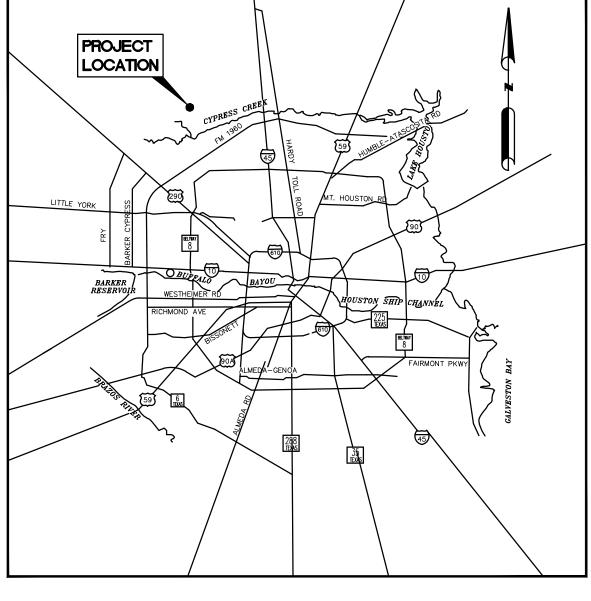
TOMBALL	IND
CONSTRUC	TION

Development Table

Juergen Road Educational Campus

Project # 2207070050

1	t	Total: Acreage within the tract owned by the Developer within the Little Cypress Creek Service Area	205.7700	acres
2	sment	Subtotal: Acreage developed prior to February 11, 2014 (as shown on plans) and all new ROW dedicated according the Master Thoroughfare Plan	0.7571	acres
3	Ses	Subtotal: Acreage developed in a previous phase under the LCCIG	0.0000	
4	Ass	Subtotal: Acreage Proposed to be Developed in this phase	205.0129	acres
5	1	Subtotal: Remaining undeveloped acreage owned by Developer within the Little Cypress Creek Watershed after completion of this development (Line1-Line2-Line3-Line4-Line5)	0.0000	acres
6	mpa	Little Cypress Creek Impact Fee	\$ 4,000.00	per acre
7]_	Total Impact Fee Due for Development Acreage (Line 4 times Line 6)	\$ 820,051.72	
8		Subtotal Impact Fees Previously Paid	\$ -	
9		Total TRE to be provided in this development phase (Line 10+Line 11)	182.46	ac-ft
10]	Required mitigation detention for this development phase (Line 4 times 0.55 ac-ft/ac)	112.76	ac-ft
11		Required Conveyance detention for this development phase (Line 4 times 0.34 ac-ft/ac)	69.70	ac-ft
12	TRE	Remaining developable Property after this development phase without previously provided TRE (Line 5)	0.00	acres
13		TRE Volume for total remaining developable property after this development phase (Line 14+Line 15)	0.00	ac-ft
14]	Required mitigation detention for entire developable Property (Line 5 times 0.55 ac-ft/ac)	0.00	ac-ft
15		Required Conveyance detention for entire developable Property (Line 5 times 0.34 ac-ft/ac)	0.00	ac-ft



LOCATION MAP N.T.S.

48 HOUR NOTICE:

CONTRACTOR SHALL NOTIFY HARRIS COUNTY PRIOR TO COMMENCING CONSTRUCTION AND/OR BACKFILLING ANY UTILITIES. CONTRACTOR(S) TO CONTACT PUBLIC REVIEW DEPARTMENT @ (713-274-3931) OR (public.review@cpid.org).

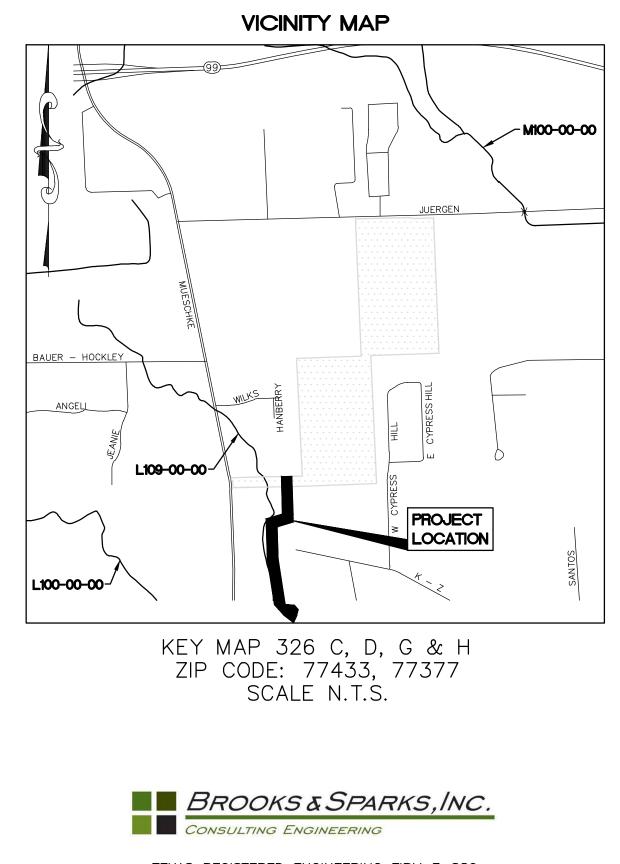
DEPENDENT SCHOOL DISTRICT PLANS FOR **NOF PROPOSED L109-00-00 CHANNEL** TO SERVE JUERGEN ROAD EDUCATIONAL CAMPUS

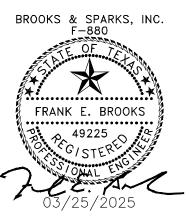
MARCH 2025

*CONSTRUCTION OF FEATURES WITHIN FUTURE HARRIS COUNTY FLOOD CONTROL DISTRICT ROV A 48-HOUR PRE-CONSTRUCTION NOTICE MUST BE PROVIDED TO THE HARRIS (HCFCD) IN ORDER TO SCHEDULE APPLICABLE INSPECTIONS DURING CONSTRUCTION OF THE PROPOSED FEATURE FAILURE TO PROVIDE THIS NOTIFICATION MAY RESULT IN THE FACILITY NOT BEING ACCEPTED FOR HCFCI MAINTENANCE.

THE 48--HOUR PRE-CONSTRUCTION NOTIFICATION FORM TO HCFCD AT DCID@HCFCD.ORG. PLEASE CONTACT THE HCFCD DEVELOPMENT & CONSTRUCTION INSPECTIONS DEPARTMENT (DCID) DCID@HCFCD.ORG FOR THE LATEST FORM

NOTIFICATIONS (PERMIT) ISSUED BY HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT - PERMITS OFFICE - IS REQUIRED FOR PROPOSED WORK WITHIN HARRIS COUNTY RIGHT-OF-WAY. THE PROJECT MUST BE APPROVED PRIOR TO OBTAINING THE REQUIRED NOTIFICATION. BE ADVISED THAT A NOTIFICATION MUST BE OBTAINED SEPARATELY FROM SITE DEVELOPMENT PERMIT PACKAGE. FOR ADDITIONAL INFORMATION, PLEASE VISIT <u>http://hcpid.org/permits/pr_notification_of_construction.html</u> OR CONTACT PUBLIC REVIEW INSPECTIONS DEPARTMENT @ (713-274-3931 OR public.review@hcpid.org)





TEXAS REGISTERED ENGINEERING FIRM F-880

-0018 866 . N N

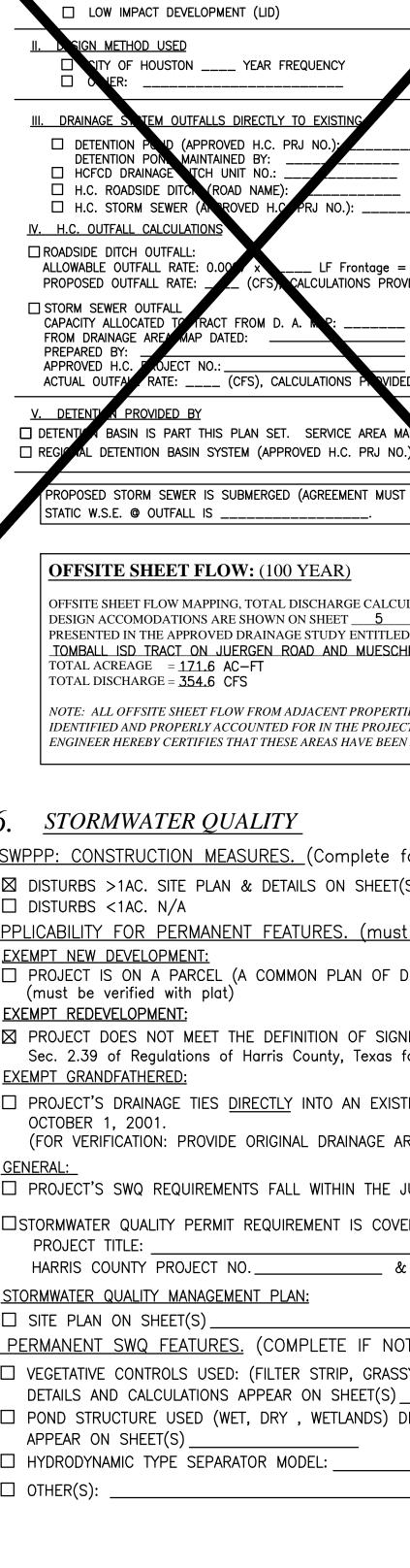
INDEX

SHEET NO.

DESCRIPTION

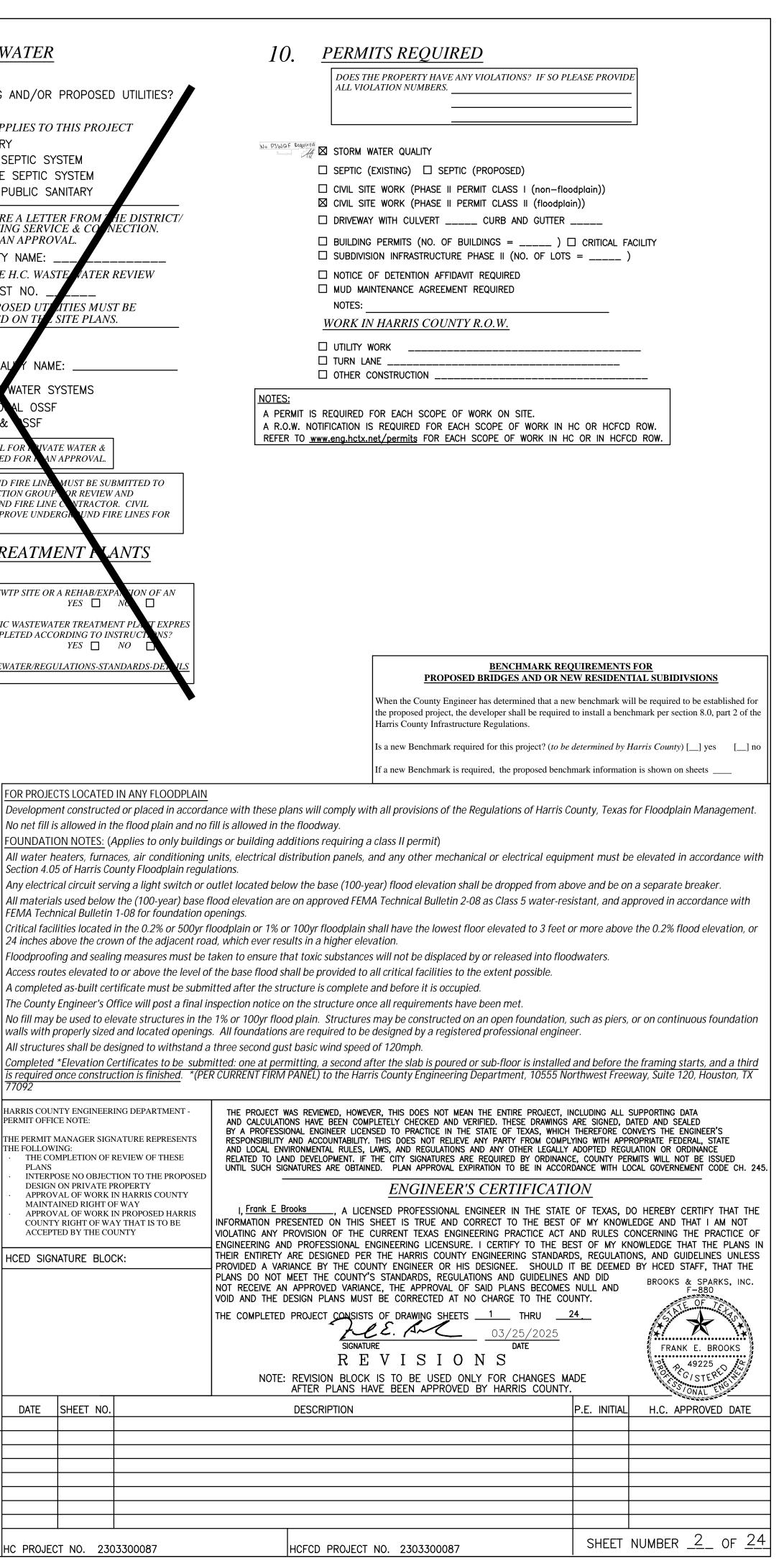
1.	COVER SHEET
2.	HARRIS COUNTY EXPRESS REVIEW SHEET
3.	HARRIS COUNTY FLOOD CONTROL DISTRICT EXPRESS REVIEW SHEET
4.	GENERAL NOTES
5.	PROJECT LAYOUT
6.	SHEET INDEX
7.	DEMOLITION PLAN
8.	SERVICE AREA MAP
9.	TYPICAL SECTIONS
10.	L109–00–00 PLAN AND PROFILE STA. 1+00 TO STA. 10+00
11.	L109–00–00 PLAN AND PROFILE STA. 10+00 TO STA. 20+00
12.	L109–00–00 PLAN AND PROFILE STA. 20+00 TO STA. 26+00
13.	L109–00–00 PLAN AND PROFILE STA. 26+00 TO END
14.	L109–00–00 OUTFALL PLAN AND PROFILE STA. 7+00 TO 15+00
15.	STORM WATER POLLUTION PREVENTION PLAN
16.	STORM WATER POLLUTION PREVENTION DETAILS
17.	CONCRETE WINGWALL WITH STRAIGHT WINGS
18.	HCFCD OUTFALL AND INTERCEPTOR STRUCTURE DETAILS
19.	HCFCD CONCRETE CHANNEL LINING DETAILS
20.	HCFCD STORM SEWER AND RIPRAP DETAILS
21.	CROSS SECTIONS STA. 2+00 TO STA. 9+00
22.	CROSS SECTIONS STA. 10+00 TO STA. 18+00
23.	CROSS SECTIONS STA. 19+00 TO STA. 27+00
24.	CROSS SECTIONS STA. 28+00 TO STA. 33+00

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III. JURISDICTIONS APPEAR ON SHEET(S) CITY OF HYDRODYNAMIC TYPE SEPARATOR MODEL: ETJ, CITY OF OTHER(S): NO ETJ OTHER(S): IV. HCAD ACCOUNT NOS. (ALL) KEY MAP PAGE 326 C.D&G 0411090000009, 041109000004, 0411090000086 0411090000026, 0411090000009, 04110900000105, 0411090000013 OTHER(S): V. UNOBSTRUCTED VISIBILITY EASEMENT (U.V.E.) REQUIRED AND SHOWN ON SHEET(S) NOT REQUIRED NOTE: ALL APPROVED, FINAL PLATS AND ASSOCIATED CPCIOI FORMS MUST BE INCLUDED WITH PLAN SUBMITTAL. CONFORMING SUBDIVISION	F -	PLAT NAM	E:					PRIVATE			DE	TAILS AND CALCULA	ATIONS APPEAR ON SHI
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CPC101 FORMS MUST BE INCLUDED WITH PLAN SUBMITTAL.				N ON SHEET(S)								
		01 FORMS	MUST BE IN	CLUDED WIT	H PLAN SUI		L.						
□ PARTIALLY NON-CONFORMING SUBDIVISION		X	NON-CO	NFORMING	SUBDIVISIC		VISION						





I DRAINAGE	<i>3. <u></u></i>	MMERCIAL / OTHER SITE DRAINAGE	4. WATER AND WASTEWAT	E
		DPOSED DRAINAGE AREA EVELOPMENT AREA:	I. COMMERCIAL PROJECTS DOES PROPERTY HAVE EXISTING AND)/(
		/ELOPMENT AREA (NET NEW DEVELOPED AREA):	□ YES □ NO	
		PACT DEVELOPMENT (LID)	F YES, CHECK THE BOX THAT APPLIE.	S T
		*□ .00 (CHANNEL) *□ .75 (STM_SWR)	PRIVATE WATER WELL & SEPTIC PUBLIC WATER & PRIVATE SEP	
~	NEW AREA DETENTION RE	$X_* = ACRE FEET QUIRED ACRE FEET WILL 1.00 (RD. DITCH)WILL OTHER:$	ARIVATE WATER WELL & PUBLI	
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 	DETENTION VOL	LUME PROVIDED BY EXISTING DETENTION POND	THIS IS REQUIRED FOR PLAN AP UTILITY DIST ICT/MUNICIPALITY NAM	
	DETENTION POI	ND SERVICE AREA MAP IS PROVIDED ON SHEET	NOTE: SEPTIC SY. TEMS REQUIRE H.C. H.C. SEPTIC PERMIT/REQUEST NO	
ntage = (CFS)	OUTFA	L TO L H.C. ROADSIDE DITCH L EXISTING H.C. STORM SEWER	NOTE: ALL EXISTING AND PROPOSED ACCURATELY SHOWN LABELED ON	\mathcal{D}
NS PROVIDED ON SHEET		DITCH OUTFALL:	II. SUBDIVISION PROJECT	
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PROVIDED ON SHEET	CAPACITY	EWER OUTFALL ALLOCATED TO TRACT FROM D. A. MAP: (CFS) XAINAGE AREA MAP DATED:	 PRIVATE WATER & WASTE WATE PRIVATE WATER & INDUCT AL 	
AREA MAP IS ON SHEET	PREPARE APPROVE		□ INDIVIDUAL WATER WELL & S	
PRJ NO.):	<u>IV. PUMPE</u>	D DETENTION FACILITIES	NOTE: A COPY OF TCEQ & PROVAL FOR WASTE WATER SYSTEMS REQUIRED FOR	R N R N
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·	OR ST	NCE VELOCITY INTO ROADSIDE DITCH ORM SEWER: SPECIFICATIONS AND AUTOMATIC SHUTOFF PLAN FOR ROADSIDE DITCH	PERMITTING BY T E UNDERGROUND FIRE REIVEW DOES N <u>I</u> REVIEW OR APPROVE THE FIRE PROTICTION SYSTEMS.	E L
	& STC	ORM SEWER OUTFALLS APPEAR ON SHEET	WASTEWATER TREAT	\overline{T}
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NTITLED MUESCHKE_ROAD	RESTR NOTE: ALL ROA	ICTOR PIPE SIZE:	IS THE ROPOSED PROJECT A NEW WWTP SIZE EXIST OF WWTP SIZE?	TE
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ROPERTIES MUST BE E PROJECT. THE SIGNING VE BEEN ADDRESSED.			REFER TO: WWW.ENG.HCTX.NET/PERMITS/WASTEWATER	R/RÌ
			FOR DOMESTIC WWTP ERS FORM	
olete for ALL projects) SHEET(S <u>) 15 – 16</u> (must be completed on a N OF DEVELOPMENT) LESS THA OF SIGNIFICANT REDEVELOPMEN Texas for Stormwater Quality I N EXISTING DRAINAGE SYSTEM	AN 5 ACRES. T (Part A, Management)	FIRM PANEL(S) FOR PROPERTY: 48201C0215L FIRM PANEL(S) DATE: JUNE 18, 2007 STATUS OF PROPERTY ON MAP □ ENTIRELY LOCATED IN UNSHADED ZONE "X" ⊠ LOCATED PARTIALLY OR ENTIRELY IN ANY "A" ZONE OR SHADED ZONE "X", DELINEATE FLOODPLAIN BOUNDARY ON CONSTRUCTION DRAWINGS (DRAINAGE LAYOUT PG. NO) (1% BASE FLOOD LEVEL 167.00' – (0.2% BASE FLOOD LEVEL 168.41' – □ SITE REMOVED FROM FLOODPLAIN BY LOMR, LOMR-F, LOMA CASE NO REVISED FLOODPLAIN IS SHOWN ON SHEET ELEVATION INFORMATION BENCHMARK USED ⊠ HARRIS COUNTY FLOODPLAIN REFERENCE MARK □ HARRIS COUNTY FLOODPLAIN REFERENCE MARK □ HARRIS COUNTY FLOODPLAIN REFERENCE MARK □ HARRIS COUNTY FLOODPLAIN REFERENCE DISTRICT BENCHMARK (FOR COASTAL SUBSIDENCE DISTRICT BENCHMARK (FOR COASTAL AREAS) DESCRIPTION OF BENCHMARK INCLUDING ELEVATION, DATUM AND YEAR OF ADJUSTMENT (2001 ADJ.)RM111050 - ALUMINUM ROD WITH LOGO	170.17') No ne 171.17') <i>FOUN</i> <i>All wa</i> <i>Sectio</i> <i>Any e</i> <i>All ma</i> <i>FEMA</i> <i>Critica</i> <i>24 inc</i>	lopi et fi NDA vate on 4 elec pate ate che
IAGE AREA MAP INCLUDING CA	LCULATIONS)			
THE JURISDICTION OF:		POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.)	A con The C	
S COVERED BY AN EXISTING S	WQMP WITHIN	II. FLOOD PLAIN DETERMINATION BASED ON GROUND ELEVATION PROPERTY LIES ENTIRELY ABOVE THE BASE FLOOD LEVEL AND IN SHADED ZONE "X"	No fill walls	
& SWQ PERMIT NO		PROPERTY LIES PARTIALLY OR ENTIRELY BELOW THE BASE FLOOD LEVEL	All str Comp	
		III. FLOODPLAIN STORAGE SUMMARY (APPLIES ONLY TO PORTION OF LAND LOCATED WITHIN FLOODPLAIN AS DELINEATED BY FIRM PANEL). A. TOTAL VOLUME OF MATERIAL PROPOSED TO BE MOVED OR PLACED WITHIN	is req 77092	quir
IF NOT EXEMPT)		THE FIRM DELINEATED FLOODPLAIN (FILL, BASE, CONCRETE, ASPHALT, ETC BELOW 0.2% BASE FLOOD ELEVATION <u>168.41'–171.17'</u> (2001 ADJ.) <u>0</u> B. TOTAL VOLUME OF MATERIAL PROPOSED TO BE REMOVED FROM THE FIRM	CUBIC YARDS HARRIS	
GRASSY SWALE, URBAN FORE ET(S)	STRY)	DELINEATED FLOODPLAIN: BELOW 0.2% BASE FLOOD ELEVATION <u>168.41'-171.17'</u> (2001 ADJ.) <u>0</u>	CUBIC YARDS THE PE THE FO	OLL
NDS) DETAILS AND CALCULATIC	INS	C. FILL AREA & VOLUME CALCULATIONS ARE SHOWN ON SHEET <u>5</u>		PLAI NTE
-		IV. LOMR REQUIRED CLOMR REQUIRED VERIFIED BY:	· A	DESI APPI MAI
		<i>CURB RAMPS</i>	C	COU
	Ć	A. ARE CURB RAMPS THAT CONNECT TO PUBLIC STREETS PROPOSED	HCED) S
	(IN THIS SET OF PLANS? [] YES [X] NO D. LANDSCAPING		
		REQUIRED AND SHOWN ON SHEET(S)		
		⊠ NOT REQUIRED		
			DA	ATE
· · _				
ARRIS C	OUN	TY		
VEERING L	• •			
REVIEW SH	EET		HC PI	RO



LOCATION INFORMATION	<u>2. SITE</u> <u>1. proposed drainage are</u>
A. HARRIS COUNTY COMMISSIONER'S PRECINCT:	🛛 NEW DEVELOPMENT AREA:
□ 1 □ 2 ⊠ 3 □ 4 B. KEY MAP: <u>326 C,D&G</u>	□ RE-DEVELOPMENT AREA (AMO □ LOW IMPACT DEVELOPMENT (
C. ADDRESS: <u>x</u>	METHOD/DESCRIPTION
LEGAL DESCRIPTION	II. METHODOLOGY
A. ACREAGE: B. 🔲 SUBDIVISION:	HCFCD PCPM DETENTION MET
	☐ METHOD 1 (LESS THAN 20 A ☐ METHOD 2 (20 ACRES TO 64
⊠ SURVEY & ABSTRACT: <u>TRS C 16 22 & 24 (PR YR OM</u> ITTED LAND 2008–2012*045009000254) ABST 705 W SETTLE	METHOD 3 (GREATER THAN 6
C. ADJACENT ROADS: MUESCHKE ROAD & KZ ROAD	OTHER OPTIONAL ROUTIN
. PLATTING	III. DETENTION VOLUME & OL OUTFALL TO:
A. SUBDIVISION PLAT B. STREETS PROPOSED	.65, H.C.F.C.D. CHANNEL,
PROPOSED PLAT / REPLAT PUBLIC RECORDED PLAT / REPLAT PRIVATE PRIVATE	.75, EXISTING STORM SEW
PLAT NAME:	1.00, ROADSIDE DITCH, (OW
. JURISDICTIONS	☑ OTHER (OWNER & OPERATO 0.89, LITTLE CYPRESS CRI
□ CITY OF ⊠ ETJ, CITY OF HOUSTON	
□ ETJ, CITY OF □ NO ETJ	IV. STORMWATER DETENTION
	A. HCFCD PCPM SUMMARY TABL
HCAD ACCOUNT NOS. (ALL) KEY MAP PAGE <u>326 C,D&G</u>	DETENTION BASIN SERVICE AREA
	MAXIMUM ALLOWABLE OUTFLOW (PREDEVELOPMENT PEAK FLOW) MAXIMUM OUTFLOW PROVIDED (PEAK BASIN)
	LOWEST NATURAL/FINISHED GROUND FINISHED FLOOR ELEVATION ESTIMATE
WORK IN HCFCD RIGHT-OF-WAY (FUTURE)	DESIGN WATER SURFACE ELEVATION
I. TYPE OF WORK TO BE PERFORMED IN HCFCD HCFCD ROW	MINIMUM STORAGE REQUIRED (ac-ft)
A. BOND/NOTIFICATION INFORMATION M HCFCD WATERSHED <u>LITTLE CYPRESS CREEK</u>	STORAGE RATE PROVIDED (ac-ft/ac)
\square HCFCD UNIT No. <u>L109–00–00</u> \square NUMBER OF OUTFALLS	OUTFLOW VELOCITY INTO CHANNEL (ft/sec)
UTILITY CROSSING	DRAIN TIME – 1% ONLY (hours) EMERGENCY OVERFLOW (TYPE SIZE FLEVATION FTC.)
□ FILL ACTIVITY □ REHABILITATION OF CHANNEL	(TYPE, SIZE, ELEVATION, ETC.)
 ☐ MAINTENANCE ☐ TEMPORARY CROSSING ☐ TRAIL (LENGTH) 	B. DETENTION BASIN TO BE MAI
 ☐ MAINTENANCE ☐ TEMPORARY CROSSING 	C. DETENTION SERVICE AREA MA
 MAINTENANCE □ TEMPORARY CROSSING □ TRAIL (LENGTH) ☑ OTHER L109-00-00 CHANNEL IMPROVEMENTS 	C. DETENTION SERVICE AREA MA D. ADDITIONAL CRITERIA FOR PU VOLUME OF PUMPED 1% EXCE MAXIMUM DESIGN OUTFLOW VEI
 MAINTENANCE □ TEMPORARY CROSSING □ TRAIL (LENGTH) ☑ OTHER <u>L109-00-00 CHANNEL IMPROVEMENTS</u> COST OF WORK IN HCFCD ROW <u>\$3,000,000.00</u> <u>II. USACE ENVIRONMENTAL PERMIT</u> ☑ US ARMY CORPS OF ENGINEERS NATIONWIDE 	C. DETENTION SERVICE AREA MA D. ADDITIONAL CRITERIA FOR PU VOLUME OF PUMPED 1% EXCE MAXIMUM DESIGN OUTFLOW VEI DRAIN TIME FOR BASIN =
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175				I. SWPPP: CONSTRUCTION MEASURES. (Must complete)
	EASED IMPERVIOU	US AREA):		☑ DISTURBS >1AC. SITE PLAN & DETAILS ON SHEET(S)
Г (LID)				DISTURBS <1AC. N/A
				<u>*II. APPLICABILITY FOR PERMANENT FEATURES. (Must complete)</u>
				EXEMPT NEW DEVELOPMENT:
IETHOD USE	D:			LESS THAN 5 ACRES. (Must be verified with plat) EXEMPT REDEVELOPMENT:
ACRES) 640 ACRES)				PROJECT DOES NOT MEET THE DEFINITION OF SIGNIFICANT
I 640 ACRES) TING METHO				REDEVELOPMENT (Part A,Sec. 2.39 of Regulations of Harris County, Texas for Stormwater Quality Management)
<u>OUTFALL</u>				SYSTEM PRIOR TO OCTOBER 1, 2001. (FOR VERIFICATION: PROVIDE ORIGINAL DRAINAGE AREA MAP
L, (H.C.F.C.D.	UNII NO.)			INCLUDING CALCULATIONS) <u>GENERAL:</u>
EWER (OWNEF	R & OPERATOR)			□ PROJECT'S SWQ REQUIREMENTS FALL WITHIN THE JURISDICTION OF:
OWNER & RO	DAD NAME)			STORMWATER QUALITY PERMIT REQUIREMENT IS COVERED BY AN EXISTING SWQMP WITHIN PROJECT TITLE:
,	<u>-00–00 (HCFC</u> + 1.00, INTER	D) —WATERSHED_TRA	NSFER	HARRIS COUNTY PROJECT No & SWQ PERMIT No.
				HARRIS COUNTY PROJECT NO & SWQ PERMIT NO. STORMWATER QUALITY MANAGEMENT PLAN:
	INFORMATION	_	NOTE: SEE DETEN	ITION
ABLE SEE SI		OF THESE PLAN	S. SUMMARY TABLES	ON SHEET 5.
	175 50% EXCEEDANCE (2-YEAR)	acres 10% EXCEEDANCE (10-YEAR)	1% EXCEEDANCE (100-YEAR)	URBAN FORESTRY DETAILS AND CALCULATIONS APPEAR ON
PRE-	141.9	235.8	422.3	SHEET(S)
EAK FLOW FROM	127.6	234.6	391.1	POND STRUCTURE USED (WET, DRY, WETLANDS) DETAILS AND CALCULATIONSAPPEAR ON SHEET(S)
ND OR MATE				HYDRODYNAMIC TYPE SEPARATOR MODEL:
DN —ft)			220.7	□ OTHER(S):
ac-ft)			229.3 229.3	
/ac) L			1.31	
L	4.36	4.69	7.81	
	12 HOURS			6. REPORTS/AGREEMENTS
				I. HCFCD ACCEPTED REPORTS (ALL)
				STORMWATER DRAINAGE DESIGN REPORT
	BY <u>HCFCD</u>			STORMWATER DRAINAGE DESIGN REPORT REPORT TITLE TOMBALL ISD TRACT ON JUERGEN ROAD AND MUESCHKE ROAD DRAINAGE IMPACT ANALYSIS
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CONTROL DISTRICT REVIEW SHEET

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4. FLOOD PLAIN STATUS

			I. GENERAL INFORMATION	
			FIRM PANEL(S) FOR PROPERTY: <u>48201C0215L</u> FIRM PANEL(S) DATE: JUNE 18, 2007	
			STATUS OF PROPERTY ON MAP	
		_	 LOCATED PARTIALLY OR ENTIRELY IN ANY "A" ZONE OR SHADED ZONE "X", DELINEATE FLOODPLAIN BOUNDARY ON CONSTRUCTION DRAWINGS (DRAINAGE LAYOUT PG. NO5) (1% BASE FLOOD LEVEL 167.00' – 170.17') (0.2% BASE FLOOD LEVEL 168.41' – 171.17') 	
			□ SITE REMOVED FROM FLOODPLAIN BY LOMR, LOMR-F, LOMA CASE NO REVISED FLOODPLAIN IS SHOWN ON SHEET)
			ELEVATION INFORMATION BENCHMARK USED	
			■ HARRIS COUNTY FLOODPLAIN REFERENCE MARK ■ HARRIS—GALVESTON COASTAL SUBSIDENCE DISTRICT	
			BENCHMARK (FOR COASTAL AREAS) DESCRIPTION OF BENCHMARK INCLUDING ELEVATION, DATUM AND	
			YEAR OF ADJUSTMENT (2001 ADJ.) <u>RM111050 – ALUMINUM ROD WITH LOGO</u> CAP <u>STAMPED "111050" LOCATED ON THE NORTH SIDE OF BAUER-HOCKLEY ROAD</u> <u>±75' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ±120' WEST OF A</u>	
			POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.)	
			II. FLOOD PLAIN DETERMINATION BASED ON GROUND ELEVATION	
			PROPERTY LIES ENTIRELY ABOVE THE BASE FLOOD LEVEL AND IN SHADED ZONE "X"	
			PROPERTY LIES PARTIALLY OR ENTIRELY BELOW THE BASE FLOOD LEVEL	
			III. FLOODPLAIN STORAGE SUMMARY	
			(APPLIES ONLY TO PORTION OF LAND LOCATED WITHIN FEMA REGULATORY FLOODPLAIN). A. TOTAL VOLUME OF MATERIAL PROPOSED TO BE MOVED OR PLACED WITHIN	
		_	THE FIRM DELINEATED FLOODPLAIN (FILL, BASE, CONCRETE, ASPHALT, ETC.): BELOW 0.2% BASE FLOOD ELEVATION (2001 ADJ.) <u>168.41'–171.17'</u> CUBIC YARDS <u></u>)
			B. TOTAL VOLUME OF MATERIAL PROPOSED TO BE REMOVED FROM THE FIRM	
			DELINEATED FLOODPLAIN: BELOW 0.2% BASE FLOOD ELEVATION (2001 ADJ.) <u>168.41'–171.17'</u> CUBIC YARDS <u>0</u>)
			INCLUDING CALCULATIONS) C. FILL AREA & VOLUME CALCULATIONS ARE SHOWN ON SHEET 5	
			0. THE AREA & VOLUME CALCOLATIONS ARE SHOWN ON SHEET <u>0</u>	
			UCECD SICNATUDE DI OCK	
			TOMBALL INDEPENDENT SCHOOL DISTRICT PLANS FOR CONSTRUCTION OF PROF	POSED
			PROJECT NAME: 109-00-00 CHANNEL TO SERVE JUERGEN ROAD EDUCATIONAL CAMPUS	
			ADDRESS: JUERGEN ROAD	
			WAS ACCEPTED BY HARRIS COUNTY FLOOD CONTROL DISTRICT FOR THE PURPOSES LISTED BE	LOW:
			HARRIS COUNTY FLOOD CONTROL DISTRICT INTERPOSE NO OBJECTION	
			BY FOR ITEMS LOCATED OUTSIDE OF HCFCD RIGHT-OF-WAY	
			APPROVED:	
			BY FOR ITEMS LOCATED WITHIN EXISTING HCFCD RIGHT-OF-WAY	
			APPROVED:	
NAL			BY FOR ITEMS LOCATED WITHIN PROPOSED HCFCD RIGHT-OF-WAY	
			NO REVIEW REQUIRED:	
			FINAL PERMITTING BY OTHERS ADDITIONAL COMMENTS:	
		_	THE PROJECT WAS REVIEWED, HOWEVER, THIS DOES NOT MEAN THE ENTIRE PROJECT, INCLUDING ALL SUPPORTING DATA AND CALCULATIONS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. THESE DRAWINGS ARE SIGNED, DATED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH THEREFORE CONVEYS THE ENGINEER	
			RESPONSIBILITY AND ACCOUNTABILITY. THIS DOES NOT RELIEVE ANY PARTY FROM COMPLYING WITH APPROPRIATE FEDERAL, S AND LOCAL ENVIRONMENTAL RULES, LAWS, AND REGULATIONS AND ANY OTHER LEGALLY ADOPTED REGULATION OR ORDINANCE RELATED TO LAND DEVELOPMENT. IF THE CITY SIGNATURES ARE REQUIRED BY ORDINANCE, COUNTY PERMITS WILL NOT BE IS)e Ssufd
			UNTIL SUCH SIGNATURES ARE OBTAINED. PLAN APPROVAL EXPIRATION TO BE IN ACCORDANCE WITH LOCAL GOVERNEMENT C	CODE CH. 245.
			<u>ENGINEER'S CERTIFICATION</u> I <u>, Frank E Brooks</u> , A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HERE	
			THAT THE INFORMATION PRESENTED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNO AND THAT I AM NOT VIOLATING ANY PROVISION OF THE CURRENT TEXAS ENGINEERING PRACTICE ACT	OWLEDGE
			CONCERNING THE PRACTICE OF ENGINEERING AND PROFESSIONAL ENGINEERING LICENSURE.	
			ANY VIOLATIONS WILL BE FORWARDED TO THE HARRIS COUNTY DISTRICT ATTORNEY'S OFFICE FOR PRO THE COMPLETED PROJECT CONSISTS OF DRAWING SHEETS <u>1</u> THRU <u>24</u> . BROOKS & SPA F-880	RKS, INC.
			Contraction of the second s	
			SIGNATURE 03/25/2025	
			REVISION S	••••••
			NOTE: REVISION BLOCK IS TO BE USED ONLY FOR CHANGES MADE AFTER PLANS HAVE BEEN APPROVED BY HARRIS COUNTY FLOOD CONTROL.	RUC
	DATE	SHEET NO.	DESCRIPTION P.E. INITIAL H.C.F.C.D APPRI	OVED DATE
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SHEET NUMBER <u>3</u> OF <u>24</u>

<u>GENERAL NOTES - OUTSIDE CITY LIMITS</u>

- CONSTRUCT WASTEWATER COLLECTION SYSTEMS, WATER LINES AND STORM DRAINAGE IN ACCORDANCE WITH THE LATEST EDITION OF THE PUBLICATIONS <u>STANDARD CONSTRUCTION</u> <u>SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE,</u> <u>AND STREET PAVING AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTIO</u> <u>SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING</u> PUBLISHED BY THE CITY (HOUSTON, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
- UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL NOTIFY TEXAS ONE CALL AT 713-223-4567/800-245-4545 AND LONE STAR ONE CALL AT 800-669-8344 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER AND STORM DRAINAGE LINES. DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE CITY OF HOUSTON. DEPARTMENT OF PUBLIC WORKS AND ENGINEERING'S STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, AND STREET PAVING, REFERENCED ABOVE, AT NO ADDITIONAL COST.
- CONTRACTOR SHALL NOTIFY THE OFFICE OF THE CITY ENGINEER, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING IN WRITING PRIOR TO COMMENCING CONSTRUCTION.
- ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
- CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.

GENERAL CONSTRUCTION NOTES

- WASTEWATER COLLECTION SYSTEMS, WATER, PAVING, TRAFFIC SIGNALS AND DRAINAGE SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING CITY DOCUMENTS. THESE DOCUMENTS ARE "STANDARD CONSTRUCTION SPECIFICATIONS (MOST RECENT ISSUE OCTOBER 2002) WITH ALL SUBSEQUENT AMENDMENTS ADDED THERETO UNLESS OTHERWISE NOTED AND APPROVED ON THESE PLANS. THE DESIGN MUST AGREE WITH THE MINIMUM STANDARDS ESTABLISHED IN THE LATEST ISSUE OF THE "INFRASTRUCTURE DESIGN MANUAL" (MOST RECENT ISSUE OCTOBER 2002)
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO PAVING, WATER LINES, WASTEWATER COLLECTION SYSTEMS, STORM SEWER, AND TRAFFIC SIGNALS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH CURRENT EDITIONS OF CITY OF HOUSTON STANDARD CONSTRUCTION SPECIFICATIONS, DESIGN DETAILS AND DESIGN MANUALS. REPAIRS SHALL BE AT NO COST TO THE PUBLIC
- CONTRACTOR SHALL NOTIFY HARRIS COUNTY ENGINEERING DEPARTMENT FORTY-EIGHT (48) HOURS IN ADVANCE OF COMMENCING CONSTRUCTION AT TELEPHONE NUMBER (713–274–3823)
- CONTRACTOR SHALL NOTIFY THE UTILITY COORDINATING COMMITTEE AT (713) 223-4567 FOR LOCATION OF EXISTING FACILITIES THAT MAY NOT BE SHOWN ON THE PLANS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL OBTAIN ALL DEVELOPMENT, RIGHT-OF-WAY AND CONSTRUCTION PERMITS REQUIRED BY THE REGULATIONS OF HARRIS COUNTY, TEXAS AT HIS EXPENSE PRIOR TO COMMENCEMENT OF WORK.
- . CONTRACTOR SHALL COMPLY WITH O.S.H.A. REGULATIONS AND TEXAS STATE LAW CONCERNING TRENCH SAFETY SYSTEMS.
- ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE AND THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY HIS FAILURE TO LOCATE AND MAINTAIN THE EXISTING UNDERGROUND UTILITIES.
- ALIGNMENT, CENTERLINE CURVE DATA AND STATIONING TO BE VERIFIED FROM APPROVED SUBDIVISION PLAT OR APPROVED PLAT OR RECORDED INSTRUMENT FOR OFFSITE EASEMENTS.

HARRIS COUNTY PERMIT NOTES

- . PAVING SHALL BE IN ACCORDANCE WITH THE "REGULATIONS OF HARRIS COUNTY, TEXAS FOR THE APPROVAL AND ACCEPTANCE OF INFRASTRUCTURE" AND/OR AMENDMENTS OF SAME.
- 2. GUIDELINES SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE
- CONTRACTOR TO OBTAIN ALL PERMITS REQUIRED BY THE "REGULATIONS OF HARRIS COUNTY. TEXAS FOR FLOOD PLAIN MANAGEMENT" PRIOR TO STARTING CONSTRUCTION.
- OWNER TO OBTAIN ALL PERMITS REQUIRED BY HARRIS COUNTY, TEXAS PRIOR TO STARTING CONSTRUCTION OF UTILITIES AND/OR CULVERTS WITHIN HARRIS COUNTY'S ROAD RIGHTS-OF-WAY.
- "AUTHORIZATION NOTICE ISSUED BY HARRIS COUNTY PUBLIC INFRASTRUCTURE ENGINEERING DEPARTMENT PERMIT OFFICE REQUIRED PRIOR TO CONSTRUCTION OF UTILITIES OR LEFT TURN LANES WITHIN HARRIS COUNTY RIGHT-OF-WAY." CONTACT HARRIS COUNTY PERMIT OFFICE (713-274-3931)
- "AS PER FIRM PANEL NO. 48201CO <u>605M</u>, DATED <u>November 15, 2019</u>, THIS TRACT (<u>IS NOT</u>, IS, IS PARTIALLY) WITHIN THE 100-YEAR FLOOD PLAIN, AND THE NEAREST APPLICABLE 100-YEAR FLOOD PLAIN ELEVATION IS <u>129</u> (1973 DATUM ADJUSTMENT)."
- CULVERT TO BE SIZED AND GRADE CONFIRMED BY HARRIS COUNTY PRECINCT NUMBER

SWPPP CONSTRUCTION NOTES

- CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
- DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
- CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FORM THE EXCAVATED AREA.
- CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
- CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN(14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
- DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION. STRUCTURAL CONTROL MEASURES. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
- CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK

STANDARD HCFCD NOTES FOR CONSTRUCTION DRAWING

- 1. OBTAIN AND COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL PERMITS AND APPROVALS, WITH ASSISTANCE FROM ENGINEER, IF NECESSARY. OBTAIN PERMIT (CERTIFICATION) FROM HARRIS COUNTY ENGINEER TO ENTER HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY.
- 2. NOTIFY THE HARRIS COUNTY FLOOD CONTROL DISTRICT'S DEVELOPMENT COORDINATION AND INSPECTION DEPARTMENT IN WRITING AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. SUBMIT THE HCFCD 48 HOUR PRE-CONSTRUCTION NOTIFICATION FORM, A COPY OF THE APPROVED CONSTRUCTION DRAWINGS, AND A COPY OF THE CORPS OF ENGINEERS INDIVIDUAL SECTION 404 PERMIT OR COMPLIANCE WITH NATIONWIDE PERMIT, IF APPLICABLE, TO HCFCD, 9900 NORTHWEST FREEWAY, HOUSTON, TEXAS 77092, ATTN: DEVELOPMENT COORDINATION AND INSPECTION DEPT. BY HAND DELIVERY, BY EMAIL DCID@HCFCD.ORG, OR FAX TO 713-684-4129 (FAX NUMBER).
- 3. ENGINEER SHALL SUBMIT CERTIFICATION LETTER AND RECORD DRAWINGS TO THE HARRIS COUNTY FLOOD CONTROL DISTRICT'S DEVELOPMENT COORDINATION AND INSPECTION SECTION REQUESTING INSPECTION OF ITEMS CONSTRUCTED IN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY. PRIOR TO REQUESTING INSPECTION, THE DRAINAGE RIGHT-OF-WAY AND/OR EASEMENTS SHALL BE STAKED AND FLAGGED.
- 4. PROTECT, MAINTAIN, AND RESTORE EXISTING BACKSLOPE DRAINAGE SYSTEMS.
- 5. BACKSLOPE SWALE AND INTERCEPTOR STRUCTURE ELEVATIONS AND LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. FINAL ELEVATIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION
- 6. ESTABLISH TURF GRASS ON ALL DISTURBED AREAS WITHIN THE CHANNEL OR DETENTION RIGHT-OF-WAY, EXCEPT THE CHANNEL BOTTOM AND WHERE STRUCTURAL EROSION MEASURES ARE USED. MINIMUM ACCEPTANCE CRITERIA ARE 75% COVERAGE OF LIVE BERMUDA GRASS AND NO EROSION OR RILLS DEEPER THAN 4".
- 7. PERFORM ALL ACTIVITIES WITHIN HARRIS COUNTY FLOOD CONTROL DISTRICT RIGHT-OF-WAY IN ACCORDANCE WITH THE MOST RECENT HARRIS COUNTY FLOOD CONTROL DISTRICT STANDARD SPECIFICATIONS BOOK.
- 8. EXCAVATE CHANNEL FLOWLINE TO DESIGN ELEVATION AS SHOWN ON PLANS AND DOWNSTREAM, AS NECESSARY, TO ENSURE NO WATER REMAINS IN THE FACILITY (STORM SEWER, LATERAL CHANNEL, OR DRY BOTTOM DETENTION BASIN) DURING NORMAL WATER SURFACE CONDITIONS IN THE CHANNEL, SO THE FACILITY WILL FUNCTION AS INTENDED. FOR WET BOTTOM DETENTION BASINS, ENSURE NO WATER IS ABOVE THE DESIGN LEVEL IN THE WET BOTTOM DURING NORMAL WATER SURFACE CONDITIONS IN THE CHANNEL.
- 9. MAINTAIN FLOW IN CHANNEL DURING CONSTRUCTION AND RESTORE CHANNEL TO ORIGINAL CONDITION.
- 10. REMOVE ALL EXCAVATED MATERIAL FROM THE HARRIS COUNTY FLOOD CONTROL DISTRICT OR DRAINAGE RIGHT-OF-WAY. NO FILL IS TO BE PLACED WITHIN A DESIGNATED FLOOD PLAIN AREA WITHOUT FIRST OBTAINING A FILL PERMIT FROM THE APPROPRIATE JURISDICTIONAL AUTHORITY.

PRIVATE UTILITY NOTES

CAUTION: UNDERGROUND GAS FACILITIES

LOCATIONS OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY INTRASTATE PIPELINE, LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATES THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713) 207-5463 OR (713) 945-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
- WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVÀTION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
- WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.

• FOR EMERGENCIES REGARDING GAS LINES CALL (713) 659-3552 OR (713) 207-4200. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL FACILITIES

OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW. SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:

- ANY ACTIVITY WHERE PERSON OR THINGS MAY COME WITHIN SIX(6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
- OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.

PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

ACTIVITIES ON OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769.

- AT&T TEXAS / SWBT FACILITIES
- THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
- 2. THE CONTRACTOR SHALL CALL 1-800-344-8377 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
- WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.
- WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
- THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN THE AREA. FOLLOW THE DIRECT BURIED CABLE PROCEDURES TO LOCATE THE AT&T TEXAS/SWBT DIRECT BURIED CABLES AS INDICATED IN THE AT&T TEXAS RESEARCH AND SIGNATURE PROCESS FOR AT&T TEXAS/SWBT FACILITIES.
- PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER MR. ROOSEVELT LEE JR. AT (713)567-4552 OR EMAIL HIM AT RL7259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATION NEAR OUR AT&T TEXAS/SWBT_FACILITIES.

SODDING.

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STORM SEWER CONSTRUCTION NOTES

1. ON SITE STORM SEWERS 12-INCH DIAMETER AND LARGER SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE (PER AASHTO M-294, TYPE S, HANCOR SURE-LOK F477 PIPE, OR APPROVED EQUAL, UNLESS OTHERWISE SHOWN ON PLANS. PRODUCT MUST HAVE GASKET

- 2. ON SITE STORM SEWERS 10-INCH DIAMETER AND LESS SHALL BE PVC (POLY-VINYL CHLORIDE) PIPE MEETING A.S.T.M. SPECIFICATIONS, ASTM D3034 AND HAVING A S.D.R. OF 26, UNLESS OTHERWISE SHOWN ON PLANS.
- ANY CONCRETE PIPE USED ON THIS PROJECT SHALL BE REINFORCED CONCRETE MEETING ASTM C-76 CLASS III, AND HAVE BELL AND SPIGOT JOINTS WITH RUBBER GASKETS. CONCRETE PIPE IS ONLY TO BE USED WHERE REQUIRED IN PUBLIC RIGHT-OF-WAY AND/OR AT TIES TO PUBLIC STORM SEWER SYSTEMS. BEDDING BACKFILLING AND INSTALLATION OF PIPE AND CONSTRUCTION OF APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CIVIL DETAIL SHEETS.
- 4. THE CONTRACTOR SHALL USE PRECAST 4000 PSI REINFORCED CONCRETE STORM SEWER MANHOLES AND INLETS. INVERT SHALL BE INSTALLED WITH NON-SHRINK GROUT AND SLOPED TO ENSURE POSITIVE DRAINAGE FROM INLET TO STORM SEWER LINE. WITH SMOOTH FINISH AND NO STANDING WATER IN INLET. BRICK MANHOLES AND/OR INLETS MAY BE USED AS APPROVED BY THE ENGINEER WHEN SETTING STRUCTURES ON EXISTING UTILITY LINE. BRICK STRUCTURES MUST BE MORTARED INSIDE AND OUT. COORDINATE EACH INCIDENT WITH
- 5. ALL INLETS, MANHOLES, CLEANOUTS, AND HEADWALLS SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND. CEMENT STABILIZED SAND FILL SHALL BE AT LEAST 12" ON BOTTOM OF STRUCTURE AND 12" AROUND OUTSIDE OF STRUCTURE.
- 6. NO CORNER CONNECTIONS WILL BE ALLOWED TO ANY INLETS, JUNCTION BOXES OR BOX MANHOLES
- 7. CONTRACTOR SHALL CUT OFF PIPE FLUSH WITH INSIDE FACE OF INLETS AND MANHOLES. ALL PIPE PENETRATIONS SHALL BE GROUTED INSIDE AND OUT WITH NON-SHRINK GROUT. 8. CONCRETE FOR DRAINAGE STRUCTURES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF
- 4.500 PSI AT 28 DAYS. 9. CULVERT CROSSINGS LOCATED WITHIN 30 FEET OF THE RIGHT-OF-WAY SHALL HAVE MINIMUM 6:1 SLOPING ENDS KNOWN AS SAFETY END TREATMENTS (SETS). THE CULVERT SHALL HAVE SUFFICIENT LENGTH TO ALLOW THE 6:1 SLOPE TO BE ACHIEVED FROM THE EDGE OF
- PAVEMENT TO THE FLOWLINE AT THE END OF THE SET. 10. CULVERTS LARGER THAN SINGLE 30-INCH DIAMETER (OR LARGER THAN MULTIPLE 24- INCH
- DIAMETER CULVERTS) SHALL REQUIRE SAFETY PIPE RUNNERS.
- CONTRACTOR SHALL FLUSH AND CLEAN ALL STORM SEWER LINES AND STRUCTURES PRIOR TO ACCEPTANCE.
- 12. UTILITIES ARE TO BE TAKEN TO WITHIN FIVE (5) FEET OF BUILDING. SEE PLUMBING SHEETS FOR CONTINUATION OF SERVICE CONNECTIONS INTO BUILDING.
- 13. TIE-INS TO EXISTING MANHOLES SHALL BE MADE SUCH THAT THE FINAL CONDITIONS UPON COMPLETION OF THE JOB SHALL BE AS GOOD OR BETTER THAN PRIOR TO STARTING WORK.
- 14. THE CONTRACTOR IS TO INSTALL WATER-TIGHT ADAPTORS OF A TYPE COMPATIBLE WITH THE MATERIALS BEING JOINED AT THE POINT OF CONNECTION OF THE SERVICE LINE TO THE BUILDING PLUMBING. NO CEMENT GROUT MATERIALS ARE PERMITTED.
- 15. THE CONTRACTOR IS TO INSTALL EACH CLEANOUT SO THAT IT OPENS IN A DIRECTION OPPOSITE TO THE FLOW OF THE WASTE AND, EXCEPT IN THE CASE OF A "WYE" BRANCH AND END-OF-THE-LINE CLEANOUTS, CLEANOUTS WILL BE INSTALLED VERTICALLY ABOVE THE FLOW LINE OF THE PIPE. CLEANOUTS WILL BE MADE WITH AIR-TIGHT MECHANICAL PLUG.
- ALL STORM SEWER MANHOLES LOCATED OUTSIDE OF PAVED AREAS SHALL BE SET AT FINISH GRADE WITH CONCRETE COLLAR UNLESS OTHERWISE NOTED ON PLANS.
- 17. ALL INLETS AND JUNCTION BOXES LOCATED OUTSIDE OF PAVED AREAS SHALL HAVE A PRE-CAST TOP WITH CAST-IN FRAME
- 18. CONTRACTOR SHALL GROUT ALL JOINTS INSIDE OF ALL INLETS, JUNCTION BOXES, AND
- MANHOLES WITH NON-SHRINK GROUT. 19. ALL TYPE "A" GRATE INLETS SHALL HAVE SLOTTED GRATE TOPS (MODEL V-4880-3).
- 20. CEMENT-SAND BACKFILL SHALL CONSIST OF NOT LESS THAN 1-1/2 SACKS OF CEMENT PER TON OF SAND WITH SUFFICIENT WATER TO HYDRATE THE CEMENT. THE MATERIAL SHALL BE PLACED IN LIFTS EIGHT (8) INCHES THICK MAXIMUM AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- CONTRACTOR IS RESPONSIBLE FOR PUMPING OUT STORM WATER QUALITY UNITS AND PROVIDING THE ENGINEER WITH A MANIFEST STATING THAT THE SILT AND DEBRIS WAS DISPOSED OF IN A LEGAL MANNER. MANIFEST AND TIME STAMPED PICTURES OF THE CLEAN UNITS MUST BE PROVIDED PRIOR TO ENGINEER SUBMITTING THE STORM WATER QUALITY AS-BUILT CERTIFICATE. CONTRACTOR TO NOTIFY ENGINEER WHEN PUMP OUT WILL TAKE PLACE.

PRIVATE UTILITY NOTES

CAUTION: UNDERGROUND GAS FACILITIES

THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713) 207-5463 OR (713) 945-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
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- NON-MECHANIZED EXCAVATION PROCEDURES. WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING. FOR EMERGENCIES REGARDING GAS LINES CALL (713) 659-2111 OR (713) 207-4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL LINES

OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:

ANY ACTIVITY WHERE PERSON OR THINGS MAY COME WITHIN SIX(6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES

PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

ACTIVITIES ON/OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769. WARNING: UNDERGROUND ELECTRICAL UTILITIES

THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- ALL INFORMATION CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTORS ARE RESPONSIBLE MAKING THEIR OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND PIPELINES, CONDUITS, AND STRUCTURES BY CONTACTING OWNERS OF UNDERGROUND UTILITIES OR BY EXCAVATING IN ADVANCE OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES WHEN AND WHERE THEY FALL IN THE PATH OF CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR CONTACTING THE UTILITY COORDINATING COMMITTEE AT (713) 223-4567 AND TEXAS ONE CALL AT 1-800-245-4545.
- FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION. THE LOCATION OF ANY CENTERPOINT ENERGY UTILITIES ARE SHOWN IN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. THEY AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND
- PRESERVE THESE UNDERGROUND UTILITIES. ALL PROPOSED FACILITIES SHALL MAINTAIN 12"CLEAR FROM ALL EXISTING UTILITIES

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AT&T TEXAS / SWBT FACILITIES

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2. THE CONTRACTOR SHALL CALL 1-800-344-8377 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.

3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES. ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.

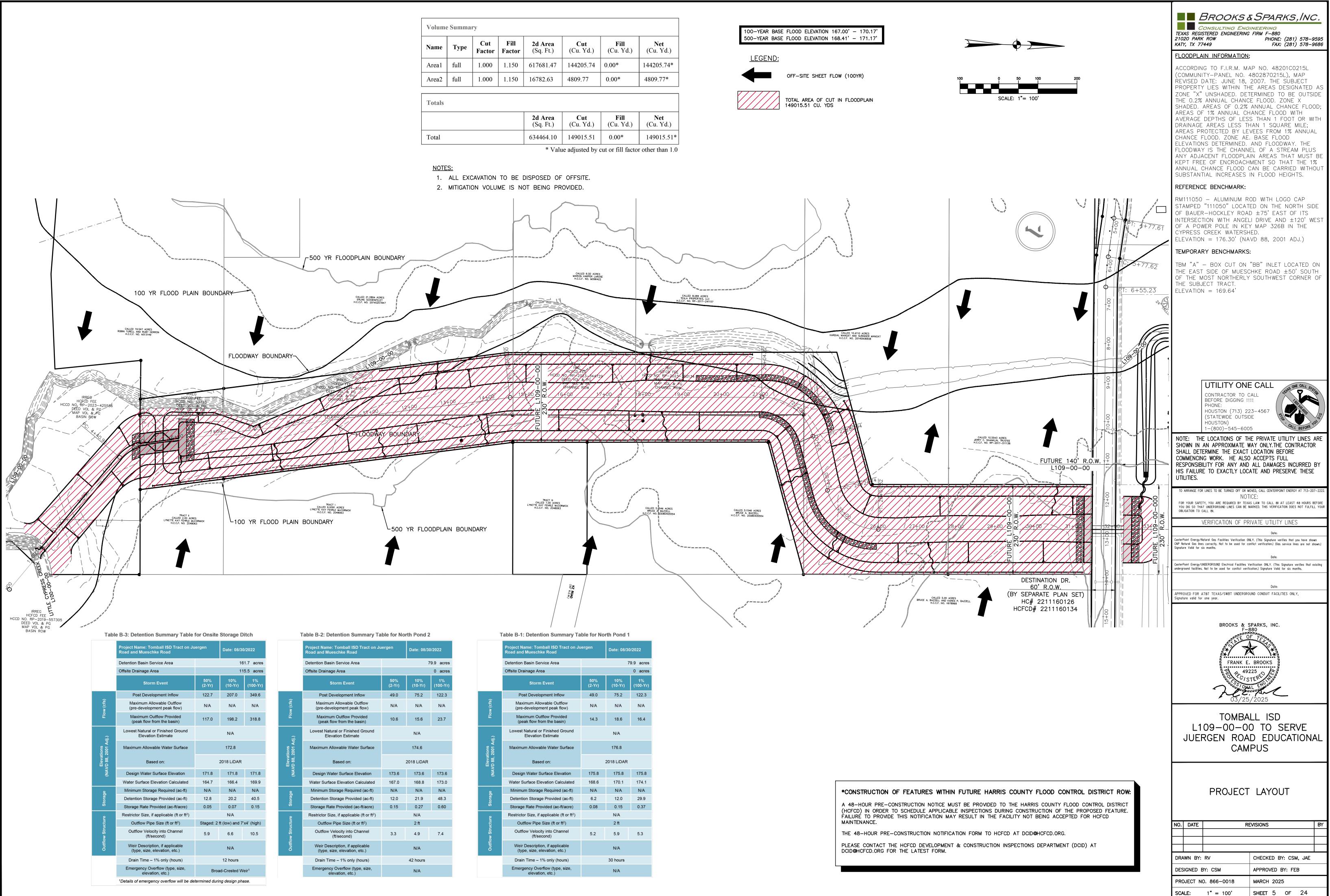
WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.

5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN THE AREA. FOLLOW THE DIRECT BURIED CABLE PROCEDURES TO LOCATE THE AT&T TEXAS/SWBT DIRECT BURIED CABLES AS INDICATED IN THE AT&T TEXAS RESEARCH AND SIGNATURE PROCESS FOR AT&T TEXAS/SWBT FACILITIES.

6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER MR. ROOSEVELT LEE JR. AT (713)567-4552 OR EMAIL HIM AT RL7259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATION NEAR OUR AT&T TEXAS/SWBT FACILITIES.

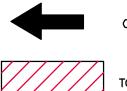
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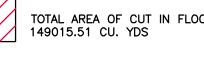
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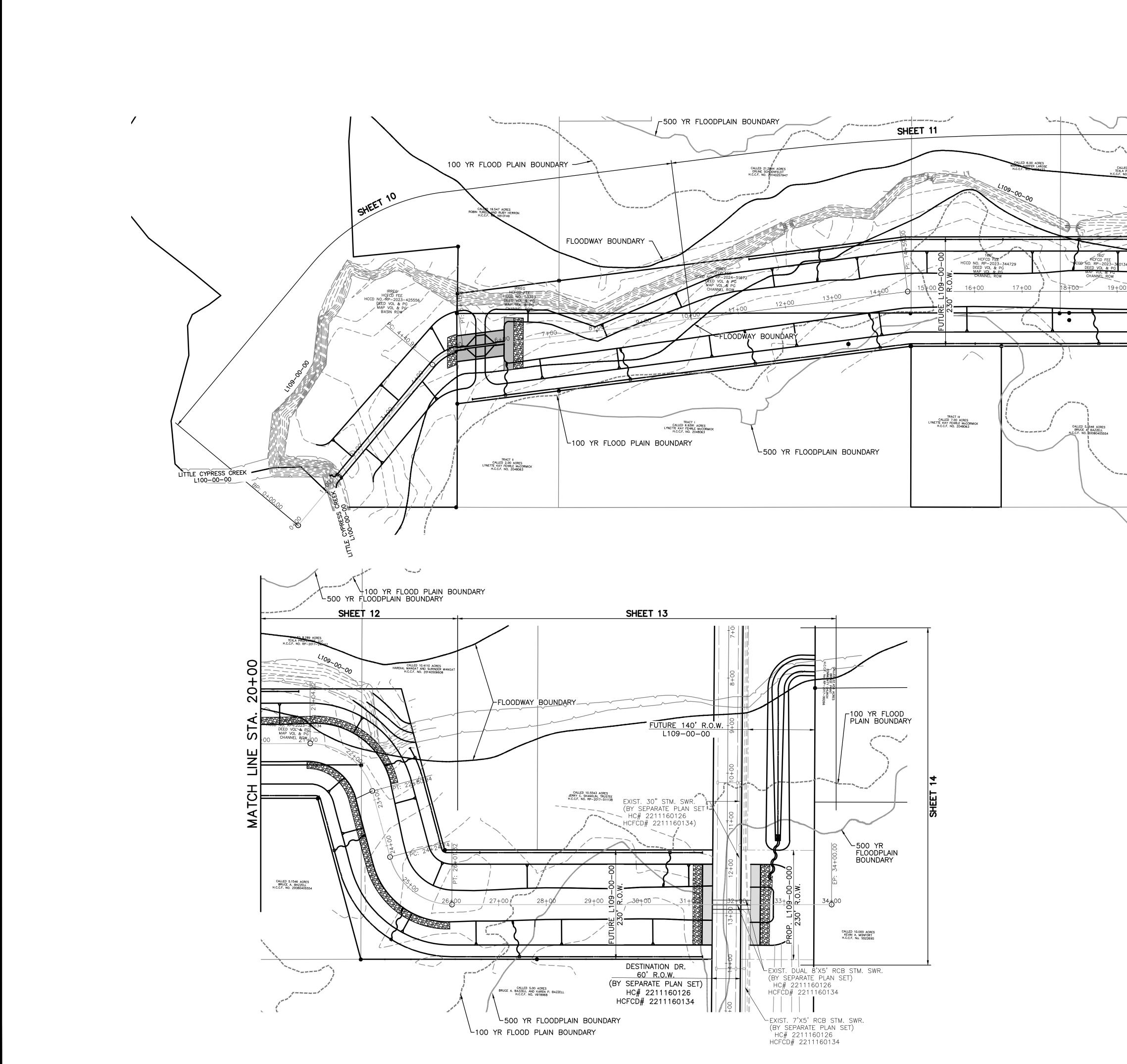
	Roau and Mueschke Roau		
	Detention Basin Service Area		7
	Offsite Drainage Area		
	Storm Event	50% (2-Yr)	10% (10-Yr)
	Post Development Inflow	49.0	75.2
(cib) (cib)	Maximum Allowable Outflow (pre-development peak flow)	N/A	N/A
2 L	Maximum Outflow Provided (peak flow from the basin)	10.6	15.6
lj.)	Lowest Natural or Finished Ground Elevation Estimate		N/A
(NAVD 88, 2001 Adj.)	Maximum Allowable Water Surface		174.6
VD 88,	Based on:		2018 LiDAR
(NA)	Design Water Surface Elevation	173.6	173.6
	Water Surface Elevation Calculated	167.0	168.8
e L	Minimum Storage Required (ac-ft)	N/A	N/A
JUIAUE	Detention Storage Provided (ac-ft)	12.0	21.9
5	Storage Rate Provided (ac-ft/acre)	0.15	0.27
ע	Restrictor Size, if applicable (ft or ft ²)		N/A
	Outflow Pipe Size (ft or ft ²)		2 ft
	Outflow Velocity into Channel (ft/second)	3.3	4.9
	Weir Description, if applicable (type, size, elevation, etc.)		N/A
	Drain Time – 1% only (hours)		42 hours
	Emergency Overflow (type, size, elevation, etc.)		N/A

Volume Summary									
Name	Туре	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)		
Areal	full	1.000	1.150	617681.47	144205.74	0.00*	144205.74*		
Area2	full	1.000	1.150	16782.63	4809.77	0.00*	4809.77*		
						-			
Totals									
				2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)		
Total				634464.10	149015.51	0.00*	149015.51*		
	* Value adjusted by cut or fill factor other than 1.0								

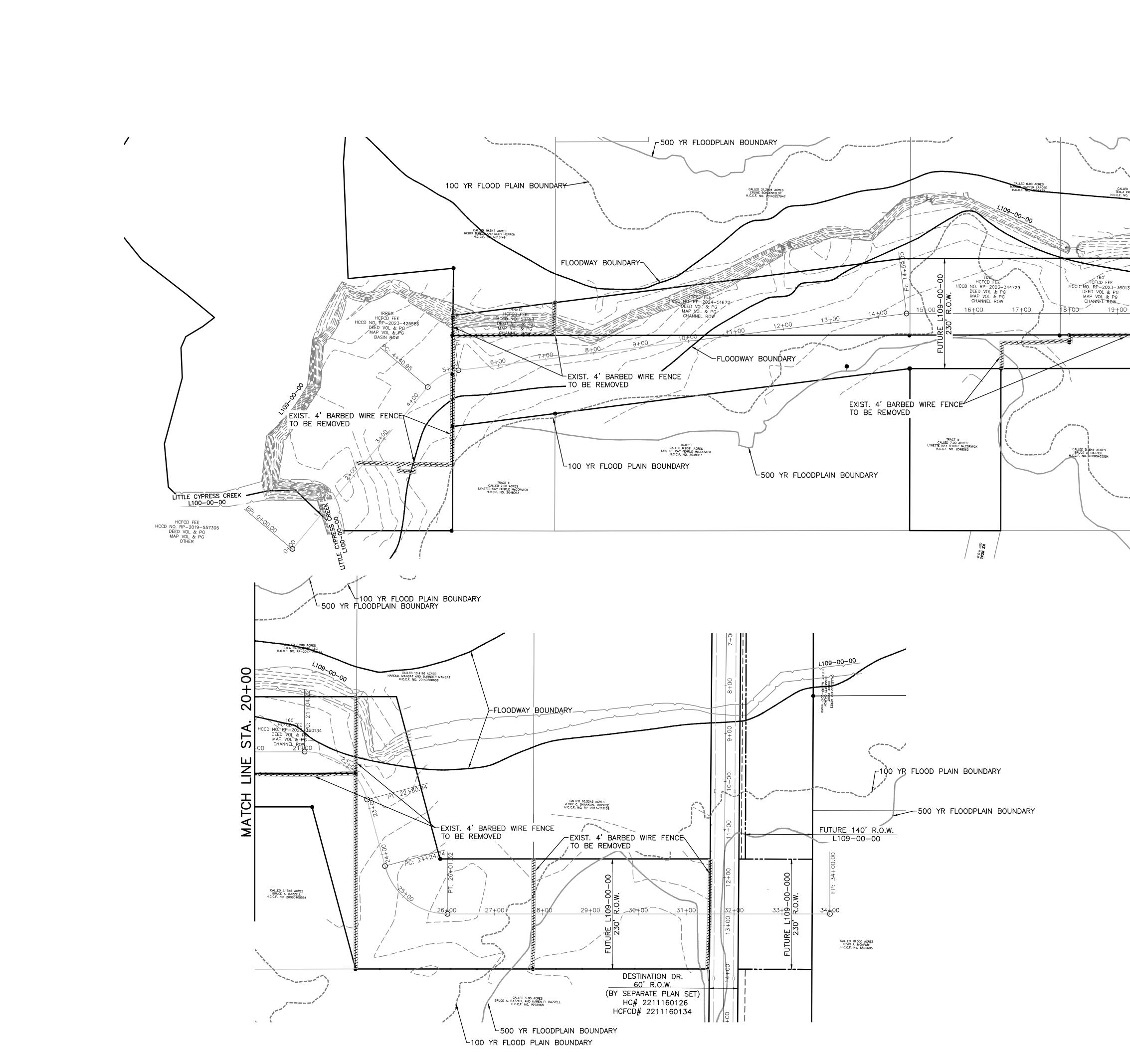




	Project Name: Tomball ISD Tract on Ju Road and Mueschke Road	ergen	Date: 08/30	/2022	
	Detention Basin Service Area		7	9.9 acres	
	Offsite Drainage Area	0 acres			
	Storm Event	50% (2-Yr)	10% (10-Yr)	1% (100-Yr)	
	Post Development Inflow	49.0	75.2	122.3	
	Maximum Allowable Outflow (pre-development peak flow)	N/A	N/A	N/A	
2	Maximum Outflow Provided (peak flow from the basin)	14.3	18.6	16.4	
lj.)	Lowest Natural or Finished Ground Elevation Estimate		N/A		
(NAVD 88, 2001 Adj.)	Maximum Allowable Water Surface	176.8			
VD 88,	Based on:	2018 LiDAR			
(NA)	Design Water Surface Elevation	175.8	175.8	175.8	
	Water Surface Elevation Calculated	168.6	170.1	174.1	
<u>v</u>	Minimum Storage Required (ac-ft)	N/A	N/A	N/A	
	Detention Storage Provided (ac-ft)	6.2	12.0	29.9	
5	Storage Rate Provided (ac-ft/acre)	0.08	0.15	0.37	
ט	Restrictor Size, if applicable (ft or ft ²)		N/A		
	Outflow Pipe Size (ft or ft ²)		2 ft		
	Outflow Velocity into Channel (ft/second)	5.2	5.9	5.3	
	Weir Description, if applicable (type, size, elevation, etc.)	N/A			
	Drain Time – 1% only (hours)		30 hours		
	Emergency Overflow (type, size, elevation, etc.)		N/A		



	BROOKS & SPARKS, INC.CONSULTING ENGINEERINGTEXAS REGISTERED ENGINEERING FIRM F-88021020 PARK ROWPHONE: (281) 578-9595KATY, TX 77449FAX: (281) 578-9686
0 0 0 0 0 0 0 0 0 0 0 0 0 0	FLOODPLAIN INFORMATION:ACCORDING TO F.I.R.M. MAP NO. 48201C0215L (COMMUNITY-PANEL NO. 4802870215L), MAP REVISED DATE: JUNE 18, 2007. THE SUBJECT PROPERTY LIES WITHIN THE AREAS DESIGNATED AS ZONE "X" UNSHADED. DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD. ZONE X SHADED. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. ZONE AE. BASE FLOOD ELEVATIONS DETERMINED. AND FLOODWAY. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS.REFERENCE BENCHMARK:RM111050 - ALUMINUM ROD WITH LOGO CAP STAMPED "111050" LOCATED ON THE NORTH SIDE
MATCH LINE STA. 20+	OF BAUER-HOCKLEY ROAD ±75' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ±120' WEST OF A POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.) TEMPORARY BENCHMARKS: TBM "A" - BOX CUT ON "BB" INLET LOCATED ON THE EAST SIDE OF MUESCHKE ROAD ±50' SOUTH OF THE MOST NORTHERLY SOUTHWEST CORNER OF THE SUBJECT TRACT. ELEVATION = 169.64'
	UTILITY ONE CALL CONTRACTOR TO CALL BEFORE DIGGING !!!! PHONE: HOUSTON (713) 223–4567 (STATEWIDE OUTSIDE HOUSTON) 1–(800)–545–6005 NOTE: THE LOCATIONS OF THE PRIVATE UTILITY LINES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE ALSO ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES INCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UTILITIES.
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	BROOKS & SPARKS, INC. F-880 FRANK E. BROOKS FRANK E. BROOKS 03/25/2025
	TOMBALL ISD L109–00–00 TO SERVE JUERGEN ROAD EDUCATIONAL CAMPUS
	SHEET INDEX
	NO. DATE REVISIONS BY
	DRAWN BY: RV CHECKED BY: CSM, JAE
	DESIGNED BY: CSM APPROVED BY: FEB PROJECT NO. 866–0018 MARCH 2025
	PROJECT NO. 866–0018 MARCH 2025 SCALE: 1" = 100' SHEET 6 OF 24



	BROOKS & SPARKS, INC. CONSULTING ENGINEERING TEXAS REGISTERED ENGINEERING FIRM F-880 21020 PARK ROW PHONE: (281) 578-9595 KATY, TX 77449 FAX: (281) 578-9686
Transformed production of the second productio	 FLOODPLAIN INFORMATION: ACCORDING TO F.I.R.M. MAP NO. 48201C0215L (COMMUNITY-PANEL NO. 4802870215L), MAP REVISED DATE: JUNE 18, 2007. THE SUBJECT PROPERTY LIES WITHIN THE AREAS DESIGNATED AS ZONE "X" UNSHADED. DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD. ZONE X SHADED. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. ZONE AE. BASE FLOOD ELEVATIONS DETERMINED. AND FLOODWAY. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS. REFERENCE BENCHMARK: RM111050 – ALUMINUM ROD WITH LOGO CAP STAMPED "111050" LOCATED ON THE NORTH SIDE OF BAUER-HOCKLEY ROAD ±75' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ±120' WEST OF A POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.) TEMPORARY BENCHMARKS: TBM "A" – BOX CUT ON "BB" INLET LOCATED ON THE EAST SIDE OF MUESCHKE ROAD ±50' SOUTH OF THE MOST NORTHERLY SOUTHWEST CORNER OF THE SUBJECT TRACT. ELEVATION = 169.64'
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	DEMOLITION PLAN
	NO. DATE REVISIONS BY Image: Constraint of the second
	DESIGNED BY: CSMAPPROVED BY: FEBPROJECT NO. 866-0018MARCH 2025SCALE:1" = 100'SHEET 7 OF 24

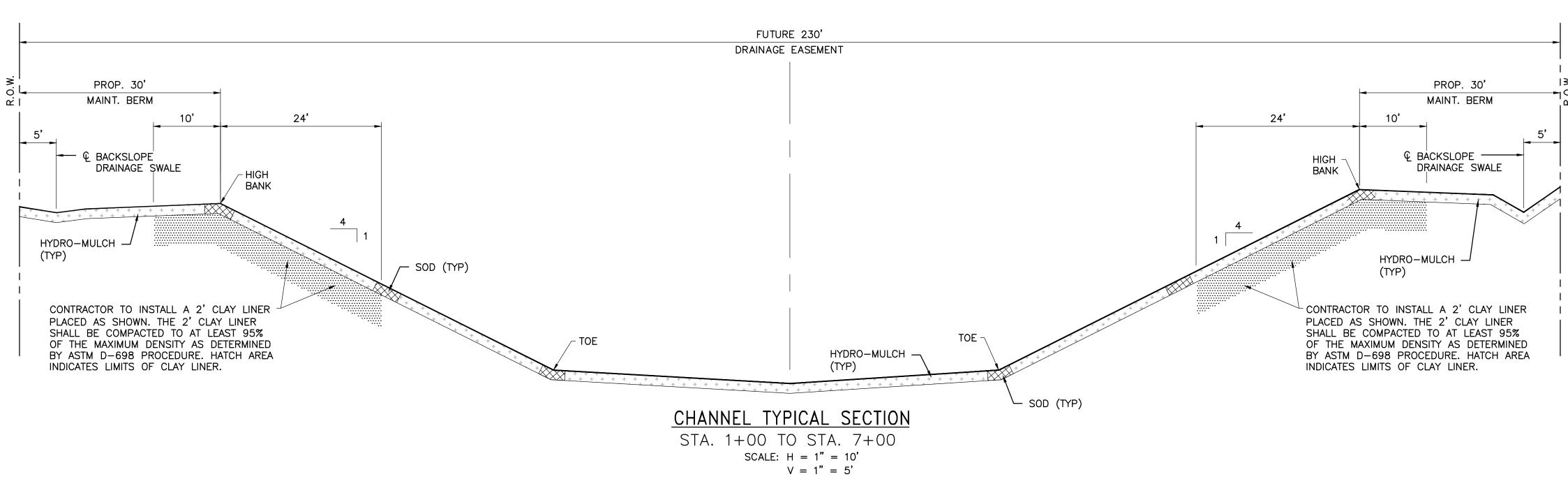


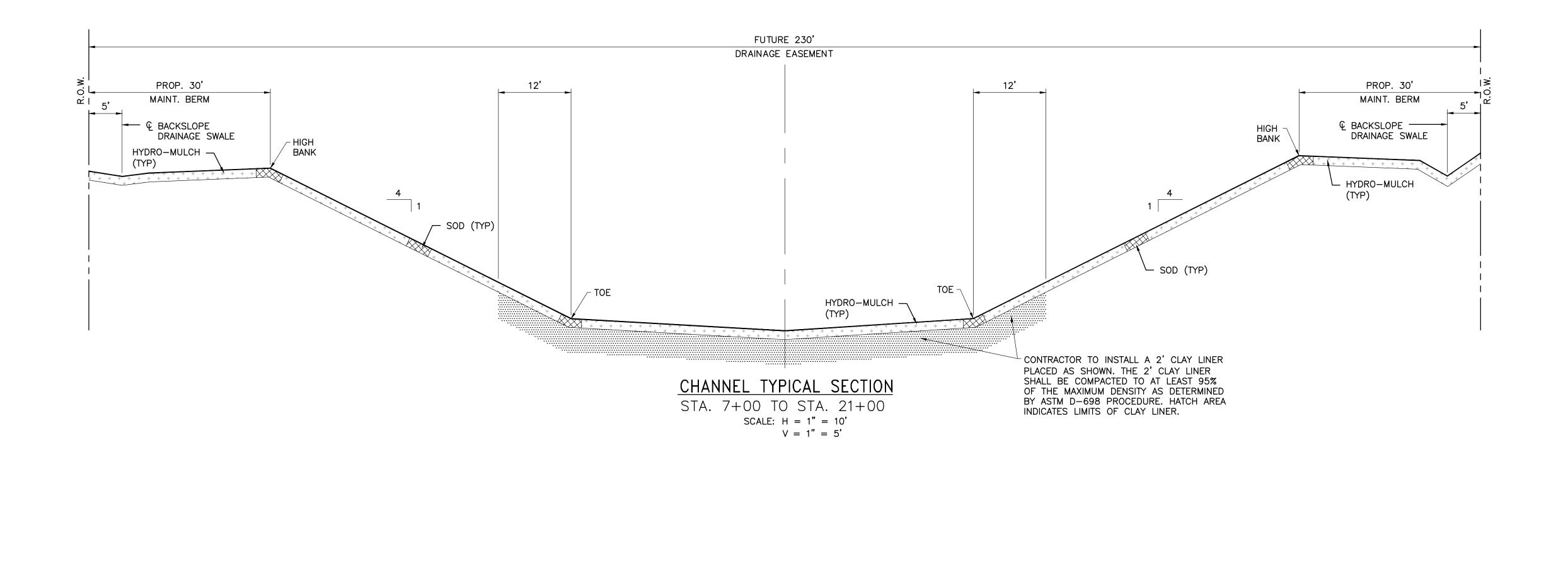
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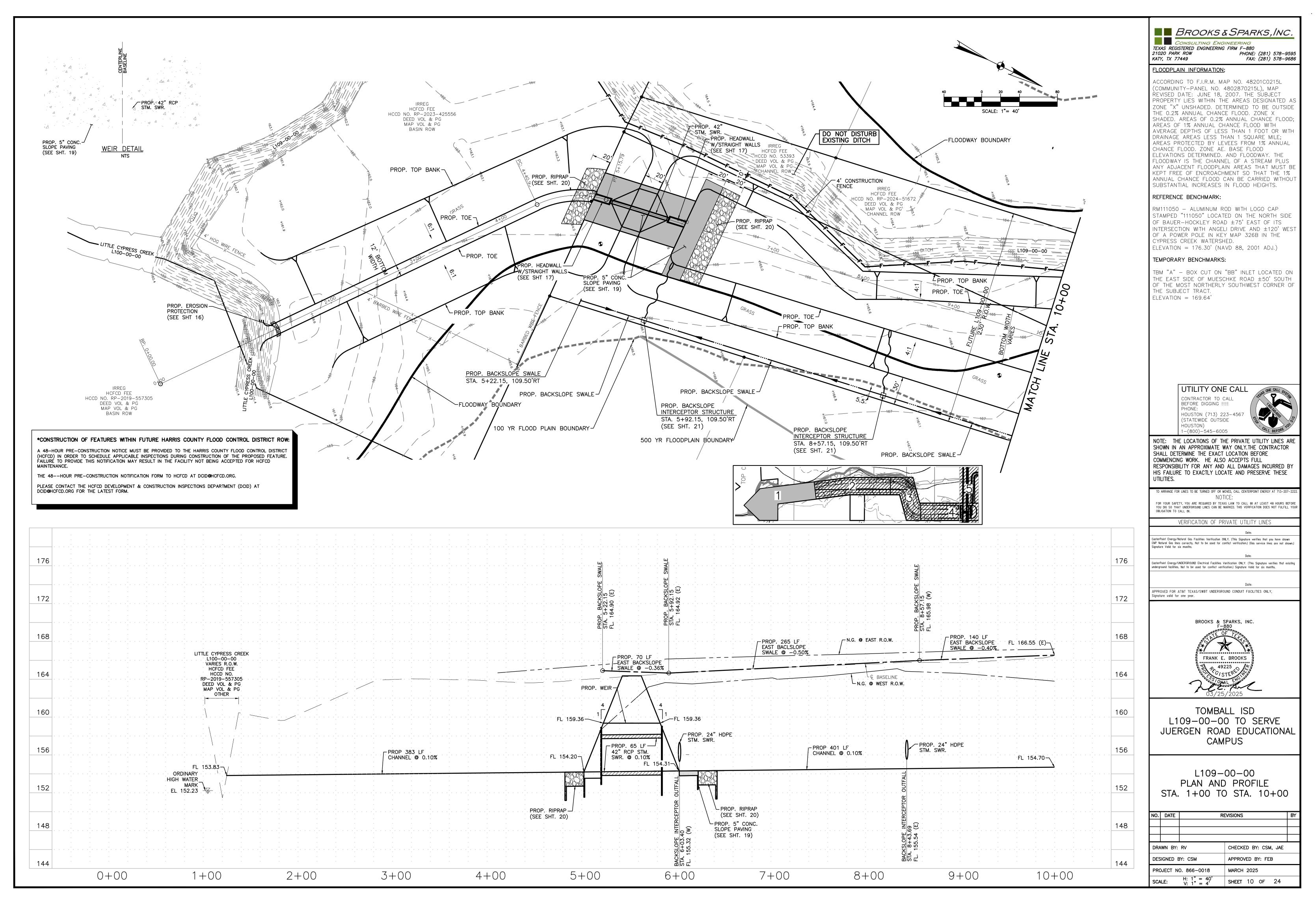
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SCALE: 1°= 200' GEND: DETENTION SERVICE AREA 100 ACRES DRAINAGE AREA 175.6 ACRES	ELOODPLAIN INFORMATION: ACCORDING TO F.I.R.M. MAP NO. 48201C0215L (COMMUNITY-PANEL NO. 4802870215L), MAP REVISED DATE: JUNE 18, 2007. THE SUBJECT PROPERTY LIES WITHIN THE AREAS DESIGNATED AS ZONE "X" UNSHADED. DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD. ZONE X SHADED. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERACE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. ZONE AE. BASE FLOOD ELEVATIONS DETERMINED. AND FLOODWAY. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS. REFERENCE BENCHMARK: RM111050 - ALUMINUM ROD WITH LOGO CAP STAMPED "111050" LOCATED ON THE NORTH SIDE OF BAUER-HOCKLEY ROAD ±75' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ±120' WEST OF A POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.) TEMPORARY BENCHMARKS: TBM "A" - BOX CUT ON "BB" INLET LOCATED ON THE EAST SIDE OF MUESCHKE ROAD ±50' SOUTH OF THE MOST NORTHERLY SOUTHWEST CORNER OF THE SUBJECT TRACT. ELEVATION = 169.64'
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	BROOKS & SPARKS, INC. FRANK E. BROOKS 49225 COSTER



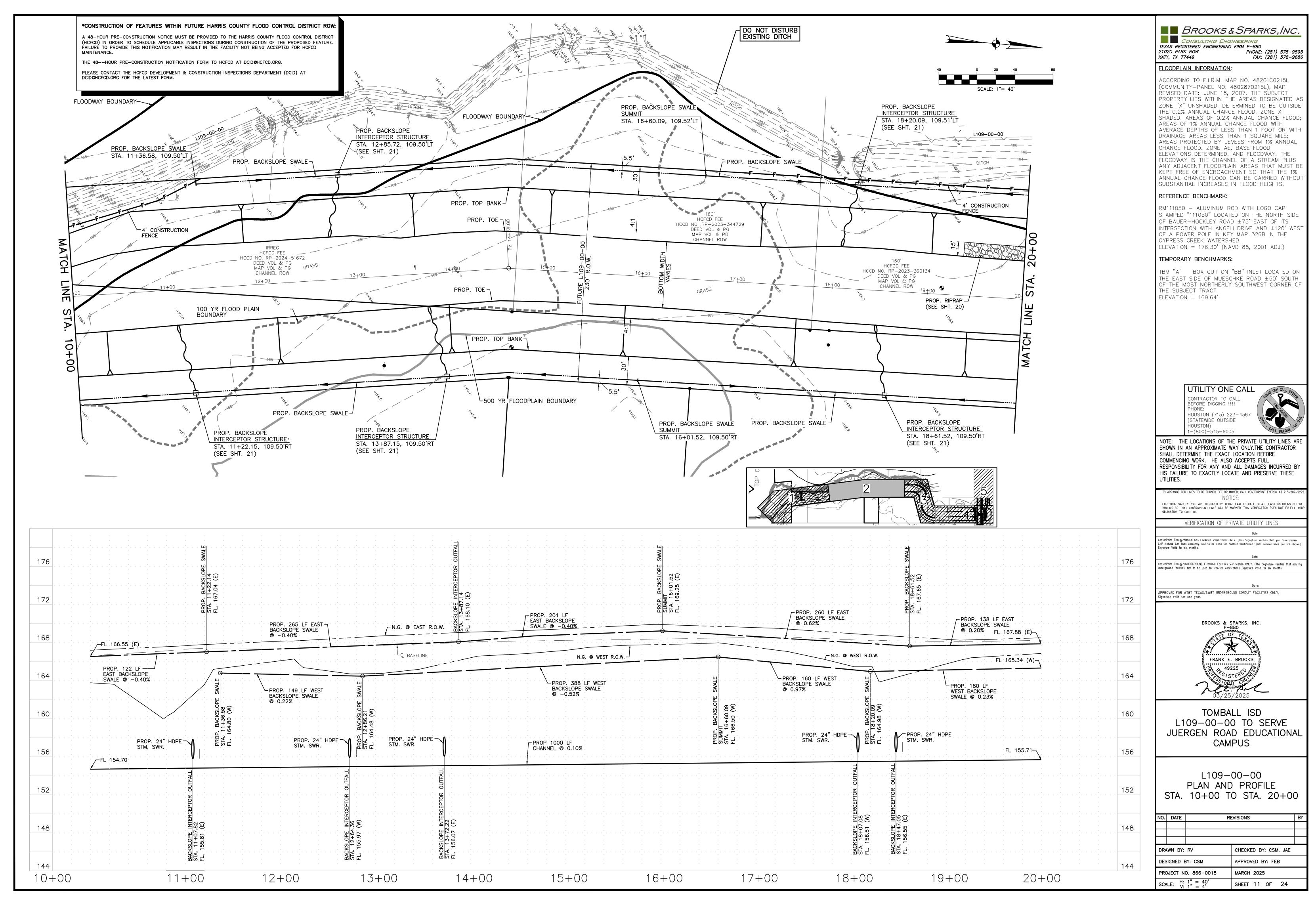


 \odot တ 25 Mar 2025 8:25AM robertv F:\project\BROOK_SP\Tomball ISD\866018-Juergen Tract\Civil\HCFCD CH Includes Xref(s): 866018-X-L109 -BRD.dwg; 866018-X-L109 -SEAL.dwg

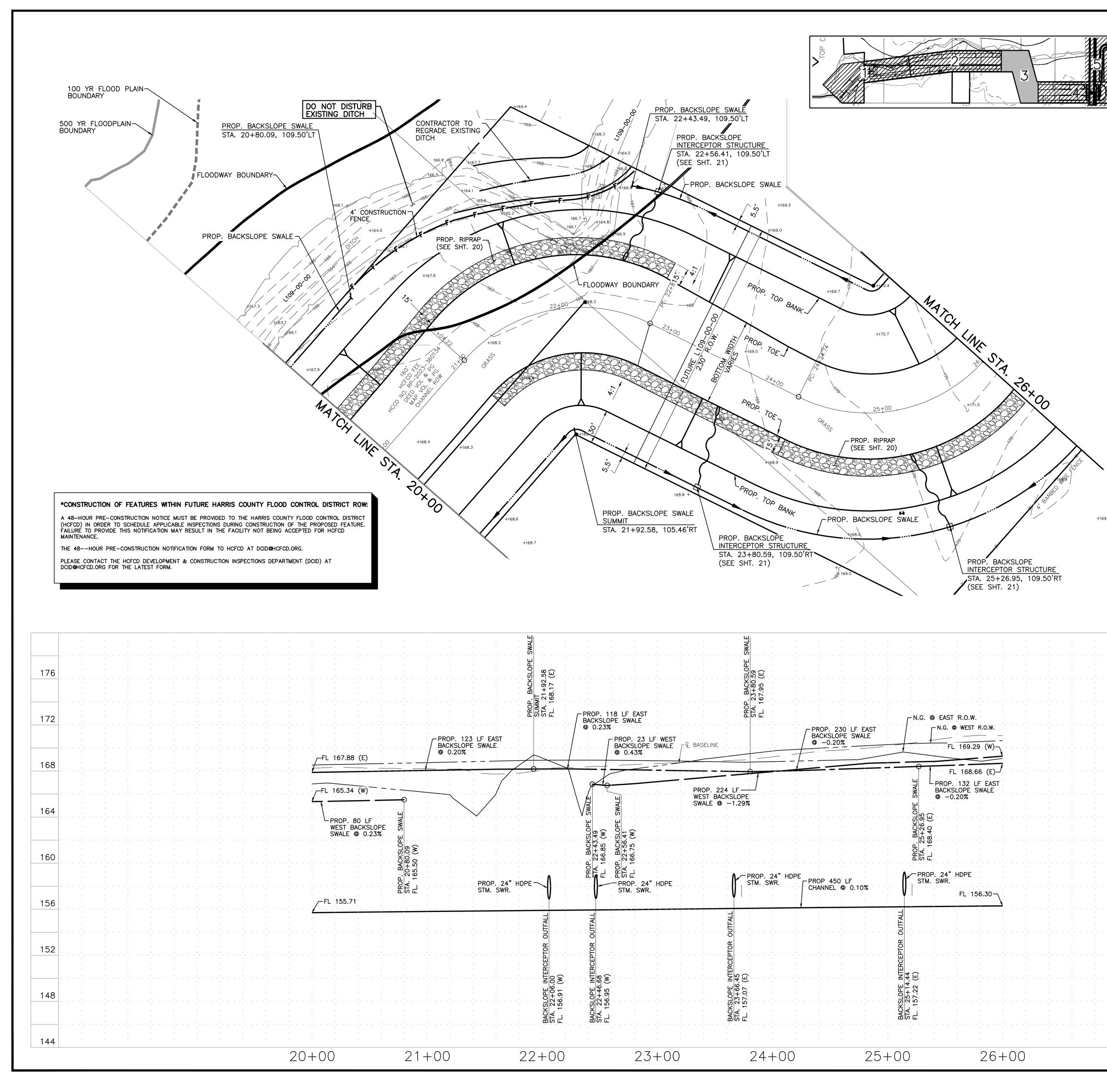
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THE EAST SID	OX CUT ON DE OF MUESC NORTHERLY TRACT.	"BB" INL Chke Ro	ET LOCATED (AD ±50' SOU ⁻ VEST CORNER	ГН
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CNP Natural Gas lines correc Signature Valid for six month	tly. Not to be used for co is. DUND Electrical Facilities V	nflict verification.) Da erification ONLY.	(Gas service lines are not s te: This Signature verifies that a	hown.)
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Signature valid for one y	ar.			
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SCALE: AS SHOW		SHEET	9 OF 24	



 $\circ \times$ $\overline{\Omega}$ <36 (3).</pre> \triangleleft Ξ× Ιώ PP01 8660 L109– RD.dwg; CHANNEL\11 866-0018 .dwg; 866018-X-L109 -PROF. Tract/Civil/H(\$018-X-L109 $\bar{\nu} \propto \infty$. D ar 2025 8:26AM robertv oject\BROOK_SP\Tomball ISD\866018 des Xref(s): 866018-X-L109 CHANNEL

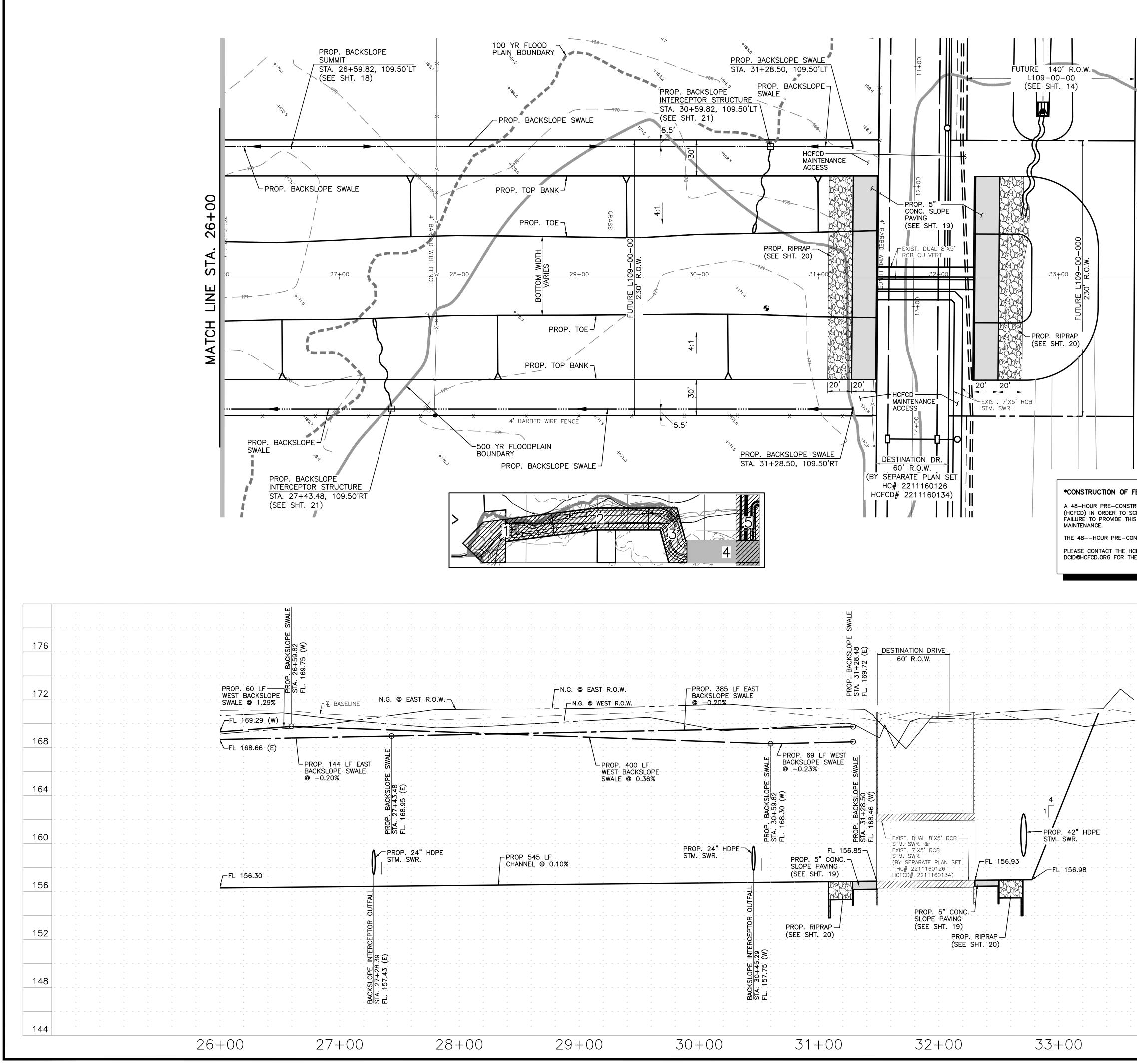


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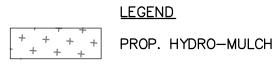


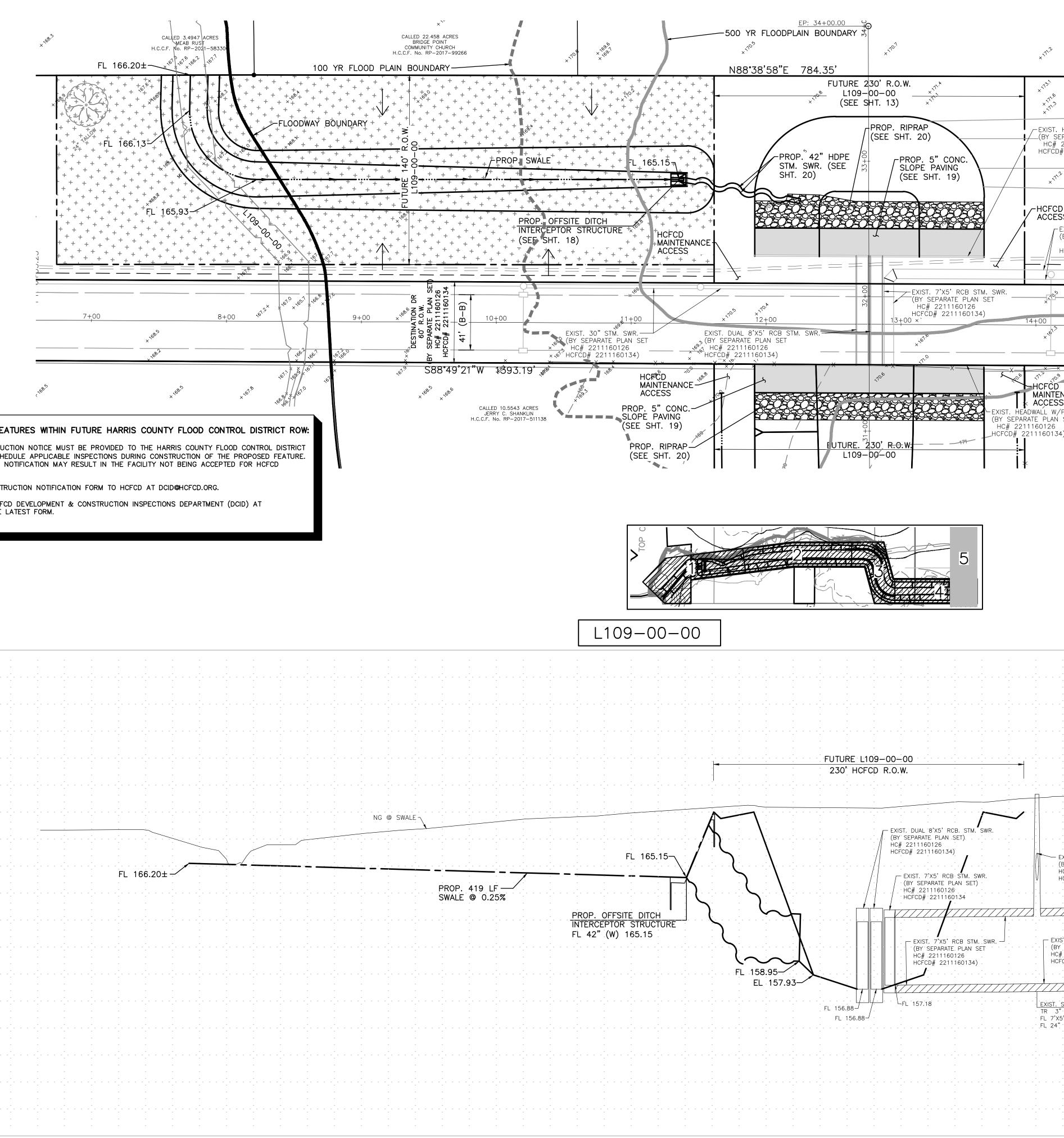
	BROOKS & SPARKS, INC. CONSULTING ENGINEERING TEXAS REGISTERED ENGINEERING FIRM F-880 21020 PARK ROW PHONE: (281) 578-9595 KATY, TX 77449 FAX: (281) 578-9686
	 FLOODPLAIN INFORMATION: ACCORDING TO F.I.R.M. MAP NO. 48201C0215L (COMMUNITY-PANEL NO. 4802870215L), MAP REVISED DATE: JUNE 18, 2007. THE SUBJECT PROPERTY LIES WITHIN THE AREAS DESIGNATED AS ZONE "X" UNSHADED. DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD. ZONE X SHADED. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SOUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. ZONE AE. BASE FLOOD ELEVATIONS DETERMINED. AND FLOODWAY. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS. REFERENCE BENCHMARK: RM111050 - ALUMINUM ROD WITH LOGO CAP STAMPED "111050" LOCATED ON THE NORTH SIDE OF BAUER-HOCKLEY ROAD ±75' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ±120' WEST OF A POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.) TEMPORARY BENCHMARKS: TBM "A" - BOX CUT ON "BB" INLET LOCATED ON THE EAST SIDE OF MUESCHKE ROAD ±50' SOUTH OF THE MOST NORTHERLY SOUTHWEST CORNER OF THE SUBJECT TRACT. ELEVATION = 169.64'
	UTILITY ONE CALL CONTRACTOR TO CALL BEFORE DIGGING !!!! PHONE: HOUSTON (713) 223-4567 (STATEWIDE OUTSIDE HOUSTON) 1-(800)-545-6005 NOTE: THE LOCATIONS OF THE PRIVATE UTILITY LINES ARE SHOWN IN AN APPROXIMATE WAY ONLY.THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE ALSO ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES INCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UTILITIES.
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176	Date: CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This Signature verifies that existing underground facilities. Not to be used for conflict verification.) Signature Valid for six months.
	Date:
172	Signature valid for one year.
168	BROOKS & SPARKS, INC. F-880 OF 75 F
	FRANK E. BROOKS
164	CISTERIO
160	TOMBALL ISD
	L109-00-00 TO SERVE JUERGEN ROAD EDUCATIONAL CAMPUS
156	
152	L109–00–00 PLAN AND PROFILE STA. 20+00 TO STA. 26+00
148	NO. DATE REVISIONS BY
	DRAWN BY: RV CHECKED BY: CSM, JAE
144	DESIGNED BY: CSM APPROVED BY: FEB PROJECT NO. 866-0018 MARCH 2025
	SCALE: $\begin{array}{c} H: 1" = 40' \\ V: 1" = 4' \end{array}$ SHEET 12 OF 24

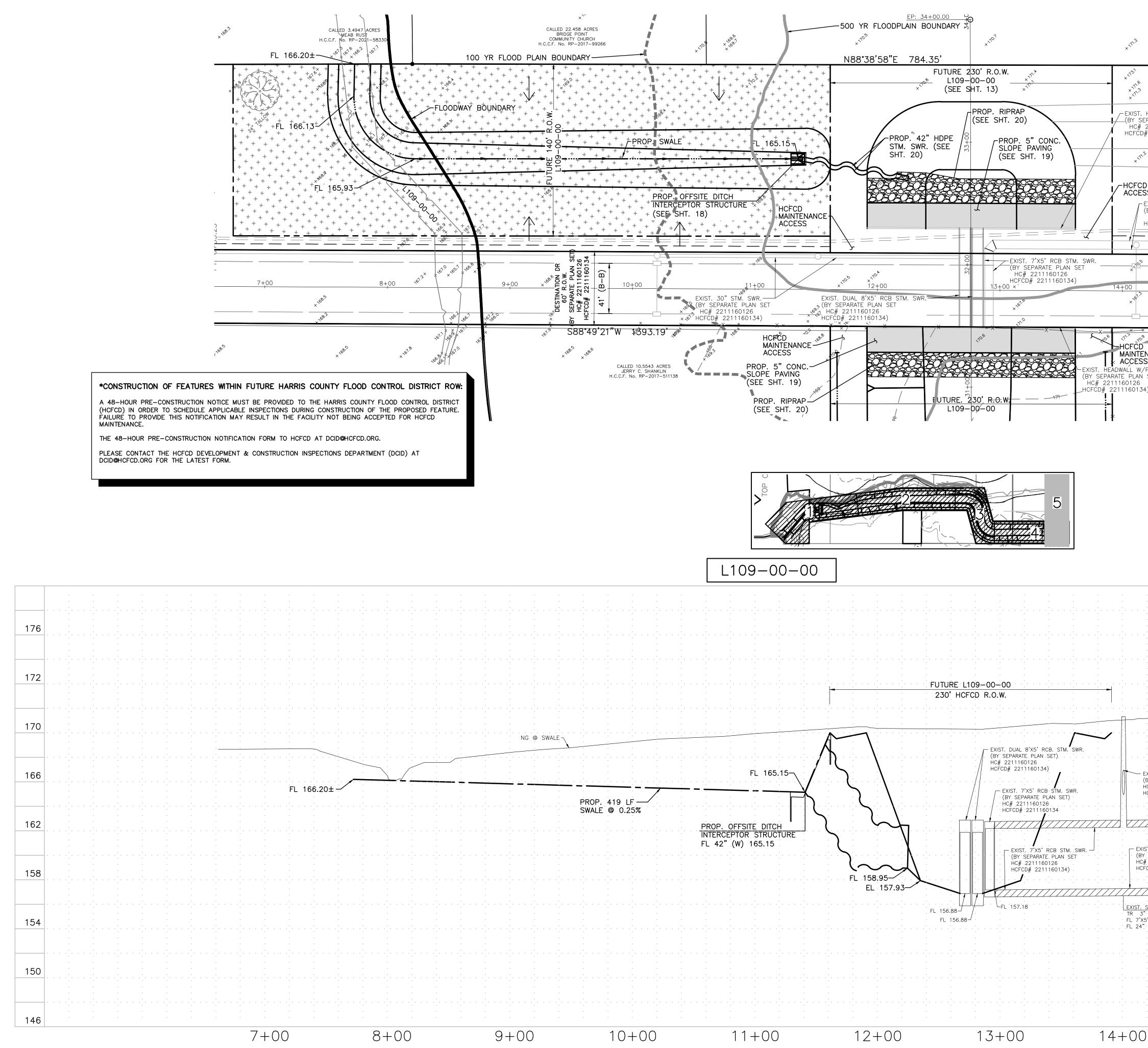
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Compare <		BROOKS & SPARKS, INC.
		TEXAS REGISTERED ENGINEERING FIRM F–880 21020 PARK ROW PHONE: (281) 578–9595
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	V88*38'58"E 34+00.000 34+00.000	RM111050 – ALUMINUM ROD WITH LOGO CAP STAMPED "111050" LOCATED ON THE NORTH SIDE OF BAUER-HOCKLEY ROAD ± 75 ' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ± 120 ' WEST OF A POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.)
	3400	TBM "A" – BOX CUT ON "BB" INLET LOCATED ON THE EAST SIDE OF MUESCHKE ROAD ± 50 ' SOUTH OF THE MOST NORTHERLY SOUTHWEST CORNER OF THE SUBJECT TRACT.
I dest form. I dest form.<	RUCTION NOTICE MUST BE PROVIDED TO THE HARRIS COUNTY FLOOD CONTROL DISTRICT CHEDULE APPLICABLE INSPECTIONS DURING CONSTRUCTION OF THE PROPOSED FEATURE. IS NOTIFICATION MAY RESULT IN THE FACILITY NOT BEING ACCEPTED FOR HCFCD INSTRUCTION NOTIFICATION FORM TO HCFCD AT DCID@HCFCD.ORG.	CONTRACTOR TO CALL BEFORE DIGGING !!!! PHONE: HOUSTON (713) 223–4567 (STATEWIDE OUTSIDE HOUSTON) 1–(800)–545–6005 NOTE: THE LOCATIONS OF THE PRIVATE UTILITY LINES ARE SHOWN IN AN APPROXIMATE WAY ONLY.THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE ALSO ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES INCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE
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172 172 172 168 168 164 164 164 165 160 160 100 156 110 156 110 152 156 148 148 144 144	176	Signature Valid for six months. Date: CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This Signature verifies that existing underground facilities. Not to be used for conflict verification.) Signature Valid for six months.
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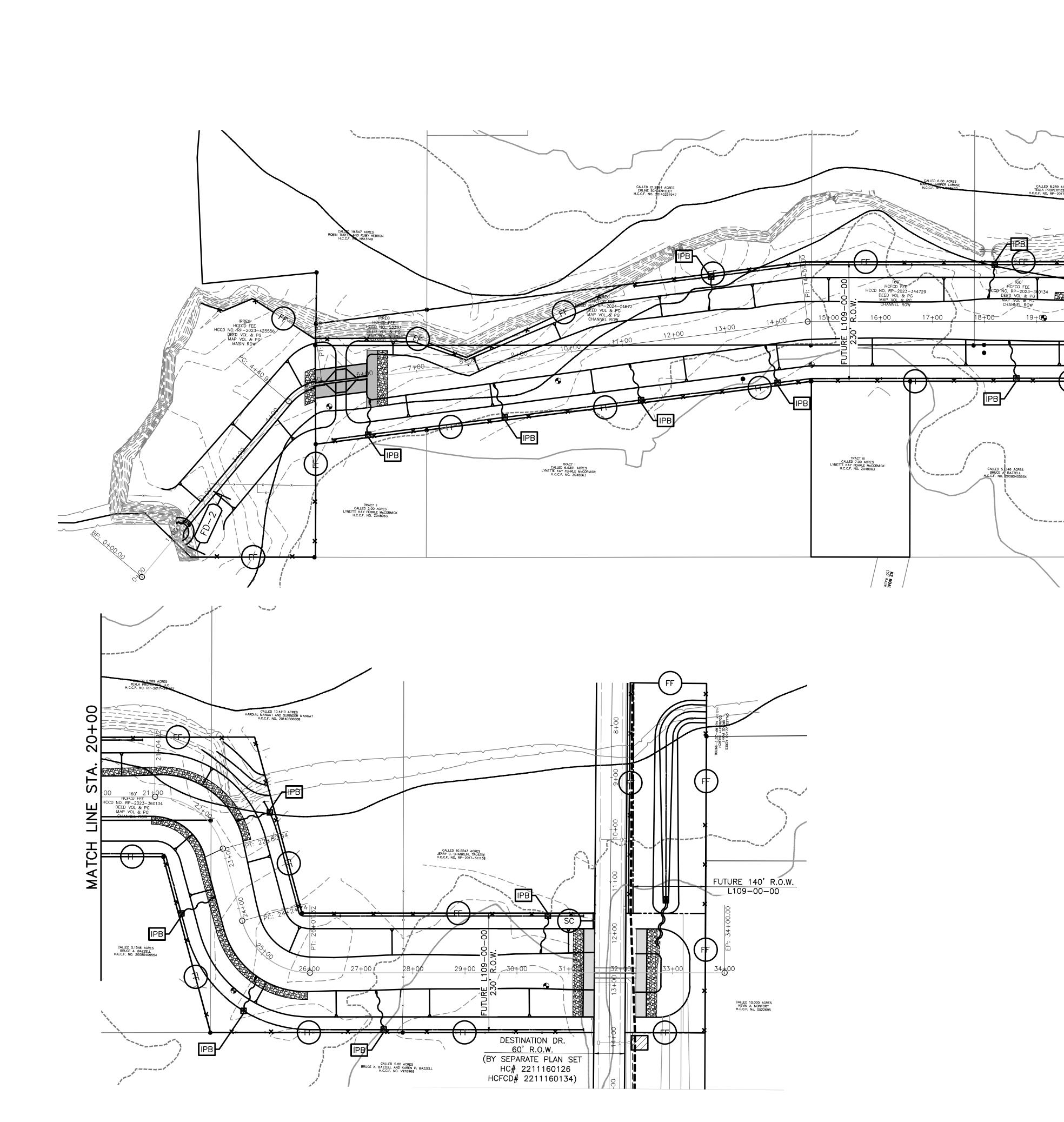




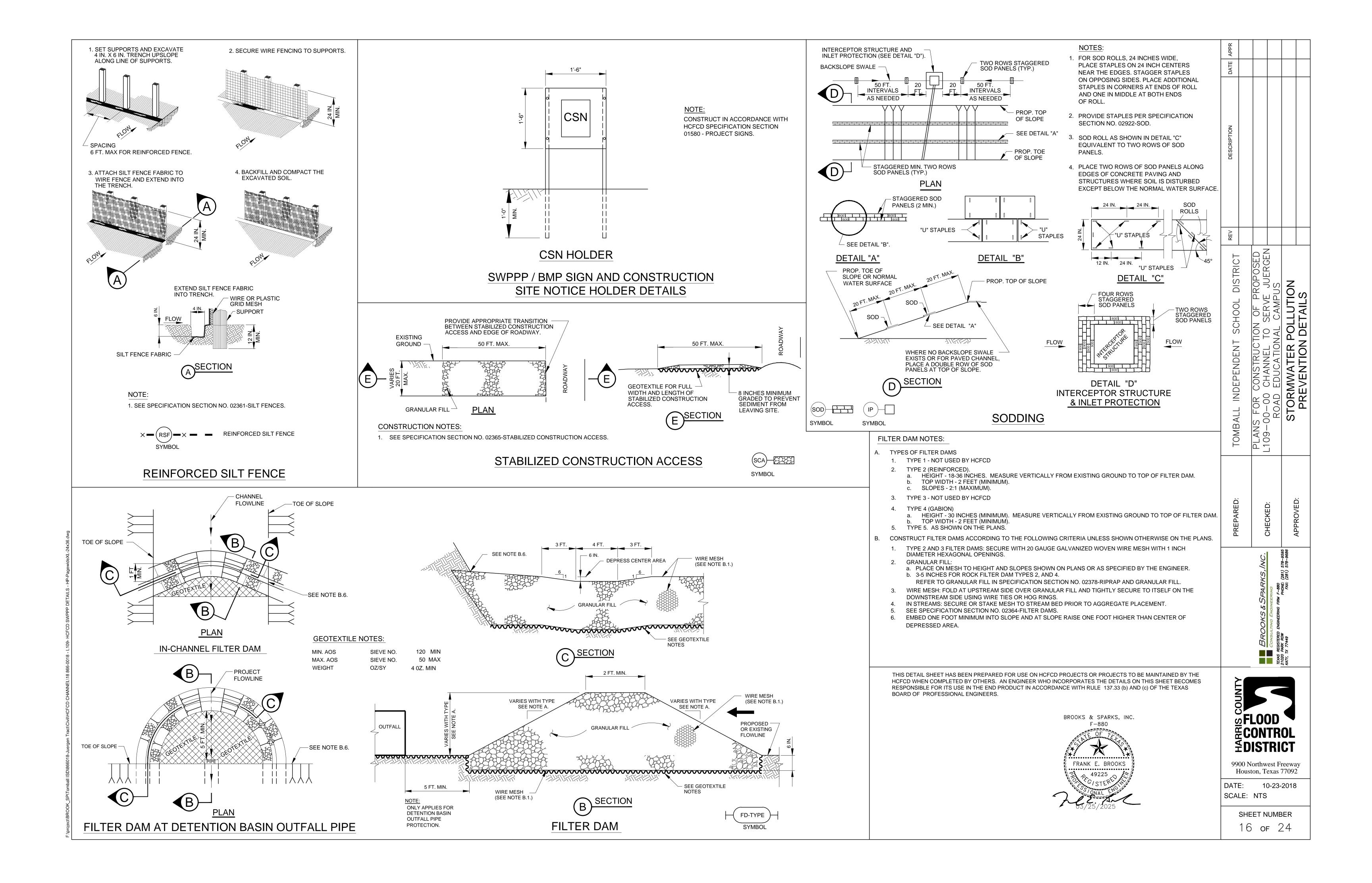
25 Mar 2025 8:27AM robertv F:\project\BROOK_SP\Tomball ISD\866018-Juergen Tract\Civil\HCFCD CHANNEL\866-0018 - L109 - OUTFALL.dwg Includes Xref(s): 866018-X-L109 -BRD.dwg; 866018-X-TOPO.dwg; 866018-X-POND.dwg; 866018-X-PROF-L109 H(

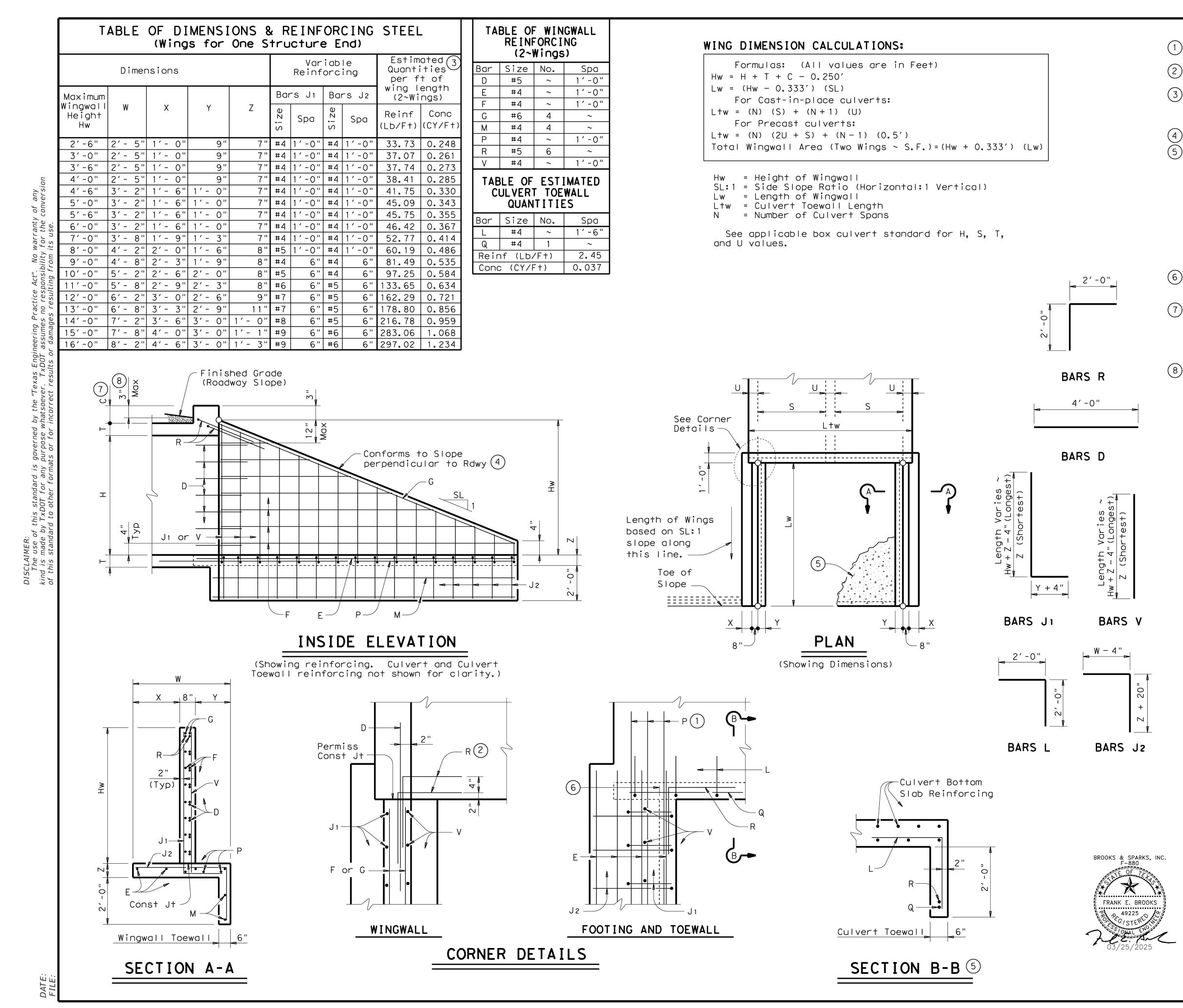
<u>LEGEND</u>

		TEXAS REGISTERED ENGINEERIN 21020 PARK ROW KATY, TX 77449	
		FLOODPLAIN INFORMATIC	<u>N:</u>
CALLED 10.000 ACRES KEVIN A. MONFORT H.C.C.F. No. S522695		ZONE "X" UNSHADED. D THE 0.2% ANNUAL CHAN SHADED. AREAS OF 0.2	4802870215L), MAP 6, 2007. THE SUBJECT THE AREAS DESIGNATED AS ETERMINED TO BE OUTSIDE NCE FLOOD. ZONE X % ANNUAL CHANCE FLOOD;
PLAT BOUNDARY		DRAINAGE AREAS LESS AREAS PROTECTED BY L CHANCE FLOOD. ZONE A	ESS THAN 1 FOOT OR WITH THAN 1 SQUARE MILE; LEVEES FROM 1% ANNUAL ME. BASE FLOOD
HEADWALL W/PARALLEL WING SEPARATE PLAN SET 2211160126 D# 2211160134)		ANY ADJACENT FLOODPL KEPT FREE OF ENCROAC	INEL OF A STREAM PLUS LAIN AREAS THAT MUST BE CHMENT SO THAT THE 1% CAN BE CARRIED WITHOUT S IN FLOOD HEIGHTS.
× 40 0 20 40 CD MAINTENANCE SS SS SCALE: 1"= 40' -EXIST. 7'X5' RCB STM. SWR. SCALE: 1"= 40' (BY SEPARATE PLAN SET HC# 2211160126 SCALE: 1"= 40' HCFCD# 2211160134)	80	OF BAUER-HOCKLEY RC	ATED ON THE NORTH SIDE PAD ±75' EAST OF ITS ELI DRIVE AND ±120' WEST EY MAP 326B IN THE SHED. NAVD 88, 2001 ADJ.)
$\frac{2}{2} \times 10^{9} \times 10^{9} \times 10^{9}$		TBM "A" - BOX CUT ON THE EAST SIDE OF MUE	N "BB" INLET LOCATED ON SCHKE ROAD ±50' SOUTH _Y SOUTHWEST CORNER OF
PLAT BOUNDARY PLAT BOUNDARY PARALLEL WING N SET			
34) CALLED 5.00 ACRES BRUCE A. BAZZELL AND KAREN P. BAZZELL H.C.C.F. No. V978968		UTILITY ON CONTRACTOR TO BEFORE DIGGING PHONE: HOUSTON (713) (STATEWIDE OUT HOUSTON) 1-(800)-545-6	CALL !!!! 223-4567 SIDE
		NOTE: THE LOCATIONS OF SHOWN IN AN APPROXIMATE SHALL DETERMINE THE EXAC COMMENCING WORK. HE AL RESPONSIBILITY FOR ANY AN	THE PRIVATE UTILITY LINES ARE WAY ONLY.THE CONTRACTOR CT LOCATION BEFORE
		N For your safety, you are required by t you dig so that underground lines can e obligation to call bii.	R MOVED, CALL CENTERPOINT ENERGY AT 713–207–2222. OTICE: EXAS LAW TO CALL BII AT LEAST 48 HOURS BEFORE BE MARKED. THIS VERIFICATION DOES NOT FULFILL YOUR PRIVATE UTILITY LINES
			Date: n ONLY. (This Signature verifies that you have shown r conflict verification.) (Gas service lines are not shown.)
	176	CenterPoint Energy/UNDERGROUND Electrical Facilitie underground facilities. Not to be used for conflict v	Date: S Verification ONLY. (This Signature verifies that existing rerification.) Signature Valid for six months.
	172	APPROVED FOR AT&T TEXAS/SWBT UNDER Signature valid for one year.	Date: GROUND CONDUIT FACILITIES ONLY,
NG © SWALE			SPARKS, INC. -880
	170	FRANK	OF 7245 E. BROOKS
EXIST. 24" RCP STM. SWR. (S) (BY SEPARATE PLAN SET HC# 2211160126 HCFCD# 2211160134)	166	PR C C	AAL THOMAS 25/2025
	162		DO TO SERVE
KIST. 7'X5' RCB STM. SWR. – IY SEPARATE PLAN SET C# 2211160126 CFCD# 2211160134)	158		AD EDUCATIONAL MPUS
STM. SWR: MH 3" ABOVE FIN. GRADE X5' (E&W) 157.39 I" (S) 164.95	154	PLAN AN	00 OUTFALL D PROFILE D TO 15+00
	150	NO. DATE	REVISIONS BY
		DRAWN BY: RV	CHECKED BY: CSM, JAE
) 15+00	146	DESIGNED BY: CSM PROJECT NO. 866-0018 SCALE: 1"=40"	APPROVED BY: FEB MARCH 2025 SHEET 14 OF 24
		$\begin{array}{ccc} 30\pi LL, & 1 = 40 \end{array}$	



	TEXAS REGISTERED ENGINEERING FIRM F-880
	21020 PARK ROW PHONE: (281) 578–9595 KATY, TX 77449 FAX: (281) 578–9686
Transformed provide the second p	 FLOODPLAIN INFORMATION: ACCORDING TO F.J.R.M. MAP NO. 48201C0215L (COMMUNITY-PANEL NO. 4802870215L), MAP REVISED DATE: JUNE 18, 2007. THE SUBJECT PROPERTY LIES WITHIN THE AREAS DESIGNATED AS ZONE "X" UNSHADED. DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD. ZONE X SHADED. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. ZONE AE. BASE FLOOD ELEVATIONS DETERMINED. AND FLOODWAY. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS. REFERENCE BENCHMARK: RM111050 - ALUMINUM ROD WITH LOGO CAP STAMPED "111050" LOCATED ON THE NORTH SIDE OF BAUER-HOCKLEY ROAD ±75' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ±120' WEST OF A POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.) TEMPORARY BENCHMARKS: TBM "A" - BOX CUT ON "BB" INLET LOCATED ON THE EAST SIDE OF MUESCHKE ROAD ±50' SOUTH OF THE MOST NORTHERLY SOUTHWEST CORNER OF THE SUBJECT TRACT. ELEVATION = 169.64'
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	Date: APPROVED FOR AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES ONLY, Signature valid for one year.
LEGEND:•PROPOSED INLET• FF PROPOSED FILTER FABRIC FENCE (SILT FENCE) $FD-2$ FILTER DAM	BROOKS & SPARKS, INC. F-880 FRANK E. BROOKS FRANK E. BROOKS OJ/25/2025
SC STABILIZED CONSTRUCTION ACCESS	TOMBALL ISD L109-00-00 TO SERVE JUERGEN ROAD EDUCATIONAL
IPB INLET PROTECTION BARRIER	CAMPUS
CONCRETE WASHOUT PIT	STORM POLLUTION PREVENTION PLAN
NOTES:	NO. DATE REVISIONS BY
1. STOCKPILE AND ALL DISTURBED AREAS TO BE HYDRO-MULCH SEEDED (TYP.)	
2. CONTRACTOR TO FINAL GRADE STOCKPILE WITH MAX 5:1 SIDE SLOPES. TOP OF STOCKPILE TO BE	DRAWN BY: RV CHECKED BY: CSM, JAE
GRADED TO DRAIN AT A MIN. OF 2% CROSS SLOPE	DESIGNED BY: CSM APPROVED BY: FEB PROJECT NO. 866-0018 MARCH 2025
	SCALE: 1" = 100' SHEET 15 OF 24





- (1) Extend Bars P 3'-0" minimum into bottom slab of Box Culvert.
- (2) Adjust to fit as necessary to maintain $1 \frac{1}{4}$ " clear cover and 4" minimum between bars.
- (3) Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings multiply the tabulated values by Lw.
- (4) Recommended values of Slope are: 2:1, 3:1, 4:1, & 6:1.
- (5) When shown elsewhere on the plans, a 5" deep concrete riprap shall be constructed. Payment for riprap shall be as required by Item 432, "Riprap". Unless otherwise shown on the plans or directed by the Engineer, the riprop shall have a 6" wide by 1'-6" deep reinforced concrete toewall along all edges adjacent to natural ground; the toewall shall be reinforced by extending typical riprop reinforcing into the toewall; construction joints or grooved joints, oriented in the direction of flow, shall extend across the full distance of the riprop, at intervals of approximately 20'. When such riprop is provided, the culvert toewall shown in SECTION B-B will not be required.
- 6 At Contractor's option, Culvert Toewall may be ended flush with Wingwall Toewall. Adjust reinforcing from that shown as necessary.
- (7) 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail or curbs taller than 1'-0", refer to ECD standard. For structures with T6 bridge rail, refer to T6-CM standard. For structures with traffic rail, other than T6, refer to RAC standard.
- (8) For vehicle safety, curb heights and wall heights shall be reduced, if necessary, to provide a maximum 3" projection above finished grade. No changes will be made in quantities and no additional compensation will be allowed for this work.



Designed according to AASHTO LRFD Specifications. All reinforcing steel shall be Grade 60. Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.

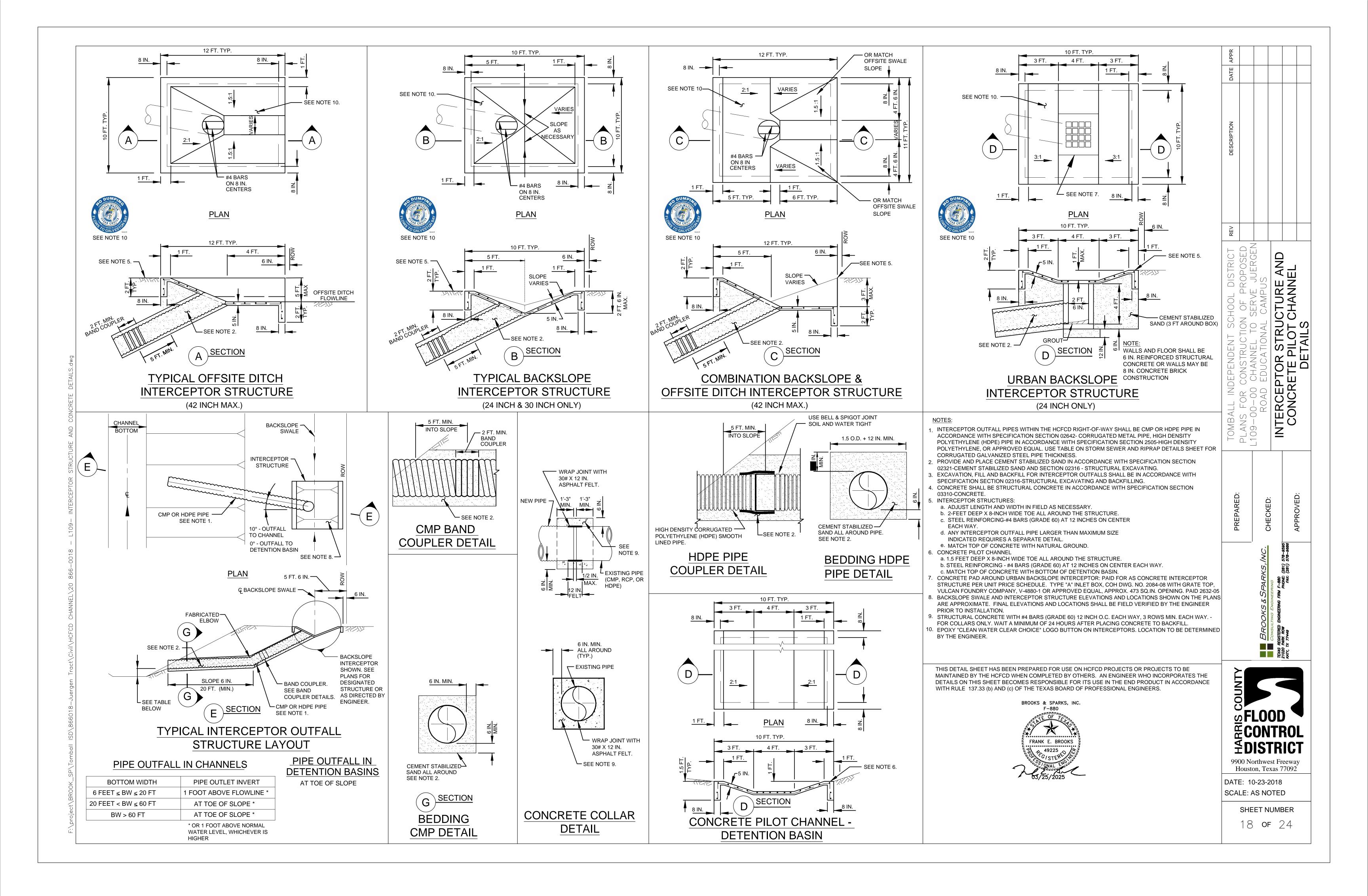
All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi. All reinforcing bars shall be adjusted to provide

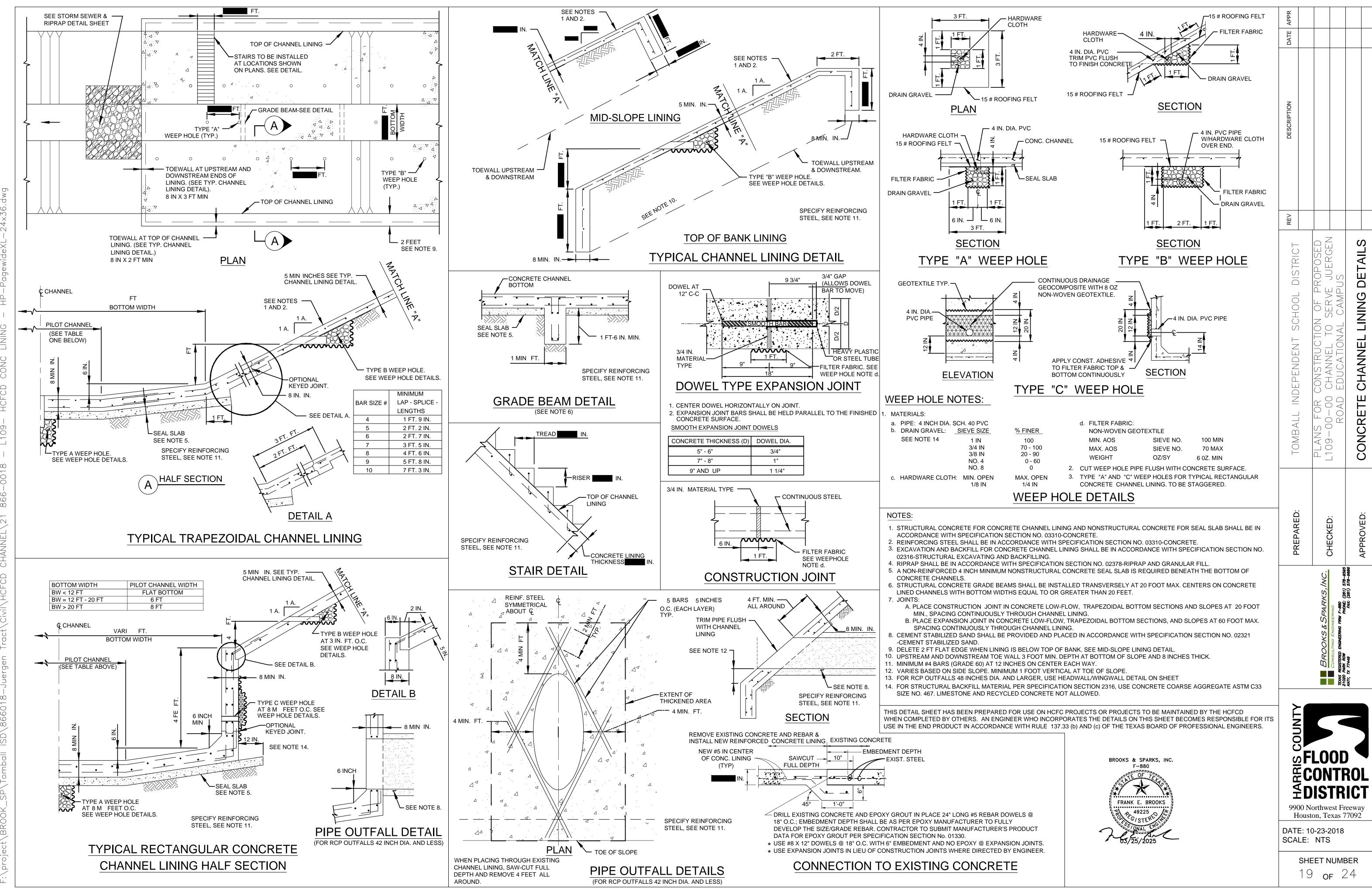
a minimum of $1 \frac{1}{4}$ clear cover. When structure is founded on solid rock, depth of

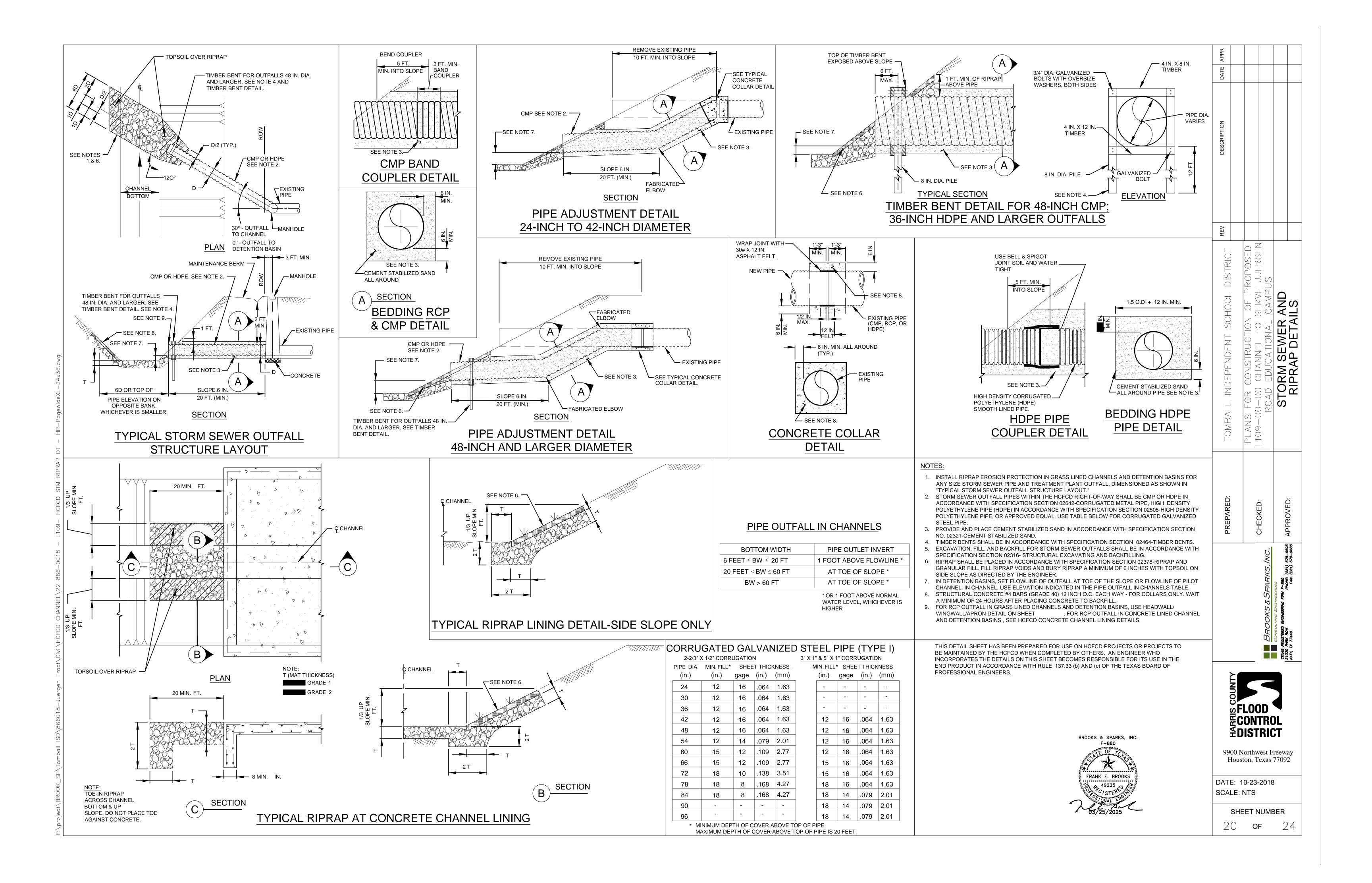
toewalls for culverts and wingwalls may be reduced or eliminated as directed by the Engineer. See BCS sheet for additional dimensions and information.

The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.

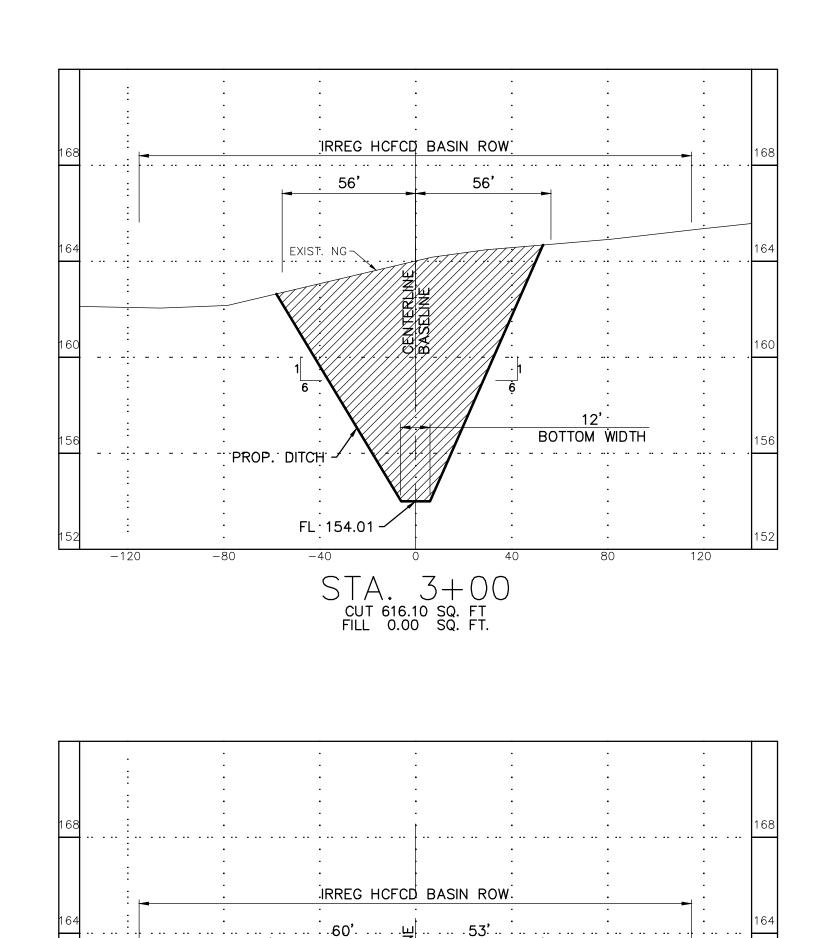
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REVISIONS						
11-10: Add note for synthetic fibers.	DIST		COUNTY			SHEET NO.
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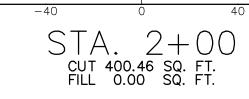












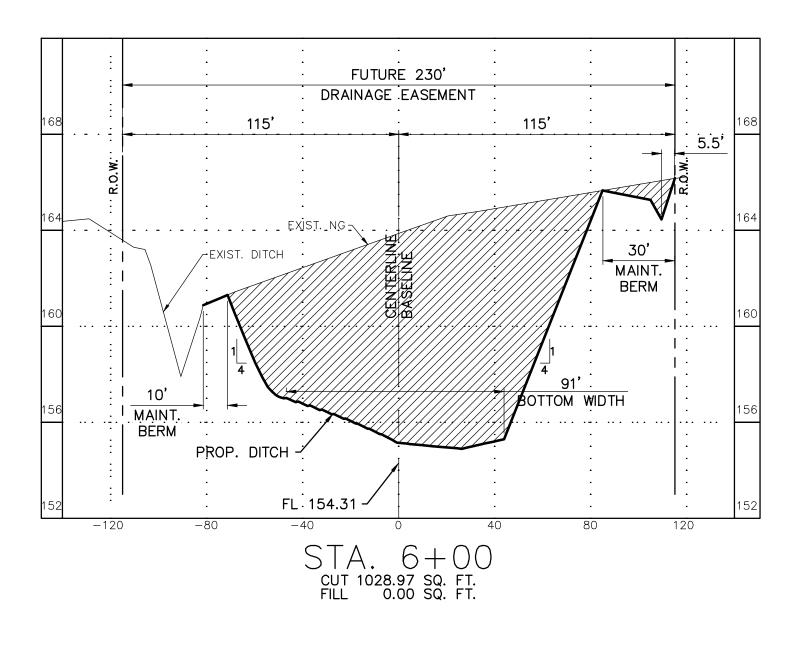
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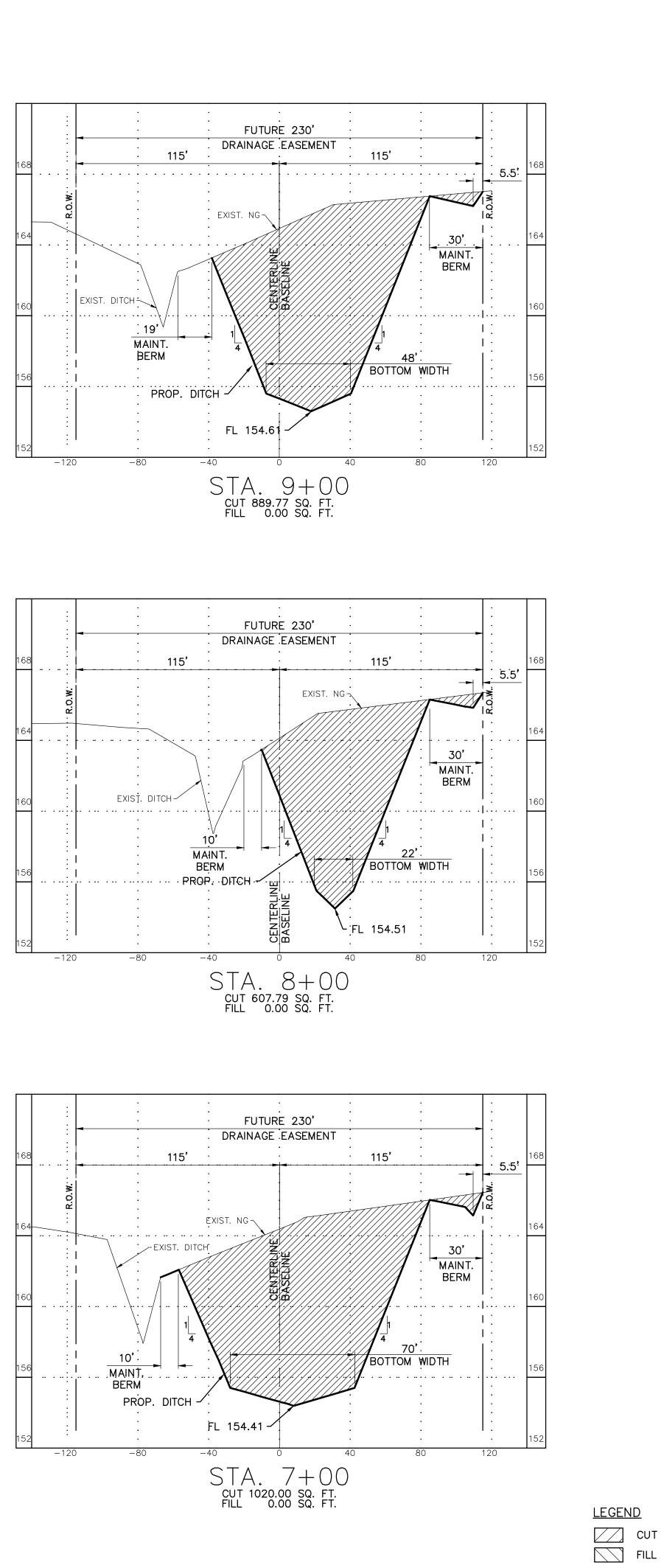
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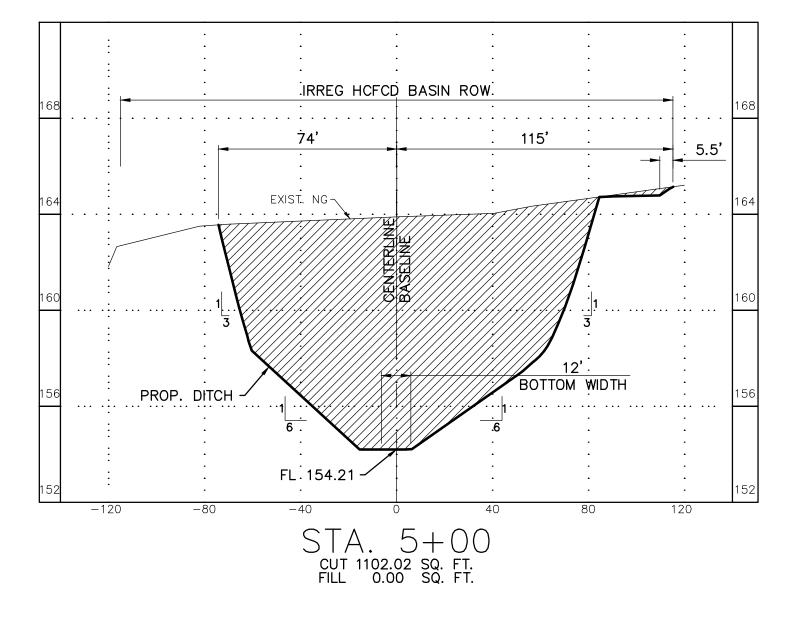
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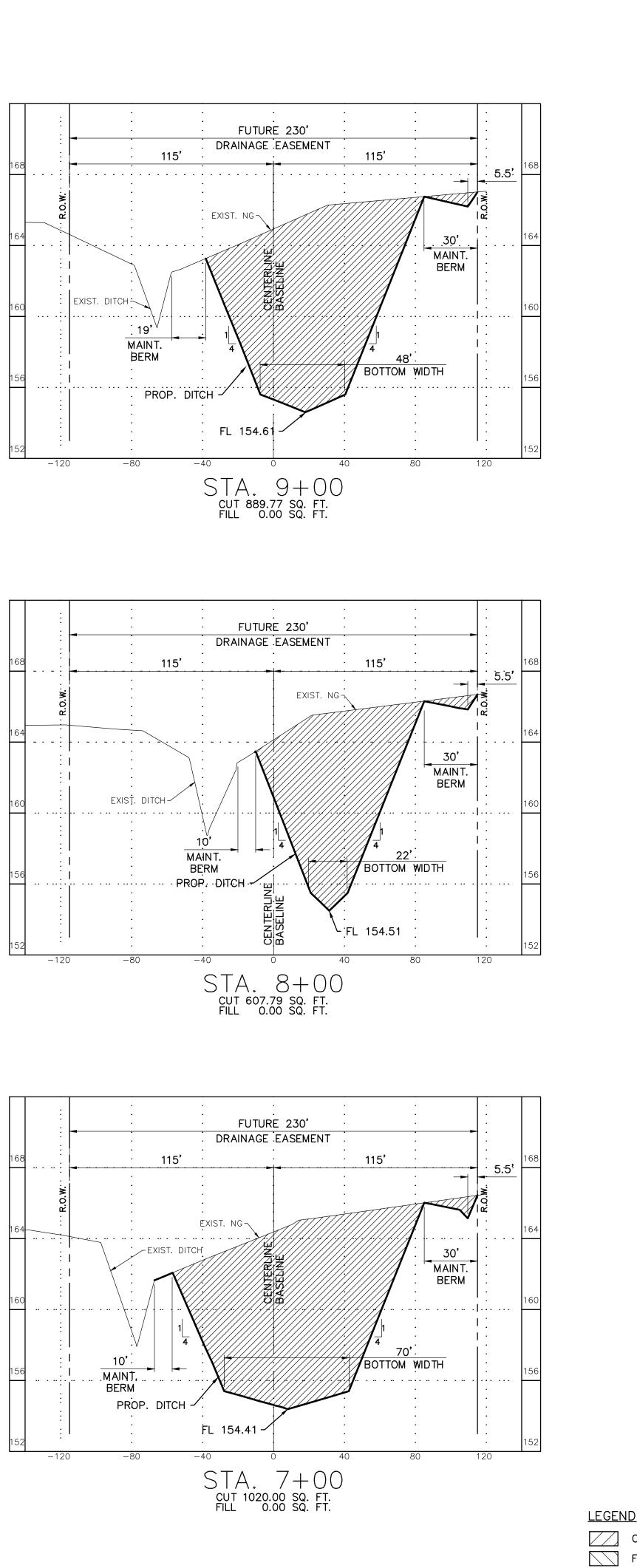
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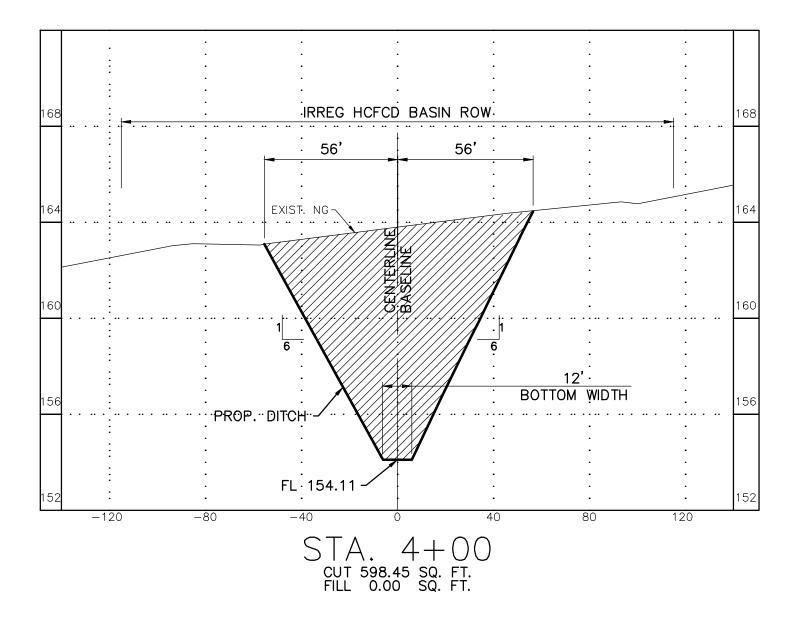
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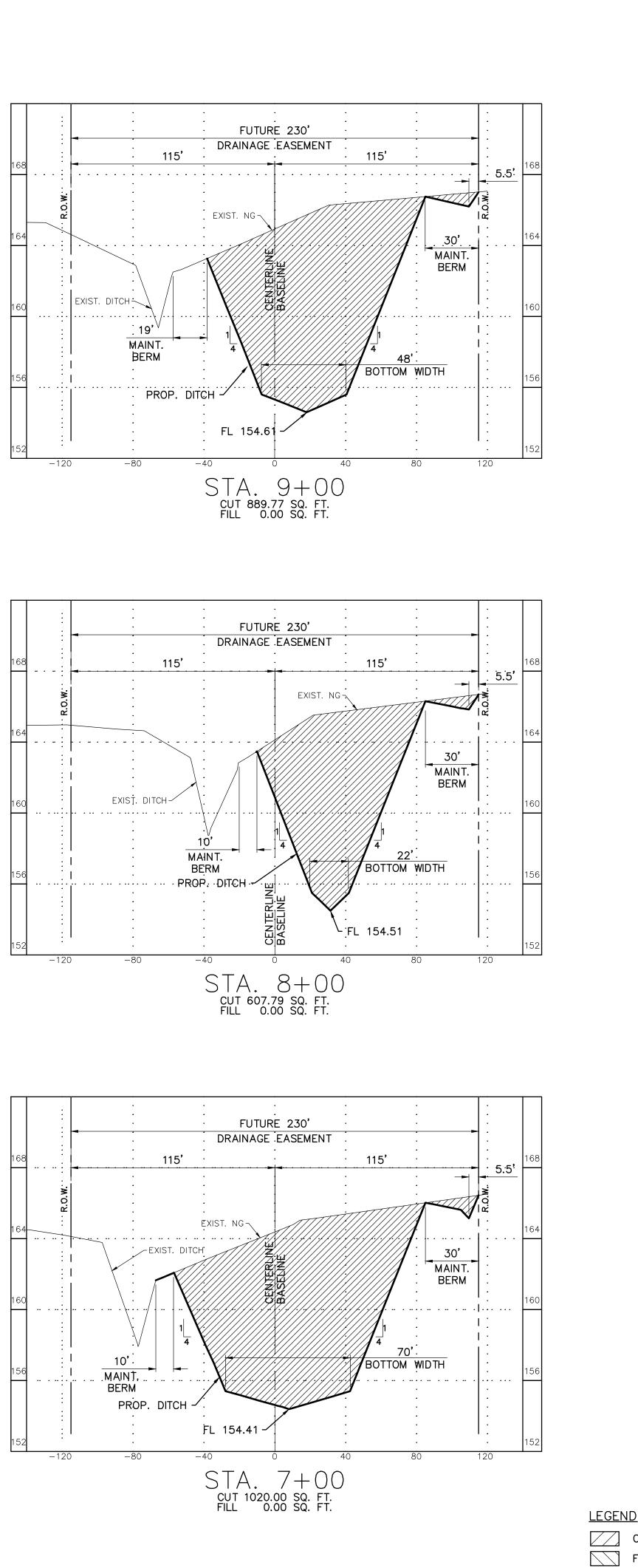








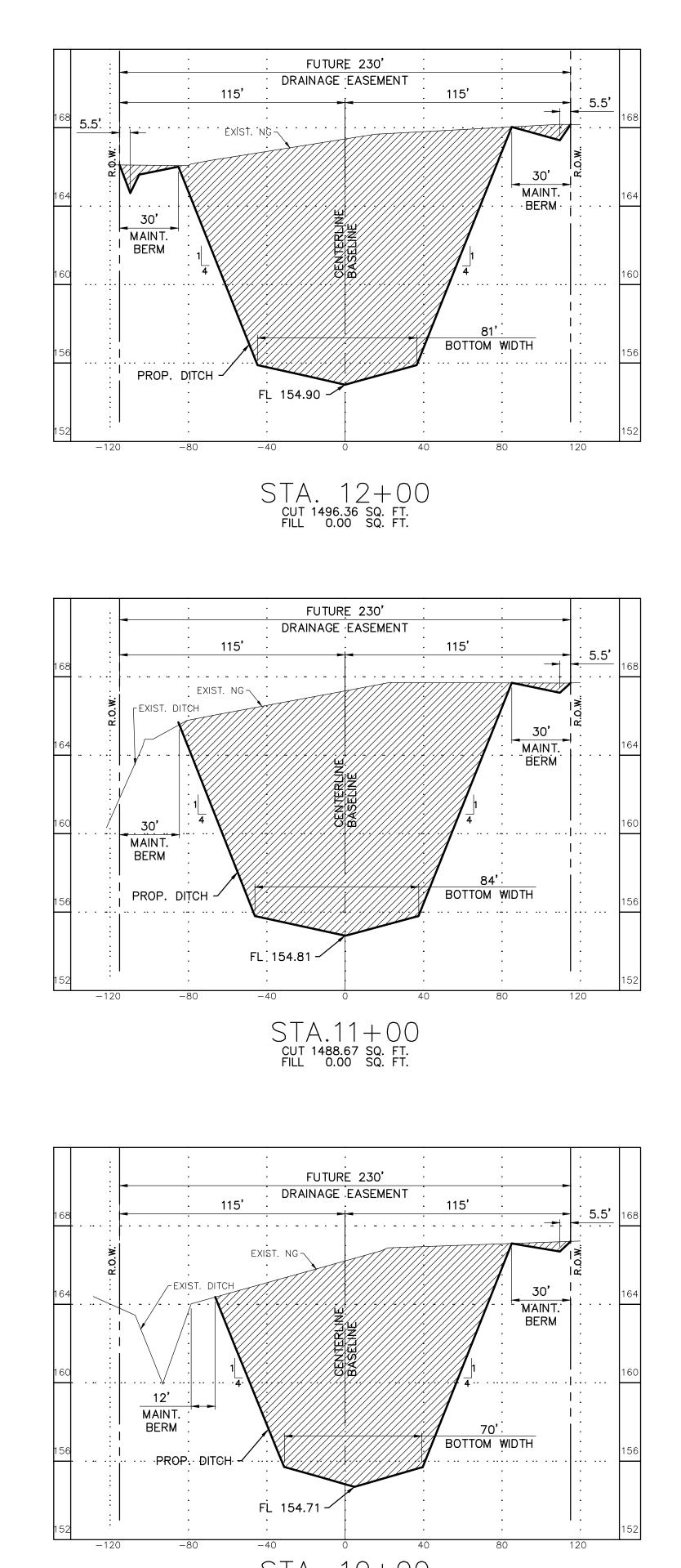




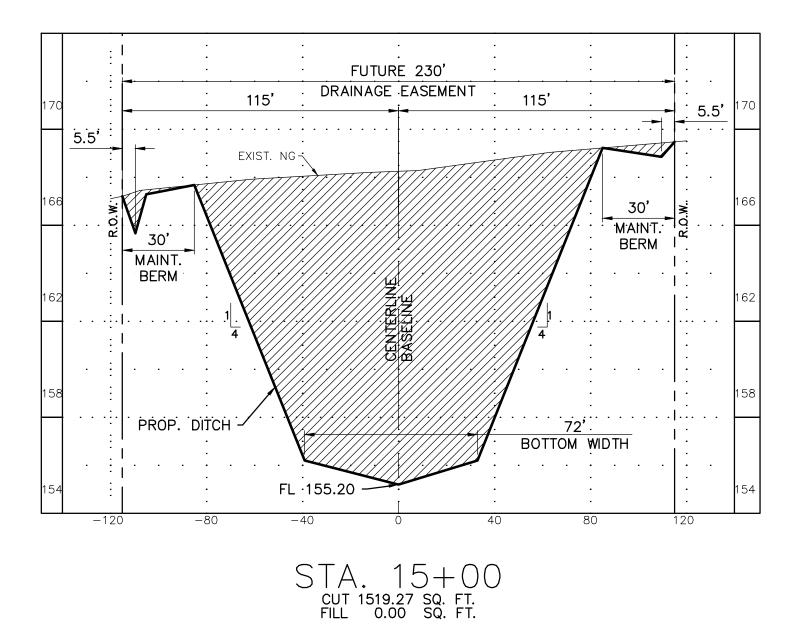
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<i>катү, тх</i> FLOODP	77449 FAX: (281) 578–96
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TO ARRANGE	FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-
YOU DIG SO	NOTICE: AFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL BII AT LEAST 48 HOURS BE THAT UNDERGROUND LINES CAN BE MARKED. THIS VERIFICATION DOES NOT FULFILL
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	gy/UNDERGROUND Electrical Facilities Verification ONLY. (This Signature verifies that exi ities. Not to be used for conflict verification.) Signature Valid for six months.
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APPROVED FO Signature valid	R AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES ONLY, for one year.
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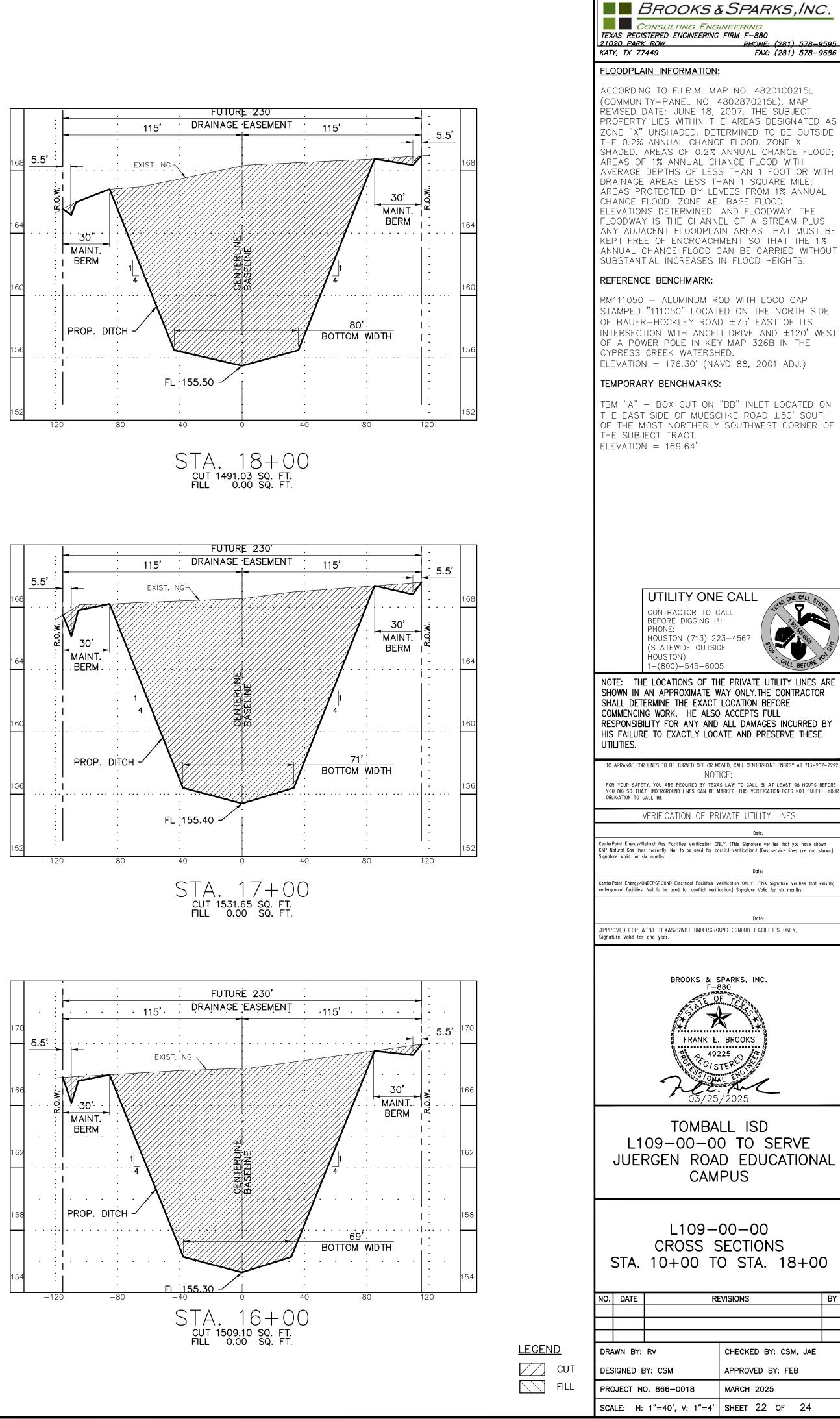
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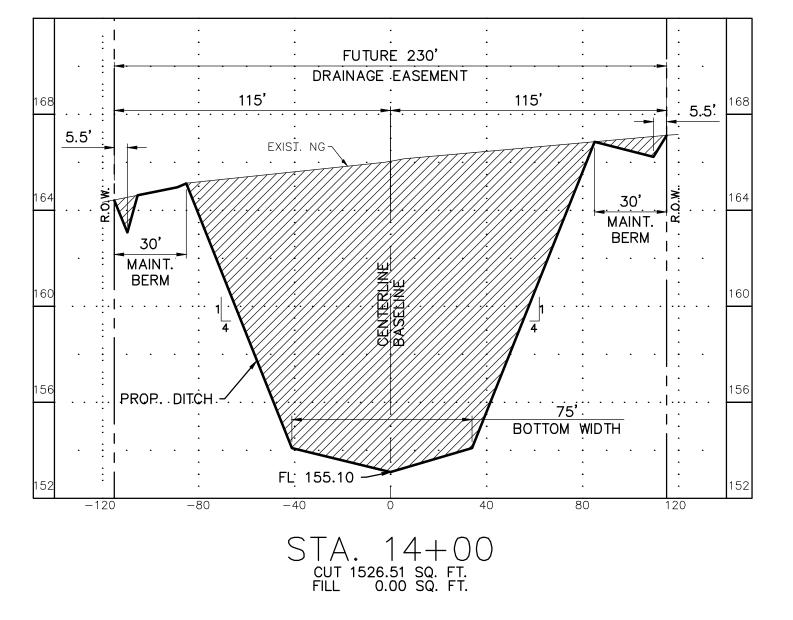
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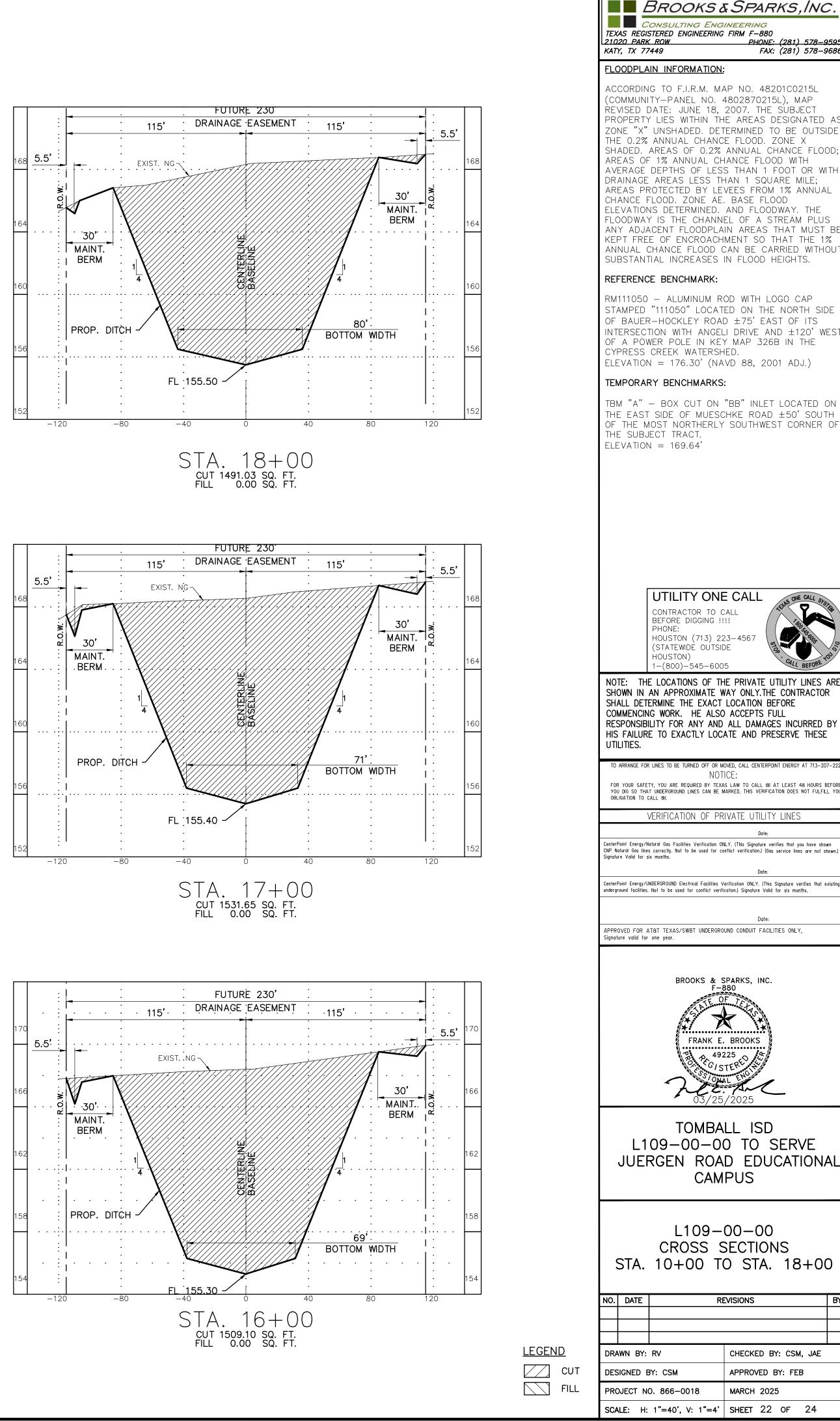


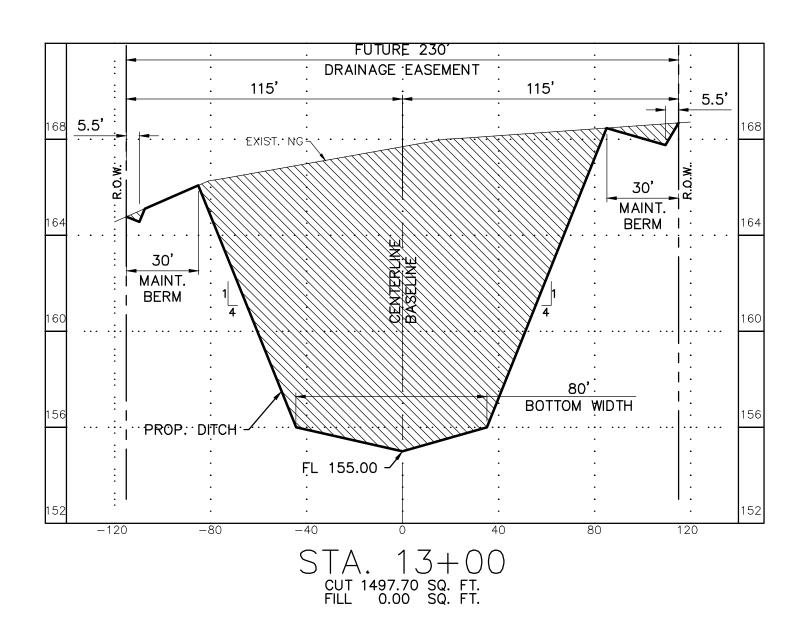
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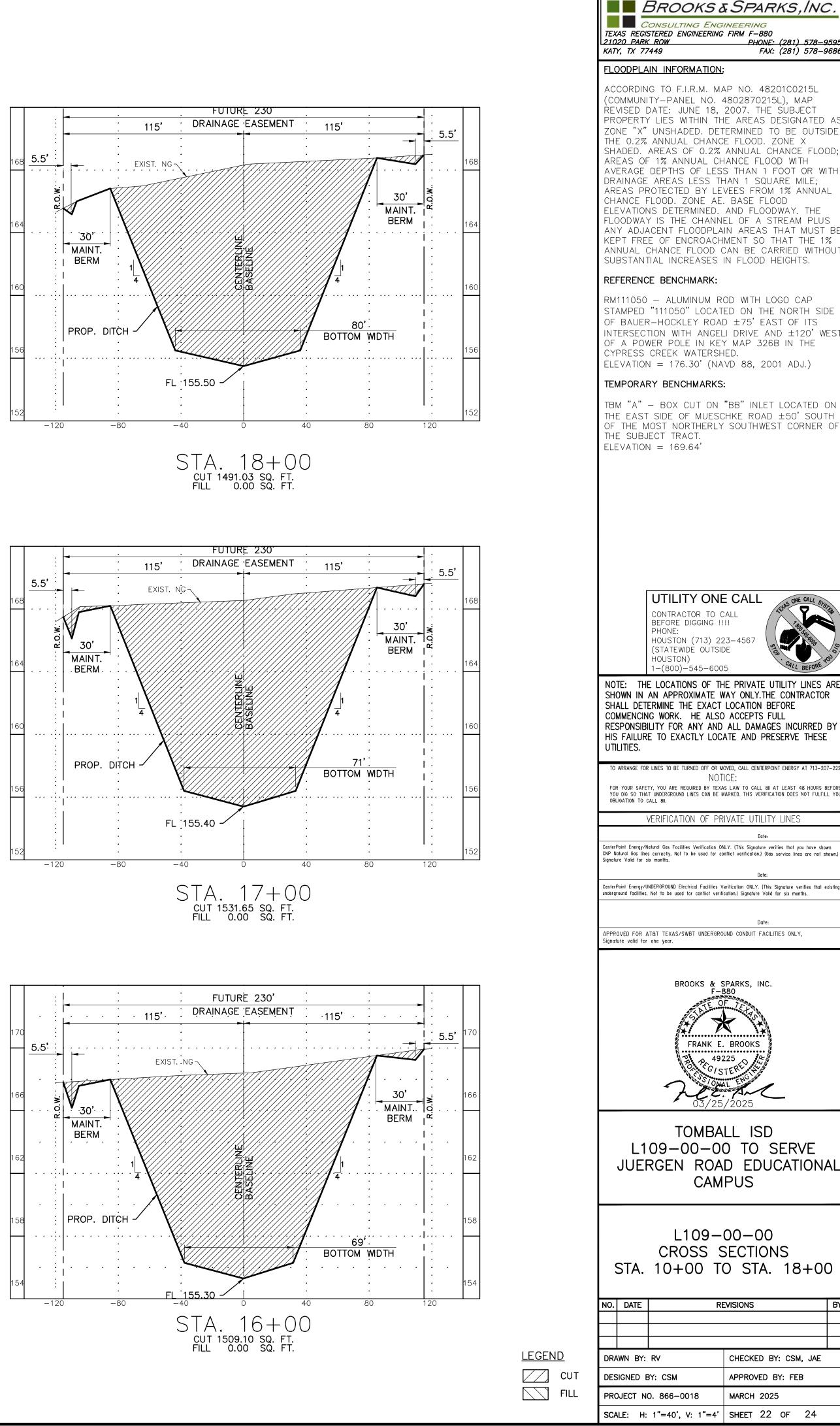


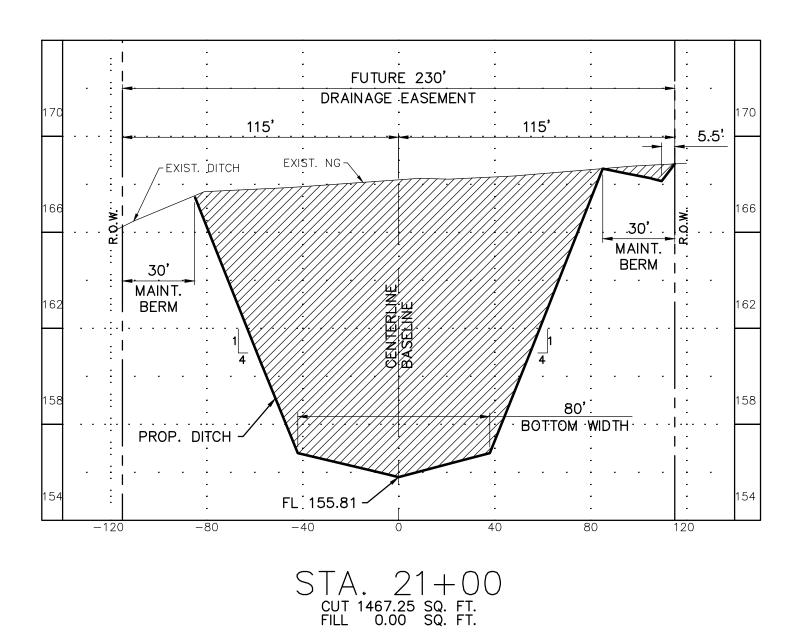


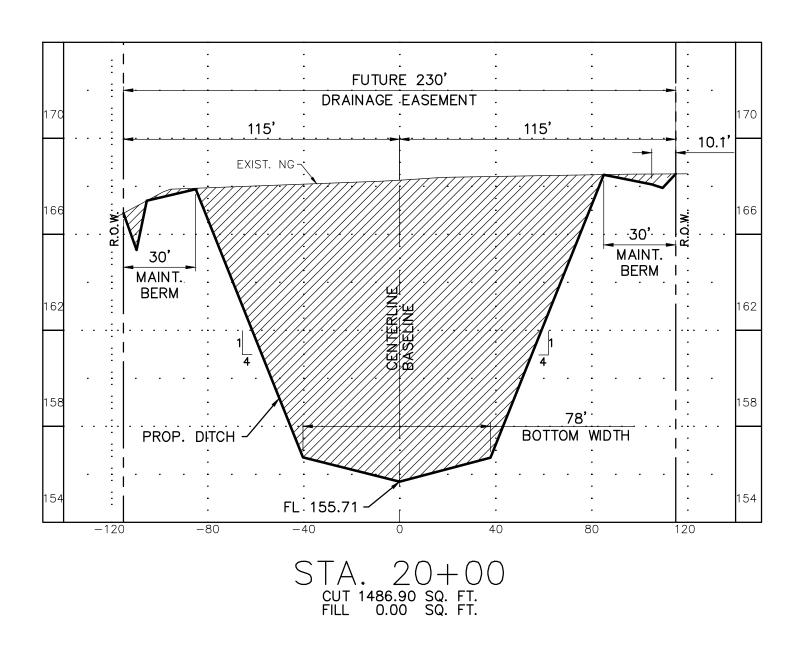


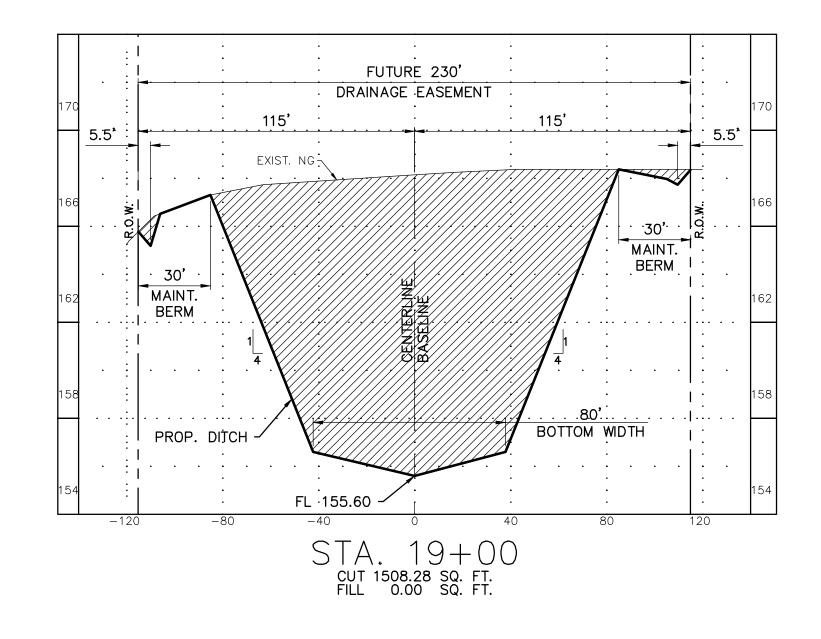




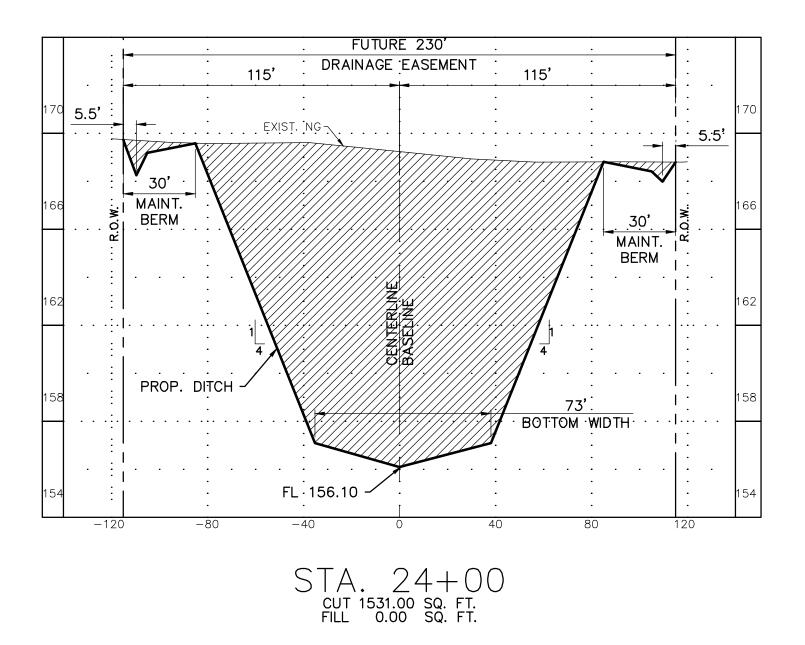


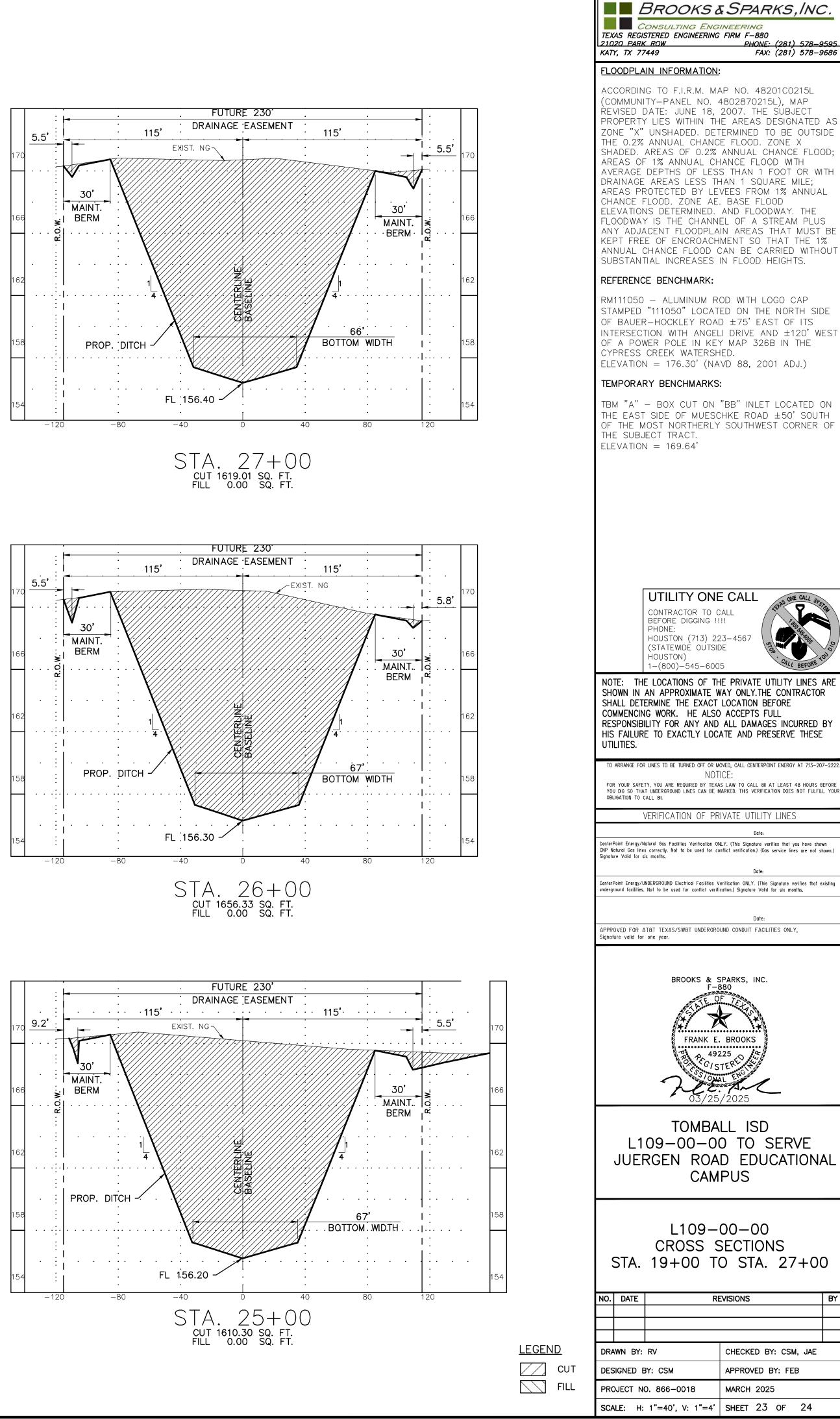


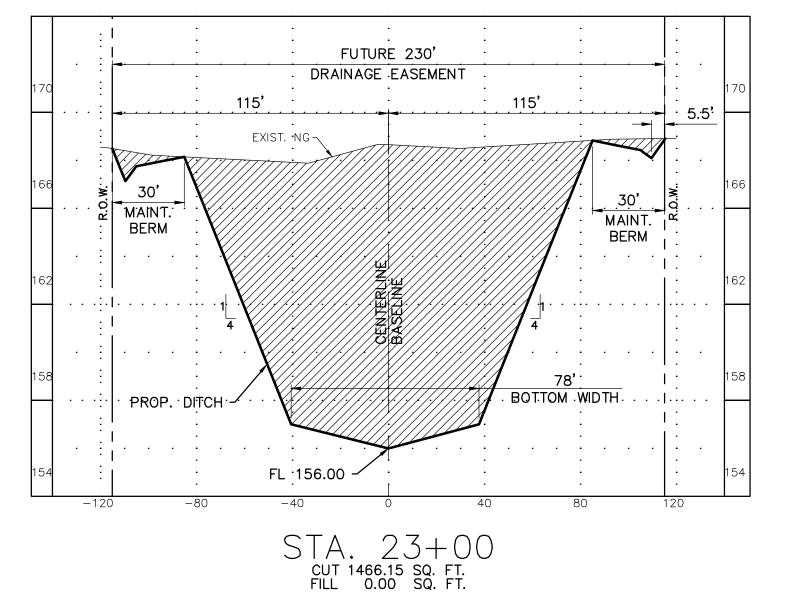


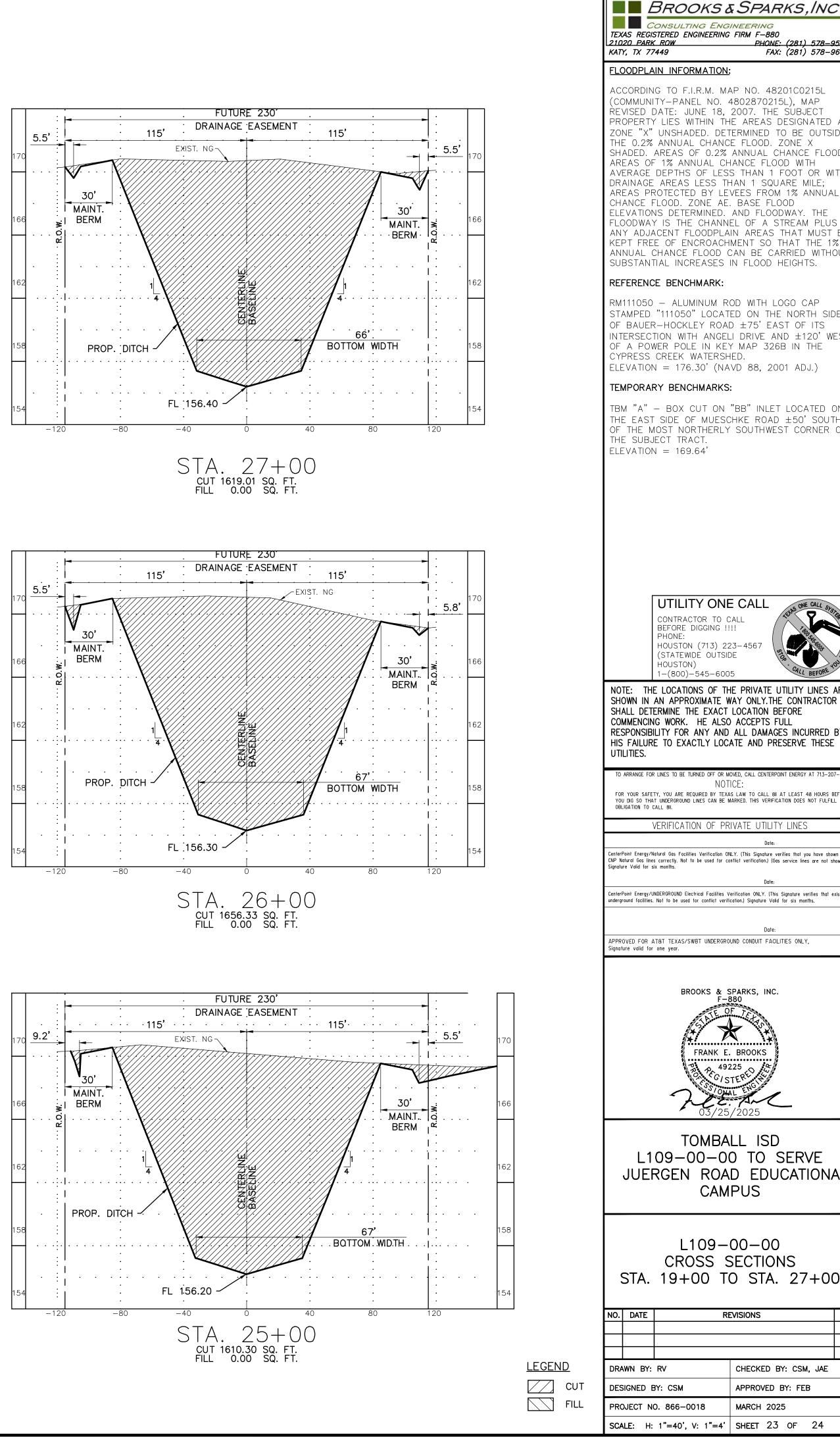


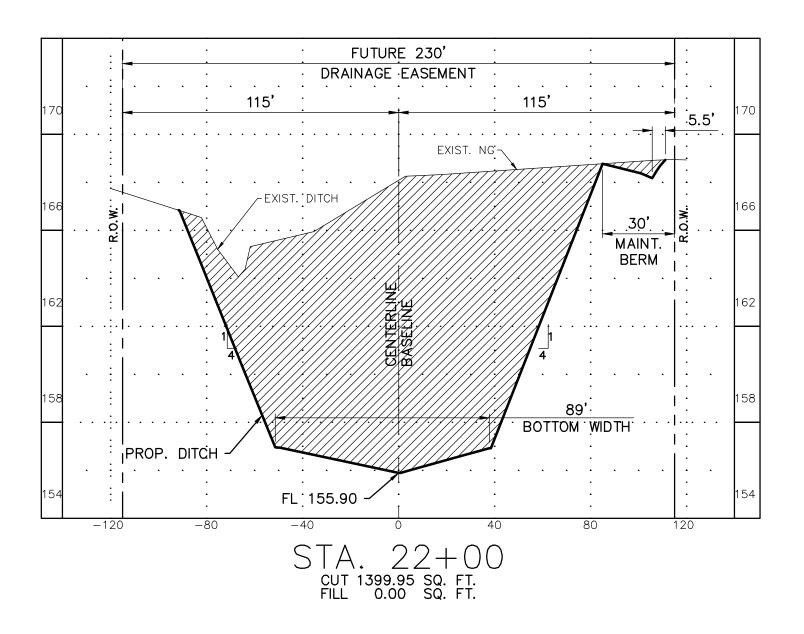
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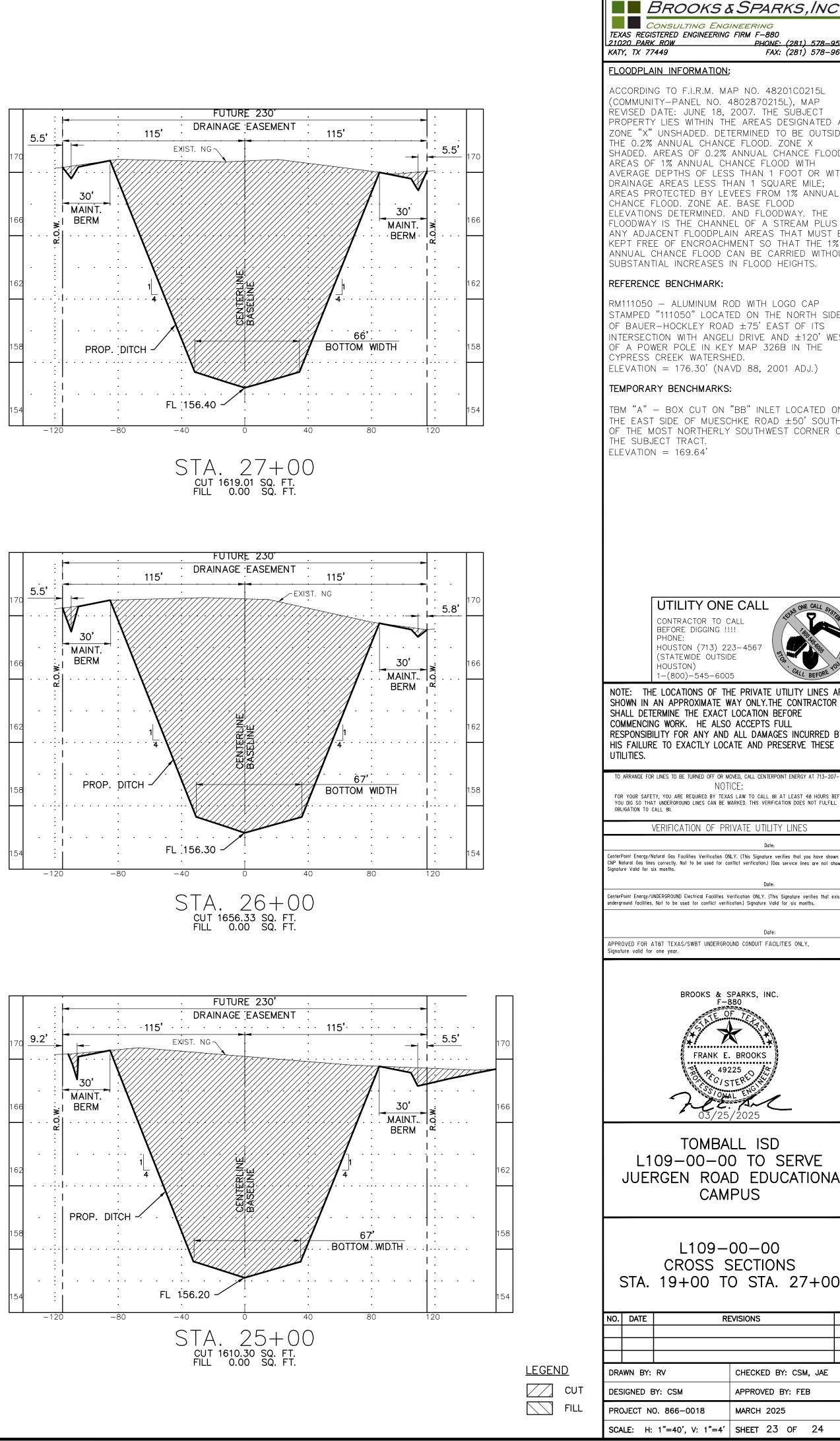




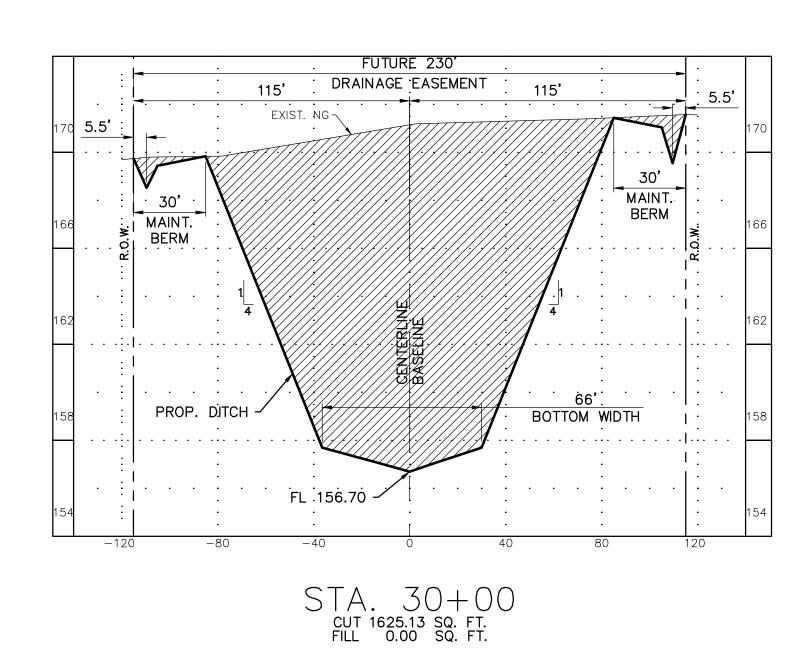


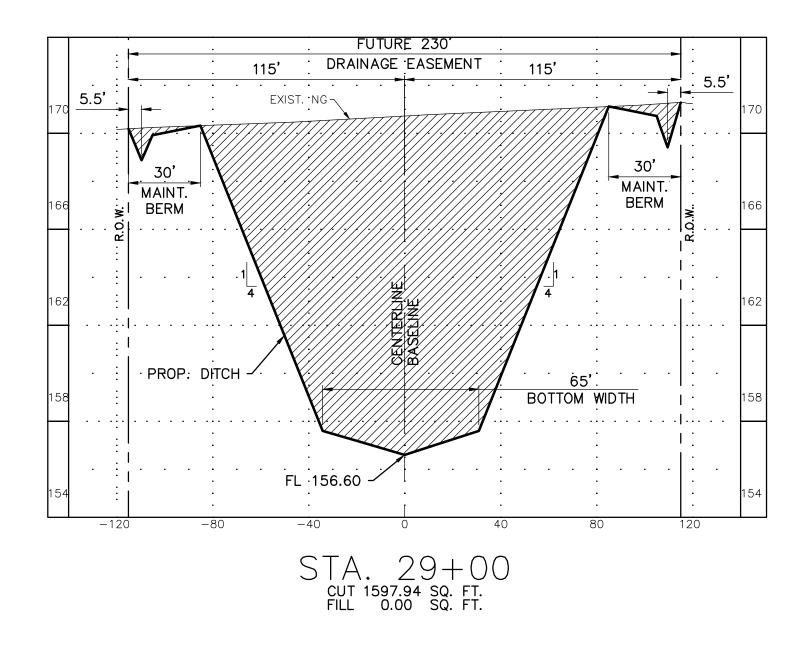


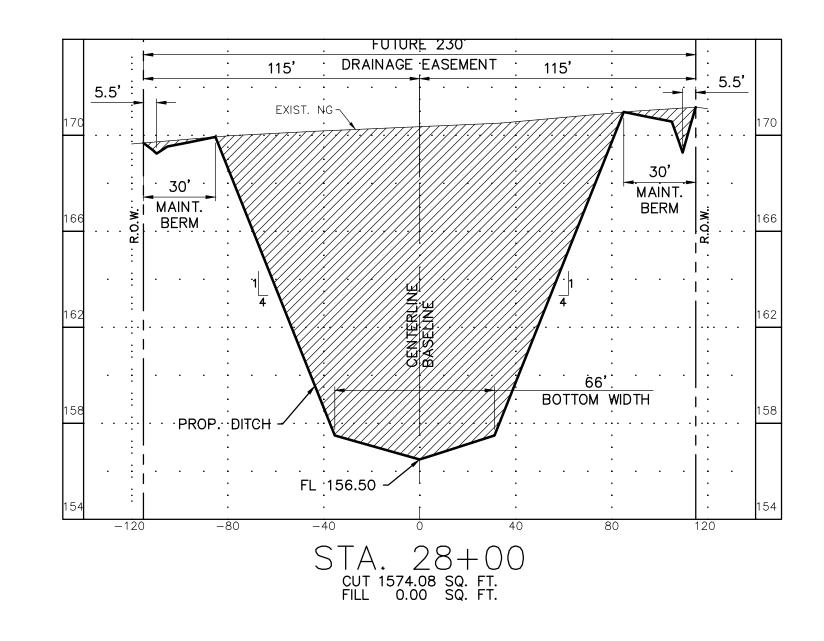


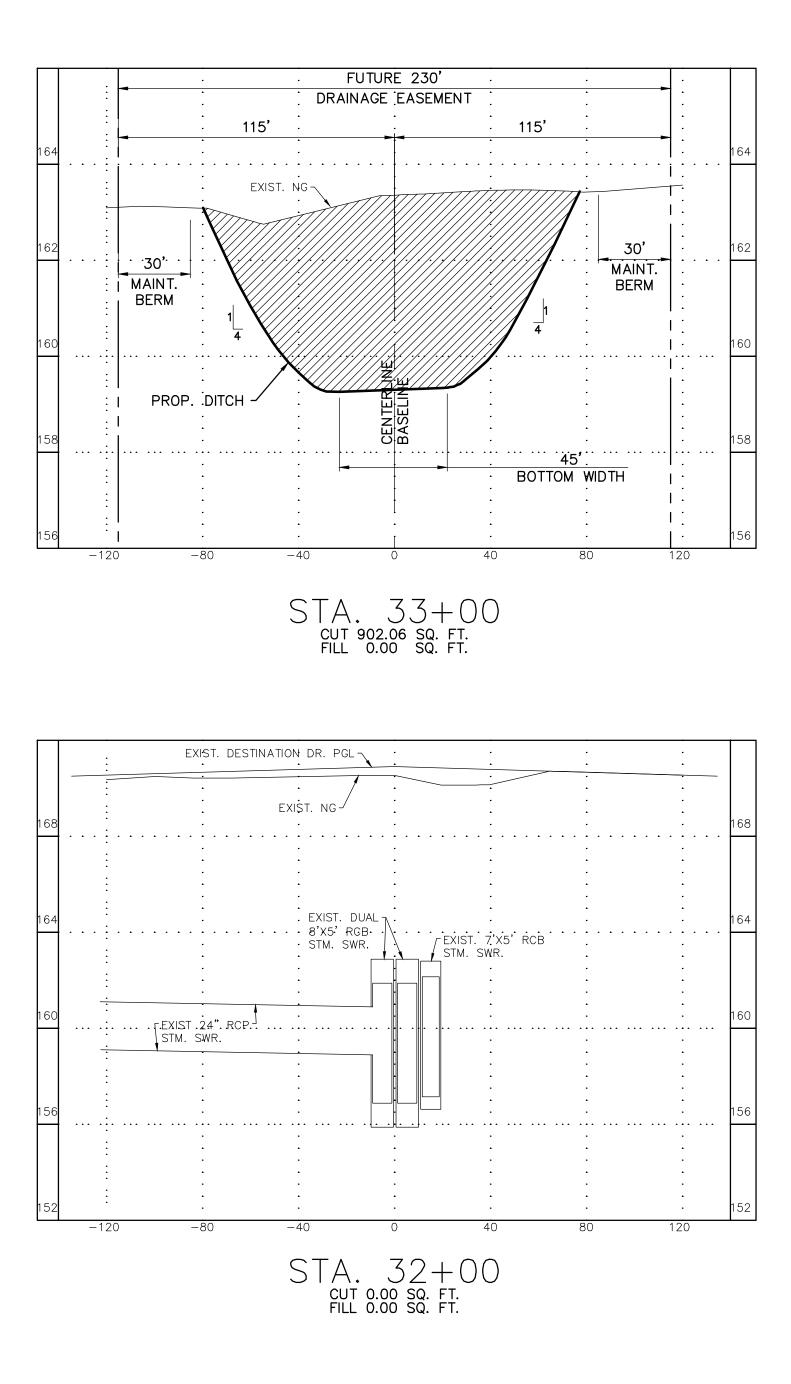


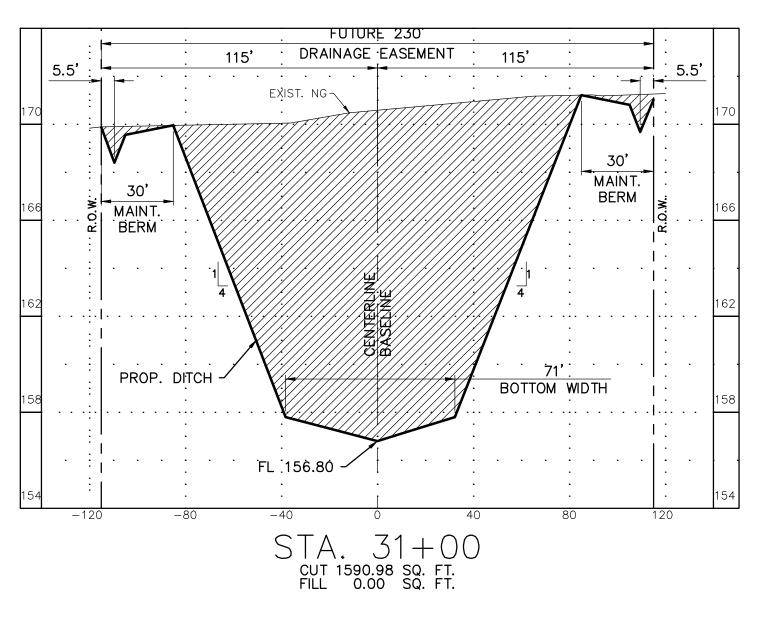
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	BROOKS & SPARKS, INC.
	TEXAS REGISTERED ENGINEERING FIRM F-880 21020 PARK ROW PHONE: (281) 578–9595 KATY, TX 77449 FAX: (281) 578–9686
	FLOODPLAIN INFORMATION:
	ACCORDING TO F.I.R.M. MAP NO. 48201C0215L (COMMUNITY-PANEL NO. 4802870215L), MAP REVISED DATE: JUNE 18, 2007. THE SUBJECT PROPERTY LIES WITHIN THE AREAS DESIGNATED AS ZONE "X" UNSHADED. DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD. ZONE X SHADED. AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. ZONE AE. BASE FLOOD ELEVATIONS DETERMINED. AND FLOODWAY. THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS.
	REFERENCE BENCHMARK:
	RM111050 – ALUMINUM ROD WITH LOGO CAP STAMPED "111050" LOCATED ON THE NORTH SIDE OF BAUER-HOCKLEY ROAD ±75' EAST OF ITS INTERSECTION WITH ANGELI DRIVE AND ±120' WEST OF A POWER POLE IN KEY MAP 326B IN THE CYPRESS CREEK WATERSHED. ELEVATION = 176.30' (NAVD 88, 2001 ADJ.) TEMPORARY BENCHMARKS:
	TBM "A" – BOX CUT ON "BB" INLET LOCATED ON
	THE EAST SIDE OF MUESCHKE ROAD ±50' SOUTH OF THE MOST NORTHERLY SOUTHWEST CORNER OF THE SUBJECT TRACT. ELEVATION = 169.64'
	UTILITY ONE CALL
	CONTRACTOR TO CALL BEFORE DIGGING !!!! PHONE: HOUSTON (713) 223-4567 (STATEWIDE OUTSIDE HOUSTON) 1-(800)-545-6005
	NOTE: THE LOCATIONS OF THE PRIVATE UTILITY LINES ARE SHOWN IN AN APPROXIMATE WAY ONLY.THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE ALSO ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES INCURRED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UTILITIES.
	FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL BIL AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS VERIFICATION DOES NOT FULFILL YOUR OBLIGATION TO CALL BIL. VERIFICATION OF PRIVATE UTILITY LINES
	Date: CenterPoint Energy/Natural Gas Facilities Verification ONLY. (This Signature verifies that you have shown CNP Natural Gas lines correctly. Not to be used for conflict verification.) (Gas service lines are not shown.) Signature Valid for six months. Date:
	CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This Signature verifies that existing underground facilities. Not to be used for conflict verification.) Signature Valid for six months.
	Date: APPROVED FOR AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES ONLY, Signature valid for one year.
	BROOKS & SPARKS, INC. F-880 FRANK E. BROOKS FRANK E. BROOKS P 49225 C/STERE OMAL 03/25/2025
	TOMBALL ISD L109–00–00 TO SERVE JUERGEN ROAD EDUCATIONAL CAMPUS
	L109-00-00 CROSS SECTIONS STA. 28+00 TO STA. 33+00
	NO. DATE REVISIONS BY
	DRAWN BY: RV CHECKED BY: CSM, JAE
UT ILL	DESIGNED BY: CSM APPROVED BY: FEB
	PROJECT NO. 866–0018 MARCH 2025 SCALE: H: 1"=40', V: 1"=4' SHEET 24 OF 24

LEGEND