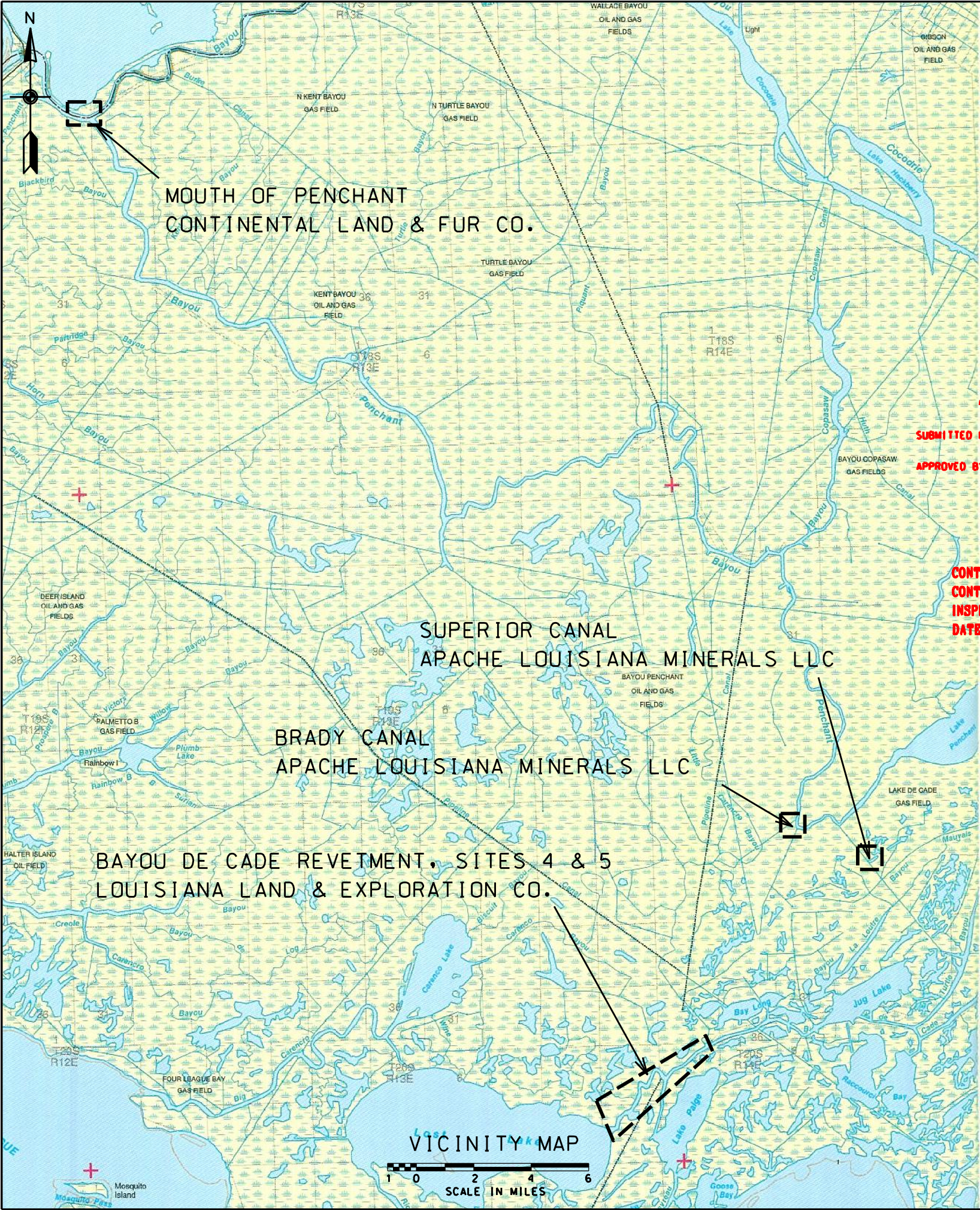




TE-34 PENCHANT BASIN
NATURAL RESOURCES PLAN
INCREMENT 1

BUILT UNDER
COASTAL WETLANDS, PLANNING, PROTECTION AND RESTORATION ACT
PUBLIC LAW 101-646
BY
COASTAL PROTECTION AND RESTORATION
AUTHORITY OF LOUISIANA
WITH THE ASSISTANCE OF
NATURAL RESOURCES CONSERVATION SERVICE
OF THE
UNITED STATES DEPARTMENT OF AGRICULTURE
2009

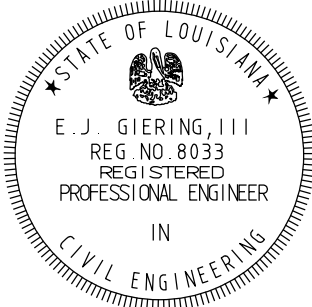
"AS-BUILT PLANS"

SUBMITTED BY: BARRON BLANCHARD 12/9/11
GOVERNMENT REPRESENTATIVE DATE
APPROVED BY: BRANDON SANSON 07/16/14
ASSISTANT STATE CONSERVATION ENGINEER DATE
MARI GILFORD 07/16/14
STATE CONSERVATION ENGINEER DATE
CONTRACT NO. 46721.76100005 DATE 12/9/2011
CONTRACTOR THE DELANEY GROUP INC
INSPECTOR ROBERT PAYTON
DATE OF COMPLETION 8/29/2011



INDEX

01	COVER SHEET	39	PLAN MAP - EXCAVATION - SUPERIOR CANAL
02	PLAN MAP - BAYOU DE CADE	40	EXCAVATION SECTIONS - SUPERIOR CANAL
03	REVEITEMT PLAN - REACH 1 - B. DE CADE	41	GATE ATTACHMENT DETAILS - SUPERIOR CANAL
04	REVEITEMT PLAN - REACH 1 - B. DE CADE	42	GATE ATTACHMENT DETAILS - SUPERIOR CANAL
05	REVEITEMT PLAN - REACH 1 & 2 - B. DE CADE	43	PLAN MAP - WEIR ALIGNMENT - BRADY CANAL
06	REVEITEMT PLAN - REACH 2 & 3 - B. DE CADE	44	SHEETPILE - ISOMETRIC VIEW - BRADY CANAL
07	REVEITEMT PLAN - REACH 3 - B. DE CADE	45	SHEETPILE - ELEVATION VIEW - BRADY CANAL
08	TYPICAL SECTION - REVEITEMT - B. DE CADE	46	EXCAVATION & SCOUR PAD - BRADY CANAL
09	REVEITEMT PROFILE - REACH 1 - B. DE CADE	47	SHEETPILE - SECTION VIEW - BRADY CANAL
10	REVEITEMT PROFILE - REACH 2 - B. DE CADE	48	PLAN MAP - EXCAVATION - BRADY CANAL
11	REVEITEMT PROFILE - REACH 3 - B. DE CADE	49	EXCAVATION - SECTIONS - BRADY CANAL
12	SECTIONS - REACH 1	50	EXCAVATION - SECTIONS - BRADY CANAL
13	SECTIONS - REACH 1	51	EXCAVATION - SECTIONS - BRADY CANAL
14	SECTIONS - REACH 1	52	EXCAVATION - SECTIONS - BRADY CANAL
15	SECTIONS - REACH 2	53	GATE ATTACHMENT DETAILS - BRADY CANAL
16	SECTIONS - REACH 2	54	GATE ATTACHMENT DETAILS - BRADY CANAL
17	SECTIONS - REACH 2	55	SHEETPILE DETAIL - ALL STRUCTURES
18	SECTIONS - REACH 2	56	PLAN MAP - MOUTH OF BAYOU PENCHANT
19	SECTIONS - REACH 3	57	DREDGE SURVEY LINES - M.O.B.P.
20	SECTIONS - REACH 3	58	ROCK DIKE PROFILES - M.O.B.P.
21	SECTIONS - REACH 3	59	TYPICAL SECTION - ROCK DIKE
22	SITE 5 PLAN MAP - FILL AREA - B. DE CADE	60	WEST CONTAINMENT AREA - M.O.B.P.
23	SITE 5 - ISOMETRIC VIEW - B. DE CADE	61	WEST CONTAINMENT DIKE PROFILES - M.O.B.P.
24	SITE 5 - SECTION VIEW - B. DE CADE	62	EAST CONTAINMENT AREA - M.O.B.P.
25	SITE 5 - FILL SECTIONS - B. DE CADE	63	EAST CONTAINMENT DIKE PROFILES - M.O.B.P.
26	SITE 5 - FILL SECTIONS - B. DE CADE	64	TYPICAL SECTION - CONTAINMENT DIKE
27	SITE 5 - FILL SECTIONS - B. DE CADE	65	SETTLEMENT PLATE DETAILS - M.O.B.P.
28	SITE 4 PLAN MAP - FILL AREA - B. DE CADE	66	WARNING SIGN DETAILS
29	SITE 4 - ISOMETRIC VIEW - B. DE CADE	67	WARNING SIGN & BATTER PILE DETAILS
30	SITE 4 - SECTION VIEW - B. DE CADE	68	WARNING SIGN ON SHEETPILE STRUCTURES
31	SITE 4 - FILL SECTIONS - B. DE CADE	69	SOIL PROFILE LEGEND
32	SITE 4 - FILL SECTIONS - B. DE CADE	70	SOIL PROFILES - BORROW - B. DECADE
33	SITE 4 - FILL SECTIONS - B. DE CADE	71	SOIL PROFILES - SHORELINE - B. DECADE
34	PLAN MAP - SUPERIOR CANAL	72	SOIL PROFILES - SITE 5
35	SHEETPILE - ISOMETRIC VIEW- SUPERIOR CANAL	73	SOIL PROFILES - SITE 4
36	SHEETPILE - ELEVATION VIEW - SUPERIOR CANAL	74	SOIL PROFILES - SUPERIOR CANAL
37	EXCAVATION & SCOUR PAD - SUPERIOR CANAL	75	SOIL PROFILES - WEST ROCK DIKE - M.O.B.P.
38	SHEETPILE - SECTION VIEW - SUPERIOR CANAL	76	SOIL PROFILES - EAST ROCK DIKE - M.O.B.P.



REVISIONS		
DATE	APPROVED	TITLE

COVER SHEET
TE-34 - PENCHANT BASIN
TERREBONNE PARISH, LA.



File Name
LA274
Drawing Name
LA27401.DGN
Sheet 1 of 76

Date	Designed	Drawn	Checked	Approved
04/06	S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E. J. GIERING, III

N315000



E3380000

LANDOWNER
LOUISIANA LAND AND EXPLORATION CO.

E3385000

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

E3390000

NOTE:
AERIAL PHOTO DATE - 2005

LEGEND

- ACCESS DREDGE CHANNEL
- EARTHEN EMBANKMENT/REVTMENT
- PIPELINE
- SOIL BORING

N310000

0+00-POB REACH1

DECADE BORROW 1

WORK LIMITS

DECADE SHORE 1

PROPOSED EARTHEN EMBANKMENT
& REVTMENT - REACH 1

DECADE BORROW 2

58+65-POE REACH1

DECADE 5 CL E
DECADE 5 CL W

PROPOSED STRUCTURE
SITE #5

PROPOSED EARTHEN EMBANKMENT
& REVTMENT - REACH 2

20+00 25+00

PROPOSED STRUCTURE
SITE #4

47+09-POE REACH2

DECADE 4 CL E
DECADE 4 CL W
DECADE SHORE 2

DECADE BORROW 4
NO WORK WITHIN 50' OF PIPELINES
16" SHELL PIPELINE

45+00 50+00

DECADE BORROW 5

DECADE SHORE 3

15+00 20+00

DECADE SHORE 4

PROPOSED EARTHEN EMBANKMENT
& REVTMENT - REACH 3

39+11-POE REACH3

DECADE BORROW 6

BAYOU DE CADE

BENCHMARK -
N322262.24 E3386557.63 NAD83FT
ELEV. = 3.80 NAVD88FT
BENCHMARK NOT FOUND ON THIS DRAWING.

NOTE:
KNOWN PIPELINES AND UTILITIES ARE SHOWN ON THE PLANS.
IT IS POSSIBLE THAT PIPELINES AND UTILITIES MAY EXIST
THAT HAVE NOT BEEN SHOWN. THE CONTRACTOR SHALL BE ON
THE ALERT FOR SUCH PIPELINES AND UTILITIES, AND SHALL
REPORT THEM IMMEDIATELY TO THE CONTRACTING OFFICER.

NOTE:
THE NATURAL RESOURCES CONSERVATION SERVICE DOES NOT GUARANTEE THE
COMPLETENESS AND ACCURACY OF OWNERSHIP SHOWN. APPARENT OWNERSHIP HAS
BEEN OBTAINED FROM MAPS IN THE OFFICE OF THE PARISH CLERK OF COURT
OR THE TAX ASSESSOR. WHERE AN APPARENT PROPERTY LINE IS SHOWN NEAR
THE CENTERLINE OF A CHANNEL, ITS LOCATION IS NOT DEFINITE.

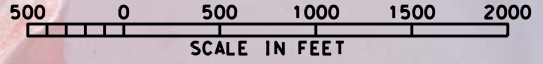
NOTE:
SEE SHEETS 70 & 71 FOR SOIL LOGS

LAKE PAIGE

"AS-BUILT"

LOST LAKE

PLAN MAP - BAYOU DE CADE



N305000



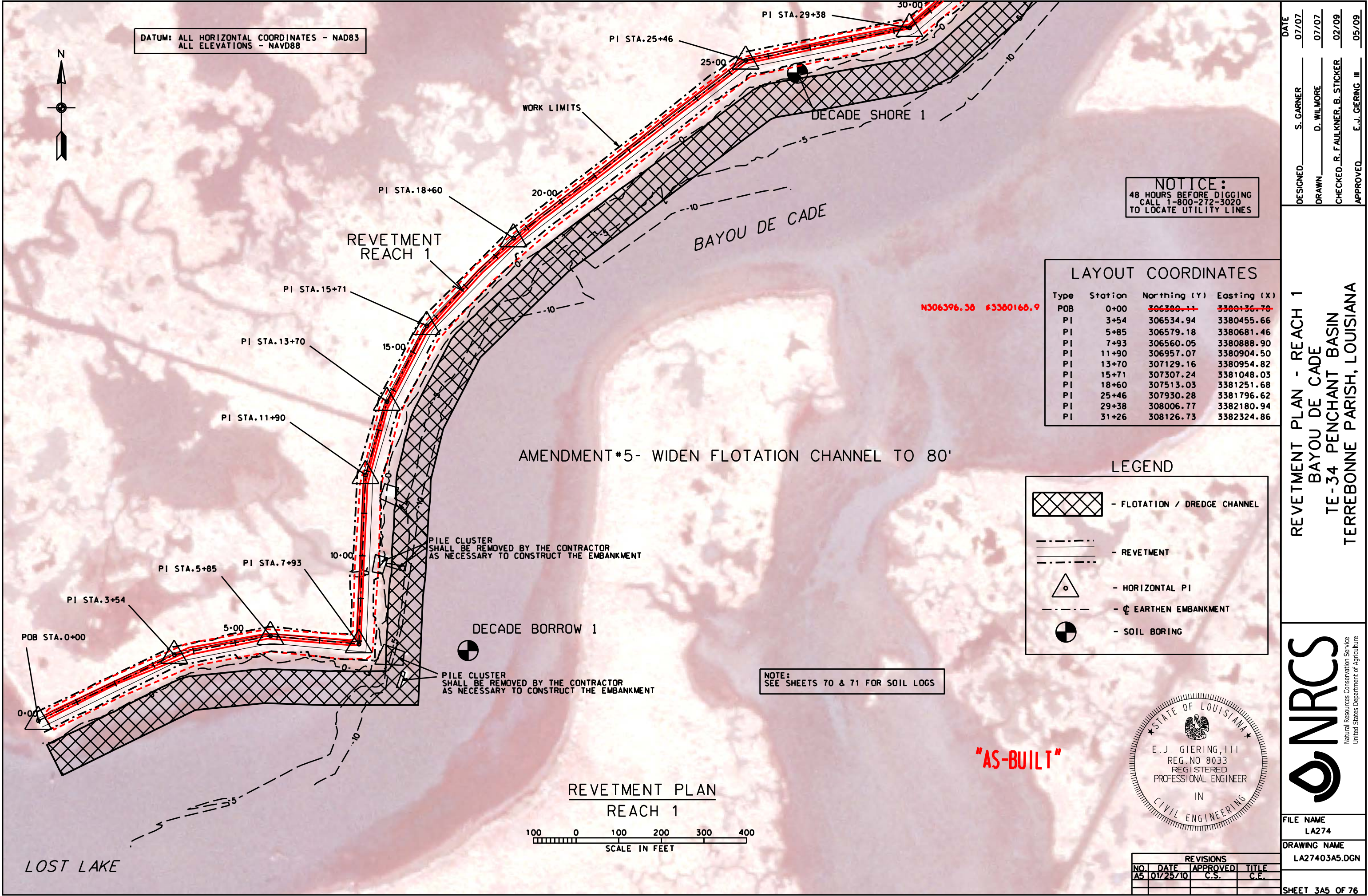
REVISIONS		
NO.	DATE	TITLE

PLAN MAP
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274
DRAWING NAME
LA27402.DGN

DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING, III



DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

LAYOUT COORDINATES

Type	Station	Northing (Y)	Easting (X)
POB	0+00	306380.11	3380136.78
PI	3+54	306534.94	3380455.66
PI	5+85	306579.18	3380681.46
PI	7+93	306560.05	3380888.90
PI	11+90	306957.07	3380904.50
PI	13+70	307129.16	3380954.82
PI	15+71	307307.24	3381048.03
PI	18+60	307513.03	3381251.68
PI	25+46	307930.28	3381796.62
PI	29+38	308006.77	3382180.94
PI	31+26	308126.73	3382324.86

LEGEND

- FLOTATION / DREDGE CHANNEL
- REVETMENT
- HORIZONTAL PI
- EARTHEN EMBANKMENT
- SOIL BORING

NOTE:
SEE SHEETS 70 & 71 FOR SOIL LOGS



RECH 1
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274
DRAWING NAME
LA27403A5.DGN

REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.



DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

LAYOUT COORDINATES

Type	Station	Northing (Y)	Easting (X)
PI	29+38	308006.77	3382180.94
PI	31+26	308126.73	3382324.86
PI	38+99	308798.91	3382706.49
PI	40+53	308952.65	3382716.30
PI	41+53	309024.71	3382786.76
PI	46+76	309530.38	3382918.27
PI	52+53	310101.62	3382835.29

DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III

AMENDMENT#5- WIDEN FLOTATION CHANNEL TO 80'

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

LEGEND

	- FLOTATION / DREDGE CHANNEL
	- REVETMENT
	- HORIZONTAL PI
	- EARTHEN EMBANKMENT
	- SOIL BORING

REVETMENT PLAN - REACH 1
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



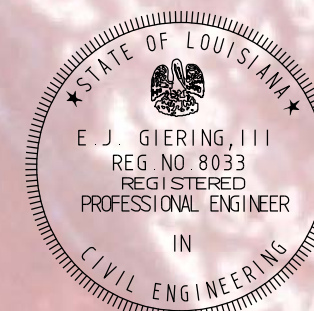
FILE NAME
LA274

DRAWING NAME
LA27404A5.DGN

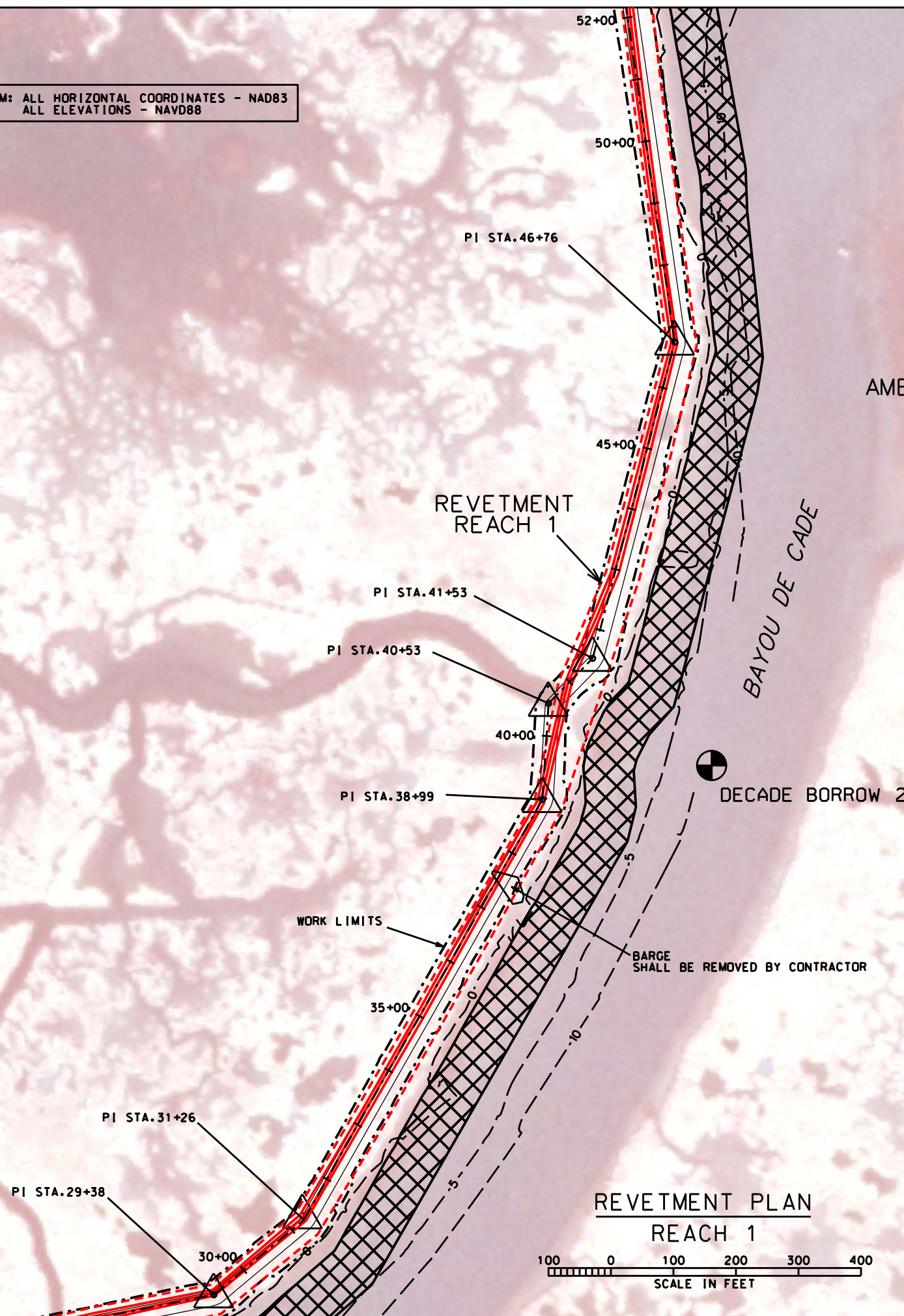
SHEET 4A5 OF 76

"AS-BUILT"

NOTE:
SEE SHEET 70 FOR SOIL LOG



REVETMENT PLAN REACH 1



LAYOUT COORDINATES

Type	Station	Northing (Y)	Easting (X)
PI	46+76	309530.38	3382918.27
PI	52+53	310101.62	3382835.29
PI	55+63	310391.93	3382943.12
PI	56+84	310477.38	3383028.97
PI	57+86	310525.19	3383119.54
POE	58+65	310536.61	3383197.80
POB	0+00	310525.45	3383376.27
PI	3+89	310338.28	3383717.60
PI	7+64	310677.65	3383876.84
PI	9+71	310846.22	3383997.10
PI	12+65	311125.49	3384088.68
PI	12+98	311157.49	3384081.86
PI	14+72	311325.94	3384127.45
PI	16+98	311524.02	3384234.61
PI	18+22	311614.85	3384319.89
PI	20+39	311713.71	3384512.82
PI	21+99	311725.80	3384672.38
PI	23+93	311670.45	3384858.56
PI	25+38	311592.45	3384980.34
PI	26+86	311489.11	3385086.31
PI	33+36	310951.61	3385451.52

DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

N310537.2 #3383194.15
N310525.61 #3383387.0

LEGEND

- FLOTATION / DREDGE CHANNEL
- REVETMENT
- HORIZONTAL PI
- EARTHEN EMBANKMENT
- SOIL BORING

NOTE:
SEE SHEET 70 FOR SOIL LOG

NOTE:
FACE OF ROCK REVETMENT SHALL TIE INTO
THE EXISTING ROCK LOCATED OVER THE SHELL PIPELINE
AS CONCURRED IN BY THE COTR.

NOTE:
NO EXCAVATION ALLOWED WITHIN 50'
OF SHELL PIPELINES

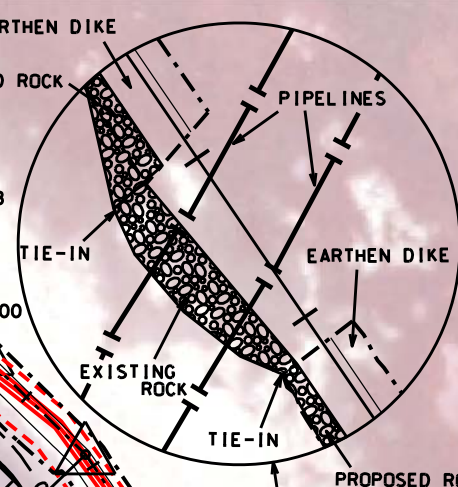
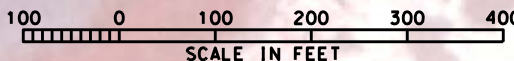
NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"

DECADE BORROW 3

AMENDMENT#5- WIDEN FLOTATION CHANNEL TO 80'

REKETMENT PLAN
REACH 1 & 2



REKETMENT PLAN - REACH 1 & 2
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III

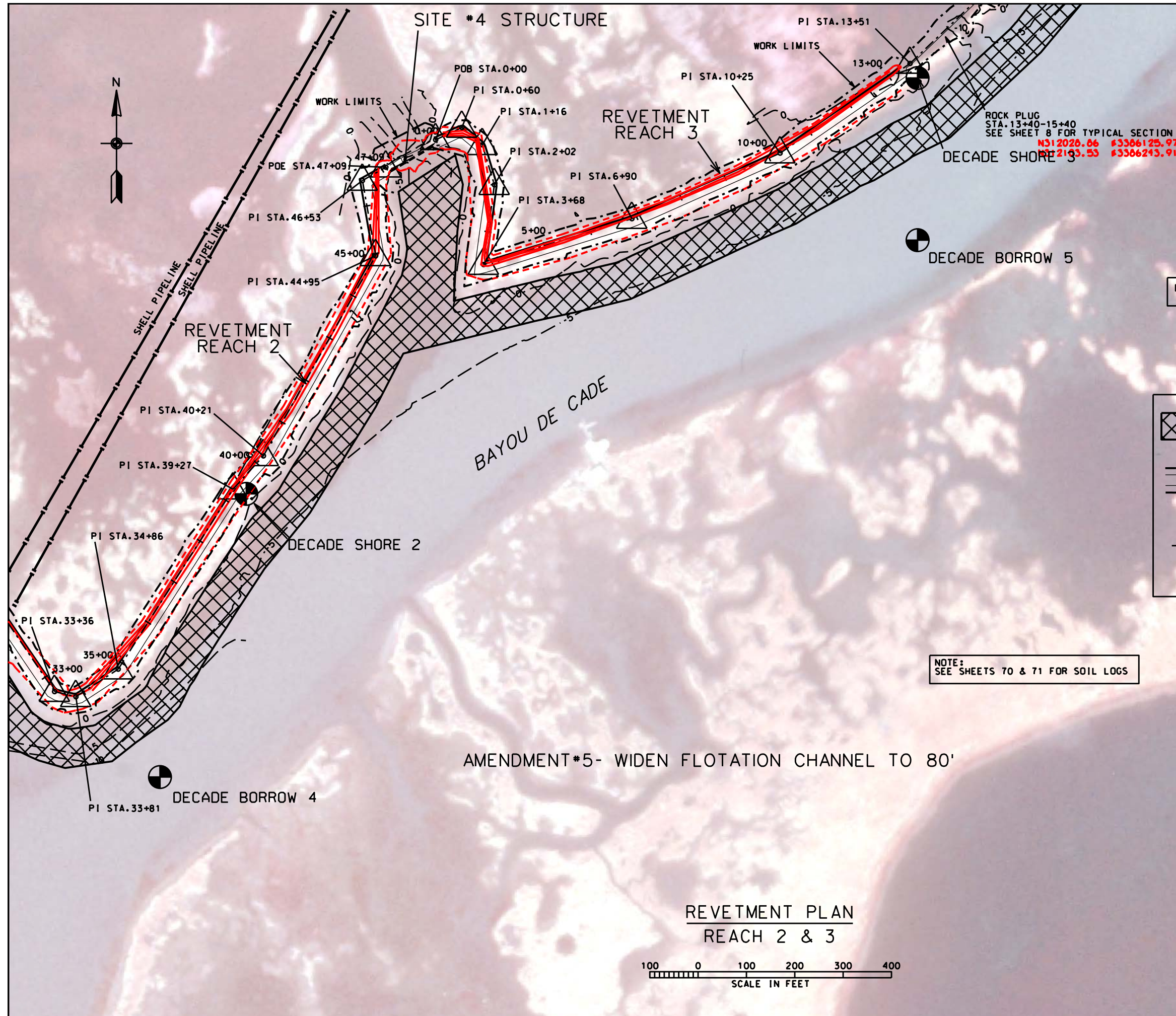


FILE NAME
LA274

DRAWING NAME
LA27405A5.DGN

SHEET 5A5 OF 76

REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.



LAYOUT COORDINATES			
Type	Station	Northing (Y)	Easting (X)
PI	26+86	311489.11	3385086.31
PI	33+36	310951.61	3385451.52
PI	33+81	310941.05	3385495.67
PI	34+86	310998.19	3385583.16
PI	39+27	311370.55	3385820.66
PI	40+21	311439.48	3385883.56
PI	44+95	311853.36	3386115.72
PI	46+53	312009.34	3386088.36
POE	47+09	312036.79	3386136.84
POB	0+00	312093.52	3386239.77
PI	0+60	312119.06	3386294.06
PI	1+16	312083.14	3386336.47
PI	2+02	312000.49	3386361.29
PI	3+68	311835.35	3386338.98
PI	6+90	311930.40	3386645.85
PI	10+25	312066.03	3386952.32
PI	13+51	312251.49	3387221.14

DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

LEGEND

- FLOTATION / DREDGE CHANNEL

- REVETMENT

- HORIZONTAL PI

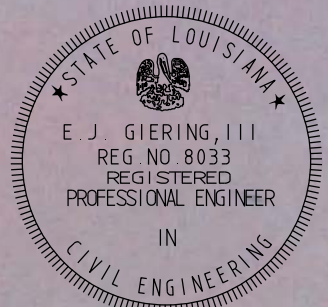
- EARTHEN EMBANKMENT

- SOIL BORING

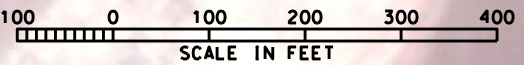
NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

NOTE:
SEE SHEETS 70 & 71 FOR SOIL LOGS

"AS-BUILT"



REVETMENT PLAN
REACH 2 & 3



DATE
07/07
07/07
02/09
05/09

DESIGNED
S. GARNER

DRAWN
D. WILMORE

CHECKED
R. FAULKNER, B. STICKER

APPROVED
E.J. GIERING III

REVETMENT PLAN - REACH 2 & 3
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

Natural Resources Conservation Service
United States Department of Agriculture

FILE NAME
LA274

DRAWING NAME
LA27406A5.DGN

SHEET 6A5 OF 76

NO. DATE APPROVED TITLE
A5 01/25/10 C.S. C.E.



LAYOUT COORDINATES			
Type	Station	Northing (Y)	Easting (X)
PI	10+25	312066.03	3386952.32
PI	13+51	312251.49	3387221.14
PI	18+51	312596.27	3387582.92
PI	20+45	312759.15	3387688.73
PI	27+94	313289.96	3388216.08
PI	31+59	313466.72	3388535.31
PI	36+35	313632.42	3388982.16
PI	36+66	313659.59	3388996.04
POE	39+11	313812.69	3388804.32

DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

LEGEND

- FLOTATION / DREDGE CHANNEL

- REVETMENT

- HORIZONTAL PI

- EARTHEN EMBANKMENT

- SOIL BORING

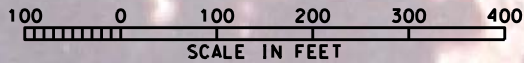
NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

NOTE:
SEE SHEETS 70 & 71 FOR SOIL LOGS

"AS-BUILT"

AMENDMENT#5- WIDEN FLOTATION CHANNEL TO 80'

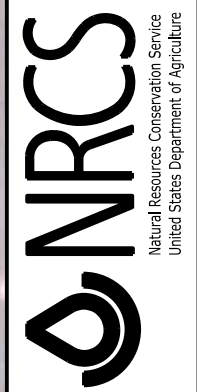
REKETMENT PLAN
REACH 3



REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.

DESIGNED	DRAWN	CHECKED	APPROVED
S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E.J. GIERING III
DATE			
07/07	07/07	02/09	05/09

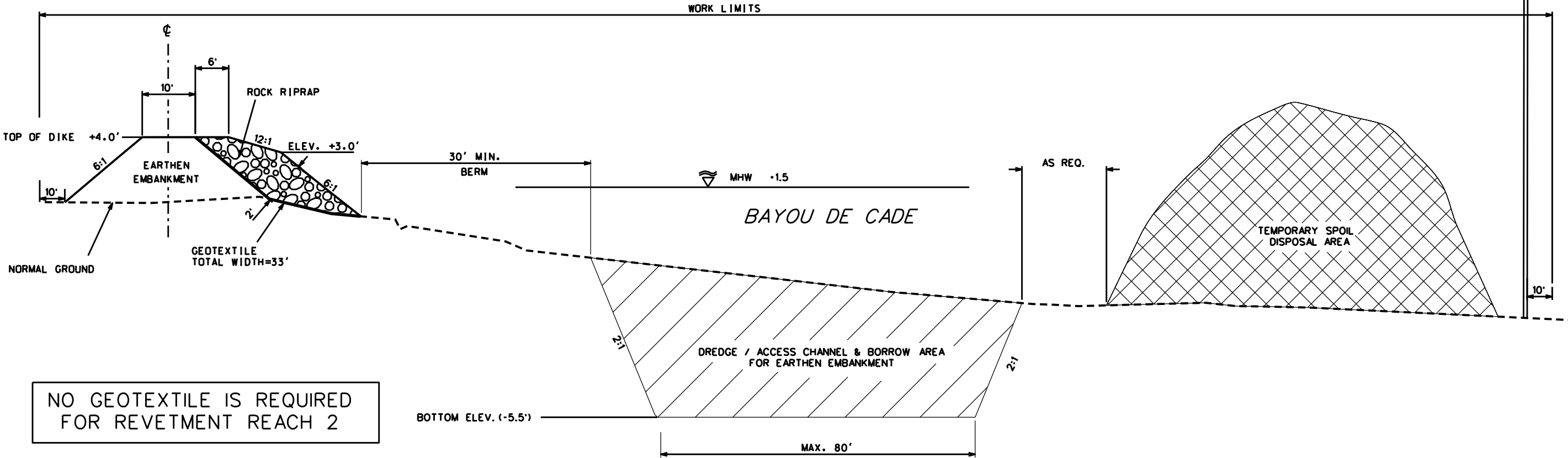
REKETMENT PLAN - REACH 3
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274

DRAWING NAME
LA27407A5.DGN

- NOTES:
- 1. EXCAVATION IS REQUIRED TO CONSTRUCT THE EARTHEN EMBANKMENT TO THE LINES AND GRADES SHOWN.
 - 2. EXCAVATION FOR FLOTATION IN EXCESS OF THE MATERIAL REQUIRED FOR CONSTRUCTING THE EARTHEN FILL EMBANKMENT IS OPTIONAL TO THE CONTRACTOR.
 - 3. SURPLUS MATERIAL MAY BE PLACED ON THE BAYOU SIDE OF THE FLOTATION CHANNEL. SUCH MATERIAL SHALL BE PLACED BACK INTO THE ACCESS CHANNEL AT THE END OF CONSTRUCTION.
 - 4. ADDITIONAL MATERIAL SHALL BE TAKEN FROM A DEEPER CUT WITHIN BAYOU DE CADE AT SECTIONS WHERE ACCESS CHANNEL EXCAVATION QUANTITIES ARE NOT SUFFICIENT FOR CONSTRUCTING THE REQUIRED EARTHFILL FOR THE EARTHEN EMBANKMENT.
 - 5. TEMPORARY WARNING SIGNS SHALL BE PLACED AS SHOWN AT A MAXIMUM DISTANCE OF 500' C-C.

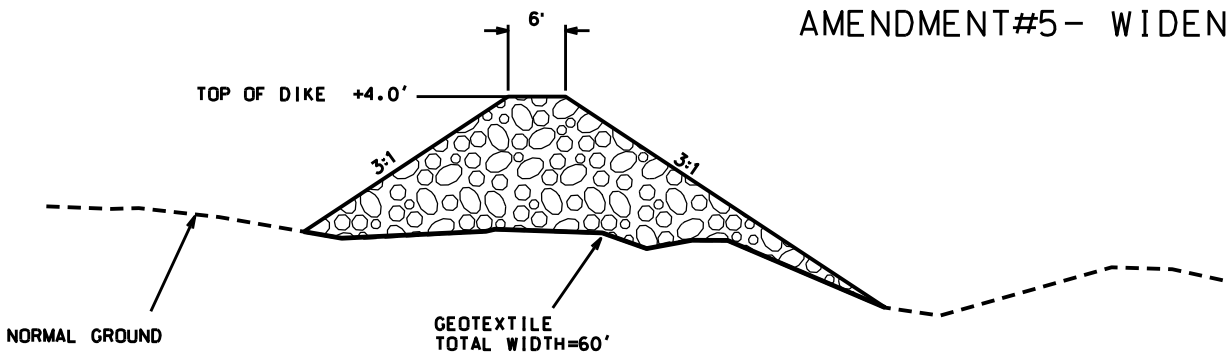


NO GEOTEXTILE IS REQUIRED FOR REVETMENT REACH 2

TYPICAL SECTION - REVETMENT
BAYOU DE CADE SHORELINE

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

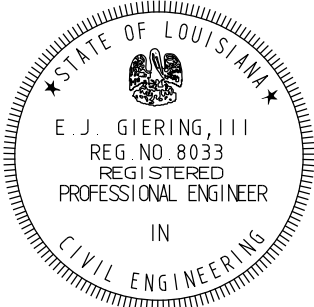
AMENDMENT#5- WIDEN FLOTATION CHANNEL TO 80'



ROCK PLUG - STA. 13+40 TO STA. 15+40
BAYOU DE CADE -REACH 3

NOT TO SCALE

"AS-BUILT"



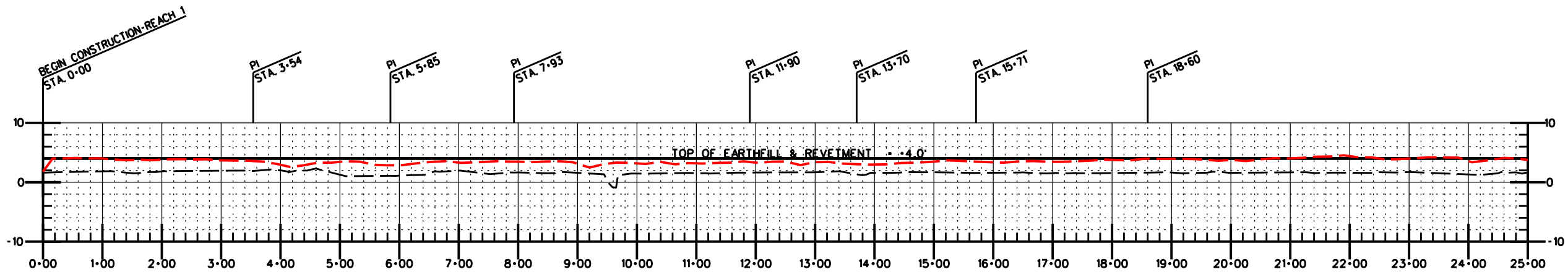
REVISIONS			
NO.	DATE	APPROVED	TITLE
AS	01/25/10	C.S.	C.E.

TYPICAL SECTION - REVETMENT
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

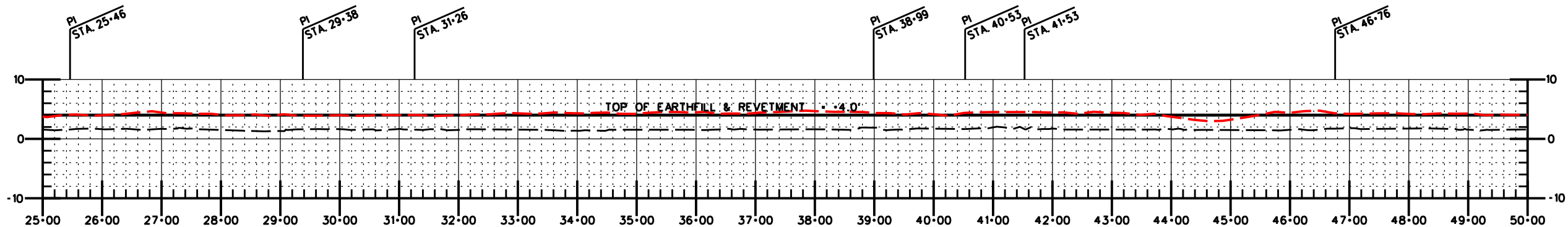


FILE NAME
LA274
DRAWING NAME
LA27408A5.DGN

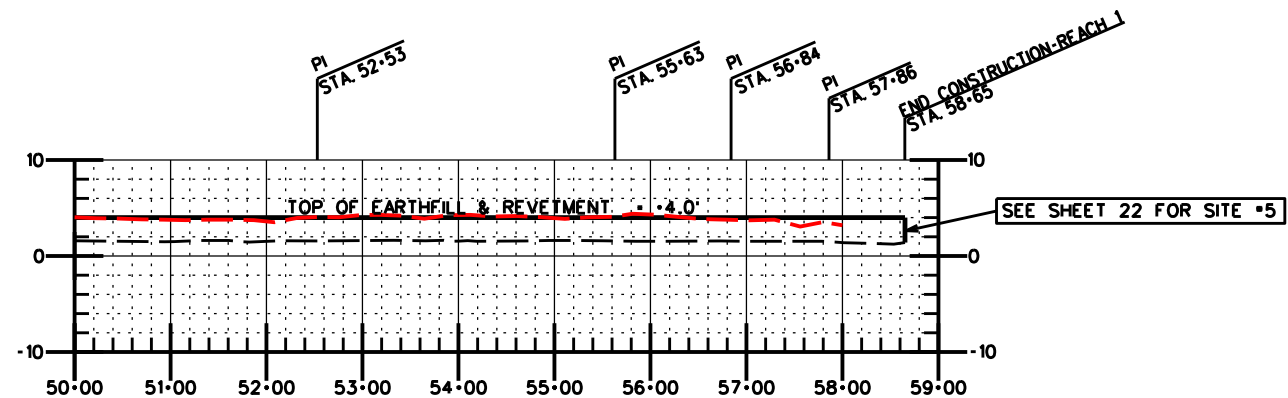
DATE	DESIGNED	DRAWN	CHECKED	APPROVED
07/07	S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E.J. GIERING III
07/07				
02/09				
05/09				



⌀ EARTHEN EMBANKMENT PROFILE - REACH 1
STA. 0+00 - STA. 25+00



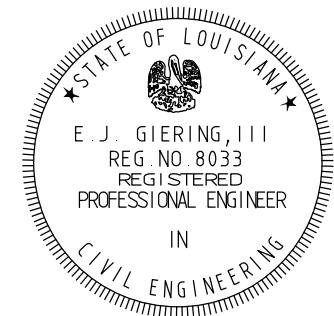
⌀ EARTHEN EMBANKMENT PROFILE - REACH 1
STA. 25+00 - STA. 50+00



⌀ EARTHEN EMBANKMENT PROFILE - REACH 1
STA. 50+00 - STA. 58+65

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



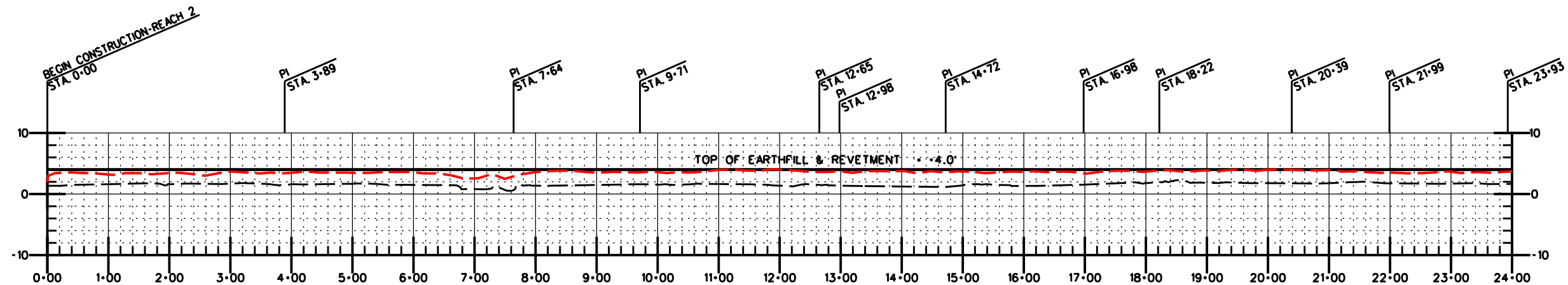
REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09

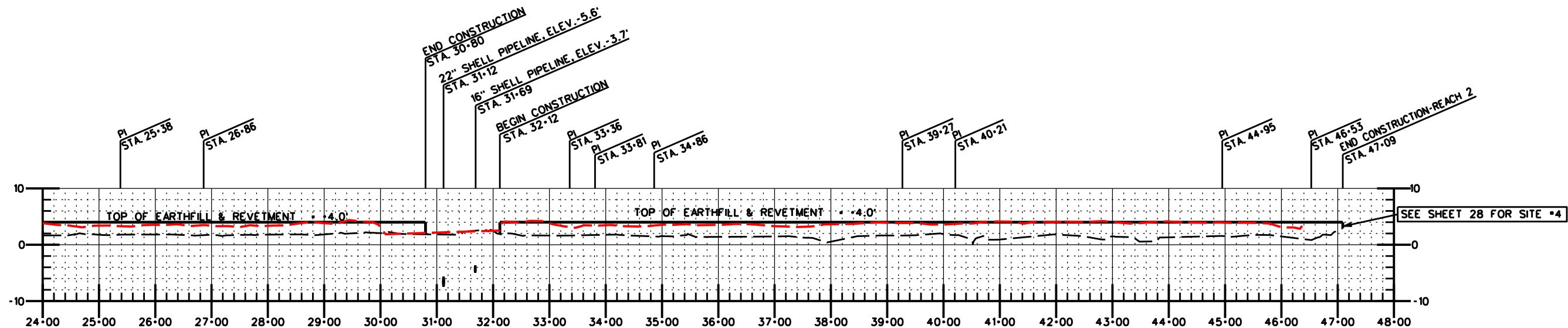
REVETMENT PROFILE - REACH 1
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27409.DGN
SHEET 9 OF 76	



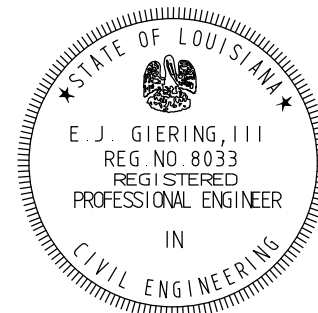
⌀ EARTHEN EMBANKMENT PROFILE - REACH 2
STA. 0+00 - STA. 24+00



⌀ EARTHEN EMBANKMENT PROFILE - REACH 2
STA. 24+00 - STA. 47+09

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



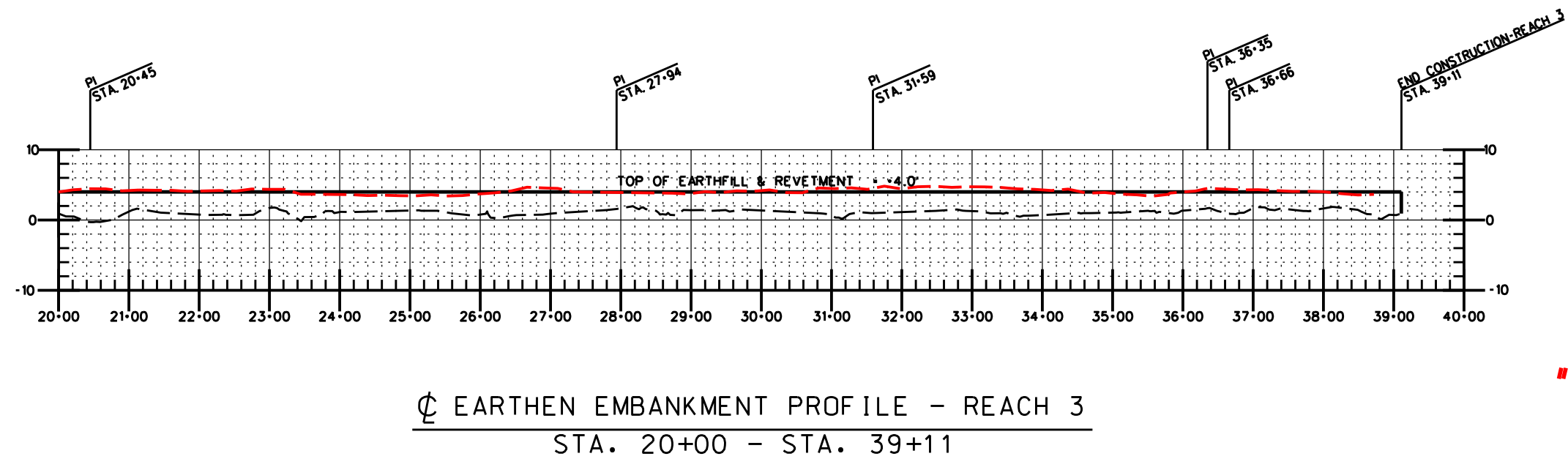
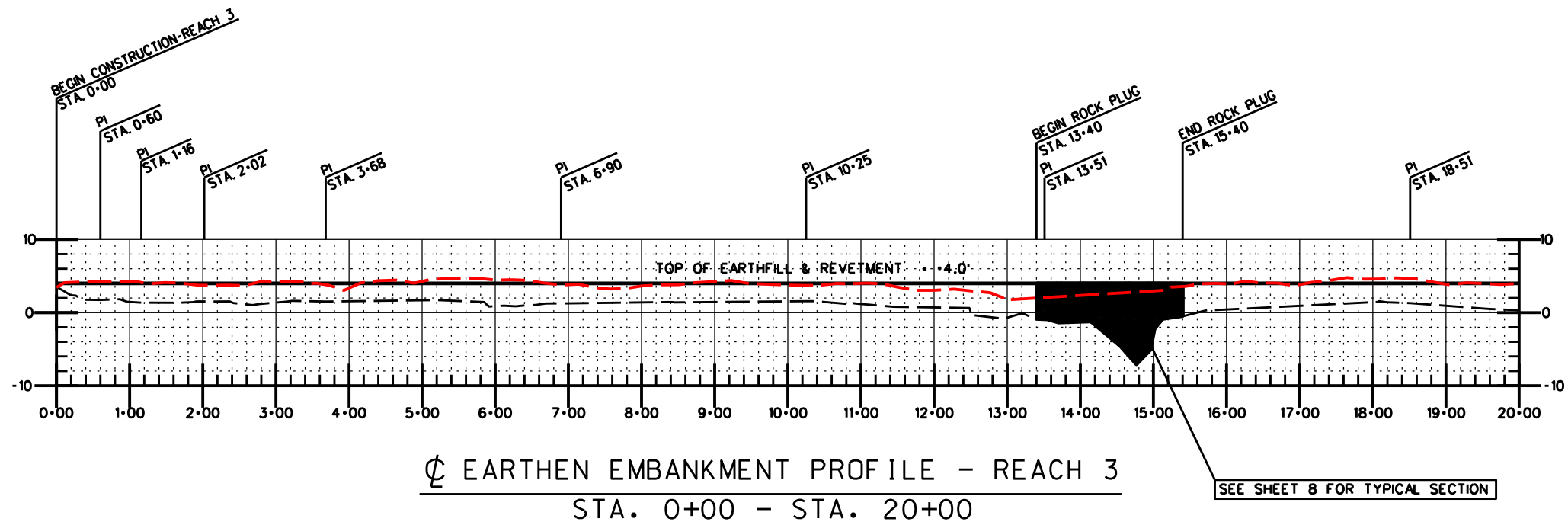
REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E. J. GIERING III		05/09

REVETMENT PROFILE - REACH 2
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

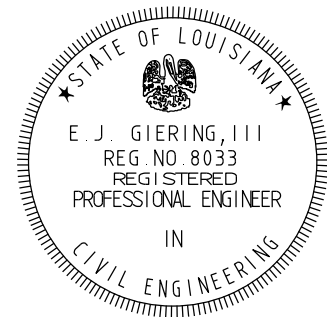


FILE NAME	LA274
DRAWING NAME	LA27410.DGN
SHEET	10 OF 76



NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

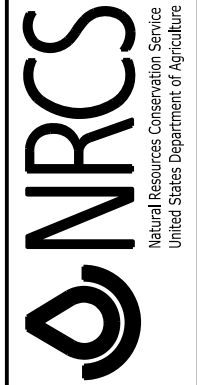
"AS-BUILT"



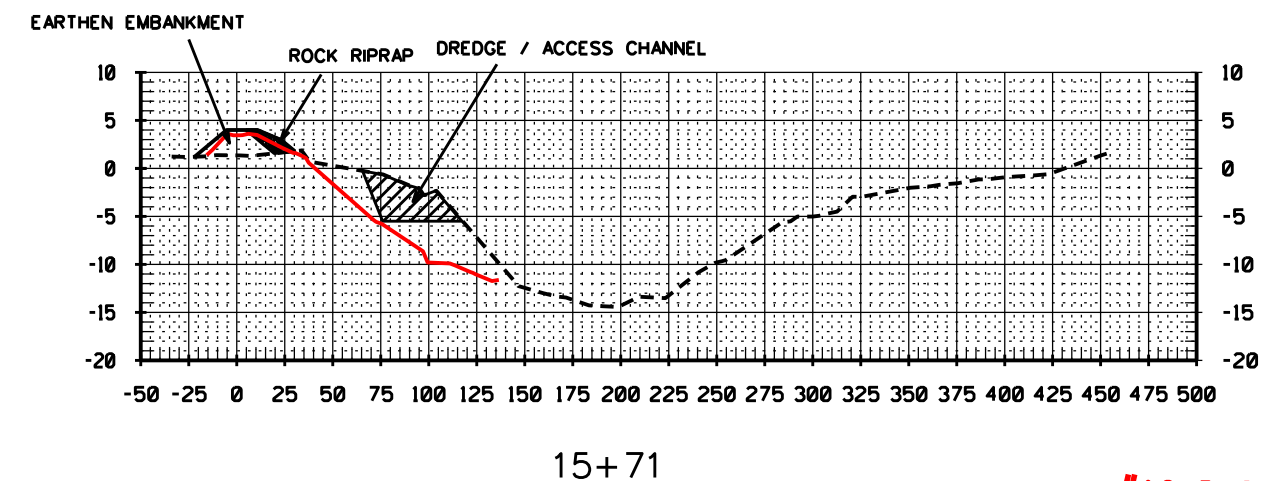
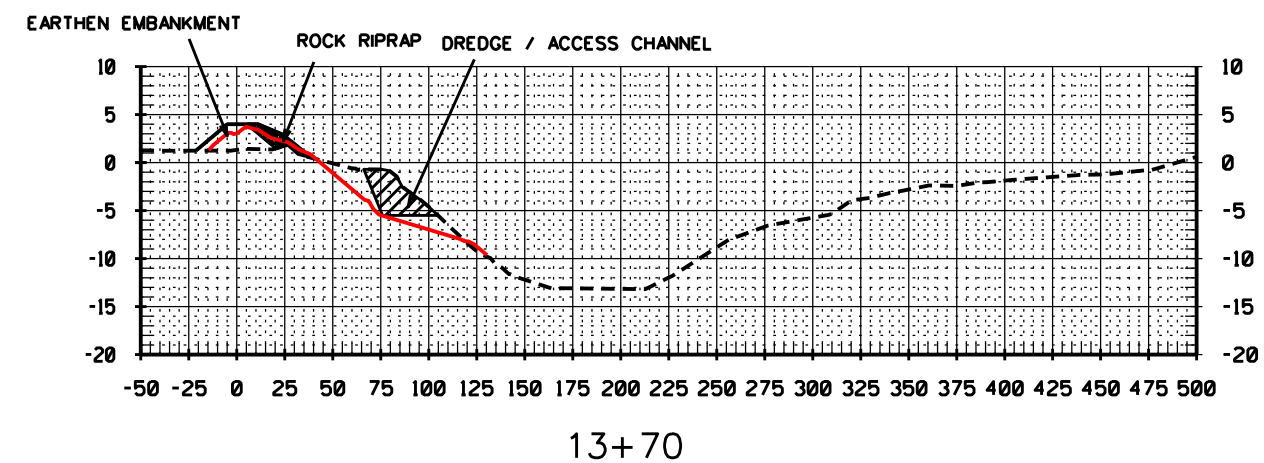
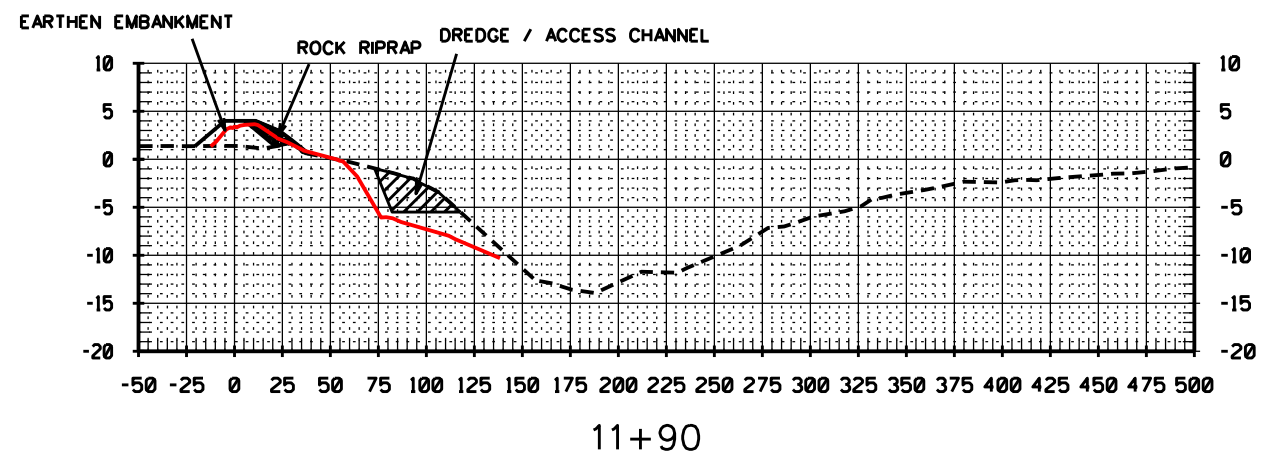
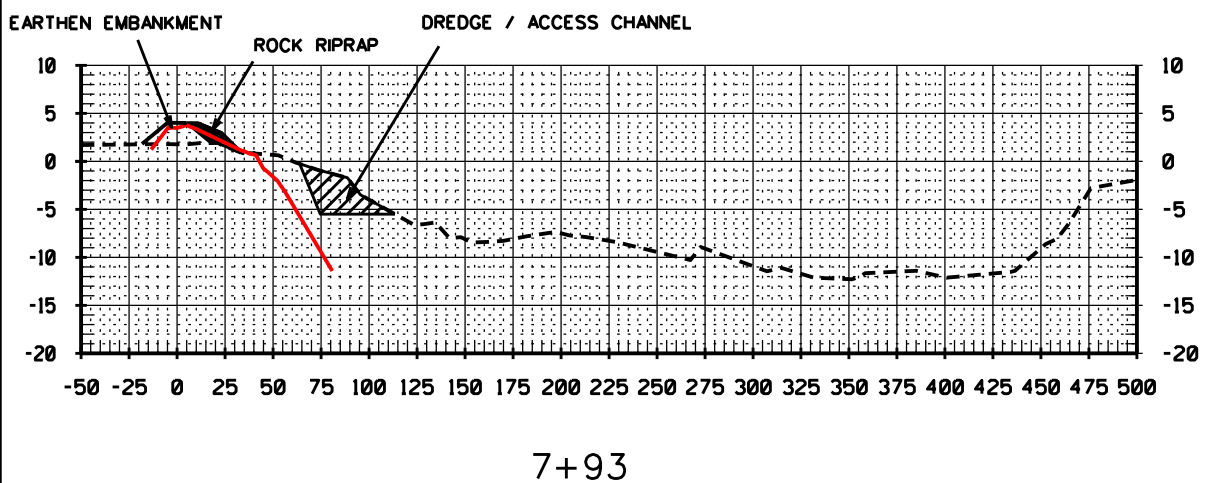
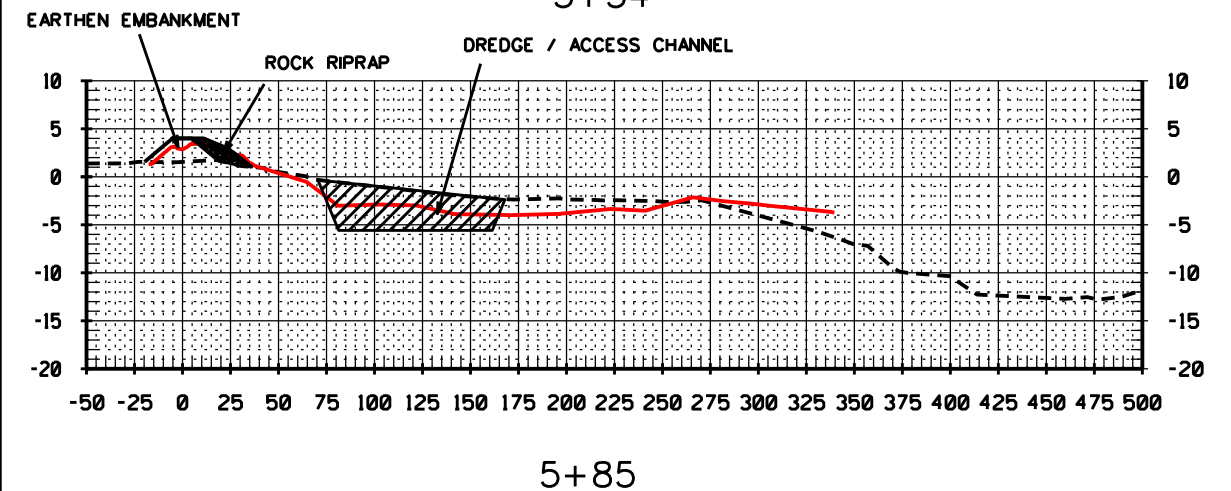
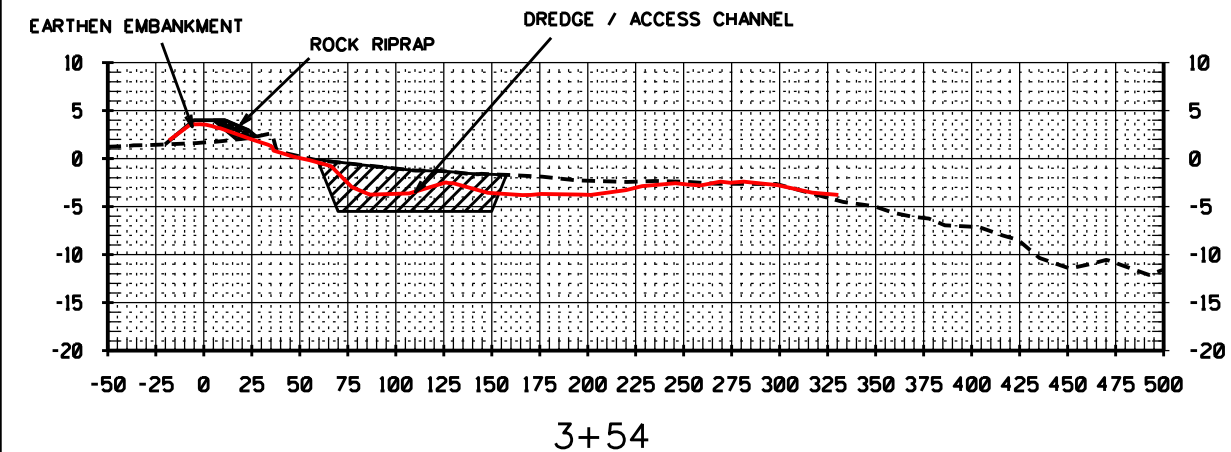
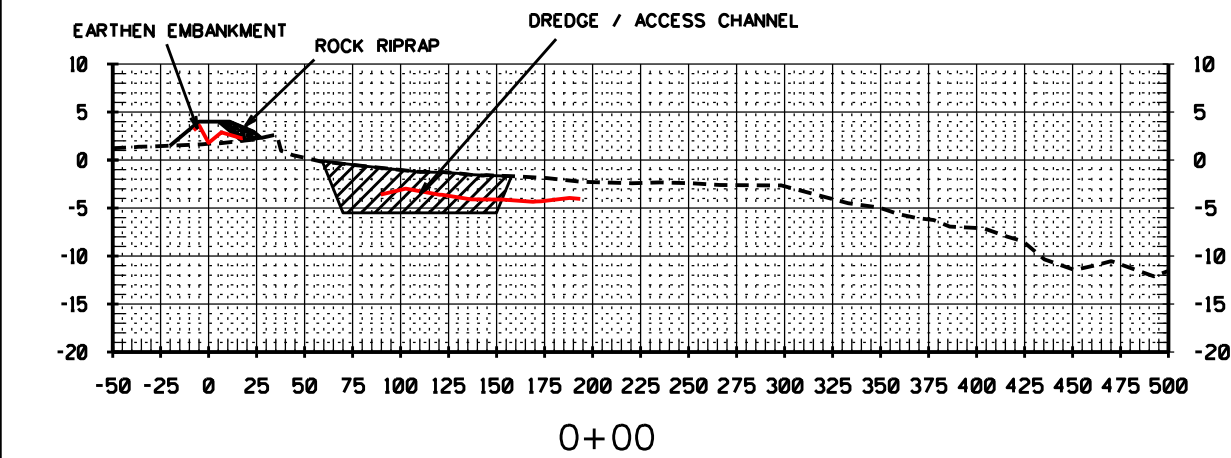
REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09

REVETMENT PROFILE - REACH 3
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27411.DGN
SHEET	11 OF 76

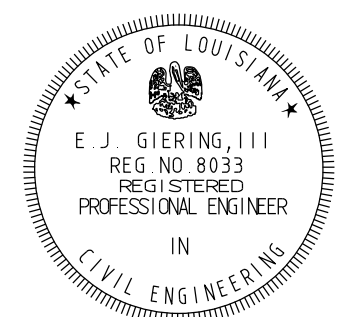


AMENDMENT #5- WIDEN FLOTATION CHANNEL TO 80'

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.

SECTIONS - REACH 1
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

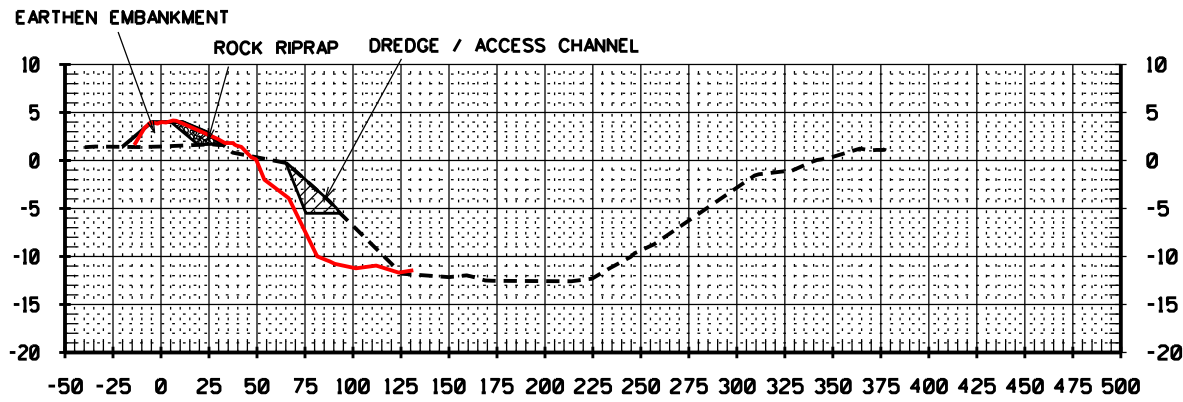


FILE NAME
LA274

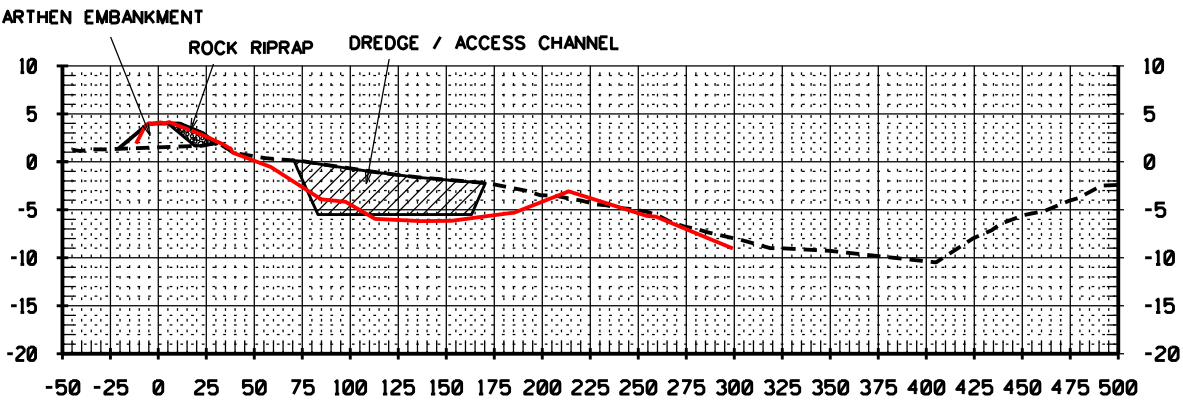
DRAWING NAME
LA27412A5.DGN

SHEET 12A5 OF 76

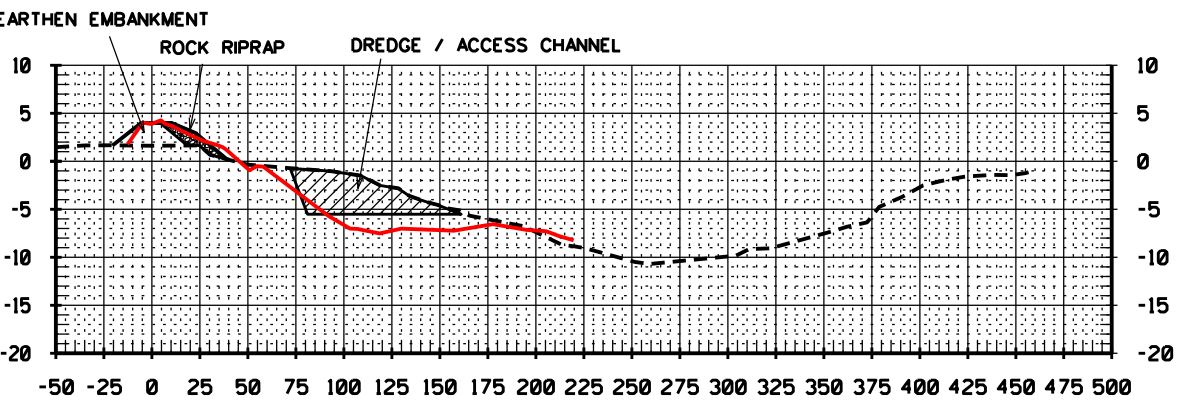
DESIGNED	S. GARNER	DATE	02/08
DRAWN	D. WILMORE	DATE	02/08
CHECKED	R. FAULKNER, B. STICKER	DATE	02/09
APPROVED	E.J. GIERING III	DATE	05/09



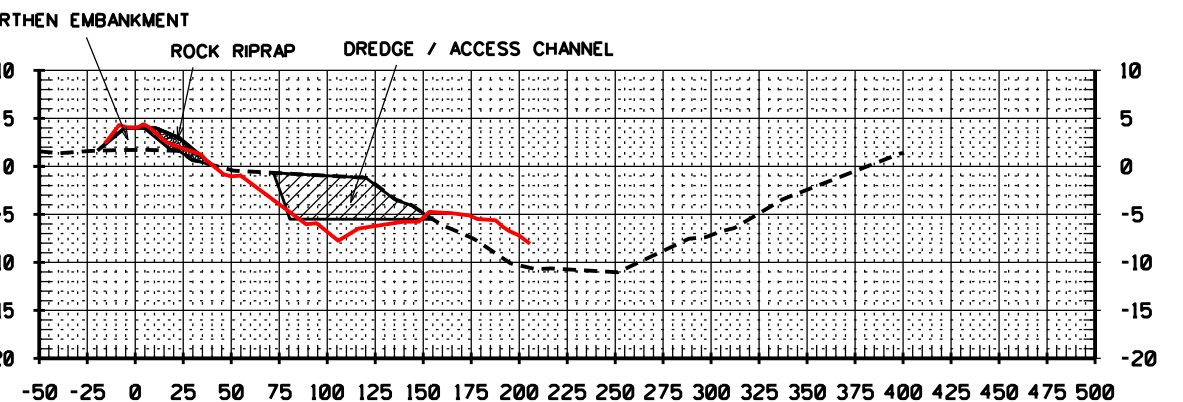
18+60



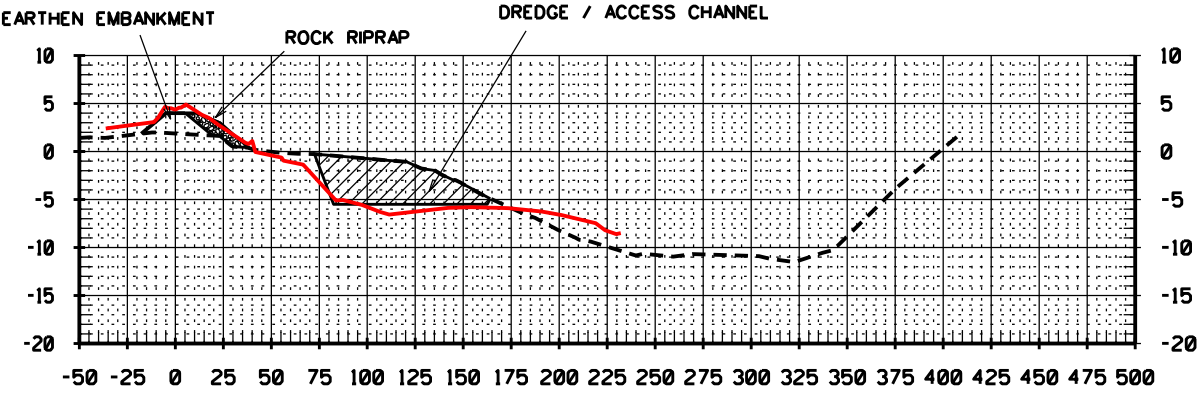
25+46



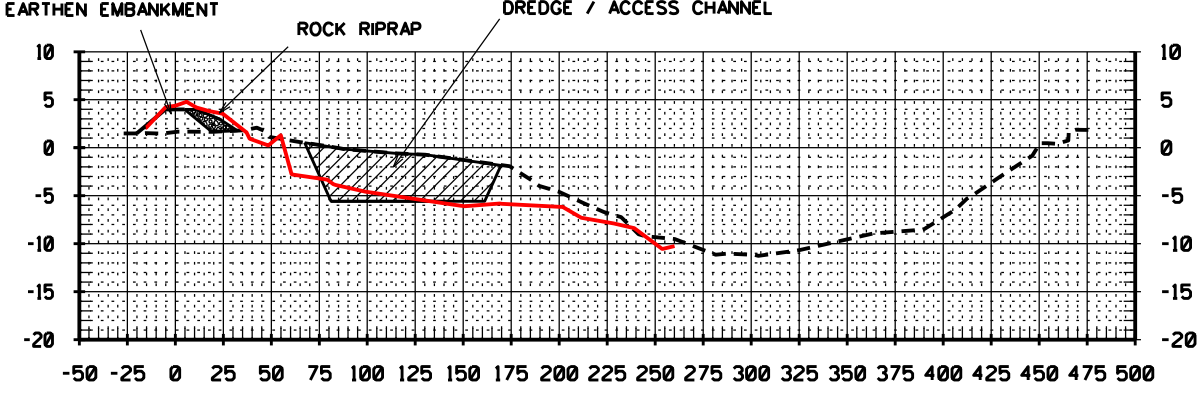
29+38



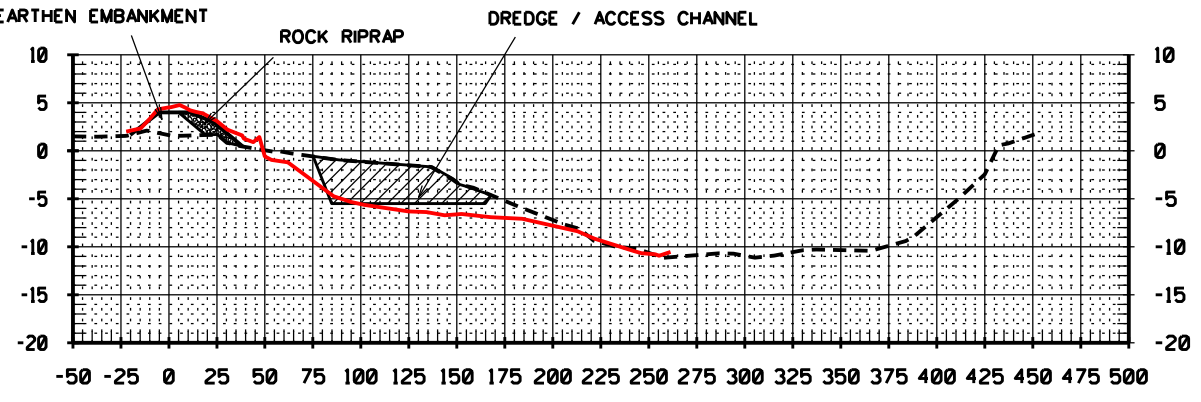
31+26



38+99



40+53



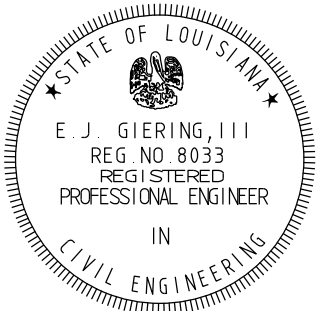
41+53

AMENDMENT #5- WIDEN FLOTATION CHANNEL TO 80'

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.

SECTIONS - REACH 1
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

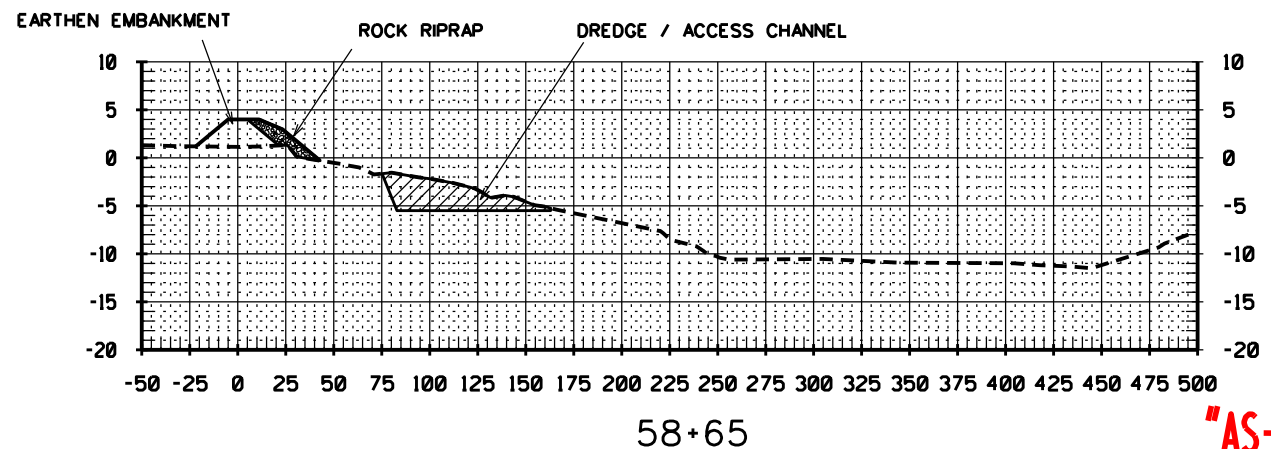
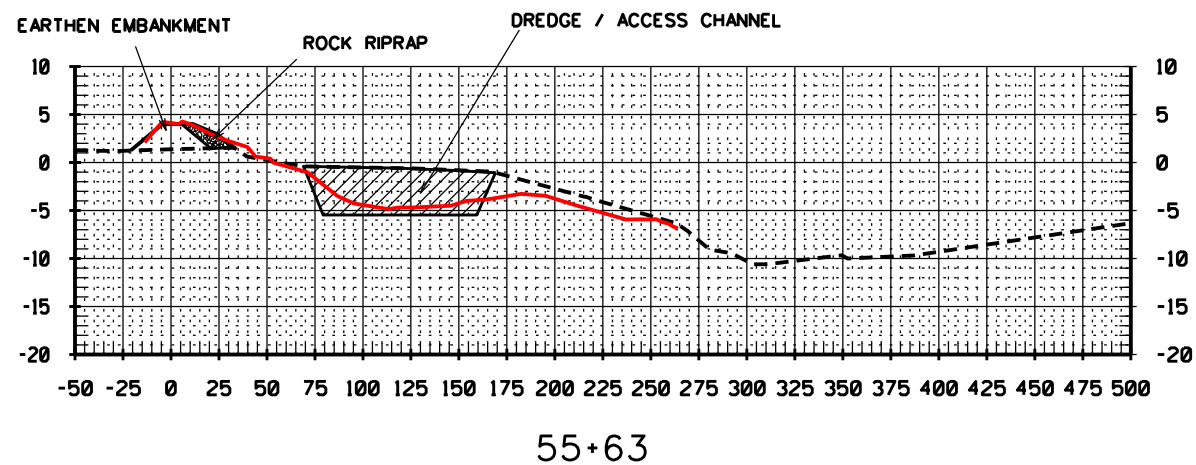
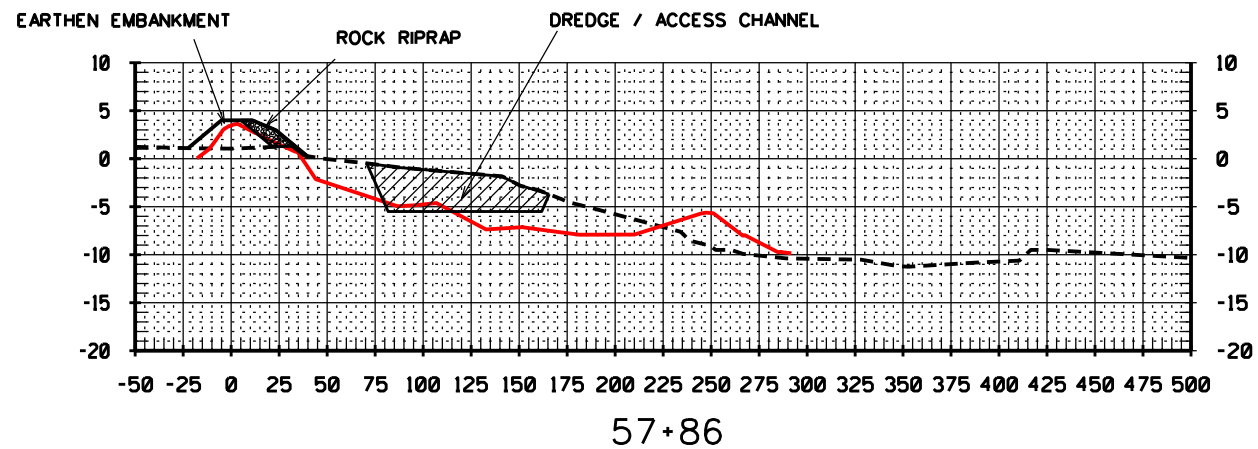
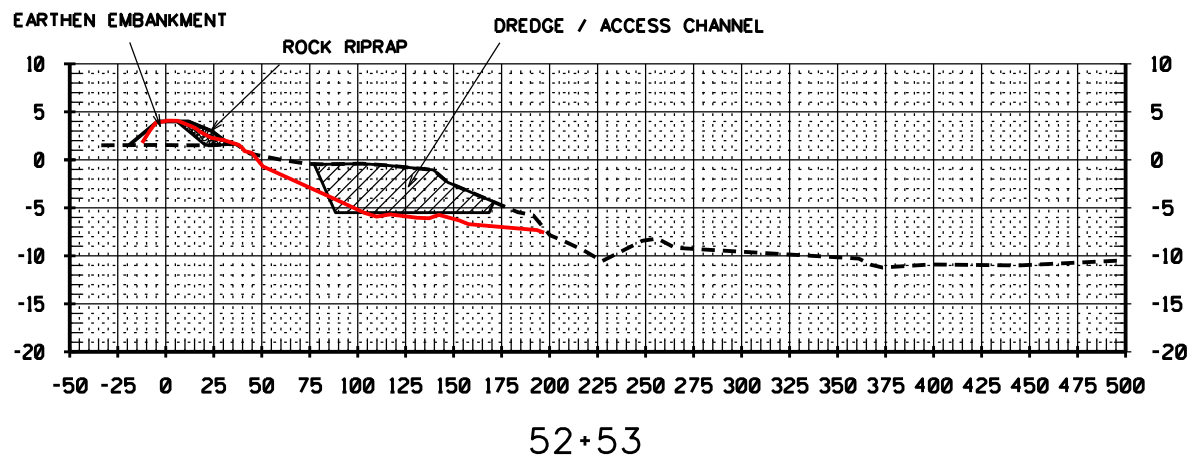
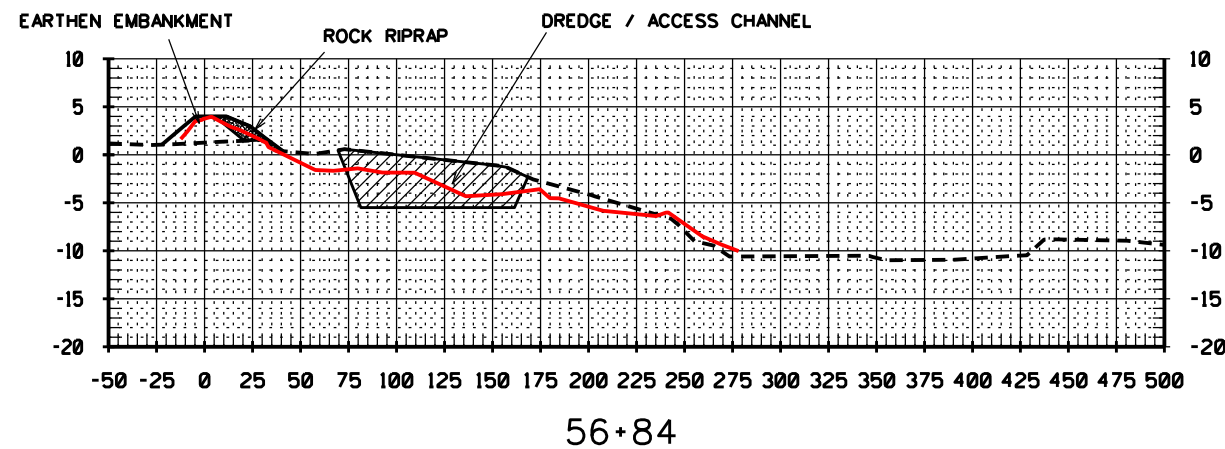
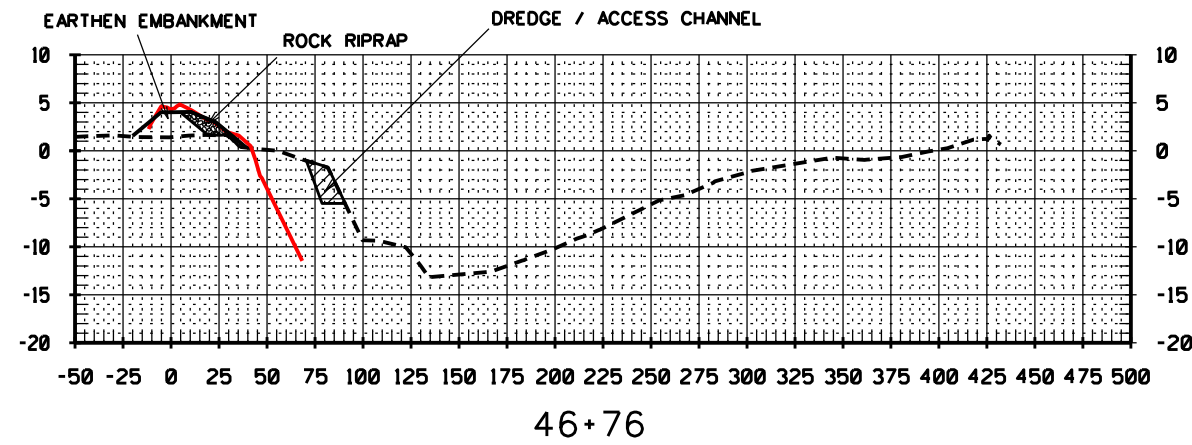


FILE NAME
LA274

DRAWING NAME
LA27413A5.DGN

SHEET 13A5 OF 76

DATE	02/08
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING, III

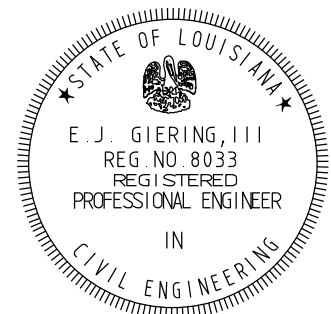


AMENDMENT#5- WIDEN FLOTATION CHANNEL TO 80'

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.

SECTIONS - REACH 1
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

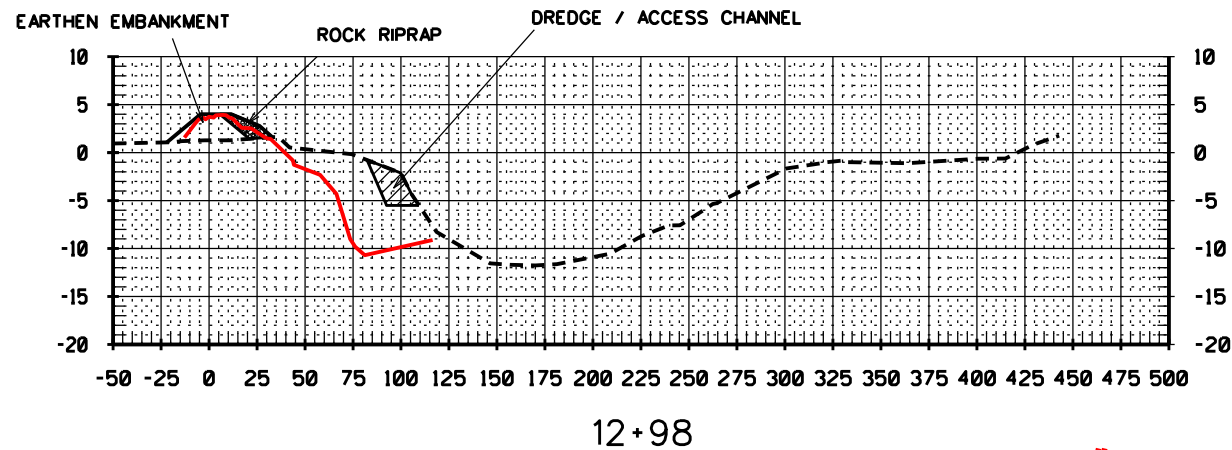
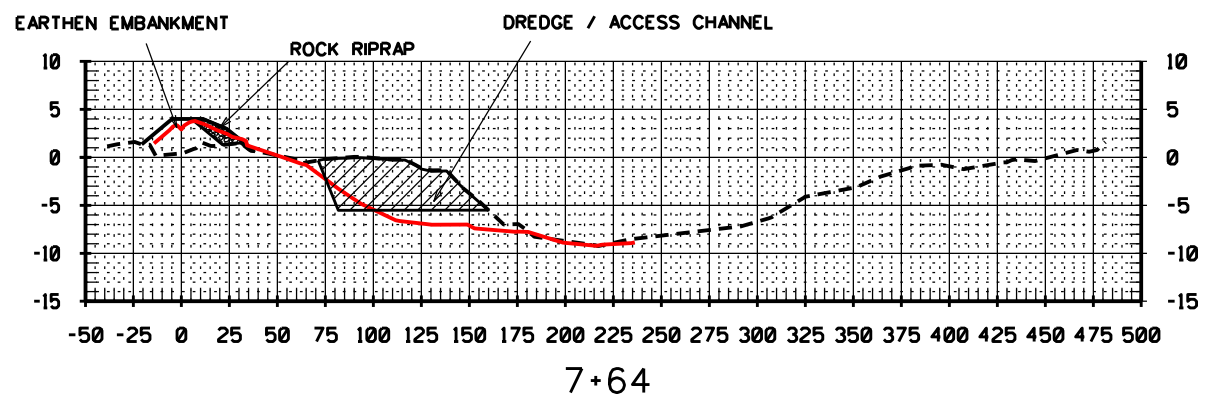
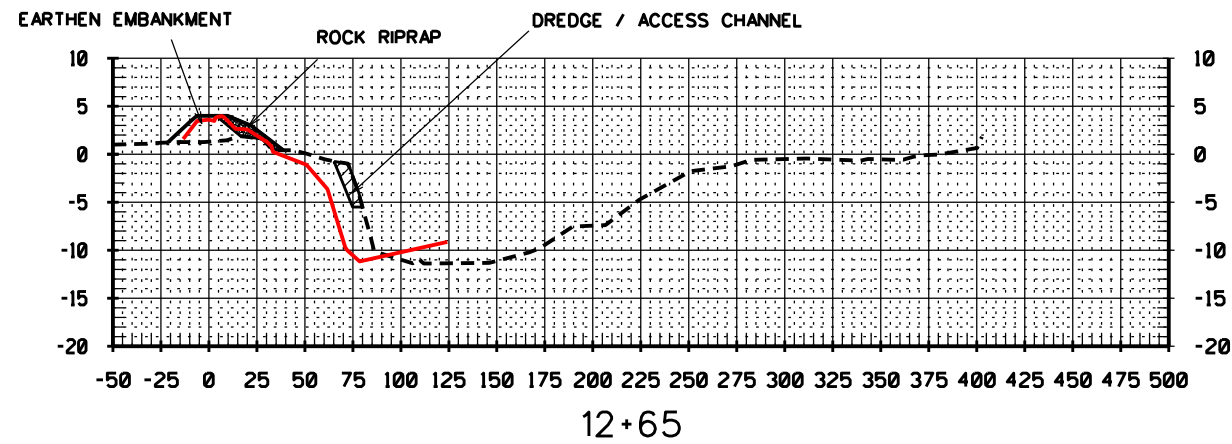
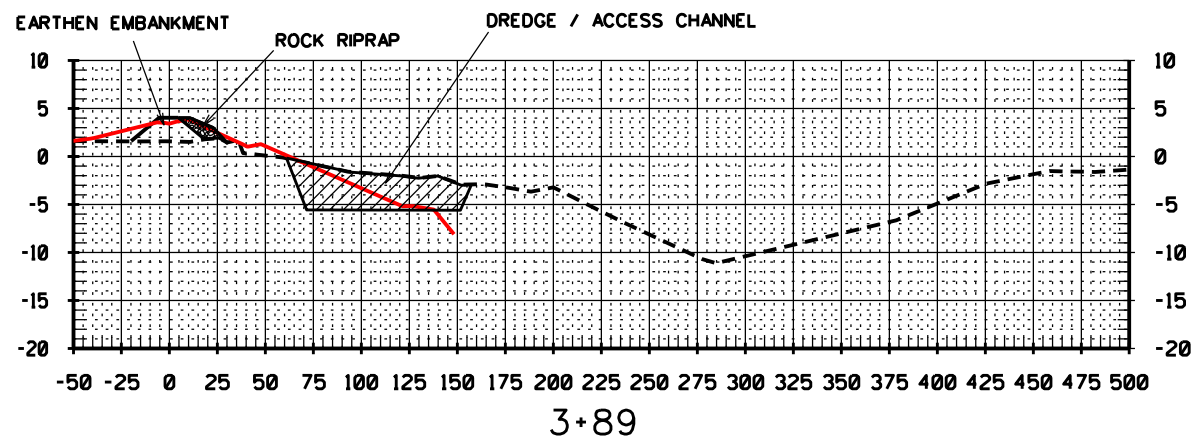
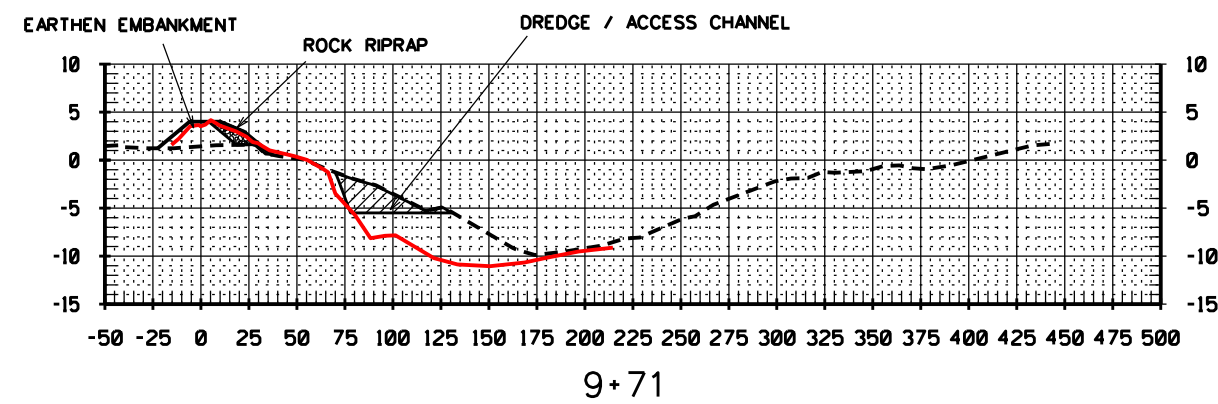
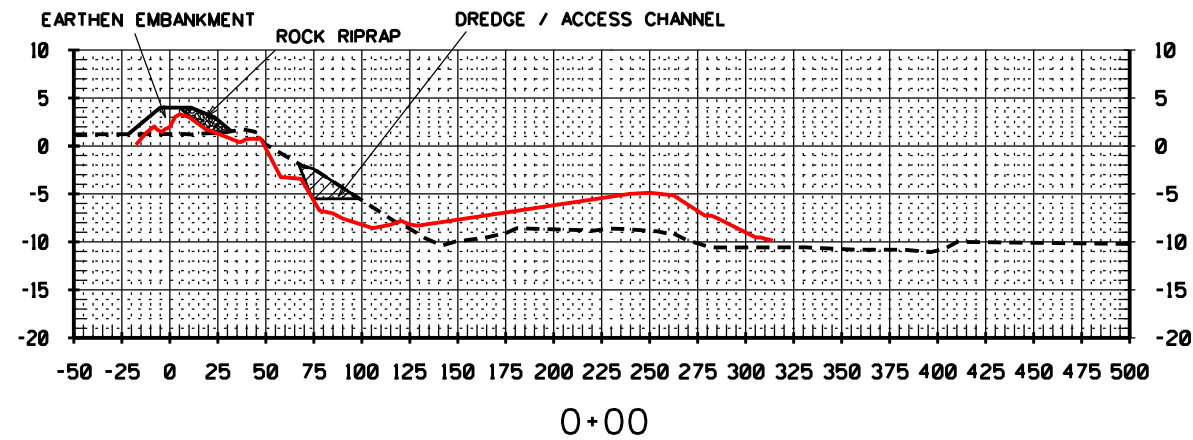


FILE NAME
LA274

DRAWING NAME
LA27414A5.DGN

SHEET 14A5 OF 76

DATE	DESIGNED	DRAWN	CHECKED	APPROVED
02/08	S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E. J. GIERING, III
02/08				
02/09				
05/09				

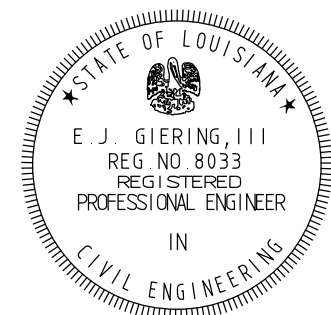


AMENDMENT #5- WIDEN FLOTATION CHANNEL TO 80'

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.

SECTIONS - REACH 2
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

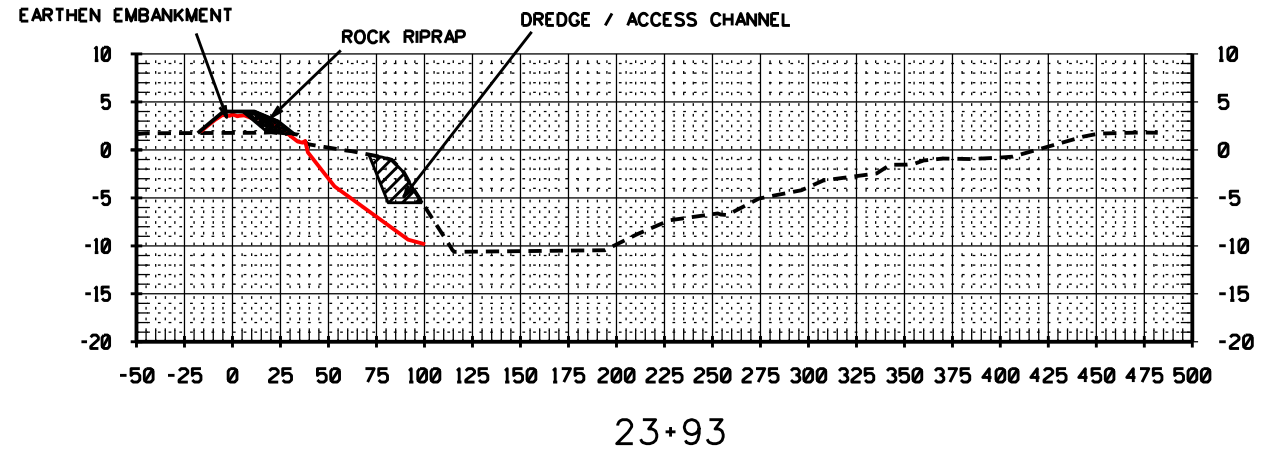
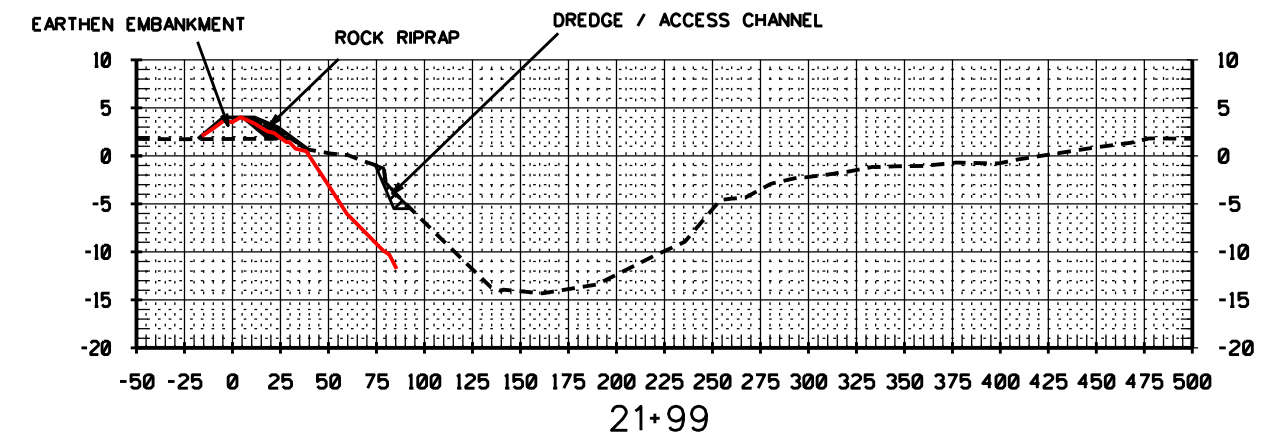
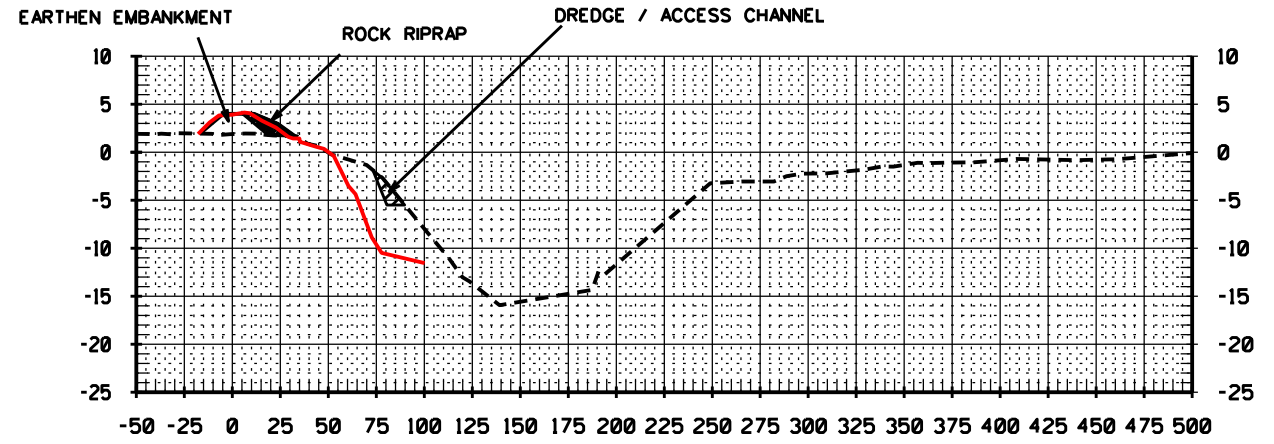
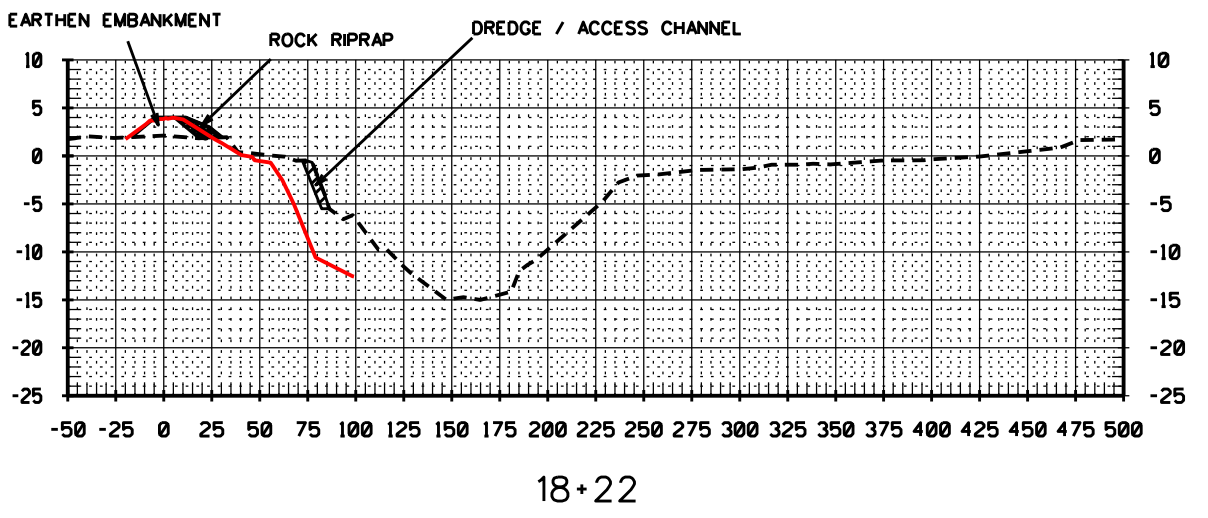
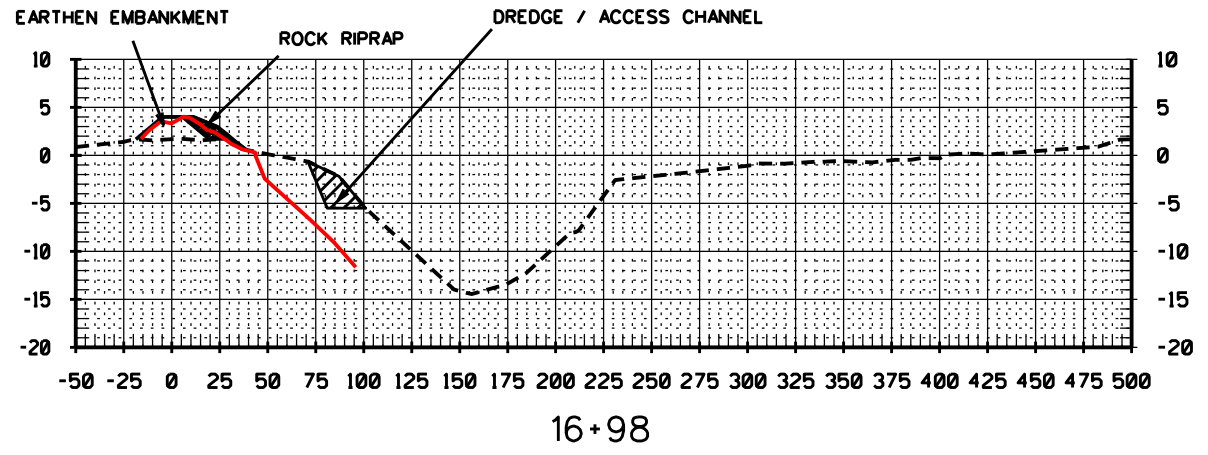
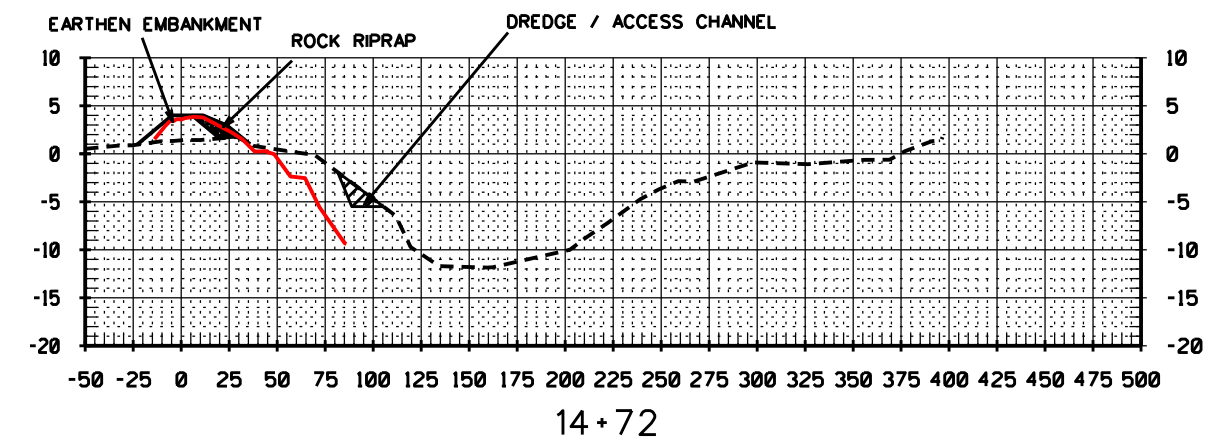


FILE NAME
LA274

DRAWING NAME
LA27415A5.DGN

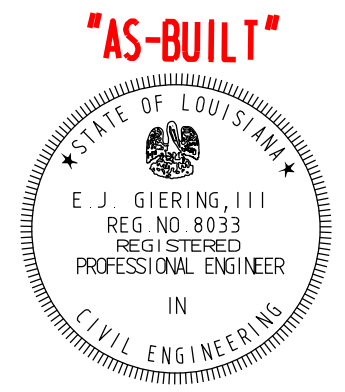
SHEET 15A5 OF 76

DATE	DESIGNED	DRAWN	CHECKED	APPROVED
02/08	S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E. J. GIERING III
02/08				
02/09				
05/09				



NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES



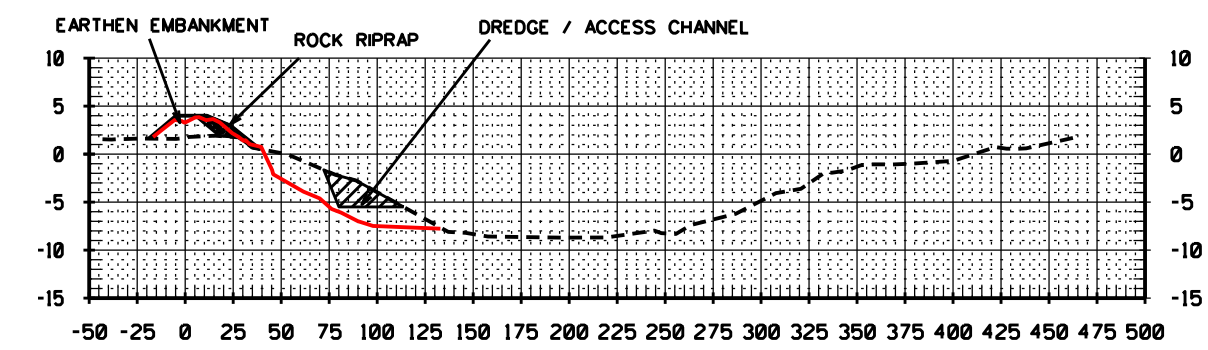
REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	DATE
S. GARNER	02/08
DRAWN	DATE
D. WILMORE	02/08
CHECKED	DATE
R. FAULKNER, B. STICKER	02/09
APPROVED	DATE
E.J. GIERING III	05/09

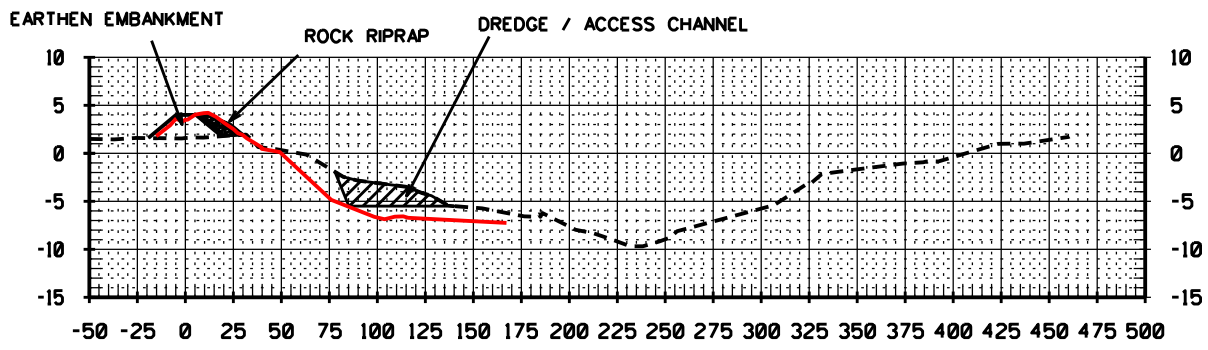
SECTIONS - REACH 2
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



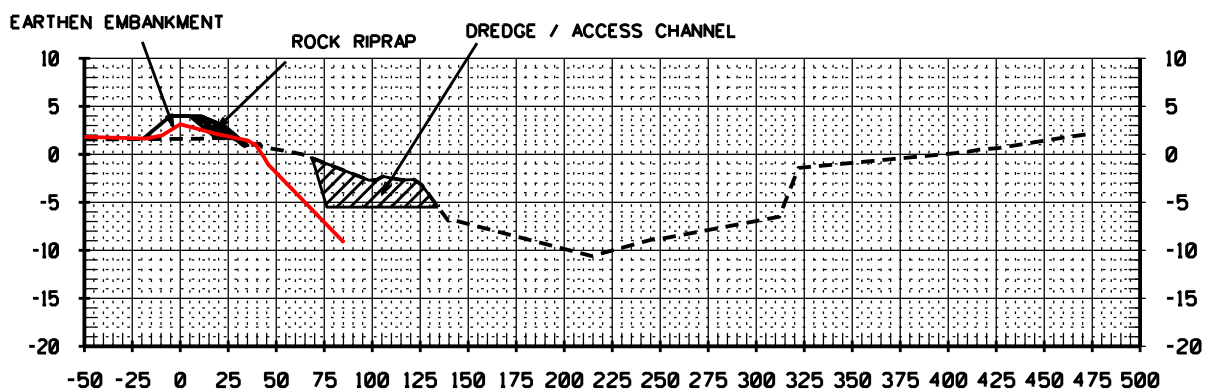
FILE NAME
LA274
DRAWING NAME
LA27416.DGN
SHEET 16 OF 76



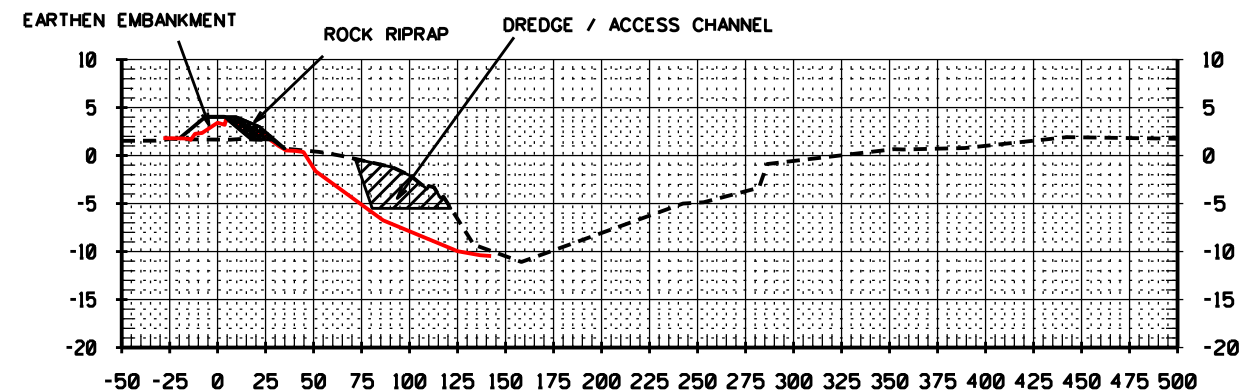
25+38



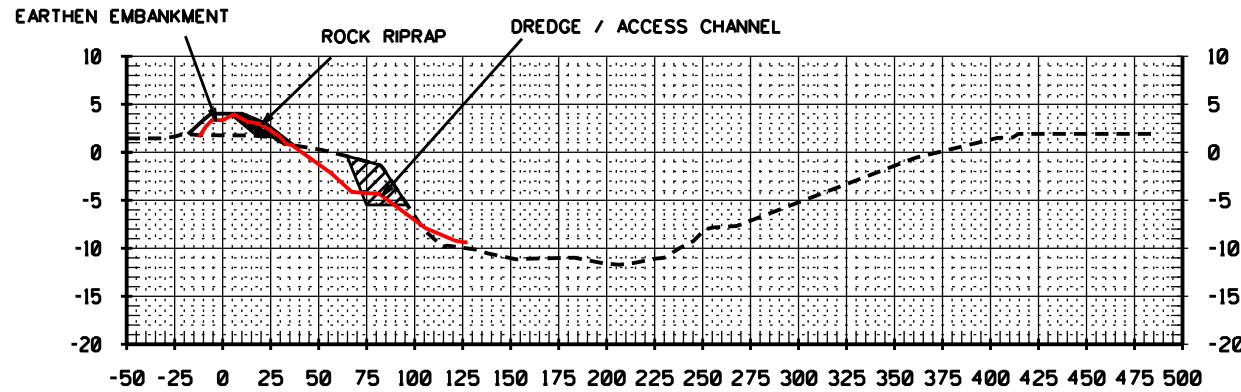
26+86



33+36



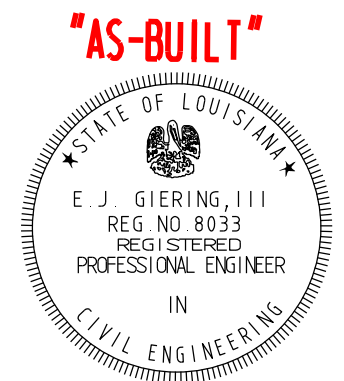
33+81



34+86

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES



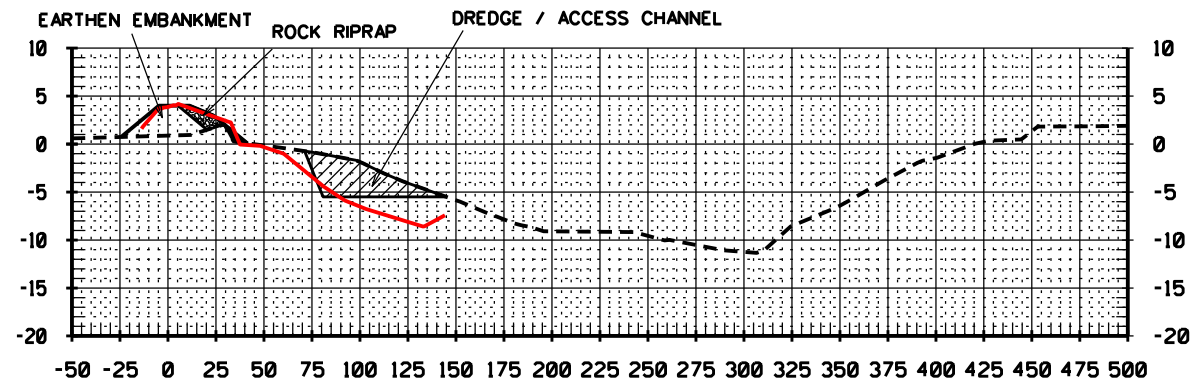
REVISIONS			
NO.	DATE	APPROVED	TITLE

DATE	02/08
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III

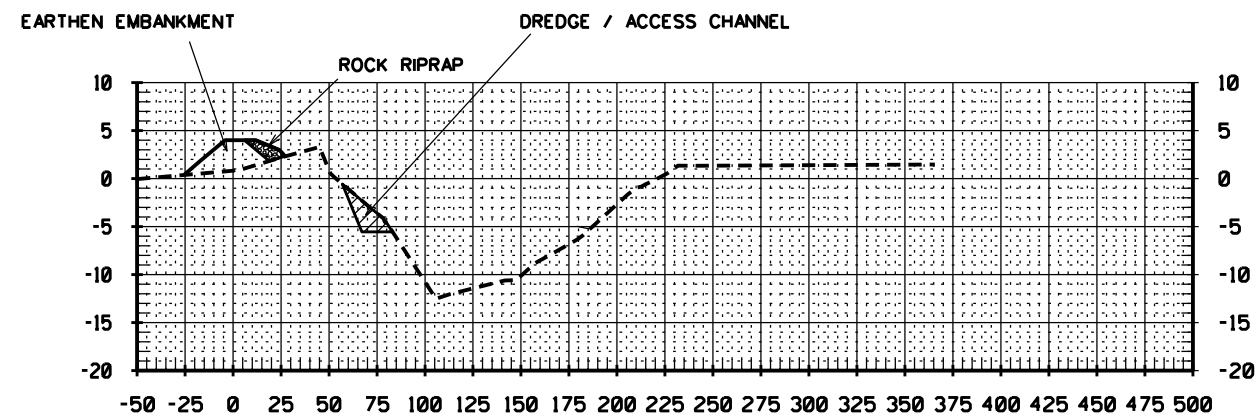
SECTIONS - REACH 2
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



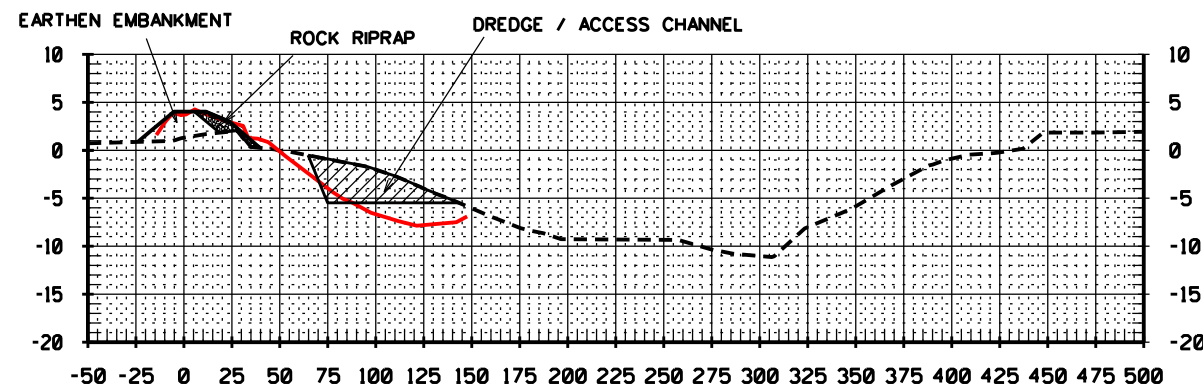
FILE NAME	LA274
DRAWING NAME	LA27417.DGN
SHEET	17 OF 76



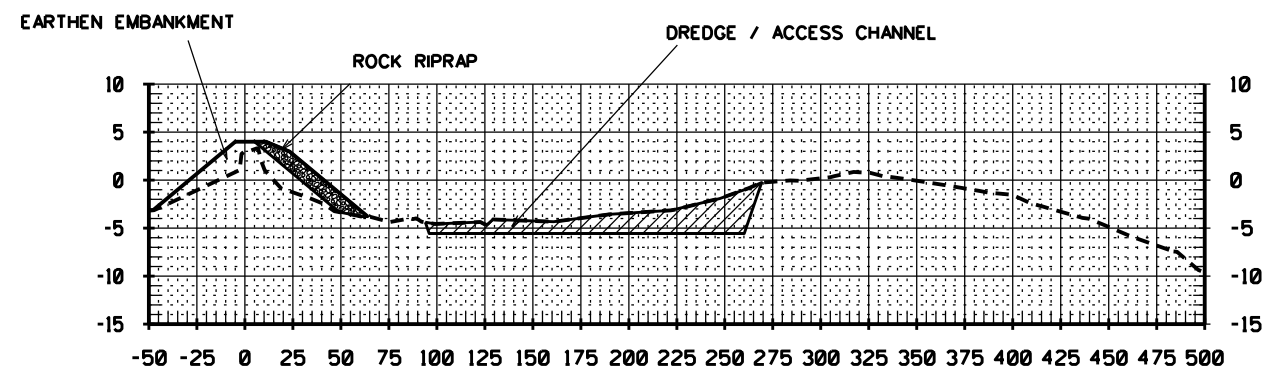
39+27



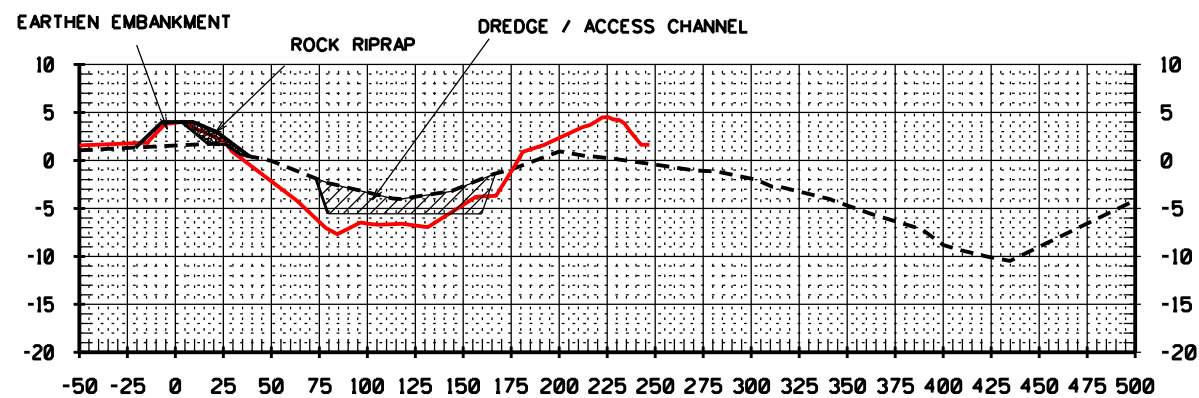
46+53



40+21



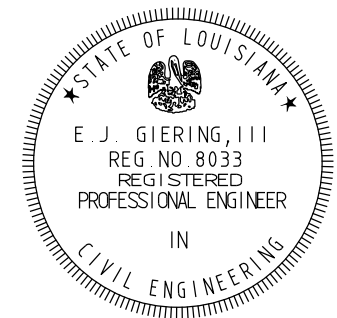
47+09



44+95

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES



"AS-BUILT"

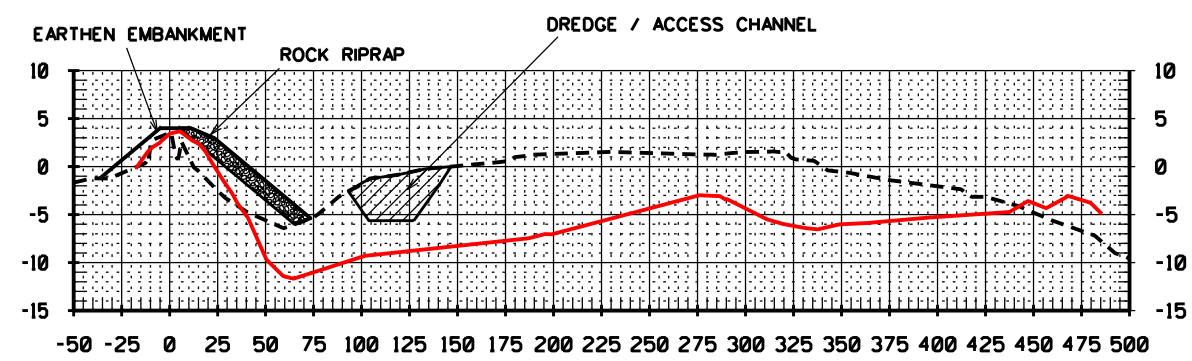
REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.

SECTIONS - REACH 2
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

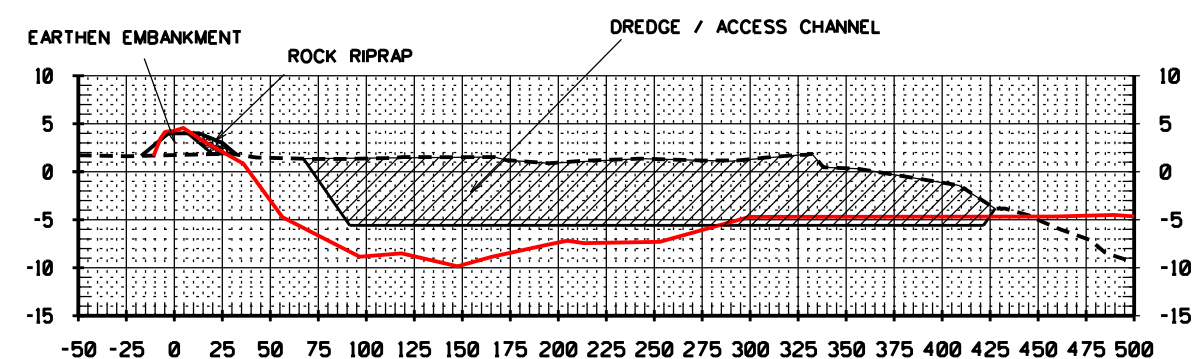


FILE NAME	LA274
DRAWING NAME	LA27418A5.DGN
SHEET	18A5 OF 76

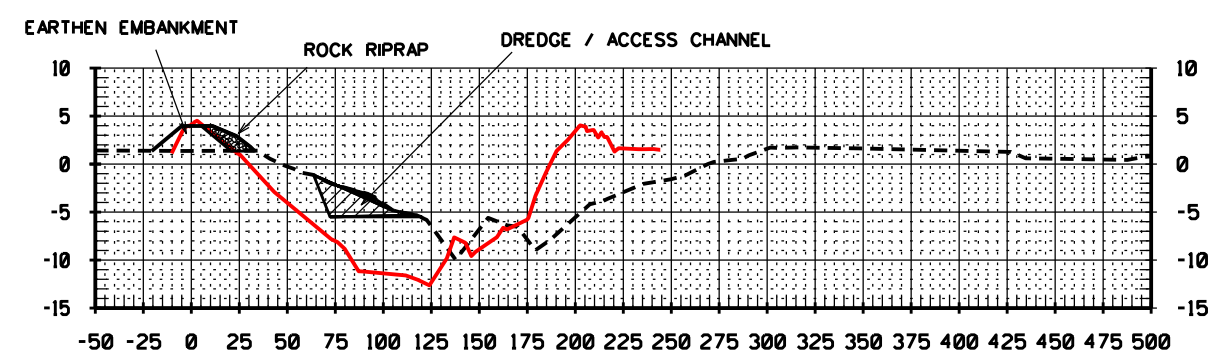
DESIGNED	S. GARNER	DATE	02/08
DRAWN	D. WILMORE		02/08
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09



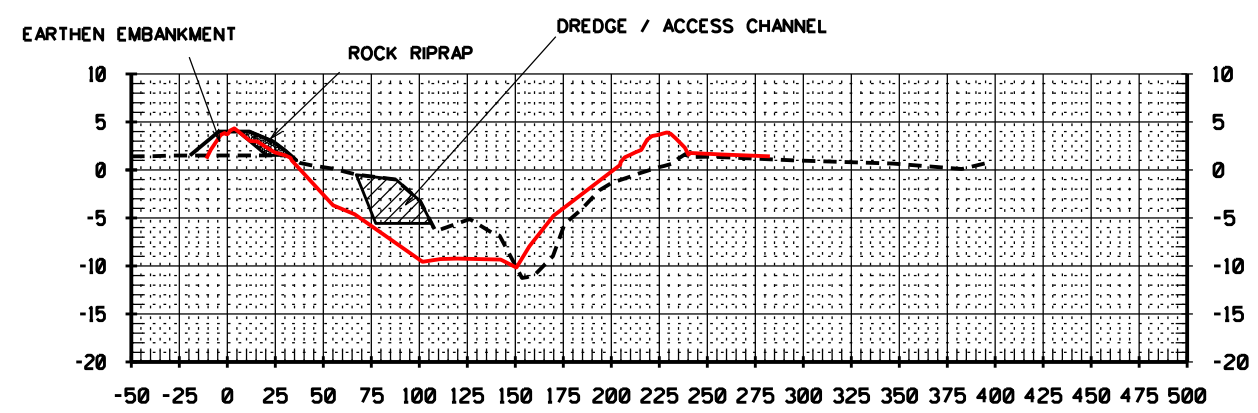
0+00



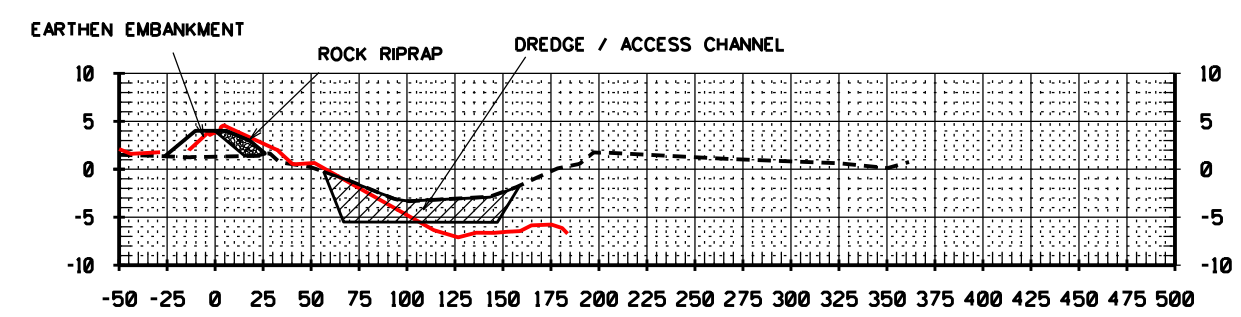
0+60



1+16



2+02



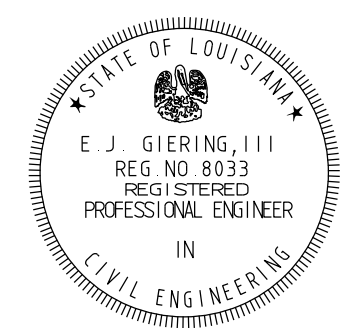
3+69

AMENDMENT*5- WIDEN FLOTATION CHANNEL TO 80'

"AS-BUILT"

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES



DATE	02/08
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III

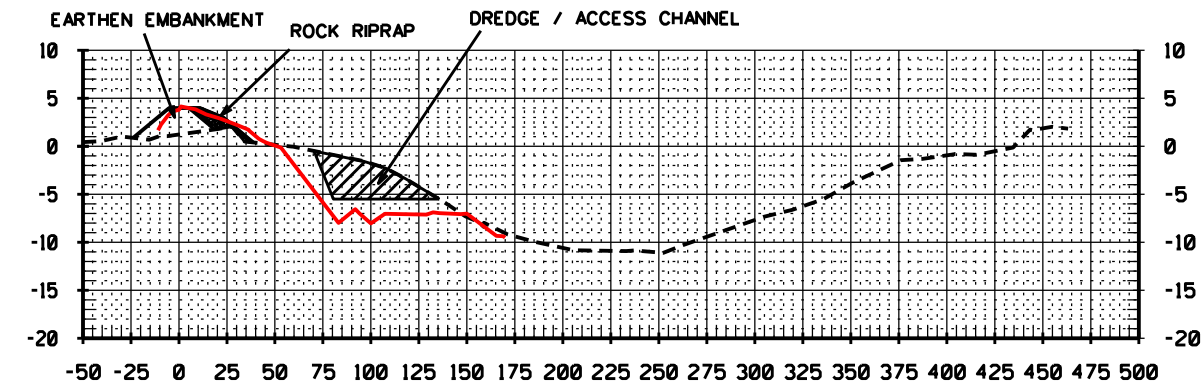
SECTIONS - REACH 3
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



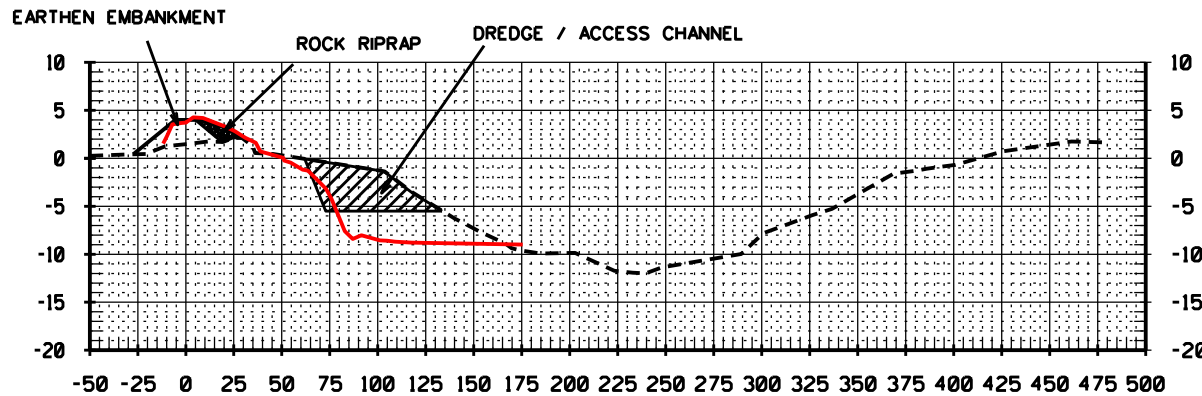
Natural Resources Conservation Service
United States Department of Agriculture

FILE NAME	LA274
DRAWING NAME	LA27419A5.DGN
SHEET	19A5 OF 76

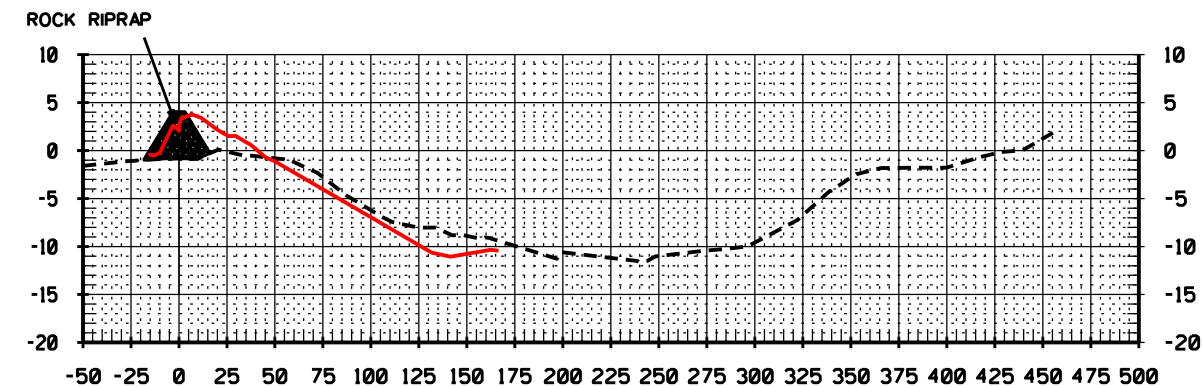
REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.



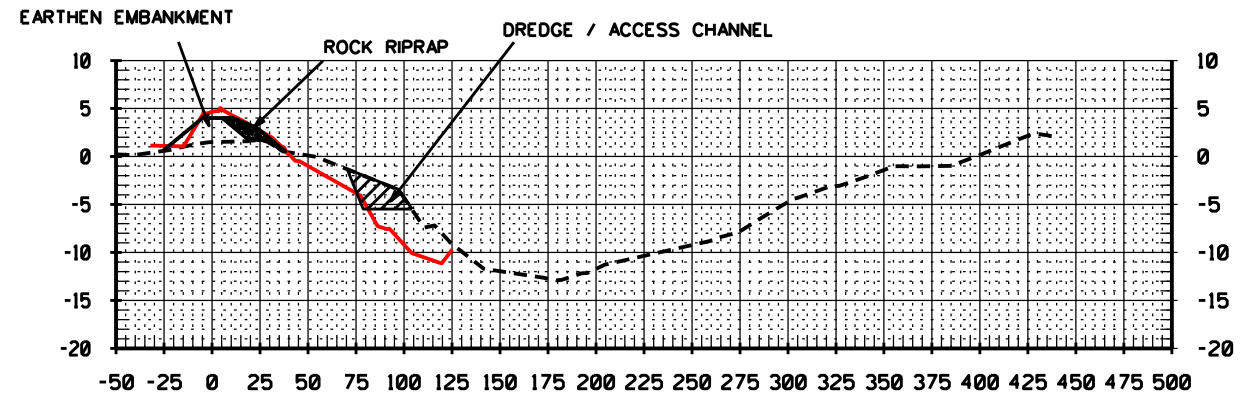
6+90



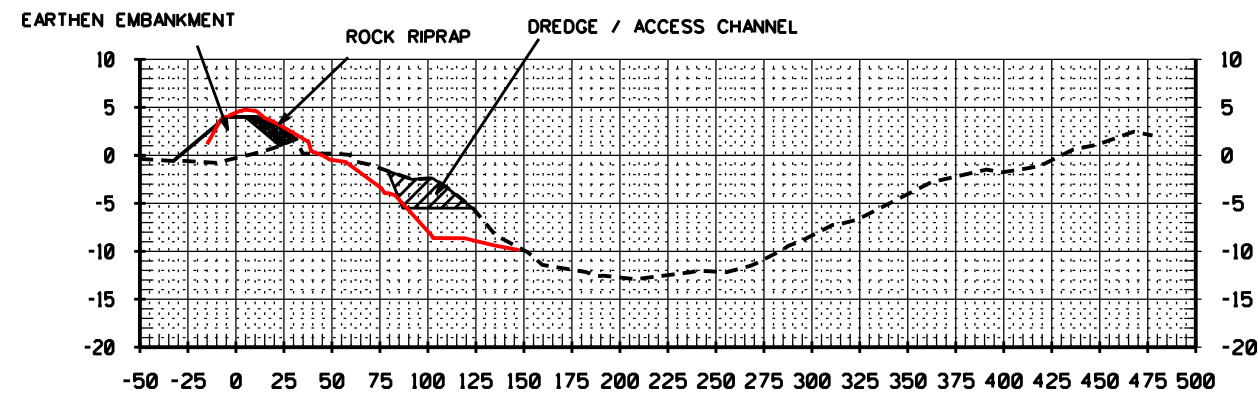
10+25



13+51



18+51

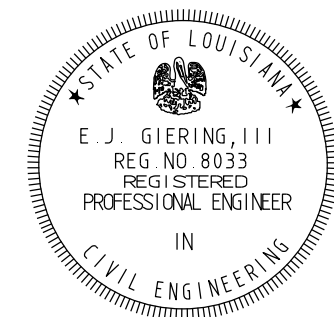


20+45

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

SECTIONS - REACH 3
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

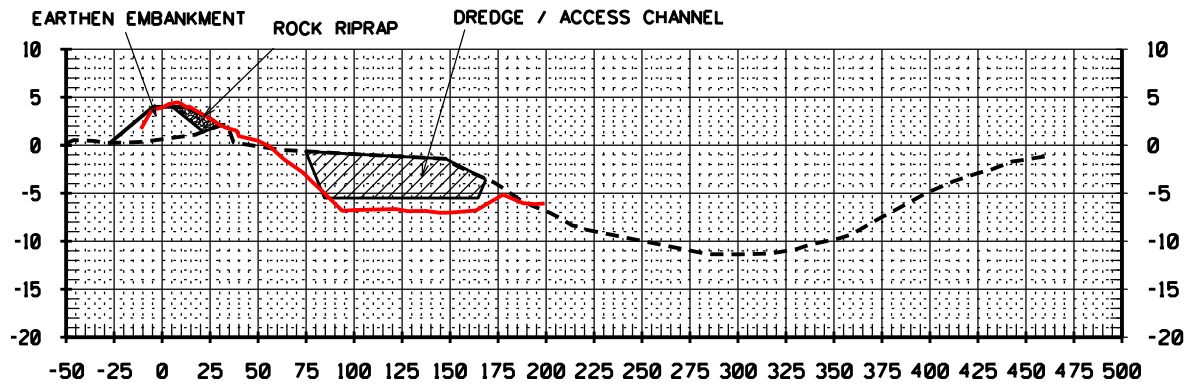


FILE NAME
LA274

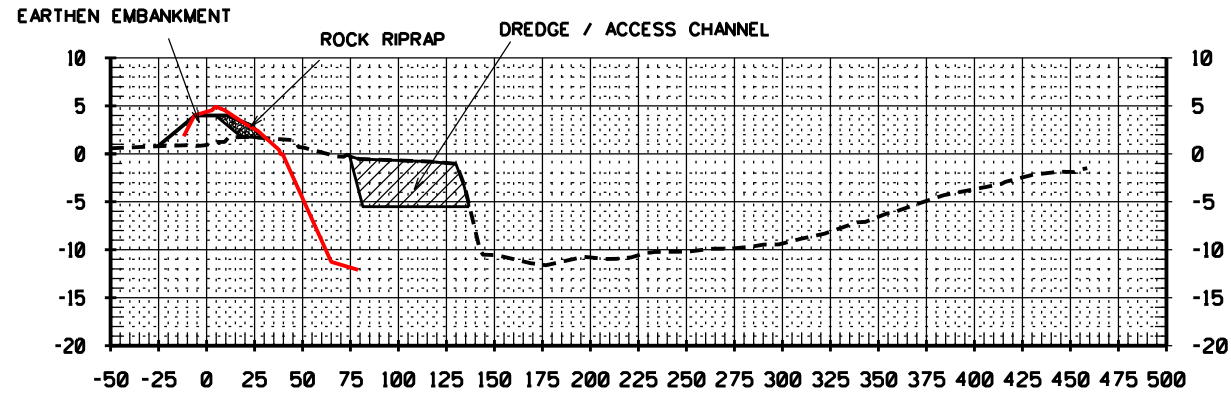
DRAWING NAME
LA27420.DGN

SHEET 20 OF 76

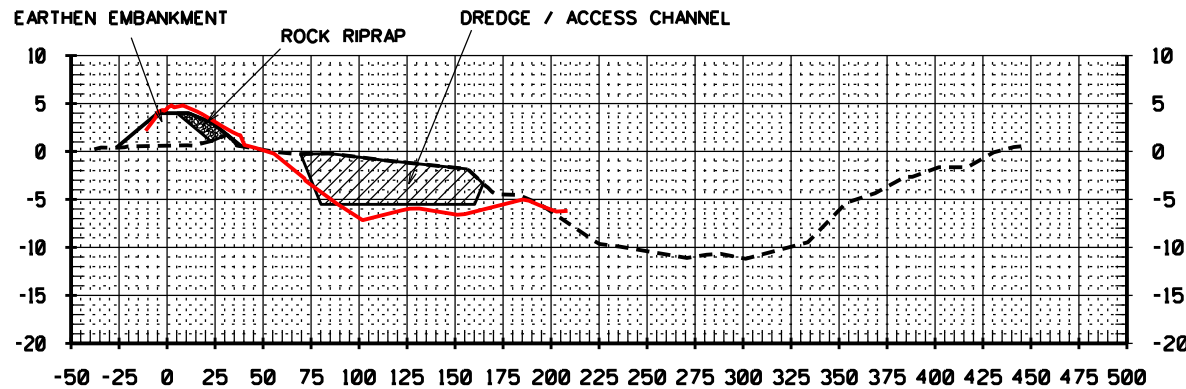
DATE	02/08
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III



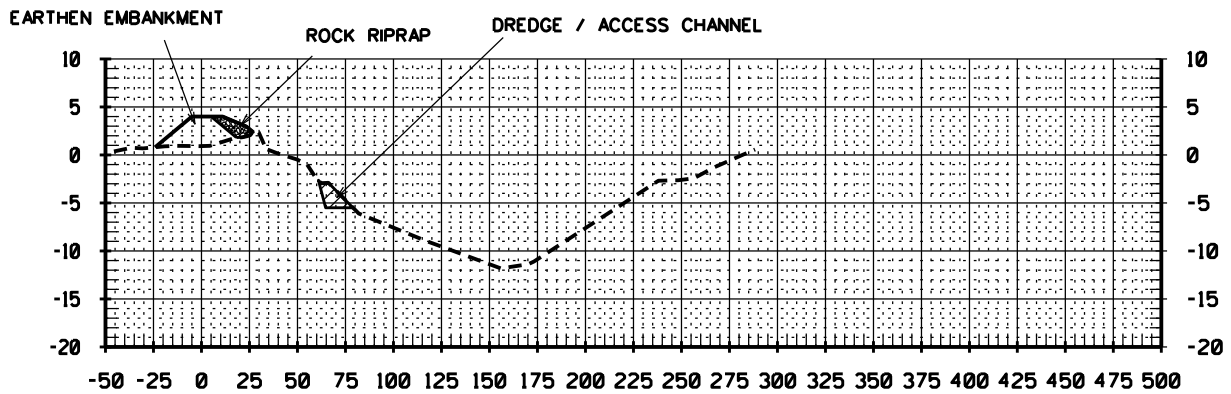
27+94



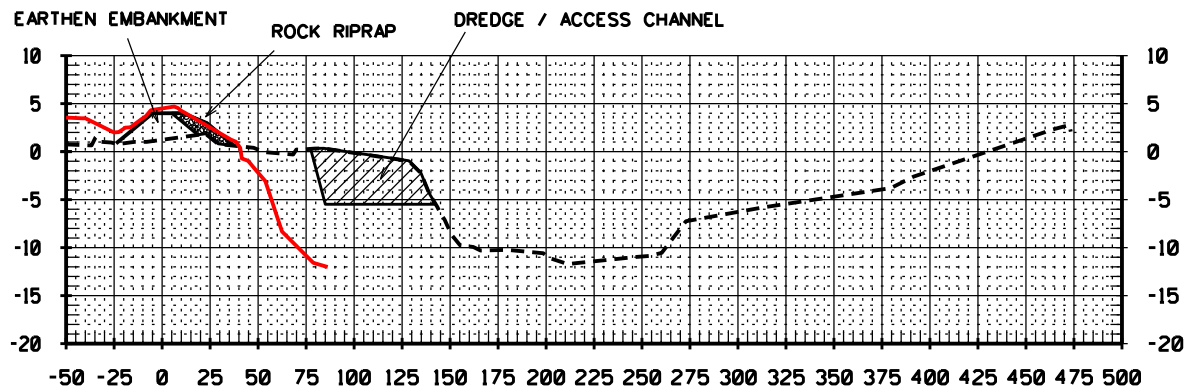
36+66



31+59



39+11



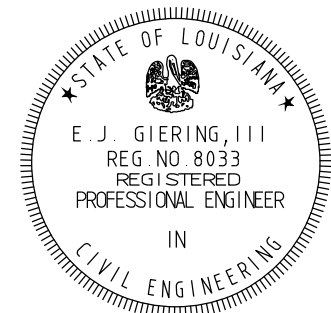
36+35

AMENDMENT*5- WIDEN FLOTATION CHANNEL TO 80'

NOTE:
CONTRACTOR SHALL EXCAVATE BEYOND EXCAVATION TEMPLATE
WHEN BORROW QUANTITY IS LESS THAN REQUIRED FOR EARTHEN
EMBANKMENT CONSTRUCTION. THIRTY FOOT BERM BETWEEN REVETMENT
AND EXCAVATION IS NOT TO BE DISTURBED.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



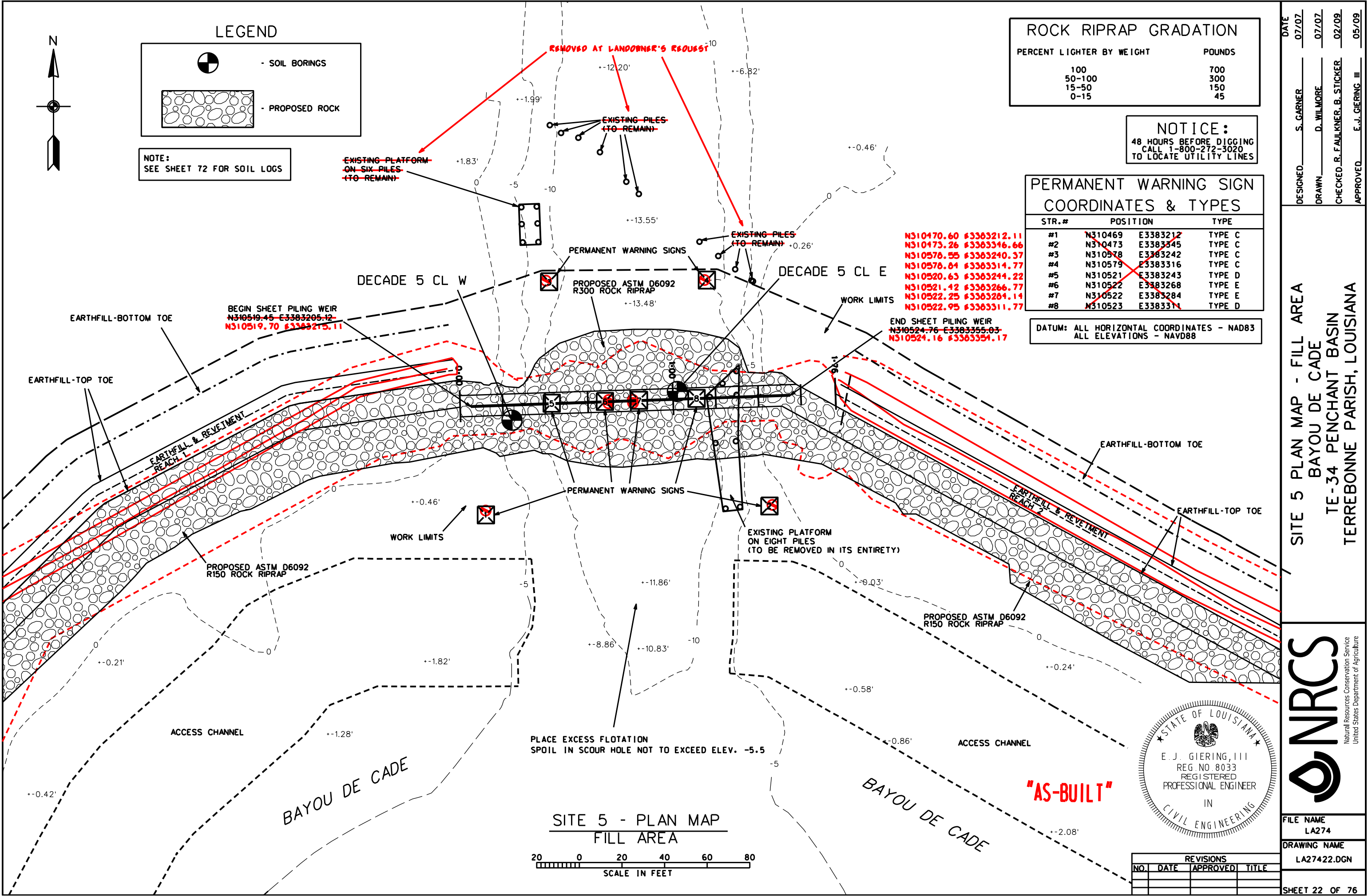
REVISIONS			
NO.	DATE	APPROVED	TITLE
A5	01/25/10	C.S.	C.E.

SECTIONS - REACH 3
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

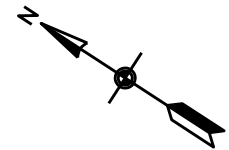


FILE NAME
LA274
DRAWING NAME
LA27421A5.DGN
SHEET 21A5 OF 76

DESIGNED	DRAWN	CHECKED	APPROVED	DATE
S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E.J. GIERING III	02/08
				02/08
				02/09
				05/09



NOTE:
SEE SHEET 55 FOR SHEETPILE DETAIL



STEEL SHEETPILE CAP
ELEV. +0.9' NAVD88

WARNING SIGN
(BOTH SIDES)

RAILING

12" X 50' TIMBER BATTER PILE @ 15° BATTER

WARNING SIGN
(BOTH SIDES)

BOAT BAY

WARNING SIGN
(BOTH SIDES)

RAILING

WARNING SIGN
(BOTH SIDES)

RAILING

STEEL SHEETPILE CAP
ELEV. +0.9' NAVD88

STEEL SHEETPILE

STEEL SHEETPILE

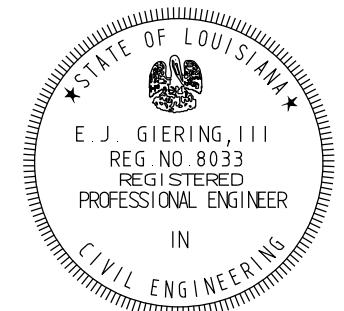
STEEL SHEETPILE

12" X 50' TIMBER BATTER PILE @ 15° BATTER

STEEL SHEETPILE:
MINIMUM THICKNESS = 0.375 INCHES
MINIMUM MOMENT OF INERTIA = 76.8 IN⁴ / FT. WALL
ASTM A 572 GRADE 50

"AS-BUILT"

ISOMETRIC VIEW
SITE 5 - SHEETPILE WALL



REVISIONS			
NO.	DATE	APPROVED	TITLE

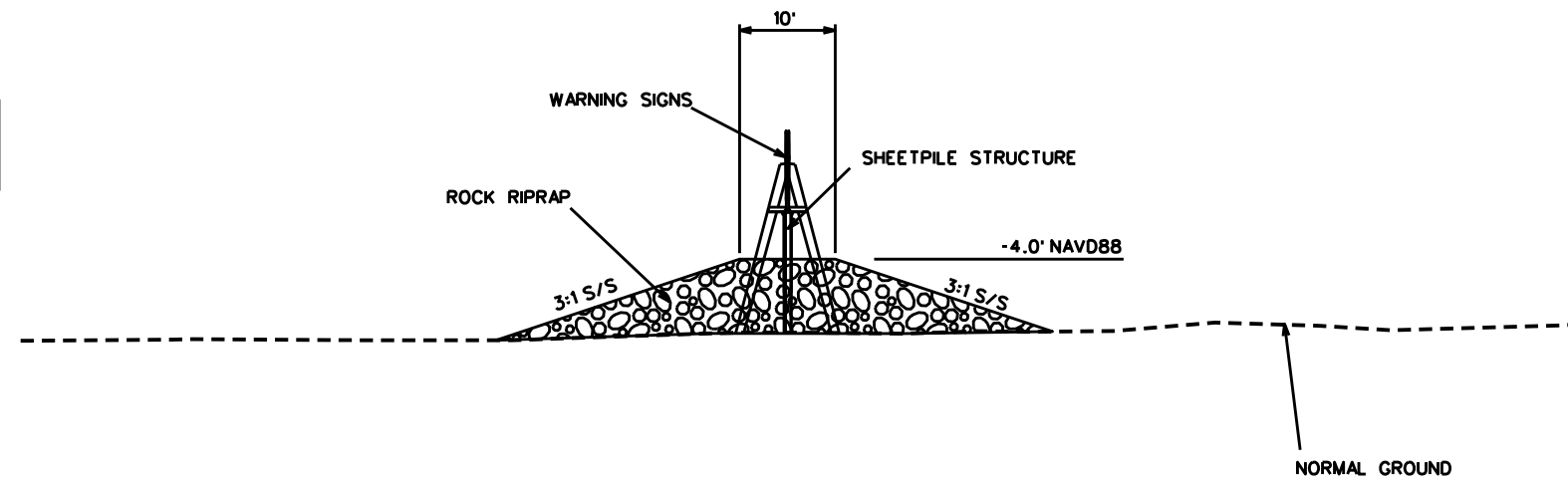
SITE 5 - ISOMETRIC VIEW
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



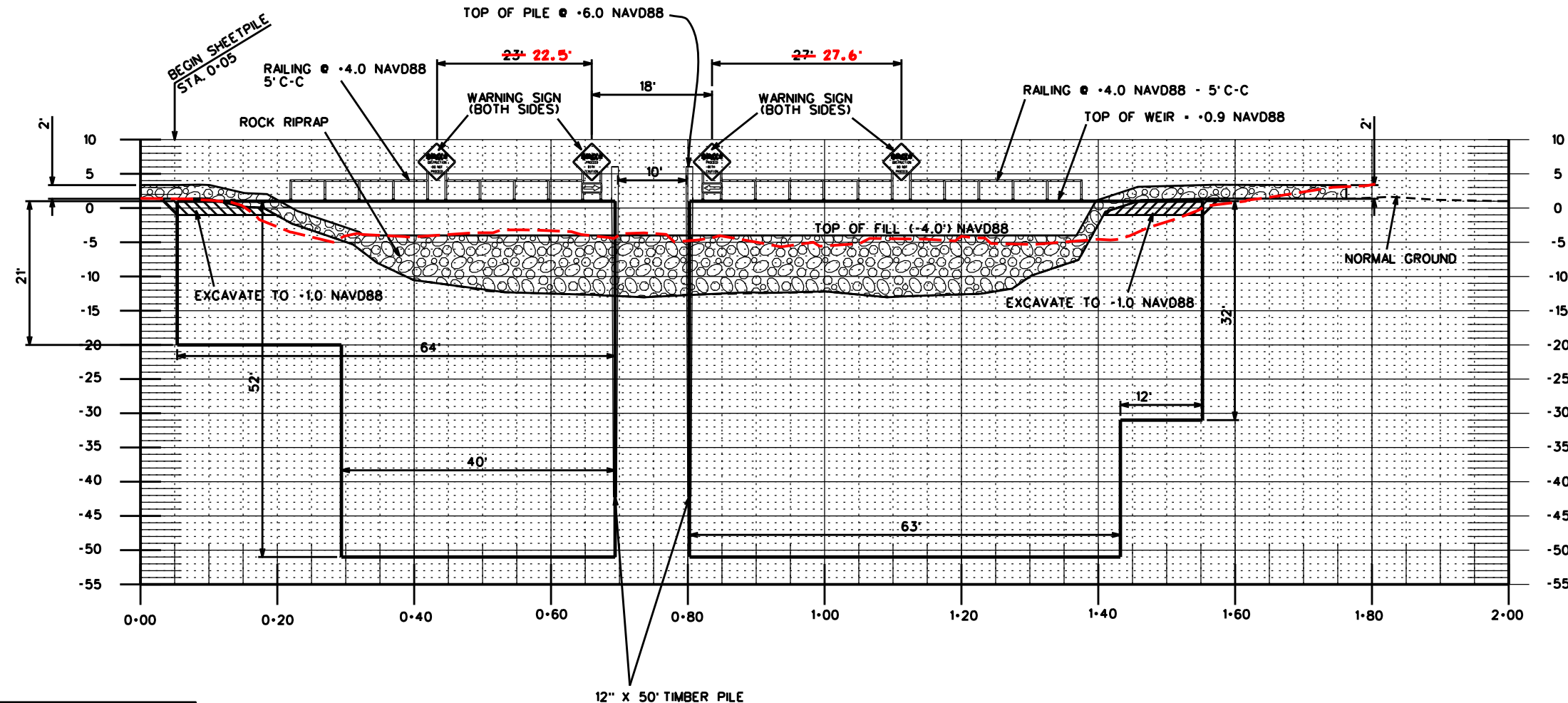
FILE NAME
LA274
DRAWING NAME
LA27423.DGN

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09

NOTE:
SEE SHEET 22 FOR RIPRAP SPECIFICATIONS
SEE SHEET 55 FOR SHEETPILE DETAIL
SEE SHEET 67 FOR SIGN AND BATTER PILE DETAILS



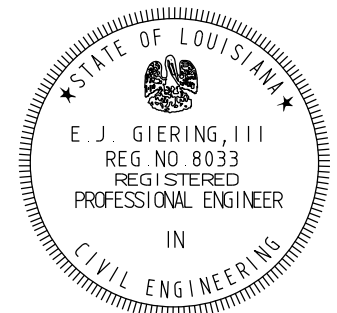
SITE 5 - TYPICAL ROCK RIPRAP SECTION
BAYOU DE CADE



BACKFILL EXCAVATED AREAS WITH ROCK RIPRAP

SITE 5 - SHEETPILE CENTERLINE PROFILE VIEW
BAYOU DE CADE

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

SITE 5 - SECTION VIEW
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

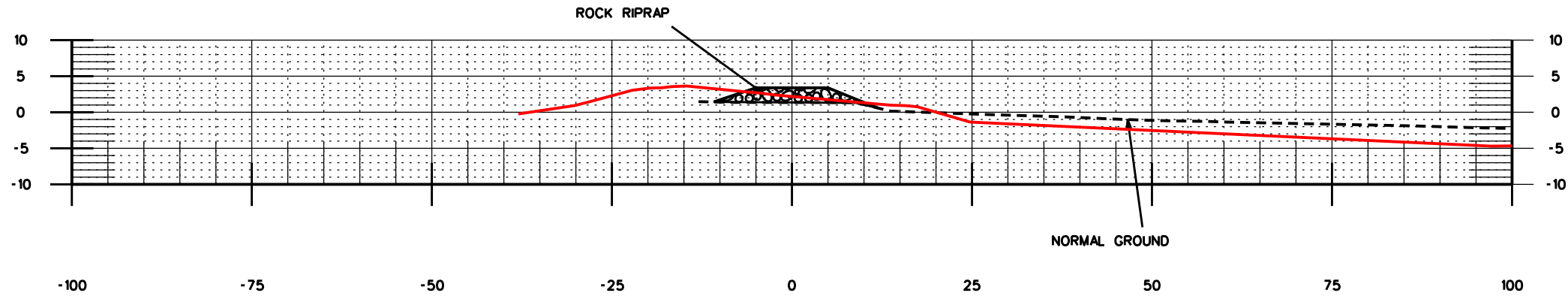


FILE NAME
LA274

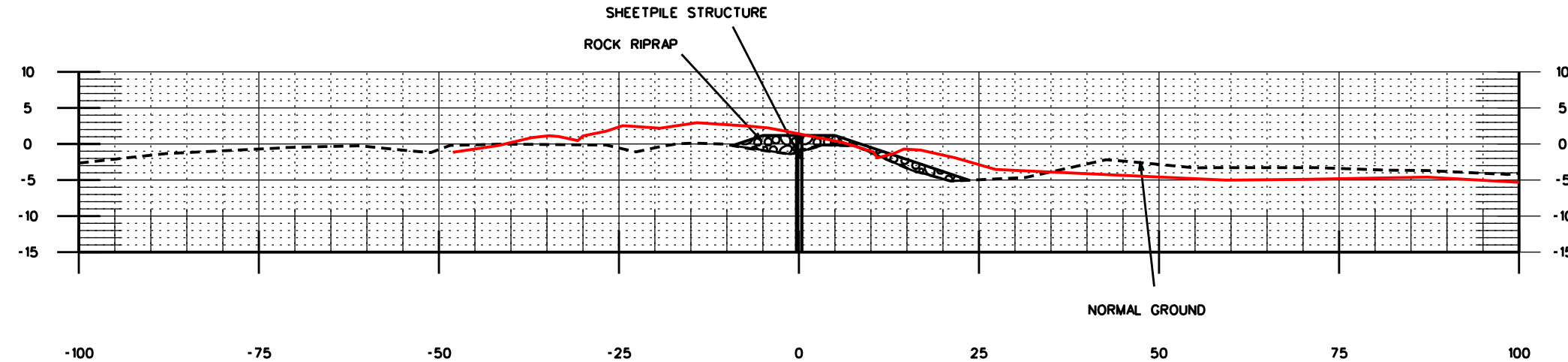
DRAWING NAME
LA27424.DGN

SHEET 24 OF 76

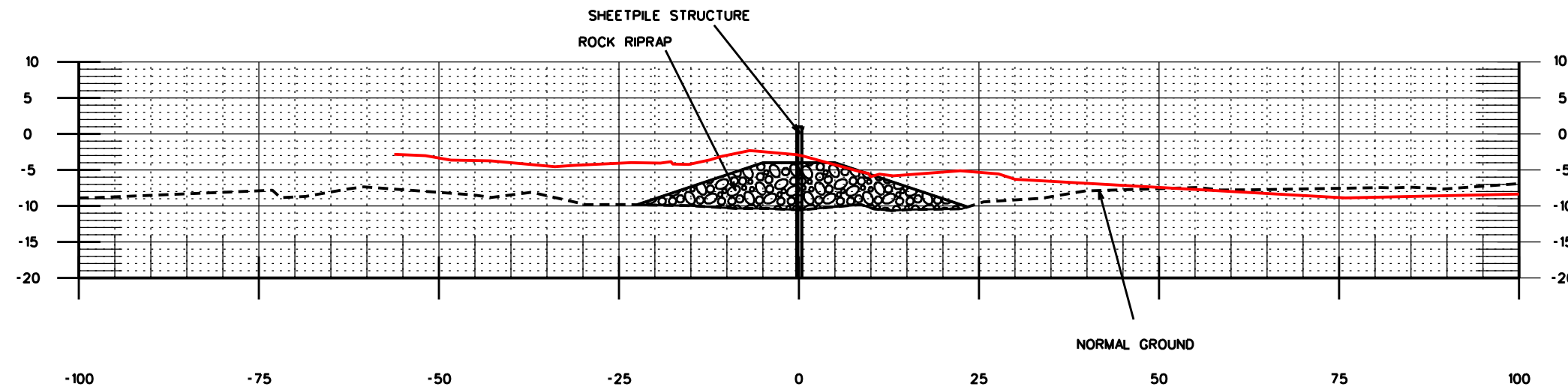
DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE	DATE	07/07
CHECKED	R. FAULKNER, B. STICKER	DATE	02/09
APPROVED	E.J. GIERING III	DATE	05/09



0+00

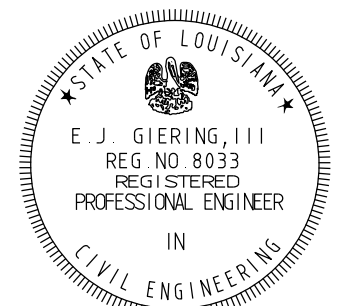


0+20



0+40

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

SITE 5 - FILL SECTIONS
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

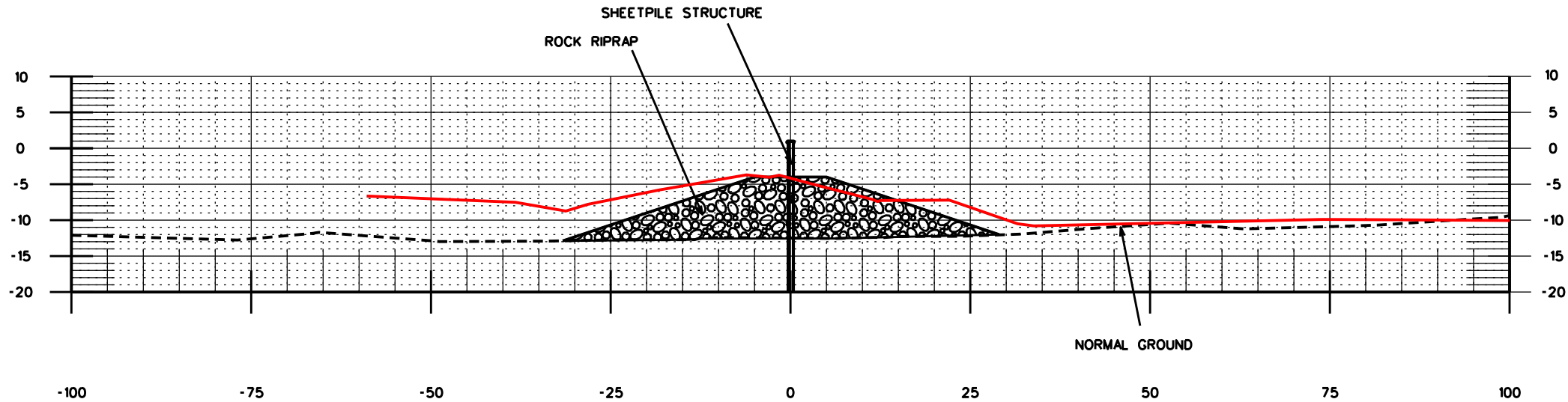


FILE NAME
LA274

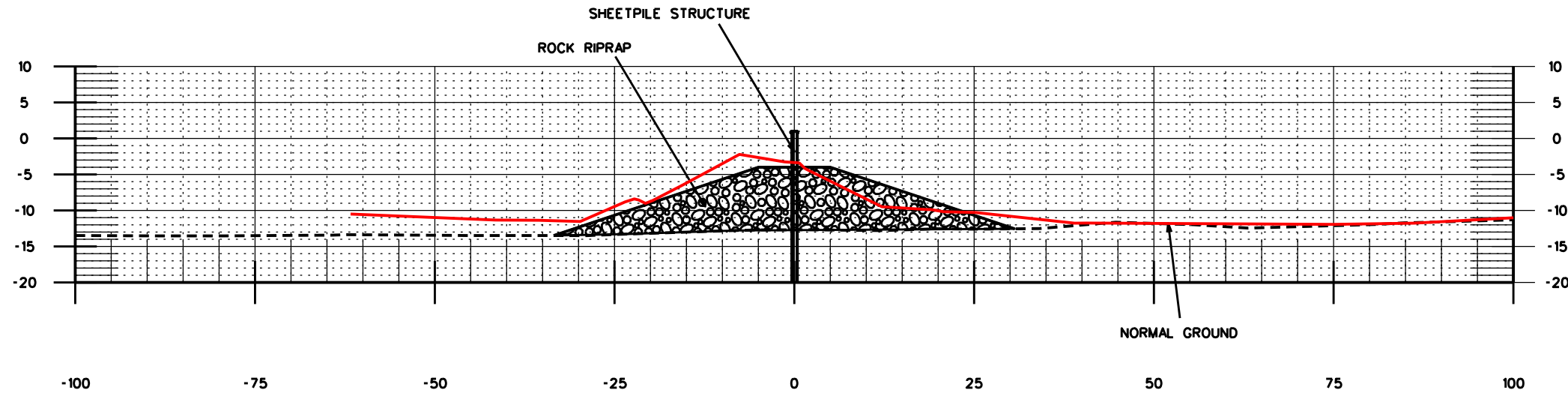
DRAWING NAME
LA27425.DGN

SHEET 25 OF 76

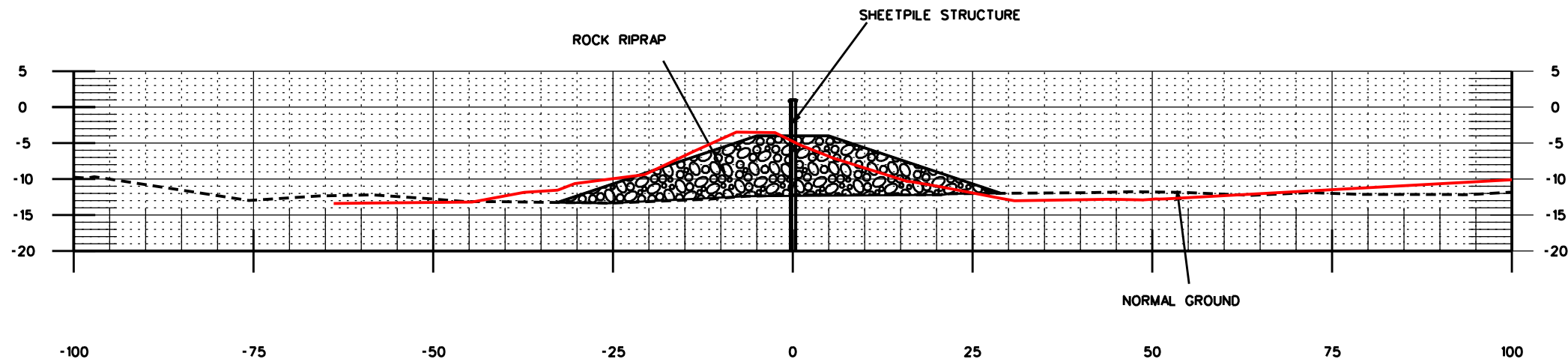
DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE	DATE	07/07
CHECKED	R. FAULKNER, B. STICKER	DATE	02/09
APPROVED	E.J. GIERING III	DATE	05/09



0+60

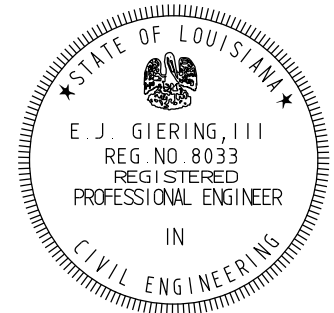


0+80



1+00

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

SITE 5 - FILL SECTIONS
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

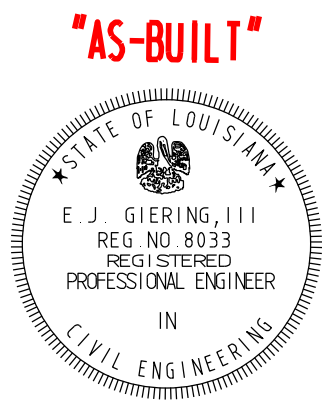
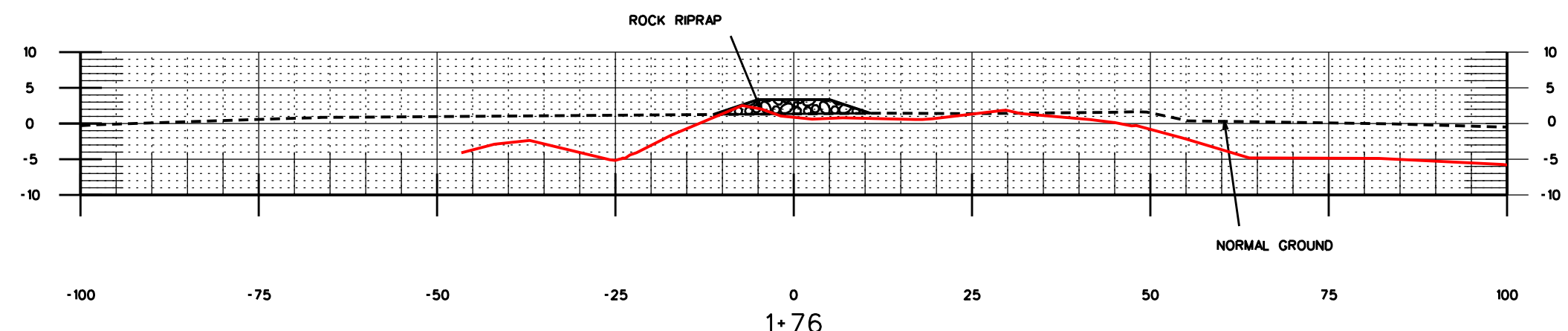
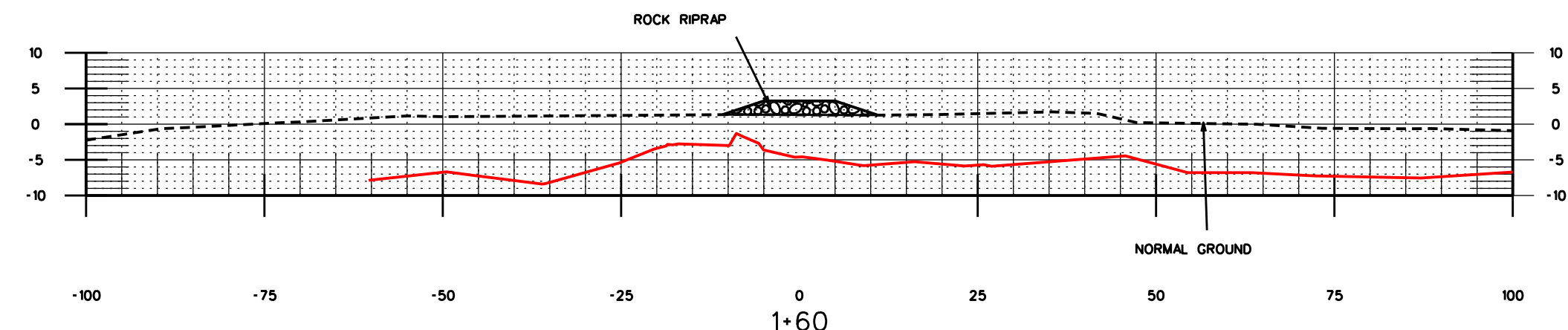
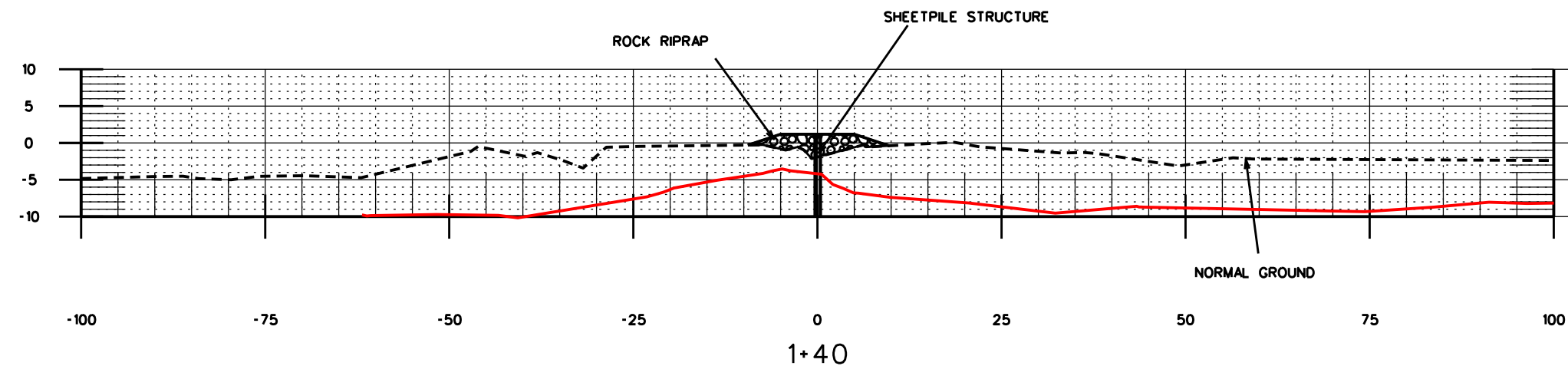
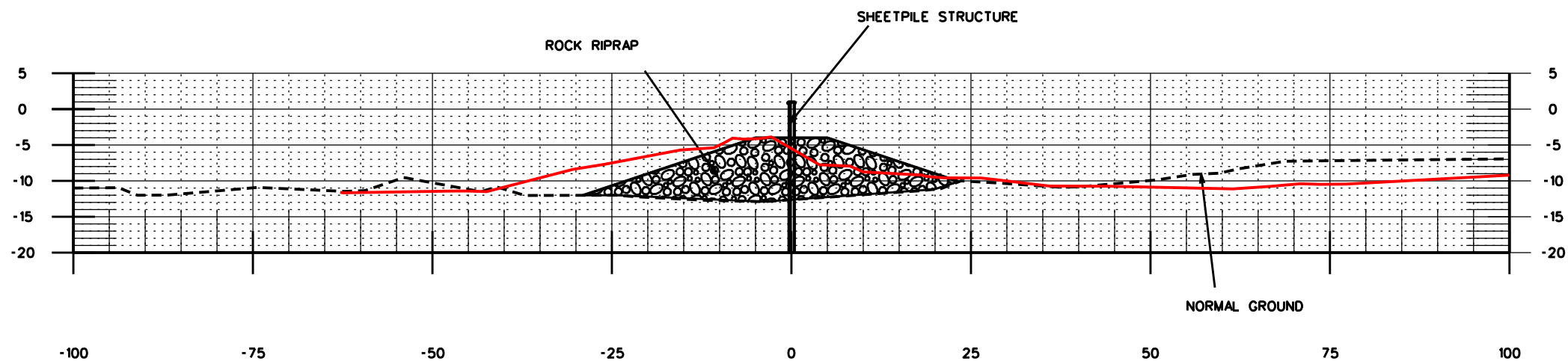


FILE NAME
LA274

DRAWING NAME
LA27426.DGN

SHEET 26 OF 76

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE	DATE	07/07
CHECKED	R. FAULKNER, B. STICKER	DATE	02/09
APPROVED	E.J. GIERING III	DATE	05/09



REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	DATE
S. GARNER	07/07
DRAWN	DATE
D. WILMORE	07/07
CHECKED	DATE
R. FAULKNER, B. STICKER	02/09
APPROVED	DATE
E. J. GIERING III	05/09

SITE 5 - FILL SECTIONS
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274
DRAWING NAME
LA27427.DGN
SHEET
27 OF 76



NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

LEGEND

- SOIL BORINGS

- PROPOSED ROCK

ROCK RIPRAP GRADATION	
PERCENT LIGHTER BY WEIGHT	POUNDS
100	700
50-100	300
15-50	150
0-15	45

DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III

PERMANENT WARNING SIGN
COORDINATES & TYPES

STR.#	POSITION	TYPE
#9	N312008 E3386157	TYPE C
#10	N312061 E3386255	TYPE C
#11	N312071 E3386120	TYPE C
#12	N312123 E3386217	TYPE C
#13	N312053 E3386166	TYPE D
#14	N312060 E3386177	TYPE E
#15	N312069 E3386192	TYPE E
#16	N312078 E3386208	TYPE D

NOTE:
SEE SHEET 73 FOR SOIL LOGS

~~N310470.60 #3383212.11~~
~~N310473.26 #3383346.66~~
~~N310578.61 #3383314.77~~
~~N310578.55 #3383240.37~~
~~N312052.44 #3386164.46~~
~~N312059.15 #3386175.25~~
~~N312068.11 #3386191.24~~
~~N312077.00 #3386206.27~~

PERMANENT WARNING SIGNS

TIMBER BULKHEAD & PILING
(TO BE REMOVED IN ITS ENTIRETY)

WORK LIMITS

DECADE 4 CL W

DECADE 4 CL E

PROPOSED ASTM D6092
R300 ROCK RIPRAP

PROPOSED ASTM D6092
R150 ROCK RIPRAP

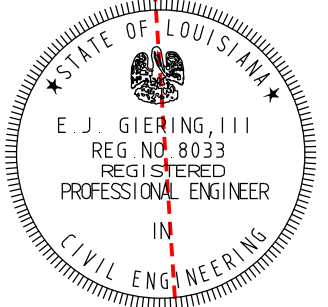
PLACE EXCESS FLOATATION
SPOIL IN SCOUR HOLE NOT TO EXCEED
ELEV. -5.5

PERMANENT WARNING SIGNS

EARTHFILL & REVETMENT
REACH 2

EARTHFILL & REVETMENT
REACH 3

"AS-BUILT"



SITE 4 - PLAN MAP
FILL AREA



BAYOU DE CADE

SITE 4 PLAN MAP - FILL AREA
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

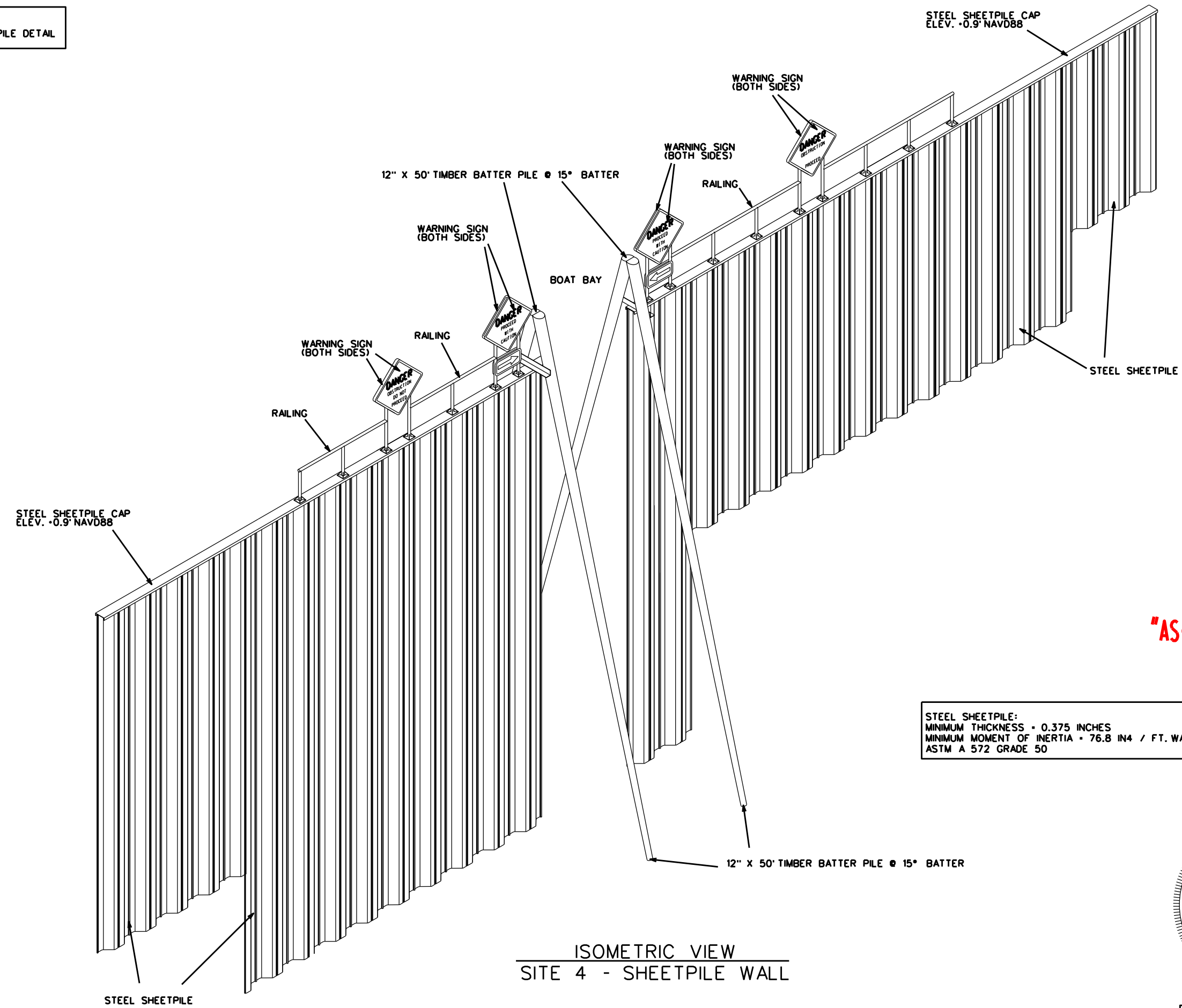
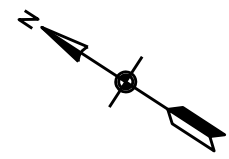


FILE NAME
LA274

DRAWING NAME
LA27428.DGN

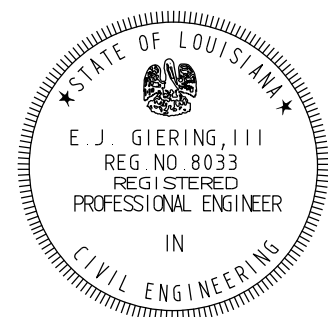
REVISIONS		
NO.	DATE	TITLE

NOTE:
SEE SHEET 55 FOR SHEETPILE DETAIL



"AS-BUILT"

STEEL SHEETPILE:
MINIMUM THICKNESS • 0.375 INCHES
MINIMUM MOMENT OF INERTIA • 76.8 IN4 / FT. WALL
ASTM A 572 GRADE 50



ISOMETRIC VIEW
SITE 4 - SHEETPILE WALL

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09

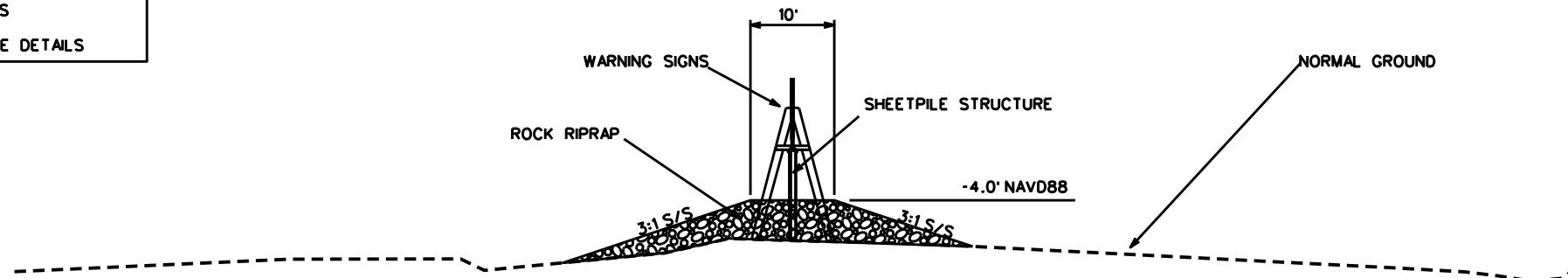
SITE 4 - ISOMETRIC VIEW
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



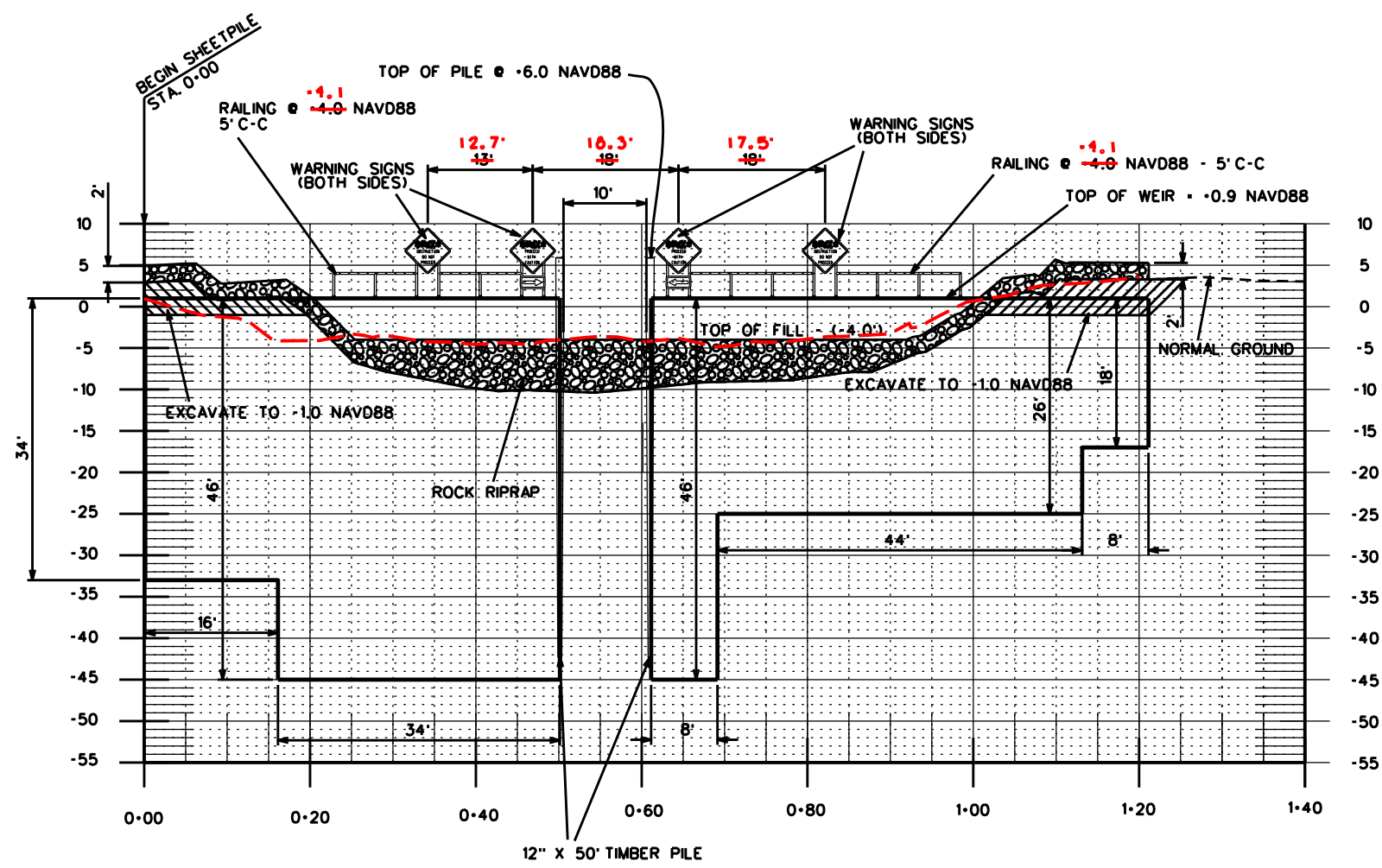
FILE NAME	LA274
DRAWING NAME	LA27429.DGN
SHEET	29 OF 76

REVISIONS			
NO.	DATE	APPROVED	TITLE

NOTE:
SEE SHEET 28 FOR RIPRAP SPECIFICATIONS
SEE SHEET 55 FOR SHEETPILE DETAIL
SEE SHEET 67 FOR SIGN AND BATTER PILE DETAILS

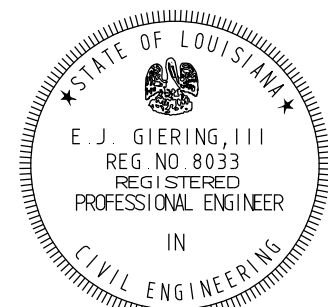


SITE 4 - TYPICAL SHEETPILE SECTION
BAYOU DE CADE



BACKFILL EXCAVATED AREAS WITH ROCK RIPRAP

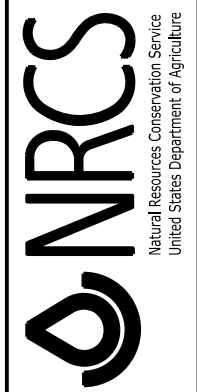
"AS-BUILT"



SITE 4 - SHEETPILE CENTERLINE PROFILE VIEW
BAYOU DE CADE

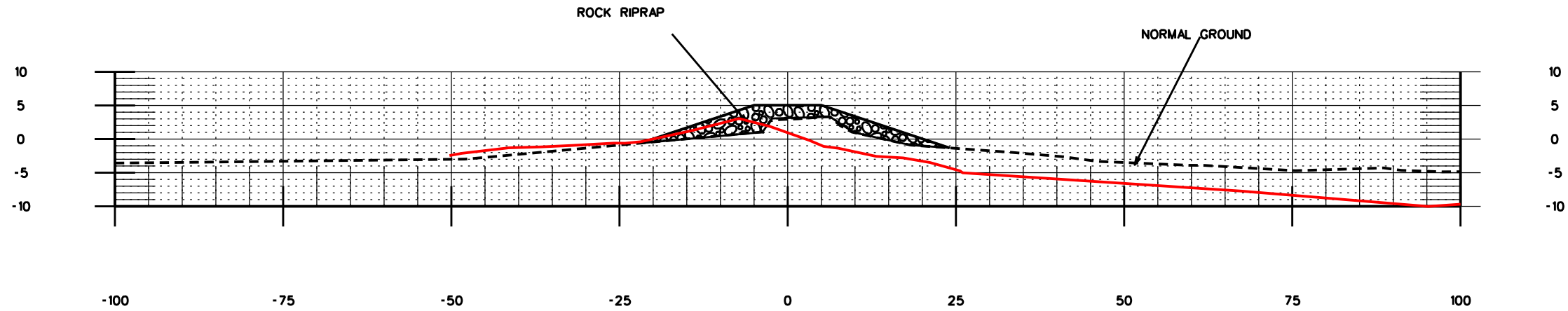
REVISIONS			
NO.	DATE	APPROVED	TITLE

SITE 4 - SECTION VIEW
BAYOU DE CADE
TE-34 PENCHANT BASIN
TEREBONNE PARISH, LOUISIANA

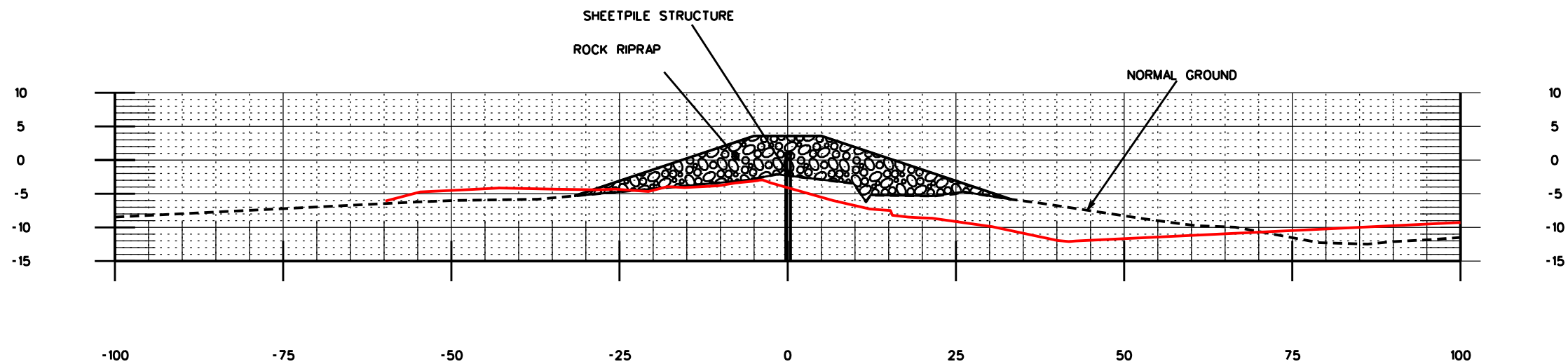


FILE NAME	LA274
DRAWING NAME	LA27430.DGN
SHEET	30 OF 76

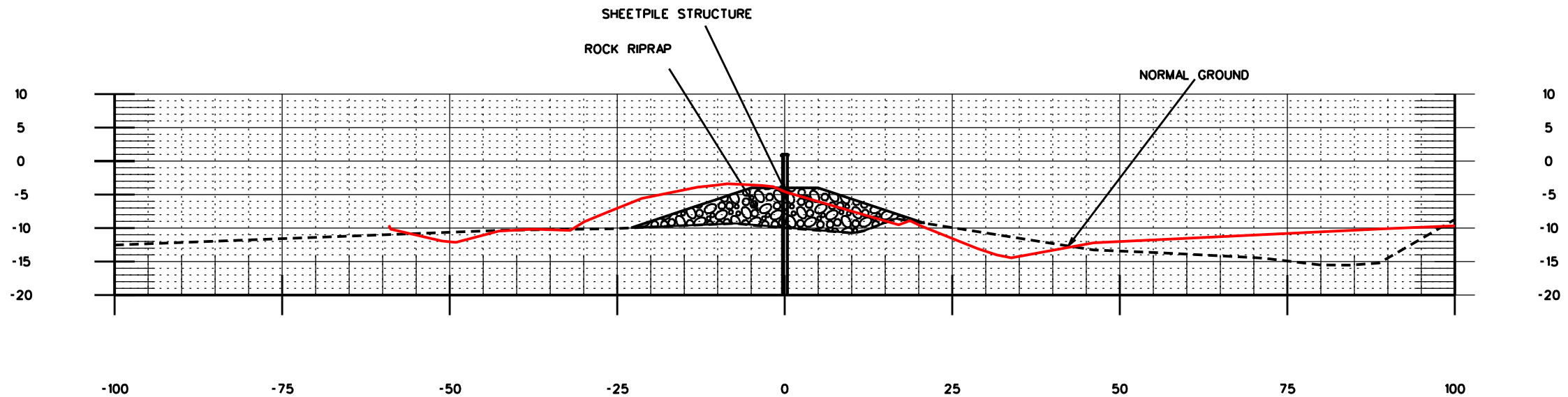
DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09



0+00

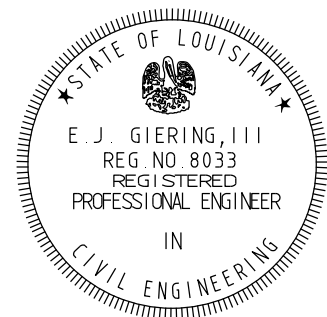


0+20



0+40

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

SITE 4 - FILL SECTIONS
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

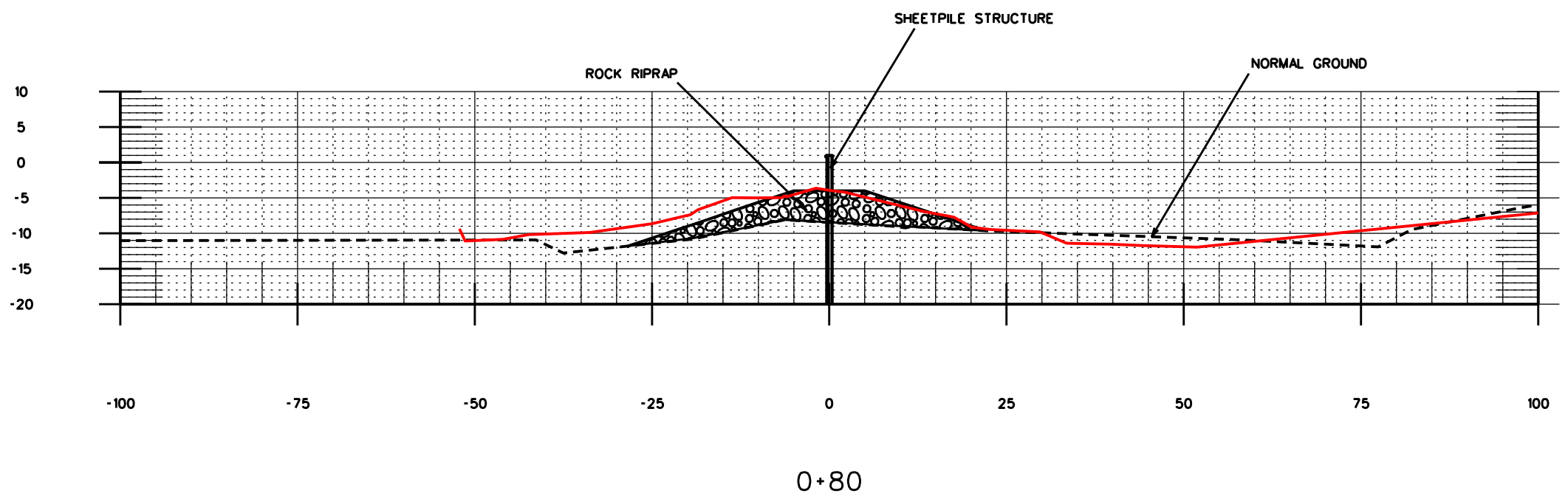
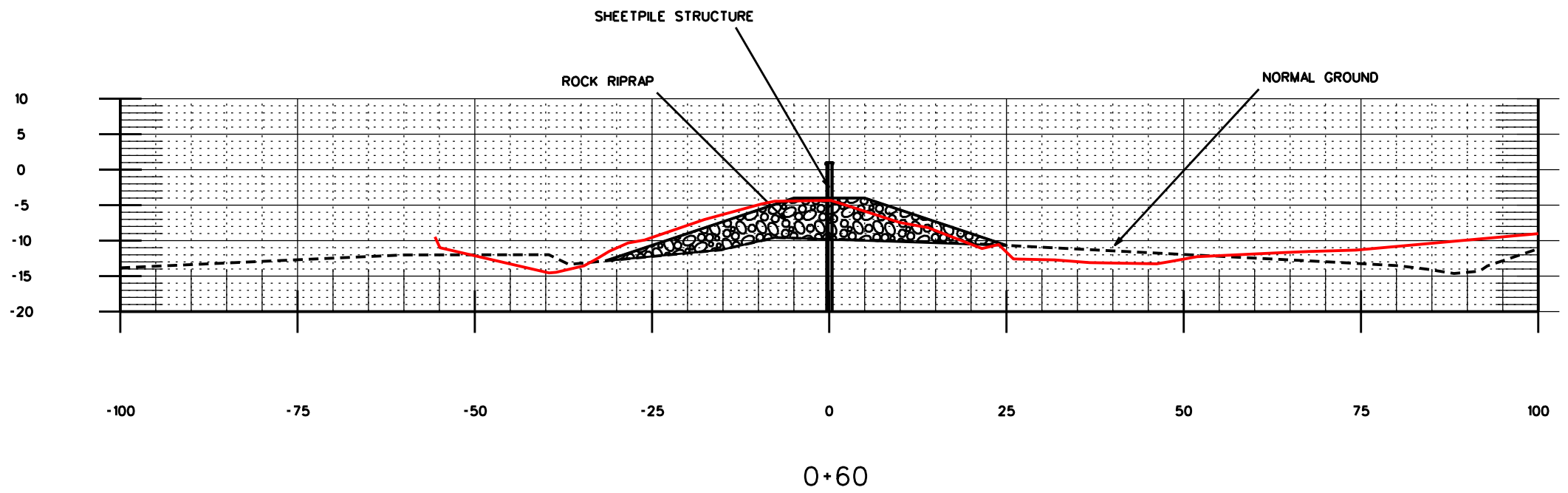


FILE NAME
LA274

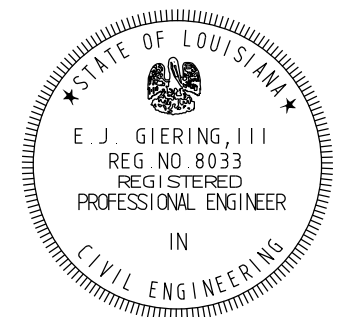
DRAWING NAME
LA27431.DGN

SHEET 31 OF 76

DESIGNED	DRAWN	CHECKED	APPROVED	DATE
S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E. J. GIERING III	07/07
				07/07
				02/09
				05/09



"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

SITE 4 - FILL SECTIONS
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

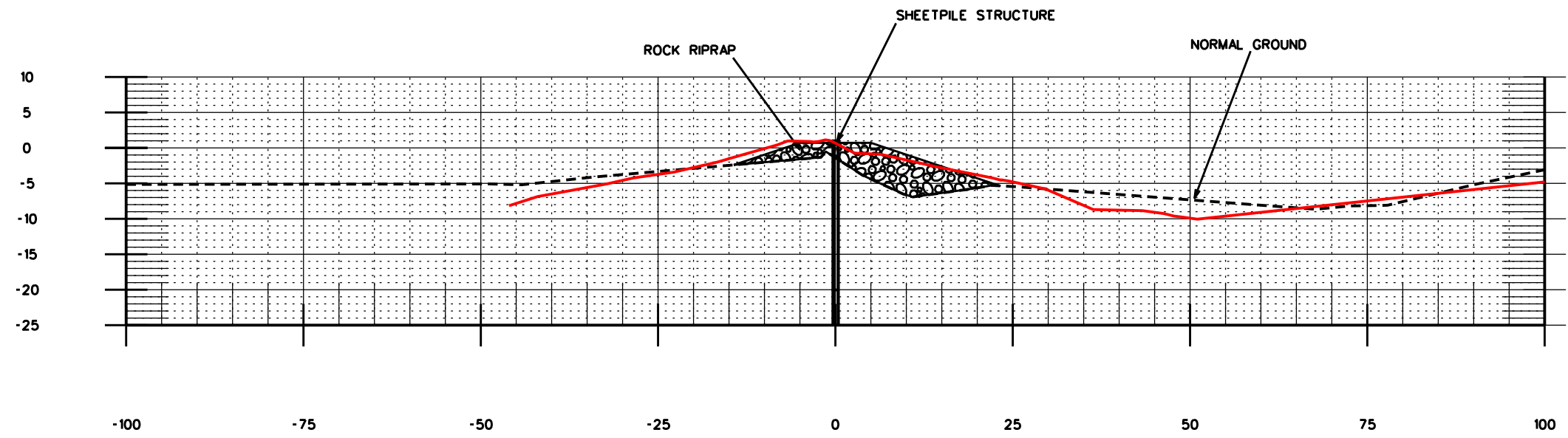


FILE NAME
LA274

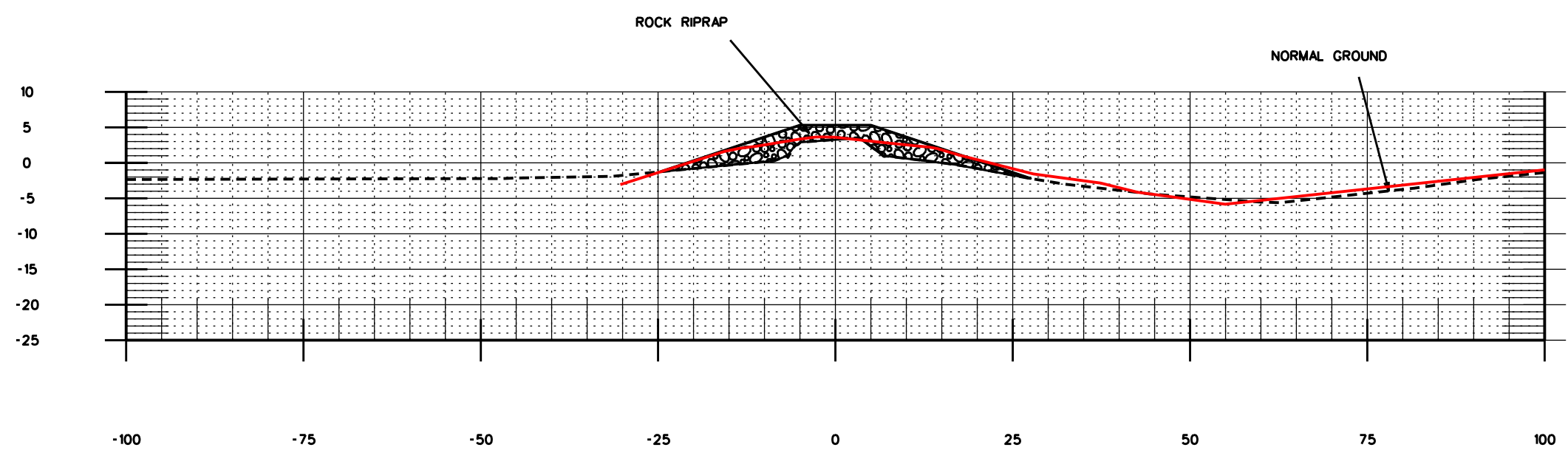
DRAWING NAME
LA27432.DGN

SHEET 32 OF 76

DESIGNED	DATE
S. GARNER	07/07
DRAWN	DATE
D. WILMORE	07/07
CHECKED	DATE
R. FAULKNER, B. STICKER	02/09
APPROVED	DATE
E.J. GIERING III	05/09

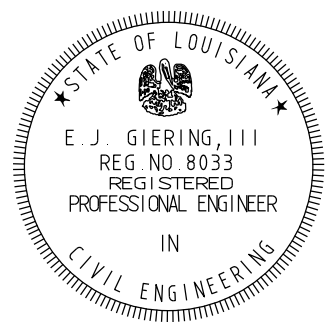


1+00



1+20

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	DATE
S. GARNER	07/07
DRAWN	
D. WILMORE	07/07
CHECKED	
R. FAULKNER, B. STICKER	02/09
APPROVED	
E. J. GIERING III	05/09

SITE 4 - FILL SECTIONS
BAYOU DE CADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



Natural Resources Conservation Service
United States Department of Agriculture

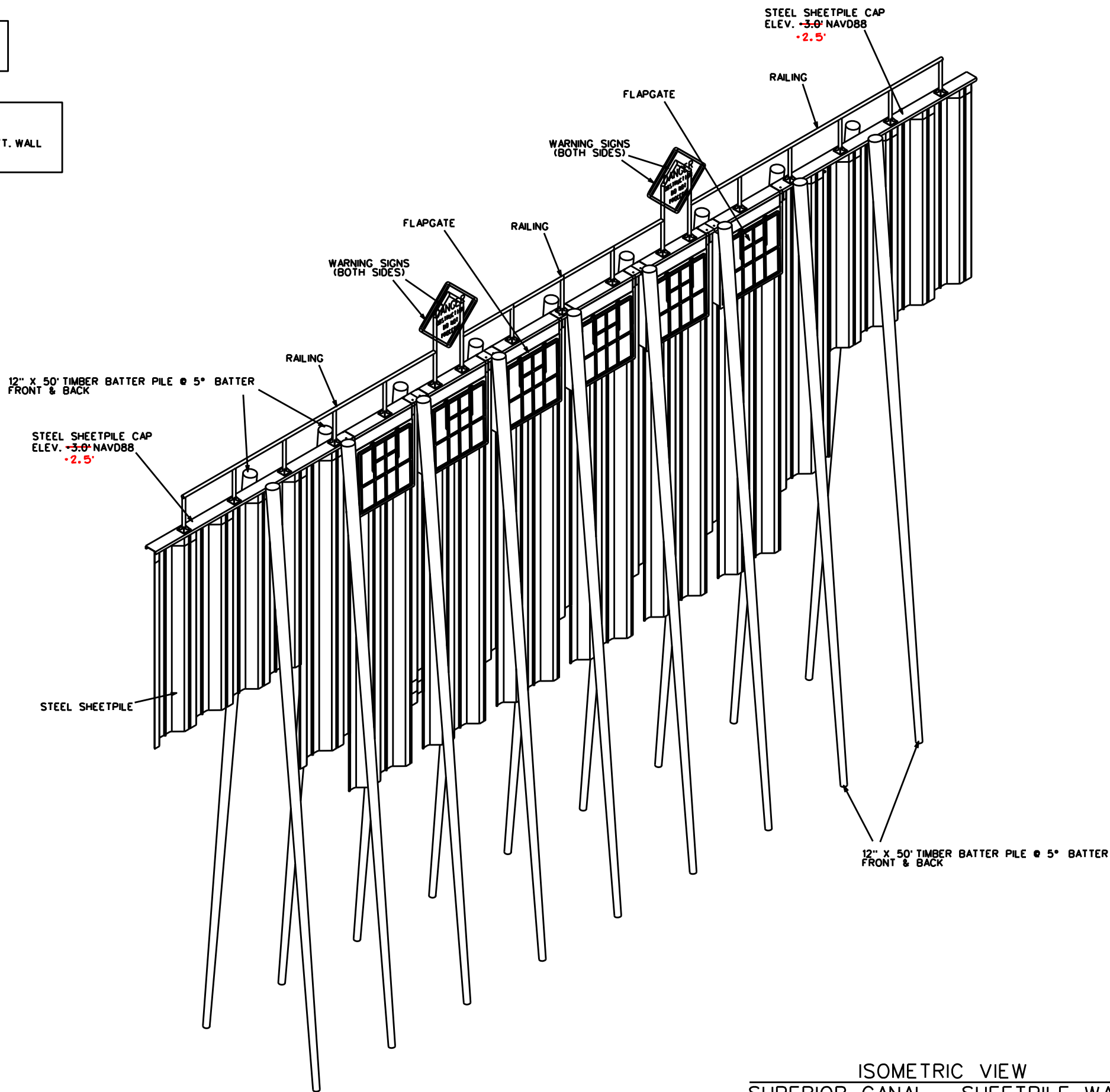
FILE NAME
LA274

DRAWING NAME
LA27433.DGN

SHEET 33 OF 76

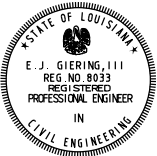
NOTES:
1. SEE SHEET 55 FOR SHEETPILE DETAIL
2. SEE SHEETS 41 & 42 FOR GATE DETAILS

STEEL SHEETPILE:
MINIMUM THICKNESS = 0.375 INCHES
MINIMUM MOMENT OF INERTIA = 76.8 IN4 / FT. WALL
ASTM A 572 GRADE 50



ISOMETRIC VIEW
SUPERIOR CANAL - SHEETPILE WALL

"AS-BUILT"



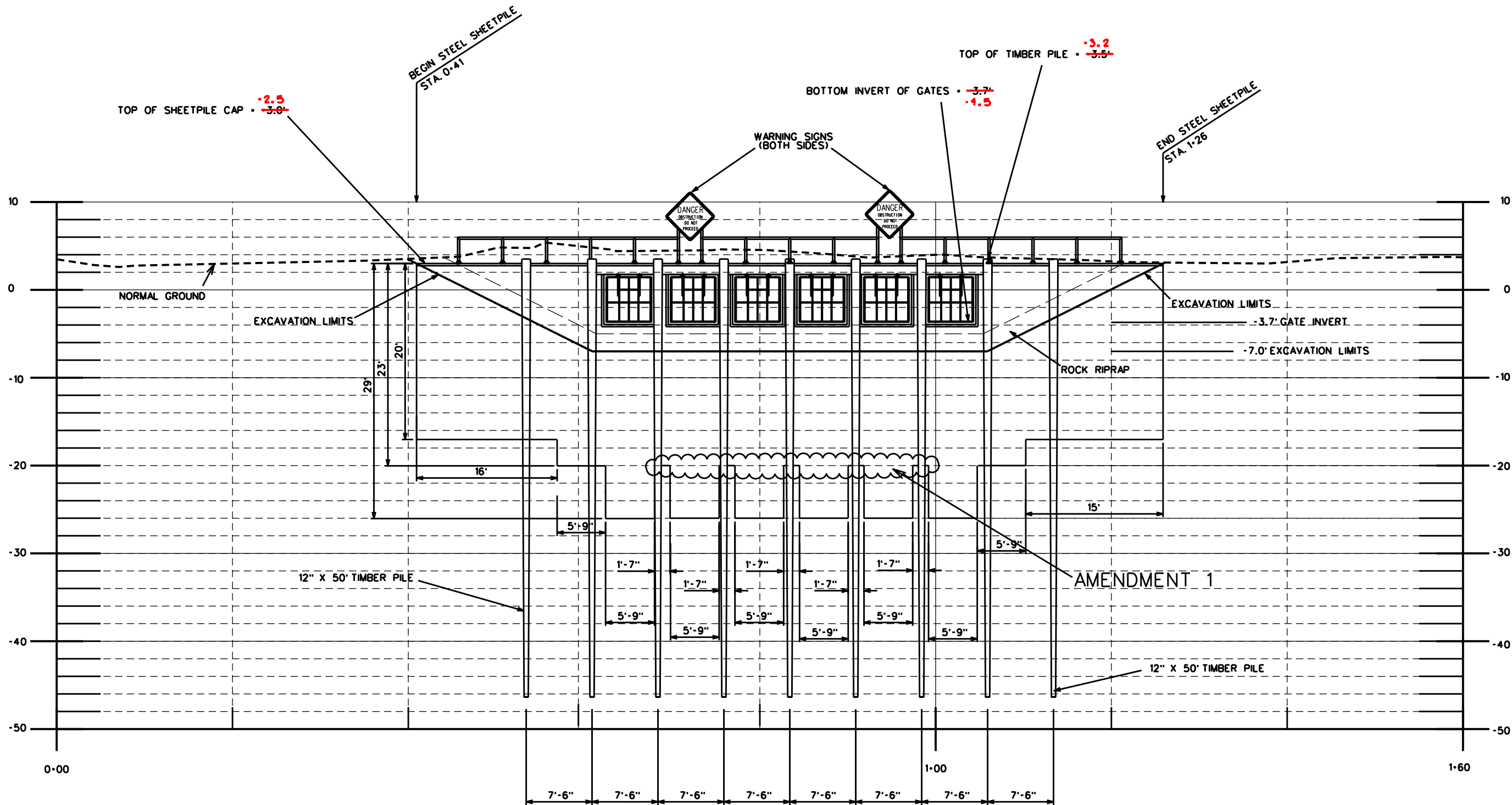
REVISIONS			
NO.	DATE	APPROVED	TITLE

SHEETPILE - ISOMETRIC VIEW
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA274.35.DGN
SHEET	35 OF 76

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E. J. GIERING, III		05/09

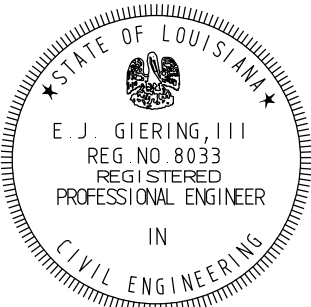


NOTE:
1. ROCK RIPRAP NOT SHOWN FOR CLARITY.
2. SEE SHEET 55 FOR SHEETPILE DETAIL

STRUCTURE - ELEVATION VIEW
SOUTH FACE

A
34

"AS-BUILT"



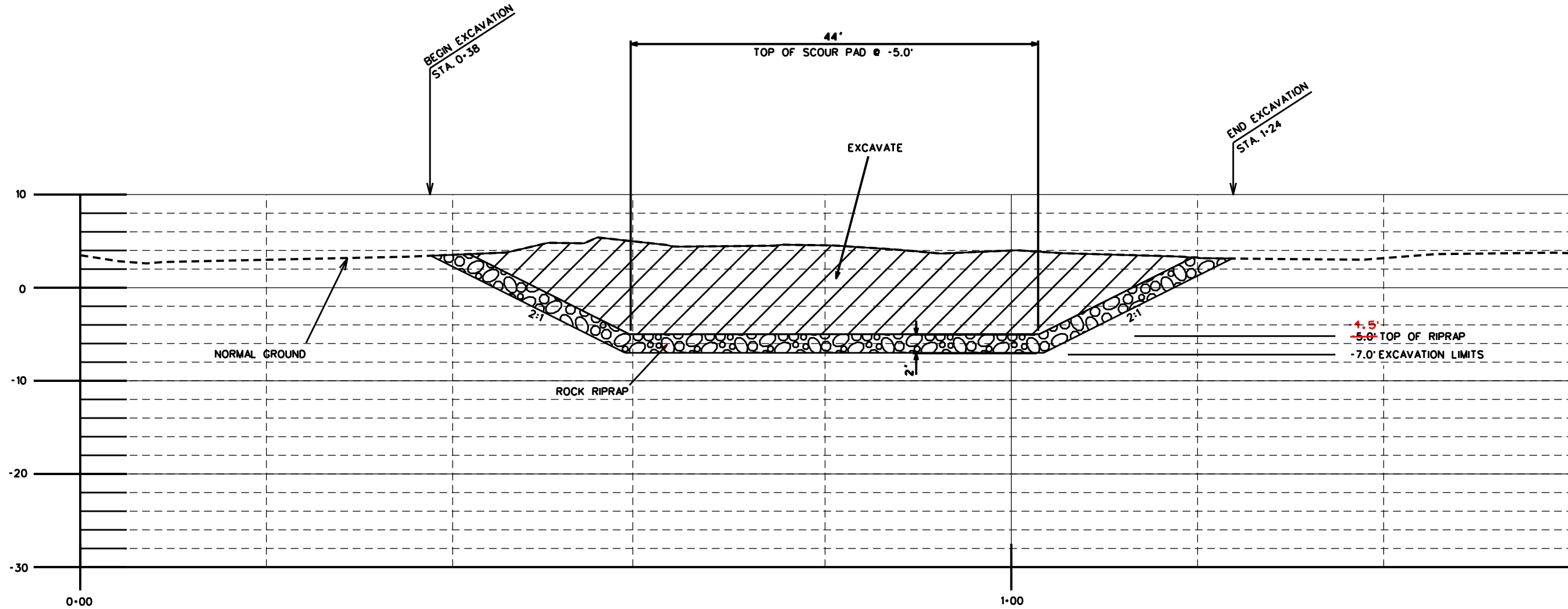
REVISIONS			
NO.	DATE	APPROVED	TITLE
AT	01/08/10	C.S.	C.E.

SHEETPILE - ELEVATION VIEW
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274
DRAWING NAME
LA27436.DGN

DESIGNED	DRAWN	CHECKED	APPROVED	DATE
S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E.J. GIERING, III	07/07
				07/07
				02/09
				05/09

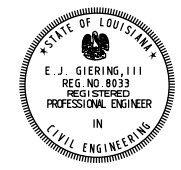


ROCK RIPRAP GRADATION	
PERCENT LIGHTER BY WEIGHT	POUNDS
100	700
50-100	300
15-50	150
0-15	45

EXCAVATION & SCOUR PAD
ELEVATION VIEW

A
34

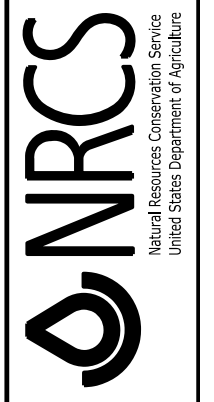
"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	DATE
S. GARNER	07/07
DRAWN	DATE
D. WILMORE	07/07
CHECKED	DATE
R. FAULKNER, B. STICKER	02/09
APPROVED	DATE
E.J. GIERING, III	05/09

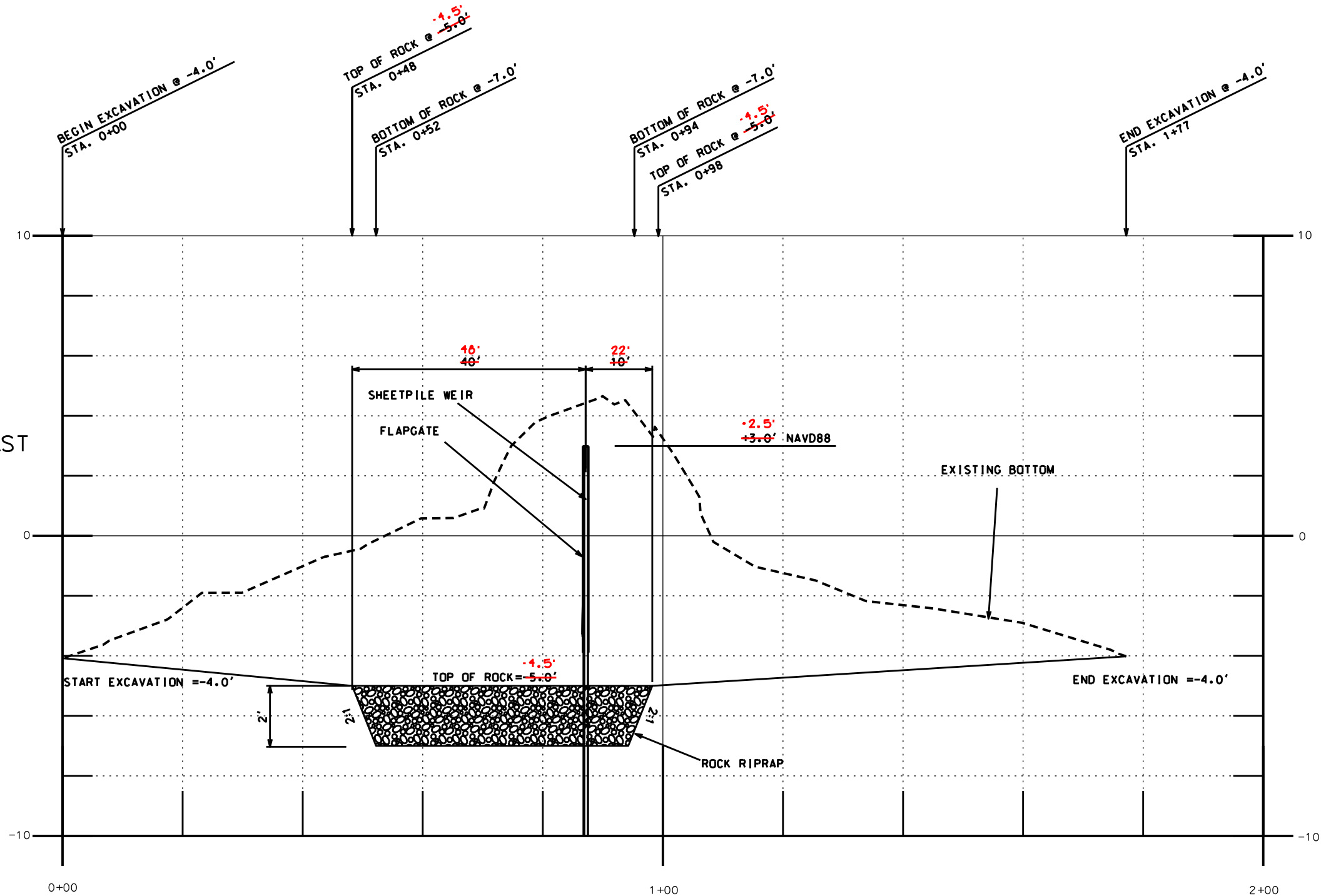
EXCAVATION & SCOUR PAD - ELEVATION VIEW
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274
DRAWING NAME
LA27437.DGN
SHEET
37 OF 76

SOUTHEAST

NORTHWEST



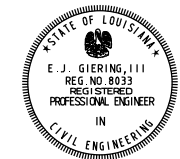
SECTION VIEW - SHEETPILE
SUPERIOR CANAL

B
34

ROCK RIPRAP GRADATION

PERCENT LIGHTER BY WEIGHT	POUNDS
100	700
50-100	300
15-50	150
0-15	45

"AS-BUILT"



SHEETPILE - SECTION VIEW
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274

DRAWING NAME
LA27438.DGN

SHEET 38 OF 76

DESIGNED	DATE
S. GARNER	07/07
DRAWN	DATE
D. WILMORE	07/07
CHECKED	DATE
R. FAULKNER, B. STICKER	02/09
APPROVED	DATE
E.J. GIERING III	05/09

REVISIONS			
NO.	DATE	APPROVED	TITLE



NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E. J. GIERING, III		05/09

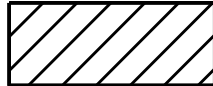
PLAN MAP - EXCAVATION
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

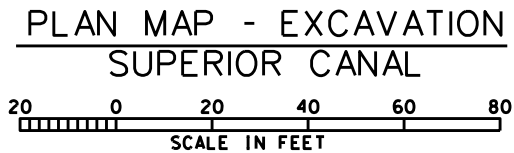
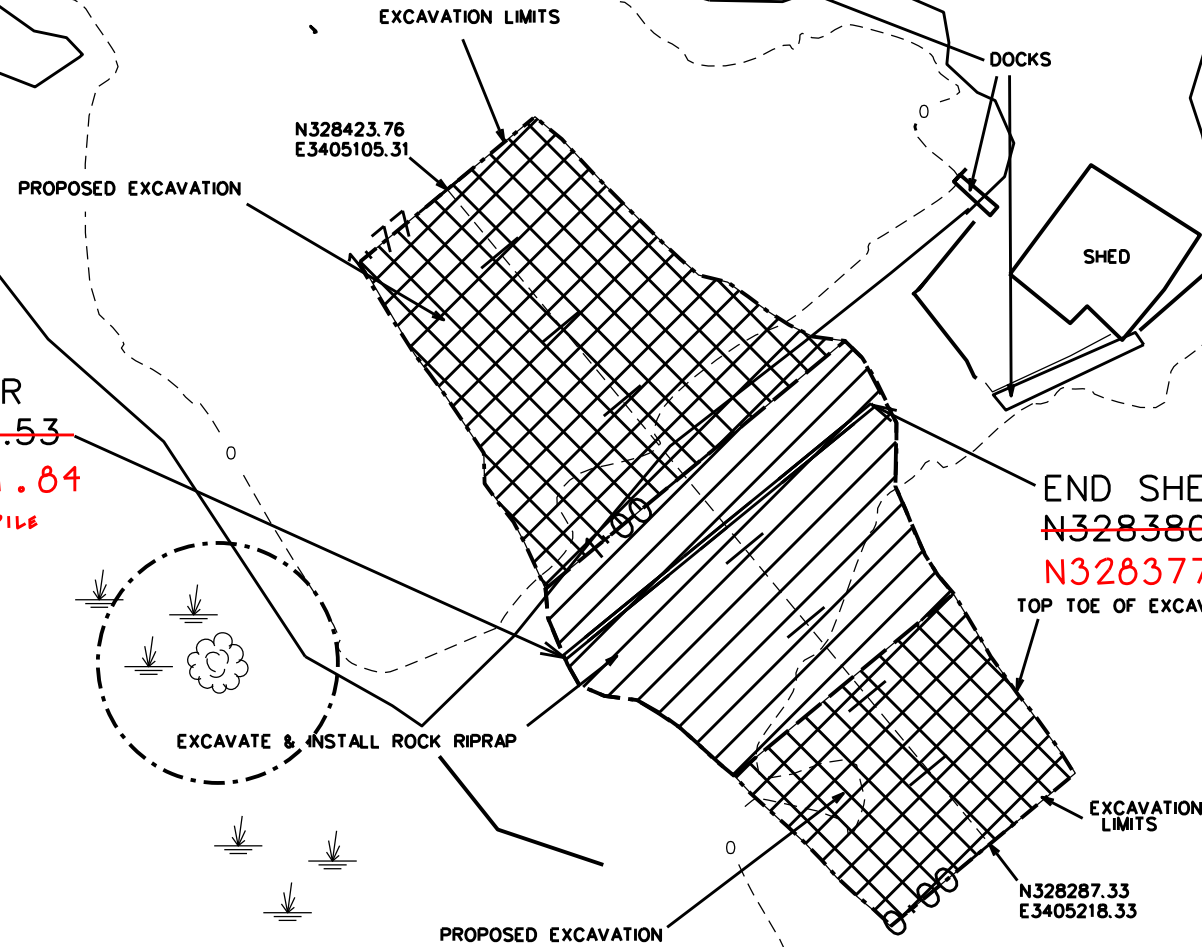


FILE NAME	LA274
DRAWING NAME	LA27439.DGN
SHEET	39 OF 76

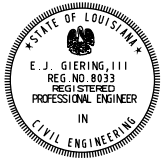
BEGIN SHEET PILE WEIR
~~N328326.82 E3405130.53~~
N328329.07 E3405131.84
NOTE: COORDINATES ARE END ROCK, BEGIN SHEETPILE

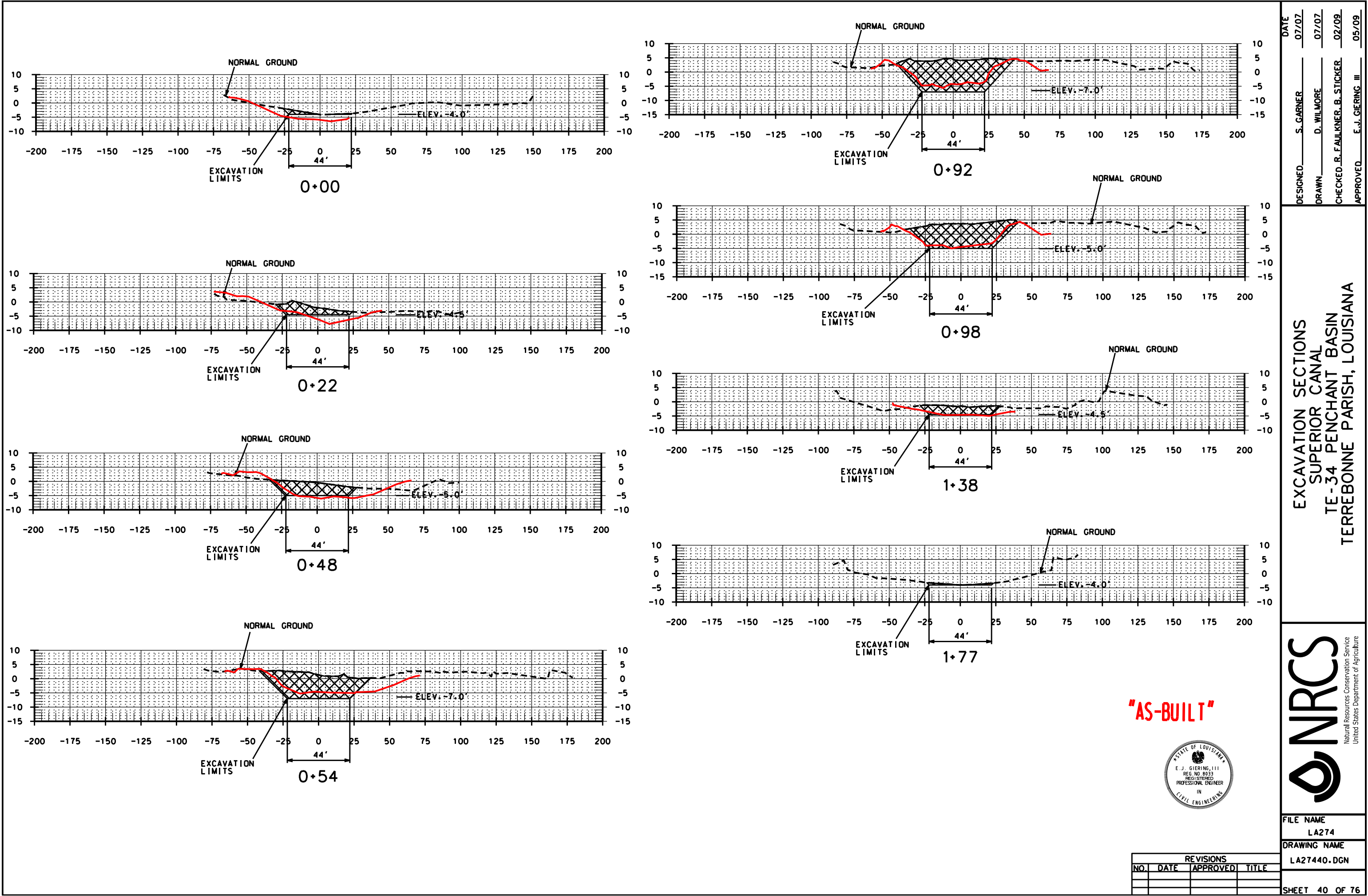
END SHEET PILE WEIR
~~N328380.73 E3405196.24~~
N328377.36 E3405191.33
NOTE: COORDINATES ARE END ROCK, BEGIN SHEETPILE

-  - PROPOSED EXCAVATION AND WORK LIMITS
-  - EXCAVATE AND PLACE ROCK RIPRAP



"AS-BUILT"





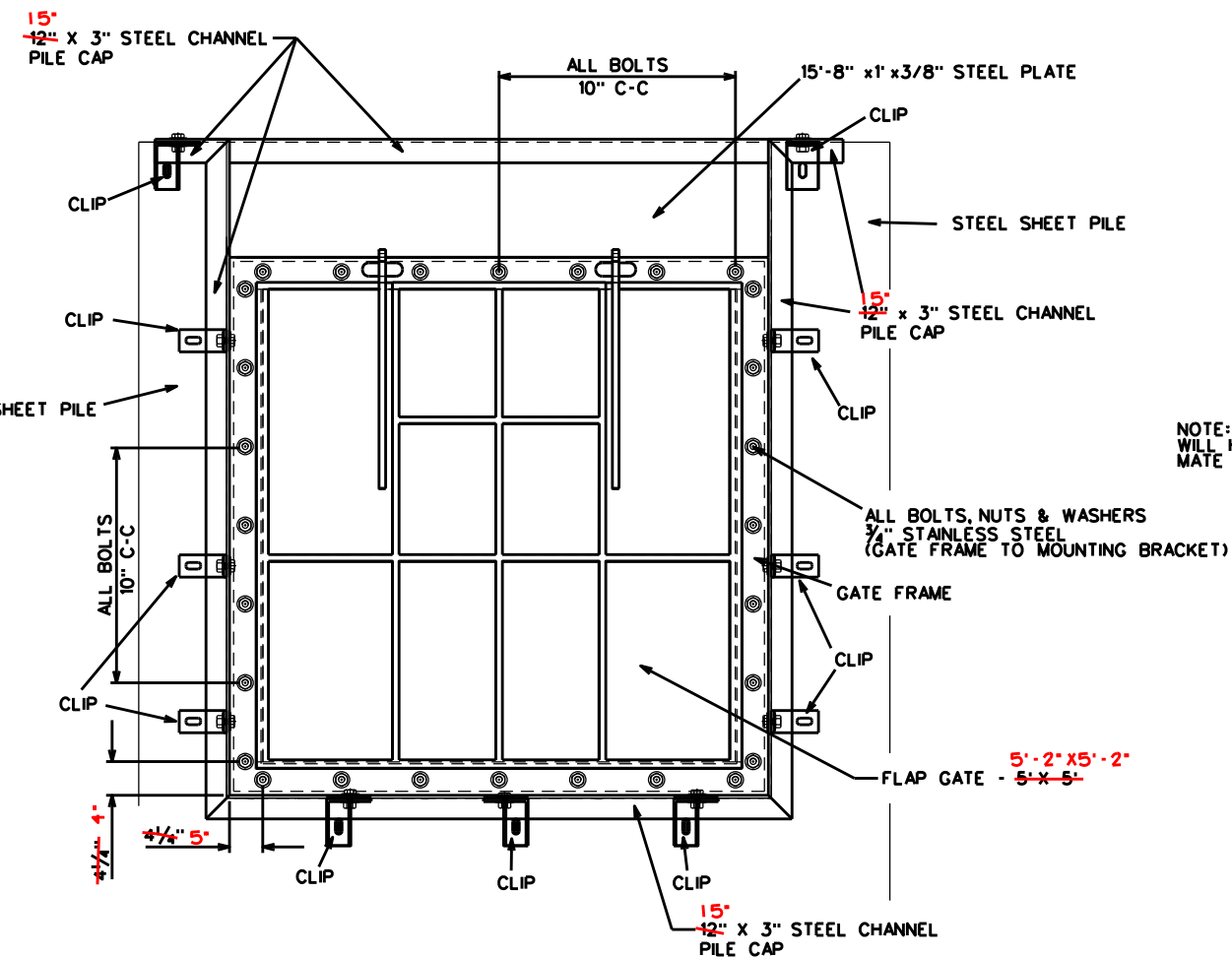
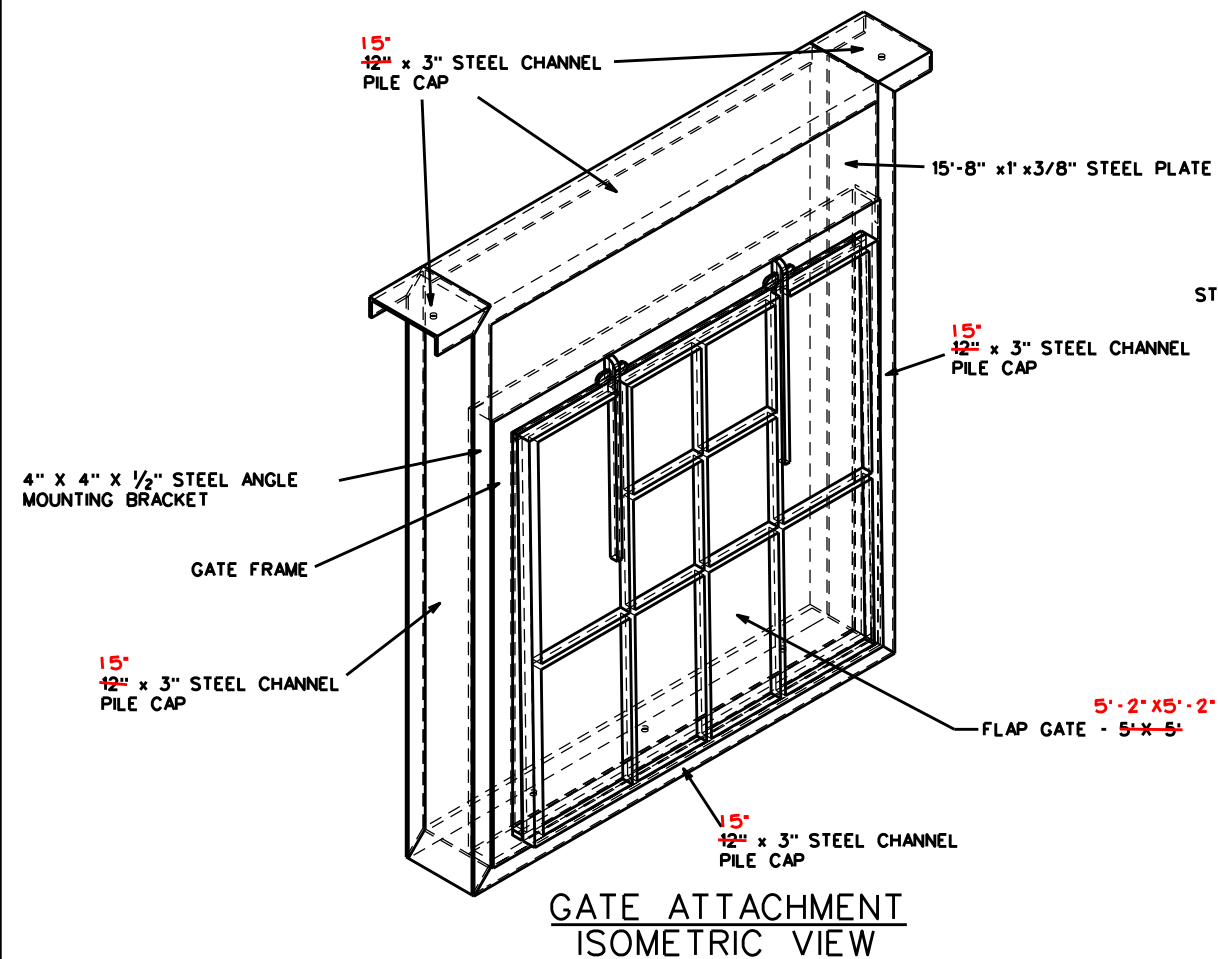
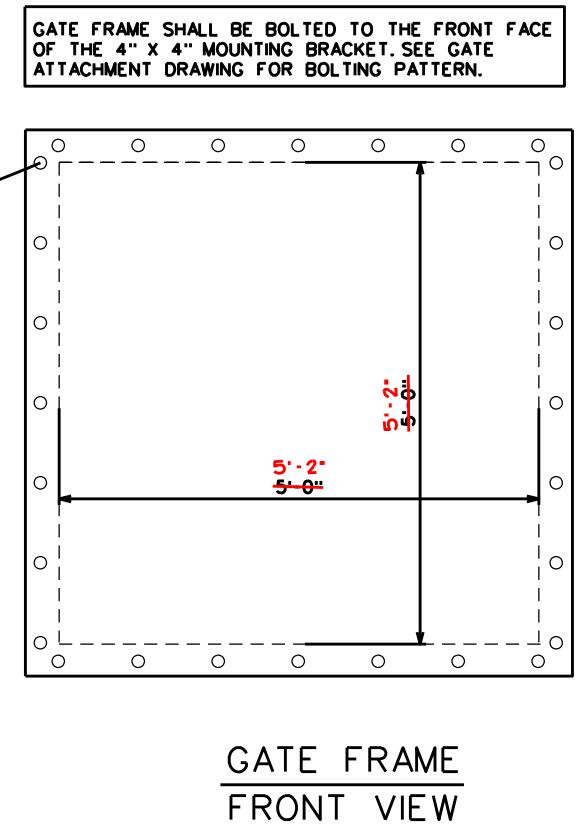
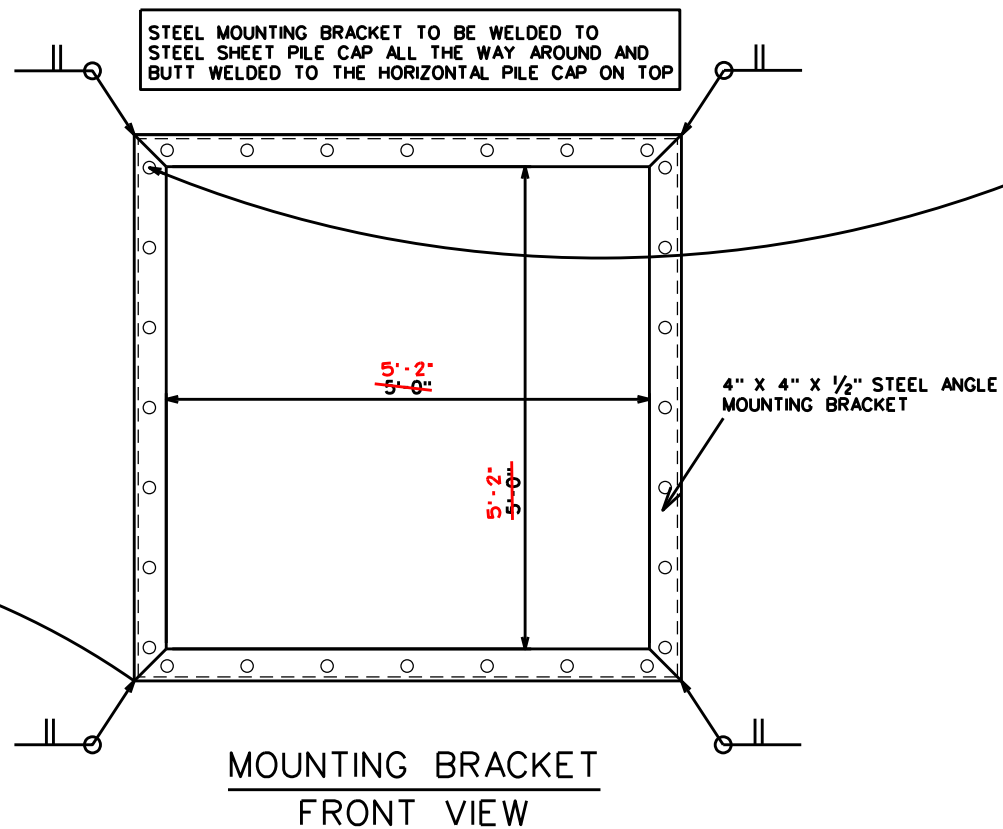
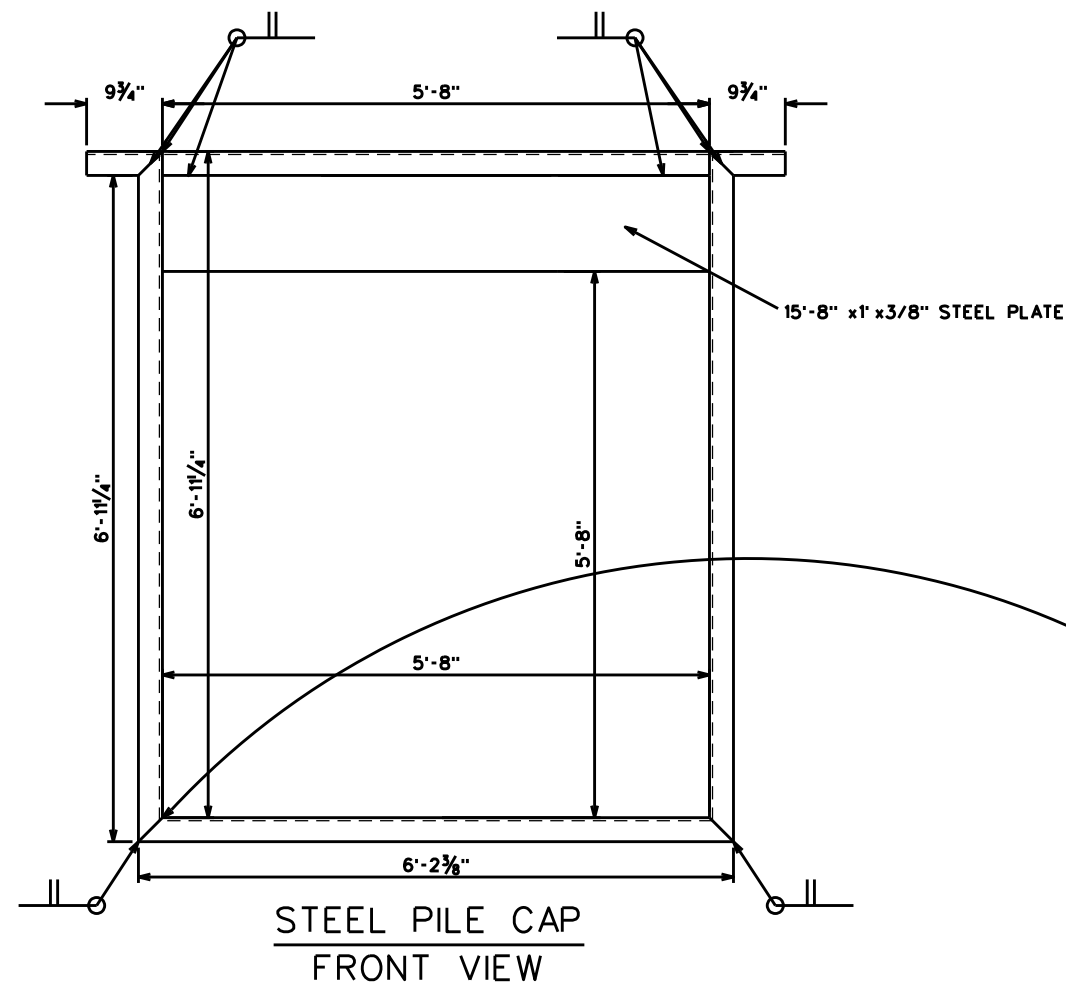
DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING, III

EXCAVATION SECTIONS
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

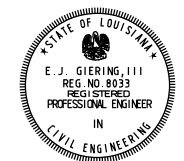


FILE NAME	LA274
DRAWING NAME	LA27440.DGN
SHEET	40 OF 76

REVISIONS			
NO.	DATE	APPROVED	TITLE



"AS-BUILT"



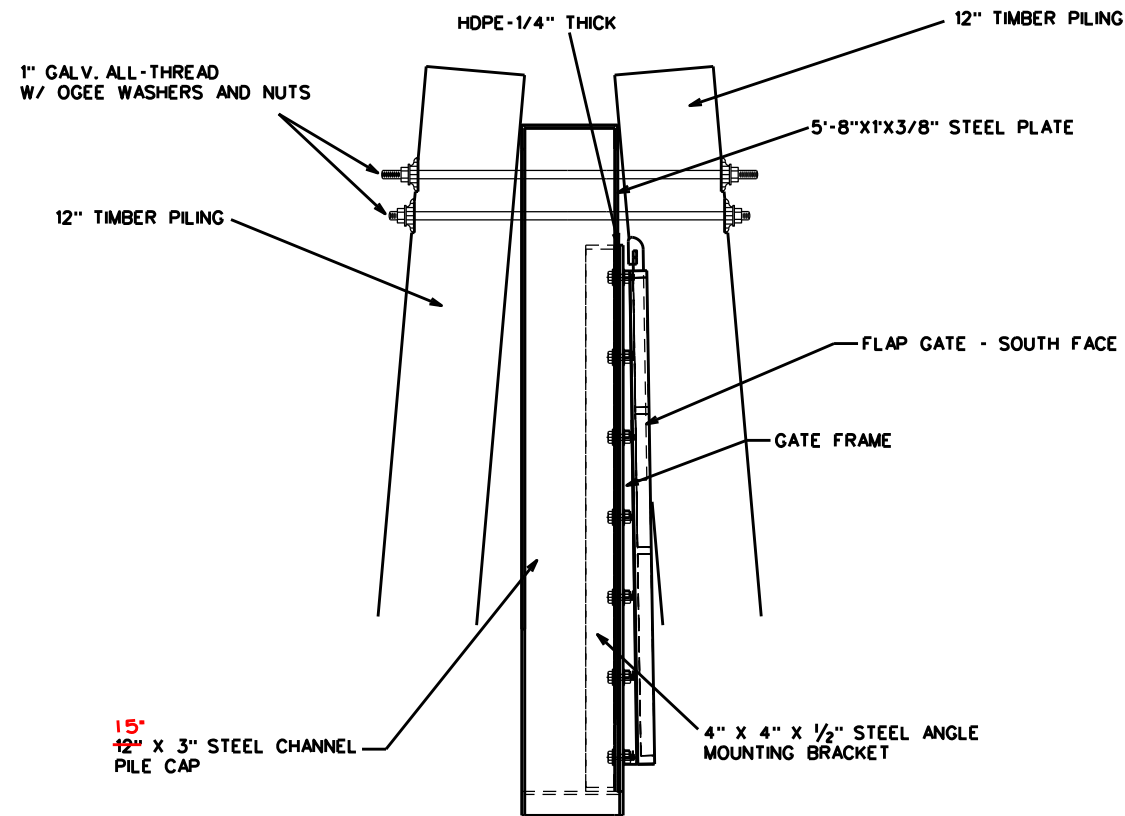
GATE ATTACHMENT DETAILS - FRONT VIEW
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09

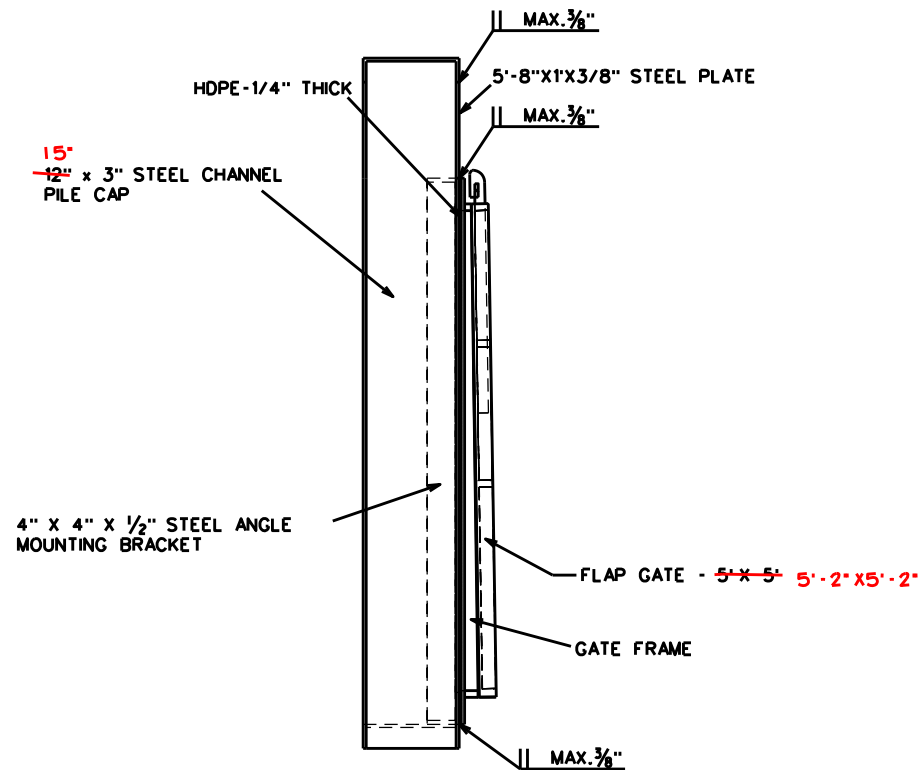


FILE NAME	LA274
DRAWING NAME	LA27441.DGN
SHEET	41 OF 76

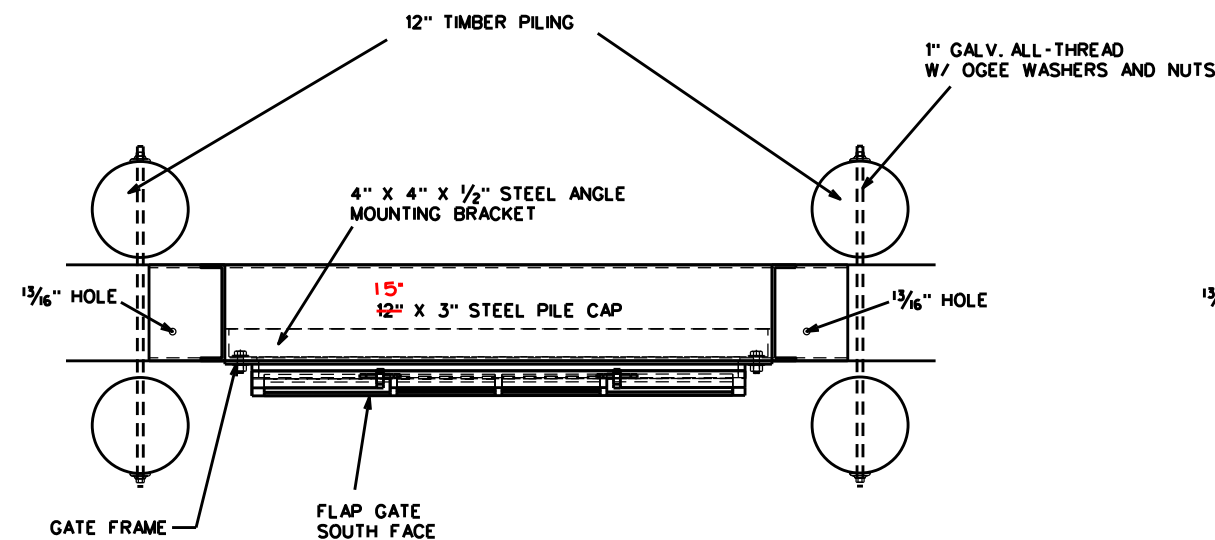
REVISIONS		
NO.	DATE	TITLE



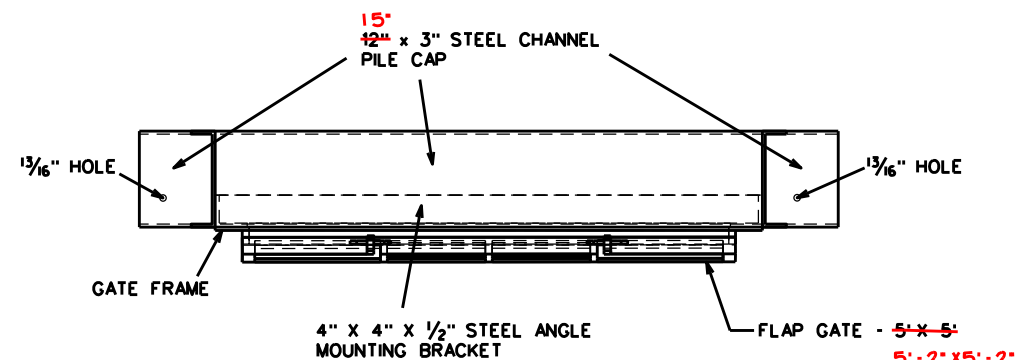
GATE ATTACHMENT W/ PILES
SIDE VIEW



GATE ATTACHMENT
RIGHT VIEW

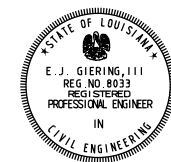


GATE ATTACHMENT W/ PILES
TOP VIEW



GATE ATTACHMENT
TOP VIEW

"AS-BUILT"



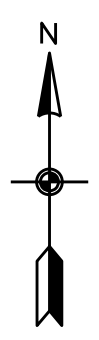
REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE	DATE	07/07
CHECKED	R. FAULKNER, B. STICKER	DATE	02/09
APPROVED	E. J. GIERING, III	DATE	05/09

GATE ATTACHMENT DETAILS - SIDE VIEW
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27442.DGN
SHEET	42 OF 76



NOTE:
DEBRIS FROM CLEARING SHALL BE PLACED ON THE NORTHWEST
BANK OF BRADY CANAL AT A LOCATION AS CONCURRED IN BY
THE COTR.

LANDOWNER
APACHE LOUISIANA MINERALS LLC

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

TBM- N333906.27, E3397496.74 (NAD 83 FEET)
ELEV. = 2.04' (NAVD 88)
BENCHMARK NOT SHOWN ON THIS DRAWING

DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

PERMANENT WARNING SIGN
COORDINATES & TYPES

STR.#	POSITION		TYPE
#23	N333777	E3397570	TYPE C
#24	N333732	E3397605	TYPE C
#25	N333684	E3397527	TYPE C
#26	N333741	E3397502	TYPE C
#27	N333752	E3397540	TYPE D
#28	N333740	E3397548	TYPE E
#29	N333726	E3397557	TYPE E
#30	N333716	E3397564	TYPE D

N333734.38 E3397602.92
N333767.64 E3397574.92
N336691.12 E3397536.07
N333746.81 E3397501.71
N333751.51 E3397539.57
N333740.79 E3397546.32
N333726.66 E3397555.47
N333716.10 E3397562.37

BAYOU PENCHANT

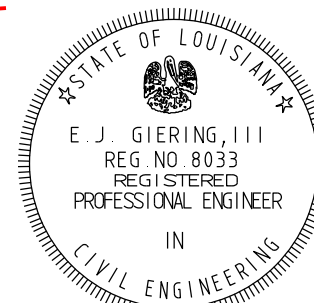
LEGEND

- MARSH
- EXISTING PILE
- EXISTING HEADWALL
- PROPOSED WEIR

END SHEET PILE WEIR

~~N333696.39 E3397577.92~~
N333700.76 E3397572.02

"AS-BUILT"



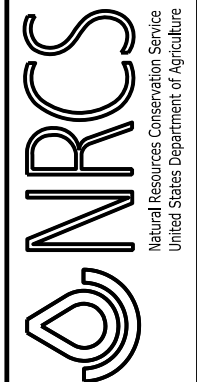
PLAN MAP - WEIR ALIGNMENT
BRADY CANAL



REVISIONS			
NO.	DATE	APPROVED	TITLE

DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING, III

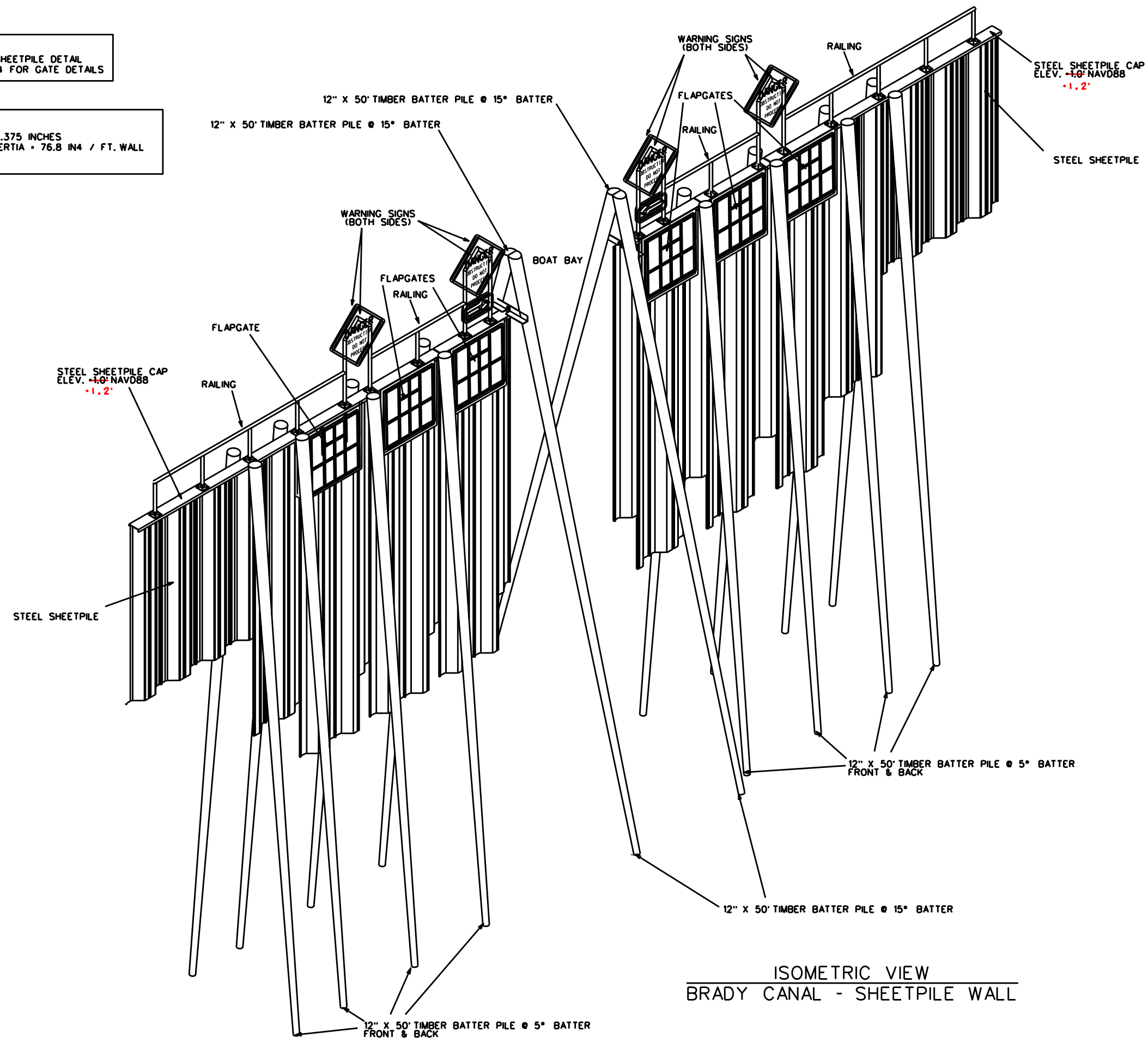
PLAN MAP - WEIR ALIGNMENT
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27443.DGN
SHEET	43 OF 76

NOTES:
1. SEE SHEET 55 FOR SHEETPILE DETAIL
2. SEE SHEETS 53 & 54 FOR GATE DETAILS

STEEL SHEETPILE:
MINIMUM THICKNESS = 0.375 INCHES
MINIMUM MOMENT OF INERTIA = 76.8 IN4 / FT. WALL
ASTM A 572 GRADE 50



ISOMETRIC VIEW
BRADY CANAL - SHEETPILE WALL

"AS-BUILT"



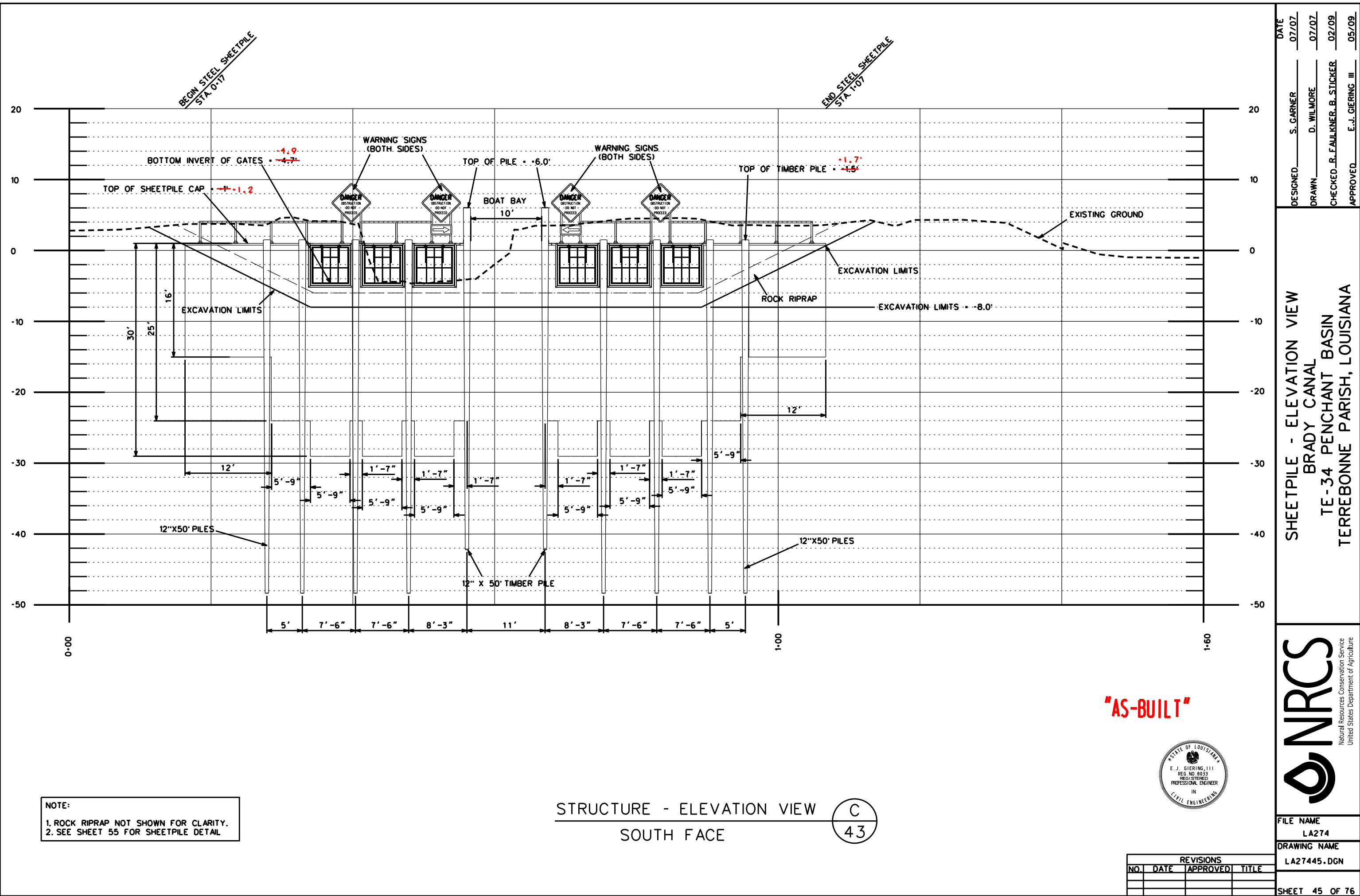
REVISIONS			
NO.	DATE	APPROVED	TITLE

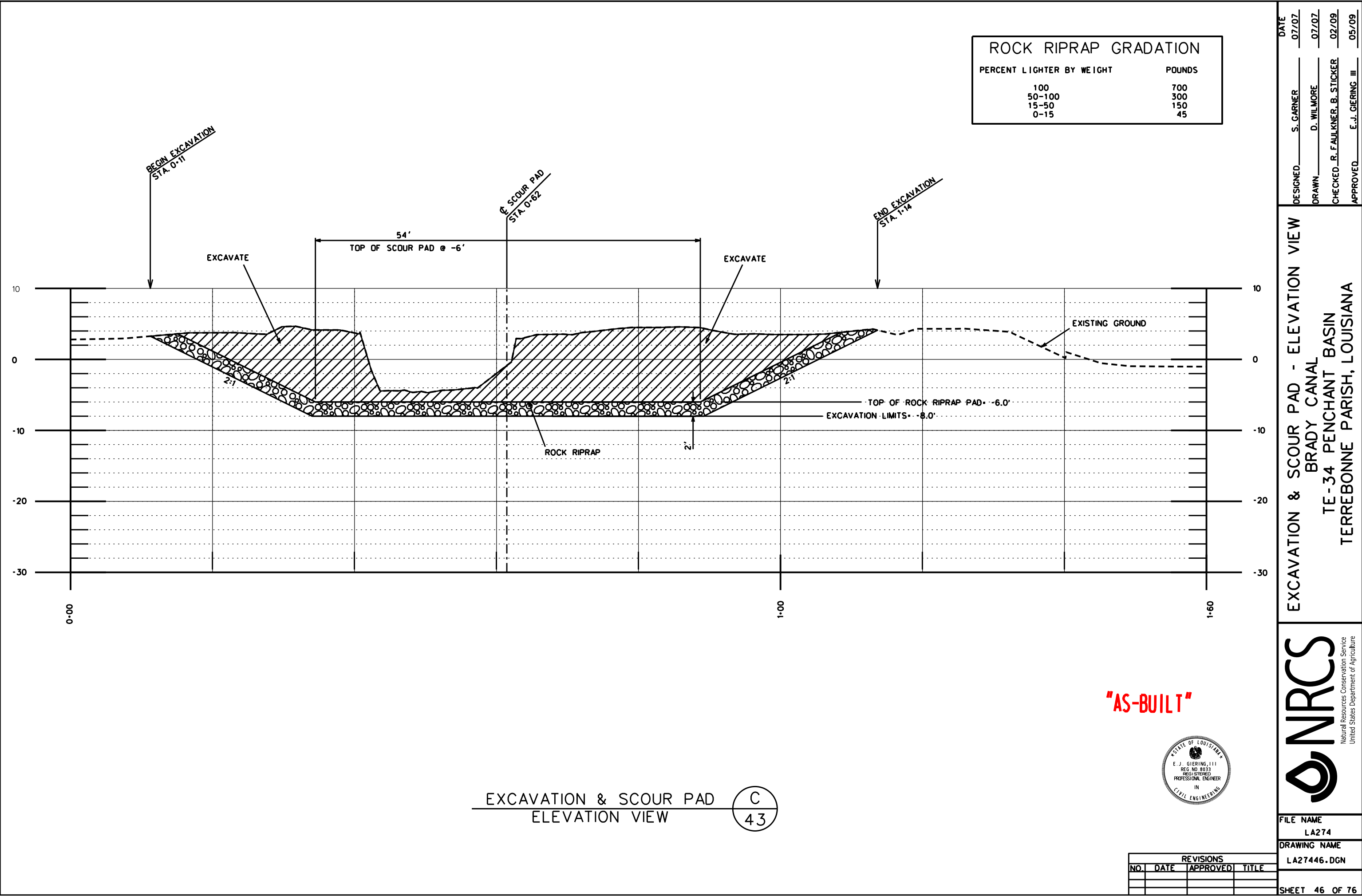
SHEETPILE - ISOMETRIC VIEW
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME LA247
DRAWING NAME LA24744.DGN
SHEET 44 OF 76

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E. J. GIERING, III		05/09



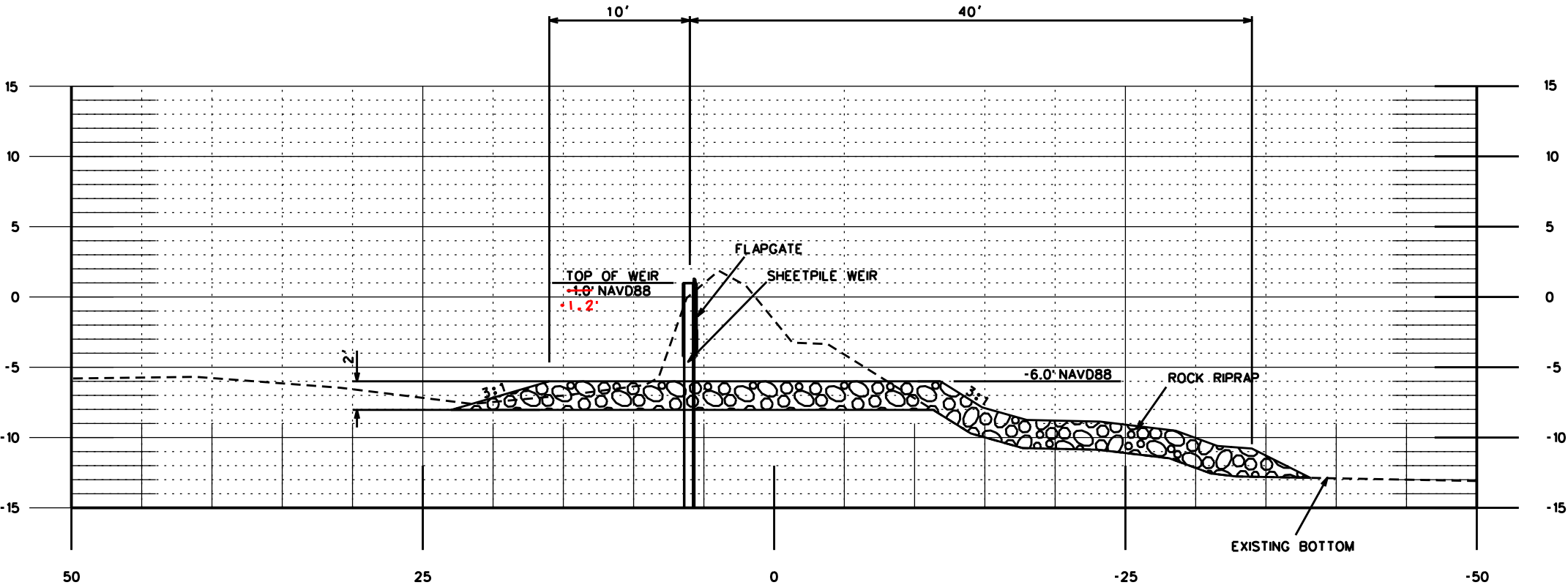


ROCK RIPRAP GRADATION

PERCENT LIGHTER BY WEIGHT	POUNDS
100	700
50-100	300
15-50	150
0-15	45

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09

NORTHEAST



SOUTHWEST

SECTION VIEW - SHEETPILE
BRADY CANAL

D
43

"AS-BUILT"

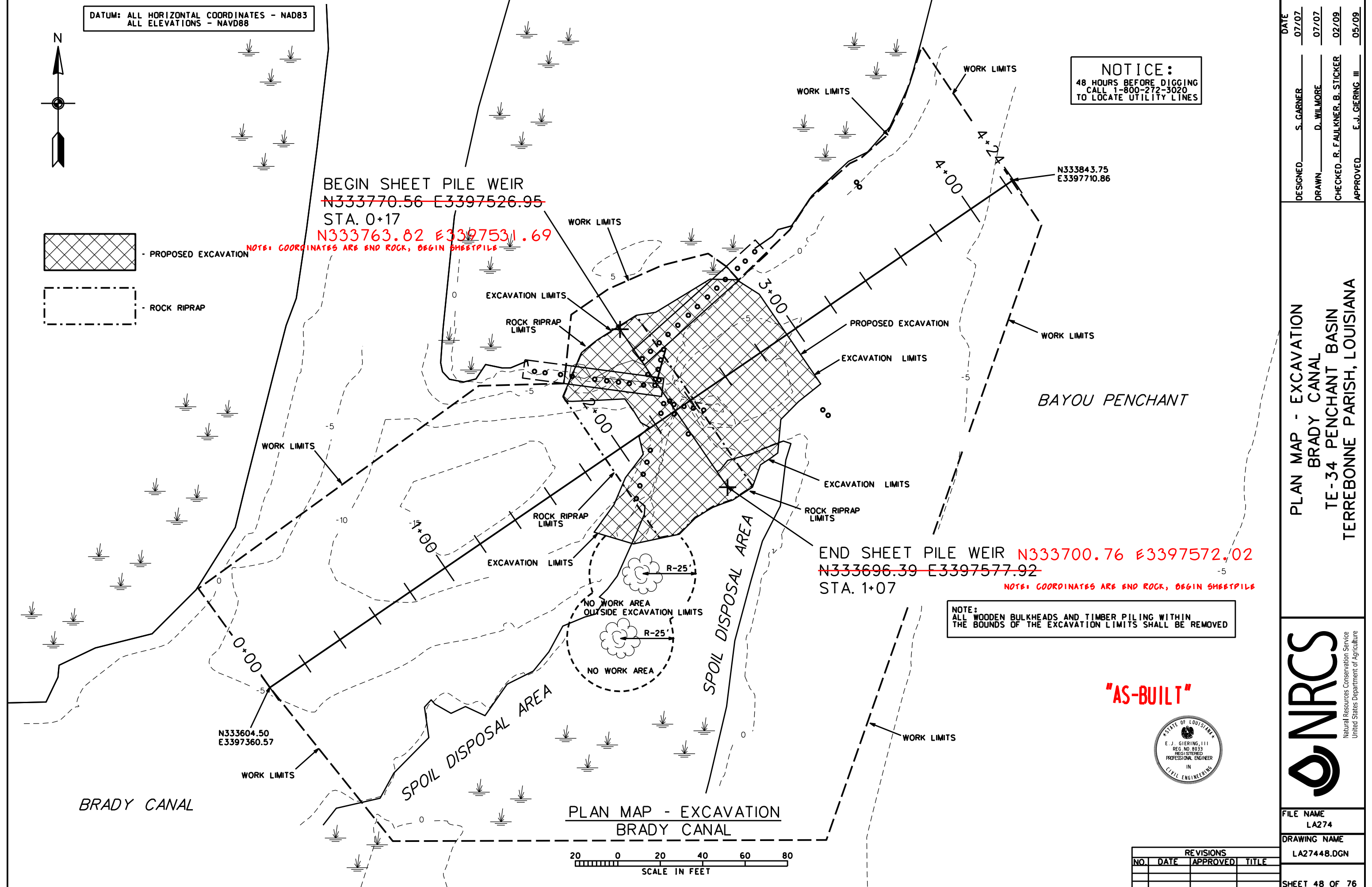


SHEETPILE - SECTION VIEW
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



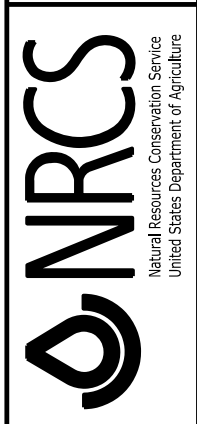
FILE NAME
LA274
DRAWING NAME
LA27447.DGN

REVISIONS			
NO.	DATE	APPROVED	TITLE



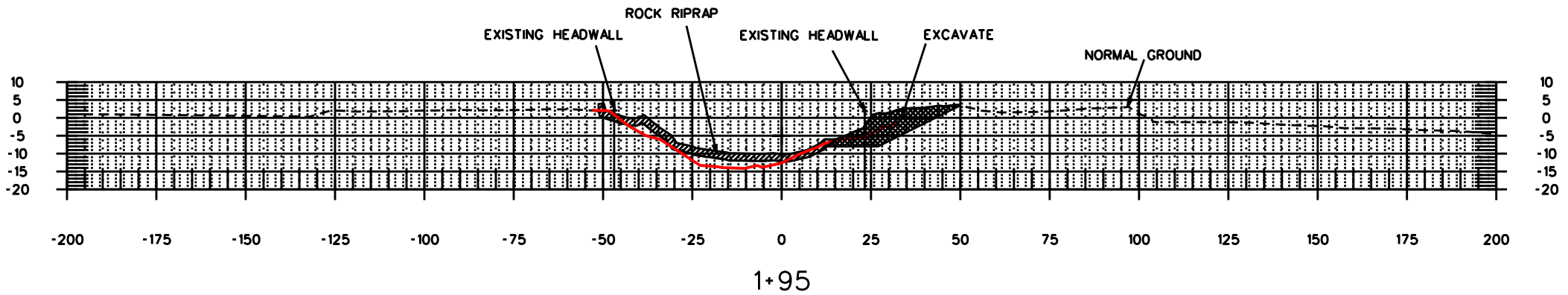
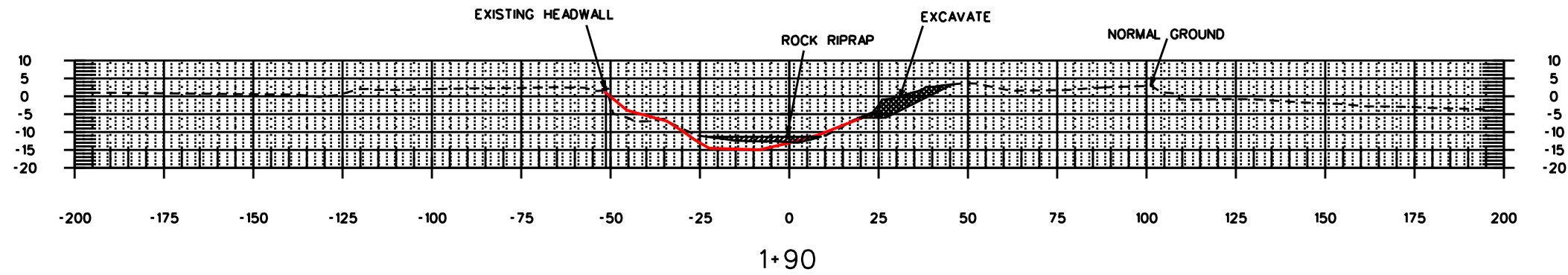
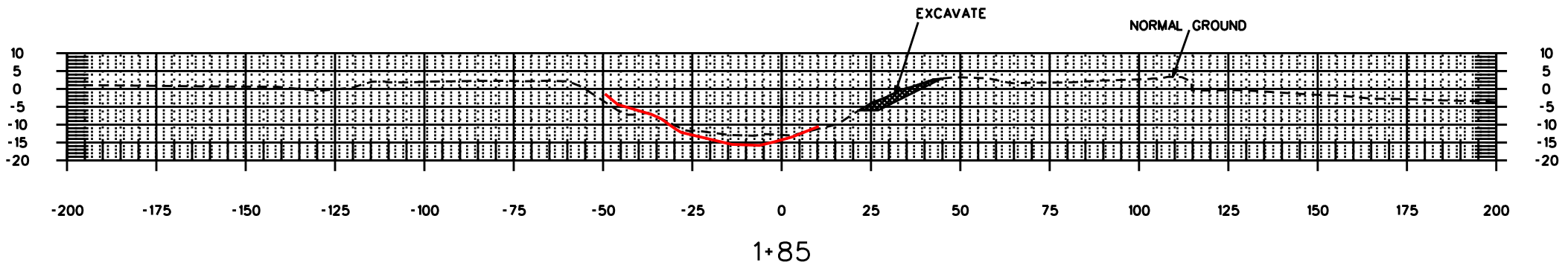
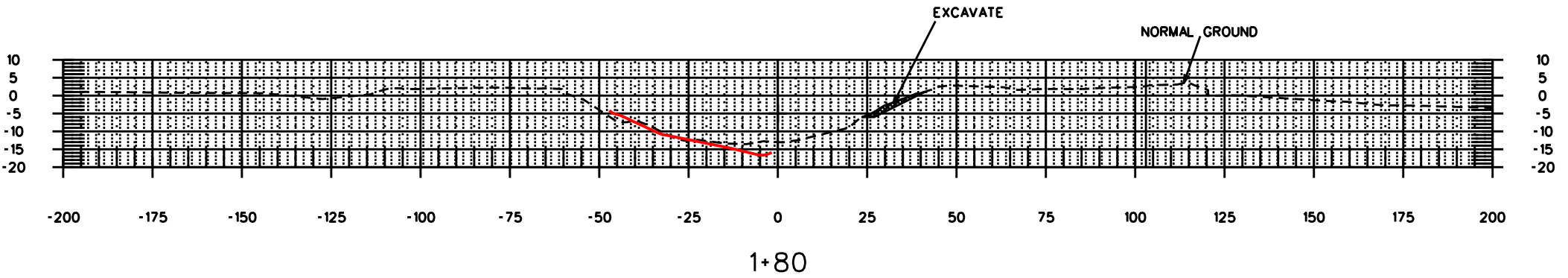
DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09

PLAN MAP - EXCAVATION
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27448.DGN
SHEET	48 OF 76

REVISIONS			
NO.	DATE	APPROVED	TITLE



NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



EXCAVATION - SECTIONS
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



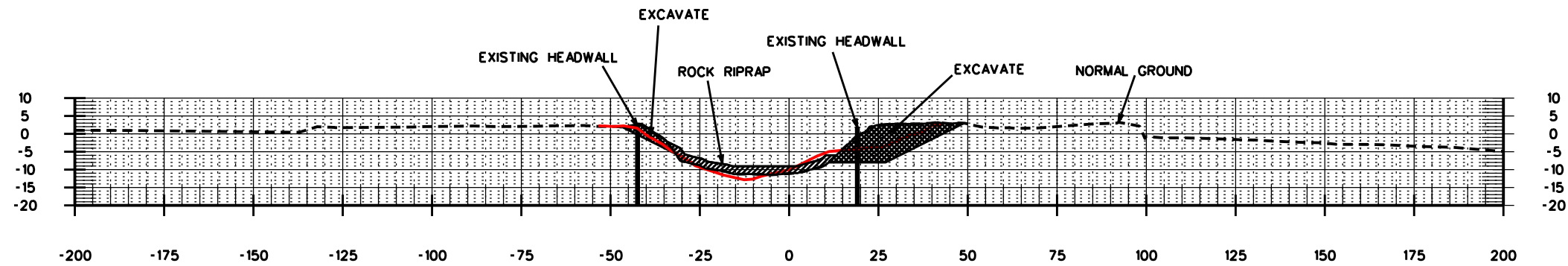
FILE NAME
LA274

DRAWING NAME
LA27449.DGN

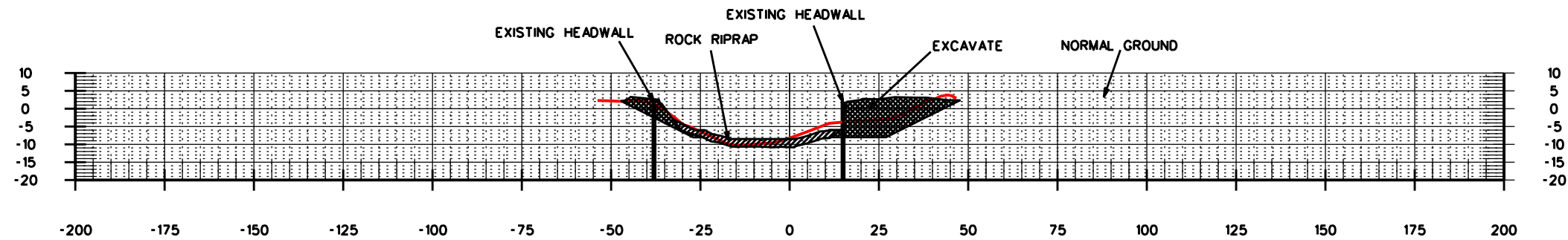
SHEET 49 OF 76

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09

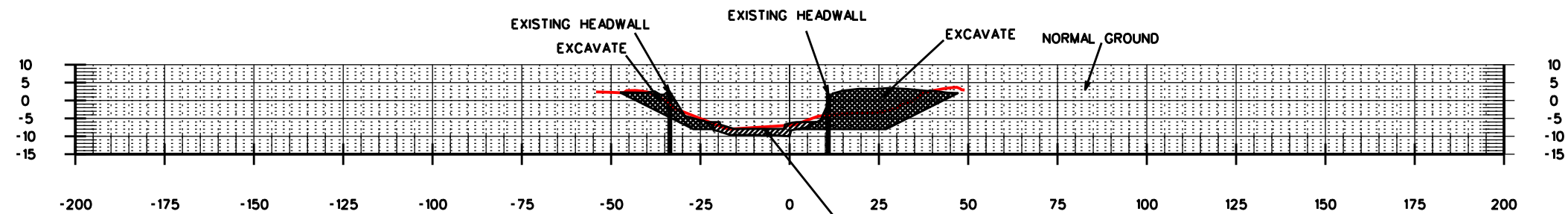
REVISIONS			
NO.	DATE	APPROVED	TITLE



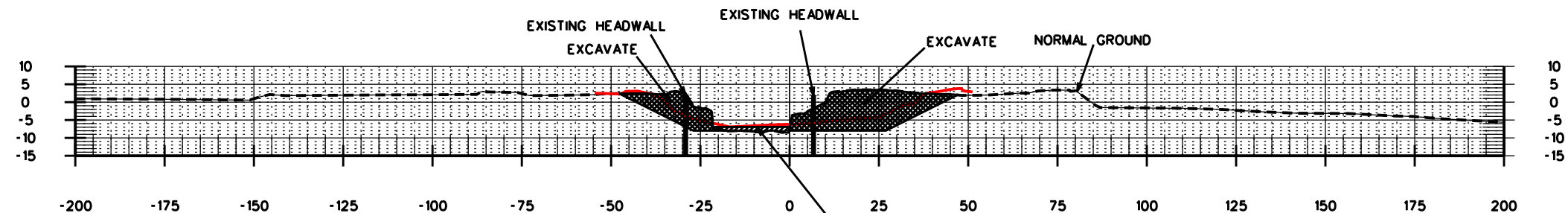
2+00



2+05



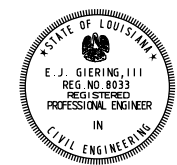
2+10



2+15

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



EXCAVATION - SECTIONS
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274
DRAWING NAME
LA27450.DGN
SHEET 50 OF 76

REVISIONS			
NO.	DATE	APPROVED	TITLE

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE	DATE	07/07
CHECKED	R. FAULKNER, B. STICKER	DATE	02/09
APPROVED	E.J. GIERING III	DATE	05/09

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



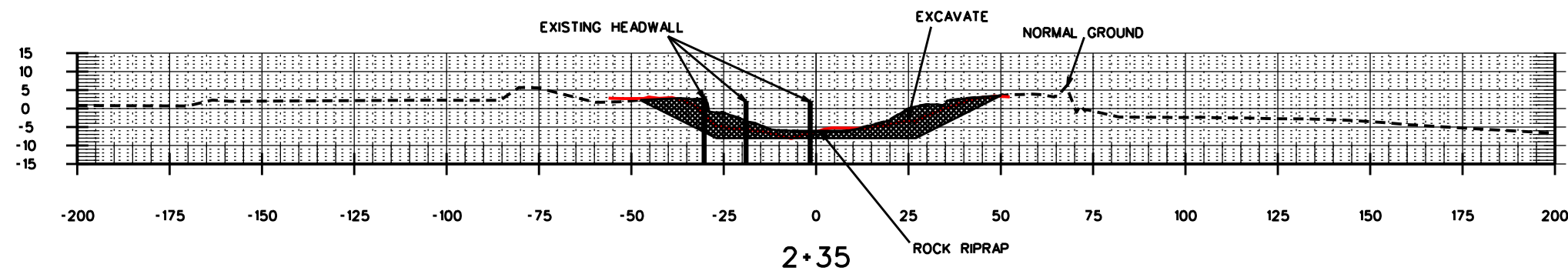
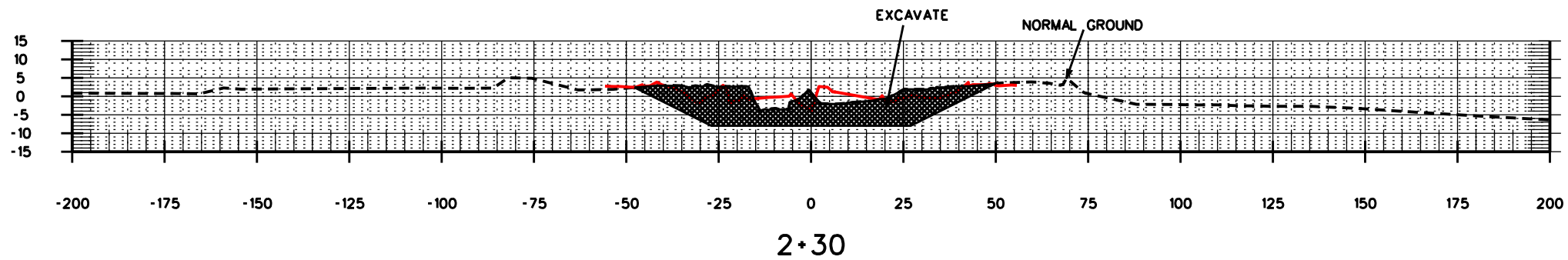
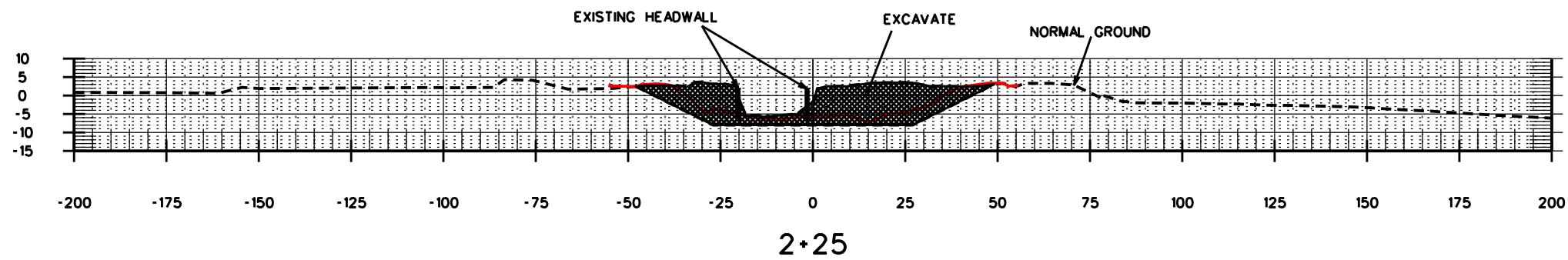
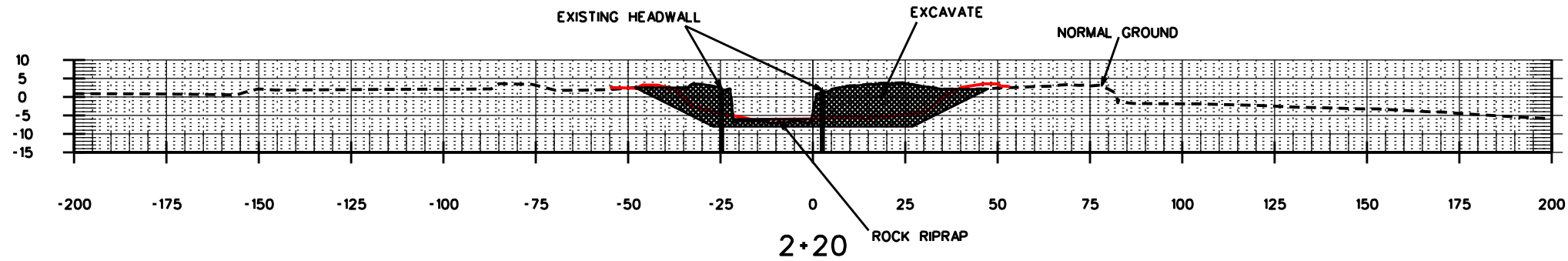
EXCAVATION - SECTIONS
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

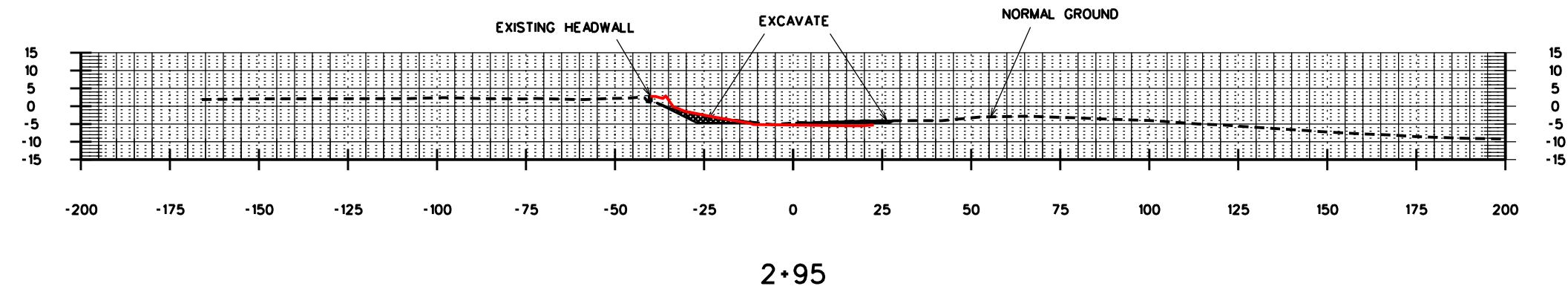
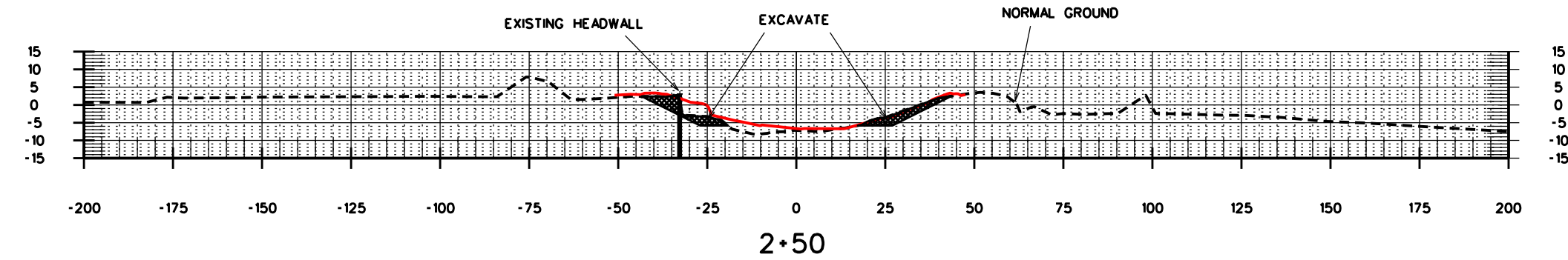
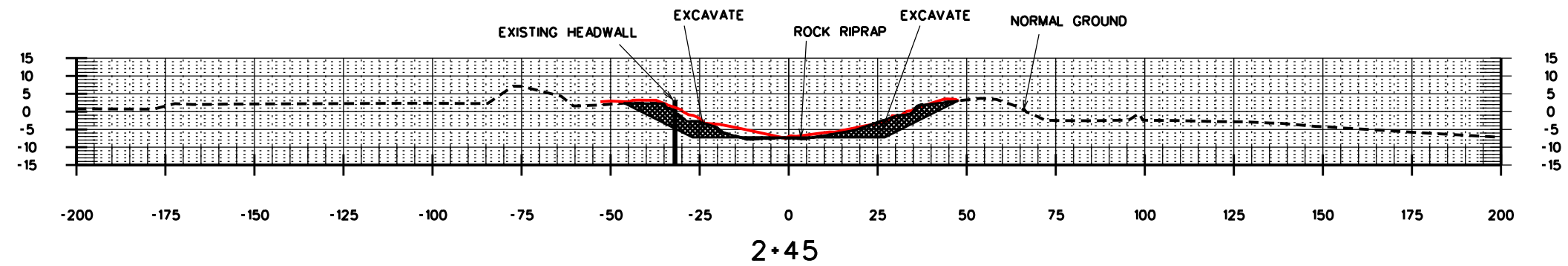
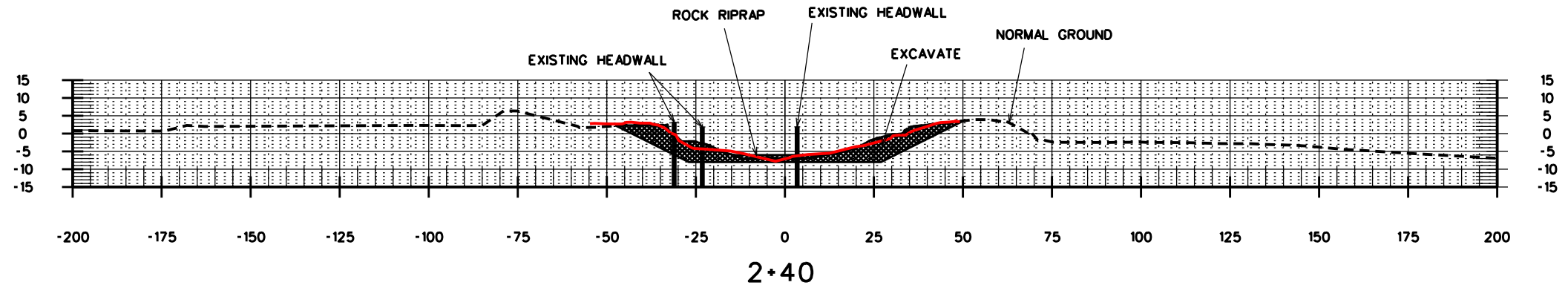


FILE NAME
LA274
DRAWING NAME
LA27451.DGN
SHEET 51 OF 76

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09

REVISIONS			
NO.	DATE	APPROVED	TITLE





NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



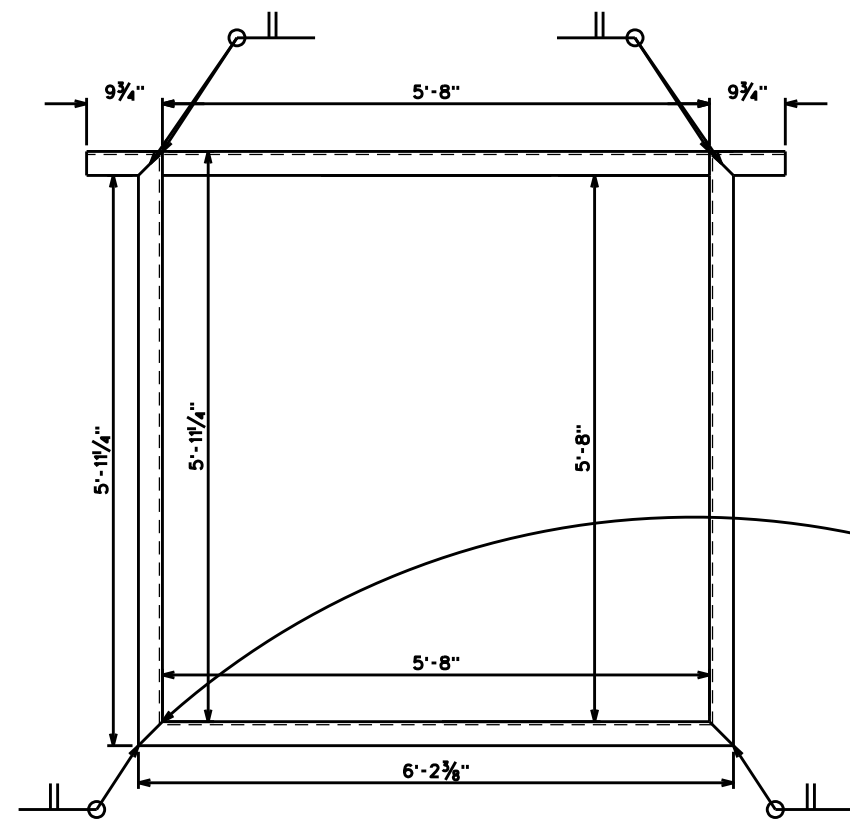
EXCAVATION - SECTIONS
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09

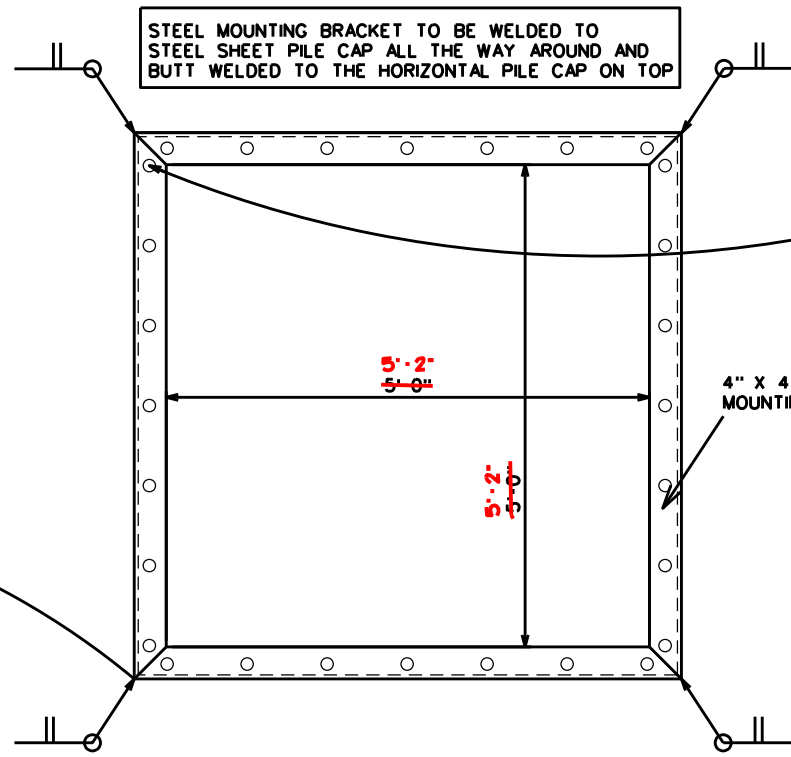


FILE NAME	LA274
DRAWING NAME	LA27452.DGN
SHEET	52 OF 76

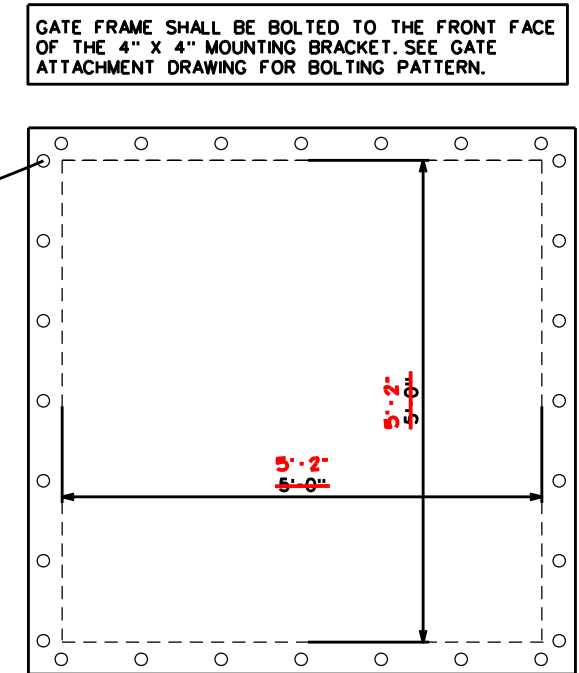
REVISIONS			
NO.	DATE	APPROVED	TITLE



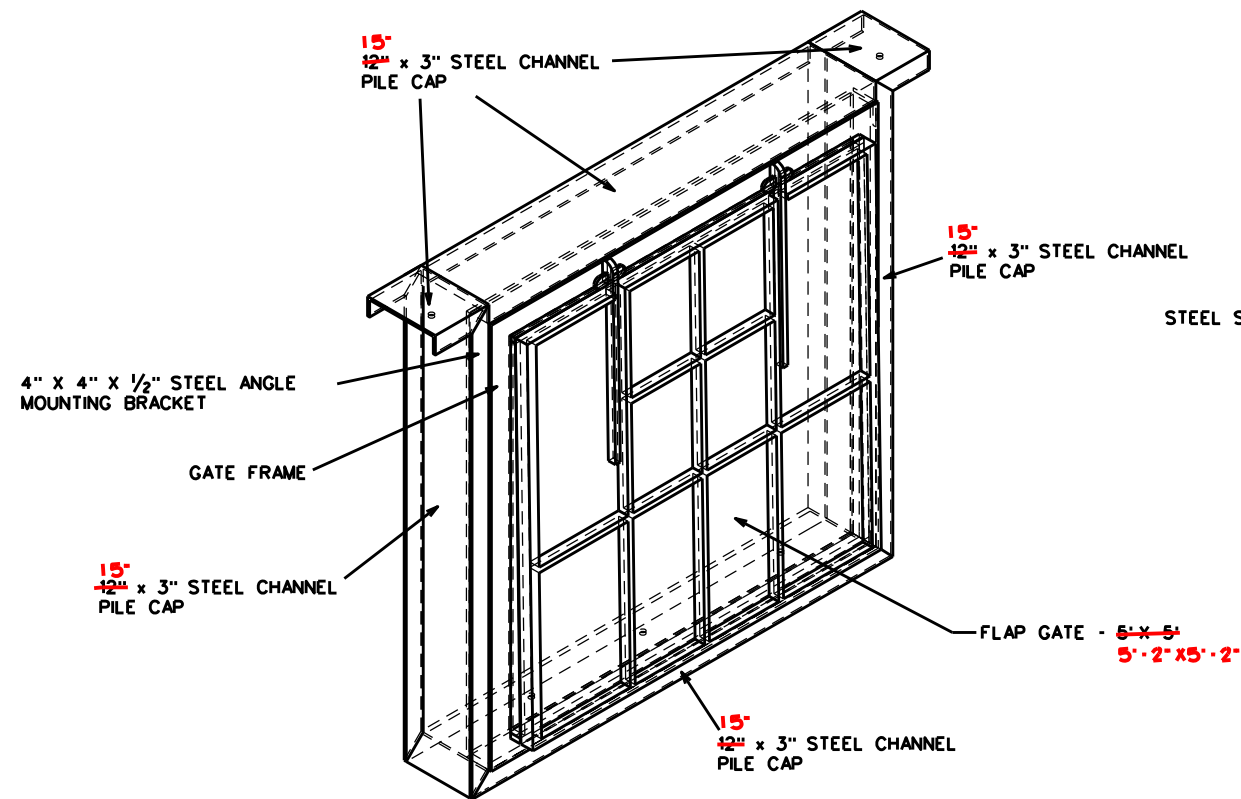
STEEL PILE CAP
FRONT VIEW



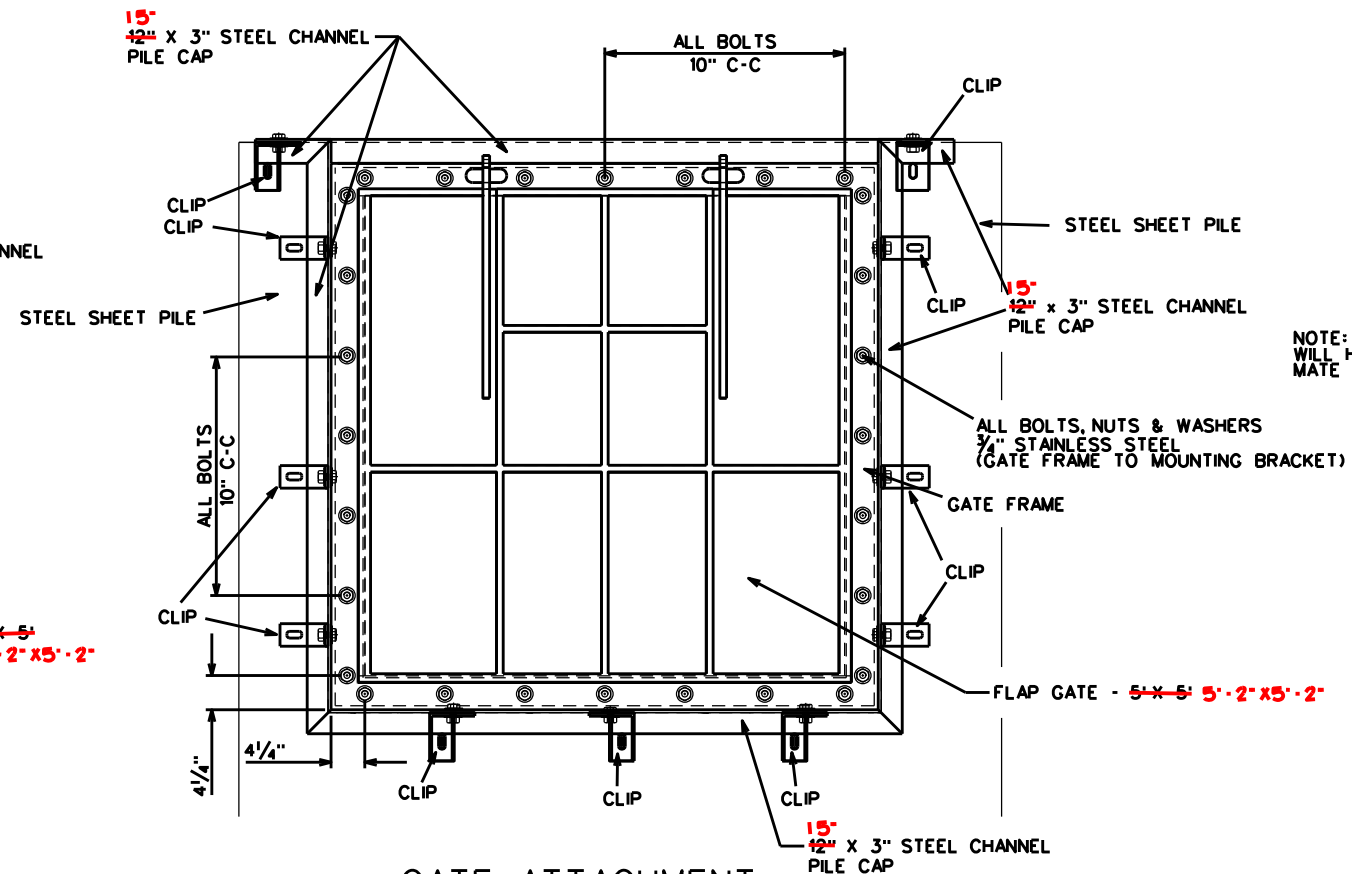
MOUNTING BRACKET
FRONT VIEW



GATE FRAME
FRONT VIEW

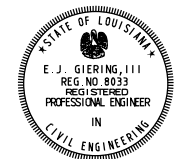


GATE ATTACHMENT
ISOMETRIC VIEW



GATE ATTACHMENT
FRONT VIEW - SOUTH FACE

"AS-BUILT"



GATE ATTACHMENT DETAILS - FRONT VIEW
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

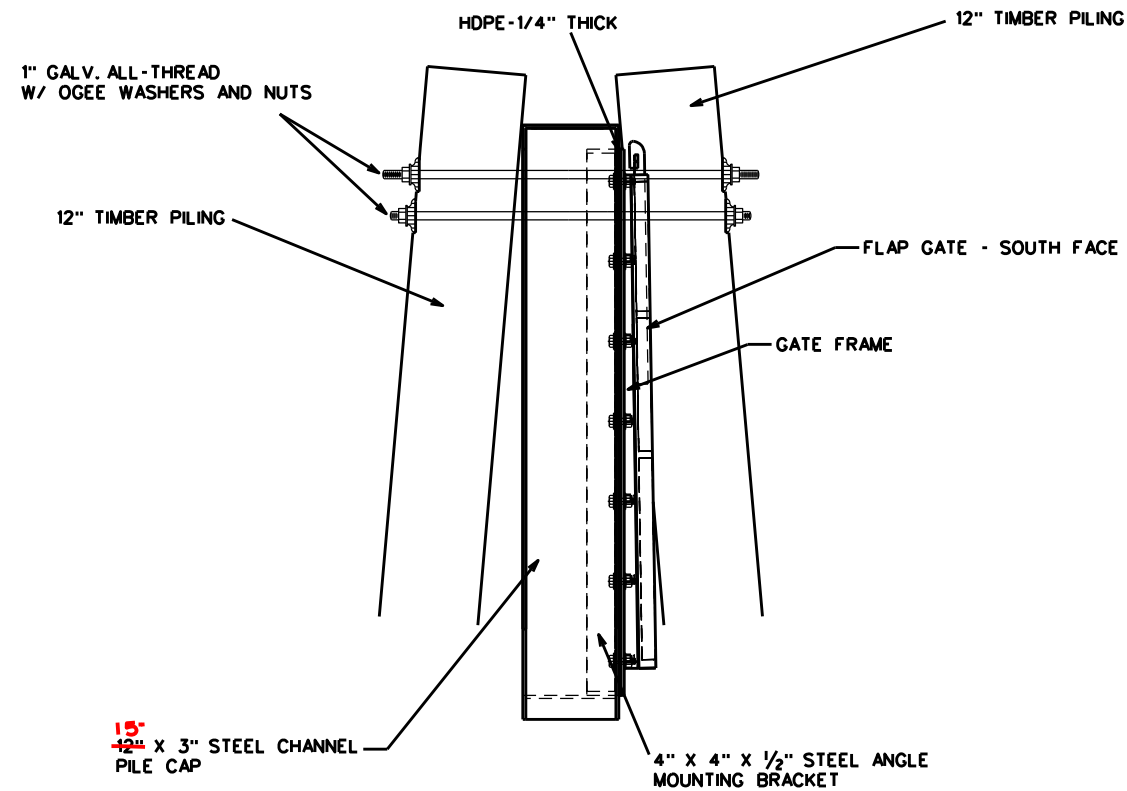
DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09



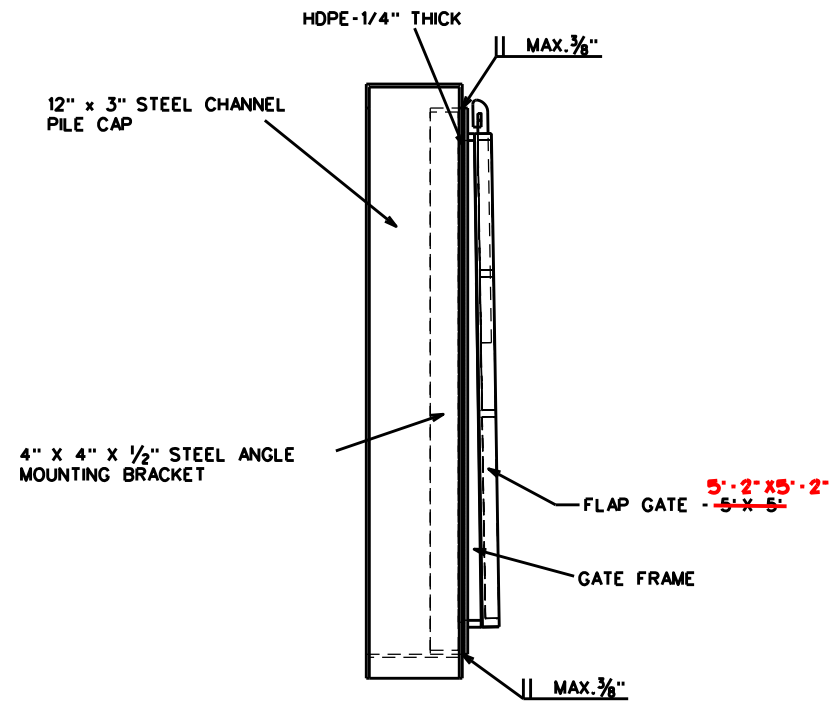
FILE NAME
LA274

DRAWING NAME
LA27453.DGN

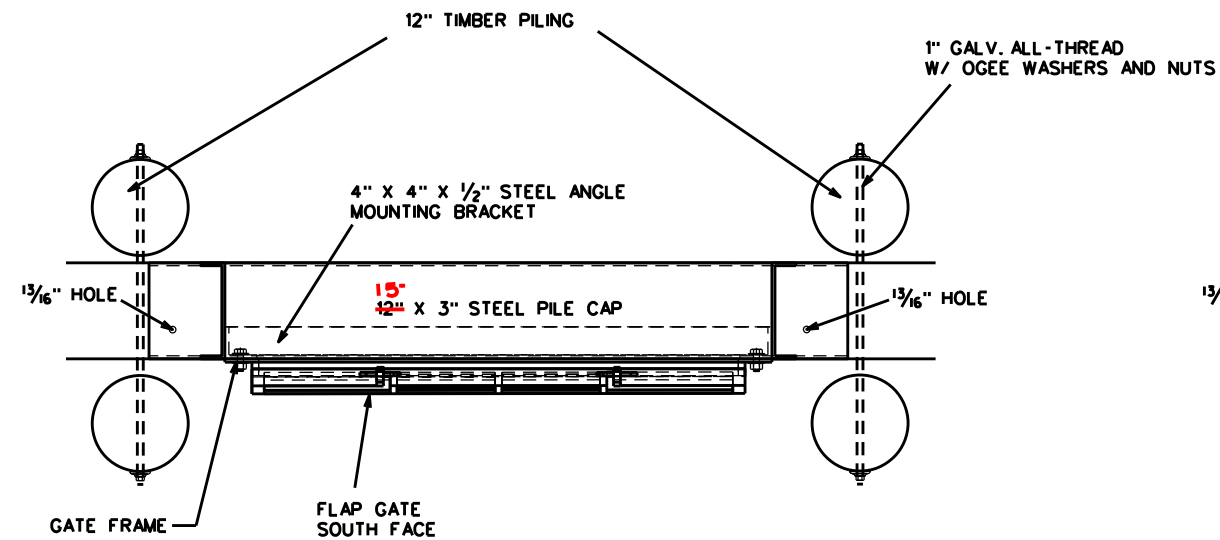
REVISIONS		
NO.	DATE	TITLE



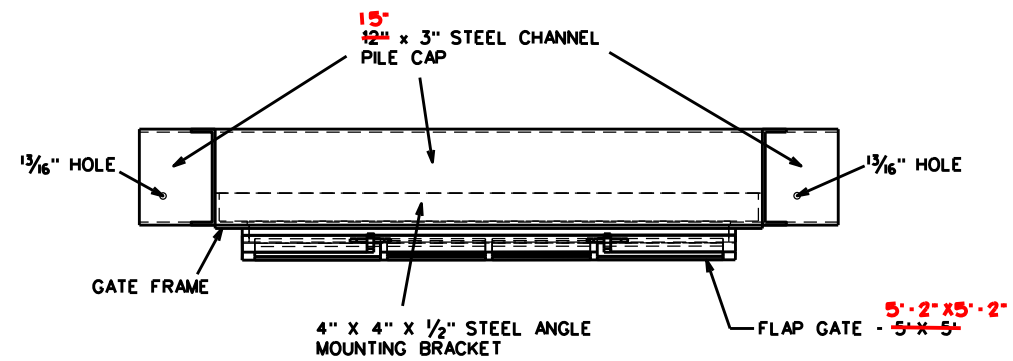
GATE ATTACHMENT W/ PILES
SIDE VIEW



GATE ATTACHMENT
RIGHT VIEW

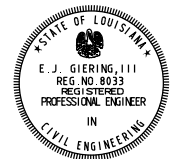


GATE ATTACHMENT W/ PILES
TOP VIEW



GATE ATTACHMENT
TOP VIEW

"AS-BUILT"



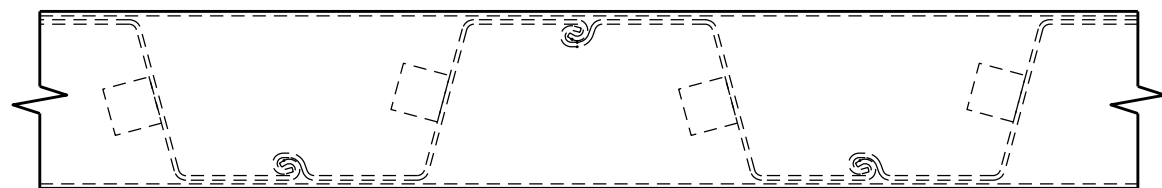
REVISIONS			
NO.	DATE	APPROVED	TITLE

DATE	DESIGNED	DRAWN	CHECKED	APPROVED
07/07	S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E.J. GIERING, III
07/07				
02/09				
05/09				

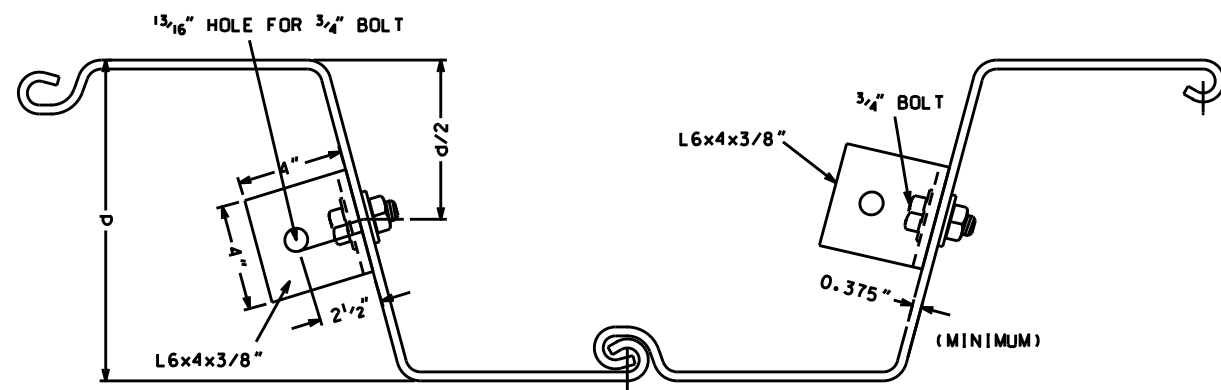
GATE ATTACHMENT DETAILS - SIDE VIEW
BRADY CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



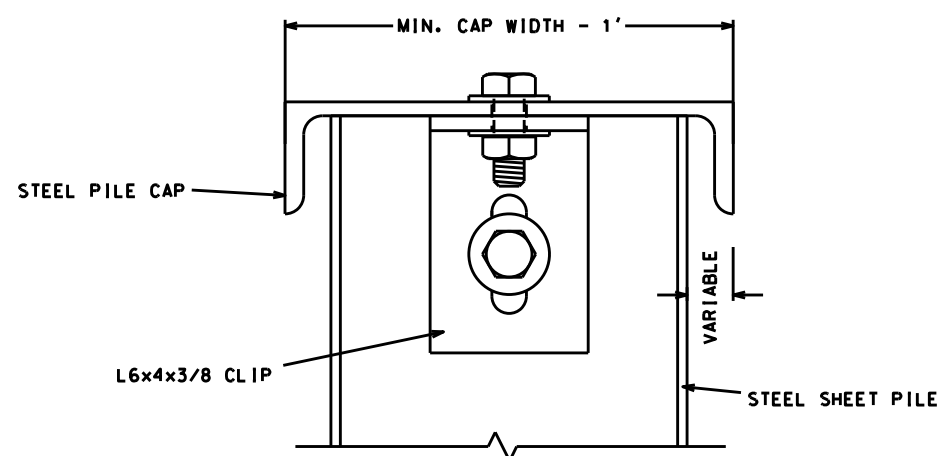
FILE NAME	LA274
DRAWING NAME	LA27454.DGN
SHEET	54 OF 76



PLAN VIEW
(TYPICAL PILE CAP TO SHEET PILE CONNECTION)



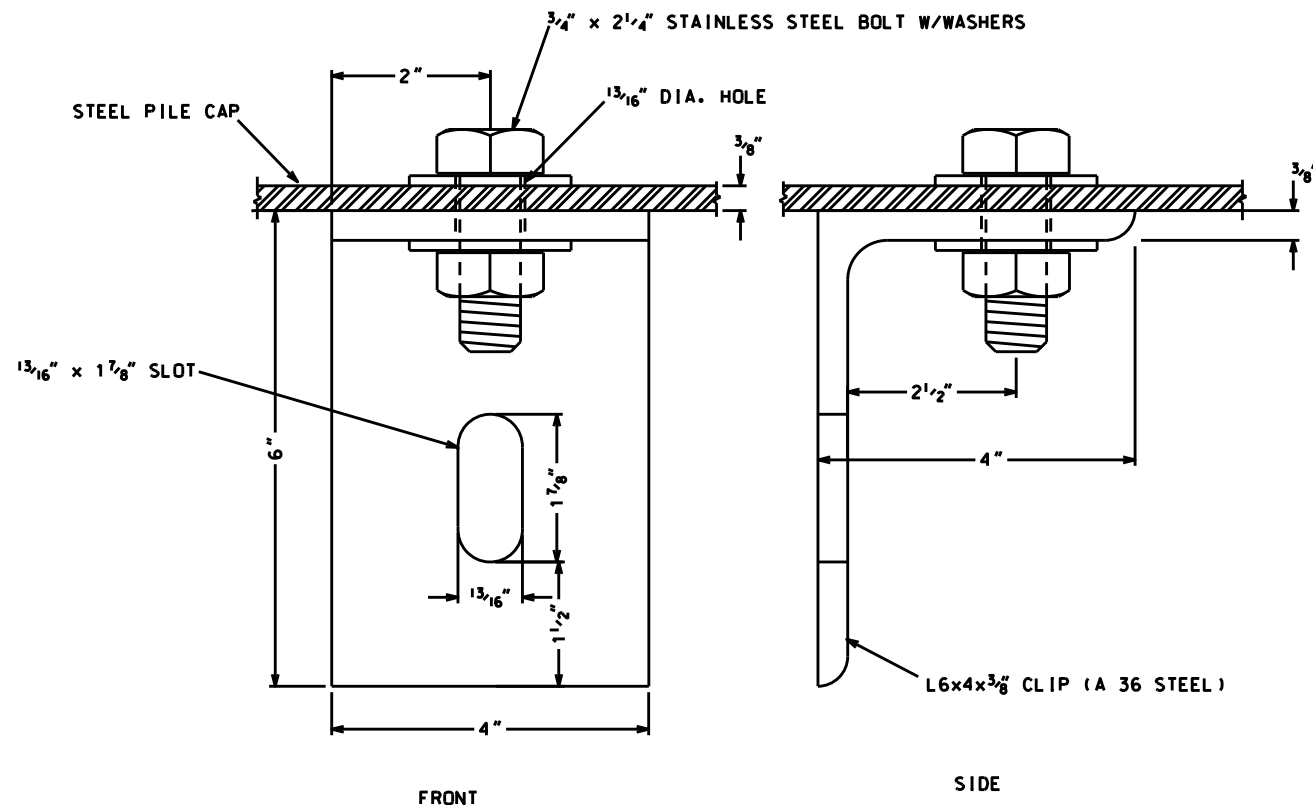
TYPICAL SHEET PILE DETAIL
(NORMAL CONFIGURATION)



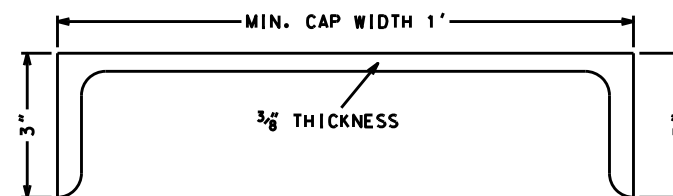
PILE CAP TO SHEET PILE CONNECTION
(SIDE VIEW)

NOTES:

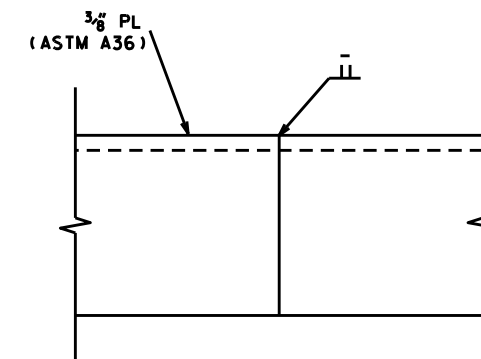
1. THE MINIMUM WEB AND FLANGE THICKNESS OF SHEET PILES SHALL BE 0.375".
2. MINIMUM MOMENT OF INERTIA = 76.8 IN⁴/FT. WALL.
3. THE CONTRACTOR SHALL SUBMIT A METHOD OF CONNECTING THE PILE CAP TO THE SHEET PILE AND ALL DRAWINGS FOR APPROVAL 14 DAYS PRIOR TO FABRICATION.
4. STEEL SHEET PILE SHALL CONFORM TO ASTM A572, GR. 50. ALL CHANNEL, ANGLES AND PLATES SHALL CONFORM TO ASTM A36. THE SHEET PILE AND PILE CONNECTOR SHALL BE PAINTED AS SPECIFIED BY CONST. SPEC. 82.
5. ALL SHEET PILE DIMENSIONS ARE TYPICAL, AND ARE SUBJECT TO CHANGE BASED ON MANUFACTURER/SUPPLIER.
6. SHEET PILE WILL BE DRIVEN IN THE "NORMAL CONFIGURATION" AS SHOWN.
7. THE HOLES IN THE SHEET PILE SHALL BE FIELD DRILLED AND COATING REPAIRED.
8. THE L 6x4x3/8" CLIPS ARE TO BE PLACED ON THE MIDDLE SECTION OF EACH PILE AS SHOWN IN THE DRAWINGS.
9. 8" STRIPS OF 2" CONSPICUITY TAPE AT 12" O.C. FOR BOTH VERTICAL FACES OF PILE CAP FOR ENTIRE LENGTH FOR BRADY CANAL STRUCTURE ONLY.



L 6x4x3/8" (CLIP)



TYPICAL PILE CAP - C 15 X 25
(NOT TO SCALE)



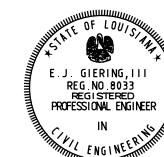
PILE CAP SPLICE DETAIL
(NOT TO SCALE)

NOTE:

1. THE CONTRACTOR SHALL PROVIDE PILE CAP LENGTHS NO LESS THAN 12' FOR ALL SPLICES.

NOT TO SCALE

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

SHEETPILE DETAIL
ALL STRUCTURES
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27455.DGN
SHEET	55 OF 76

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING III		05/09

SEE SHEETS 75 & 76 FOR SOIL BORING PROFILES

SOIL BORING LOCATIONS		
BORING	NORTHING	EASTING
WEST 1	396019.34	3334079.79
WEST 2	396232.51	3334776.95
WEST 3	396435.70	3335553.57
EAST 1	396508.03	3336621.74
EAST 2	397033.82	3336956.41
EAST 3	397276.79	3337318.00
EAST 4	397742.68	3338094.19

NOTE:
SEE SHEET 57 FOR LIMITS OF BORROW AREAS

LANDOWNER
CONTINENTAL LAND AND FUR CO.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

TBM- N394985.08 E3336850.30 (NAD 83)
ELEV. = 5.14 (NAVD 88)
DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

NOTE:
ROCK DIKE TIE-INS @ THE BANKLINE
SHALL BE CONCURRED IN BY THE COTR.

ROCK DIKE (EAST) LAYOUT		
STA. 0+00	N397779.05	E3338249.32
STA. 19+14	N396821.65	E3336592.01
STA. 37+88	N395177.17	E3337491.61



NOTE:
ROCK DIKE TIE-INS @ THE BANKLINE
SHALL BE CONCURRED IN BY THE COTR.

ROCK DIKE (WEST) LAYOUT		
STA. 0+00	N395943.94	E3333841.06
STA. 22+25	N396687.67	E3335937.81
STA. 27+99	N396170.72	E3336186.87
STA. 28+79	N396102.43	E3336145.18

LEGEND

SOIL BORING

TBM

CONTAINMENT DIKE

ROCK DIKE

ACCESS CHANNEL

PLAN MAP

MOUTH OF BAYOU PENCHANT

200

0

200

400

600

800

SCALE IN FEET

DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING, III

PLAN MAP
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

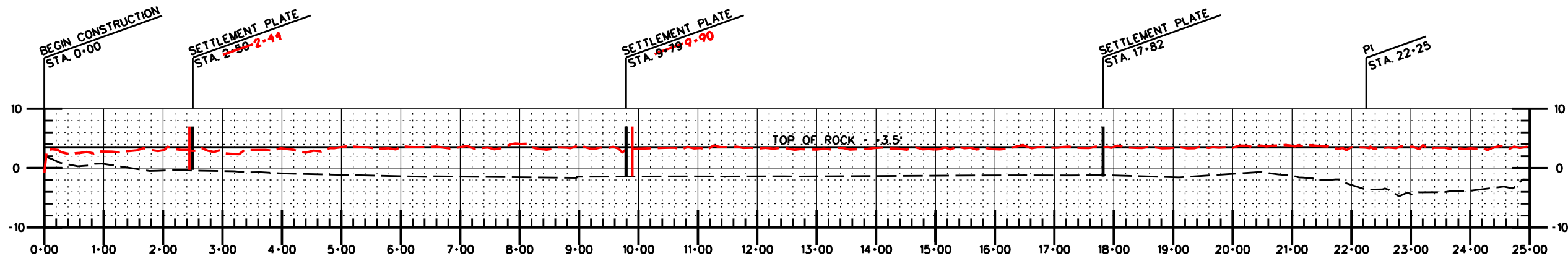
NRC
Natural Resources Conservation Service
United States Department of Agriculture

FILE NAME
LA274

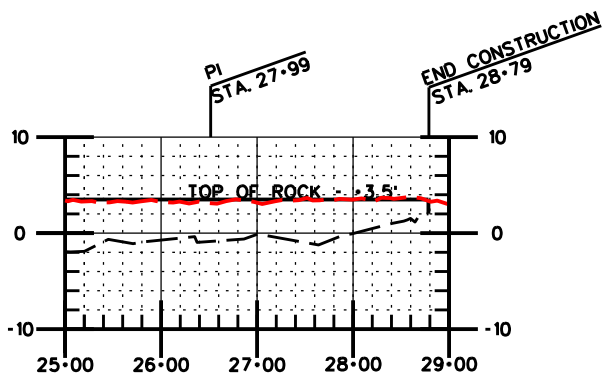
DRAWING NAME
LA27456.DGN

SHEET 56 OF 76

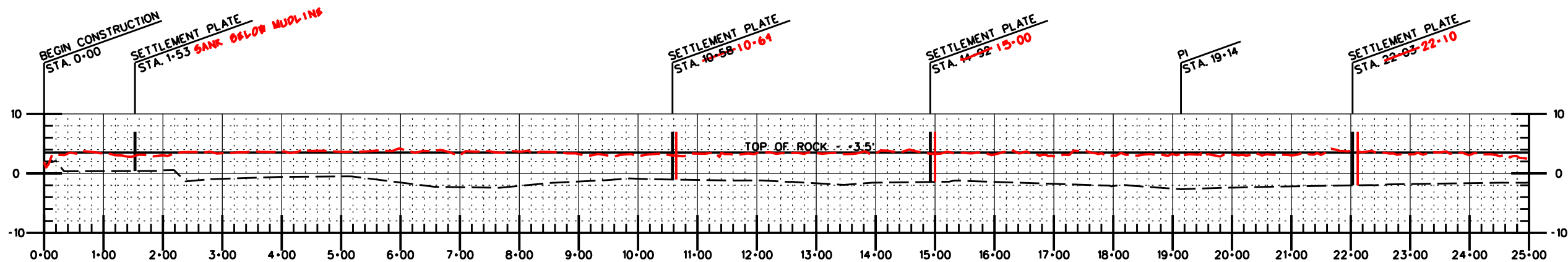
REVISIONS		
NO.	DATE	TITLE



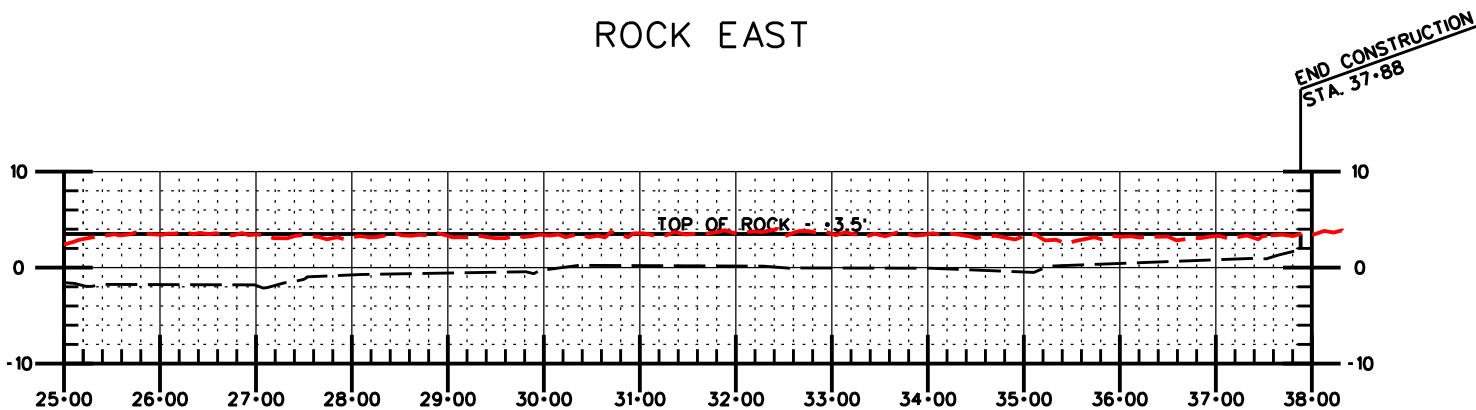
ROCK WEST



ROCK WEST (CONT.)



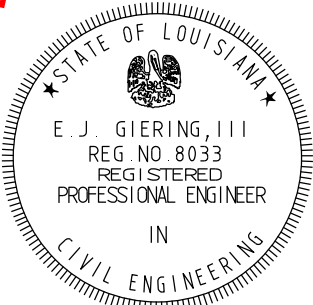
ROCK EAST



ROCK EAST (CONT.)

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



REVISIONS		
NO.	DATE	TITLE

ROCK DIKE PROFILES
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27458.DGN
SHEET 58 OF	76

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09

TEMPORARY WARNING SIGN
ELEV. +10.0'

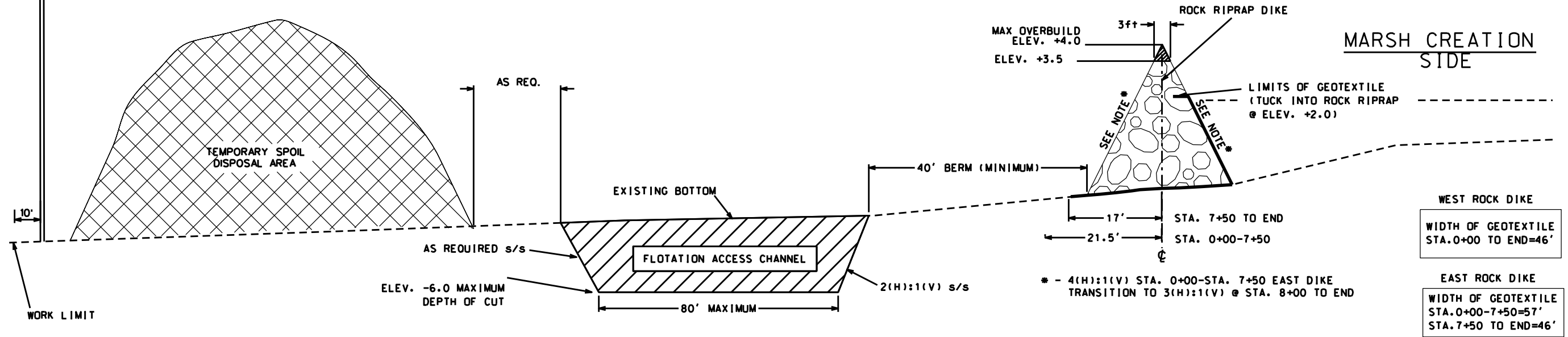
- NOTES:
1. EXCAVATED MATERIAL TO BE PLACED ON THE BAYOU SIDE OF THE FLOTATION CHANNEL. SUCH MATERIAL SHALL BE PLACED BACK INTO THE ACCESS CHANNEL AT THE END OF CONSTRUCTION.
 2. TEMPORARY WARNING SIGNS SHALL BE PLACED AS SHOWN AT A MAXIMUM DISTANCE OF 500' C-C.
 3. THE PAYMENT FOR THE GEOTEXTILE WILL BE BASED ON THE ORIGINAL DESIGN IF CONTRACTOR CHOOSES ALTERNATIVE METHOD FOR GEOTEXTILE PLACEMENT.

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

ROCK RIPRAP GRADATION	
PERCENT LIGHTER BY WEIGHT	POUNDS
100	700
50-100	300
15-50	150
0-15	45

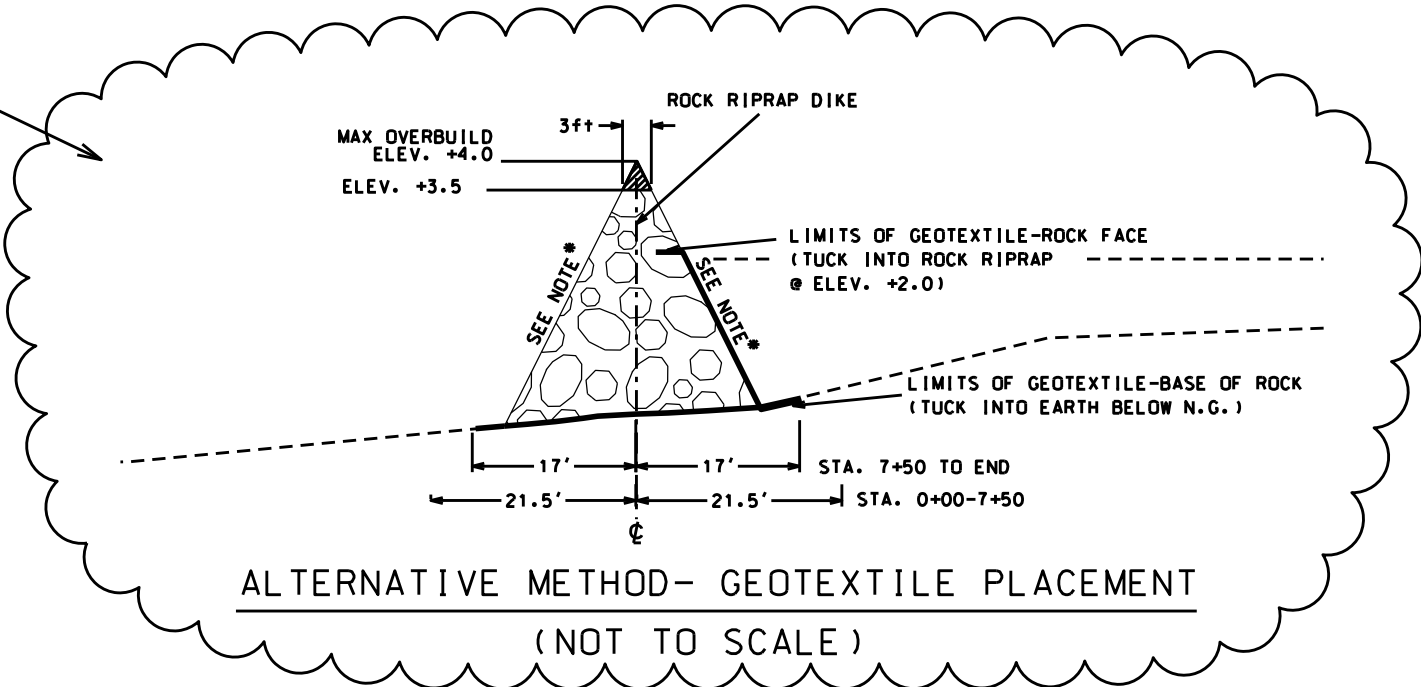
Date	
Designed	05/07
Drawn	05/07
Checked	02/09
Approved	05/09
S. GARNER	
D. WILMORE	
R. FAULKNER, B. STICKER	
E. J. GIERING, III	

AMENDMENT 1

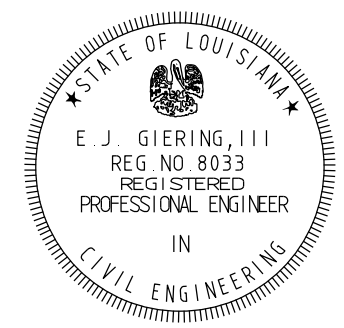


TYPICAL SECTION-ROCK RIPRAP DIKE W/ FLOTATION CHANNEL
(NOT TO SCALE)

AMENDMENT 1



"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE
AT	01/08/10	C.S.	C.E.

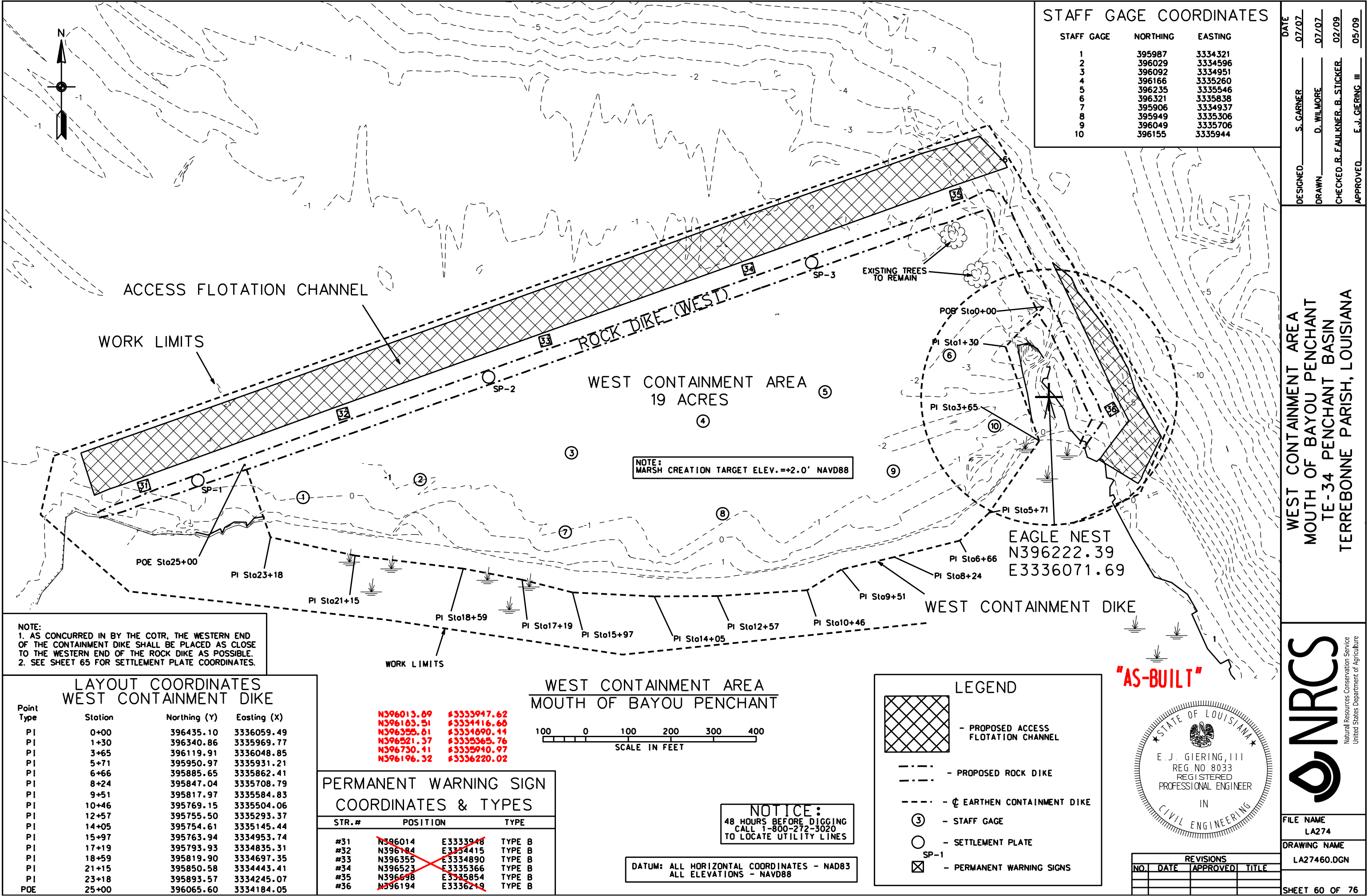
TYPICAL SECTION - ROCK DIKE
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

File Name
LA274

Drawing Name
LA27459.DGN

Sheet 59 of 76



STAFF GAGE COORDINATES

STAFF GAGE	NORTHING	EASTING
1	395987	3334321
2	396029	3334596
3	396092	3334951
4	396166	3335260
5	396235	3335546
6	396321	3335838
7	395906	3334937
8	395949	3335306
9	396049	3335706
10	396155	3335944

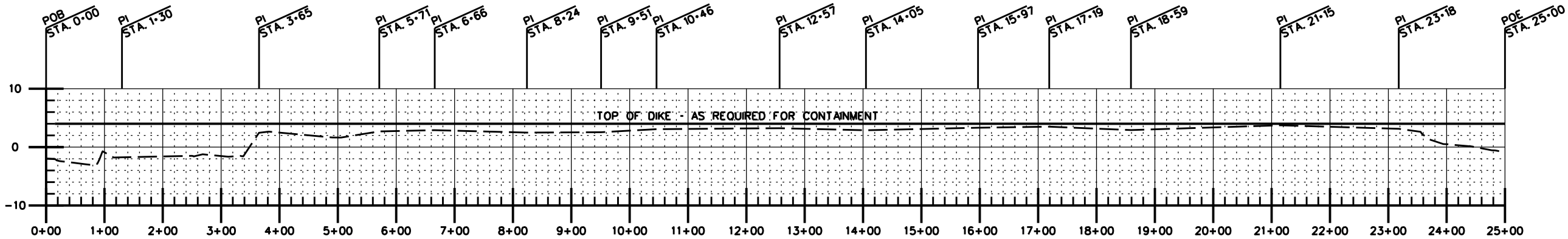
DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING, III

WEST CONTAINMENT AREA
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274

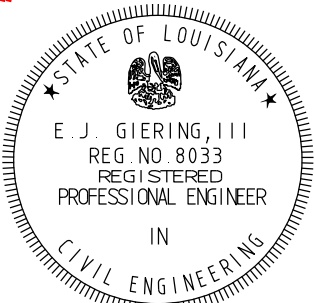
DRAWING NAME
LA27460.DGN



PROFILE - WEST CONTAINMENT DIKE

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

"AS-BUILT"



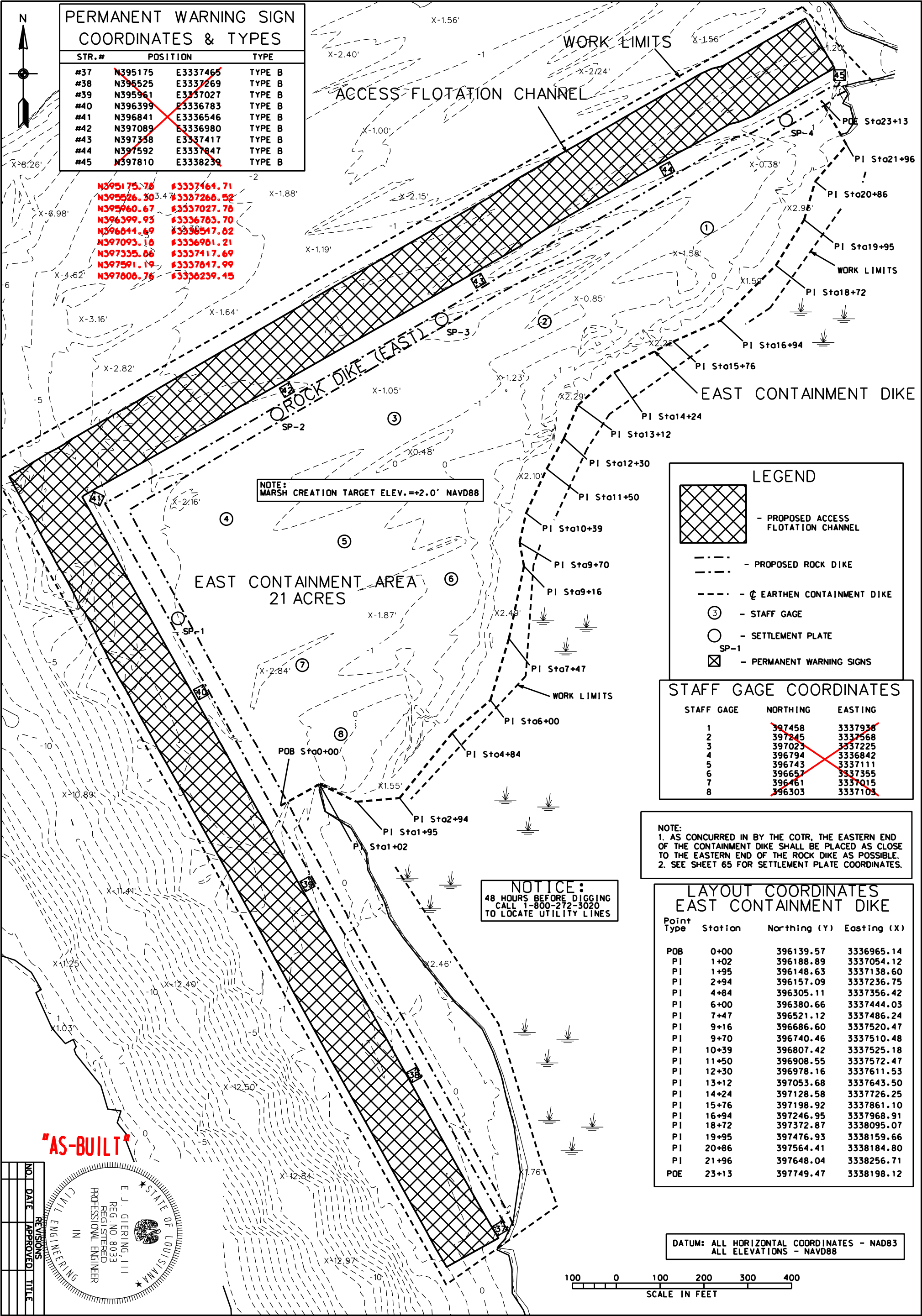
REVISIONS			
NO.	DATE	APPROVED	TITLE

WEST CONTAINMENT DIKE PROFILES
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME
LA274
DRAWING NAME
LA27461.DGN

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09



PERMANENT WARNING SIGN
COORDINATES & TYPES

STR.#	POSITION		TYPE
#37	N395175	E3337465	TYPE B
#38	N395525	E3337269	TYPE B
#39	N395961	E3337027	TYPE B
#40	N396399	E3336783	TYPE B
#41	N396841	E3336546	TYPE B
#42	N397089	E3336980	TYPE B
#43	N397358	E3337417	TYPE B
#44	N397592	E3337847	TYPE B
#45	N397810	E3338239	TYPE B

N395175.78
N395526.30
N395960.67
N396399.93
N396841.69
N397089.18
N397355.86
N397591.19
N397806.76

E3337464.71
E3337266.52
E3337027.76
E3336783.70
E3336547.02
E3336981.21
E3337417.69
E3337847.99
E3338239.45

NOTE:
MARSH CREATION TARGET ELEV. = +2.0' NAVD88

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES

LEGEND

- PROPOSED ACCESS FLOTATION CHANNEL
- PROPOSED ROCK DIKE
- EARTHEN CONTAINMENT DIKE
- STAFF GAGE
- SETTLEMENT PLATE
- PERMANENT WARNING SIGNS

STAFF GAGE COORDINATES

STAFF GAGE	NORTHING	EASTING
1	397458	3337938
2	397245	3337568
3	397023	3337225
4	396794	3336842
5	396743	3337111
6	396657	3337355
7	396461	3337015
8	396303	3337103

NOTE:
1. AS CONCURRED IN BY THE COTR, THE EASTERN END OF THE CONTAINMENT DIKE SHALL BE PLACED AS CLOSE TO THE EASTERN END OF THE ROCK DIKE AS POSSIBLE.
2. SEE SHEET 65 FOR SETTLEMENT PLATE COORDINATES.

LAYOUT COORDINATES
EAST CONTAINMENT DIKE

Point Type	Station	Northing (Y)	Easting (X)
POB	0+00	396139.57	3336965.14
PI	1+02	396188.89	3337054.12
PI	1+95	396148.63	3337138.60
PI	2+94	396157.09	3337236.75
PI	4+84	396305.11	3337356.42
PI	6+00	396380.66	3337444.03
PI	7+47	396521.12	3337486.24
PI	9+16	396686.60	3337520.47
PI	9+70	396740.46	3337510.48
PI	10+39	396807.42	3337525.18
PI	11+50	396908.55	3337572.47
PI	12+30	396978.16	3337611.53
PI	13+12	397053.68	3337643.50
PI	14+24	397128.58	3337726.25
PI	15+76	397198.92	3337861.10
PI	16+94	397246.95	3337968.91
PI	18+72	397372.87	3338095.07
PI	19+95	397476.93	3338159.66
PI	20+86	397564.41	3338184.80
PI	21+96	397648.04	3338256.71
POE	23+13	397749.47	3338198.12

DATUM: ALL HORIZONTAL COORDINATES - NAD83
ALL ELEVATIONS - NAVD88

100 0 100 200 300 400
SCALE IN FEET

"AS-BUILT"

NO. DATE REVISIONS APPROVED TITLE

CIVIL ENGINEERING

E. J. GIERING, III
REG. NO. 8033
REGISTERED
PROFESSIONAL ENGINEER
IN
STATE OF LOUISIANA

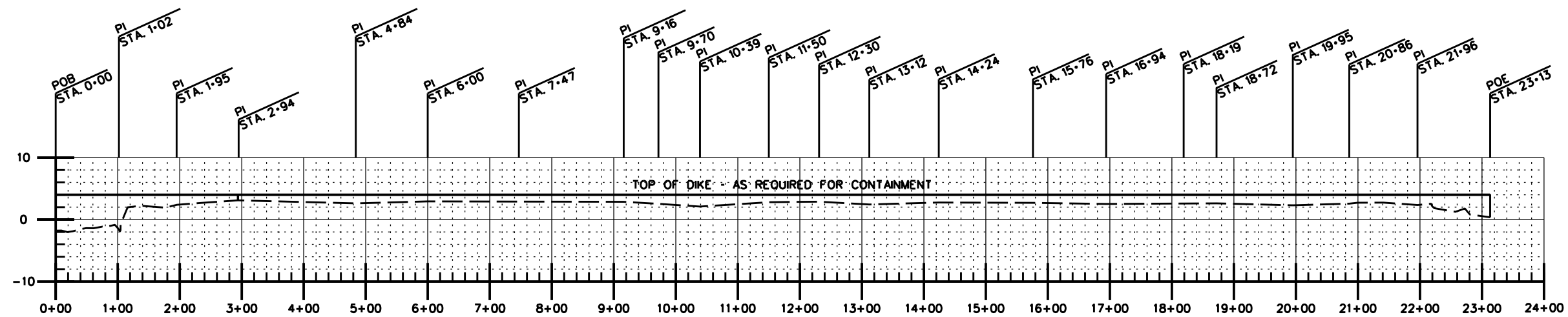
FILE NAME
LA274

DRAWING NAME
LA27462.DGN

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

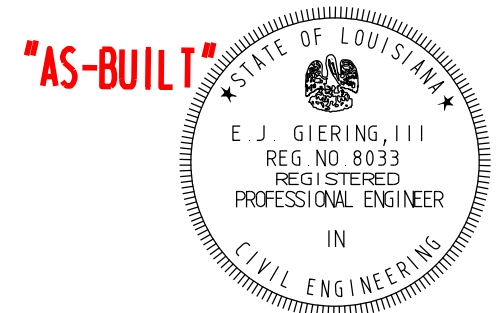
EAST CONTAINMENT AREA
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE	DATE	07/07
CHECKED	R. FAULKNER, B. STICKER	DATE	02/09
APPROVED	E.J. GIERING III	DATE	05/09



PROFILE - EAST CONTAINMENT DIKE

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES



REVISIONS			
NO.	DATE	APPROVED	TITLE

EAST CONTAINMENT DIKE PROFILES
MOUTH OF BAYOU PENCHANT
TE - 34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

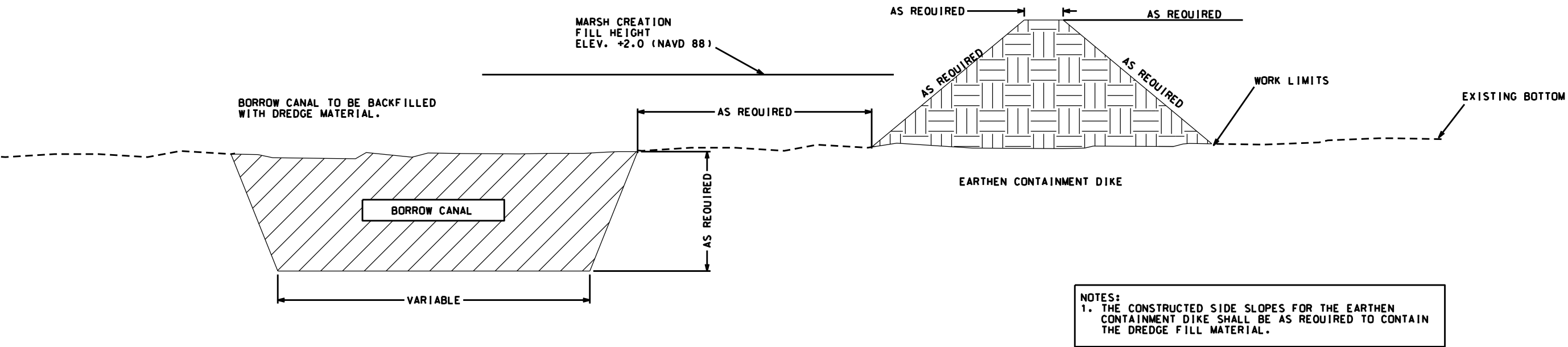


FILE NAME
LA274
DRAWING NAME
LA27463.DGN

DESIGNED	S. GARNER	DATE	07/07
DRAWN	D. WILMORE		07/07
CHECKED	R. FAULKNER, B. STICKER		02/09
APPROVED	E.J. GIERING, III		05/09

MARSH CREATION SIDE

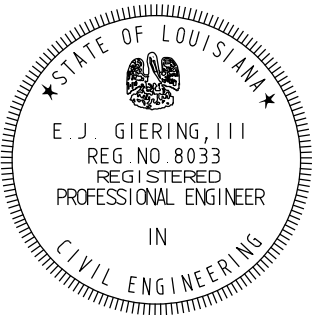
MARSH SIDE



TYPICAL SECTION-EARTHEN CONTAINMENT DIKE INTERIOR BORROW
(NOT TO SCALE)

"AS-BUILT"

NOTICE:
48 HOURS BEFORE DIGGING
CALL 1-800-272-3020
TO LOCATE UTILITY LINES



REVISIONS			
NO.	DATE	APPROVED	TITLE

TYPICAL SECTION - CONTAINMENT DIKE
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



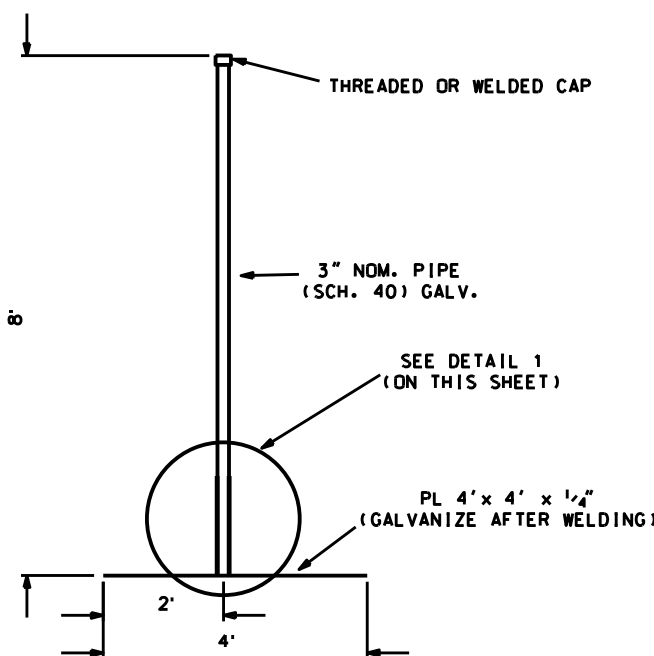
File Name
LA274

Drawing Name
LA27464.DGN

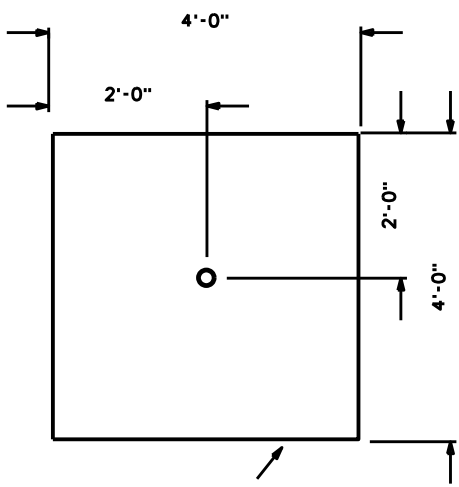
Sheet 64 of 76

Designed	S. GARNER	Date	05/07
Drawn	D. WILMORE		05/07
Checked	R. FAULKNER, B. STICKER		02/09
Approved	E.J. GIERING, III		05/09

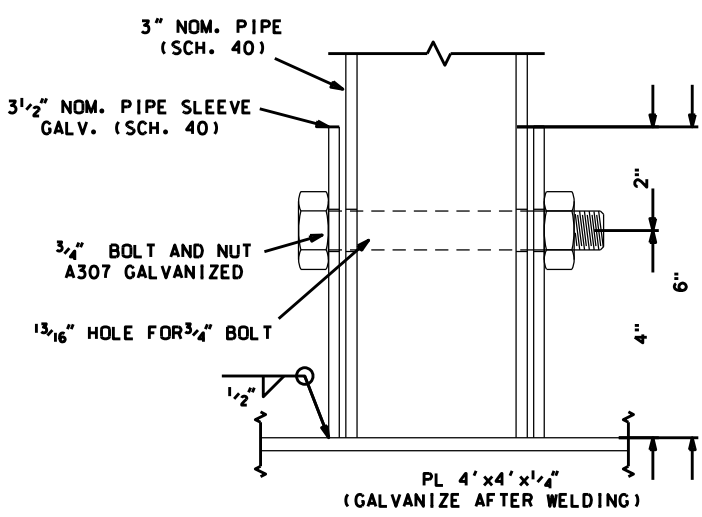
NOTE:
IF THREADED CAP IS USED, COLD GALVINIZE
THREADS AFTER INSTALLATION.



ELEVATION VIEW

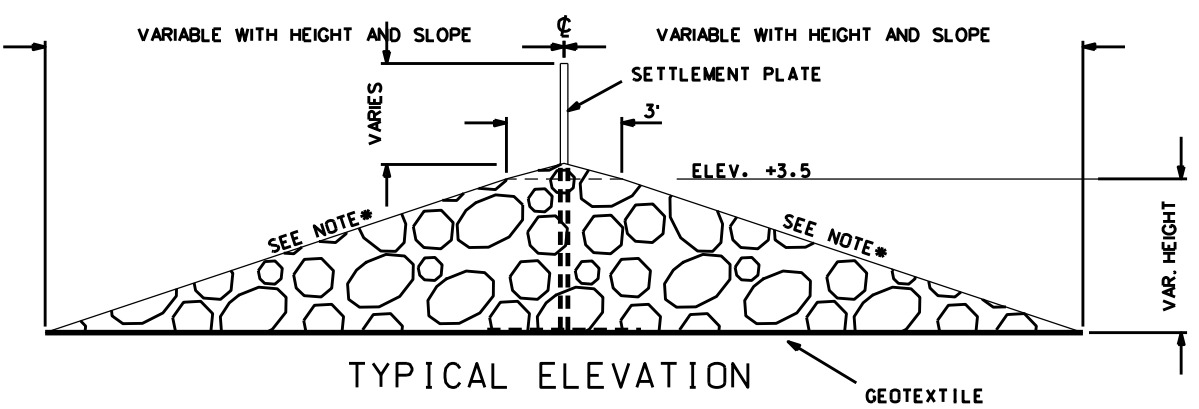


PLAN VIEW



DETAIL 1 - 6" PIPE SLEEVE
(NOT TO SCALE)

SETTLEMENT PLATE DETAILS
(NOT TO SCALE)



TYPICAL ELEVATION

GEOTEXTILE

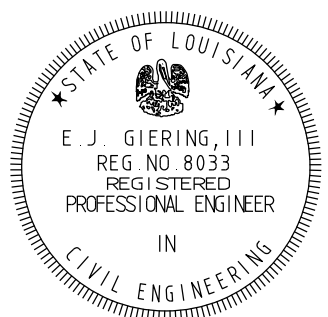
NOTE:
THE SETTLEMENT PLATE ELEVATION SHALL BE DETERMINED
BEFORE PLACING ROCK AND AT END OF CONSTRUCTION.

* - SIDE SLOPE OF EAST ROCK DIKE = 4:1 FROM
STA. 0+00 - STA. 7+50. TRANSITION TO 3:1
SIDE SLOPE @ STA. 8+00 TO END. ALL OTHER
ROCK SECTION SIDE SLOPES ARE 3:1.

ROCK DIKE SETTLEMENT PLATES

AREA	SP-#	NORTHING	EASTING		
WEST	1	396012	3334082	N396023.39	33334058.08
WEST	2	396209	3334783	N396272.64	33334761.34
WEST	3	396427	3335556	N396537.07	33335507.59
EAST	1	396568	3336731		
EAST	2	397033	3336957	N397240.56	33337333.43
EAST	3	397251	3337335	N397033.17	33336949.26
EAST	4	397703	3338117	N396569.80	33336714.42

"AS-BUILT"

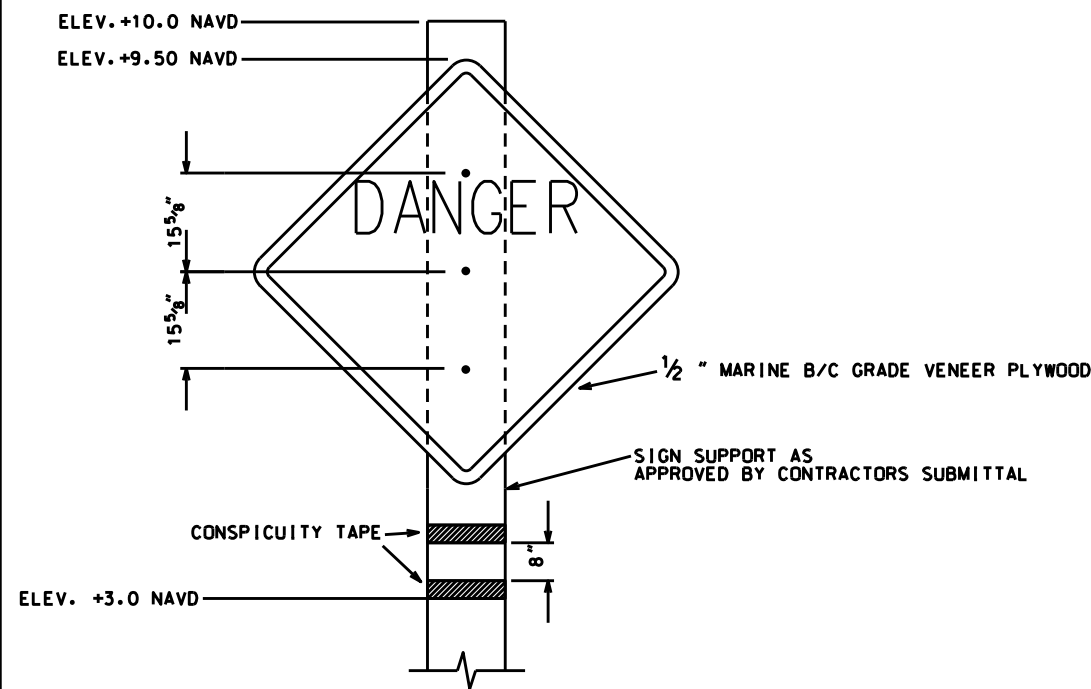


DATE	05/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E. J. GIERING, III

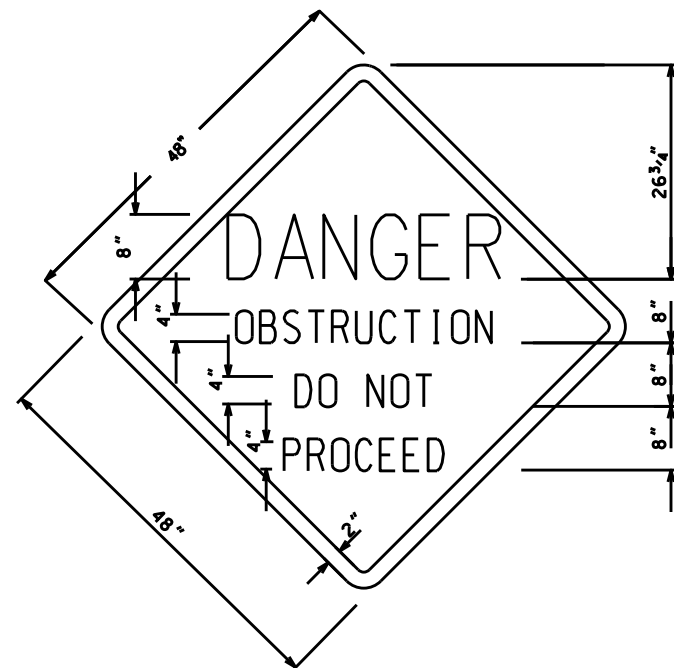
SETTLEMENT PLATE DETAILS
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA27465.DGN
SHEET	65 of 76



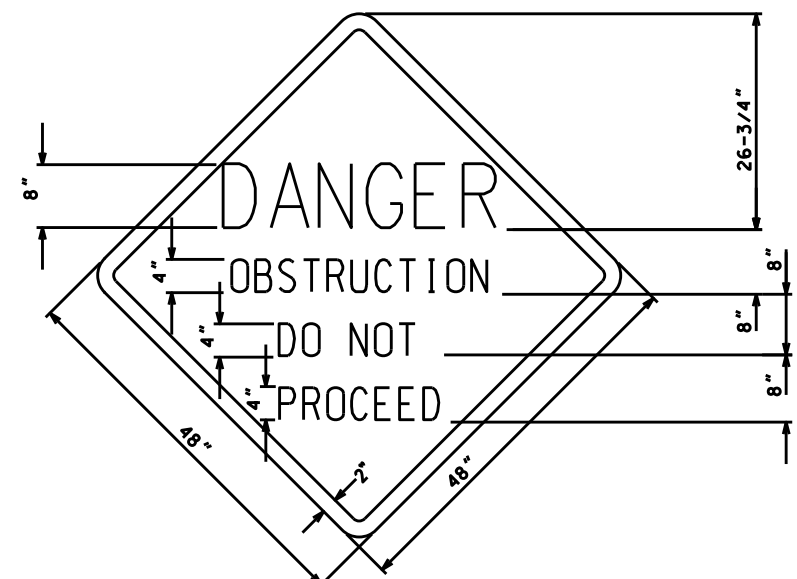
ELEVATION VIEW



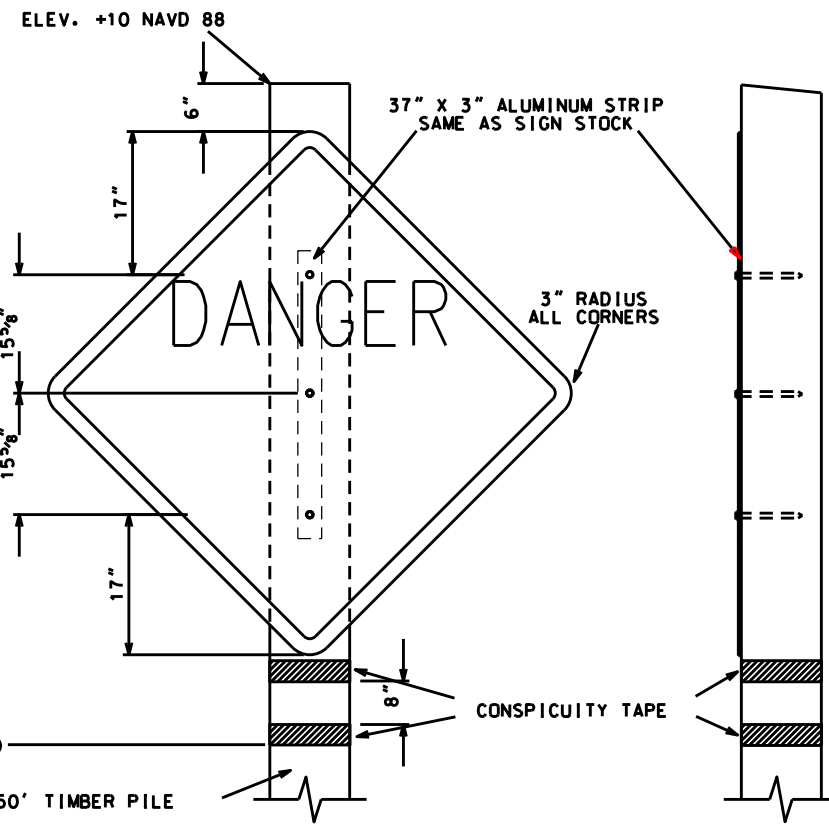
WARNING SIGN DETAILS

NOTE:
1. THE 2" BORDER ON THE WARNING SIGN SHALL BE A REFLECTIVE MATERIAL OF ORANGE COLOR. THE LETTERING FIELD SHALL BE A RETRO-REFLECTIVE MATERIAL OF WHITE COLOR. THE LETTERING FOR THE WARNING SIGNS SHALL BE BLACK. WARNING SIGNS SHALL BE PLACED ON TWO SIDES WITH THE SIGN FACING PERPENDICULAR TO THE SHORELINE AS CONCURRED IN BY THE COTR.
2. TEMPORARY WARNING SIGNS SHALL BE PLACED AT A MAXIMUM DISTANCE OF 500' APART.

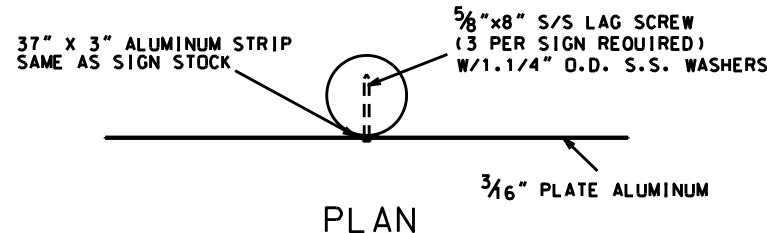
TEMPORARY WARNING SIGN DETAILS
TYPE 'A'



WARNING SIGN DETAILS

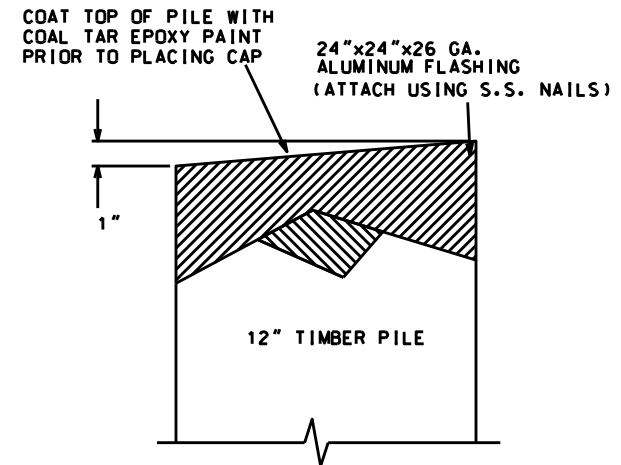


CONNECTION DETAILS



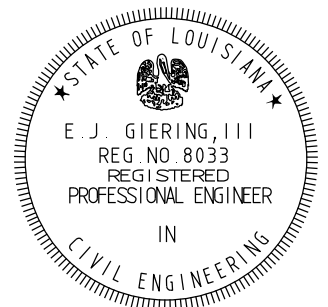
PLAN

PERMANENT WARNING SIGN DETAILS
TYPE 'B'



TYPICAL TIMBER PILE CAP
(NOT TO SCALE)

"AS-BUILT"



Date	Designed	Drawn	Checked	Approved
05/07	S. GARNER	D. WILMORE	R. FAULKNER, B. STICKER	E.J. GIERING III
05/07				
02/09				
05/09				

WARNING SIGN DETAILS
TYPES 'A' & 'B'
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

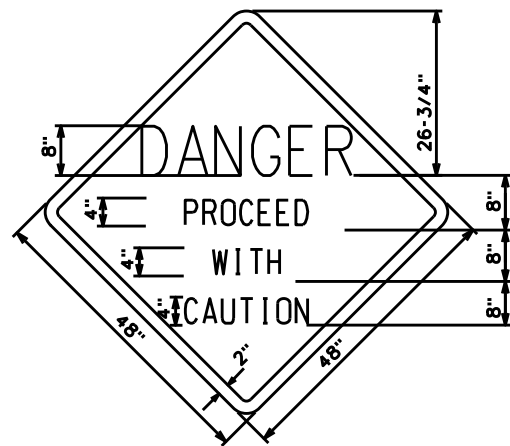


File Name
LA274

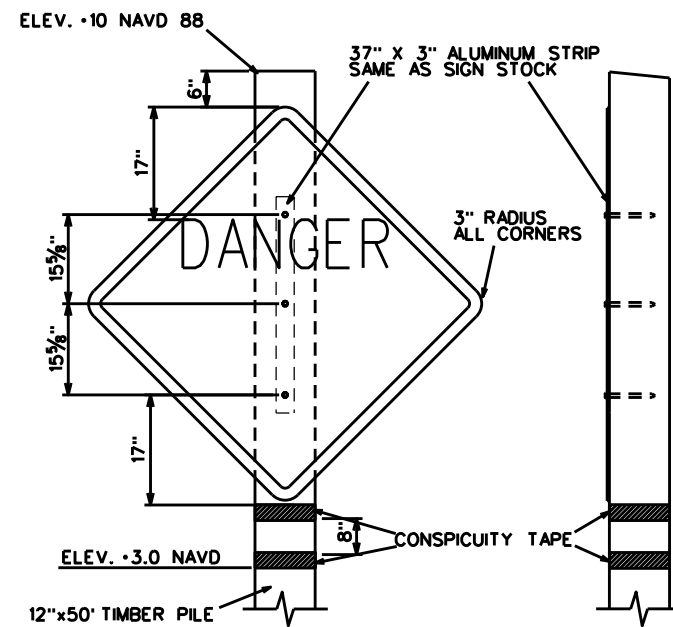
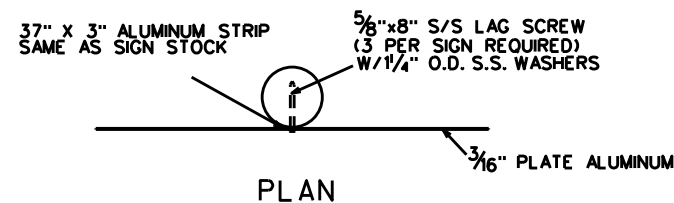
Drawing Name
LA27466.DGN

Sheet 66 of 76

REVISIONS		
DATE	APPROVED	TITLE

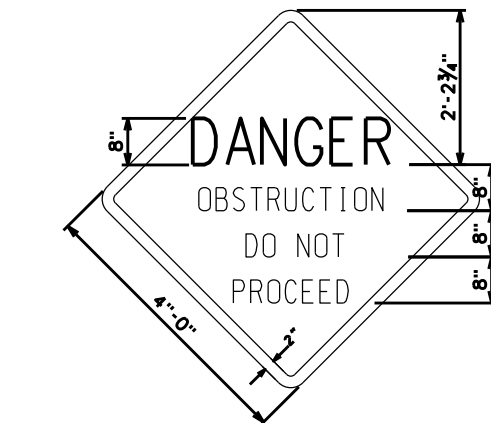
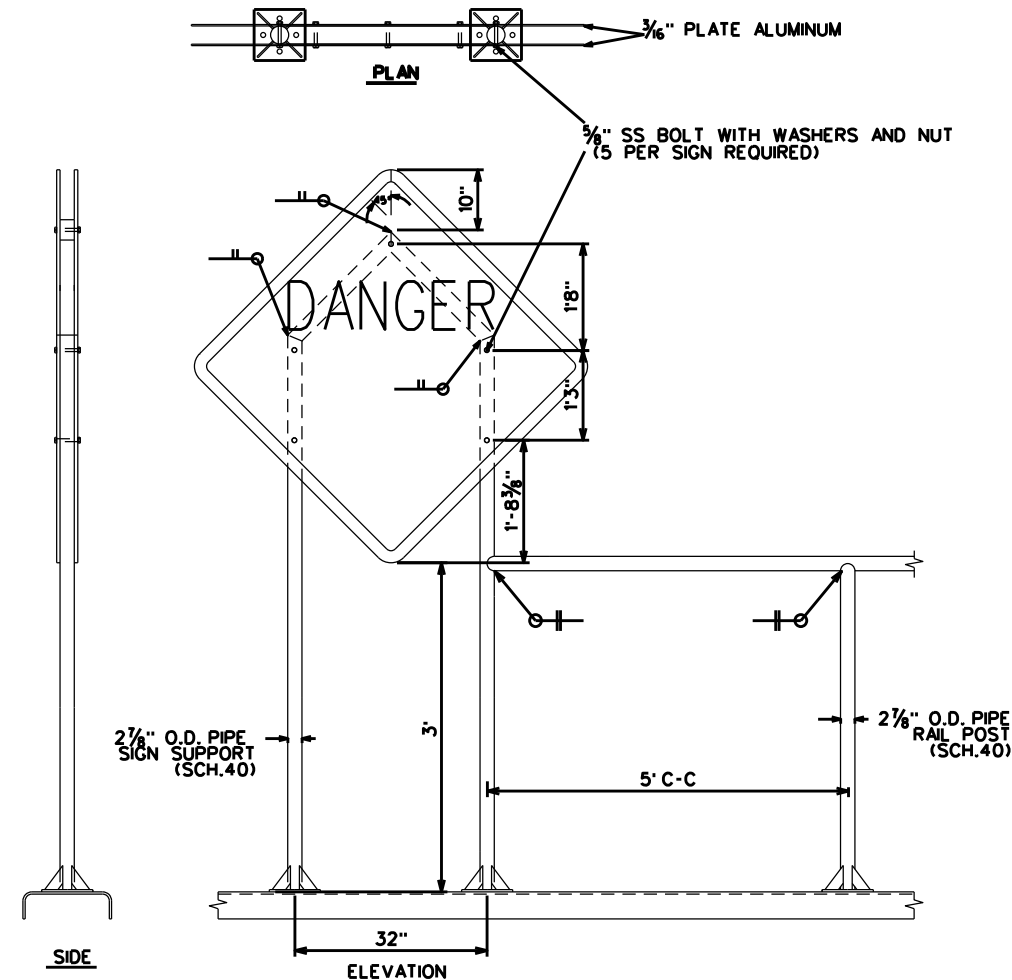


WARNING SIGN DETAILS



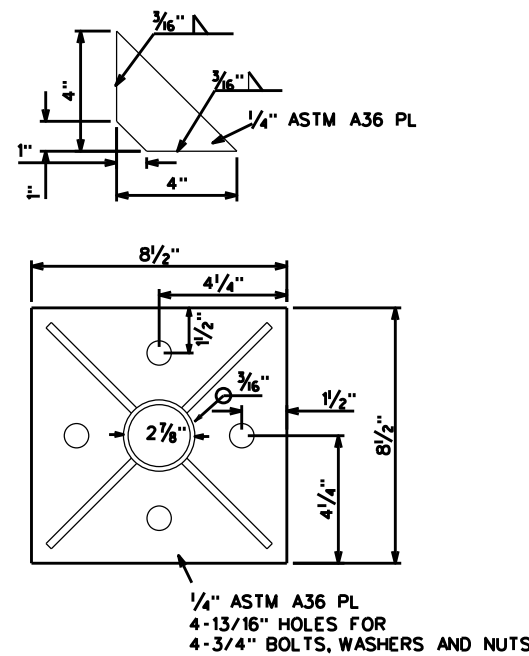
CONNECTION DETAILS
ELEVATION SIDE

PERMANENT WARNING SIGN DETAILS
TYPE 'C'

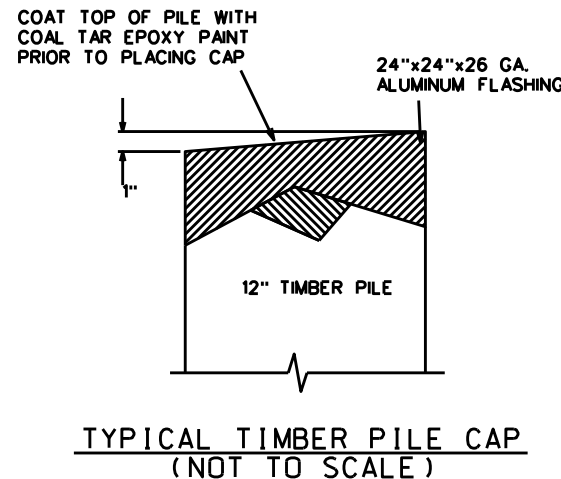


WARNING SIGN DETAILS
PERMANENT WARNING SIGN DETAILS
TYPE 'D'

- NOTES:
1. SIGNS SHALL BE CONSTRUCTED USING 3/16" PLATE 6061 ALUMINUM.
 2. THE 2" BORDER SHALL BE A RETRO-REFLECTIVE MATERIAL OF ORANGE COLOR
 3. THE LETTERING AND ARROW FIELD SHALL BE A RETRO-REFLECTIVE MATERIAL OF WHITE COLOR
 4. THE LETTERING AND ARROWS FOR THE SIGNS SHALL BE BLACK.
 5. TEFLON OR NEOPRENE WASHERS SHALL BE PLACED BETWEEN STEEL PIPE AND ALUMINUM SIGNS.
 6. THE SIGN SUPPORTS SHALL BE PAINTED AS SPECIFIED IN CONSTRUCTION SPECIFICATION 82. CLEANING AND PAINTING METALWORK.
 7. TACK WELD NUTS TO BOLTS, WHERE APPLICABLE.

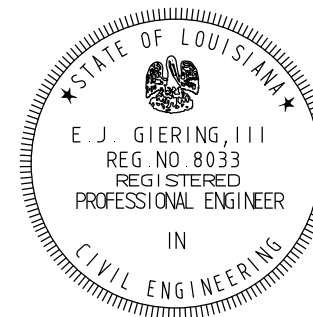


SIGN SUPPORT & RAILING POST
BASE PLATE
(NOT TO SCALE)



TYPICAL TIMBER PILE CAP
(NOT TO SCALE)

"AS-BUILT"

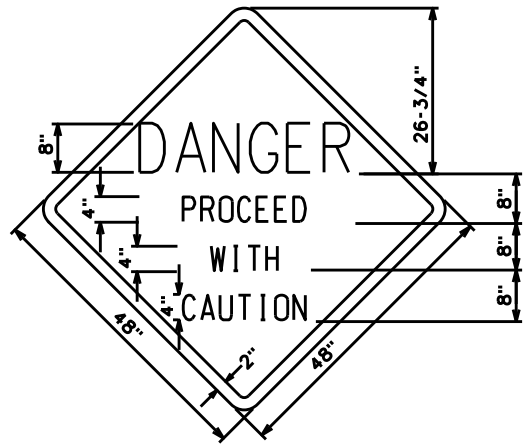


REVISIONS		
NO.	DATE	TITLE

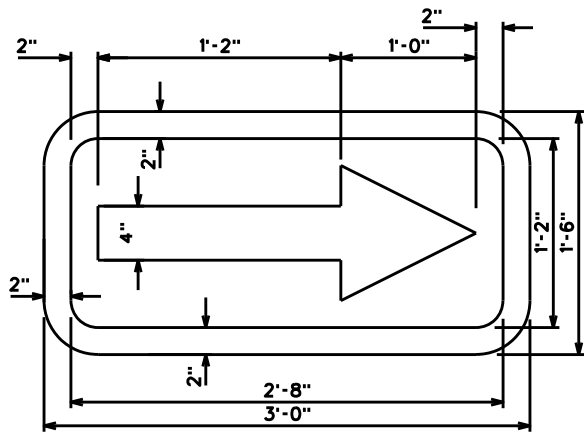
DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III

WARNING SIGN & BATTER PILE DETAILS
TYPES 'C' & 'D'
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

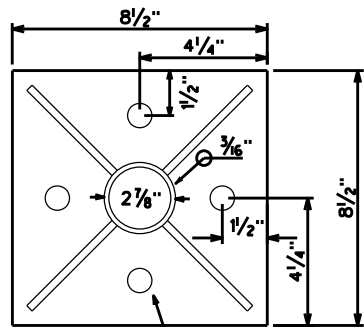
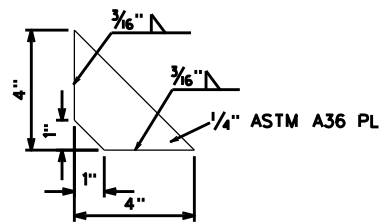
	FILE NAME
	LA274
	DRAWING NAME
	LA274067.DGN
SHEET 67 OF 76	



WARNING SIGN DETAILS

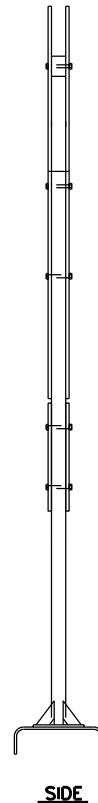


DIRECTIONAL SIGN DETAILS

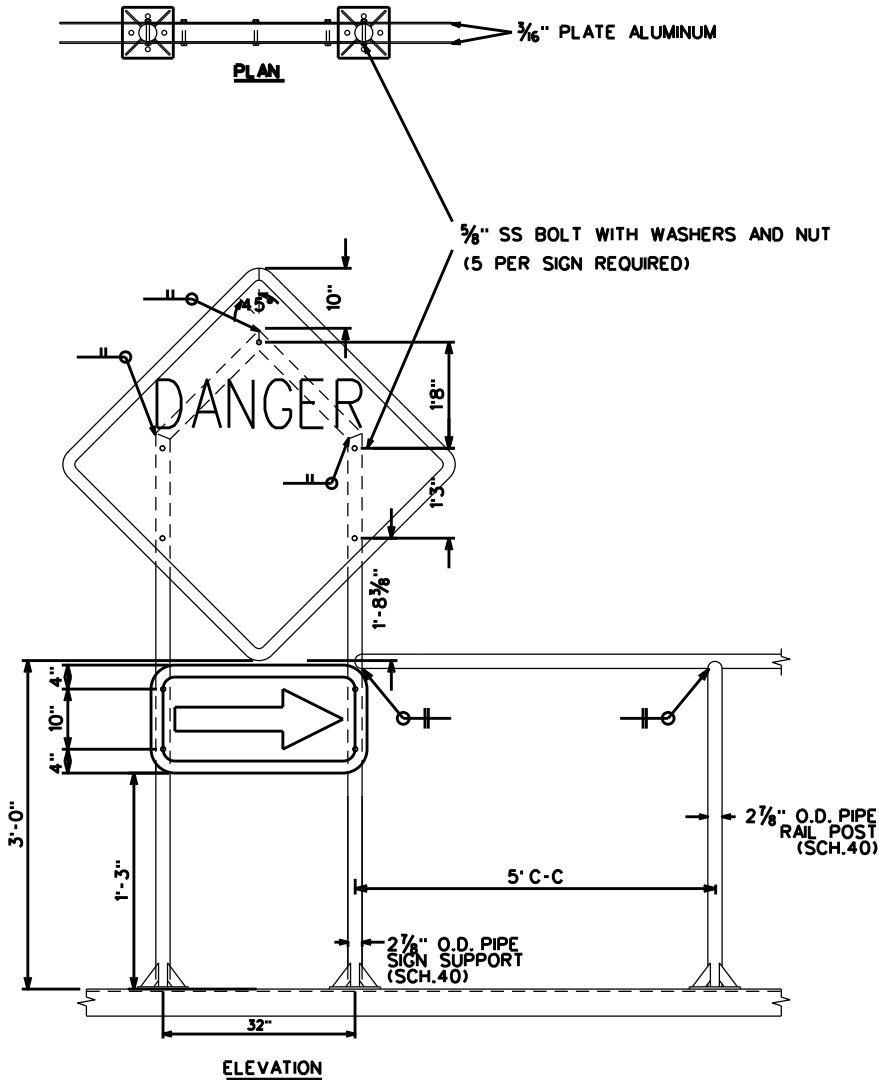


1/4" ASTM A36 PL
4-13/16" HOLES FOR
4-3/4" BOLTS, WASHERS AND NUTS

SIGN SUPPORT & RAILING POST
BASE PLATE
(NOT TO SCALE)



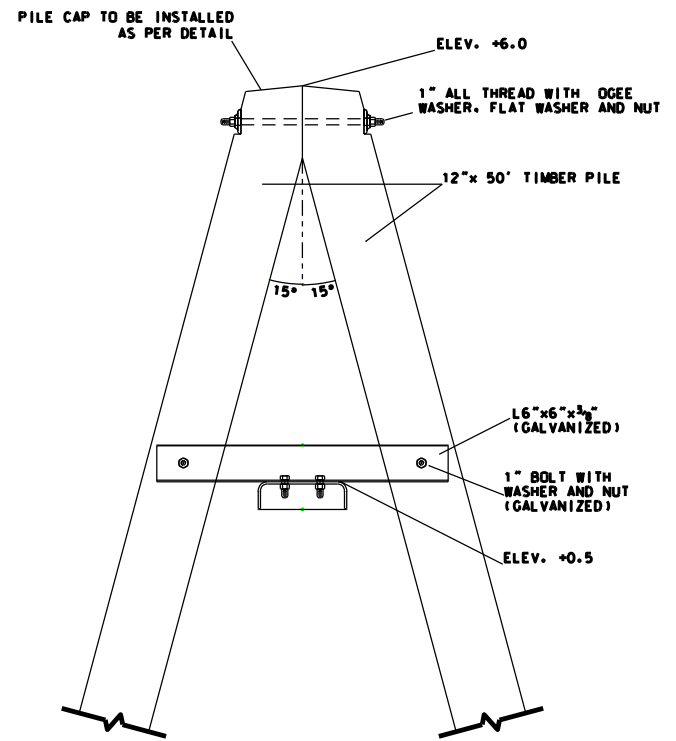
SIDE



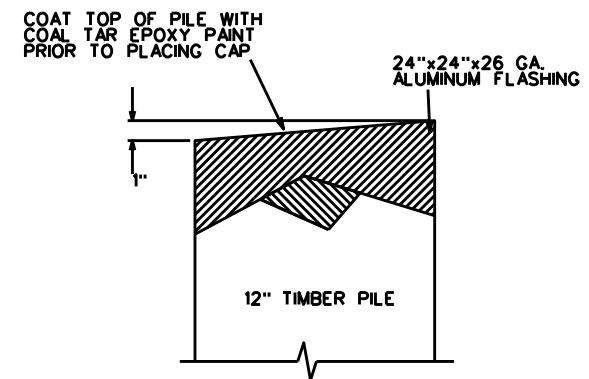
SIGN - DETAILS
(NOT TO SCALE)

PERMANENT WARNING SIGN DETAILS
TYPE 'E'

- NOTES:
1. SIGNS SHALL BE CONSTRUCTED USING 3/16" PLATE 6061 ALUMINUM.
 2. THE 2" BORDER SHALL BE A RETRO-REFLECTIVE MATERIAL OF ORANGE COLOR
 3. THE LETTERING AND ARROW FIELD SHALL BE A RETRO-REFLECTIVE MATERIAL OF WHITE COLOR
 4. THE LETTERING AND ARROWS FOR THE SIGNS SHALL BE BLACK.
 5. TEFLON OR NEOPRENE WASHERS SHALL BE PLACED BETWEEN STEEL PIPE AND ALUMINUM SIGNS.
 6. THE SIGN SUPPORTS SHALL BE PAINTED AS SPECIFIED IN CONSTRUCTION SPECIFICATION 82.
 7. TACK WELD NUTS TO BOLTS, WHERE APPLICABLE.

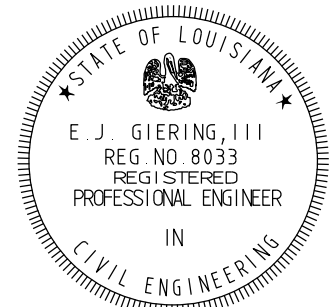


15° BATTER PILE DETAIL
ELEVATION VIEW



TYPICAL TIMBER PILE CAP
(NOT TO SCALE)

"AS-BUILT"



REVISIONS			
NO.	DATE	APPROVED	TITLE

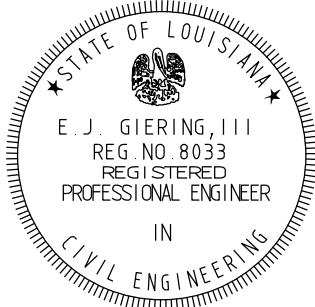
WARNING SIGN ON SHEETPILE STRUCTURES
TYPE 'E'
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



FILE NAME	LA274
DRAWING NAME	LA274068.DGN
SHEET 68 OF 76	

DATE	07/07
DESIGNED	S. GARNER
DRAWN	D. WILMORE
CHECKED	R. FAULKNER, B. STICKER
APPROVED	E.J. GIERING III

UNIFIED SOIL CLASSIFICATION SYSTEM						
MAJOR DIVISIONS			SYMBOL & LETTER		DESCRIPTION	
COARSE-GRAINED SOILS More than half of material larger than No. 200 sieve size	GRAVELS More than half of coarse fraction larger than No.4 sieve size	Clean Gravels (Little or no fines)		GW	WELL GRADED GRAVEL, GRAVEL-SAND MIXTURE	
				GP	POORLY GRADED GRAVEL, GRAVEL-SAND MIXTURE	
		Gravels with fines (Appreciable amount of fines)		GM	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURE	
				GC	CLAYEY GRAVEL, GRAVEL-SAND-CLAY MIXTURE	
	SANDS More than half of coarse fraction smaller than No.4 sieve size	Clean Sands (Little or no fines)		SW	WELL GRADED SAND, GRAVELLY SAND	
				SP	POORLY GRADED SAND, GRAVELLY SAND	
		Sands with fines (Appreciable amount of fines)		SM	SILTY SAND, SAND-SILT MIXTURE	
				SC	CLAYEY SAND, SAND-CLAY MIXTURE	
FINE-GRAINED SOILS More than half of material smaller than No. 200 sieve size	SILTS AND CLAYS Liquid limit less than 50			ML	SILT WITH LITTLE OR NO PLASTICITY	
				ML	CLAYEY SILT, SILT WITH SLIGHT TO MEDIUM PLASTICITY	
				ML	SANDY SILT	
				CL	SILTY CLAY, LOW TO MEDIUM PLASTICITY	
				CL	SANDY CLAY, LOW TO MEDIUM PLASTICITY (30% TO 50% SAND)	
	SILTS AND CLAYS Liquid limit greater than 50			MH	SILT, HIGH PLASTICITY	
				CH	CLAY, HIGH PLASTICITY	
				OH	ORGANIC CLAY OF MEDIUM TO HIGH PLASTICITY	
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOIL	



"AS-BUILT"

Date	05/07
Designed	S. GARNER
Drawn	D. WILMORE
Checked	R. FAULKNER, B. STICKER
Approved	E.J. GIERING III

SOIL PROFILE LEGEND
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



Natural Resources Conservation Service
United States Department of Agriculture

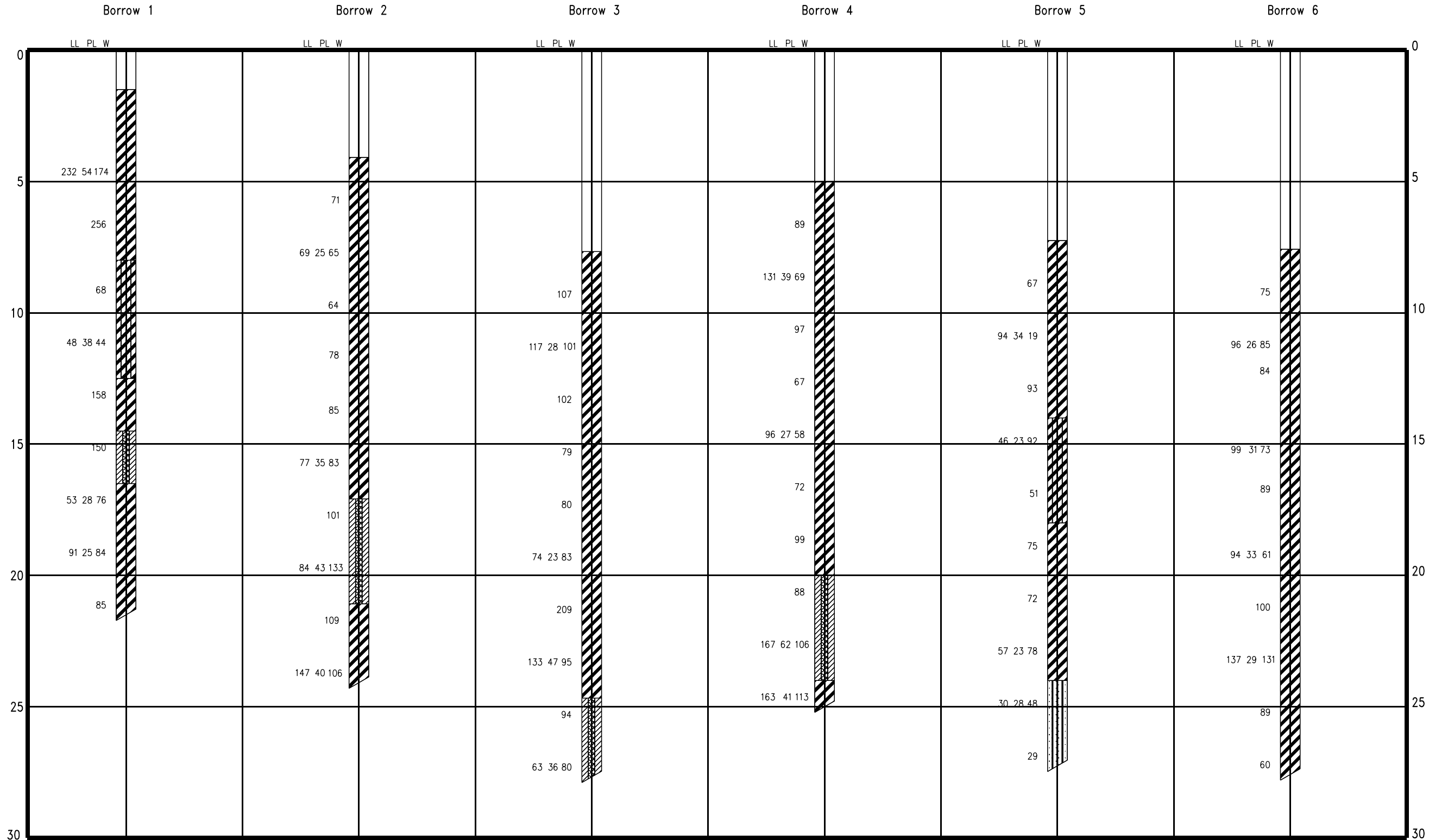
File Name
LA274

Drawing Name
LA27469.DGN

Sheet 69 of 76

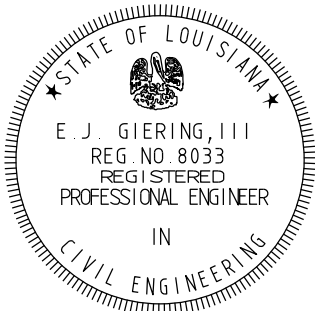
REVISIONS		
DATE	APPROVED	TITLE

DEPTH IN FEET



LEGEND:
LL = Liquid Limit
PL = Plastic Limit
W = Water Content
DD = Dry Density (pcf)
C/N = Cohesion (ksf)/Penetration
Resistance, N (blows per ft)
in the same column
% -200 = % Passing No. 200 Sieve

"AS-BUILT"



REVISIONS		
DATE	APPROVED	TITLE

SOIL PROFILES - BORROW

BAYOU DECADE

TE-34 PENCHANT BASIN

TERREBONNE PARISH, LOUISIANA

NRCS

Natural Resources Conservation Service

United States Department of Agriculture

File Name

LA274

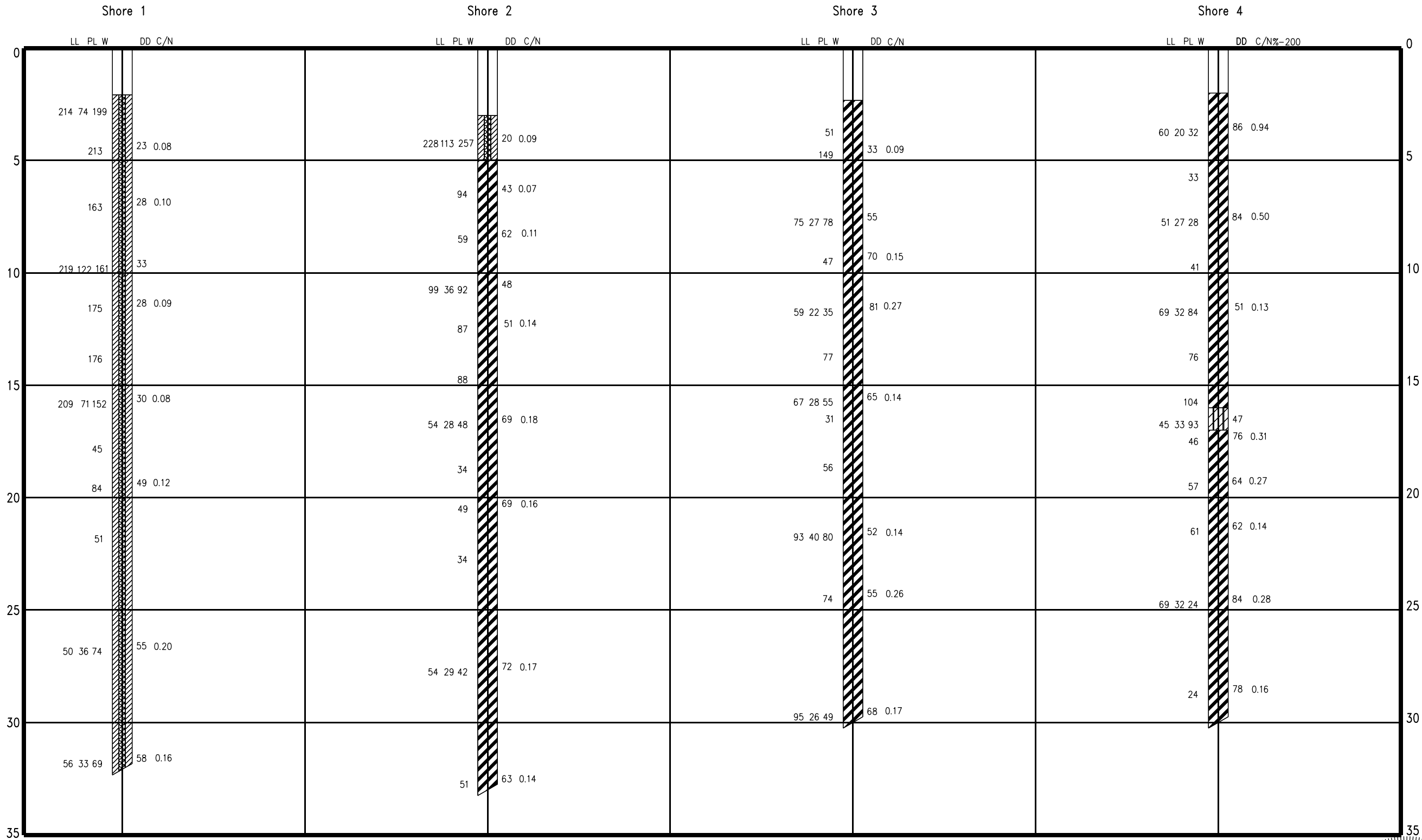
Drawing Name

LA27470.DGN

Sheet 70 of 76

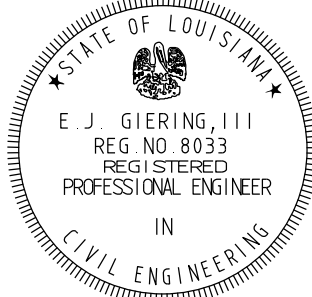
Date	05/07
Designed	S. GARNER
Drawn	D. WILMORE
Checked	R. FAULKNER, B. STICKER
Approved	E.J. GIERING III

DEPTH IN FEET



LEGEND:
LL = Liquid Limit
PL = Plastic Limit
W = Water Content
DD = Dry Density (pcf)
C/N = Cohesion (ksf)/Penetration
Resistance, N (blows per ft)
in the same column
% -200 = % Passing No. 200 Sieve

"AS-BUILT"



REVISIONS		
DATE	APPROVED	TITLE

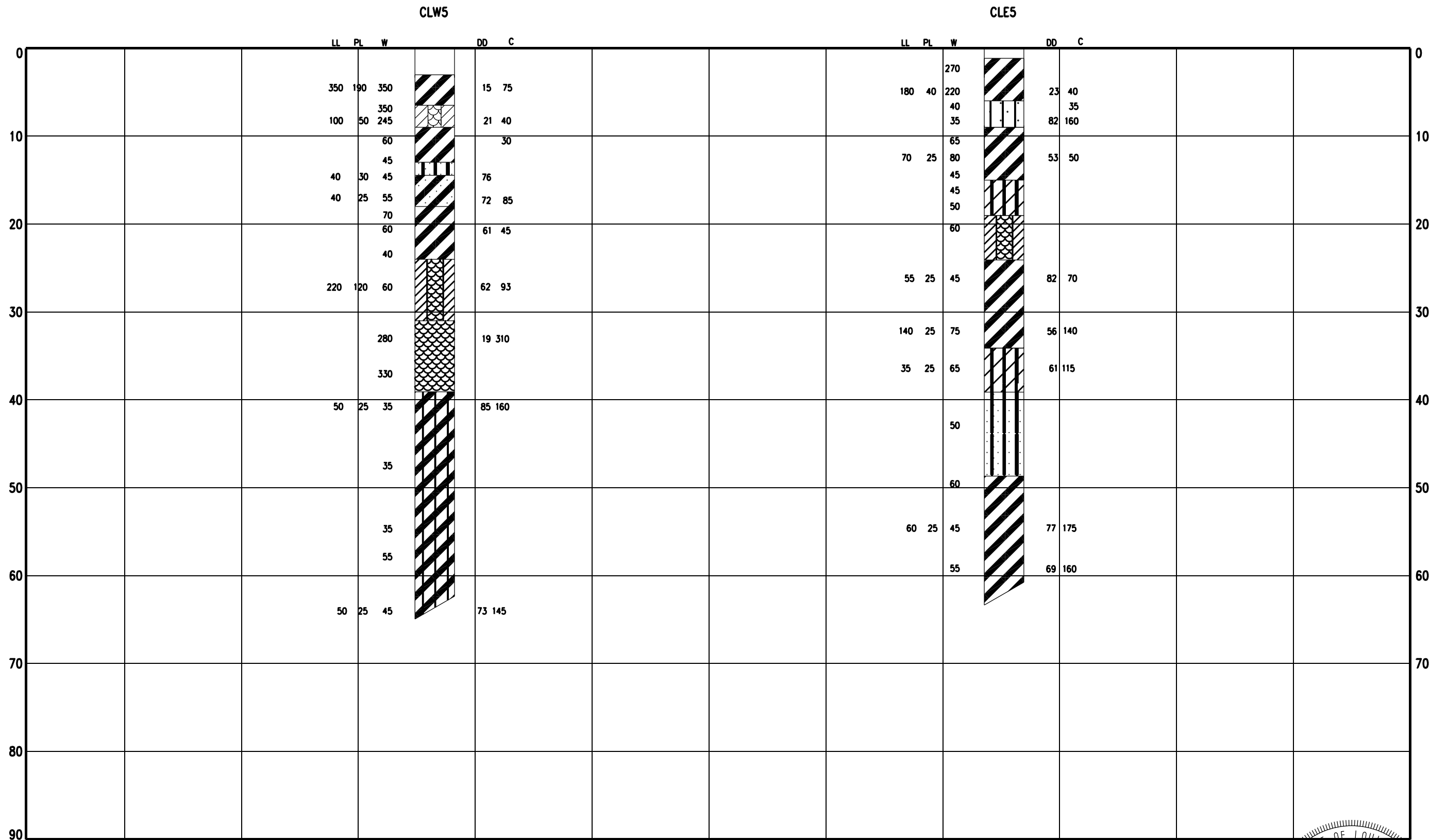
SOIL PROFILES - SHORELINE
BAYOU DECADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



File Name	LA274
Drawing Name	LA27471.DGN
Sheet	71 of 76

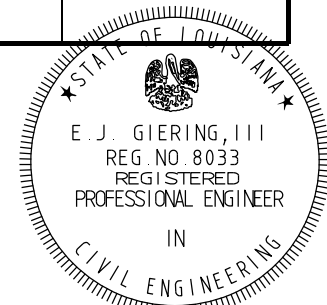
Date	05/07
Designed	S. GARNER
Drawn	D. WILMORE
Checked	R. FAULKNER, B. STICKER
Approved	E.J. GIERING III

DEPTH IN FEET



LEGEND:
LL = Liquid Limit
PL = Plastic Limit
W = Water Content
DD = Dry Density (pcf)
C/N = Cohesion (ksf)/Penetration
Resistance, N (blows per ft)
in the same column
% -200 = % Passing No. 200 Sieve

"AS-BUILT"



REVISIONS		
DATE	APPROVED	TITLE

Date05/07

DesignedS. GARNER

Date05/07

DrawnD. WILMORE

Date02/09

CheckedR. FAULKNER, B. STICKER

Date05/09

ApprovedE.J. GIERING III

SOIL PROFILES - SITE 5
BAYOU DECADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

NRCS

Natural Resources Conservation Service
United States Department of Agriculture

File Name
LA274

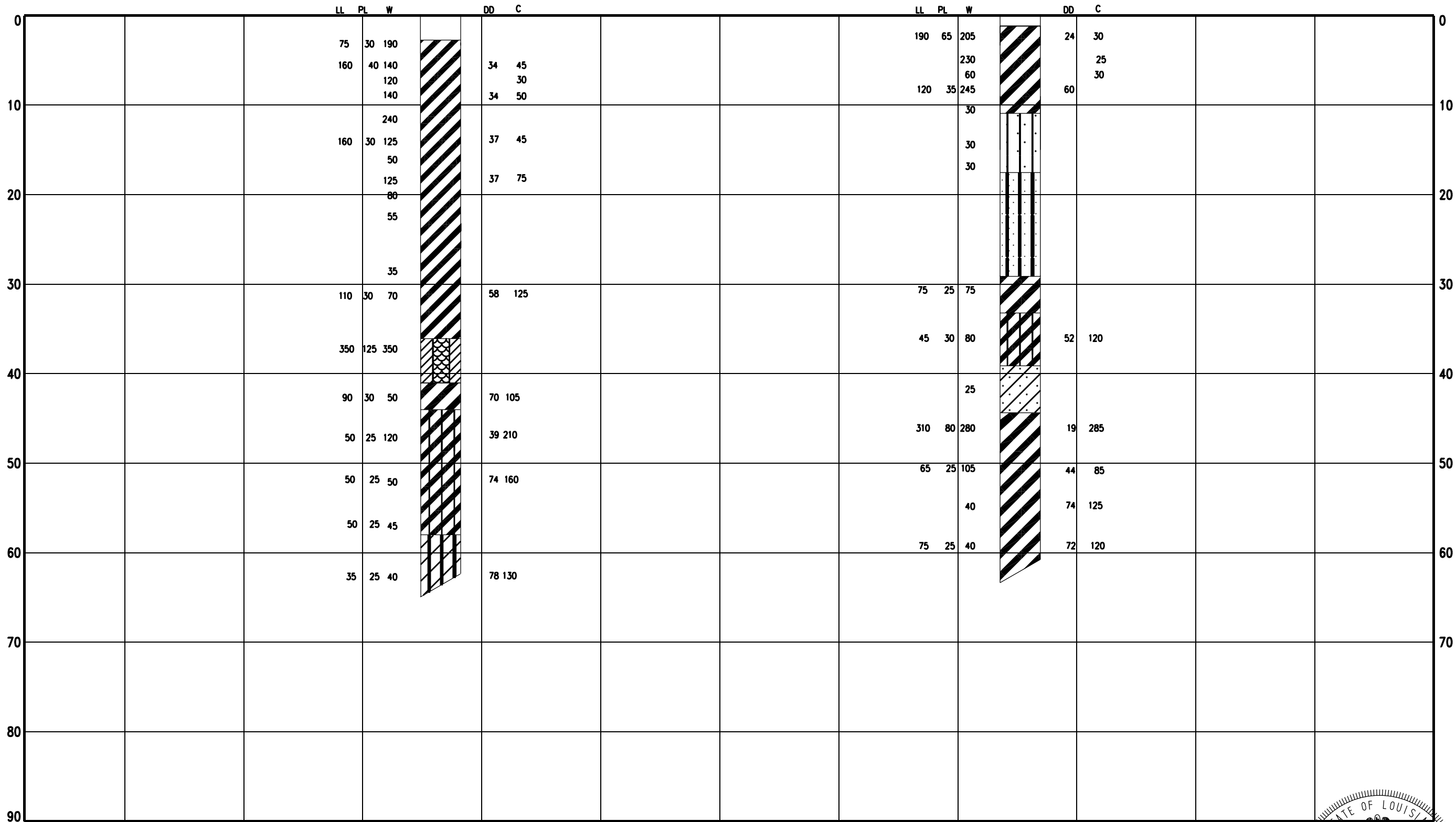
Drawing Name
LA27472.DGN

Sheet 72 of 76

DEPTH IN FEET

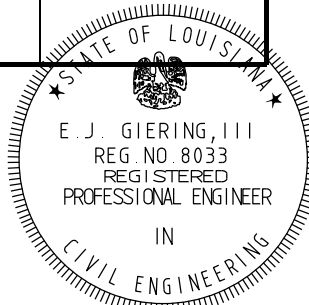
CLW4

CLE4



LEGEND:
LL = Liquid Limit
PL = Plastic Limit
W = Water Content
DD = Dry Density (pcf)
C/N = Cohesion (ksf)/Penetration Resistance, N (blows per ft) in the same column
% -200 = % Passing No. 200 Sieve

"AS-BUILT"



REVISIONS		
DATE	APPROVED	TITLE

SOIL PROFILES - SITE 4
BAYOU DECADE
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

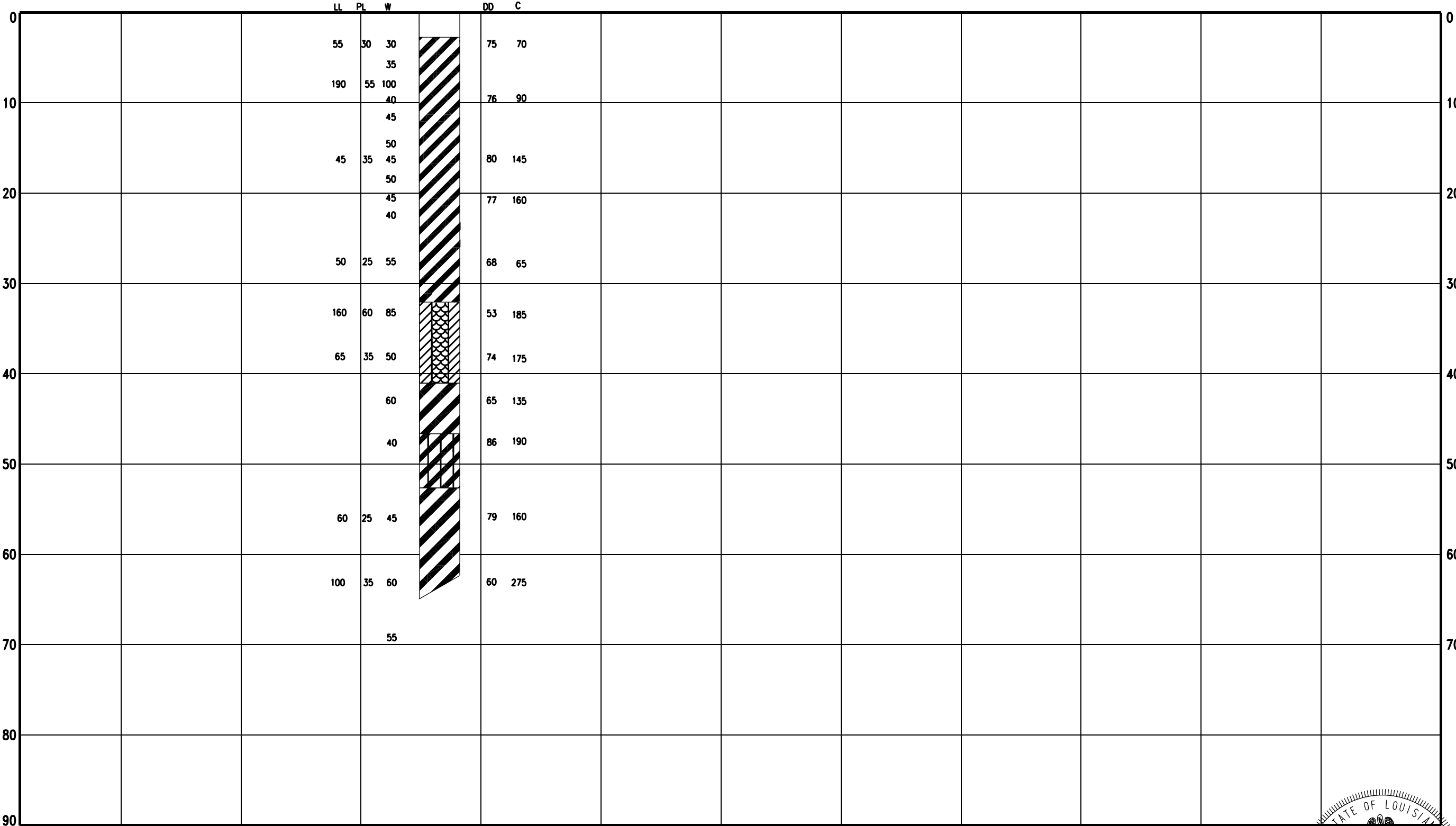


File Name	LA274
Drawing Name	LA27473.DGN
Sheet	73 of 76

Date	05/07
Designed	S. GARNER
Drawn	D. WILMORE
Checked	R. FAULKNER, B. STICKER
Approved	E.J. GIERING III

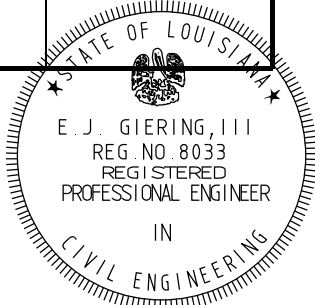
DEPTH IN FEET

SUPERIOR NORTH



LEGEND:
LL = Liquid Limit
PL = Plastic Limit
W = Water Content
DD = Dry Density (pcf)
C/N = Cohesion (ksf)/Penetration
Resistance, N (blows per ft)
in the same column
% -200 = % Passing No. 200 Sieve

"AS-BUILT"



REVISIONS		
DATE	APPROVED	TITLE

SOIL PROFILES
SUPERIOR CANAL
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA

Natural Resources Conservation Service
United States Department of Agriculture

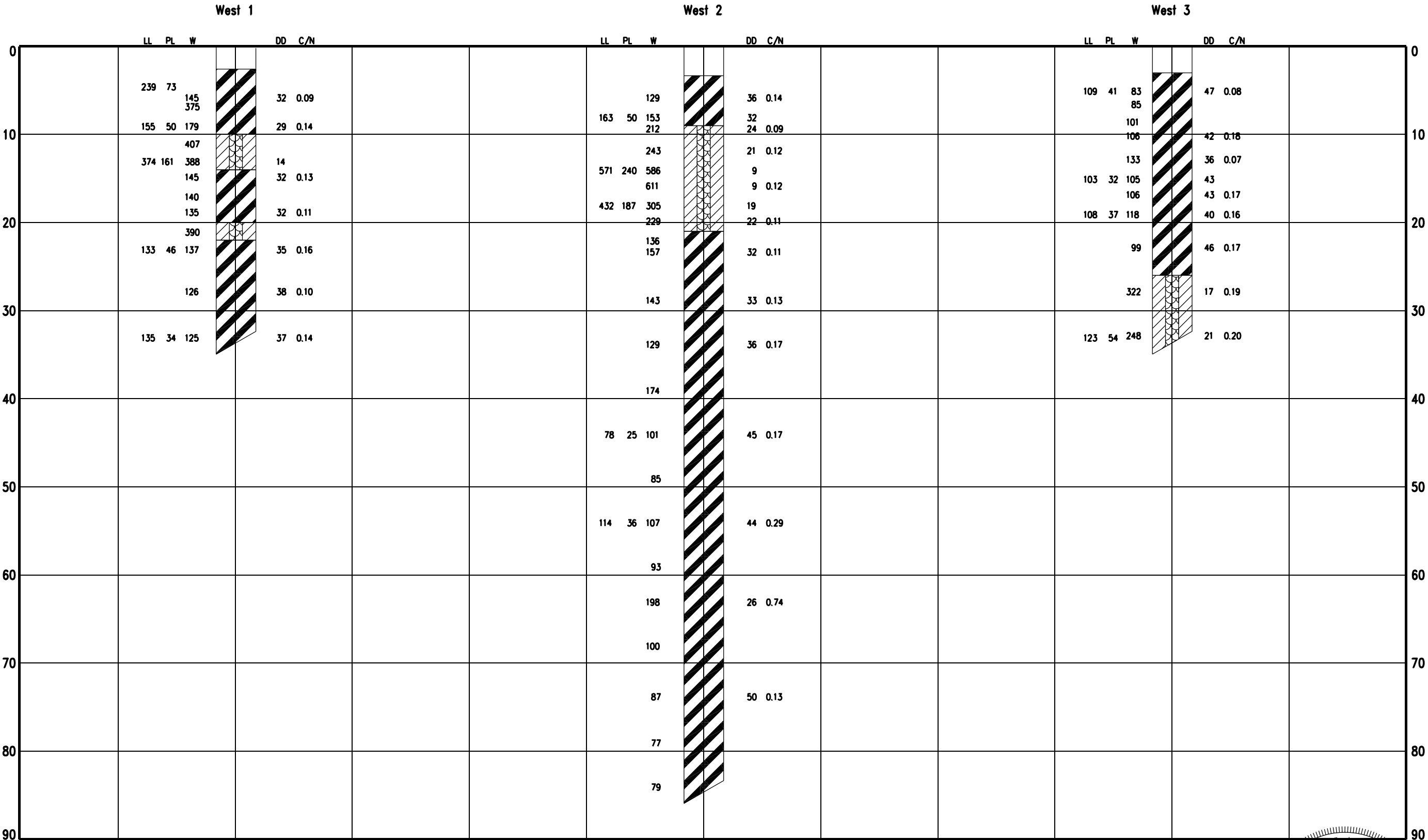
File Name
LA274

Drawing Name
LA27474.DGN

Sheet 74 of 76

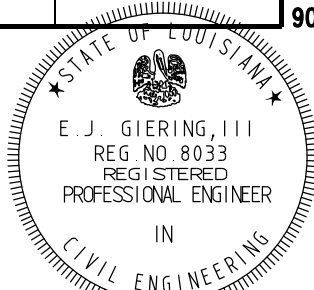
Designed	S. GARNER	Date	05/07
Drawn	D. WILMORE		05/07
Checked	R. FAULKNER, B. STICKER		02/09
Approved	E.J. GIERING III		05/09

DEPTH IN FEET



LEGEND:
LL = Liquid Limit
PL = Plastic Limit
W = Water Content
DD = Dry Density (pcf)
C/N = Cohesion (ksf)/Penetration
Resistance, N (blows per ft)
in the same column
% -200 = % Passing No. 200 Sieve

"AS-BUILT"



REVISIONS		
DATE	APPROVED	TITLE

SOIL PROFILES - WEST ROCK DIKE
MOUTH OF BAYOU PENCHANT
TE-34 PENCHANT BASIN
TERREBONNE PARISH, LOUISIANA



File Name	LA274
Drawing Name	LA27475.DGN
Sheet	75 of 76

Date			
05/07			
Designed	S. GARNER	Drawn	D. WILMORE
05/07			
Checked	R. FAULKNER, B. STICKER	Approved	E.J. GIERING III
02/09			
05/09			

