

MANATEE COUNTY, FLORIDA MARS COUNTRY MEADOWS DRY LINE CONNECTION 404-6082090

SEPTEMBER 2012



PROJECT SITE

VICINITY MAP N.T.S.

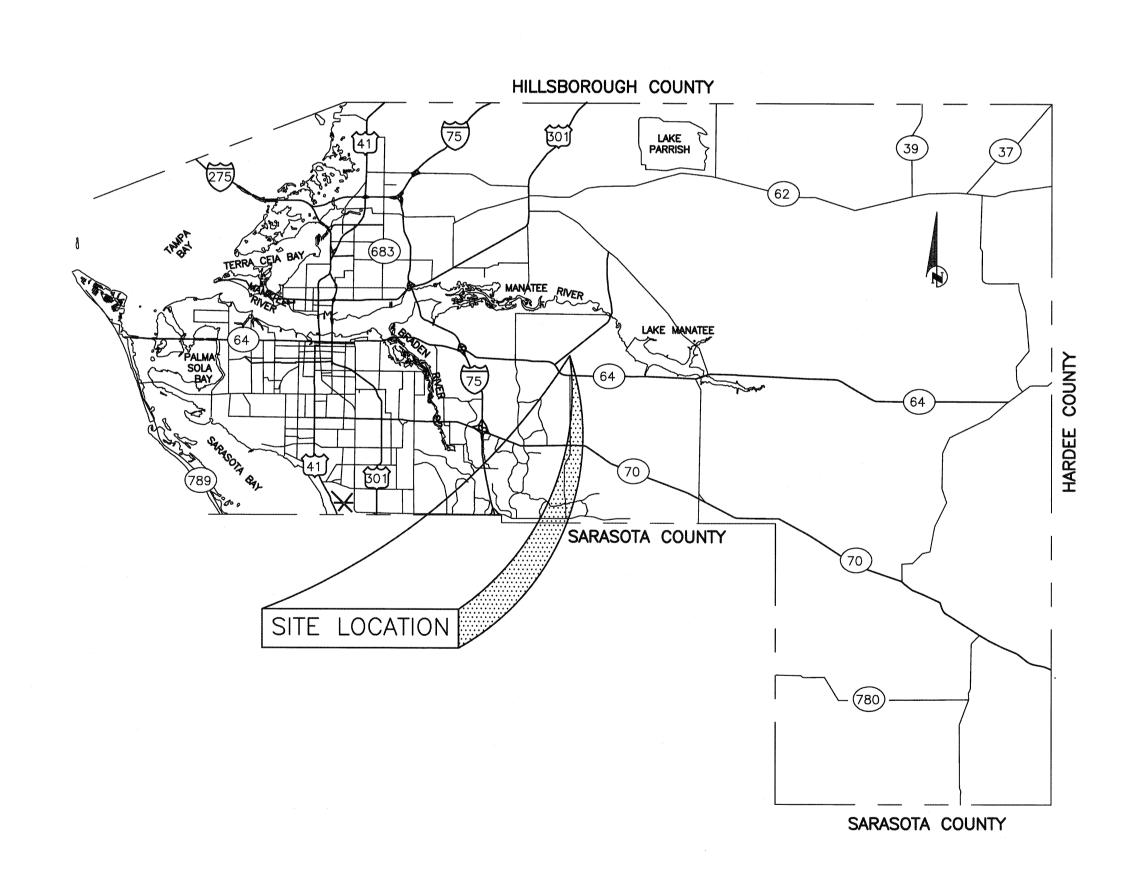
PROJECT DESCRIPTION

EXTEND EXISTING RECLAIMED WATER MAIN FROM RYE ROAD ALONG 147TH ST. E. TO 2ND AVE. N.E. AND CONNECT TO DRY LINE SYSTEM IN COUNTRY MEADOWS SUBDIVISION.

FUNDED BY:

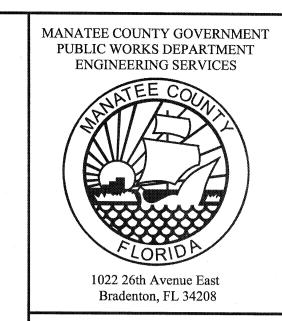
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND MANATEE COUNTY PER AGREEMENT NO. 12C00000052

MANATEE COUNTY COUNTRY MEADOWS RECLAIMED WATER TRANSMISSION PROJECT (N344)/404-6082090



BID DOCUMENTS

	NO.	INDEX OF SHEETS
	1	COVER SHEET
	2	GENERAL NOTES & LEGEND
,	3-10	PLAN & PROFILE
1	1-12	DETAILS
	13	EROSION CONTROL



COUNTRY MEADOWS DR LINE CONNECTION

DATE									
BY									
REVISION DESCRIPTION	×								
NO.	***************************************		***********						
PRO	JECT	#			4	104-	- 6	0820	090
SUR	VEY	#						??	
SEC	./TWI	۷./	RG	EΕ		27/	34	4S/1	9E
SCA	LE					1	"=	=20'	
					BY			DA	ΓE
SUR	VEYE	D		C	FY	,	0	5/0	7/12
DES	IGNEC)		J	DS)	5,	/24/	'2012
DRA	WN			(СВ		5,	/24/	2012
CHE	CKED		-				5,	/31/	2012
111111111	AME SION	HAND STAT	1 ×	P.E	AND BY	W. SON GEN	7 7 7 7 6 6	P.E	

GENERAL

- ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION THE PROJECT MANAGER IS: ANTHONY BENITEZ AND CAN BE REACHED AT (941) 708-7450; EXT. 7333
- 2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER
- ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.
- 4. VERTICAL CONTROL FOR THIS PROJECT WAS ESTABLISHED BY A MINIMUM OF TWO REFERENCE BENCHMARKS DESCRIBED ON THE "THE NATIONAL GEODETIC VERTICAL DATUM OF 1929", (NGVD '29).
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.
- THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE
- THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
- 8. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 OR THE NATIONAL 811 ONE CALL NUMBER WHEN APPLICABLE FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE RELOCATION OR THE TEMPORARY MOVEMENT OF ANY EXISTING UTILITIES WITHIN THE RIGHTS-OF-WAY.
- 9. NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PROJECT RESTRAINTS, REFER TO SECTION 01310 OF THE SPECIFICATIONS.

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
- 1. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.
- 12. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND UTILITIES, POWER LINES, ETC.
- 13. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

ENVIRONMENTAL

- 14. WHEN A BENTONITE SPILL OR FRACK-OUT OCCURS OR THERE IS A LOSS OF RETURN INDICATING EXCESSIVE SEEPAGE OR LOSS OF DRILLING FLUID, DRILLING MUST BE STOPPED UNTIL THE LOCATION OF THE SPILL IS IDENTIFIED. UNDER NO CIRCUMSTANCES WILL DRILLING CONTINUE WHEN A SPILL IS APPARENT.
- 5. ONCE LOCATED, THE BENTONITE SPILL MUST BE ISOLATED AND SEEPAGE INTO ANY NEARBY WATER BODIES WILL BE BLOCKED DEPENDING ON THE DEGREE OF THE SPILL, THE ISOLATED BENTONITE MUST BE REMOVED MANUALLY OR MECHANICALLY AND DISPOSED OF BY APPROPRIATE MEANS OR REUSED.
- 16. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.
- STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.
- 8. STORM WATER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED HAY BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS, AND WHICH MUST BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. THIS WILL BE MAINTAINED TO PREVENT DEGRADATION OF THE WATERS OF THE COUNTY AND STATE.
- 19. SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT ONTO ADJACENT PROPERTIES, OR INTO EXISTING BODIES OF WATER, MUST BE INSTALLED, CONSTRUCTED, OR IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS. SUCH SYSTEMS SHALL BE FULLY OPERATIVE BEFORE ANY OTHER DISTURBANCE OF THE SITE BEGINS. EARTHEN STRUCTURES INCLUDING BUT NOT LIMITED TO BERMS, FARTH FILTERS, DAMS OR DIKES SHALL BE STABILIZED AND PROTECTED FROM DRAINAGE DAMAGE OR EROSION WITHIN ONE (1) WEEK OF INSTALLATION.
- 20. ALL SWALES, DITCHES, AND CHANNELS LEADING FROM THE SITE SHALL BE PROTECTED FROM SILTATION AND EROSION DURING CONSTRUCTION AND BE SODDED WITHIN THREE (3) DAYS OF EXCAVATION.
- 21. SOIL DISPLACED BY CONSTRUCTION WILL BE REMOVED. EROSION CONTROL SHALL BE IMPLEMENTED IN AREAS WHICH ARE CONSIDERED ENVIRONMENTALLY SENSITIVE. EROSION CONTROL SYSTEMS SHALL BE REQUIRED FOR ALL WORK WITHIN JURISDICTIONAL AREAS. THESE SYSTEMS MAY INCLUDE STAKED HAY BALES, SILT SCREENS, FILTER FABRIC, AND TURBIDITY SCREENS.
- 22. ALL EROSION AND POLLUTION CONTROL DEVICES SHALL BE CHECKED REGULARLY, ESPECIALLY AFTER EACH RAINFALL AND SHALL BE CLEANED OUT AND/OR REPAIRED AS REQUIRED.
- 23. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER WETLAND AREAS THAT MAY BE ON OR NEAR THE CONSTRUCTION SITE. ALL WORK IN THE VICINITY OF OPEN WATER AND/OR WETLANDS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL REGULATIONS AND/OR PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES RESULTING FROM HIS VIOLATION OF ANY REGULATIONS OR PERMIT CONDITIONS.
- 24. FOR MORE INFORMATION, SEE THE EROSION CONTROL DETAIL SHEET INCLUDED IN THE PLANS.

RIGHT-OF-WAY

- 25. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY/FDOT RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.
- 26. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- 27. THE CONTRACTOR, PRIOR TO CONSTRUCTION AND RESTRICTING ANY TRAFFIC, MUST OBTAIN A RIGHTS—OF—WAY USE PERMIT AND A TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM OTHER GOVERNMENTAL AGENCIES HAVING RELEVANT JURISDICTION. ALL MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES". A TRAFFIC CONTROL PLAN SHALL BE SUPPLIED BY THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.
- 28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL DAMAGED STORM WATER STRUCTURES, PIPING, ENTRANCE PIPE AND HEADWALLS WHETHER SHOWN ON THE PLANS OR NOT. THE HEADWALLS SHALL BE REPLACED IN ACCORDANCE WITH F.D.O.T. STANDARDS.
- 29. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH IN THE FIELD THE RIGHT-OF-WAY LINES, BASE LINES, BENCH MARKS (ELEV.), CENTER LINES, AND STATIONING AS REQUIRED TO CONSTRUCT THIS PROJECT.
- 30. THE CONTRACTOR SHALL COORDINATE THE CUTTING OF DRIVEWAYS WITH THE PROPERTY OWNER PRIOR TO CUT. ALL DRIVEWAYS WILL BE IN PASSABLE CONDITION AT THE END OF THE WORK DAY AND FULLY RESTORED PER SECTION 02575.

31. A RIGHT OF ENTRY AGREEMENT SHALL BE OBTAINED BY THE PROJECT MANAGER FROM THE PROPERTY OWNER BEFORE ANY DRIVEWAY CONSTRUCTION WORK IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR EASEMENT.

- 32. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SHOWN OR RELOCATED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY EFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.
- 33. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO HIS CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE
- 34. THE CONTRACTOR SHALL USE APPROPRIATE TECHNIQUES, AS APPROVED, RECOMMENDED OR OFFERED BY FLORIDA POWER AND LIGHT TO PREVENT UNDERMINING OF POWER POLES DURING CONSTRUCTION. IF HOLDING OF POWER POLES IS RECOMMENDED OR REQUIRED BY THE UTILITY, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH THE UTILITY AND BEAR ALL RELATED COSTS.
- 35. ANY TEMPORARY SHUTDOWNS FOR MODIFICATIONS OF EXISTING UTILITY SYSTEMS THAT MUST REMAIN IN SERVICE DURING CONSTRUCTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE COORDINATED WITH AND APPROVED BY THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IT IS NOTED THAT TEMPORARY SHUTDOWNS MAY BE RESTRICTED TO CERTAIN HOURS AT ANY TIME OF THE DAY OR NIGHT AND WILL BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER.
- 36. FOR WORK BEING DONE ON EXISTING SANITARY SEWER LINES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE FLOW OF ALL SEWAGE DURING CONSTRUCTION, WHICH MAY REQUIRE BY-PASS PUMPING AND/OR PUMPER TRUCKS. THE CONTRACTOR SHALL SUBMIT A DETAILED BY-PASS PUMPING PLAN PER SECTION 02720.

- 37. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
- 38. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.
- 39. ALL CONCRETE THRUST BLOCKS INSTALLED FOR TESTING PURPOSES AND NOT REQUIRED FOR THE OPERATION OF THE PIPELINE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE, AT NO ADDITIONAL COST TO THE OWNER.
- 40. ASPHALT DRIVES THAT ARE CUT SHALL BE RESTORED PER SECTION 02513.
- 41. CONCRETE DRIVEWAYS OR SIDEWALKS THAT ARE CUT SHALL BE RESTORED TO MATCH EXISTING ACCORDING TO THE CURRENT EDITIONS OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN, SECTION 522, AND SECTION 310 OF THE F.D.O.T. DESIGN STANDARDS.
- 42. WHENEVER A PERMANENT ROADWAY SURFACE IS NOT PLACED IMMEDIATELY AFTER BACKFILLING AND COMPACTION OF THE NEWLY INSTALLED PIPE LINE IN AREAS WHERE TRAFFIC MUST PASS, THE CONTRACTOR SHALL INSTALL A TEMPORARY SURFACE CONSISTING OF NINE INCHES OF COMPACTED LIME ROCK BASE AND A COAT OF ASPHALT EMULSION. PERMANENT ROADWAY REPAIR SHALL BE PERFORMED A MAXIMUM OF TWENTY-ONE CALENDAR DAYS AFTER THE INITIAL OPEN CUTTING.
- 43. RESTORATION OF CURBS, DRIVEWAYS, SIDEWALKS, AND PLACEMENT OF SOD SHALL BE COMPLETED WITHIN FORTY-FIVE CALENDAR DAYS OF INITIAL DISTURBANCE, OR TWENTY-ONE CALENDAR DAYS OF SUBSTANTIAL COMPLETION. WHICHEVER OCCURS FIRST.

<u>CONSTRUCTION</u>

- 44. THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFFLES POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
- 45. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEPT DAILY AS PART OF DAILY CLEAN UP.
- 46. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
- 47. INGRESS AND EGRESS TO ALL THE PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.
- 48. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.
- 49. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP ALL EXCAVATIONS DRY. DEWATERING IS REQUIRED TO 18" BELOW TRENCH BOTTOM.
- 50. ALL PIPING AND FITTINGS USED ON THIS PROJECT SHALL BE AS NOTED ON THE PLANS AND IN THE CONTRACT DOCUMENT AND SHALL BE INSTALLED TO THE LINES AND GRADES SHOWN ON THE PLANS AND PROFILES.
- 51. ALL PIPE SHALL BE COLOR CODED TO CONFORM TO MANATEE COUNTY STANDARDS.
- 52. ALL PIPE AND FITTINGS SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER AND ALL PIPE JOINTS SHALL BE RESTRAINED WHERE REQUIRED.
- 53. ALL FITTINGS FOR PRESSURE CLASS-RATED PIPE SHALL BE RESTRAINED DUCTILE IRON. RESTRAINED LENGTHS OF PIPE SHALL ADHERE TO THE REQUIREMENTS AS SHOWN ON THE DETAIL SHEETS.
- 54. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURER'S MAXIMUM ALLOWABLE RECOMMENDED DEFLECTION.
- 55. ALL PIPE LENGTHS ARE PLUS OR MINUS AND MAY BE ADJUSTED IN THE FIELD AS REQUIRED. PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES OR FITTINGS.
- 56. ALL ROCKS OR STONES LARGER THAN SIX INCH DIAMETER SHALL BE REMOVED FROM THE BACKFILL MATERIAL. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES SHALL NOT CONTAIN ANY STONES LARGER THAN TWO INCH DIAMETER.
- 57. ONLY MANATEE COUNTY UTILITY OPERATIONS STAFF ARE AUTHORIZED TO OPERATE VALVES ON COUNTY OWNED AND MAINTAINED UTILITY SYSTEMS.
- 58. ALL PENETRATION OF EXISTING STRUCTURES SHALL BE BY THE MECHANICAL ROTARY CORE BORING METHOD.
- 59. ALL CONCRETE PENETRATED OR DISTURBED SHALL BE COATED WITH TWO COATS OF EPOXY.
- 60. THE CONTRACTOR, PRIOR TO ANY TEMPORARY WATER SHUT-OFFS DURING WATER MAIN TIE-IN, ETC., SHALL NOTIFY THE AFFECTED RESIDENTS BY POSTING INFORMATIONAL SIGNS IN THE NEIGHBORHOOD AT LEAST TWO DAYS (48 HRS) PRIOR TO THE WATER SHUT-OFF. REFERENCE SECTION 01580, PARAGRAPH 1.03 OF THE SPECIFICATIONS. WHEN FEASIBLE, "DOOR HANGERS" SHALL BE DELIVERED TO AFFECTED RESIDENCES AT LEAST TWO DAYS (48 HRS) PRIOR TO WATER SHUT-OFF. FOR LARGE PROJECTS WITH HUNDREDS OF HOMES AFFECTED, THE CONTRACTOR SHALL ALSO MAKE EXTENSIVE USE OF THE MEDIA AND SHALL HAVE PRIOR CONTACT WITH HOMEOWNER'S ASSOCIATIONS, WRITTEN NOTIFICATIONS SHALL ALSO BE FAXED TO THE TAMPA TRIBUNE, BRADENTON HERALD, SARASOTA HERALD TRIBUNE, WBRD RADIO, EMERGENCY COMMUNITY CENTERS, INSPECTIONS, WATER TREATMENT PLANT, WATER MANAGER, HELPLINE, CUSTOMER SERVICE, AND THE MANATEE COUNTY UTILITY OPERATIONS DEPARTMENT.
- 61. ALL NEW PIPE LINES SHALL BE PIG CLEANED (4" AND LARGER), FLUSHED, PRESSURE TESTED, DISINFECTED (POTABLE ONLY) AND CERTIFIED PRIOR TO TIE-INS TO EXISTING FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR PIG CLEANING AND PRESSURE TESTING.
- 62. ALL TEST POINT PIPING SHALL BE CUT LOOSE FROM THE CORPORATION STOP AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. A CORPORATION STOP PLUG SHALL BE INSTALLED AND THE CORPORATION STOP SHALL REMAIN IN PLACE.

- 63. ALL EXISTING MAINS THAT ARE BEING REPLACED SHALL BE ABANDONED IN PLACE UPON ACCEPTANCE AND ACTIVATION OF THE NEW MAINS. ABANDONED MAINS SHALL BE CUT. FILLED WITH GROUT. AND CAPPED. REFER TO SECTION 02064 OF THE SPECIFICATIONS FOR GROUTING OF ABANDONED PIPE.
- 64. WATER MAINS CROSSING OVER OR UNDER SANITARY SEWERS, FORCE MAINS, AND RECLAIMED WATER LINES SHALL BE LAID PER CURRENT EDITION OF "10 STATE STANDARDS" AND MANATEE COUNTY UTILITY STANDARDS UNLESS NOTED OTHERWISE ON THE PLANS.
- 65. FIELD CONDITIONS MAY NECESSITATE MINOR ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER.
- 66. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH SECTION 14 IN THE CURRENT MANATEE COUNTY UTILITY STANDARDS AT NO COST TO THE OWNER. RECORD DRAWINGS SHALL BE SIGNED & SEALED BY A SURVEYOR CURRENTLY LICENSED BY THE STATE OF FLORIDA. ALL RECORD DRAWING INFORMATION REQUIREMENTS IN SECTION 14 SHALL BE STRICTLY ENFORCED. A COPY OF SECTION 14 WILL BE PROVIDED UPON REQUEST.

PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East Bradenton, FL 34208

MANATEE COUNTY GOVERNMENT

EMERGENCY CONTACTS

FLORIDA POWER & LIGHT

1253 12TH AVENUE EAST

PALMETTO, FL 34221

Greg_Coker@fpl.com

FAX: (941) 723-4444

BRADENTON, FL. 34208

MANAGEMENT DISTRICT

DARYL R. FLATT, P.E.

6750 FRUITVILLE ROAD

SARASOTA, FL. 34240

FAX: (941) 373-7660

(941) 377-3722

SOUTHWEST FLORIDA WATER

SARASOTA SERVICE OFFICE

(941) 723-4430

GREG COKER

HANS ROESE

MANATEE COUNTY PUBLIC WORKS DEPT. WAYNE TROXLER, P.E. 1022 26TH AVENUE EAST BRADENTON, FL. 34208 (941) 708-7450 EXT. 7650 FAX: (941) 708-7415

TECO/PEOPLES GAS CO. DAN SHANAHAN 8261 VICO COURT 410 6th AVENUE EAST SARASOTA, FL. 34240 (941) 342-4030 (941) 748-0747 FAX: (941) 342-4011 EMERGENCY: 1-877-832-6911 FAX: (941) 750-9364

VERIZON FLORIDA INC. JOHN PLOTT 1701 RINGLING BLVD. SARASOTA, FL. 34236 (941) 906-6707 FAX: (941) 906-6706 John.Plott@verizon.com

FLORIDA GAS TRANSMISSION CHAD HARRELL 7804 ANDERSON RD. TAMPA FL 33634 PHONE: (813) 466-3327 E-mail: chad.harrell@sug.com EMERĜENĆY: 1-800-4-OUTAGE DEPARTMENT OF

ENVIRONMENTAL PROTECTION MANATEE COUNTY HEALTH DEPT. STEPHANIE BARIOS 13051 N. TELECOM PKWY TEMPLE TERRACE, FL 33637 PHONE: (813) 632-7600, EXT. 408 FAX: (813) 632-7662 BRIGHT HOUSE NETWORKS

> TOM WRIGHT 5413 E. STATE ROAD 64 BRADENTON, FL. 34208-5535 (941) 748-3816 EXT. 21348 Tom.Wright@mybrighthouse.com SUNSHINE STATE ONE CALL OF

> > LEGEND

FLORIDA 1-(800) 432-4770

(863) 767-4660 kendell.coker@preco.coop MANATEE COUNTY PUBLIC WORKS DEPT./TRAFFIC ENGINEERING / ATMS

2101 47TH TERRACE EAST BRADENTON, FL 34203 VISHALL KAKKAD, P.E. (941) 749-3500 EXT. 7812 FAX: (941) 749-3517 vishall.kakkad@mymanatee.org

PEACE RIVER ELECTRIC COOPERATIVE, INC. P.O. BOX 1310 WACHULA, FL 33873 KENDELL COKER

X

ABBREVIATIONS

RIGHT OF WAY

CONCRETE

DRIVEWAY

SIDEWALK

EDGE OF PAVEMENT

MASTER METER ASSEMBLY

SERVICE LINE & METER

DOUBLE SERVICE

	_			
ВМ	lacktriangle	BENCH MARK		BUSH
СМ	•	CONCRETE MONUMENT		TREE
IP	0	IRON PIPE		OAK TREE
IR	*	IRON ROD	S	PALM TREE
HUB	۵	HUB	***************************************	PINE TREE
N&D	•	NAIL & DISK	mm	EDGE OF VEGETATION
×5.2356		ELEVATION		CHAIN LINK FENCE
(1234)		PARCEL ID NO.		WOOD FENCE
(1878))	PARCEL ID NO.	xx	BARBED WIRE FENCE
Q7D		LOT NO.	FM	FORCE MAIN
GW	\leftarrow	GUY WIRE	PW	POTABLE WATER
PP ·	\Diamond	POWER POLE		RECLAIMED WATER
LP	❖	LIGHT POLE	ss	SANITARY SEWER
MB	₫	MAIL BOX	s	STORM DRAIN
SN	d	SIGN	——— GAS ————	GAS LINE
REF	9	REFLECTOR	OHTV	OVERHEAD TV
SPRK	0	SPRINKLER	UGTV	UNDERGROUND TV
GM	©	GAS MARKER	——— OE ———	OVERHEAD ELECTRIC -
BFP	-	BACKFLOW PREVENTER	BE	UNDERGROUND ELECTRIC -
ВО	Μo	BLOW OFF VALVE	OH VER	OVERHEAD VERIZON
FH	Q	FIRE HYDRANT	UG VER	UNDERGROUND VERIZON
WV	\bowtie	WATER VALVE	VER	√ERIZON
ARV	\bigcirc	AIR RELEASE VALVE	UG	UNDERGROUND UTILITY
WM		WATER METER	———— OH ————	OVERHEAD UTILITY
SMH	(S)	SANITARY SEWER MANHOLE		RAIL ROAD TRACKS
CO	\circ	SANITARY SEWER CLEAN OUT		EDGE OF CONCRETE
SB#1	+	SOIL BORING LOCATION		EDGE OF ROAD
TEL C	TED	TELEPHONE SERVICE BOX		TOE OF SLOPE
	(FLOW DIRECTION		TOP OF BANK
GI		GRATE INLET		PROPERTY LINE
		MITERED END SECTION		RIGHT OF WAY

EXISTING

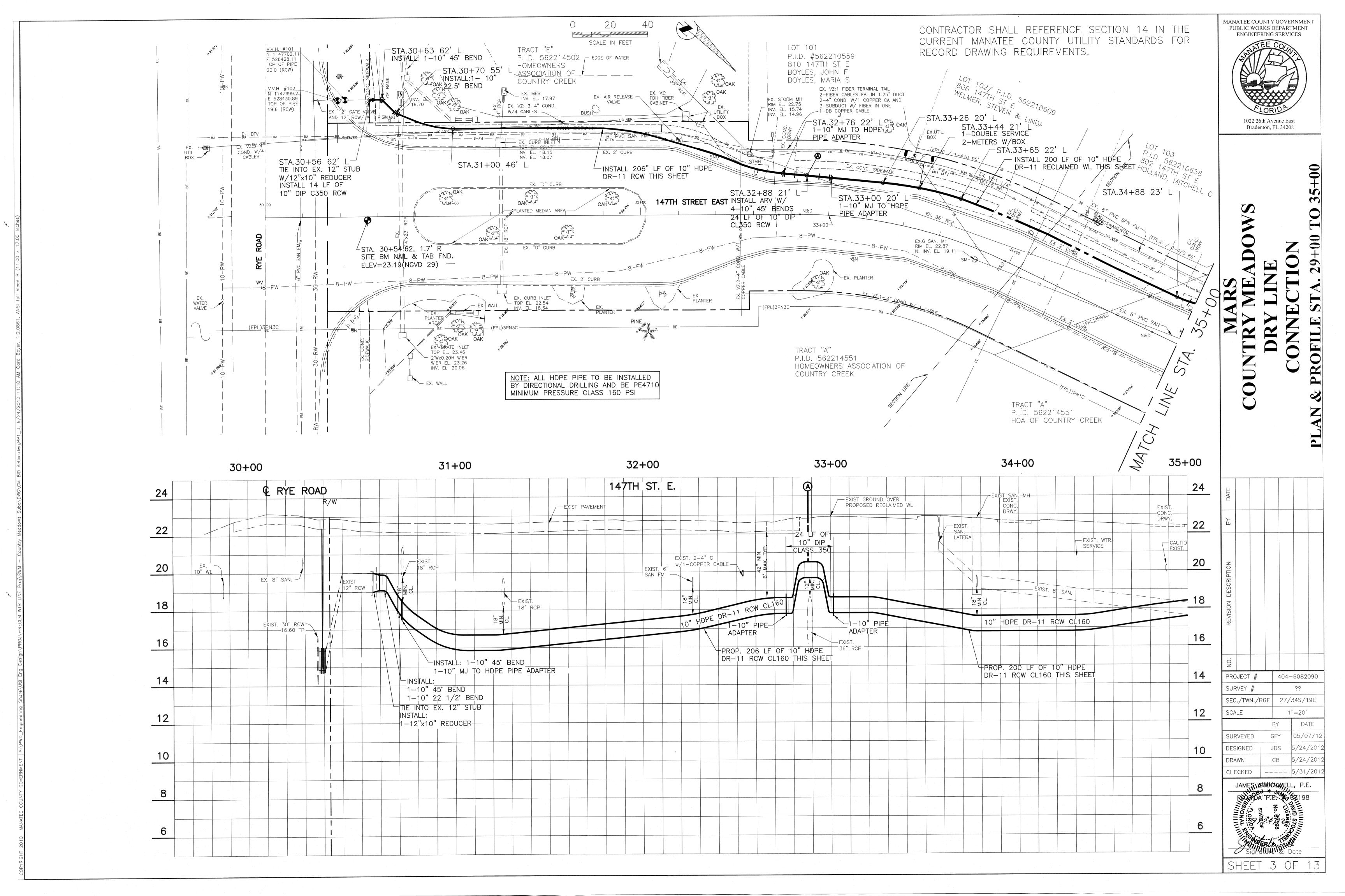
BACK OF CURB PROPOSED - SERVICE LINE FIRE HYDRANT VALVE SANITARY SEWER MANHOLE BLOW OFF ASSEMBLY REDUCER TEE HORIZONTAL BEND VERTICAL BEND

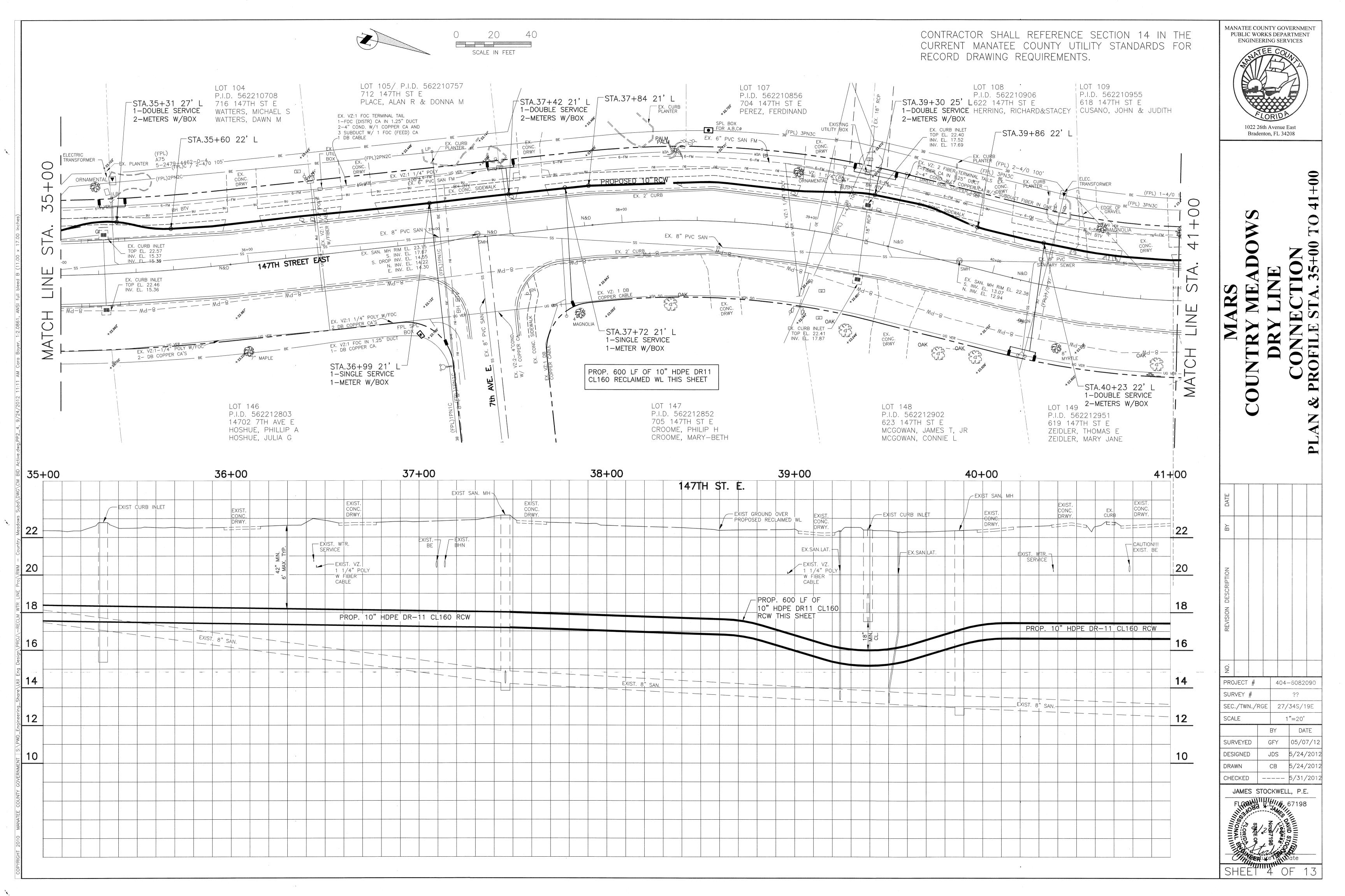
PROPOSED PROJECT NOTES JOB SPECIFIC (EXAMPLE): WATER LINE CALL-OUT (TYPICAL)

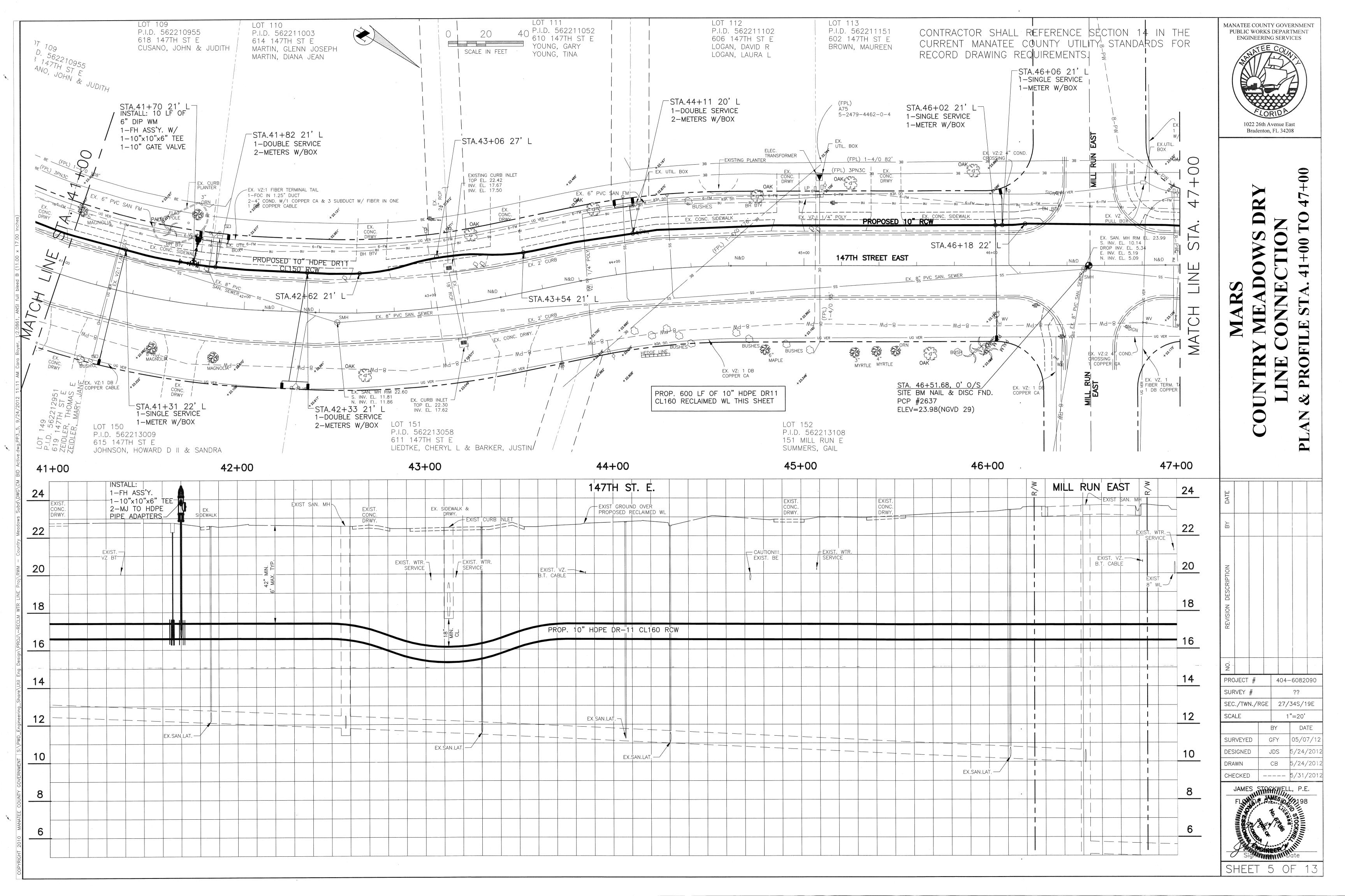
STA. 40+60, 17' LT. 1-6" GATE VALVE 1-6" FITTING

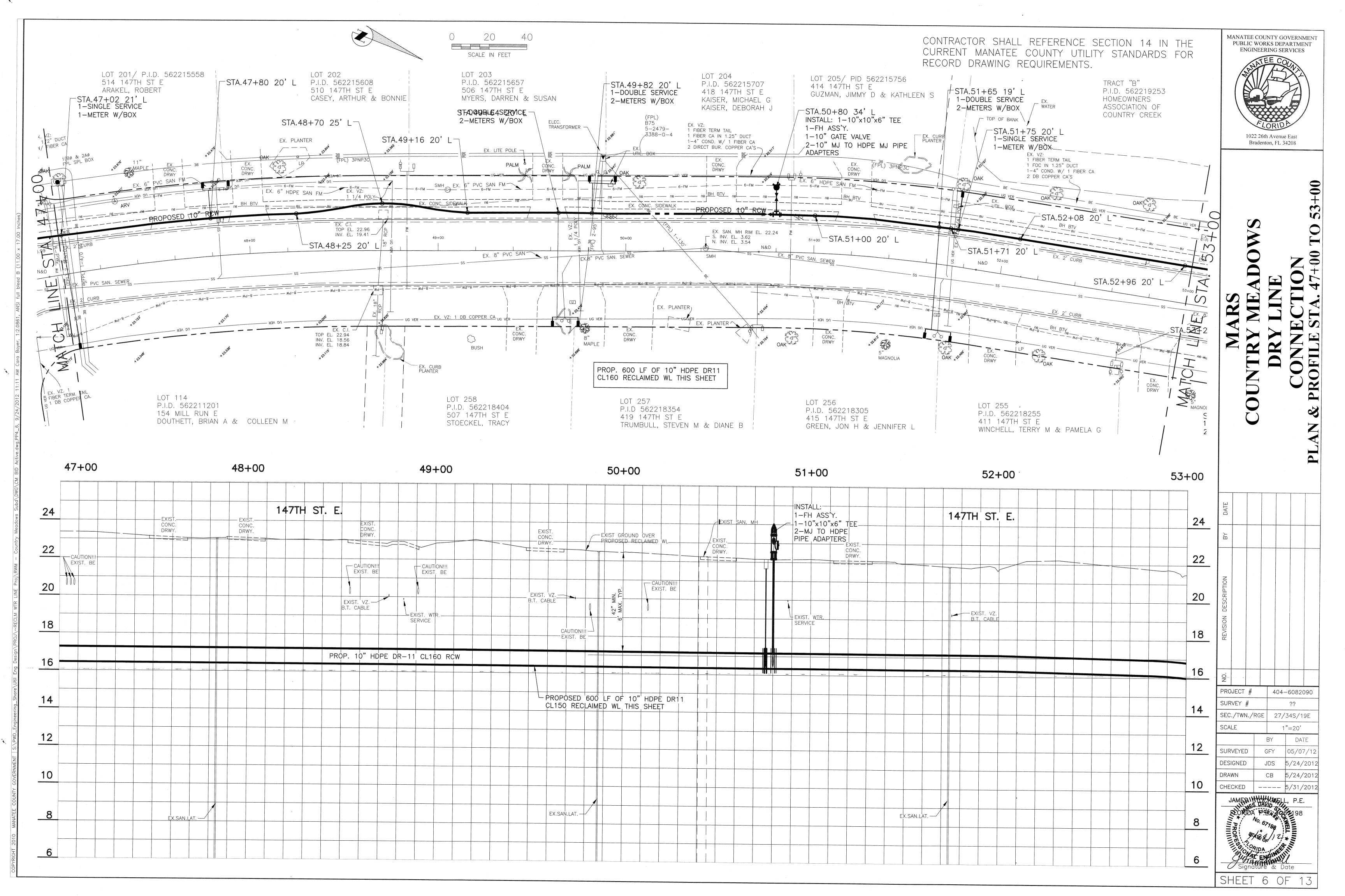
PROJECT # 404-6082090 SURVEY # 33 SEC./TWN./RGE | 27/34S/19E **SCALE** 1"=20' DATE BY GFY 05/07/1 SURVEYED DESIGNED JDS 5/24/201 CB 5/24/201 DRAWN ____ 5/31/201 CHECKED

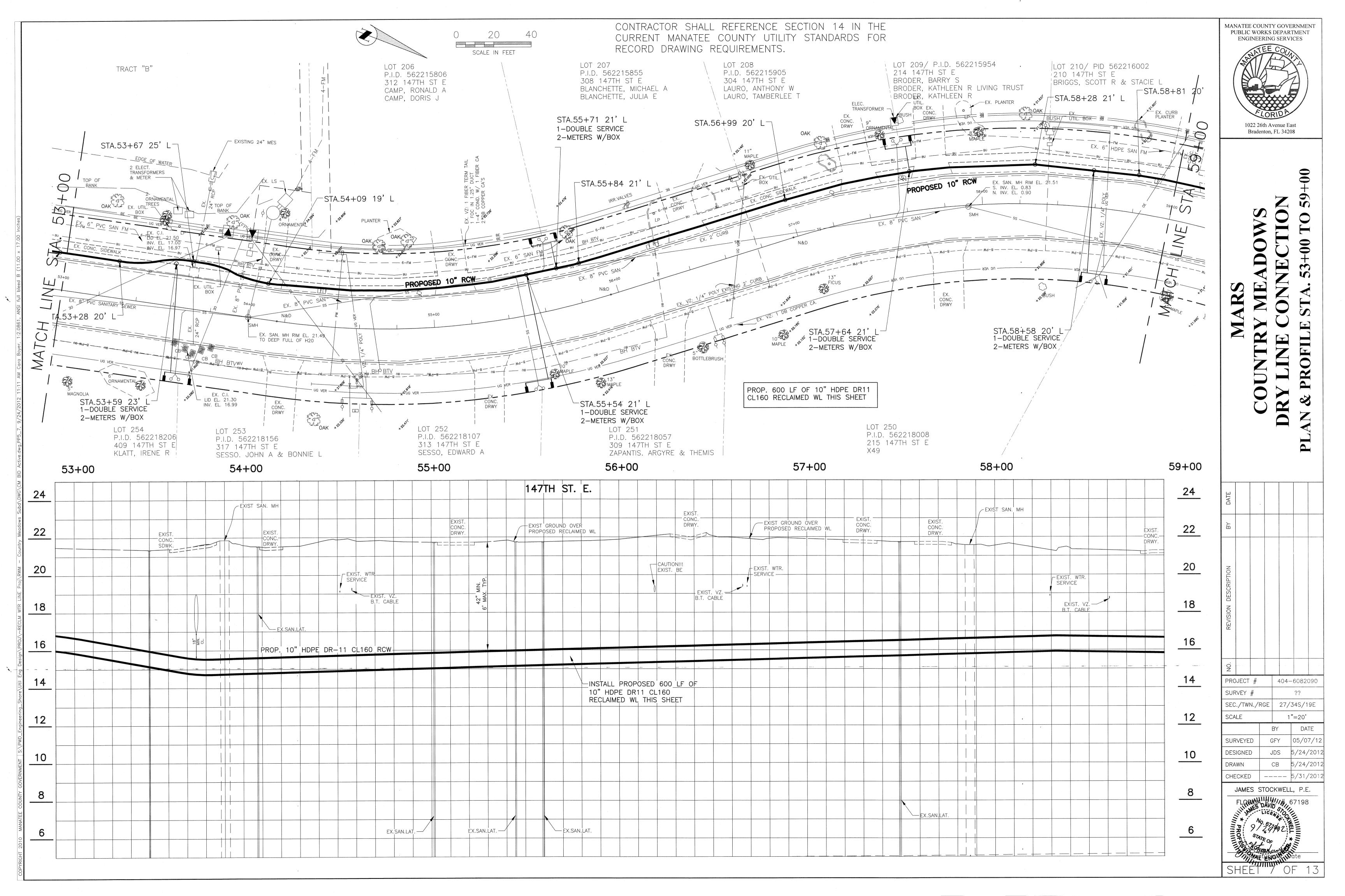
JAMES, STOCKWELL, P.E. MODEL 1 PM 167198 NO. DATE OF STORAGE OF

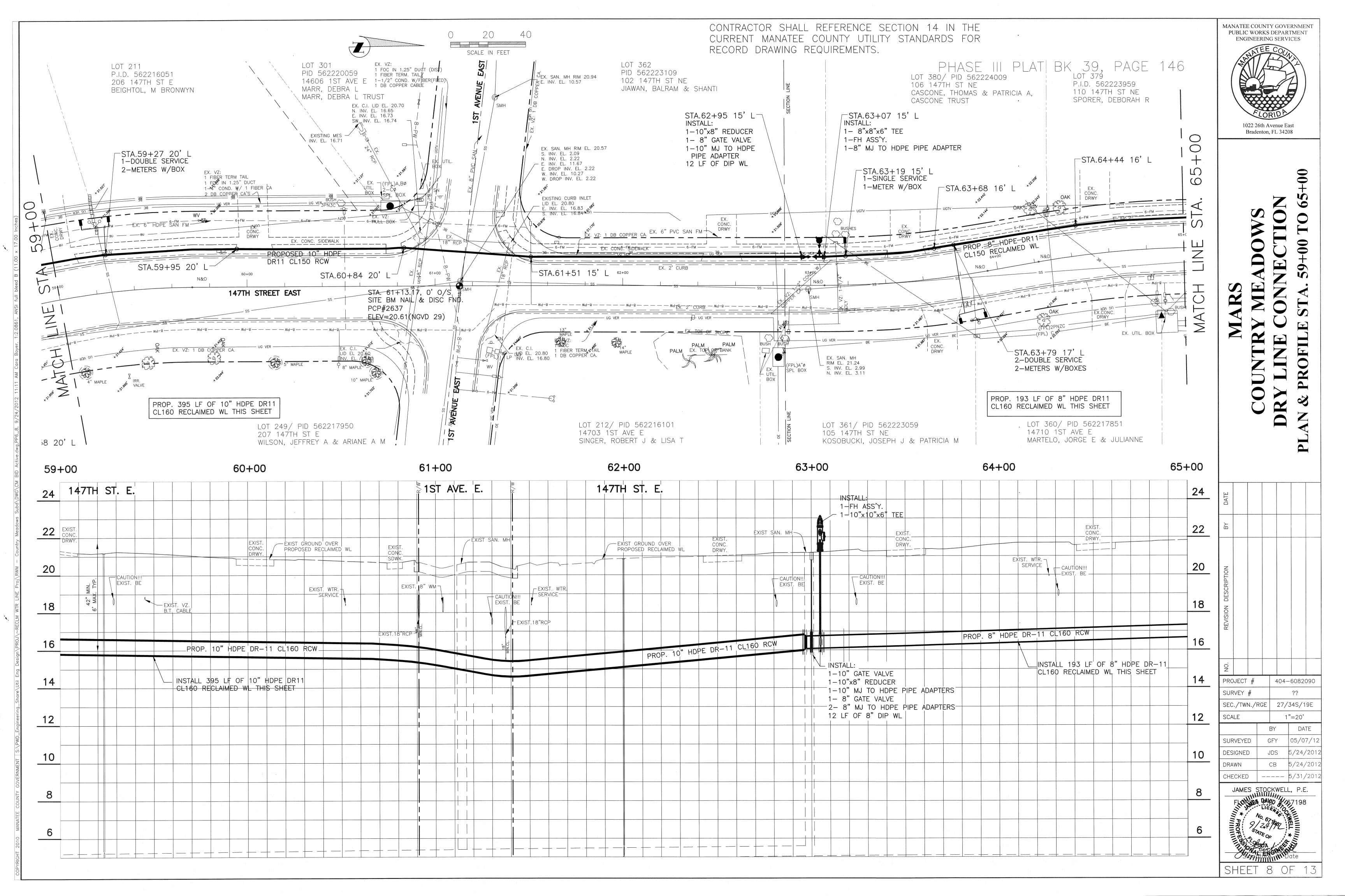










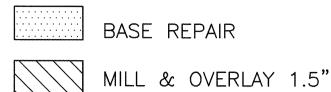


10 FOR 2ND AVE. N.E.

DRAKE, ANDREA

TO DRAWING

CONTRACTOR SHALL REFERENCE SECTION 14 IN THE CURRENT MANATEE COUNTY UTILITY STANDARDS FOR RECORD DRAWING REQUIREMENTS.

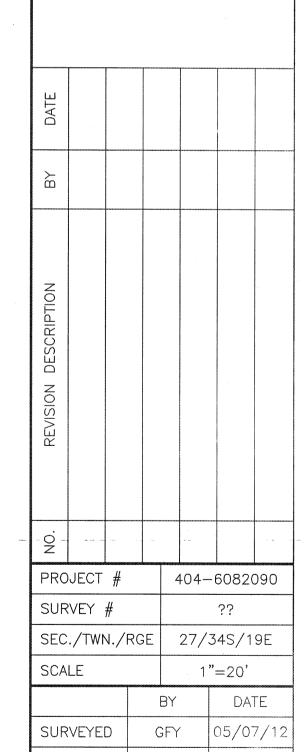


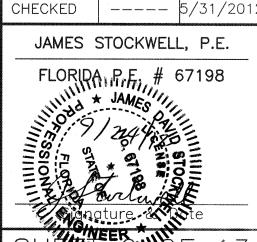
NOTES FROM SURVEYOR'S REPORT: FOR COMPLETE SURVEY, REQUEST FROM PROJECT ENGINEER/SURVEYOR:

- 1. THE SURVEY WAS PREPARED WITHOUT BENEFIT OF A CURRENT TITLE REPORT AND THEREFORE MAY NOT NECESSARILY INDICATE ALL ENCUMBRANCES AFFECTING SUBJECT PROPERTY.
- 2. THERE ARE NO VISIBLE ENCROACHMENTS EXCEPT AS SHOWN. FOUNDATIONS BENEATH THE SURFACE OF THE GROUND THAT MAY ENCROACH HAVE NOT BEEN LOCATED.
- 3. THE APPROXIMATE RIGHT—OF—WAY LINE LOCATIONS AND BOUNDARY LINES SHOWN ON THIS MAP WERE TAKEN FROM VARIOUS RECORD PLATS THAT ARE ADJACENT TO THE PROPOSED CONSTRUCTION ROUTE AND ARE ALL WITHIN THE PUBLIC RECORDS OF MANATEE COUNTY, FLORIDA.
- 4. THE LOCATION AND EXISTENCE OF UNDERGROUND UTILITIES AND UNDERGROUND FOUNDATIONS OR ANY OTHER PERTINENT ATTRIBUTES TO SUBJECT PROPERTY (IF ANY) NOT ABSTRACTED AS PART OF THIS SURVEY, EXCEPT AS SHOWN.
- 5. THIS IS NOT A BOUNDARY SURVEY OR RIGHT OF WAY SURVEY, THE PURPOSE OF THIS TOPOGRAPHIC SURVEY WAS TO SHOW THE EXISTING TOPOGRAPHIC CONDITIONS FOR DESIGN PURPOSES.
- 6. SUBJECT TO ALL RESTRICTIONS, RIGHTS OF WAY AND EASEMENTS OF RECORD, IF ANY.
- 7. REUSE OF DOCUMENTS: THIS DOCUMENT IS AN INSTRUMENT OF SERVICE IN RESPECT OF THE PROJECT TO WHICH IT APPLIES AND ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY GEORGE F. YOUNG, INC. (G.F.Y.) FOR THE SPECIFIC PURPOSES INTENDED WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO G.F.Y. AND USER SHALL INDEMNIFY AND HOLD HARMLESS GFY FROM ALL CLAIMS, DAMAGES, LOSSES AND -EXPENSES INCLUDING ATTORNEYS FEES ARISING OUT OF OR RESULTING THEREFROM. ANY SUCH VERIFICATION OR ADAPTATION WILL ENTITLE G.F.Y. TO FURTHER COMPENSATION AT RATES TO BE AGREED UPON BY USER AND G.F.Y.
- 8. THE EASEMENTS SHOWN WERE TAKEN FROM THE RECORD DOCUMENTS, AS PROVIDED TO THE SURVEYOR.
- 9. ELEVATIONS SHOWN ARE RELATIVE TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD), AND WERE ESTABLISHED ON A CLOSED DIFFERENTIAL LEVEL LOOP THROUGH MANATEE COUNTY BENCH RUN No. 78. THE BENCH MARK USED WAS R-8, BEING LOCATED AT THE S.W. CORNER OF A "U" SHAPED HEADWALL, 82 FEET NORTH OF THE CENTERLINE OF A SHELL DRIVEWAY AT HOUSE #911, TWENTY SEVEN FEET EAST OF THE CENTERLINE OF RYE ROAD, PUBLISHED ELEVATION 23.65'(NGVD 29). THE COORDINATE VALUES SHOWN HEREON ARE BASED ON STATE PLANE COORDINATES, FLORIDA WEST ZONE IN U.S. SURVEY FEET, NORTH AMERICAN DATUM OF 1983 AND WERE ESTABLISHED BY GPS SURVEY.
- 10. CERTIFICATION IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE SURVEYOR AND MAPPER BASED ON THE SURVEYOR AND MAPPER'S KNOWLEDGE AND INFORMATION, AND THAT IT IS NOT A GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED.
- 11. THE DATE OF FIELD SURVEY WAS MAY 07, 2012.
- 12. THIS REPORT IS NOT FULL AND COMPLETE WITHOUT THE ELECTRONIC DRAWING FILE.



COUNTRY MEADOWS DRY LINE CONNECTION LAN & PROFILE STA 65+00 TO 71+00





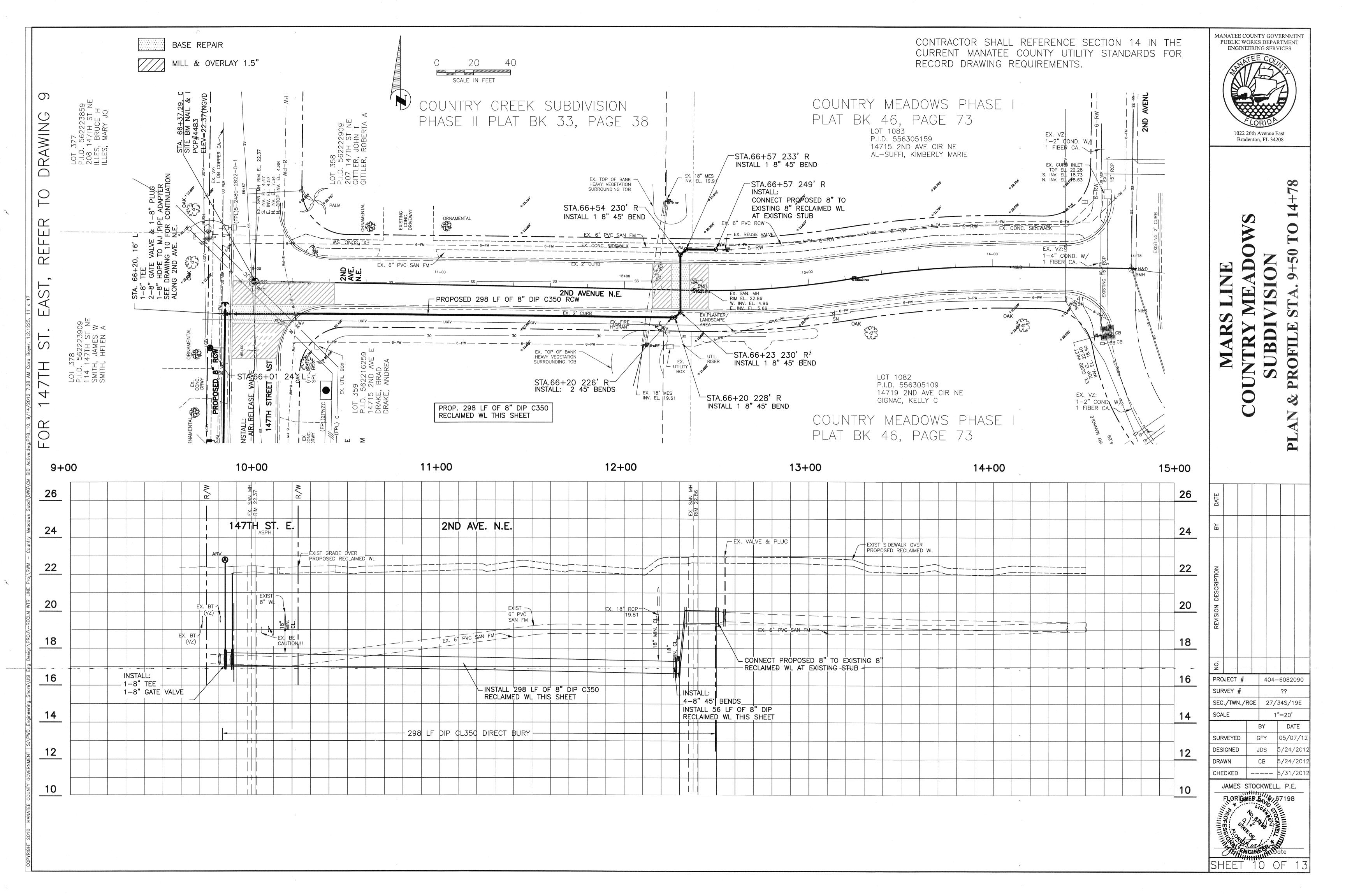
JDS 5/24/201:

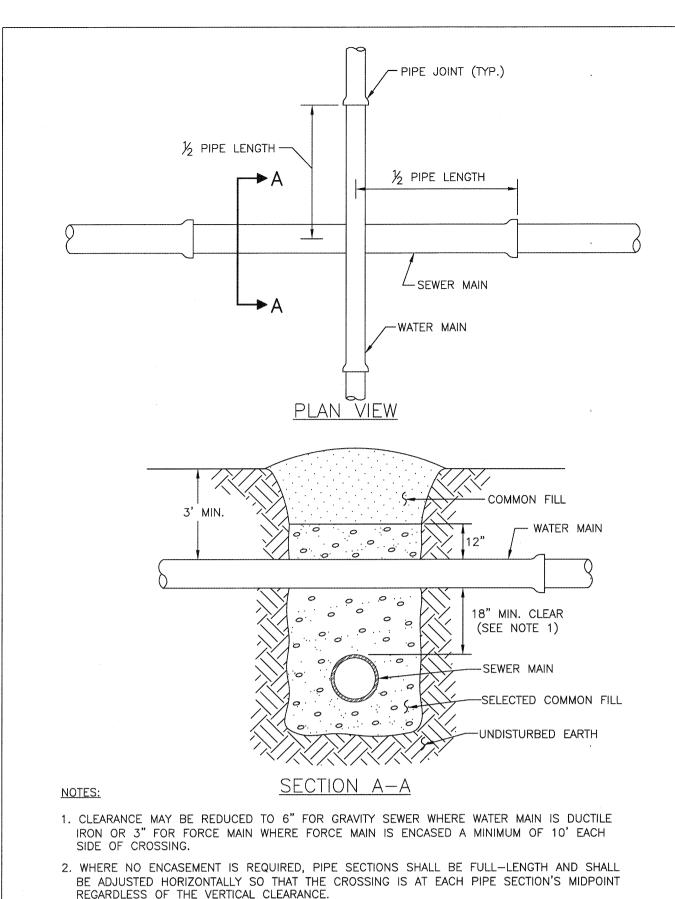
CB 5/24/201:

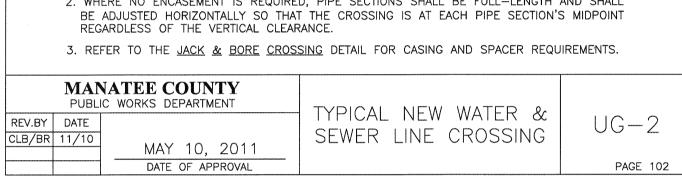
DESIGNED

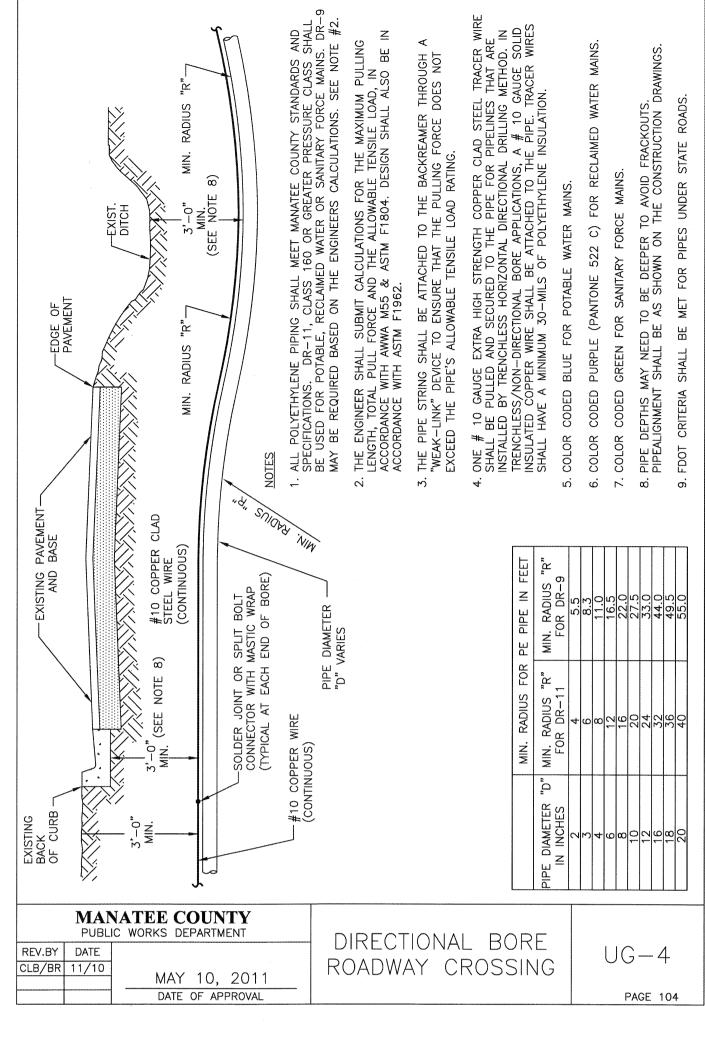
DRAWN

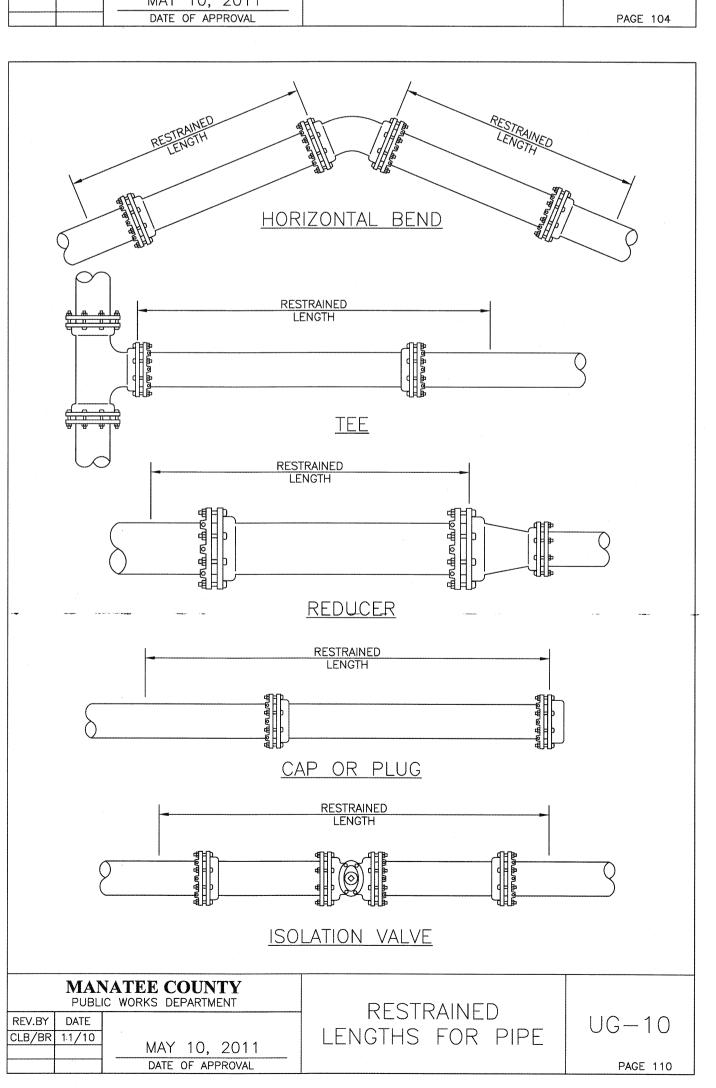
HERMING F 1

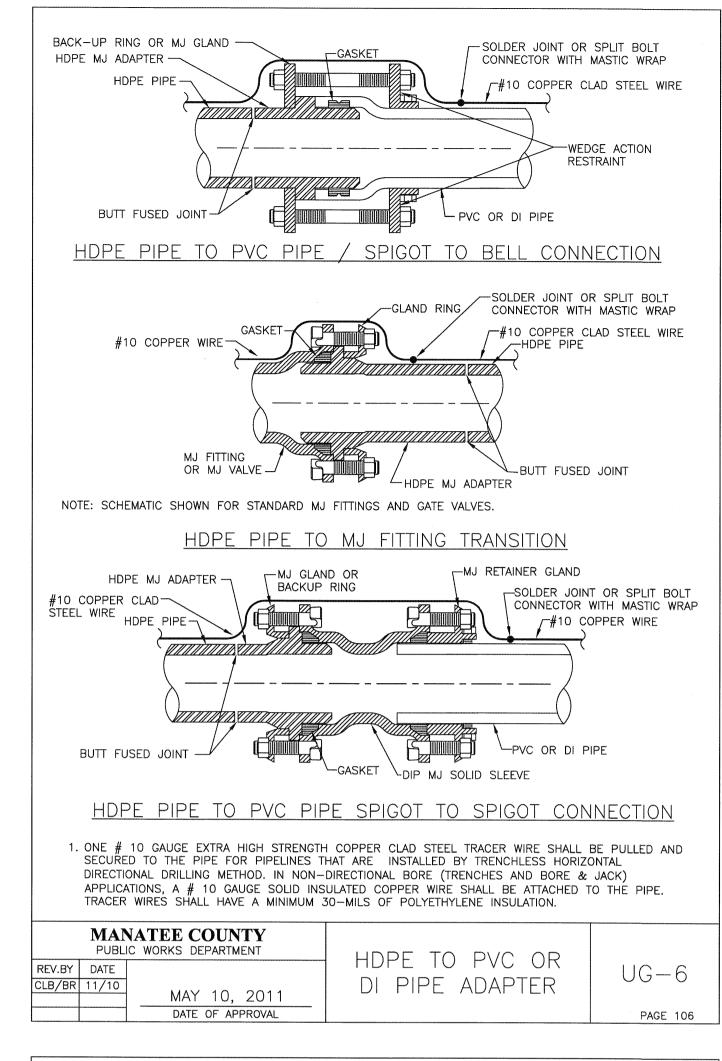


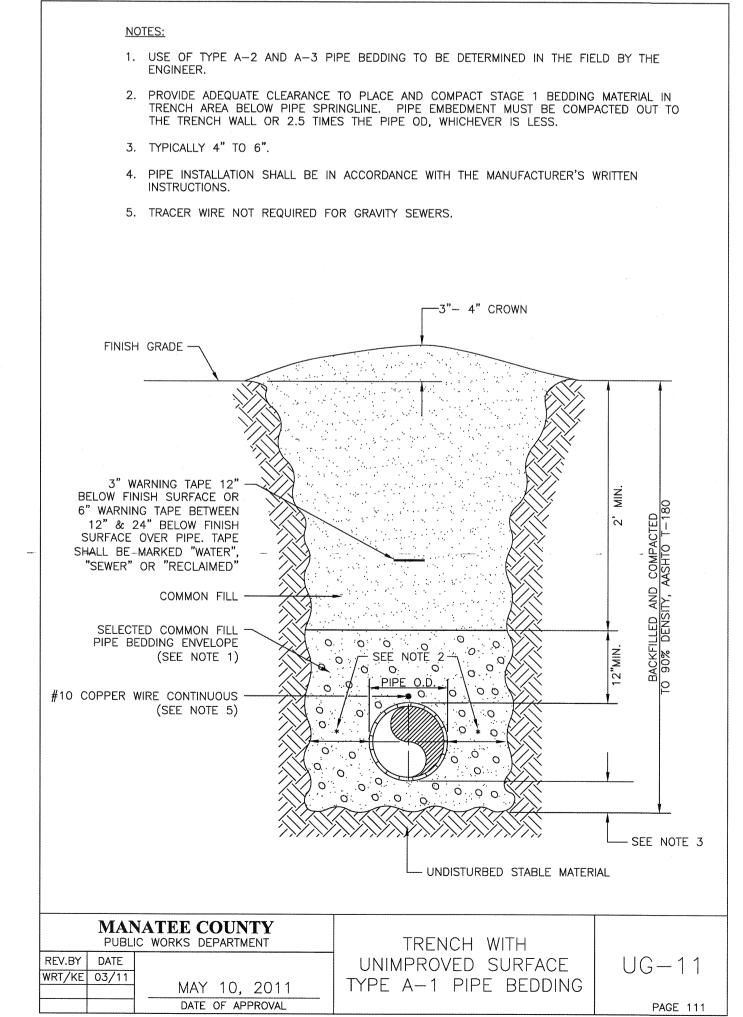


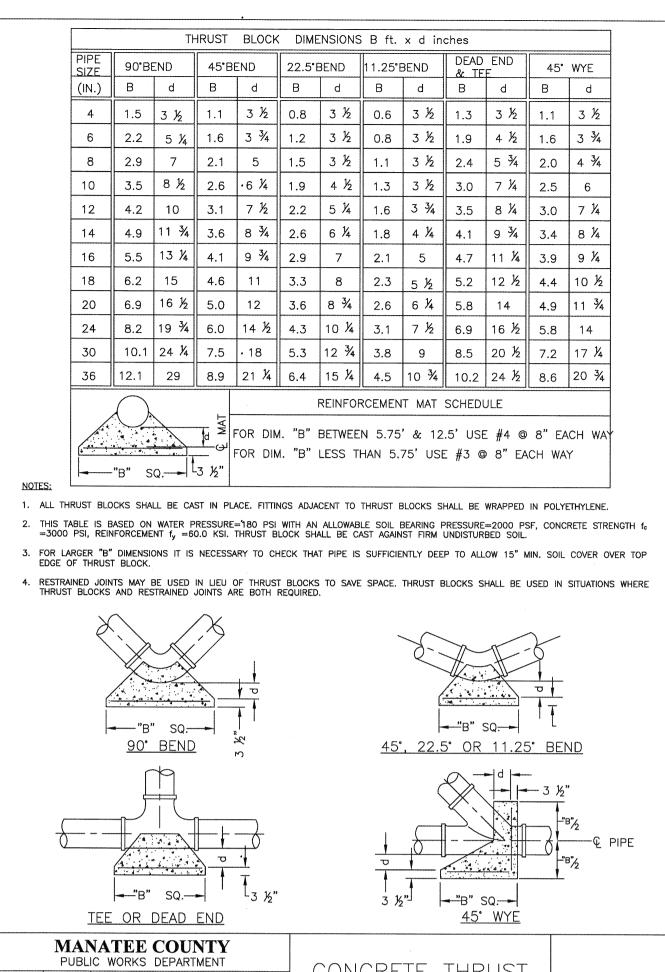


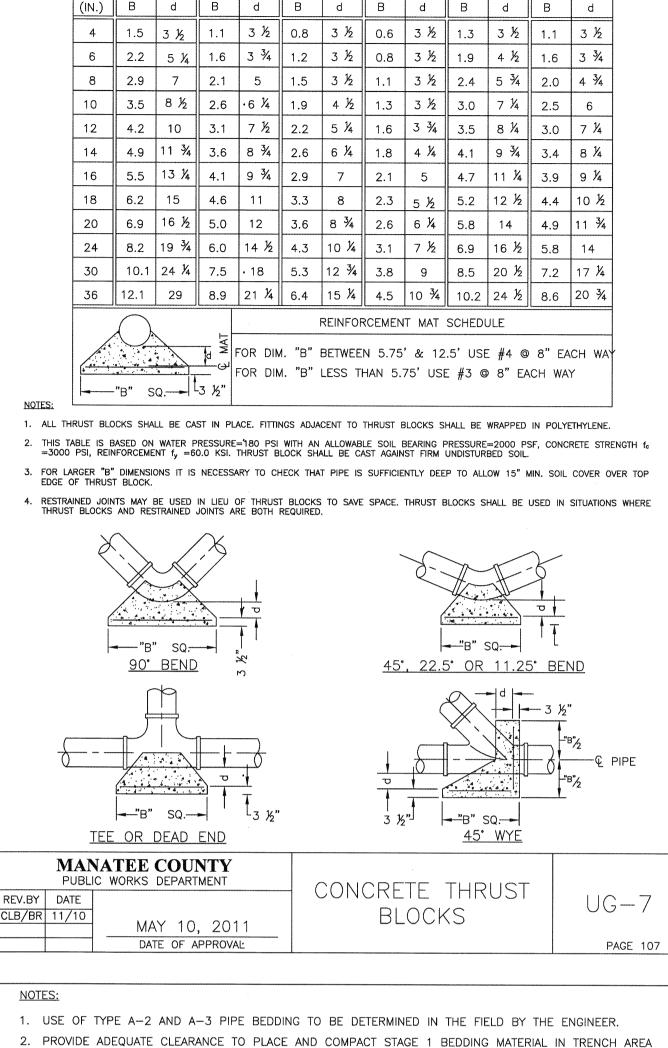


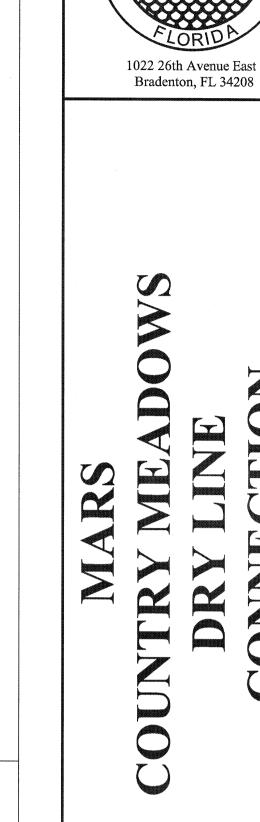




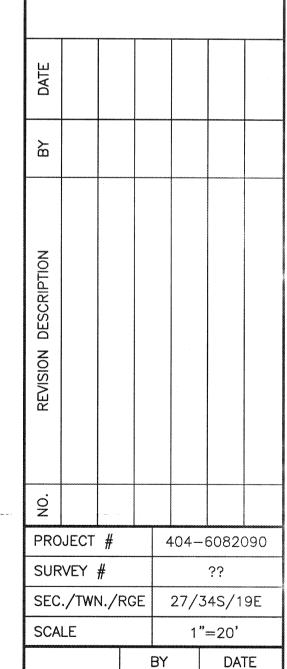








MANATEE COUNTY GOVERNMENT PUBLIC WORKS DEPARTMENT **ENGINEERING SERVICES**



GFY

JDS

CB

JAMES STOCKWELL, P.E.

05/07/12

5/24/201

5/24/201:

---- 5/31/201

SURVEYED

DESIGNED

CHECKED

DRAWN

PAGE 112

REQUIRED LENGTH OF RESTRAINED JOINT PIPE

FOR DIP (POLY-WRAPPED)

MAIN PIPE	HORIZ. BENDS TEES							REDUCERS				PLUGS	& VALVES		
SIZE	90,	45°	22.5			SIZE	LENGTH	+		SIZE LENGTH					
36	142	59	28	x36 393	x30 318	x24 232	x20 165	x16 84	x12 1	X30 137	X24 247	X20 309	X16 359		453
30	124	51	25	X30 333	X24 252	X20 189	X16 115	X12 23	×10 1	X24 137	X20 213	X16 276			391
24	106	44	21	X24 270	X20 211	X16 143	X12 61	X10 10	×8 1	X20 98	X16 178	X12 241			327
20	92	38	18	X20 225	X16 161	X12 85	X10 39	x8_1		X16 98	X12 176	X10 227		2	280
16	77	32	15	X16 177	X12 107	X10 65	X8 19	x6_1		X12 98	X10 163	X8 169			231
12	61	25	12	X12 127	X10 89	X8 50	×6 ₁			X10 88	X8 96	X6 131			181
10	52	22	10	X10 101	X8 64	×6 11				X8 51	X6 94	X4 125			153
8	44	18	9	X8 78	X6 30	×4_1				X6 54	X4 92				128
6	34	14	7	X6 46	×4_1					X4 50					98
4	24	10	5	×4 19											69

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (NON-WRAPPED)

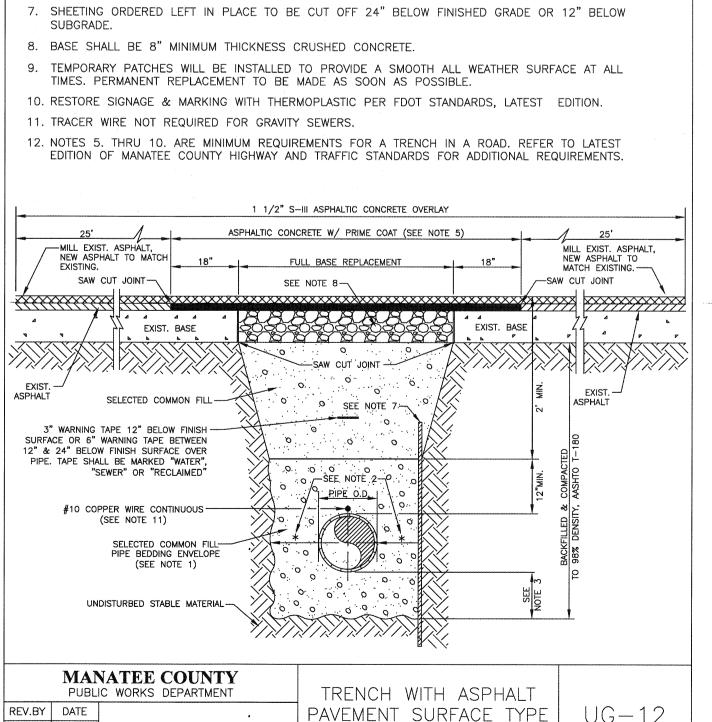
MAIN	HOF	RIZ. B	ENDS	TEES							REDU	CERS	PLUGS	& VALVES		
PIPE SIZE	90.	45°	22.5°	·	SIZE LENGTH							SIZE LENGTH				
 36	100	42	20	x36 163		x24 9 6	x20 68	x16 35	x12	X30 57	X24 103	X20 128	X16 1 4 9	-	188.]_
30	88	37	18	X30 138	X24 104		X16 48	X12 10	×10_1	X24 57	X20 88	X16 114			162] [
24	75	31	15	X24 112	X20 87	X16 59	X12 25	×104	x8 ₁	X20 40	X16 74	X12 100			135	
20	65	27	13	X20 93	X16 67	X12 35	X10 16	x8 1		X16 41	X12 73	X10 94			116	
16	54	22	11	X16 73	X12 44	X10 27	x8 8	x6_1		X12 41	X10 68	X8 70			96	
12	43	18	8	X12 53	X10 37	X8 21	x6 ₁			X10 37	X8 40	X6 54			75	
10	37	15	7	X10 42	X8 26	×6 ₅				X8 21	X6 39	X4 52			63	
8	30	13	6	X8 32	X6 12	×4 1				X6 22	X4 38				53	
6	24	10	5	X6 19	×4_1					X4 21					41	
4	17	7	3	×4 8											29	

SEE <u>RESTRAINED LENGTHS FOR PVC PIPE</u> DETAIL FOR NOTES 1 THROUGH 8 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR DIP.

			NATEE COUNTY IC WORKS DEPARTMENT	
RE	V.BY	DATE		
CL	B/BR	11/10	MAY 10, 2011	LENC
			DATE OF APPROVAL	

RESTRAINED GTHS FOR DIP

UG-9PAGE 109



A-1 PIPE BEDDING

BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5

4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

AS EXISTING OR A MINIMUM OF 1 1/4 INCH, WHICHEVER IS GREATER.

5. ASPHALTIC CONCRETE STRUCTURE COURSE WITH PRIME COAT SHALL BE THE SAME DEPTH AND TYPE

6. MILL 25' BACK FROM TRENCH SAW CUT. ADJUST MILLING PER INDIVIDUAL SITE TO NOT IMPACT BASE. BUTT JOINT TO EXIST ASPHALT. FINAL OVERLAY LIMITS ARE FROM EDGE OF PAVEMENT TO EDGE OF

PAVEMENT. FINAL OVERLAY TO MATCH EXISTING WITH NO DISCERNABLE "BUMP" AT JOINT. MILLING LIMITS THAT IMPACT INTERSECTION SHALL BE ADDRESSED ON A CASE BY CASE BASIS AND APPROVED

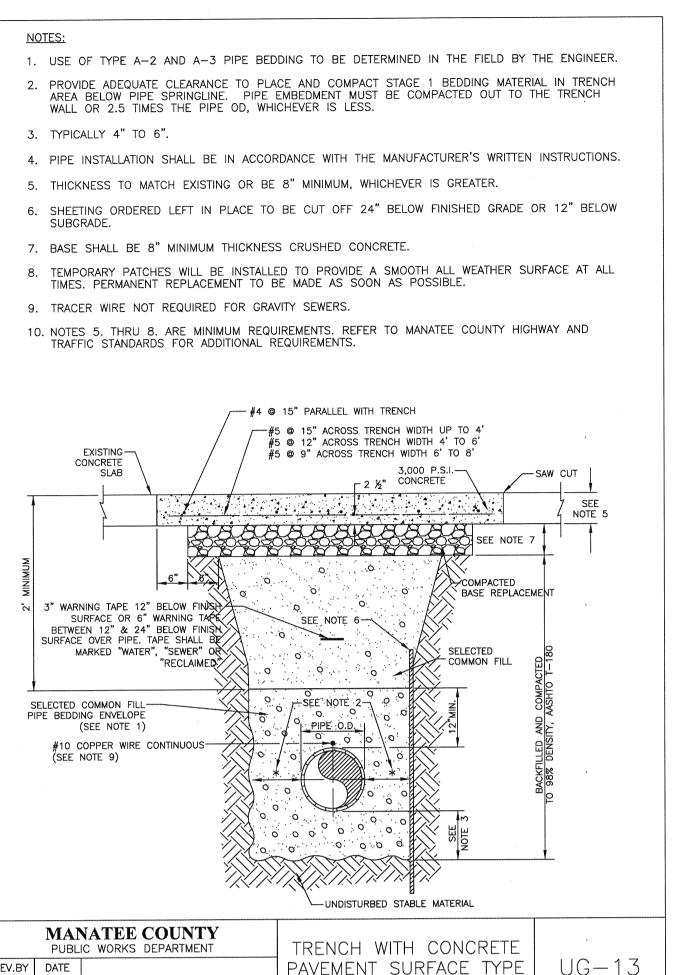
TIMES THE PIPE OD, WHICHEVER IS LESS.

MAY 10, 2011

DATE OF APPROVAL

3. TYPICALLY 4" TO 6".

BY MANATEE COUNTY.



A-1 PIPE BEDDING

MAY 10, 2011

DATE OF APPROVAL

VALVE BOX & LID SEE GATE VALVE,

BOX LID AND TAG STANDARD DETAIL

UNDISTURBED -

THRUST BLOCK

OR APPROVED EQUAL BY

WATER OR 150 PSI FOR FORCE MAIN.

LOWER TAPPING MACHINE INTO THE HOLE.

MAY 10, 2011

DATE OF APPROVAL

LENGTH SPECIFIED FOR "TEES."

MANATEE COUNTY

PUBLIC WORKS DEPARTMENT

(WHICHEVER IS GREATER) FROM A JOINT OR FITTING.

MANATEE COUNTY

CONCRETE -

STAINLESS SREEL -

TAPPING SLEEVE

FINISHED GRADE-

PROVIDE S.S

TEST PLUG

EXISTING_MAIN_

TAPPING SLEEVE

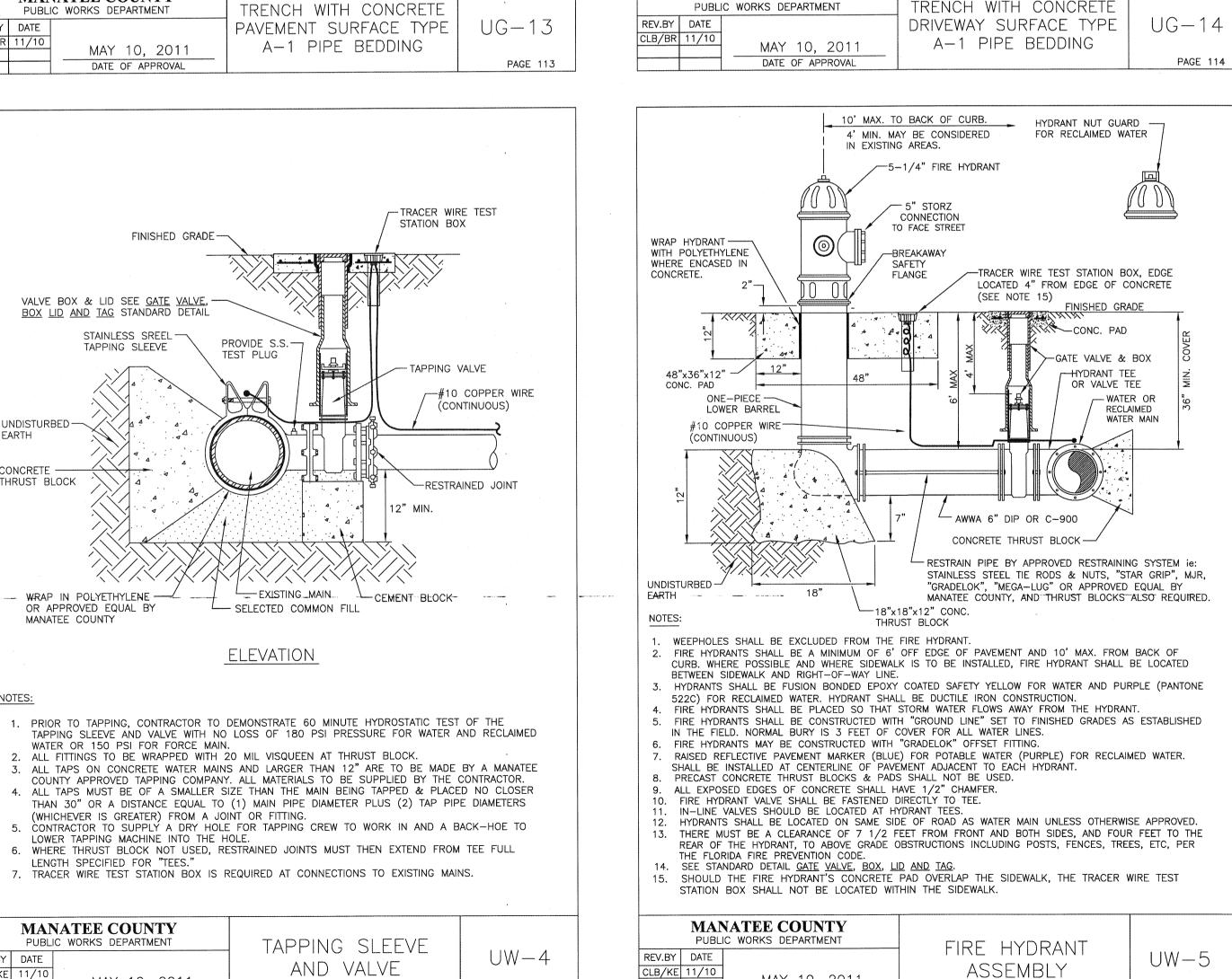
AND VALVE

PAGE 122

SELECTED COMMON FILL

ELEVATION

2. ALL FITTINGS TO BE WRAPPED WITH 20 MIL VISQUEEN AT THRUST BLOCK.



MAY 10, 2011

DATE OF APPROVAL

. USE OF TYPE A-2 AND A-3 PIPE BEDDING TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

4. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

8. DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST ADOPTED CONSTRUCTION STANDARDS OF THE MANATEE COUNTY TRANSPORTATION DEPARTMENT.

10. IF THERE IS AN EXISTING EXPANSION JOINT WITHIN 3' OF THE PROPOSED JOINT, EXTEND DRIVEWAY

5. THICKNESS TO MATCH EXISTING OR BE 6" MINIMUM, WHICHEVER IS GREATER.

7. BASE SHALL BE COMPACTED 6" MINIMUM THICKNESS OF APPROVED MATERIAL.

EXPANSION JOINT 发" PREFORMED JOINT FILLER

~6"x6" #10 WIRE MESH

(¾6" WIDE AND 1½" DEEP) AFTER THE CONCRETE HAS SET.

OR APPROVED ALTERNATE (TYPICAL)

REPLACEMENT TO THE EXISTING JOINT.

11. TRACER WIRE NOT REQUIRED FOR GRAVITY SEWERS.

3. TYPICALLY 4" TO 6".

EXIST. CONCRETE-

" WARNING TAPE 12

FINISH SURFACE OR 6" WARNING

SHALL BE MARKED "WATER",

#10 COPPER WIRE CONTINUOUS

PIPE BEDDING ENVELOPE

(SEE NOTE 1)

MANATEE COUNTY

(SEE NOTE 11)

"SEWER" OR "RECLAIMED"

TAPE BETWEEN 12" & 24" BELOW

FINISH SURFACE OVER PIPE, TAPE,

PROVIDE ADEQUATE CLEARANCE TO PLACE AND COMPACT STAGE 1 BEDDING MATERIAL IN TRENCH AREA BELOW PIPE SPRINGLINE. PIPE EMBEDMENT MUST BE COMPACTED OUT TO THE TRENCH WALL OR 2.5 TIMES THE PIPE OD, WHICHEVER IS LESS.

6. SHEETING ORDERED LEFT IN PLACE TO BE CUT OFF 24" BELOW FINISH GRADE OR 12" BELOW SUBGRADE.

9. IF THE DRIVEWAY IS 12' OR WIDER, SAWCUT AN EXPANSION JOINT ALONG THE CENTER OF THE DRIVEWAY

SAW CUT JOINT & EXP. JT.-

COMPACTED BASE

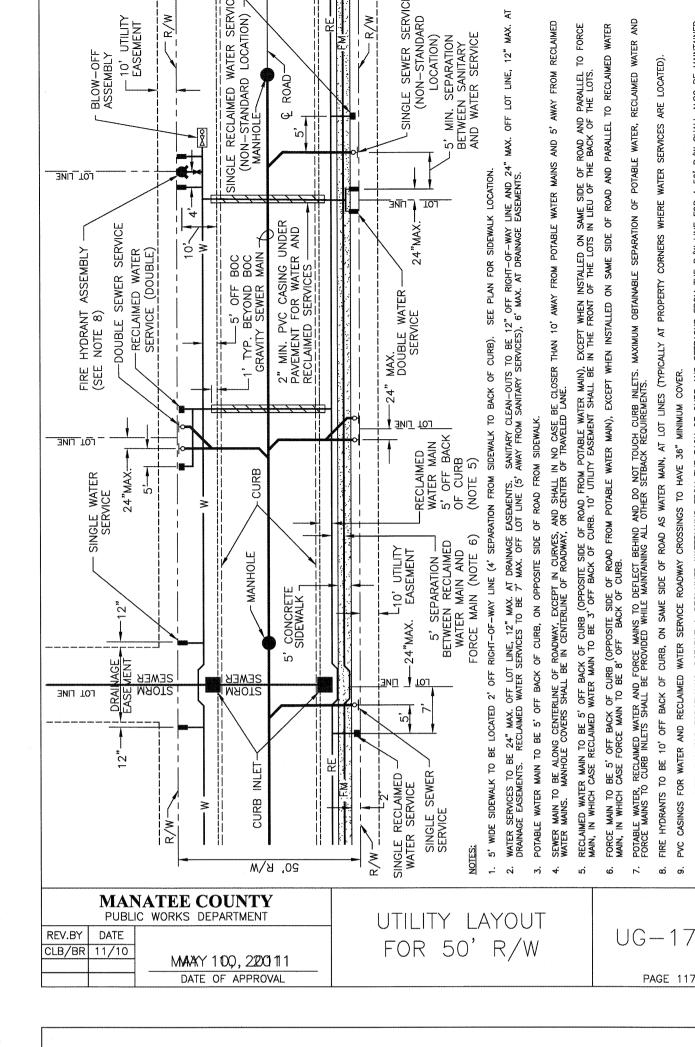
COMMON FILL

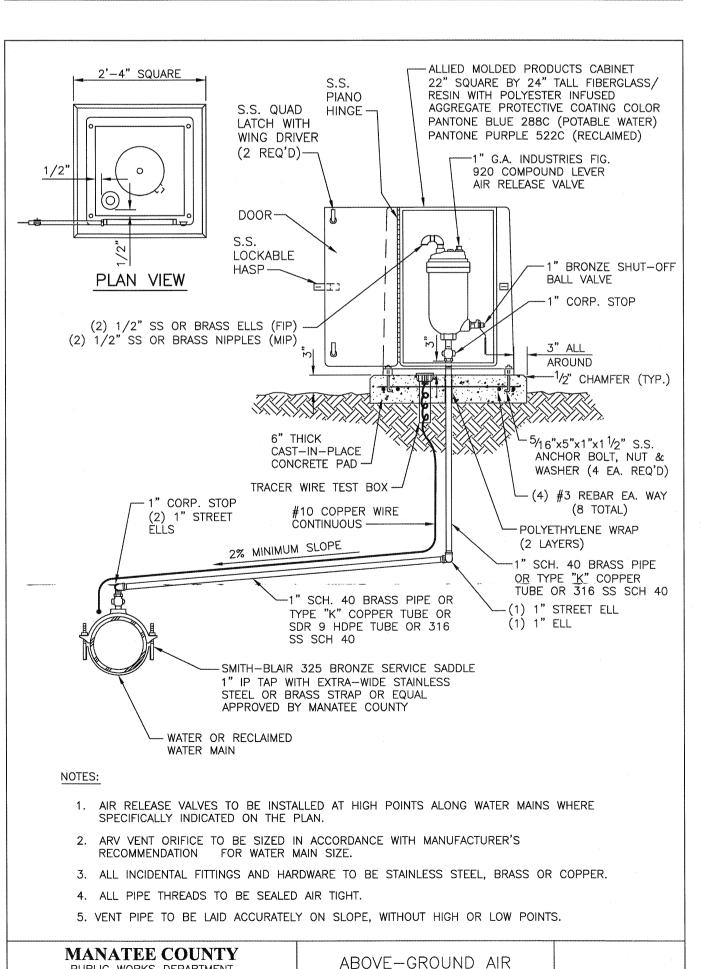
UNDISTURBED STABLE MATERIAL

-EXIST. CONCRETE

DRIVEWAY

(TYPICAL, SEE NOTE 10)





RELEASE VALVE ASSY. FOR

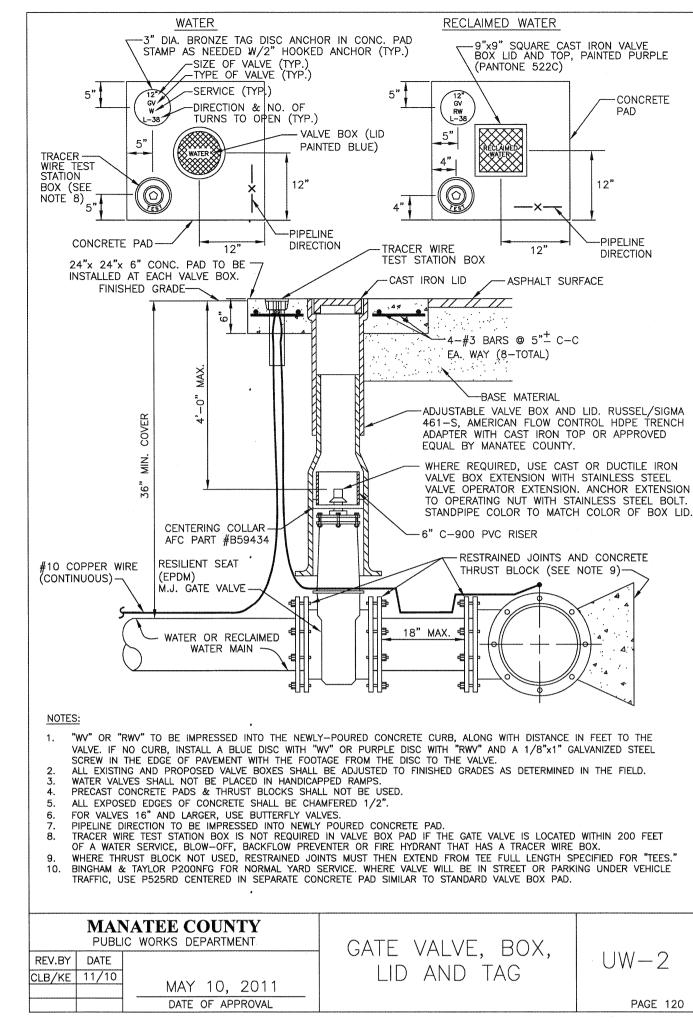
12-INCH AND SMALLER

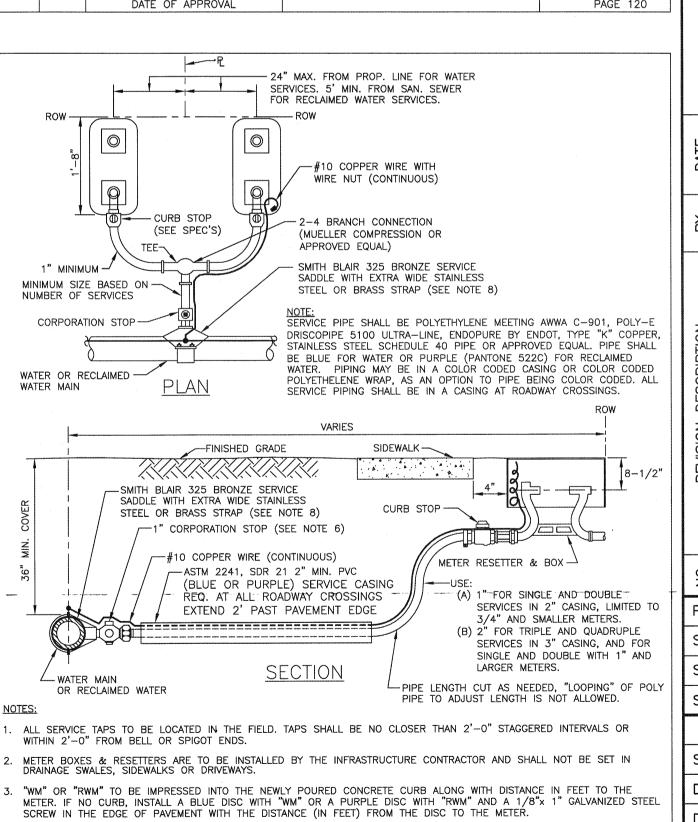
WATER MAINS

UW-9

PAGE 127

PAGE 117





#10 COPPER WIRE SHALL BE INSTALLED WITH WATER AND RECLAIMED MAIN AND ALL SERVICES, SERVICE WIRE SHALL BE CONNECTED TO THE TRACER WIRE ALONG THE MAIN.

WHEN THE DISTANCE BETWEEN THE EDGE OF THE SIDEWALK AND THE ROW IS ONE FOOT (CUL-DE-SAC W/MEDIAN) A 10-FOOT-WIDE PUBLIC UTILITY EASEMENT SHALL BE LOCATED IN THE FRONT OF THE LOTS, ADJACENT TO THE ROW.

TYPICAL SERVICE

CONNECTION

:. FOR 2" SERVICES REPLACE CORPORATION STOP WITH 2" RESILIENT WEDGE FIP GATE VALVE W/BOX, LID & TAG.

. WATER AND RECLAIMED WATER SERVICE LINES TO BE 5' MINIMUM FROM SEWER SERVICE PIPES.

I. FOR HDPE MAINS, USE ROMAC 306H SS OR CENTRAL PLASTICS ELECTRO FUSION CORP SADDLE.

MANATEE COUNTY

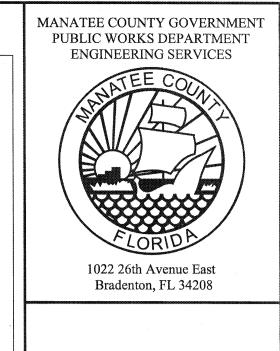
PUBLIC WORKS DEPARTMENT

MAY 10, 2011

DATE OF APPROVAL

REV.BY DATE

CLB/BR 11/10



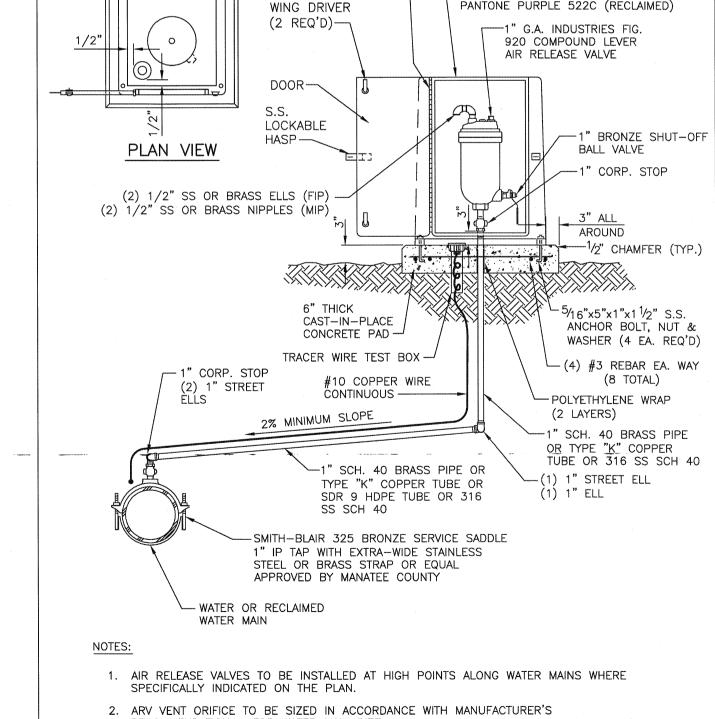
S

PROJECT # 404-6082090 SURVEY # ?? **SEC./TWN./RGE** | 27/34S/19E 1"=20' BY DATE 05/07/1 SURVEYED GFY DESIGNED JDS 5/24/201 CB 5/24/201 DRAWN CHECKED ____ 5/31/201

JAMES STOCKWELL, P.E. FLORIDAVIB PTO 67198 No. 67198 STATE OF

UW - 19

PAGE 137



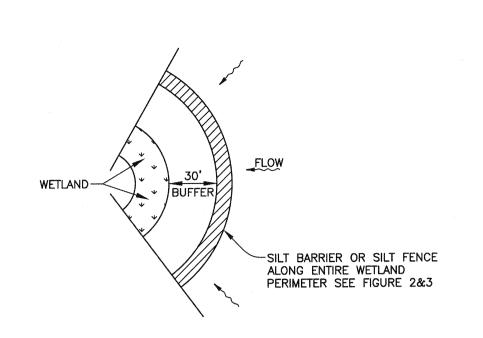
PUBLIC WORKS DEPARTMENT

MAY 10, 2011

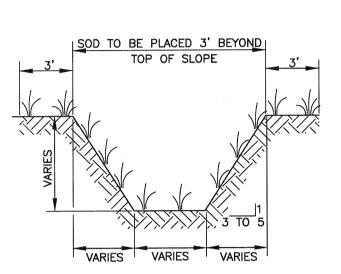
REV.BY DATE

CLB/KE 11/10

PAGE 123



WETLAND BUFFER

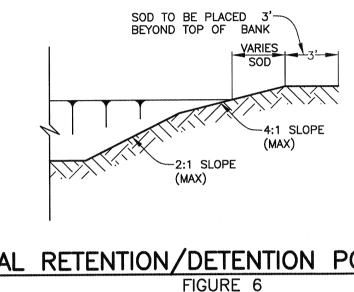


TYPICAL SWALE SECTION FIGURE 5

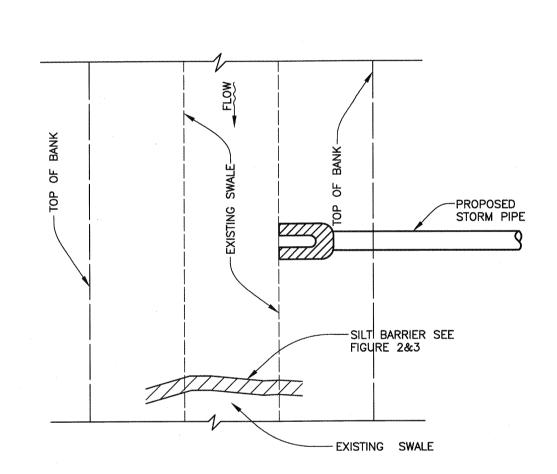
TURBIDITY BARRIER SEE FIGURE 4

EDGE OF WATER

EXISTING LAKE



TYPICAL RETENTION/DETENTION POND SECTION



SILT BARRIER AT CONNECTION OF

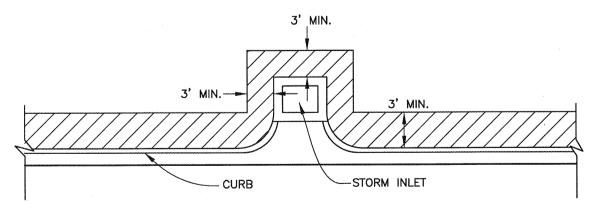
STORM PIPE TO EXISTING SWALE

FIGURE 10

GRASS SLOPES

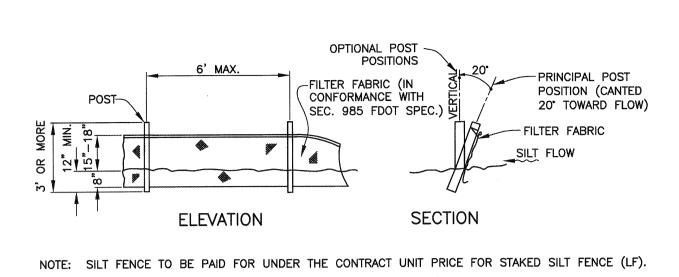
TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE FIGURE 9

WHERE A DAM IS REQUIRED
WITHIN EXISTING LAKE FOR
CONSTRUCTION OF STORM PIPE,
TURBIDITY BARRIER SHALL BE
PLACED BEYOND THE DAM

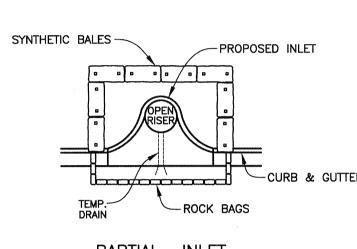


SOD ALONG CURB AND AROUND INLET FIGURE 14

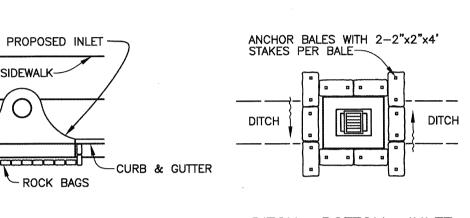
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.



TYPICAL SILT FENCE FIGURE 2



PARTIAL INLET COMPLETED INLET



LOOSE SOIL PLACED BY SHOVEL & LIGHTLY COMPACTED ALONG

UPSTREAM EDGE OF BALES

DITCH BOTTOM INLET

SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES FIGURE 7

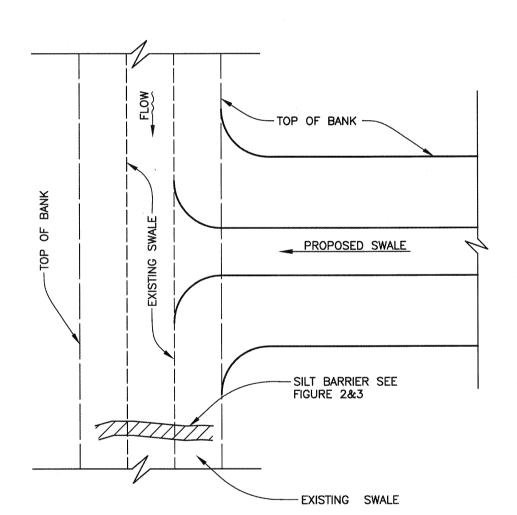
ROCK BAGS

ANCHOR BALES WITH

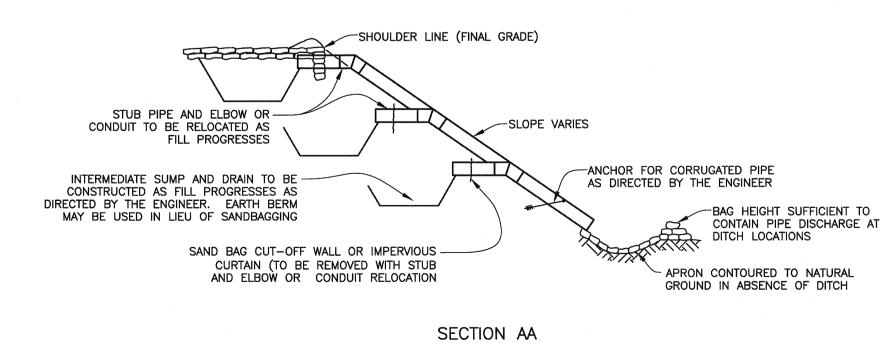
2-2"x2"x4' STAKES PER BALE

TYPICAL BALE SILT BARRIER

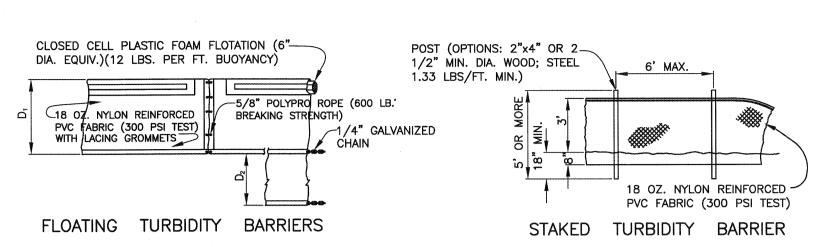
FIGURE 3



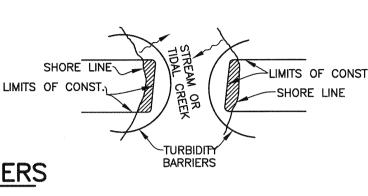
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE FIGURE 11



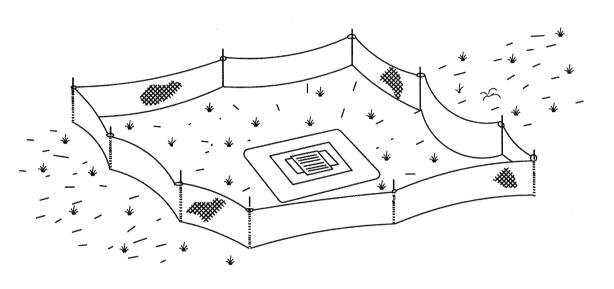
TEMPORARY SLOPE DRAIN FIGURE 15



 $D_1 = 5$ ' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS). $D_2 = 5$ ' STD. (ADDITIONAL PANEL FOR DEPTHS > 5'). CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO(2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER. NOTICE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

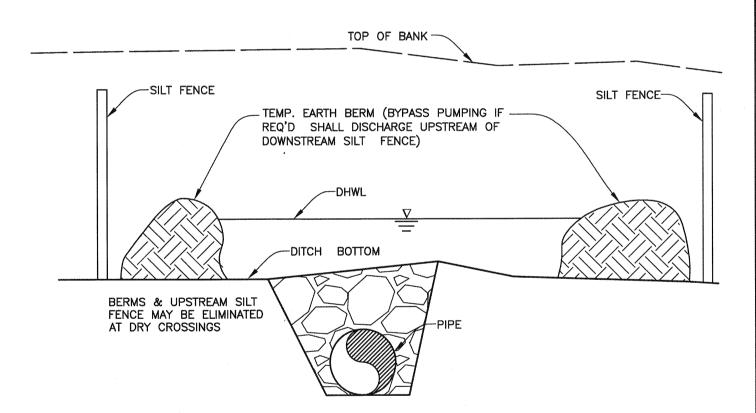


TURBIDITY BARRIERS FIGURE 4

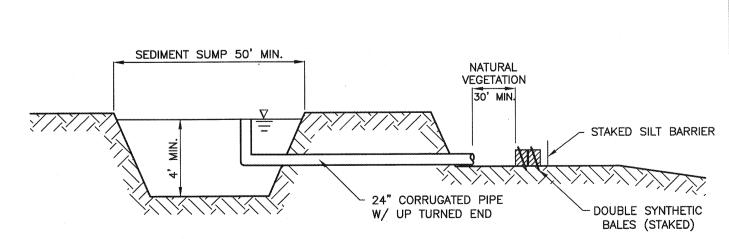


TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS

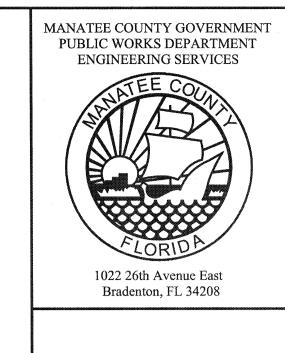
STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS FIGURE 8



UNDERGROUND PIPE CROSSING FIGURE 12



SEDIMENT SUMP SECTION FIGURE 16



								•		
DATE										
ВҮ		,								
REVISION DESCRIPTION										
NO.										
PRC	JECT	#			4	104-	-6082	090		
SUF	RVEY	#					??	•••••		
SEC	./TWI	۱./۱		27/.	34S/1	9E				
SCA	LE					1	"=20'			
					BY		DA	TE		

		<u> </u>						
SURVEY #	??							
SEC./TWN./I	27/34S/19E							
SCALE	1"=20′							
		BY	DATE					
SURVEYED	C	GFY .	05/07/1					
DESIGNED	Ų	IDS	5/24/201					
DRAWN		СВ	5/24/201					
CHECKED		O MECONO PRINCEY SCHOOL	5/31/201					
JAMES STOCKWELL P.F.								

