

MANATEE COUNTY, FLORIDA CANAL ROAD PIPING – FINAL DESIGN FROM 24TH STREET EAST TO 29TH STREET EAST MANATEE COUNTY PROJECT NO. 6067300

NO. INDEX OF SHEETS

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GOVERNING STANDARDS AND SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED JANUARY 2008,

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
CONSTRUCTION DATED 2007, AS AMENDED
BY CONTRACT DOCUMENTS,

MANATEE COUNTY TRANSPORTATION HIGHWAY & DRAINAGE STANDARDS
DATED 2007.

ANY COUNTY UTILITIES EFFECTED AS A RESULT OF THIS PROJECT
SHALL BE DEALT WITH PER THE LATEST VERSION OF THE APPROVED
MANATEE COUNTY UTILITY STANDARDS.

AT LEAST 72 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION
OF THE PROJECT, THE CONTRACTOR SHALL CONTACT THE LOCAL
MAINTENANCE FDOT ENGINEER'S OFFICE TO SECURE GENERAL
USE PERMIT AND/OR OTHER PERMITS AS REQUIRED FOR WORKING
WITHIN THE DEPARTMENT'S RIGHT-OF-WAY.

UTILITIES SHOWN WHERE INTERPOLATED FROM THE FOLLOWING
CONSTRUCTION AND RECORD DRAWINGS:

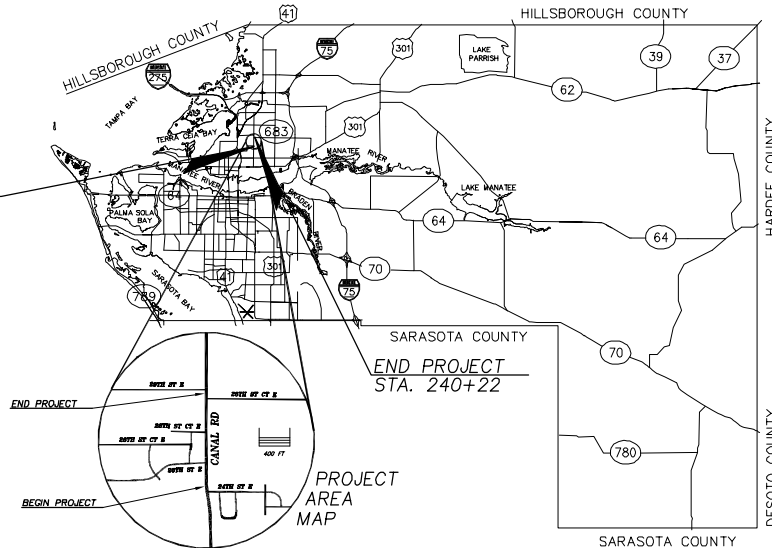
NORTH SUREGIONAL SEWER SYSTEM - 1988 - LARSON ENGINEERING, INC.
SAFETY IMPROVEMENTS TO CANAL ROAD - 1993 - GRACE RADCLIFFE, INC.

SURVEY DATA ALONG CANAL ROAD WAS INTERPOLATED FROM
GRACE RADCLIFFE, INC. PLANS DATED 1993.

SURVEY DATA FOR THE EXISTING CANAL ROAD DITCH SYSTEM
WAS PROVIDED BY BOWYER-SINGLETON & ASSOCIATES, INC.
DATED 2007.

BEGIN PROJECT
STA. 226+71

END PROJECT
STA. 240+22



SHOP DRAWINGS
TO BE SUBMITTED TO:

DAVID O. THEUNG, PE #44786
Wade Trim, Inc.
8745 Henderson Road, Suite 220
Tampa, Florida 33634
Vendor No. 59-2417170

PLANS PREPARED BY:



NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

CONSTRUCTION PLANS
ENGINEER OF RECORD: DAVID O. THEUNG, P.E.

P.E. NO.: 44786

LENGTH OF PROJECT	
	FEET
ROADWAY	1,351
BRIDGES	N/A
NET LENGTH OF PROJ.	1,351
EXCEPTIONS	N/A
GROSS LENGTH OF PROJ.	1,351

WADE TRIM PROJECT MANAGER : MICHAEL REINEKE

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION
8/07/09	MR	SHEETS 2, 7, 8, 9, 10, 11

PAY ITEM QUANTITIES:

ITEM	PAY ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
1	101-1	Mobilization	LS	1
2	102-1	Maintenance of Traffic	LS	1
3	104-10-2	Synthetic Bales	LF	20
4	104-11	Floating Turbidity Barrier	LF	45
5	110-1-1	Clearing & Grubbing	LS	4
6	120-1	Regular Excavation	CY	5928
7	120-6	Embankment (Inc. final grading work)	CY	8118
8	285-705	Optional Base, Group 5	SY	70
9	327-70-1	Milling Existing Asphalt Pavement, 1"	SY	94
10	334-1-11	Superpave Asphaltic Conc, Traffic A, SP-9.5	TN	11.6
11	400-1-2	Concrete Class I, Endwalls	CY	11.6
12	400-1-15	Concrete Class I, Miscellaneous	CY	0.2
13	425-1-583	DBI Type H, J Bot, <10', Mod	EA	7
14	425-2-71	MH, J-7, <10', Mod	EA	3
15	430-175-101	Pipe Culvert, RCP, 0-24'S/CD	LF	16
16	430-175-202	Pipe Culvert, ERCP, 25-36'S/CD	LF	34
17	430-175-203	Pipe Culvert, ERCP, 37-48'S/CD	LF	2590
18	520-1-10	Concrete Curb and Gutter, Type F	LF	35
19	536-73	Guardrail Removal	LF	1196
20	570-1-2	Performance Turf, Sod	SY	6584
21	630-1-12	Signals-Conduit, F&I, Underground	LF	15
22	635-1-11	Pull & Junction Boxes, F&I, Pull Box	EA	1
23	660-2-106	Loop Detector, Inductive, F&I, Type F	EA	2
24	700-20-40	Single Post Sign (Relocate)	AS	1
25		Miscellaneous Work and Cleanup	LS	1
		Discretionary Work (Roadway)		
26		Steel Casing, 14"	LF	20
27		Steel Casing, 20"	LF	35
28		6" DIP Class 50 Watermain (RJ)	LF	35
29		6" 45° Bend	EA	4
		Discretionary Work (Utilities)		

PAY ITEM NOTES:

ITEM 6: CONTRACTOR IS ADVISED OF THE POTENTIAL OF SHALLOW LIMESTONE LAYERS IN THE PROJECT VICINITY. ROCK EXCAVATED SHALL BE INCIDENTAL TO REGULAR EXCAVATION. NO ADDITIONAL PAYMENT WILL BE MADE FOR ROCK EXCAVATION.

REGULAR EXCAVATION INCLUDES REMOVAL OF MATERIAL FOR INSTALLATION OF PIPE AND CONSTRUCTION OF SWALE.

ITEM 7: EMBANKMENT INCLUDES REPLACEMENT MATERIAL EXCAVATED FOR PIPE INSTALLATION.

ITEMS 9, 21-24: WILL ONLY BE REQUIRED IF THE 28TH STREET COURT EAST SIGNALIZATION AND INTERSECTION IMPROVEMENTS HAVE BEEN COMPLETE BY THE COUNTY. THESE ITEMS MAY BE DELETED BY THE ENGINEER.

DESIGNED BY	MR	DATE	05/01/09	REVISION DESCRIPTION & DATE	BY	NO.
CHECKED BY	JT	DATE	05/01/09	REVISED PER ADDENDUM 1 7/29/09	MR	1
DRAWN BY	BG	DATE	05/01/09	REVISED PER ADDENDUM 2 8/07/09	MR	2
CHECKED BY	LS	DATE	05/01/09			
SUPERVISED BY	DAVID O. THEUNG, PE	44786				

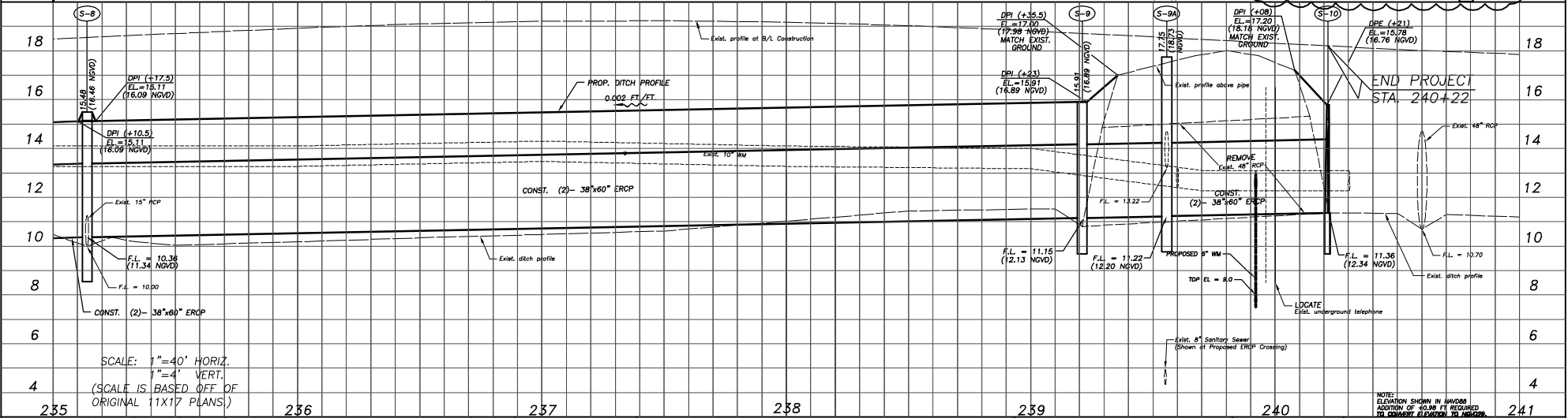
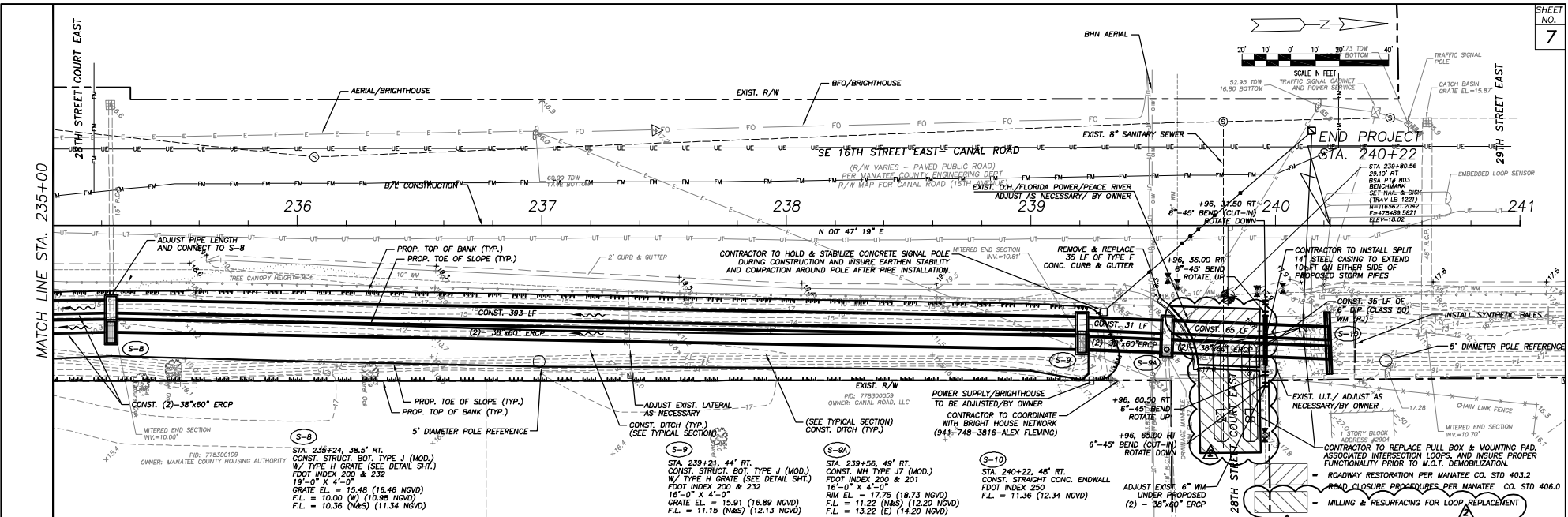


CANAL ROAD PIPING
FINAL DESIGN
FROM 24TH STREET EAST TO 29TH STREET EAST
MANATEE COUNTY, FLORIDA

WADETRIM
www.wadetrin.com
8745 Henderson Road, Suite 220, Tampa, FL 33634
813.882.8366 FAX 813.884.5990
Engineer of Record: David O. Theung, PE No. 44786
Certificate of Authorization No. 3852

ENGINEER Proj. No. 6067300
Dwg. Date 06/01/09

SUMMARY OF
PAY ITEMS



SCALE: 1" = 40' HORIZ.
1" = 4' VERT.
(SCALE IS BASED OFF OF ORIGINAL 11X17 PLANS)

DESIGNED BY	MR	DATE	05/01/09
CHECKED BY	PS	DATE	05/01/09
DRAWN BY	KR	DATE	05/01/09
CHECKED BY	PS	DATE	05/01/09
SUPERVISED BY	DAVID O. THEUNG, PE 44786		

REVISION DESCRIPTION & DATE	BY	NO.
REVISED PER ADDENDUM 2 8/07/09	MR	1



CANAL ROAD PIPING FINAL DESIGN

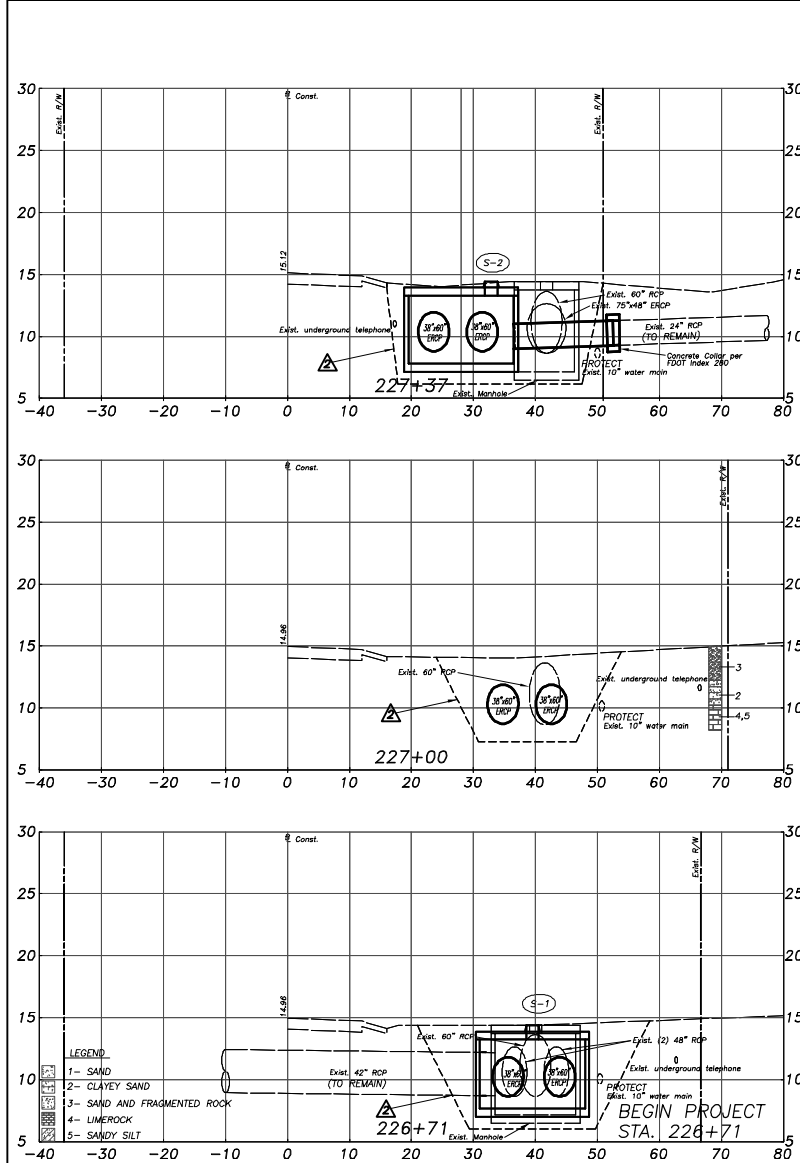
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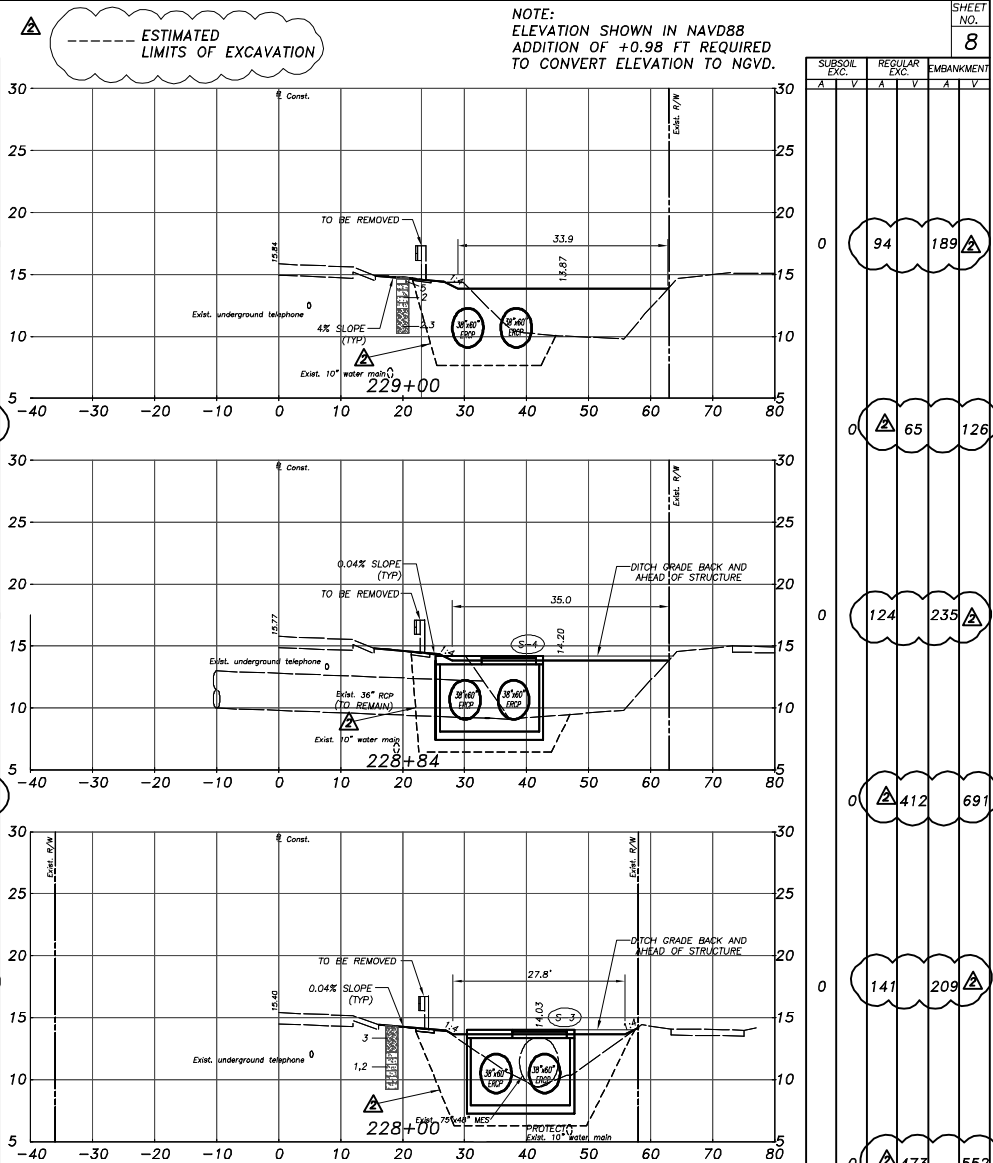
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ENGINEER	Proj. No.	6067300
	Dwg. Date	05/01/09
PLAN & PROFILE		

NOTE: ELEVATION SHOWN IN PARAGRAPHS ADDITION OF 40.00 FT REQUIRED TO BRING ELEVATION TO INVERT.



SUBSOIL EXC.	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
	264	264	288	288
	157	157	215	215
	244	244		



SUBSOIL EXC.	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
	94	189	65	126
	124	235	412	691
	141	209	473	552

ESTIMATED LIMITS OF EXCAVATION

NOTE: ELEVATION SHOWN IN NAVD88 ADDITION OF +0.98 FT REQUIRED TO CONVERT ELEVATION TO NGVD.

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CHECKED BY	LS	DATE	05/01/09
SUPERVISED BY	DAVID O. THEUNG, PE 44786		

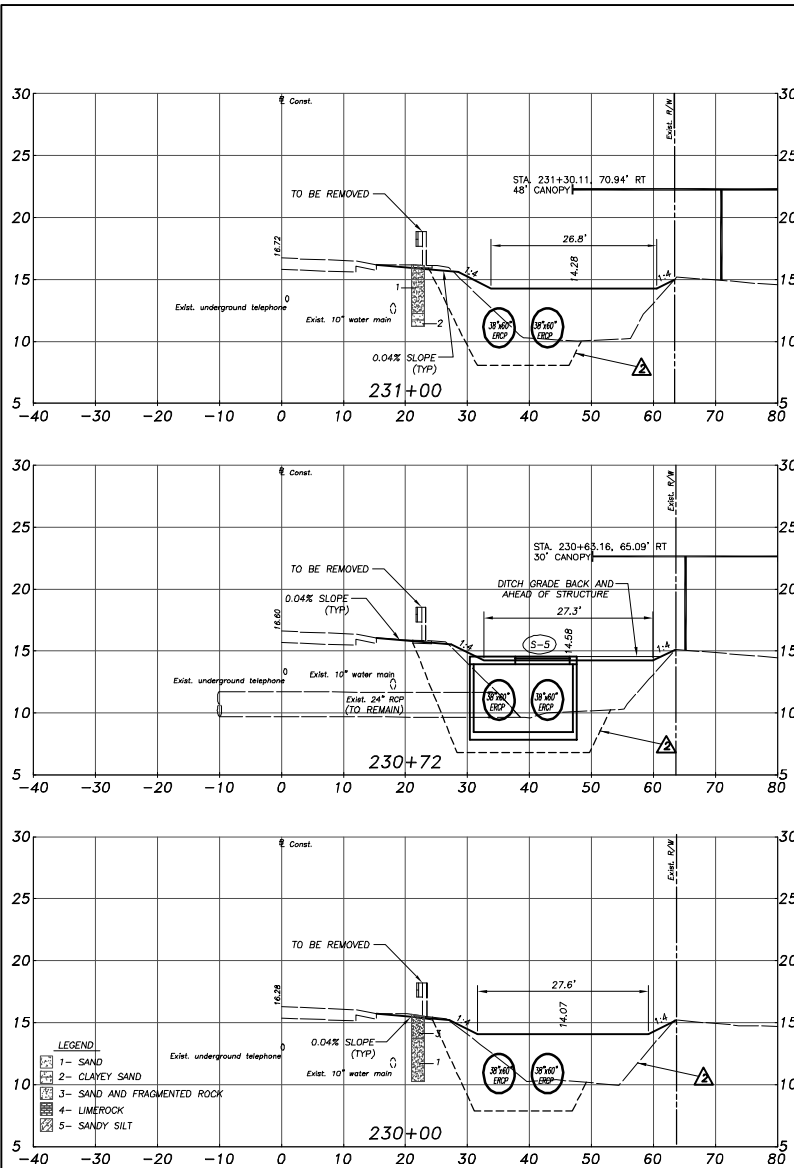
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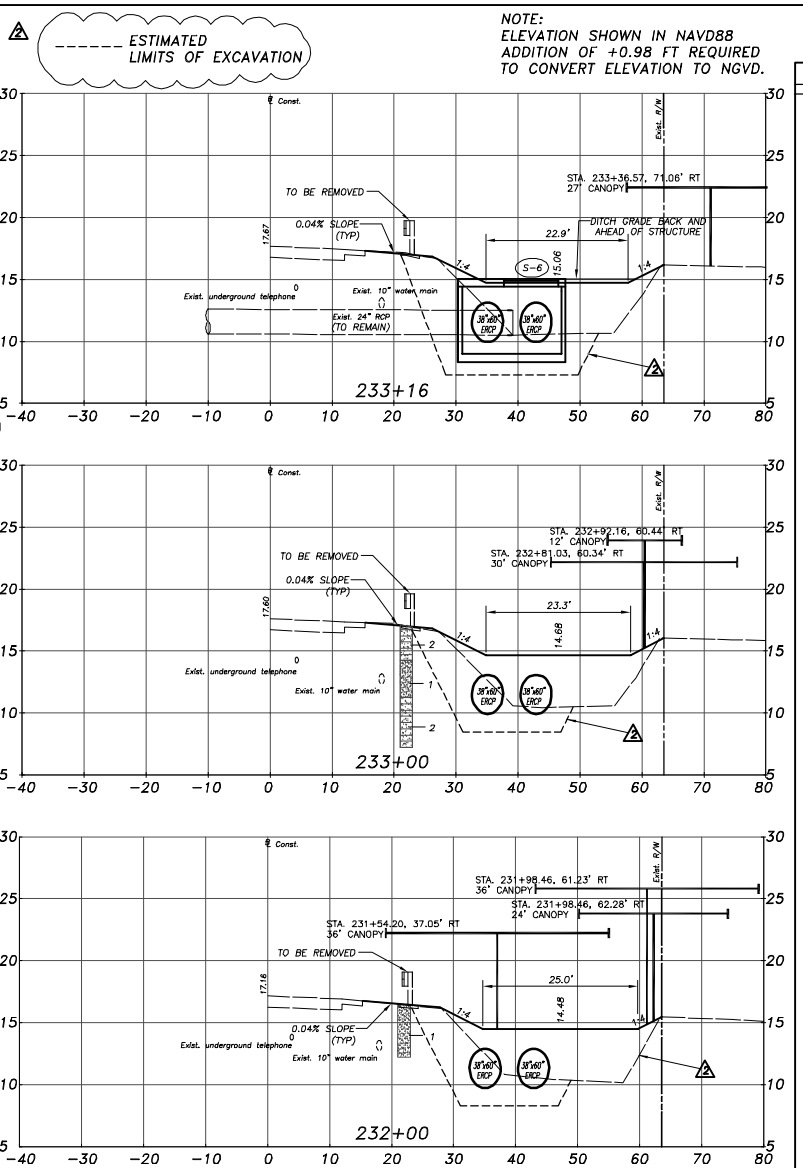
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CROSS SECTIONS		



SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
A	V	A	V	A	V
		74	176		
		104	212		
		126	232		
		273	539		
		79	172		
		320	669		



SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
A	V	A	V	A	V
		137	240		
		65	126		
		81	184		
		304	691		
		83	189		
		291	676		

DESIGNED BY	MR	DATE	05/01/09
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SUPERVISED BY	DAVID O. THEUNG, PE 44786		

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REVISED PER ADDENDUM 2 8/07/09		MR	1

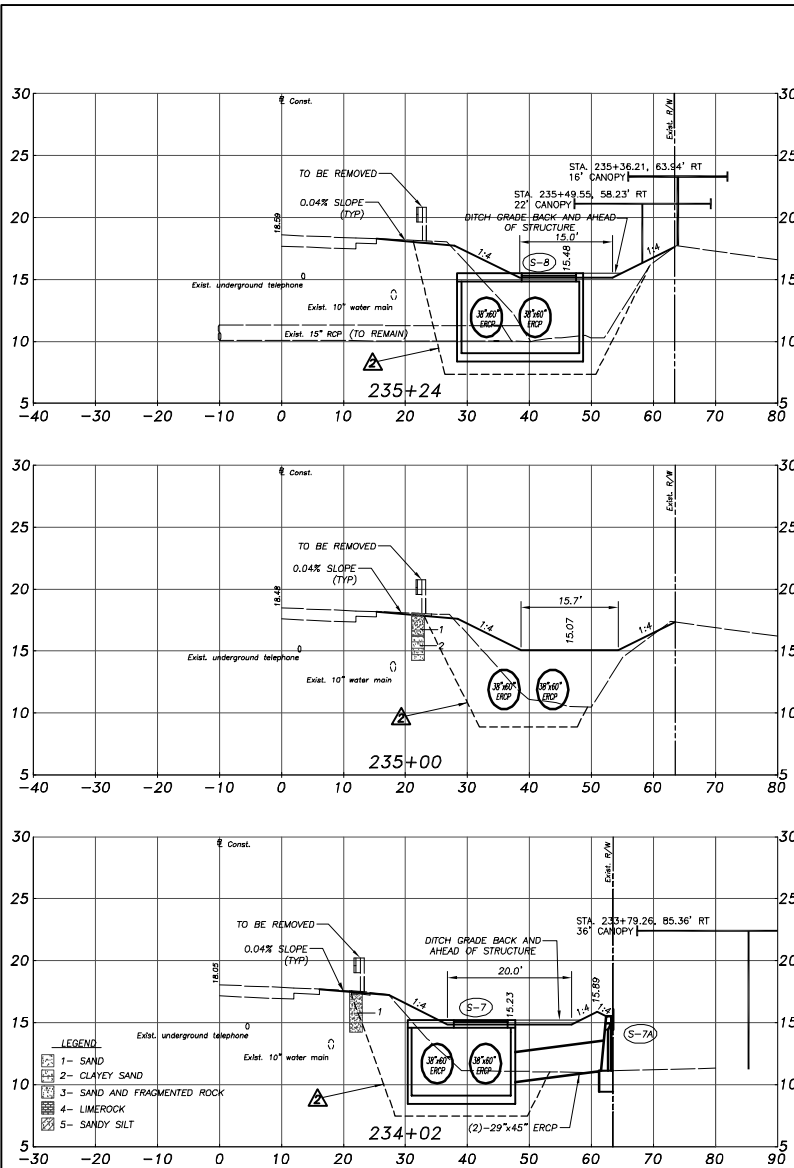


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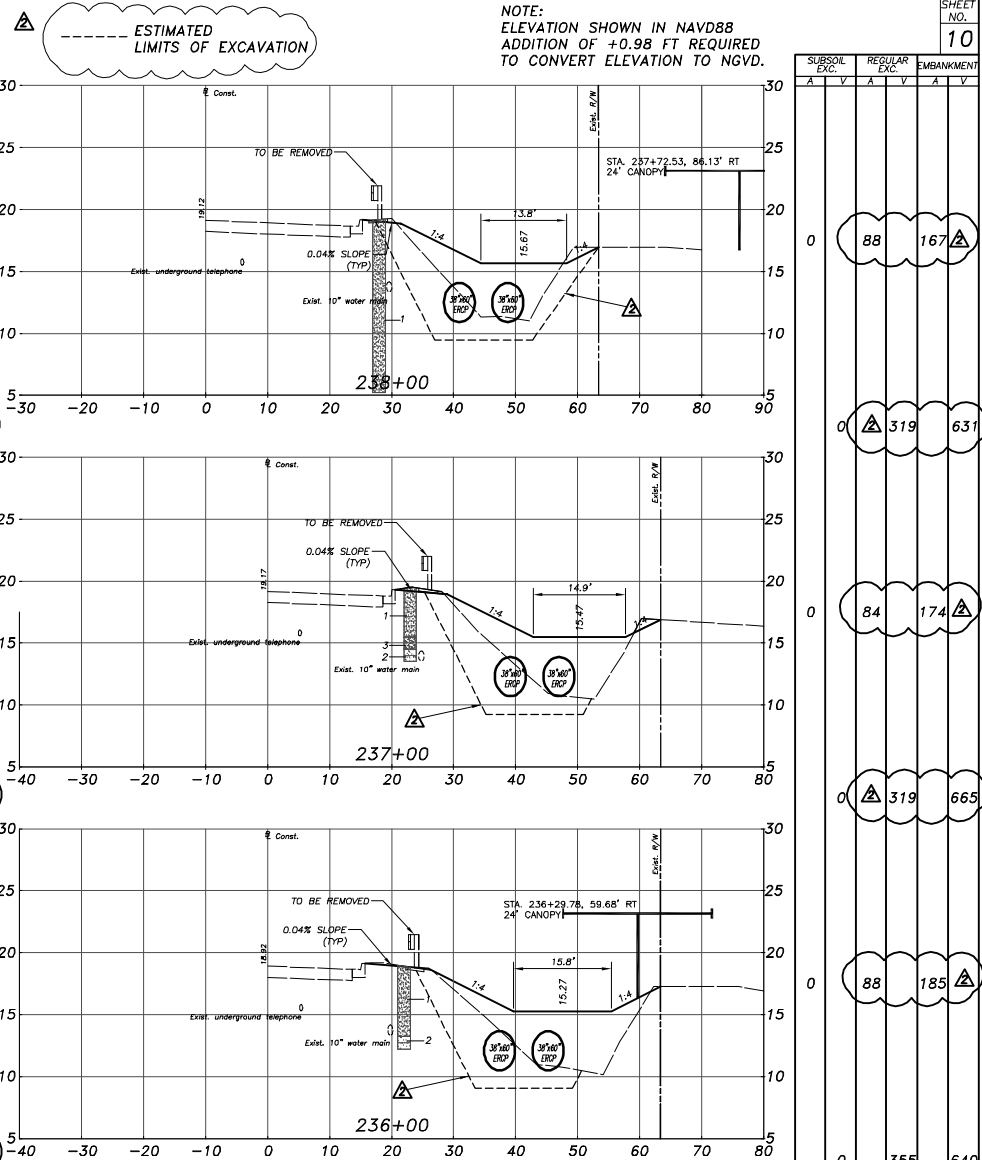
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	Dwg. Date	05/01/09
CROSS SECTIONS		

NOTE:
ELEVATION SHOWN IN NAVD88
ADDITION OF +0.98 FT REQUIRED
TO CONVERT ELEVATION TO NGVD.



SUBSOIL EXC.		REGULAR EXC.		EMBANKMENT	
A	V	A	V	A	V
0	164	270	111	195	85
0	169	421	319	631	84
0	177	319	665	174	88
0	795	452	185	640	147



ESTIMATED LIMITS OF EXCAVATION

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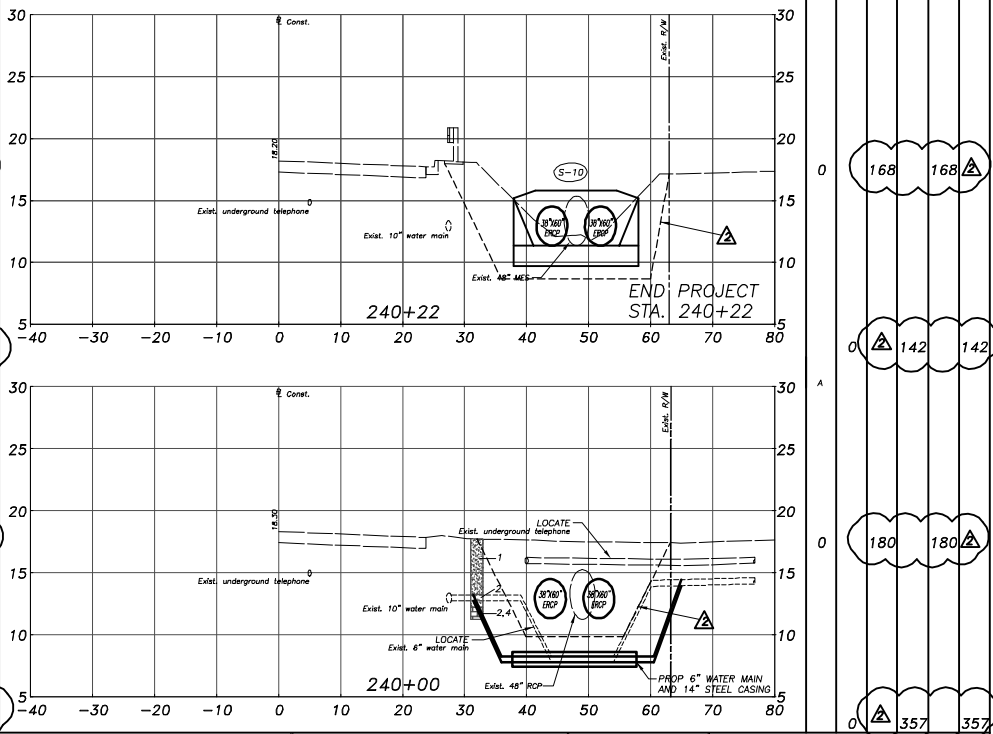
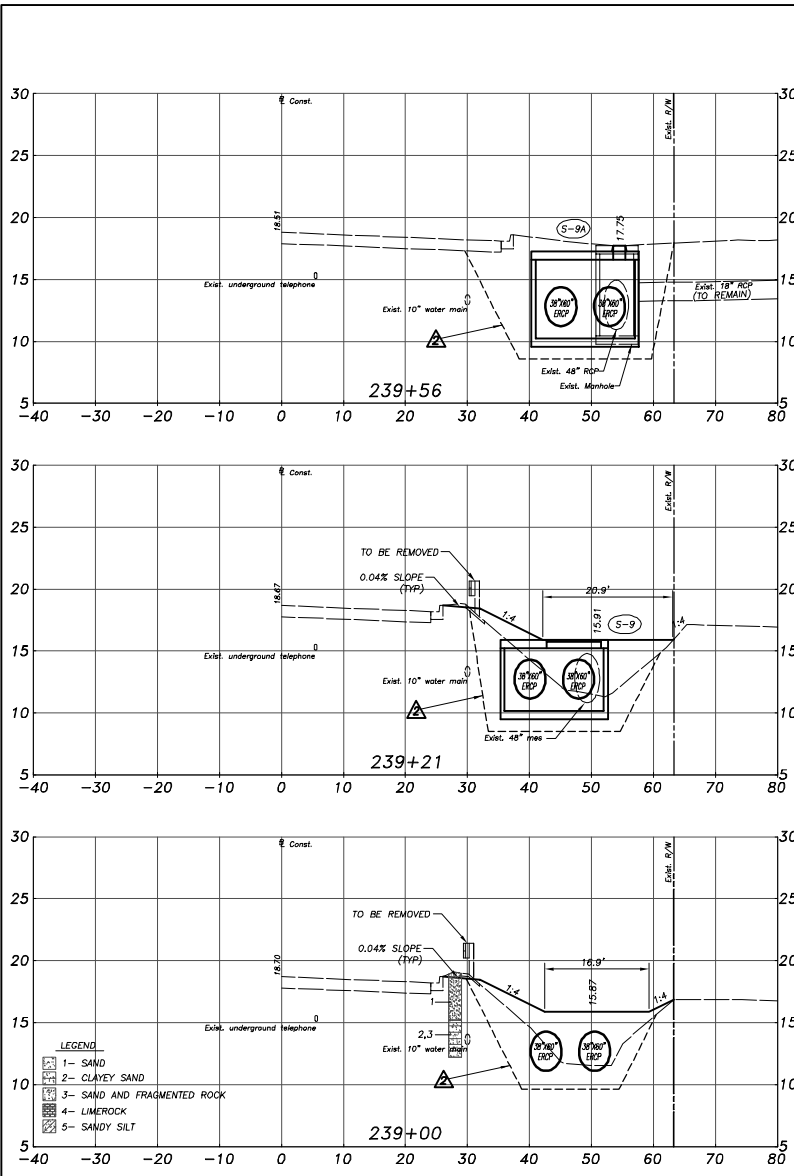
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ESTIMATED LIMITS OF EXCAVATION

DESCRIPTION	CY	
	R	F
TOTAL REGULAR EXCAVATION	5928	
EMBANKMENT	10023	
PIPE & STRUCTURE VOLUME	(-)1905	
TOTAL EMBANKMENT	8118	

SUBSOIL EXC.	REGULAR EXC.		EMBANKMENT	
	A	V	A	V
	258	258		
	250	304		
	128	211		
	81	142		
	81	153		
	313	593		



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