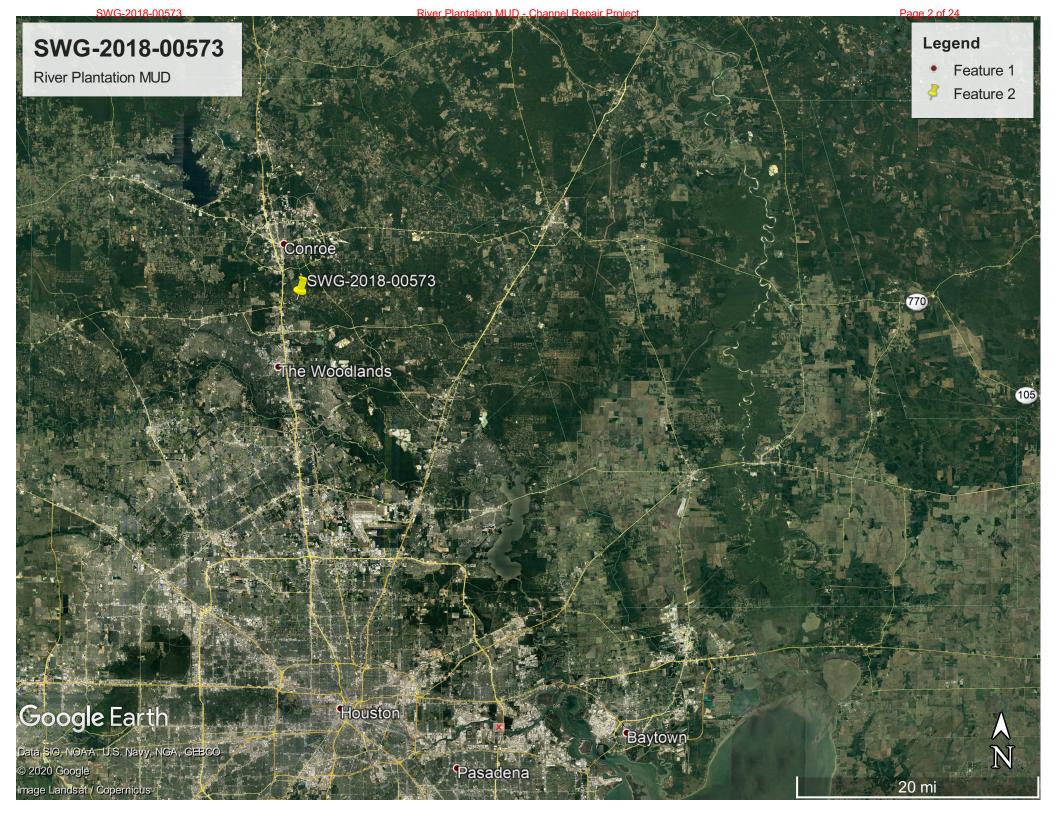
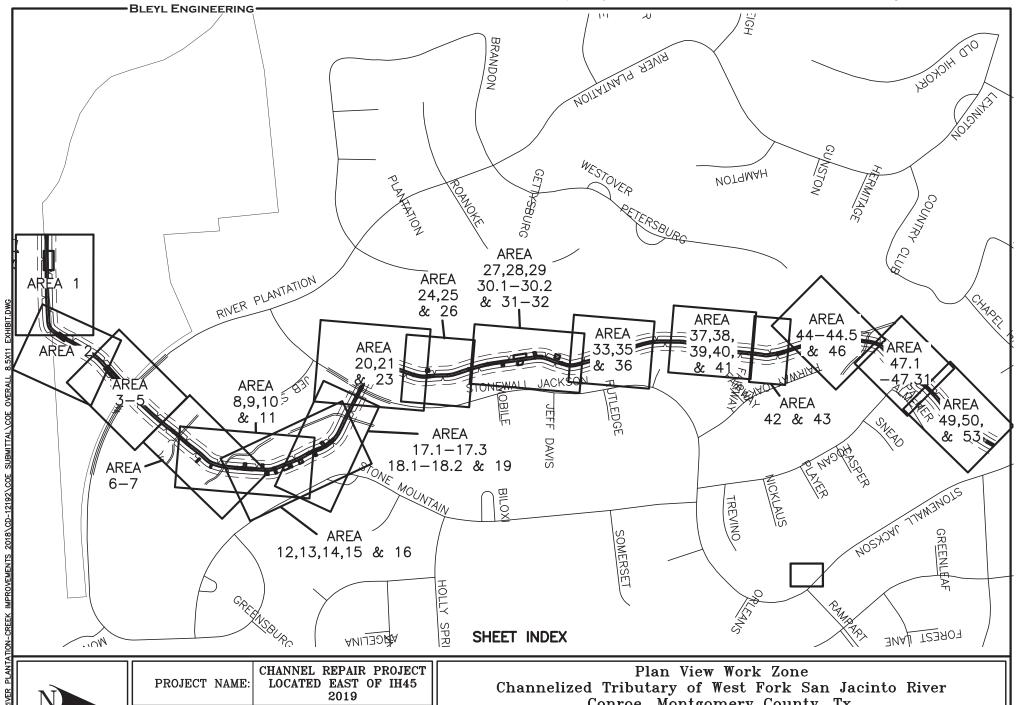
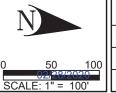


Aerial Photograph-2014







PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADD INFO. FI

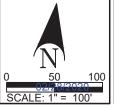
Conroe, Montgomery County, Tx.



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USACESMS FIRMREGISTRATION NO 1F16783 WWW.BLEYLENGINEERING.COM

100 NUGENT STREET, CONROE TEXAS 77301 Page 5 of 66 PHONE 936-441-7833



PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADDINFO. RE

OHWM = ORDINARY HIGH WATER MARK

Conroe, Montgomery County, Tx.

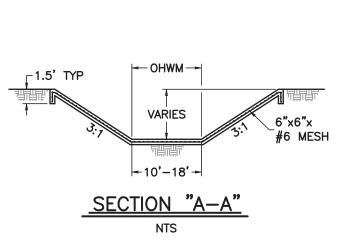


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100 NUGENT STREET, CONROE TEXAS 77301 Page 6 of 66 PHONE 936-441-7833 BLEYL ENGINEERING



IMPROVEMENTS 2018\CD-12192\COE SUBMITTAL\COE 8.5X11 EXHIBITS.DWC



WORK AREA

AREA 2:

TOTAL WORK
IMPACT WORK
NON-IMPACT WORK
LINEAR FEET OF CHANNEL/WORK AREA

NOTES:

166 SY

95 SY

71 SY

55 LF

1. DRAWINGS DEPICT FINAL DESIGN.

ALL CALCULATIONS USE HIGH BANK AS OUTBOARD CHANNEL LIMITS.

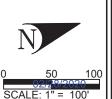
3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

LEGEND

WORK BELOW OHWM

OHWM = ORDINARY HIGH WATER MARK

4. EXISTING OHWM MAPPED USING GPS.



PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADD JINFO. RE

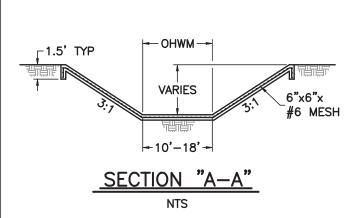
Plan View Work Zone Channelized Tributary of West Fork San Jacinto River Conroe, Montgomery County, Tx.

AREA 2: REMOVE AND REPLACE APPROX 95 SY OF 4" CONCRETE PAVEMENT



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100 NUGENT STREET, CONROE TEXAS 77301 Page 7 of 66 PHONE 936-441-7833



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WORK AREAS

AREA 3:

TOTAL WORK	161	SY
IMPACT WORK	71	SY
NON-IMPACT WORK	90	SY
LINEAR FEET OF CHANNEL/WORK AREA	48	LF

AREA 4:

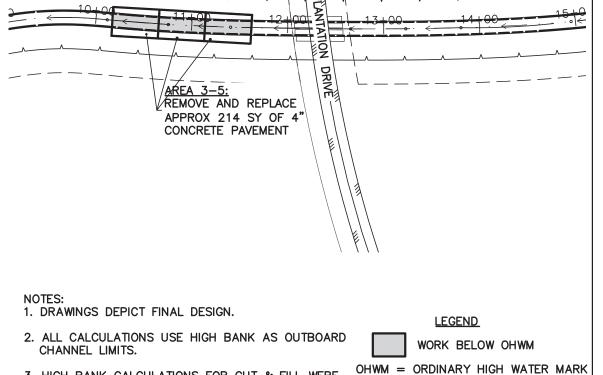
TOTAL WORK	161 SY
IMPACT WORK	71 SY
NON-IMPACT WORK	90 SY
LINEAR FEET OF CHANNEL/WORK AREA	48 LF

AREA 5:

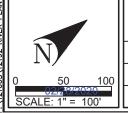
TOTAL WORK	161 SY
IMPACT WORK	71 SY
NON-IMPACT WORK	90 SY
LINEAR FEET OF CHANNEL/WORK AREA	48 LF

3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

4. EXISTING OHWM MAPPED USING GPS.



Plan View Work Zone Channelized Tributary of West Fork San Jacinto River Conroe, Montgomery County, Tx.



PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADDINGO. RE



100 NUGENT STREET, CONROE TEXAS 77301 Page 8 of 66 PHONE 936-441-7833

N	
0 50 100	
02/28/2020 SCALE: 1" = 100'	

8.5X1

SIZE

LAYOUT

ORIGINAL

PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019	
PROJECT NUMBER:	12192	L
PREPARED FOR:	RIVER PLANTATION MUD	l
DATE:	RESPONSE TO ADD INFO. R	ŧ

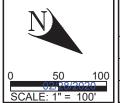
Plan View Work Zone
Channelized Tributary of West Fork San Jacinto River
Conroe, Montgomery County, Tx.



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USACES SIRM REGISTRATION NOTE 19783

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PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADD INFO. RE

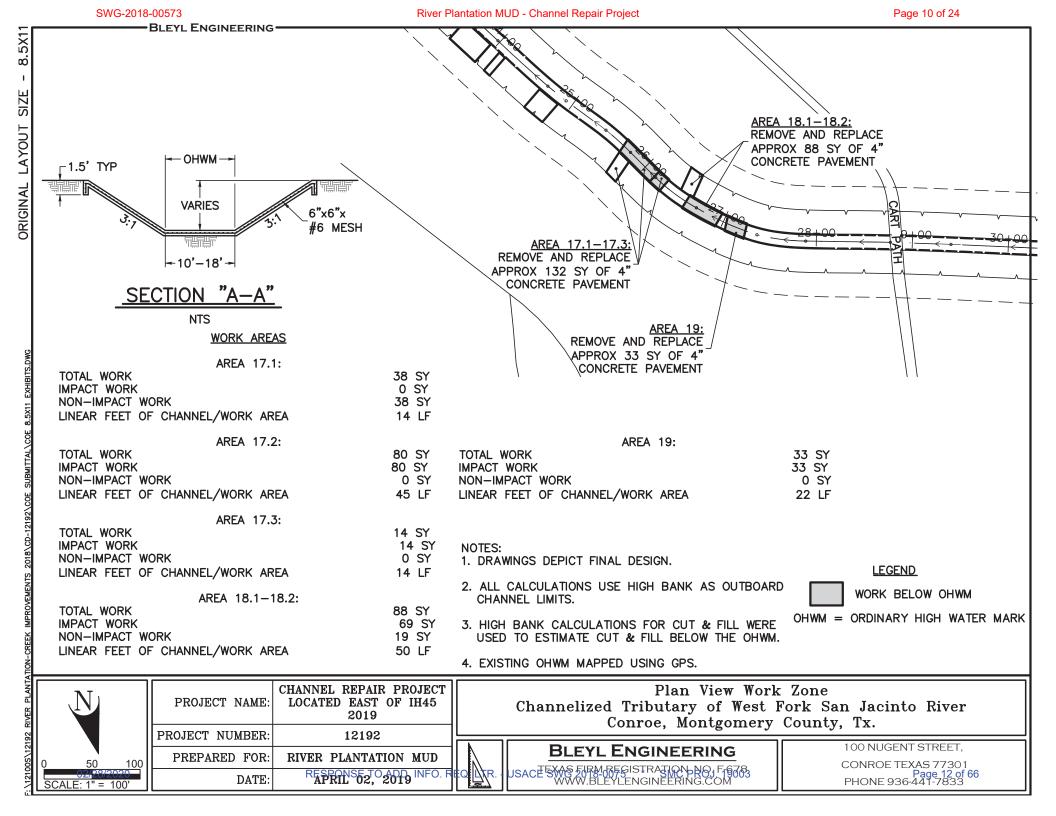
Channelized Tributary of West Fork San Jacinto River Conroe, Montgomery County, Tx.

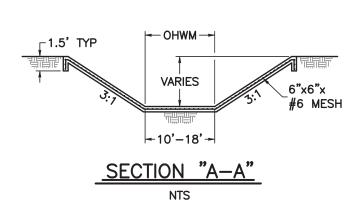


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USACESWS FIRM REGISTRATION NOTE 16783

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WORK AREAS

AREA 20:

TOTAL WORK	25 SY
IMPACT WORK	25 SY
NON-IMPACT WORK	0 SY
LINEAR FEET OF CHANNEL/WORK AREA	27 LF

AREA 21:

TOTAL WORK 5 SY 0 SY IMPACT WORK NON-IMPACT WORK 5 SY LINEAR FEET OF CHANNEL/WORK AREA 10 LF

AREA 23:

TOTAL WORK IMPACT WORK	78 SY 0 SY
NON-IMPACT WORK	78 SY
LINEAR FEET OF CHANNEL/WORK AREA	36 LF

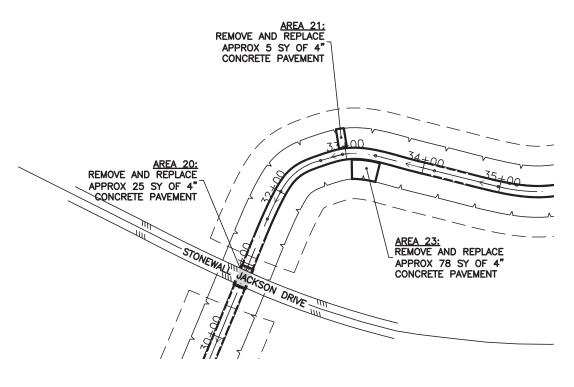
NOTES:

1. DRAWINGS DEPICT FINAL DESIGN.

2. ALL CALCULATIONS USE HIGH BANK AS OUTBOARD CHANNEL LIMITS.

3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

4. EXISTING OHWM MAPPED USING GPS.



Plan View Work Zone

Conroe, Montgomery County, Tx.

LEGEND

WORK BELOW OHWM

OHWM = ORDINARY HIGH WATER MARK

CHANNEL REPAIR PROJECT PROJECT NAME: LOCATED EAST OF IH45 Channelized Tributary of West Fork San Jacinto River

2019

PROJECT NUMBER: 12192

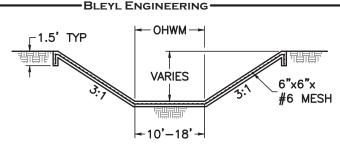
PREPARED FOR: RIVER PLANTATION MUD RESPONSE TO ADD INFO. F DATE

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100 NUGENT STREET, CONROE TEXAS 77301 Page 13 of 66 PHONE 936-441-7833



SACETEMOS FIRM REGISTRATION AND F678



SECTION "A-A"

AREA 26:
REMOVE AND REPLACE
APPROX 8 SY OF 4"
CONCRETE PAVEMENT

AREA 25:
REMOVE AND REPLACE
APPROX 37 100

37 100

AREA 25:
REMOVE AND REPLACE
APPROX 33 SY OF 4"
CONCRETE PAVEMENT

WORK AREAS

ARFA 24.

36 SY
0 SY
36 SY
20 LF

AREA 25:

TOTAL WORK	33	SY
IMPACT WORK	33	SY
NON-IMPACT WORK	0	SY
LINEAR FEET OF CHANNEL/WORK AREA	20	LF

AREA 26:

TOTAL WORK	8	SY
IMPACT WORK	8	SY
NON-IMPACT WORK	0	SY
LINEAR FEET OF CHANNEL/WORK AREA	5	LF

NOTES:

1. DRAWINGS DEPICT FINAL DESIGN.

2. ALL CALCULATIONS USE HIGH BANK AS OUTBOARD CHANNEL LIMITS.

3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

4. EXISTING OHWM MAPPED USING GPS.

LEGEND

WORK BELOW OHWM

OHWM = ORDINARY HIGH WATER MARK



Plan View Work Zone Channelized Tributary of West Fork San Jacinto River Conroe, Montgomery County, Tx.

SELECT FILL BACKFILL



PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADDINFO. RE

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RESPONSE TO ADD INFO. F

DATE

SCALE: 1" = 100'

AREA 36:

REMOVE AND REPLACE

APPROX 40 SY OF 4"

AREA 35:

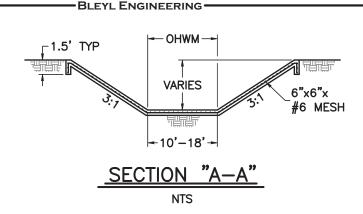
Plan View Work Zone

Channelized Tributary of West Fork San Jacinto River

Conroe, Montgomery County, Tx.

REMOVE AND REPLACE APPROX 83 SY OF 4" CONCRETE PAVEMENT

CONCRETE PAVEMENT



WORK AREAS

AREA 33:

TOTAL WORK

IMPACT WORK

NON-IMPACT WORK

LINEAR FEET OF CHANNEL/WORK AREA

AREA 35:

TOTAL WORK 0 SY
IMPACT WORK 83 SY
NON-IMPACT WORK 0 SY
LINEAR FEET OF CHANNEL/WORK AREA 50 LF

AREA 36:

TOTAL WORK 0 SY
IMPACT WORK 40 SY
NON-IMPACT WORK 0 SY
LINEAR FEET OF CHANNEL/WORK AREA 24 LF

NOTES:

1. DRAWINGS DEPICT FINAL DESIGN.

2. ALL CALCULATIONS USE HIGH BANK AS OUTBOARD CHANNEL LIMITS.

AREA 33:

BACKFILL WITH SELECT FILL

UNDERMINED AREAS

 HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

4. EXISTING OHWM MAPPED USING GPS.



WORK BELOW OHWM

 $\mathsf{OHWM} = \mathsf{ORDINARY} \; \mathsf{HIGH} \; \mathsf{WATER} \; \mathsf{MARK}$

SELECT FILL BACKFILL

PROJECT

0 50 100 02/23/2020 SCALE: 1" = 100' PROJECT NAME: CHANNEL REPAIR PROJECT LOCATED EAST OF 1H45 2019

PROJECT NUMBER: 12192

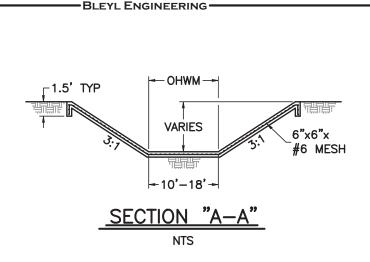
PREPARED FOR: RIVER PLANTATION MUD

DATE: RESPONSE TO 2019 INFO. REPAIR PROJECT APRIL 62, 2019 INFO. REPAIR PROJECT APRIL 6

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AREA 38: REMOVE AND REPLACE APPROX 27 SY OF 4" CONCRETE PAVEMENT AREA 39: REMOVE AND REPLACE AREA 37: APPROX 25 SY OF 4" REMOVE AND REPLACE CONCRETE PAVEMENT APPROX 42 SY OF 4" **AREA 40:** CONCRETE PAVEMENT REMOVE AND REPLACE APPROX 21 SY OF 4" CONCRETE PAVEMENT AREA 41: REMOVE AND REPLACE APPROX 9 SY OF 4" CONCRETE PAVEMENT AREA 40:

WORK AREAS

AREA 37:

TOTAL WORK TOTAL WORK 44 SY 21 SY 44 SY IMPACT WORK 9 SY IMPACT WORK NON-IMPACT WORK SY NON-IMPACT WORK 12 SY LINEAR FEET OF CHANNEL/WORK AREA 25 LF LINEAR FEET OF CHANNEL/WORK AREA 15 LF

AREA 38:

AREA 41: TOTAL WORK 27 SY TOTAL WORK 9 SY IMPACT WORK 27 SY IMPACT WORK 0 SY NON-IMPACT WORK 0 SY NON-IMPACT WORK 9 SY LINEAR FEET OF CHANNEL/WORK AREA 8 LF LINEAR FEET OF CHANNEL/WORK AREA 16 LF

AREA 39:

TOTAL WORK 25 SY IMPACT WORK 25 SY NON-IMPACT WORK 0 SY LINEAR FEET OF CHANNEL/WORK AREA 15 LF NOTES:

1. DRAWINGS DEPICT FINAL DESIGN.

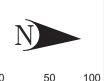
2. ALL CALCULATIONS USE HIGH BANK AS OUTBOARD CHANNEL LIMITS.

LEGEND

WORK BELOW OHWM

3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

4. EXISTING OHWM MAPPED USING GPS.



PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADD INFO. RE

Plan View Work Zone Channelized Tributary of West Fork San Jacinto River Conroe, Montgomery County, Tx.



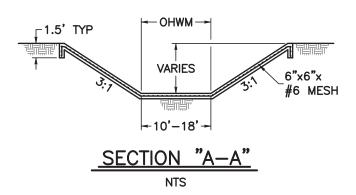
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OHWM = ORDINARY HIGH WATER MARK

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AREA 42:
REMOVE AND REPLACE
APPROX 20 SY OF 4"
CONCRETE PAVEMENT

57-00

AREA 43:
REMOVE AND REPLACE
APPROX 33 SY OF 4"
CONCRETE PAVEMENT

WORK AREAS

AREA 42:

TOTAL WORK 20 SY
IMPACT WORK 20 SY
NON-IMPACT WORK 0 SY
LINEAR FEET OF CHANNEL/WORK AREA 12 LF

AREA 43:

TOTAL WORK 33 SY
IMPACT WORK 33 SY
NON-IMPACT WORK 0 SY
LINEAR FEET OF CHANNEL/WORK AREA 20 LF

NOTES:

1. DRAWINGS DEPICT FINAL DESIGN.

2. ALL CALCULATIONS USE HIGH BANK AS OUTBOARD CHANNEL LIMITS.

3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

<u>LEGEND</u>

WORK BELOW OHWM

OHWM = ORDINARY HIGH WATER MARK

4. EXISTING OHWM MAPPED USING GPS.



PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADDIVINGO. RE

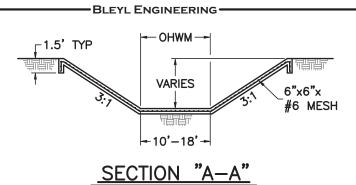
Plan View Work Zone Channelized Tributary of West Fork San Jacinto River Conroe, Montgomery County, Tx.



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WORK AREAS AREA 44:

TOTAL WORK 39 SY 39 SY IMPACT WORK NON-IMPACT WORK 0 SY LINEAR FEET OF CHANNEL/WORK AREA 22 LF

AREA 44.5:

TOTAL WORK 54 SY IMPACT WORK 54 SY NON-IMPACT WORK 0 SY LINEAR FEET OF CHANNEL/WORK AREA 30 LF

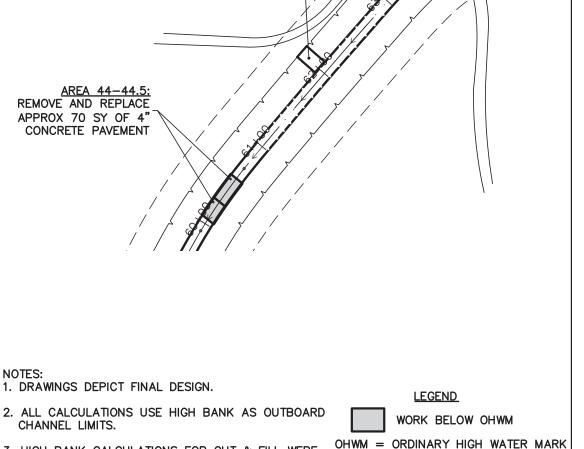
AREA 46:

TOTAL WORK 41 SY IMPACT WORK 0 SY 41 SY NON-IMPACT WORK LINEAR FEET OF CHANNEL/WORK AREA 15 LF NOTES:

- CHANNEL LIMITS.

3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

4. EXISTING OHWM MAPPED USING GPS.



AREA 46:

REMOVE AND REPLACE

APPROX 33 SY OF 4" CONCRETE PAVEMENT

ĺ	V	,
0	50	100
SCAL	02/28/20 F: 1" = 1	20 00'

PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	RIVER PLANTATION MUD
DATE:	RESPONSE TO ADD INFO. RE

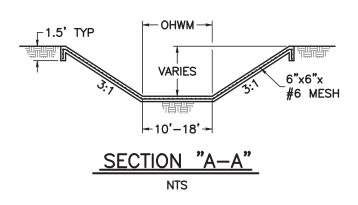
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AREA 47.1-47.3: REMOVE AND REPLACE APPROX 157 SY OF 4" CONCRETE PAVEMENT PALME PALMER

WORK AREAS

AREA 47.1-47.3:

TOTAL WORK IMPACT WORK NON-IMPACT WORK LINEAR FEET OF CHANNEL/WORK AREA NOTES:

157 SY

157 SY

0 SY

80 LF

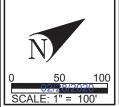
- 1. DRAWINGS DEPICT FINAL DESIGN.
- 2. ALL CALCULATIONS USE HIGH BANK AS OUTBOARD CHANNEL LIMITS.
- 3. HIGH BANK CALCULATIONS FOR CUT & FILL WERE USED TO ESTIMATE CUT & FILL BELOW THE OHWM.

LEGEND

WORK BELOW OHWM

OHWM = ORDINARY HIGH WATER MARK

4. EXISTING OHWM MAPPED USING GPS.



PROJECT NAME:	CHANNEL REPAIR PROJECT LOCATED EAST OF IH45 2019
PROJECT NUMBER:	12192
PREPARED FOR:	
DATE:	RESPONSE TO ADDINGO. RE

Plan View Work Zone Channelized Tributary of West Fork San Jacinto River Conroe, Montgomery County, Tx.



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