

CONSTRUCTION PLANS FOR RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION

OPTION T-2 IMPROVEMENTS BY CITY OF NAPLES, FLORIDA UTILITIES DEPARTMENT

380 RIVERSIDE CIRCLE
NAPLES, FL 34102
PHONE: (239) 213-4745



CITY OF NAPLES, FLORIDA

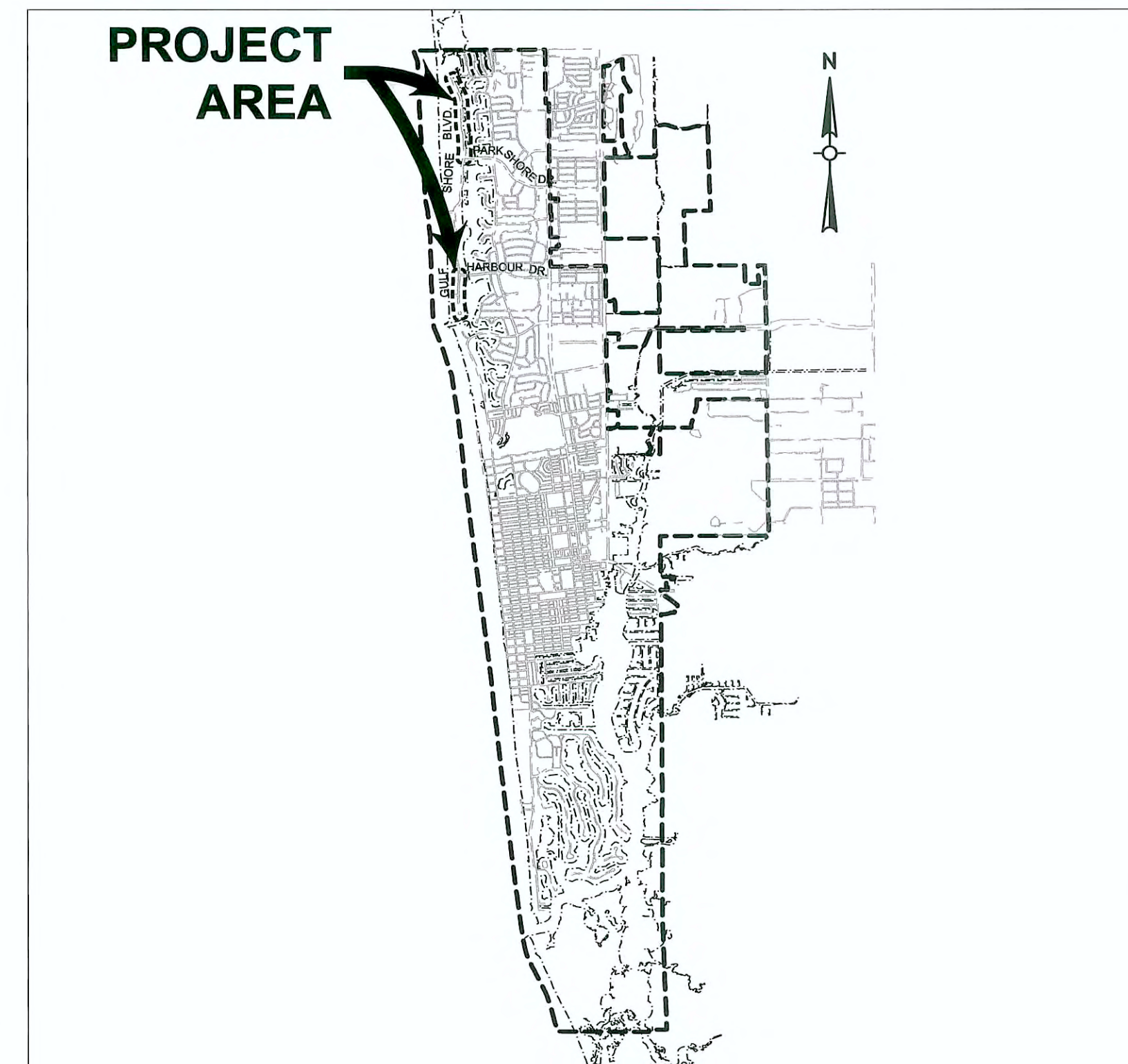
John Sorey III, Mayor
Gary Price, Vice Mayor
Bill Barnett, Council Member
Doug Finlay, Council Member
Teresa Heitmann, Council Member
Sam Saad III, Council Member
Margaret "Dee" Sulick, Council Member

William Moss, City Manager

Robert Middleton, Utility Director
Justin Frederiksen, Deputy Utility Director



LOCATION MAP
NTS



SITE MAP
NTS

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SHEET NO.	DRAWING NO.	
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4	C-2	GULF SHORE BLVD STA 30+10 TO 48+50
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UTILITY SERVICES

WATER
NAPLES UTILITY DEPARTMENT
380 RIVERSIDE CIRCLE
NAPLES, FL 34102
(239) 213-4745

CABLE TV
COMCAST
28100 WESTLINKS DRIVE,
SUITE 4
FT. MYERS, FL 33913
(239) 432-1805

ELECTRIC
FLORIDA POWER & LIGHT
COMPANY
4105 SW 15TH AVENUE
NAPLES, FL 34116
(239) 947-7372

COMMUNICATIONS
U.S. METROPOLITAN TELECOM
24017 PRODUCTION CIRCLE
BONITA SPRINGS, FL 34135
(239) 631-8251

SEWER
NAPLES UTILITY DEPARTMENT
380 RIVERSIDE CIRCLE
NAPLES, FL 34102
(239) 213-4745

GAS
TECO PEOPLES GAS
5901 ENTERPRISE PARKWAY
FORT MYERS, FL 33905
(239) 896-0812

TELEPHONE
CENTURYLINK
3330 KRAFT ROAD
NAPLES, FL 34105
(239) 213-7531

NUVU, LLC
9148 PARK AVENUE
MARCO ISLAND, FL 34145
(239) 842-4545

NOTE:
CONTRACTOR SHALL CALL SUNSHINE
STATE ONE CALL OF FLORIDA, INC. AT
LEAST 48 HOURS PRIOR TO EXCAVATION
1-(800)-432-4770

FEBRUARY 2014

Weston & Sampson

4210 METRO PARKWAY, SUITE 250, FORT MYERS, FL 33917
CERTIFICATE OF AUTHORIZATION NO. 26190

THIS IS A COPY OF A SIGNED/SEALED DOCUMENT THAT HAS BEEN
FILED WITH THE CITY OF NAPLES, FL UTILITIES DEPARTMENT

FEB 20 2014

RECLAIMED WATER IMPROVEMENTS
ENGINEER OF RECORD
Jeffrey A. Wilson, P.E.
FL License No. 41792

GENERAL NOTES & INSTRUCTIONS:

- ALL WATER MAIN AND PIPING FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NAPLES STANDARD DETAILS AND SPECIFICATIONS (LATEST UPDATE). THE MINIMUM COVER FOR ALL PROPOSED UTILITIES SHALL BE 30" UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLANS OR APPROVED BY THE CITY UTILITY ENGINEER.
- CONTRACTOR SHALL NOT EXCEED 75% OF THE MANUFACTURERS' RECOMMENDED MAXIMUM DEFLECTION WHEN DEFLECTING PIPE. FITTINGS MAY BE USED FOR PIPE ALIGNMENT CHANGES RATHER THAN DEFLECTING JOINTS AT THE CONTRACTOR'S EXPENSES.
- CONTRACTOR SHALL KEEP A RECORD OF ALL CHANGES AND MAINTAIN AN AS-BUILT PLAN AT ALL TIMES. THIS PLAN WILL BE FURNISHED TO THE ENGINEER IMMEDIATELY AFTER PRESSURE TESTING IS COMPLETED FOR THE PREPARATION OF AS-BUILTS. THE CONTRACTOR SHALL ALSO NOTATE ALL OTHER UTILITIES LOCATED DURING EXCAVATION. THE CONTRACTOR SHALL OBTAIN GPS LOCATIONS OF NEW AND EXISTING UTILITIES DURING CONSTRUCTION AND PROVIDE THE GPS LOCATIONS TO THE ENGINEER IN A FORMAT COMPATIBLE WITH THE CITY'S GIS STANDARDS.
- CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC/ACCESS, EXISTING DRAINAGE, AND EXISTING UTILITIES DURING CONSTRUCTION.
- ALL FINAL FITTINGS, PIPE, AND VALVE LOCATIONS THAT DEVIATE FROM THE PLAN SHALL BE APPROVED IN THE FIELD BY THE OWNER/UTILITY ENGINEER/PROJECT MANAGER.
- THE LOCATION OF EXISTING UTILITIES AND FACILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE CITY. THE INFORMATION IS NOT GUARANTEED, THEREFORE THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES AND FACILITIES IN THE FIELD PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN THE AREA 48 HOURS MINIMUM PRIOR TO START OF CONSTRUCTION, AND SHALL HAVE ALL SERVICE LINES (TELEPHONE, POWER, GAS, CABLE TV, WATER, SANITARY SEWER, FORCE MAINS, STORMWATER, IRRIGATION, AND ANY OTHERS) LOCATED AND FLAGGED PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL UTILITY LINES AND SERVICES DAMAGED DURING CONSTRUCTION, INCLUDING IRRIGATION SERVICES. THE APPROPRIATE UTILITY SHALL BE NOTIFIED OF ALL DAMAGED LINES AND FACILITIES PRIOR TO REPAIRS. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY UPON DAMAGE OF THE LINE OR FACILITY.
- ALL PAVING, STABILIZED EARTH, DRIVEWAYS, CURBS, SIDEWALKS, SOD, LANDSCAPING, SIGNS, MAIL BOXES, GRASS, FENCING, ETC.; DAMAGED OR REMOVED BY THE CONTRACTOR'S OPERATIONS, SHALL BE RESTORED TO A CONDITION EQUIVALENT TO PRE-CONSTRUCTION OR BETTER CONDITION; UNLESS OTHERWISE APPROVED BY THE UTILITY ENGINEER/PROJECT MANAGER/OWNER.
- ALL ELEVATIONS SHALL BE BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD).
- THE CONTRACTOR IS REQUIRED TO OBTAIN WRITTEN APPROVAL FROM THE UTILITY ENGINEER/PROJECT MANAGER/OWNER FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND NOTIFY THE UTILITY ENGINEER IMMEDIATELY OF ANY REQUIRED PLAN DEVIATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A DEWATERING PERMIT FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AS REQUIRED (IF APPLICABLE). NO EXTRA COMPENSATION FOR DEWATERING WILL BE ALLOWED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A RIGHT OF WAY PERMIT FROM THE CITY OF NAPLES STREETS AND STORMWATER DEPARTMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS/PROPERTIES ADJACENT TO THE PROJECT AREA AT ALL TIMES. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 600 SERIES. CONTRACTOR SHALL SUBMIT AN APPROVED MAINTENANCE OF TRAFFIC PLAN TO THE OWNER/UTILITY ENGINEER PRIOR TO CONSTRUCTION.
- ALL UTILITY CONNECTIONS SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OF EACH INDIVIDUAL UTILITY LINE.
- THE CONTRACTOR SHALL MINIMIZE THE WORK AREA OF THE TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION OR PAVEMENT. SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS, EXISTING RIGHT-OF-WAY, OR APPROVED EASEMENT. THE CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY TREES OR SHRUBS WITHOUT PRIOR APPROVAL FROM THE OWNER/UTILITY ENGINEER/PROJECT MANAGER.
- THE 30" MINIMUM COVER REQUIREMENT FOR THE PROPOSED REUSE LINE IMPROVEMENTS SHALL BE MEASURED FROM FINISHED GRADES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE MINIMUM COVER REGARDLESS OF EXISTING GRADE. PERIODIC CHECKS (MIN. EVERY 200FT) FOR MINIMUM COVER SHALL BE MADE BY THE CONTRACTOR AND RECORDED ON THE RECORD DRAWINGS.
- ALL MECHANICAL FITTINGS SHALL BE RESTRAINED WITH MEGA-LUG OR APPROVED EQUAL. ALL FLANGED FITTINGS SHALL HAVE MIN. 1/16" RUBBER GASKETS AND STAINLESS STEEL HARDWARE.
- ALL IN-LINE VALVES SHALL BE MAIN SIZED MECHANICAL JOINT AND RESTRAINED WITH MOLDED FLANGE ADAPTOR WITH STEEL RETAINING RING AS SUPPLIED BY THE MANUFACTURER. THE VALVES SHALL BE RESILIENT SEAT GATE VALVES WITH 2" DRIVER NUT AS PER CITY STANDARDS.
- THE CONTRACTOR SHALL NOTIFY RESIDENCES AND BUSINESSES AT LEAST 48 HOURS IN ADVANCE OF ANY DISRUPTION OF SERVICE, INCLUDING DRIVEWAY CUTS.
- CONTRACTOR IS ADVISED TO VISIT THE PROJECT CONSTRUCTION AREA PRIOR TO SUBMITTING THEIR PROPOSAL. THE PROPOSAL SHALL BE FINAL AND ACKNOWLEDGES THAT CONTRACTOR IS FAMILIAR WITH EXISTING SITE CONDITIONS.
- NO WORK SHALL BE PERFORMED AT NIGHT. ANY WORK REQUIRED TO BE PERFORMED AT NIGHT SHALL BE SUBJECT TO APPROVAL BY THE OWNER/UTILITY ENGINEER/PROJECT MANAGER. ALL WORK SHALL BE BETWEEN THE HOURS OF 7 A.M. AND 7 P.M.

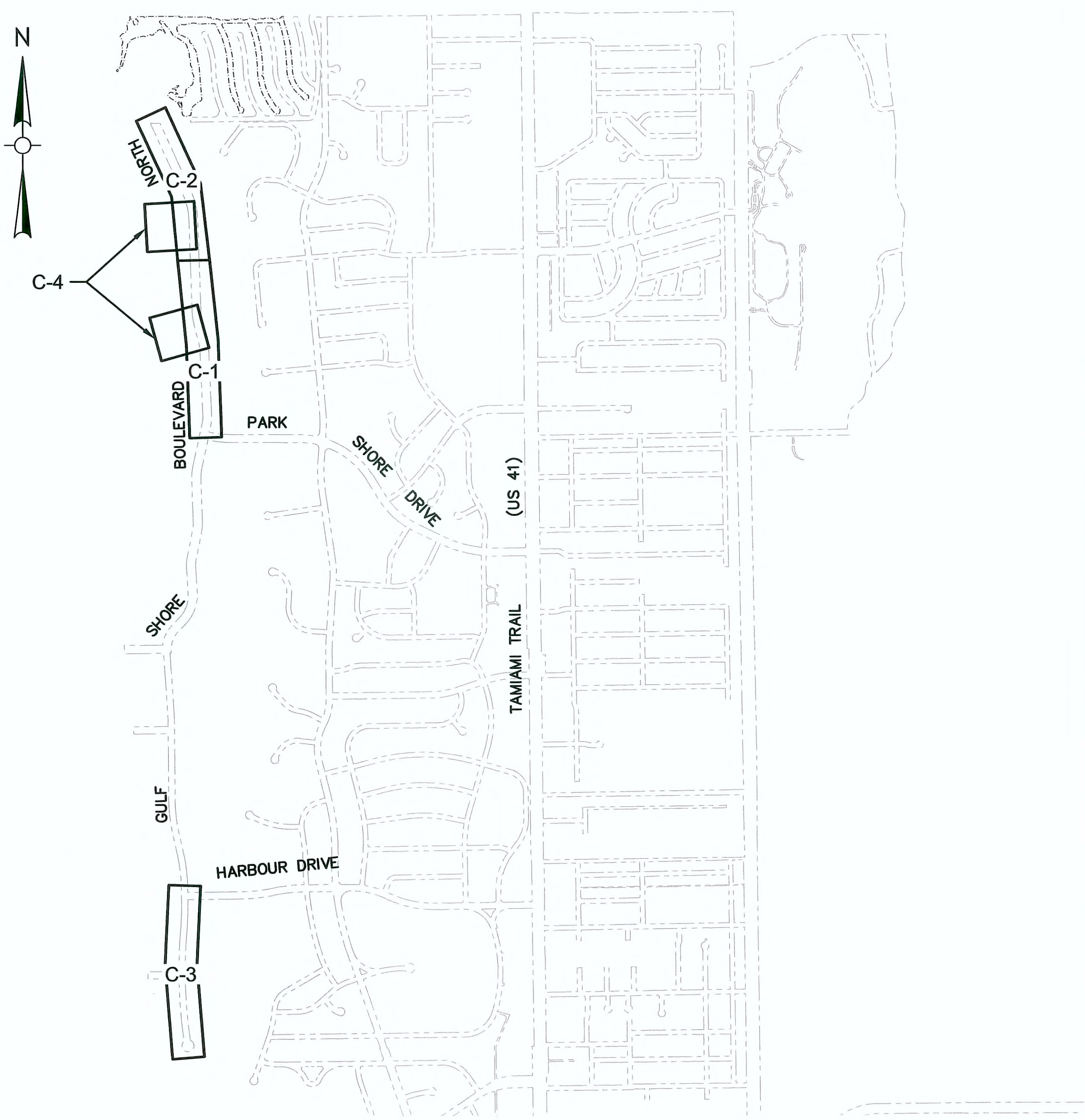
- THE CONTRACTOR SHALL PERFORM AN AUDIO/VIDEO LOG OF THE ENTIRE PROJECT CONSTRUCTION AREA PRIOR TO ANY CONSTRUCTION ACTIVITIES. THIS LOG WILL ENSURE RESTORATION ACTIVITIES AND AID IN RESOLVING ANY CONFLICTS THAT MAY ARISE.
- THE CONTRACTOR SHALL SUPPLY ALL PIPING, FITTINGS, AND RECLAIMED WATER MAIN ASSOCIATED MATERIALS. THE CONTRACTOR SHALL SUPPLY ALL MATERIALS AND SUPPLIES NECESSARY FOR THE INSTALLATION OF THE SPECIFIED RECLAIMED WATER LINE/CONNECTIONS AND ALL RESTORATION ACTIVITIES.
- ALL RECLAIMED WATER MAIN PIPING SHALL BE C-900/C-905 PVC PIPE (PURPLE) DR-14 TO BE USED THROUGHOUT ENTIRE PROJECT; UNLESS OTHERWISE NOTED ON THE PLANS OR INSTRUCTED BY THE UTILITY ENGINEER/ PROJECT MANAGER.
- THE CONTRACTOR SHALL INSTALL A TRACER WIRE, 1030P-HS BY COPPERHEAD INDUSTRIES, LLC. OR APPROVED EQUAL, ALONG THE ENTIRE LENGTH OF THE REUSE MAIN, ADDITIONAL REUSE CONNECTIONS, AND ANY RESUSE METER SERVICE DROPS. THIS TRACER WIRE SHALL BE INSTALLED AT THE TOP-DEAD CENTER OF THE PIPE AND HELD IN PLACE WITH A PIECE OF DUCT TAPE (SUPPLIED BY CONTRACTOR). DROOPING OR MIS-ALIGNMENT OF THE TRACER WIRE IS NOT ACCEPTABLE. A 6" LOOP SHALL BE PROVIDED AT EACH SERVICE CONNECTION/TAP SO THAT THE TRACER WIRE WILL BE SPLICED FROM THE MAIN TRACER WIRE TO THE SERVICE TRACER WIRE; WITH A 78B MIN. SELF-SEALING WIRE NUT. AN 18" TO 24" LOOP OF TRACER WIRE SHALL BE LEFT IN EACH METER BOX AND CAPPED WITH A WIRE CONNECTOR. LOCATOR BALLS SHALL BE PLACED AT THE BEGINNING AND END OF EACH MAIN LINE DEFLECTION; AT EACH TAP; AT EACH BRANCH LINE; AND EVERY 100 LINEAR FEET OF PIPE, AS SPECIFIED IN SECTION 02650, LAYING AND JOINTING BURIED PIPELINES. SERIAL NUMBERS OF LOCATOR BALLS SHALL BE INCLUDED ON THE AS-BUILT DRAWINGS.
- THE CONTRACTOR SHALL ACCURATELY LOG ALL ELEVATIONS AND DIMENSIONS OF ALL DEFLECTIONS, TAPS, AND BRANCHES ON THE PLANS PRIOR TO BACKFILL.
- ANY TIME STRUCTURES, ROADWAY/ROAD BASE, CURBS, AND/OR DRIVES ARE UNDERMINED OR DISTURBED DURING PROJECT INSTALLATIONS, THE CONTRACTOR SHALL REMOVE FOR A MINIMUM OF 10 FEET IN EACH DIRECTION FROM THE LIMITS OF UNDERMINING AND REPLACE IN KIND AFTER PROPER COMPACTION. THE CONTRACTOR SHALL REPAIR/REPLACE ANY FACILITIES DAMAGED DURING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- REQUIRED CLEARANCES:** CONTRACTOR SHALL MAINTAIN A MINIMUM 3 FEET HORIZONTALLY FROM POTABLE WATER MAINS AND 12 INCHES VERTICALLY; OTHERWISE NOTIFY UTILITY ENGINEER/PROJECT MANAGER IMMEDIATELY.

SPECIAL NOTE TO CONTRACTOR:

IT IS THE LAW IN FLORIDA: TWO BUSINESS DAYS BEFORE YOU DIG - CALL SUNSHINE 1-800-432-4770. (811)** CONTRACTOR SHALL PRE-MARK PROPOSED WORK AREA WITH WHITE PAINT PRIOR TO REQUESTING LOCATIONS AS REQUIRED BY STATUTE.

DESIGN PLAN NOTES:

- BASE AERIAL SOURCE: COLLIER COUNTY PROPERTY APPRAISER'S OFFICE. FLIGHT DATES: 12-07-2011 THROUGH 01-03-2012.
- TOPOGRAPHICAL SURVEY: LIMITED TOPOGRAPHICAL SURVEY (HORIZONTAL/VERTICAL CONTROL AND IDENTIFIABLE CONFLICTS) PERFORMED BY MARCO SURVEY & MAPPING, NAPLES, FL.
- RIGHT-OF-WAY: THE RIGHT-OF-WAY WAS NOT FIELD VERIFIED. IF REQUIRED, CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA TO LOCATE PROPERTY CORNERS IN THE FIELD AND VERIFY RIGHT-OF-WAY IN ADVANCE OF THE WORK.
- EXISTING UTILITY INFORMATION: LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES BASED UPON AVAILABLE INFORMATION REVIEWED AT THE TIME OF DOCUMENT PREPARATION. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF THIS INFORMATION FOR CONSTRUCTION NEEDS.



KEY MAP
NTS

LEGEND:			
	BACKFLOW PREVENTER		FLAG POLE
	BENCH MARK		FORCE MAIN
	BOLLARD		GAS PIPELINE MARKER
	CABLE RISER		GUARD RAIL
	CABLE TV BOX		GUY POLE
	CATCH BASIN		GUY WIRE
	CENTERLINE		IRRIGATION BOX
	CLEANOUT		IRRIGATION VALVE
	COORDINATE NUMBER		LIGHT POLE
	CONCRETE POWER POLE		MAIL BOX
	DRAINAGE MANHOLE		MITERED END
	ELECTRICAL BOX		MONITORING WELL
	ELECTRIC METER		OVERHEAD POWER LINE
	ELECTRIC LINE		POWER POLE
	EXISTING ELEVATION		POWER POLE w/ RISER
	FENCE - BARBED WIRE		SANITARY SEWER LINE
	FENCE - CHAIN LINK		SEWER MANHOLE
	FENCE - WOOD		SEWER VALVE
	FIBER OPTIC MARKER		SECURITY SENSOR
	FIRE HYDRANT		SIGN SINGLE POST
	FIRE VALVE		SIGN DOUBLE POST
	SPIGOT		SPRINKLER
	STEEL POST		TELEPHONE CANISTER
	TELEPHONE MANHOLE		TELEPHONE RISER
	TOE OF SLOPE		TOP OF BANK
	TRAFFIC SIGNAL BOX		UNDERGROUND UTILITIES
	WATER MAIN		WATER GROUND
	WATER LINE FLAG		WATER METER
	WATER VALVE		WOOD POST
	WOOD SUPPORT POLE		YARD DRAIN
	BUSH		CABBAGE PALM
	OAK TREE		PALM TREE
	PINE TREE		SHADE TREE (VARIOUS TYPE)
	FOUND CONCRETE MONUMENT		FOUND DRILL HOLE
	FOUND IRON ROD		FOUND IRON ROD & CAP
	FOUND NAIL		FOUND NAIL & DISK
	FOUND PARKER KALON NAIL		FOUND PARKER KALON NAIL & DISK
	SET CONCRETE MONUMENT		SET DRILL HOLE
	SET 5/8" IRON ROD & CAP		SET 5/8" PARKER KALON NAIL & DISK
	TOPOGRAPHY AND PIPE INVERTS		NEW RECLAIMED WATER MAIN
	NEW REDUCER		EXISTING REDUCER
	NEW BLOWOFF ASSEMBLY		

SURVEY CONTROL INFORMATION					
POINT NUMBER	APPROXIMATE STATION	DESCRIPTION	NORTHING	EASTING	ELEVATION
BM V-1189	STA 150+00 (C-3)	MAG W/ BLUE DISK	670291.8984	389489.9995	3.71
BM V-1188	STA 151+90 (C-3)	MAG W/ BLUE DISK	670479.6017	389461.2064	3.92
BM V-1190	STA 153+36 (C-3)	MAG W/ BLUE DISK	670625.4074	389470.9114	3.76
BM V-1187	STA 156+72 (C-3)	MAG W/ BLUE DISK	670957.1587	389418.2799	4.25
BM V-1186	STA 160+98 (C-3)	MAG W/ BLUE DISK	671383.3473	389434.4048	3.17
BM V-1185	STA 165+48 (C-3)	MAG W/ BLUE DISK	671833.1963	389437.1389	4.19
BM K604	STA 169+65 (C-3)	MAG W/ BLUE DISK	672248.2516	389476.8132	3.92
MSM TRAV	STA 180+00 (C-1)	MAG W/ RED DISK	678019.3880	389672.3078	5.54
BM V-1178	STA 184+03 (C-1)	MAG W/ BLUE DISK	678421.7035	389694.8095	5.05
BM V-1179	STA 188+87 (C-1)	MAG W/ BLUE DISK	678906.0700	389700.5700	5.00
BM V-1180	STA 194+07 (C-1)	MAG W/ BLUE DISK	679417.3042	389606.2776	5.02
BM V-1181	STA 198+52 (C-1)	MAG W/ BLUE DISK	679860.9829	389582.6950	5.51
BM V-1182	STA 203+14 (C-2)	MAG W/ BLUE DISK	680321.4775	389543.1654	5.71
BM V-1183	STA 207+68 (C-2)	MAG W/ BLUE DISK	680775.6693	389545.0729	4.88
BM V-1184	STA 212+21 (C-2)	MAG W/ BLUE DISK	681190.7008	389362.6507	5.92

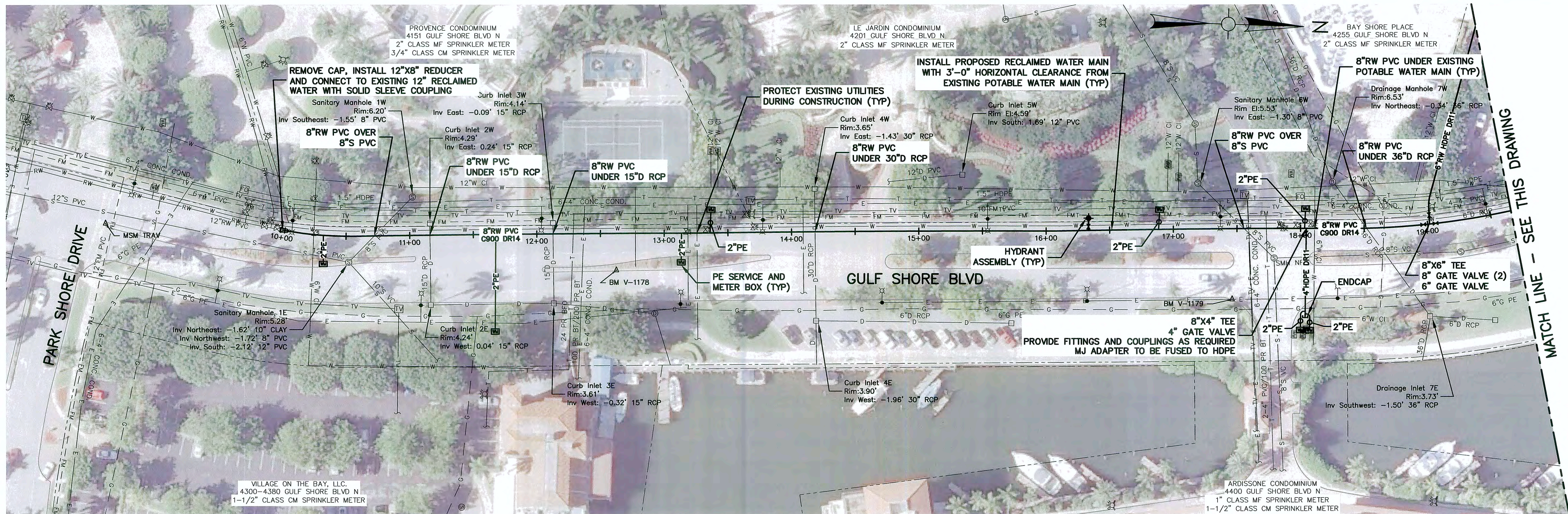
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Fort Myers, FL 33916
(239) 437-4601 (800) 5AMPSON
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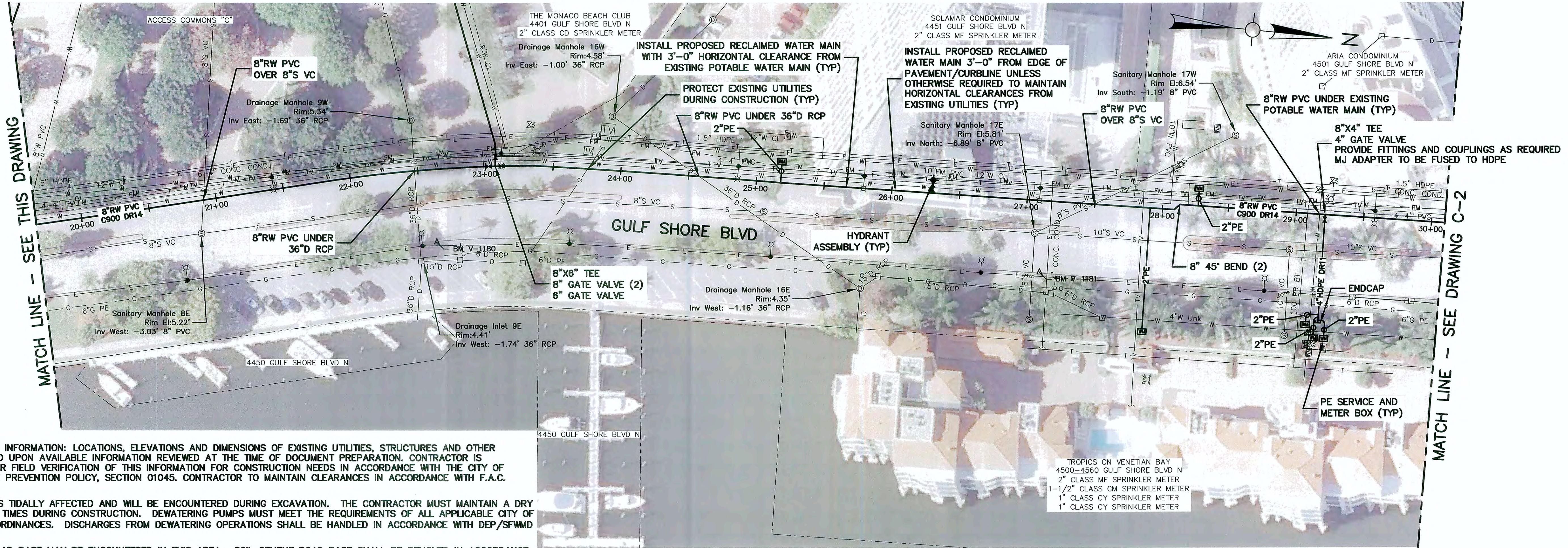
No.	Date	Dr. By	Ck. By	App. By	Description
1	02/14	DCM	RLH	JAW	ISSUED FOR BIDDING

(RECLAIMED WATER)
Jeffrey A. Wilson, P.E.
FL License No. 47182

CITY OF NAPLES, FLORIDA
RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
OPTION T-2
GENERAL NOTES / KEY MAP
JOB NO. 2120311
SCALE: RMW2
CONTRACT: NOTED
DR. BY
CHK. BY
APP. BY



PLAN
SCALE: 1"=40'



PLAN
SCALE: 1"=40'



- NOTES:**
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 - GROUNDWATER IS TIDALLY AFFECTED AND WILL BE ENCOUNTERED DURING EXCAVATION. THE CONTRACTOR MUST MAINTAIN A DRY TRENCH AT ALL TIMES DURING CONSTRUCTION. DEWATERING PUMPS MUST MEET THE REQUIREMENTS OF ALL APPLICABLE CITY OF NAPLES NOISE ORDINANCES. DISCHARGES FROM DEWATERING OPERATIONS SHALL BE HANDLED IN ACCORDANCE WITH DEP/SFWM PERMITS.
 - SOIL CEMENT ROAD BASE MAY BE ENCOUNTERED IN THIS AREA. SOIL CEMENT ROAD BASE SHALL BE REMOVED IN ACCORDANCE WITH THE "TRENCH BACKFILL IN PAVED ROADWAYS" DETAIL AND PROPERLY DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER.
 - ALL BRANCH VALVES SHALL BE INSTALLED WITHIN 2' OF TEES.

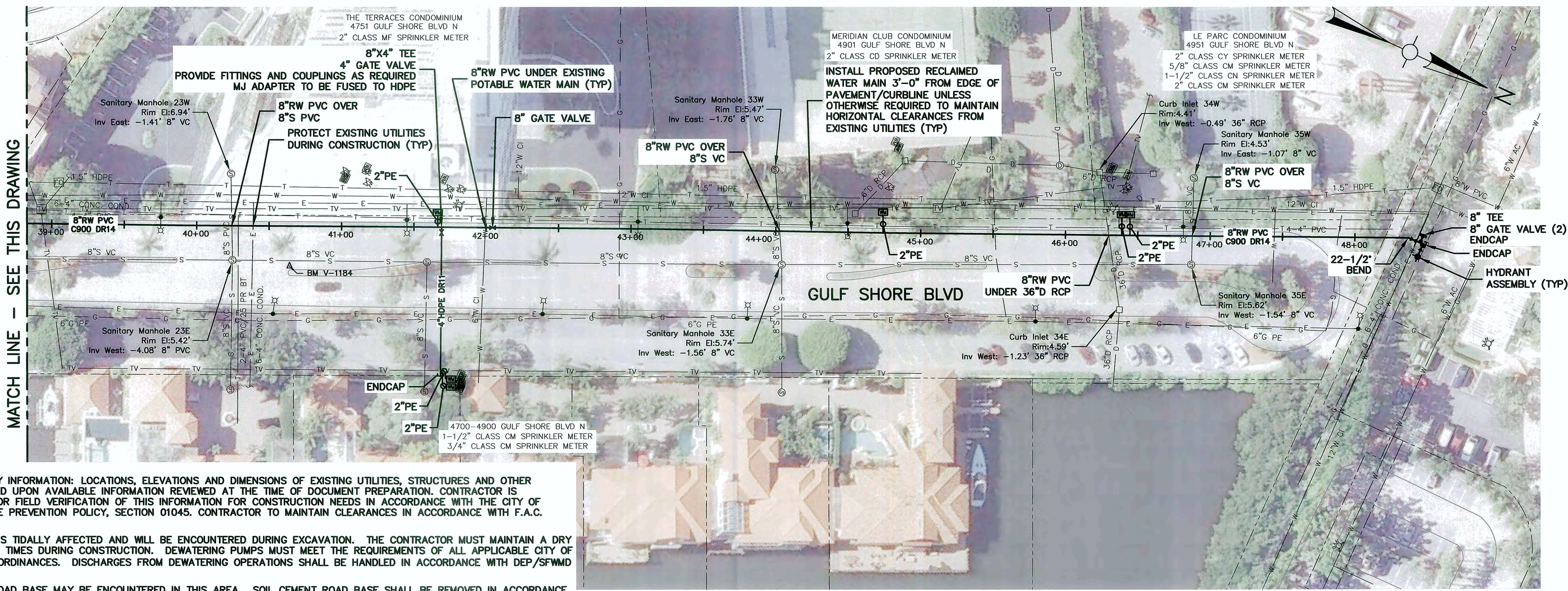
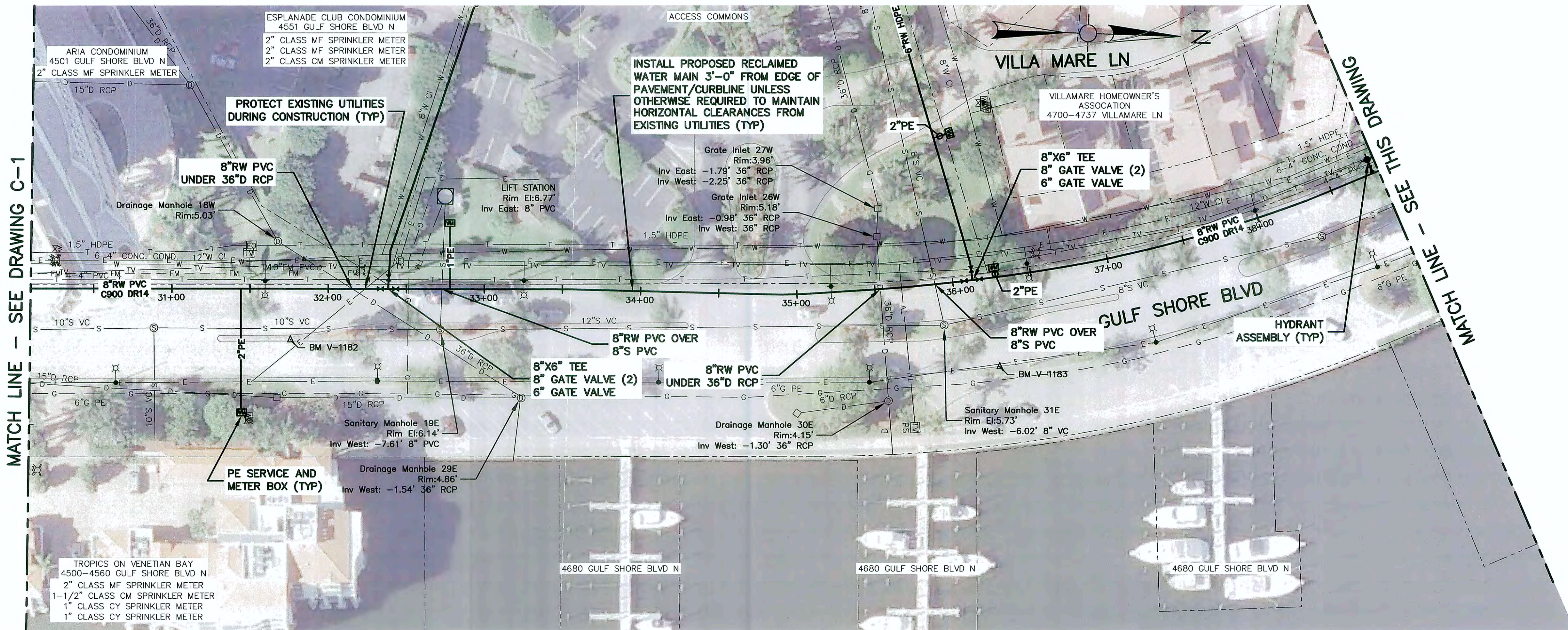
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No.	Date	Dr. By	Chk. By	App. By	Description
1	02/14	DCM	RLH	JAW	ISSUED FOR BIDDING

(RECLAIMED WATER)
DATE: 02/10/2015
JAW
A. Wilson, P.E.
FL License No. 41792

CITY OF NAPLES, FLORIDA
RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
OPTION T-2
GULF SHORE BOULEVARD STA 10+00 TO 30+10
SCALE: NOTED
CONTRACT: 2120311
JOB NO.: 2120311
DR. BY: []
CHK. BY: []
APP. BY: []
CADD NO.: NAPLES RW/M2
FILE NO.: []



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No.	Date	Dr. By	App. By	Description
1	10/2/14	DCM	RLH	ISSUED FOR BIDDING
		JAW		
		CKBy		

(RECLAIMED WATER)
Jedrew A. Wilson, P.E.
FL License No. 41792

CITY OF NAPLES, FLORIDA
RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
OPTION T-2

GULF SHORE BOULEVARD STA 30+10 TO 48+50

SCALE: NOTED

CONTRACT: 2120311

FILE NO. NAPLES RWM2

JOB NO. 2120311

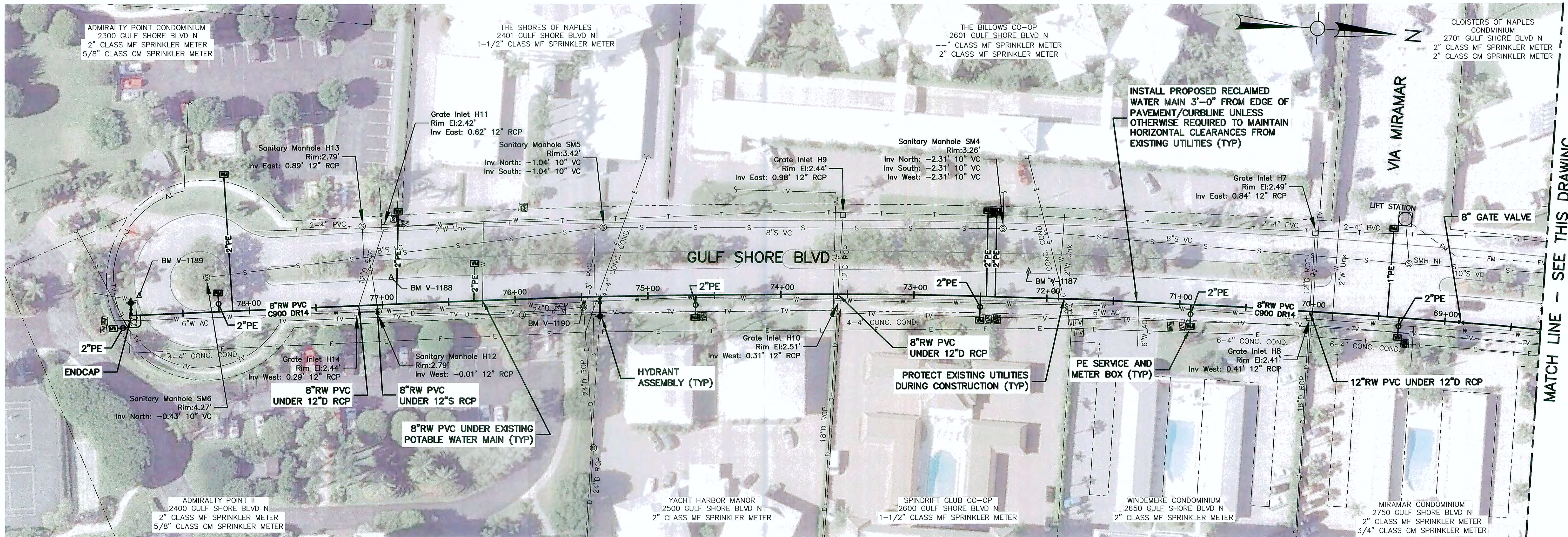
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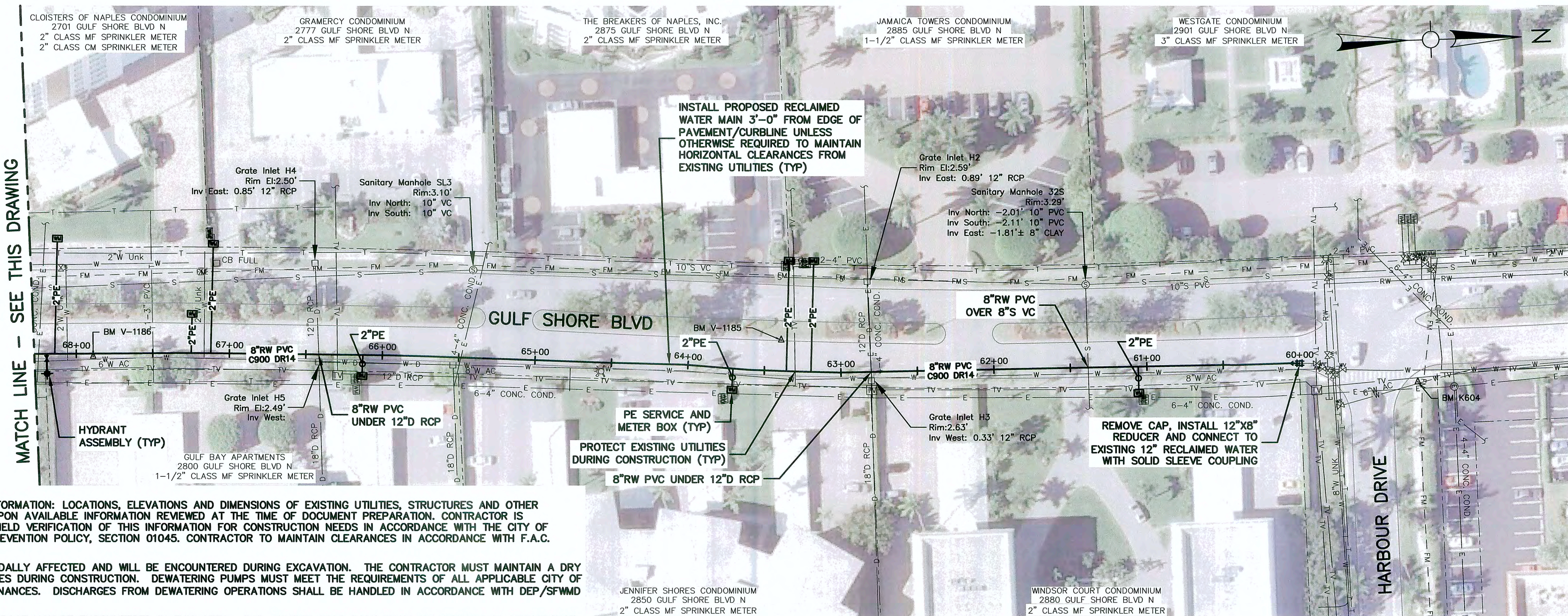
C-2

SHEET 4 OF 10



PLAN

SCALE: 1"=40'



PLAN

SCALE: 1"=40'



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- SOIL CEMENT ROAD BASE MAY BE ENCOUNTERED IN THIS AREA. SOIL CEMENT ROAD BASE SHALL BE REMOVED IN ACCORDANCE WITH THE "TRENCH BACKFILL IN PAVED ROADWAYS" DETAIL AND PROPERLY DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER.
- ALL BRANCH VALVES SHALL BE INSTALLED WITHIN 2' OF TEES.

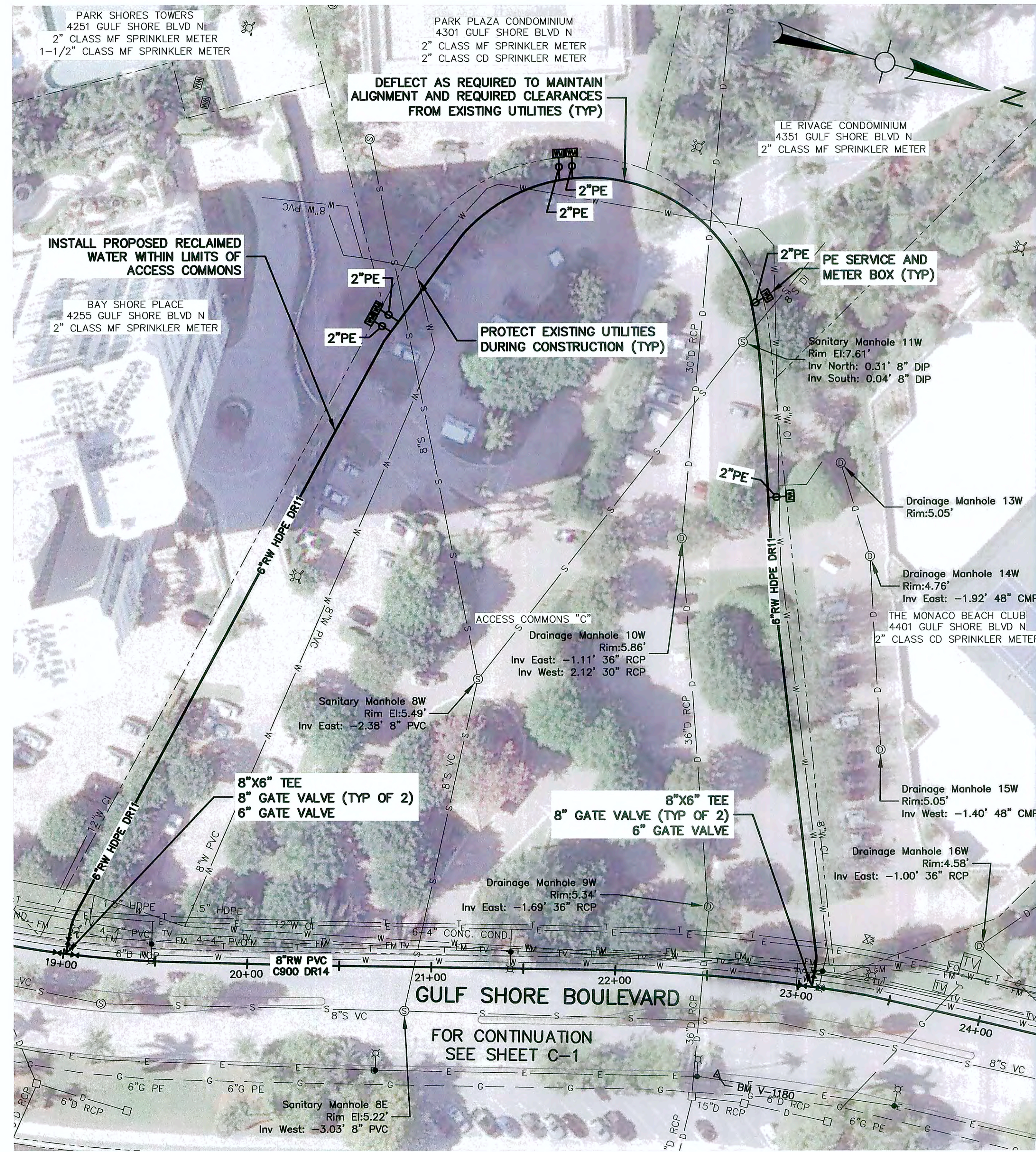
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No.	Date	Dr. By	Chk. By	App. By	Description
1	02/14	DCM	RLH	JAW	ISSUED FOR BIDDING

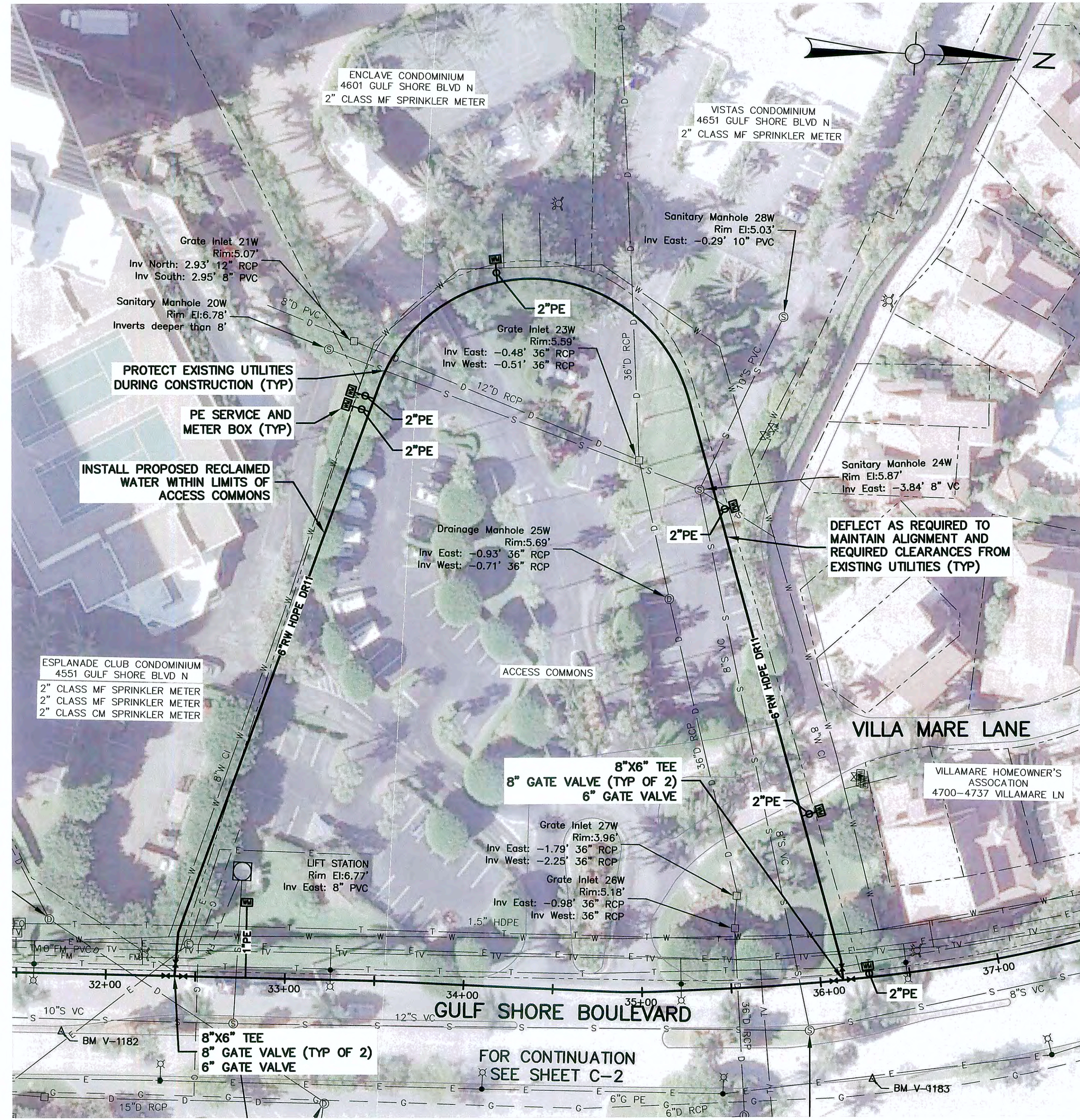
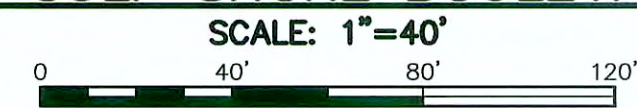
(RECLAIMED WATER)

 Jeffrey A. Wilson, P.E.
 FL License No. 41792

CITY OF NAPLES, FLORIDA					
RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION					
OPTION T-2					
GULF SHORE BOULEVARD STA 60+00 TO 78+90					
CAAD NO.	CONTRACT	SCALE	JOB NO.	DR. BY	CHK. BY
NAPLES RW02	NOTED		2120311		
FILE NO.					



4251-4401 GULF SHORE BOULEVARD N PLAN

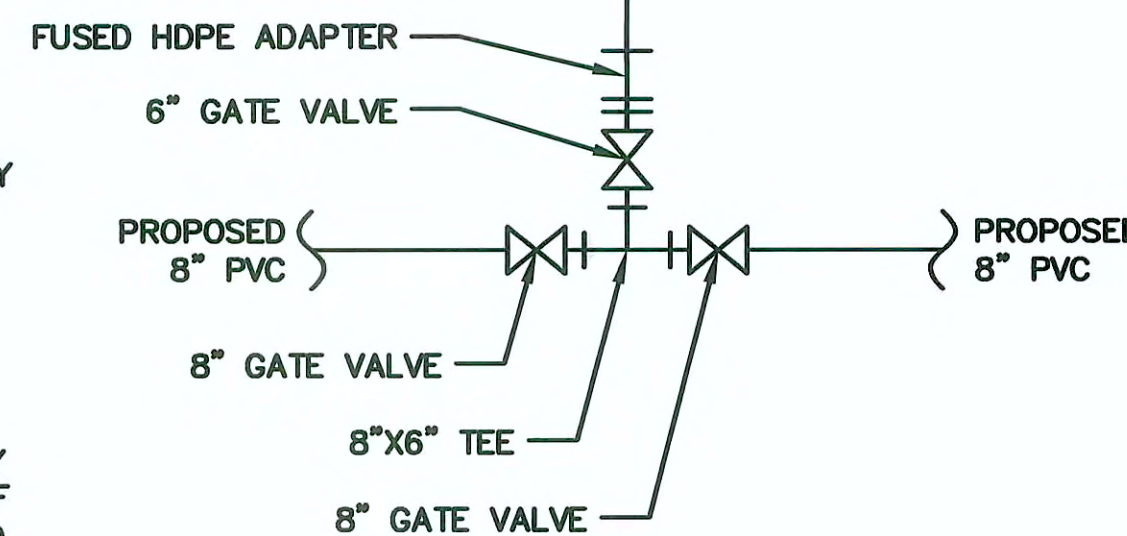


4551-4651 GULF SHORE BOULEVARD N PLAN



NOTES:

- IT SHALL BE THE INTENT TO HORIZONTALLY DIRECTIONAL DRILL 6" HDPE DR11 PIPE FOR EACH OF THESE LOOPS TO MINIMIZE SURFACE DISTURBANCES. CONTRACTOR SHALL SUBMIT ENTRY/EXIT LOCATION(S) AND BORE PATH(S) IN ADVANCE FOR REVIEW BY THE ENGINEER.
- EXISTING UTILITY INFORMATION: LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES BASED UPON AVAILABLE INFORMATION REVIEWED AT THE TIME OF DOCUMENT PREPARATION. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF THIS INFORMATION FOR CONSTRUCTION NEEDS IN ACCORDANCE WITH THE CITY OF NAPLES DAMAGE PREVENTION POLICY, SECTION 01045. CONTRACTOR TO MAINTAIN CLEARANCES IN ACCORDANCE WITH F.A.C. 62-555.314.
- GROUNDWATER IS TIDALLY AFFECTED AND WILL BE ENCOUNTERED DURING EXCAVATION. THE CONTRACTOR MUST MAINTAIN A DRY TRENCH AT ALL TIMES DURING CONSTRUCTION. DEWATERING PUMPS MUST MEET THE REQUIREMENTS OF ALL APPLICABLE CITY OF NAPLES SOIL ORDINANCES. DISCHARGES FROM DEWATERING OPERATIONS SHALL BE HANDLED IN ACCORDANCE WITH DEP/SFWM PERMITS.
- SOIL CEMENT ROAD BASE MAY BE ENCOUNTERED IN THIS AREA. SOIL CEMENT ROAD BASE SHALL BE REMOVED IN ACCORDANCE WITH THE "TRENCH BACKFILL IN PAVED ROADWAYS" DETAIL AND PROPERLY DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER.



NOTES:

- ALL VALVES TO BE INSTALLED WITHIN 2' OF THE TEE.

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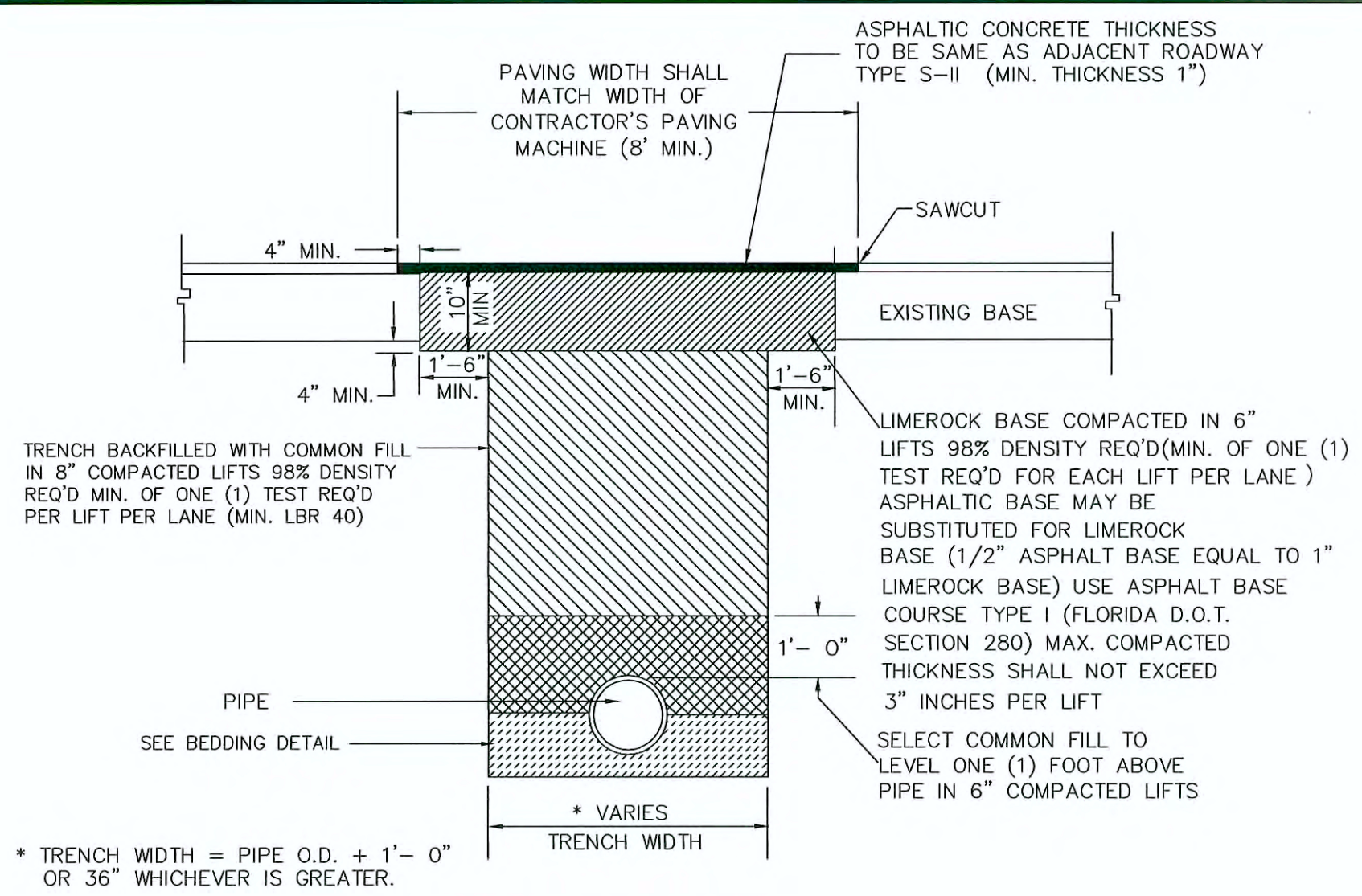
No.	Date	Dr. By	Chk. By	App. By	Description
1	02/14	DCM	RLH	JAW	ISSUED FOR BIDDING

(RECLAIMED WATER)
 Jeffrey A. Wilson, P.E.
 FL License No. 41792

CITY OF NAPLES, FLORIDA
 RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
 OPTION T-2
4251 - 4401 GULF SHORE BOULEVARD NORTH
4451 - 4651 GULF SHORE BOULEVARD NORTH

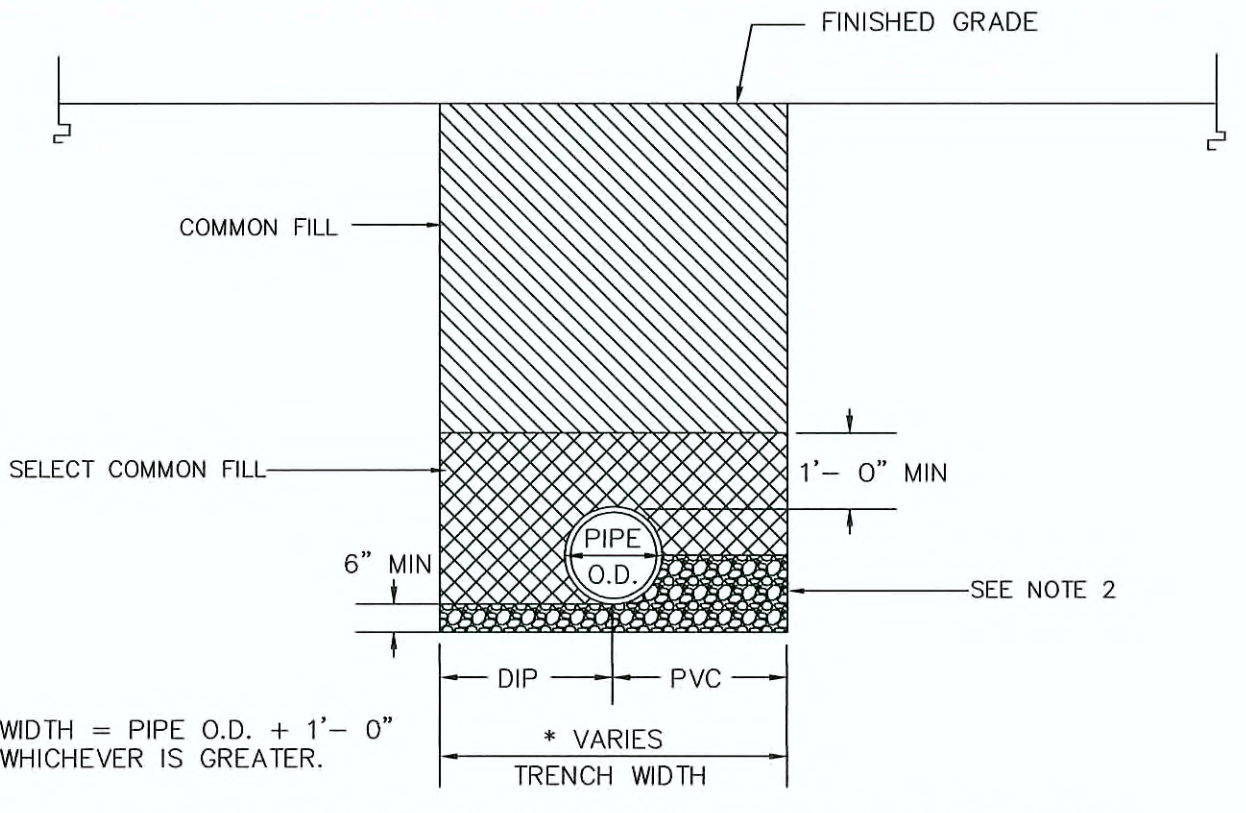
CONTRACT: NOTED
 SCALE: R/W/M2
 CADD NO.: NAPLES R/W/M2
 JOB NO.: 2120311
 DR. BY: []
 DSN. BY: []
 CHK. BY: []
 APP. BY: []

FILE NO. []



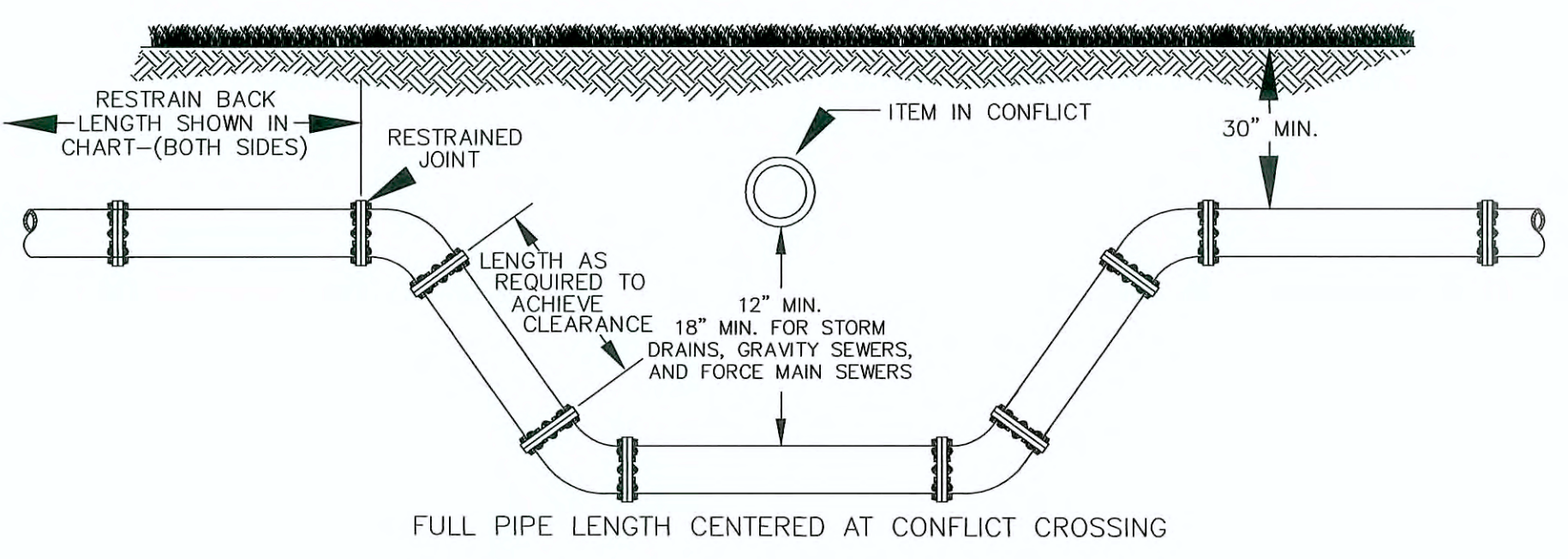
- NOTES:
- 1) ALL PROCTOR AND DENSITY TESTS SHALL BE TAKEN BY A CERTIFIED LABORATORY
 - 2) ALL TESTS SHALL BE COMPLETED AND MEET MINIMUM DENSITY REQUIREMENTS PRIOR TO ADDITIONAL BACK-FILLING
 - 3) ORDINANCE 82-91 REQUIRES A R.O.W. PERMIT FOR ALL WORK WITHIN PUBLIC ROADS. THE R.O.W. PERMIT REQUIREMENTS SHALL SUPERSEDE THIS DETAIL.
 - 4) COMPACTION AND DENSITY TESTING SHALL BE COMPLETED ALONG THE TRENCH AT 500' INTERVALS.
 - 5) A DRY TRENCH SHALL BE MAINTAINED AT ALL TIMES AND BACKFILLING SHALL BE COMPLETED IN COMPACTED LIFTS AS SHOWN ABOVE.

TRENCH BACKFILL IN PAVED ROADWAYS DETAIL
N.T.S.



- NOTES:
- 1) COMMON FILL SHALL BE COMPACTED TO MATCH CRITERIA PROVIDED IN BACKFILL DETAILS FOR PAVED AND UNPAVED LOCATIONS RESPECTIVELY.
 - 2) BEDDING MATERIAL SHALL BE FDOT #57 STONE IF BELOW THE SEASONAL LOW GROUNDWATER TABLE, OR FDOT #69 STONE, FDOT #131 OR #132 SCREENING IF ABOVE THE SEASONAL LOW GROUNDWATER TABLE.
 - 3) ORDINANCE 82-91 REQUIRES A R.O.W. PERMIT FOR ALL WORK WITHIN PUBLIC ROADS. THE R.O.W. PERMIT REQUIREMENTS SHALL SUPERSEDE THIS DETAIL.

PIPE BEDDING AND BACKFILL DETAIL
N.T.S.



*RESTRAINED JOINT PIPE DISTANCES FOR NEW PIPE (IN FEET)				
PIPE SIZE	90° BEND	45° BEND	22 1/2°	11 1/4°
8"	74	31	15	7
10"	87	36	17	9
12"	100	41	20	10
16"	123	51	24	12
20"	143	59	29	14
24"	162	67	32	16
30"	184	76	37	18
36"	207	86	41	20

*FOR FITTINGS NOT SHOWN HERE, REFER TO PIPE RESTRAINT DETAIL DRAWING

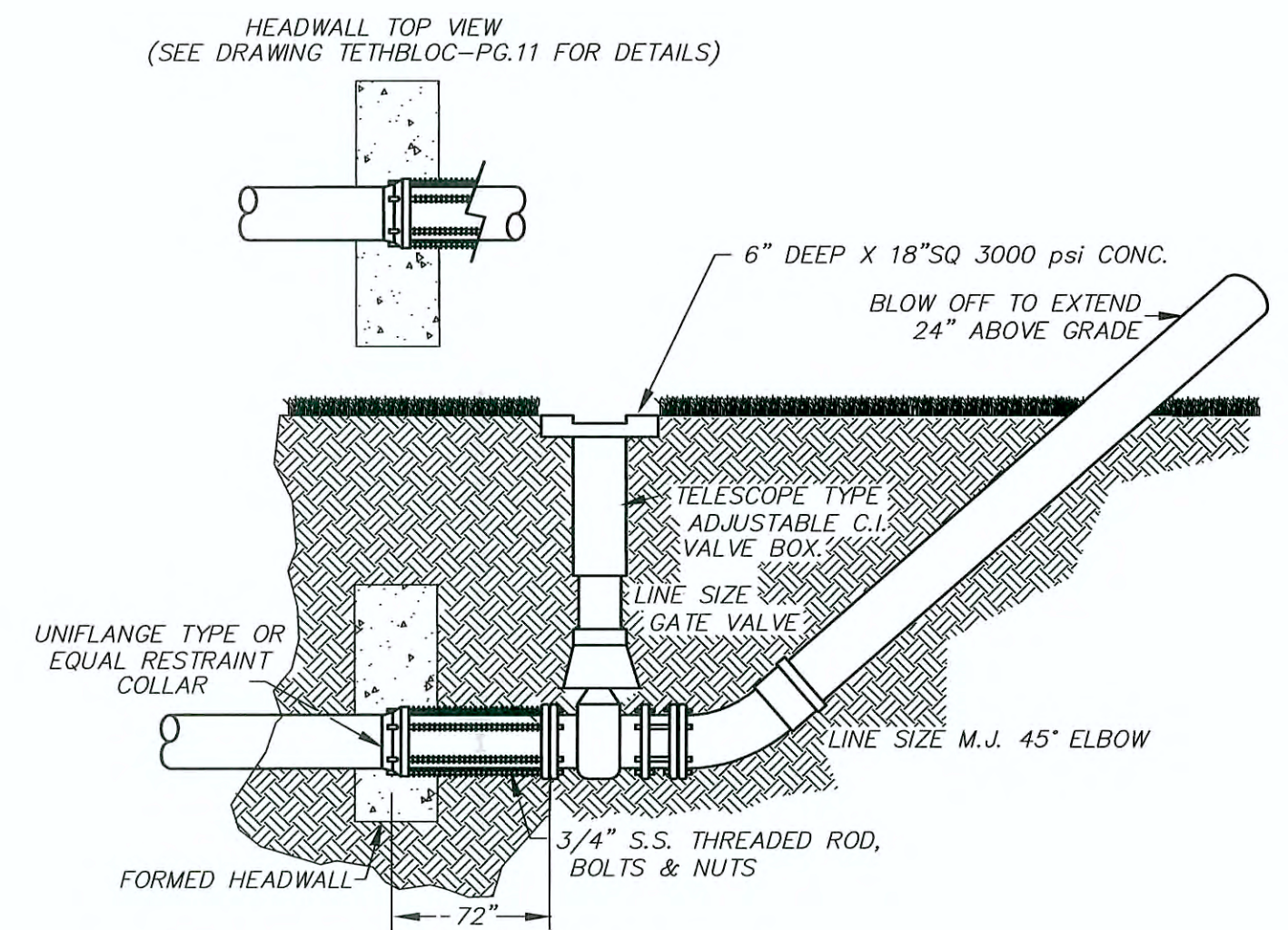
TYPICAL CONFLICT CROSSING DETAIL
N.T.S.

PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)					45° BENDS	
	HORIZONTAL BENDS					UPPER	LOWER
	90°	45°	22-1/2°	11-1/4°	DEAD ENDS (2)		
4	23	9	5	2	55	23	8
6	32	13	6	3	77	32	11
8	41	17	7	4	100	41	14
10	51	21	8	5	120	50	17
12	61	25	9	6	141	58	20
16	81	33	11	8	181	75	25
18	93	38	12	9	200	83	28
20	105	43	13	10	218	90	30
24	123	51	15	12	253	105	35
30	143	59	17	14	303	125	41
36	162	67	19	16	350	145	47

PIPE SIZE IN INCHES	RESTRAINED PIPE LENGTH IN FEET (1)	
	TEE (3)	REDUCER (4)
6 x 4	0	40
6 x 6	34	
8 x 4	0	72
8 x 8	55	
10 x 6	3	74
10 x 10	75	
12 x 4	0	122
12 x 8	31	75
12 x 12	95	
16 x 6	0	153
16 x 10	44	107
16 x 16	134	
18 x 8	0	157
18 x 12	68	108
18 x 18	152	
20 x 10	29	161
20 x 16	120	77
20 x 20	170	
24 x 12	37	187
24 x 18	132	109
24 x 24	204	
30 x 16	78	213
30 x 20	138	165
30 x 30	252	
36 x 18	84	259
36 x 24	170	191
36 x 36	298	

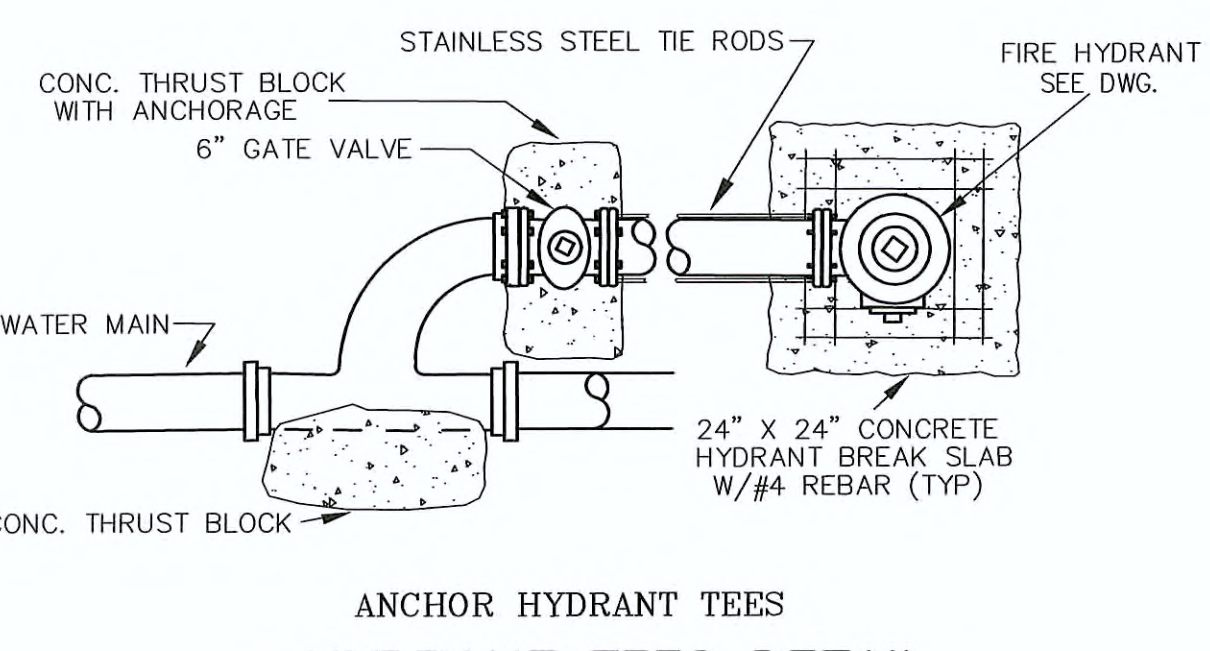
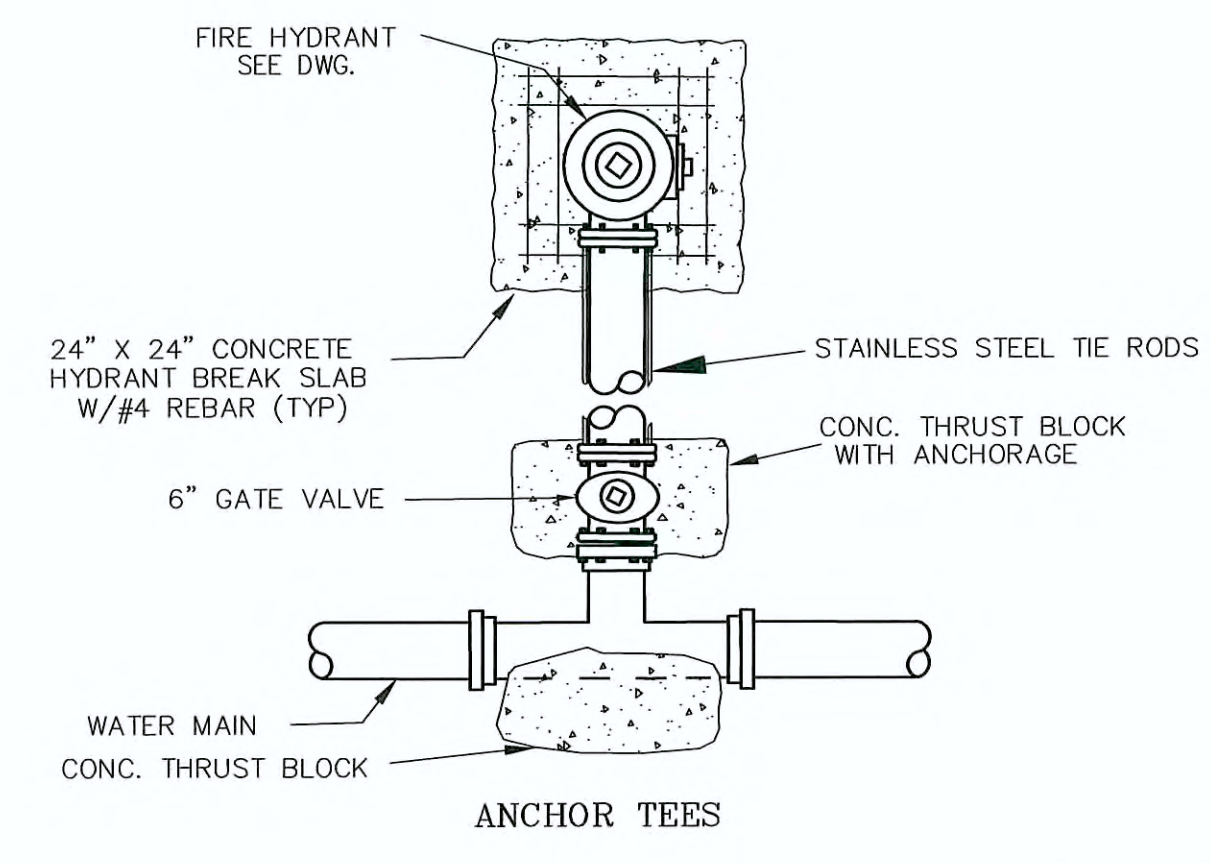
- NOTES:
1. RESTRAIN ALL PIPE JOINTS WITHIN THE DISTANCE SHOWN ON THE TABLES MEASURED FROM THE POINT OF CONNECTION.
 2. ISOLATION VALVES SHALL BE TREATED AS DEAD ENDS. WITH RESTRAINT ON BOTH SIDES OF THE VALVE.
 3. RESTRAINT IS FOR BRANCH OF TEE. IF BRANCH SIZE IS NOT ON TABLE, USE NEXT LARGEST BRANCH.
 4. RESTRAINT IS FOR LARGE DIAMETER SIDE OF REDUCER. IF REDUCER SIZE IS NOT ON TABLE, USE NEXT SMALLER REDUCER (SMALL END).
 5. THIS SCHEDULE IS TO BE USED FOR DUCTILE IRON AND PVC PIPE.

PIPE RESTRAINT SCHEDULE
N.T.S.

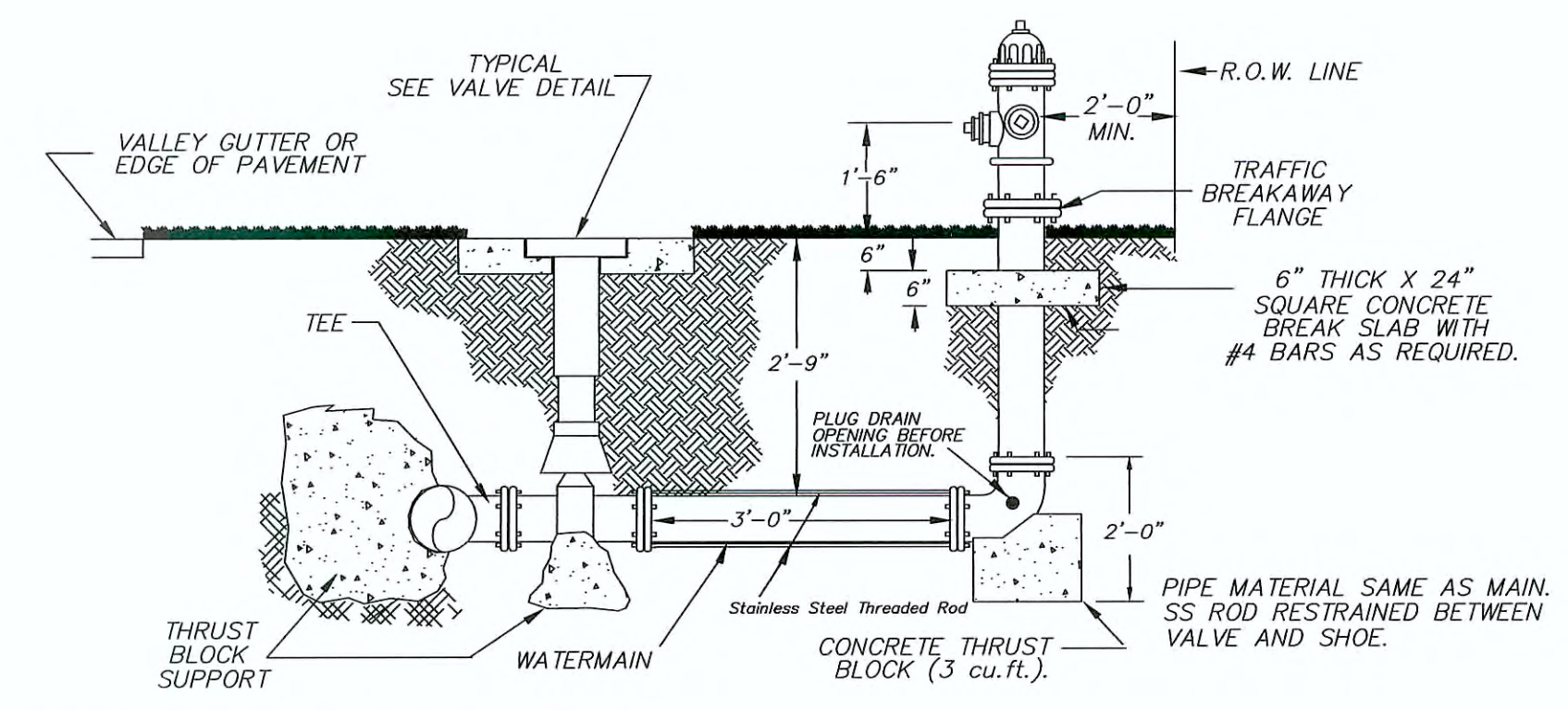


- NOTE: VALVE BOX RISER SHALL NOT BEAR ON VALVE OR PIPE.
- NOTE: TEMPORARY BLOW-OFF TO REMAIN IN PLACE UNTIL DISTRIBUTION SYSTEM HAS BEEN FLUSHED. AFTER CLEARANCE IS OBTAINED REFER TO FIRE HYDRANT DETAIL FOR FINAL CONFIGURATION.

TEMPORARY BLOWOFF DETAIL
N.T.S.



HYDRANT TEES DETAIL
N.T.S.



CITY OF NAPLES FIRE HYDRANT REQUIREMENTS:

1. ALL HYDRANTS INSTALLED ON CITY WATER MAINS SHALL MEET AWWA C-502-85 (LATEST REVISION) & AWWA MANUAL M-17 FOR DRY BARRELL FIRE HYDRANTS.
2. ALL HYDRANTS SHALL CARRY AWWA RECOMMENDATIONS FOR UNIFORM COLOR SCHEME AS PER FEDERAL STANDARD 595A (PURPLE).
3. IN ADDITION TO MEETING AWWA, CITY HYDRANTS SHALL BE UL/FM APPROVED (2) 2 1/2" HOSE NOZZLES; (3) AND EQUIPPED WITH (1) 4 1/2" PUMPER NOZZLE; 5-1/4" DIAMETER MAIN VALVE. SHOE INTERIOR AND EXTERIOR SHALL BE COATED WITH 8 MIL EPOXY. PUMPER NOZZLE AND HOSE NOZZLE CAPS SHALL BE SECURED WITH CHAINS.
4. FINAL LANDSCAPING ELEVATION/GRADE SHALL BE A MINIMUM 18" AND MAXIMUM OF 24" TO THE CENTERLINE OF THE PUMPER NOZZLE. ALL FENCING, OR OTHER OBSTRUCTIONS SHALL NOT BE PLACED CLOSER THAN 3' FROM HYDRANT TO ALLOW FREE UNRESTRICTED ACCESS.
5. UPON HYDRANT INSTALLATION, HYDRANT SHALL BE FLOW TESTED AS PER AWWA M17 AND APPROPRIATELY COLOR CODED PER FEDERAL STANDARD 575A.
6. MANUFACTURE YEAR MUST BE CAST ON BARREL.
7. SIX (6") TO 12" TAPPING SADDLE MAY BE EITHER 316 STAINLESS STEEL OR C.I. AT CITY ENGINEER'S OPTION. ALL LINE SIZE TAPS AND THOSE OVER 12" SHALL BE C.I.
8. HYDRANTS SHALL BE LUBRICATED WITH FOOD GRADE GREASE, NO OIL ALLOWED, INCLUDING INTERNAL BONNET LUBRICATION.

HYDRANT DETAIL
N.T.S.

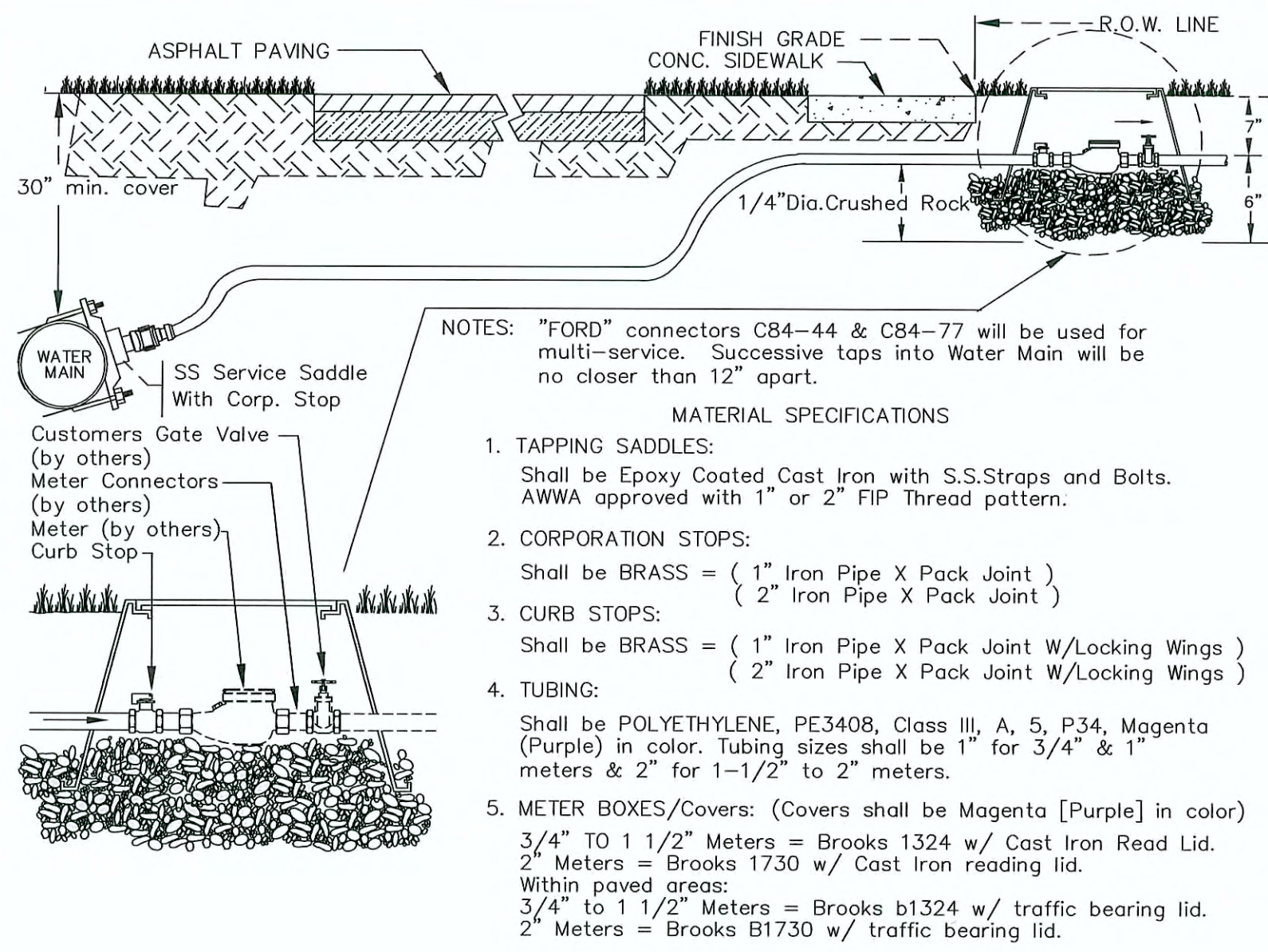
NOTE: THIS SHEET PRESENTS DETAILS WHICH HAVE BEEN DEVELOPED/DESIGNED BY OTHERS AND ARE STANDARDS FOR THE CITY OF NAPLES UTILITIES DEPARTMENT. THEY HAVE BEEN REVIEWED/EVALUATED BY THE ENGINEER OF RECORD AND ARE ACCEPTABLE FOR USE ON THIS PROJECT.

Weston & Sampson
4210 Metro Parkway, Suite 250
Fort Myers, FL 33916
(239) 437-4801
Certificate of Authorization No. 26190
www.westonsampson.com

No.	Date	Dr. By	Chk. By	App. By	Description
1	02/14	DCM	RLH	JAW	ISSUED FOR BIDDING

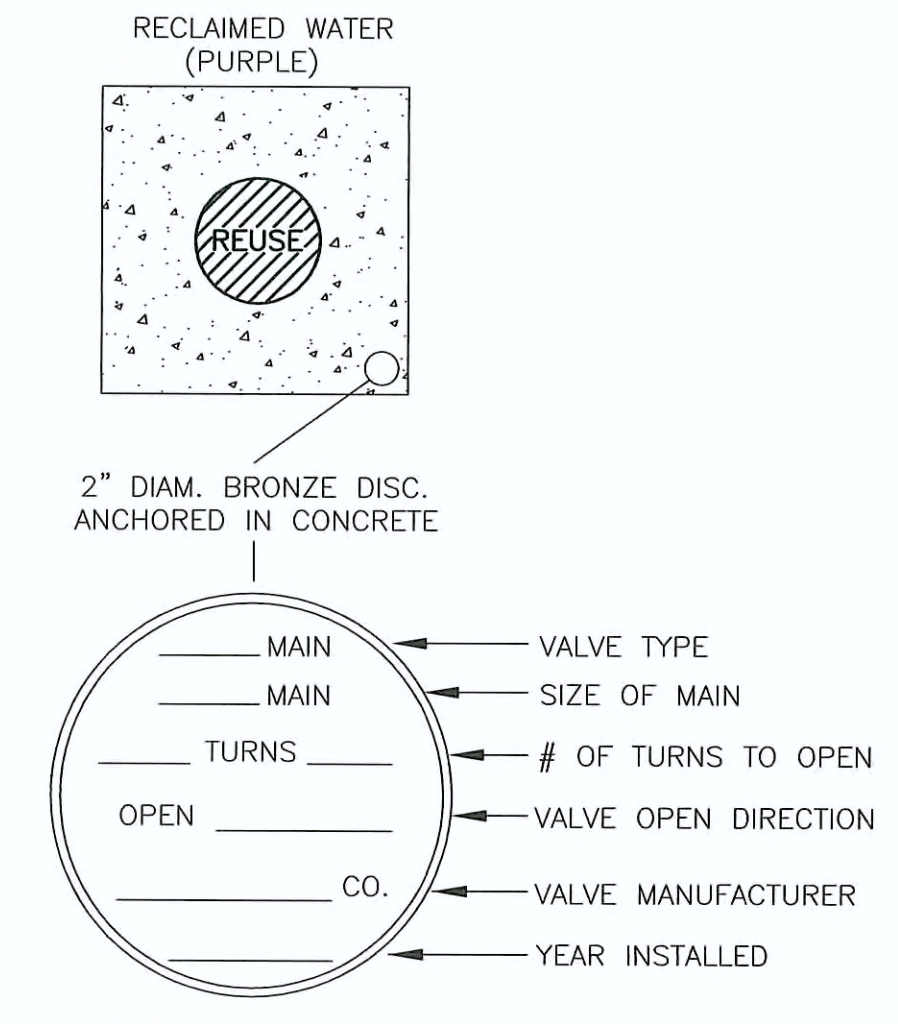
(RECLAIMED WATER)
JEFFREY A. WILSON, P.E.
FL LICENSE NO. 47192

CITY OF NAPLES, FLORIDA
RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
OPTION T-2
CITY OF NAPLES STANDARD DETAILS
SCALE: NOTED
CONTRACT: RMW2
JOB NO.: 2120311
DR. BY: []
DES. BY: []
CHK. BY: []
APP. BY: []

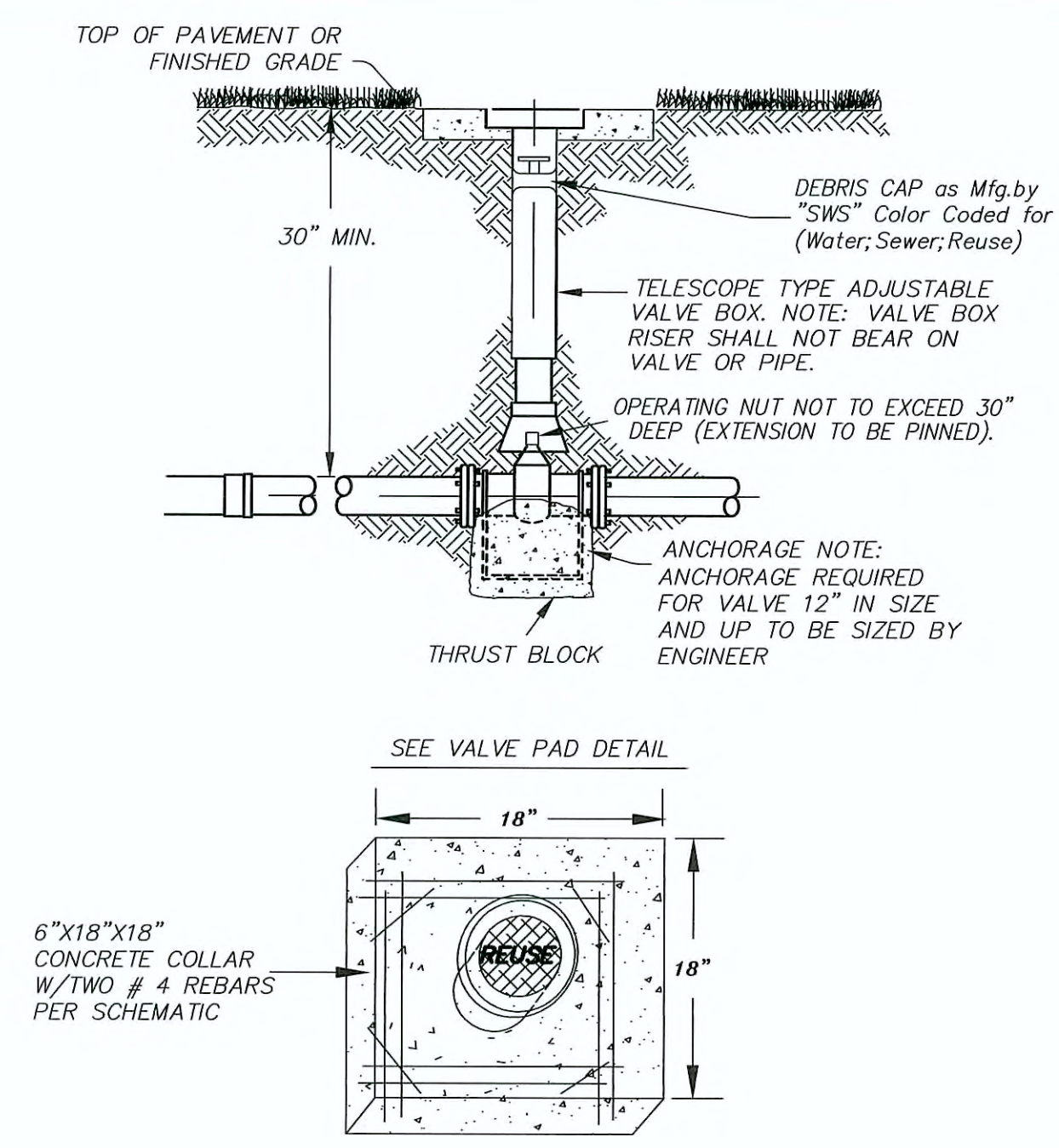


- NOTES: "FORD" connectors C84-44 & C84-77 will be used for multi-service. Successive taps into Water Main will be no closer than 12" apart.
- MATERIAL SPECIFICATIONS
- TAPPING SADDLES:
Shall be Epoxy Coated Cast Iron with S.S.Straps and Bolts. AWWA approved with 1" or 2" FIP Thread pattern.
 - CORPORATION STOPS:
Shall be BRASS = (1" Iron Pipe X Pack Joint)
(2" Iron Pipe X Pack Joint)
 - CURB STOPS:
Shall be BRASS = (1" Iron Pipe X Pack Joint W/Locking Wings)
(2" Iron Pipe X Pack Joint W/Locking Wings)
 - TUBING:
Shall be POLYETHYLENE, PE3408, Class III, A, 5, P34, Magenta (Purple) in color. Tubing sizes shall be 1" for 3/4" & 1" meters & 2" for 1-1/2" to 2" meters.
 - METER BOXES/Covers: (Covers shall be Magenta [Purple] in color)
3/4" TO 1 1/2" Meters = Brooks 1324 w/ Cast Iron Read Lid.
2" Meters = Brooks 1730 w/ Cast Iron reading lid.
Within paved areas:
3/4" to 1 1/2" Meters = Brooks b1324 w/ traffic bearing lid.
2" Meters = Brooks B1730 w/ traffic bearing lid.

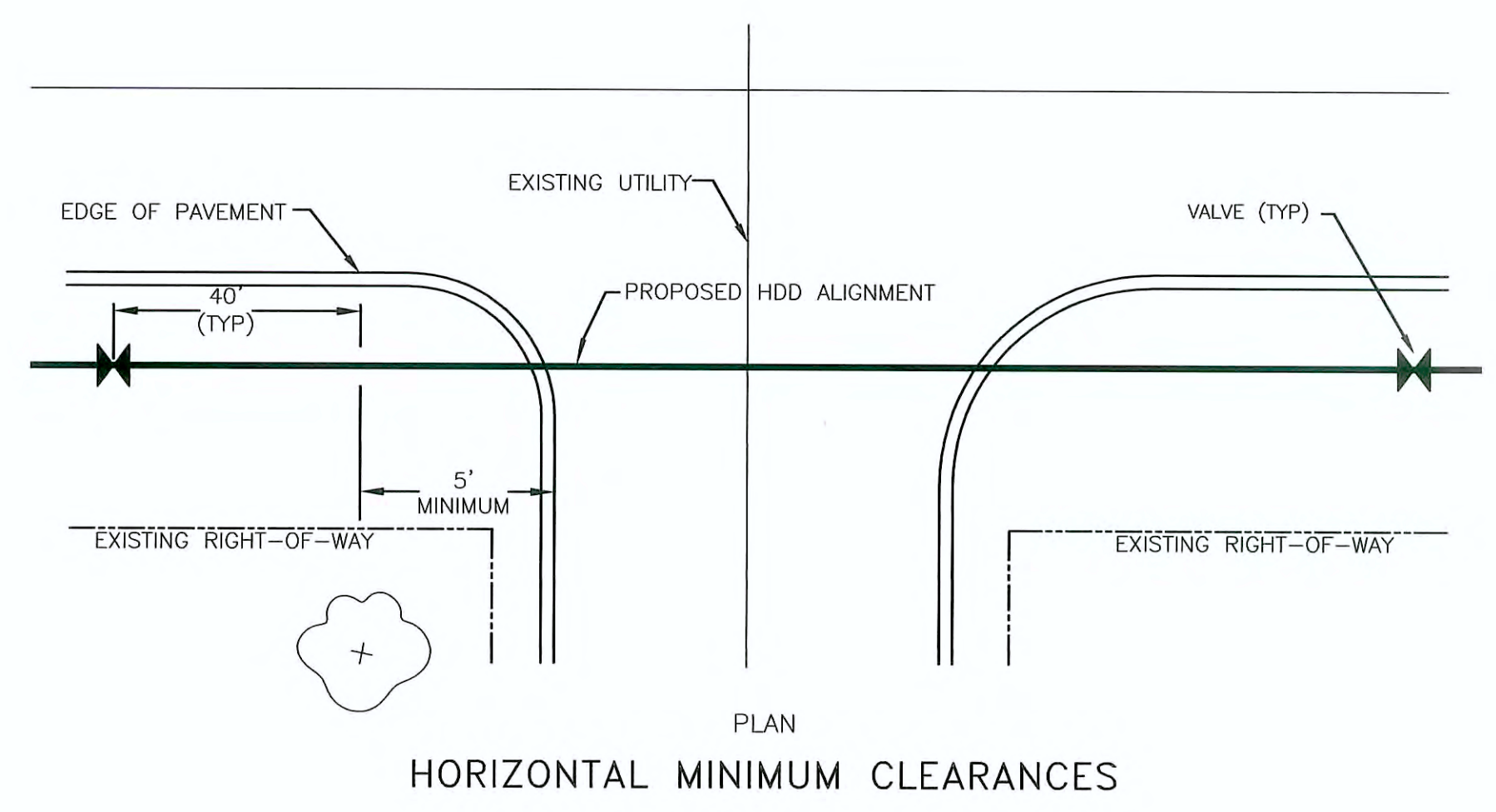
RECLAIMED WATER METER SETTING DETAIL
N.T.S.



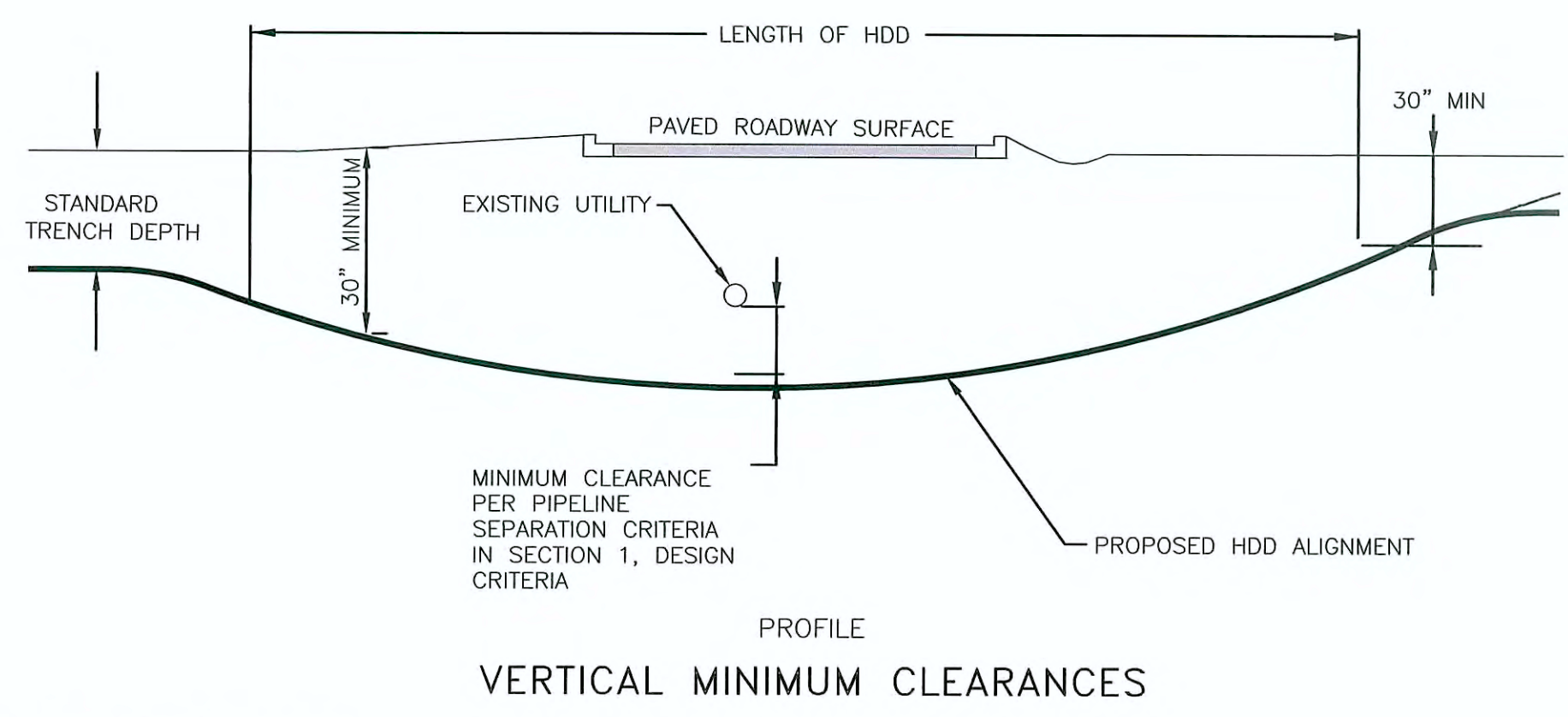
VALVE PAD DETAIL
N.T.S.



TYPICAL IN-LINE VALVE
N.T.S.



HORIZONTAL MINIMUM CLEARANCES



VERTICAL MINIMUM CLEARANCES

HDD INSTALLATION NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH SECTIONS 1 AND 02300 OF THE CITY UTILITIES STANDARDS MANUAL.
- ALL HDD INSTALLATION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE FLORIDA D.O.T. UTILITY ACCOMMODATIONS MANUAL AND THE CITY UTILITIES STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED AGENCIES AND COORDINATION WITH ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL CONSTRUCTION MATERIALS, INCLUDING DRILLING FLUID, SHALL BE REMOVED FROM THE SITE PRIOR TO RESTORATION OF DISTURBED AREAS.
- ALL RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY UTILITIES STANDARD MANUAL.
- EXCAVATIONS SHALL BE RESTORED IN ACCORDANCE WITH THE CITY UTILITIES STANDARD MANUAL AND STANDARD DETAILS.
- ALLOW 40' BETWEEN VALVE AND HDPE TO PVC TRANSITION COUPLING. DISTANCE LESS THAN 40' REQUIRES APPROVAL OF DEVIATION. THE 40' LENGTH SHALL NOT INCLUDE BRANCHES/TEES IN THE PIPING BETWEEN VALVE AND END OF CASING.
- VALVES AT EACH END OF THE HDD ARE REQUIRED FOR NUMBERED COUNTY ROADS, STATE ROADS AND AT INTERSECTIONS WITH NUMBERED COUNTY ROADS AND STATE ROADS.

TYPICAL HORIZONTAL DIRECTIONAL DRILL (HDD) UNDER ROADWAY DETAIL
N.T.S.

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No.	Date	Dr. By	Chk. By	App. By	Description
1	02/14	DCM	RLH	JAW	ISSUED FOR BIDDING

(RECLAIMED WATER)
Jeffrey A. Wilson, P.E.
FL License No. 41752

CITY OF NAPLES, FLORIDA
RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
OPTION T-2

CITY OF NAPLES STANDARD DETAILS

SCALE: **NAPLES RMM2**

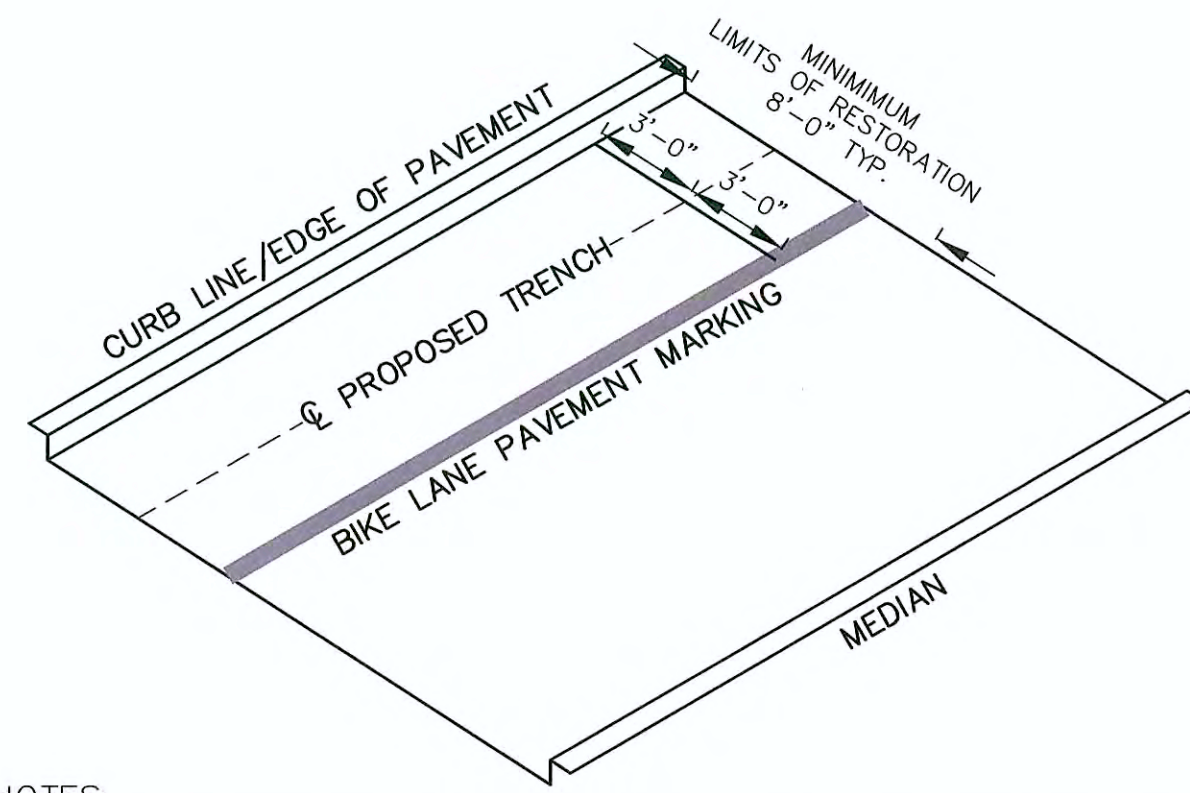
CONTRACT: **NOTED**

JOB NO.: **2120311**

DR. BY: **DCM**

CHK. BY: **RLH**

APP. BY: **JAW**

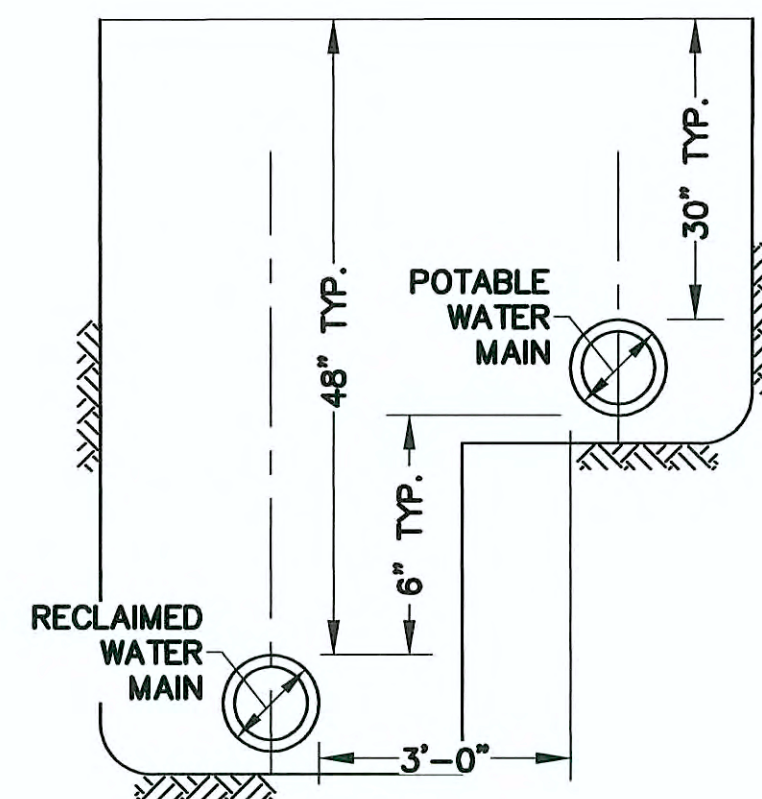


NOTES:

1. PROPOSED RECLAIMED WATER MAIN TO BE INSTALLED 3'-0" FROM CURB LINE IN THE EXISTING BIKE LANE ON GULF SHORE BOULEVARD EXCEPT IN LOCATIONS WHERE ADDITIONAL SPACE IS REQUIRED TO ACHIEVE MINIMUM HORIZONTAL CLEARANCE FROM THE EXISTING POTABLE WATER MAIN.
2. SEE PAVEMENT RESTORATION DETAIL FOR PAVING LIMITS AND PAVEMENT PROFILE.

PROPOSED RECLAIMED WATER MAIN LOCATION

N.T.S.



RECLAIMED WATER MAIN PARALLEL TO POTABLE WATER MAIN

N.T.S.

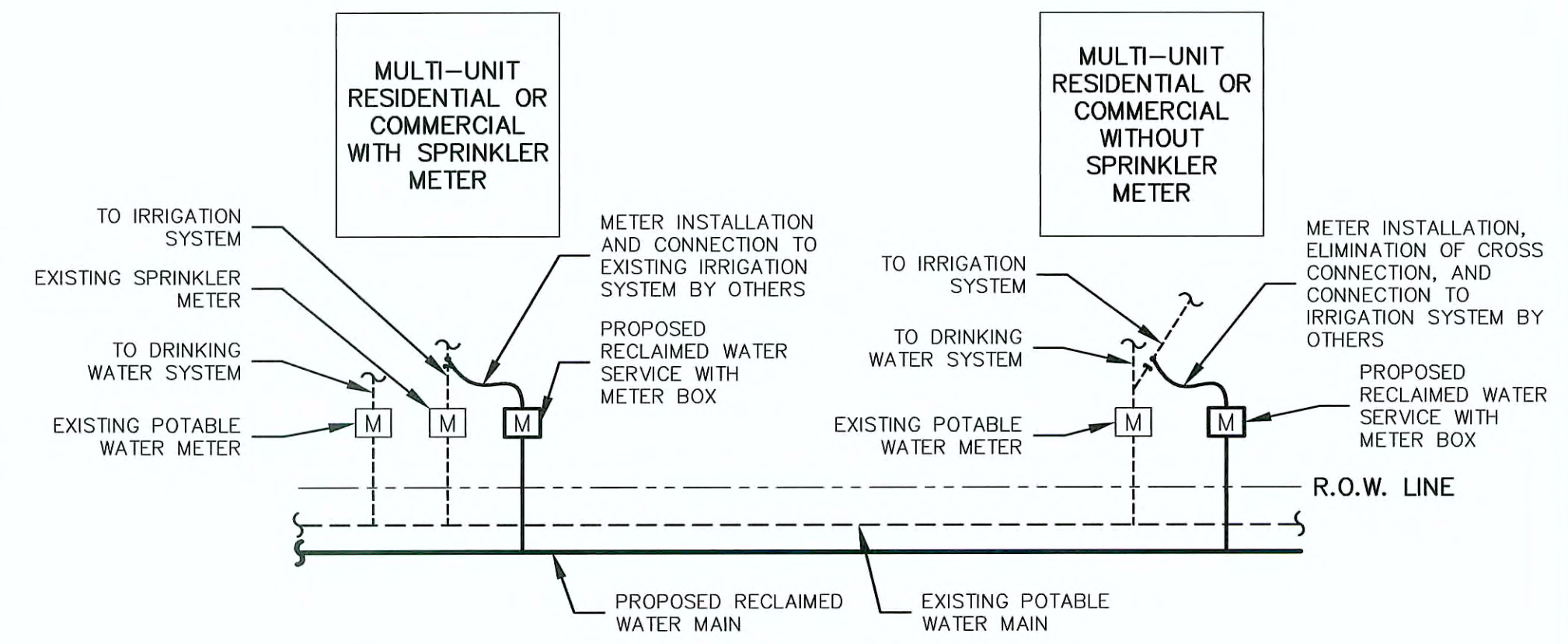
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING AT CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	WATER MAIN 3'-0" MIN.	WATER MAIN 12" MIN. EXCEPT STORM SEWER: 12" PREFERRED AND 6" MIN.	ALTERNATE 3'-0" MIN. WATER MAIN
VACUUM SANITARY SEWER	WATER MAIN 10'-0" PREFERRED 3'-0" MIN.	WATER MAIN 12" PREFERRED 6" MIN.	ALTERNATE 3'-0" MIN. WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (4)	WATER MAIN 10'-0" PREFERRED 6'-0" MIN. (3)	WATER MAIN 12" MIN. EXCEPT GRAVITY SEWER: 12" PREFERRED AND 6" MIN.	ALTERNATE 6'-0" MIN. WATER MAIN
ON-SITE SEWAGE TREATMENT AND DISPOSAL	10'-0" MIN.	--	--

NOTES:

1. WATER MAIN SHALL CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
3. 3'-0" FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6" ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

N.T.S.

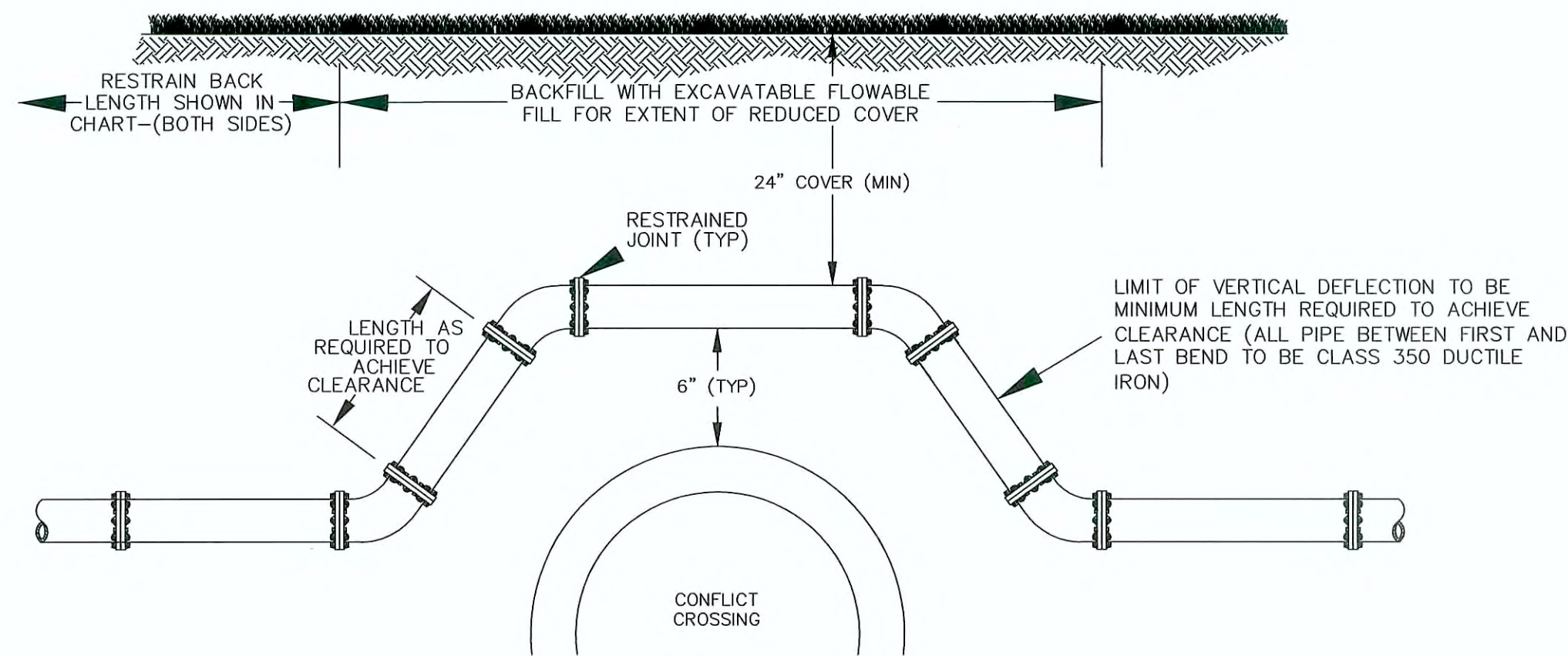


NOTES:

1. CONTRACTOR TO INSTALL APPROPRIATELY SIZED TAPPING SADDLE, CORPORATION AND CURB STOPS, SERVICE PIPING, AND METER BOX (WITHOUT METER) FOR ALL SERVICE CONNECTIONS.
2. FINAL LOCATION OF METER BOX TO BE APPROVED BY THE CITY AND THE PROPERTY OWNER.

RECLAIMED WATER SERVICE TRANSFER DETAIL

N.T.S.



*RESTRAINED JOINT PIPE DISTANCES FOR NEW PIPE (IN FEET)				
PIPE SIZE	90° BEND	45° BEND	22 1/2°	11 1/4°
8"	74	31	15	7
10"	87	36	17	9
12"	100	41	20	10
16"	123	51	24	12
20"	143	59	29	14
24"	162	67	32	16
30"	184	76	37	18
36"	207	86	41	20

*FOR FITTINGS NOT SHOWN HERE, REFER TO PIPE RESTRAINT DETAIL DRAWING

NOTES:

1. REDUCED COVER CROSSING MAY ONLY BE COMPLETED WITH THE PRIOR APPROVAL OF THE OWNER.

REDUCED COVER CONFLICT CROSSING DETAIL

N.T.S.

Weston&Sampson
 4210 Metro Parkway, Suite 250
 Fort Myers, FL 33916
 (239) 437-4801 (800) 5AMPSON
 Certificate of Authorization No. 26190
 www.westonandsampson.com

No.	Date	Dr. By	Chk. By	App. By	Description
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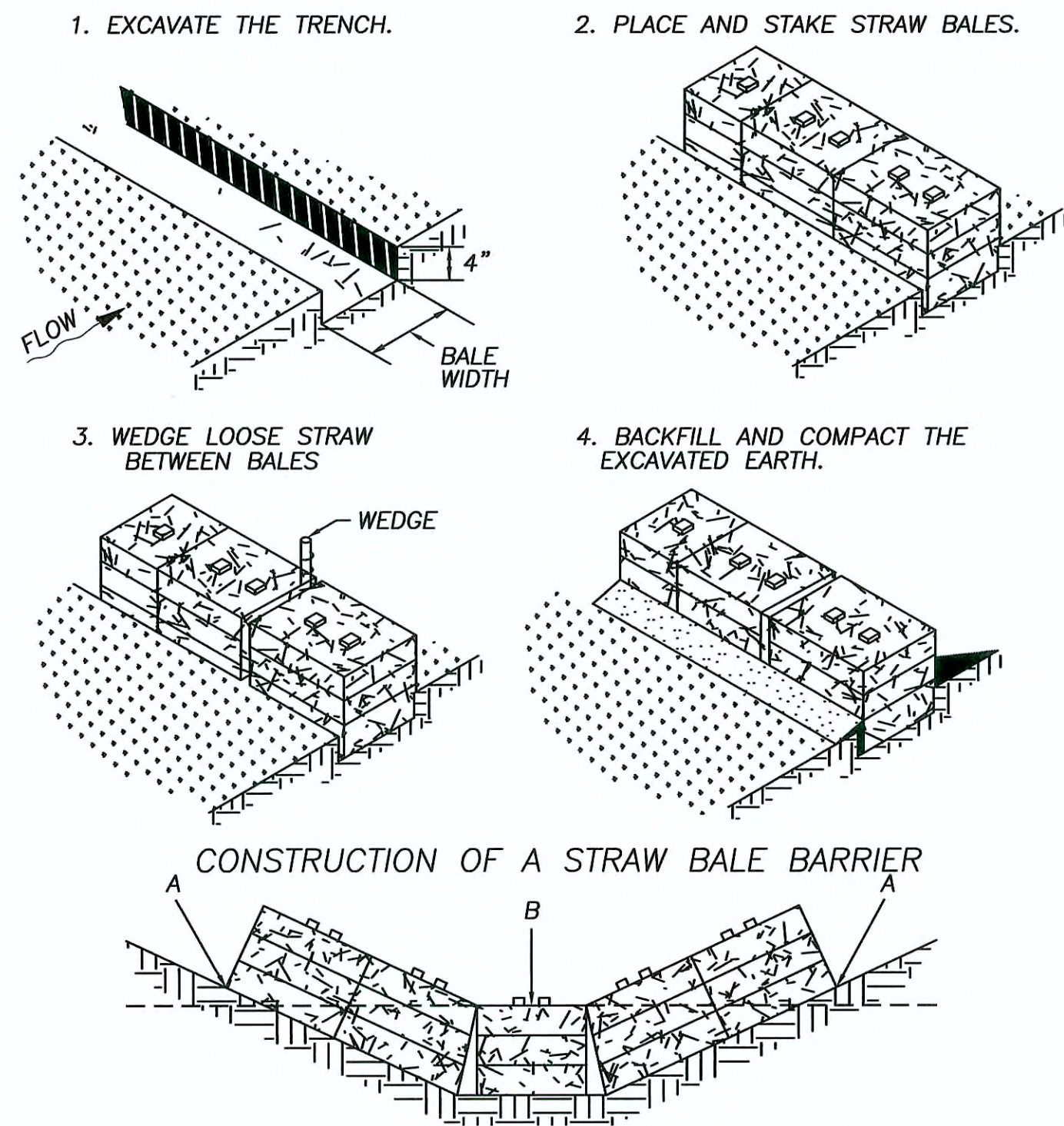
(RECLAIMED WATER)

 Jeffrey A. Wilson, P.E.
 FL License No. 47192

CITY OF NAPLES, FLORIDA
 RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
 OPTION T-2
STANDARD DETAILS
 CONTRACT: NOTED
 SCALE: RMW2
 JOB NO.: 2120311
 DR. BY: []
 DSN. BY: []
 CHK. BY: []
 APP. BY: []

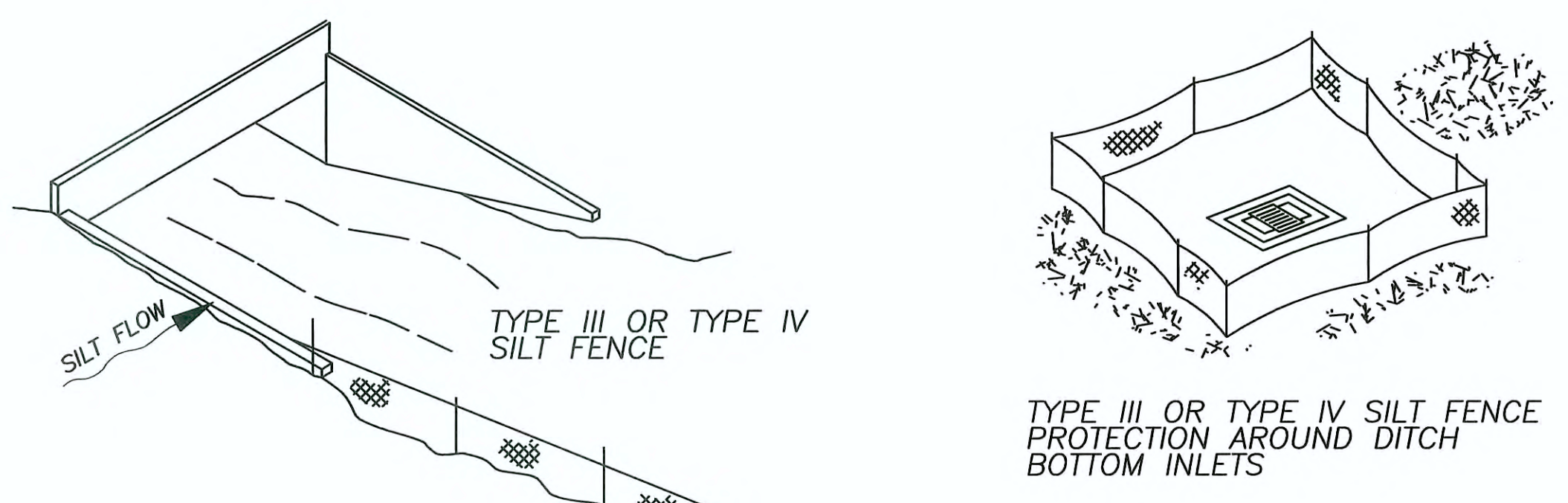
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 SHEET 9 OF 10

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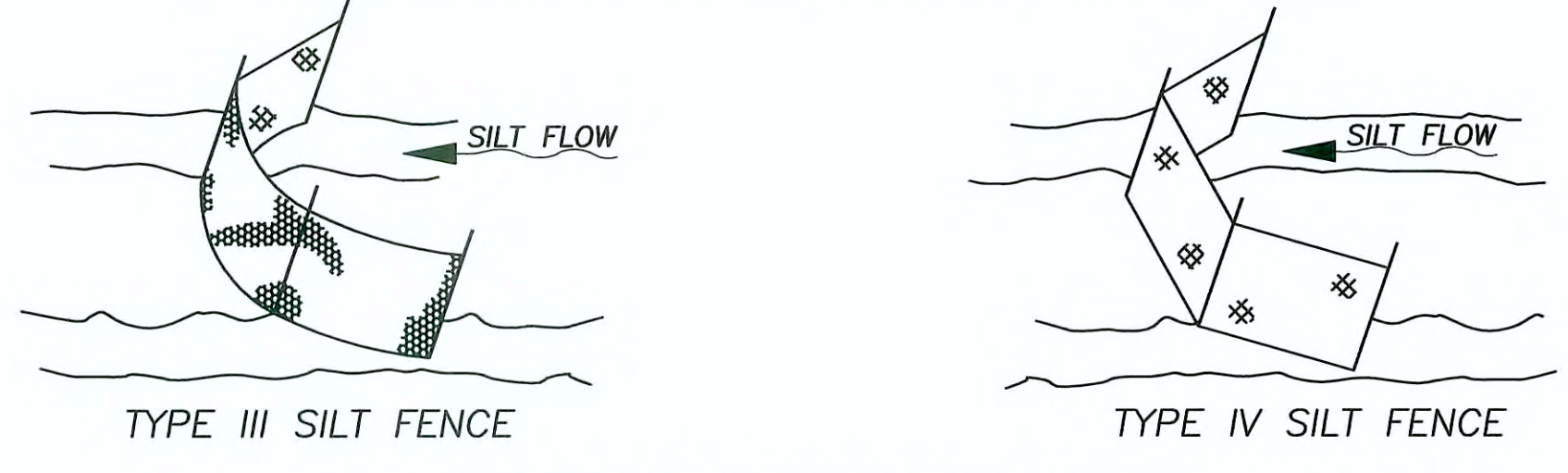


CONSTRUCTION OF A STRAW BALE BARRIER

POINTS A SHOULD BE HIGHER THAN POINT B
PROPER PLACEMENT OF A STRAW BALE BARRIER IN DRAINAGE WAY

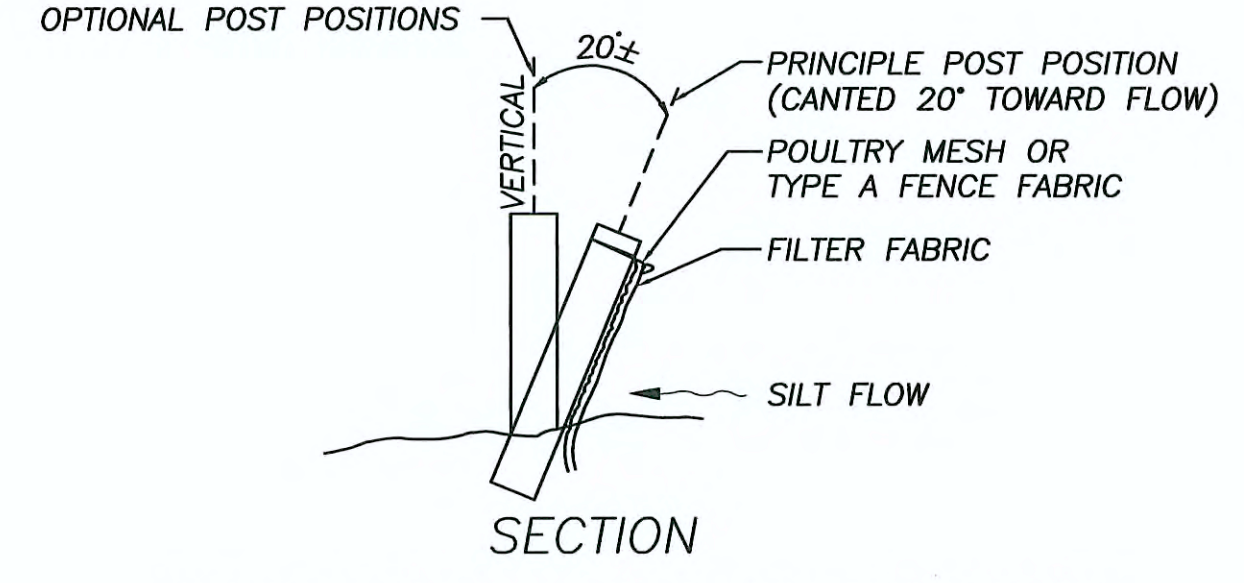
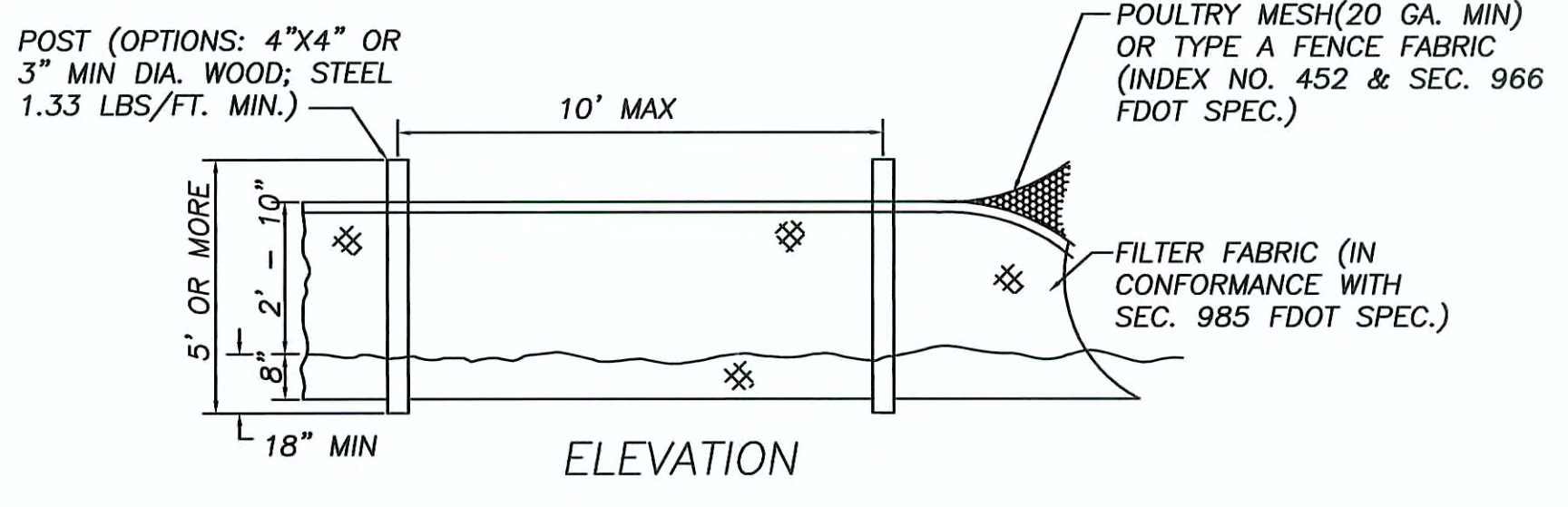
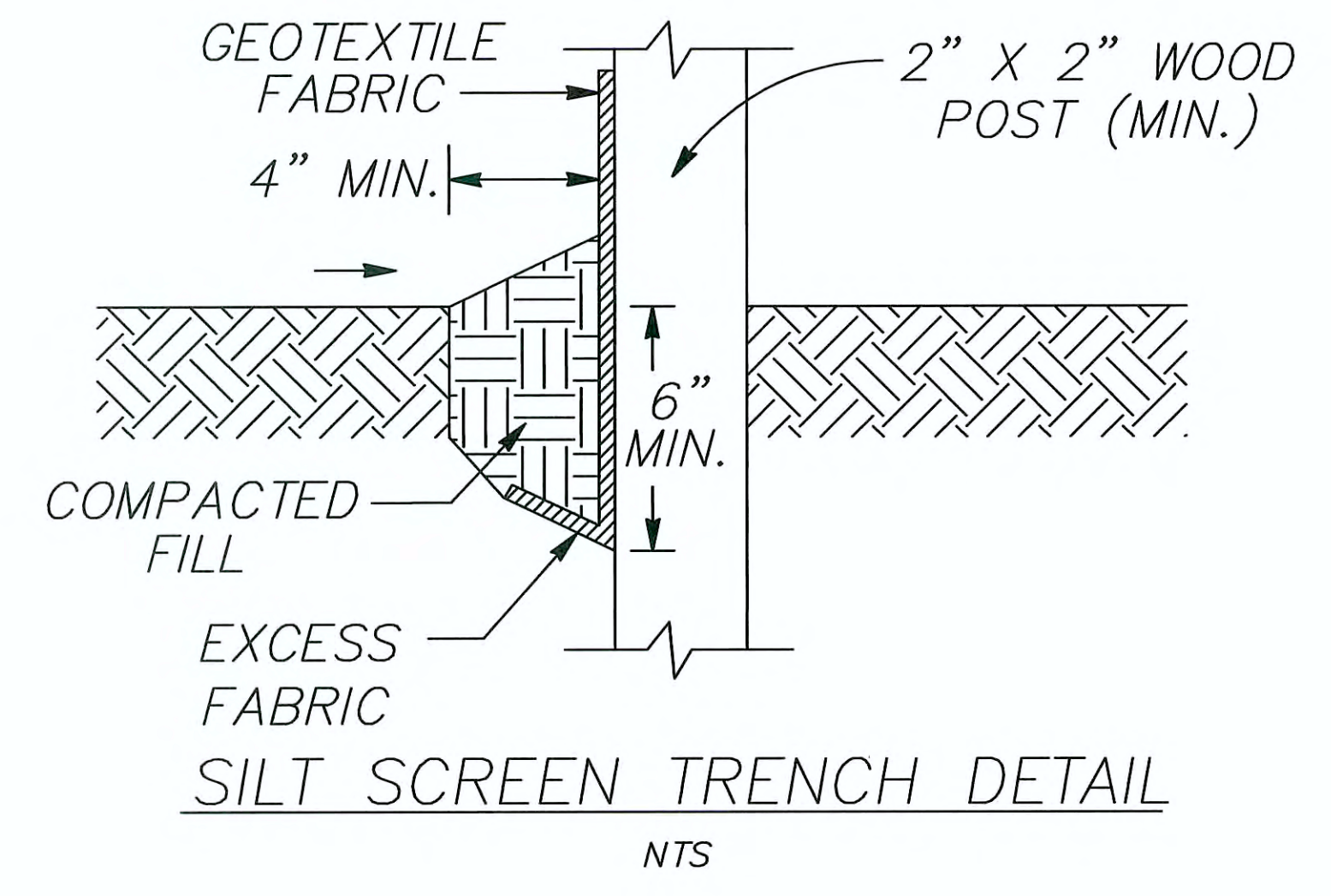
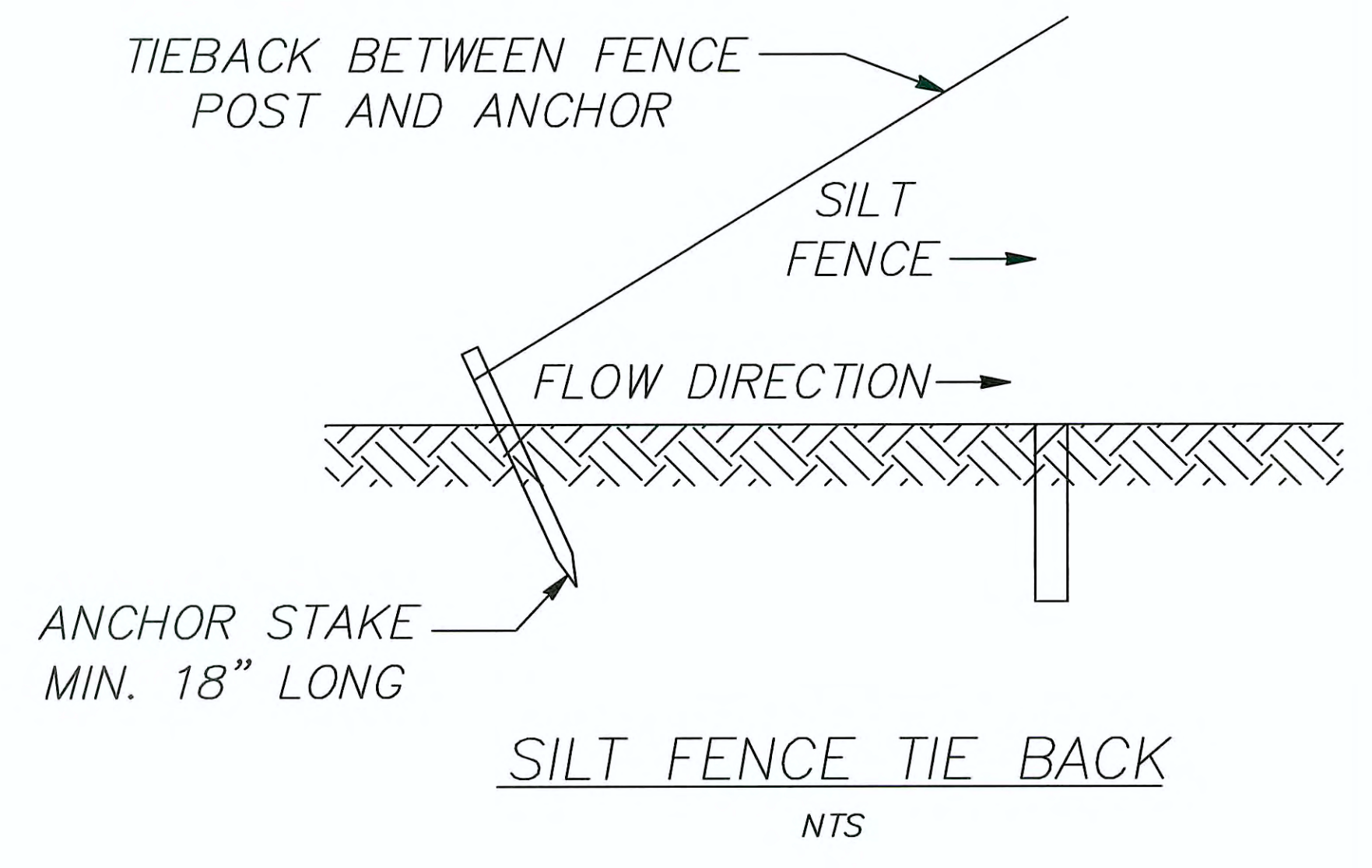


DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

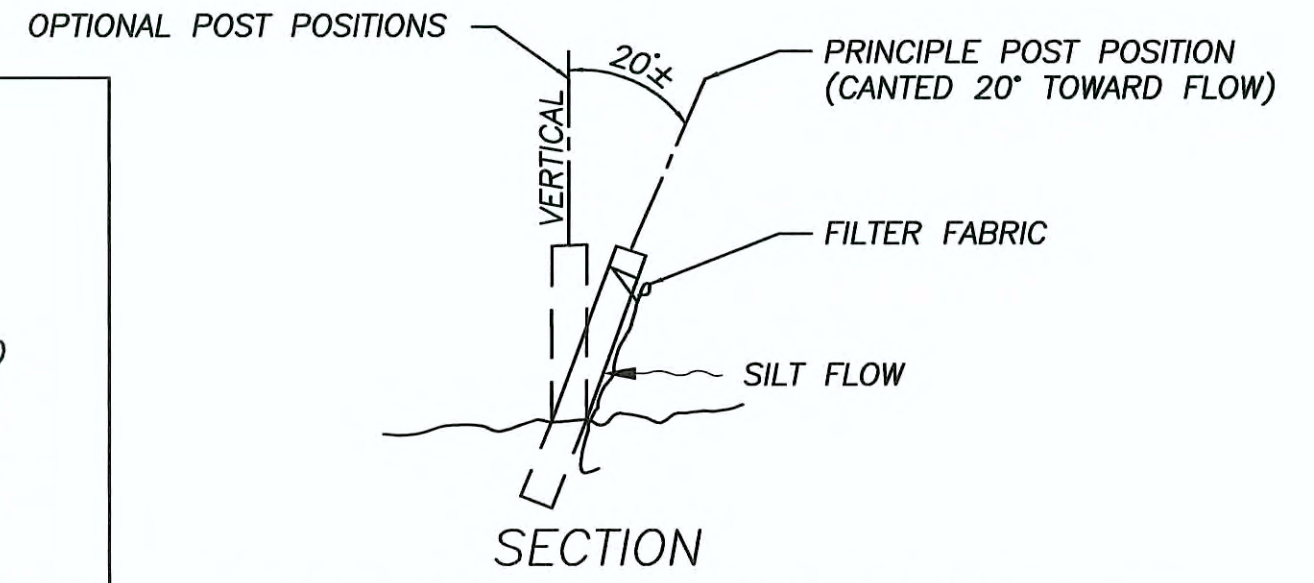
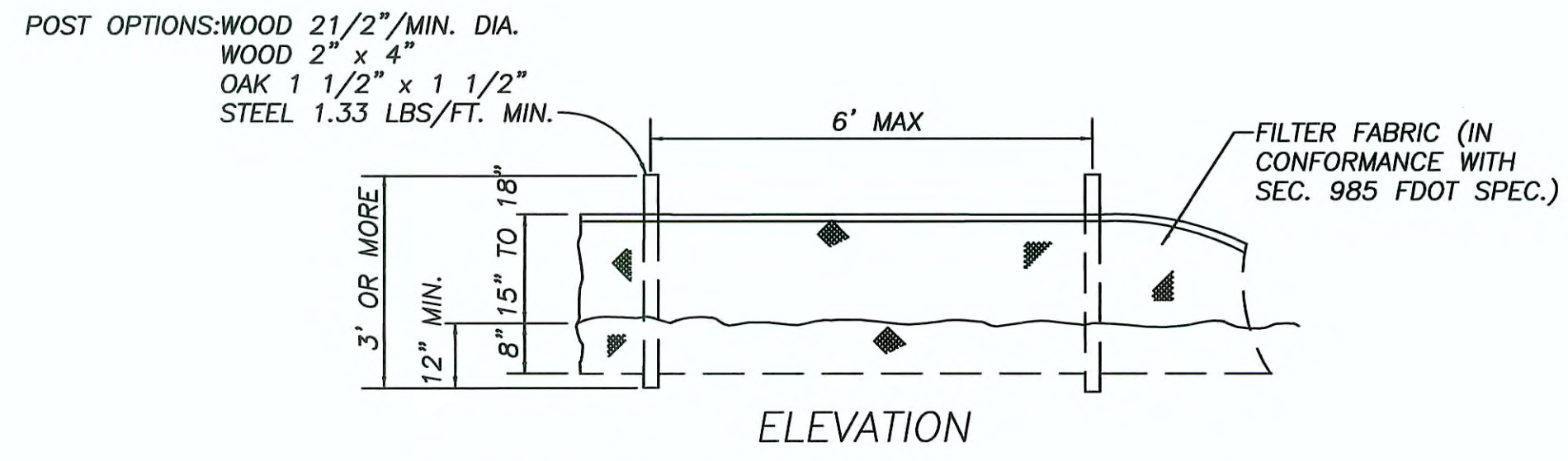


NOTE: SPACING FOR TYPE IV AND TYPE V FENCES TO BE IN ACCORDANCE WITH DITCH INSTALLATIONS AT DRAINAGE

SILT FENCE APPLICATIONS

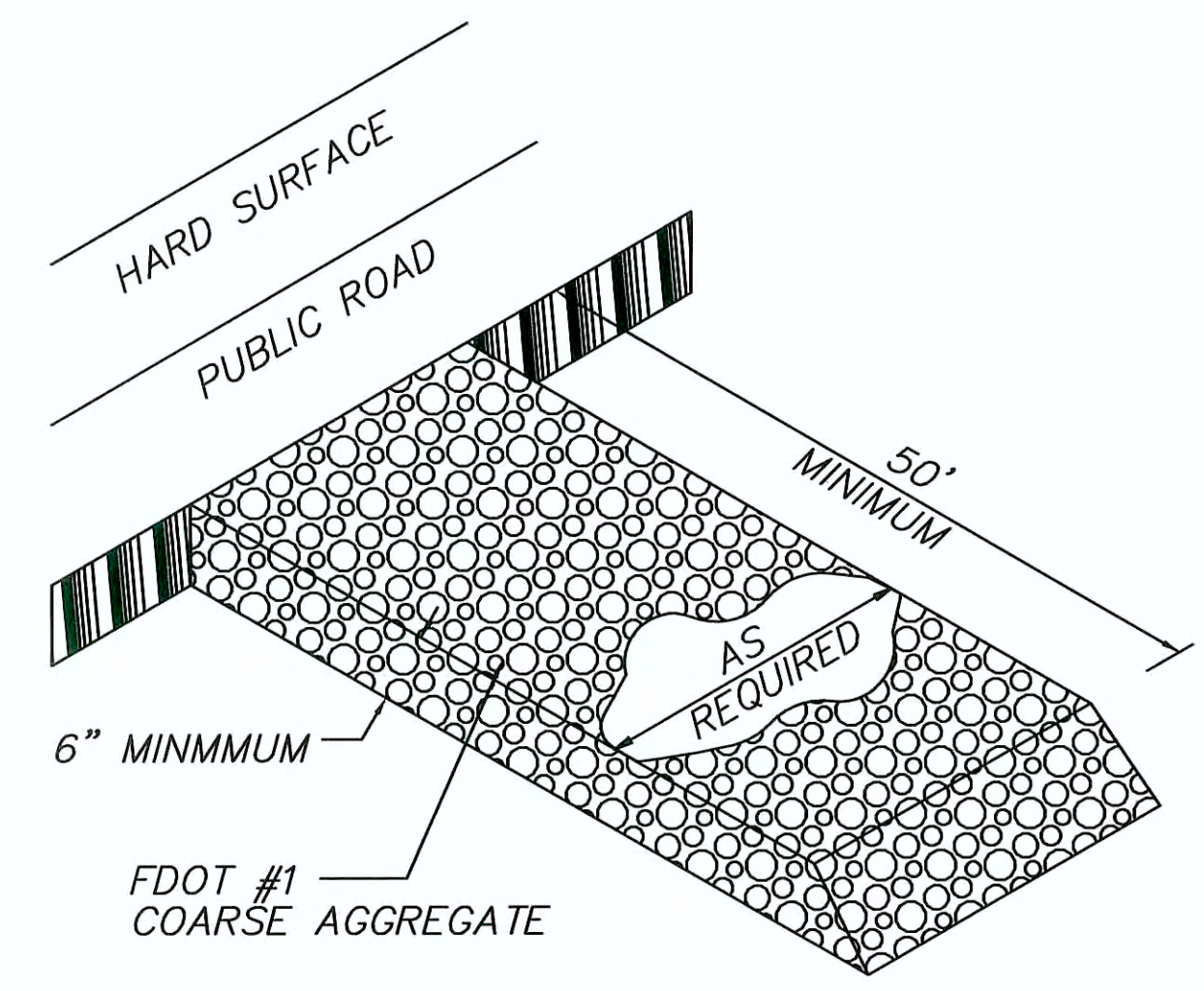


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF)
TYPE IV SILT FENCE



NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF)
TYPE III SILT FENCE

- NOTE:**
1. THE USE OF STRAW BALE BARRIERS AND SILT FENCE SHALL BE INCREASED AS NECESSARY TO CONTAIN EROSION.
 2. CONTRACTOR SHALL INSTALL SILT FENCE AND HAY OR STRAW BALE BARRIERS PER FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS INDEX 102 OR APPROVED EQUIVALENT PRIOR TO ANY SITE ACTIVITIES.
 3. REFER TO THE "PAVING, GRADING AND DRAINAGE PLAN" AND "DEMOLITION PLAN" FOR ADDITIONAL INFORMATION.



THIS IS A COPY OF A SIGNED/SEALED DOCUMENT THAT HAS BEEN FILED WITH THE CITY OF NAPLES, FL UTILITIES DEPARTMENT

ISSUED FOR BIDDING	Description
JAW	App. By
RLH	Ck. By
DCM	Dr. By
1 02/14	Date
No.	No.

(RECLAIMED WATER)
 Jeffrey A. Wilson, P.E.
 FL License No. 41752

CITY OF NAPLES, FLORIDA
 RECLAIMED WATER DISTRIBUTION SYSTEM EXPANSION
 OPTION T-2

BEST MANAGEMENT PRACTICES DETAILS

CADD NO. NAPLES RMW2
 SCALE: NOTED
 CONTRACT: NOTED
 JOB NO. 2120311
 DR. BY
 DSN. BY
 CHK. BY
 APP. BY