

FEB 11 2019



PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT	OWNER:	RUSSELL MARINE		DESIGN BY:	KM
		APPLIED BY:	LLOYD ENGINEERING		DRAWN BY:	JV
		APPLIC. No:			SCALE:	NTS
LOCATION:	HOUSTON, TX	COUNTY:	HARRIS COUNTY		DATE:	08/21/18
		WATER BODY:	HOUSTON SHIP CHANNEL		SHEET No:	1
		DATUM:	MLLW			

FILE NAME: L:\LEI Projects\Russell Marine\Permit\PermitAug22_2018\1_vic map.dwg LAYOUT NAME: vic map PLOTTED: Tuesday, August 21, 2018 - 2:42pm USER: rc

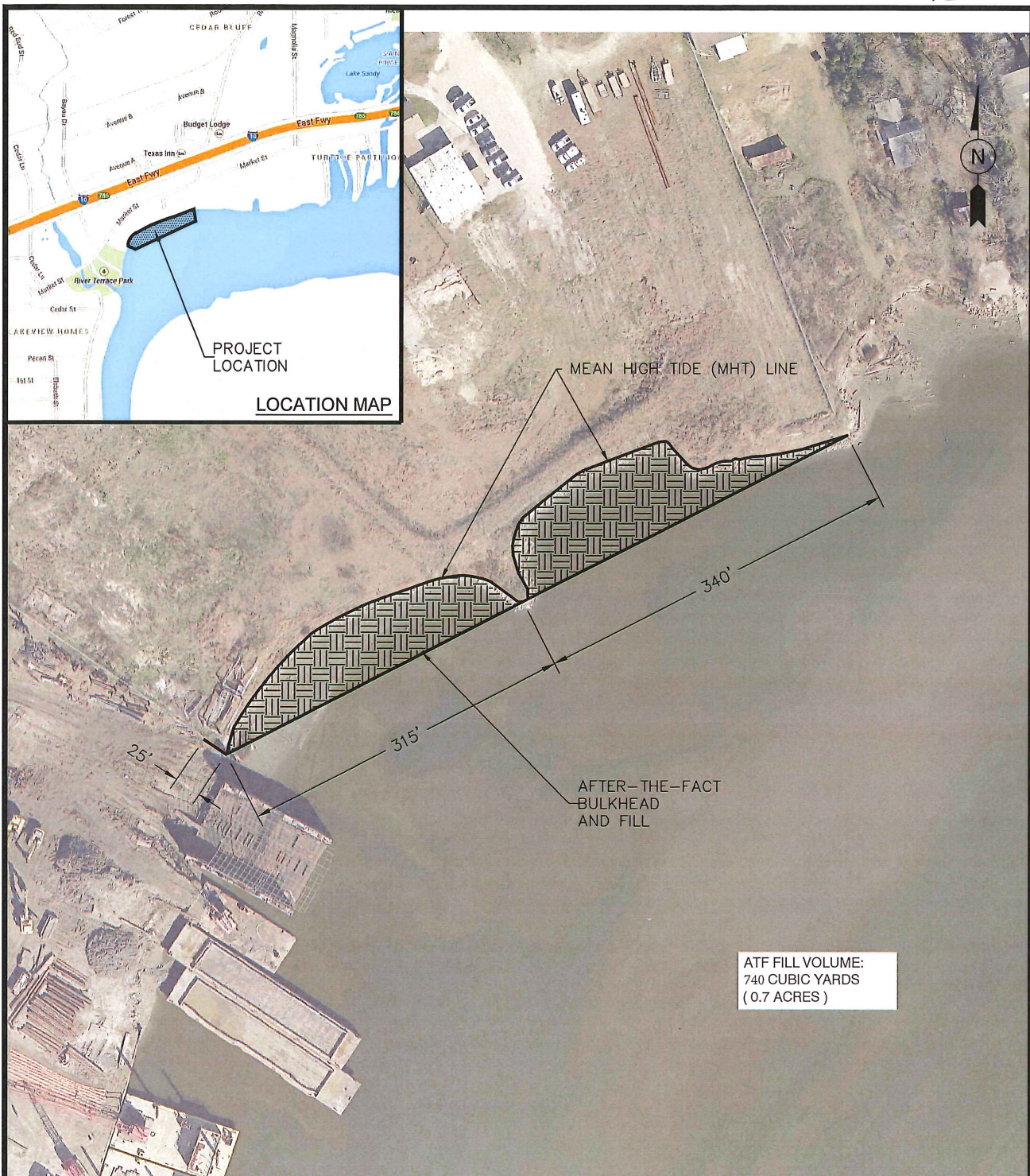
FEB 11 2019

FILE NAME: L:\LEI Projects\Russell Marine\Permit\Permit\Aug22_2018\2_AfterTheFactComponents.dwg LAYOUT NAME: _dredge plan PLOTTED: Tuesday, August 21, 2018 - 2:42pm USER: rc



PURPOSE:	AFTER THE FACT COMPONENTS RUSSELL MARINE	OWNER:	RUSSELL MARINE		DESIGN BY:	KM
		APPLIED BY:	LLOYD ENGINEERING		DRAWN BY:	JV
		APPLIC. No:			SCALE:	NTS
LOCATION:	HOUSTON, TX	COUNTY:	HARRIS COUNTY		DATE:	08/21/18
		WATER BODY:	HOUSTON SHIP CHANNEL		SHEET No:	2
		DATUM:	MLLW			

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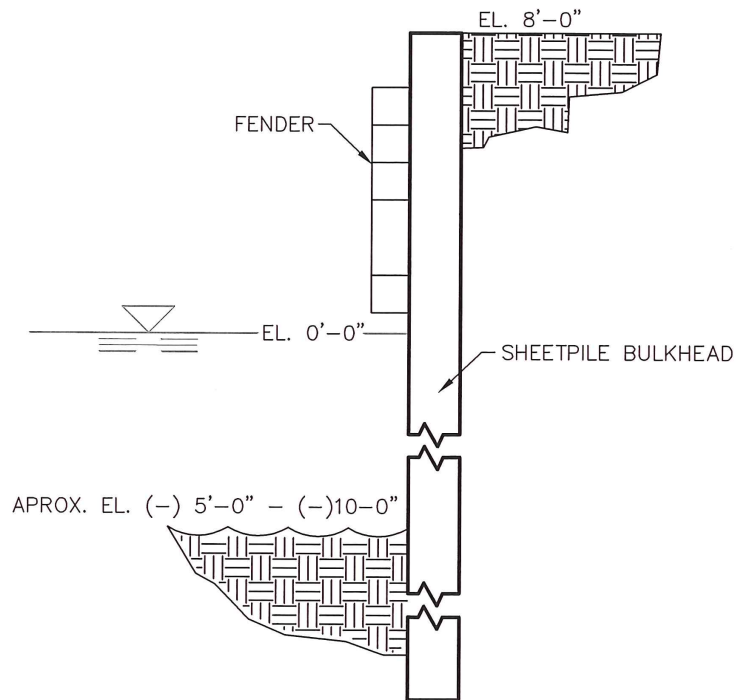
ATF FILL VOLUME:
740 CUBIC YARDS
(0.7 ACRES)

PURPOSE:	AFTER THE FACT COMPONENTS RUSSELL MARINE	OWNER:	RUSSELL MARINE	DESIGN BY:	KM
		APPLIED BY:	LLOYD ENGINEERING	DRAWN BY:	JV
		APPLIC. No:		SCALE:	NTS
LOCATION:	HOUSTON, TX	COUNTY:	HARRIS COUNTY	DATE:	08/21/18
		WATER BODY:	HOUSTON SHIP CHANNEL	SHEET No:	3
		DATUM:	MLLW		



FILE NAME: L:\LEI Projects\Russell Marine\Permit\Dredging Permit\PermitAug22_2018\3_AfterFillVolume.dwg LAYOUT NAME: AfterFillVolume PLOTTED: Tuesday, August 21, 2018 - 2:42pm USER: rc

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TYPICAL SECTION

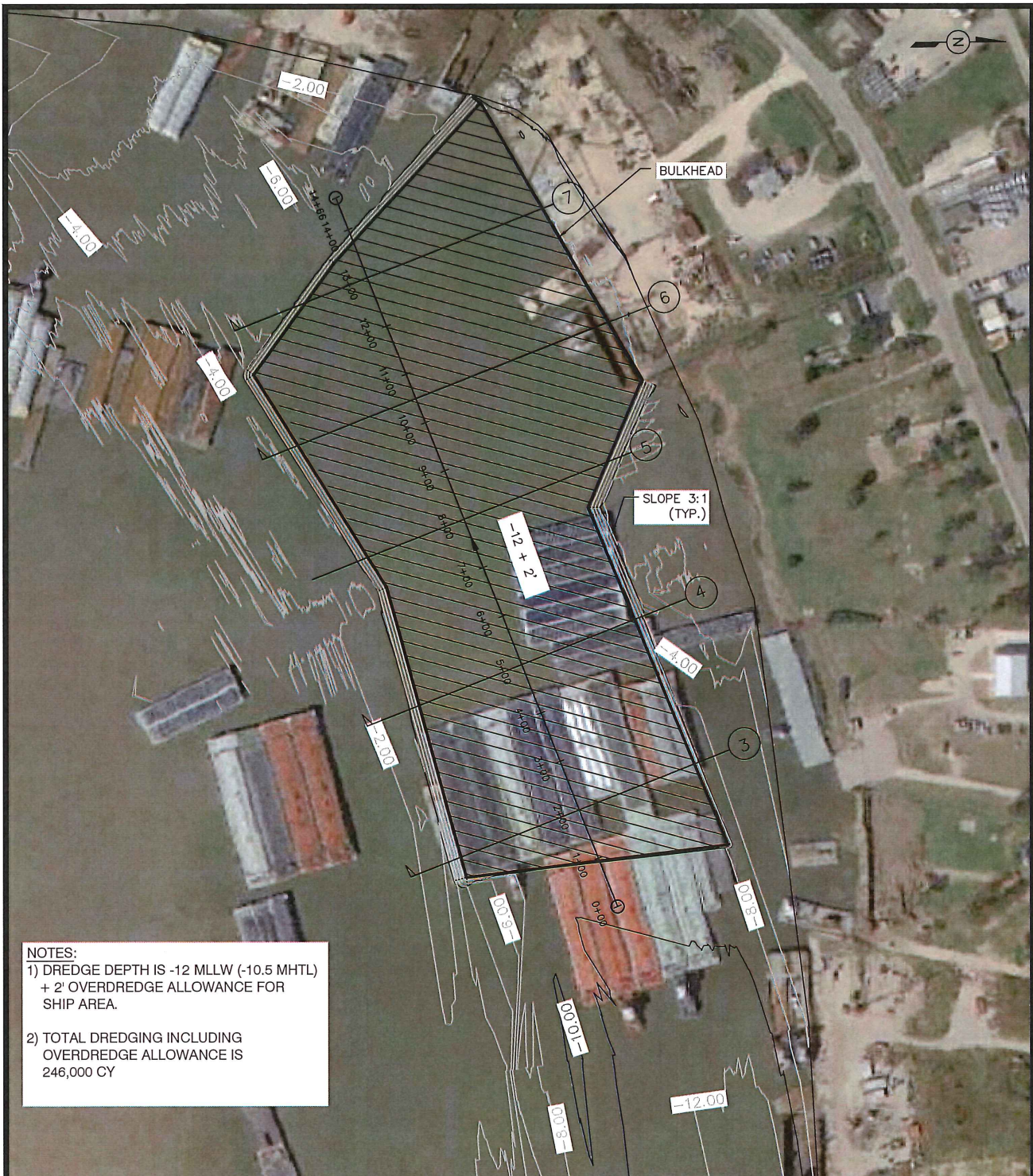
NOT TO SCALE

FILE NAME: L:\LEI Projects\Russell Marine\Permit\ dredging Permit\PermitAug22_2018\3_AfterFillVolume.dwg LAYOUT NAME: AfterBulkheadSection PLOTTED: Tuesday, August 21, 2018 - 2:43pm USER: rc

PURPOSE:	AFTER THE FACT COMPONENTS RUSSELL MARINE	OWNER:	RUSSELL MARINE		DESIGN BY:	KM
		APPLIED BY:	LLOYD ENGINEERING		DRAWN BY:	JV
		APPLIC. No:			SCALE:	NTS
LOCATION:	HOUSTON, TX	COUNTY:	HARRIS COUNTY		DATE:	08/21/18
		WATER BODY:	HOUSTON SHIP CHANNEL	SHEET No:	4	
		DATUM:	MLLW			

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FILE NAME: L:\LED Projects\Russell Marine\Permit\ dredging Permit\PermitAug22_2018\5_dredge plan.dwg LAYOUT NAME: _dredge plan PLOTTED: Tuesday, August 21, 2018 - 2:43pm USER: rc

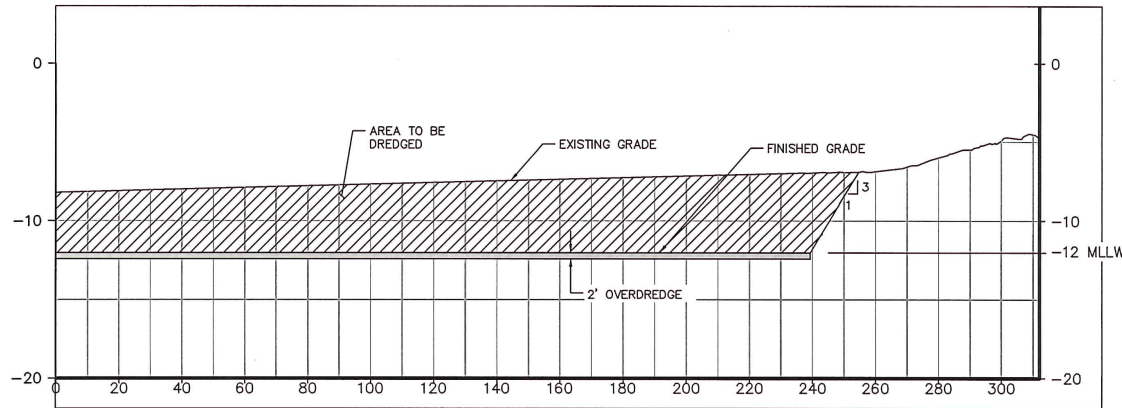
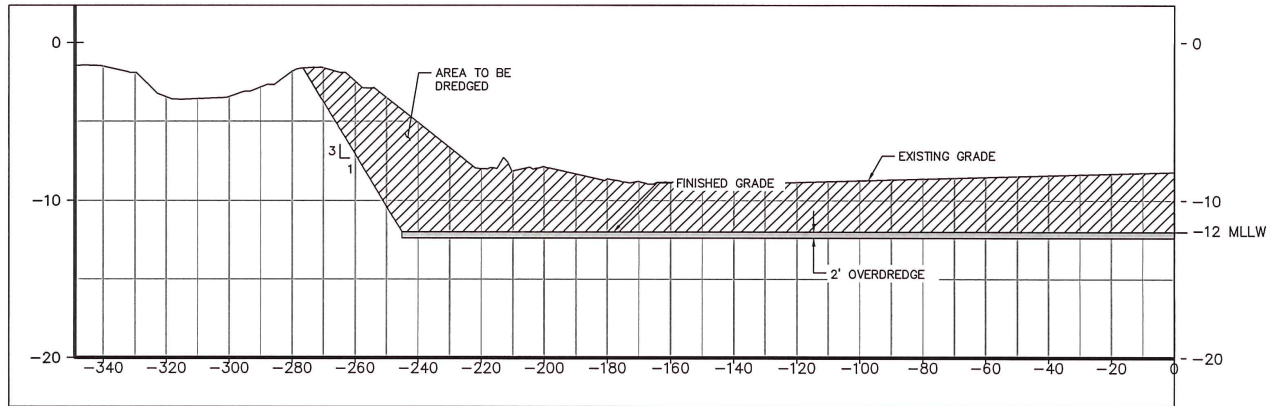


NOTES:
1) DREDGE DEPTH IS -12 MLLW (-10.5 MHTL)
+ 2' OVERDREDGE ALLOWANCE FOR
SHIP AREA.
2) TOTAL DREDGING INCLUDING
OVERDREDGE ALLOWANCE IS
246,000 CY

PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT	OWNER:	RUSSELL MARINE		DESIGN BY:	KM
		APPLIED BY:	LLOYD ENGINEERING		DRAWN BY:	JV
LOCATION:	HOUSTON, TX	APPLIC. No:			SCALE:	NTS
		COUNTY:	HARRIS COUNTY		DATE:	08/21/18
		WATER BODY:	HOUSTON SHIP CHANNEL		SHEET No:	5
		DATUM:	MLLW			

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STA. 2+00
SCALE: 1:50



DREDGE CALCULATIONS
DREDGE (CuYds) 191,000
O.D. (CuYds) 55,000

DESIGN BY:	KM
DRAWN BY:	JW
SCALE:	NTS
DATE:	08/21/18
SHEET No:	6

LLOYD ENGINEERING, INC. HARRIS COUNTY LICENSE NO. F-602846

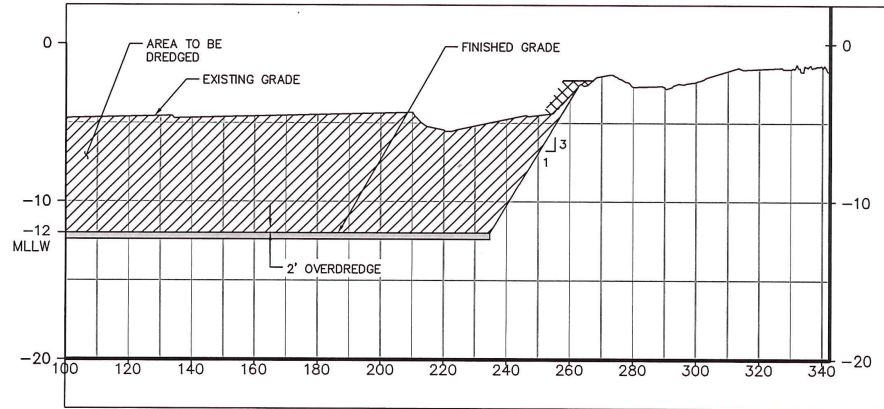
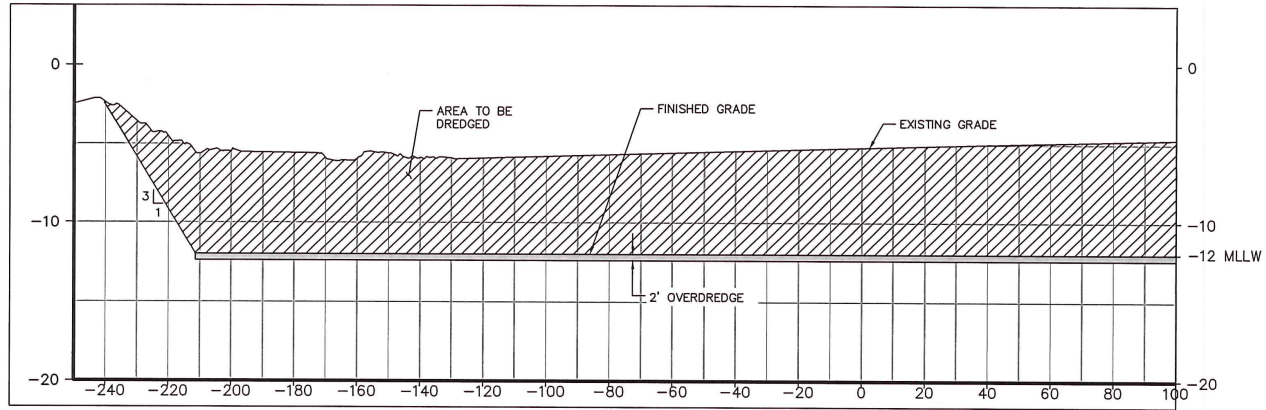
OWNER:	RUSSELL MARINE
APPLIED BY:	LLOYD ENGINEERING
APPLIC. No:	
COUNTY:	HARRIS COUNTY
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT
LOCATION:	HOUSTON, TX

FILE NAME: I:\LE Projects\Russell Marine\Permit\Dredging Permit\Aug22-2018\dredge profiles.dwg LAYOUT NAME: _dredge profiles - STA 2+00 PLOTTED: Tuesday, August 21, 2018 - 2:43pm USER: rc

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STA. 5+00
SCALE: 1:50



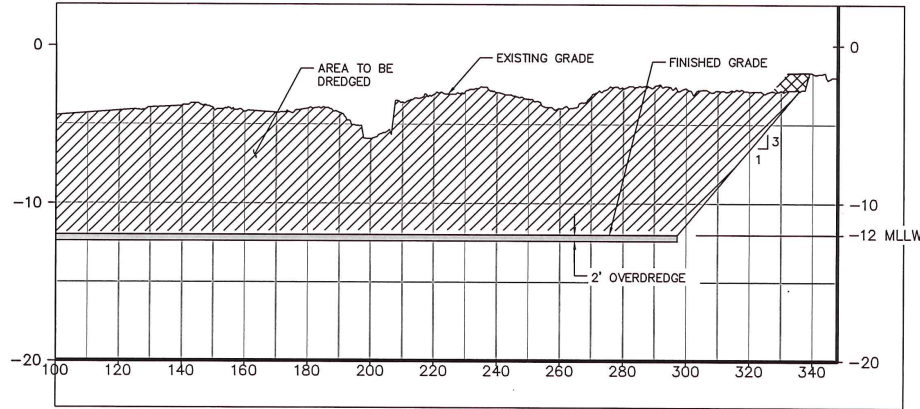
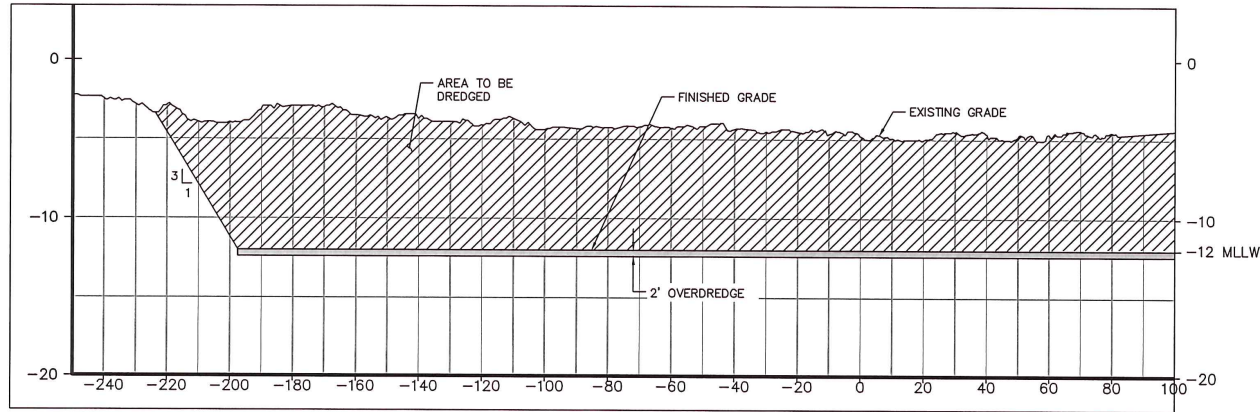
DREDGE CALCULATIONS	
DREDGE (cuYds)	191,000
O.D. (cuYds)	55,000

PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT			
	HOUSTON, TX			
LOCATION:	HOUSTON, TX			
	HOUSTON SHIP CHANNEL			
OWNER:	RUSSELL MARINE	APPLIED BY:	LLOYD ENGINEERING	
APPLIC. No:		COUNTY:	HARRIS COUNTY	
WATER BODY:	HOUSTON SHIP CHANNEL	DATUM:	MLLW	
DESIGN BY:	KM	DRAWN BY:	JV	
SCALE:	NTS	DATE:	08/21/18	
SHEET No:	7			



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STA. 8+00
SCALE: 1:50



DREDGE CALCULATIONS	
DREDGE (cu yds)	191,000
O.D. (cu yds)	55,000

DESIGN BY:	KM
DRAWN BY:	JV
SCALE:	NTS
DATE:	08/21/18
SHEET No:	8

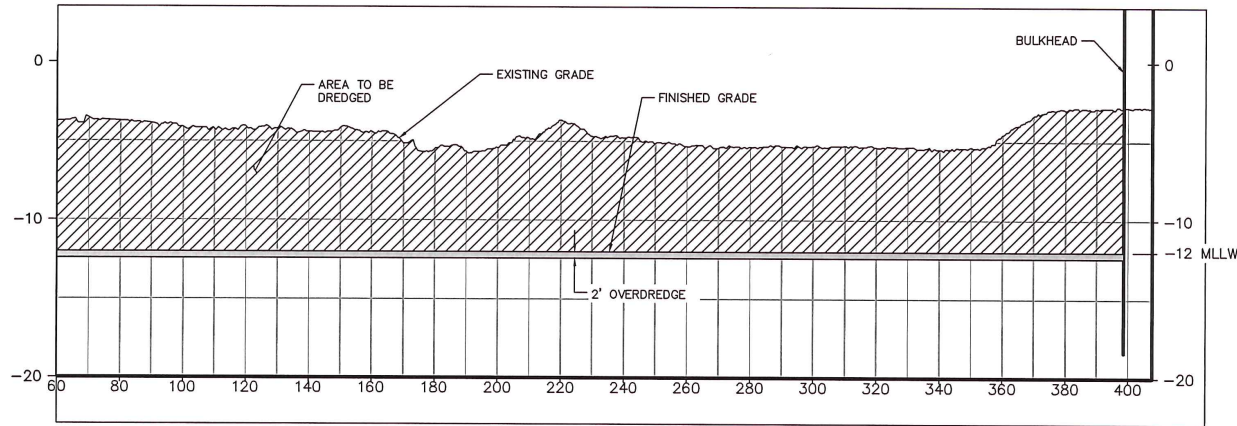
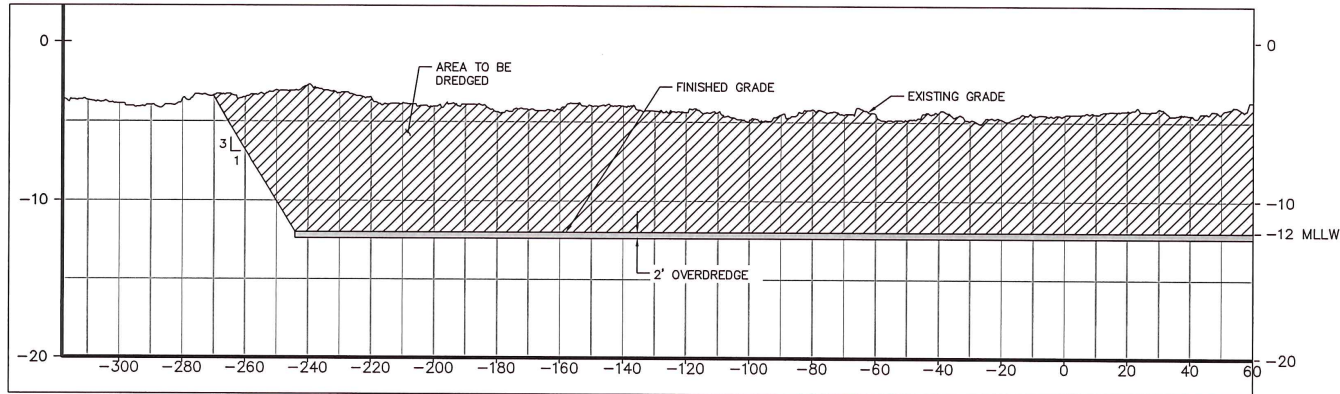
LLOYD ENGINEERING, INC. HOUSTON, TEXAS, USA LICENSE NO. F-002646	

OWNER:	RUSSELL MARINE
APPLIED BY:	LLOYD ENGINEERING
APPLIC. No:	
COUNTY:	HARRIS COUNTY
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT
LOCATION:	HOUSTON, TX

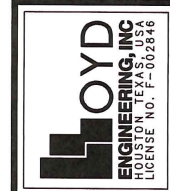
FEB 11 2019

STA. 11+00
SCALE: 1:50



DREDGE CALCULATIONS	
DREDGE (CuYds)	191,000
O.D. (CuYds)	55,000

DESIGN BY:	KM
DRAWN BY:	JV
SCALE:	NTS
DATE:	08/21/18
SHEET No:	9

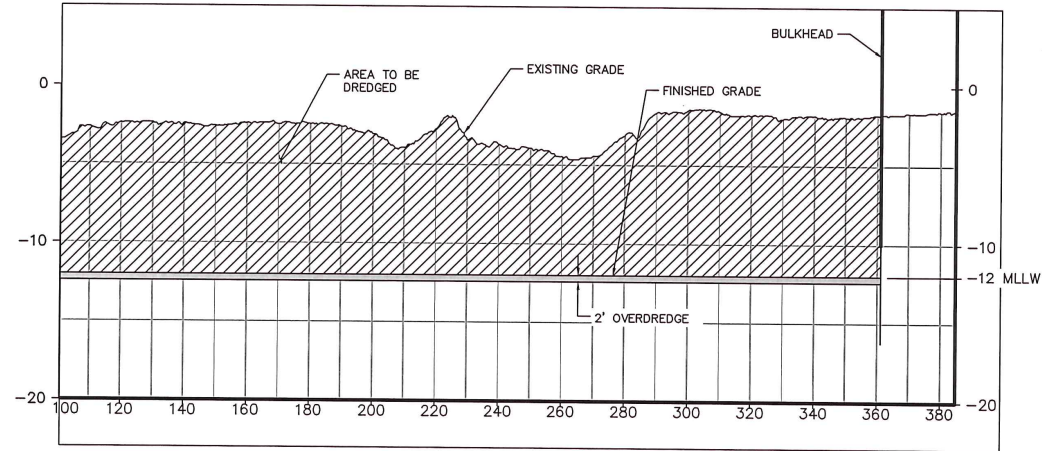
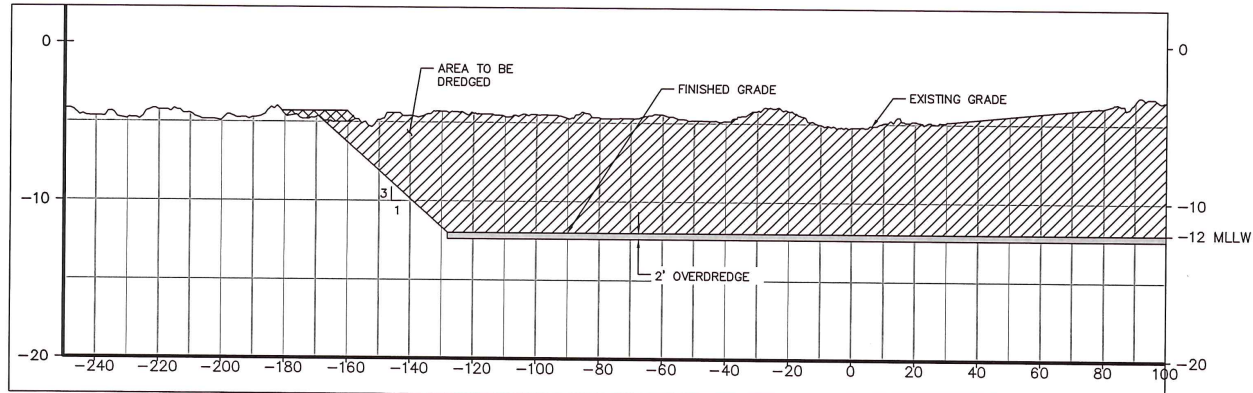


OWNER:	RUSSELL MARINE
APPLIED BY:	LLOYD ENGINEERING
APPLIC. No:	
COUNTY:	HARRIS COUNTY
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT
LOCATION:	HOUSTON, TX

FEB 11 2019

STA. 13+50
SCALE: 1:50



DREDGE CALCULATIONS	
DREDGE (CuYds)	191,000
O.D. (CuYds)	55,000

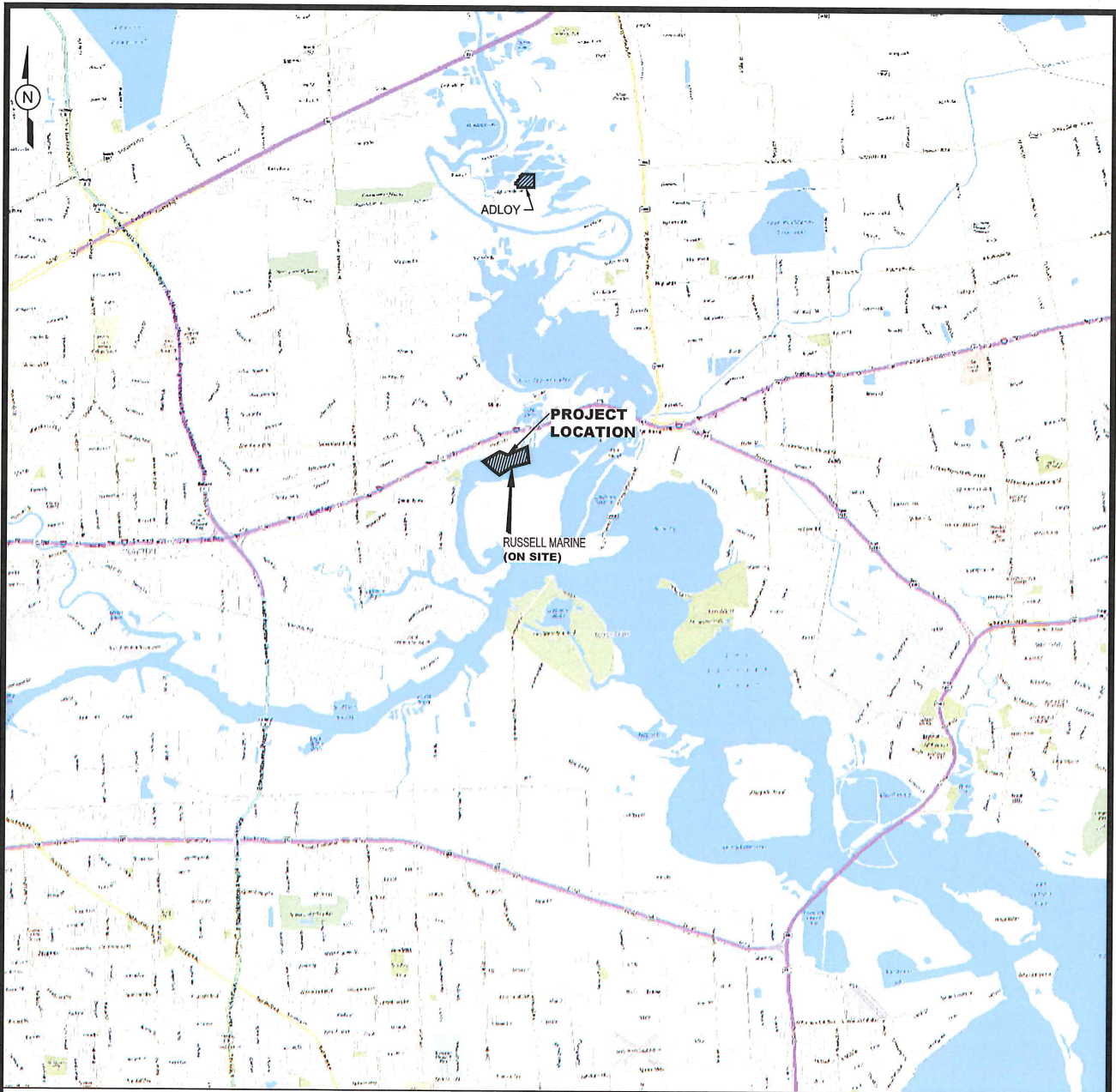
DESIGN BY:	KM
DRAWN BY:	JV
SCALE:	NTS
DATE:	08/21/18
SHEET No:	10



OWNER:	RUSSELL MARINE
APPLIED BY:	LLOYD ENGINEERING
APPLIC. No:	
COUNTY:	HARRIS COUNTY
WATER BODY:	HOUSTON SHIP CHANNEL
DATUM:	MLLW

PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT
LOCATION:	HOUSTON, TX

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PROPOSED PLACEMENT AREAS:

1. ON-SITE
2. ADLOY-PRIVATE



DREDGE PLACEMENT AREA

PURPOSE:	PROPOSED RUSSELL MARINE OLD RIVER FACILITY DEVELOPMENT PROJECT	OWNER:	RUSSELL MARINE	 LLOYD ENGINEERING, INC. HOUSTON, TEXAS, USA LICENSE NO. F-002846	DESIGN BY:	KM
		APPLIED BY:	LLOYD ENGINEERING		DRAWN BY:	JV
		APPLIC. No:			SCALE:	NTS
		COUNTY:	HARRIS COUNTY		DATE:	08/21/18
		WATER BODY:	HOUSTON SHIP CHANNEL		SHEET No:	11
LOCATION:	HOUSTON, TX	DATUM:	MLLW			