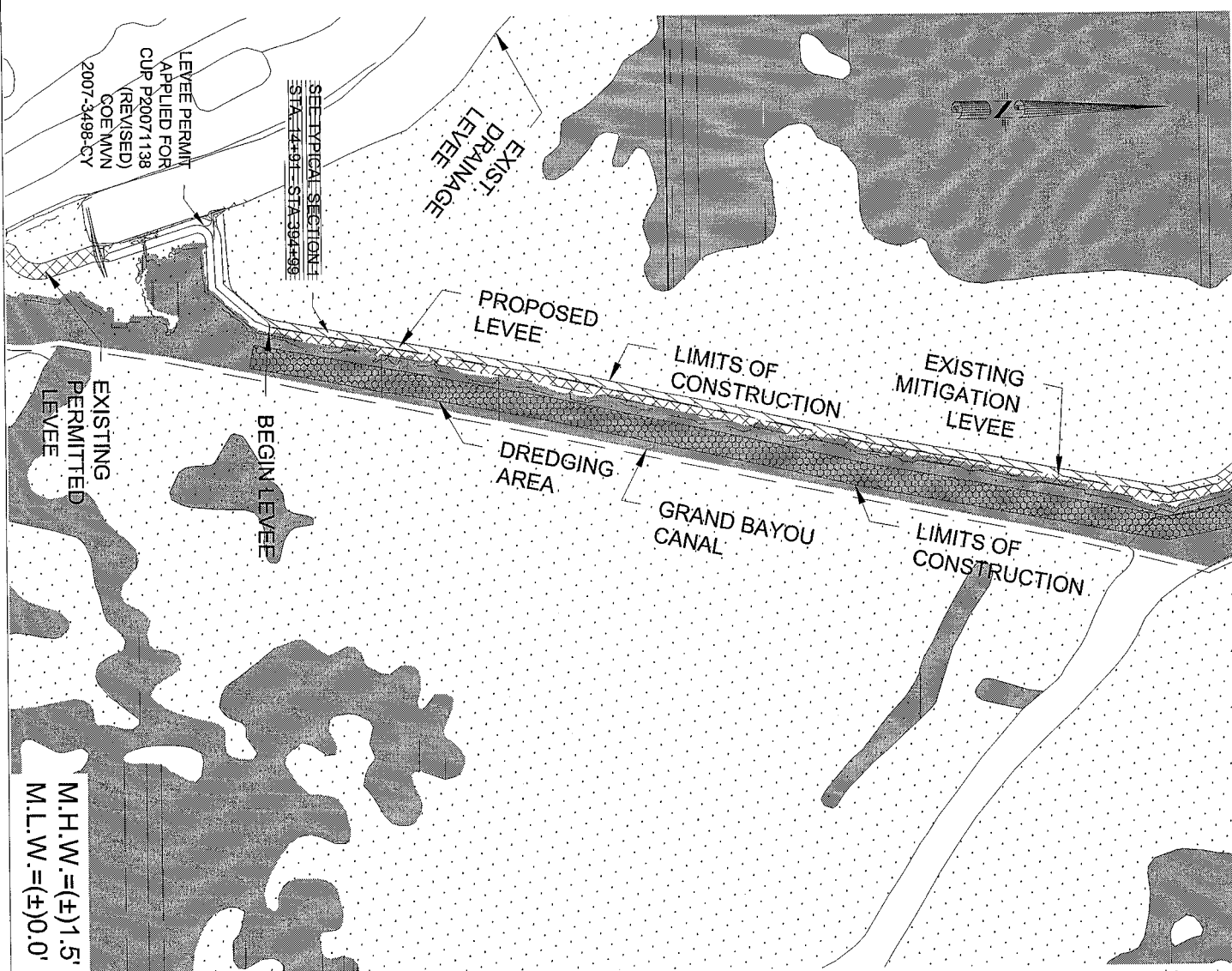


SHEET NO. <b>1</b> OF <b>12</b>	<b>MORGANZA TO THE GULF          REACHES "K" AND "L" - FIRST LIFT          LAFORCHE PARISH, LOUISIANA          PERMIT APPLICATION</b>	DATE: 10-02-2012	DESIGNED BY: BDE	<b>ALL SOUTH CONSULTING ENGINEERS, L.L.C.</b> 652 PAPWORTH AVENUE METAIRIE, LA 70005 (504) 322-2799 ASCE PROJECT No. XXX-XXX-XX	REVISIONS		CADD FILE NAME:	
		SCALE: 1"=10,000'	DRAWN BY: TFR		DATE:	REMARKS:		APP'D:
		JOB NO. 041-001-01	CHECKED BY: DFB		DATE:	REMARKS:		APP'D:

MATCHLINE "K-1"



**WETLAND IMPACTS:**

**-LEVEE CONSTRUCTION:**

TOTAL LEVEE AREA = (132.09 AC)  
EXIST. LEVEE AREA = (50.59 AC)

**TOTAL WETLAND IMPACTS = (81.50 AC)**

- MARSH AREA IMPACTED = (73.55 AC)
- BRACKISH MARSH = (44.91 AC)
- FRESHWATER / INTERMEDIATE MARSH = (28.64 AC)
- OPEN WATER IMPACTED = (7.95 AC)

**-EXCAVATION AND DREDGING:**

TOTAL EXCAVATION AREA = (214.9 AC)  
-NON-WETLAND PASTURE AREA = (102 AC)  
-OPEN WATER DREDGING = (112.8 AC)

**ESTIMATED QUANTITIES:**

- OPEN WATER DREDGING = (935,000 CY)
- ON-SITE BORROW EXCAVATION = (1,074,000 CY)
- MAXIMUM VESSEL DRAFT = 5.0'



**LEGEND:**

- EXIST. LEVEE LIMITS
- - - EXIST. PIPELINE
- ▨ EXIST. MARSHLAND
- ▨ PROPOSED LEVEE
- ▨ OPEN WATER
- ▨ BORROW AREA
- ▨ EXIST. LEVEE AREA

M.H.W. = (+) 1.5'  
M.L.W. = (+) 0.0'

GRID FILE NUMBER

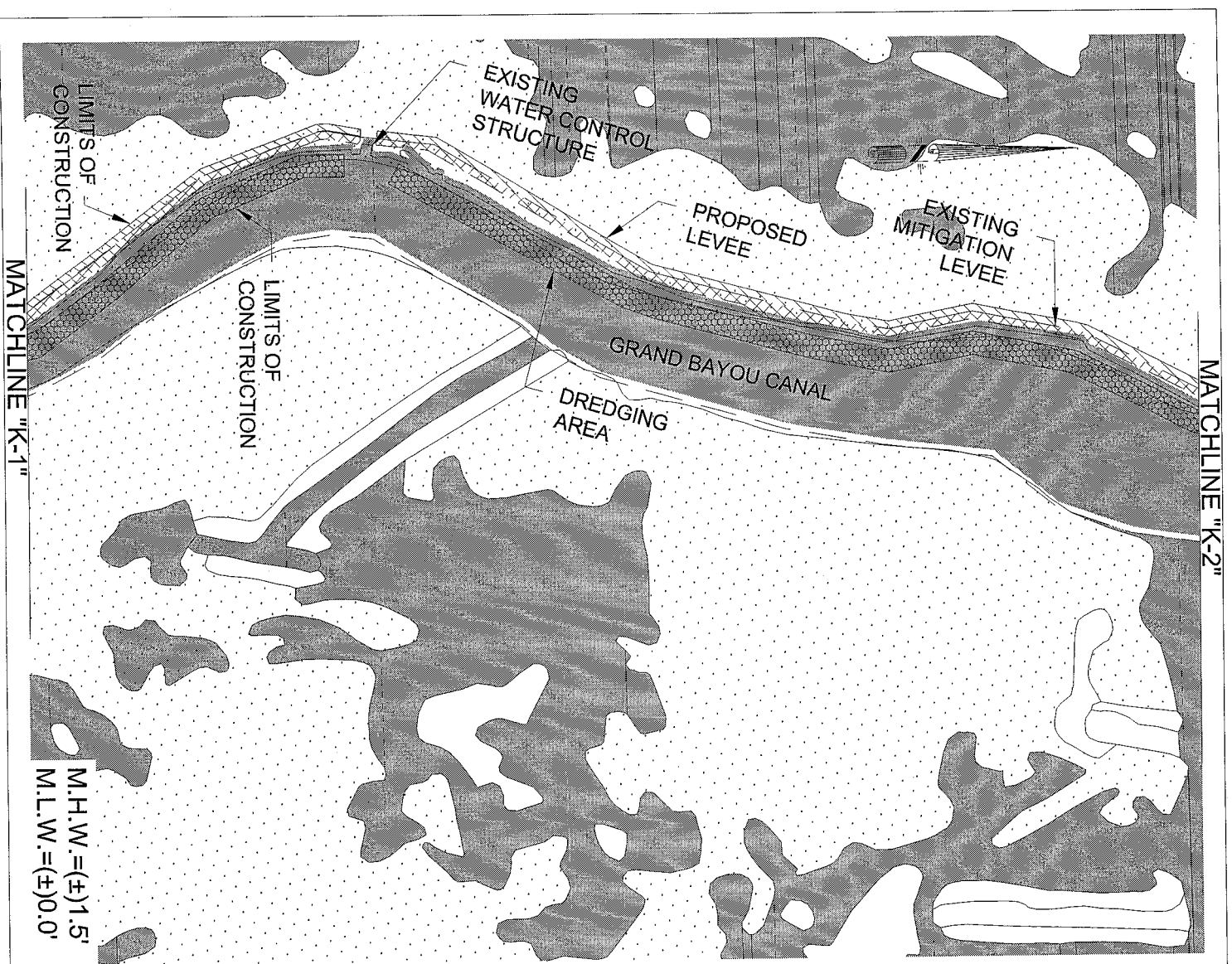
REVISIONS		
DATE:	REMARKS:	APPD

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**ALL SOUTH CONSULTING ENGINEERS, L.L.C.**  
 652 PAPWORTH AVENUE  
 METAIRIE, LA 70005  
 (504) 322-2783  
 ASCE PROJECT No. XXX-XXX-XX

DESIGNED BY: BDE	DATE: 10-02-2012
DRAWN BY: TFR	SCALE: 1"=1000'
CHECKED BY: DFB	JOB NO. 041-001-01

MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFOURCHE PARISH, LOUISIANA  
 PERMIT APPLICATION  
 OVERALL PROJECT PLAN

SHEET NO.	2
2 OF 12	



M.H.W. = (±) 1.5'  
M.L.W. = (±) 0.0'

**WETLAND IMPACTS:**

**-LEVEE CONSTRUCTION:**

TOTAL LEVEE AREA = (132.09 AC)  
EXIST. LEVEE AREA = (50.59 AC)

TOTAL WETLAND IMPACTS = (81.50 AC)

-MARSH AREA IMPACTED = (73.55 AC)

-BRACKISH MARSH = (44.91 AC)

- FRESHWATER / INTERMEDIATE MARSH = (28.64 AC)

-OPEN WATER IMPACTED = (7.95 AC)

**-EXCAVATION AND DREDGING:**

TOTAL EXCAVATION AREA = (214.9 AC)

-NON-WETLAND PASTURE AREA = (102 AC)

-OPEN WATER DREDGING = (112.8 AC)

**ESTIMATED QUANTITIES:**

OPEN WATER DREDGING = (935,000 CY)

ON-SITE BORROW EXCAVATION = (1,074,000 CY)

MAXIMUM VESSEL DRAFT = 5.0'

SCALE: 1"=1000'



**LEGEND:**

- EXIST. LEVEE LIMITS
- - - EXIST. PIPELINE
- ▨ EXIST. MARSHLAND
- ▨ PROPOSED LEVEE
- ▨ OPEN WATER
- ▨ BORROW AREA
- ▨ EXIST. LEVEE AREA

REVISIONS		APPRO
DATE:	REMARKS:	

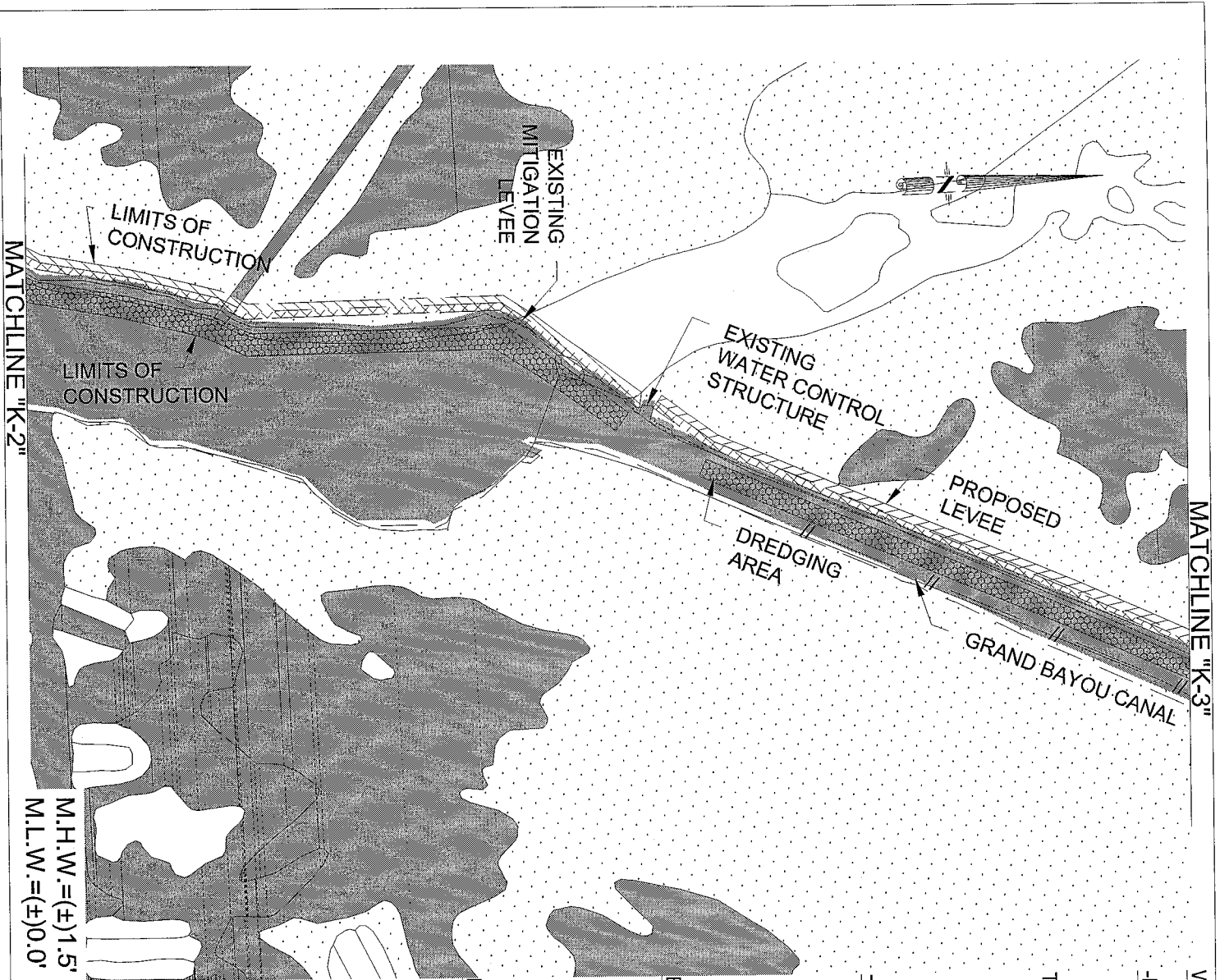
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 METAIRIE, LA 70005  
 (504) 322-2783  
 ASCE PROJECT No. XXX-XXX-XX

DATE:	DESIGNED BY:
10-02-2012	BDE
SCALE:	DRAWN BY:
1"=1000'	TFR
JOB NO.	CHECKED BY:
041-001-01	DFB

MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFORCHE PARISH, LOUISIANA  
 PERMIT APPLICATION  
 OVERALL PROJECT PLAN

SHEET NO.	3
3 of 12	

COORD FILE NAME



**WETLAND IMPACTS:**

**-LEVEE CONSTRUCTION:**

TOTAL LEVEE AREA = (132.09 AC)  
 EXIST. LEVEE AREA = (50.59 AC)

**TOTAL WETLAND IMPACTS = (81.50 AC)**

- MARSH AREA IMPACTED = (73.55 AC)
- BRACKISH MARSH = (44.91 AC)
- FRESHWATER / INTERMEDIATE MARSH = (28.64 AC)
- OPEN WATER IMPACTED = (7.95 AC)

**-EXCAVATION AND DREDGING:**

TOTAL EXCAVATION AREA = (214.9 AC)  
 -NON-WETLAND PASTURE AREA = (102 AC)  
 -OPEN WATER DREDGING = (112.8 AC)

**ESTIMATED QUANTITIES:**

- OPEN WATER DREDGING = (935,000 CY)
- ON-SITE BORROW EXCAVATION = (1,074,000 CY)
- MAXIMUM VESSEL DRAFT = 5.0'

SCALE: 1"=1000'



**LEGEND:**

- EXIST. LEVEE LIMITS
- - - EXIST. PIPELINE
- ..... EXIST. MARSHLAND
- ▨ PROPOSED LEVEE
- OPEN WATER
- ▩ BORROW AREA
- ▤ EXIST. LEVEE AREA

CADD FILE NAME:

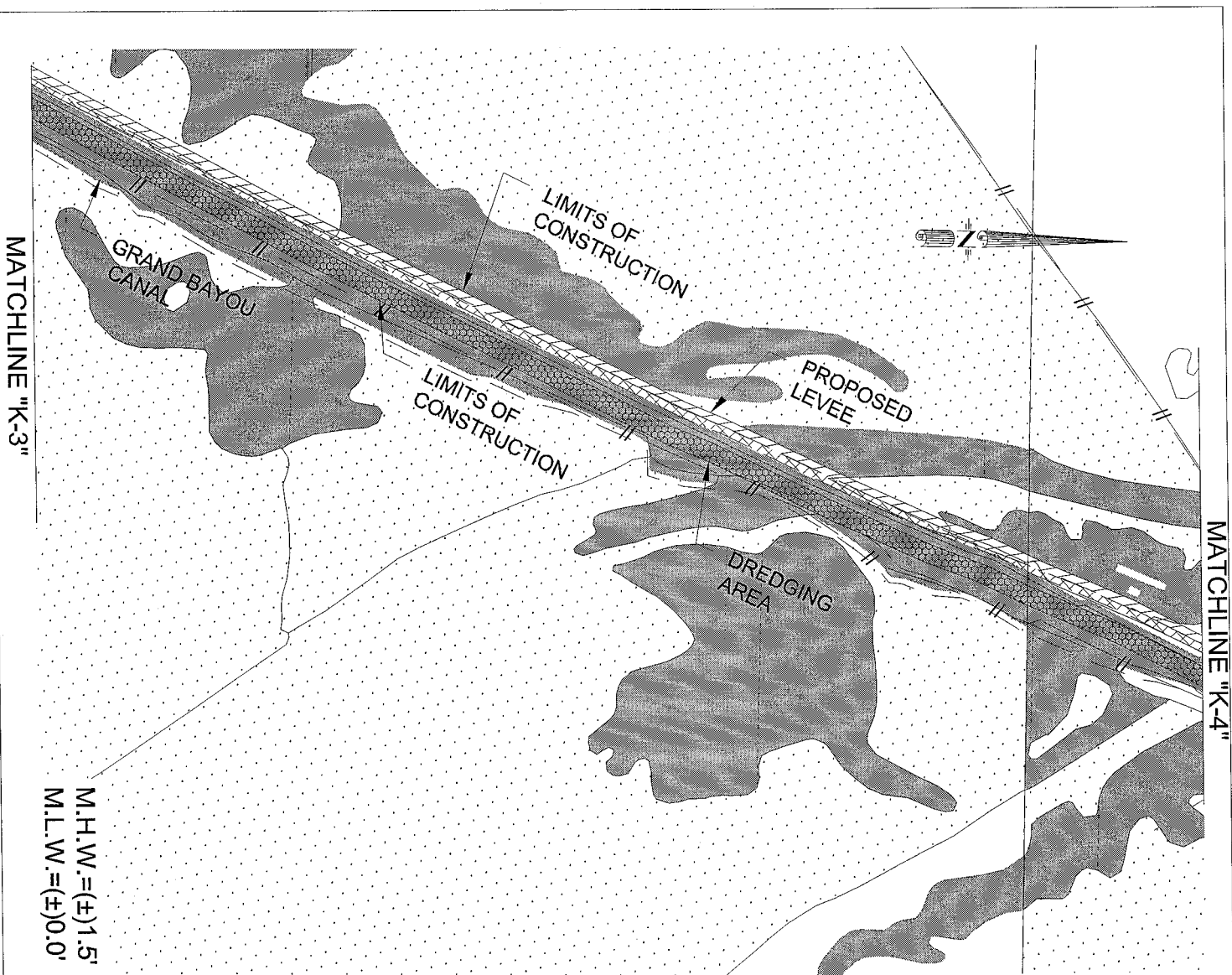
REVISIONS		APP'D
DATE:	REMARKS:	

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 METAIRIE, LA 70005  
 (504) 322-2783  
 ASCE PROJECT No. XXX-XXX-XX

DESIGNED BY: BDE	DATE: 10-02-2012
DRAWN BY: TFR	SCALE: 1"=1000'
CHECKED BY: DFB	JOB NO. 041-001-01

MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFORCHE PARISH, LOUISIANA  
 PERMIT APPLICATION  
 OVERALL PROJECT PLAN

SHEET NO.	4
4 of 12	



M.H.W. = (+) 1.5'  
M.L.W. = (+) 0.0'

**WETLAND IMPACTS:**

**-LEVEE CONSTRUCTION:**

TOTAL LEVEE AREA = (132.09 AC)  
EXIST. LEVEE AREA = (50.59 AC)

**TOTAL WETLAND IMPACTS = (81.50 AC)**

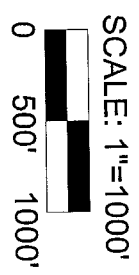
- MARSH AREA IMPACTED = (73.55 AC)
- BRACKISH MARSH = (44.91 AC)
- FRESHWATER / INTERMEDIATE MARSH = (28.64 AC)
- OPEN WATER IMPACTED = (7.95 AC)

**-EXCAVATION AND DREDGING:**

TOTAL EXCAVATION AREA = (214.9 AC)  
-NON-WETLAND PASTURE AREA = (102 AC)  
-OPEN WATER DREDGING = (112.8 AC)

**ESTIMATED QUANTITIES:**

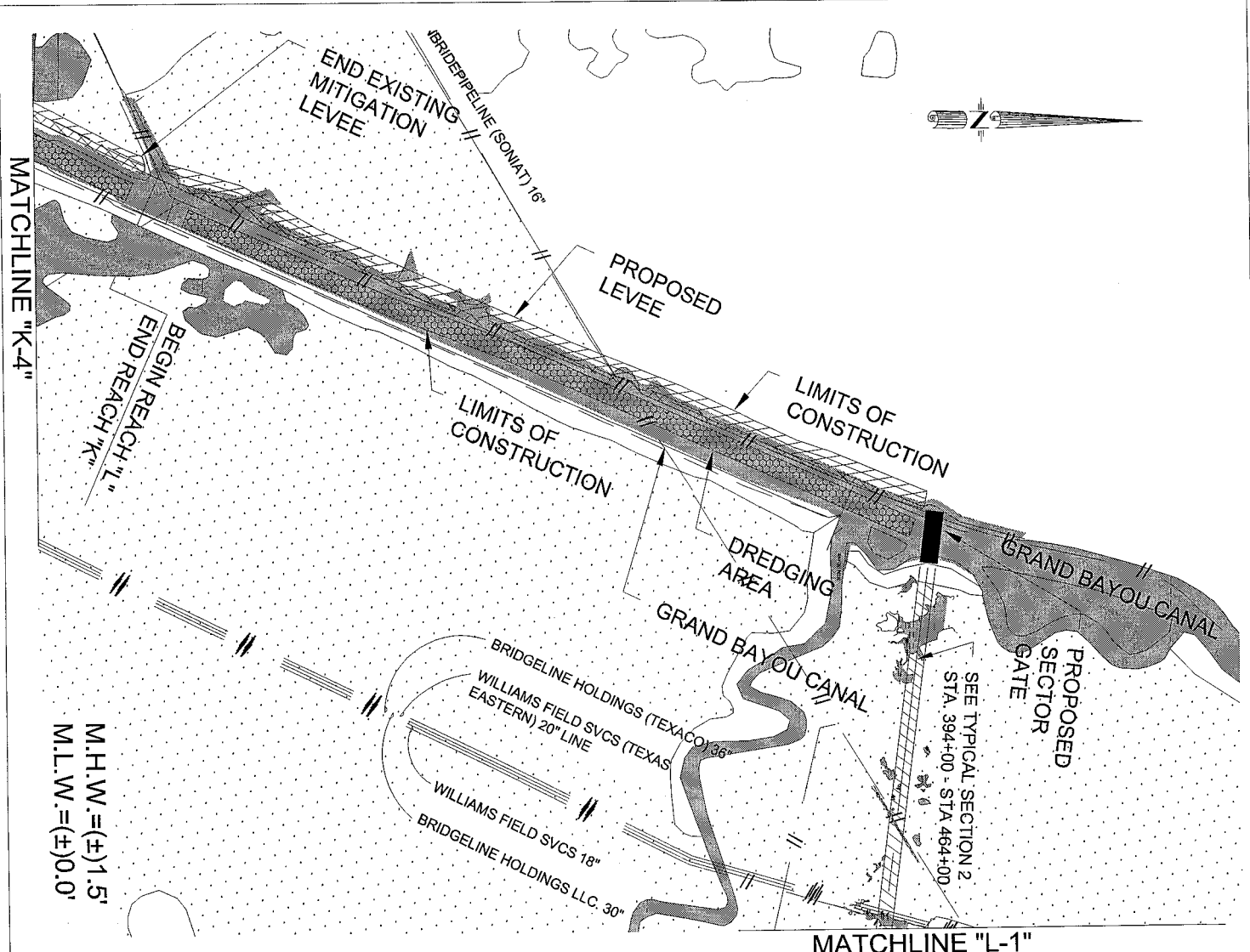
- OPEN WATER DREDGING = (935,000 CY)
- ON-SITE BORROW EXCAVATION = (1,074,000 CY)
- MAXIMUM VESSEL DRAFT = 5.0'



**LEGEND:**

- EXIST. LEVEE LIMITS
- - - EXIST. PIPELINE
- ..... EXIST. MARSHLAND
- PROPOSED LEVEE
- OPEN WATER
- ▨ BORROW AREA
- ▩ EXIST. LEVEE AREA

MORGANZA TO THE GULF REACHES "K" AND "L" - FIRST LIFT LAFORCHE PARISH, LOUISIANA PERMIT APPLICATION OVERALL PROJECT PLAN	DATE:	DESIGNED BY:	ALL SOUTH CONSULTING ENGINEERS, L.L.C. 652 PAPWORTH AVENUE METAIRIE, LA 70005 (504) 922-2785 ASCE PROJECT No. XXX-XXX-XX	REVISIONS		CADD FILE NAME:
	SCALE:	DRAWN BY:		DATE:	REMARKS:	
	1"=1000'	TFR	10-02-2012			
	JOB NO.	CHECKED BY:	041-001-01			
SHEET NO. 5						
5 of 12						



**WETLAND IMPACTS:**

**-LEVEE CONSTRUCTION:**

TOTAL LEVEE AREA = (132.09 AC)  
 EXIST. LEVEE AREA = (50.59 AC)

TOTAL WETLAND IMPACTS = (81.50 AC)

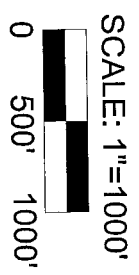
- MARSH AREA IMPACTED = (73.55 AC)
- BRACKISH MARSH = (44.91 AC)
- FRESHWATER / INTERMEDIATE MARSH = (28.64 AC)
- OPEN WATER IMPACTED = (7.95 AC)

**-EXCAVATION AND DREDGING:**

TOTAL EXCAVATION AREA = (214.9 AC)  
 -NON-WETLAND PASTURE AREA = (102 AC)  
 -OPEN WATER DREDGING = (112.8 AC)

**ESTIMATED QUANTITIES:**

- OPEN WATER DREDGING = (935,000 CY)
- ON-SITE BORROW EXCAVATION = (1,074,000 CY)
- MAXIMUM VESSEL DRAFT = 5.0'



**LEGEND:**

- EXIST. LEVEE LIMITS
- - - EXIST. PIPELINE
- ▨ EXIST. MARSHLAND
- ▩ PROPOSED LEVEE
- OPEN WATER
- ▤ BORROW AREA
- ▥ EXIST. LEVEE AREA

REVISIONS		APPD
DATE	REMARKS	

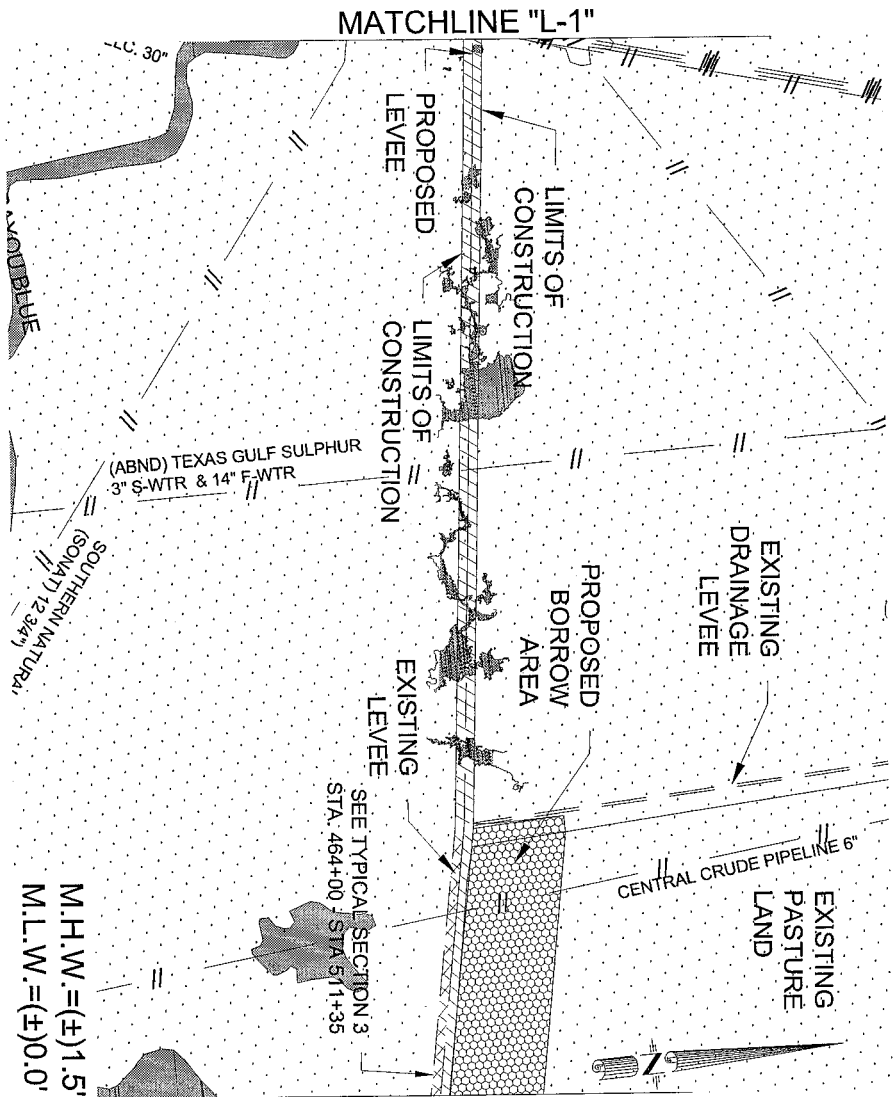
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**ALL SOUTH CONSULTING ENGINEERS, L.L.C.**  
 652 PAPWORTH AVENUE  
 METAIRIE, LA 70005  
 (504) 322-2785  
 ASCE PROJECT No. XXX-XXX-XX

DATE: 10-02-2012	DESIGNED BY: BDE
SCALE: 1"=1000'	DRAWN BY: TFR
JOB NO. 041-001-01	CHECKED BY: DFB

MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFOURCHE PARISH, LOUISIANA  
 PERMIT APPLICATION  
 OVERALL PROJECT PLAN

SHEET NO.	6
6 of 12	

CADD FILE NAME:



MATCHLINE "L-2"

**WETLAND IMPACTS:**

**-LEVEE CONSTRUCTION:**

TOTAL LEVEE AREA = (1322.09 AC)  
 EXIST. LEVEE AREA = (50.59 AC)

TOTAL WETLAND IMPACTS = (81.50 AC)

- MARSH AREA IMPACTED = (73.55 AC)
- BRACKISH MARSH = (44.91 AC)
- FRESHWATER / INTERMEDIATE MARSH = (28.64 AC)
- OPEN WATER IMPACTED = (7.95 AC)

**-EXCAVATION AND DREDGING:**

TOTAL EXCAVATION AREA = (214.9 AC)  
 -NON-WETLAND PASTURE AREA = (102 AC)  
 -OPEN WATER DREDGING = (112.8 AC)

**ESTIMATED QUANTITIES:**

- OPEN WATER DREDGING = (935,000 CY)
- ON-SITE BORROW EXCAVATION = (1,074,000 CY)
- MAXIMUM VESSEL DRAFT = 5.0'

SCALE: 1"=1000'



**LEGEND:**

- EXIST. LEVEE LIMITS
- - - EXIST. PIPELINE
- ..... EXIST. MARSHLAND
- ▨ PROPOSED LEVEE
- ▩ OPEN WATER
- ▧ BORROW AREA
- ▦ EXIST. LEVEE AREA

REVISIONS		APPD
DATE	REMARKS	

**ASCE**

**ALL SOUTH CONSULTING ENGINEERS, L.L.C.**

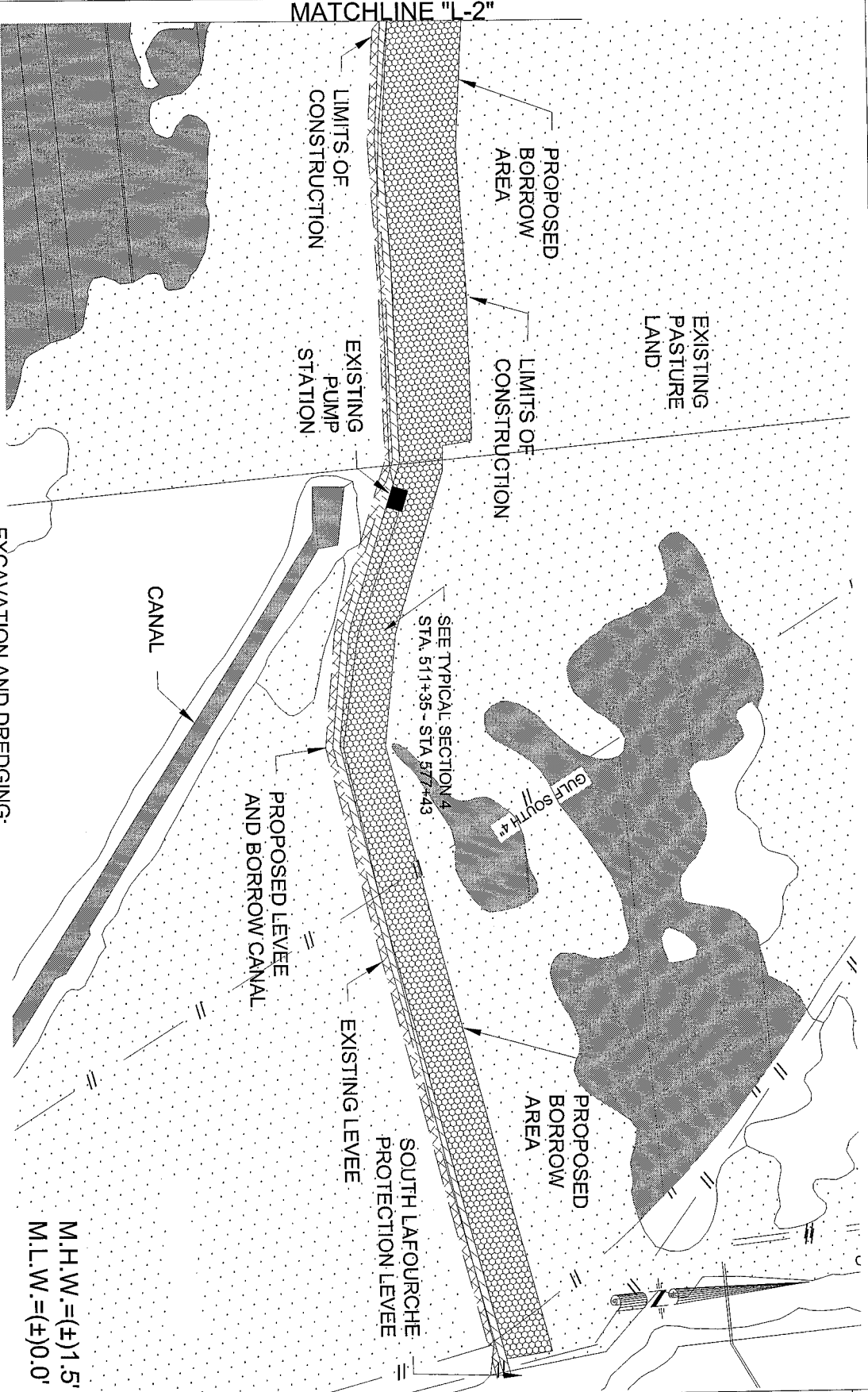
652 PAPWORTH AVENUE  
 METAIRIE, LA 70005  
 (504) 322-2783

ASCE PROJECT No. XXX-XXX-XX

DATE:	10-02-2012	DESIGNED BY:	BDE
SCALE:	1"=1000'	DRAWN BY:	TFR
JOB NO.	041-001-01	CHECKED BY:	DFB

**MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFOURCHE PARISH, LOUISIANA  
 PERMIT APPLICATION**

**OVERALL PROJECT PLAN**



**WETLAND IMPACTS:**

**-LEVEE CONSTRUCTION:**  
 TOTAL LEVEE AREA = (132.09 AC)  
 EXIST. LEVEE AREA = (50.59 AC)

**TOTAL WETLAND IMPACTS = (81.50 AC)**

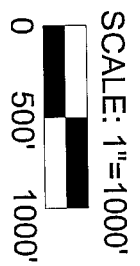
-MARSH AREA IMPACTED = (73.55 AC)  
 -BRACKISH MARSH = (44.91 AC)  
 -FRESHWATER / INTERMEDIATE MARSH = (28.64 AC)  
 -OPEN WATER IMPACTED = (12.88 AC)

**-EXCAVATION AND DREDGING:**  
 TOTAL EXCAVATION AREA = (214.9 AC)  
 -NON-WETLAND PASTURE AREA = (102 AC)  
 -OPEN WATER DREDGING = (112.8 AC)

**ESTIMATED QUANTITIES:**

OPEN WATER DREDGING = (935,000 CY)  
 ON-SITE BORROW EXCAVATION = (1,074,000 CY)

**MAXIMUM VESSEL DRAFT = 5.0'**



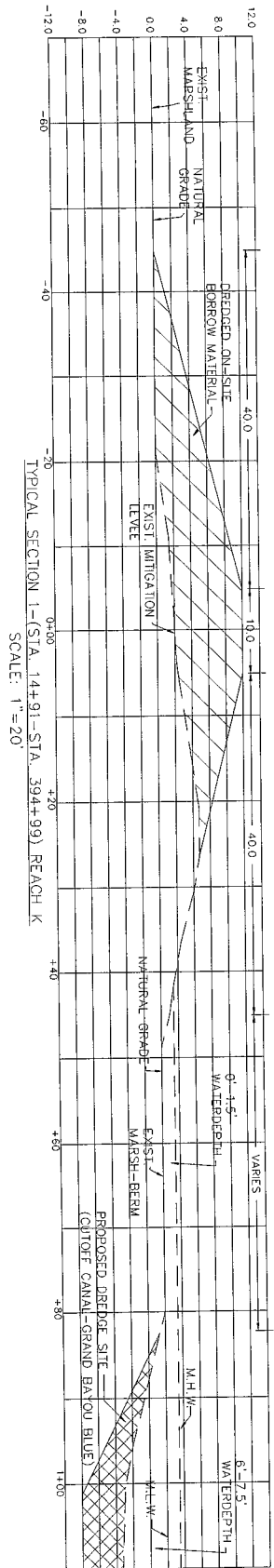
**LEGEND:**

- EXIST. LEVEE LIMITS
- - - EXIST. PIPELINE
- EXIST. MARSHLAND
- PROPOSED LEVEE
- OPEN WATER
- BORROW AREA
- EXIST. LEVEE AREA

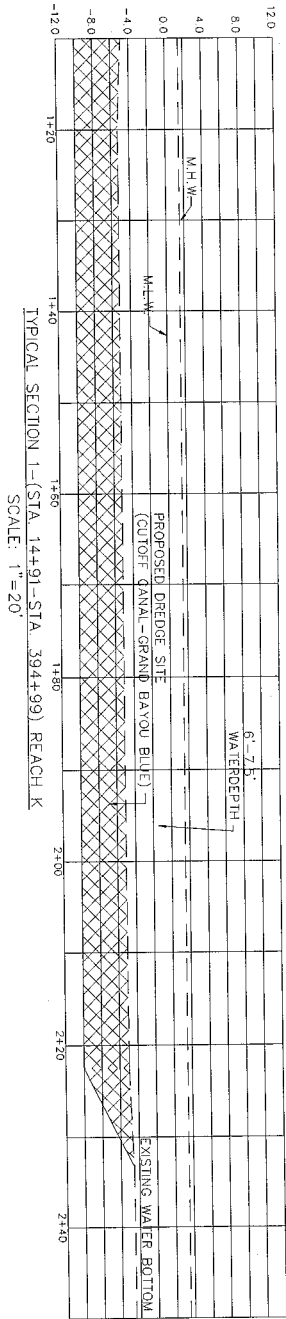
M.H.W. = (+) 1.5'  
 M.L.W. = (+) 0.0'

SHEET NO. 8 OF 12	MORGANZA TO THE GULF REACHES "K" AND "L" - FIRST LIFT LAFOURCHE PARISH, LOUISIANA PERMIT APPLICATION	DATE: 10-02-2012 SCALE: 1"=1000' JOB NO. 041-001-01	DESIGNED BY: BDE DRAWN BY: TFR CHECKED BY: DFB	<p>ALL SOUTH CONSULTING ENGINEERS, L.L.C.          652 PAPWORTH AVENUE          METAIRIE, LA 70005          (504) 922-2783</p> <p>ASCE PROJECT No. XXX-XXX-XX</p>	REVISIONS DATE:      REMARKS:      APPD	COORD FILE NAME:
	OVERALL PROJECT PLAN		(Empty table for revisions)			





TYPICAL SECTION 1-(STA. 14+91-STA. 394+99) REACH K  
SCALE: 1"=20'



TYPICAL SECTION 1-(STA. 14+91-STA. 394+99) REACH K  
SCALE: 1"=20'

MEAN HIGH WATER (M.H.W.)=(±)1.5'  
MEAN LOW WATER (M.L.W.)=(±)0.0'

GRAND BAYOU/CUTOFF CANAL

- WATER DEPTH=(±)6.0' LOW TIDE  
- WATER DEPTH=(±)7.5' HIGH TIDE

CADD FILE NAME:

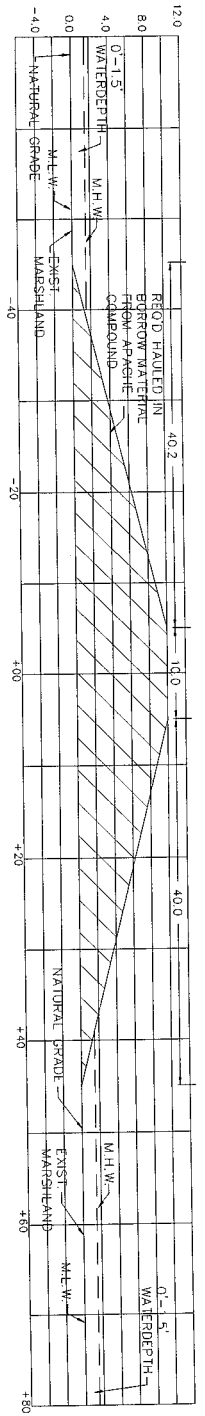
REVISIONS		APPD
DATE	REMARKS	

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**ALL SOUTH CONSULTING ENGINEERS, L.L.C.**  
 652 PAPWORTH AVENUE  
 METAIRIE, LA 70005  
 (504) 522-2765  
 ASCE PROJECT No. XXX-XXX-XX

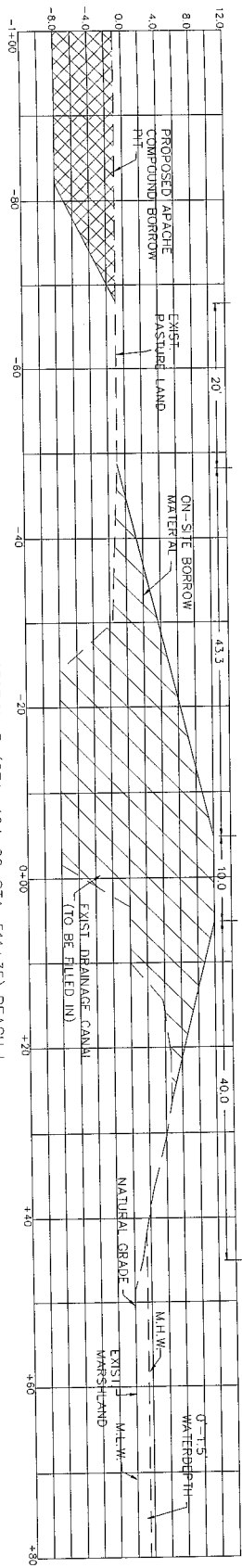
DATE: 10-02-2012	DESIGNED BY: BDE
SCALE: -	DRAWN BY: TFR
JOB NO. 041-001-01	CHECKED BY: DFB

MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFORCHE PARISH, LOUISIANA  
 PERMIT APPLICATION  
 TYPICAL SECTIONS

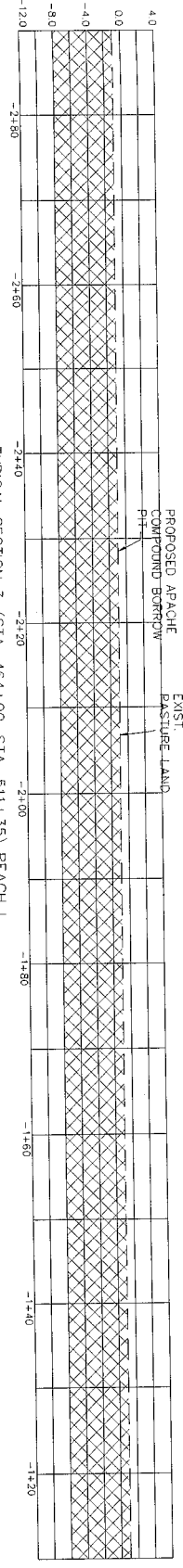
SHEET NO. 9 OF 12



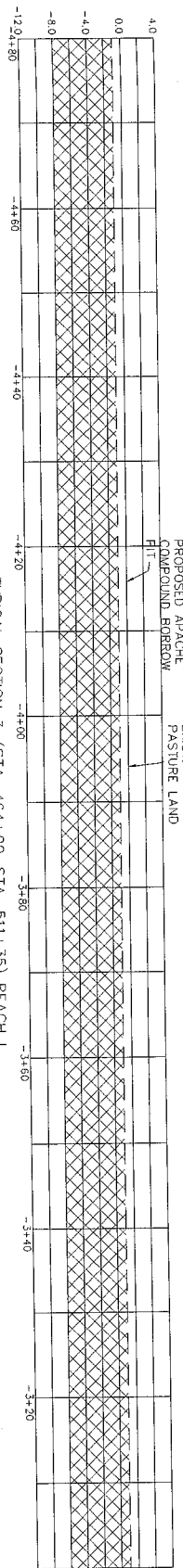
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SCALE: 1"=20'



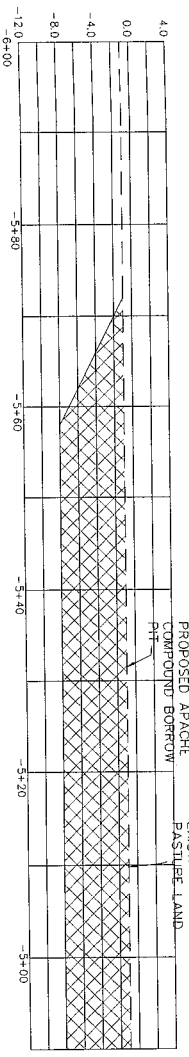
TYPICAL SECTION 3--(STA. 464+00-STA. 511+35) REACH L  
SCALE: 1"=20'



TYPICAL SECTION 3--(STA. 464+00-STA. 511+35) REACH L  
SCALE: 1"=20'



TYPICAL SECTION 3--(STA. 464+00-STA. 511+35) REACH L  
SCALE: 1"=20'



TYPICAL SECTION 3--(STA. 464+00-STA. 511+35) REACH L  
SCALE: 1"=20'

MEAN HIGH WATER (M.H.W.)=(±)1.5'  
MEAN LOW WATER (M.L.W.)=(±)0.0'  
GRAND BAYOU/CUTOFF CANAL

-WATER DEPTH=(±)6.0' LOW TIDE  
-WATER DEPTH=(±)7.5' HIGH TIDE

CROSS FILE NAME:

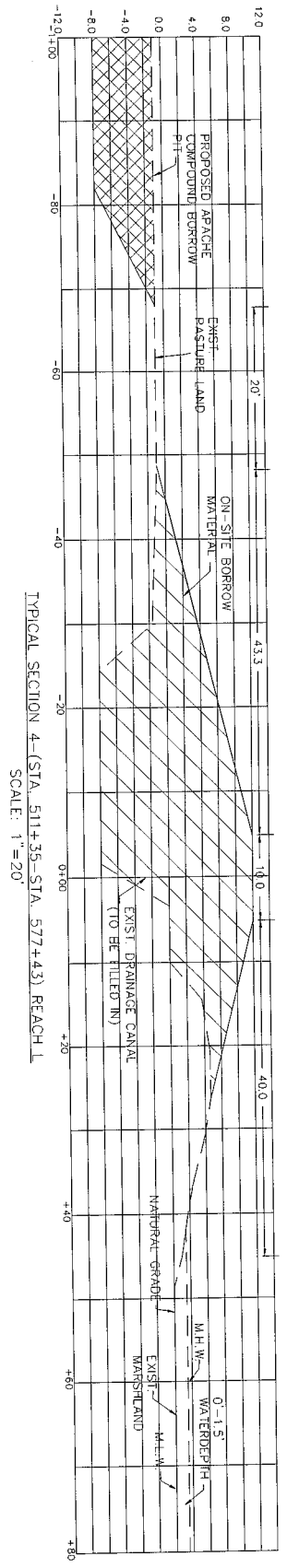
REVISIONS		APPO
DATE:	REMARKS:	

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 652 PAPWORTH AVENUE  
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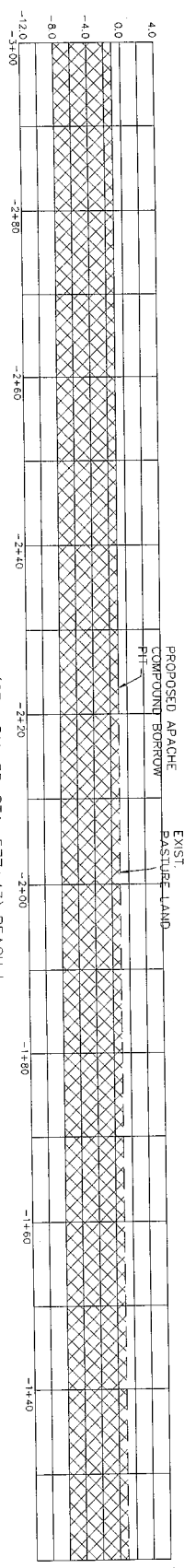
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SCALE:		DRAWN BY:	TFR
JOB NO.	041-001-01	CHECKED BY:	DFB

MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFOURCHE PARISH, LOUISIANA  
 PERMIT APPLICATION  
 TYPICAL SECTIONS

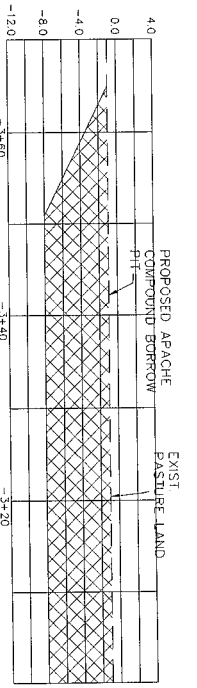
SHEET NO. 10  
 10 of 12



TYPICAL SECTION 4--(STA. 511+35--STA. 577+43) REACH L  
SCALE: 1"=20'



TYPICAL SECTION 4--(STA. 511+35--STA. 577+43) REACH L  
SCALE: 1"=20'



TYPICAL SECTION 4--(STA. 511+35--STA. 577+43) REACH L  
SCALE: 1"=20'

MEAN HIGH WATER (M.H.W.)=(±)1.5'  
 MEAN LOW WATER (M.L.W.)=(±)0.0'  
 GRAND BAYOU/CUTOFF CANAL  
 -WATER DEPTH=(±)6.0' LOW TIDE  
 -WATER DEPTH=(±)7.5' HIGH TIDE

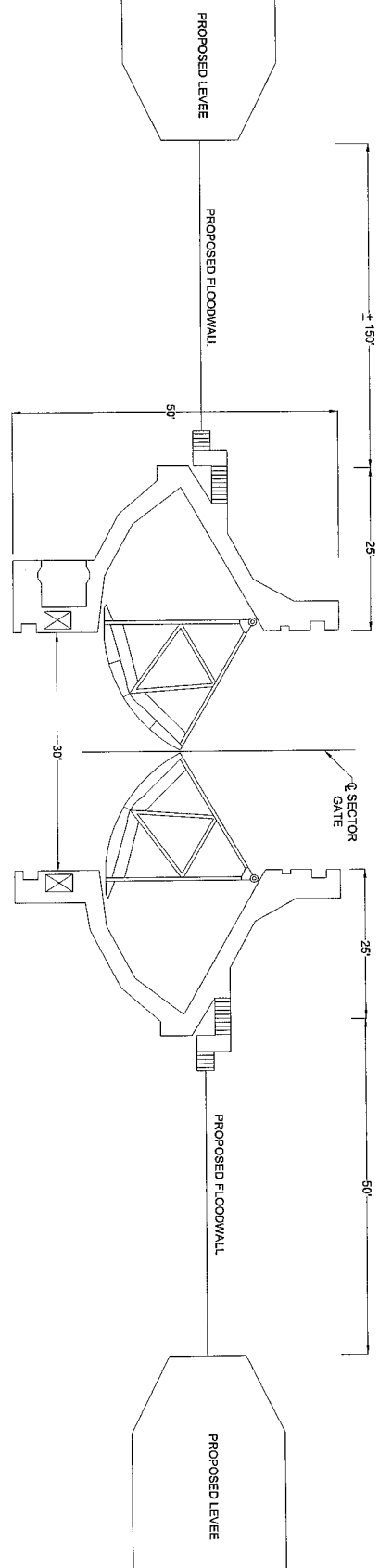
MORGANZA TO THE GULF  
 REACHES "K" AND "L" - FIRST LIFT  
 LAFORCHE PARISH, LOUISIANA  
 PERMIT APPLICATION  
 TYPICAL SECTIONS

DATE: 10-02-2012	DESIGNED BY: BDE
SCALE: -	DRAWN BY: TFR
JOB NO. 041-001-01	CHECKED BY: DFB

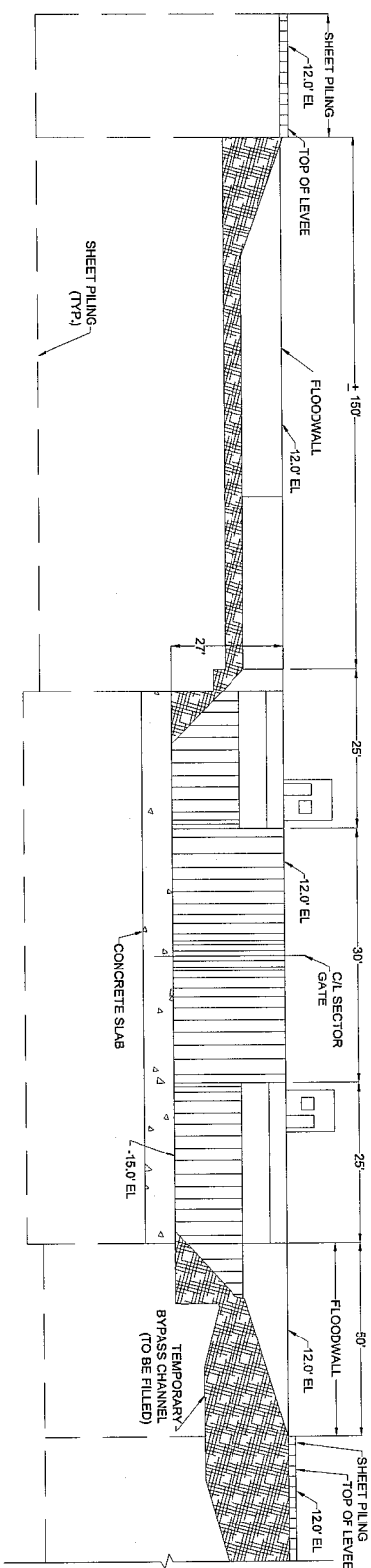
**ASCE**  
**ALL SOUTH CONSULTING ENGINEERS, L.L.C.**  
 652 PAPWORTH AVENUE  
 METAIRIE, LA 70005  
 (504) 522-2785  
 ASCE PROJECT No. XXX-XXX-XX

REVISIONS		APPD
DATE:	REMARKS:	

CADD FILE NAME:



**SECTOR GATE PLAN**  
Scale: NTS



**ELEVATION**  
Scale: NTS

SHEET NO. 12

12 of 12

MORGANZA TO THE GULF  
REACHES "K" AND "L" - FIRST LIFT  
LAFOURCHE PARISH, LOUISIANA  
PERMIT APPLICATION  
FLOODGATE DETAILS

DATE:	10-02-2012	DESIGNED BY:	BDE
SCALE:	-	DRAWN BY:	TFR
JOB NO.:	041-001-01	CHECKED BY:	DFB

**ASCE**

**ALL SOUTH CONSULTING ENGINEERS, L.L.C.**

652 PAPWORTH AVENUE  
METAIRIE, LA 70005  
(504) 322-2765

ASCE PROJECT No. XXX-XXX-XX

REVISIONS		
DATE	REMARKS	APP'D

CADD FILE NAME: