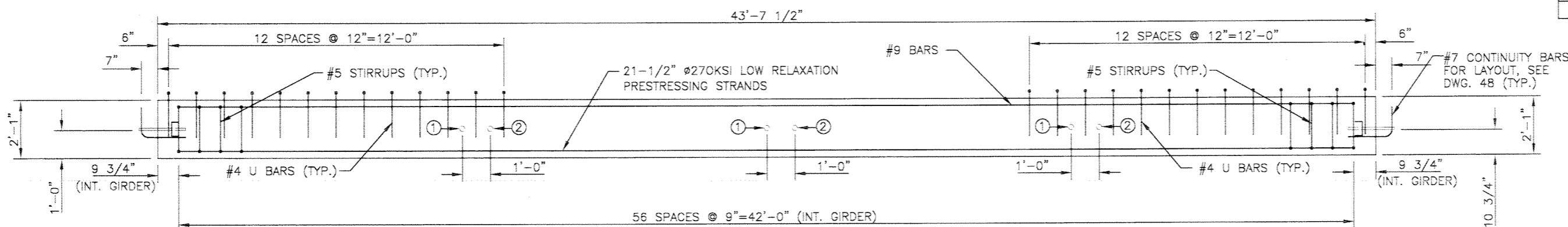
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
PCC EXTERIOR GIRDER DETAILS - 1			
DESIGNED BY: DLB	DATE: FEB. 1998	PLOT SCALE: 24	PLOT DATE: 2/20/98
DRAWN BY: WE	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 46 OF 67



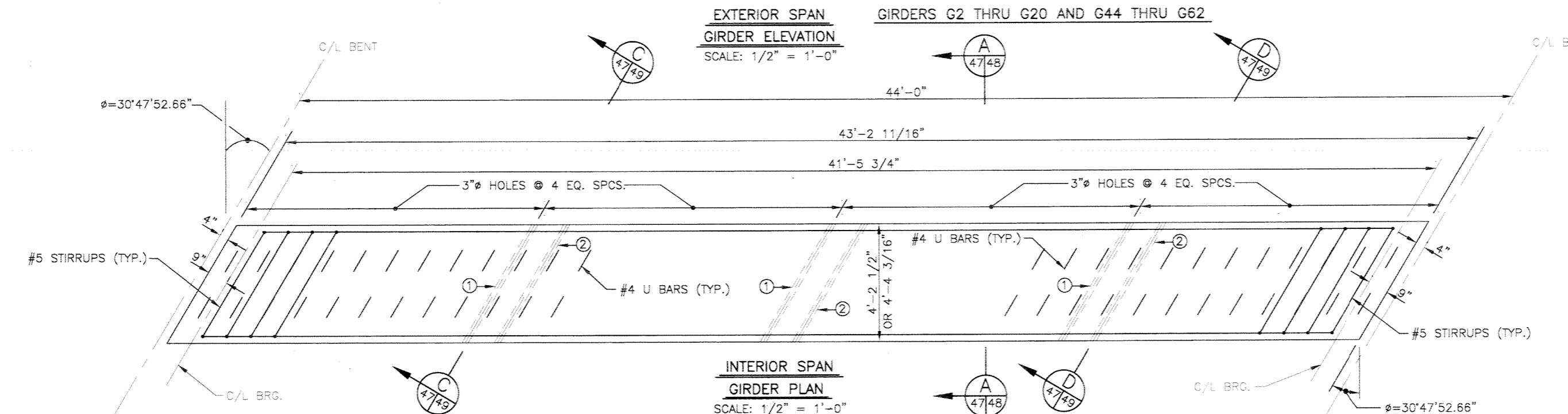
Safety is a Part of Your Contract



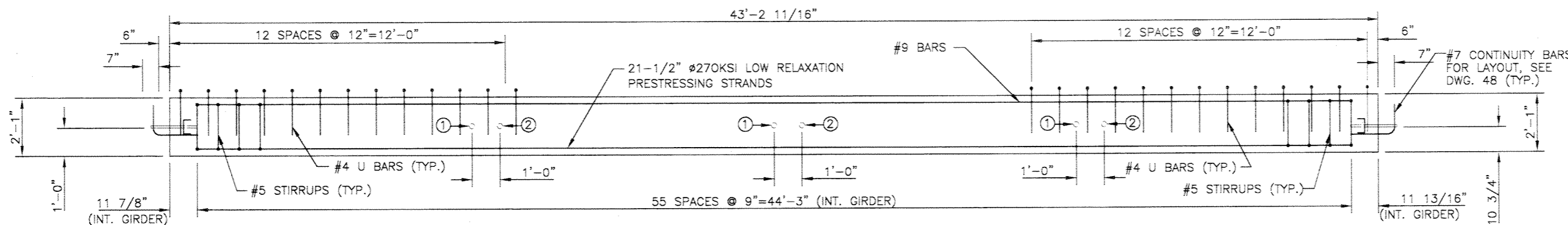
EXTERIOR SPAN
GIRDER PLAN
SCALE: 1/2" = 1'-0"



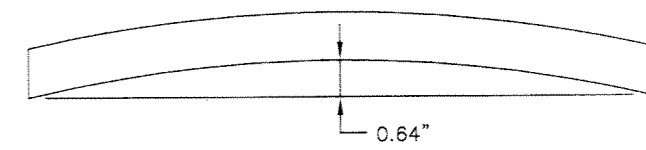
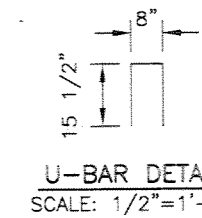
EXTERIOR SPAN
GIRDER ELEVATION
SCALE: 1/2" = 1'-0"



INTERIOR SPAN
GIRDER PLAN
SCALE: 1/2" = 1'-0"



INTERIOR SPAN
GIRDER ELEVATION
SCALE: 1/2" = 1'-0"



INITIAL PRESTRESSED CAMBER
CALCULATED VALUE FOR INFORMATION ONLY
NO SCALE

GENTILLY BRIDGE

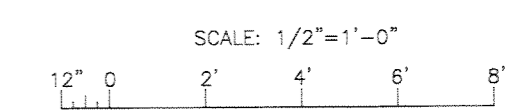
	GIRDER SERVICE MOMENTS, SHEARS, AND REACTIONS			
	MOMENT (ft. kips)	SHEAR (kips)	REACTION (kips)	
	MIDSPAN	ENDS	ABUT.	BENTS
DL	661.0	62.8	62.8	125.6
LL	211.4	23.0	23.0	46.0
I	59.9	6.6	6.6	13.2
DL+LL+I	932.3	92.4	92.4	184.8
UPLIFT	261.7	28.7	19.2	52.7

- NOTE:
- 1.) INTERIOR GIRDERS SHOWN
 - 2.) FOR GIRDER FRAMING LAYOUT SEE DWG. 44

GIRDER DIMENSIONS

GIRDER NO.	LENGTH	WIDTH
G2 THRU G10 & G44 THRU G52	43'-7 1/2"	4'-4 3/16"
G11 THRU G20 & G53 THRU G62	43'-7 1/2"	4'-2 1/2"
G23 THRU G31	43'-2 11/16"	4'-4 3/16"
G32 THRU G41	43'-2 11/16"	4'-2 1/2"

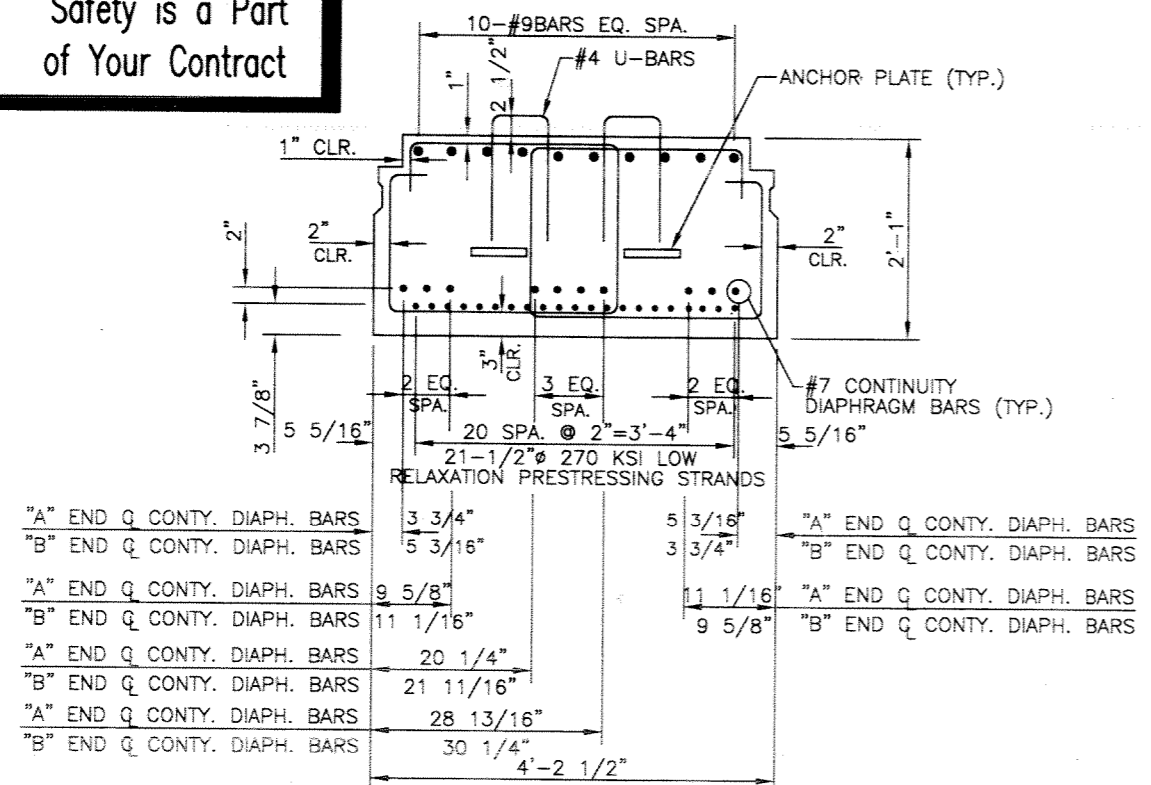
- LEGEND
1. 3" HOLES CAST PARALLEL WITH GIRDER SIDE SLOPE (TYP. ALL INTERIOR GIRDERS)
 2. 3" HOLES CAST LEVEL WITH HORIZONTAL (ONLY GIRDERS G10, G11, G31, G32, G52, G53 FOR CENTERLINE ELEV. OF HOLES SEE SECTION D)



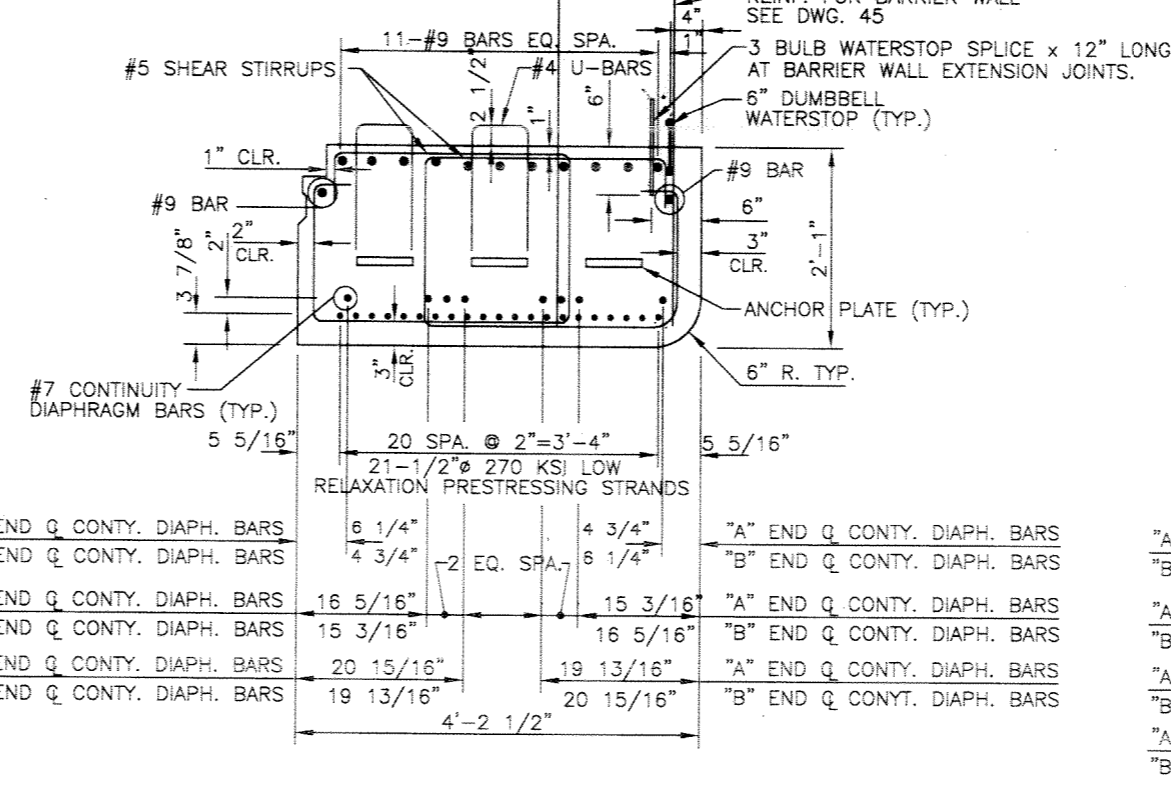
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
PCC INTERIOR GIRDER DETAILS - 2			
DESIGNED BY: DLB	DATE: FEB. 1998	PLOT SCALE: 24	PLOT DATE: 2/20/98
DRAWN BY: WE	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 47 OF 67



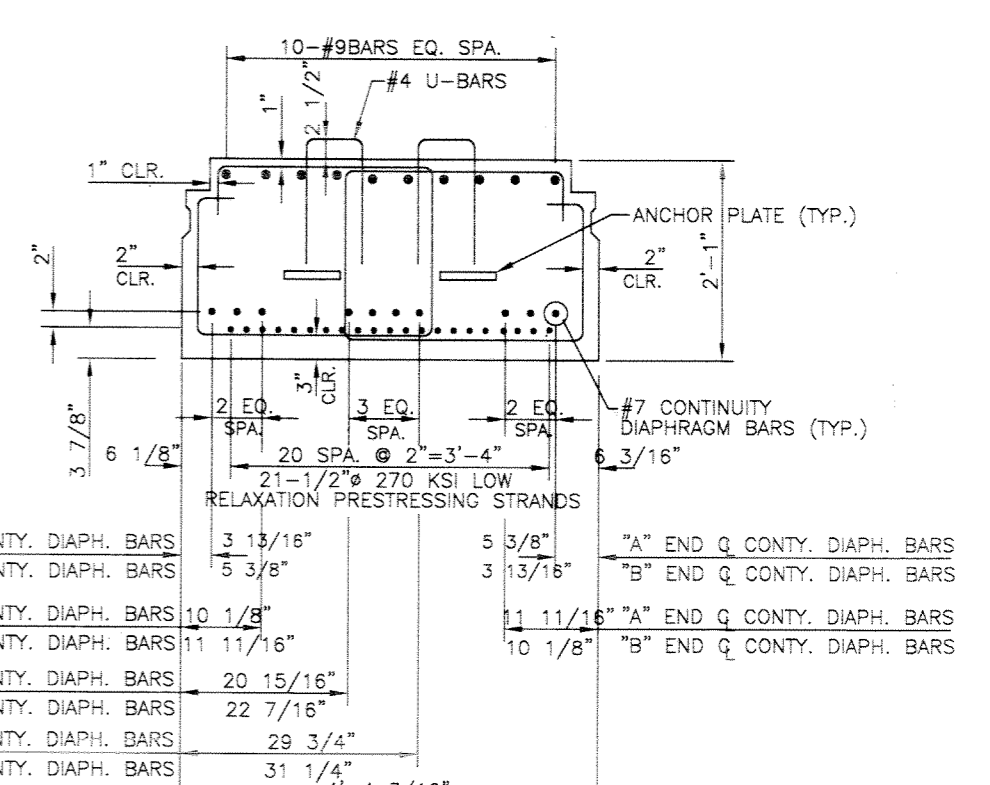
**Safety is a Part
of Your Contract**



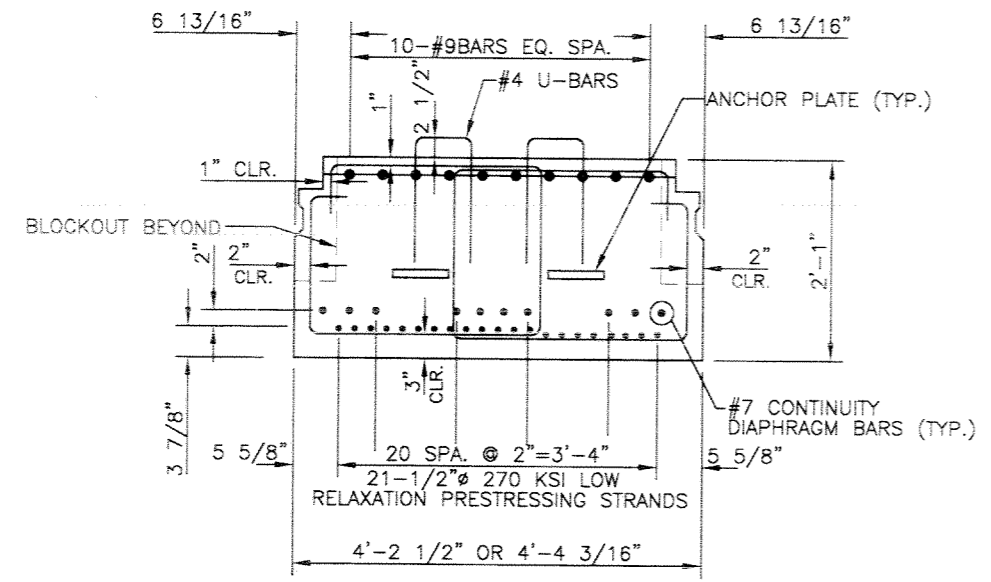
SECTION A 4748
**INTERIOR GIRDERS G12 THRU G20,
G33 THRU G41 AND G54 THRU G62**
SCALE: 1"=1'-0"



SECTION B 4648
**EXTERIOR GIRDER G1, G21,
G22, G42, G43, G63**
SCALE: 1"=1'-0"

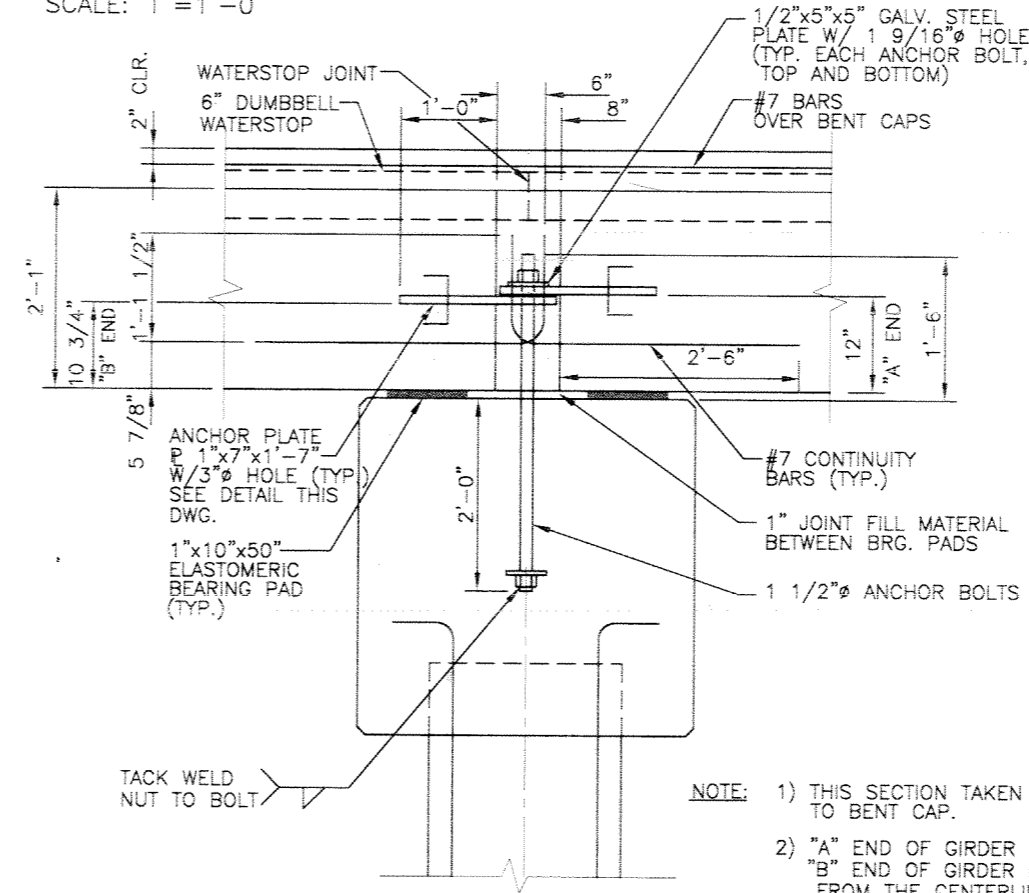


SECTION A 4748
**INTERIOR GIRDERS G2 THRU G9,
G23 THRU G30 AND G44 THRU G51**
SCALE: 1"=1'-0"

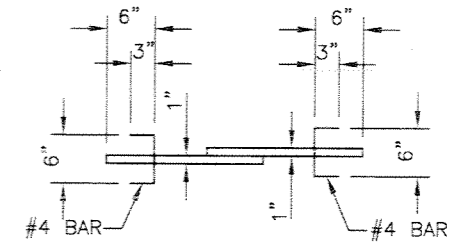


SECTION A 4748
INTERIOR GIRDER G10, G11, G31, G32, G52, G53
SCALE: 1"=1'-0"

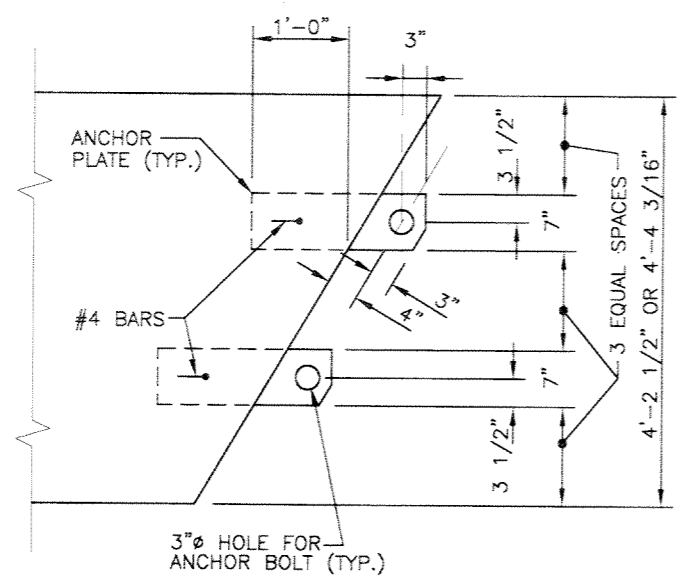
NOTE:
#7 CONTINUITY BARS AND ANCHOR BOLT PLATES ARE NOT AT SECTIONS AS CUT BUT ARE SHOWN TO CLARIFY PLACEMENT LOCATION AND DIMENSIONS.



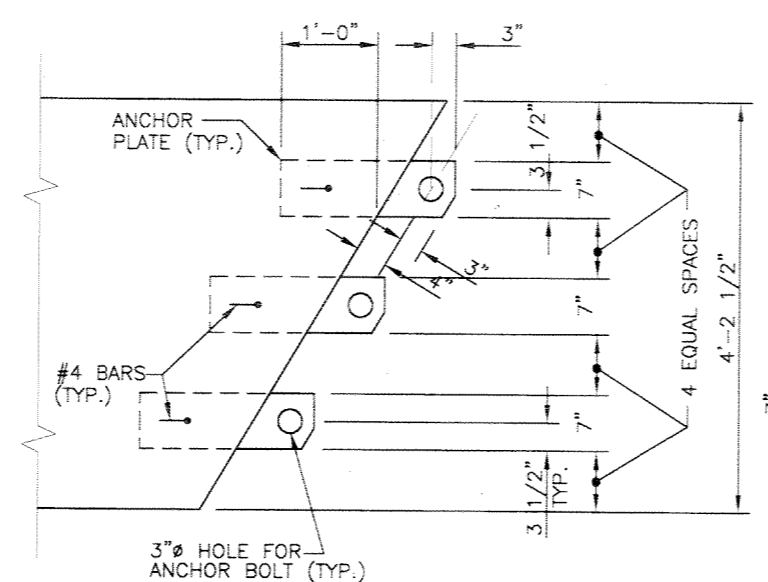
JOINT DETAILS AT BENTS
SCALE: 1"=1'-0"



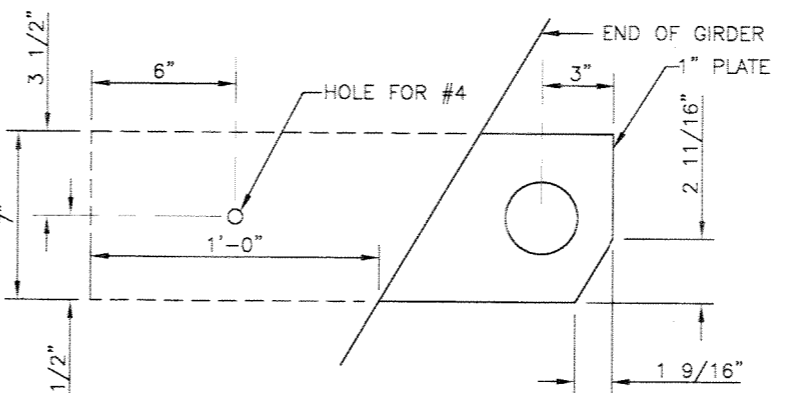
ANCHOR BOLT PLATES
SCALE: 1"=1'-0"



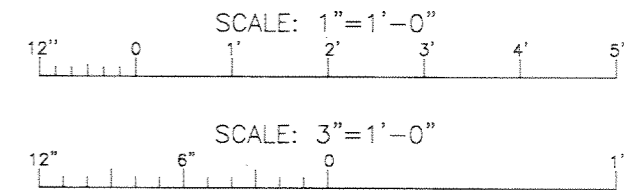
INTERIOR GIRDER ANCHOR BOLT PLATE
SCALE: 1"=1'-0"



EXTERIOR GIRDER ANCHOR BOLT PLATE
SCALE: 1"=1'-0"



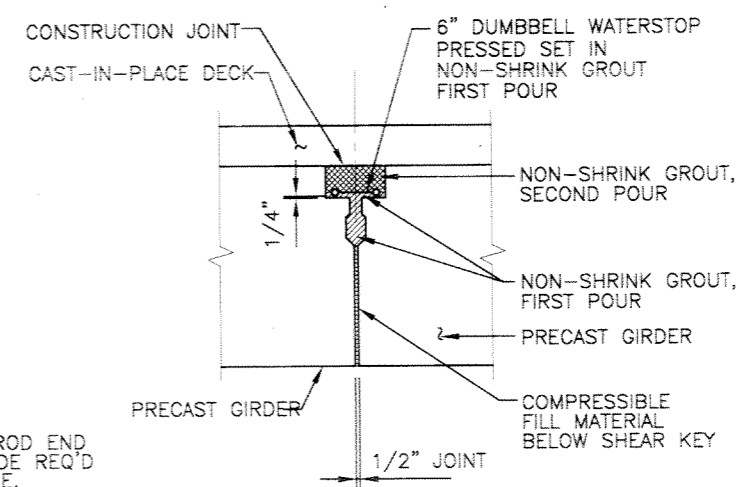
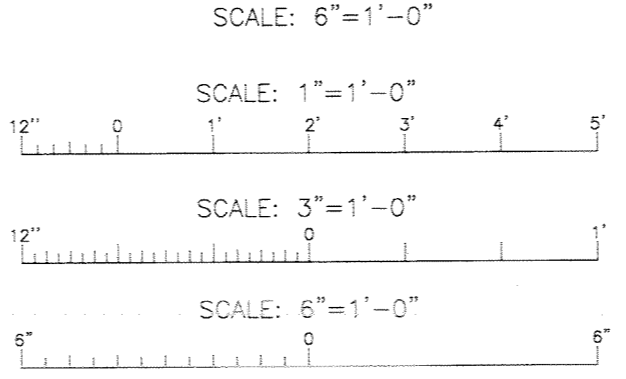
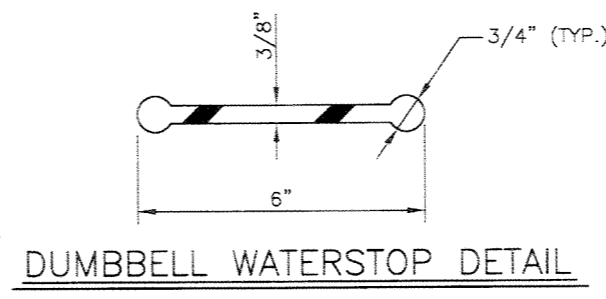
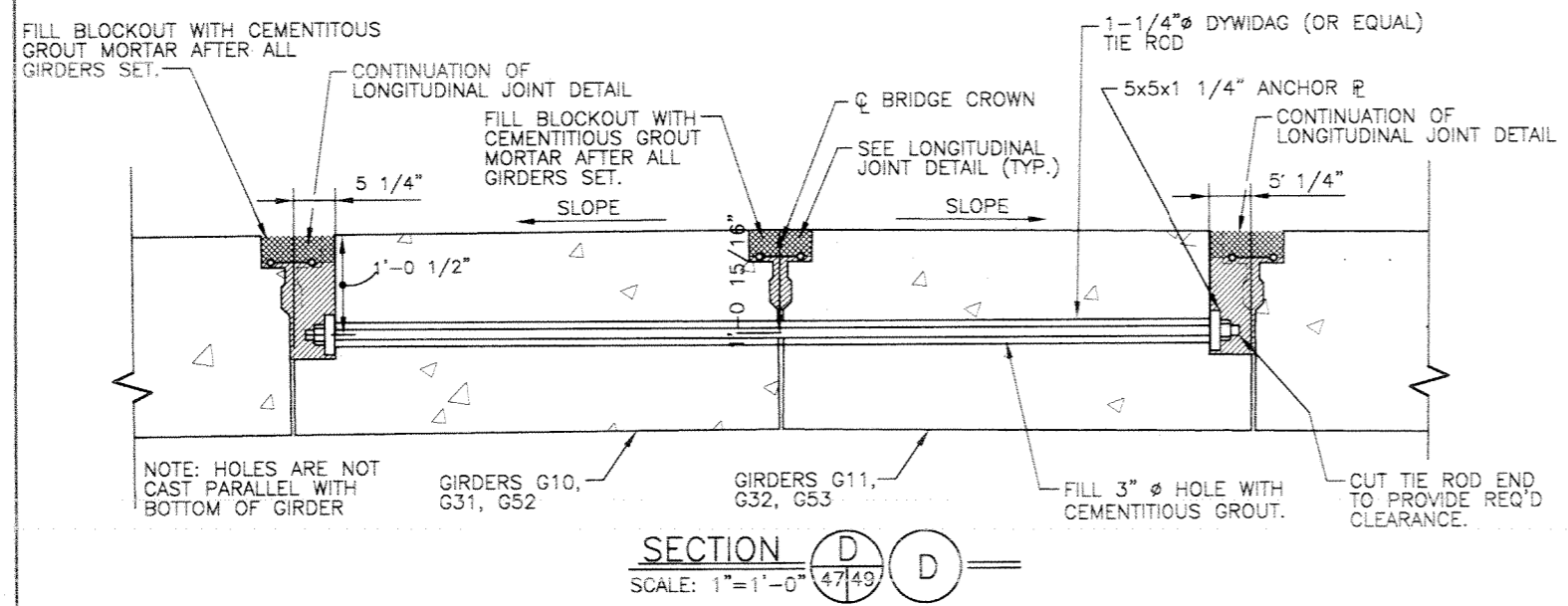
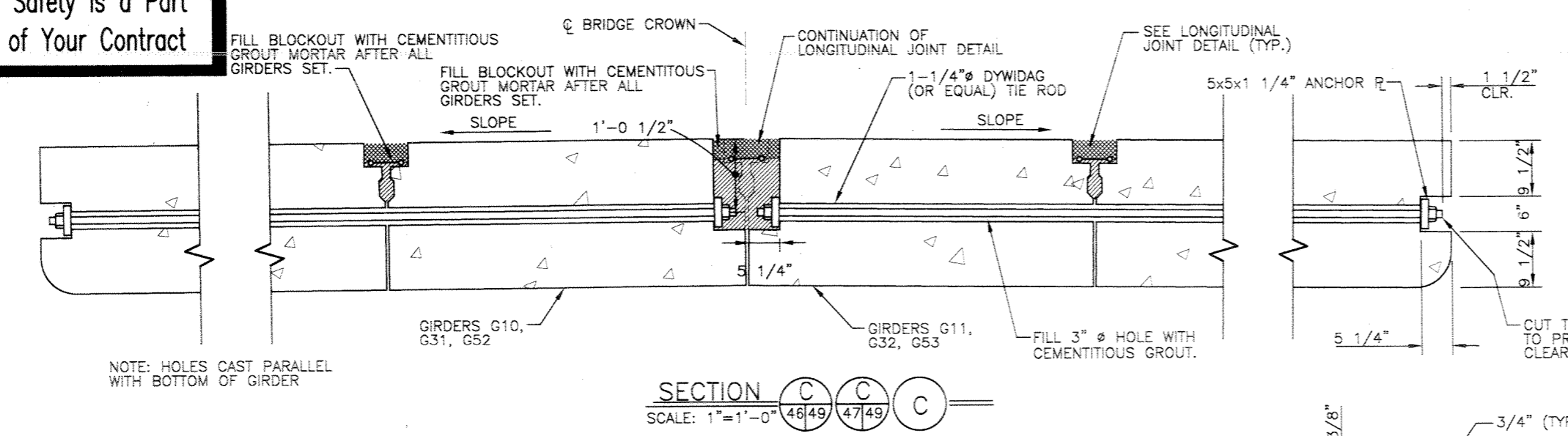
ANCHOR BOLT PLATE DETAIL
SCALE: 3"=1'-0"



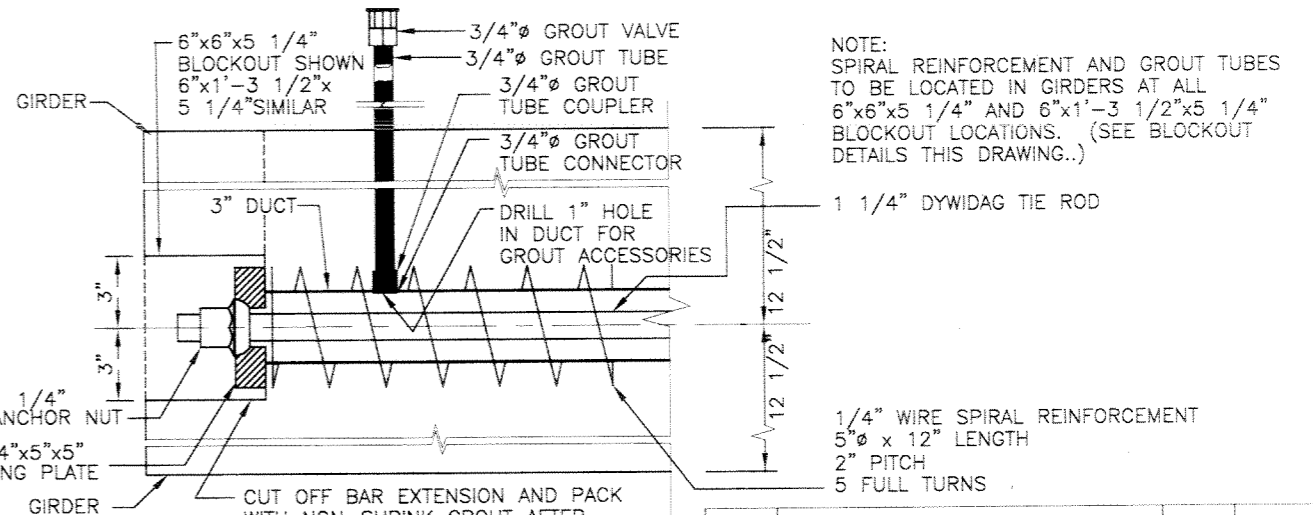
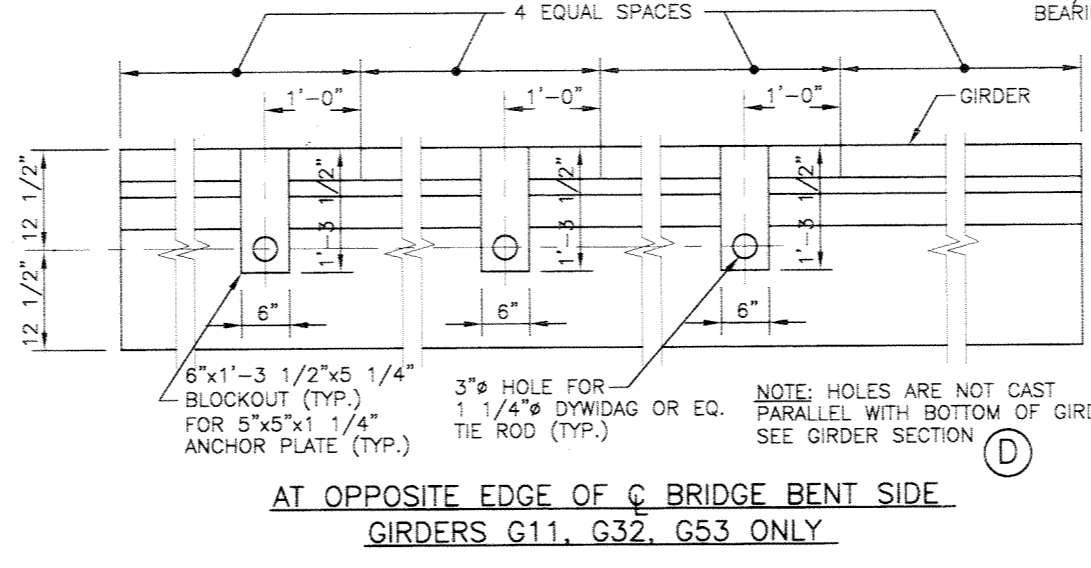
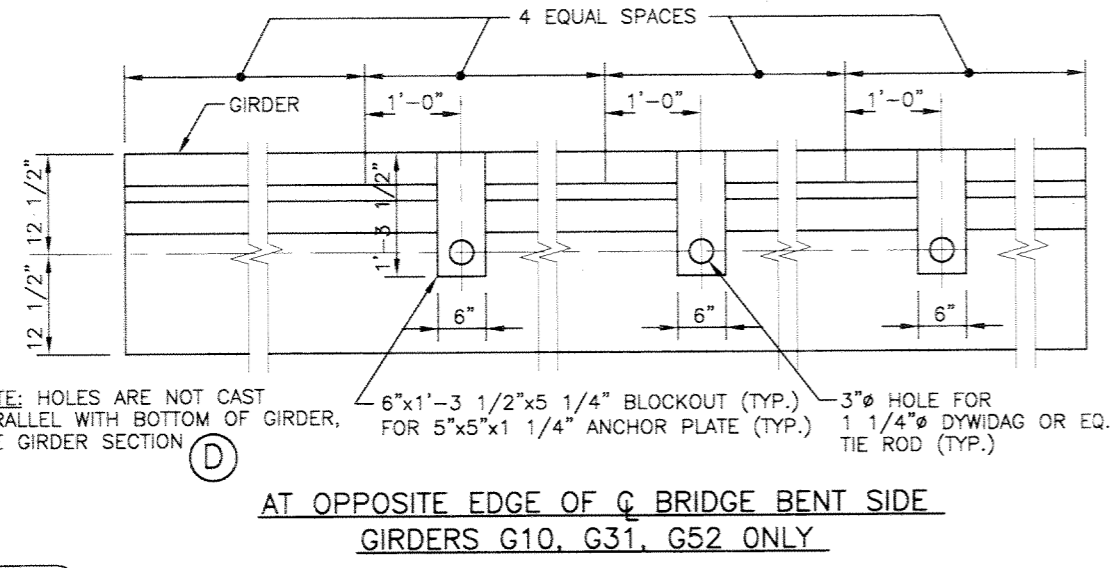
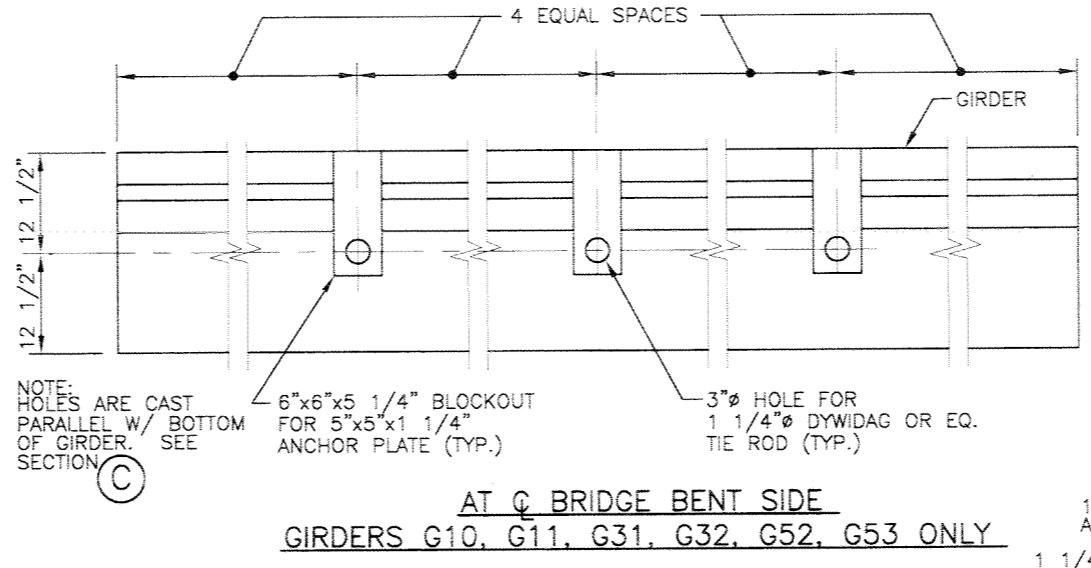
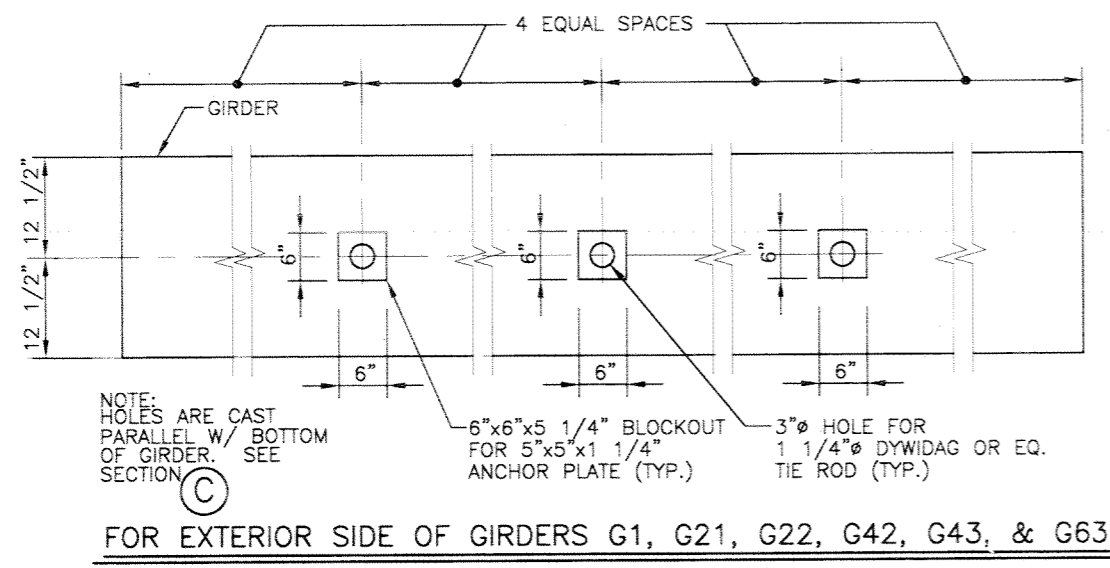
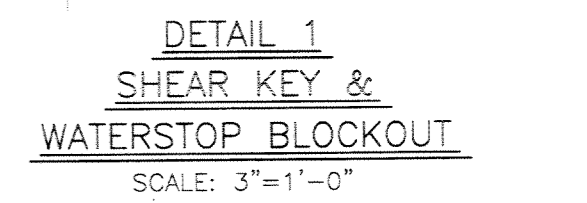
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
PCC GIRDER DETAILS - 3			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 12	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY:	DWG. 48 OF 67	
A. GOODSON DESIGN ENGINEER		SOLICITATION NO. DACW29-98-B-0060	



Safety is a Part of Your Contract



NOTES:
1. PRESS WATERSTOP INTO FIRST POUR OF NON-SHRINK GROUT BEFORE IT IS SET. NO AIR SHALL BE TRAPPED UNDER WATERSTOP.
2. AFTER FIRST POUR HAS SET, FILL BLOCKOUT WITH SECOND POUR OF NON-SHRINK GROUT.



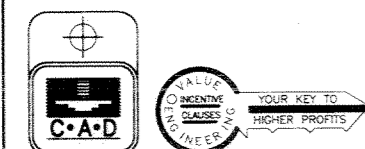
NOTE: SPIRAL REINFORCEMENT AND GROUT TUBES TO BE LOCATED IN GIRDERS AT ALL 6"x6"x5 1/4" AND 6"x1'-3 1/2"x5 1/4" BLOCKOUT LOCATIONS. (SEE BLOCKOUT DETAILS THIS DRAWING.)

TIE ROD SEQUENCE

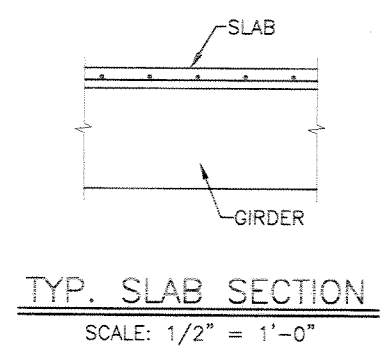
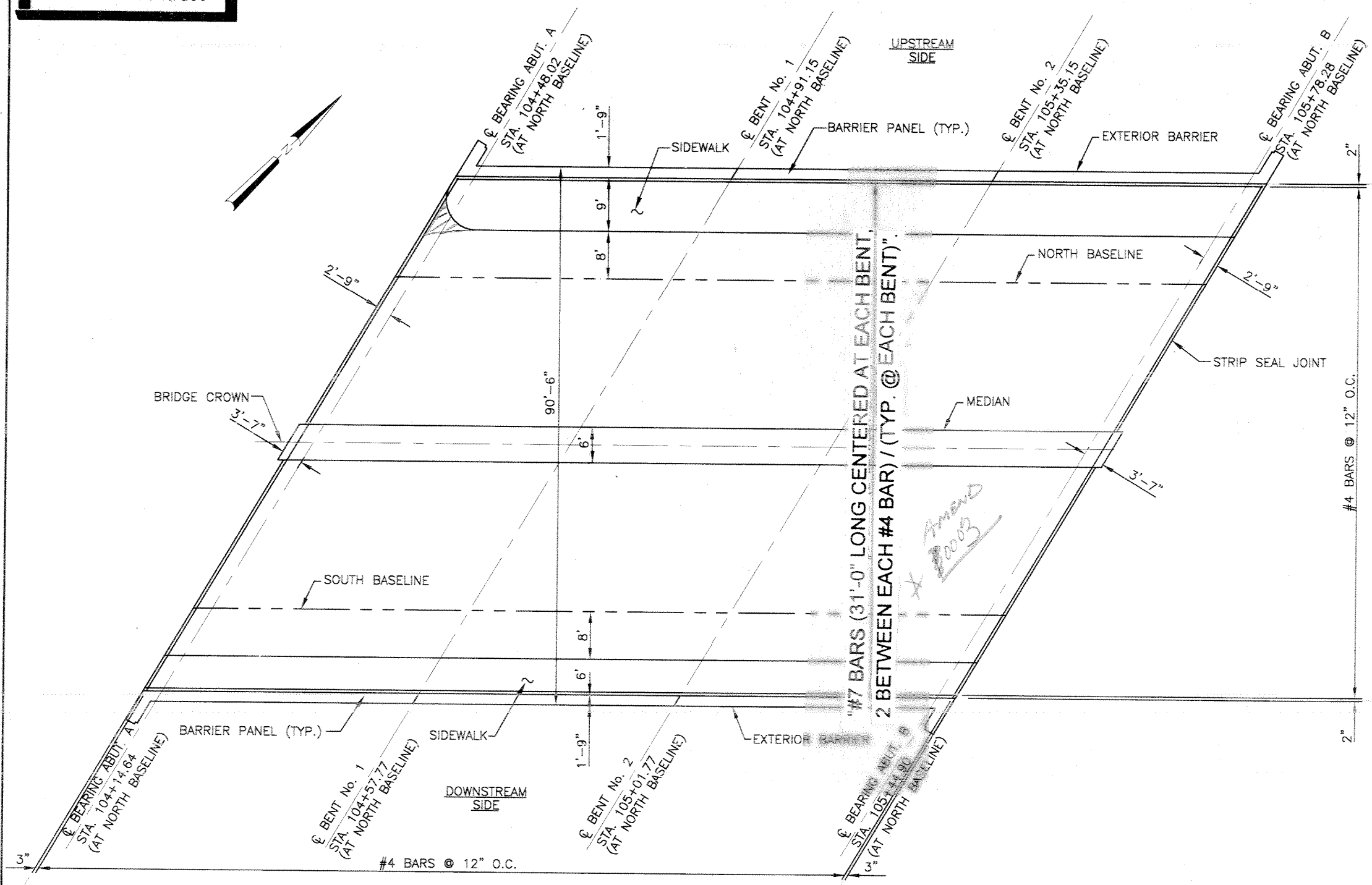
1. PLACE GIRDERS G10, G11, G31, G32, G52 & G53, INSTALL SHORT TIE RODS AND TENSION TO 5 KIPS.
2. PLACE REMAINING GIRDERS, INSTALL LONG TIE RODS AND TENSION TO 5 KIPS.
3. FILL 3" HOLES WITH CEMENTITIOUS GROUT.
4. FILL INTERIOR BLOCKOUTS WITH CEMENTITIOUS GROUT.
5. FILL EXTERIOR BLOCKOUTS WITH DRY PACK MORTAR.

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKELAND, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002			
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
PCC GIRDER DETAILS - 4			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 12	PLOT DATE: 2/20/98
DRAWN BY: RKP	CHECKED BY: AFG	QA/QC FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY:	SOLUTION NO. DACW29-98-B-0060	DWG. 49 OF 67	

GIRDER ELEVATIONS-TIE ROD BLOCKOUT DETAILS
SCALE: 1"=1'-0"



Safety is a Part of Your Contract



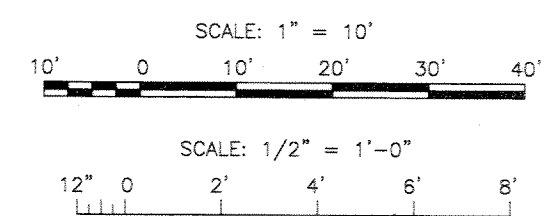
134'
3 @ 44' Girders
2 @ 11' Points

SLAB PLACING PLAN
SCALE: 1" = 10'

NOTE:
CAST IN PLACE SLAB IS PLACED CONTINUOUSLY OVER ENTIRE SPAN.

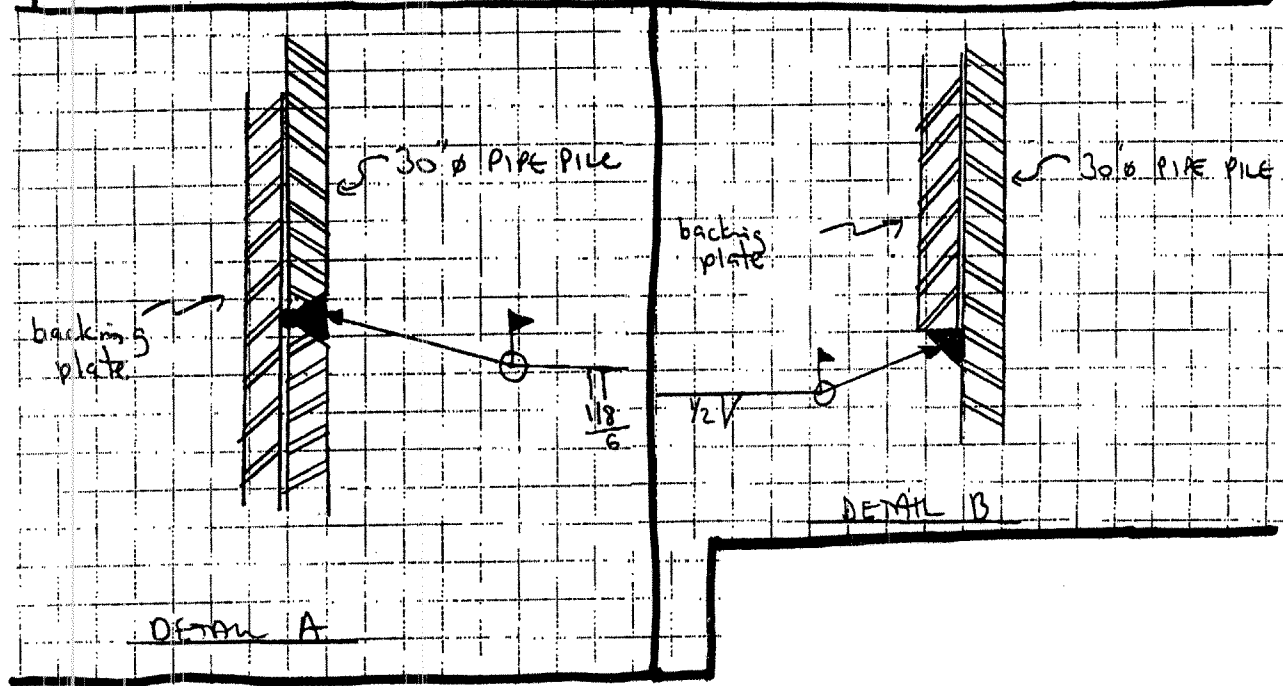
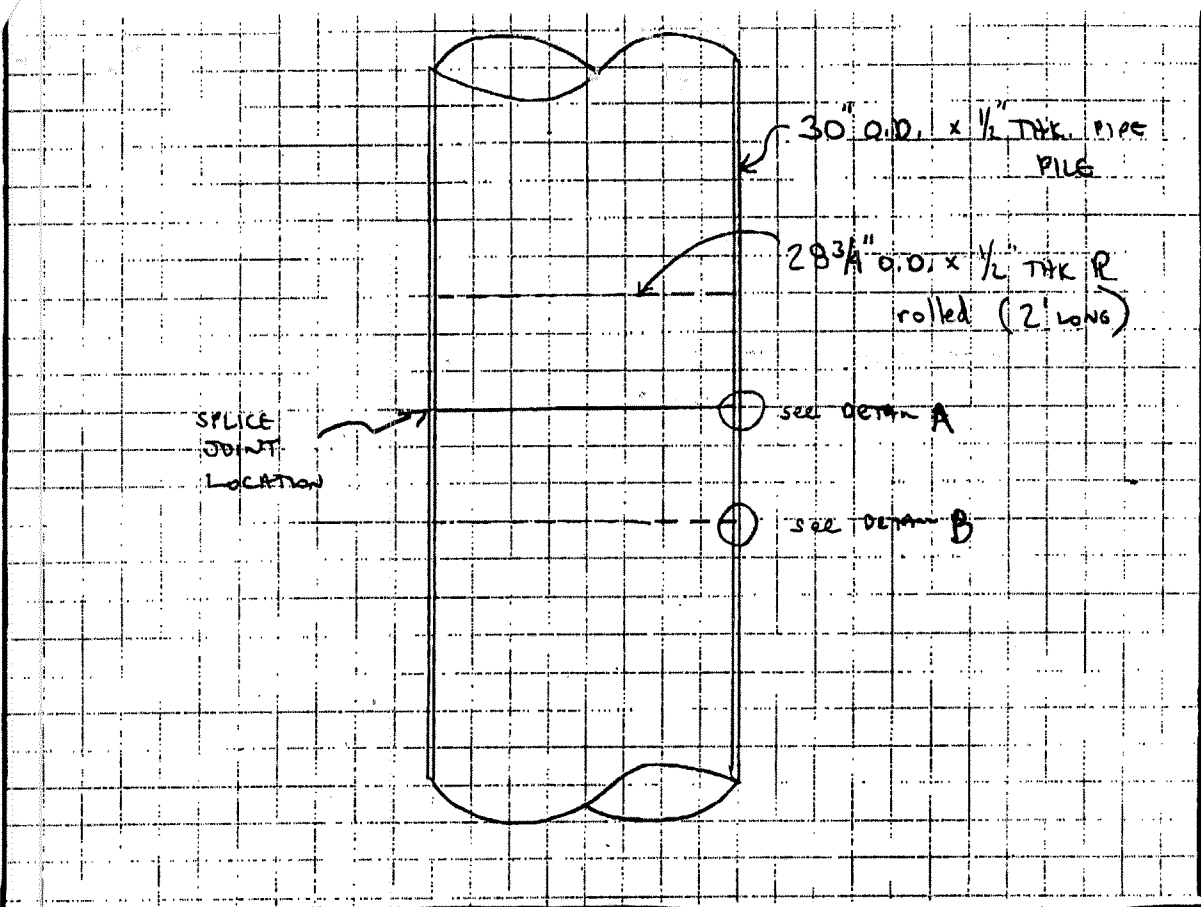
134'
87'
11,658 SF
x 5"
4,857.50 CF
→ 180cy

NOTE:
FOR GENERAL NOTES, SEE DWG. No. 3.
FOR TYPICAL SUPERSTRUCTURE SECTION SEE DWGS. NOS. 31 AND 45.
ALL LONGITUDINAL LAPS TO BE MADE ONLY AT THIRD POINTS BETWEEN SPANS.
ALL TRANSVERSE LAPS TO BE MADE ONLY AT BRIDGE CROWN.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNTUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd, Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA SLAB PLACING PLAN			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 10	PLOT DATE: 2/20/98
DRAWN BY: RKP	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY:	SOLICITATION NO. DACW29-98-B-0060	DESIGN ENGINEER	DWG. 50 OF 67

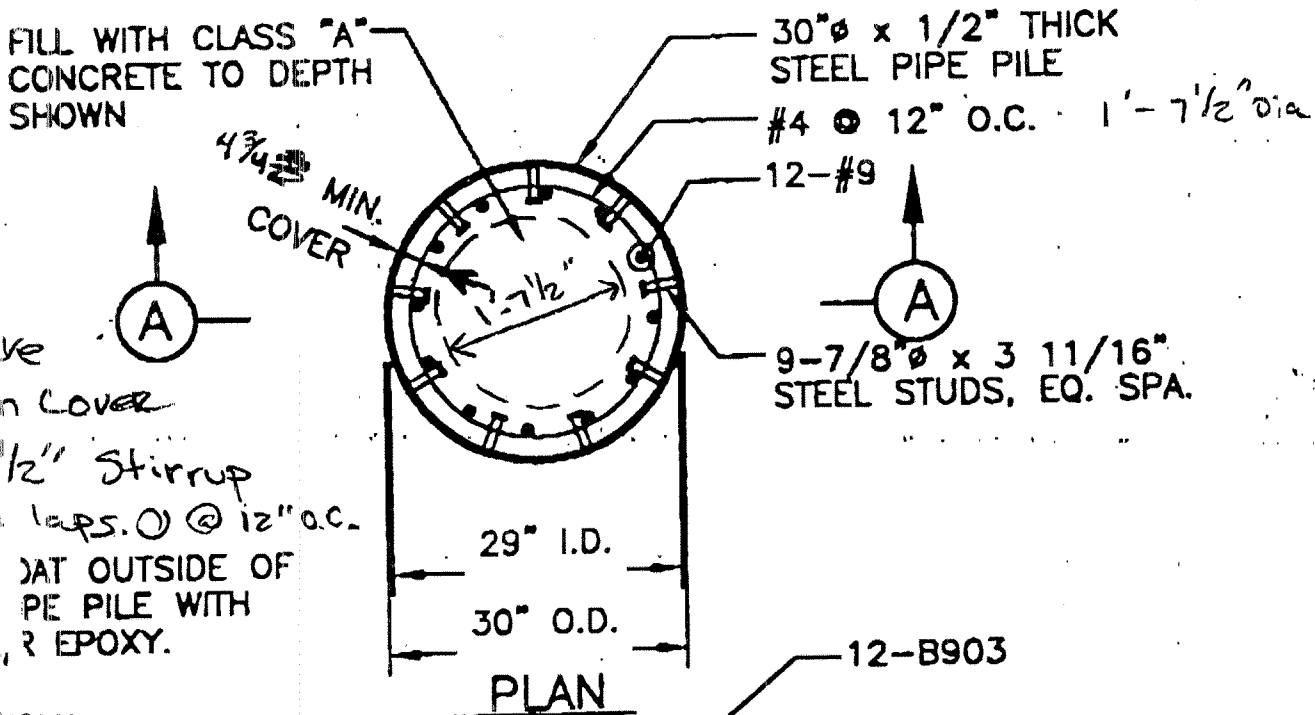




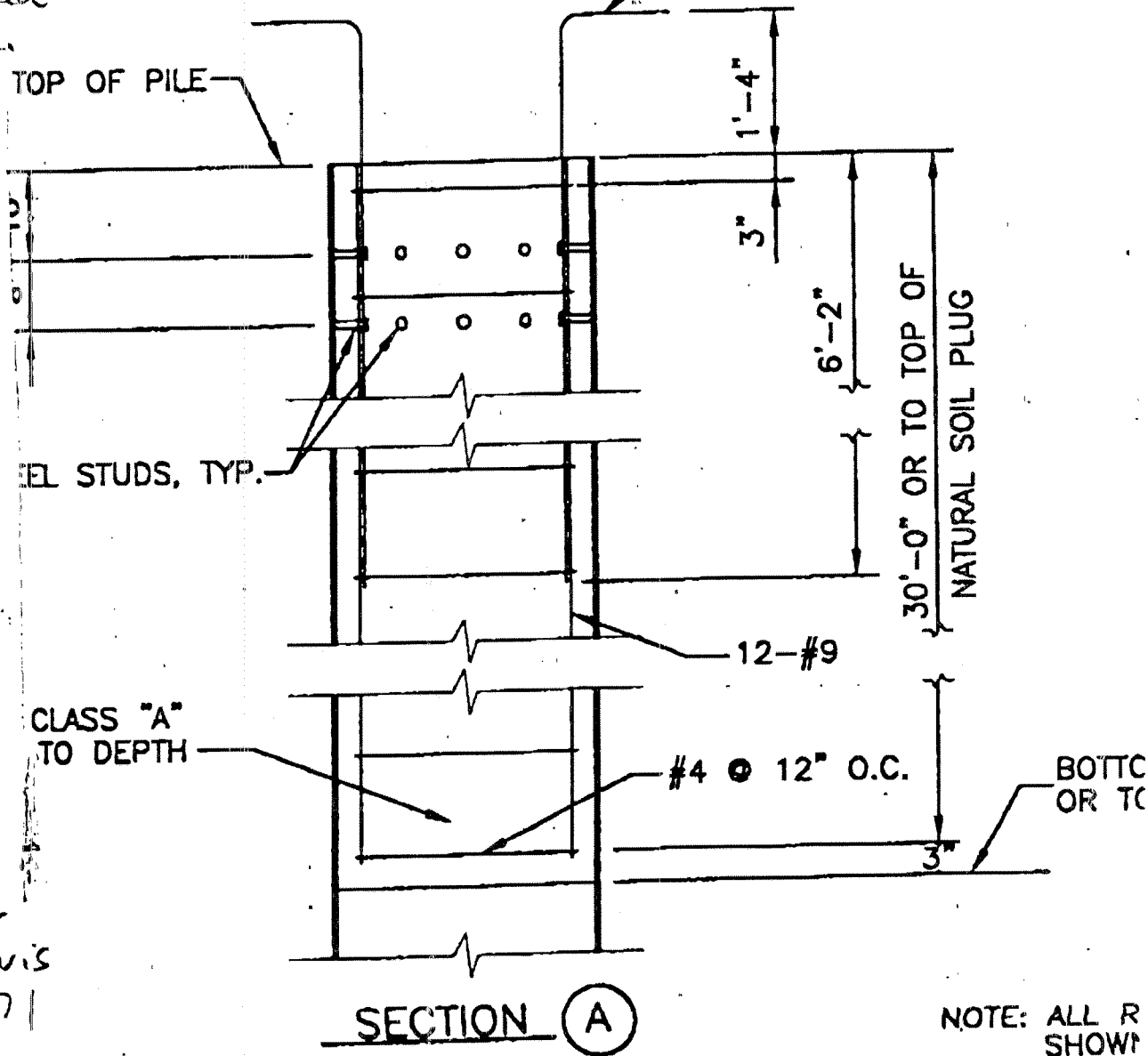
SK-99-0005-001

A00001

ALTERNATE SPLICE METHOD
 (FOR STEEL TEST PIPE PILE)
 ONLY



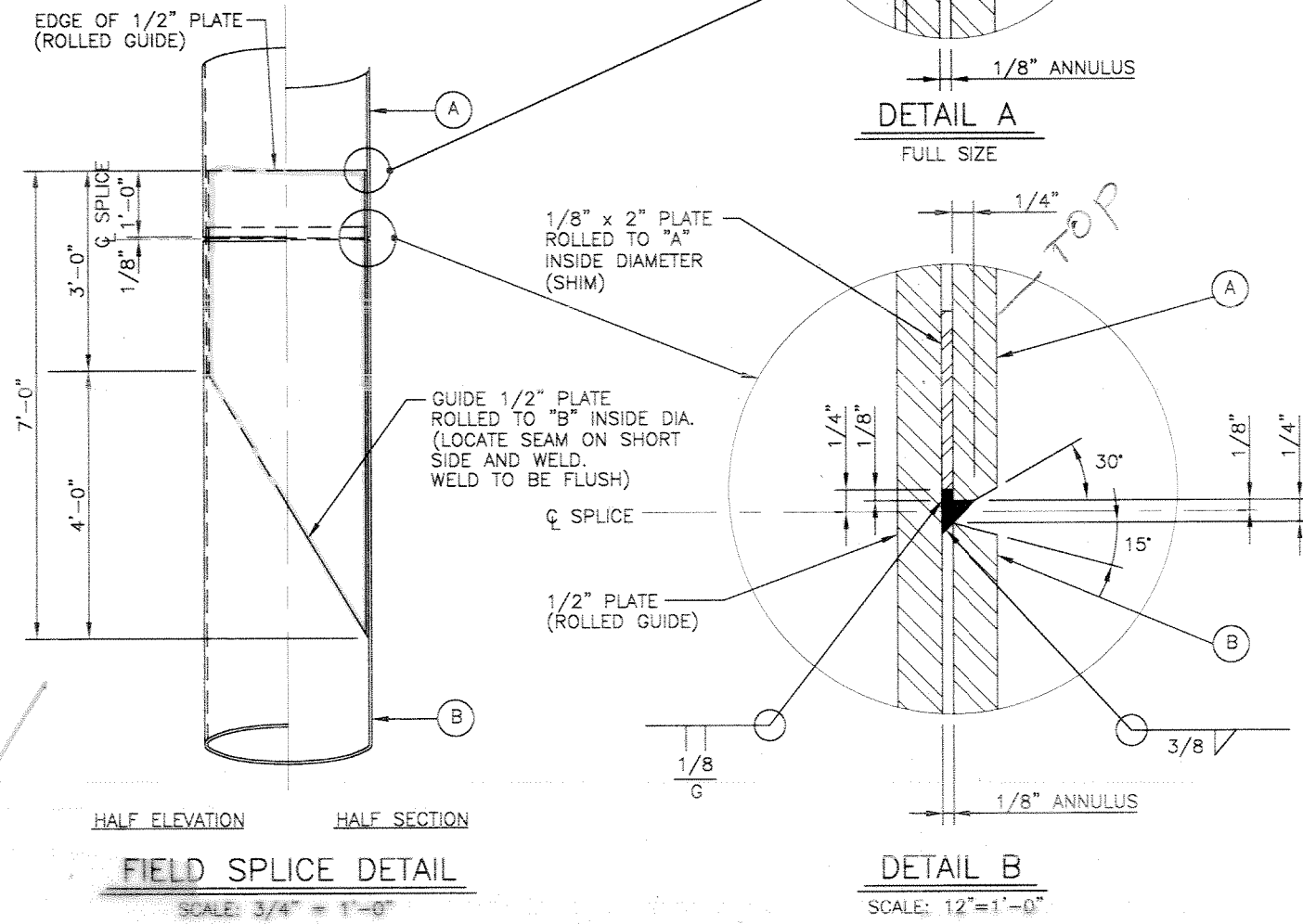
Glenn,
 We will have a 4 3/4" min cover and 1-7 1/2" stirrup w/ standard laps. @ 12" o.c.
 Distance between studs is 21" at outside of PE PILE WITH R EPOXY.
 at 1-7 1/2" we have 1 1/2" clearance.



Jason Travis
 947-4771

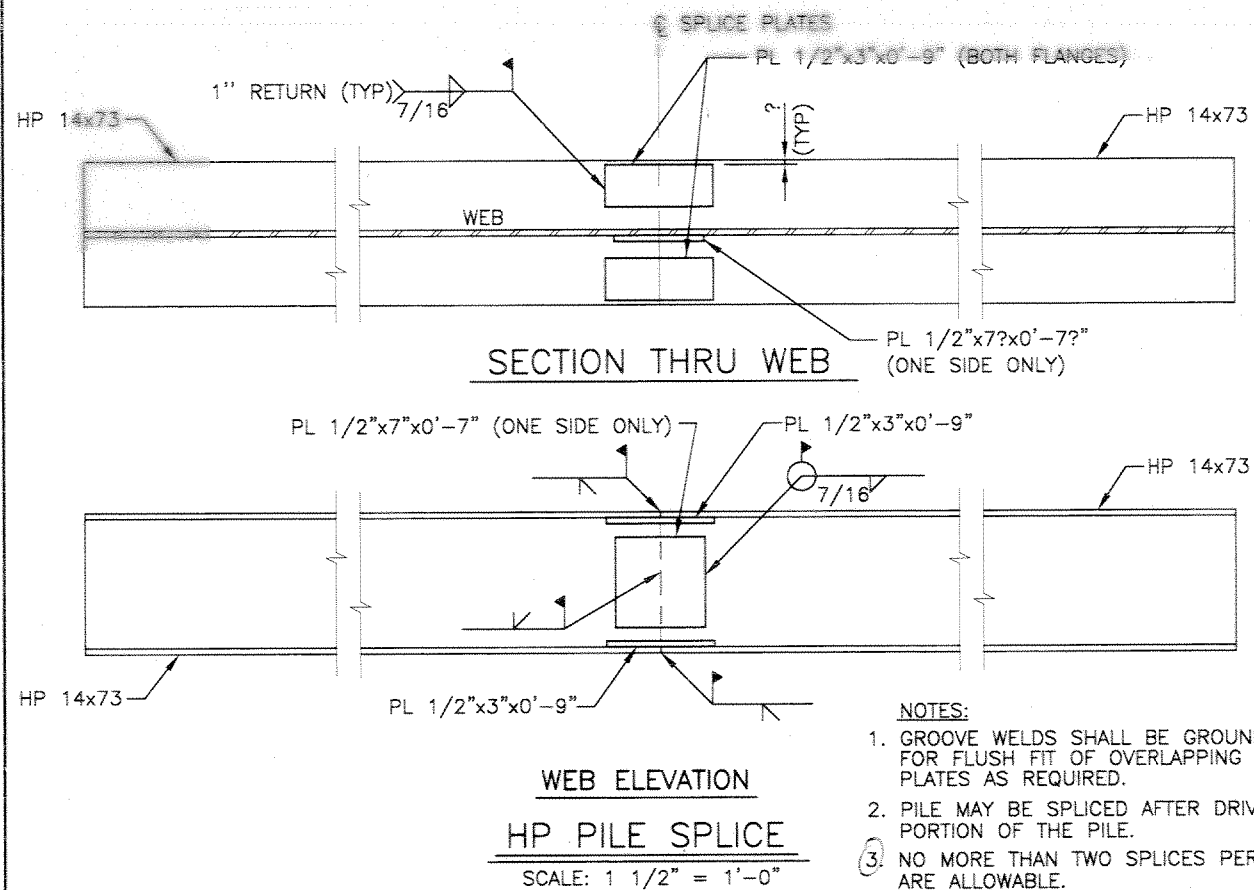
NOTE: ALL R SHOW
 TOTAL P.01

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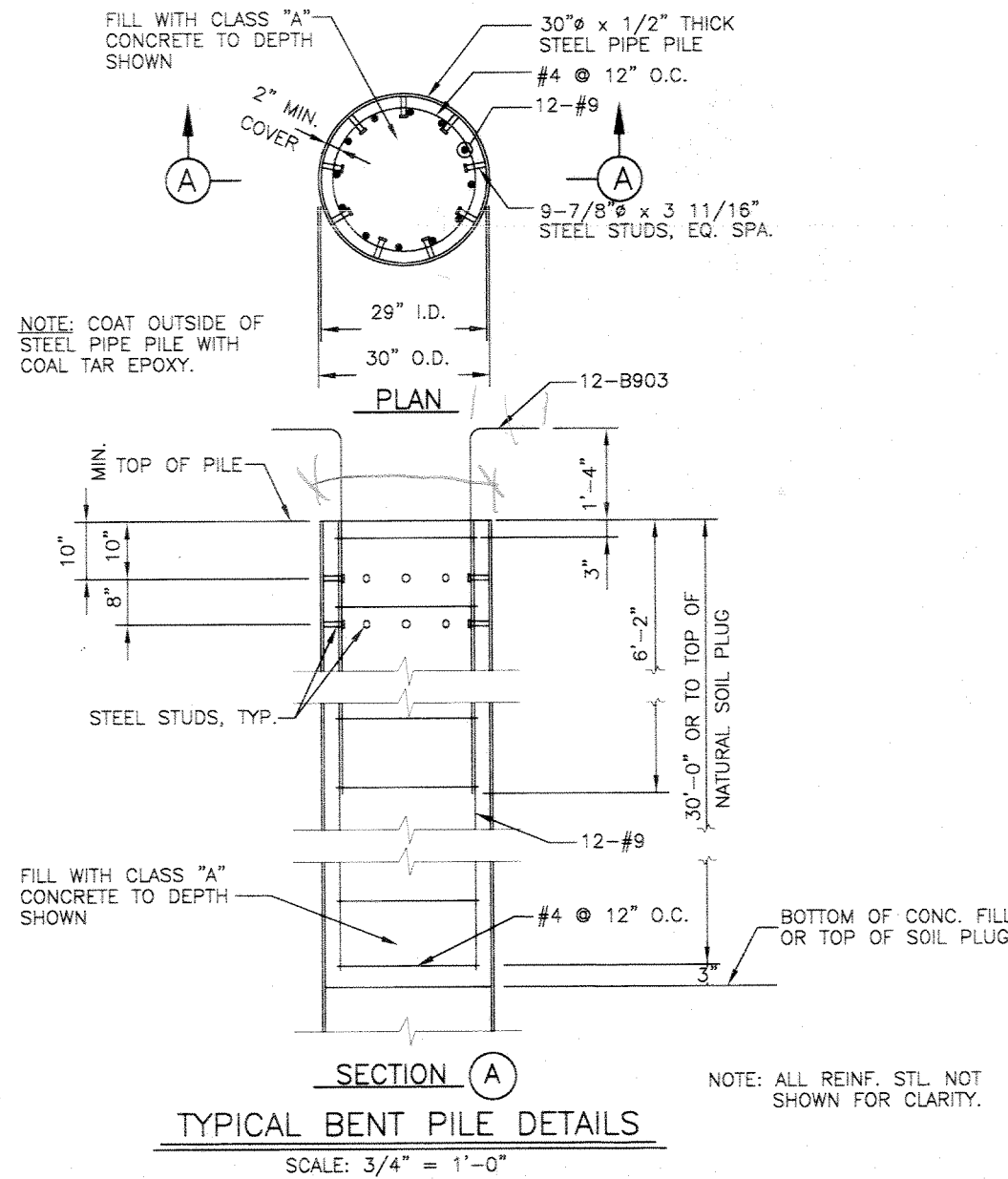
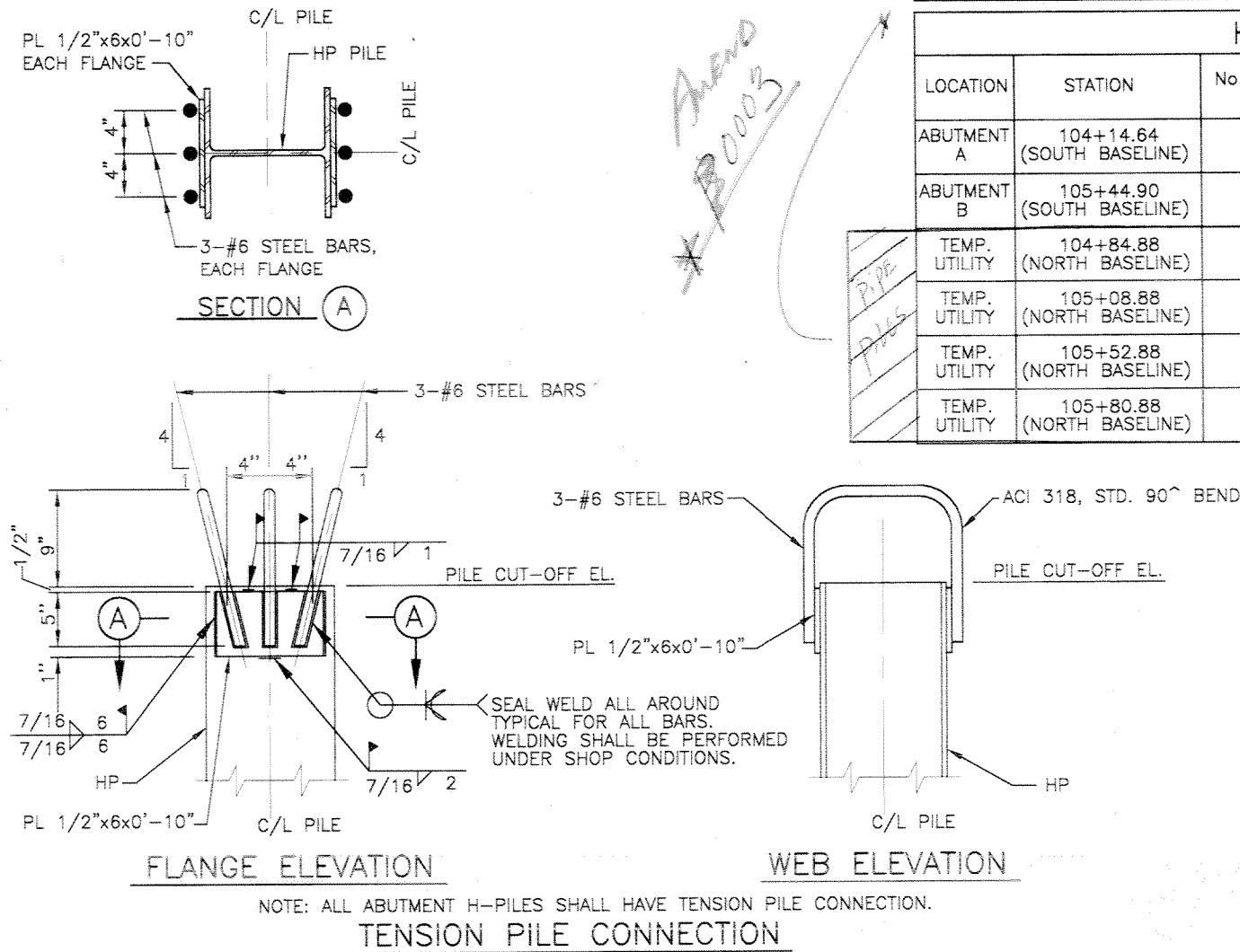


NOTE:

After pipe pile section A has been inserted into pipe pile section B, the two sections shall be connected with an all-around, full penetration bevel-groove weld, ground flush.



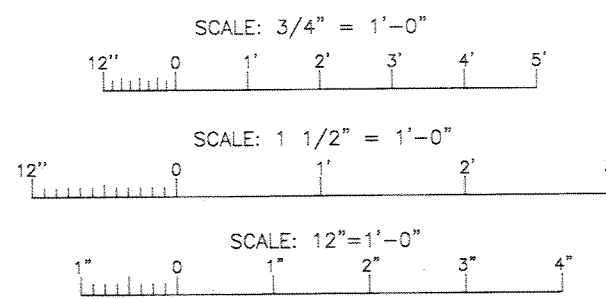
- NOTES:**
- GROOVE WELDS SHALL BE GROUND SMOOTH FOR FLUSH FIT OF OVERLAPPING SPLICE PLATES AS REQUIRED.
 - PILE MAY BE SPLICED AFTER DRIVING THE FIRST PORTION OF THE PILE.
 - NO MORE THAN TWO SPLICES PER PILE ARE ALLOWABLE.
 - THE MINIMUM DISTANCE BELOW THE PILE CUTOFF ELEVATION TO THE FIRST PILE SPLICE SHALL BE 30'.
 - THE FOUR FLANGE PLATES SHALL BE IN PLACE BEFORE THE GROOVE WELDS ARE MADE.



PIPE PILE SCHEDULE						
LOCATION	STATION	No. VERTICAL PILES	ORDER LENGTH *	No. BATTER PILES	BATTER	ORDER LENGTH *
BENT No.1	104+57.77 (SOUTH BASELINE)	9	101'	2	1:12	101'
BENT No.2	105+01.77 (SOUTH BASELINE)	9	101'	2	1:12	101'

H-PILE SCHEDULE						
LOCATION	STATION	No. VERTICAL PILES	ORDER LENGTH *	No. BATTER PILES	BATTER	ORDER LENGTH *
ABUTMENT A	104+14.64 (SOUTH BASELINE)	12	92'	0	1:12	92'
ABUTMENT B	105+44.90 (SOUTH BASELINE)	12	92'	0	1:12	92'
TEMP. UTILITY	104+84.88 (NORTH BASELINE)	1	30'	0	0	0
TEMP. UTILITY	105+08.88 (NORTH BASELINE)	1	30'	0	0	0
TEMP. UTILITY	105+52.88 (NORTH BASELINE)	1	30'	0	0	0
TEMP. UTILITY	105+80.88 (NORTH BASELINE)	1	30'	0	0	0

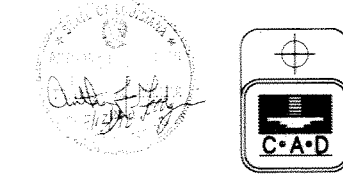
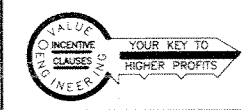
* FOR ESTIMATING PURPOSES ONLY. EXACT LENGTHS TO BE DETERMINED ON PILE LOAD TESTS.

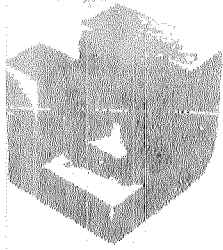


SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 1500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN FLOODPROOFING OF LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA STEEL PILE DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 16	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 44732B.KJ.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SOLICITATION NO. DACW29-98-B-0060	DWG. 51 OF 67	
SUBMITTED BY: A. GOODSON DESIGN ENGINEER			

Amend B0003

Amend B0001





LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS

1606 18th Street / Suite 200
Metairie, Louisiana 70003
(504) 833-8300 / (504) 833-8350 Fax

P. 1 P. 01
Ralph W. Junius, Jr.
Frank C. Newell
Anthony F. Goodgion
Lawrence D. LeBlanc, Arch.
Sergio J. Girona
Lisa H. Sosa
David L. Bolinger

FACSIMILE TRANSMISSION COVER SHEET

DATE: 5/2/00
TO: Daryl Benusa
COMPANY: COE
FAX No.: 862-1894
FROM: Anthony Goodgion
REGARDING: Gentilly Blvd Bridge
TOTAL PAGES FOLLOWING: 1

ORIGINAL/HARD COPY: WILL BE MAILED WILL NOT BE MAILED

MESSAGE: Construction joint Detail

Note: Contractor MUST pour walls in two pours!

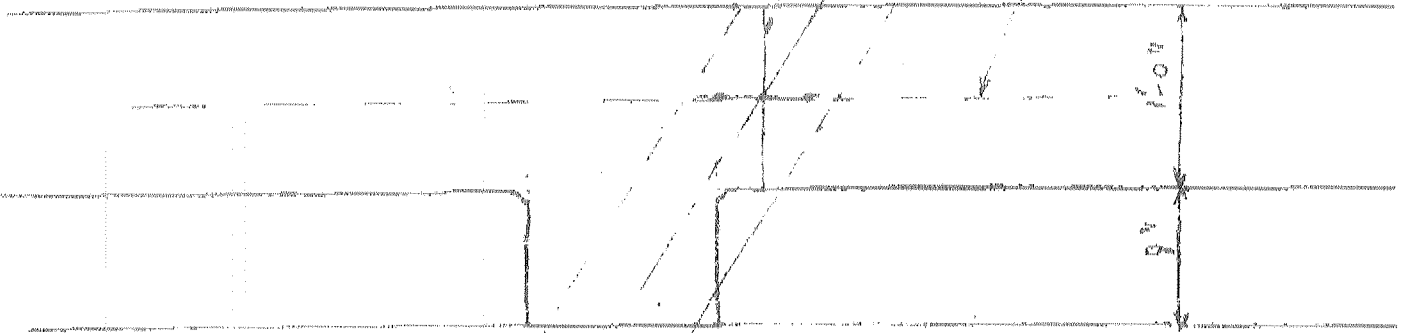
OUR FILE

Please contact our office if the fax message you receive is incomplete or illegible.

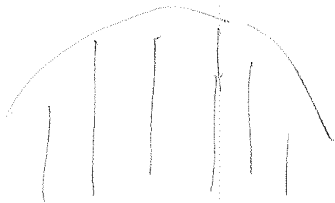
Construction
Joint

← BENT

waterproof in girder



8"
GAP
BETWEEN
GIRDERS



JOB

BY

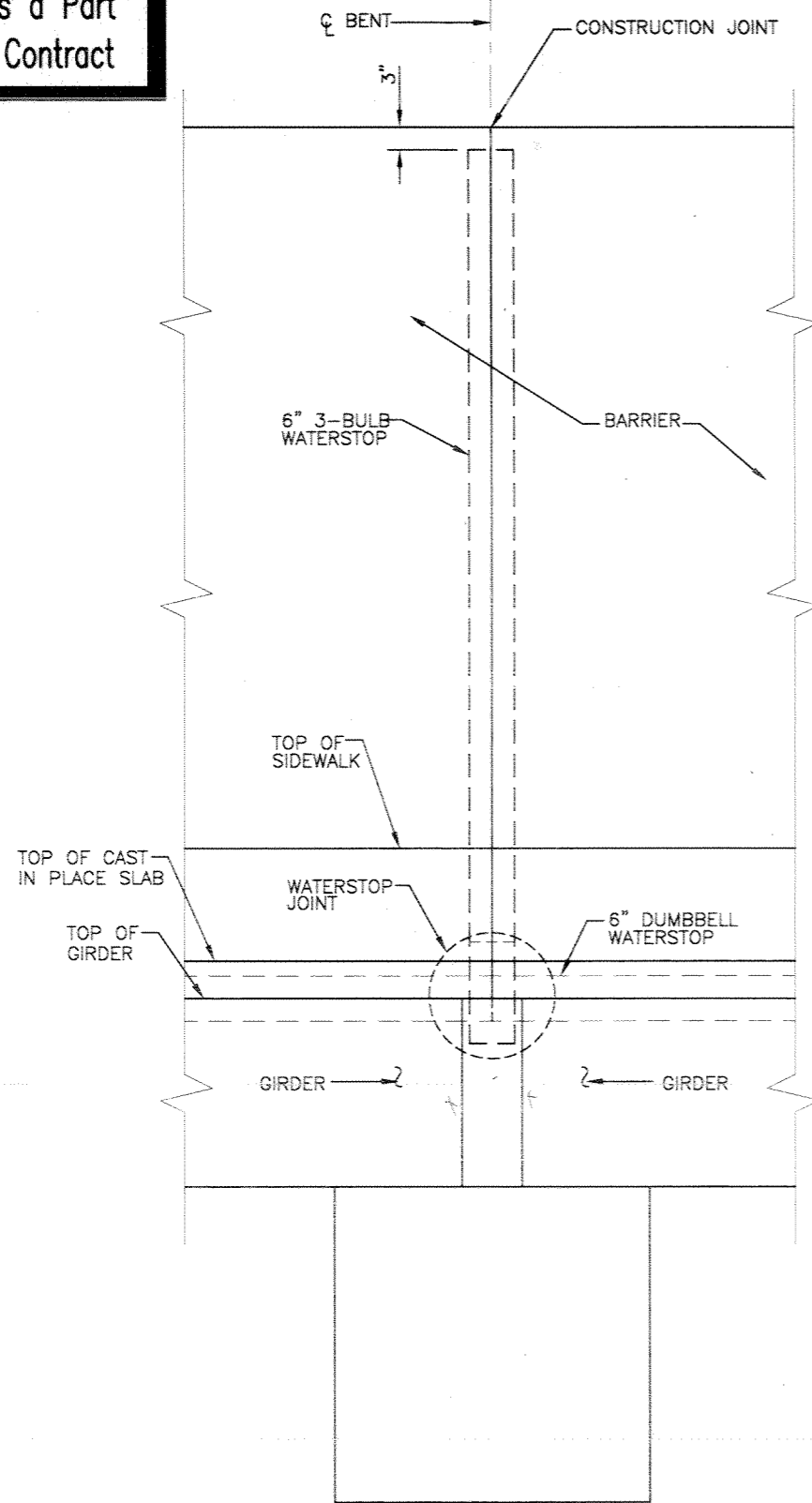
DATE

JOB NUMBER

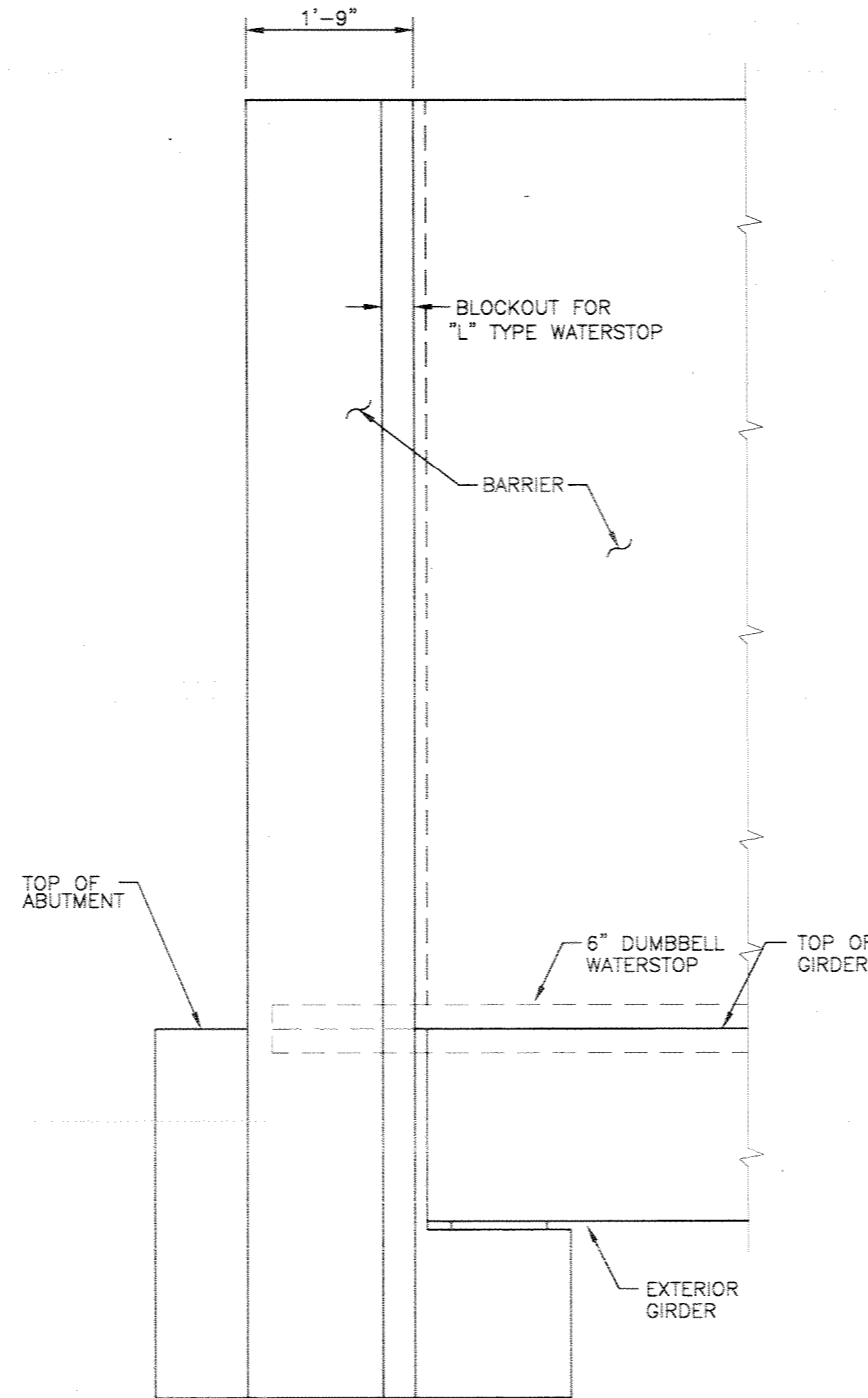
SHEET OF

LINFIELD, HUNTER & JUNIUS, INC.
ENGINEERS AND ARCHITECTS

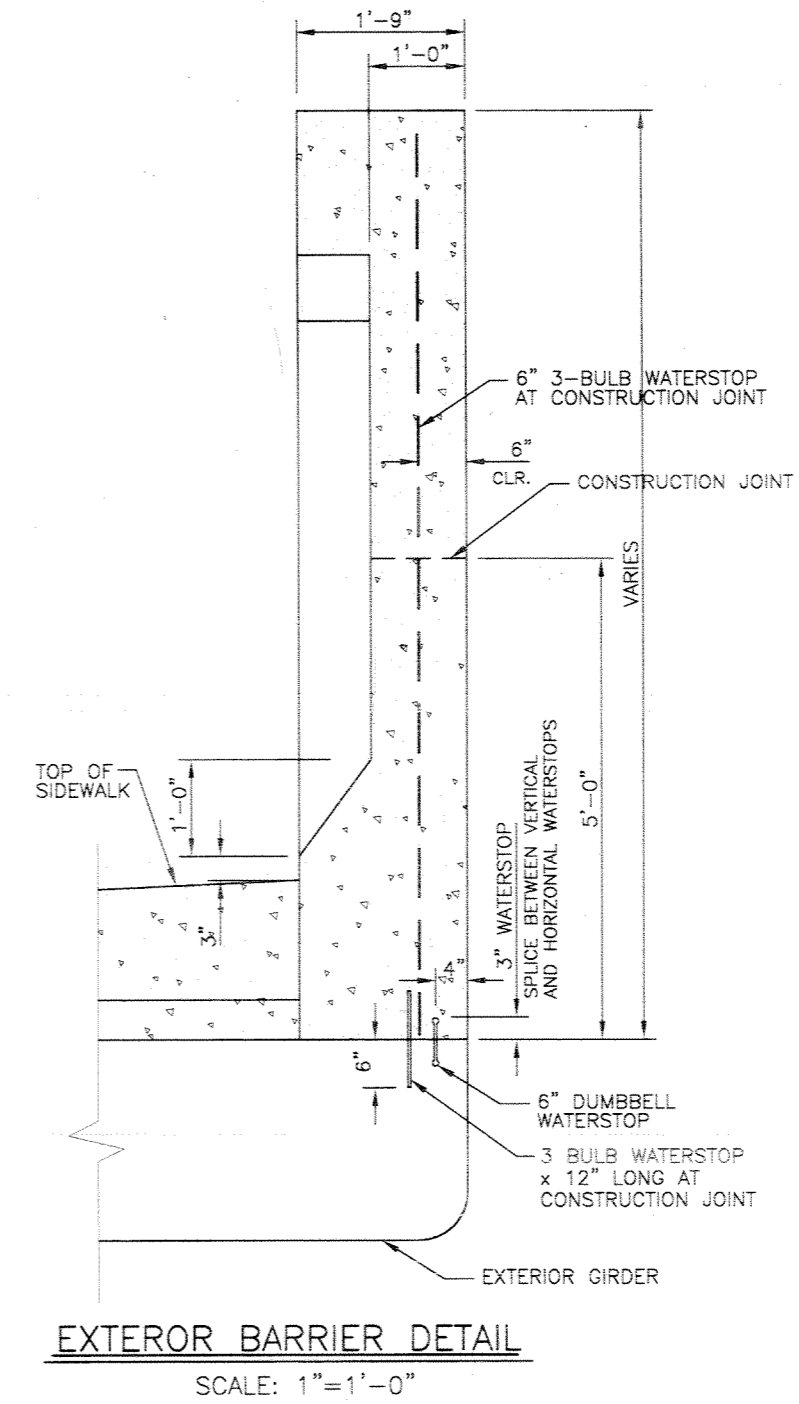
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BARRIER JOINT AT BENTS
SCALE: 1"=1'-0"

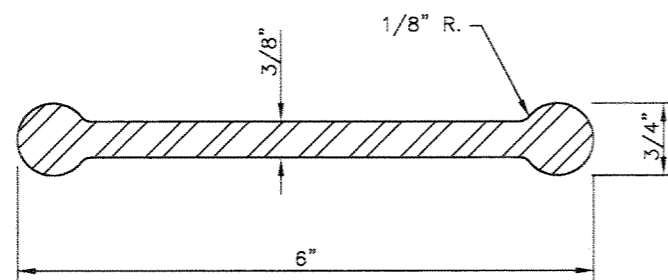


ABUTMENT END (FLOODSIDE) VIEW OF WALL GIRDER/BARRIER SEAL AT ABUTMENTS
SCALE: 1"=1'-0"

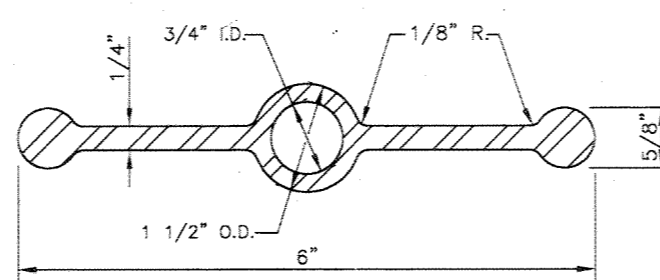


EXTERIOR BARRIER DETAIL
SCALE: 1"=1'-0"

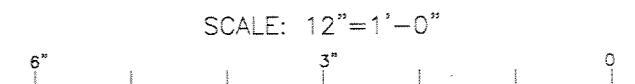
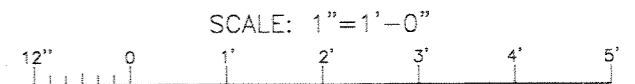
NOTE: FOR BARRIER WALL REINFORCEMENT
SEE DWG. 45
FOR ARCHITECTURAL FINISH
SEE DWG. 53



DUMBBELL WATERSTOP
SCALE: 12"=1'-0"



3-BULB WATERSTOP
SCALE: 12"=1'-0"



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

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

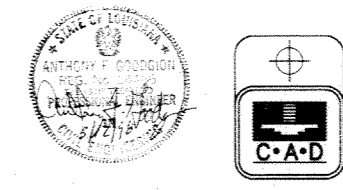
BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

LAKELAND, HUNTER & TUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

LAKE PONCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

BARRIER JOINT DETAILS

DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 12	PLOT DATE: 2/20/98
DRAWN BY: RKP	CHECKED BY: AFG	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	FILE NO. H-4-44733
SOLICITATION NO. DACW29-98-B-0060		DWG. 52 OF 67	



$$\frac{\text{Walls}}{(9.46') (134') (1.95)} = 90 \text{ y} \rightarrow \underline{180 \text{ y}}$$

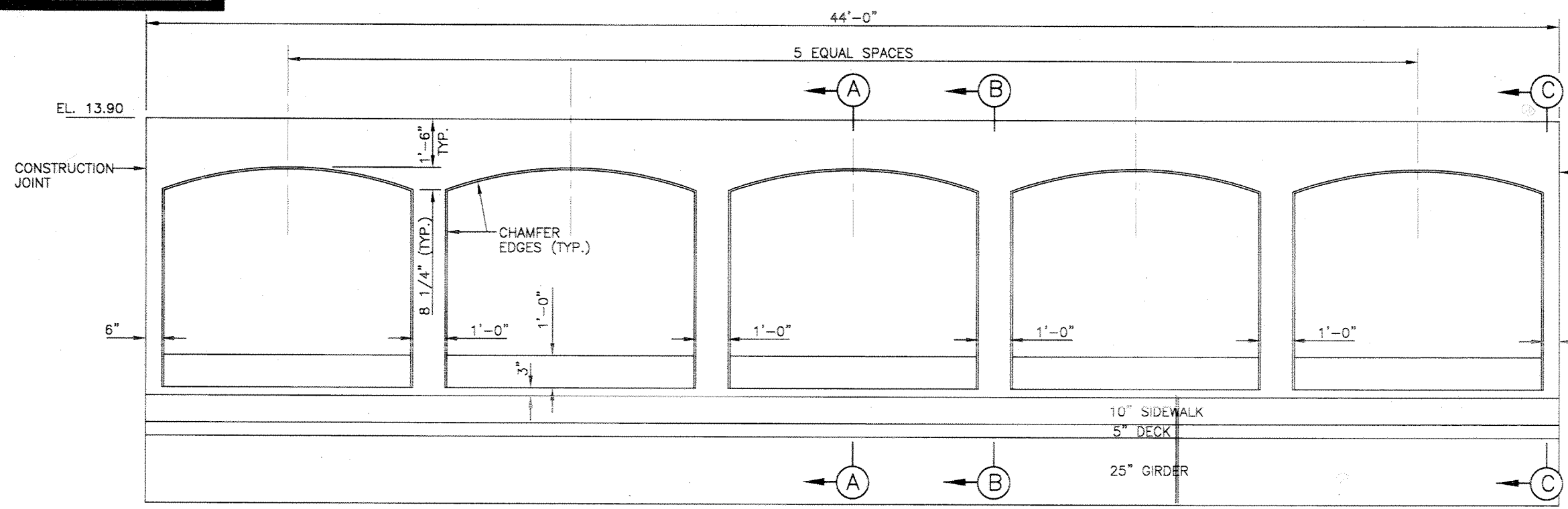
Blockouts

$$(7.65') (119') (0.75) = 250 \text{ y} \rightarrow 500 \text{ y}$$

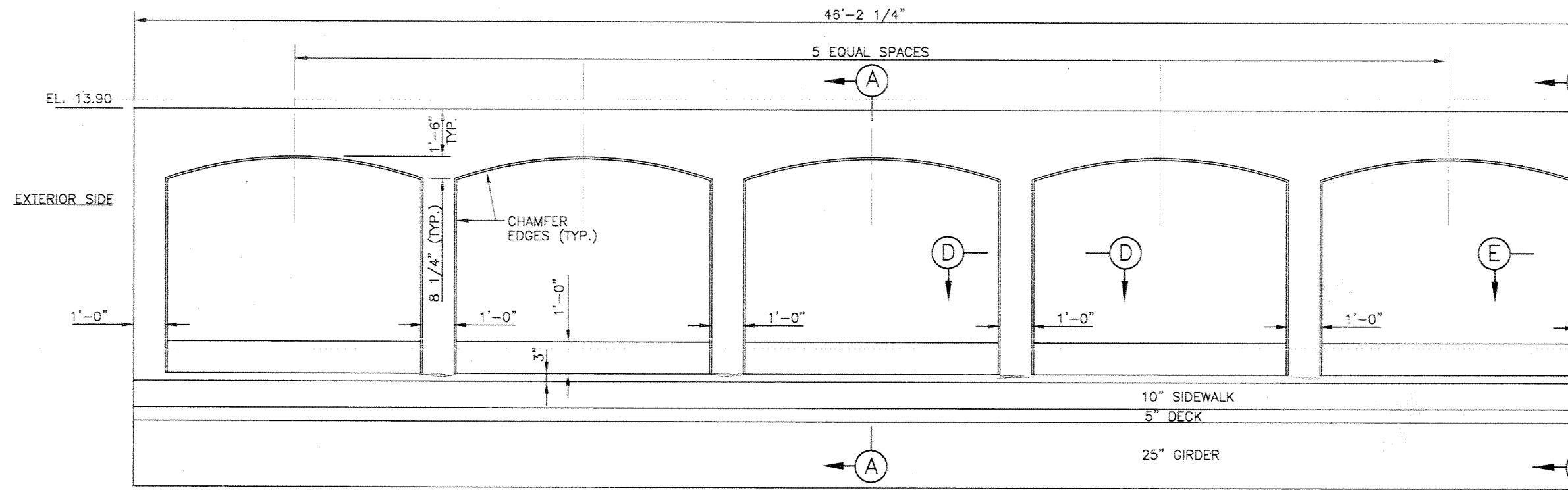
1300 y Total

Base ee walls

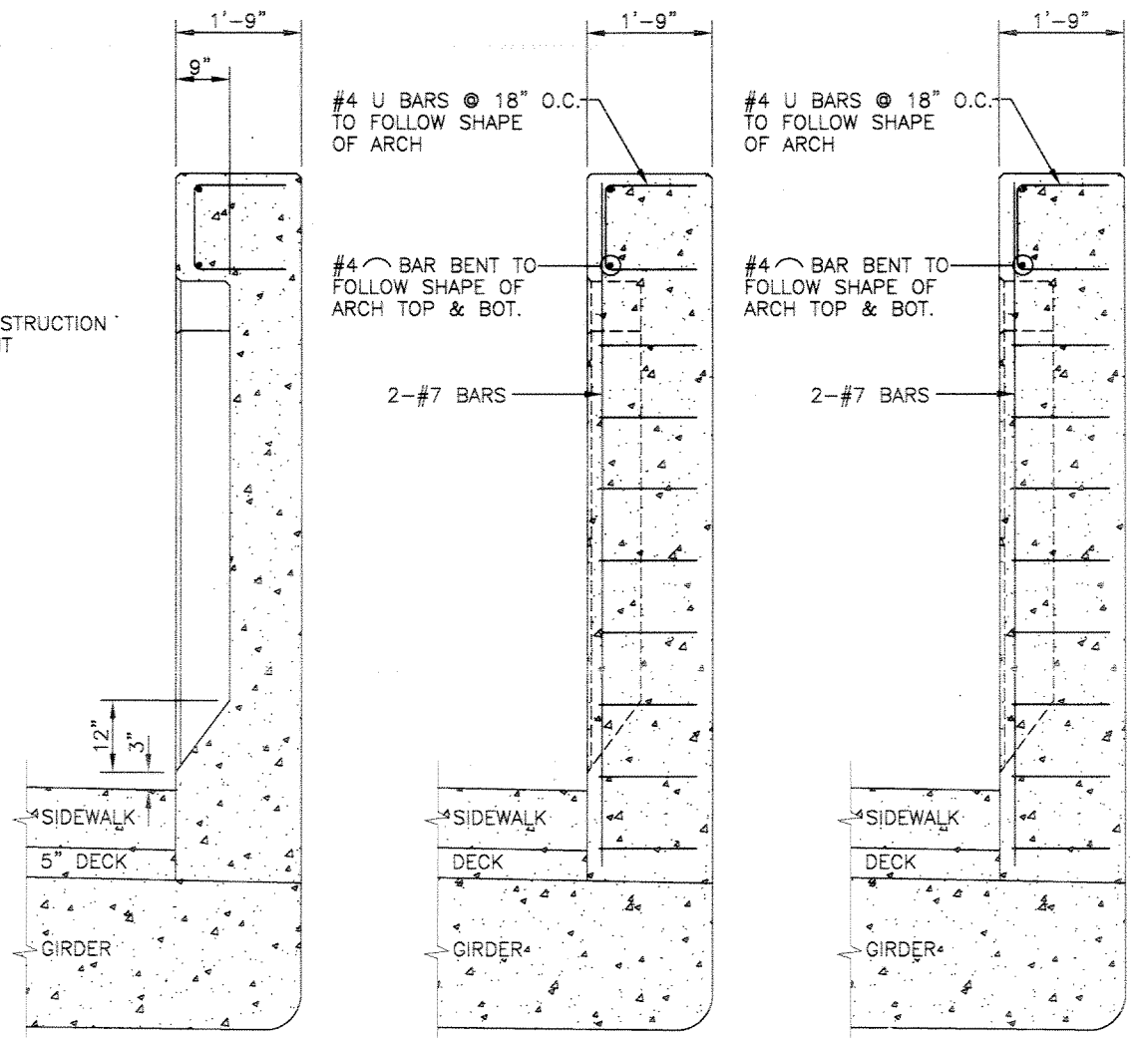
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TYPICAL INTERIOR BARRIER WALL ARCHITECTURAL DETAIL
SCALE: 1/2" = 1'-0"



TYPICAL EXTERIOR BARRIER WALL ARCHITECTURAL DETAIL
SCALE: 1/2" = 1'-0"

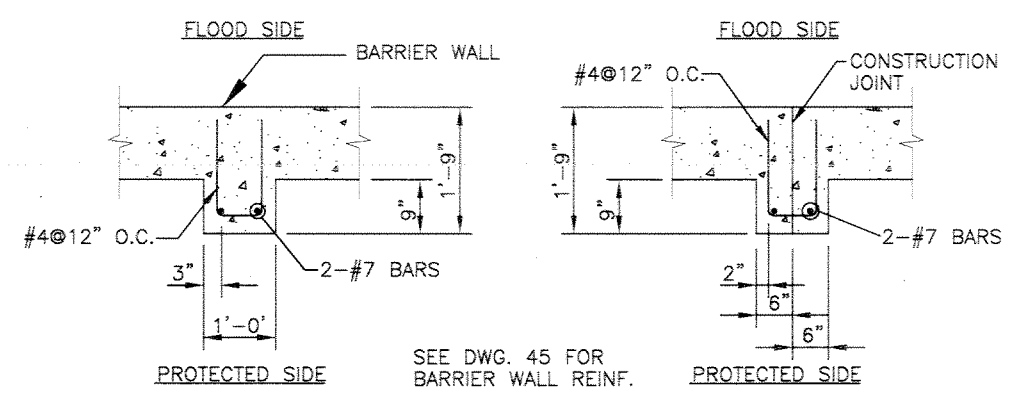


SECTION A
SCALE: 3/4" = 1'-0"

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

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

CONSTRUCTION JOINT
INTERIOR SIDE (AT JOINT)



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

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

Top Arch (122 N) (1.315)
 Top Bent (2.90 N) (2.220)
 Girder (2'-1")
 Joint (1")

North
 2.70
 1.87
 2.3

South
 2.33
 1.88
 2.3

2.3
 + 0.08 JOINT
 + 2.08 GIRDER
 4.46' TOP OF GIRDER
 AVG.

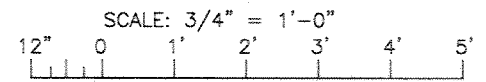
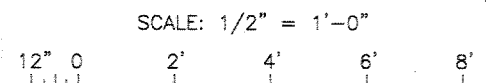
13.95' TOP OF WALLS

Blockouts
 134' (3044)
 - 15' Columns
 119' LENGTH

HEIGHT WALLS
 134' (3044)
 3011'
 LENGTH WALL

16.9' = 1.75' thickness
 9/16" = 0.75 thick

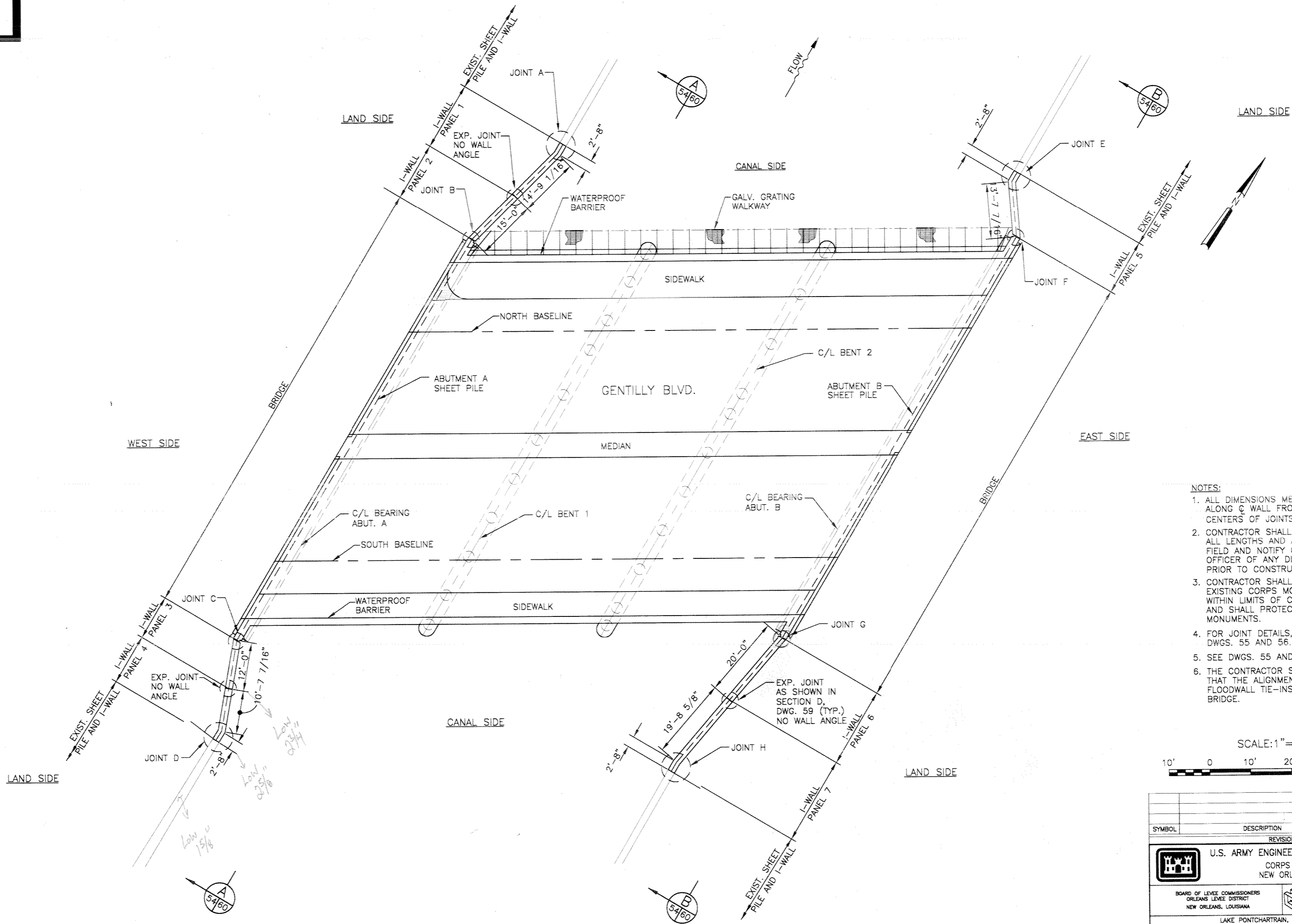
Go to Back Previous PAGE



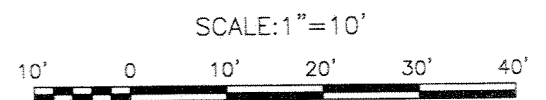
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA BARRIER WALL ARCHITECTURAL DETAILS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 24	PLOT DATE: 2/20/98
DRAWN BY: RKP	CHECKED BY: AFG	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. OODGON	SOLICITATION NO. DACW29-98-B-0060	DWG. 53 OF 67	



Safety is a Part of Your Contract

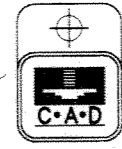
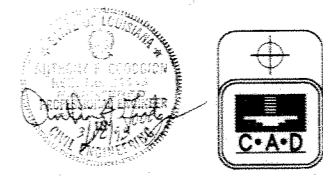
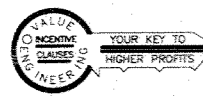


- NOTES:**
1. ALL DIMENSIONS MEASURED ALONG C WALL FROM CENTERS OF JOINTS.
 2. CONTRACTOR SHALL VERIFY ALL LENGTHS AND ANGLES IN FIELD AND NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
 3. CONTRACTOR SHALL LOCATE ALL EXISTING CORPS MONUMENTS WITHIN LIMITS OF CONSTRUCTION AND SHALL PROTECT ALL MONUMENTS.
 4. FOR JOINT DETAILS, SEE DWGS. 55 AND 56.
 5. SEE DWGS. 55 AND 56 FOR WALL ANGLES.
 6. THE CONTRACTOR SHALL ASSURE THAT THE ALIGNMENT OF THE FLOODWALL TIE-INS MATCH THE BRIDGE.

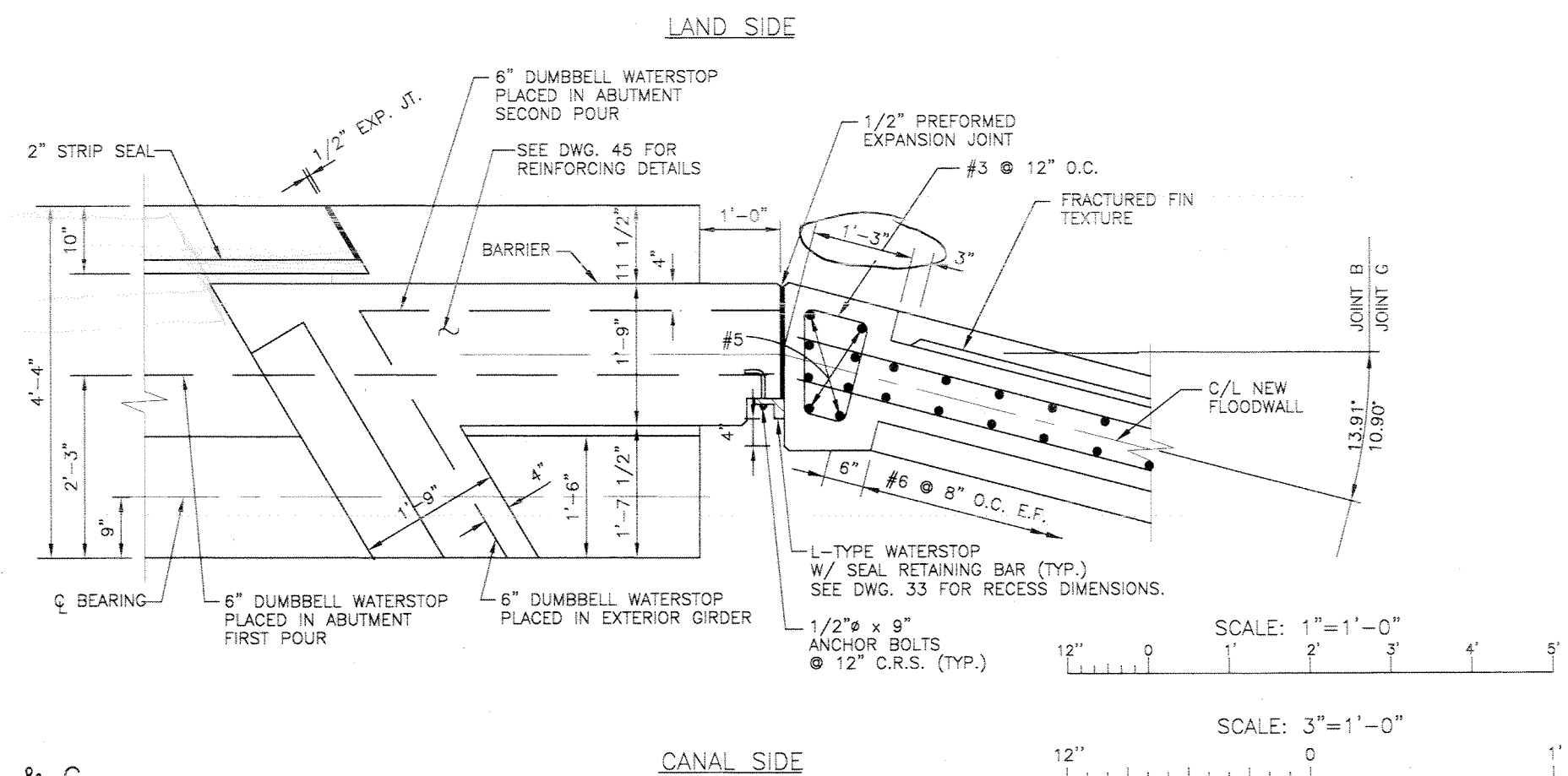
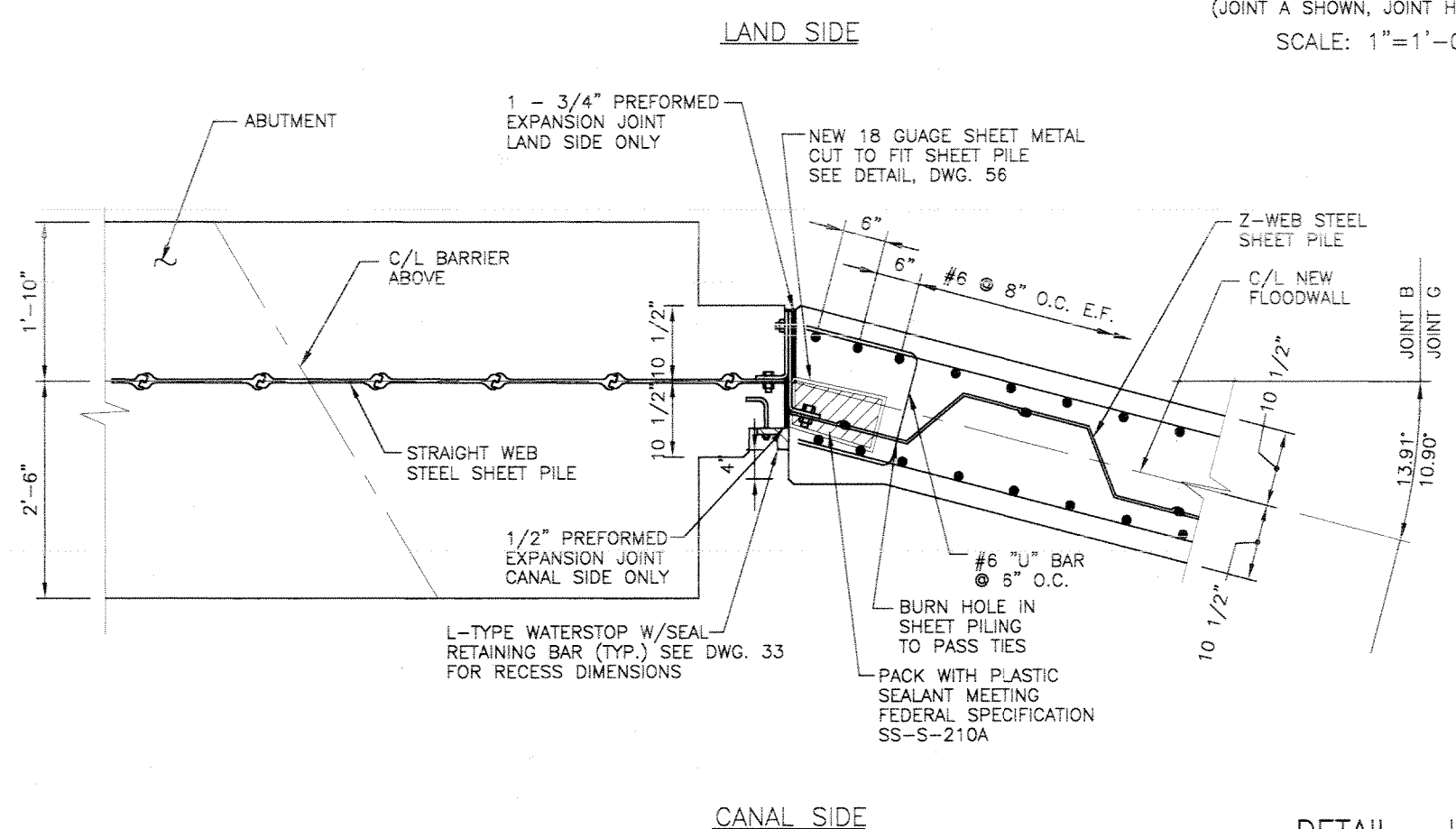
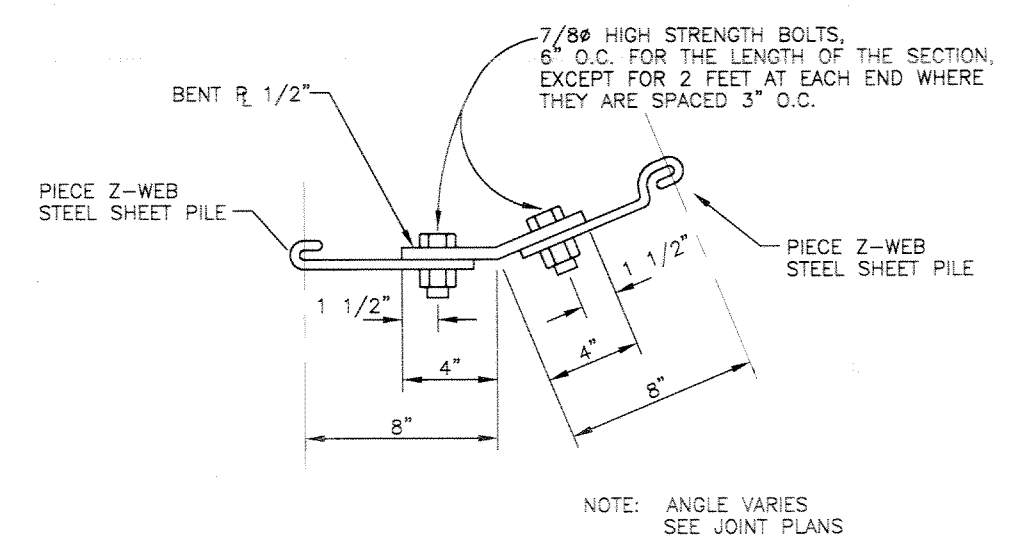
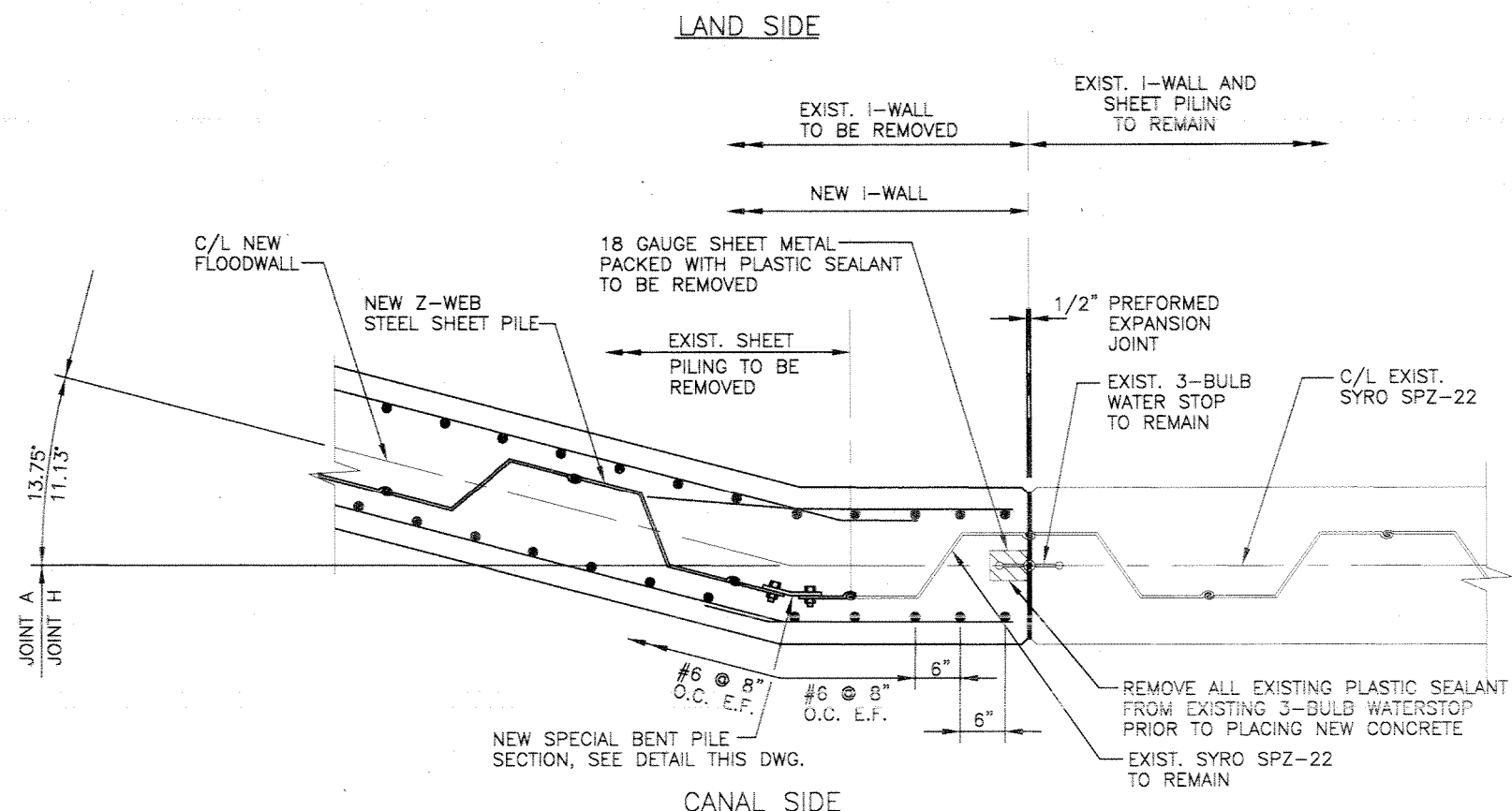


FLOODWALL KEY PLAN - GENTILLY BLVD. BRIDGE
SCALE: 1" = 10'

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEEVE COMMISSIONERS ORLEANS LEEVE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
FLOODWALL KEY PLAN			
DESIGNED BY: REN	DATE: EFB. 1998	PLOT SCALE: 10	PLOT DATE: 2/20/98
DRAWN BY: MKA	CADD FILE: 44732BLK.DGN	FILE NO.	H-4-44733
CHECKED BY: AFG	SUBMITTED BY: A. GOODGION	SOLICITATION NO. DACW29-98-B-0050	DWG. 54 OF 67



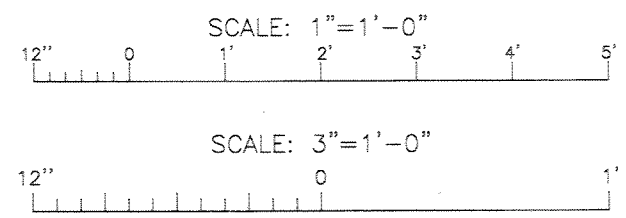
Safety is a Part of Your Contract



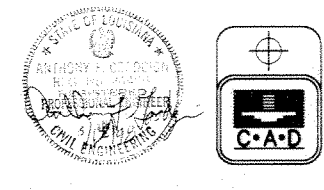
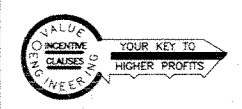
DETAIL- JOINT B & G
(JOINT B SHOWN, JOINT G SIMILAR)
SCALE: 1"=1'-0"

NOTE:

- FOR GENERAL NOTES, SEE DWG. NO.3.
- HOLES CUT IN STEEL SHEET PILING FOR PASSING REINFORCING BARS SHALL NOT EXCEED 2"Ø. WHERE HOLES FALL WITHIN THE WEB OF THE STEEL SHEET PILE, THE HOLE SHALL BE SLOTTED 4" HORIZONTALLY TO ACCOMMODATE PASSING THE REINFORCING BARS.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
FLOODWALL DETAIL - 1			
DESIGNED BY: REN	DATE: FEB. 1998	PLOT SCALE: 1	PLOT DATE: 2/20/98
DRAWN BY: MKA	CHECKED BY: AFG	CADD FILE: 44732BK.DGN	FILE NO. H-4-44733
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 55 OF 67	



L-TYPE WATERSTOP WSEAL
RETAINING BAR (TYP.) SEE DWG. 33
FOR RECESS DIMENSIONS

SHEET PILING
TO PASS TIES
PACK WITH PLASTIC
SEALANT MEETING
FEDERAL SPECIFICATION
SS-S-210A

CANAL SIDE

SECTION THROUGH SHEET PILE

DETAIL- JOINT B

SCALE: 1" = 1'-0"

SEE DETAIL 4
(SHEETPILE ONLY)

ANGLES AND
SECTIONS.

SEE DETAIL 2
(SHEETPILE ONLY)

PACK WITH PLASTIC
SEALANT MEETING
FEDERAL SPECIFICATION
SS-S-210A

L-TYPE WATERSTOP WSEAL
RETAINING BAR (TYP.) SEE DWG 33
FOR RECESS DIMENSIONS.

1/2" PREFORMED
EXPANSION JOINT
CANAL SIDE ONLY

BURN HOLE IN
SHEET PILING
TO PASS TIES

#6 "U" BAR
@ 6" O.C.

CANAL SIDE

STRAIGHT WEB STEEL
SHEET PILE

CL NEW
FLOODWALL

Z-WEB STEEL
SHEET PILE

CL BARRIER
ABOVE

1 3/4" PREFORMED
EXPANSION JOINT,
LAND SIDE ONLY

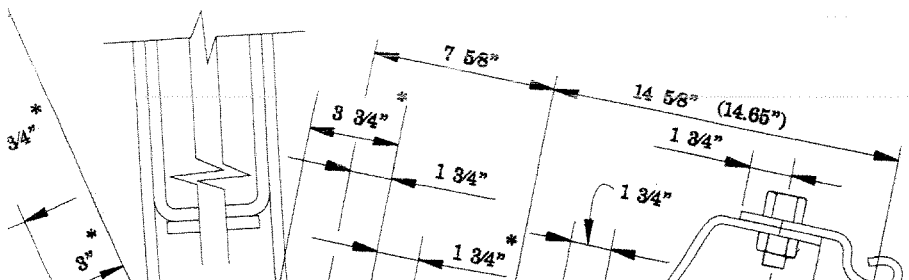
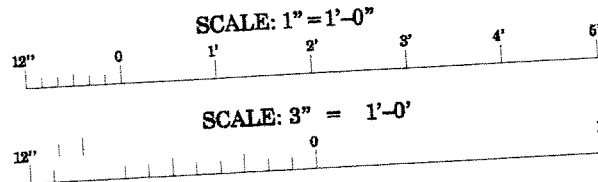
ENSURE SLIP JOINT HAS A
1-7/8" MINIMUM CLEARANCE
FROM THE BOLT


LAND SIDE
NEW 18 GAUGE
SHEET METAL CUT TO FIT SHEET
PILE SEE DETAIL, DRAWING 56

SECTION THROUGH SHEET PILE

DETAIL - JOINT F

SCALE: 1" = 1'-0"



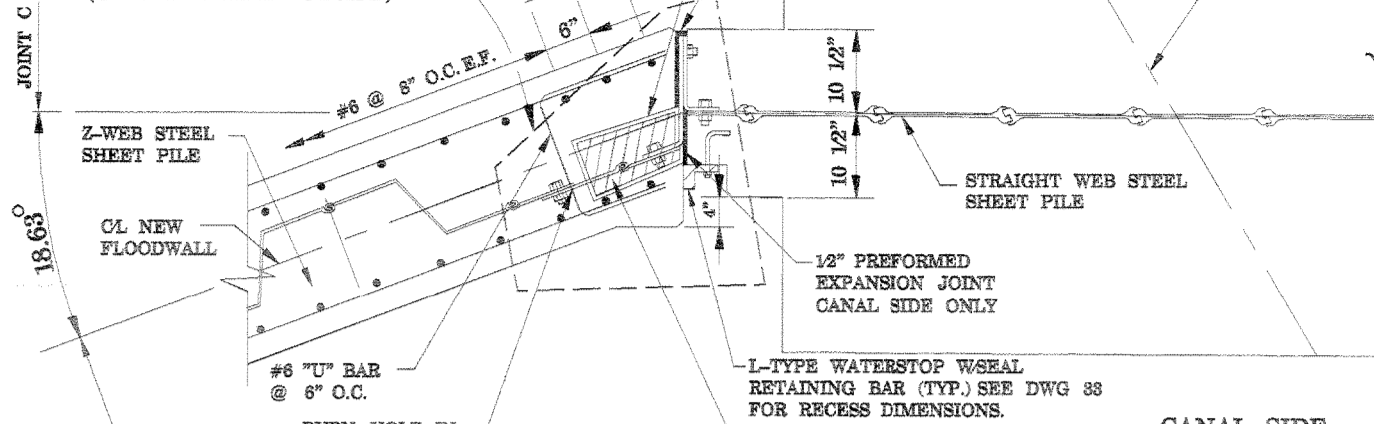
NEW DRAWING FOR SLIP JOINTS		1/6/69	DCB
DESCRIPTION		DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
LAKE PONTCHARTRAIN, LA. AND VICINITY			

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LAND SIDE

NEW 18 GAUGE SHEET METAL CUT TO FIT SHEET PILE SEE DETAIL, DRAWING 56
1 3/4" PREFORMED EXPANSION JOINT, LAND SIDE ONLY

SEE DETAIL 3 (SHEETPILE ONLY)



SECTION THROUGH SHEET PILE

DETAIL - JOINT C

SCALE: 1" = 1'-0"

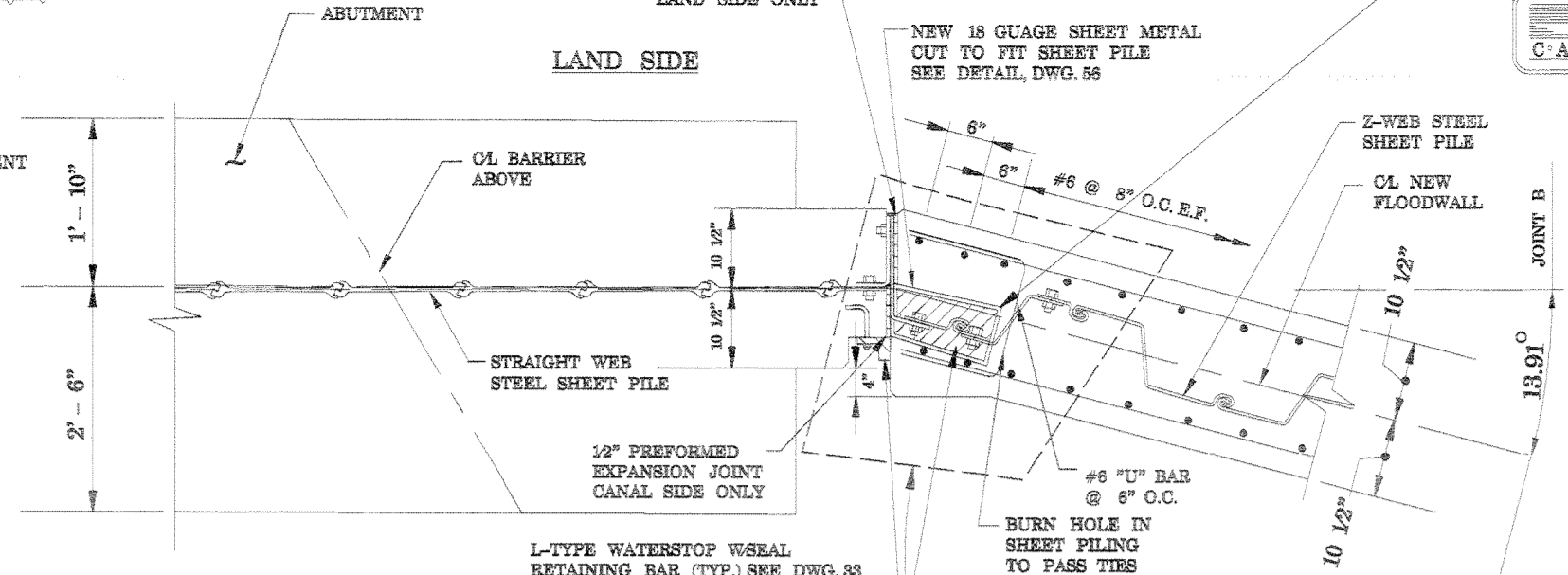
NOTE:

FIELD VERIFY ALL LENGTHS, ANGLES AND SPECIAL T-SECTION DIMENSIONS PRIOR TO FABRICATION OF MODIFIED SECTIONS.

LAND SIDE

1 - 3/4" PREFORMED EXPANSION JOINT LAND SIDE ONLY

EXTEND SLIP JOINT AS REQUIRED TO PROVIDE A 1-7/8" MINIMUM CLEARANCE FROM THE BOLT.



SECTION THROUGH SHEET PILE

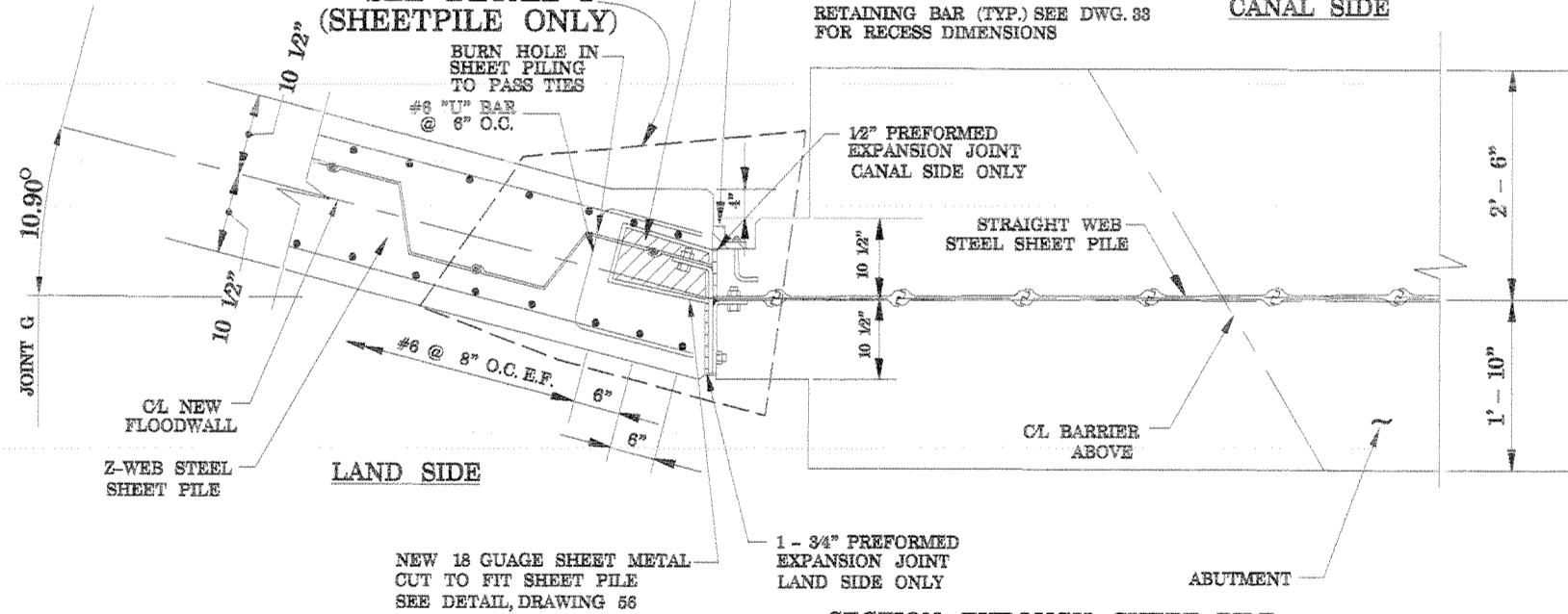
DETAIL - JOINT B

SCALE: 1" = 1'-0"

GENERAL NOTES

- FOR GENERAL NOTES, SEE DWG. NO. 8.
- Holes cut in steel sheet piling for passing reinforcing bars shall not exceed 2". Where holes fall within the web of the steel sheet pile, the hole shall be slotted 4" horizontally to accommodate passing the reinforcing bars.
- Bolts shall be 7/8" dia. high strength bolts w/flat washers. Bolts shall be type as required in specifications section 02411, paragraph 8.3.
- Bolts shall be placed at 6 inches on center for the length of any bolted section, except for 2 feet at each end, where the bolts shall be spaced 3 inches on center.
- Fabrication of special sections and modified sheetpile section shall be in accordance with specification sections 02411 and 05501.

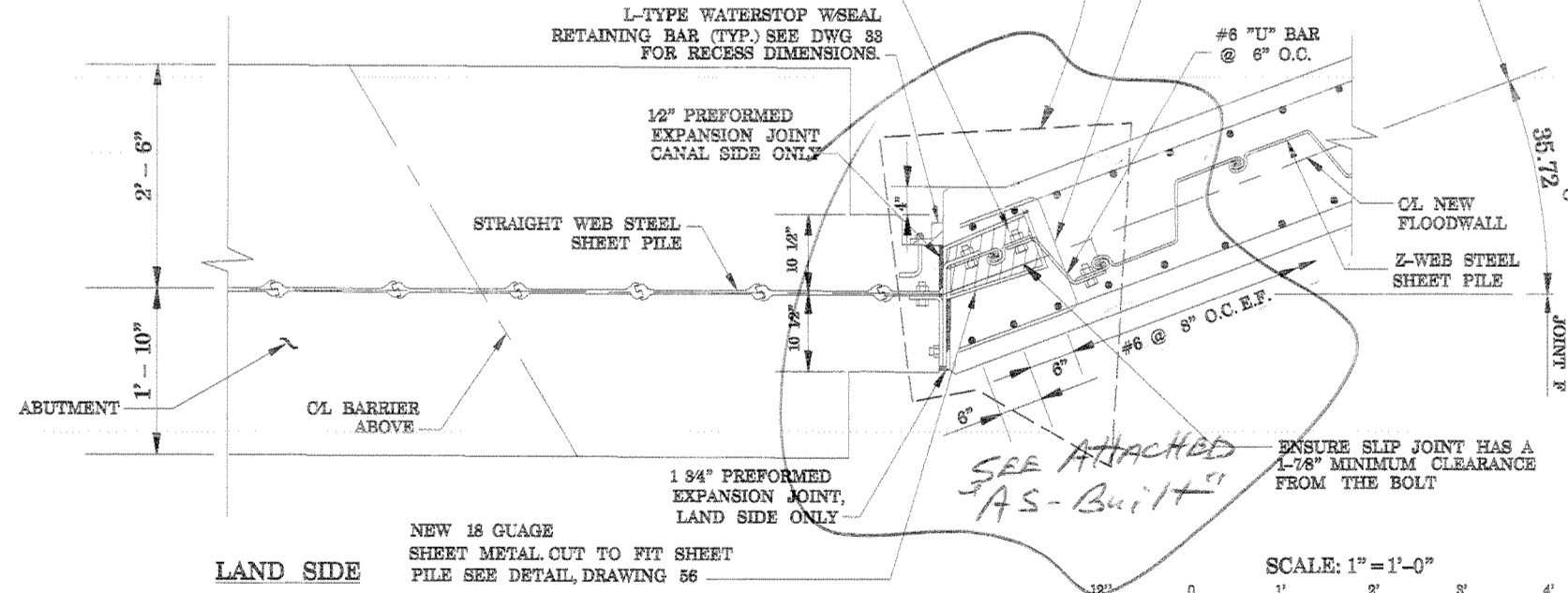
SEE DETAIL 1 (SHEETPILE ONLY)



SECTION THROUGH SHEET PILE

DETAIL - JOINT G

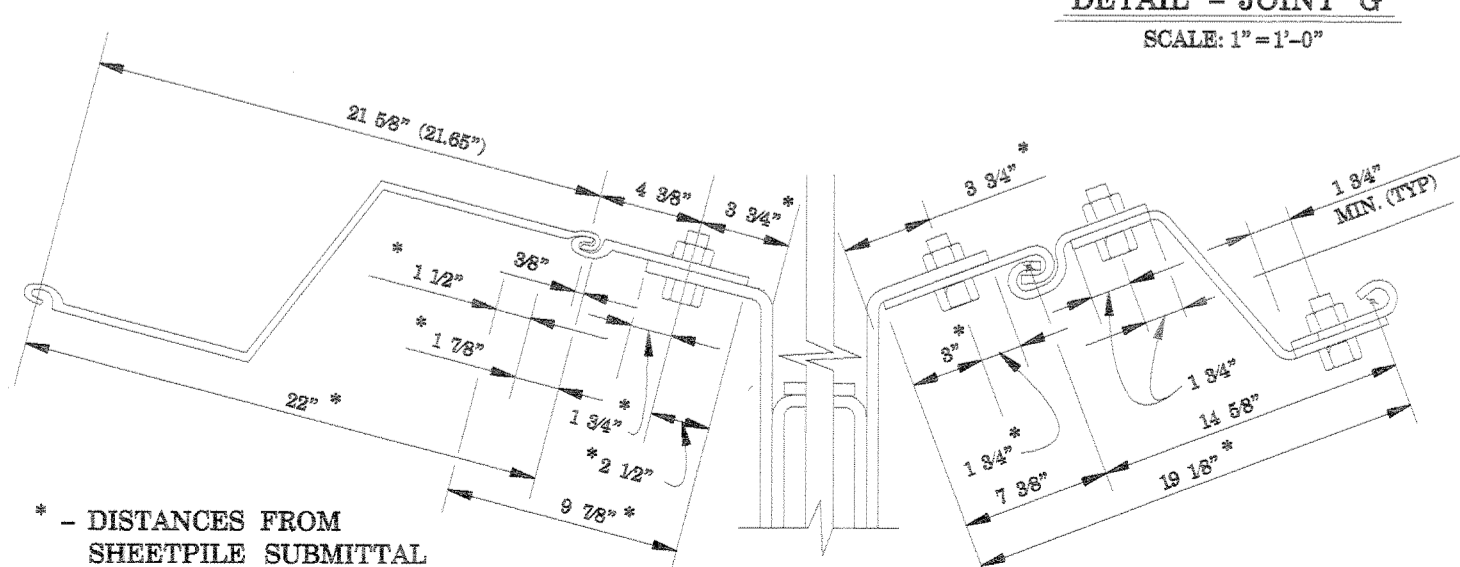
SCALE: 1" = 1'-0"



SECTION THROUGH SHEET PILE

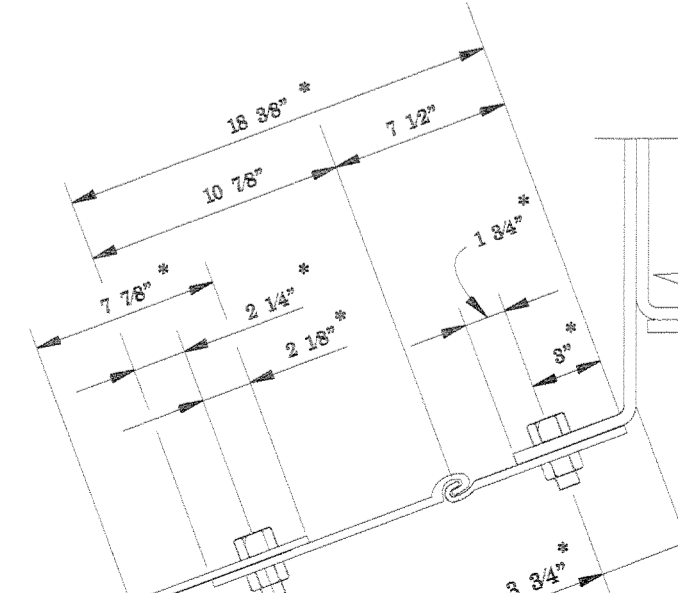
DETAIL - JOINT F

SCALE: 1" = 1'-0"



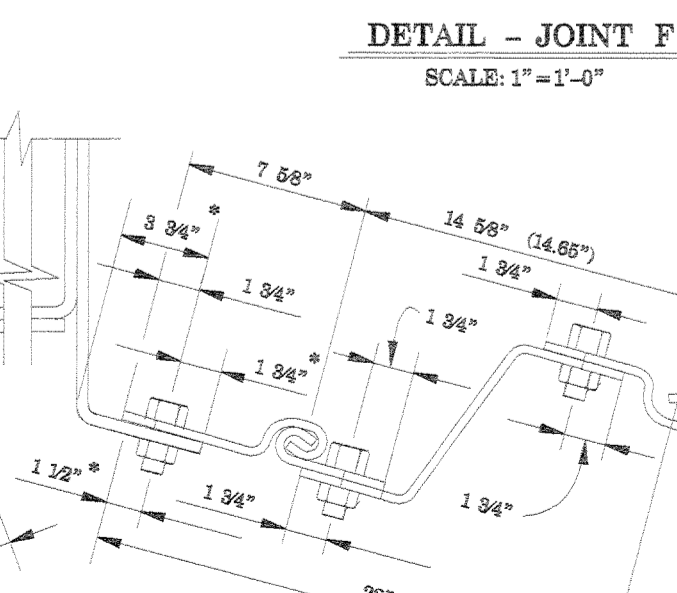
DETAIL 1 - JOINT G

SCALE: 3" = 1'-0"



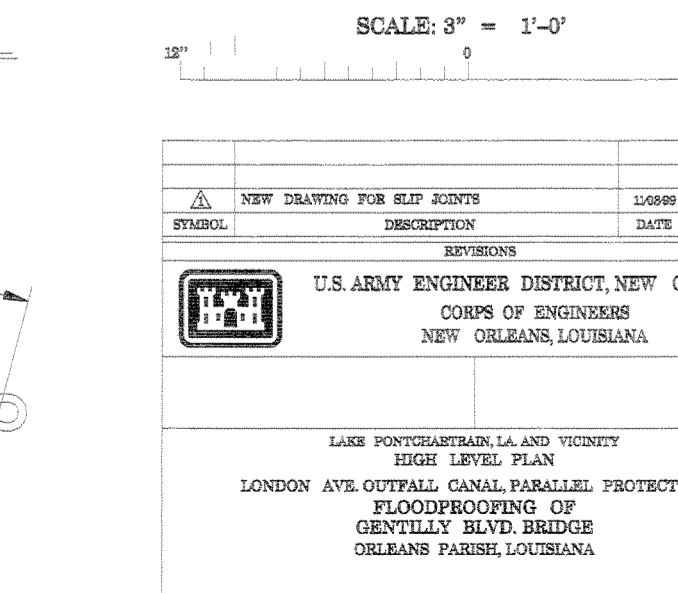
DEATAIL 2 - JOINT F

SCALE: 3" = 1'-0"



DETAIL 3 - JOINT C

SCALE: 3" = 1'-0"



DETAIL 4 - JOINT B

SCALE: 3" = 1'-0"

NEW DRAWING FOR SLIP JOINTS	1/0899	DCB
SYMBOL	DESCRIPTION	DATE APPROVED

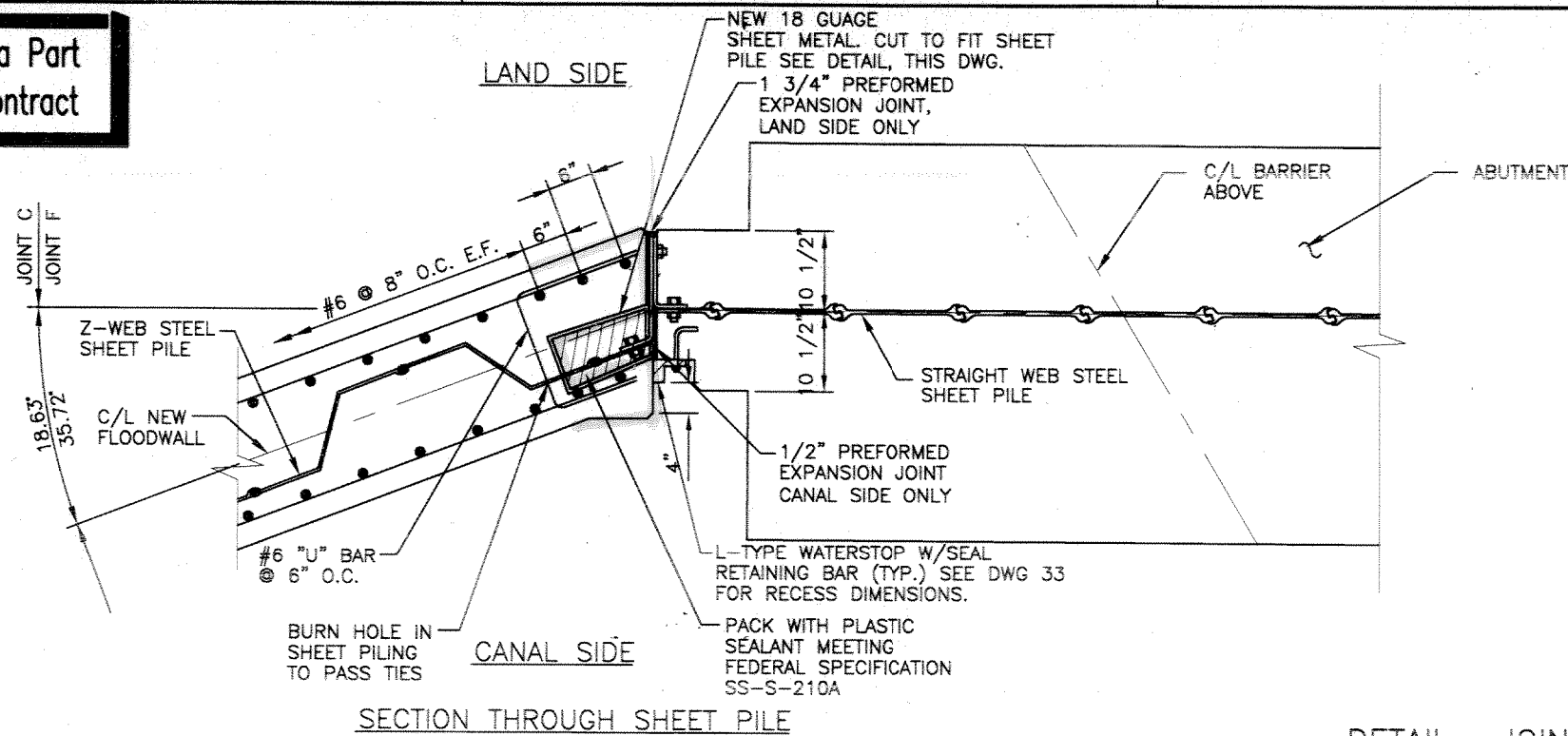
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

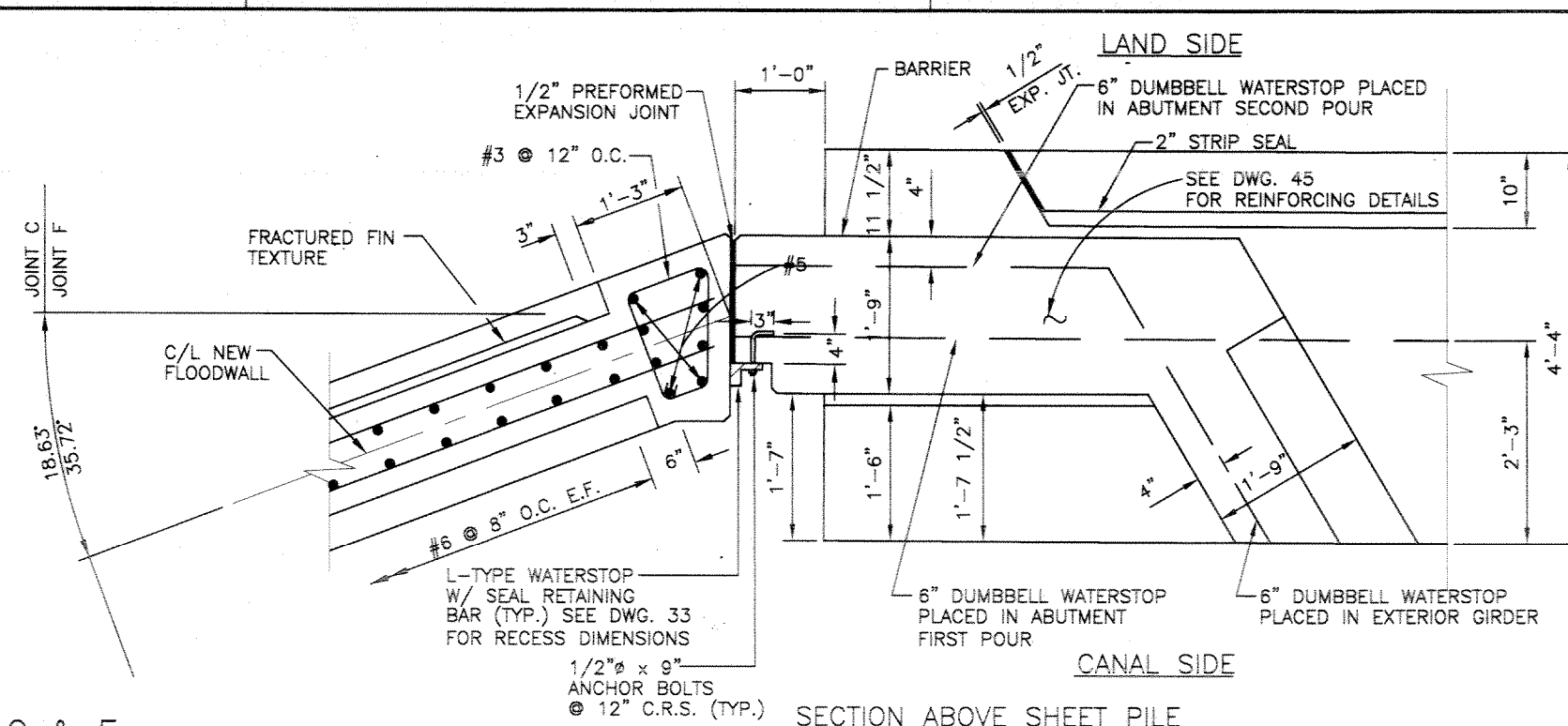
FLOODWALL DETAIL - 2A

DESIGNED BY: PSY	DATE: NOV 1999	PLOT SCALE: 1	PLOT DATE: 11/03/99
DRAWN BY: PSY	CHECKED BY: DCB	FILE NO. H-4-44733	
SUBMITTED BY: DARRYL C. BONURA	DESIGN ENGINEER	SOLICITATION NO. DACW72-98-B-0080	DWG. 56A OF 67

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SECTION THROUGH SHEET PILE

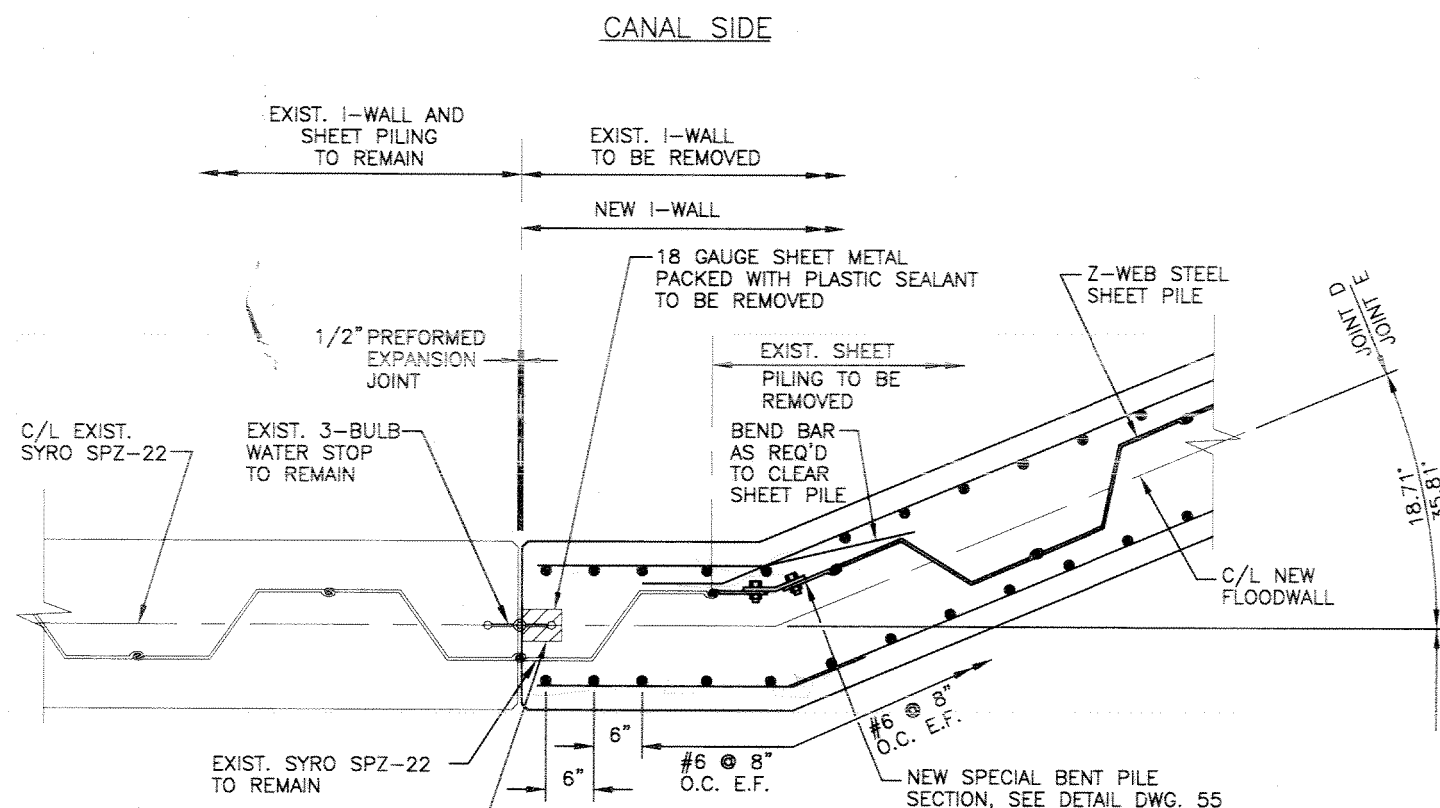


SECTION ABOVE SHEET PILE

DETAIL- JOINT C & F

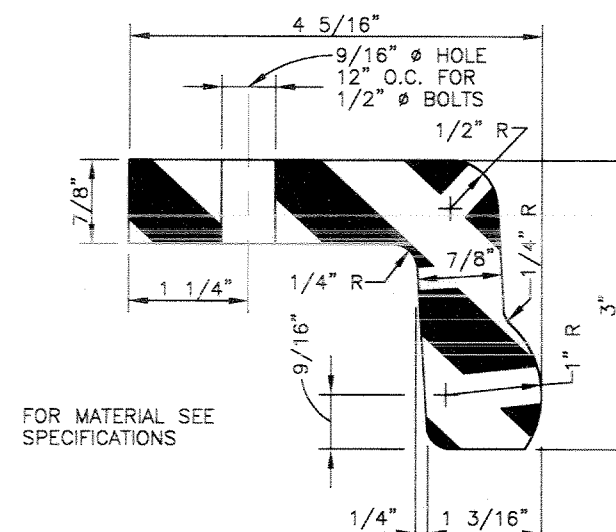
(JOINT C SHOWN, JOINT F SIMILAR)

SCALE: 1"=1'-0"



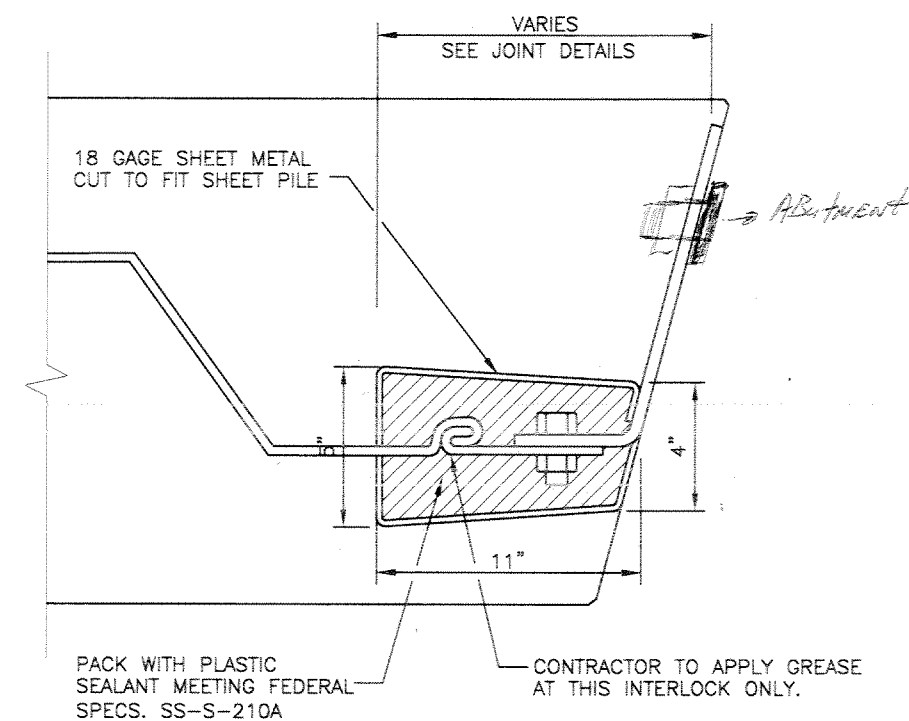
DETAIL- JOINT D & E

(JOINT D SHOWN, JOINT E SIMILAR)



"L" TYPE WATERSTOP

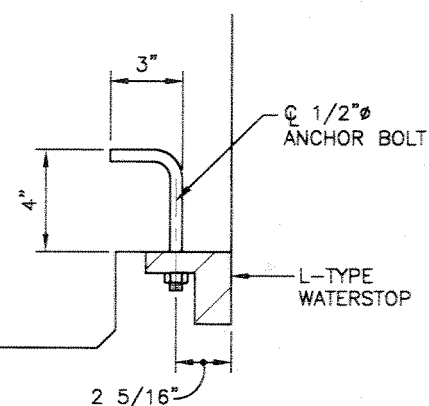
SCALE: 12"=1'-0"



SLIP JOINT DETAIL

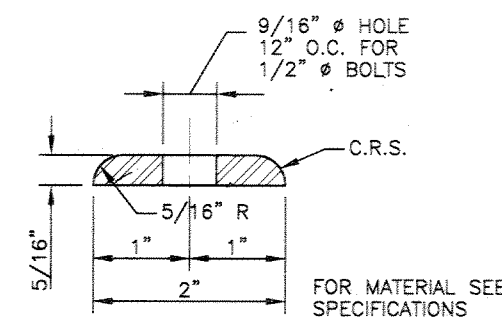
SCALE: 3"=1'-0"

REMOVE ALL EXIST. PLASTIC SEALANT FROM EXIST. 3-BULB WATERSTOP PRIOR TO PLACING NEW CONCRETE.



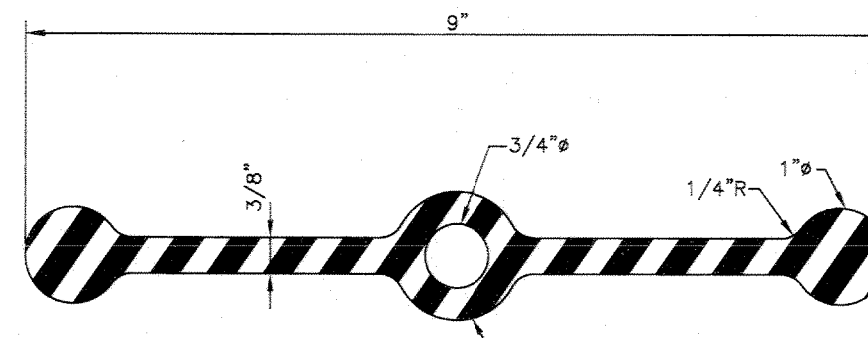
TYPICAL L-TYPE
WATERSTOP ANCHOR
BOLT DETAIL

SCALE: 3"=1'-0"



SEAL RETAINING BAR

SCALE: 12"=1'-0"



THREE BULB WATERSTOP

SCALE: 12"=1'-0"

SCALE: 1"=1'-0"

SCALE: 3"=1'-0"

SCALE: 12"=1'-0"

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

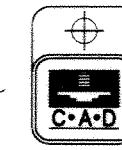
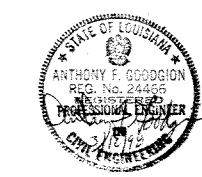
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS
NEW ORLEANS, LOUISIANA

BOARD OF LEVEE COMMISSIONERS
ORLEANS LEVEE DISTRICT
NEW ORLEANS, LOUISIANA

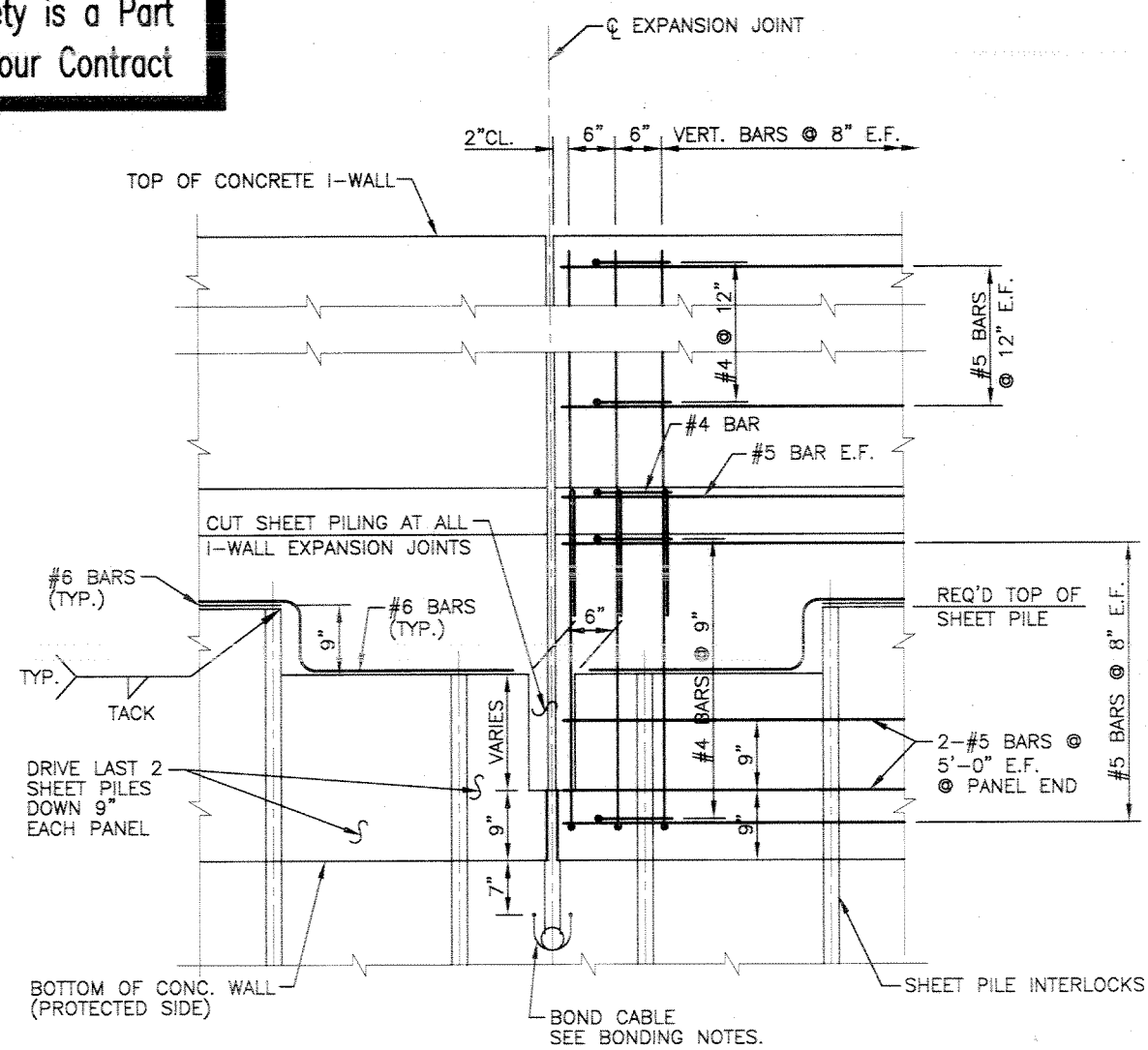
LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
3500 North Causeway Blvd. Suite 200
Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA. AND VICINITY
HIGH LEVEL PLAN
LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
FLOODPROOFING OF
GENTILLY BLVD. BRIDGE
ORLEANS PARISH, LOUISIANA

DESIGNED BY: REN	DATE: FEB. 1998	PLOT SCALE: 1	PLOT DATE: 2/20/98
DRAWN BY: MKA	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 56 OF 67

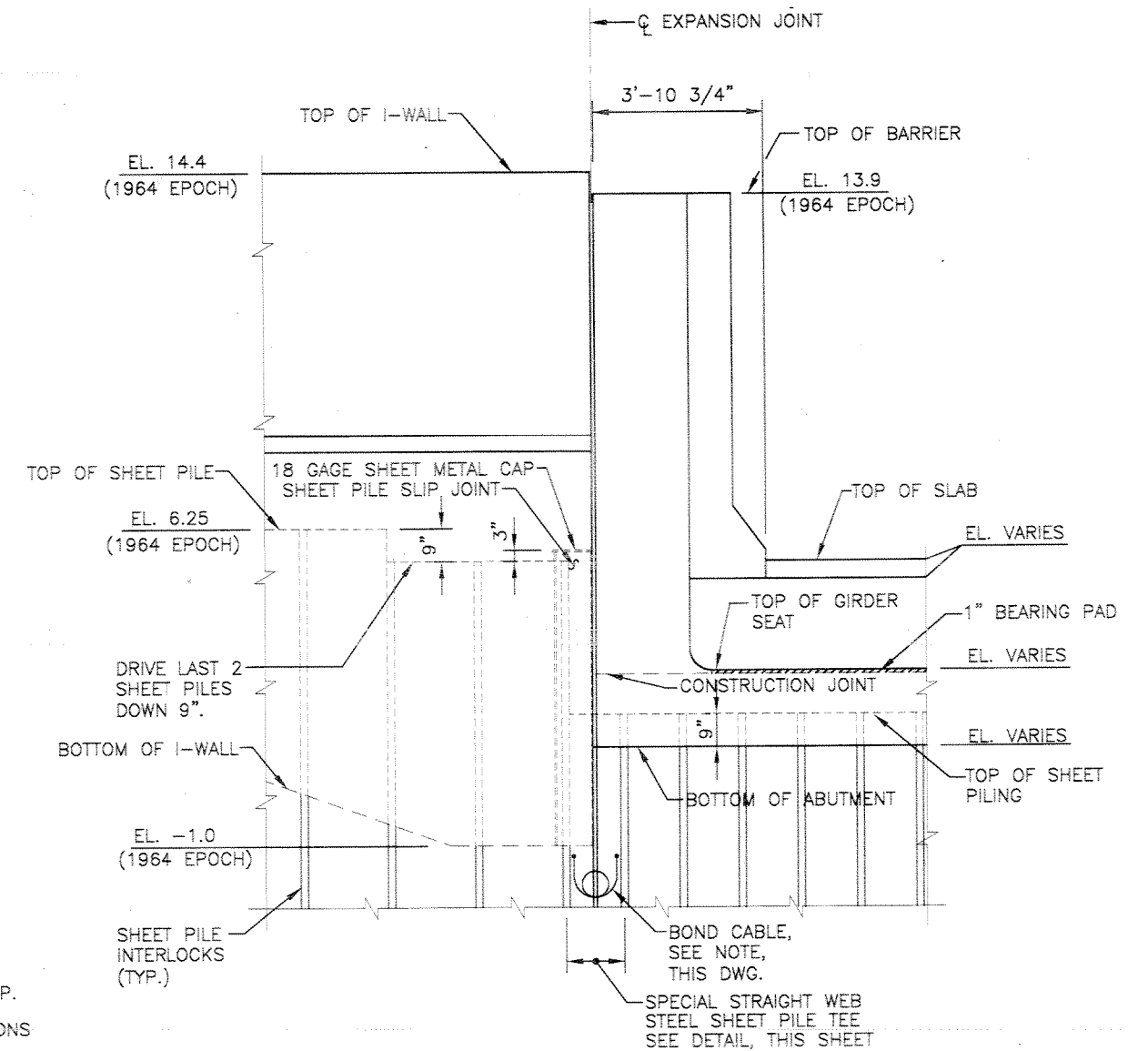


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SHEET PILING AND REINFORCING DETAILS AT JOINTS

SCALE: 1"=1'-0"



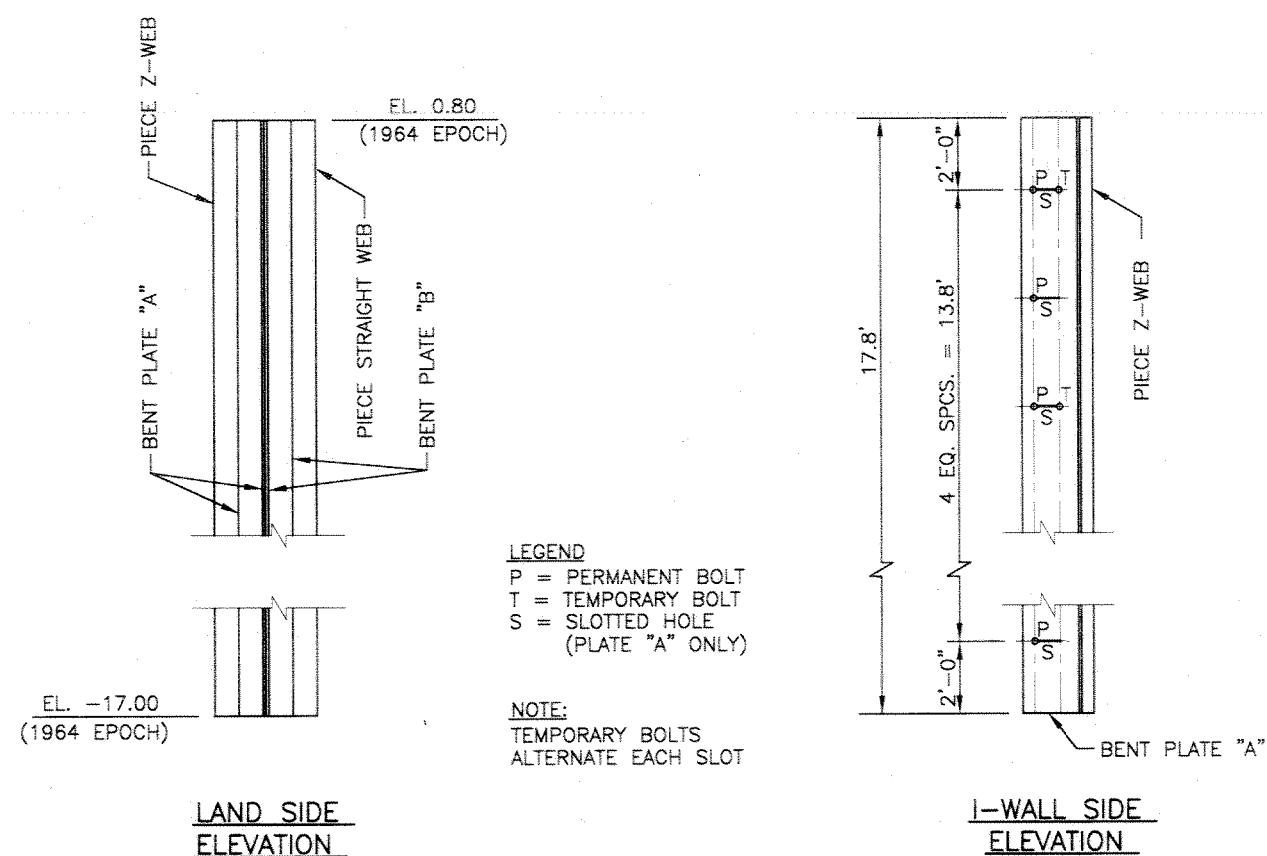
I-WALL TO ABUTMENT/BARRIER

(JOINT B SHOWN, OTHERS SIMILAR)

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

BONDING NOTES:

- #6 REINFORCING BAR TO BE WELDED TO THE TOP OF EACH STEEL SHEET PILE. #6 REINFORCING BAR SHALL NOT EXTEND ACROSS THE EXPANSION JOINT. INSTALL BOND CABLE AT ALL EXPANSION JOINTS. BOND CABLES SHALL HAVE A 8" DIAMETER LOOP TO ALLOW FOR STRESSES.
- BOND CABLES SHALL BE WELDED AS SPECIFIED TO ADJACENT STEEL PILES 7" BELOW BOTTOM OF CONCRETE CAP. WELDED CONNECTIONS SHALL BE COATED WITH SPLICING EPOXY TO OBTAIN MOISTURE-PROOF JOINT. SEE SPECIFICATIONS "CATHODIC PROTECTION".
- #6 REINFORCING BAR SHALL BE WELDED TO THE LAST THREE SHEET PILING AT EACH END OF THE MONOLITH FOR CONTINUITY. SPLICING OF #6 BAR WILL NOT BE ALLOWED.

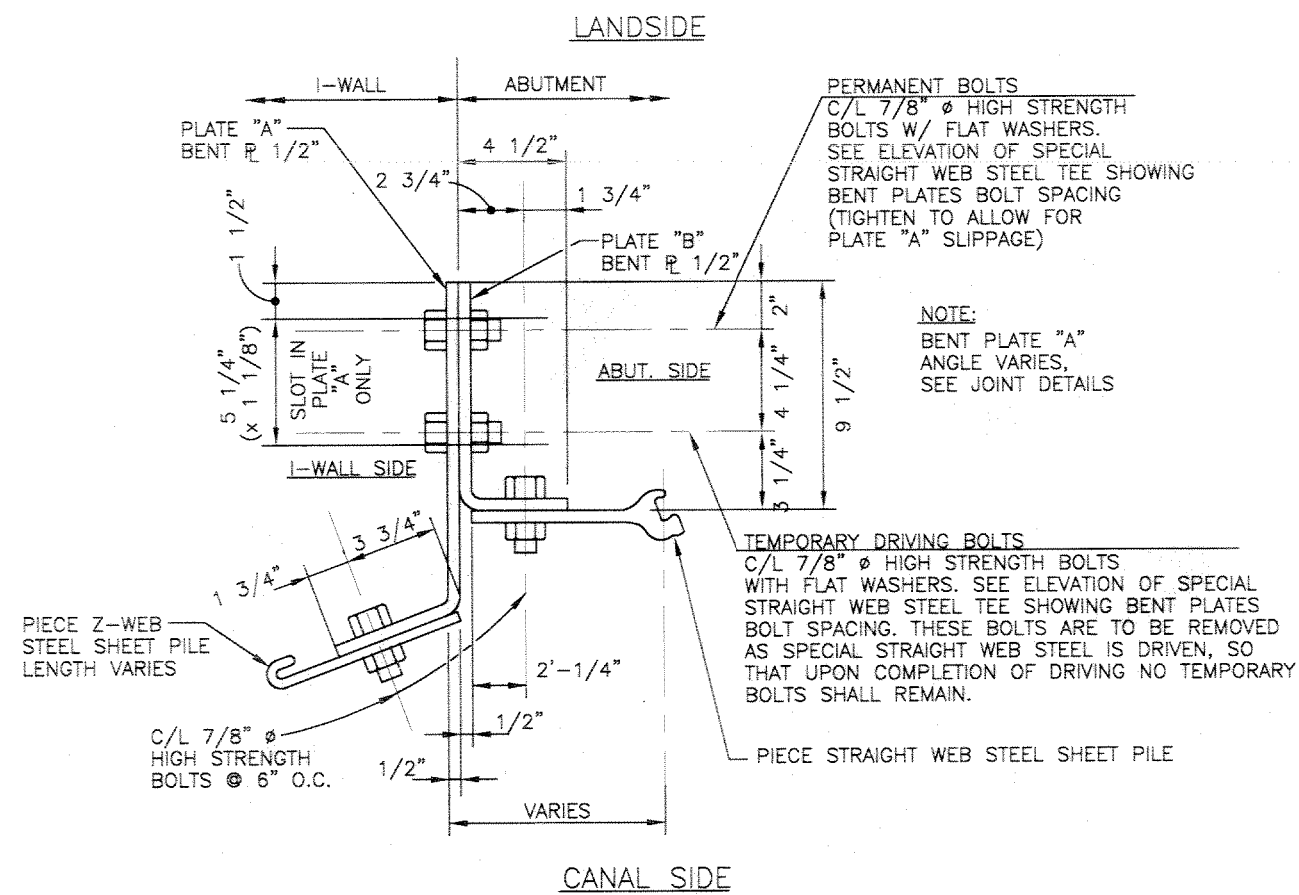


ELEVATION OF SPECIAL STRAIGHT WEB TEE

SHOWING BENT PLATES BOLT SPACING

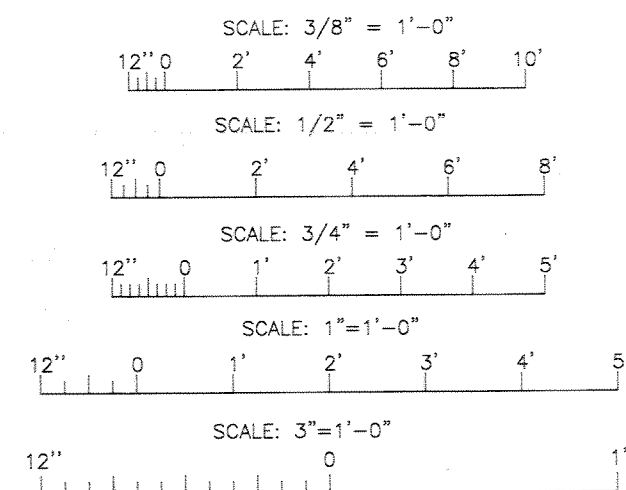
(JOINT B SHOWN, OTHERS SIMILAR)

SCALE: HORIZ. 3/4" = 1'-0"
VERT. 3/8" = 1'-0"



SPECIAL STRAIGHT WEB PILE SECTION

SCALE: 3"=1'-0"



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
FLOODWALL DETAIL-3			
DESIGNED BY: REN	DATE: FEB. 1998	PLOT SCALE: 48	PLOT DATE: 2/20/98
DRAWN BY: WE	CADD FILE: 44732BLK.DGN		FILE NO. H-4-44733
CHECKED BY: AFG	SOLICITATION NO. DACW29-98-B-0060		DWG. 57 OF 67
SUBMITTED BY: A. GOODSON DESIGN ENGINEER			



DACW29-99-C-0005

3-14-00

Floodproofing of Gentilly Blvd. Bridge

I-Wall Elevations

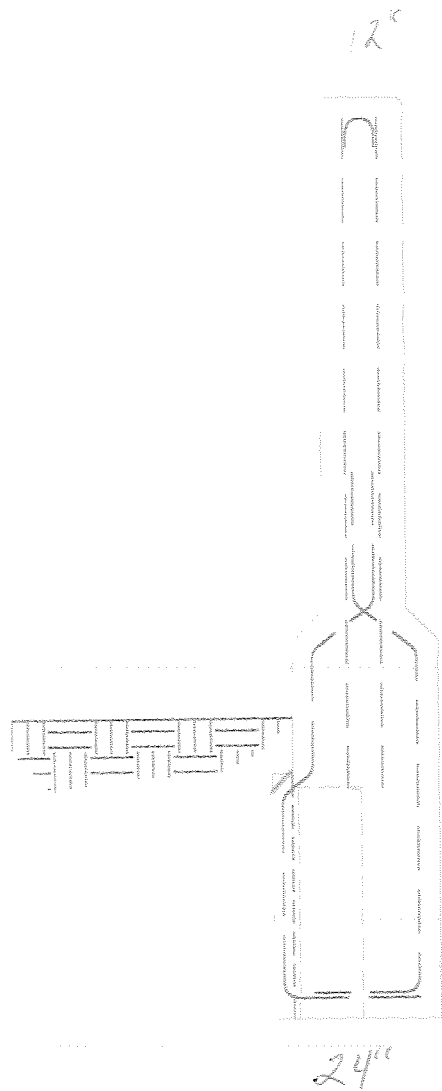
N. W. Corner	North End	South End	Comments
Panel #1	Elev. 14.14	Elev. 14.14	This wall poured first (months ago). 1 st wall North of Panel #1
Panel #2	Elev. 14.34	Elev. 14.34	
Exist. Wall	Elev. 14.32	Elev. 14.40	
S.W. Corner			
Panel #3	Elev. 14.26	Elev. 14.29	1 st wall south of Panel #4
Panel #4	Elev. 14.26	Elev. 14.27	
Exist. Wall	Elev. 14.32	Elev. 14.32	
N. E. Corner			
Exist. Wall	Elev. 14.32	Elev. 14.32	1 st wall North of Panel #5 (Panel #5 not poured yet.)
S.E. Corner			
Panel #6	Elev. 14.38	Elev. 14.34	This wall poured on 3-13-00. 1 st Wall south of Panel #7 (Panel #7 not poured yet.)
Exist. Wall	Elev. 14.28	Elev. 14.33	
<p>* NOTE :</p> <p>All elev.'s shown are top of I-walls at each end (1964 Epoch). Plan Elev. = 14.40</p> <p>J. Justice (Field Engineer) C.R. Pittman Construction 3-14-2000</p>			

REMOVAL & RECONSTRUCTION OF I-WALL MONOLITH (PANEL 1)

1. Remove the I-wall monolith (Panel 1) between approximate station 14+08.24 and station 14+24.80. The work shall be performed in a manner that will preserve the 3-bulb waterstops at the joints with the two adjacent I-wall monoliths. If the waterstop is damaged to the extent that it must be replaced, the Contractor shall replace the waterstop.
 - a. Waterstop replacement shall be performed by cutting a dovetailed section around the back of the existing water stop. Width of the section should be approximately 3 to 4 inches and the depth shall be 5 ½ to 6 inches. The dovetailed slot shall be grouted after placement of the waterstop. The grout shall be a non-shrink grout with a final compressive strength equal to 3000 psi and submitted to the Contracting Officer for approval.
2. Prior to Placement of the stabilization slab for the I-wall monolith (panel 1), the ground 2.5 feet beneath the stabilization slab shall be removed and re-compacted to a density equal to 95 percent proctor. The excavation shall be free of standing water at all times.
3. Replace the I-wall monolith (panel 1). The work shall be performed in accordance with the contract specifications.

Floodwall Panel #3

PROTECTED SIDE



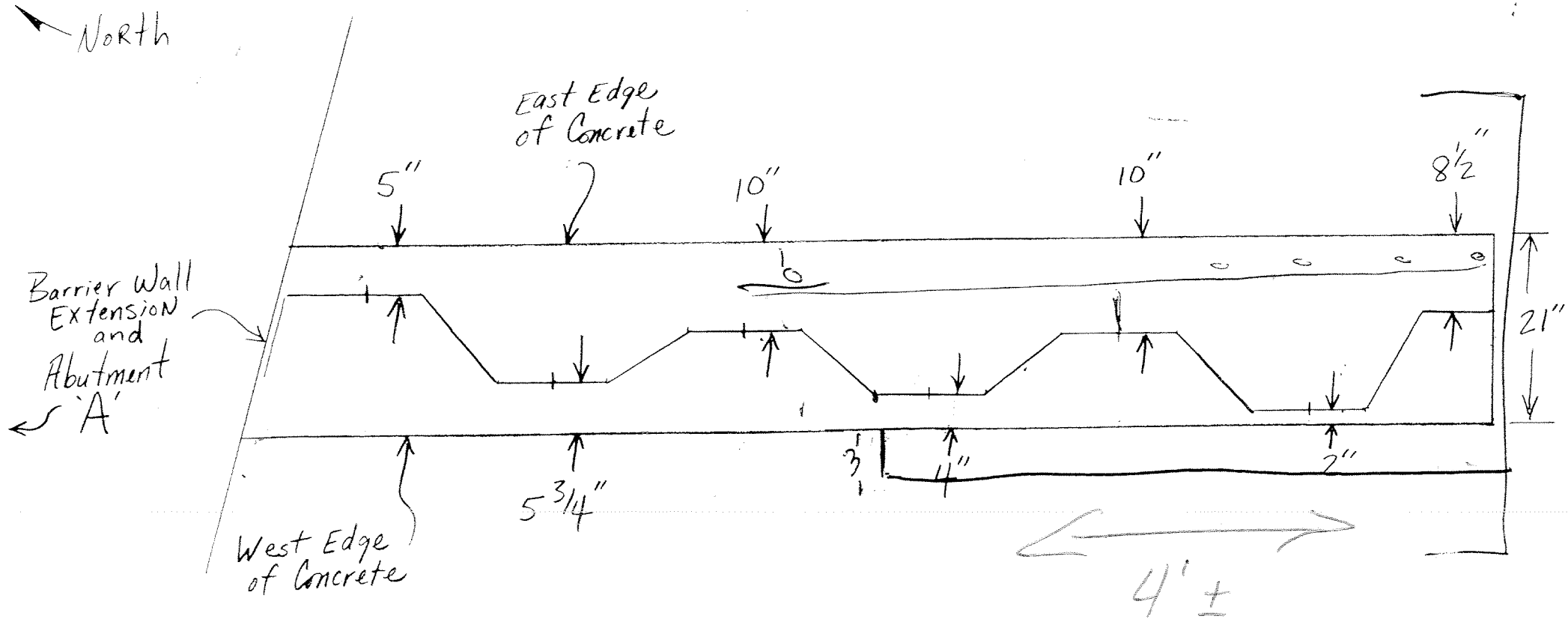
Flood
LAND SIDE

- 8" Fill over Blockout
- 3" Blockout
- 2" Above Sheet piling End of Blockout

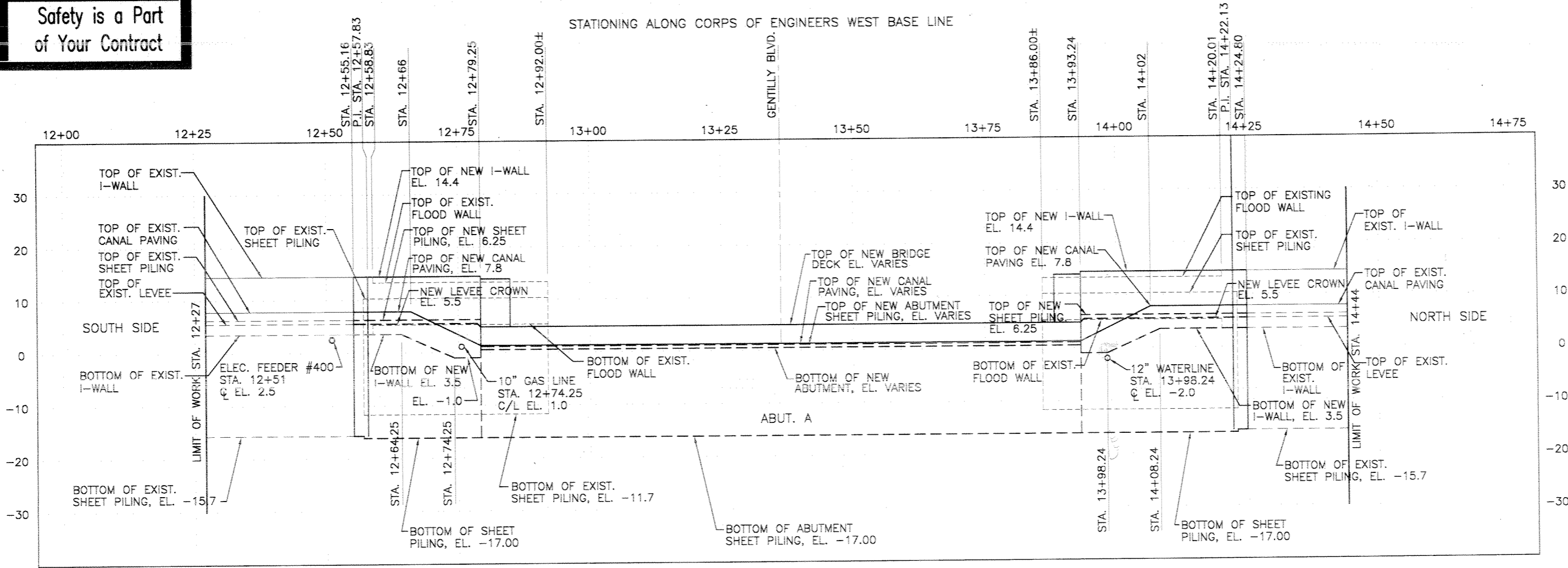
DACW29-99-
C-0005

Floodproofing Gentilly Blvd. Bridge at London Ave Canal
I-Wall Panel #3 - Sheet Pile Asbuilt

6-21-00.
Jim Justice
CR. Pittman

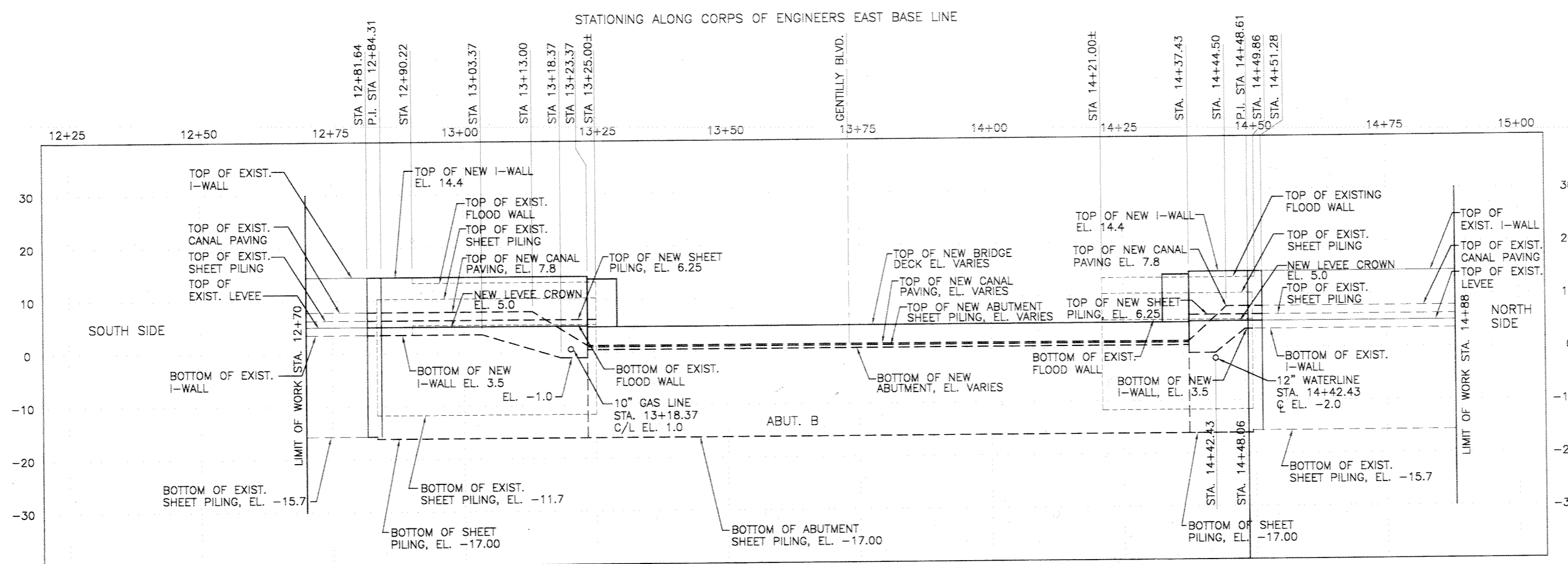


Safety is a Part
of Your Contract



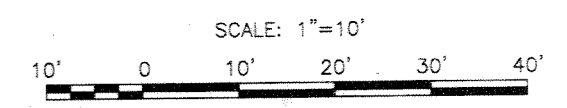
WEST PROFILE - CANAL SIDE (A)
SCALE: HOR. 1"=10'
VERT. 1"=10'

- NOTES:**
- 1). ALL ELEVATIONS ARE 1964 EPOCH UNLESS OTHERWISE NOTED.
 - 2). CONTRACTOR TO FIELD LOCATE EXISTING UTILITIES BEFORE INSTALLING NEW UTILITIES AND SLEEVES THRU FLOODWALLS.

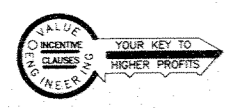


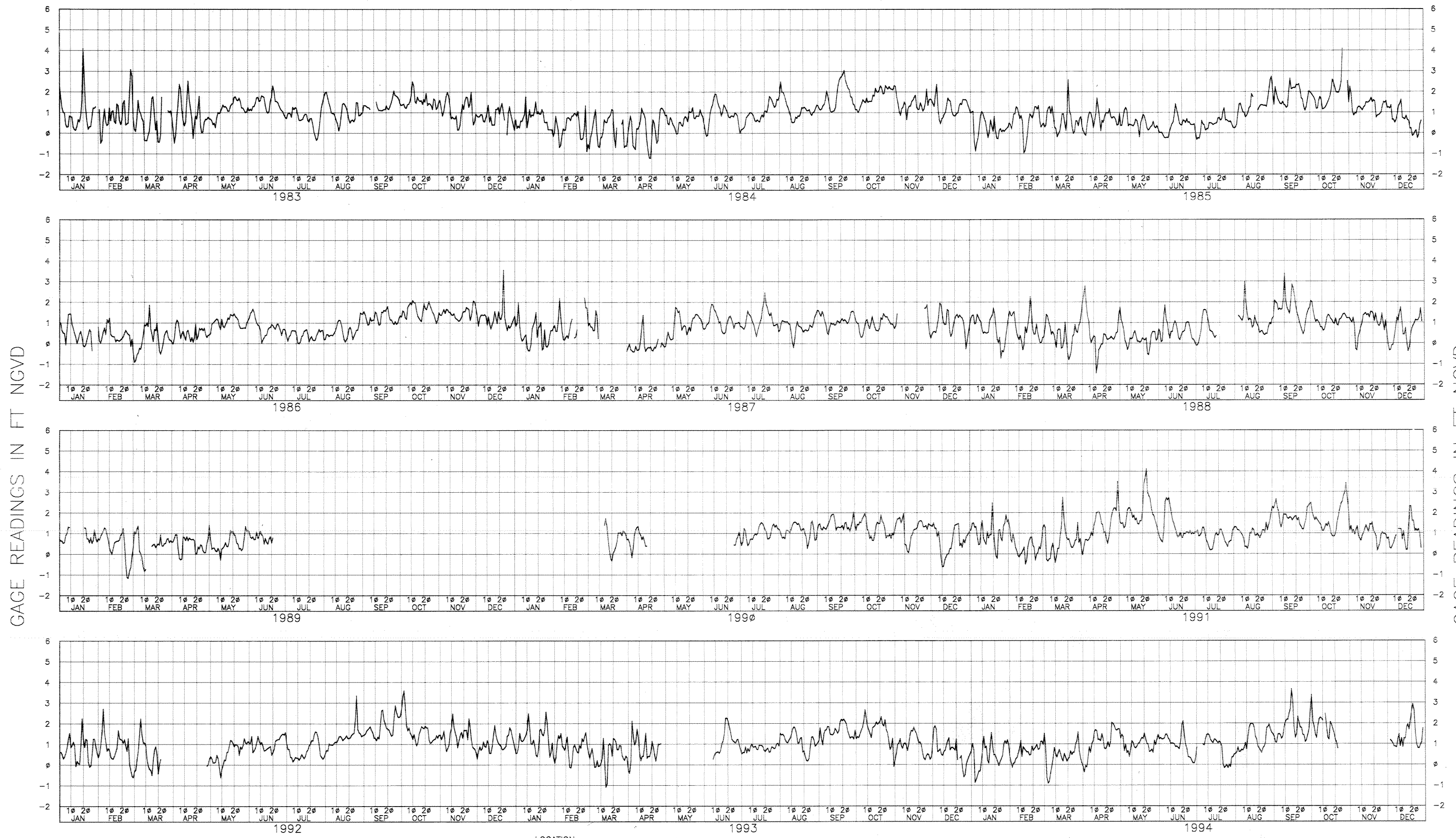
EAST PROFILE - LAND SIDE (B)
SCALE: HOR. 1"=10'
VERT. 1"=10'

NOTE: ALL ELEVATIONS ARE 1964 EPOCH UNLESS OTHERWISE NOTED.



SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3800 North Causeway Blvd. Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
ABUTMENT AND I-WALL PROFILES			
DESIGNED BY: REN	DATE: FEB. 1998	PLOT SCALE: 10	PLOT DATE: 2/20/98
DRAWN BY: WAY	CADD FILE: 44732BLK.DGN	FILE NO.	H-4-44733
CHECKED BY: AFG	SUBMITTED BY: A. GOODSON	SOLICITATION NO. DACW29-98-B-0060	DWG. 60 OF 67





GAGE READINGS IN FT NGVD

GAGE READINGS IN FT NGVD

LOCATION:
 LAT. 30°01'45", LONG. 90°01'58" BAROID PLANT WHARF
 ON EAST BANK, 250 FEET SOUTH OF SEABROOK BRIDGE.
 (STA. 7606006)



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

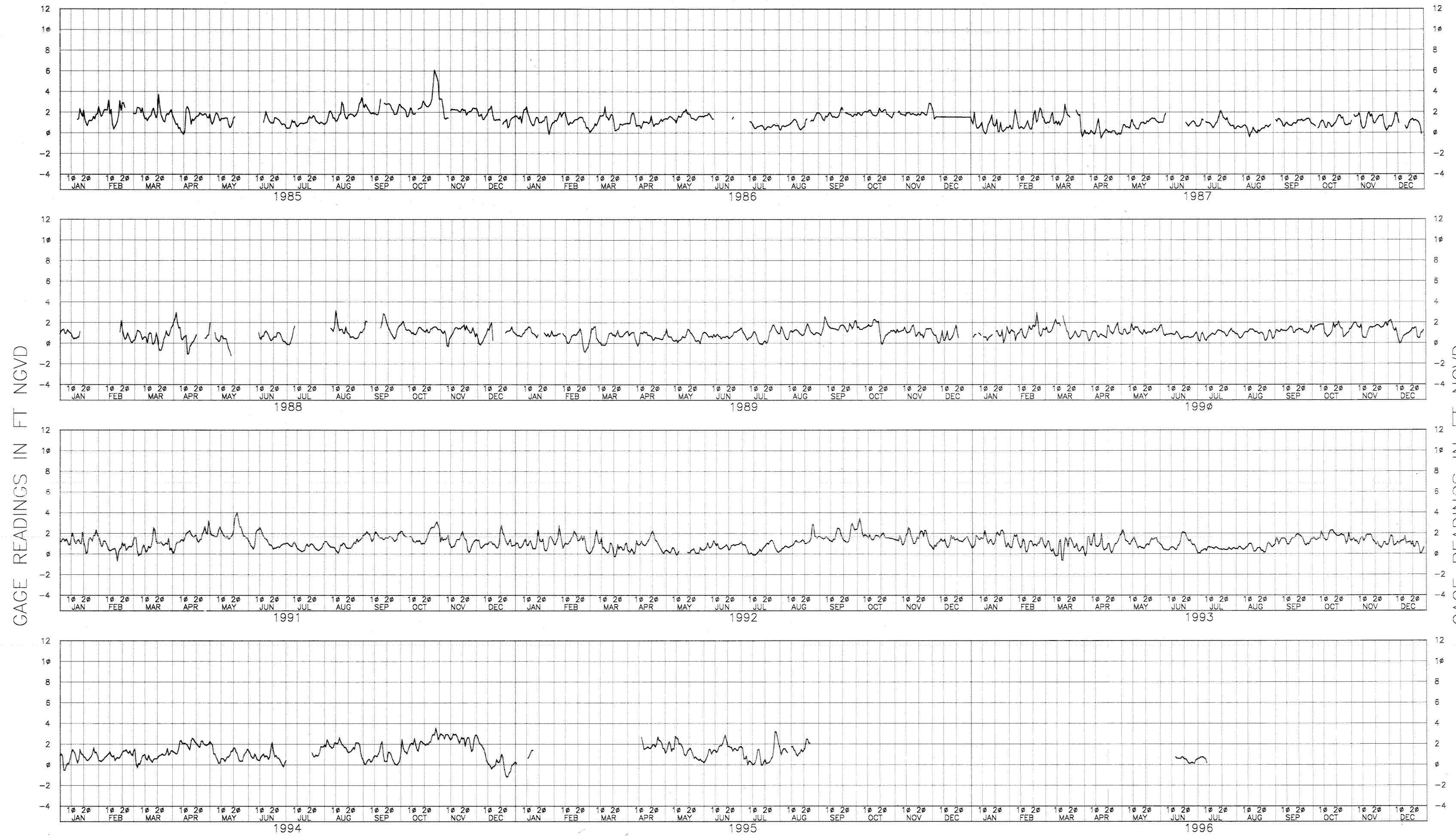
ORLEANS LEVEE DISTRICT
 BOARD OF LEVEE COMMISSIONERS
 NEW ORLEANS, LOUISIANA

LINFIELD, HUNTER & JUNTUS, INC.
 CONSULTING ENGINEERS AND ARCHITECTS
 3500 North Causeway Blvd. Suite 200
 Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA. AND VICINITY
 HIGH LEVEL PLAN
 LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
 FLOODPROOFING OF
 GENTILLY BLVD. BRIDGE
 ORLEANS PARISH, LOUISIANA
STAGE HYDROGRAPH
 I.H.N.C. NEAR SEABROOK BRIDGE, N.O., LA.

DESIGNED BY:	DATE:	PLOT SCALE:	PLOT DATE:
DRAWN BY:	FEB. 1998	16	2/20/98
CHECKED BY:	CADD FILE: 44732BLK.DGN		FILE NO.
		H-4-44733	
SUBMITTED BY:	SOLICITATION NO.		DWG. NO.
A. GOODGION DESIGN ENGINEER	DACW29-98-B-0060		61 OF 67


SYMBOL	DESCRIPTION	DATE	APPROVED




GAGE READINGS IN FT. NGVD

GAGE READINGS IN FT. NGVD

LOCATION:
 LAT. 30°01'18", LONG. 90°06'57" ON WEST
 END OF MUNICIPAL YACHT BUILDING IN WEST END HARBOR.
 (STA. 8562506)

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

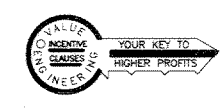
BOARD OF LEVEE COMMISSIONERS
 ORLEANS LEVEE DISTRICT
 NEW ORLEANS, LOUISIANA  LINFIELD, HUNTER & JUNIUS, INC.
CONSULTING ENGINEERS AND ARCHITECTS
 3300 North Causeway Blvd. Suite 200
 Metairie, Louisiana 70002

LAKE PONTCHARTRAIN, LA. AND VICINITY
 HIGH LEVEL PLAN
 LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION
 FLOODPROOFING OF
 GENTILLY BLVD. BRIDGE
 ORLEANS PARISH, LOUISIANA
STAGE HYDROGRAPH
LAKE PONTCHARTRAIN AT WEST END, LA

DESIGNED BY:	DATE:	PLOT SCALE:	PLOT DATE:
DRAWN BY:	FEB. 1998	16	2/20/98
CHECKED BY:	CADD FILE: 44732BLK.DGN		FILE NO.
SUBMITTED BY:	SOLICITATION NO.		H-4-44733
A. GOODSON DESIGN ENGINEER	DACW29-98-B-0060		DWG. 62 OF 67

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			

**Safety is a Part
of Your Contract**



Safety is a Part
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EUSTIS ENGINEERING COMPANY, INC. LOG OF BORING AND TEST RESULTS (Sheet 1 of 3)
ORLEANS LEVEE DISTRICT
LONDON AVENUE CANAL
GENTILLY BOULEVARD BRIDGE
NEW ORLEANS, LOUISIANA

Date: 11/11/97 Job No.: 15033 Boring: 1

Scale in Feet	PP	SPT	Symbol	Visual Classification	USC	Sample Number	Depth in Feet	Water Content		Density		Shear Tests		Atterberg Limits		Percent Passing #200 Sieve	Other Tests
								Dry	Wet	Type	φ	c	LL	PL	PI		
0		5	CH	2" Asphalt Concrete	CH	1	2-3										
0.75			CL	Medium stiff gray clay	CL	2	5-6										
0.10			CL	Medium stiff gray & tan clay w/silt pockets	CL	3	8-9										
10			ML	Very soft gray & tan silty clay	ML	4	11-12										
			ML	Loose to medium compact gray sandy silt	ML	5	14-15	28	92	118	OB						2160
20			CL	Soft gray silty clay	CL	6	18-19										
			CH	Soft gray clay w/silt lenses & pockets	CH	7	23-24										98.6
30			CL	Medium stiff gray silty clay w/sandy silt layers	CL	8	28-28	47	72	105	UC						
0.10			CL	Medium stiff gray silty clay w/sandy silt layers	CL	9	33-34	34	82	109	OB						
40			ML	Medium compact gray clayey silt w/clay lenses	ML	10	38-39										
0.50			ML	Medium compact gray clayey silt w/clay lenses	ML	11	43-44	34	82	109	OB						
50			CL	Medium stiff gray silty clay	CL	12	48-49										
0.50			CL	Very soft to soft gray silty clay w/clayey silt layers	CL	13	53-54										
0.25			CH	Soft to medium stiff gray clay w/sand lenses & layers	CH	14	58-59	32	84	111	UC						
0.50			CH	Soft to medium stiff gray clay w/sand lenses & layers	CH	15	63-64	54	85	100	UC						
70			CH	Medium dense gray fine sand w/silt	CH	16	67-68										
			CH	Medium dense gray fine sand w/silt	CH	17	69-70										
0.50			CH	Very stiff gray clay w/sand lenses & fissures	CH	18	73-74	33	87	116	UC						1880
2.50			CH	Very stiff gray clay w/sand lenses & fissures	CH	19	78-79										
2.50			CH	Stiff gray clay w/sand lenses	CH	20	83-84	35	89	114	OB						1785
1.50			SM	Medium dense gray silty sand	SM	21	87-88										
90			SM	Very dense gray silty sand	SM	22	89-90										
			SM	Medium dense gray silty sand	SM	23	92-93										
0.50			SM	w/ clay lenses	SM	24	95-96										
100			SM	Very dense gray silty sand	SM	25	98-100										
100			SM	Very dense gray silty sand	SM	26	104-105										
110			CH	Medium stiff gray clay w/sand lenses & pockets	CH	27	109-110										
0.50			CH	Stiff gray clay w/sand lenses	CH	28	113-114	36	83	112							
1.00			CH	Stiff gray clay w/sand lenses	CH	29	118-119	42	76	108	UC						1110
1.00			CH	w/sand lenses & pockets	CH	30	123-124										
0.75			CH	w/sand lenses & pockets	CH	31	128-129	38	81	112	UC						1115
0.75			CH	w/sand lenses & pockets	CH	32	133-134										

EUSTIS ENGINEERING COMPANY LOG OF BORING (Sheet 1 of 2)
ORLEANS LEVEE DISTRICT
LONDON AVENUE CANAL
GENTILLY BOULEVARD BRIDGE
NEW ORLEANS, LOUISIANA

Date: 7 October 1985 Job No.: 2049-0269 Boring: 4

Sample No.	SAMPLE DEPTH - FEET		DEPTH STRATUM - FEET		VISUAL CLASSIFICATION	STANDARD PENETRATION TEST	
	From	To	From	To		Blows	Penetration
			0.0	0.2	Asphalt & gravel		
1	1.5	2.5	0.2		Stiff tan & gray silty clay w/clay pockets, brick fragments & clayey silt layers		
7	4.5	5.5	6.0		Stiff tan & gray silty clay w/clayey silt layers & some gravel		
3	7.5	8.5	6.0	9.0	Medium stiff tan & gray clay w/clayey silt pockets		
4	10.5	11.5	9.0		Soft gray & tan silty clay w/clayey silt layers & lenses		
5	13.5	14.5			Soft gray & tan silty clay w/clayey silt layers & roots		
6	17.0	18.0	19.5		Soft gray & tan silty clay w/roots & clayey silt layers		
7	20.5	21.0	19.5		Soft gray silty clay w/roots, clayey silt lenses & clay pockets		
*8	23.5	*24.5			Very soft gray silty clay w/clayey silt & clay lenses		
9	28.5	29.5	31.5		Soft gray silty clay w/clayey silt & clay lenses		
10	32.5	34.5	31.5		Very loose gray clayey silt w/silty clay lenses & pockets		
11	38.5	39.5			Loose gray clayey silt w/clay & silty clay lenses		
12	42.5	44.5	45.0		Loose gray clayey silt w/clay lenses		
13	48.5	49.5	46.0		Medium compact gray clayey silt w/alternating clay lenses		
14	53.0	54.0			Ditto		
15	57.5	58.5	58.5		Medium compact gray clayey silt w/clay pockets & trace of sand	5	22
16	58.5	60.0	58.5	60.5	Medium compact gray sandy silt	2	6
17	61.0	62.5	60.5		Medium stiff gray silty clay	3	14
18	63.5	65.0	65.0		Medium stiff gray silty clay w/clayey silt & clay lenses		
19	68.5	69.5	65.0	71.0	Stiff gray clay w/sandy silt layers		
20	74.5	75.0	71.0	75.0	Medium dense gray silty sand w/clay lenses		
21	78.5	79.5	75.0	80.0	Medium stiff greenish-gray & tan clay w/silt lenses		

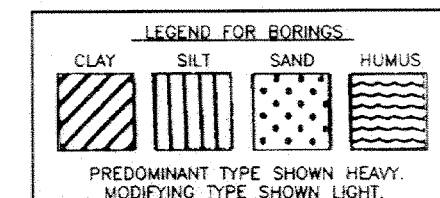
EUSTIS ENGINEERING COMPANY LOG OF BORING (Sheet 1 of 2)
ORLEANS LEVEE DISTRICT
LONDON AVENUE CANAL
GENTILLY BOULEVARD BRIDGE
NEW ORLEANS, LOUISIANA

Date: 5 November 1985 Job No.: 2049-0269 Boring: 39

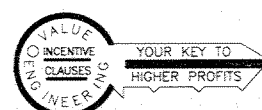
Sample No.	SAMPLE DEPTH - FEET		DEPTH STRATUM - FEET		VISUAL CLASSIFICATION	STANDARD PENETRATION TEST	
	From	To	From	To		Blows	Penetration
1	0.0	0.5	0.0	1.0	Medium stiff gray silty clay w/grass roots		
2	2.5	3.0	1.0	4.5	Medium stiff gray & tan clay w/clayey silt pockets, few roots & fill		
3	5.5	6.0	4.5	7.5	Medium stiff brown & gray clay w/clayey silt pockets & fill		
4	8.5	9.0	7.5	11.0	Medium stiff gray & tan silty clay w/roots		
5	11.5	12.0	11.0	13.5	Very soft gray silty clay w/clayey silt		
6	14.5	15.0	13.5	17.0	Medium compact gray clayey silt		
7	19.5	20.0	17.0	21.0	Loose gray sandy silt w/clayey silt		
8	24.5	25.0	21.0	27.0	Soft gray silty clay w/clayey silt		
9	29.5	30.0	27.0		Loose gray sandy silt w/silty clay lenses		
10	34.5	35.0			Ditto		
11	39.5	40.0			Ditto	2	7
12	43.5	45.0			Ditto	2	8
13	45.0	46.5			Ditto	2	7
14	47.5	49.0			Ditto	2	8
15	50.0	51.5			Loose gray sandy silt w/clayey silt	1	9
16	53.5	55.0			Ditto	1	6
17	58.5	60.0			Ditto	1	4
18	63.5	65.0			Ditto	2	6
19	68.5	70.0	73.5		Ditto	2	11
20	73.5	75.0	73.5		Medium stiff greenish-gray fissured clay w/clayey silt pockets		
21	79.5	80.0			Medium stiff greenish-gray fissured clay		
22	84.5	85.0	86.0		Medium stiff greenish-gray fissured clay w/clayey silt layers		
23	89.5	90.0	86.0		Medium stiff tan & gray fissured clay		
24	94.5	95.0	95.0		Stiff tan & gray fissured clay		
25	95.0	96.5	95.0	97.0	Medium dense gray silty sand	4	29
26	96.5	100.0	97.0	100.0	Medium dense gray clayey sand w/silty sand layers	5	16

NOTES:

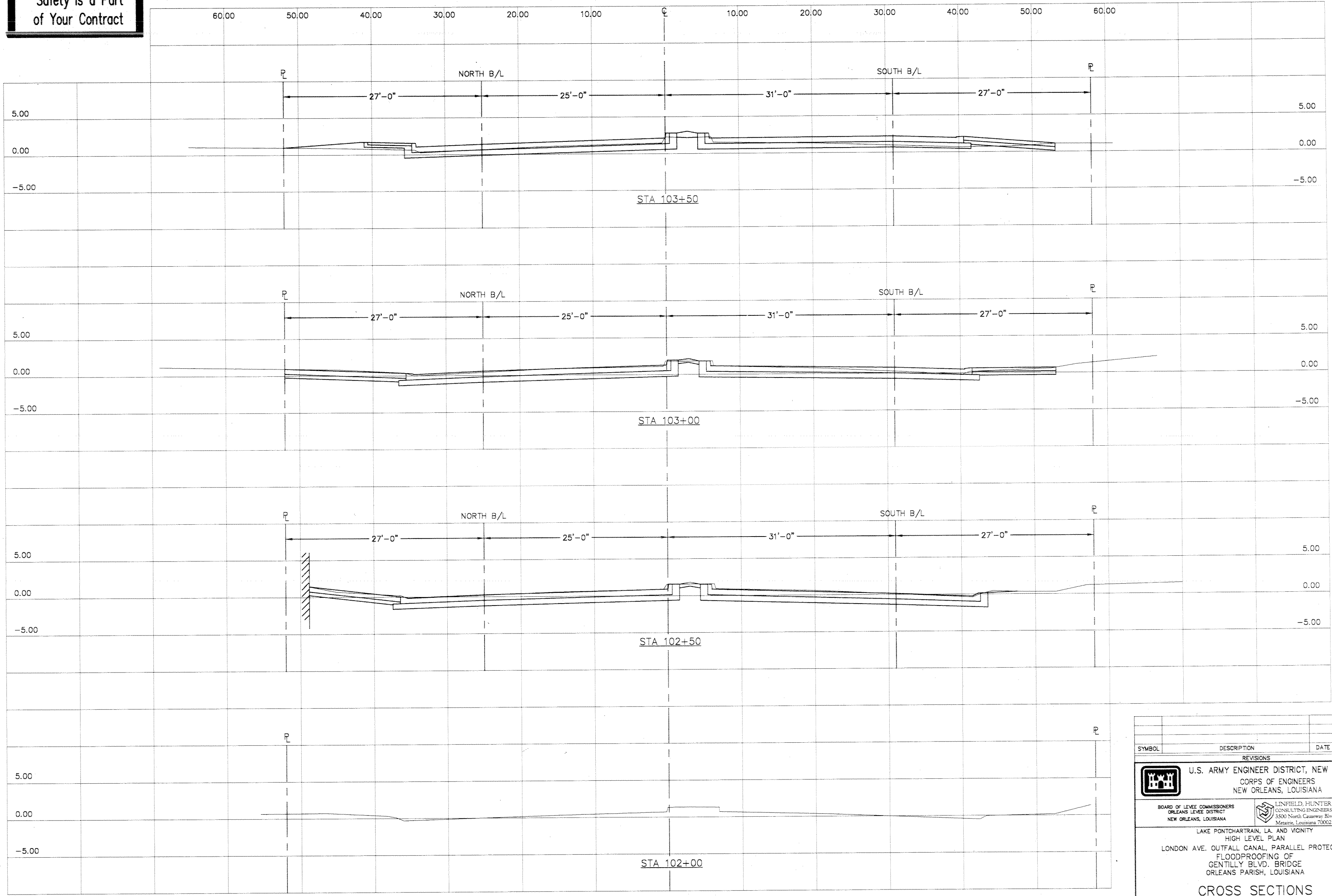
- ±STANDARD PENETRATION TEST
*NUMBER IN FIRST COLUMN INDICATES NUMBER OF BLOWS OF 140-LB HAMMER DROPPED 30 IN. REQUIRED TO SEAT 2-IN. O.D. SPLITSPOON SAMPLER 6 IN. NUMBER IN SECOND COLUMN INDICATES NUMBER OF BLOWS OF 140-LB HAMMER DROPPED 30 IN. REQUIRED TO DRIVE 2-IN. O.D. SPLITSPOON SAMPLER 1 FT. AFTER SEATING 6 IN.
- FOR EUSTIS ENGINEERING BORINGS FURTHER INFORMATION IS AVAILABLE IN EUSTIS ENGINEERING APPENDICES DESIGN MEMORANDUM NO. 19A GENERAL DESIGN DATED JANUARY 1989 LONDON AVE. OUTFALL CANAL ORLEANS PARISH VOLUME II DEPARTMENT OF THE ARMY.
- WHILE THESE LOGS OF BORING ARE CONSIDERED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT ITS RESPECTIVE LOCATION ON THE DATE SHOWN, IT IS NOT WARRANTED THAT IT IS REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.
- SEE DWG. 31 FOR BORING LOCATIONS.





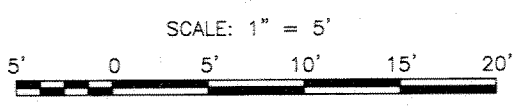
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REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3300 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
BORING LOGS			
DESIGNED BY: PWB	DATE: FEB. 1998	PLOT SCALE: 1	PLOT DATE: 2/20/98
DRAWN BY: RKP	CADD FILE: 44732BK.DGN	FILE NO. H-4-44733	
CHECKED BY: AFG	SOLICITATION NO. DACW29-98-B-0060	DWG. 63	OF 67



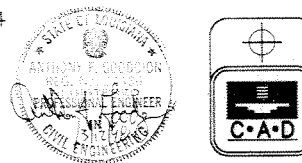
Safety is a Part of Your Contract



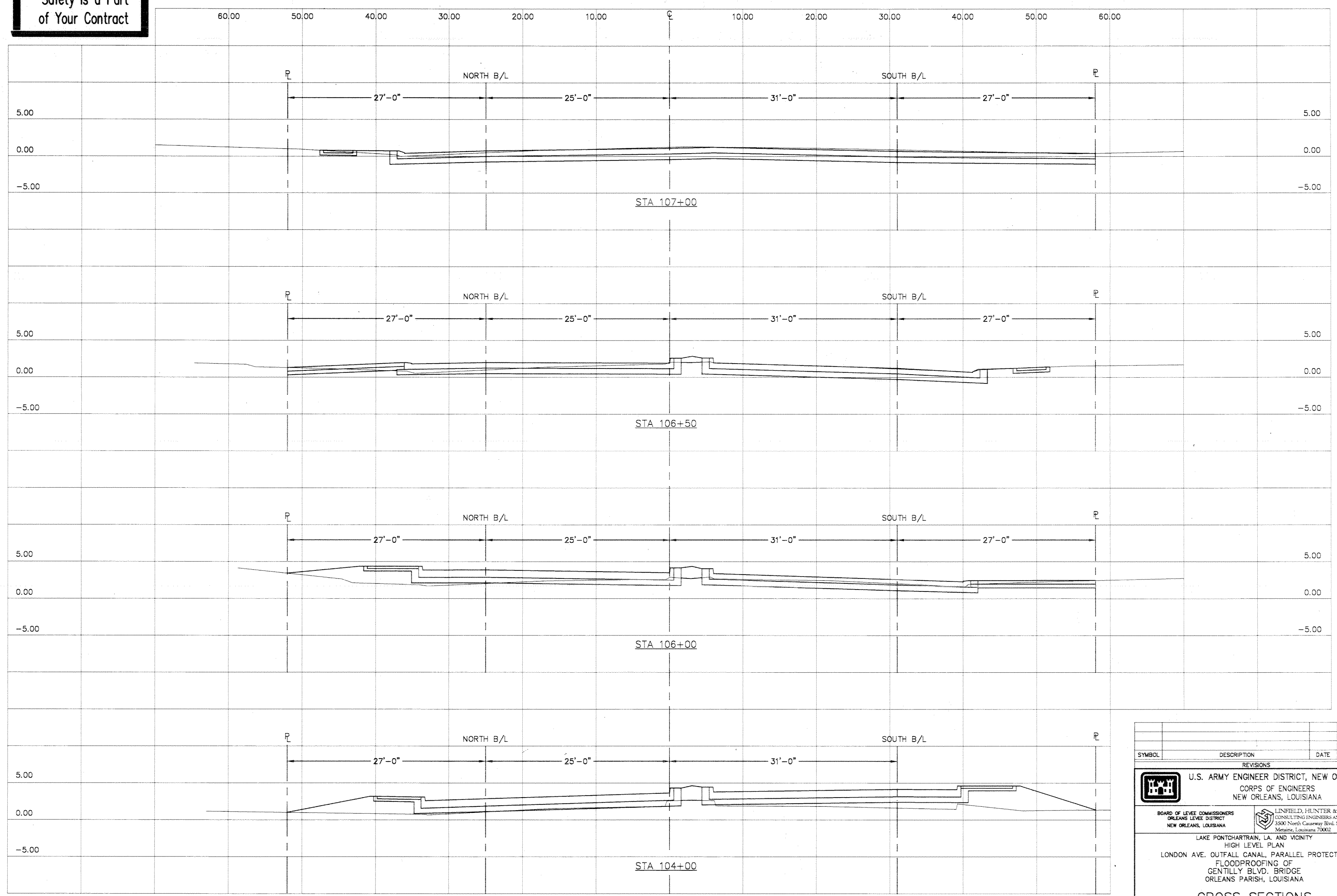
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
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BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		 LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA CROSS SECTIONS			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 5	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY:	SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 64 OF 67




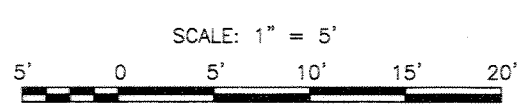
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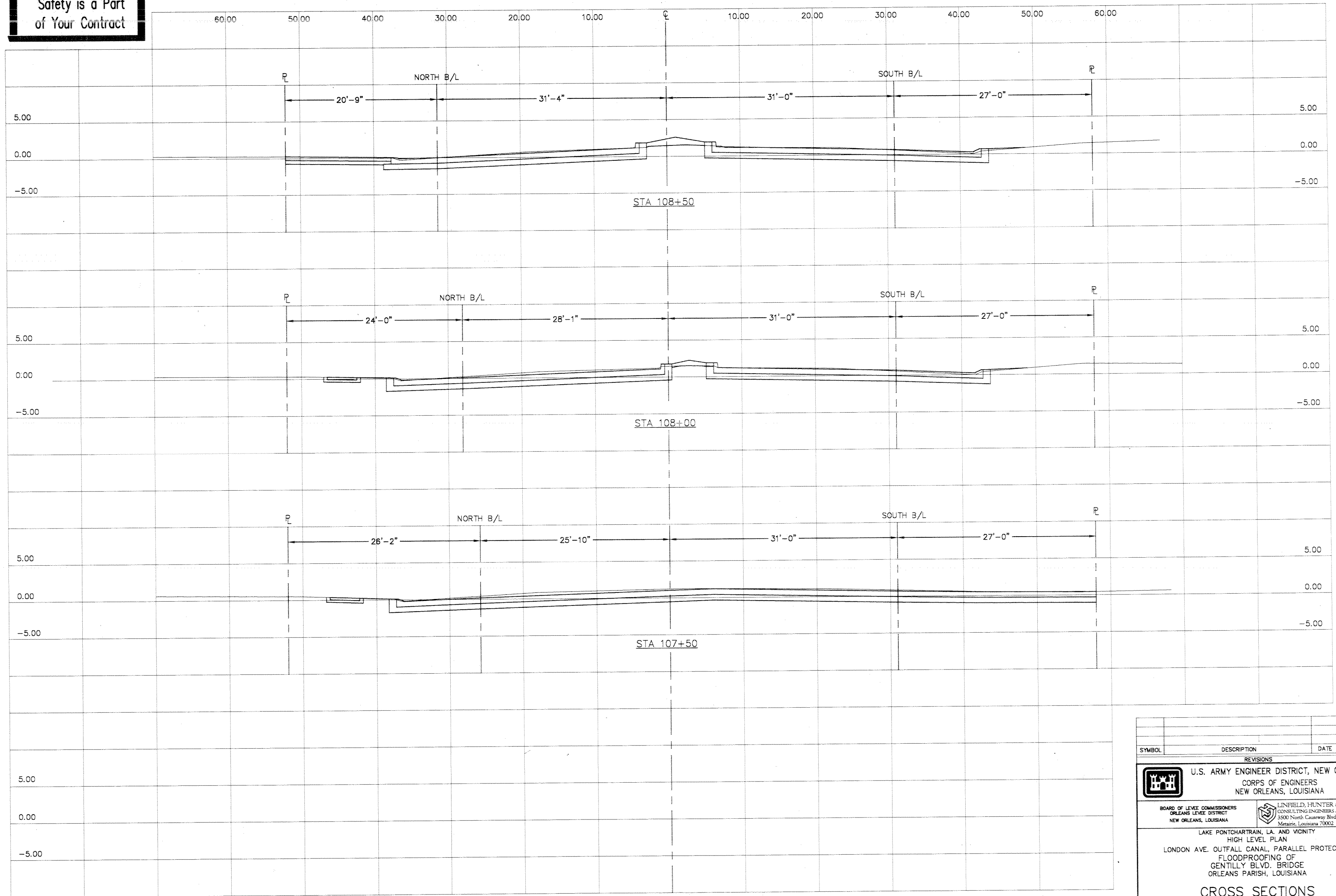
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
 U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd, Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA CROSS SECTIONS			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 5	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
SUBMITTED BY: A. GOODSON DESIGN ENGINEER	SOLICITATION NO. DACW29-98-B-0060	DWG. 65 OF 67	



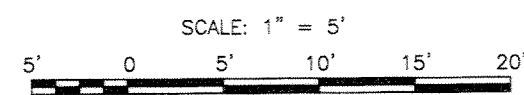
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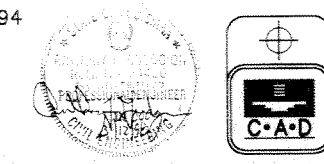
**Safety is a Part
of Your Contract**



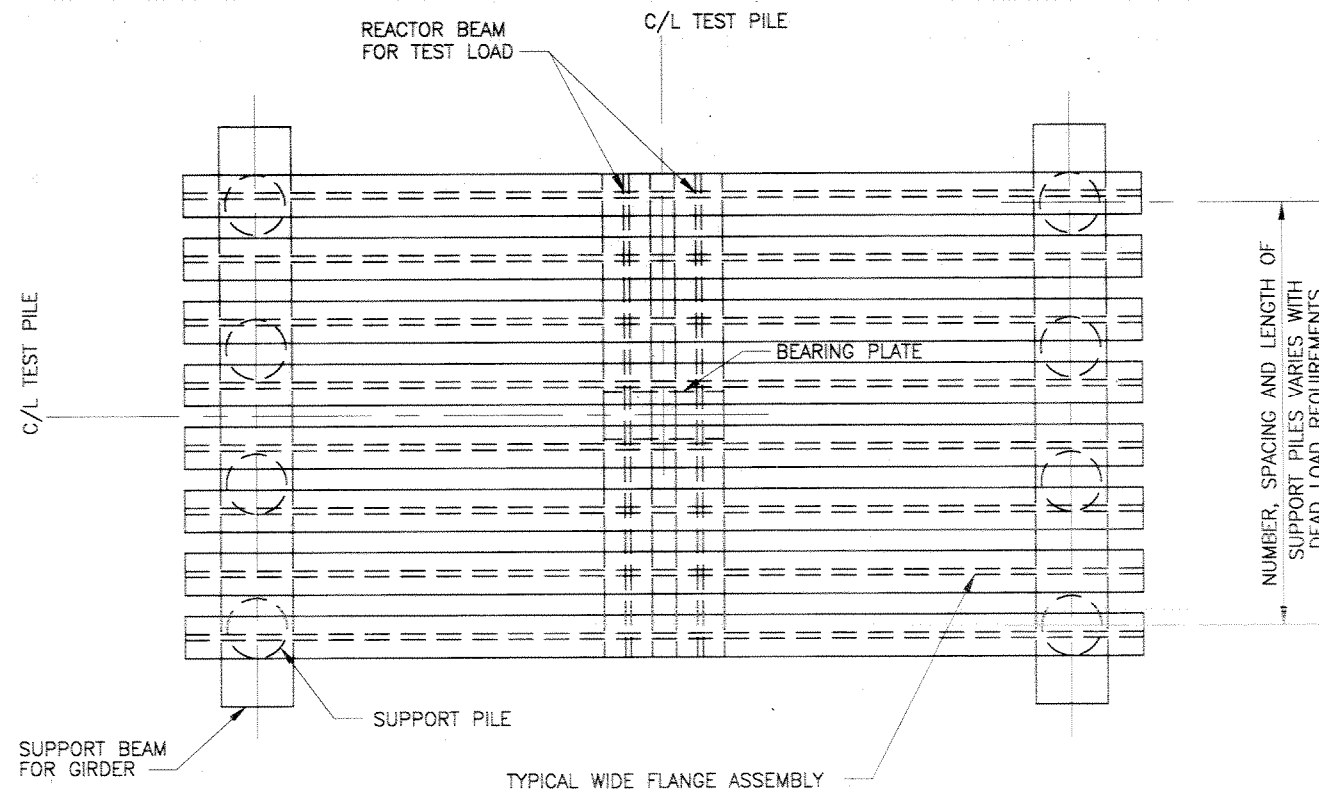
SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
CROSS SECTIONS			
DESIGNED BY: C.M.B.	DATE: FEB. 1998	PLOT SCALE: 5	PLOT DATE: 2/20/98
DRAWN BY: T.F.B.	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733	
CHECKED BY:	SOLICITATION NO. DACW29-98-B-0060	DWG. 66 OF 67	
SUBMITTED BY: A. GOODSON DESIGN ENGINEER			



SURVEY DATE: FEBRUARY 22, 1994



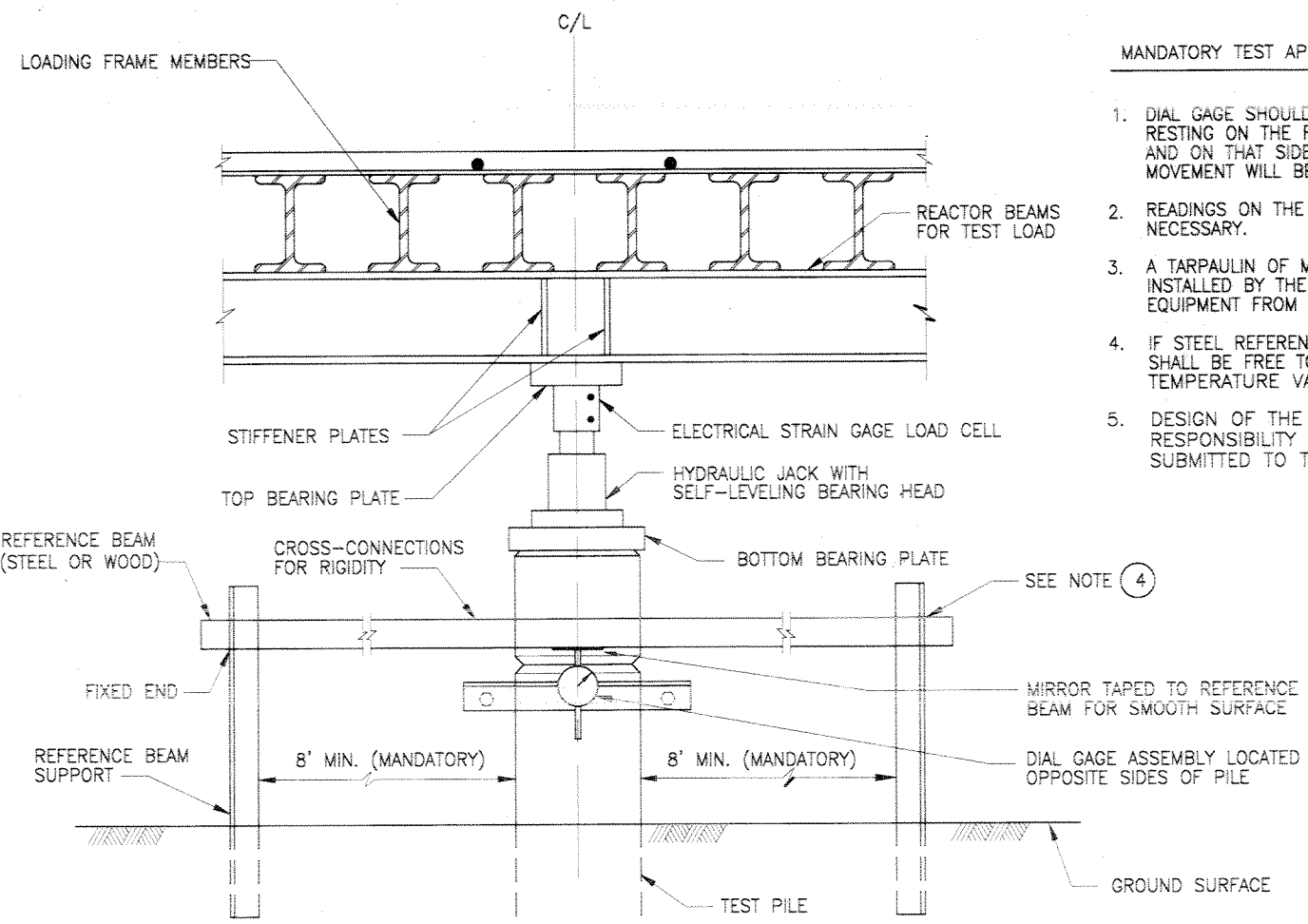
Safety is a Part of Your Contract



PLAN

MANDATORY LOADING FRAME NOTES:

1. LOADING FRAME SHOWN WITHOUT DEAD LOAD.
2. CONTRACTOR TO PROVIDE PILE LAYOUT FOR EACH PARTICULAR DEAD LOAD TEST.
3. SECURE DEAD WEIGHT LOAD TO LOADING FRAME WITH CHAINS AND BINDERS.
4. DESIGN OF THE LOADING FRAME IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL.



SECTION B

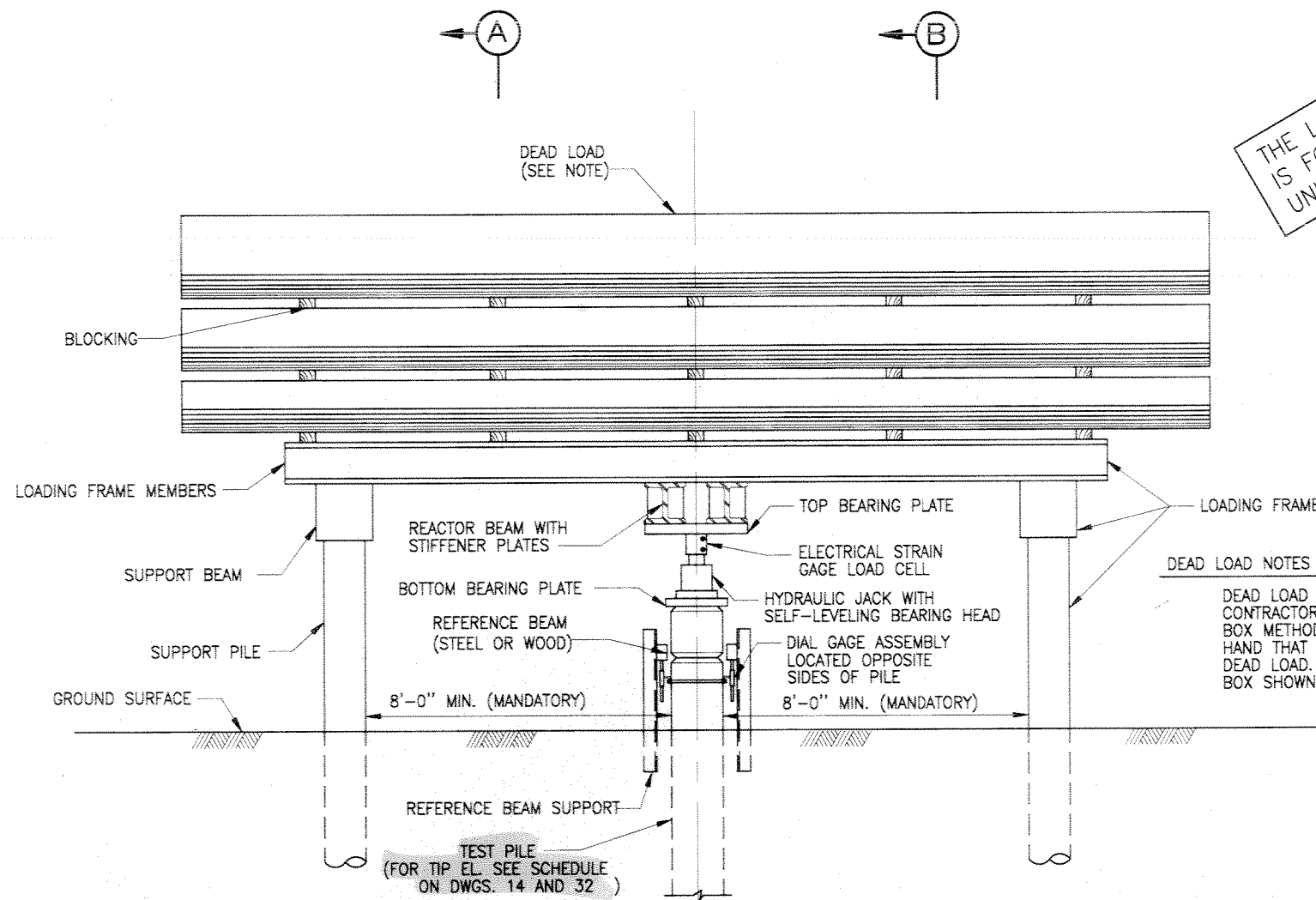
TEST APPARATUS

SCALE: 1" = 1'- 0"

NOTES:
THE CONTRACTOR HAS THE OPTION OF USING REACTION PILES IN LIEU OF THE LOADING FRAME. (SEE SPECIFICATIONS)

MANDATORY TEST APPARATUS NOTES:

1. DIAL GAGE SHOULD BE ATTACHED TO THE PILE WITH THE STEM RESTING ON THE REFERENCE BEAM IN THE COMPRESSED POSITION AND ON THAT SIDE OF THE REFERENCE BEAM WHERE THE MOVEMENT WILL BE AWAY FROM THE BEAM.
2. READINGS ON THE OPPOSITE SIDES OF THE PILE ARE NECESSARY.
3. A TARPULIN OF MINIMUM DIMENSION 12' X 12' SHALL BE INSTALLED BY THE CONTRACTOR TO PROTECT THE MEASURING EQUIPMENT FROM THE DIRECT EFFECTS OF THE WEATHER.
4. IF STEEL REFERENCE BEAMS ARE USED, ONE END OF EACH BEAM SHALL BE FREE TO MOVE AS THE LENGTH OF BEAMS CHANGE WITH TEMPERATURE VARIATIONS.
5. DESIGN OF THE TEST APPARATUS PILE SETUP IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL.



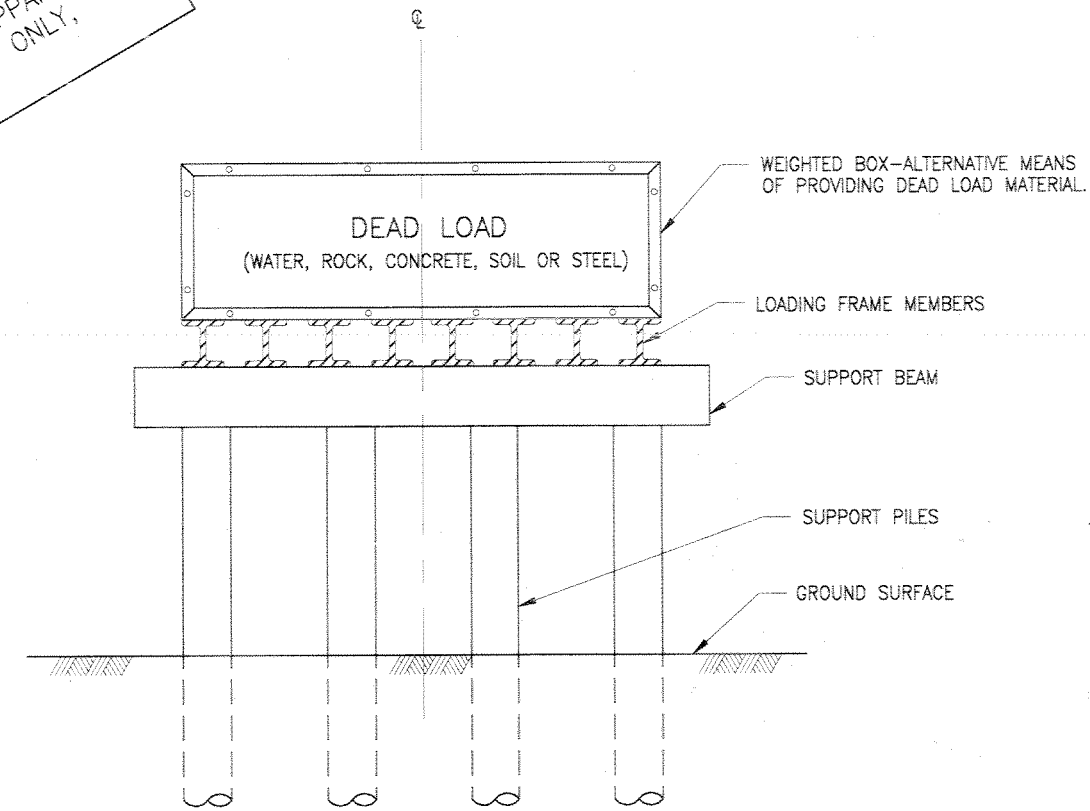
**ELEVATION
LOADING FRAME**

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

THE LOADING FRAME AND TEST APPARATUS IS FOR ILLUSTRATION PURPOSES ONLY, UNLESS OTHERWISE NOTED.

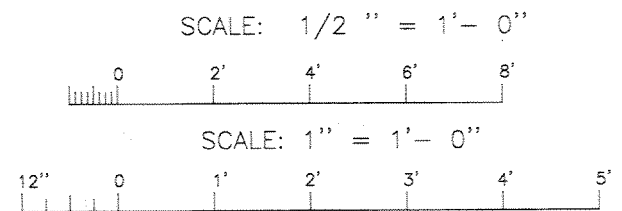
DEAD LOAD NOTES

DEAD LOAD WEIGHT OPTIONAL. CONTRACTOR CAN USE WEIGHTED BOX METHOD OR MATERIAL ON HAND THAT WILL RESULT IN REQUIRED DEAD LOAD. (EXAMPLE OF WEIGHTED BOX SHOWN IN SECTION A)



SECTION A

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



PILE TEST REQUIREMENTS:

TP1 - HP14x73	LOCATION: SEE DWG. 14 AND 32
TIP EL.: -90 N.G.V.D.	DESIGN LOAD: 79T
TP2 - 30" PIPE PILE	LOCATION: SEE DWG. 14 AND 32
TIP EL.: -100 N.G.V.D.	DESIGN LOAD: 182T

TP2 - HP14x73
LOCATION: SEE DWG. 14
TIP EL.: -100 N.G.V.D.
DESIGN LOAD: 79T

SYMBOL	DESCRIPTION	DATE	APPROVED
REVISIONS			
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS CORPS OF ENGINEERS NEW ORLEANS, LOUISIANA			
BOARD OF LEVEE COMMISSIONERS ORLEANS LEVEE DISTRICT NEW ORLEANS, LOUISIANA		LINFIELD, HUNTER & JUNIUS, INC. CONSULTING ENGINEERS AND ARCHITECTS 3500 North Causeway Blvd., Suite 200 Metairie, Louisiana 70002	
LAKE PONTCHARTRAIN, LA. AND VICINITY HIGH LEVEL PLAN LONDON AVE. OUTFALL CANAL, PARALLEL PROTECTION FLOODPROOFING OF GENTILLY BLVD. BRIDGE ORLEANS PARISH, LOUISIANA			
COMPRESSION PILE TEST			
DESIGNED BY: SGJ	DATE: FEB. 1998	PLOT SCALE: 1	PLOT DATE: 2/20/98
DRAWN BY: CMB	CHECKED BY: SGJ	CADD FILE: 44732BLK.DGN	FILE NO. H-4-44733
SUBMITTED BY:	SOLICITATION NO. DACW29-96-B-0060	DWG. 67 OF 67	
A. GOODSON DESIGN ENGINEER			

