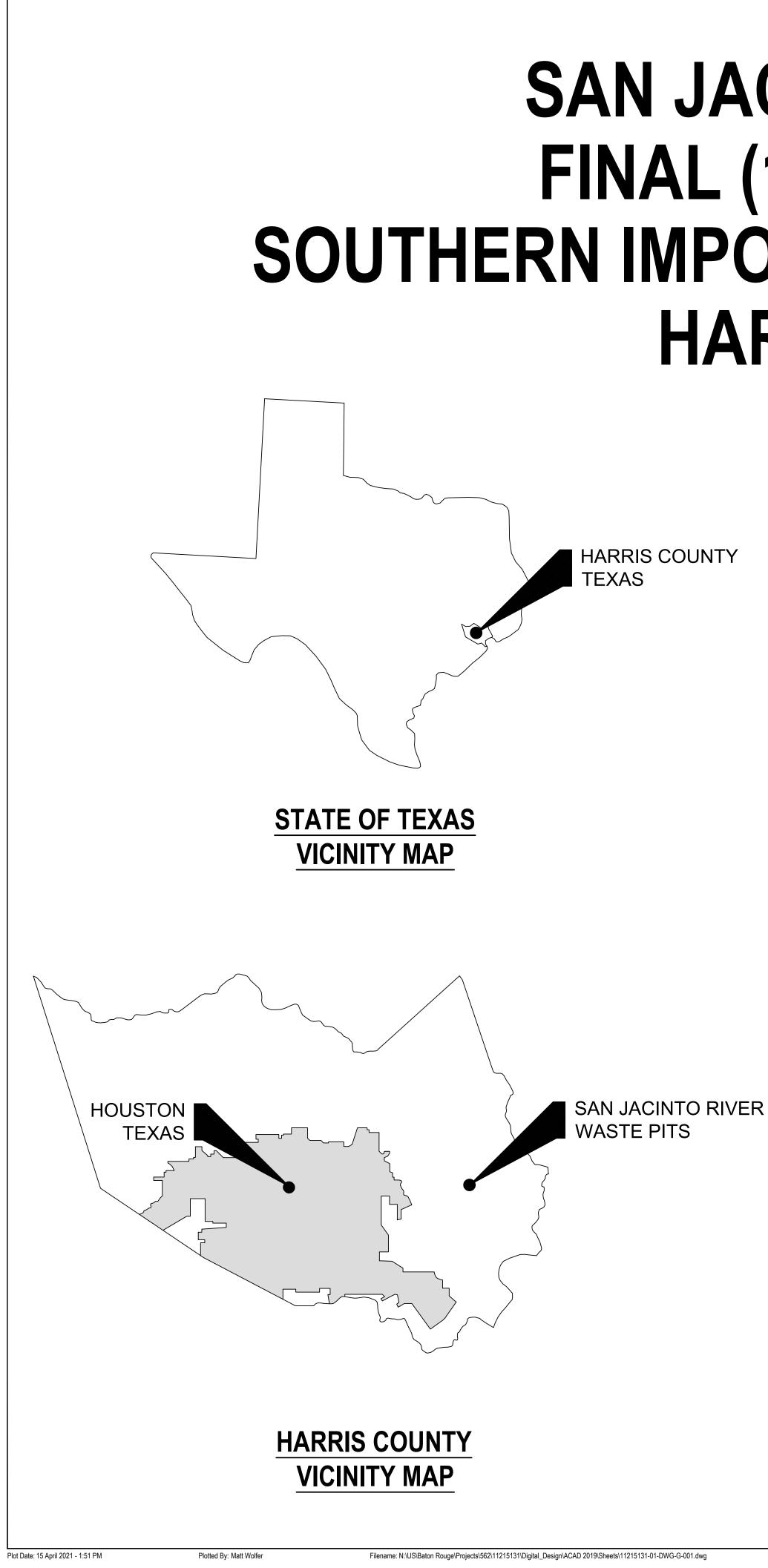
Appendix D Design Drawings



SAN JACINTO RIVER WASTE PITS FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS

APRIL 2021 11215131-02



LOCATION MAP

DRAWING NUMBER

GENERAL SERIES

G-01

C-01

C-02

C-03

C-04

C-05

C-06 C-07

C-08

C-09 C-10

C-13 C-14

C-15

C-16

C-18

C-20

C-22

C-23

C-24 C-25

C-26

C-27

C-28 C-29

C-30

C-32

C-31

C-33

C-34

C-35

C-36 C-37

C-38

C-39

C-40

C-41 C-42

C-43

C-44

P-01

P-02

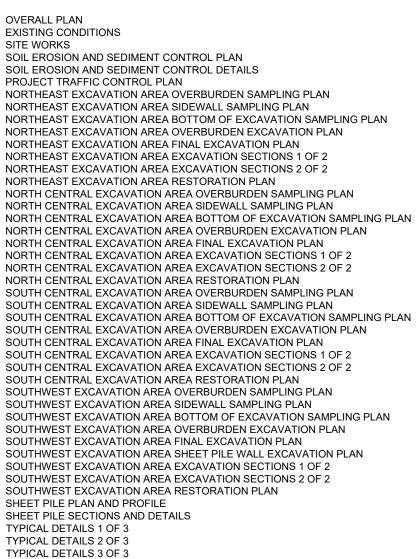
P-03 P-04

C-19

CIVIL SERIES

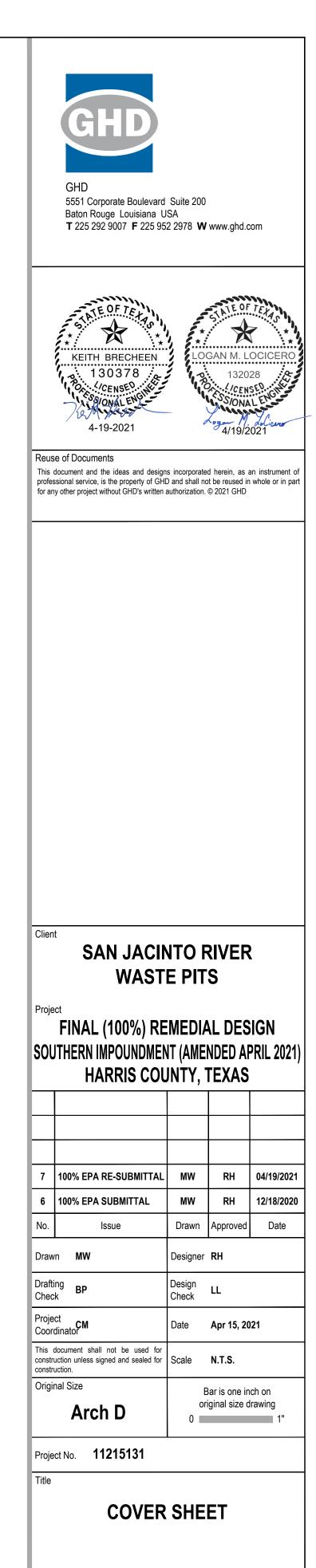
COVER SHEET

DRAWING NAME



PROCESS FLOW AND INSTRUMENTATION SERIES

WATER TREATMENT SYSTEM PROCESS FLOW DIAGRAM/MASS BALANCE WATER TREATMENT SYSTEM P&ID (1 OF 2) WATER TREATMENT SYSTEM P&ID (2 OF 2) WATER TREATMENT SYSTEM SITE PLAN



CHD GHD SERVICES INC.

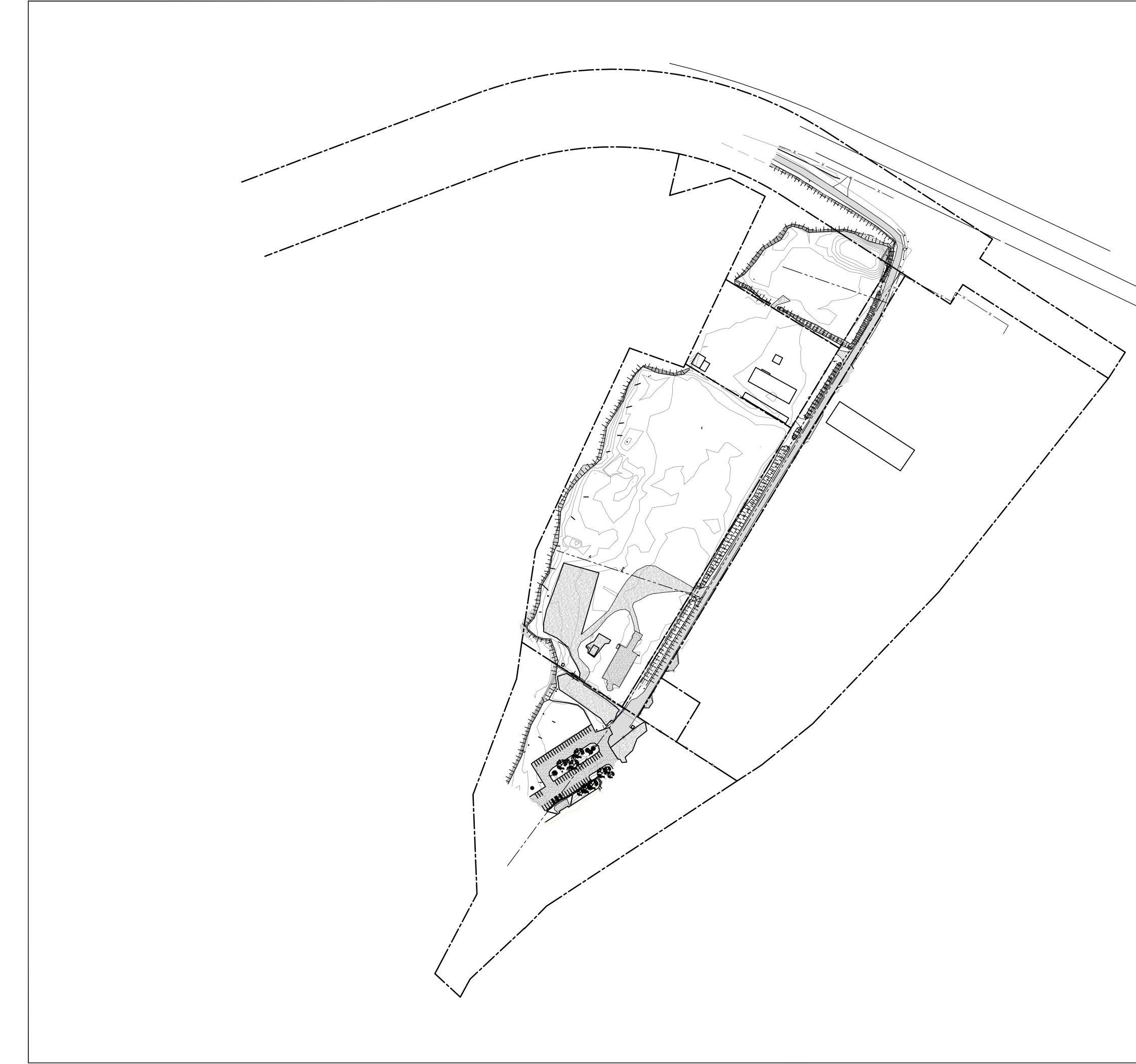
JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. 276

100% EPA RE-SUBMITTAL

G-01

Sheet No.

Sheet **1** of **49**



	_				
0 75 150 ft	67	GHD 5551 Corporate Boulevard Baton Rouge Louisiana U T 225 292 9007 F 225 95	SA		com
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E OF TEX M. LOCIC 32028 CENSE ONAL 19/2021	ERO	
		e of Documents locument and the ideas and design	s incorporate	d herein, as	an instrument of
	profes	sional service, is the property of GHI y other project without GHD's written a	D and shall no	ot be reused	n whole or in part
		620 X 	LEGEND PROPERT PROPERT EXISTING FENCELIN SHORELIN TOP OF B, TOE OF SI OVERHEA GUARDRA UNDERGR PDI/RI BOI	- Y BOUND/ Y EASEME CONTOUF E IE IE ANK _OPE D ELECTF IL COUND CC	ENT RINTERVAL RICAL TV LINE
		● MW ● P.P.	PDI/RI BOI MONITORI POWER PO LIGHT POI	NG WELL OLE	ATION
		O WELL	WELL ASPHALT		
			CONCRET GRAVEL	E	
	Client Proje SOU	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN	E PIT Media It (Ame	S Al de: Nded A	SIGN PRIL 2021)
	Ь	HARRIS COL	JNIY,)
	7	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021
	6	100% EPA SUBMITTAL	MW	RH	12/18/2020
	No.	lssue	Drawn	Approved	Date
	Draw	n MW	Designer	RH	
	Drafti Chec		Design Check	LL	
	Proje Coord	ct CM dinator	Date	Apr 15, 2	021
	This c	locument shall not be used for uction unless signed and sealed for	Scale	1" = 150'	
	<u> </u>	Arch D	1	3ar is one i iginal size	
RCE: OGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO	Proje	ct No. 11215131	<u> </u>		
R WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 08, JULY 8, 2019 TO AUGUST 2, 2019	Title				
CELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. RELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 417 - 6417.bdry - 07-24-2020		OVEI PL		1	
GHD SERVICES INC.					
GHD SERVICES INC.	Shee	t No.			
JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. <u>276</u>		C-	01		
		~	VI		
100% EPA RE-SUBMITTAL	1		Shee	t 2	of 49

SOUR

TOPO0 RIVER 190608

PARCE HARRE 20-641



GHD SERVICES INC.

Sheet No.

EXISTING CONDITIONS

GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY.

2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE

3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD.

JOB NO. 11215131 FILE NO. 02 ghd texas firm registration no. _____276

CHD

1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE

NOTES:

SOURCE:

TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -20-6417 - 6417.bdry - 07-24-2020

Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS

MW

Designer RH

Design Check LL

Date Apr 15, 2021

Bar is one inch on original size drawing

0 1"

Sheet **3** of **49**

7 100% EPA RE-SUBMITTAL MW

This document shall not be used for construction unless signed and sealed for construction.

6 100% EPA SUBMITTAL

Issue

No.

Drawn MW

Drafting BP

Project Coordinator

Original Size

Arch D

Project No. 11215131

Check

SAN JACINTO RIVER WASTE PITS

SJSB002 • MW ● P.P. ● L.P. O WELL

Client

_____O/H_____

Reuse of Documents

TOP OF BANK — — — — — — — TOE OF SLOPE OVERHEAD ELECTRICAL - - UE - UNDERGROUND CCTV LINE PDI/RI BORING LOCATION MONITORING WELL POWER POLE LIGHT POLE WELL

AREA OF IMPACT

ASPHALT CONCRETE

GRAVEL

AREA OF POTENTIAL VOLUNTARY EXCAVATION

RH 04/19/2021

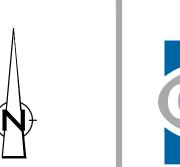
RH 12/18/2020

Drawn Approved Date

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD LEGEND PROPERTY BOUNDARY ------------------------PROPERTY EASEMENT ——620—— EXISTING CONTOUR INTERVAL FENCELINE -------------------------SHORELINE

GAN M. LOCICE 132028

GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com



100 ft





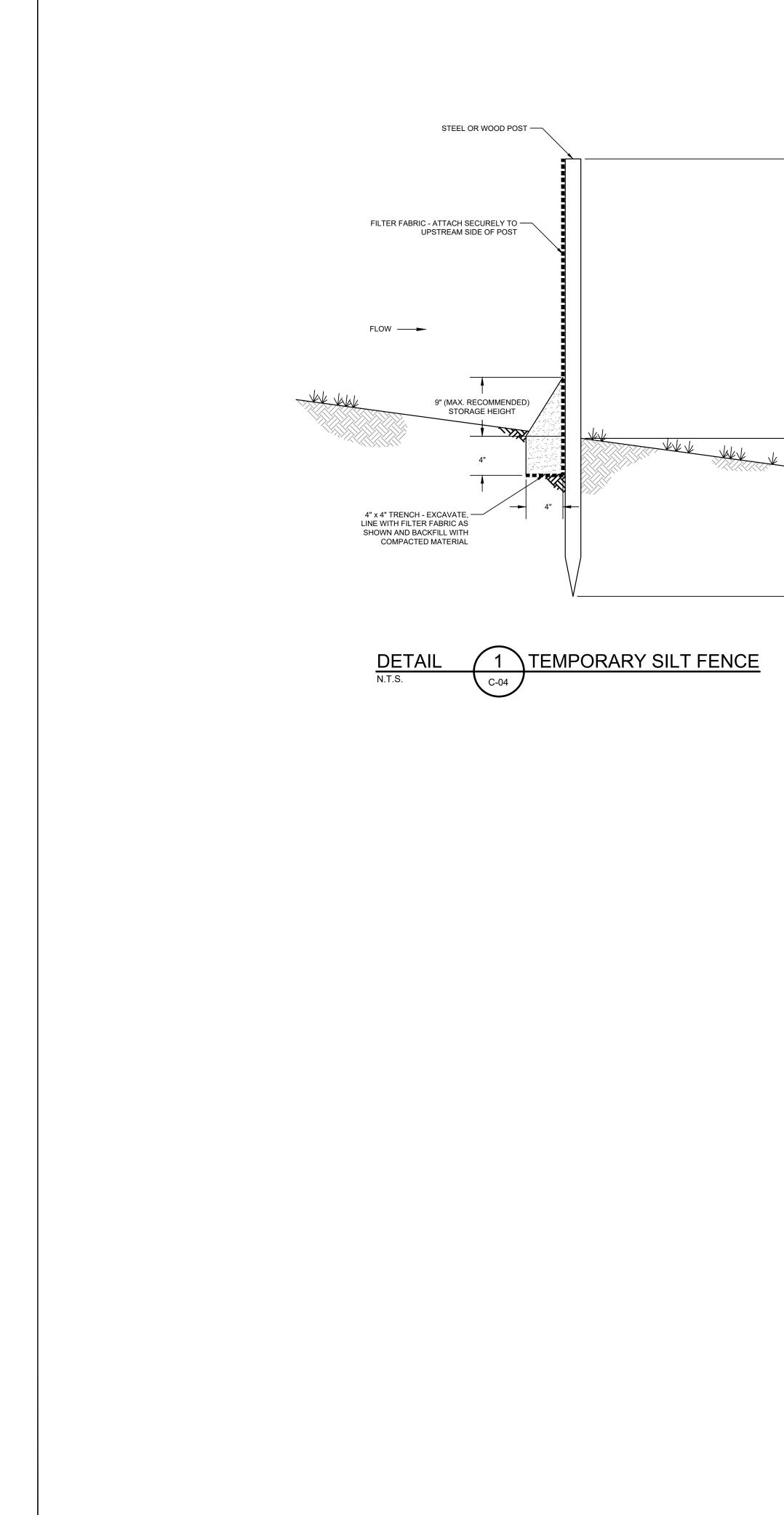
	1	GHD 5551 Corporate Boulevard Baton Rouge Louisiana U T 225 292 9007 F 225 955	SA		com
		Contraction of the second seco	OF TEXA LOCICE 2028 ENSE NAL ENG NAL ENG NAL ENG NAL	ERO	
	This profes	e of Documents document and the ideas and design ssional service, is the property of GHE ay other project without GHD's written a) and shall n	ot be reused in	
		620 X UE O/H O/H O/H O/H O/H O/H O/H O/H	PROPERT EXISTING FENCELIN SHORELIN TOP OF B TOE OF S OVERHEA GUARDRA UNDERGF PDI/RI BO MONITOR POWER P LIGHT PO WELL AREA OF POT AREA OF POT AREA OF POT ASPHALT CONCRET GRAVEL	Y BOUNDA Y EASEME CONTOUR IE NE ANK LOPE D ELECTR AL ROUND CC RING LOCA ING WELL OLE LE IMPACT ENTIAL VOLUN	NT INTERVAL
	Clien Proje	SAN JACIN WAST	e pit Medi/ It (Ame	"S Al des Nded A	SIGN PRIL 2021)
	7 6 No.	100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	MW MW Drawn	RH RH Approved	04/19/2021 12/18/2020 Date
	Draw	n MW	Designer		I
SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC.,	Drafti Chec		Design Check	LL	
190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -		dinator	Date	Apr 15, 20	021
20-6417 - 6417.bdry - 07-24-2020 NOTES:	constr constr		Scale	1" = 100'	
1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO FITHER THE STREET OR ONTO THE	Origi	Arch D		Bar is one ir riginal size o	
 EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION 	Proje	ect No. 11215131	<u>.</u>		
 OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. EXISTING CONCRETE PAD TO BE REMOVED DURING REMEDIAL ACTION AND WILL BE REPLACED BASED ON AGREEMENT BETWEEN THE LANDOWNER AND RESPONSIBLE PARTY. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	Title	SITE W	/ORM	(S	
JOB NO. 11215131 FILE NO. 02 GHD TEXAS FIRM REGISTRATION NO. 276	Shee		ია		
100% EPA RE-SUBMITTAL		C-	UJ		
			Shee	et 4	of 49

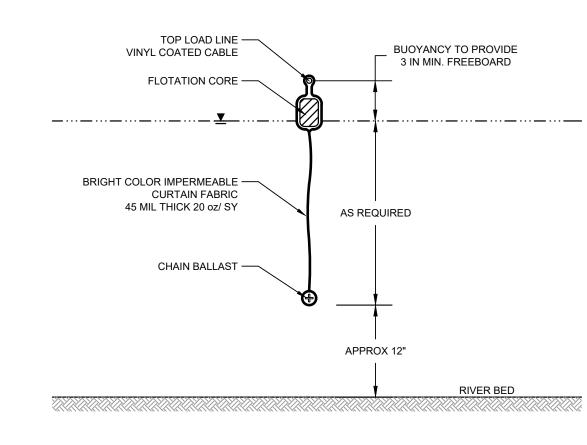


	5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com				
		LOGAN M 38, 13 55/0 4/1	ENSE		
	This	se of Documents document and the ideas and design			
		ssional service, is the property of GH ny other project without GHD's written			n whole or in par
		620 X LILIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	PROPERT EXISTING FENCELIN SHORELIN TOP OF B TOE OF S OVERHEA GUARDRA UNDERGF PDI/RI BO MONITOR POWER P LIGHT PO WELL AREA OF POT ASPHALT CONCRET GRAVEL SILT FENC	- Y BOUNDA Y EASEME CONTOUR IE NE ANK LOPE AD ELECTR AIL ROUND CC ⁻ RING LOCA LE IMPACT TE TE	NT INTERVAL
	Clier	SAN JACI			R
	Proje	SAN JACII WAST	E PIT Emedi/ NT (Ame	"S Al des :Nded A	SIGN PRIL 2021
	Proje	SAN JACI WAST FINAL (100%) RE	E PIT Emedi/ NT (Ame	"S Al des :Nded A	SIGN PRIL 2021
	Proje	SAN JACI WAST FINAL (100%) RE	E PIT	"S Al des :Nded A	SIGN PRIL 2021
	Proje SOL	SAN JACII WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU	E PIT	S AL DES NDED A TEXAS	SIGN PRIL 2021
	Proje	SAN JACIN WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	E PIT	S AL DES NDED A TEXAS RH RH Approved	SIGN PRIL 2021
	Proje SOL 7 6 No. Drav	SAN JACIN WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	E PIT	S AL DES NDED A TEXAS RH RH Approved	SIGN PRIL 2021
SURCE	Proje SOL 7 6 No. Drav Draft	SAN JACIN WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue m MW	E PIT	S AL DES NDED A TEXAS RH Approved RH LL	SIGN PRIL 2021 04/19/2021 12/18/2020 Date
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019	Proje SOL 7 6 No. Drav Draft Cheo Proje Coor This constr	SAN JACIN WAST Pot FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP ect CM document shall not be used for	E PIT	S AL DES NDED A TEXAS RH RH Approved RH	SIGN PRIL 2021 04/19/2021 12/18/2020 Date
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC.,	Proje SOL 7 6 No. Drav Draft Chec Coor This constri	SAN JACIN WAST Pot FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue vn MW	E PIT	S AL DES NDED A TEXAS RH Approved RH LL Apr 15, 20	SIGN PRIL 2021 04/19/2021 12/18/2020 Date
 TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE 	Proje SOL 7 6 No. Drav Draft Chec Coor This consti Origi	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP ect CM document shall not be used for uction unless signed and sealed for uction.	E PIT MEDI/ T (AME JNTY, ' MW Drawn Designer Design Check Date Scale	S AL DES NDED A TEXAS RH Approved RH LL Apr 15, 20 1" = 100' Bar is one ir	SIGN PRIL 2021 04/19/2021 12/18/2020 Date 021
 TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE 	Proje SOL 7 6 No. Drav Draft Chec Coor This consti Origi	SAN JACIN WAST et FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU I00% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP et CM dinator BP et CM document shall not be used for uction unless signed and sealed for uction. nal Size Arch D et No. 11215131	E PIT MEDI/ T (AME JNTY, Drawn Drawn Designer Design Check Date Scale	S AL DES NDED A TEXAS RH Approved RH LL Apr 15, 20 1" = 100' Bar is one ir riginal size o	SIGN PRIL 2021 04/19/2021 12/18/2020 Date 021
 TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL OT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE 	Proje SOL 7 6 No. Drav Draft Chec Coor This constr Origi	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP ect CM document shall not be used for uction unless signed and sealed for uction. nal Size Arch D	E PIT MEDI/ T (AME JNTY, Drawn Drawn Designer Design Check Date Scale	S AL DES NDED A TEXAS RH Approved RH LL Apr 15, 20 1" = 100' Bar is one ir riginal size o	SIGN PRIL 2021 04/19/2021 12/18/2020 Date 021
 TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE 	Proje SOL 7 6 No. Draw Draft Chec Proje Coor This constr constr Chec Proje Title	SAN JACIN WAST et FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU I00% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP et CM dinator BP et CM document shall not be used for uction unless signed and sealed for uction. nal Size Arch D et No. 11215131	E PIT MEDI/ T (AME JNTY, Drawn Drawn Designer Design Check Date Scale	S AL DES NDED A TEXAS RH Approved RH LL Apr 15, 20 1" = 100' Bar is one ir riginal size o	SIGN PRIL 2021 04/19/2021 12/18/2020 Date 021
 TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. MOR 11215131 _ FLE NO. 02 DE NO. 11215131 _ FLE NO. 02 	Proje SOL 7 6 No. Draw Draft Chec Proje Coor This constr constr Chec Proje Title	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU INDOW EPA RE-SUBMITTAL INDOW EPA SUBMITTAL ISSUE M MW ing BP et CM document shall not be used for uction unless signed and sealed for uction. Inal Size Arch D et No. SOIL ERO SEDIMENT CO	E PIT	S AL DES NDED A TEXAS RH Approved RH LL Apr 15, 20 1" = 100' Bar is one ir riginal size o	SIGN PRIL 2021 04/19/2021 12/18/2020 Date 021
 TOPOGRAPHIC, HYDROGGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE LATERAL LIMIT OF THIS BULKHEAD. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	Proje SOL 7 6 No. Drav Draft Chee Coor This constr Constr Constr Constr Cor This constr Cor Shee	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU INDOW EPA RE-SUBMITTAL INDOW EPA SUBMITTAL ISSUE M MW ing BP et CM document shall not be used for uction unless signed and sealed for uction. Inal Size Arch D et No. SOIL ERO SEDIMENT CO	E PIT MEDI/ T (AME JNTY, Drawn Drawn Designer Design Check Date Scale	S AL DES NDED A TEXAS RH Approved RH LL Apr 15, 20 1" = 100' Bar is one ir riginal size o	SIGN PRIL 2021 04/19/2021 12/18/2020 Date 021

100 ft

GHD

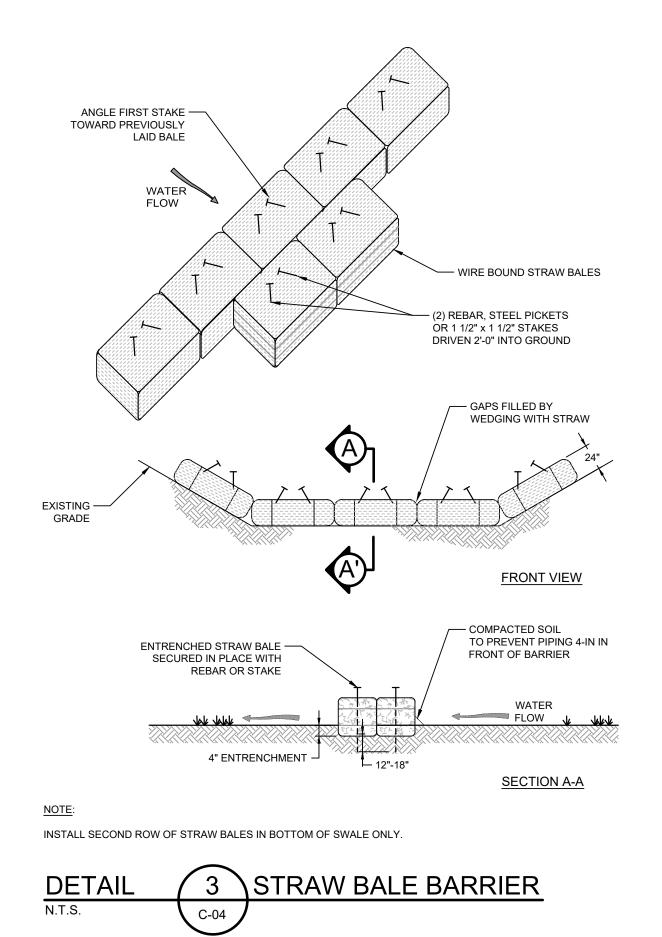




<u>NOTES</u>

- 1. TURBIDITY CURTAIN SHALL BE TYPE II ACCORDING TO DEPARTMENT OF THE ARMY, US ARMY CORPS OF ENGINEERS WASHINGTON, DC, ENGINEERING AND DESIGN "HANDBOOK FOR THE PREPARATION OF STORM WATER POLLUTION PREVENTION PLANS FOR CONSTRUCTION ACTIVITIES", APPENDIX 'C' BMP 27 TURBIDITY CURTAIN, DOCUMENT EP1110-1-16, 1997.
- ACTIVITIES", APPENDIX 'C' BMP 27 TURBIDITY CURTAIN, DOCUMENT EP1110-1-16, 1997. 2. CURTAIN SYSTEM SHALL BE EQUIPPED WITH LOAD TRANSFER TYPE PANEL CONNECTORS, HEAT SEALED FABRIC SEAMS AND TIGHT SKIRT JOINTS.
- 3. INCLUDE MOORING SYSTEM IF REQUIRED.





3'-0" MAX.

1'-0" MIN.

		GHD 5551 Corporate Boulevard Baton Rouge Louisiana U T 225 292 9007 F 225 95	SA		com
	This profes	120:	32028 CENSE DNAL 9/2021 s incorporate D and shall no	d herein, as a bt be reused in	an instrument of whole or in part
	Clien Proje SOL	SAN JACIN WAST	E PIT Media It (Ame	S Al des Nded Af	SIGN Pril 2021)
	7	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021
	6	100% EPA SUBMITTAL	MW	RH	12/18/2020
	No.	lssue	Drawn	Approved	Date
	Draw Draft	ing BD	Designer Design		
	Chec		Check Date	LL Apr 15, 20	021
	This constr	document shall not be used for ruction unless signed and sealed for	Scale	N.T.S.	
	constr Origi	nal Size		Bar is one in iginal size d	
	_	Arch D	0	-	1"
	Proje Title	ect No. 11215131			
	S	SOIL ERO EDIMENT CON			
GHD GHD SERVICES INC.	Shee	et No.			
JOB NO. 11215131 FILE NO. 02	SILEE		~ -		
		C-	05		
100% EPA RE-SUBMITTAL			Shee	t 6	of 49



	Sneet No.
JOB NO. <u>11215131</u> FILE NO. <u>02</u>	
GHD TEXAS FIRM REGISTRATION NO276_	
100% EPA RE-SUBMIT	TAL

^	^	~
C-	U	b

PROJECT TRAFFIC CONTROL PLAN

This document shall not be used for construction unless signed and sealed for construction.

GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE

GHD SERVICES INC.

COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD.

GHD

3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE

NOTES:

PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -20-6417 - 6417.bdry - 07-24-2020

SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019

6 100% EPA SUBMITTAL No. Issue Drawn MW Drafting BP

Check

Project Coordinator

Original Size

Title

Arch D

Project No. 11215131

WASTE PITS Project FINAL (100%) REMEDIAL DESIGN

SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021)

HARRIS COUNTY, TEXAS

MW

Designer RH

Design Check LL

Date Apr 15, 2021

Bar is one inch on original size drawing

0 1"

Sheet **7** of **49**

7 100% EPA RE-SUBMITTAL MW

SAN JACINTO RIVER

SJSB002 MW • P.P. ● L.P. O WELL $\times \times \times \times \times \times$ TRAFFIC FLOW

Client

_____O/H_____

Reuse of Documents

------------------------PROPERTY EASEMENT ——620—— EXISTING CONTOUR INTERVAL FENCELINE _____ TOP OF BANK _____ TOE OF SLOPE OVERHEAD ELECTRICAL ____O____O_____ GUARDRAIL PDI/RI BORING LOCATION MONITORING WELL POWER POLE LIGHT POLE WELL

AREA OF IMPACT

ASPHALT

CONCRETE GRAVEL

AREA OF POTENTIAL VOLUNTARY EXCAVATION

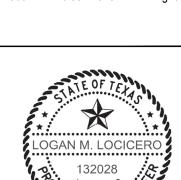
RH 04/19/2021

RH 12/18/2020

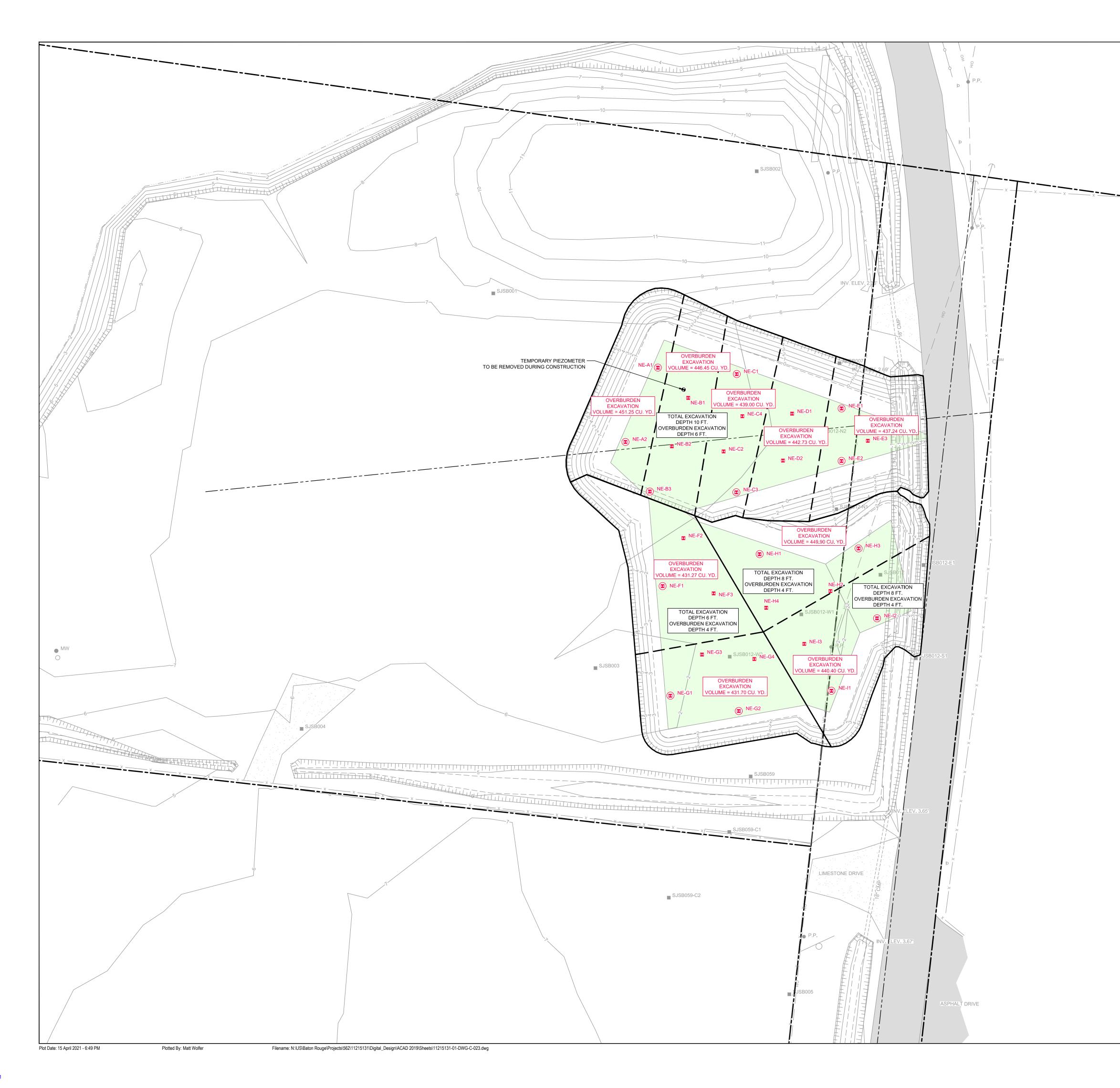
Drawn Approved Date

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD LEGEND PROPERTY BOUNDARY





100 ft



100%	EPA	RE-SL	JBMIT	TAL

ghd texas firm registration no. _____276

JOB NO. 11215131 FILE NO. 02

SOURCE:

NOTES:

GHD SERVICES INC.

TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019

PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -20-6417 - 6417.bdry - 07-24-2020

1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE

GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE

2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE

3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD.

GLENDALE BOAT WORKS, INC. PROPERTY.

Sheet No.

NORTHEAST EXCAVATION AREA **OVERBURDEN SAMPLING PLAN**

C-07

Sheet **8** of **49**

Project No. 11215131

SAN JACINTO RIVER WASTE PITS						
Froject FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS						
5	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021		
4	100% EPA SUBMITTAL	MW	RH	12/18/2020		
No.	lssue	Drawn	Approved	Date		
Draw	n MW	Designer	RH			
Drafti Chec		Design Check	LL			
Proje Coord	ct dinator	Date Apr 15, 2021		21		
constru	his document shall not be used for onstruction unless signed and sealed for onstruction.					
Driginal Size Bar is one inch on original size drawing 0 1"						

LOGA	N M. LOCICERO 132028 CENSES SIONAL ENGLISH 4/19/2021
	esigns incorporated herein, as an instrur f GHD and shall not be reused in whole or itten authorization. © 2021 GHD
620 X 	LEGEND PROPERTY BOUNDARY PROPERTY EASEMENT EXISTING CONTOUR INTERN FENCELINE SHORELINE TOP OF BANK TOE OF SLOPE OVERHEAD ELECTRICAL GUARDRAIL UNDERGROUND CCTV LINE PDI/RI BORING LOCATION MONITORING WELL POWER POLE LIGHT POLE WELL
	AREA OF IMPACT
	ASPHALT
	CONCRETE GRAVEL
620	EXCAVATION CONTOUR INTE EXCAVATION TOP OF BANK EXCAVATION TOE OF SLOPI POLYGON LIMITS (WITH ADDITIONAL SIDE SLOPE AR
	EXCAVATION TOP OF BANK EXCAVATION TOE OF SLOPI POLYGON LIMITS

20 ft

GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com



100%	EPA	RE-SI	JBMIT	TAL

_	_
\frown	
	-08
	-01

Sheet 9 of 49

Sheet No.

Project No. **11215131**

NORTHEAST EXCAVATION AREA SIDEWALL SAMPLING PLAN

EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD.

3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

GHD SERVICES INC.

JOB NO. 11215131 FILE NO. 02

ghd texas firm registration no. _____276

1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE

NOTES:

PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -20-6417 - 6417.bdry - 07-24-2020

SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019

GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com OGAN M. LOCICEF Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD LEGEND PROPERTY BOUNDARY ---------------------------------PROPERTY EASEMENT ——620—— EXISTING CONTOUR INTERVAL FENCELINE _____X _____ TOP OF BANK TOE OF SLOPE _____ OVERHEAD ELECTRICAL _____O/H_____ ____O____O_____ GUARDRAIL PDI/RI BORING LOCATION SJSB002 MW MONITORING WELL POWER POLE • P.P. LIGHT POLE ● L.P. O WELL WELL AREA OF IMPACT ASPHALT CONCRETE GRAVEL EXCAVATION CONTOUR INTERVAL _____620_____ EXCAVATION TOP OF BANK ____ EXCAVATION TOE OF SLOPE PRE-CONSTRUCTION SIDEWALL CONFIRMATION BORING LOCATIONS Client SAN JACINTO RIVER WASTE PITS Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS 5 100% EPA RE-SUBMITTAL MW RH 04/19/2021 4 100% EPA SUBMITTAL MW RH 12/18/2020 Drawn Approved Date No. Issue Drawn MW Designer RH Drafting BP Design Check LL Check Project Coordinator Date Apr 15, 2021 This document shall not be used for construction unless signed and sealed for construction. Original Size Bar is one inch on original size drawing Arch D 0 1"

20 ft



100%	EPA	RE-SI	TAL

GHD TEXAS FIRM REGISTRATION NO. 276

JOB NO. 11215131 FILE NO. 02

SOURCE:

NOTES:

20-6417 - 6417.bdry - 07-24-2020

TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019

PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -

1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE

GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE

2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE

3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

GHD SERVICES INC.

COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD.

GLENDALE BOAT WORKS, INC. PROPERTY.

Sheet No.

C-09

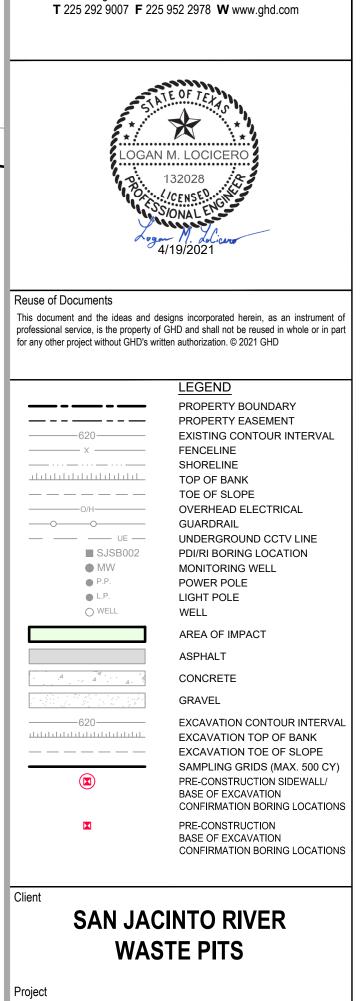
Sheet **10** of **49**

NORTHEAST EXCAVATION AREA **BOTTOM OF EXCAVATION** SAMPLING PLAN

Client

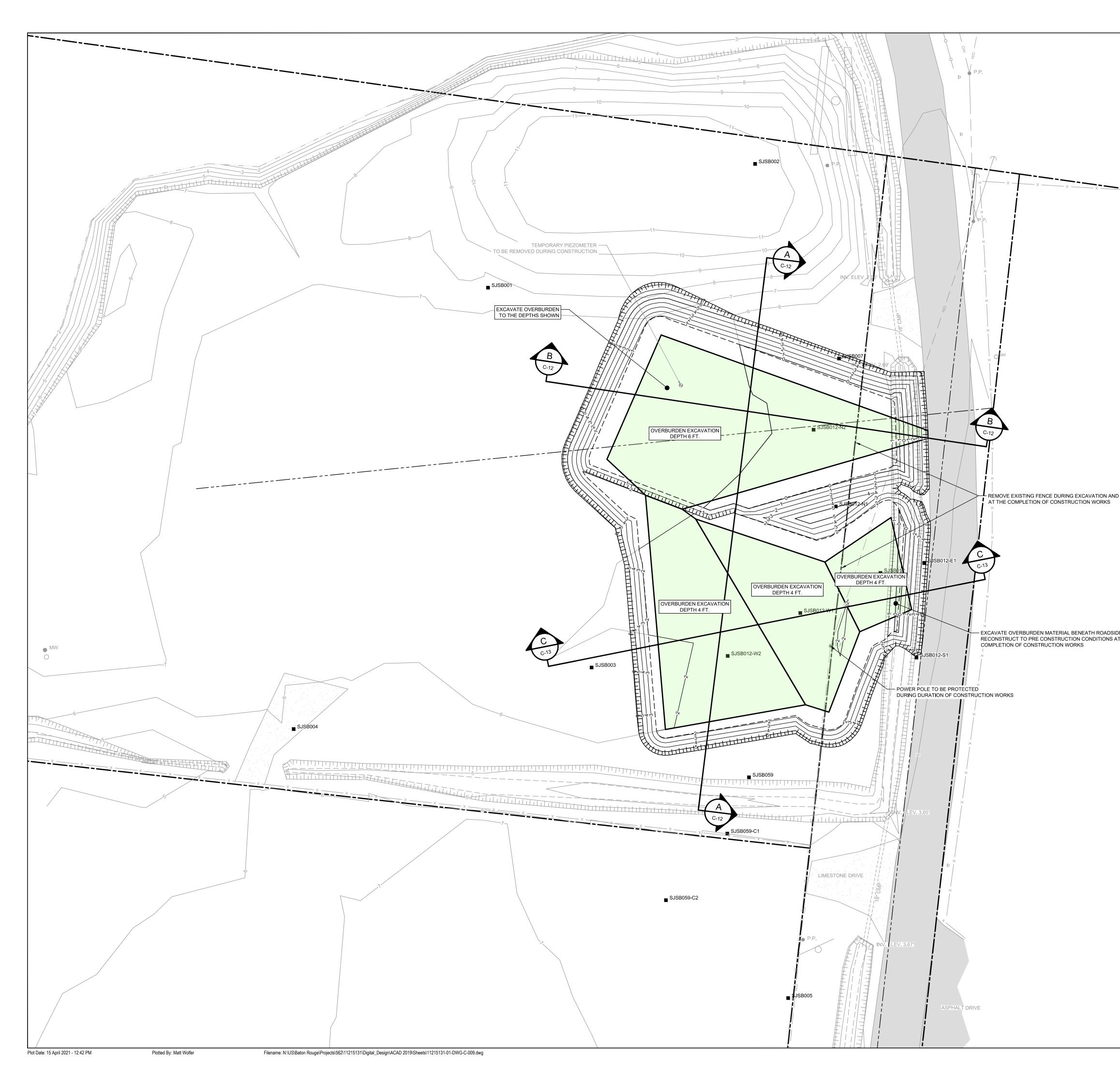
Project No. 11215131

	SAN JACINTO RIVER WASTE PITS				
	Froject FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS				
5	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021	
4	100% EPA SUBMITTAL	MW	RH	12/18/2020	
No.	lssue	Drawn	Approved	Date	
Draw	n MW	Designer RH			
Drafti Chec	* RP	Design Check	LL		
Proje Coor	ct dinator	Date	Apr 15, 20	121	
constru	document shall not be used for uction unless signed and sealed for uction.	Scale	1" = 20'		
Origii	nal Size Arch D		ar is one in iginal size d		

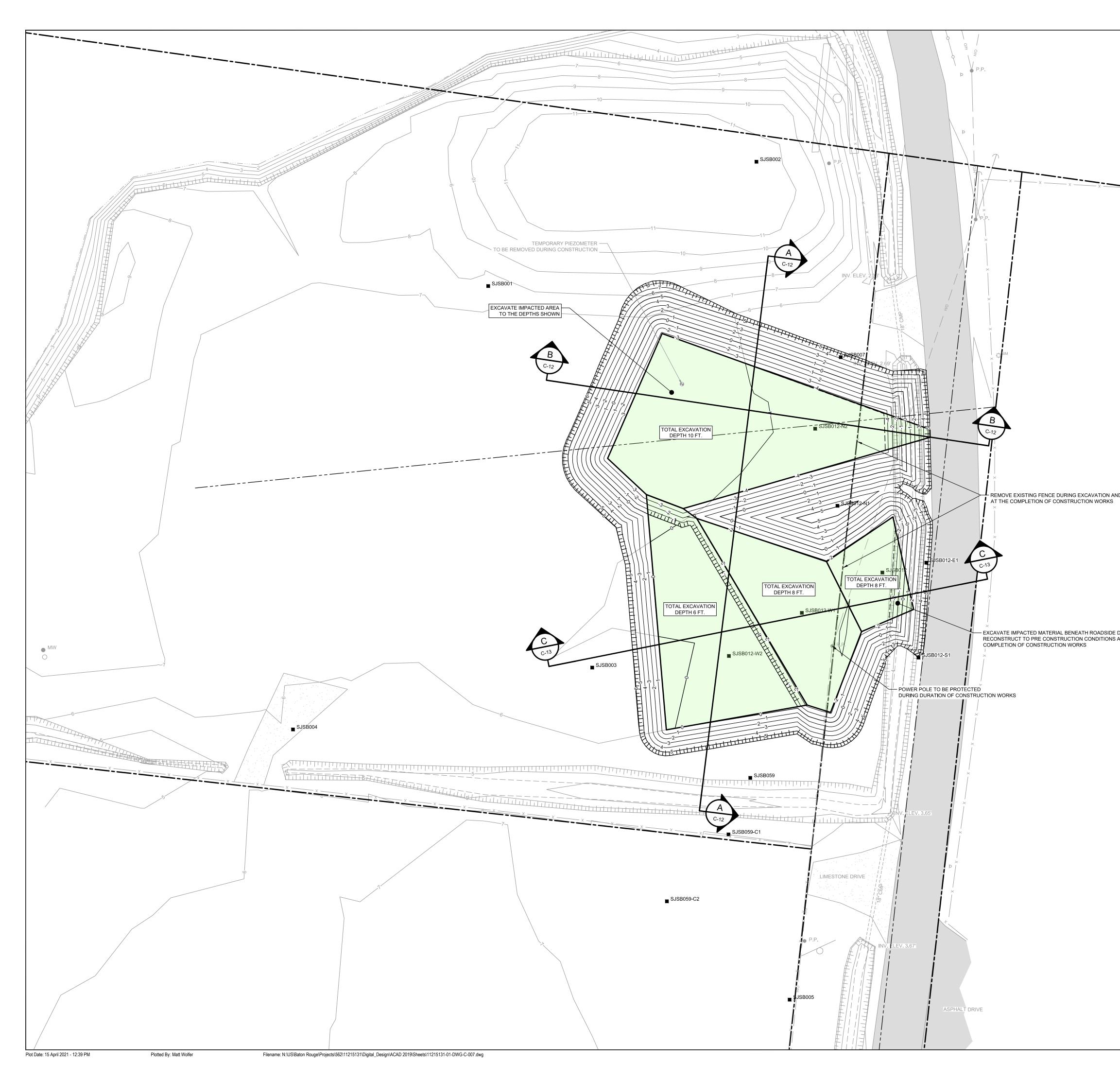


20 ft

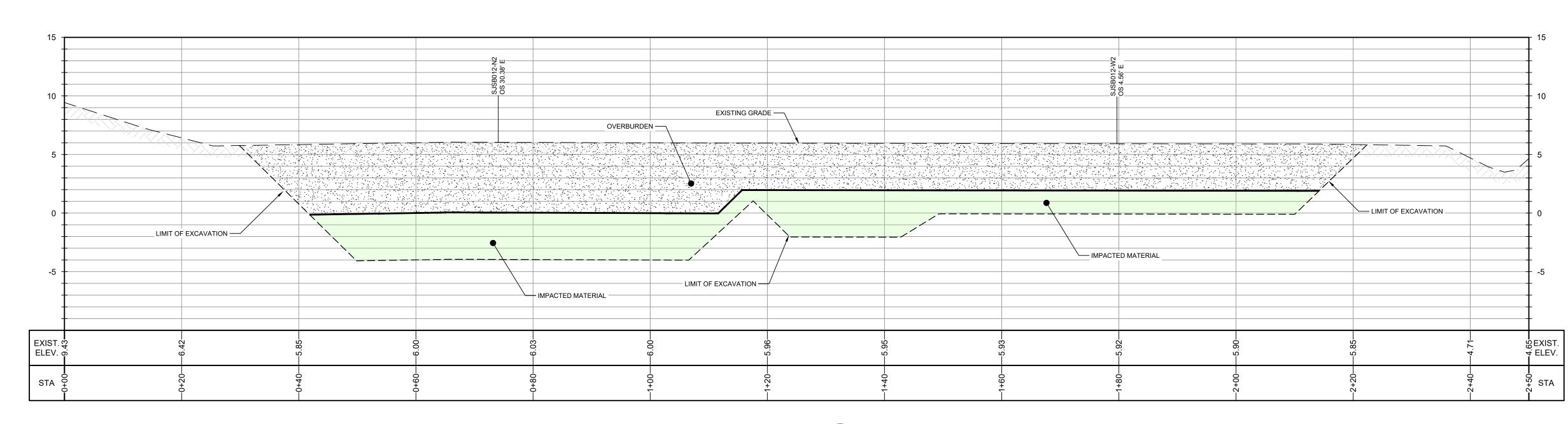
GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA

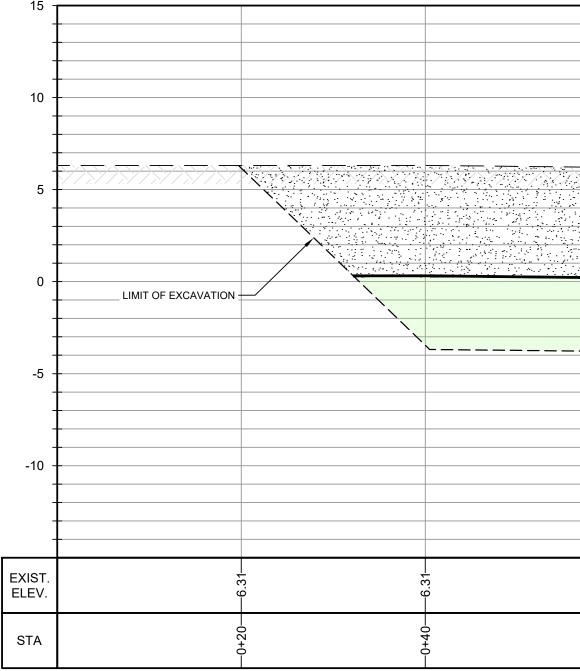


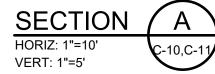
GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com
LOGAN M. LOCICERO 132028 132028 //CENSED S/ONAL EN S/ONAL EN 4/19/2021
Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization @ 2021 CHD
for any other project without GHD's written authorization. © 2021 GHD LEGEND PROPERTY BOUNDARY PROPERTY EASEMENT EXISTING CONTOUR INTERVAL FENCELINE TOP OF BANK TOP OF SLOPE OVH PP POWER POLE UGHT POLE WELL AREA OF IMPACT ASPHALT CONCRETE GRAVEL 620 EXCAVATION CONTOUR INTERVAL EXCAVATION TOP OF BANK EXCAVATION TOP OF SLOPE SHEET PILE WALL ALIGNMENT
HARRIS COUNTY, TEXAS
Image: Market with the system Im
Drawn MW Designer RH Drafting Check BP Design Check LL Project Coordinator Date Apr 15, 2021
This document shall not be used for construction unless signed and sealed for construction. Scale 1" = 20' Original Size Bar is one inch on original size drawing
Project No. 11215131 Title NORTHEAST EXCAVATION AREA OVERBURDEN EXCAVATION PLAN Sheet No.
Sheet No. C-10 Sheet 11 of 49



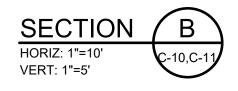
0 10 20 ft 10	GHD 5551 Corporate Boulevard Baton Rouge Louisiana U T 225 292 9007 F 225 95	SA	.com
XXX _X	33. 132 30	LOCICERO 2028 NSEP VAL ENG	
	Reuse of Documents This document and the ideas and design professional service, is the property of GHE for any other project without GHD's written a) and shall not be reused	in whole or in part
DITCH	620 X HIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	LEGEND PROPERTY BOUND, PROPERTY EASEME EXISTING CONTOUP FENCELINE SHORELINE TOP OF BANK TOE OF SLOPE OVERHEAD ELECTF GUARDRAIL UNDERGROUND CC PDI/RI BORING LOC MONITORING WELL POWER POLE LIGHT POLE WELL AREA OF IMPACT ASPHALT CONCRETE GRAVEL EXCAVATION CONTO EXCAVATION TOP O SHEET PILE WALL A	ARY ENT RINTERVAL RICAL TV LINE ATION OUR INTERVAL OF BANK OF SLOPE LIGNMENT
AT THE	SOUTHERN IMPOUNDMEN HARRIS COU	IT (AMENDED A	PRIL 2021)
			<u> </u>
	7 100% EPA RE-SUBMITTAL	MW RH	04/19/2021
	6 100% EPA SUBMITTAL	MW RH	12/18/2020
	No. Issue	Drawn Approved	Date
	Drawn MW	Designer RH	
	Drafting Check BP	Design Check LL	
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO	Project CM Coordinator	Date Apr 15, 2	2021
RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019	This document shall not be used for construction unless signed and sealed for construction.	Scale 1" = 20'	
	Original Size Arch D	Bar is one original size	drawing
1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE		0	1"
EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE	Project No. 11215131		
 GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	Title NORTHEAST EX(FINAL EXCA)		
GIE	Sheet No.		
JOB NO. 11215131 FILE NO. 02	-	A A	
CHD TEXAS FIRM REGISTRATION NO	C-	11	
100% EPA RE-SUBMITTAL		Sheet 12	of 49

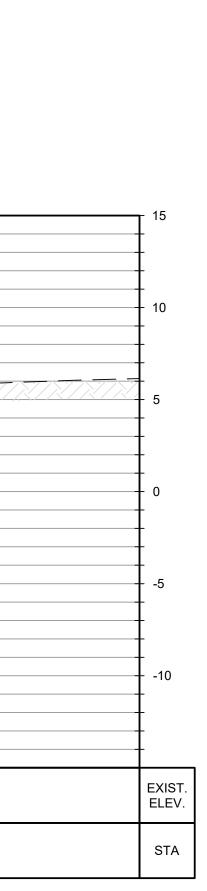


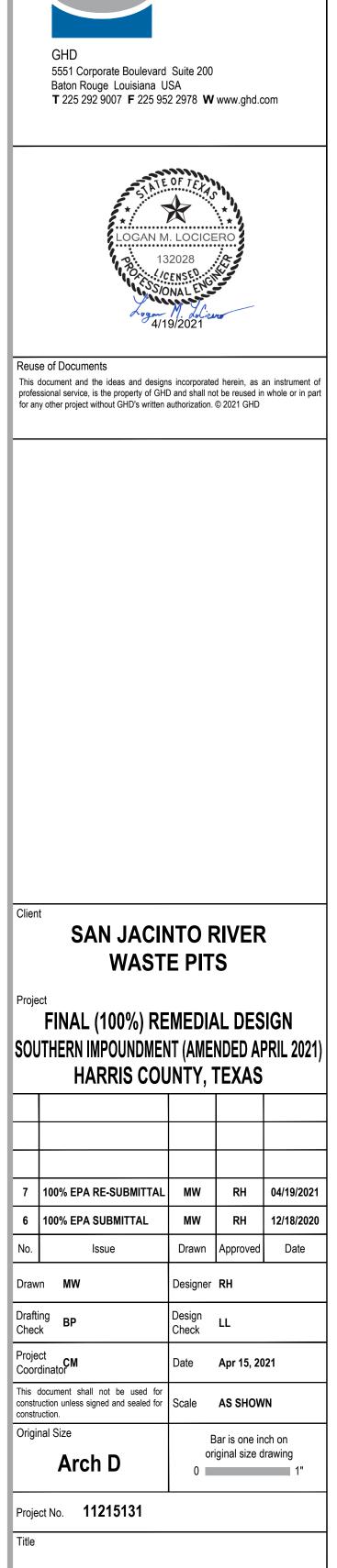




				~		
				MARKET STREET PROPERTY BOUNDARY		
			SJSB012-N2 053382'S 053382'S	STR T		
			3.82 3.82			
				MAR PRO		
$\overline{\Sigma}$		UNANANANA.		State of the second second		$\overline{\overline{z}}/\overline{\overline{z}}/\overline{\overline{\lambda}}$
				Y		
	■					
	 +	\		/		ATION
с С	-0.10-			5.72	3.78	5.69-
				40		
0			<u>+</u>	+ -	¥	~
						<u> </u>







NORTHEAST EXCAVATION AREA EXCAVATION SECTIONS 1 OF 2

GHD SERVICES INC.

1. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

> JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. <u>276</u>

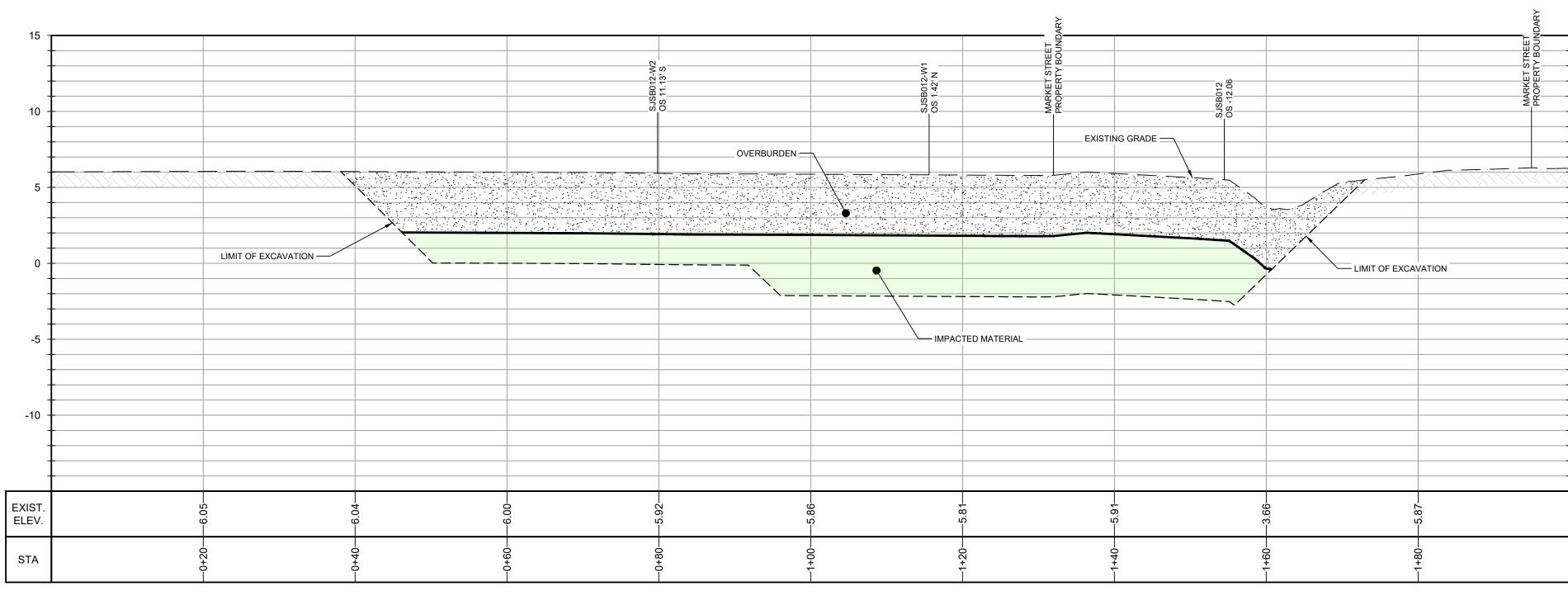
NOTES:

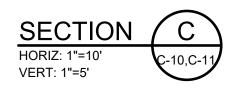
100% EPA RE-SUBMITTAL

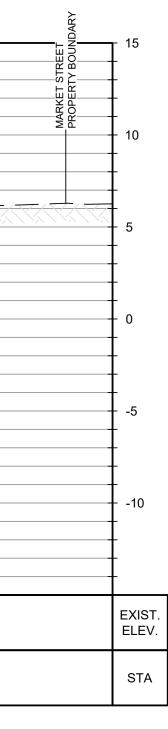
C-12

Sheet No.

Sheet **13** of **49**



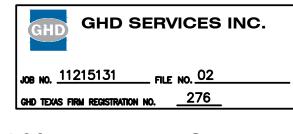




	GHD 5551 Corporate Boulevard Baton Rouge Louisiana U T 225 292 9007 F 225 95	SA	www.ghd.c	om
	13 13 13 15 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	A. LOCICI 32028 CENSE DNAL ENG M. J.C. 19/2021	ERO	
This profe	se of Documents document and the ideas and design ssional service, is the property of GHI ny other project without GHD's written	D and shall no	ot be reused in	
Clier	" SAN JACIN WAST			2
Proje	SAN JACIN WAST	E PIT MEDIA	S Al des Nded Af	ign Pril 2021)
Proje	SAN JACIN WAST FINAL (100%) RE	E PIT MEDIA	S Al des Nded Af	IGN Pril 2021)
Proje	SAN JACIN WAST FINAL (100%) RE	E PIT MEDIA	S Al des Nded Af	IGN Pril 2021)
Proje	SAN JACIN WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COL	E PIT	S AL DES NDED AF TEXAS	FIGN PRIL 2021)
Proje	SAN JACIN WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU		S AL DES NDED AF TEXAS	GIGN PRIL 2021)
Proje SOL 5 4 No.	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	E PIT MEDIA T (AME) JNTY, MW MW Drawn Designer	S AL DES NDED AI TEXAS RH RH Approved	GIGN PRIL 2021) 04/19/2021 12/18/2020
Proje SOL 5 4 No.	SAN JACIN WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	E PIT MEDIA T (AME) JNTY, " MW MW Drawn	S AL DES NDED AI TEXAS RH RH Approved	GIGN PRIL 2021) 04/19/2021 12/18/2020
Proje SOL 5 4 No. Drav	SAN JACIN WAST FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue /n MW	E PIT MEDIA T (AME JNTY, T MW MW Drawn Designer Design	S AL DES NDED AI TEXAS RH RH Approved RH	SIGN PRIL 2021) 04/19/2021 12/18/2020 Date
Proje SOL 5 4 No. Draw Draft Chec Coor This constr	SAN JACIN WAST ect FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP ect CM dinator	E PIT MEDIA T (AME) JNTY, MW MW Drawn Designer Design Check	S AL DES NDED AF TEXAS RH RH Approved RH	SIGN PRIL 2021) 04/19/2021 12/18/2020 Date
Proje SOL 5 4 No. Draft Chec Coor This constr	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN HARRIS COL 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP ect CM dinator M	E PIT MEDIA T (AME) JNTY, MW MW Drawn Designer Designer Design Check Date Scale	S AL DES NDED AI TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in	SIGN PRIL 2021) 04/19/2021 12/18/2020 Date 021
Proje SOL 5 4 No. Draft Chec Coor This constr	SAN JACIN WAST ect FINAL (100%) RE JTHERN IMPOUNDMEN HARRIS COU HARRIS COU I00% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue /n MW ing BP ect dinator document shall not be used for uction unless signed and sealed for uction.	E PIT MEDIA T (AME) JNTY, MW MW Drawn Designer Designer Design Check Date Scale	S AL DES NDED AI TEXAS RH RH Approved RH LL Apr 15, 20 AS SHOW	SIGN PRIL 2021) 04/19/2021 12/18/2020 Date 021
Proje SOL 5 4 No. Dravt Checo Coor This constr Constr Origi	SAN JACIN WAST ect FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue m MW ing BP ect CM document shall not be used for uction unless signed and sealed for uction. nal Size	E PIT MEDIA T (AME JNTY, MW MW Drawn Designer Design Check Date Scale	S AL DES NDED AI TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in	EIGN PRIL 2021) 04/19/2021 12/18/2020 Date Date
Proje SOL 5 4 No. Draft Chec Coor This constr Origi Proje Title	SAN JACIN WAST ect FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU HARRIS COU I00% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue In MW ing BP ect CM dinator document shall not be used for uction unless signed and sealed for uction. nal Size Arch D ect No. 11215131	E PIT MEDIA T (AME JNTY, MW MW Drawn Designer Design Check Date Scale	S AL DES NDED AI TEXAS RH RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in iginal size of	SIGN PRIL 2021) 04/19/2021 12/18/2020 Date Date
Proje SOL 5 4 No. Draft Chec Coor This constr Origi Proje Title	SAN JACIN WAST FINAL (100%) RE THERN IMPOUNDMEN HARRIS COL HARRIS COL 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue /n MW ing BP et CM document shall not be used for uction unless signed and sealed for uction unless signed and sealed for uction. nal Size Arch D et No. 11215131	E PIT MEDIA MEDIA T (AME JNTY, MW MW Drawn Designer Designer Check Date Scale CAVA CAVA	S AL DES NDED AI TEXAS RH RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in iginal size of	SIGN PRIL 2021) 04/19/2021 12/18/2020 Date Date

NOTES:

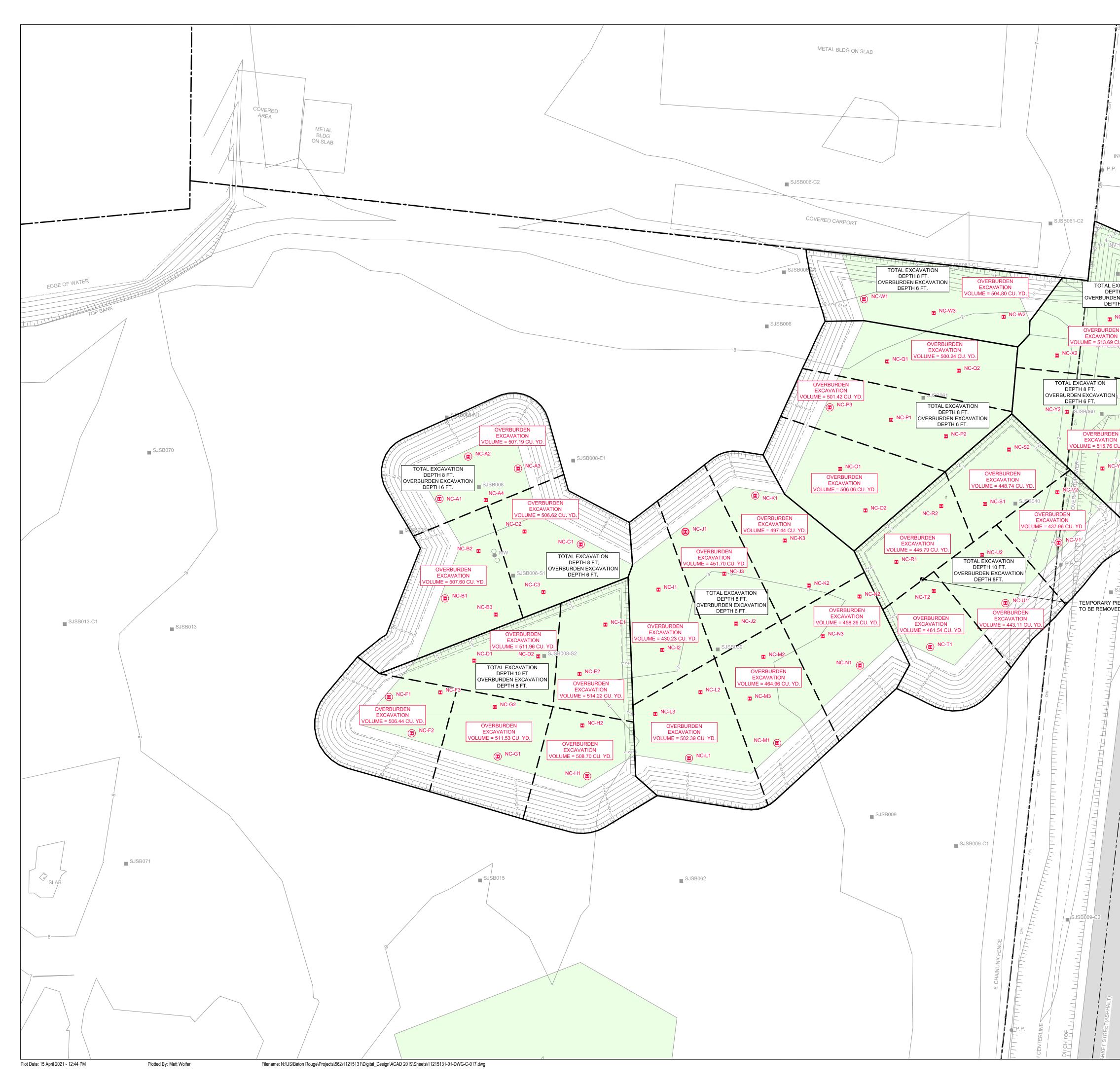
1. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.



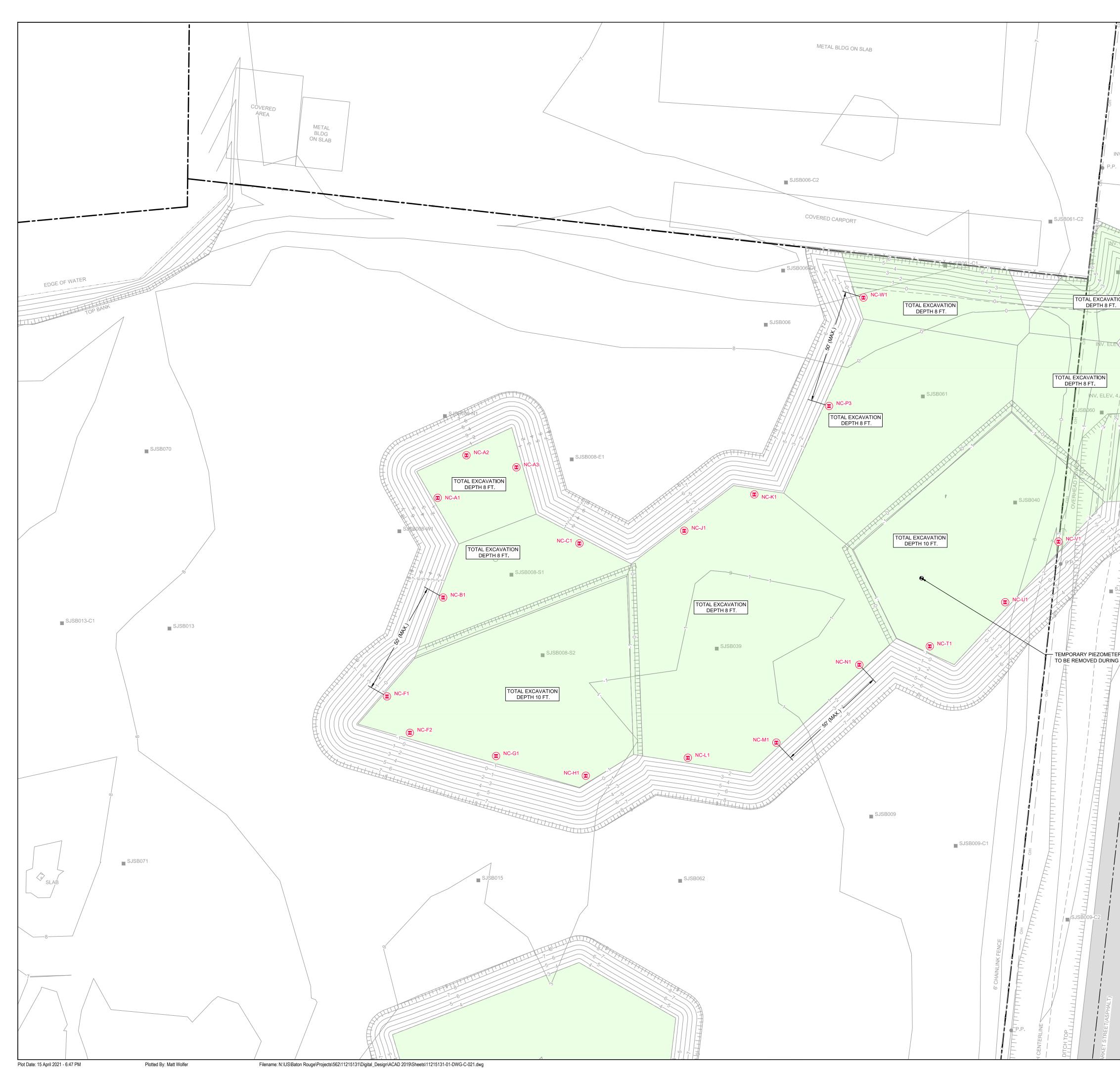
100% EPA RE-SUBMITTA



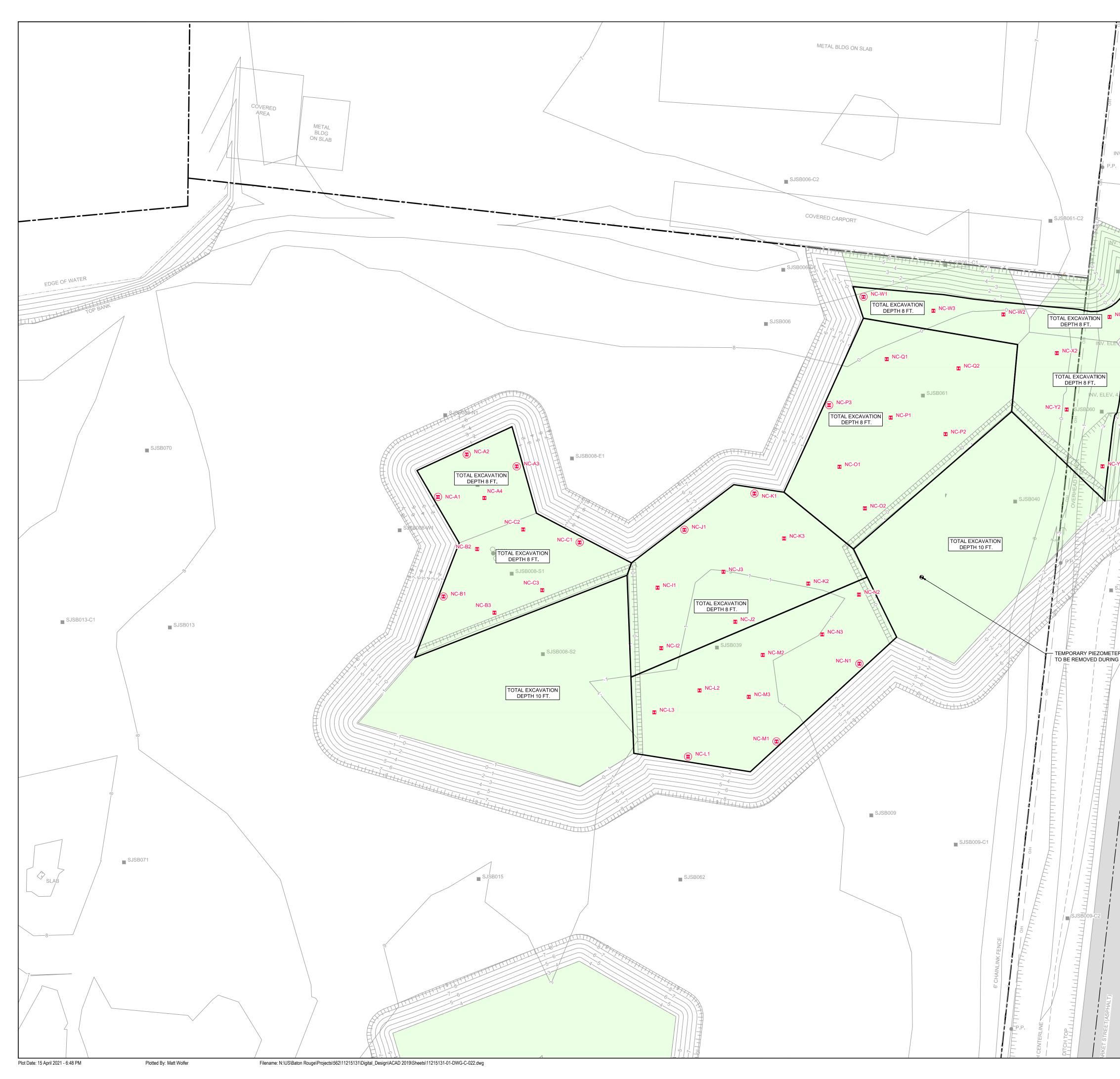
0 10 20 ft	5	GHD 5551 Corporate Boulevard Baton Rouge Louisiana L T 225 292 9007 F 225 95	JSA		com
= <u>x</u> x		7	E OF TEX M. LOCIO 32028 CENSES ONAL EN 19/2021	SERO SERO	
	This do profess	of Documents ocument and the ideas and design ional service, is the property of GH other project without GHD's written	D and shall r	ot be reused in	
	Client	620 x 0/H 0/H 0/H 0/H 0/H 0/H 0/H 0/H	PROPERT EXISTING FENCELIN SHORELIN TOP OF E TOE OF S OVERHEA GUARDR/ UNDERGI PDI/RI BO MONITOR POWER F LIGHT PO WELL ASPHALT CONCRET GRAVEL RESTORAT RESTORAT SHEET PI	TY BOUNDA Y EASEME CONTOUR IE NE ANK LOPE AD ELECTR AIL ROUND CCT RING LOCA ING WELL OLE LE TE TION CONTO TION	NT INTERVAL
	\square				
	l-+	100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	MW MW Drawn	RH RH Approved	04/19/2021 12/18/2020 Date
	Drawn		Designer	RH	
	Draftin Check	- BP	Design Check	LL	
	This do	nator noument shall not be used for	Date	Apr 15, 20	021
	construct construct Origina		Scale	1" = 20' Bar is one ir	ach on
SOURCE:		Arch D		riginal size o	
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC.,	Projec	t No. 11215131	1		
190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. PROPOSED RESTORATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.	Title	IORTHEAST EX RESTORA			
GHD SERVICES INC.	Sheet	No.			
JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. <u>276</u>		C-	14		
		-			



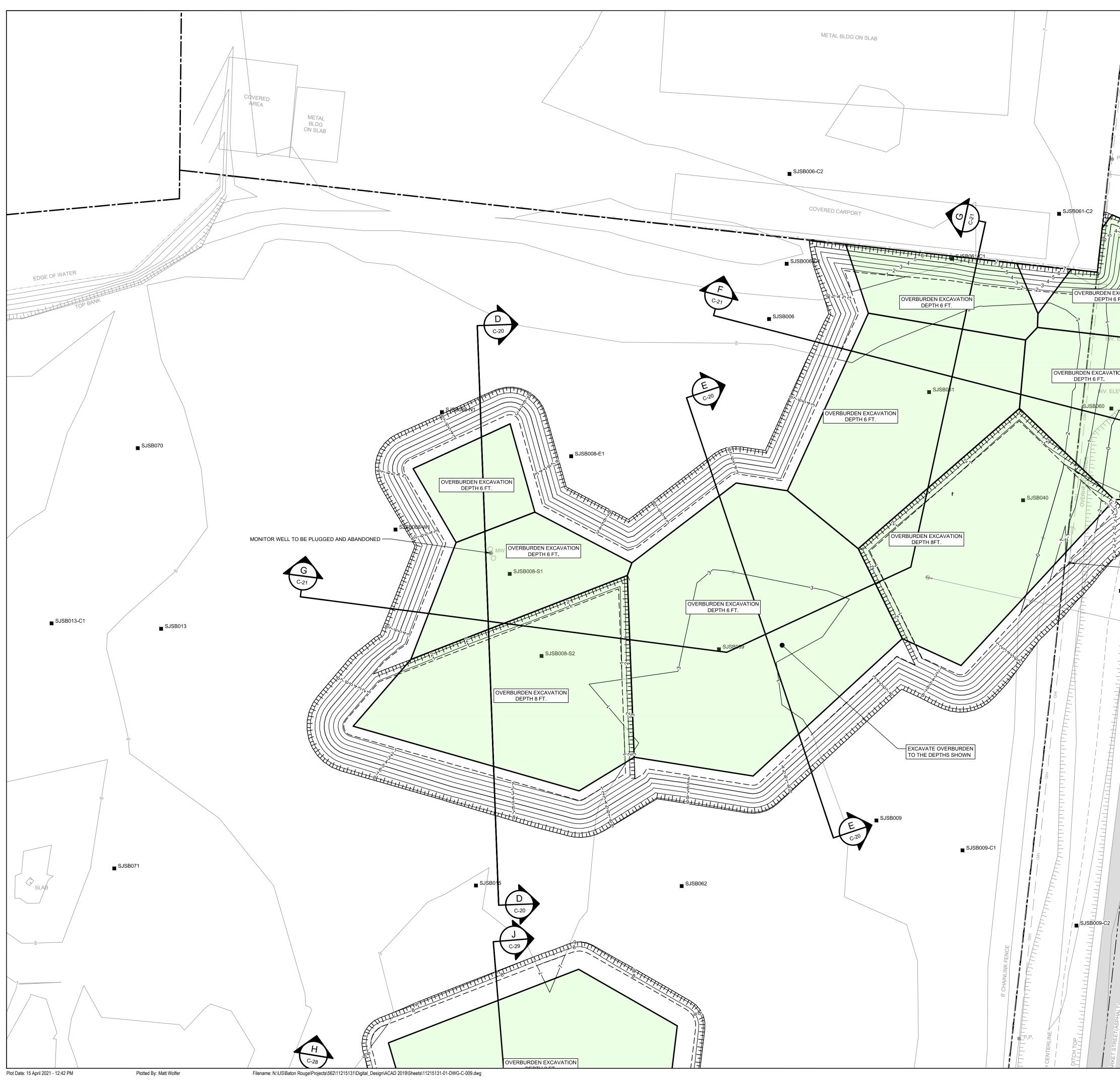
б SJSB014 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	SJSB060-C2	0 10 20 ft		GHD 5551 Corporate Boulevard Baton Rouge Louisiana U T 225 292 9007 F 225 95	SA	www.ghd.c	com
CAVATION H & FT. N EXCAVATION H & FT.	ASPHALTDRIVE		This of profes	Contraction of the second seco	2028 NSE VAL VAL VAL VAL VAL VAL VAL VAL VAL VAL	d herein, as a to be reused in	
AC-X10 N 07 0 07 0 07 00 U. YD. H 00 H 00 H 00 H 00 H 00 H 00 H 00 H 0	SJSB060-C3			620 X 	PROPERT EXISTING FENCELIN SHORELIN TOP OF B/ TOE OF SI OVERHEA GUARDRA UNDERGR PDI/RI BOI MONITORI POWER POI LIGHT POI WELL AREA OF I ASPHALT	- Y BOUNDA Y EASEMEI CONTOUR E IE ANK -OPE D ELECTRI IL OUND CC1 RING LOCA NG WELL DLE .E MPACT	NT INTERVAL ICAL
EZOMETER D DURING CONSTRUCTION			Client	620 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	EXCAVATI POLYGON LI (WITH ADDIT SAMPLING (~500 CY) PRE-CONSTI SIDEWALL/ C CONFIRMATI PRE-CONS' CONFIRMAT	ON CONTO ON TOP OF ON TOE OF MITS IONAL SIDE S GRIDS WITHIN PO RUCTION ON BORING L TRUCTION CO TION BORING	F SLOPE GLOPE AREAS) OLYGONS I LOCATIONS OVERBURDEN G LOCATIONS
			SOU 	FINAL (100%) RE THERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL	IT (AME	NDED AI	PRIL 2021)
SOUR	CE:		No. Draw Drafti Chec Proje	ng k BP	Drawn Designer Design Check	LL	Date
RIVER 190608 PARCI HARRI 20-641 NOTES 1. FC	OR THE AREAS REQUIRING SOIL REMOVA	MORRISON SURVEYING INC., FOR GHD SITUATED IN THE J. T. (AS HUTCHISON & ASSOCIATES - AL NEAR MARKET STREET AND THE	This c constru constru	dinator document shall not be used for uction unless signed and sealed for uction. nal Size Arch D	or	Apr 15, 20 1" = 20' Bar is one in iginal size o	nch on drawing
	LENDALE BOAT WORKS, INC. PROPERTY XCAVATION WILL EXTEND IMMEDIATELY LENDALE BOAT WORKS, INC. PROPERTY XCAVATION WILL NOT EXTEND INTO EITH LENDALE BOAT WORKS, INC. PROPERTY OR THE AREAS REQUIRING SOIL REMOVA F THE SOUTHERN IMPOUNDMENT, A BUL DJACENT TO THE SAN JACINTO RIVER. T OMPLETED UP TO THE LATERAL LIMIT OF ROPOSED EXCAVATION EXTENT SUBJEC ESULTS OF THE PRE-CONSTRUCTION SA	UP TO MARKET STREET AND THE LIMITS; HOWEVER, THE HER THE STREET OR ONTO THE AL ON THE SOUTHWEST PORTION KHEAD WILL BE INSTALLED HE EXCAVATION WILL BE THIS BULKHEAD. T TO CHANGE BASED ON THE	Title	RTH CENTRAL E			
6' CHJ	GHD SERVI JOB NO. <u>11215131</u> FILE N GHD TEXAS FIRM REDISTRATION NO	<u>o. 02</u> <u>276</u>	Shee		15 Shee	t 16	of 49



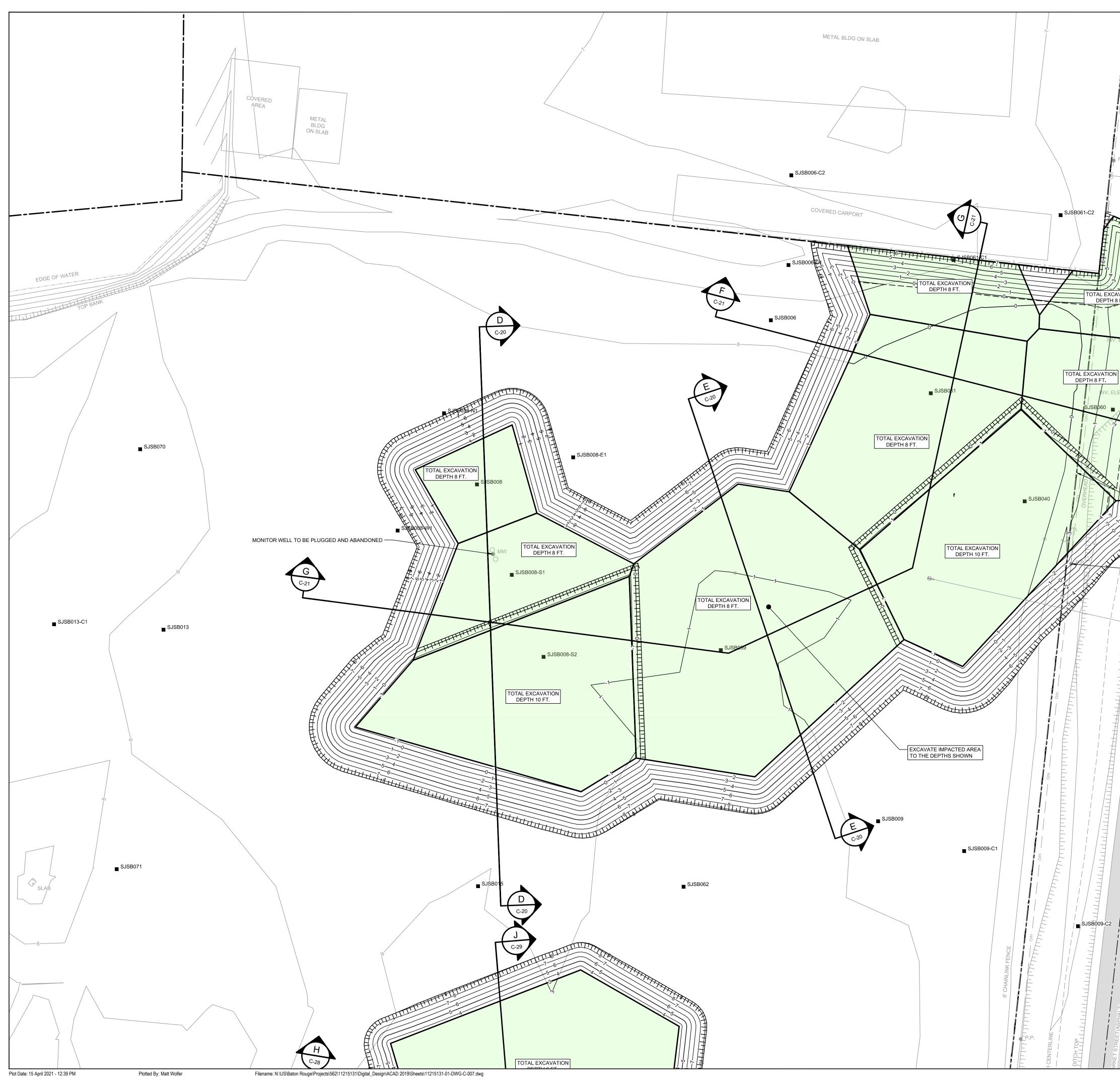
SJSB014 TO SJSB060-C2 0 10 20 ft 10 10 10 10 10 10 10 10 10 10	GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com	
	Clear of Document The document and the ideas and designs incorporated herein, as an instrument of the ideas and designs incorporated herein, as an instrument of the ideas and designs incorporated herein, as an instrument of the ideas and designs incorporated herein, as an instrument of any other project without GHD's written authorization. © 2021 GHD Image: Clear of Clear of Clear of Clear of the interview of the i	µart L
	FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 202 HARRIS COUNTY, TEXAS	21)
	5 100% EPA RE-SUBMITTAL MW RH 04/19/20	
	4 100% EPA SUBMITTAL MW RH 12/18/20 No. Issue Drawn Approved Date	
	Drawn MW Designer RH	\neg
	Drafting BP Design	\neg
SOURCE:	Check Check LL	\neg
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019	This document shall not be used for	\square
PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -	construction unless signed and sealed for Scale 1" = 20'	
20-6417 - 6417.bdry - 07-24-2020 NOTES:	Original Size Bar is one inch on original size drawing	
1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE	0	
EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE	Project No. 11215131	
GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE	Title NORTH CENTRAL EXCAVATION ARE SIDEWALL SAMPLING PLAN	: A
3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.	1	
GHD GHD SERVICES INC.	Sheet No.	
GHD GHD SERVICES INC. JOB NO. <u>11215131</u> FILE NO. <u>02</u> 976		
	C-16	



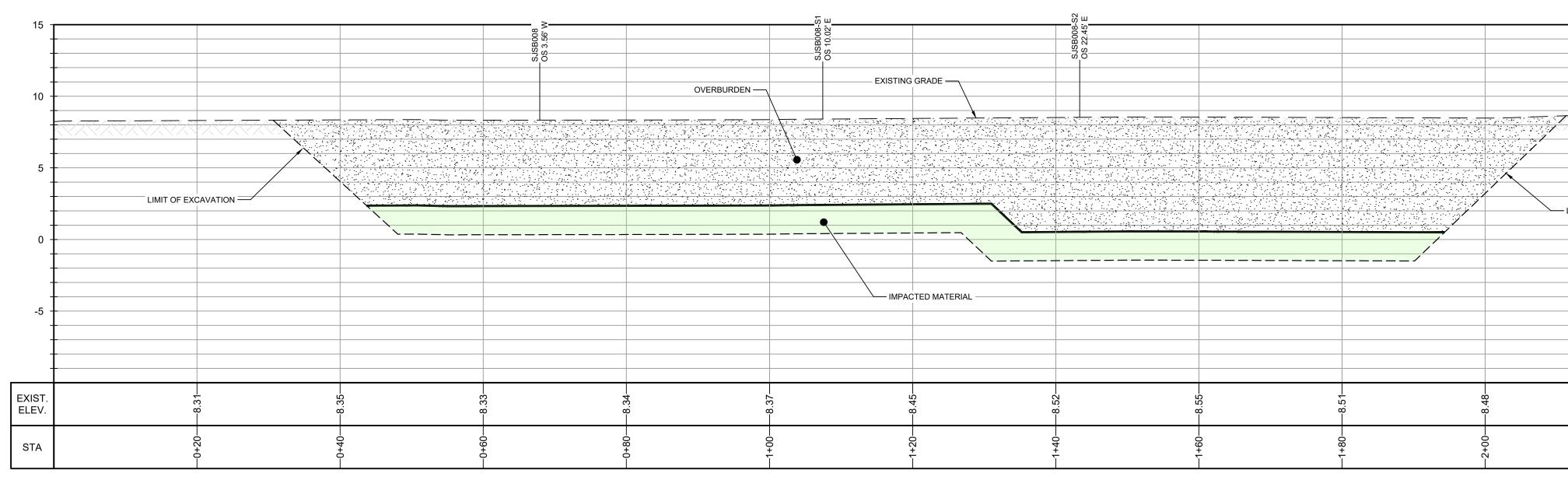
б SJSB014	SJSB060-C2	0 10 20 ft		GHD 5551 Corporate Boulevard Baton Rouge Louisiana U T 225 292 9007 F 225 95	SA	www.ghd.c	om
16" MP	SJSB060-C3		Thi	Use of Documents s document and the ideas and design fessional service, is the property of GHE any other project without GHD's written a) and shall not	be reused in	
				620 X 	PROPERTY PROPERTY EXISTING C FENCELINE SHORELINE TOP OF BA TOE OF SL OVERHEAL GUARDRAI UNDERGRC PDI/RI BOR MONITORIN POWER POLI GUARDAI WELL AREA OF IN ASPHALT CONCRETE GRAVEL EXCAVATIC EXCAVATIC	EASEMEN CONTOUR NK OPE DELECTRIC L DUND CCT ING LOCA NG WELL LE E MPACT	INTERVAL CAL V LINE TION
R BCONSTRUCTION			Clie	© ■ SAN JACIN WAST ject FINAL (100%) RE UTHERN IMPOUNDMEN	EXCAVATIC SAMPLING PRE-CONST BASE OF EX CONFIRMAT PRE-CONST BASE OF EX CONFIRMAT	IVER S CAVATION ION BORING RUCTION CAVATION ION BORING CAVATION ION BORING CAVATION ION BORING	SLOPE AX. 500 CY) IDEWALL/ GLOCATIONS GLOCATIONS
			5 4 No Dra Che	MW MW	MW MW Drawn Designer	RH RH Approved	04/19/2021 12/18/2020 Date
	SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETC RIVER WASTE PITS, HARRIS COUNTY, TEXAS, 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYEL HARRELL SURVEY, A-330 HARRIS COUNTY, TE 20-6417 - 6417.bdry - 07-24-2020 NOTES: I. FOR THE AREAS REQUIRING SOIL REMOV GLENDALE BOAT WORKS, INC. PROPERT' EXCAVATION WILL EXTEND IMMEDIATELY GLENDALE BOAT WORKS, INC. PROPERT' EXCAVATION WILL NOT EXTEND INTO EIT GLENDALE BOAT WORKS, INC. PROPERT'	MORRISON SURVEYING INC., D FOR GHD SITUATED IN THE J. T EXAS HUTCHISON & ASSOCIATES AL NEAR MARKET STREET AND Y, THE LATERAL LIMITS OF THE Y UP TO MARKET STREET AND THE Y LIMITS; HOWEVER, THE HER THE STREET OR ONTO THE	THE Pro	ject CM ordinator document shall not be used for struction unless signed and sealed for struction. ginal Size Arch D ject No. 11215131	Scale	Apr 15, 20 1" = 20' ar is one in- ginal size d	ch on
FENCE	 FOR THE AREAS REQUIRING SOIL REMOVIOF THE SOUTHERN IMPOUNDMENT, A BUIND ADJACENT TO THE SAN JACINTO RIVER. COMPLETED UP TO THE LATERAL LIMIT COMPLETED UP TO THE LATERAL LIMIT COMPLETED UP TO THE PRE-CONSTRUCTION STRUCTION STRUCTURE S	VAL ON THE SOUTHWEST PORTION LKHEAD WILL BE INSTALLED THE EXCAVATION WILL BE OF THIS BULKHEAD. CT TO CHANGE BASED ON THE AMPLING EVENT.	N	ORTH CENTRAL E BOTTOM OF SAMPLIN	EXCA NG PL	VATI	
	100% EPA RE-			C-	Sheet	18	of 49

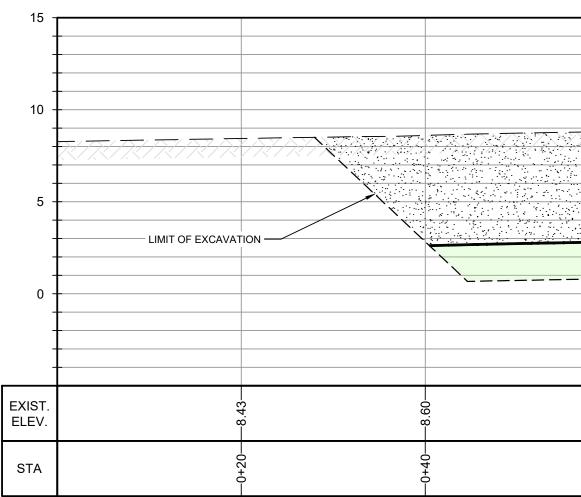


	HO INV. ELEV. 4.13'	SJSB060-C2		GHD 5551 Corporate Boulevard Baton Rouge Louisiana	USA		com
Control of control of the relation of the	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		This of profes	e of Documents document and the ideas and designsional service, is the property of GF	32028 CENSE DNAL 9/2021 Ins incorporat D and shall r	ed herein, as not be reused i	
AT THE COMPLETION OF CONSTRUCTION WORKS BOURGE FINAL CONSTRUCTION OF CONSTRUCTION WORKS BURNE DURING DURING CONSTRUCTION WORKS BURNE DURING CONSTRUCTION WORKS BURNE DURING CONSTRUCTION FOR ENANCY DE ZUBARTER FOR ENANCY DURING ENANCY FOR ENANCY FOR ENANCY FOR ENA		CULVERT TO BE REMOVED AND REPLACED TO PRE-CONSTRUCTION CONDITIONS		620 X UE SJSB002 MW P.P. L.P. WELL 620 620	LEGENI PROPER PROPER EXISTING FENCELII SHORELI TOP OF E TOE OF S OVERHEJ GUARDR UNDERG PDI/RI BO MONITOF POWER F LIGHT PO WELL AREA OF ASPHALT CONCRE GRAVEL EXCAVAT EXCAVAT	D TY BOUNDA TY EASEME CONTOUR NE SANK SLOPE AD ELECTR AIL ROUND CC' ORING LOCA RING LOCA RING WELL POLE IMPACT TE ION CONTO TON TOP O TON TOE O	NT INTERVAL ICAL IV LINE ITION UR INTERVAL E BANK SLOPE
SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC. 19988, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2.8, 3.8 PRIVATE ROAD SURVEYED FOR GHD STUATED IN THE J. T. HARRELL SURVEY, A-330 A HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC. 19988, JULY 8, 2019 TO AUGUST 2, 2019 NOTES: 1. GEN THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE SCAVATION WILL EXTEND IMEDIATELY UP TO MARKET STREET AND THE SCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL ROT EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL ROT EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL ROT EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL ROT EXTEND INTO EITHER THE STREET OR ONTO THE SCAVATION WILL ROT EXTEND INTO EITHER THE STREET PORTHON SCAVATION WILL ROT EXTEND INTO EITHER THE STREET OR ONTO THE	POWEF DURING SJSB016 TEMPORARY PIEZOM TO BE REMOVED DUF	AT THE COMPLETION OF CONSTRUCTION WORKS	Proje	SAN JACI WAST ^{در} FINAL (100%) RI ITHERN IMPOUNDME	E PIT Emedi Nt (Ame	T S Al des Ended a	SIGN PRIL 2021)
SOURCE: Image: Source in the image: Source in t							
SOURCE: TOPOGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO Drawn RYMER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 Date Apr 15, 2021 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES-20-6417 - 6417.bdry - 07-24-2020 Date Apr 15, 2021 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL DOTE SUTHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. Bar is one inch oo original size drawing 0 Title							04/19/2021 12/18/2020
SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 Date Apr 15, 2021 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES- Driginal Size Date Apr 15, 2021 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY. HIMTS; HOWEVER, THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. Bar is one inch or original size drawing of the EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION Title			H			_ ··	Date
SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 Date Apr 15, 2021 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES-20-6417 - 6417.bdry - 07-24-2020 Date Apr 15, 2021 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY. LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. Bar is one inch o original size drawin o 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION Friget No. 11215131			Drafti	ng _{BP}	Design		
NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY. This document shall not be used for construction. Scale 1" = 20' Project No. 11215131 Project No. 11215131 Title				к ,)21
 HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION 		RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019	This of constru	document shall not be used for uction unless signed and sealed for		1" = 20'	
1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION		HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020		nal Size			Irawing
EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. Title 2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION		GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE	Proje		0		1"
ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.		 EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	NO	OVERBURDEN	NEXC		
GHD SERVICES INC.	0	GHD SERVICES INC.	Shee	t No.			
JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. <u>276</u> C-18	те (ASPH,	076		C.	-18		
100% EPA RE-SUBMITTAL Sheet 19 of		100% EPA RE-SUBMITTAI		v		at 10	of 49

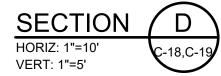


В В В В В В В В В В В В В В		SJSB060-C2		20 ft		GHD 5551 Corporate Boulevard Baton Rouge Louisiana L T 225 292 9007 F 225 95	ISA		om
REC COL		RIAL BENEATH ROAD STRUCTION CONDITI CTION WORKS	SIDE DITCH IONS AT THE			620 X UE O/H O/H O/H O/H O/H O/H O/H O/H	2028 ACCOLORING ACCOLORINA ACCOLORINA ACCOLORINA ACCOLORINA ACCOLORINA ACCOLORINA	d herein, as a ot be reused in © 2021 GHD Y BOUNDA Y EASEMEI CONTOUR E IE ANK LOPE D ELECTRI IIL COUND CCT RING LOCA NG WELL DLE LE MPACT E	UR INTERVAL
					Client Proje SOU	SAN JACII WAST	E PIT MEDIA	S Al des Nded Af	IGN PRIL 2021)
					7	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021
					6 No.	100% EPA SUBMITTAL	MW Drawn	RH Approved	12/18/2020 Date
					Draw		Designer		- 310
					Drafti	^{ng} BP	Design		
	SOURCE:				Check Project	<	Check Date	Apr 15, 20	121
	TOPOGRAPHIC, HYDRO RIVER WASTE PITS, HAF 190608, JULY 8, 2019 TO	RRIS COUNTY, TEXAS,			This c	linator ocument shall not be used for iction unless signed and sealed for	Scale	1" = 20'	
j	PARCELS 1, 2 & 3 & PRI\ HARRELL SURVEY, A-33 20-6417 - 6417.bdry - 07-2	0 HARRIS COUNTY, TE			constru			Bar is one in	ch on
	NOTES:					Arch D		iginal size d	
ו	EXCAVATION WILL GLENDALE BOAT W	ORKS, INC. PROPERT EXTEND IMMEDIATELY ORKS, INC. PROPERT	Ύ, THE LATERAL LIMIT Υ UP TO MARKET STRE Ύ LIMITS; HOWEVER, T	S OF THE ET AND THE HE	Proje	ot No. 11215131	<u> </u>		
X CHAINLINK FENCE	 GLENDALE BOAT W 2. FOR THE AREAS RE OF THE SOUTHERN ADJACENT TO THE COMPLETED UP TO 3. PROPOSED EXCAVA RESULTS OF THE P 	ORKS, INC. PROPERT EQUIRING SOIL REMO I IMPOUNDMENT, A BL SAN JACINTO RIVER. I THE LATERAL LIMIT (VAL ON THE SOUTHWE JLKHEAD WILL BE INST THE EXCAVATION WILI DF THIS BULKHEAD. CCT TO CHANGE BASEL SAMPLING EVENT.	ST PORTION ALLED - BE	Title NO	RTH CENTRAL I FINAL EXCA			
6. 6.	GHD				Shee	No.			
X		1215131 FILE	_{NO.} 02 276			C-	19		
	100% E		-SUBMI	TTAL		•	Shee	t 20	of 49
					-		5.100		

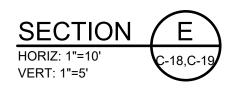




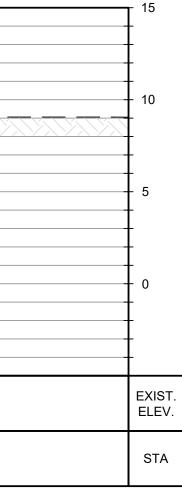
Filename: N:\US\Baton Rouge\Projects\562\11215131\Digital_Design\ACAD 2019\Sheets\11215131-01-DWG-C-010.dwg

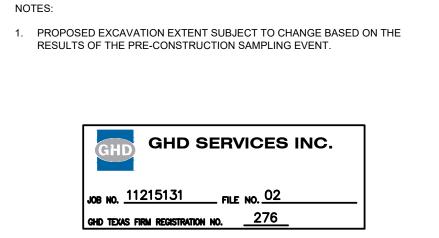


			SJSB03 OS 21.(
			SSIS			
	OVERBURDE					
		<u>XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</u>	<u> XXXXXXXXXXX</u>	<u>XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</u>		
				<u> </u>		
···						
					LIMIT OF EXCAVATI	ON
			•	/		
				 /		
					 -	
à						5
Ĩ						Ĩ
Ĺ						
191) <u>8</u> +		f c		- Q
ċ		Э 	-	- •	÷ 	<u>-</u>
		·				1

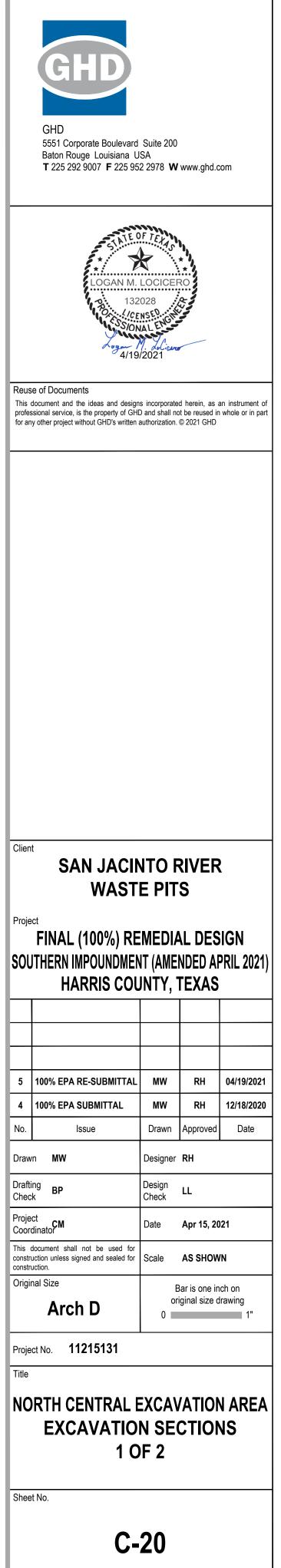


			4 -
			- 15 - -
			- - - 10 -
			- - - 5
LIMIT OF EXCAV	ATION		-
			- 0 - -
			- 5 -
			-
0 2 2		0000	EXIS ELE [\]
	07+7		STA

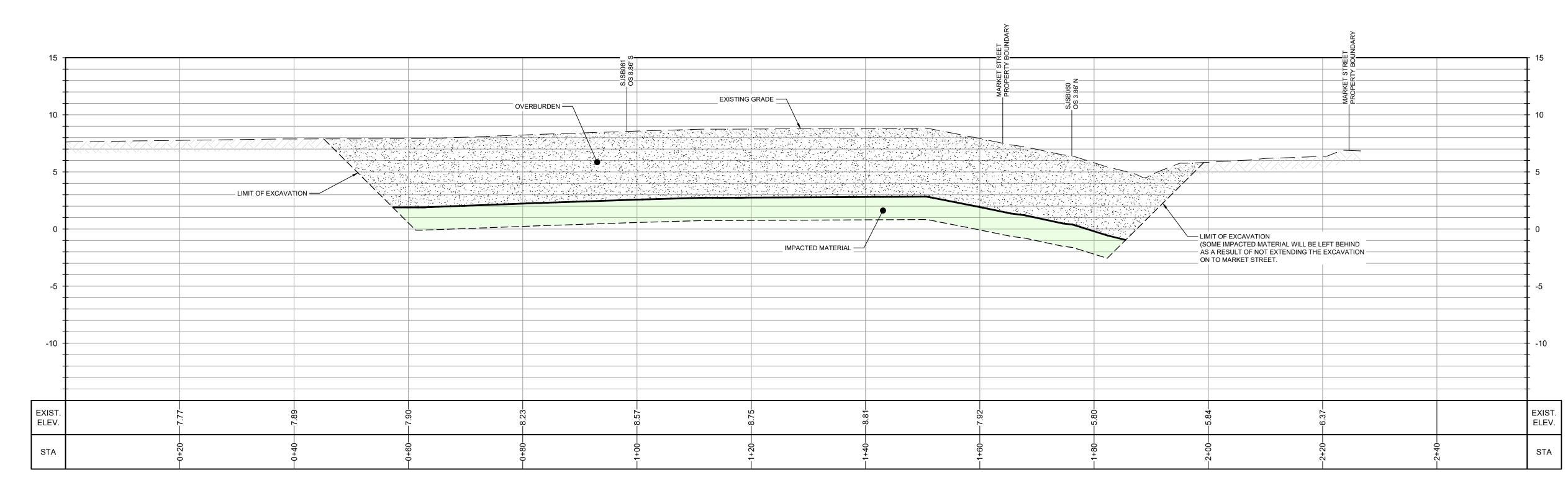


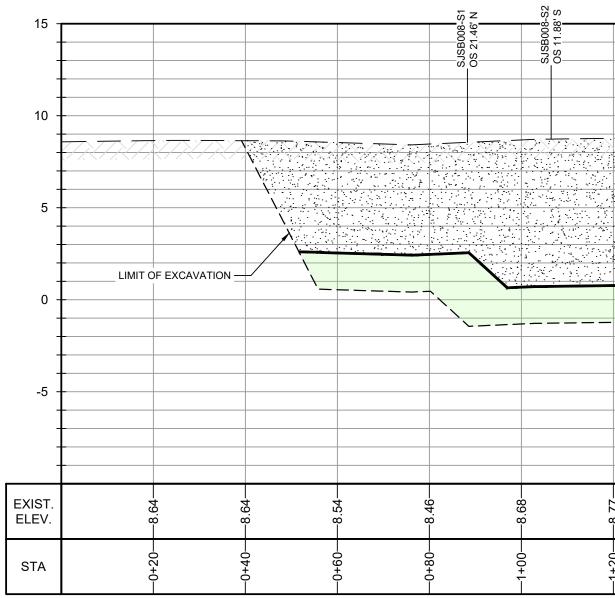


100% EPA RE-SUBMITTAL



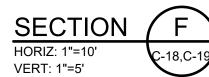
Sheet **21** of **49**



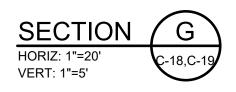


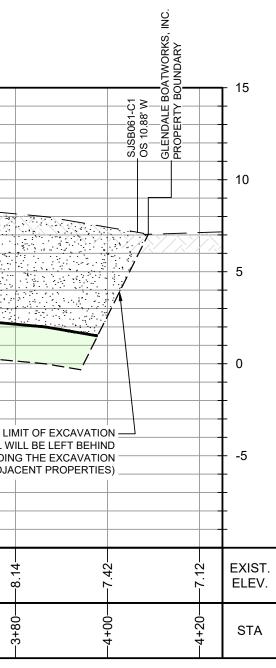
Filename: N:\US\Baton Rouge\Projects\562\11215131\Digital_Design\ACAD 2019\Sheets\11215131-01-DWG-C-010.dwg

Plotted By: Matt Wolfer



				N 							>		
				SJSB03(OS 0.87		\					SJSB061 OS 8.28		-
					EXISTING GRADE								_
													-
4		<u>ZAZA</u>										TAR T	K
						۲							
		\square											
	•									 \			
_						• <u> </u> •					IATERIAL		_
												LII CTED MATERIAL W OF NOT EXTENDIN ON TO ADJA	/ILL IG [·]
0 77				•								2.0 C.2.0	8.14
													Ĩ
1-20			09+1		+ -		00+7	-08+2	-00+5	+ + 1 +			

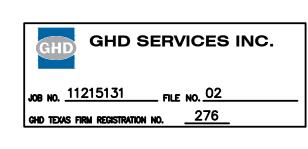




NOTES:

	GHD 5551 Corporate Boulevard Baton Rouge Louisiana U	SA		
	T 225 292 9007 F 225 95		www.gna.c	.com
This profes	e of Documents document and the ideas and design ssional service, is the property of GHI by other project without GHD's written a	D and shall no	ot be reused ir	
Clien	SAN JACIN WAST	e pit	S	
SOL	JTHERN IMPOUNDMEN HARRIS COL	IT (AME	NDED AI	PRIL 2021)
5	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021
4	100% EPA SUBMITTAL	MW	RH	12/18/2020
No.	lssue	Drawn	Approved	Date
Draw	n MW	Designer	RH	
Draft Chec		Design Check	LL	
Proje Coor	ect CM dinator	Date	Apr 15, 20)21
This constr	document shall not be used for uction unless signed and sealed for uction.	Scale	AS SHOW	/N
	nal Size Arch D		Bar is one ir iginal size c	
Proje	ect No. 11215131	<u> </u>		
Title	ORTH CENTRAL E EXCAVATIO 2 O			
Shee	et No.			
	C-	21		

1. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.



100% EPA RE-SUBMITTAL

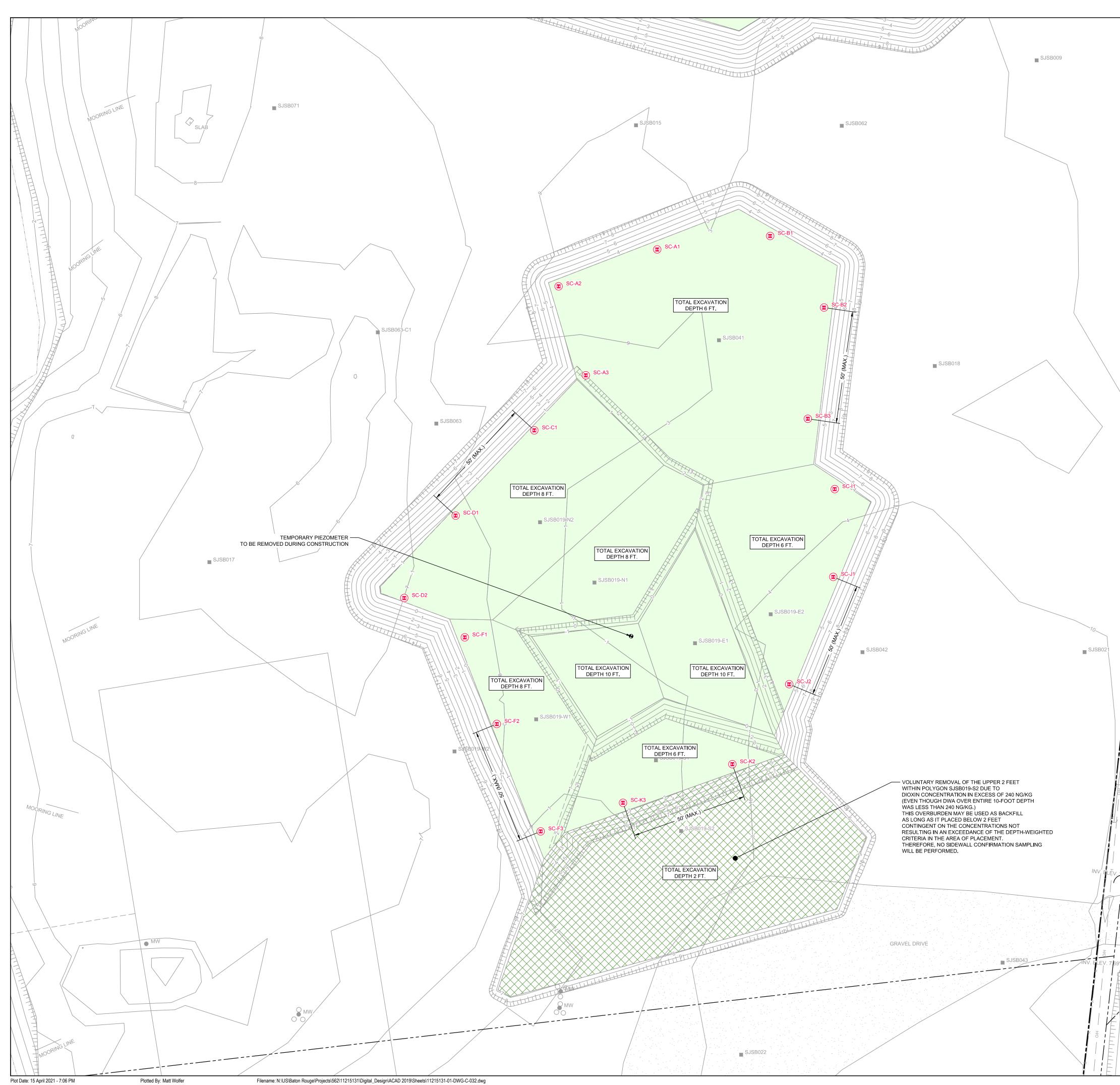
Sheet **22** of **49**



SJSB014 SJSB060-C2 0 10 20 ft 0 10 20 ft P.P.	GHD S551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com
NV. ELEV. 4.24 HUG ELEV. 4.32' A A A A A A A A A A A A A	Vertication of the second of
	ASPHALT CONCRETE GRAVEL RESTORATION CONTOUR INTERVAL RESTORATION LIMIT SHEET PILE WALL ALIGNMENT Client Client Client Client SAN JACINTO RIVER WASTE PITS Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS
SURCE:	5 100% EPA RE-SUBMITTAL MW RH 04/19/2021 4 100% EPA SUBMITTAL MW RH 12/18/2020 No. Issue Drawn Approved Date Drawn MW Designer RH Drafting BP Design LL Project CM Date Apr 15, 2021 This document shall not be used for construction. Scale 1" = 20" Original Size Bar is one inch on original size drawing 0 0 1" 1"
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES- 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. PROPOSED RESTORATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.	Project No. 11215131 Title NORTH CENTRAL EXCAVATION AREA RESTORATION PLAN Sheet No. C-22 Sheet 23 of 49



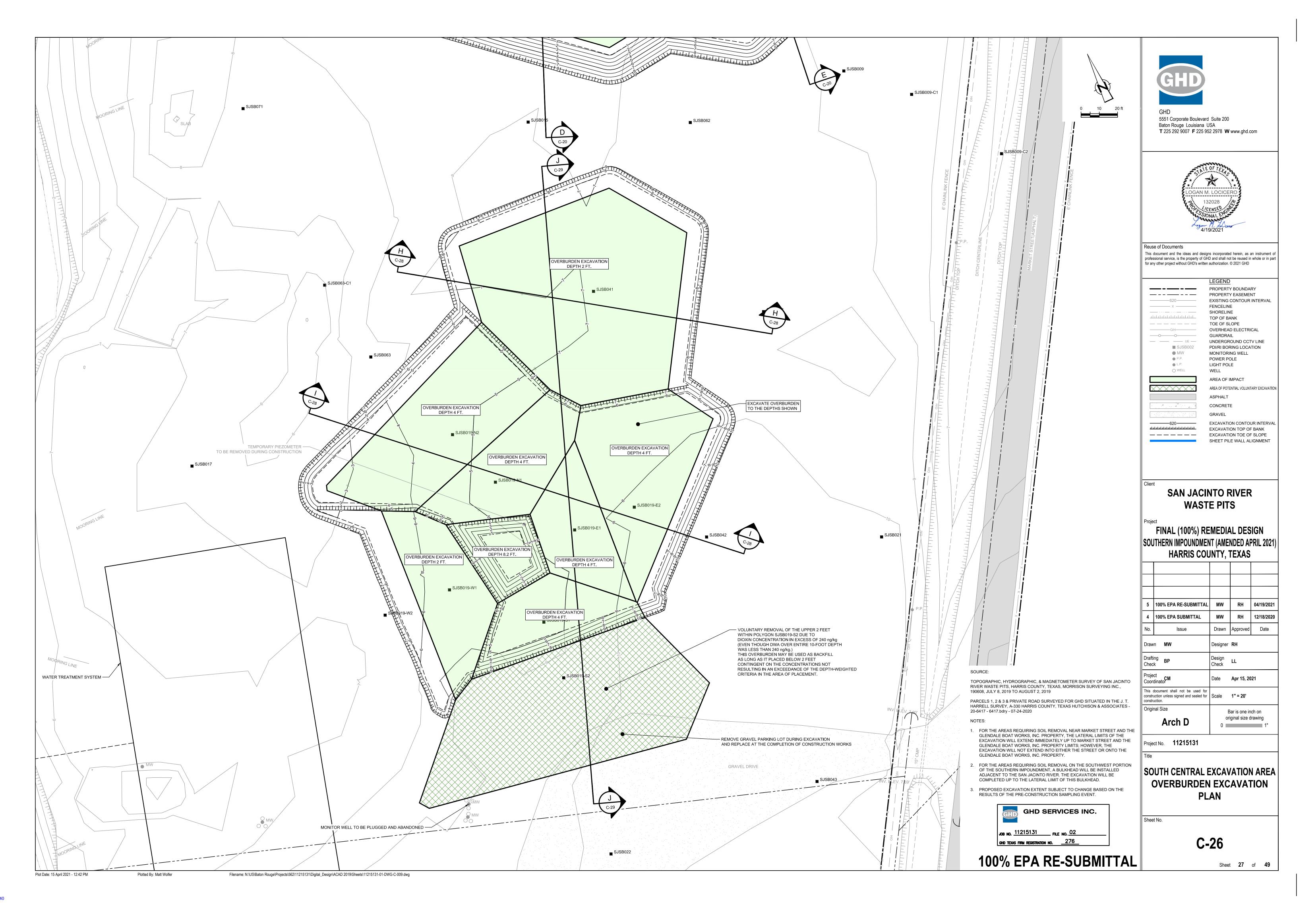
SJSB009-C1	GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com
6' CHAINLINK FENCE	LOGAN M. LOCICERO 132028 CENSE SJONAL EVO 4/19/2021
	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD LEGEND PROPERTY BOUNDARY PROPERTY BOUNDARY PROPERTY EASEMENT 620 EXISTING CONTOUR INTERVAL FENCELINE SHORELINE Initialitititititititititititititititititi
	 L.P. WELL AREA OF IMPACT AREA OF POTENTIAL VOLUNTARY EXCAVATION ASPHALT GRAVEL 620 EXCAVATION CONTOUR INTERVAL EXCAVATION TOP OF BANK EXCAVATION TOP OF BANK EXCAVATION TOE OF SLOPE POLYGON LIMITS (WITH ADDITIONAL SIDE SLOPE AREAS) SAMPLING GRIDS (~500 CY) WITHIN POLYGONS PRE-CONSTRUCTION SIDEWALL/ OVERBURDEN CONFIRMATION BORING LOCATIONS PRE-CONSTRUCTION OVERBURDEN
	Client Client SAN JACINTO RIVER WASTE PITS Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS
	Image: system in the
SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES:	Drawn MW Designer RH Drafting Check BP Design Check LL Project Coordinator Date Apr 15, 2021 This document shall not be used for construction unless signed and sealed for construction. Scale 1" = 20' Original Size Bar is one inch on original size drawing
 NOTES: FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	Arch D 0 1" Project No. 11215131 Title SOUTH CENTRAL EXCAVATION AREA OVERBURDEN SAMPLING PLAN
GHD SERVICES INC. JOB NO. 11215131 FILE NO. 02 GHD TEXAS FIRM REGISTRATION NO. 276 100% EPAR RE-SUBMITTAL	Sheet No. C-23 Sheet 24 of 49

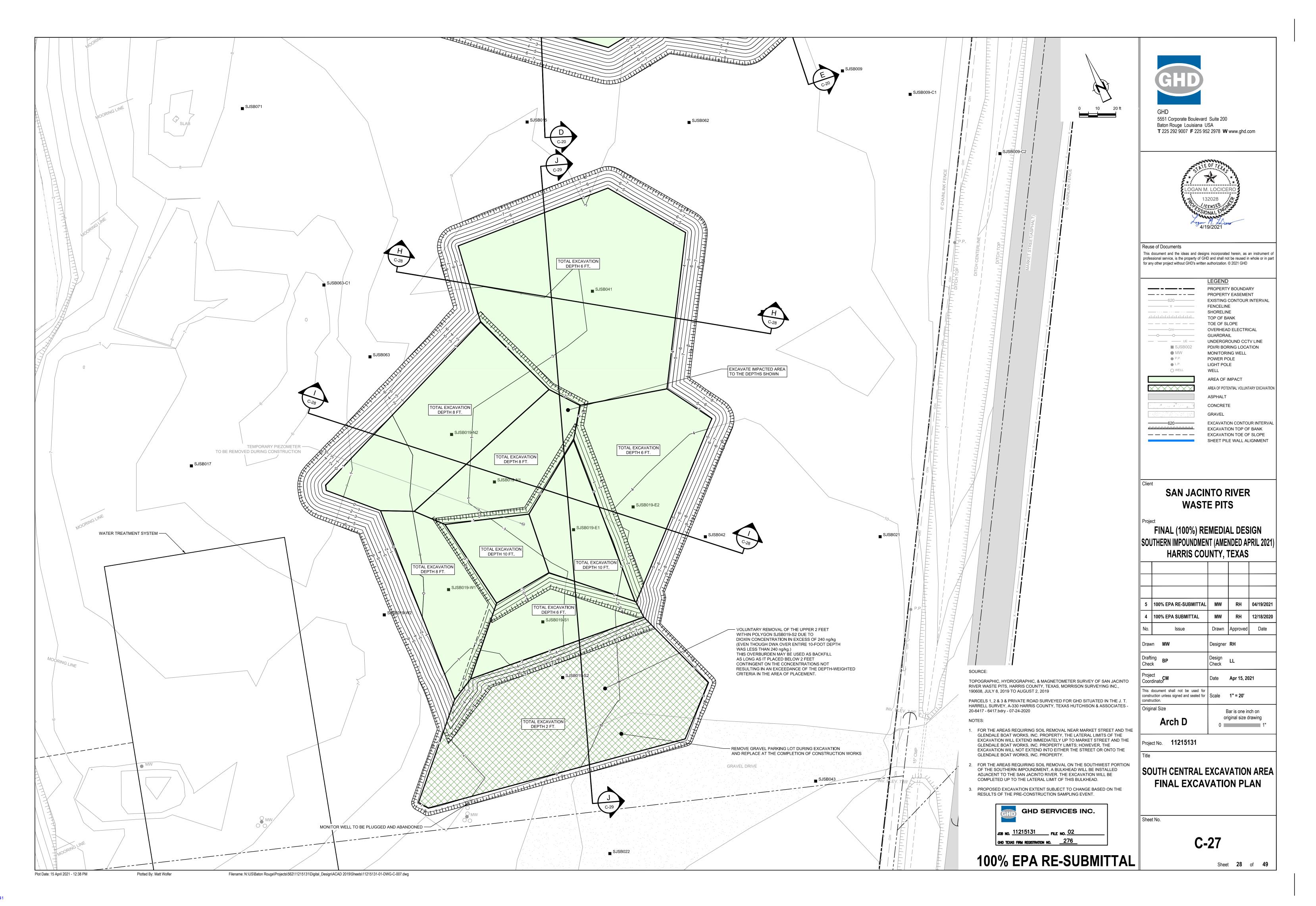


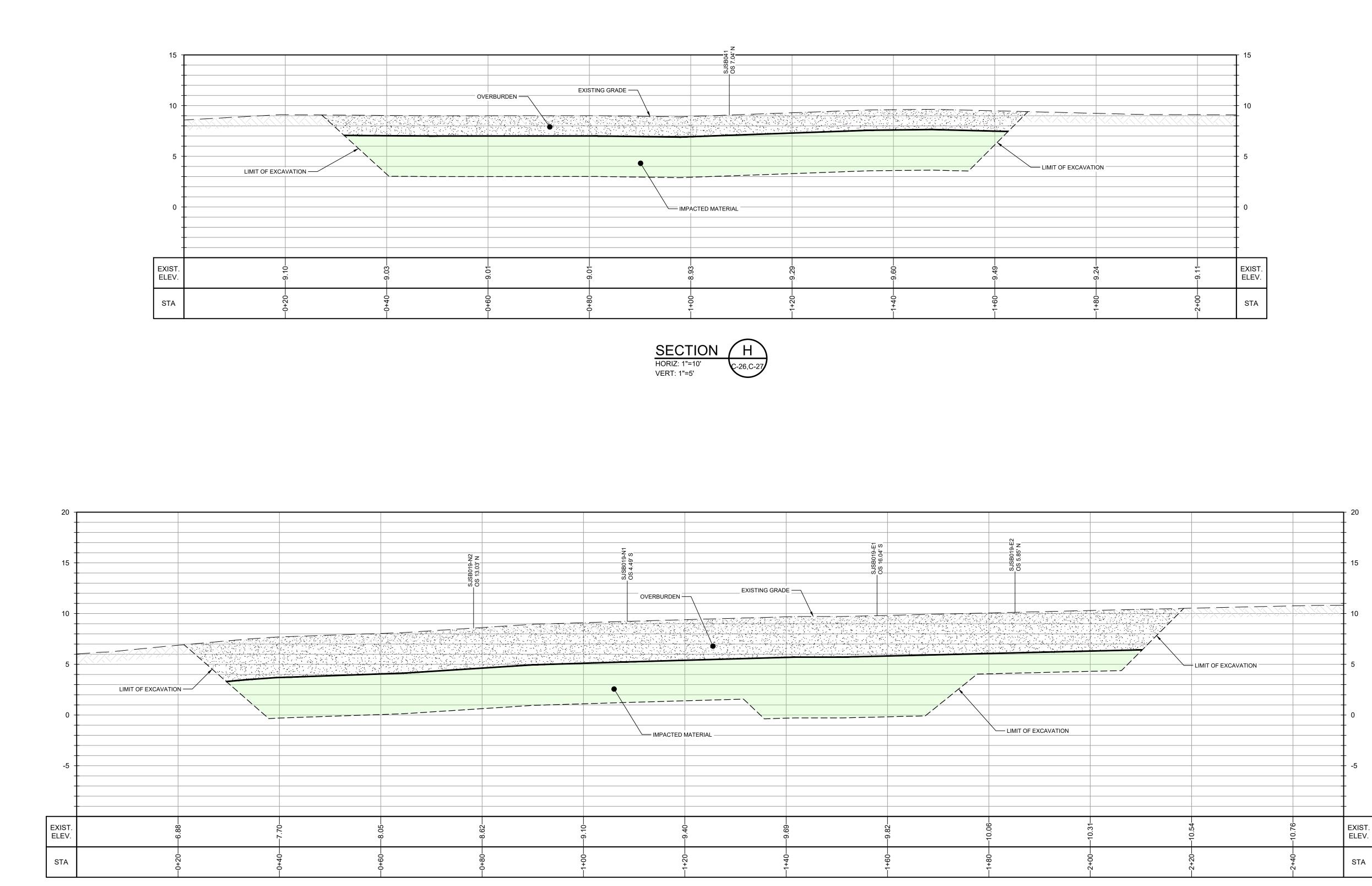
SJSB009-C1	GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com
6'CHAINLINK FENCE	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD
МА МА МА МА МА МА МА МА МА МА	LEGEND PROPERTY BOUNDARY PROPERTY EASEMENT 620 EXISTING CONTOUR INTERVAL X FENCELINE SHORELINE Juituutuutuutuu O/H OVERHEAD ELECTRICAL GUARDRAIL UNDERGROUND CCTV LINE SJSB002 PDI/RI BORING LOCATION MW MONITORING WELL P.P. POWER POLE LIP. LIGHT POLE WELL
	AREA OF IMPACT AREA OF POTENTIAL VOLUNTARY EXCAVATION ASPHALT CONCRETE 620 620 620 620 EXCAVATION CONTOUR INTERVAL 620 EXCAVATION TOP OF BANK EXCAVATION TOP OF SLOPE PRE-CONSTRUCTION SIDEWALL CONFIRMATION BORING LOCATIONS
	Client SAN JACINTO RIVER WASTE PITS Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS
	Image: Second system Image: Second system 5 100% EPA RE-SUBMITTAL MW RH 04/19/2021 4 100% EPA SUBMITTAL MW RH 12/18/2020 No. Issue Drawn Approved Date Drawn MW Designer RH Drafting BP Design LL
SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE	Check Check Check Project Coordinator Date Apr 15, 2021 This document shall not be used for construction unless signed and sealed for construction. Scale 1" = 20' Original Size Bar is one inch on original size drawing 0 1"
 EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	Project No. 11215131 Title SOUTH CENTRAL EXCAVATION AREA SIDEWALL SAMPLING PLAN
JOB NO. 11215131 FILE NO. 02 GHD TEXAS FIRM REDISTRATION NO. 276 100% EPA RE-SUBMITTAL	Sheet No. C-24 Sheet 25 of 49



TOE OF SLOPE OVERHEAD ELECTRI GUARDRAIL UNDERGROUND CCT SJSB002 MW MW MONITORING WELL P.P. LIGHT POLE WELL WELL AREA OF IMPACT AREA OF POTENTIAL VOLUNT	ITARY EXCAVATION
ASPHALT CONCRETE GRAVEL CONCRETE GRAVEL EXCAVATION CONTOU EXCAVATION CONTOU EXCAVATION TOP OF EXCAVATION TOP OF EXCAVA	PF BANK PF SLOPE MAX. 500 CY) SIDEWALL/ NG LOCATIONS NG LOCATIONS SIGN PRIL 2021)
P.P. HARRIS COUNTY, TEXAS HARRIS COUNTY, TE	04/19/2021 12/18/2020 Date
PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES- 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY. 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY.	
 Properties and properties of the second properties of the southwest portion of the southern impoundment, a bulkhead will be installed abacent to the san jacent or the san jacent o	

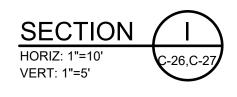






008242

			<u> </u>		SJSB019-E2 0S 5.85' N	
			SJSB019-E1 0S 16.04' S			
			6.01		5.8 2.8	
	4.40 4.40		St S		Srsc	
	SJSB019-N1 OS 4.49' S		တ်_O			
	, , , , , , , , , , , , , , , , , , ,					
		EXISTING GRAD	E			
	OVERBURDEN -	\neg				
						5 77777 7777777
		Z <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u>		~ 1				
						<i></i> /
						/
						/
	•					
		==== (
					LIMIT OF EXCAVATION	
		MATERIAL				
				882-		ς Γ
				-0.82 2007		0.31
				,		
	Ĺ					<u> </u>
						-00+z
· · · · · · · · · · · · · · · · · · ·		-	<u>·</u> ,	, 	(N I
	1		1			<u> </u>



	132 70			
	4/19/	2021		
This	se of Documents document and the ideas and design ssional service, is the property of GHI	s incorporate	ed herein, as a	an instrument of
	ny other project without GHD's written			
Clier	ht.			
21101	SAN JACI	NTO F	RIVER	
	WAST	E PIT	S	
Proj€				
50l	FINAL (100%) RE	NT (AME	NDED AF	PRIL 2021)
501	• •	NT (AME	NDED AF	PRIL 2021)
501	JTHERN IMPOUNDMEN	NT (AME	NDED AF	PRIL 2021)
5	JTHERN IMPOUNDMEN	NT (AME	NDED AF	PRIL 2021)
	JTHERN IMPOUNDMEN HARRIS COU	IT (AME JNTY, '	NDED AF	PRIL 2021)
5 4 No.	JTHERN IMPOUNDMEN HARRIS COL 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	MW Drawn	NDED AF TEXAS RH RH Approved	PRIL 2021) 04/19/2021
5 4 No.	JTHERN IMPOUNDMEN HARRIS COL 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue	IT (AME JNTY, ' MW	NDED AF TEXAS RH RH Approved RH	PRIL 2021) 04/19/2021 12/18/2020
5 4 No. Draft Cheo	JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL Issue vn MW	IT (AME JNTY, JNTY, MW MW Drawn Designer Design Check	NDED AF TEXAS RH Approved RH	PRIL 2021) 04/19/2021 12/18/2020 Date
5 4 No. Draw Draft Chec Coor	JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue vn MW ing BP ect CM document shall not be used for uction unless signed and sealed for	IT (AME JNTY, ' MW MW Drawn Designer Design	NDED AF TEXAS RH RH Approved RH	PRIL 2021) 04/19/2021 12/18/2020 Date
5 4 No. Draft Chec Proje Coor	JTHERN IMPOUNDMEN HARRIS COU IMPOUNDMEN HARRIS COU IMPOUNDMEN INGEPA RE-SUBMITTAL ISSUE INGEPA SUBMITTAL ISSUE INGEPA BP Contemportant State of the second o	IT (AME JNTY, ' MW MW Drawn Designer Design Check Date Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20	PRIL 2021) 04/19/2021 12/18/2020 Date 021
5 4 No. Draft Chec Proje Coor	JTHERN IMPOUNDMEN HARRIS COU 100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL 100% EPA SUBMITTAL Issue vn MW ing BP ck CM document shall not be used for ruction unless signed and sealed for ruction.	IT (AME JNTY, ' MW MW Drawn Designer Design Check Date Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in	PRIL 2021) 04/19/2021 12/18/2020 Date 021
5 4 No. Draft Chec Proje Coor This constr Drigi	JTHERN IMPOUNDMEN HARRIS COU IMPOUNDMEN HARRIS COU IMPOUNDMEN INGEPA RE-SUBMITTAL ISSUE INGEPA SUBMITTAL ISSUE INGEPA BP Contemportant State of the second o	IT (AME JNTY, ' MW MW Drawn Designer Design Check Date Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in	PRIL 2021) 04/19/2021 12/18/2020 Date Date
5 4 No. Draft Chec Proje Coor This constr Drigi	JTHERN IMPOUNDMEN HARRIS COU IMPOUNDMEN HARRIS COU Impound International	IT (AME JNTY, ' MW MW Drawn Designer Design Check Date Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in iginal size d	PRIL 2021) 04/19/2021 12/18/2020 Date Date 021 /N Ich on Irawing 1"
5 4 No. Draft Chec Proje Coor This constr Drigi	ARRIS COU HARRIS COU INTERN IMPOUNDMEN HARRIS COU INTERNITAL INTERNITAL INTERNITAL INTERNITAL INTERNITAL INTERNITAL ISSUE INI	IT (AME JNTY, ' MW MW Drawn Designer Design Check Date Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in riginal size of ATION	PRIL 2021) O4/19/2021 12/18/2020 Date Date Date NAREA
5 4 No. Draft Chec Proje Coor This constr Drigi	JTHERN IMPOUNDMEN HARRIS COU INTERNIN IMPOUNDMEN HARRIS COU INTERNING INTERN	IT (AME JNTY, ' MW MW Drawn Designer Design Check Date Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in riginal size of ATION	PRIL 2021) O4/19/2021 12/18/2020 Date Date Date NAREA
5 4 No. Draft Chec Proje Coor This constr Drigi	JTHERN IMPOUNDMEN HARRIS COL IMPOUNDMEN HARRIS COL IMPOUNDMEN HARRIS COL Impound International Impound	IT (AME JNTY, JNTY, MW MW Drawn Designer Design Check Date Scale Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in riginal size of ATION	PRIL 2021) O4/19/2021 12/18/2020 Date Date Date NAREA
5 4 No. Draft Chec Proje Coor This constr Drigi	JTHERN IMPOUNDMEN HARRIS COU INTERNINPOUNDMEN HARRIS COU INTERNINCTIONICULATIONIC	IT (AME JNTY, JNTY, MW MW Drawn Designer Design Check Date Scale Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in riginal size of ATION	PRIL 2021) O4/19/2021 12/18/2020 Date Date Date NAREA
5 4 No. Draft Chec Proje Coor his constr Drigi	JTHERN IMPOUNDMEN HARRIS COL IMPOUNDMEN HARRIS COL INDIVISIONAL INDIVISIA INDIVISIA INDIVISIA INDIVISIA INDIVISIA INDIVISI	IT (AME JNTY, JNTY, MW MW Drawn Designer Design Check Date Scale Scale	NDED AF TEXAS RH Approved RH LL Apr 15, 20 AS SHOW Bar is one in riginal size of ATION	PRIL 2021) O4/19/2021 12/18/2020 Date Date Date NAREA

GHI

5551 Corporate Boulevard Suite 200

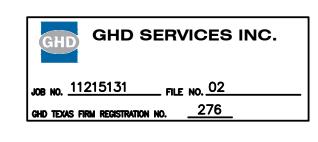
Baton Rouge Louisiana USA **T** 225 292 9007 **F** 225 952 2978 **W** www.ghd.com

×

GHD

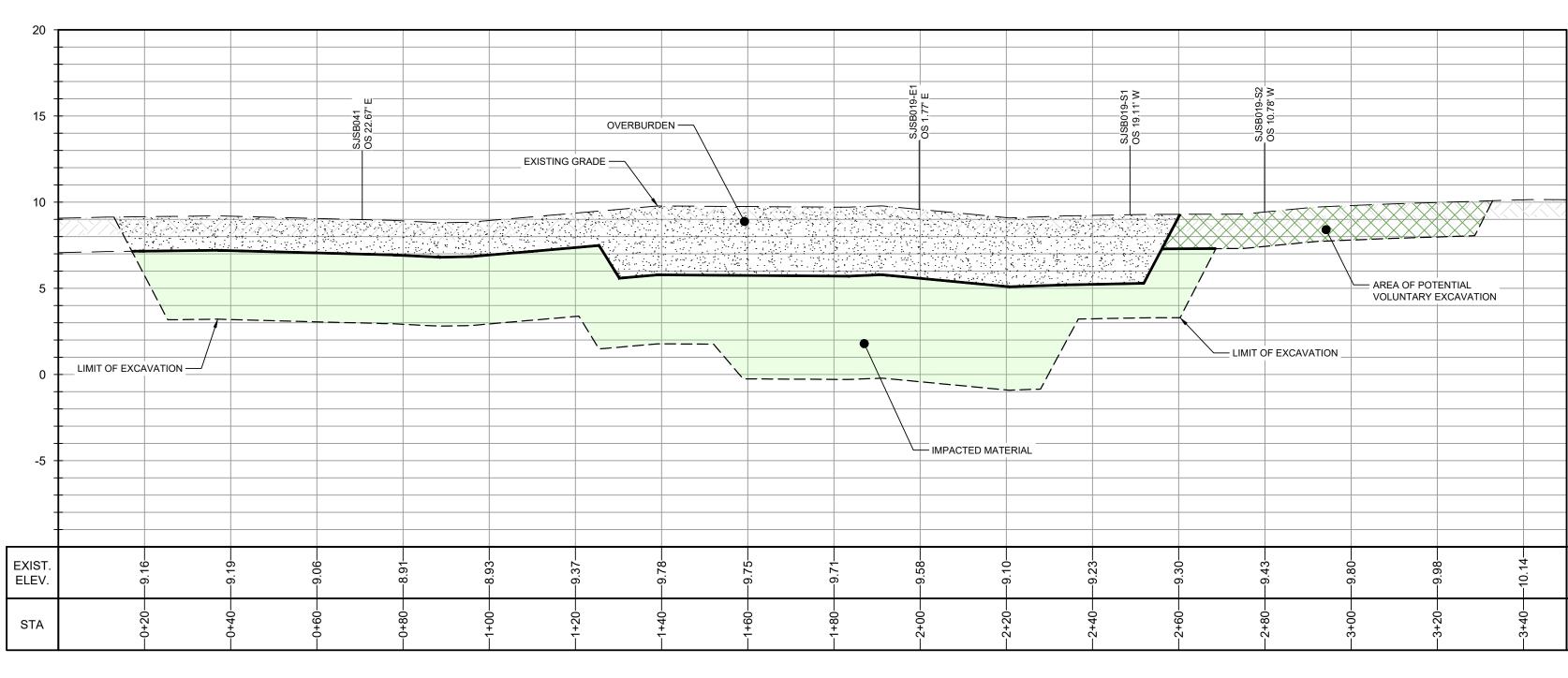
1. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

NOTES:

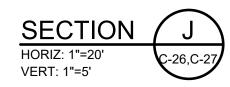


100% EPA RE-SUBMITTAL

Sheet **29** of **49**



008243



EXIST. ELEV. STA

> SAN JACINTO RIVER WASTE PITS

GHD

Reuse of Documents

5551 Corporate Boulevard Suite 200

T 225 292 9007 F 225 952 2978 W www.ghd.com

X

OGAN M. LOCICER

132028

4/19/2021

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD

Baton Rouge Louisiana USA

FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS

5	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021	
4	100% EPA SUBMITTAL	MW	RH	12/18/2020	
No.	lssue	Drawn	Approved	Date	
Draw	Drawn MW		RH		
	Drafting Check BP		LL		
Proje Coor	ct CM dinator	Date	Apr 15, 2021		
constr	document shall not be used for uction unless signed and sealed for uction.	Scale	AS SHOWN		
Origi	nal Size Arch D		ar is one in ginal size d		

Project No. **11215131**

Title

Sheet No.

Client

SOUTH CENTRAL EXCAVATION AREA EXCAVATION SECTIONS 2 OF 2

GHD SERVICES INC. JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. <u>276</u>

1. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

NOTES:

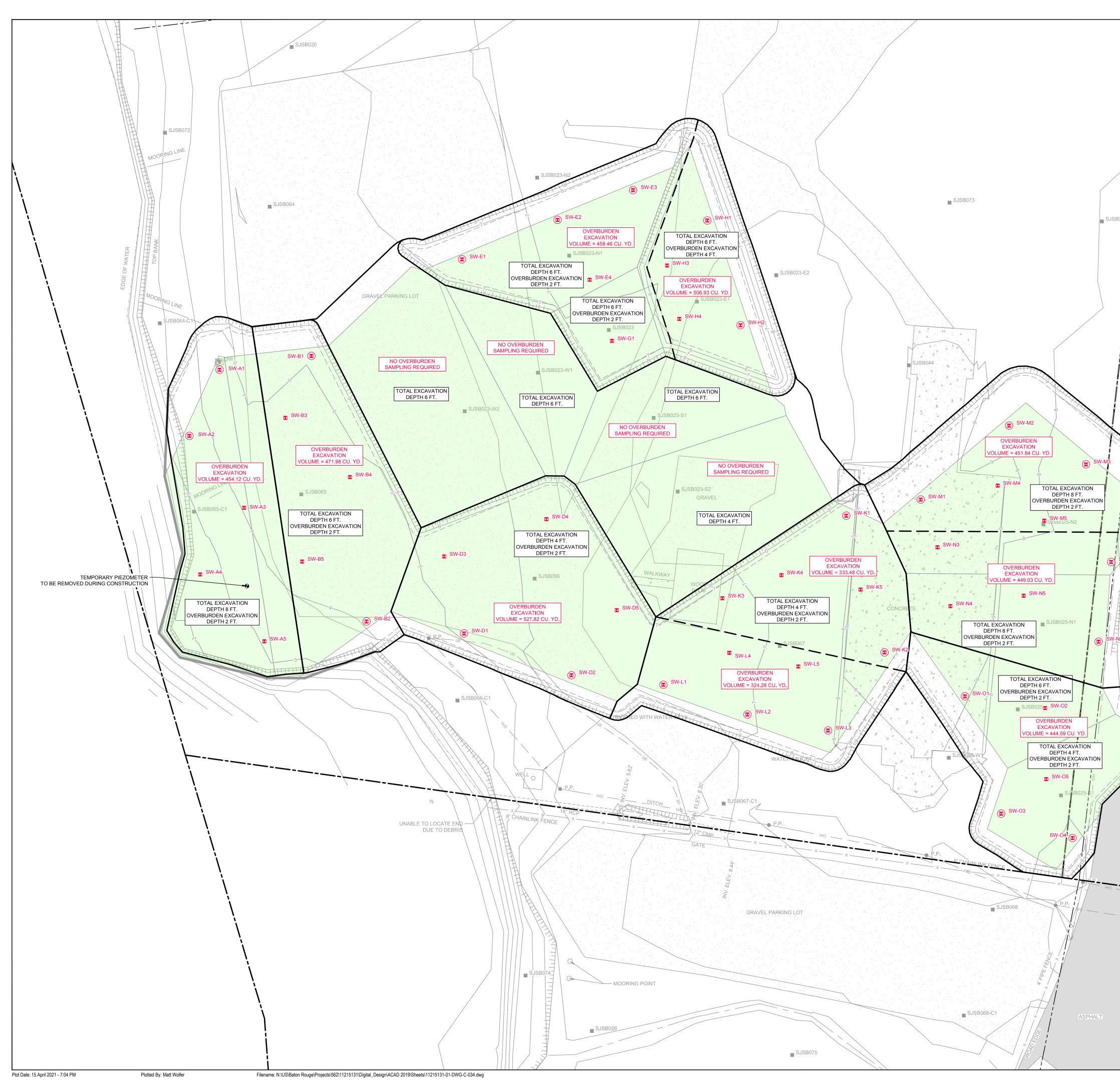
100% EPA RE-SUBMITTAL

C-29

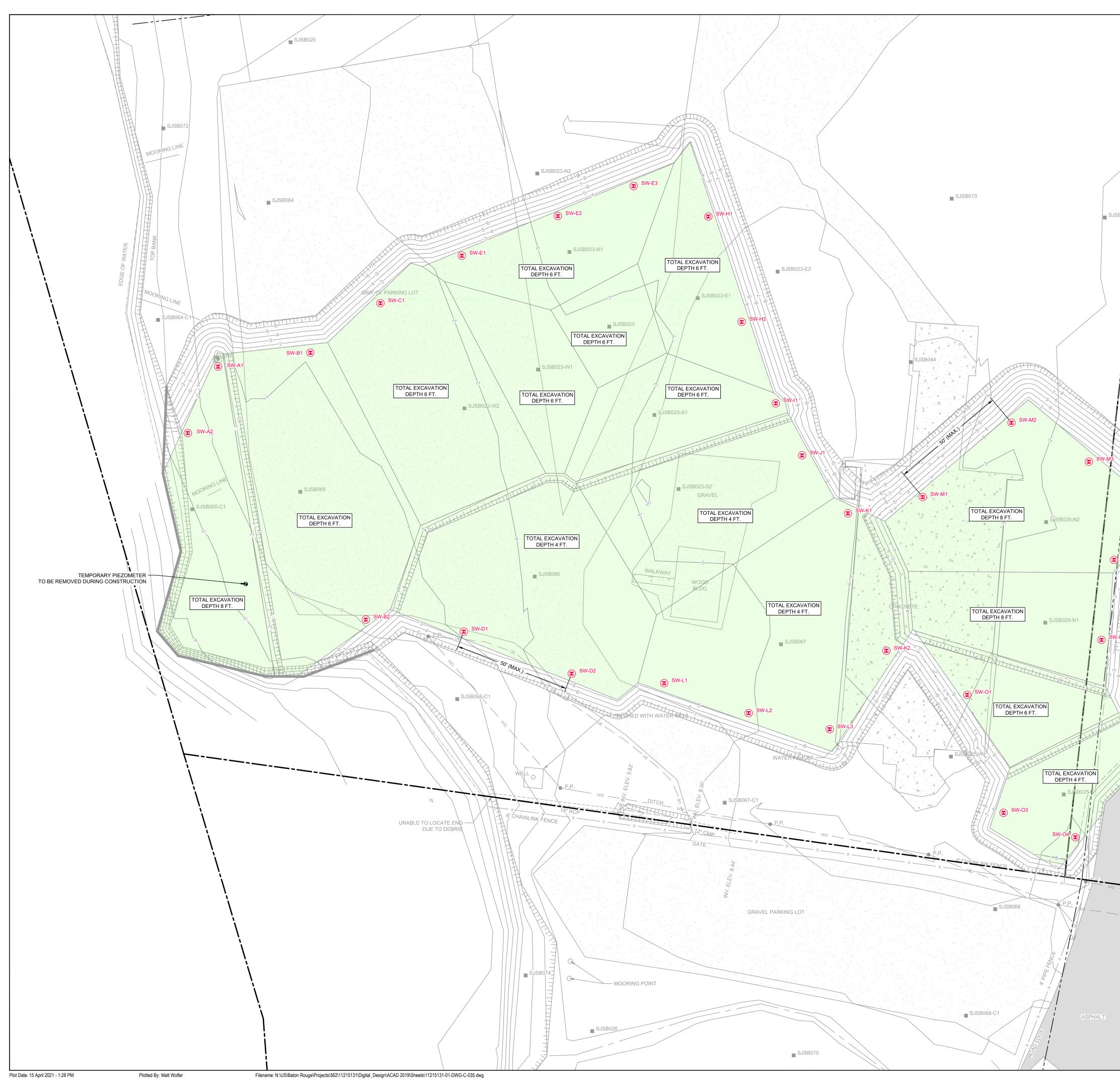
Sheet **30** of **49**



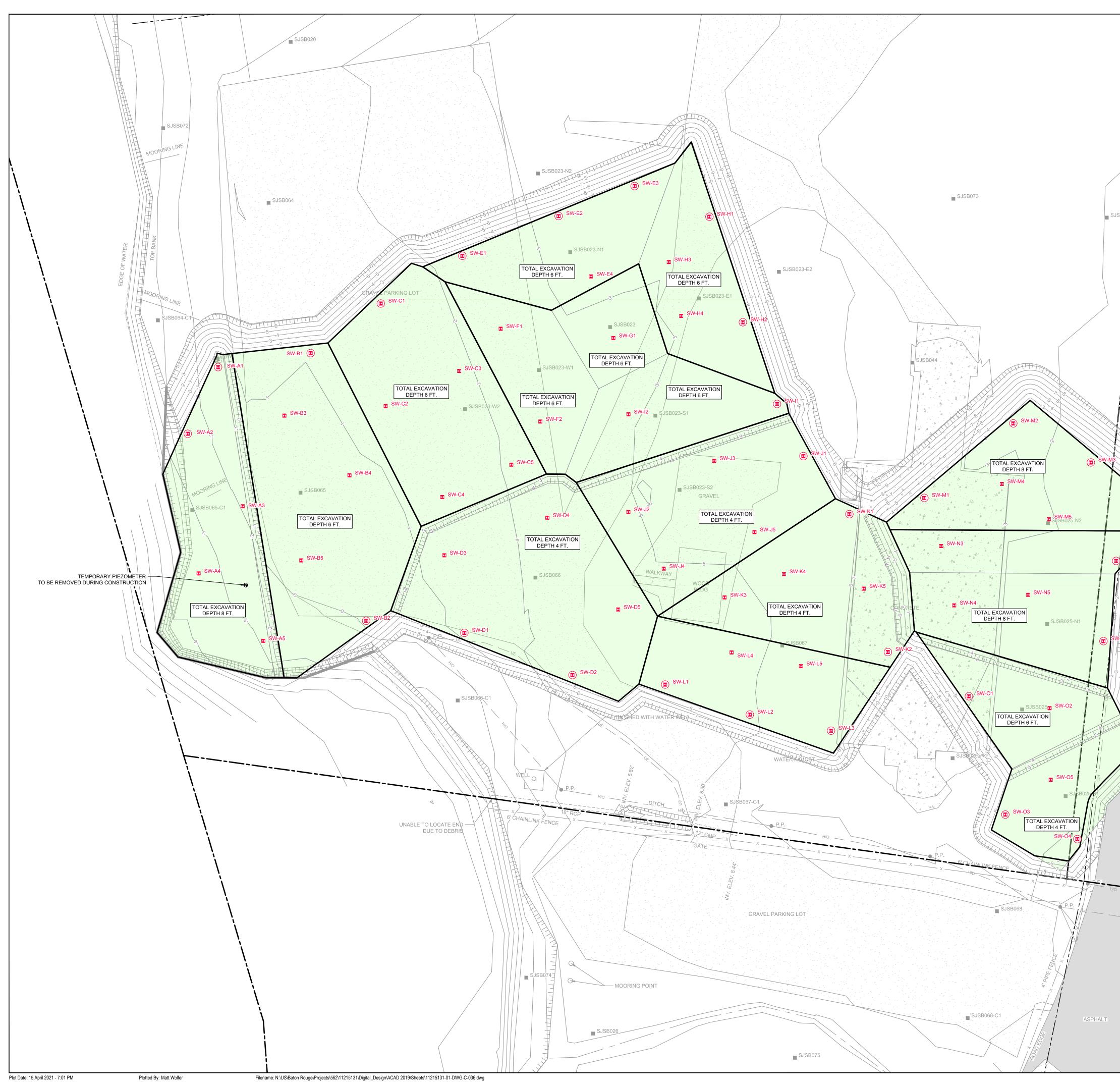
SJSB009-C1	GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com
6' CHAINLINK FENCE	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD
	LEGEND PROPERTY BOUNDARY PROPERTY EASEMENT 620 X FENCELINE SHORELINE SHORELINE O/H O/H O/H O/H O/H O/H O/H O/H O/H OVERHEAD ELECTRICAL GUARDRAIL UNDERGROUND CCTV LINE SJSB002 PDI/RI BORING LOCATION MW MONITORING WELL P.P. POWER POLE UR URL WELL
	Client Cl
	FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS HARRIS COUNTY, TEXAS 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 100% EPA RE-SUBMITTAL MW RH 04/19/2021 4 100% EPA SUBMITTAL MW No. Issue Drawn Approved Drawn MW Date
SOURCE:	Drafting Check BP Design Check LL Project Coordinator CM Date Apr 15, 2021 This document shall not be used for construction unless signed and sealed for construction. Scale 1" = 20' Original Size Bar is one inch on original size drawing 0 1"
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. PROPOSED RESTORATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. GHD SERVICES INC.	Project No. 11215131 Title SOUTH CENTRAL EXCAVATION AREA RESTORATION PLAN
JOB NO. 11215131 FILE NO. 02 GHD TEXAS FIRM REGISTRATION NO. 276 100% EPA RE-SUBMITTAL	Sheet No. C-30 Sheet 31 of 49



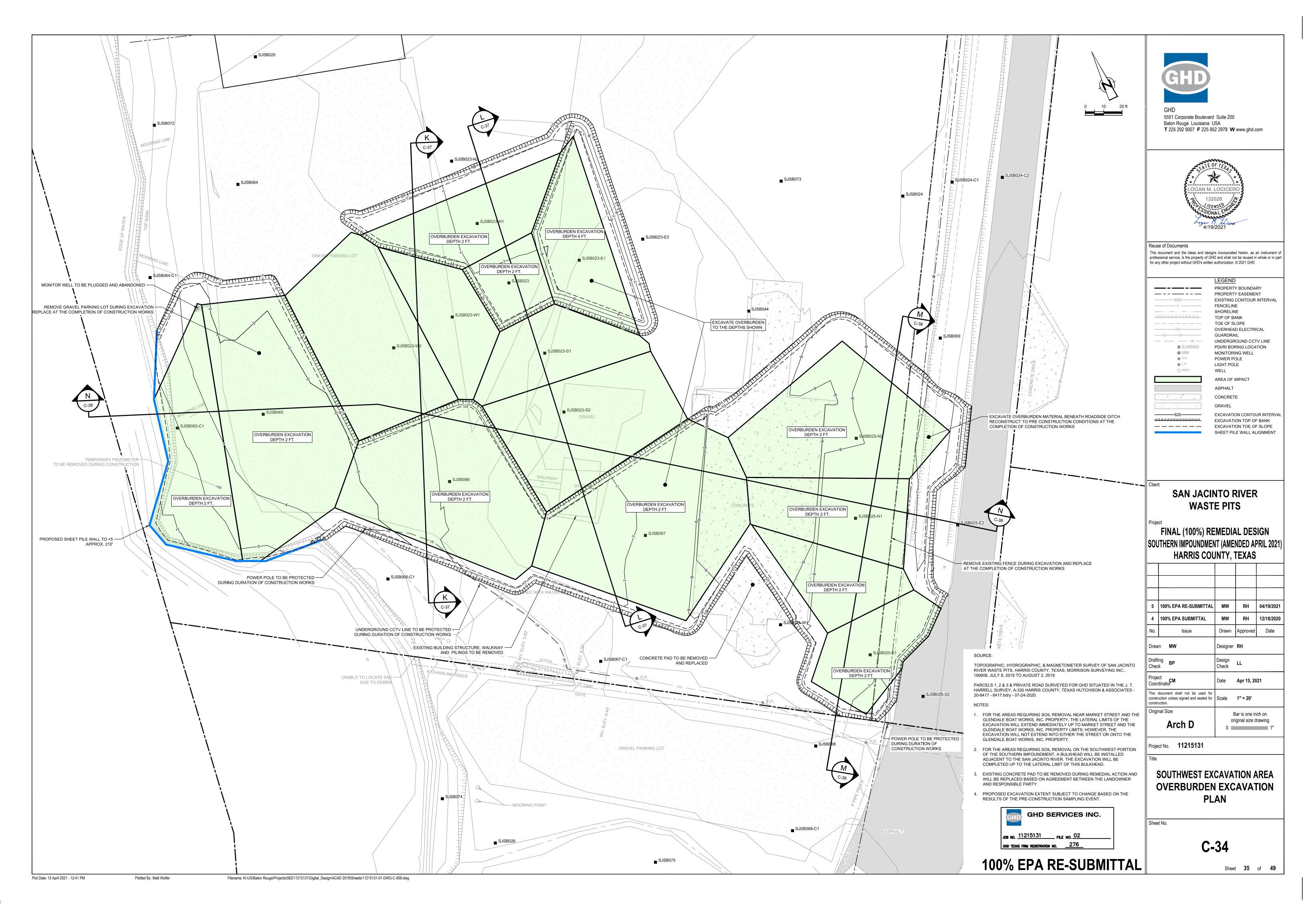
	GHD 551 Corporate Boulevard Suite 200 Bato Rouge Louisian USA T252 292 9007 F 225 952 2978 W www.ghd.com Image: Colspan="2">Image: Colspan="2" Image: Colspan="2" <td cols<="" th=""></td>	
Second and a second a second and a second and a second and a second a	Project CM Sidewala, Construction Sidewala, Construction Construction	

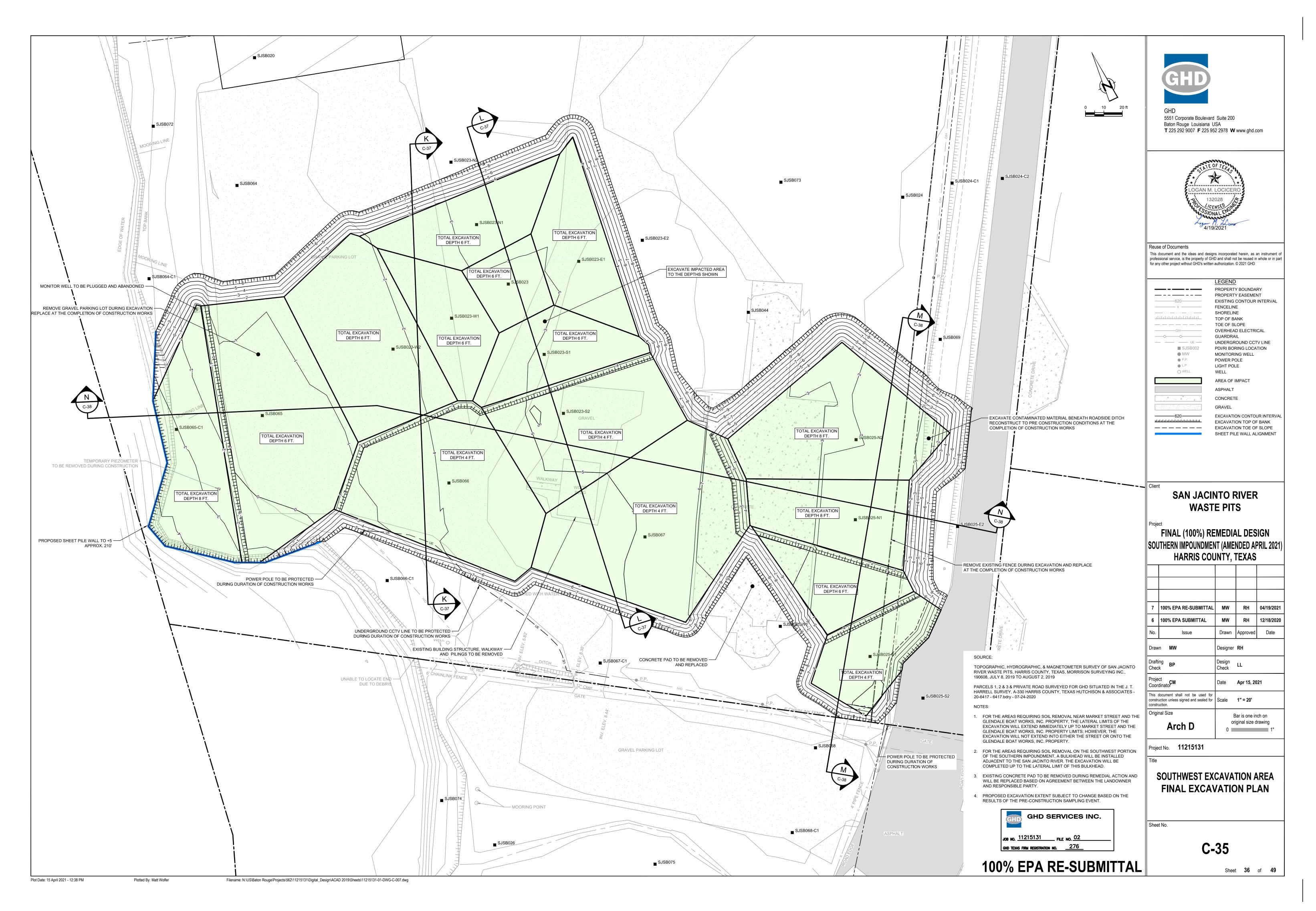


3024 8 SJSB024-C1	GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com
	Augustation Herein and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD Image: Construct of the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD Image: Construct of the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD Image: Construct of the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD Image: Construct of the project without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authorization. © 2021 GHD Image: Construct on side without GHD's written authoris dona
SW-N1 SW-N1 SJSB025-E2	Client SAN JACINTO RIVER WASTE PITS Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS
SOURCE:	Image: Note of the sector o
SJSB025-S2 TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: GATE	Project Coordinator Date Apr 15, 2021 This document shall not be used for construction unless signed and sealed for construction. Scale 1" = 20' Original Size Bar is one inch on original size drawing 0 1"
 Ho Ho For the AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	Project No. 11215131 Title SOUTHWEST EXCAVATION AREA SIDEWALL SAMPLING PLAN
GHD SERVICES INC. JOB NO. 11215131 FILE NO. 02 GHD TEXAS FIRM REGISTRATION NO. 276 100% EPA RE-SUBMITTAL	Sheet No. C-32 Sheet 33 of 49



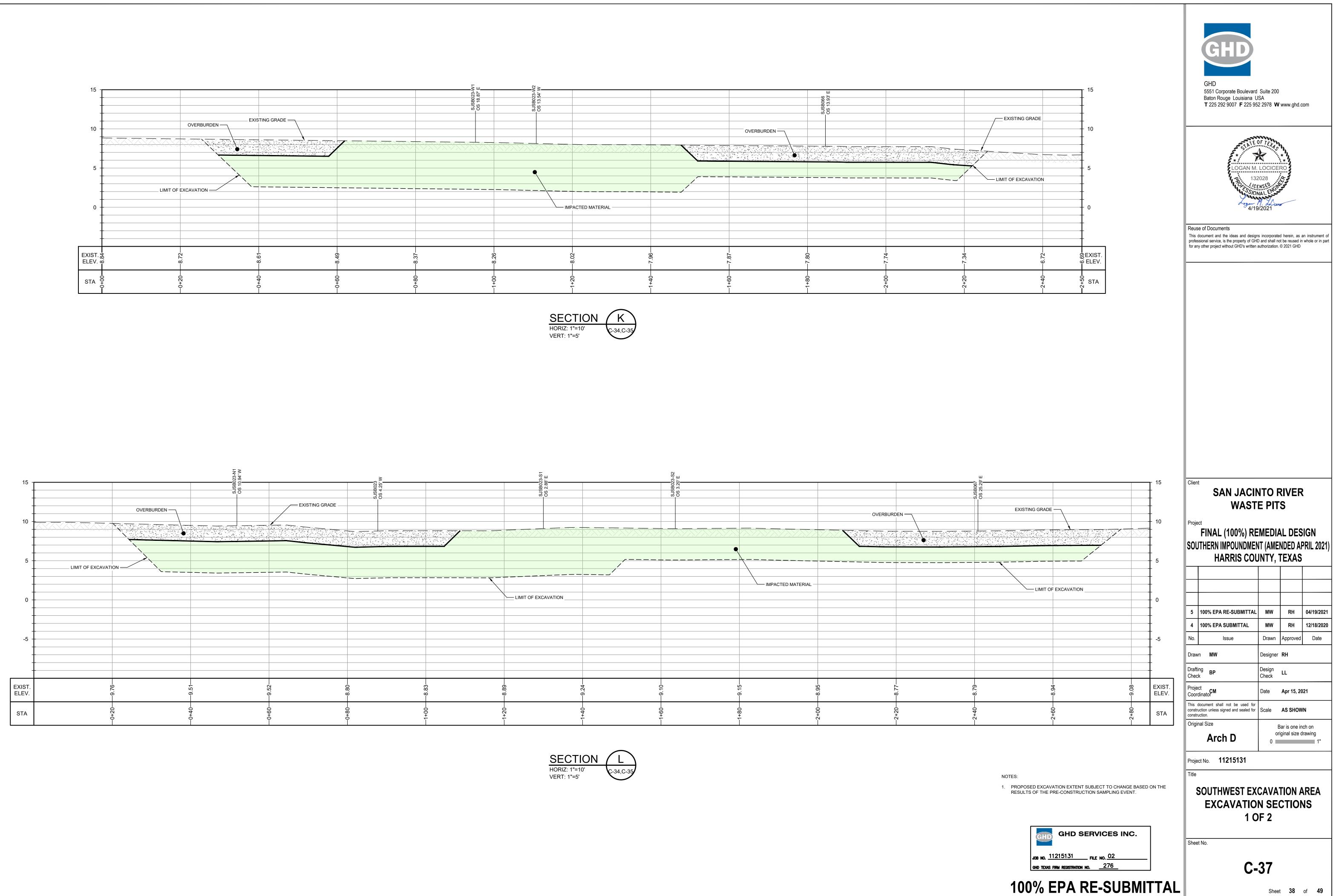
	GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com
SJSB024-C2	LOGAN M. LOCICERO 132028 13208 1320
	for any other project without GHD's written authorization. © 2021 GHD
	L.P. LIGHT POLE WELL WELL AREA OF IMPACT ASPHALT CONCRETE GRAVEL 620 EXCAVATION CONTOUR INTERVAL EXCAVATION TOP OF BANK EXCAVATION TOP OF BANK EXCAVATION TOP OF SLOPE SAMPLING GRIDS (MAX. 500 CY) PRE-CONSTRUCTION SIDEWALL/ BASE OF EXCAVATION CONFIRMATION BORING LOCATIONS PRE-CONSTRUCTION BASE OF EXCAVATION CONFIRMATION BORING LOCATIONS
SJSB025-E2	Client SAN JACINTO RIVER WASTE PITS Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS
	5 100% EPA RE-SUBMITTAL MW RH 04/19/2021
	4 100% EPA SUBMITTAL MW RH 12/18/2020
	No. Issue Drawn Approved Date Drawn MW Designer RH
	Drafting BP Design
SOURCE: SJSB025-S2 SJSB025-S2 SJSB025-S2 SJSB025	Check Check Project CM Coordinator Date Apr 15, 2021 This document shall not be used for construction unless signed and sealed for construction. Original Size Bar is one inch on original size drawing
GATE NOTES: Image: Book of the state of th	Arch D O Inginar size drawing 0 1" Project No. 11215131 Title 1
 2. POR THE AREAS REGURING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	SOUTHWEST EXCAVATION AREA BOTTOM OF EXCAVATION SAMPLING PLAN
JOB NO. <u>11215131</u> FILE NO. <u>02</u>	Sheet No.
GHD TEXAS FIRM REGISTRATION NO. 276	C-33
100% EPA RE-SUBMITTAL	Sheet 34 of 49

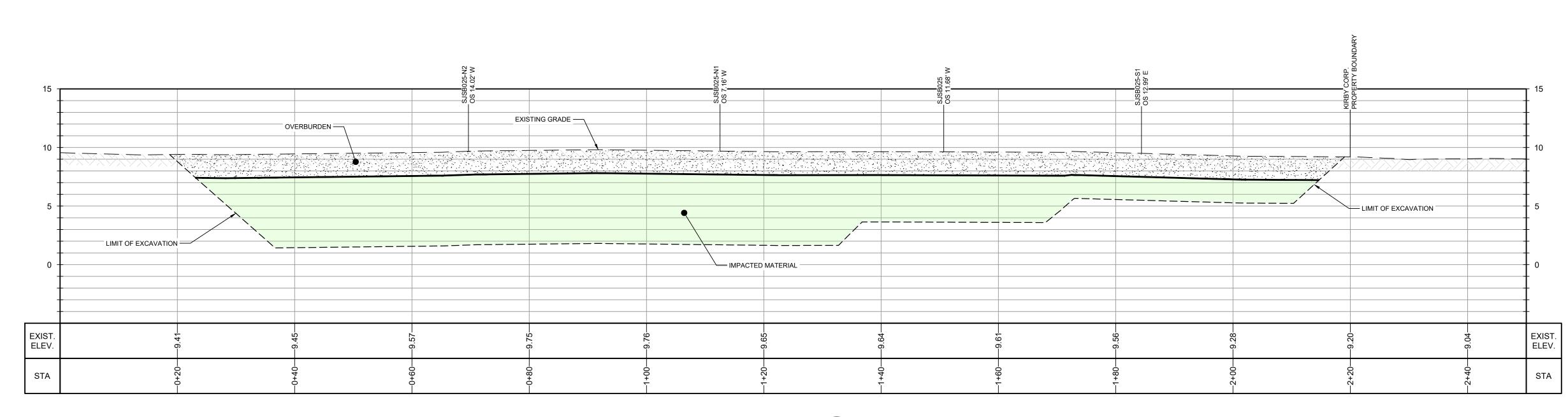


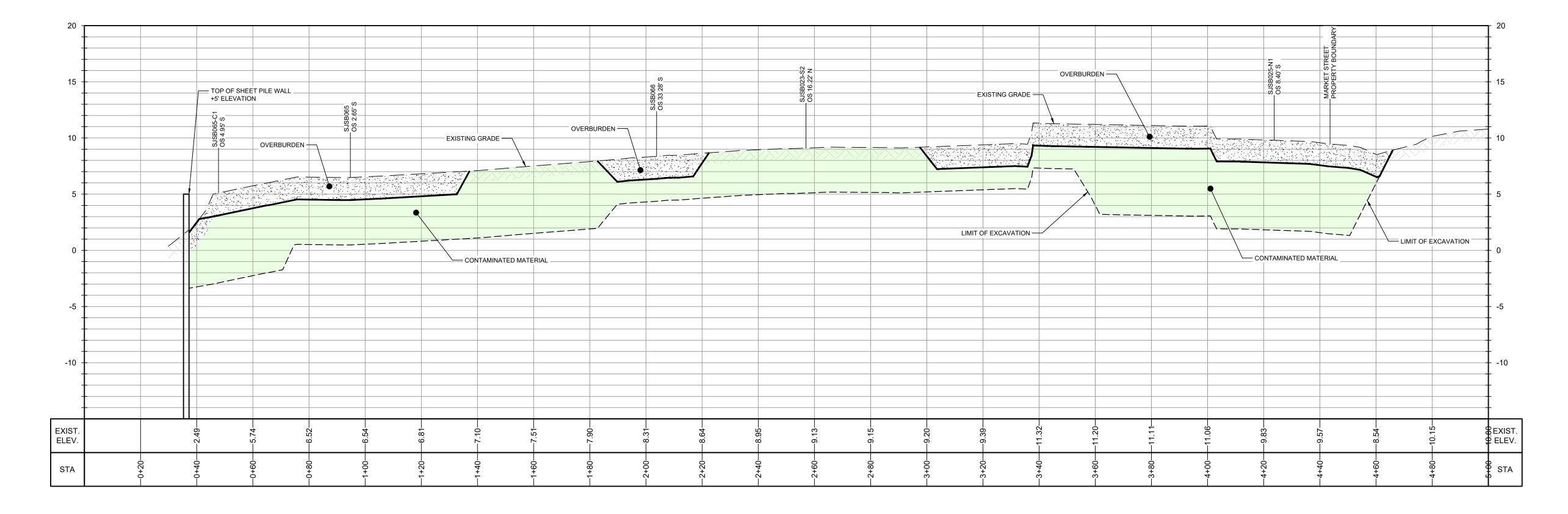




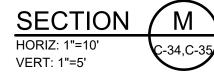
			GHD			
		55 Ba	HD 51 Corporate Boulevard iton Rouge Louisiana U 225 292 9007 F 225 95	SA		com
	SJSB023-W1		A CONTRACTOR OF	OF TEXA		
SJSB023-V	TOTAL EXCAVATION DEPTH 6 FT.		Res Providence	A. LOCIC 32028 CENSE DNAL M. J.C. 19/2021	ERO	
		professional	Documents ent and the ideas and desigr service, is the property of GHI project without GHD's written	D and shall n	ot be reused in	an instrument of n whole or in part
			620 X	PROPERT	- TY BOUNDA TY EASEME CONTOUR NE NE	NT
		 	O/H UE SJSB002 MW P.P.	TOE OF S OVERHEA GUARDRA UNDERGA PDI/RI BO MONITOR POWER P	LOPE AD ELECTR AIL ROUND CC ⁻ RING LOCA ING WELL OLE	TV LINE
- THE ALL AND A DE A			O WELL	LIGHT PO WELL AREA OF ASPHALT CONCRE ⁻	IMPACT	
TTTTT	TOTAL EXCAVATION DEPTH 4 FT.			EXCAVAT EXCAVAT	ION CONTO ION TOP O ION TOE O LE WALL AI	F SLOPE
	■ SJSB066	Client	SAN JACIN WAST			2
			NAL (100%) RE Ern Impoundmen Harris Col	NT (AME	NDED A	PRIL 2021)
***	SOURCE:	6 1009	% EPA RE-SUBMITTAL % EPA SUBMITTAL	MW MW	RH	04/19/2021 12/18/2020
		<u> </u>	Issue	Drawn Designer	Approved RH	Date
SJSB066-C		Drafting Check Project Coordinato	ВР СМ	Design Check Date	LL Apr 15, 20)21
	TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T.	This docum	on ent shall not be used for unless signed and sealed for	Scale	1" = 10'	
	HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE	Original Si	ze Arch D		Bar is one ir riginal size o	
	GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY.	Project No Title	. 11215131	1		
	 FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT. 	SO	JTHWEST EX SHEET P	ILE V	ALL	AREA
	GHD GHD SERVICES INC.	Sheet No.	EXCAVAT		rlan	
	JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. <u>276</u>		C-	36		
	100% EPA RE-SUBMITTAL			Shee	et 37	of 49

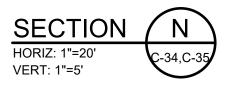






Filename: N:\US\Baton Rouge\Projects\562\11215131\Digital_Design\ACAD 2019\Sheets\11215131-01-DWG-C-010.dwg





Clier	SAN JACIN WAST			2
Proje	FINAL (100%) RE JTHERN IMPOUNDMEN	NT (AME	NDED AF	PRIL 2021)
	HARRIS COL			
	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021
5				
4	100% EPA SUBMITTAL	MW	RH	12/18/2020
4 No.	100% EPA SUBMITTAL	Drawn	Approved	
4 No. Drav	100% EPA SUBMITTAL Issue vn MW	Drawn Designer Design	Approved RH	
4 No. Drav Draft Cheo	100% EPA SUBMITTAL Issue vn MW	Drawn Designer Design Check	Approved RH LL	Date
4 No. Drav Draft Chec Coor This	100% EPA SUBMITTAL Issue vn MW ing BP ck BP ect CM dinator document shall not be used for	Drawn Designer Design Check Date	Approved RH LL Apr 15, 20	Date
4 No. Drav Draft Chec Coor This constit	100% EPA SUBMITTAL Issue vn MW ing BP ck BP	Drawn Designer Design Check Date Scale	Approved RH LL	Date 021 /N
4 No. Drav Draft Chec Coor This constit	100% EPA SUBMITTAL Issue vn MW ing BP ck BP ect CM document shall not be used for ruction unless signed and sealed for ruction.	Drawn Designer Design Check Date Scale	Approved RH LL Apr 15, 20 AS SHOW	Date 021 /N
4 No. Drav Draft Chec Coor This constr Constr Origi	100% EPA SUBMITTAL Issue vn MW ing BP ck BP ect CM document shall not be used for uction unless signed and sealed for uction. nal Size	Drawn Designer Design Check Date Scale	Approved RH LL Apr 15, 20 AS SHOW Bar is one in	Date 021 /N Irawing
4 No. Drav Draft Chec Coor This constr Constr Origi	100% EPA SUBMITTAL Issue vn MW ing BP ect CM dinator document shall not be used for ruction unless signed and sealed for ruction. nal Size Arch D	Drawn Designer Design Check Date Scale	Approved RH LL Apr 15, 20 AS SHOW Bar is one in	Date 021 /N Irawing
4 No. Drav Draft Chec Coor This constr Coort Origi Proje	100% EPA SUBMITTAL Issue Iss	Drawn Designer Design Check Date Scale	Approved RH LL Apr 15, 20 AS SHOW Bar is one in iginal size d	Date
4 No. Draw Draft Chec Coor This constr Coort Origi	100% EPA SUBMITTAL Issue Iss	Drawn Designer Design Check Date Scale	Approved RH LL Apr 15, 20 AS SHOW Bar is one in iginal size d	Date
4 No. Drav Draft Chec Coor This constr Coort Origi	100% EPA SUBMITTAL Issue vn MW ing BP ect CM document shall not be used for ruction unless signed and sealed for ruction. nal Size Arch D ect No. 11215131 SOUTHWEST EX EXCAVATIO 2 O	Drawn Designer Design Check Date Scale E or 0 CAVA NSE F 2	Approved RH LL Apr 15, 20 AS SHOW Bar is one in iginal size d	Date
4 No. Drav Draft Chec Coor This constr Coort Origi	100% EPA SUBMITTAL Issue vn MW ing BP ect CM document shall not be used for ruction unless signed and sealed for ruction. nal Size Arch D ect No. 11215131 SOUTHWEST EX EXCAVATIO 2 O	Drawn Designer Design Check Date Scale	Approved RH LL Apr 15, 20 AS SHOW Bar is one in iginal size d	Date

GHD

Reuse of Documents

5551 Corporate Boulevard Suite 200

Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com

X

OGAN M. LOCICEF

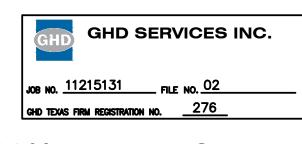
132028

4/19/20

This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD

1. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.

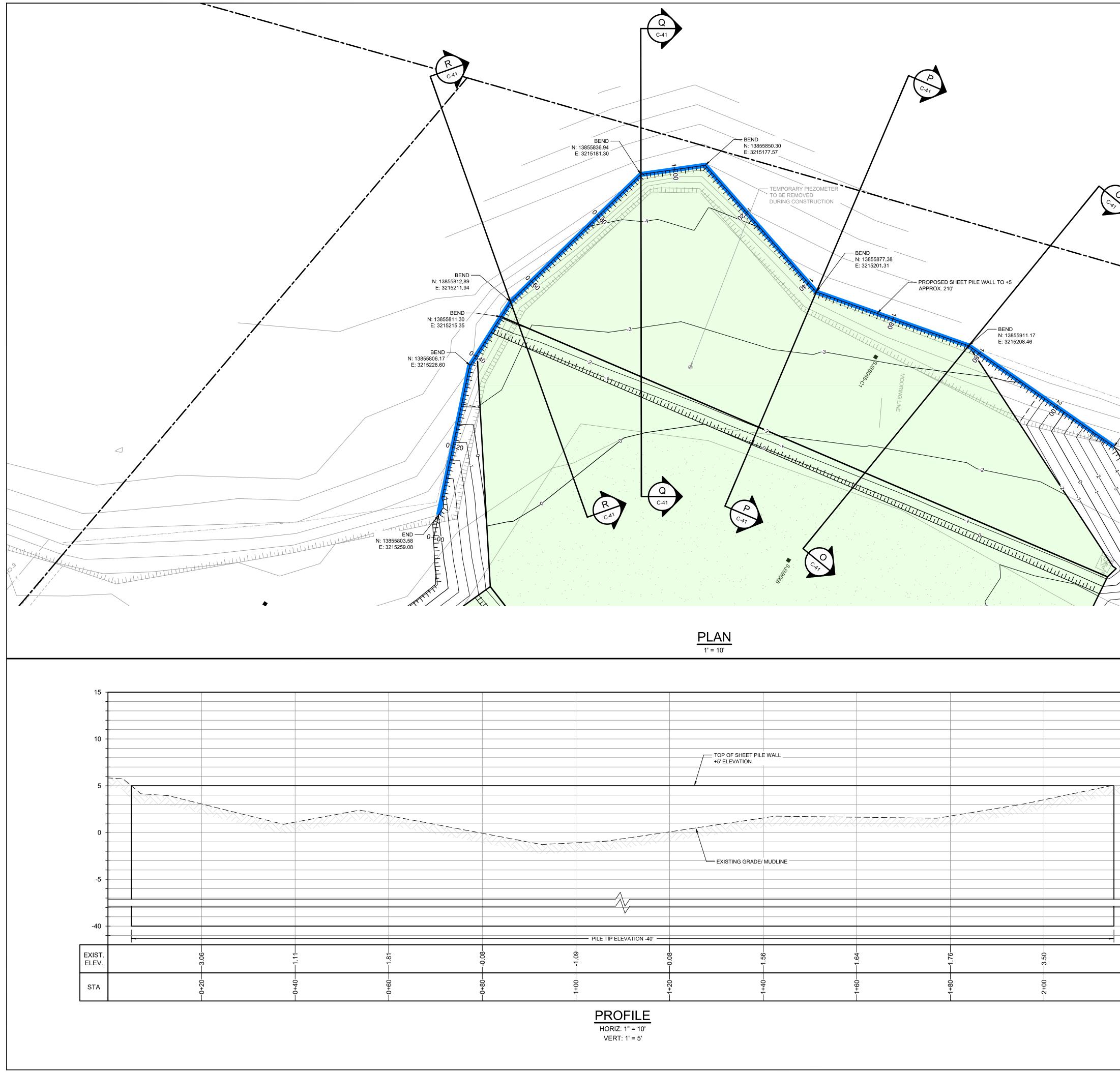
NOTES:



100% EPA RE-SUBMITTAL

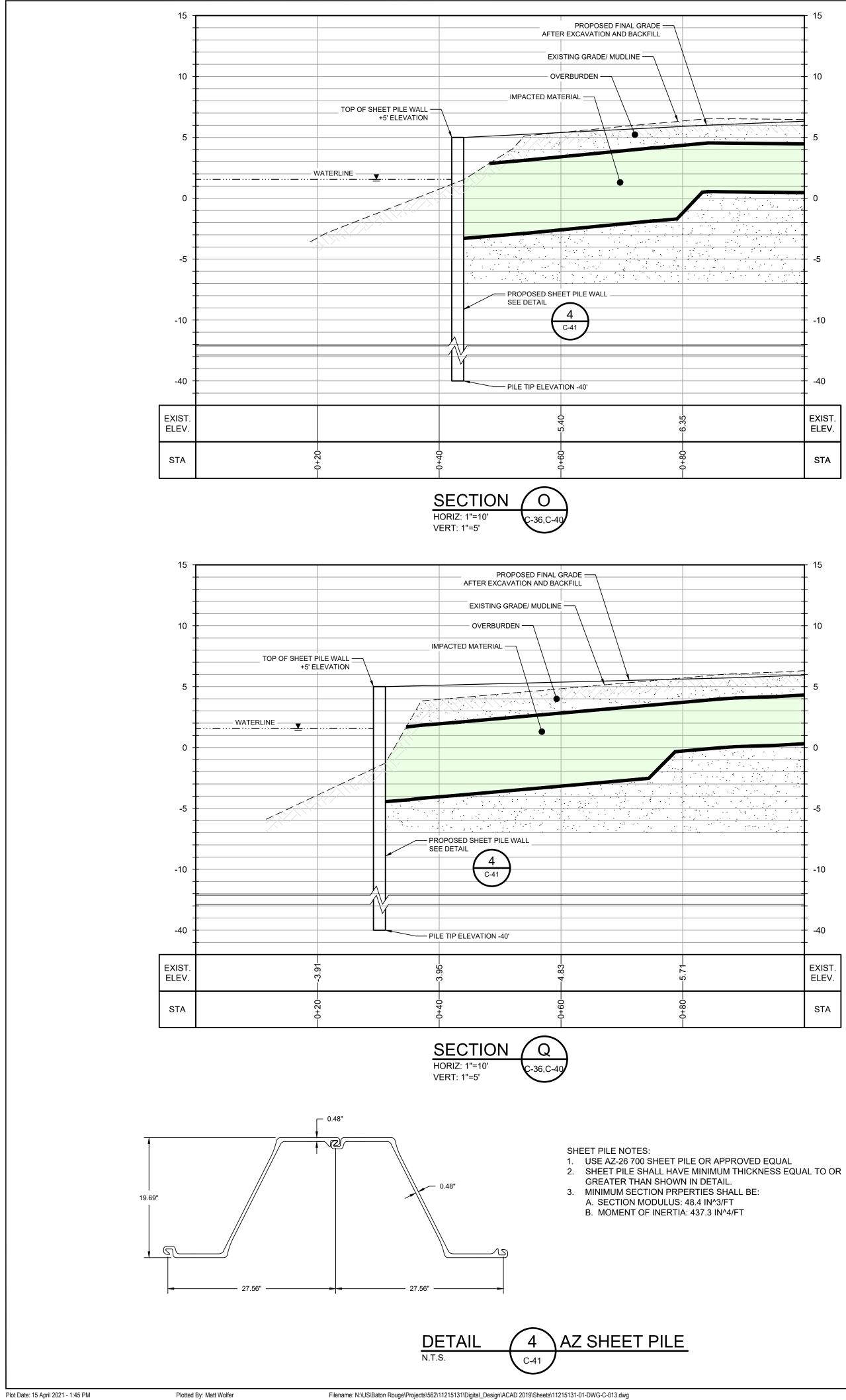


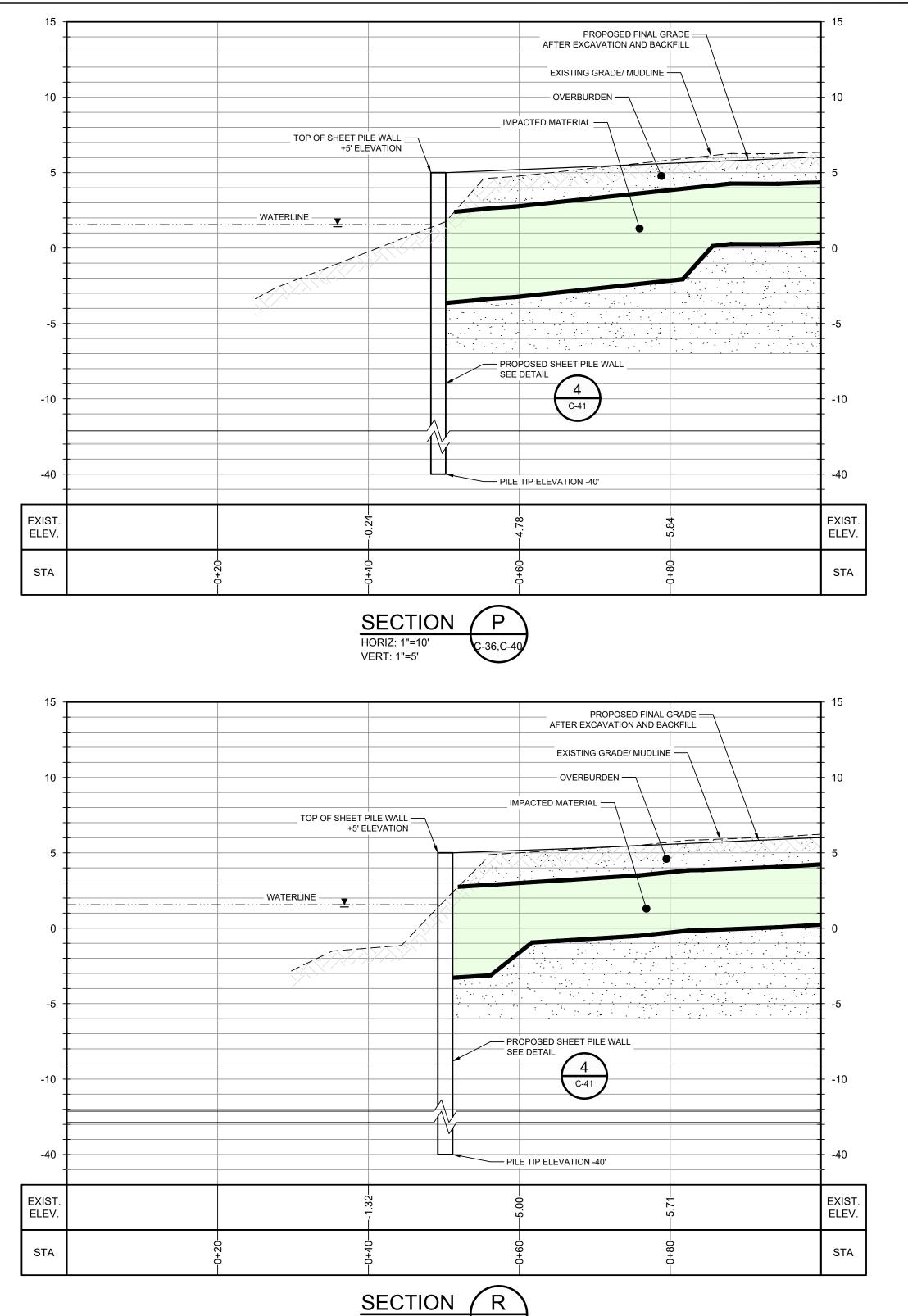
	This profes for an	e of Documents document and the ideas and design ssional service, is the property of GHI y other project without GHD's written	SA 2 2978 W OF 7 2 2978 W OF 7 2 2028 2028 2028 2028 2028 2028 2029 2021 3 2020 2021 3 2028 2028 2028 2028 2028 2028 2028 20	www.ghd.	an instrument of n whole or in part
SJSB025-E2	Clien Proje	SAN JACI WAST	e pit	S	
	SOL	ITHERN IMPOUNDMEN HARRIS COU			
	5	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021
	4	100% EPA SUBMITTAL	MW	RH	12/18/2020
	No. Draw	lssue	Drawn Designer	Approved RH	Date
	Drafti	ng BP	Design Check		
X			Date	Apr 15, 2	021
SJSB025-S2	This constr	document shall not be used for uction unless signed and sealed for	Scale	1" = 20'	
	constr Origi	nal Size		Bar is one ii riginal size (
SOURCE:		Arch D	0	iginal SIZE (1"
GATE TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019	<u> </u>	ct No. 11215131			
PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020	Title	SOUTHWEST EX	<u>Ϲ</u> Δ\/۸		
NOTES: 1. PROPOSED RESTORATION EXTENT SUBJECT TO CHANGE BASED ON THE		RESTORA			
RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.					
GHD GHD SERVICES INC.	Shee	t No.			
JOB NO. <u>11215131</u> FILE NO. <u>02</u> GHD TEXAS FIRM REGISTRATION NO. <u>276</u>		C-	39		
100% EPA RE-SUBMITTAL			Shee	et 40	of 49



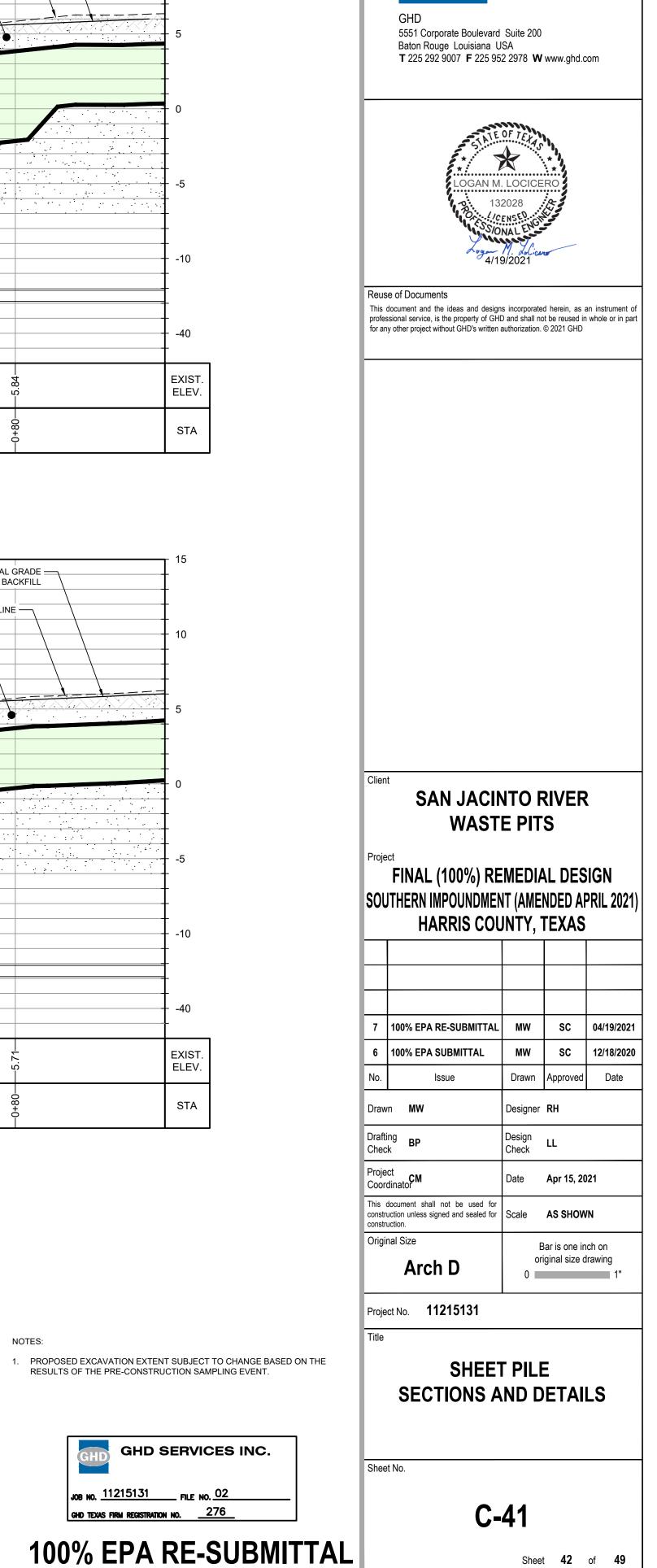
		TOP OF SHEET PILE +5' ELEVATION	= WALL				
		+5' ELEVATION					
		/					
		+					
							$\underline{\langle}$
			\$7\$777777777	/ / / / / / / / / / /			
\sim \sim							
レストアトンシン							
		EXISTING GRADE/	MUDLINE				
	A						
	•						
	PILE TIP ELEVATION -40'					>	
c c					- 07	2	
τ					-1.1	5	
					<u> </u>		—
ç						Ş	
		+ +		+		í N	
					<u> </u>		

	-				
$0 \qquad 5 \qquad 10 \text{ ft}$		GHD 5551 Corporate Boulevard Baton Rouge Louisiana (T 225 292 9007 F 225 9	JSA		com
		A BROWN TO STATE	A. LOCICE 32028 CENSE DNAL 19/2021	ERO	
	This profe	document and the ideas and desig ssional service, is the property of GH y other project without GHD's writter	ID and shall n	ot be reused i	an instrument of whole or in par
END N: 13855944.77 E: 3215225.80 HULLIULIULIULIULIULIULIULIULIULIULIULIULI		620 X UE O/H O/H O/H O/H O/H SJSB002 MW P.P. L.P. WELL 620 HILL 620	PROPERT EXISTING FENCELIN SHORELIN TOP OF B TOE OF S OVERHEA GUARDRA UNDERGF PDI/RI BO MONITOR POWER P LIGHT PO WELL AREA OF ASPHALT CONCRET GRAVEL EXCAVATI EXCAVAT	IE NE ANK LOPE D ELECTR AIL ROUND CC RING LOCA ING WELL OLE LE IMPACT	NT INTERVAL ICAL IV LINE TION UR INTERVAL F BANK F SLOPE
	Clier	san jaci		RIVEF	2
	Proje SOI	WAST FINAL (100%) RI ITHERN IMPOUNDME HARRIS CO	E me di/ Nt (Ame	AL DES NDED A	PRIL 2021
	⊢				
10	7	100% EPA RE-SUBMITTAL 100% EPA SUBMITTAL	. MW	SC SC	04/19/2021
	No.	Issue	Drawn	Approved	12/18/2020 Date
5	Drav	m MW	Designer	RH	
	Draff Cheo		Design Check	LL	
SOURCE: TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC.,	Proje Coor	ct CM dinator	Date	Apr 15, 2	021
PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES -	const const	document shall not be used for uction unless signed and sealed for uction.		AS SHOV	/N
	Origi	nal Size Arch D	0	Bar is one ir riginal size (drawing
1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE			0		1"
GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY.	Proje Title	ct No. 11215131			
		SHEE	T PIL	E	
EXIST. COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD. ELEV. 3. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.		PLAN AN	D PRO	OFILE	
STA GHD SERVICES INC.					
	Shee	t No.			
GHD TEXAS FIRM REGISTRATION NO276_		C-	-40		
100% EPA RE-SUBMITTAL			Shee	et 41	of 49





HORIZ: 1"=10' VERT: 1"=5' C-36,C-40

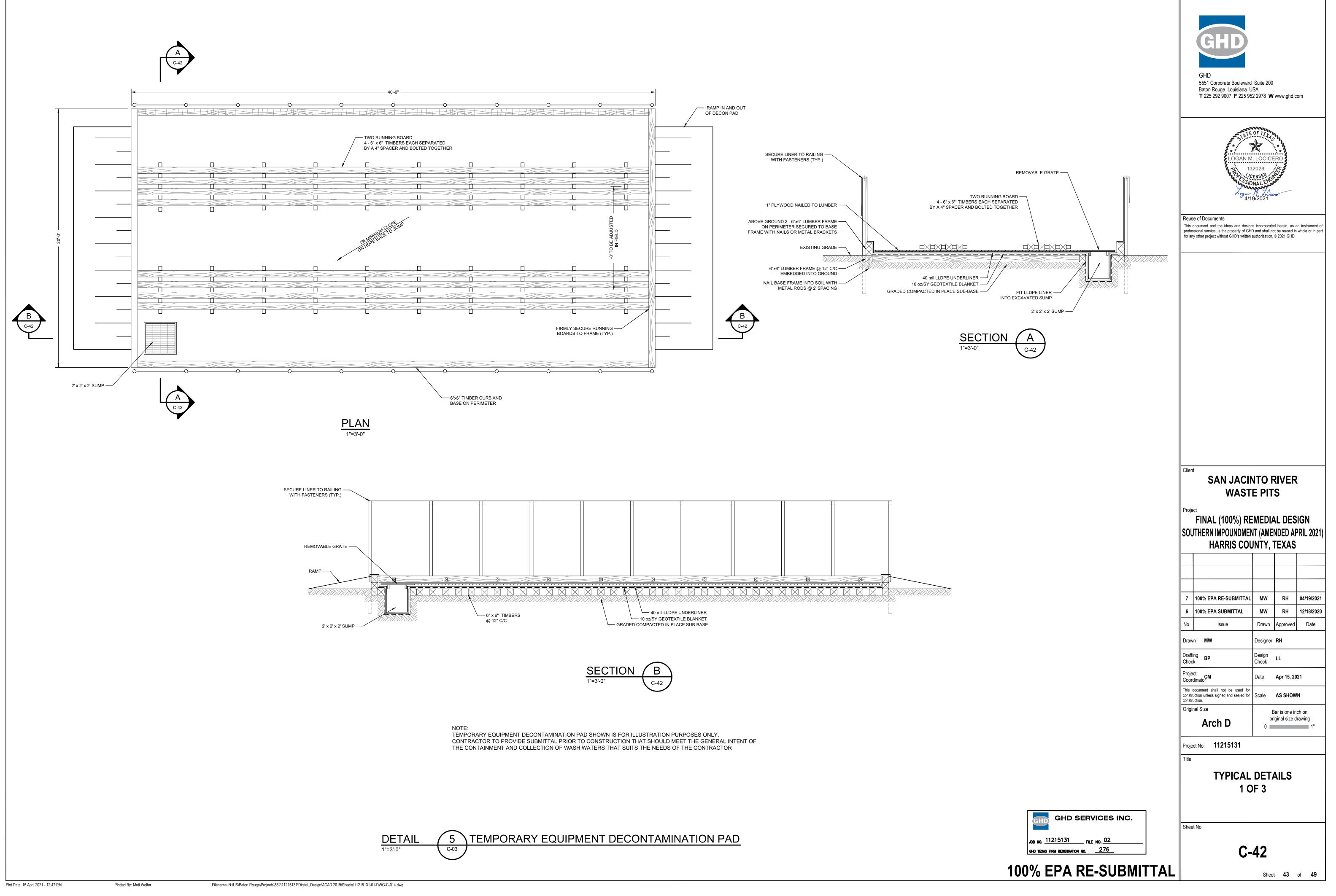


JOB NO. 11215131 FI	le NO. 02
GHD TEXAS FIRM REGISTRATION NO.	276

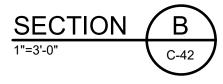
NOTES:

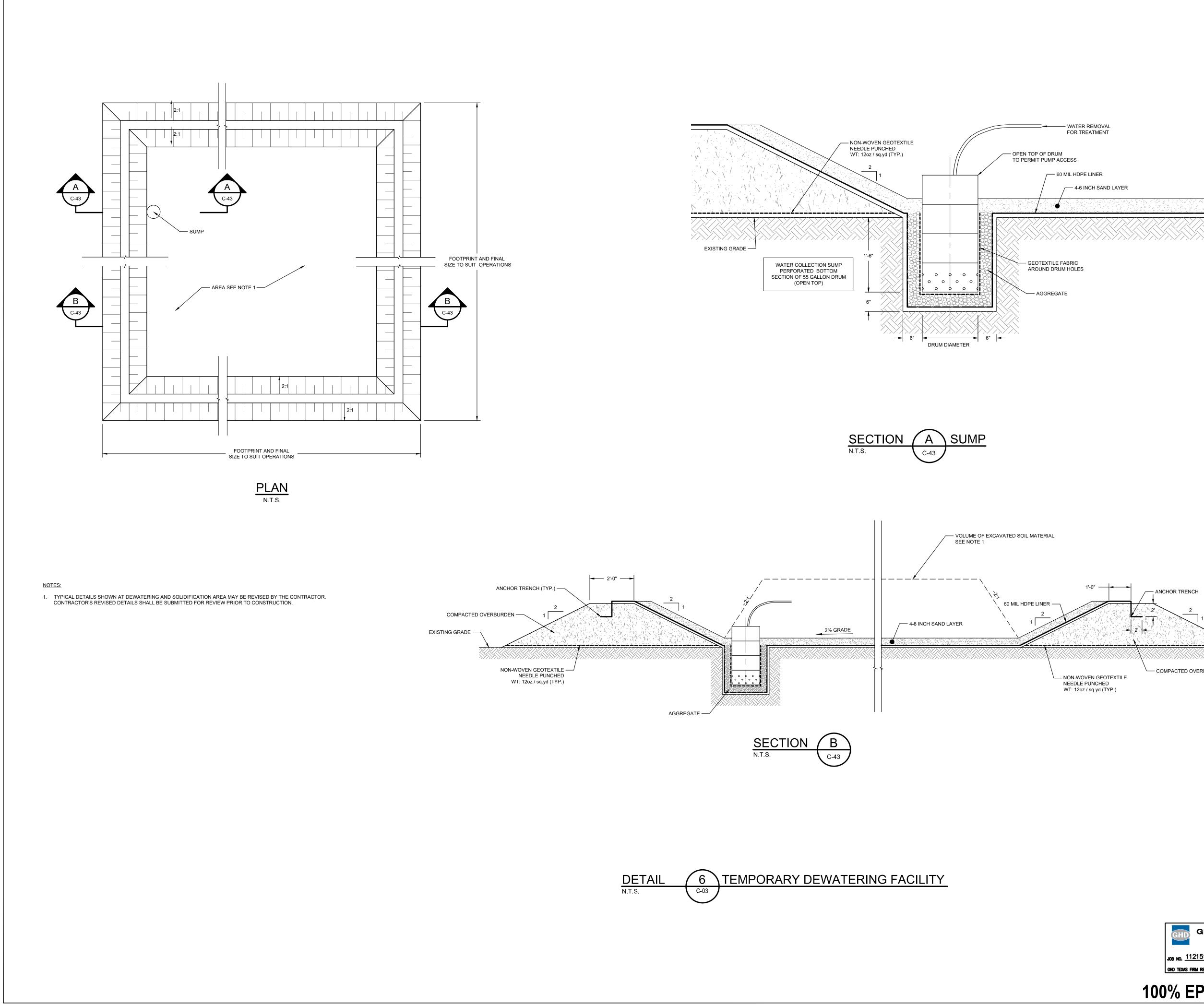
GHD

100% EPA RE-SUBMITTAL











60 MIL HDPE LINER

/----- 4-6 INCH SAND LAYER

1'-0" — - ANCHOR TRENCH 2'

GHD

NON-WOVEN GEOTEXTILE NEEDLE PUNCHED WT: 12oz / sq.yd (TYP.)

GHD 5551 Corporate Boulevard Suite 200 Baton Rouge Louisiana USA T 225 292 9007 F 225 952 2978 W www.ghd.com DGAN M. LOCICER 132028 Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2021 GHD Client SAN JACINTO RIVER WASTE PITS Project FINAL (100%) REMEDIAL DESIGN SOUTHERN IMPOUNDMENT (AMENDED APRIL 2021) HARRIS COUNTY, TEXAS 7 100% EPA RE-SUBMITTAL MW RH 04/19/2021 6 100% EPA SUBMITTAL MW RH 12/18/2020 Drawn Approved Date No. Issue Drawn MW Designer RH Drafting Check BP Design Check LL Project Coordinator Date Apr 15, 2021 This document shall not be used for construction unless signed and sealed for construction. Original Size Bar is one inch on original size drawing Arch D 0 1" Project No. **11215131** Title **TYPICAL DETAILS** 2 OF 3 Sheet No. **C-43**

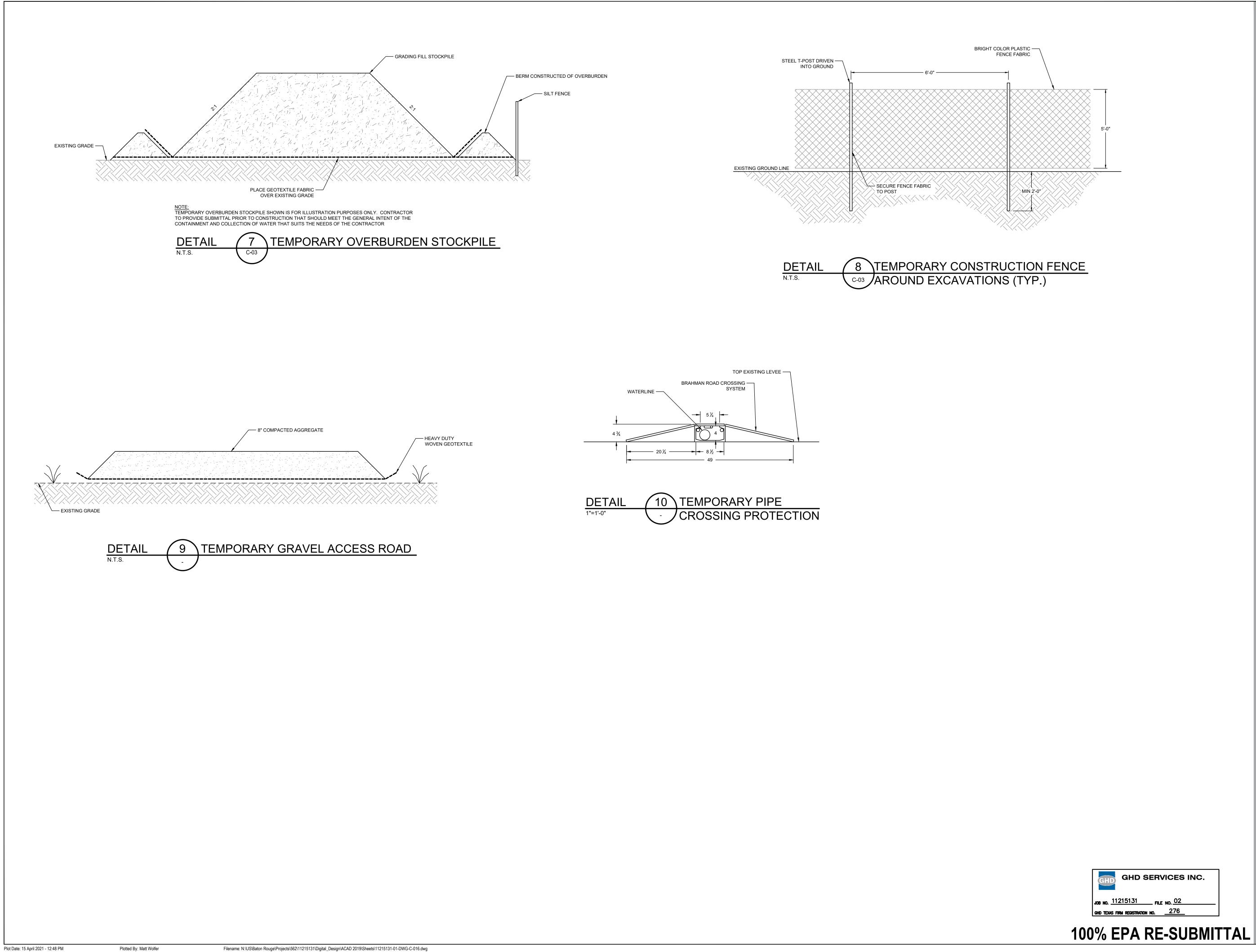
100% EPA RE-SUBMITTAL

JOB NO. 11215131 FILE NO. 02

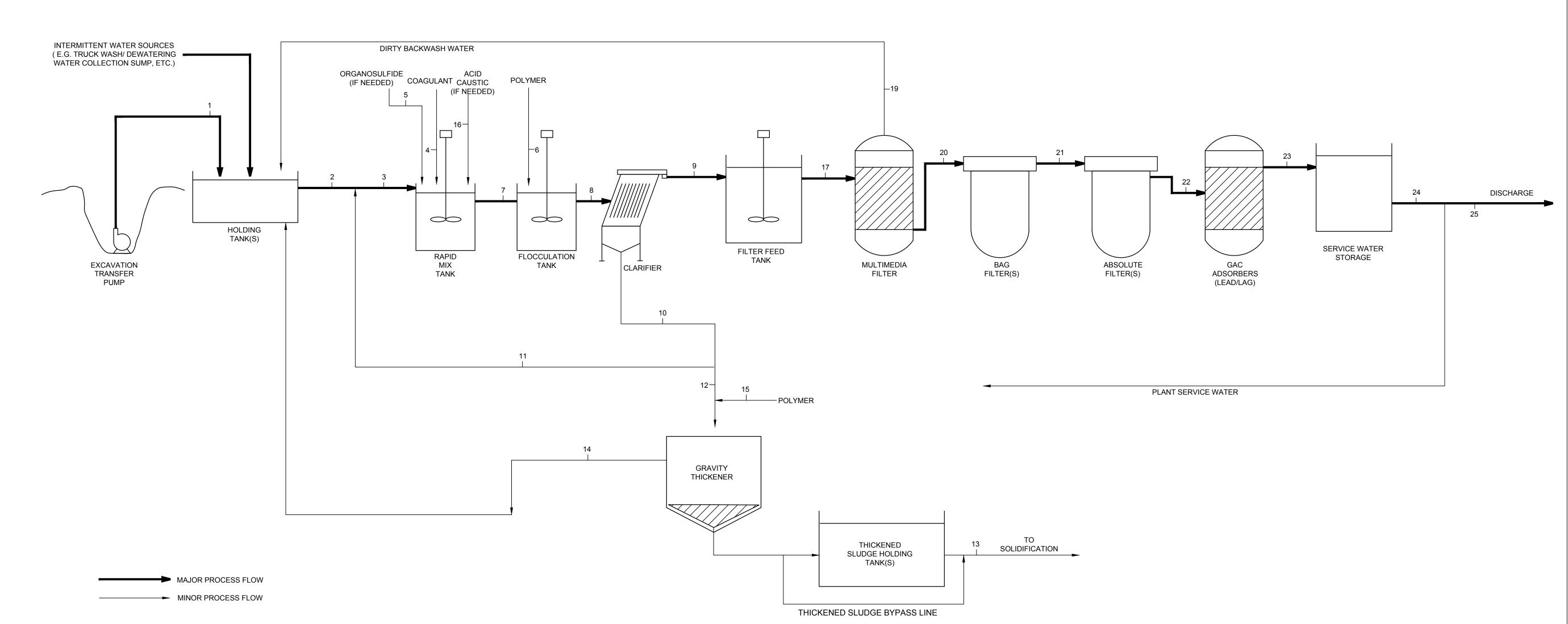
ghd texas firm registration no. ____276___

GHD SERVICES INC.

Sheet **44** of **49**





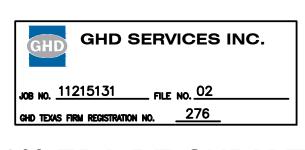


Streams		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Units	Contact Water	Equalization Tank Effluent		Coagulant Feed	Organosulfi de Feed	Clarifier Polymer Feed	Flocculation Tank Influent		Clarifier Effluent	Clarifier Underflow	Sludge Recycle	Sludge to Thickener	Sludge to Stabilization	Decant to Front End	Thickener Polymer Feed	Acid/Caustic Feed	Sand Filter Feed	Clean Back- wash	Dirty Back- wash	Nominal Bag Filter Feed	Absolute Filter Feed	GAC Absober Feed	Effluent Storage Tank Feed	Storage Tank Effluent	Discharge
Volumetric Flow	gpm	600	421	772	0.0	2 0.03	0.2	773	773	304	468	351	117	17	100	0.059	0.015	304	21	21	304	304	304	304	304	284
Maximum Volumetric Flow	v gpm	600	421	772	2.5	2.5	2.5	773	773	304	468	351	117	17	100	2.5	2.5	304	760	760	304	304	304	304	304	284
Total Mass Flow	lb/hr	300,240	210,805	386,519	14	4 14	107	394,369	386,660	152,351	241,313	180,985	60,328	10,013	50,227	30	8	152,351	10,458	10,458	152,351	152,347	152,347	152,347	152,347	141,888
Suspended Solids	%	0.41%	0.29%	0.61%	5.00%	6 0.50%	1.00%	0.61%	0.61%	0.00%	1.00%	1.00%	1.00%	6.00%	0.01%	1.00%	10.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Chemical Feed	ppm				500.0	50.0	50.0									50.0	50.0									
Chem Solids Generation	lb/lb				0.3	3 0.3	0.01									0.01	0.1									1
Chem Solids Generation	lb/hr				3.5	2 3.2	1.1									0.0	0.0									
Mass Flow Liquid	lb/hr	299,024	210,193	384,150	1	1 11	105	391,951	384,290	152,347	238,900	179,175	59,725	9,412	50,225	29	8	152,347	10,458	10,457	152,347	152,347	152,347	152,347	152,347	141,888
Mass Flow Solids	lb/hr	1,216	612	2,369	3.:	2 3.2	1.1	2,418	2,370	4.6	2,413	1,810	603	601	2.5	0.3	0.8	4.6	0.02	1.5	3.0	0.6	0.3	0.3	0.3	0.3
Specific Gravity		1.0	1.0	1.0	1.3	3 1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Density	lb/cf	62.4	62.4	62.4	81.	1 62.4	62.4	63.6	62.4	62.4	64.3	64.3	64.3	74.9	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4

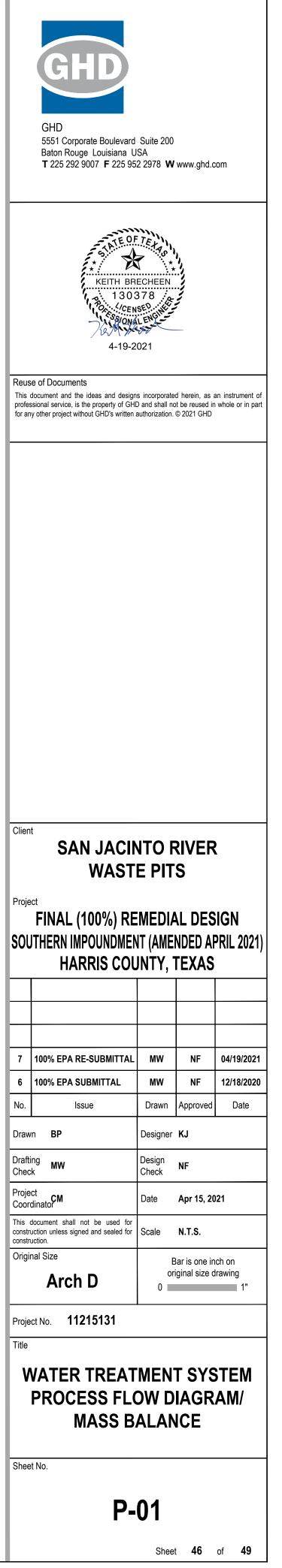
NOTE: 1. SOME PROCESS FLOWS ARE AVERAGED OVER ESTIMATED TOTAL OPERATING CYCLE. PROCESS FLOW/MASS BALANCE SHOULD NOT BE USED FOR EQUIPMENT SIZING PURPOSES. 2. TREATMENT IS 300 GPM PLUS RECYCLE FLOWS. THE TREATMENT SYSTEM DESIGNS ARE PRELIMINARY AND SUBJECT TO CHANGE. FINAL DESIGNS SHALL BE BASED ON CONTACT WATER FLOW RATE SELECTED BY THE CONTRACTOR.
 INTERMITTENT FLOWS SUCH AS FILTER BACKWASHES ARE TO BE CONFIRMED BY CONTRACTOR BASED ON FILTER VESSELS SIZING.

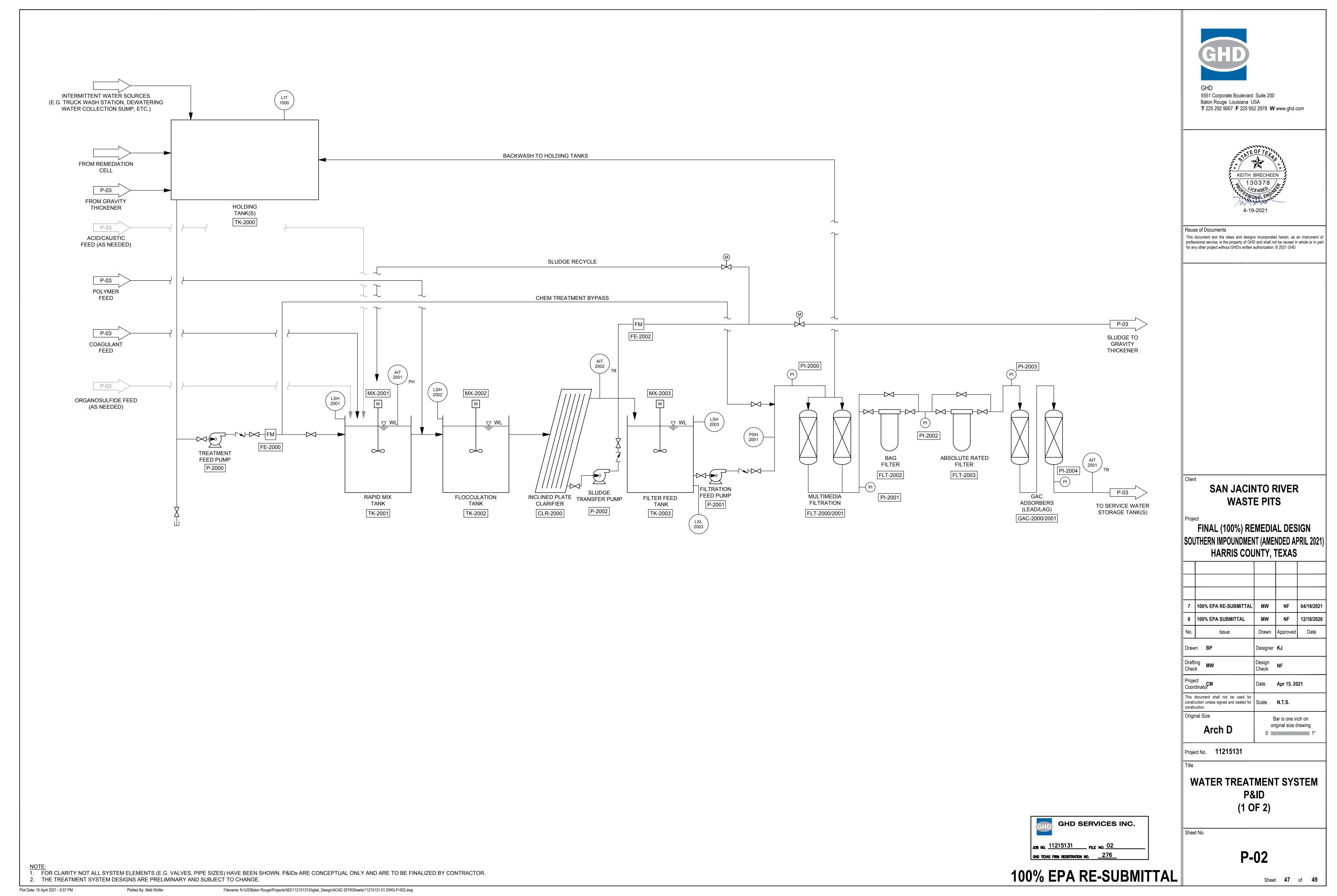
Plot Date: 15 April 2021 - 6:58 PM

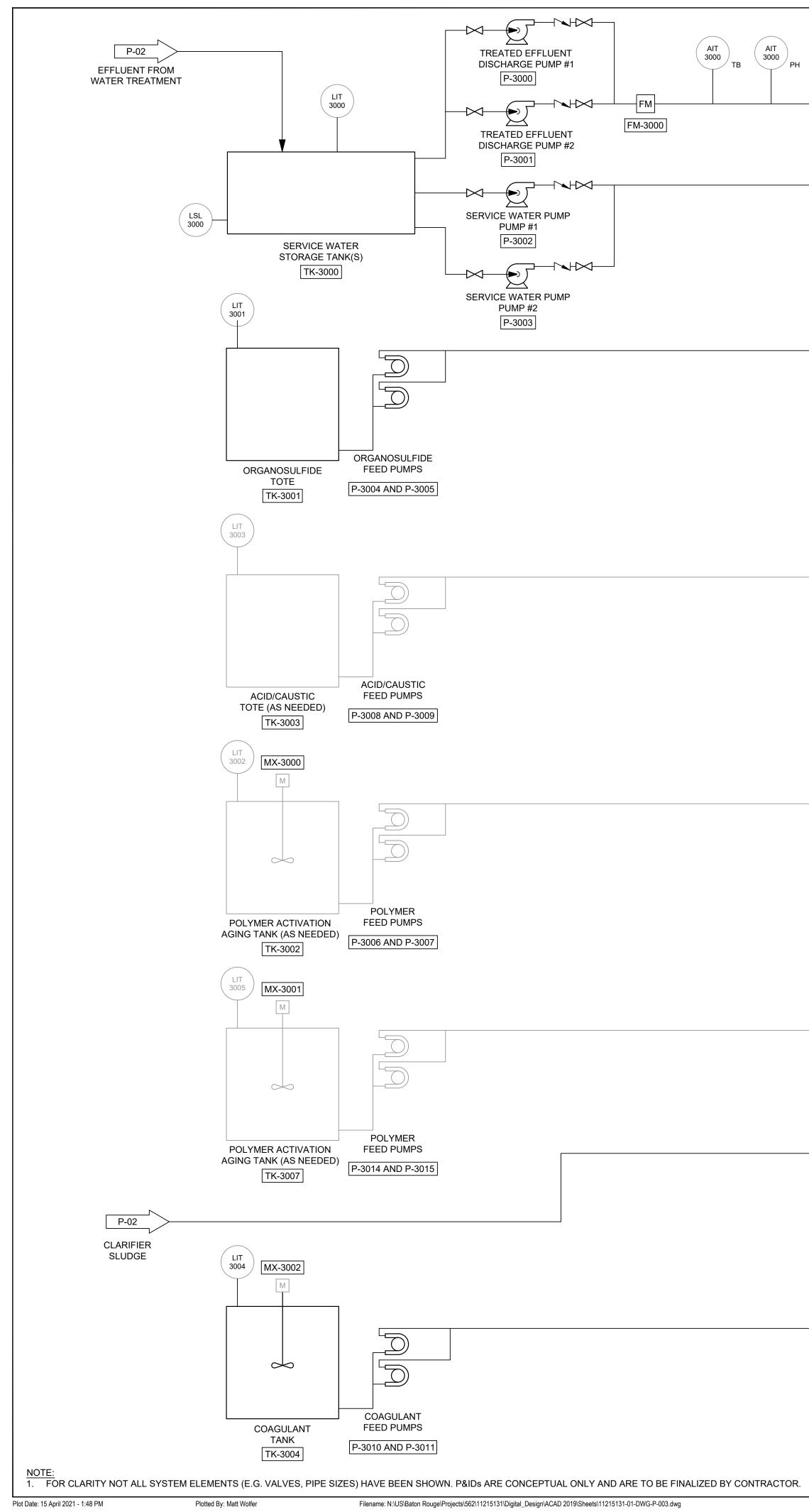
WATER TREATMENT PLANT PROCESS STREAMS



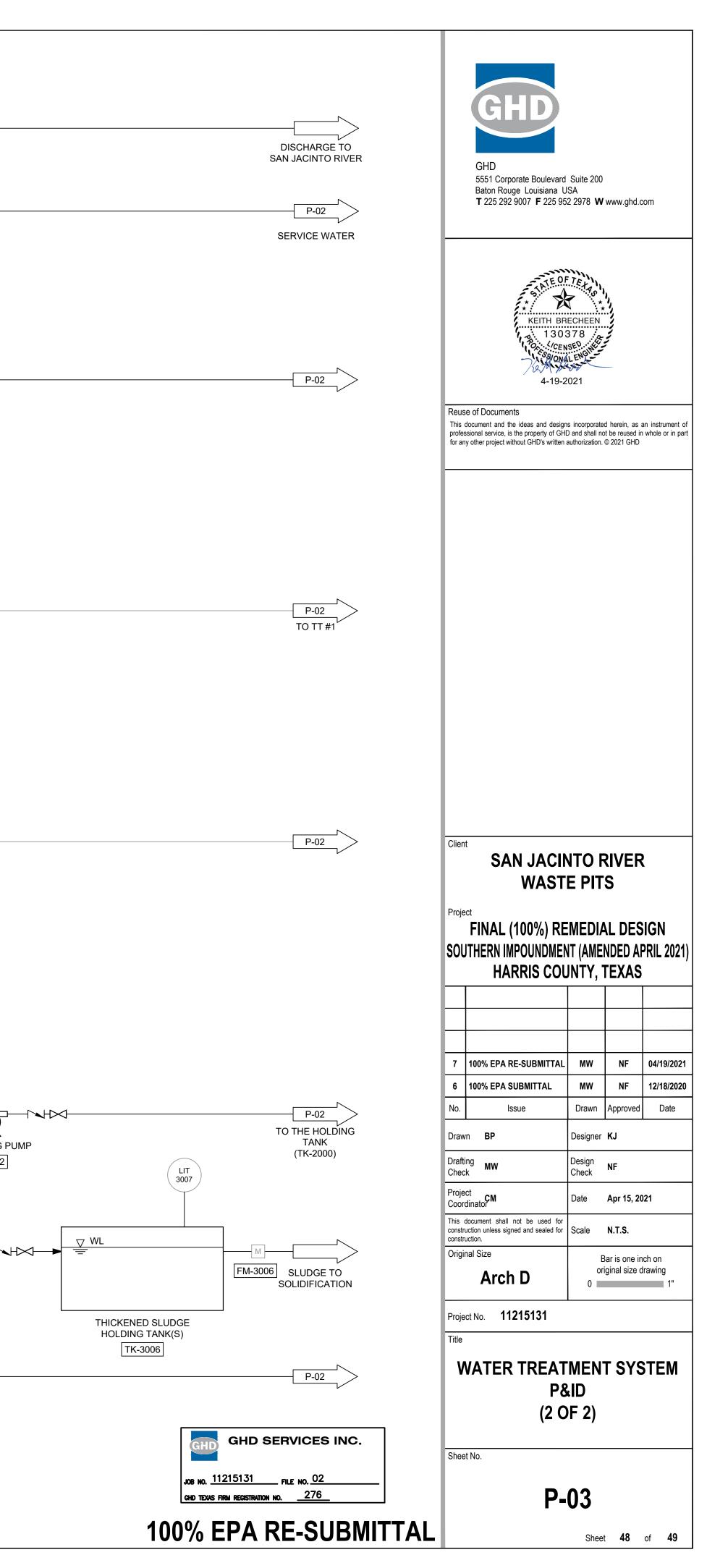
100% EPA RE-SUBMITTAL

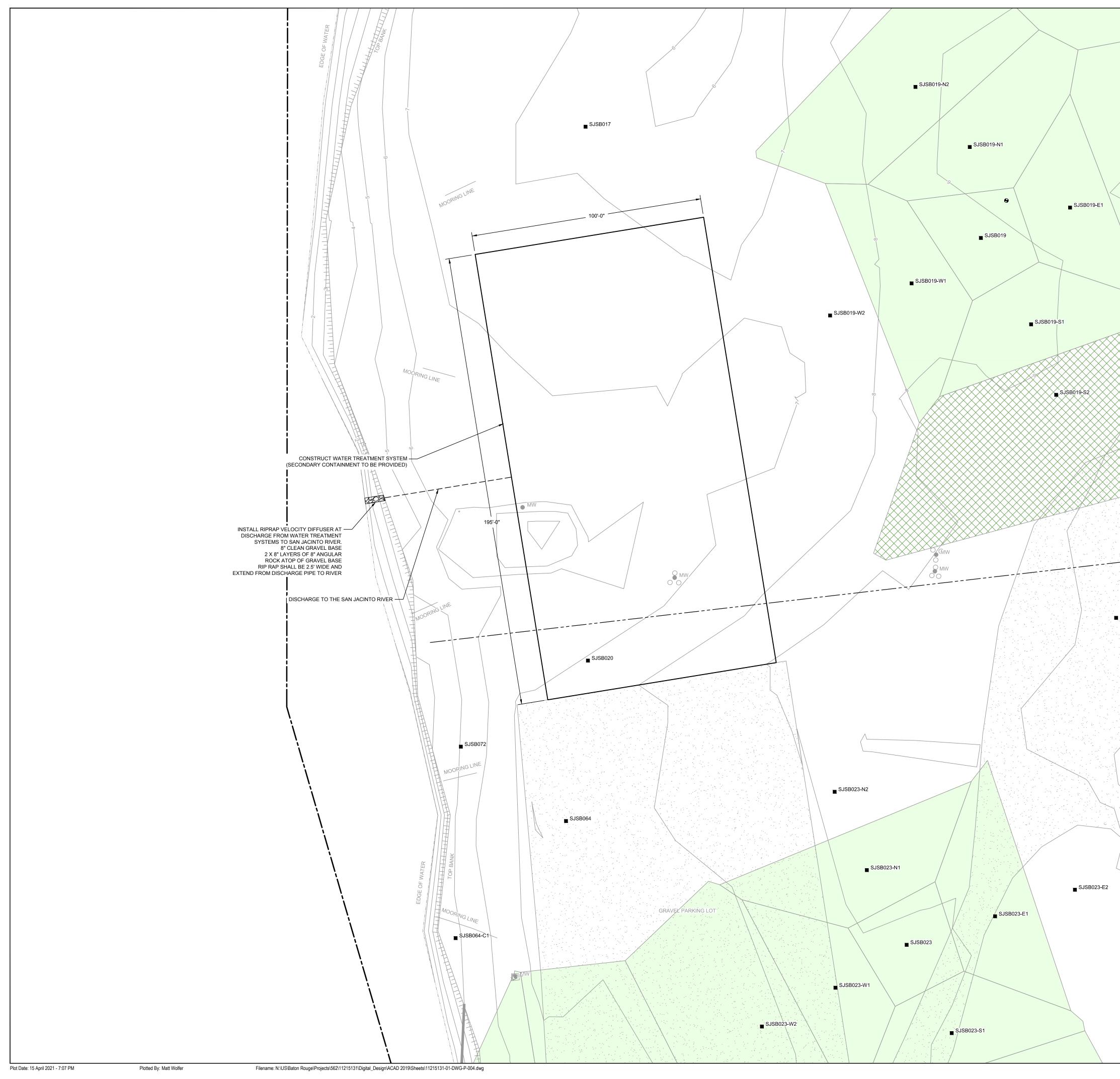






AIT 3000 TB PH	DISCHARGE COMPLIANCE SAMF	E IPLING	
		LIT 3006	
			DECANTING P P-3012
		SLUDGE GRAVITY THICKENER TK-3005	SLUDGE TRANSFER PUMP P-3013





	GHD 5551 Corp Baton Rot	borate Boulevard uge Louisiana Lo 2 9007 F 225 95	JSA	www.ghd.c	com
SJSB019-E2 SJSB042		KEITH BR 130 130 130 130 4-19-2	378 ISEP. LENGINE		
GRAVEL DRIVE		he ideas and design s the property of GH vithout GHD's written	D and shall no authorization. PROPERTY PROPERTY EXISTING (FENCELINI SHORELINI SHORELINI TOP OF BA TOE OF SL OVERHEAI GUARDRA UNDERGR PDI/RI BOF MONITORI POWER PO LIGHT POL WELL AREA OF I	It be reused in 2021 GHD Y BOUNDA Y EASEME CONTOUR E E ANK OPE D ELECTRI IL OUND CCT RING LOCA NG WELL DLE .E MPACT ENTIAL VOLUNT	N whole or in part
\$J\$B022	Project FINAL SOUTHERN II	N JACI WAST (100%) RE MPOUNDMEN .RRIS COL	E PIT Media NT (Amei	S NL DES NDED AI	SIGN PRIL 2021)
	6 100% EPA	RE-SUBMITTAL SUBMITTAL	MW MW Drawn	NF NF Approved	04/19/2021 12/18/2020 Date
SJSB073	Drawn MW Drafting Check BP Project CM Coordinator This document shall construction unless sign construction.			NF Apr 15, 20 1" = 20' aar is one ir	ich on
SOURCE:	Arcl	1215131	0	ginal size o	1"
TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019 PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020 NOTES: 1. PROPOSED EXCAVATION EXTENT SUBJECT TO CHANGE BASED ON THE RESULTS OF THE PRE-CONSTRUCTION SAMPLING EVENT.	Title	SITE	PLAN		