The Enclosed Document Is Provided For Your Convenience.

Please Email ALL Questions:

MailTo:ContractAdministration@TampaGov.net

City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456

BILL OF MATERIALS

BILL OF MATERIALS FOR CONTRACTOR REFERENCE ONLY – CONTRACTOR SHALL BE RESPONSIBLE FOR COMPUTING MATERIAL QUANITTIES FROM PLAN AND PROFILE SHEETS WITHIN SET.

SIZE	ITEM	TYPE	EST.	ACT.

NOTE

1. Existing utilities, buildings, ground elevations, and other features are shown according to the best information available. All conditions and dimensions affecting required work shall be verified by contractors.

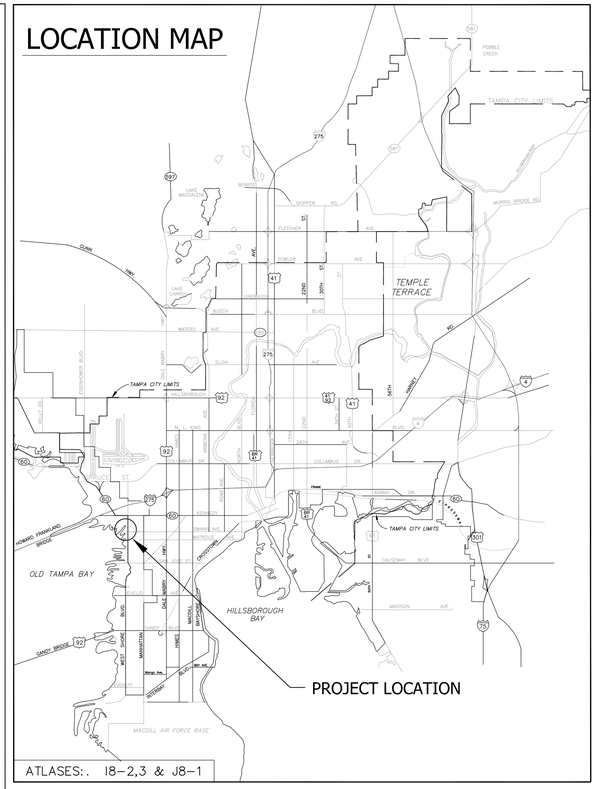
PERMIT ■ City ☐ County ☐ State ■ DEP			
CALL 48 HRS. BEFORE YOU DIG "Sunshine State One Call of Fla. Inc." 811	Date / Request No.		
Contractor TBD – BID CONTRACTOR			
Inspector			
Job started	Completed		
Job stopped	Reason		
Pressure Test	Date / Allowable Leakage / Actual Leakage / Inspector		
Re-Test			
Bacteriological Test	No. 1 Date / Results	No. 2 Date / Results	Re-test Date / Results
Final Inspection	Date / Inspector	Reinspection	Date / Inspector
Acceptance Date	Const. Eng.		
Record Drawing Submitted	Accepted / Approved by	Date	

LEGEND

PROPOSED	EXISTING	DESCRIPTION
	10	BASE LINE (SURVEY LINE)
		CENTER LINE
R/W	R/W	R/W LINE
		LIMITED ACCESS R/W LINE
		PROPERTY LINE
		EASEMENT LINE
		IRON PIPE
		CONCRETE MONUMENT
8" G	8" G	GAS MAIN
8" ST	8" ST	STORM SEWER
8" SS	8" SS	SANITARY SEWER
6" FM	6" FM	SANITARY FORCE MAIN
4" F	4" F	FUEL LINE
ELEC	ELEC	ELECTRIC CABLE
T	T	TELEPHONE CABLE
TV	TV	TELEVISION CABLE
	6" W	WATER MAIN
	6" RCM	RECLAIMED WATER MAIN
		FIRE HYDRANT ASSEMBLY (INCLUDES VALVE & TEE)
		WATER VALVE
		DETECTOR CHECK VALVE
		DOUBLE DETECTOR CHECK VALVE – IN VAULT
		DOUBLE DETECTOR CHECK VALVE – ABOVE GROUND
		VAULT
		CASING PIPE (JACK & BORE)
	R	RECLAIMED WATER METER
SINGLE DUAL / SINGLE DUAL	SINGLE DUAL / SINGLE DUAL	WATER METER
	M	METER TO BE TRANSFERRED
B	B	BACK FLOW PREVENTER
		WET TAP
		SLEEVE, BEND, TEE, CROSS, PLUG, REDUCER, BLOW-OFF
E	E	ELECTRIC MANHOLE OR PULL BOX
T	T	TELEPHONE MANHOLE OR UTILITY BOX
		MANHOLE – SANITARY, STORM
or	or	VALVE
	10' x.xx	SANITARY LATERAL WITH DEPTH AT R/W LINE.

PROPOSED	EXISTING	DESCRIPTION
		CURB INLET
		GRATE INLET
		CULVERT WITH HEADWALL
		MITERED END SECTION
Proposed 2" G / Proposed 8" W	2" Gas / 8" W	UTILITIES IN PROFILE
		TELEPHONE POLE
		ELECTRIC POLE
		COMBINATION POLE
		LIGHT POLE
		GUY WIRE
		GUY POLE & WIRE
		MAILBOX
		POLYWRAP
		ASPHALT ROADWAY & DRIVES
		BRICK ROADWAYS & DRIVES
		CURB OR CURB & GUTTER
Label	Label	CONCRETE DRIVES & SIDEWALKS
		BUILDING LIMIT
		FENCE
		RAILROAD TRACKS
		SHORELINE
		SWALE
		NARROW DITCH
		WIDE DITCH
		SPRINKLER HEAD
	12"	PINE
	8"	TREE
	6"	PALM
	10"	OAK
	10"	ROOT PRUNE
		SHRUB
		HEDGE
		WOODS/HEAVY BRUSH
		MARSH
	B.M. -25	BENCH MARK & NUMBER
	T.B.M. -15	TEMPORARY BENCH MARK & NUMBER
4.3	4.3	SPOT ELEVATIONS
		SIGN
S		SAMPLE TAP LOCATION
C		CHLORINE INJECTION POINT
M		TRANSFER METER SERVICE TO NEW MAIN

LOCATION MAP



ATLASES:. I8-2,3 & J8-1

CITY OF TAMPA WATER DEPARTMENT

ENGINEERING DIVISION

Culbreath Bayou (CIP 2017)

FILE NAME

8397

WORK ORDER NUMBER

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST. 5E
TAMPA, FLA. 33602
P.E. #79453

RORY A. JONES LICENSE No 79453 STATE OF FLORIDA PROFESSIONAL ENGINEER

SEAL

CITY OF TAMPA CONSTRUCTION NOTES

GENERAL

1. WATER MAIN TAPS SHALL BE MADE WITH CUTTERS DESIGNED FOR THE PIPE TYPE BEING TAPPED. SIZE-ON-SIZE TAPS SHALL BE MADE WITH MJ TAPPING SLEEVE, OFF-SIZE TAPS CAN BE WITH STEEL TAPPING SLEEVES. TAPPING SLEEVE INSTALLATION AND TAP MUST BE COORDINATED WITH (AND WITNESSED BY THE CITY) INSPECTOR.
2. NORMAL WORKING HOURS SHALL BE WEEKDAYS FROM 7:30 AM TO 4:00 PM UNLESS OTHERWISE APPROVED BY THE ENGINEER/INSPECTOR.
3. ELEVATION INFORMATION SHOWN ON THESE PLANS IS REFERENCED TO N.A.V.D. 1988 UNLESS OTHERWISE STATED.
4. CONSTRUCTION SHALL BE COORDINATED WITH THE WATER DEPARTMENT PRIOR TO THE START OF THE CONSTRUCTION. CONTACT CITY OF TAMPA CONTRACT ADMINISTRATION DEPARTMENT @ 813-635-3432 TO SCHEDULE A PRE-CONSTRUCTION MEETING A MINIMUM OF 10 WORKING DAYS PRIOR TO THE PLANNED CONSTRUCTION.
6. EXISTING UTILITIES, BUILDINGS, GROUND ELEVATIONS, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. ALL CONDITIONS, DIMENSIONS, AND QUANTITIES AFFECTING REQUIRED WORK SHALL BE VERIFIED BY CONTRACTOR BEFORE BEGINNING WORK OR ORDERING MATERIALS.
7. VALVES ON EXISTING PUBLIC WATER MAINS SHALL BE OPERATED BY CITY PERSONNEL ONLY.
8. ALL PROPOSED WATER LINES SHALL BE MANUFACTURED, INSTALLED, AND TESTED PER THE STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA) AND BY F.A.C.-62-555.
9. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED BY THE CITY FOR ALL PROPOSED ITEMS. ALL SUBMITTALS AND SHOP DRAWINGS SHALL BE HIGH QUALITY PDF DOCUMENTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR RESTRAINING ALL EXISTING PIPE NECESSARY TO MAINTAIN A SAFE CONSTRUCTION AREA AND PERFORM THE WORK SHOWN IN THE PLANS. EXISTING PIPE REQUIRING RESTRAINTS SHALL UTILIZE EXTERIOR BELL RESTRAINTS.
11. THE CONTRACTOR SHALL DEWATER ANY EXCAVATION OR TRENCH TO MAINTAIN A SAFE WORK ENVIRONMENT AND TO ABIDE BY AWWA INSTALLATION STANDARDS. DEWATERING IS AT THE EXPENSE OF THE CONTRACTOR.
12. THE CONTRACTOR IS RESPONSIBLE TO PROTECT ALL TREES (PUBLIC AND PRIVATE) WITHIN THE VICINITY OF PROPOSED CONSTRUCTION IN ACCORDANCE WITH CHAPTER 13 OF THE CITY OF TAMPA CODE, AND STANDARDS THEREIN. EXCAVATION WITHIN THE PRODUCTIVE RADIUS OF TREES REQUIRES ROOT PRUNING WITH THE APPROPRIATE EQUIPMENT TO ASSURE ROOTS ARE SEVERED CLEAN AT THE APPROVED RADIUS - EXCAVATIONS SHALL NOT BE PERFORMED IN TREE ROOT ZONES WITHOUT CUTTING ROOTS CLEANLY -- CUTTING TREE ROOTS VIA BACK HOE IS UNACCEPTABLE. BRANCH PRUNING IS NOT AUTHORIZED WITHOUT APPROVAL FROM THE CITY OF TAMPA PLANNING AND DEVELOPMENT DEPARTMENT, NATURAL RESOURCE SECTION, AND IF AUTHORIZED SHALL BE COMPLETED BY A CERTIFIED ARBORIST.

PERMITS

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHT-OF-WAY PERMITS AND ROADWAY CLOSURES ASSOCIATED WITH THE WORK SHOWN IN THE PLANS.
2. IN ORDER TO OBTAIN ROADWAY CLOSURES OR RIGHT-OF-WAY PERMITS, AT MINIMUM, THE CONTRACTOR MUST SUBMIT DETAILED MAINTENANCE OF TRAFFIC (MOT) PLANS ALONG WITH APPLICATIONS TO THE APPROPRIATE AGENCY. THE MOT(S) SHALL CONFORM TO APPLICABLE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DRAWINGS (MOST CURRENT EDITION). THE GOVERNING AGENCIES MAY REQUIRE ADDITIONAL INFORMATION AND DICTATE SPECIFIC WORK TIME DURING NON-PEAK TRAFFIC HOURS.

PIPE CLEARANCES

1. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES AND SHALL MAINTAIN A MINIMUM OF THREE (3) FEET HORIZONTAL SEPARATION FROM OTHER UTILITIES, EXCEPT STORM, SANITARY, AND GAS, WHICH SHALL MAINTAIN TEN (10) FEET HORIZONTAL SEPARATION, UNLESS OTHERWISE NOTED.
2. WATER MAIN SHALL CROSS ABOVE OTHER PIPES. WHEN WATER MUST BE BELOW, PROVIDE 12" MINIMUM VERTICAL SEPARATION UNLESS OTHERWISE NOTED.
3. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED PIPE CROSSINGS.

INDEX

	DESCRIPTION
1	COVER SHEET
2	KEY SHEET
3	GENERAL NOTES & INDEX
4	BEACHWAY DRIVE - PLAN AND PROFILE SHEETS
5	BEACHWAY DRIVE & IDLEWOOD DRIVE - PLAN AND PROFILE SHEETS
6	IDLEWOOD DRIVE & WOODMERE ROAD - PLAN AND PROFILE SHEETS
7	SYLVAN RAMBLE ROAD - PLAN AND PROFILE SHEETS
8	WOODMERE ROAD - PLAN AND PROFILE SHEETS
9	SWANN AVENUE - PLAN AND PROFILE SHEETS
10	NEPTUNE WAY - PLAN AND PROFILE SHEETS
11	S. ROYAL POINCIANA AVE. & THE RIVIERA STREET - PLAN AND PROFILE SHEETS
12	THE RIVIERA STREET - PLAN AND PROFILE SHEETS
13	WEST NEPTUNE WAY - PLAN AND PROFILE SHEETS
14	ROYAL POINCIANA DRIVE - PLAN AND PROFILE SHEETS
15	S. ROYAL POINCIANA AVE. - PLAN AND PROFILE SHEETS
16	CLEVELAND STREET - PLAN AND PROFILE SHEETS
17	CLEVELAND STREET - PLAN AND PROFILE SHEETS
18	MISC. CROSS SECTIONS
19-22	DETAIL SHEETS

MATERIAL

1. ALL VALVES SHALL BE RIGHT HAND OPEN.
2. POLYWRAP ALL DUCTILE IRON PIPE (D.I.P) FITTINGS AND APPURTENANCES.
3. ALL HARDWARE SHALL BE 304 STAINLESS STEEL, UNLESS OTHERWISE NOTED.
4. ALL BELOW GROUND BENDS SHALL BE MECHANICAL JOINT (MJ).
5. RESTRAIN ALL JOINTS AND FITTINGS PER CONSTRUCTION PLANS AND DETAILS..
6. CONCRETE THRUST BLOCKS SHALL NOT BE USED TO PROVIDE THRUST RESTRAINT. RESTRAINT OF PUSH-ON DIP (OTHER THAN FOR FITTINGS & VALVES) SHALL BE WITH APPROVED PUSH-ON "GRIPPER-TYPE" RESTRAINTS. FITTINGS AND VALVES SHALL BE CONNECTED TO PIPE WITH MEGALUGS, OR APPROVED EQUAL.
7. ALL POTABLE WATER SERVICE LATERAL, AIR RELEASE VALVES, AND TEMPORARY SAMPLE POINTS SHALL BE CONSTRUCTED OF BLUE SDR-9 HIGH DENSITY POLYETHYLENE (HDPE) TUBING. ALL HDPE TUBING SHALL BE INSTALLED WITHIN A CASING AS DEFINED IN THE SPECIFICATIONS AND DETAILS.

TESTING

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL BE PROPERLY PRESSURE TESTED, WITNESSED AND ACCEPTED BY THE CITY. PRESSURE TESTS TO BE PERFORMED IN ACCORDANCE WITH WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY THE ASSIGNED CITY INSPECTOR A MINIMUM OF THREE (3) WORKING DAYS IN ADVANCE OF PERFORMING TESTS. CONTRACTOR SHALL PRESSURE TEST WATER MAINS AT A MINIMUM OF 150 PSI FOR A PERIOD OF 2 HOURS IN ACCORDANCE WITH AWWA C600-87 STANDARDS. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS.
2. ALL SAMPLE, PRESSURE TEST, AND CHLORINATION POINT PIPING SHALL BE COMPLETELY REMOVED PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP SHALL BE CLOSED AND PLUGGED AT THE MAIN.
3. CONTRACTOR SHALL PERFORM CHLORINATION AND HIRE INDEPENDENT FIRMS TO CONDUCT BACTERIOLOGICAL TESTING AS DEFINED IN F.A.C. 62-555.340. CONTRACTOR TO SUPPLY THE CITY WITH AS-BUILTS AND SAMPLE RESULTS NECESSARY TO OBTAIN DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) CLEARANCES BEFORE PLACING METERS OR PIPELINES IN SERVICE.

RESTORATION

1. ROADWAY RESTORATION SHALL BE IN CONFORMANCE WITH CORRESPONDING JURISDICTION'S LATEST STANDARDS.
2. DISTURBANCE TO ANY PROPERTY, PUBLIC OR PRIVATE, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

PROJECT SPECIFIC NOTES:

1. ALL ASPHALT ROADWAY OPEN CUTS WITHIN CITY RIGHT-OF-WAY SHALL BE FULLY MILLED & OVERLAYED (FROM EDGE-OF-PAVEMENT TO EDGE-OF-PAVEMENT) PER TYPICAL PAVING SECTION DETAIL SHOWN ON PAGE 22.

NORTH

Sec. 20–T29S–R18E
Sec. 29–T29S–R18E

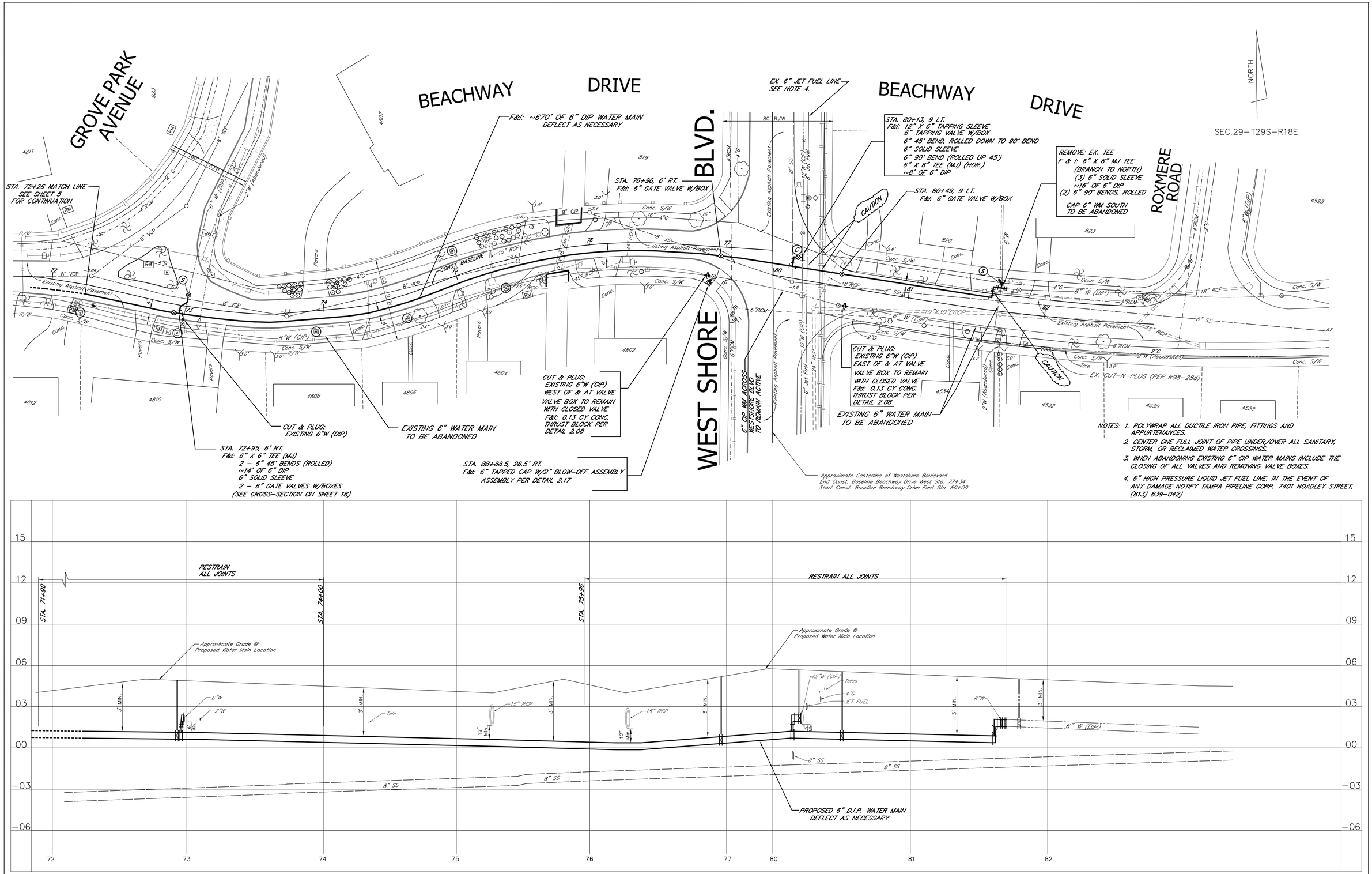
LEGEND

- EXISTING HYDRANT
- PROPOSED HYDRANT
- 2"W EXISTING WATER MAIN
- PROPOSED WATER MAIN
- PROPOSED CUT & PLUG
- 5 SHEET NUMBER

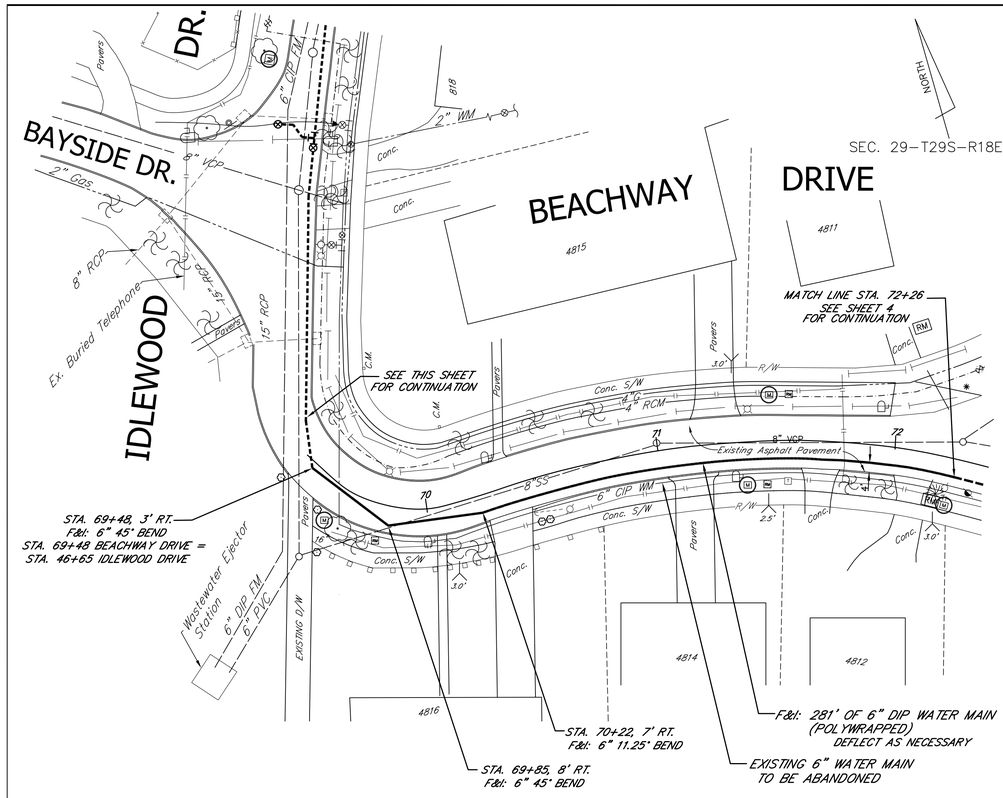
RORY A. JONES
LICENSE
No 79453
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

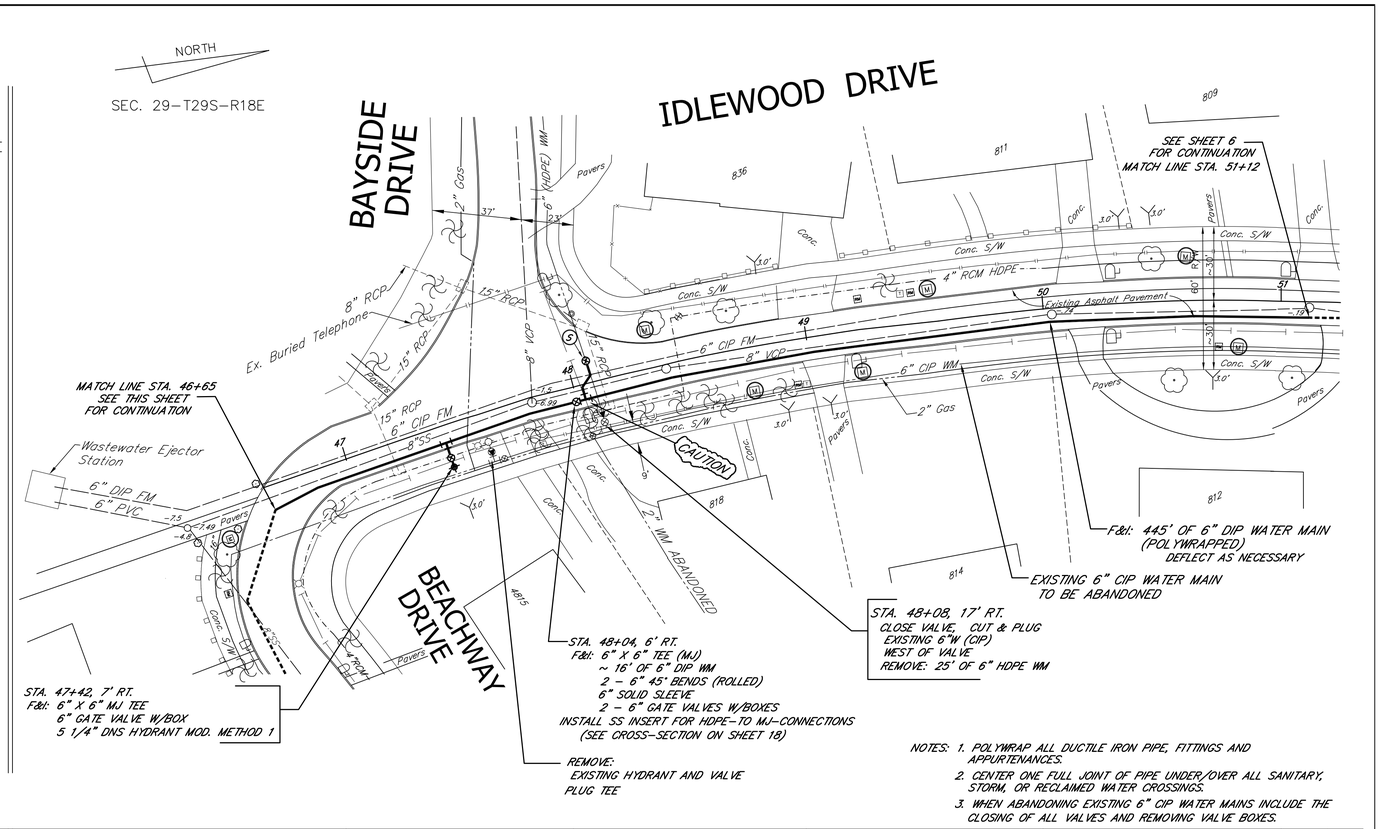
RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

Water Department	FY17 CIP UNLINED CAST IRON MAIN REPLACEMENT	KEY SHEET	NOT TO SCALE	Atlas Page 18–2,3 J8–1	No. Date REVISION By Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 File: Culbreath Bayou (CIP 2017 FILE NUMBER SHEET 2 OF 22 SHEETS

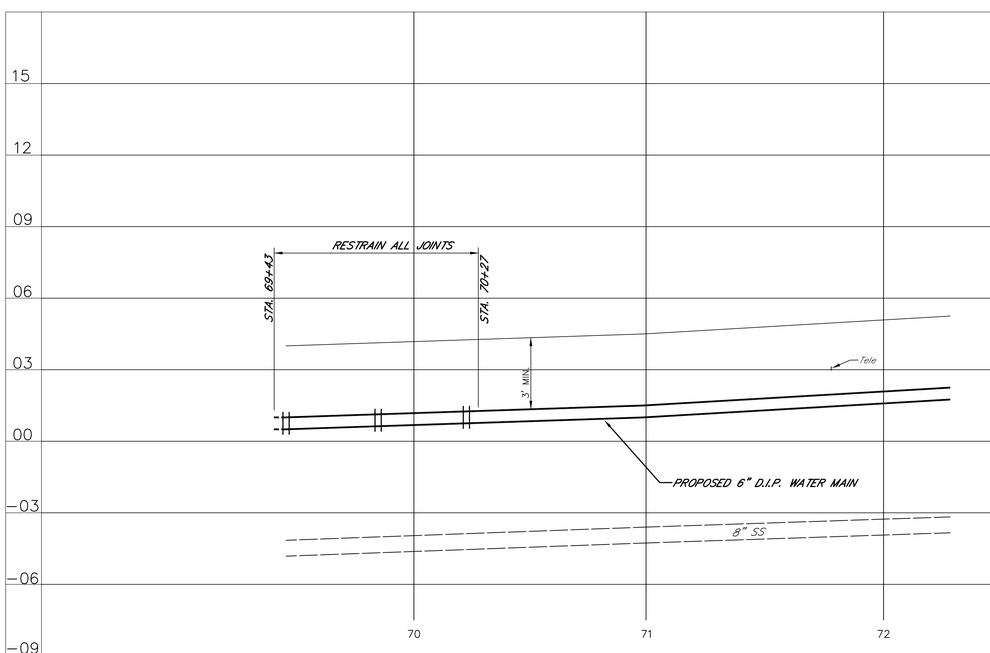


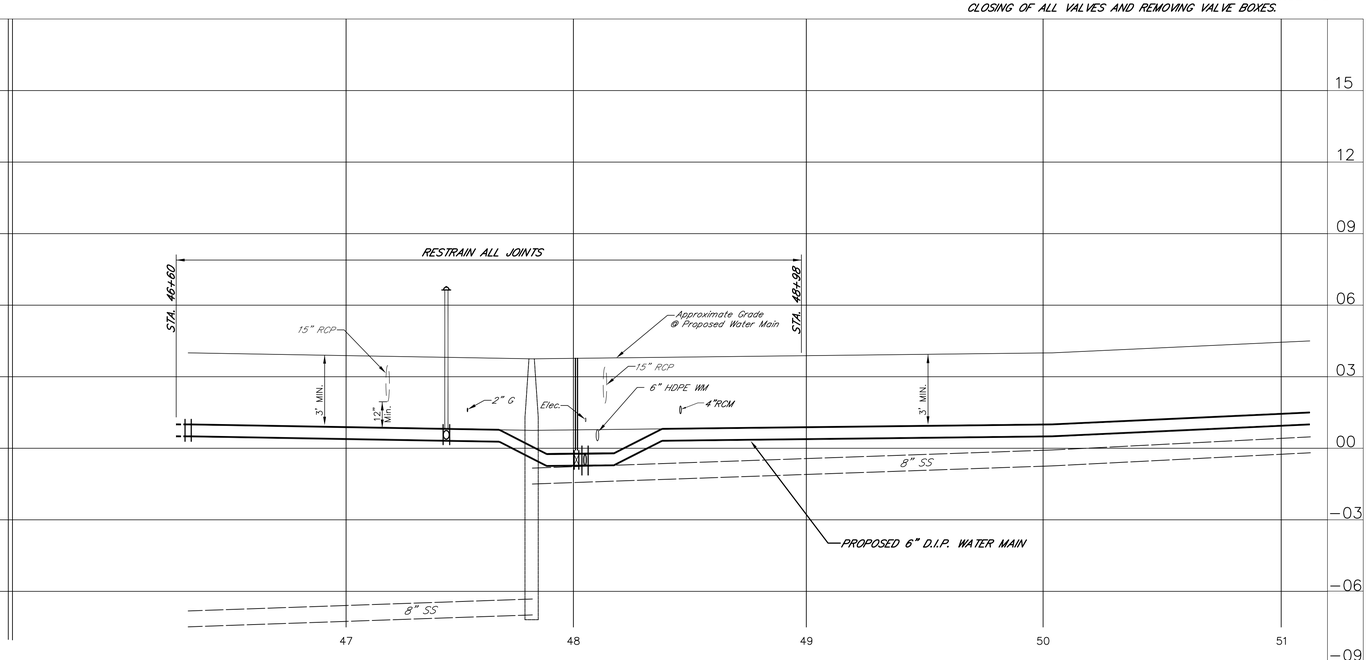
Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	BEACH WAY DRIVE – from Grove Park Ave. to Roxmere Road	30 0 30 60 — 1" = 30' HORIZ.; 3 0 3 6 — 1" = 3' VERT.	Atlas Page J8–1	No. / Date / REVISION / By — Approved / Date	Des: RNM; Dwn: MGL; Ckd: RAJ	W.O. 8397 File: Culbreath Bayou (CIP 2017); FILE NUMBER; SHEET 4 OF 22 SHEETS



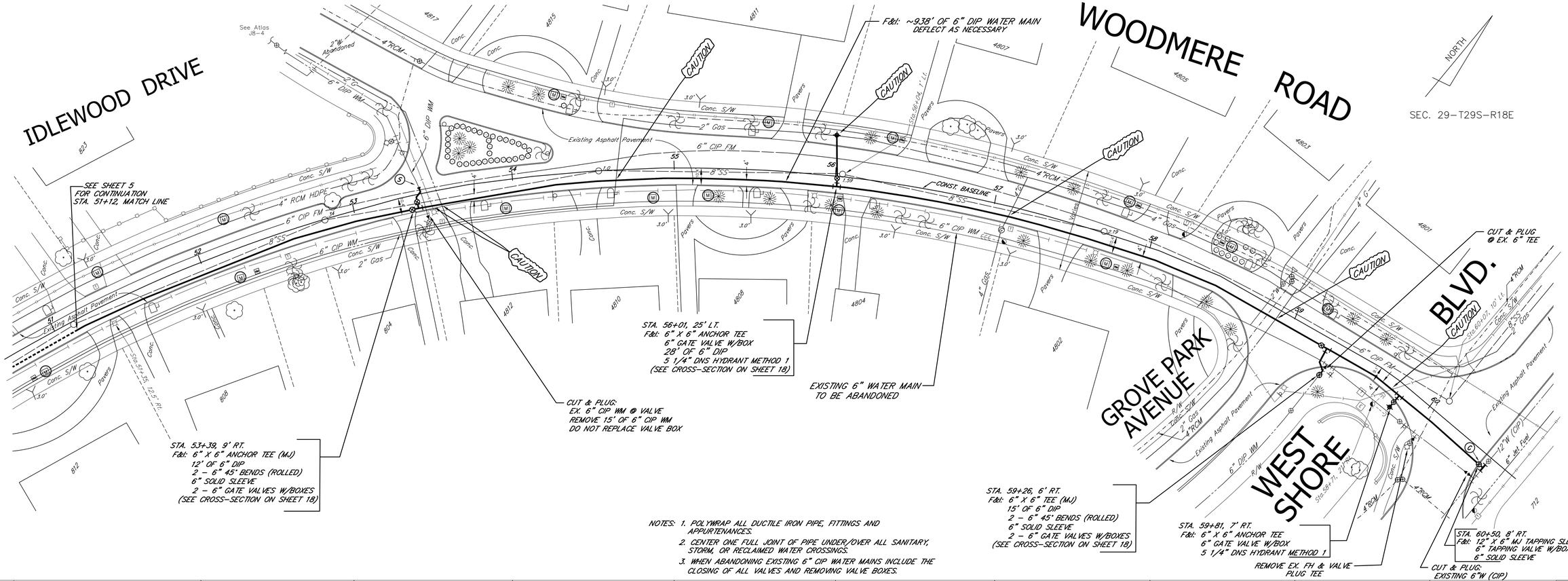


NOTES:
1. POLYWRAP ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES.
2. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED WATER CROSSINGS.
3. WHEN ABANDONING EXISTING 6" CIP WATER MAINS INCLUDE THE CLOSING OF ALL VALVES AND REMOVING VALVE BOXES.





Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	IDLEWOOD DRIVE - from Beach Way Drive to 400' North.	1" = 30' HORIZ. 1" = 3' VERT.	Atlas Page J8-4	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 File: Oulbreath Bayou (CIP 2017) FILE NUMBER
				No. Date REVISION By Approved Date		SHEET 5 OF 22 SHEETS



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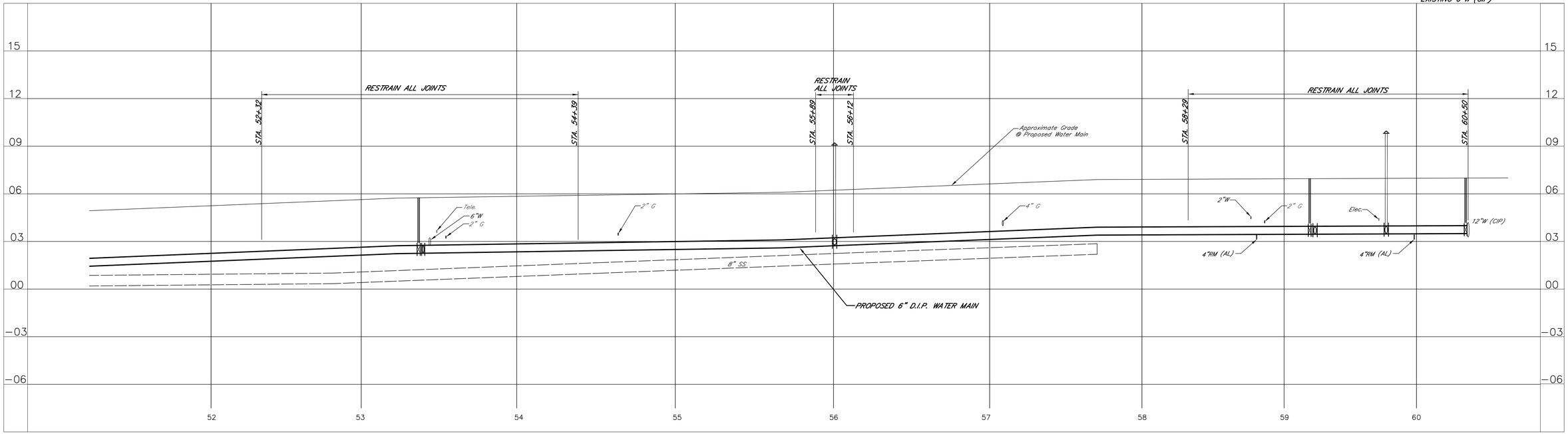
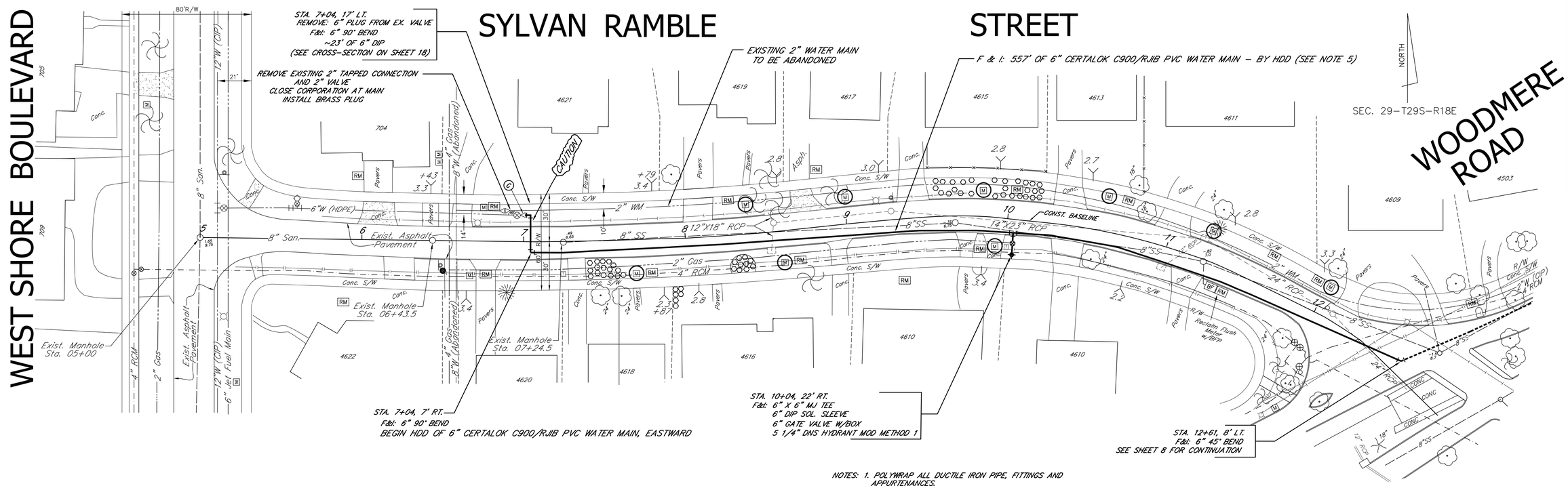


Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	WOODMERE ROAD – from Idlewood Drive to West Shore Boulevard	30 0 30 60 — 1" = 30' HORIZ.; 3 0 3 6 — 1" = 3' VERT.	Atlas Page J8–1	No. Date REVISION By; Approved Date	Des: RNM; Dwn: MGL; Ckd: RAJ	W.O. 8397; FILE NUMBER	File: Cultreath Bayou (CIP 2017); SHEET 6 OF 22 SHEETS



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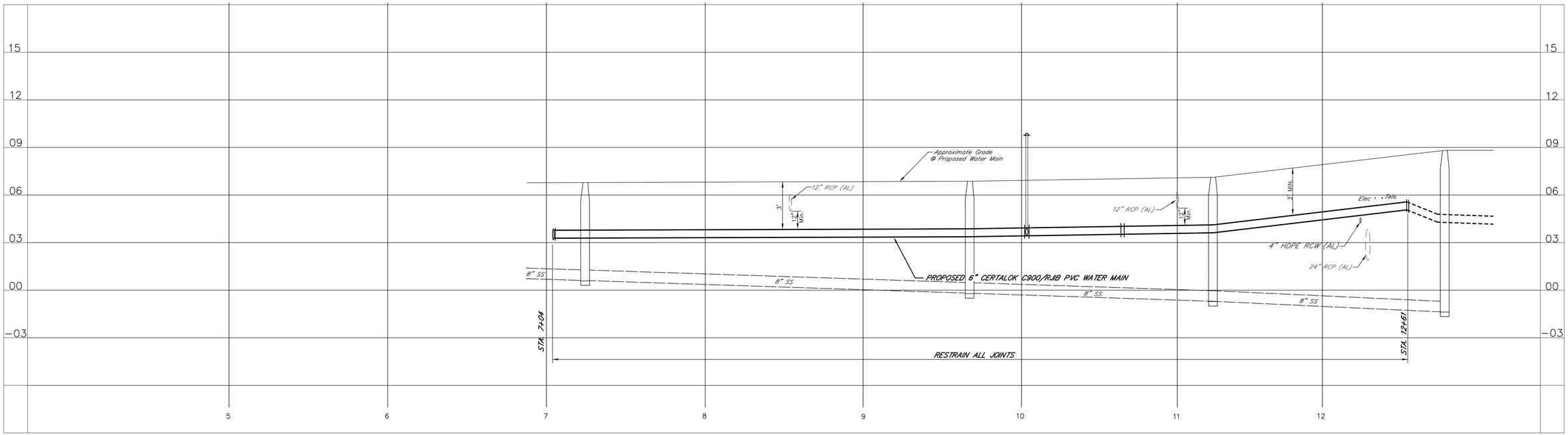
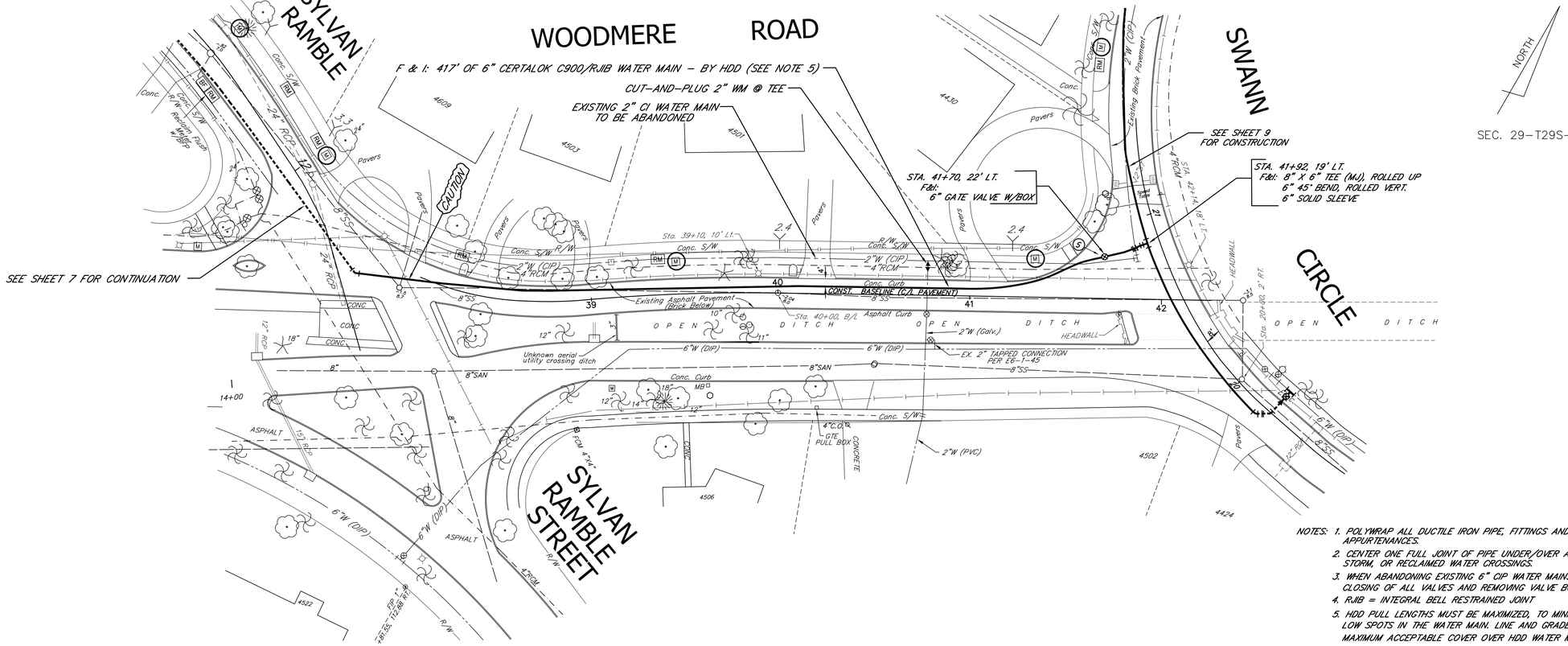


Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	SYLVAN RAMBLE ST. – from West Shore Boulevard to Woodmere Road	1" = 30' HORIZ. 1" = 3' VERT.	Atlas Page J8–1	No. Date REVISION By	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397	File: Culbreath Bayou (OP 2017)	
					Approved Date		FILE NUMBER		
							SHEET 7 OF 22 SHEETS		



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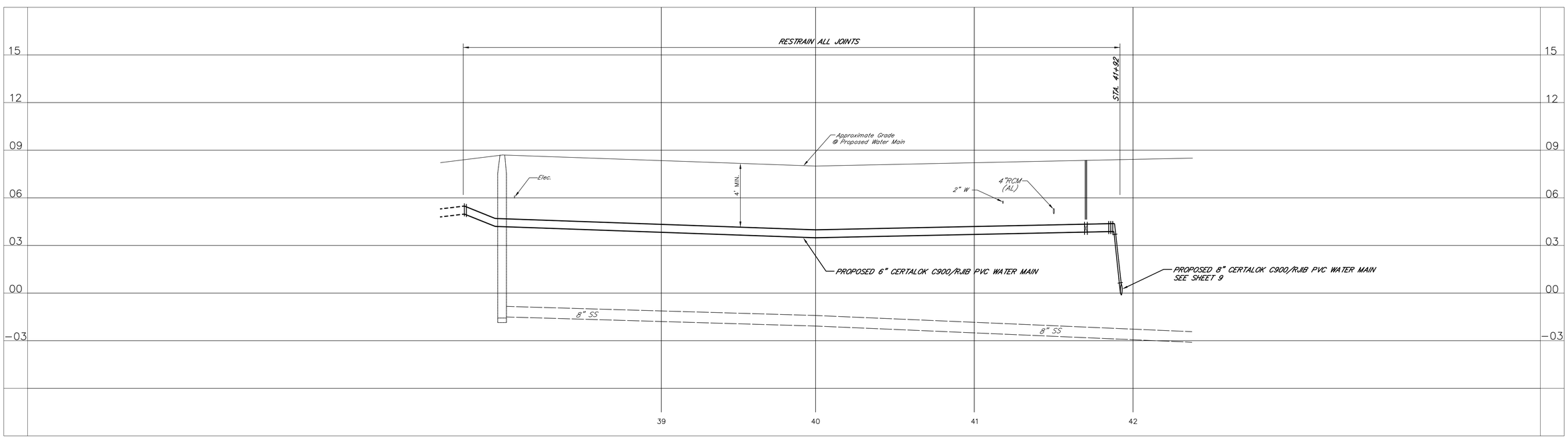

Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	WOODMERE ROAD – from Sylvan Ramble to Swann Circle	1" = 30' HORIZ. 1" = 3' VERT.	Atlas Page J8–1	No. / Date / REVISION / By / Approved / Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 FILE NUMBER	File: Cultreath Bayou (DP 2017)
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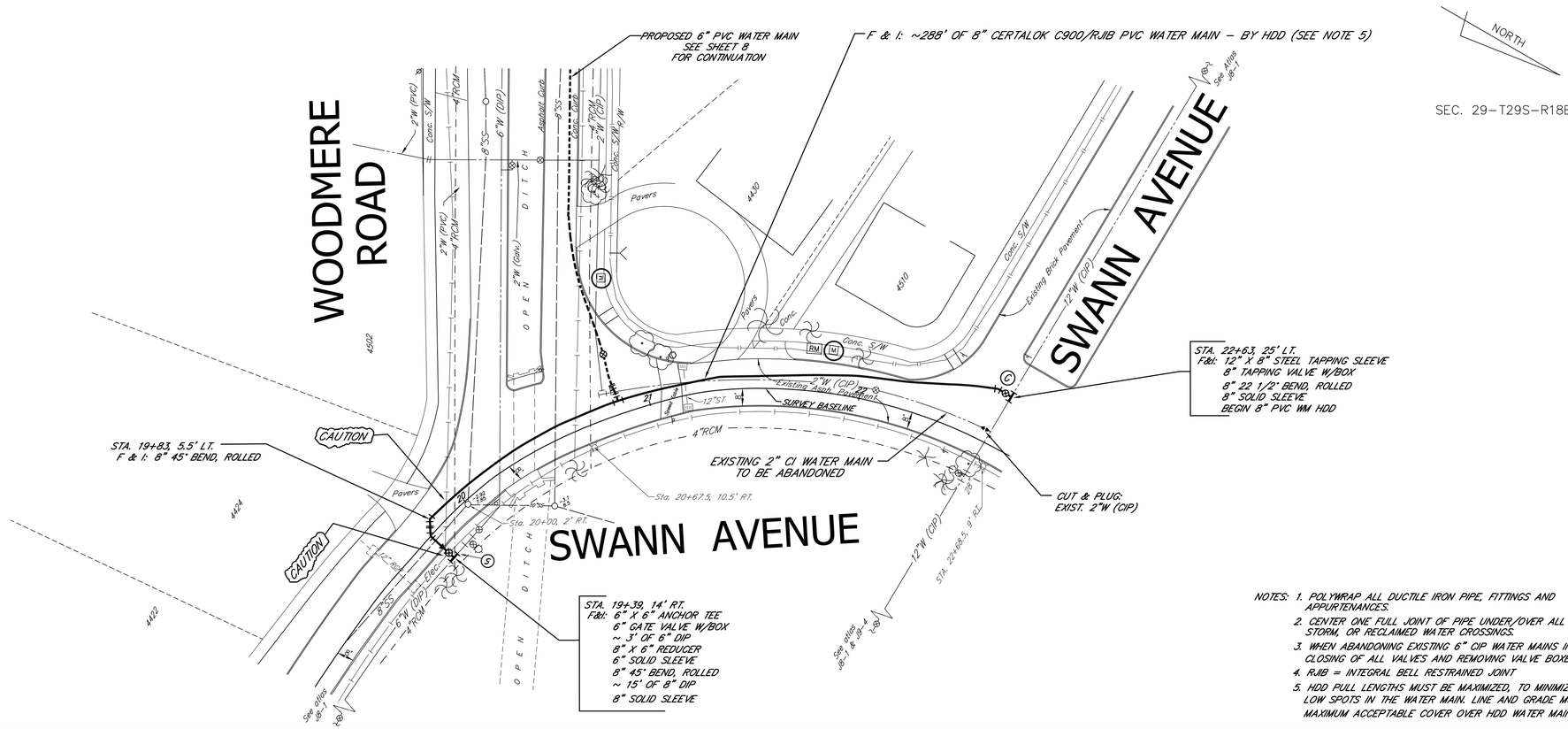

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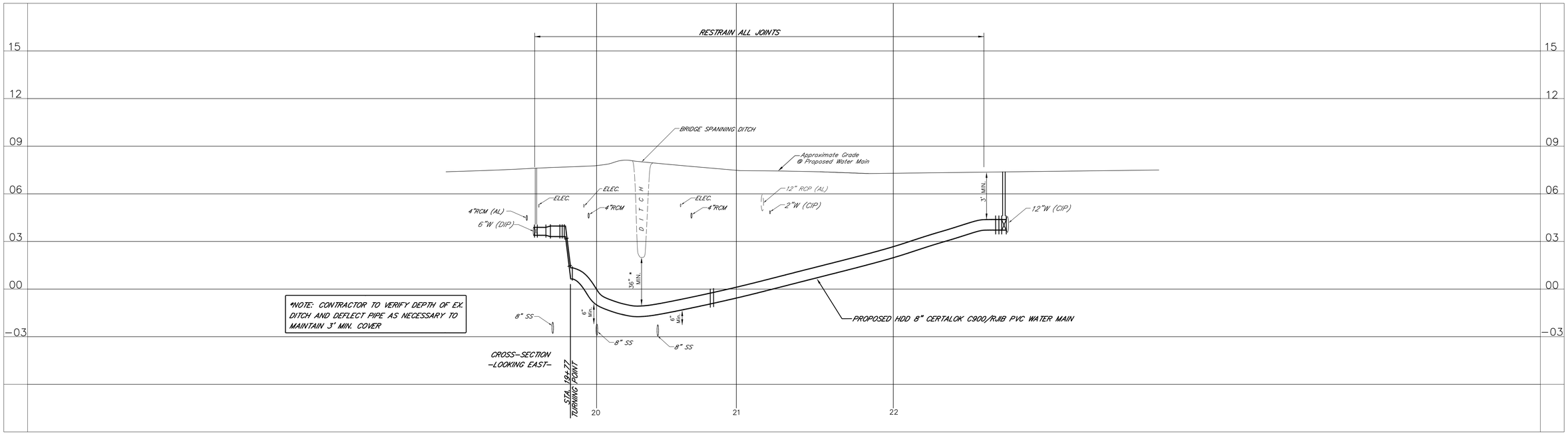
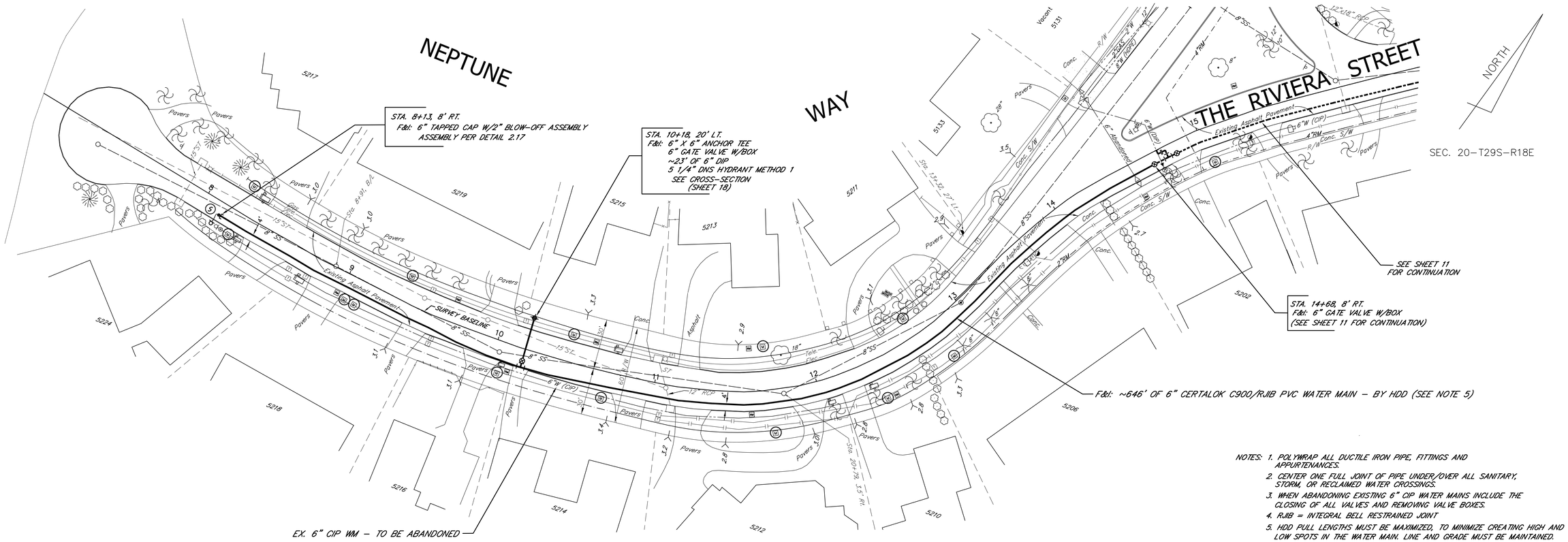


Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	SWANN CIRCLE – from Woodmere Road to Swann Avenue	30 0 30 60 — 1" = 30' HORIZ. 3 0 3 6 — 1" = 3' VERT.	Atlas Page J8–1	No. Date REVISION By Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 File: Culbreath Bayou (CIP 2017) FILE NUMBER SHEET 9 OF 22 SHEETS



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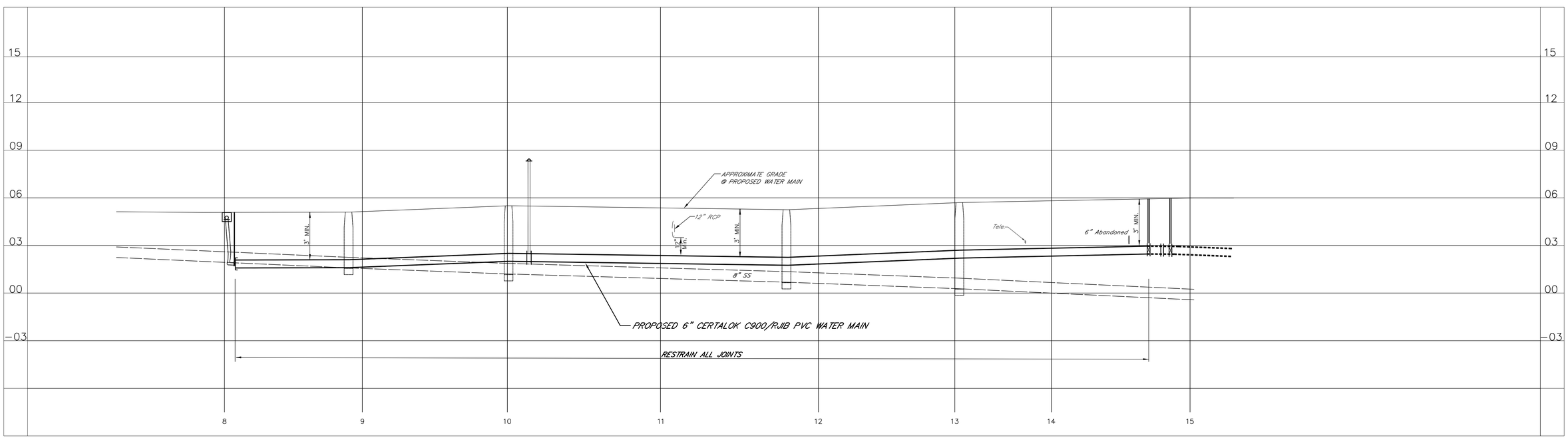
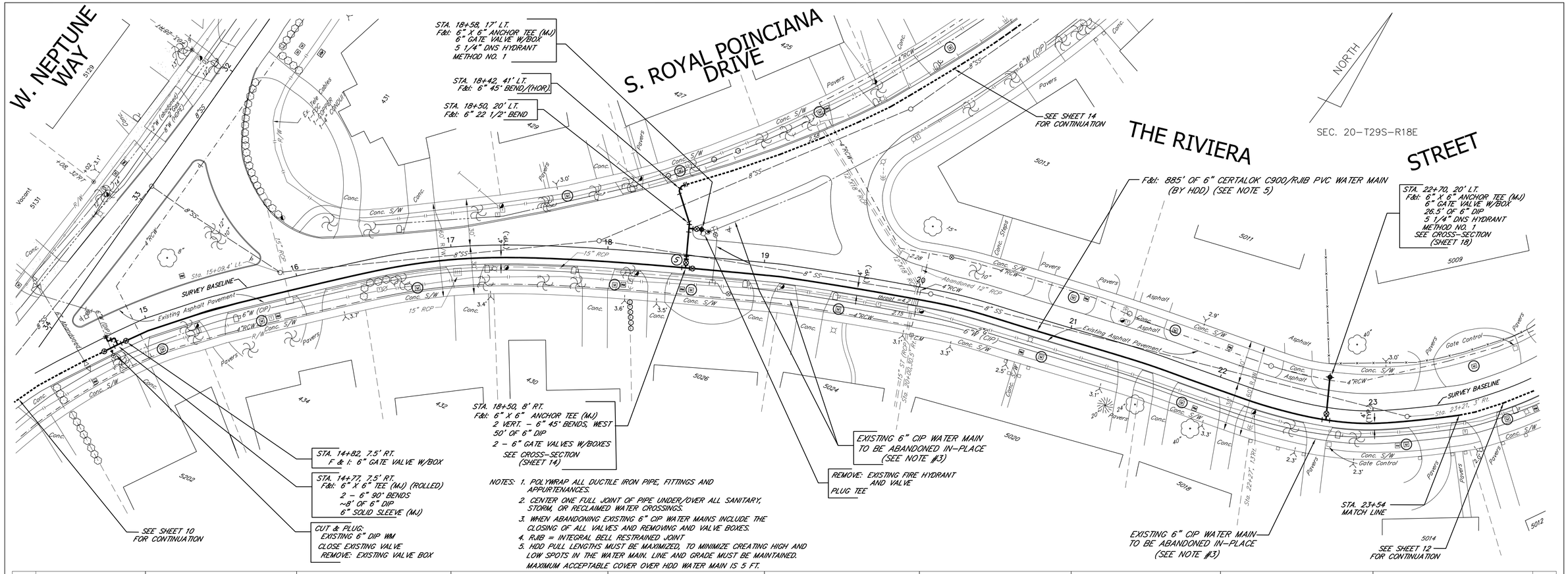
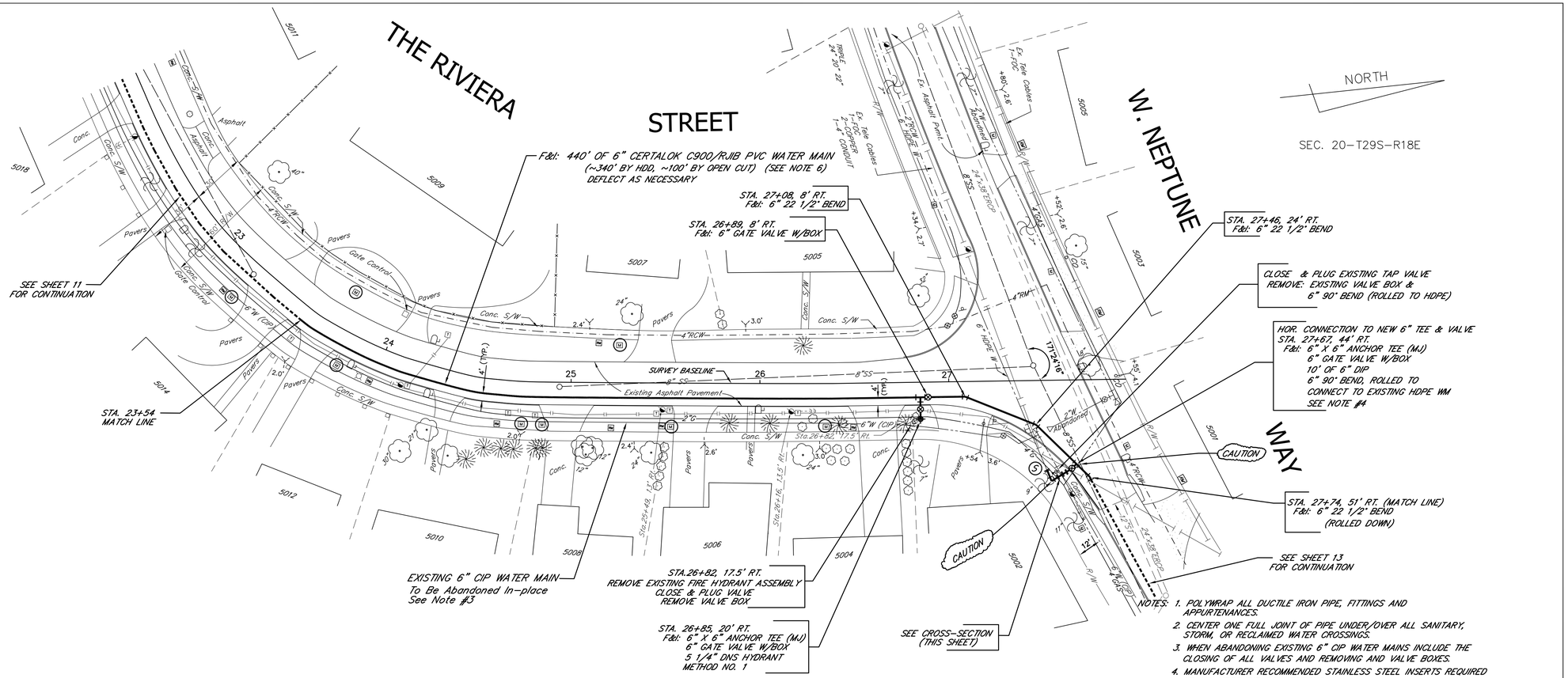
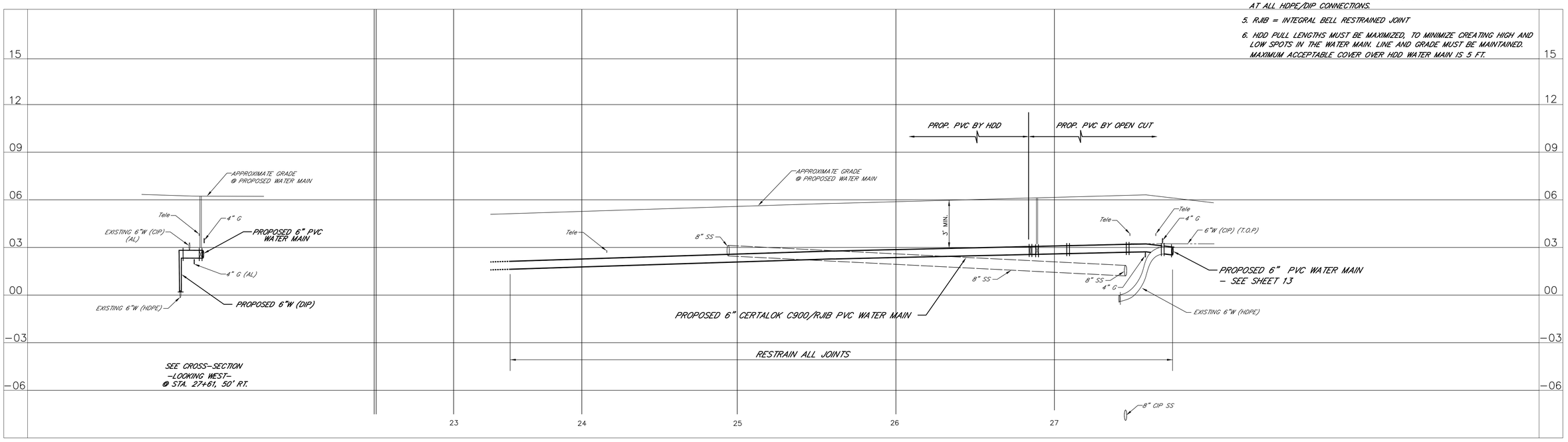


Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	NEPTUNE WAY – from the Cul de Sac to The Riviera Street	30 0 30 60 — 1" = 30' HORIZ. 3 0 3 6 — 1" = 3' VERT.	Atlas Page 18–3 J8–4	No. Date REVISION By Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 File: Culbreath Bayou (CIP 2017) FILE NUMBER SHEET 10 OF 22 SHEETS

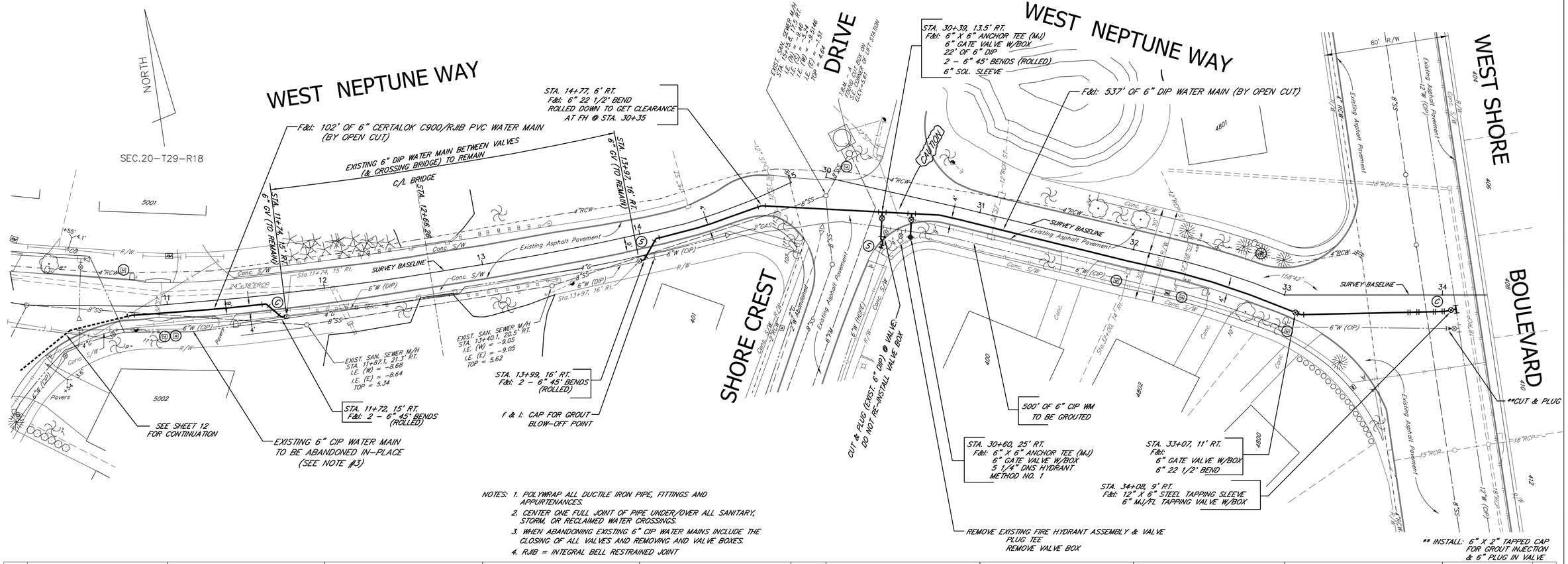

W. NEPTUNE WAY
S. ROYAL POINCIANA DRIVE
THE RIVIERA STREET
NORTH
SEC. 20–T29S–R18E
STA. 18+58, 17' LT.
F&I: 6" X 6" ANCHOR TEE (MJ)
6" GATE VALVE W/BOX
5 1/4" DNS HYDRANT
METHOD NO. 1
STA. 18+42, 41' LT.
F&I: 6" 45° BEND/(HOR)
STA. 18+50, 20' LT.
F&I: 6" 22 1/2° BEND
SEE SHEET 14
FOR CONTINUATION
F&I: 885' OF 6" CERTALOK C900/RJIB PVC WATER MAIN
(BY HDD) (SEE NOTE 5)
STA. 22+70, 20' LT.
F&I: 6" X 6" ANCHOR TEE (MJ)
6" GATE VALVE W/BOX
26.5' OF 6" DIP
5 1/4" DNS HYDRANT
METHOD NO. 1
SEE CROSS-SECTION
(SHEET 18)
SURVEY BASELINE
Existing Asphalt Pavement
STA. 18+50, 8' RT.
F&I: 6" X 6" ANCHOR TEE (MJ)
2 VERT. – 6" 45° BENDS, WEST
50' OF 6" DIP
2 – 6" GATE VALVES W/BOXES
SEE CROSS-SECTION
(SHEET 14)
EXISTING 6" CIP WATER MAIN
TO BE ABANDONED IN-PLACE
(SEE NOTE #3)
REMOVE: EXISTING FIRE HYDRANT
AND VALVE
PLUG TEE
STA. 14+82, 7.5' RT.
F & I: 6" GATE VALVE W/BOX
STA. 14+77, 7.5' RT.
F&I: 6" X 6" TEE (MJ) (ROLLED)
2 – 6" 90° BENDS
~8' OF 6" DIP
6" SOLID SLEEVE (MJ)
CUT & PLUG:
EXISTING 6" DIP WM
CLOSE EXISTING VALVE
REMOVE: EXISTING VALVE BOX
SEE SHEET 10
FOR CONTINUATION
EXISTING 6" CIP WATER MAIN
TO BE ABANDONED IN-PLACE
(SEE NOTE #3)
STA. 23+54
MATCH LINE
SEE SHEET 12
FOR CONTINUATION
Sta. 15+09.4' Lt.
Sta. 23+21, 1' Rt.
Sta. 22+27', 1.7' Rt.
Vacant
5131
5129
5011
5009
5013
5014
5012
5002
5018
5020
5024
5026
430
431
432
434
427
429
425
Conc. S/W
Pavers
Asphalt
Gate Control
8"SS
4"RCW
6"W (CIP)
15" RCP
Abandoned 12" RCP
Slope = 4.2%
Slope = 2.15
Slope = 1.0%
Slope = 0.5%
Slope = 0.7%
Slope = 0.8%
Slope = 0.9%
Slope = 1.1%
Slope = 1.2%
Slope = 1.3%
Slope = 1.4%
Slope = 1.5%
Slope = 1.6%
Slope = 1.7%
Slope = 1.8%
Slope = 1.9%
Slope = 2.0%
Slope = 2.1%
Slope = 2.2%
Slope = 2.3%
Slope =



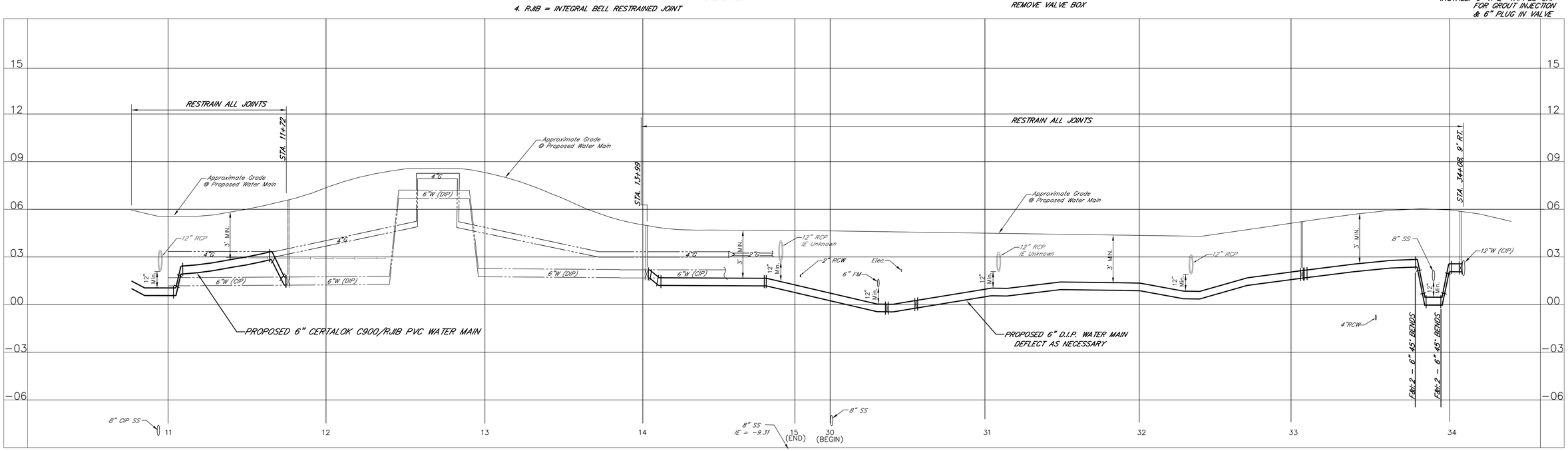
NOTES:
1. POLYWRAP ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES.
2. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED WATER CROSSINGS.
3. WHEN ABANDONING EXISTING 6" CIP WATER MAINS INCLUDE THE CLOSING OF ALL VALVES AND REMOVING AND VALVE BOXES.
4. MANUFACTURER RECOMMENDED STAINLESS STEEL INSERTS REQUIRED AT ALL HDPE/DIP CONNECTIONS.
5. RJIB = INTEGRAL BELL RESTRAINED JOINT
6. HDD PULL LENGTHS MUST BE MAXIMIZED, TO MINIMIZE CREATING HIGH AND LOW SPOTS IN THE WATER MAIN. LINE AND GRADE MUST BE MAINTAINED. MAXIMUM ACCEPTABLE COVER OVER HDD WATER MAIN IS 5 FT.



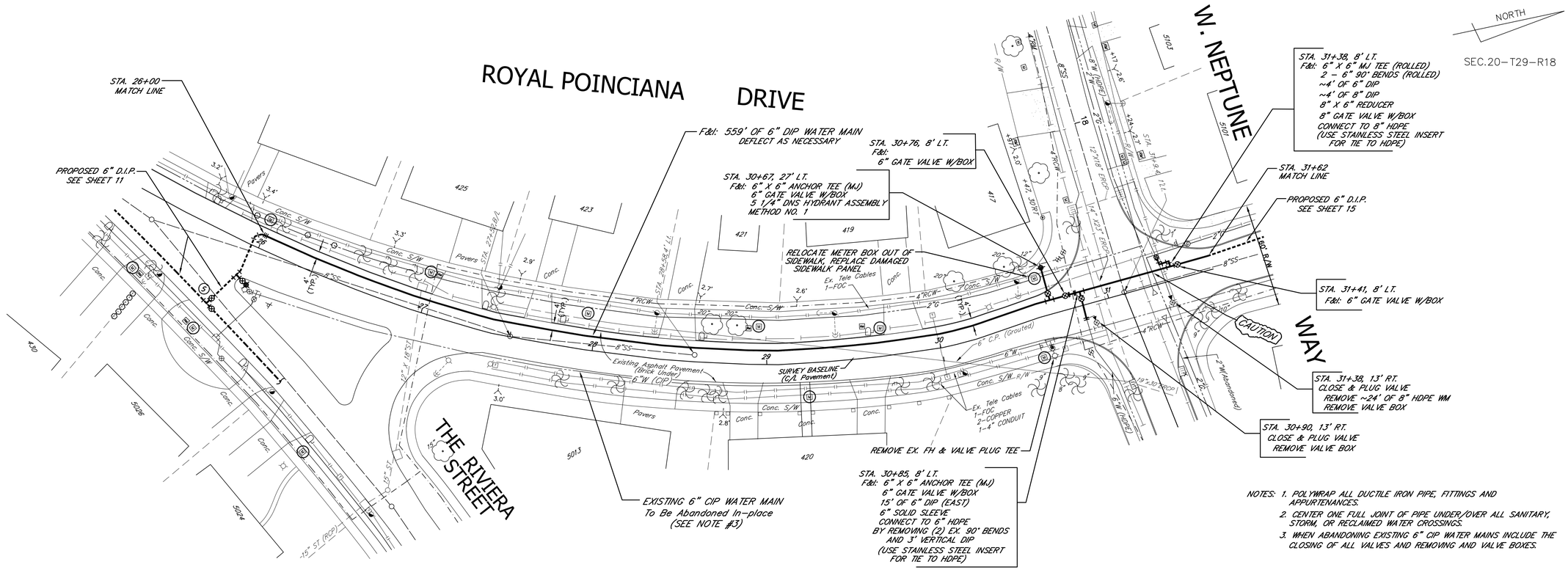
Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	THE RIVIERA STREET - from Royal Poinciana Dr. to Neptune Way	30 0 30 60 — 1" = 30' HORIZ. 3 0 3 6 — 1" = 3' VERT.	Atlas Page 18-3	No. Date REVISION By Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397	File: Cultreeth Bayou (CIP 2017) FILE NUMBER
							SHEET 12 OF 22 SHEETS	



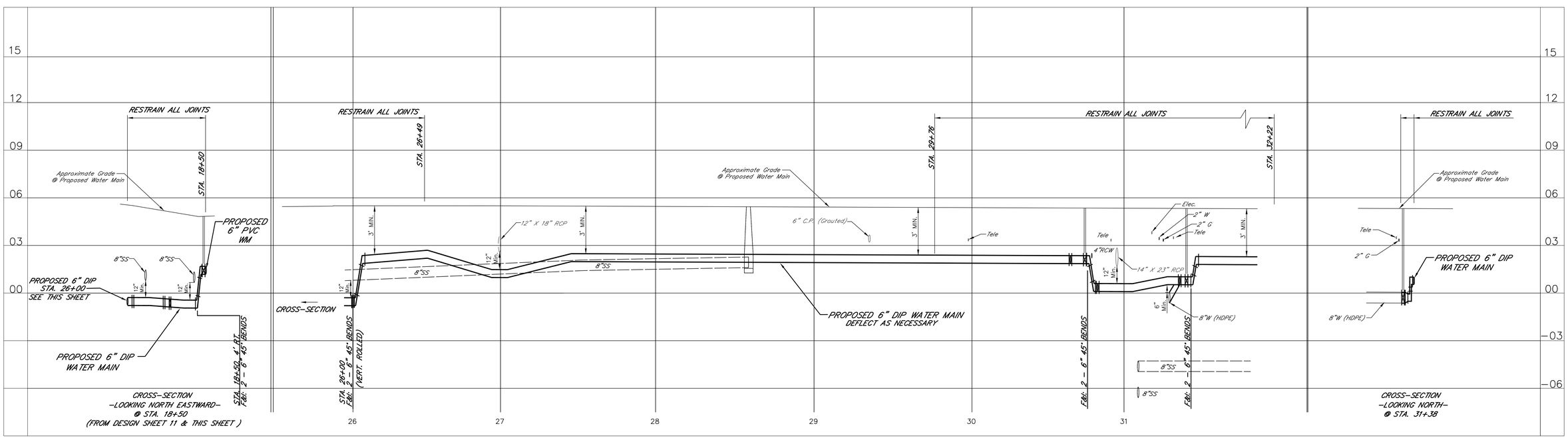
NOTES:
1. POLYWRAP ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES.
2. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED WATER CROSSINGS.
3. WHEN ABANDONING EXISTING 6" CIP WATER MAINS INCLUDE THE CLOSING OF ALL VALVES AND REMOVING AND VALVE BOXES.
4. RJIB = INTEGRAL BELL RESTRAINED JOINT



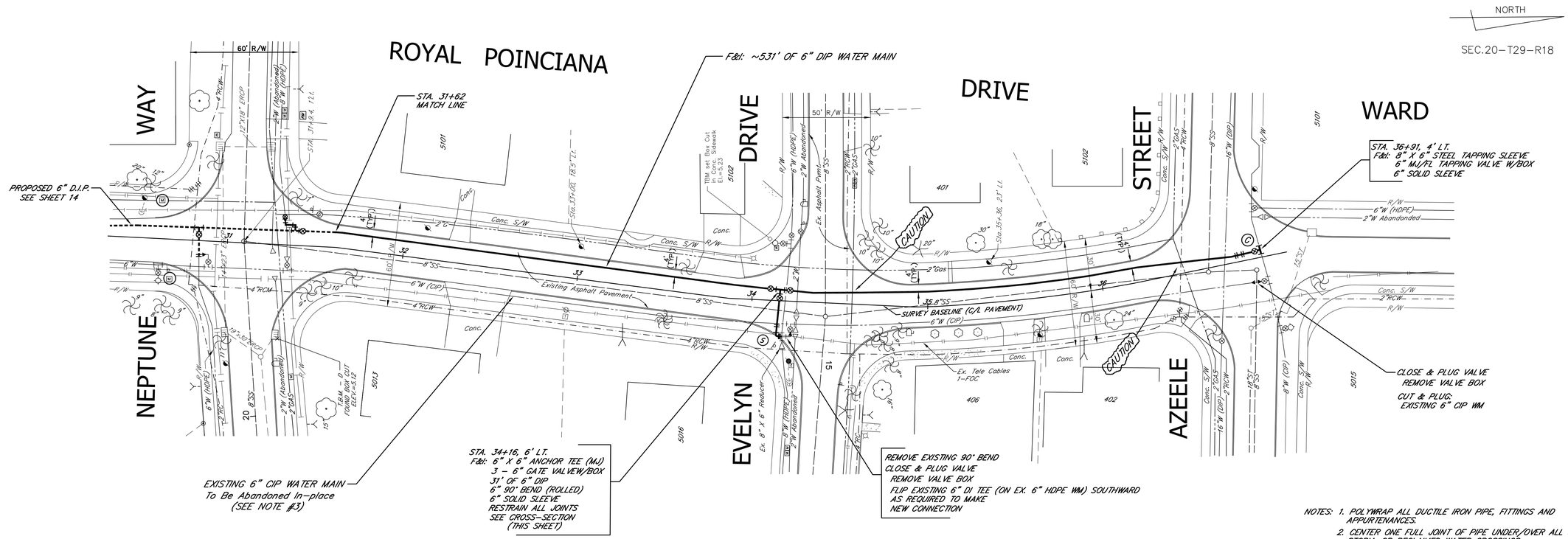
Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	WEST NEPTUNE WAY – from The Riviera St. to West Shore Blvd.	1" = 30' HORIZ. 1" = 3' VERT.	Atlas Page 18-2	No. Date REVISION By Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 File: Culbreath Bayou (CIP 2017) FILE NUMBER SHEET 13 OF 22 SHEETS



NOTES:
1. POLYWRAP ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES.
2. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED WATER CROSSINGS.
3. WHEN ABANDONING EXISTING 6" CIP WATER MAINS INCLUDE THE CLOSING OF ALL VALVES AND REMOVING AND VALVE BOXES.



Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	ROYAL POINCIANA DR. – from The Riviera St. to Neptune Way	30 0 30 60 — 1" = 30' HORIZ. 3 0 3 6 — 1" = 3' VERT.	Atlas Page 18–3	No. Date REVISION By Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 File: Cubreath Bayou (CIP 2017) FILE NUMBER SHEET 14 OF 22 SHEETS



NOTES:
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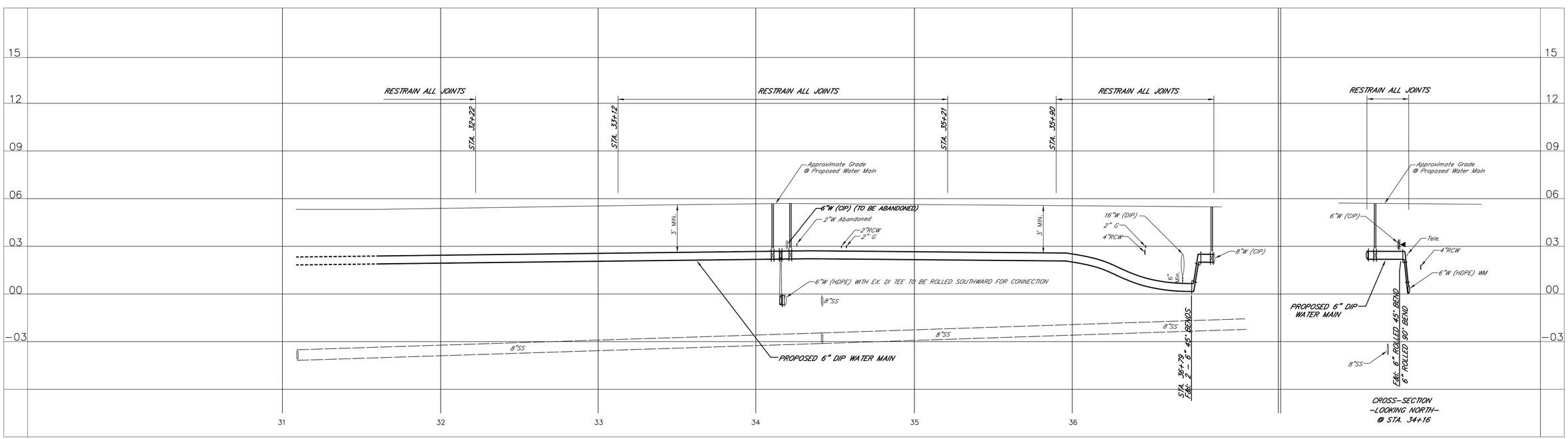
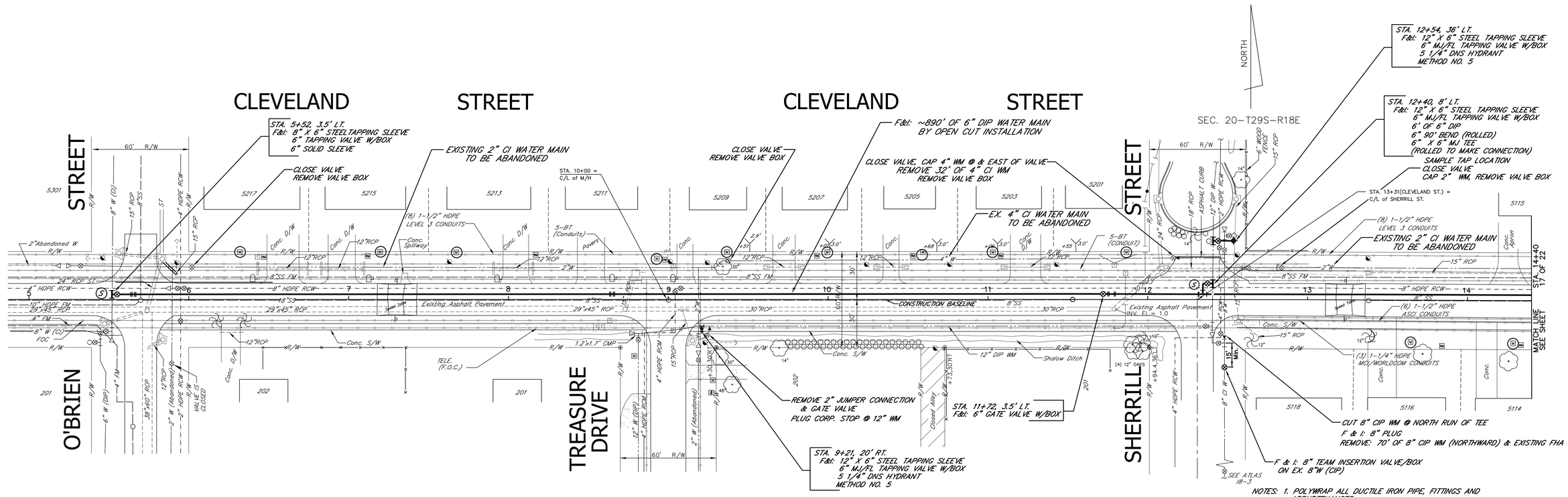
2. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED WATER CROSSINGS.
3. WHEN ABANDONING EXISTING 6" CIP WATER MAINS INCLUDE THE CLOSING OF ALL VALVES AND REMOVING AND VALVE BOXES.



Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	ROYAL POINCIANA DR. – from Neptune Way to Azeele Street	30 0 30 60 3 0 3 6	1" = 30' HORIZ. 1" = 3' VERT.	Atlas Page 18-3	No. Date REVISION By Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 File: Culbreath Bayou (CIP 2017) FILE NUMBER SHEET 15 OF 22 SHEETS



NOTES:
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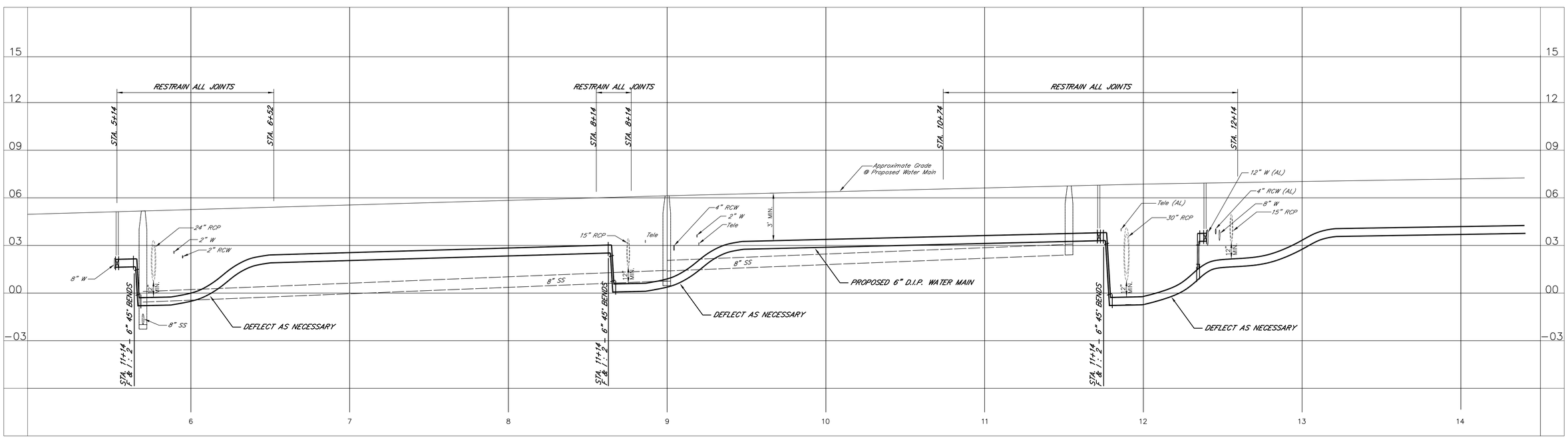
3. WHEN ABANDONING EXISTING 6" CIP WATER MAINS INCLUDE THE CLOSING OF ALL VALVES AND REMOVING AND VALVE BOXES.
4. MANUFACTURER RECOMMENDED STAINLESS STEEL INSERTS REQUIRED AT ALL HDPE/DIP CONNECTIONS.



Water Department

FY17 CIP
CAST IRON MAIN REPLACEMENT

CLEVELAND AVENUE – from O'Brien Ave.
to ~200' east of Sherrill Street

30 0 30 60 1" = 30' HORIZ.
3 0 3 6 1" = 3' VERT.

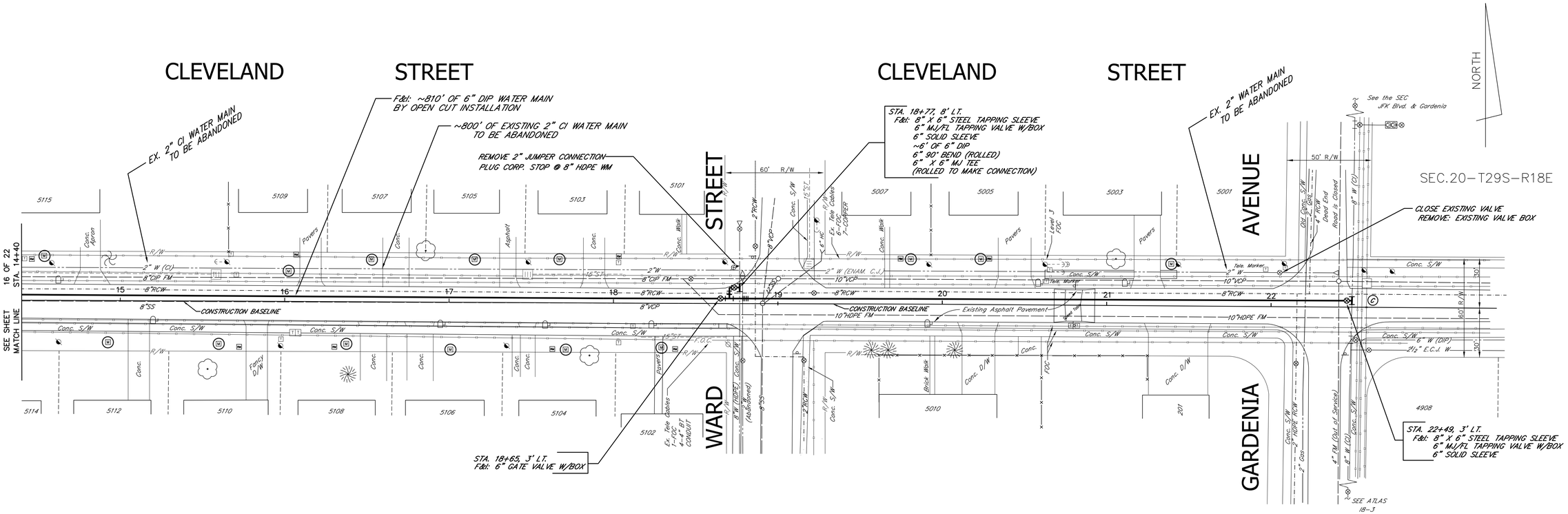
Atlas Page 18-3

No.	Date	REVISION	By
Approved		Date	

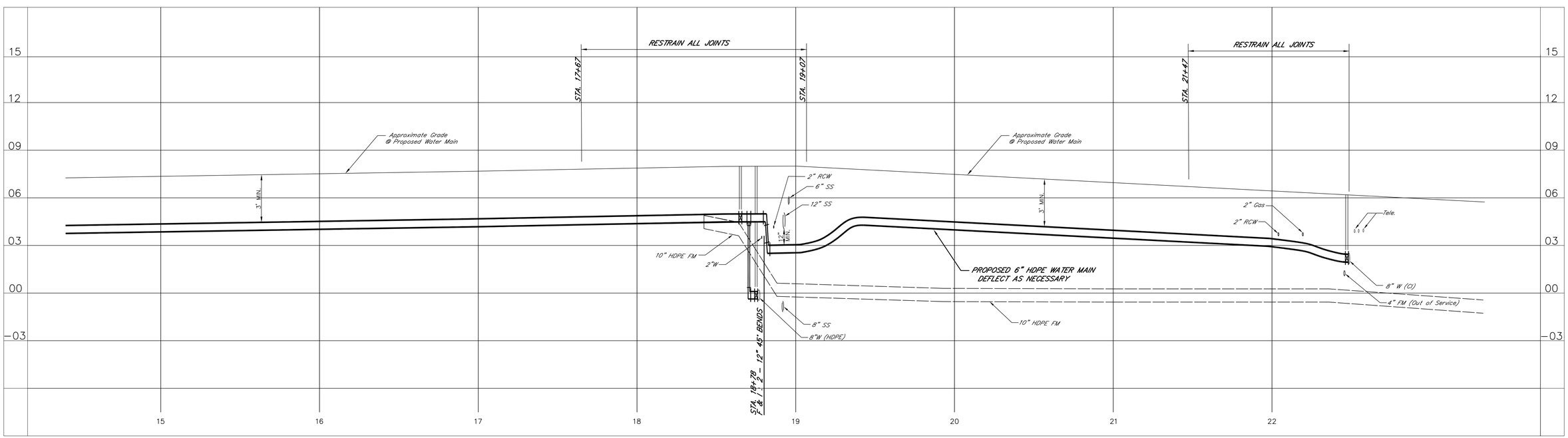
Des: RNM
Dwn: MGL
Ckd: RAJ

W.O. 8397 File: Culbreath Bayou (CIP 2017)
FILE NUMBER

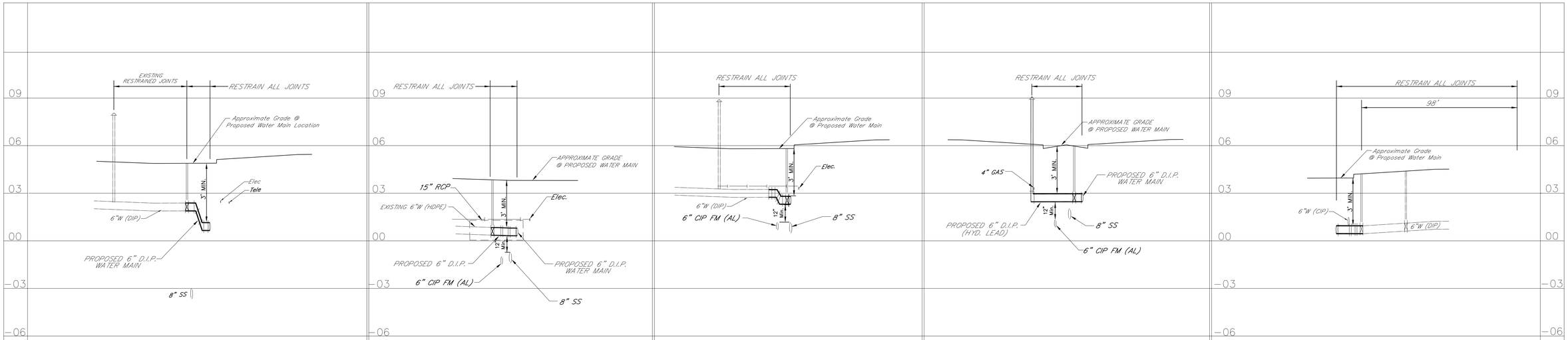
SHEET 16 OF 22 SHEETS



NOTES: 1. POLYWRAP ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES.
2. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED WATER CROSSINGS.



Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	CLEVELAND STREET – from east of Sherrill St. to Gardenia Avenue	1" = 30' HORIZ. 1" = 3' VERT.	Atlas Page 18–3	No. Date REVISION By / Approved Date	Des: RNM Dwn: MGL Ckd: RAJ	W.O. 8397 FILE NUMBER	File: Dalbreath Bayou (DP 2017)	SHEET 17 OF 22 SHEETS



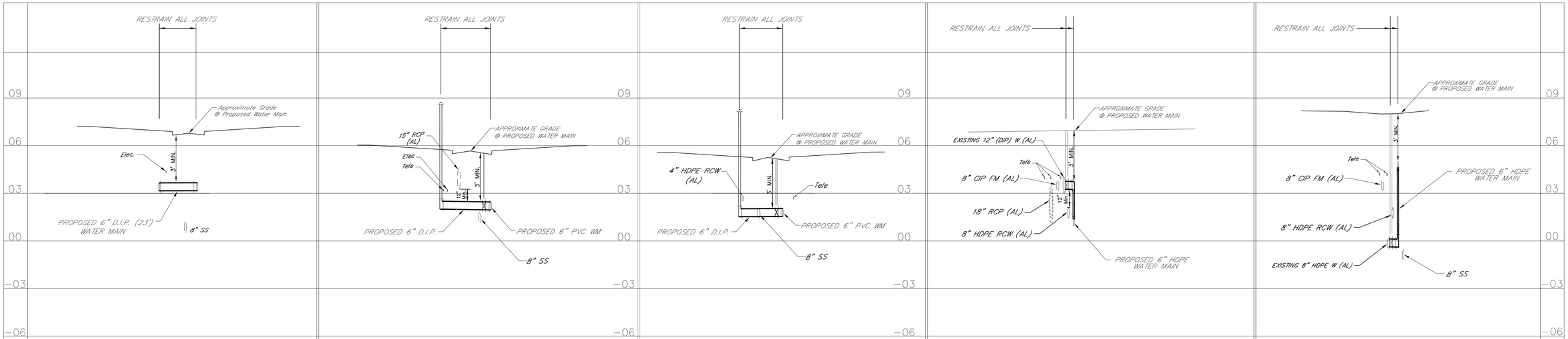
CROSS-SECTION
-LOOKING EAST-
STA. 72+95
(FROM SHEET 4)

CROSS-SECTION
-LOOKING NORTH-
STA. 48+04
(FROM SHEET 5)

CROSS-SECTION
-LOOKING NORTH-
STA. 53+39
(FROM SHEET 6)

CROSS-SECTION
-LOOKING EAST-
STA. 56+01
(FROM SHEET 6)

CROSS-SECTION
-LOOKING EAST-
STA. 59+26
(FROM SHEET 6)



CROSS-SECTION
-LOOKING EAST-
STA. 7+04
(FROM SHEET 7)

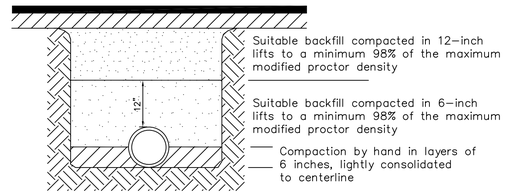
CROSS-SECTION
-LOOKING EASTWARD-
STA. 10+18
(FROM SHEET 10)

CROSS-SECTION
-LOOKING EASTWARD-
STA. 22+70
(FROM SHEET 11)

CROSS-SECTION
-LOOKING EAST-
STA. 12+35
(FROM SHEET 16)

CROSS-SECTION
-LOOKING EAST-
STA. 18+77
(FROM SHEET 17)

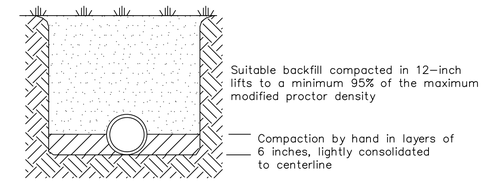
Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	CROSS-SECTIONS	CULBREATH BAYOU	Atlas Page 18-3	No. / Date / REVISION / By	Des: RNM	W.O. 8397	File: Culbreath Bayou (CIP 2017)
					Approved / Date	Dwn: MGL	FILE NUMBER	
						Ckd: RAJ	SHEET 18 OF 22 SHEETS	



NOTES:

1. Type 2 trench is defined as a flat–bottom trench. Lightly consolidate backfill to centerline of pipe.
2. This standard shall be utilized in the absence of specific standards. The standard of the agency controlling the Right–of–Way shall govern unless otherwise directed by the Engineer.
3. Suitable backfill shall be defined as material free from cinders, ashes, refuse, clay, organic matter, boulders, rocks or stones, or other material that in the opinion of the Engineer is unsuitable.
4. Non–pervious areas shall mean any concrete or asphalt curb, sidewalk, trail, driveway, or roadway.

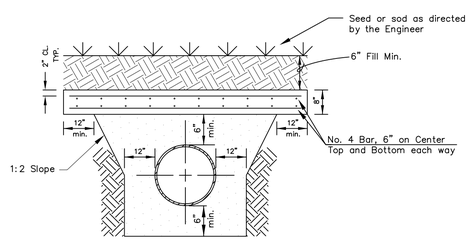
TAMPA WATER DEPARTMENT	APPROVED Feb. 2014	REVISED	TRENCHING, BEDDING AND BACKFILL DETAIL FOR NON–PERVIOUS (paved) AREAS	2.01



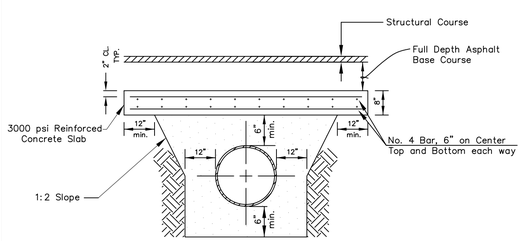
NOTES:

1. Type 2 trench is defined as a flat–bottom trench. Lightly consolidate backfill to centerline of pipe.
2. This standard shall be utilized in the absence of specific standards. The standard of the agency controlling the Right–of–Way shall govern unless otherwise directed by the Engineer.
3. Suitable backfill shall be defined as material free from cinders, ashes, refuse, clay, organic matter, boulders, rocks or stones, or other material that in the opinion of the Engineer is unsuitable.
4. Non–paved area is a pervious area. If any part of the trench is within a concrete or asphalt curb, sidewalk, driveway, or roadway, then Standard Detail 2.01 applies.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED JRD 9/2011	TRENCHING, BEDDING AND BACKFILL DETAIL FOR PERVIOUS (non–paved) AREAS	2.02



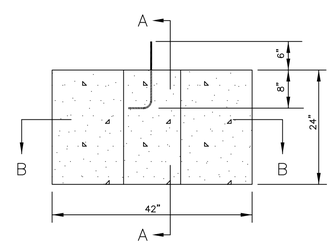
GRASSED SECTION



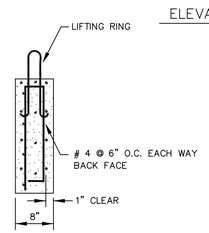
ROADWAY SECTION

NOTES:
1. Structural course and base course requirement shall be established by the agency having jurisdiction.
2. Shock pads for mains too shallow for the above configuration shall be designed on a case–by–case basis.

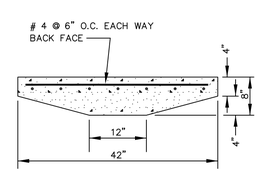
TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	REINFORCED CONCRETE SHOCK PAD (FOR COVER LESS THAN 2.5')	2.06



ELEVATION



SECTION A–A



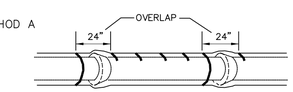
SECTION B – B

Notes:

1. Reinforcing to be standard 60 ksi deformed bar.
2. Concrete f'c=3000 psi
3. Precast thrust blocking to be used only on fire hydrants and 8" or smaller fittings, if allowed by the Engineer.
4. A 12"x18" spacer block shall be placed between the precast thrust block and fitting if so directed by the Engineer.

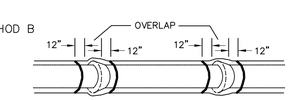
TAMPA WATER DEPARTMENT	APPROVED April, 2009	REVISED	PRECAST CONCRETE THRUST BLOCK	2.10

METHOD A



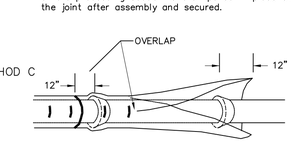
Polyethylene tube is cut into lengths approximately two feet longer than the pipe section and placed around it. After the pipe joint is assembled, the polyethylene tube is made to overlap the joint and the overlap secured in place. Since the tube is considerably larger than the barrel of pipe, it is made to fit snugly by folding over at the top and securing with tape every 24" along the pipe section.

METHOD B



Polyethylene tube is cut one foot shorter than the length of the pipe section. After placement of the pipe, it is folded and secured snugly overall. A three foot length of polyethylene tube placed over the end of the preceeding section is then pulled in place over the joint after assembly and secured.

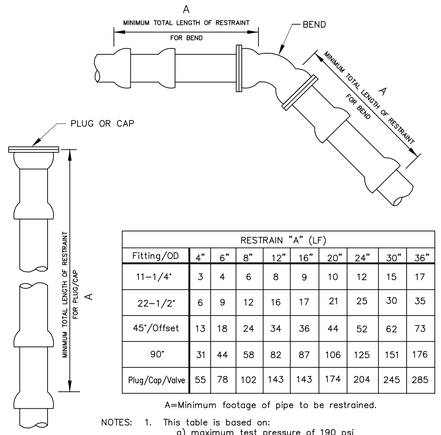
METHOD C



Polyethylene sheet is cut to a length two feet longer than the pipe section. The sheet is wrapped around the pipe so that it overlaps circumferentially over the top quadrant of the pipe, then secured. After joint assembly, the surplus length of polyethylene film is secured around the joint, providing an overlap of each joint. Tape at each joint and at 3' intervals in between.

NOTES:
1. Use blue polyethylene film and tape only.
2. Polyethylene film shall be a minimum of 8 mil. thickness.
3. Spiral Wrap not required with polywrap.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED JRD 4/09 JRD 9/2011	POLYETHYLENE ENCASEMENT INSTALLATION DETAIL	2.05

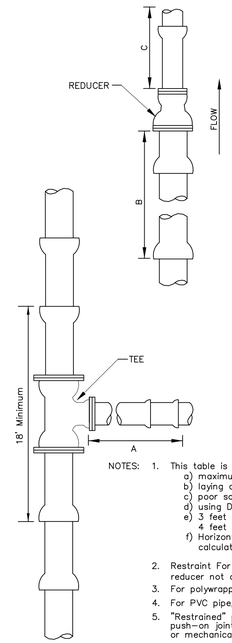


RESTRAIN "A" (LF)									
Fitting/OD	4"	6"	8"	12"	16"	20"	24"	30"	36"
11-1/4°	3	4	6	8	9	10	12	15	17
22-1/2°	6	9	12	16	17	21	25	30	35
45°/Offset	13	18	24	34	36	44	52	62	73
90°	31	44	58	82	87	106	125	151	176
Plug/Cap/Valve	55	78	102	143	143	174	204	245	285

A=Minimum footage of pipe to be restrained.

NOTES:
1. This table is based on:
   a) maximum test pressure of 190 psi
   b) laying condition type 2 (see Details 2.01 and 2.02)
   c) poor soil conditions
   d) using D.I.P.
   e) 3 feet of cover for 12" and smaller mains; 4 feet of cover for 16" and larger mains
   f) Horizontal bends only – Engineer to submit calculations for vertical restraints
2. For polywrapped D.I.P., increase the footage to restrain by 25%.
3. For PVC pipe, increase the footage to restrain by 20%.
4. "Restrained" pipe shall be Manufactured Restrained Joint pipe, push-on joint pipe restrained w/gasket-type "Gripper Restraints", or mechanical joint pipe restrained by Megalug (or approved equivalant).
5. Any additional fittings within the restrained section shall be restrained accordingly.

TAMPA WATER DEPARTMENT	APPROVED April, 2009	REVISED	RESTRAINED JOINT STANDARD FOR BENDS, PLUGS, CAPS & VALVES	2.11

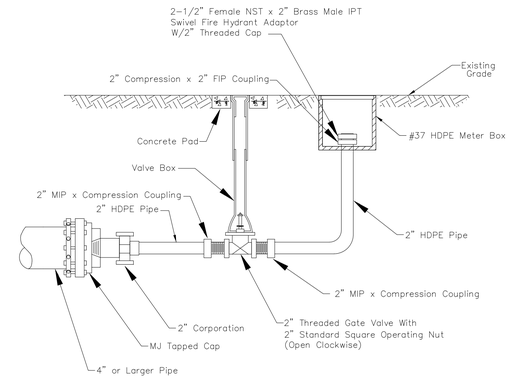


Fitting Size	Restrain (LF) Tee "A"	Restrain (LF) Reducer "B"	Unrestrained Straight Run (LF) Reducer "C"
4x4	25	*	*
6x4	11	40	59
6x6	48	*	*
8x4	A.T.	73	142
8x6	38	43	56
8x8	72	*	*
12x4	A.T.	124	364
12x6	19	104	208
12x8	57	76	115
12x12	114	*	*
16x6	A.T.	121	321
16x8	27	104	212
16x12	77	61	82
16x16	118	*	*
20x6	A.T.	156	527
20x8	14	144	369
20x12	68	109	186
20x16	111	61	77
20x20	149	*	*
24x6	A.T.	189	777
24x8	A.T.	179	560
24x12	59	150	313
24x16	104	111	172
24x20	144	61	74
24x24	179	*	*
30x6	A.T.	234	1227
30x8	A.T.	226	904
30x12	45	204	542
30x16	94	173	341
30x20	135	134	208
30x24	172	86	110
30x30	220	*	*
36x6	A.T.	276	1784
36x8	A.T.	269	1328
36x12	30	251	824
36x16	83	226	551
36x20	127	195	373
36x24	165	156	245
36x30	215	86	106
36x36	261	*	*

A.T.–Restraint required at Tee only.
*–not applicable

NOTES:
1. This table is based on:
   a) maximum test pressure of 190 psi
   b) laying condition type 2 (see Details 2.01 and 2.02)
   c) poor soil conditions
   d) using D.I.P.
   e) 3 feet of cover for 12" and smaller mains; 4 feet of cover for 16" and larger mains
   f) Horizontal bends only – Engineer to submit calculations for vertical restraints
2. Restraint For Reducers: If "C" straight run of pipe downstream of reducer not available, then restrain "B" upstream of reducer.
3. For polywrapped D.I.P., increase the footage to restrain by 25%.
4. For PVC pipe, increase the footage to restrain by 20%.
5. "Restrained" pipe shall be Manufactured Restrained Joint pipe, push-on joint pipe restrained w/gasket-type "Gripper Restraints", or mechanical joint pipe restrained by Megalug (or approved equivalant).
6. Any additional fittings within the restrained section shall be restrained accordingly.

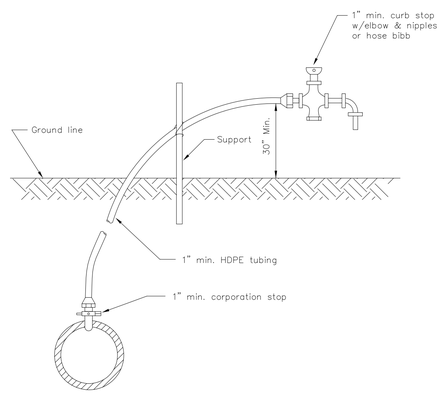
TAMPA WATER DEPARTMENT	APPROVED Sept., 2011	REVISED	RESTRAINED JOINT STANDARD FOR TEES AND REDUCERS	2.12



BLOW-OFF FOR ≥ 4" MAINS

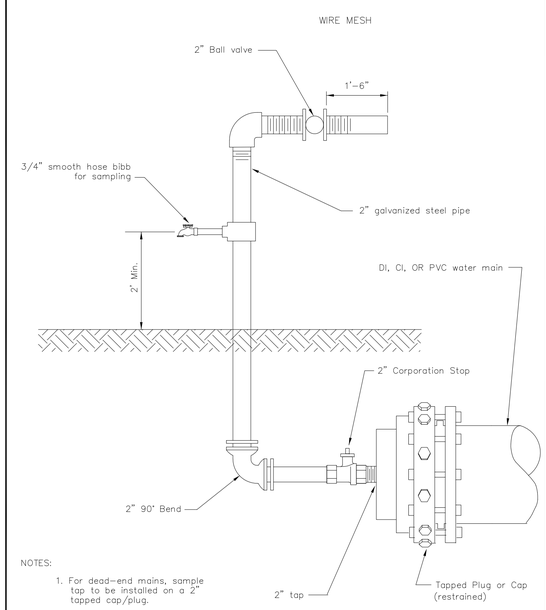
N.T.S.

TAMPA WATER DEPARTMENT	APPROVED April, 2009	REVISED	BLOW-OFF VALVE ASSEMBLY FOR ≥4" MAINS W/DI, CI OR PVC PIPE	2.17



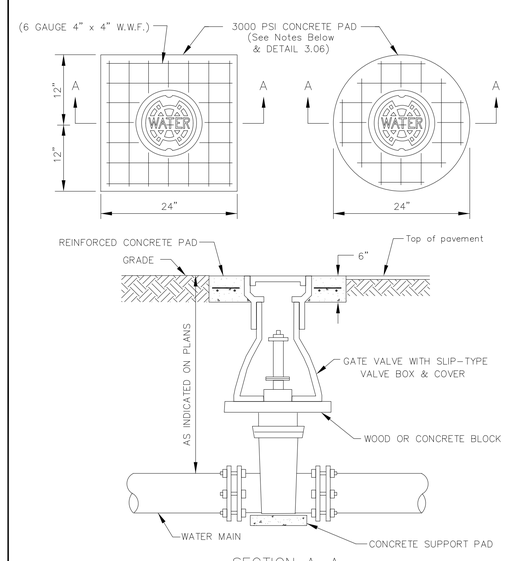
Notes:
1. Water outlet shall be held up off the ground so as not to interfere with the sampling process.
2. Corporation stop to be removed and brass plug installed in tapped main after operation.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	TEMPORARY SAMPLE TAP INSTALLATION w/DI, CI, OR PVC PIPE	2.18



NOTES:
1. For dead-end mains, sample tap to be installed on a 2" tapped cap/plug.
2. Flushing/sampling arrangement to be removed after disinfection of main line.
3. After operation complete, install brass plug at corporation stop.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	TEMPORARY SAMPLE TAP INSTALLATION FOR END OF LINE W/DI, CI, OR PVC PIPE	2.19

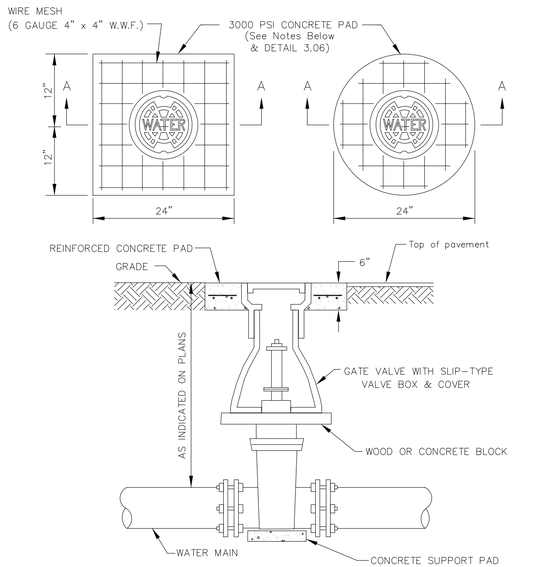


SECTION A–A

N.T.S.

Notes :
1. Circular or square concrete pad required for all valve box installations.
2. Cast iron valve boxes shall be firmly supported and centered and plumb over the operating nut of the valve. Valve box cover shall be flush with the surface of the finished pavement, or grade or at such other level as may be directed by the Department.
3. "Blue" Water Valve locate markers (curb markers) required for all valve installations.
4. Embed bronze valve info disk into concrete valve box collar, per Detail 3.06.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2015	REVISED	VALVE INSTALLATION W/VALVE BOX & PAD FOR DI OR CI PIPE	3.01



SECTION A–A

N.T.S.

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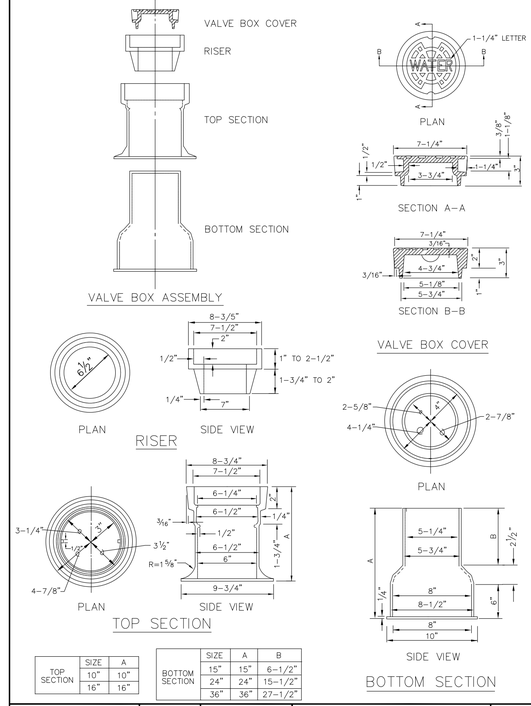
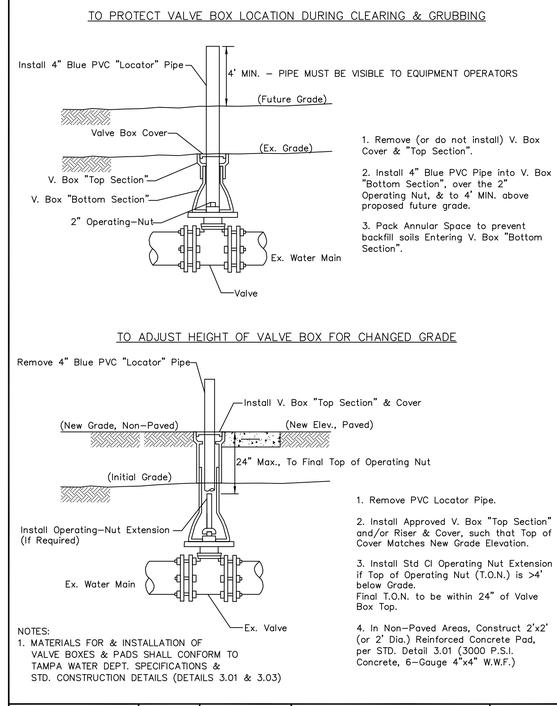
TAMPA WATER DEPARTMENT	APPROVED Sept. 2015	REVISED	VALVE INSTALLATION W/VALVE BOX & PAD FOR DI OR CI PIPE	3.01



TOP SECTION	SIZE	A
	10"	10"
	16"	16"

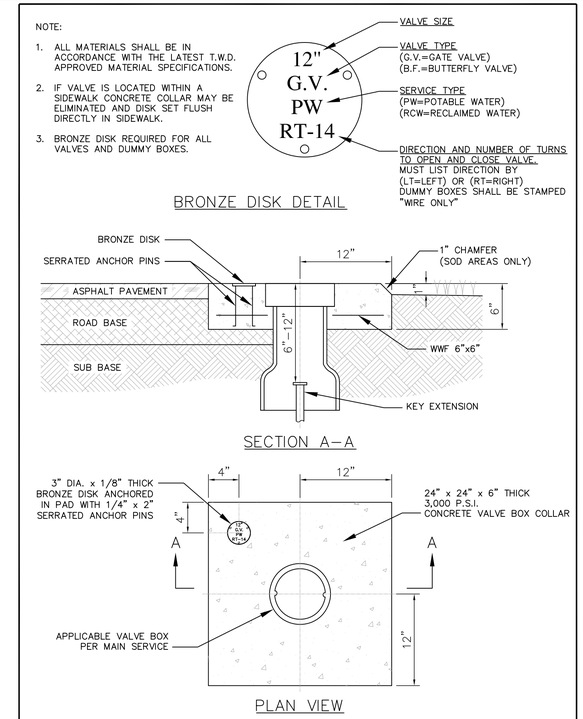
BOTTOM SECTION	SIZE	A	B
	15"	15"	6–1/2"
	24"	24"	15–1/2"
	36"	36"	27–1/2"

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	VALVE BOX, SLIP-TYPE	3.04

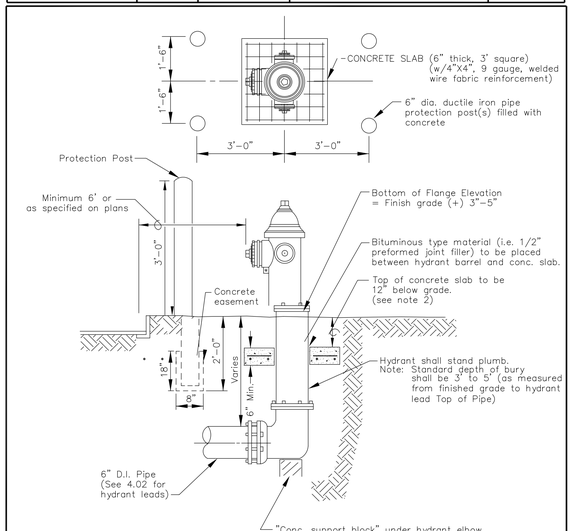


NOTES:
1. MATERIALS FOR & INSTALLATION OF VALVE BOXES & PADS SHALL CONFORM TO TAMPA WATER DEPT. SPECIFICATIONS & STD. CONSTRUCTION DETAILS (DETAILS 3.01 & 3.03)

TAMPA WATER DEPARTMENT	APPROVED RNM	REVISED Jan 2017	VALVE BOX (V. BOX) ADJUSTMENTS FOR GRADE CHANGE	3.05

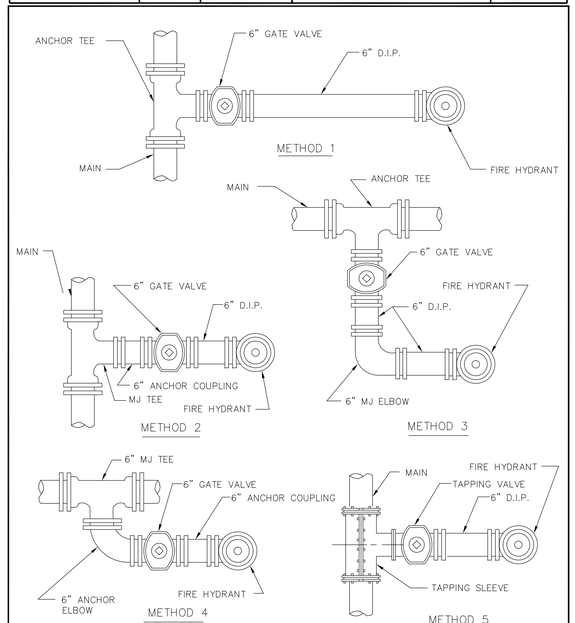


TAMPA WATER DEPARTMENT	APPROVED RNM	REVISED SEPT. 2016	CONCRETE VALVE BOX COLLAR DETAIL	3.06



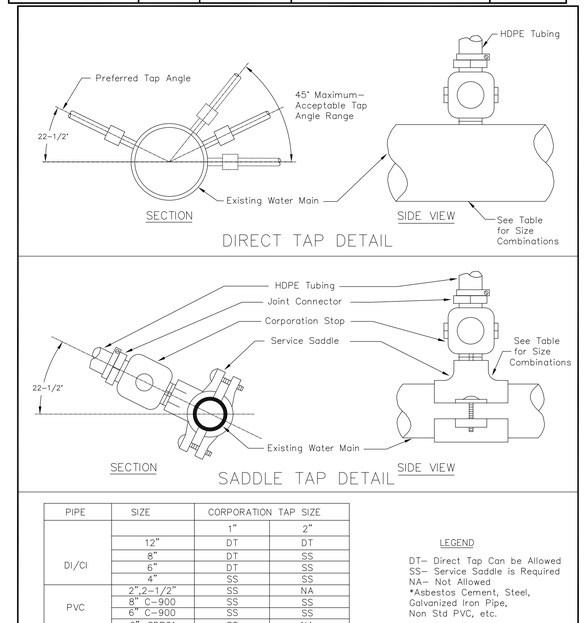
NOTES:
1. Fire hydrant barrel above the ground line shall be painted with a high–grade enamel paint, Federal Safety yellow (OSHA approved), and the hydrant bonnet shall be painted OSHA green.
2. Concrete slab may be eliminated in areas where hydrant is set in sidewalk and sidewalk has been installed prior to final acceptance of the hydrant.
3. Thrust restraint for hydrant:
   a) hydrant shall be firmly supported under elbow in all methods by support block
   b) all backfill shall be thoroughly compacted under support block and under thrust collar
   c) all hydrant leads shall be restrained by Megalugs or equivalent mechanical restraints
4. Protection posts are required when hydrant is less than 6 feet from edge of pavement, or as directed by the Engineer.
5. For PVC mains, install concrete support block under all hydrant tees.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	FIRE HYDRANT INSTALLATION	4.01



1. Valve shall be set in accordance with Detail 3.01. For hydrant set, see Detail 4.01.
2. All valves shall be anchored to branch of tee on all hydrant installations.
3. All hydrant leads shall be restrained by Megalugs or equivalent.
4. For PVC mains, install concrete support block under hydrant tees.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	FIRE HYDRANT METHODS OF INSTALLATION	4.02

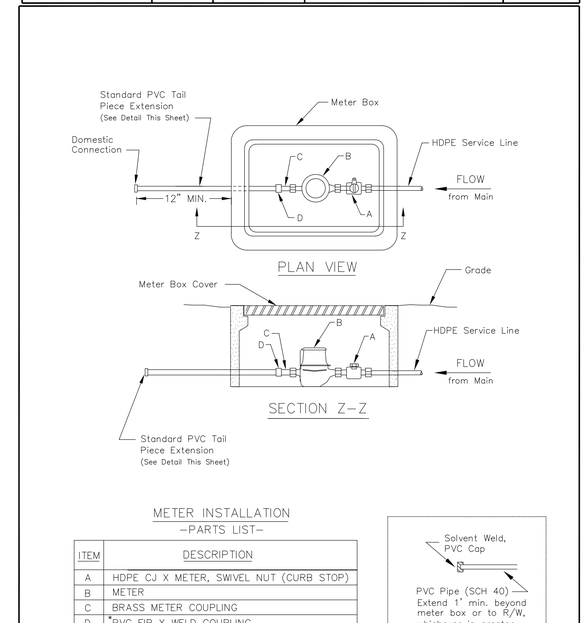


PIPE	SIZE	CORPORATION TAP SIZE	
		1"	2"
DI/CI	12"	DT	DT
	8"	DT	SS
	6"	DT	SS
	4"	SS	SS
PVC	2",2–1/2"	SS	NA
	8" C–900	SS	SS
	6" C–900	SS	SS
	2"–SDR21	SS	NA
OTHER*	12"	SS	SS
	10"	SS	SS
	8"	SS	SS
	6"	SS	SS
	4"	SS	NA
	3"	SS	NA
	2",2–1/2"	SS	NA

LEGEND

DT– Direct Tap Can be Allowed
SS– Service Saddle is Required
NA– Not Allowed
*Asbestos Cement, Steel, Galvanized Iron Pipe, Non Std PVC, etc.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	TAPPING DETAIL FOR 3/4", 1", 1–1/2" & 2" W/DI, CI, OR PVC PIPE	5.01



METER INSTALLATION
–PARTS LIST–

ITEM	DESCRIPTION
A	HDPE CJ X METER, SWIVEL NUT (CURB STOP)
B	METER
C	BRASS METER COUPLING
D	*PVC FIP X WELD COUPLING

* All PVC pipe and fittings shall be SCH 80 except for standard tail piece section which will be SCH 40.

NOTE: Parts list is for standard installation; actual parts required may vary as directed by the Engineer.

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	SINGLE METER SET DETAIL 3/4", 1", 1–1/2", 2"	5.02

Water Department

FY17 CIP
CAST IRON MAIN REPLACEMENT

DETAIL SHEET

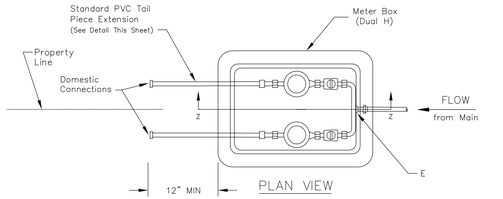
CULBREATH BAYOU

Atlas Page 18

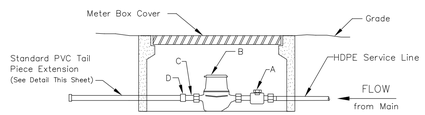
No.	Date	REVISION	By
		Approved	Date

Des: RNM
Dwn: MGL
Ckd: RAJ

W.O. 8397 File: Culbreath Bayou (CIP 2017)
FILE NUMBER



PLAN VIEW



SECTION Z–Z

METER INSTALLATION
–PARTS LIST–

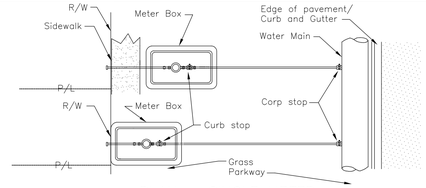
ITEM	DESCRIPTION
A	FIP CURB X METER SWIVEL NUT (CURB STOP)
B	METER
C	METER COUPLING
D	*PVC FIP X WELD COUPLING
E	MIP X HDPE CJ BRANCH COUPLING

STD. TAIL PIECE EXTENSION

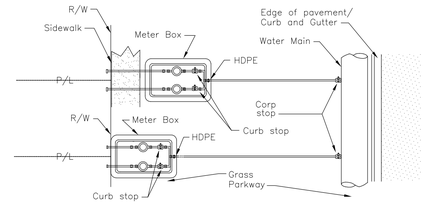
* All PVC pipe and fittings shall be SCH 80 Except for standard tail piece section which will be SCH 40.

NOTE: Parts list is for standard installation; actual parts required may vary as directed by the Engineer.

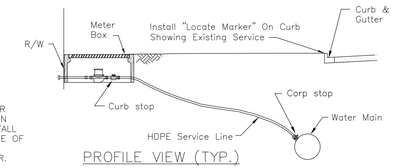
TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	DUAL METER SET DETAIL 3/4" & 1"	5.03



PLAN – SINGLE METER



PLAN VIEW – DUAL METER



DO NOT INSTALL METER WITHIN SIDEWALK. WHEN SIDEWALK EXISTS, INSTALL METER ON STREET SIDE OF SIDEWALK OR WHERE DIRECTED BY ENGINEER.

PROFILE VIEW (TYP.)

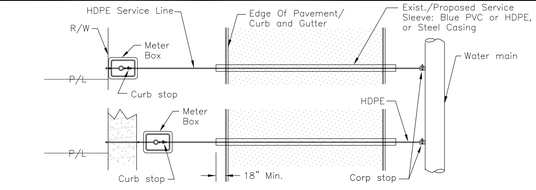
* Line size applicable for DDCVA

SINGLE METER SIZE (inches)	SERVICE LINE SIZE (inches) (0–15')
3/4	1
1	1
1–1/2	2
2*	2

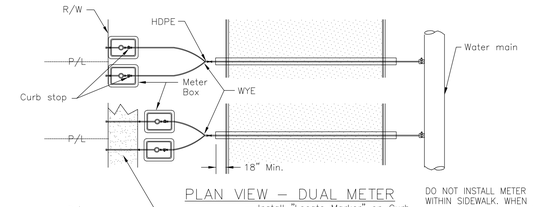
DUAL METER SIZE (inches)	SERVICE LINE SIZE (inches) (0–15')
3/4	2
1	2
1–1/2	n/a
2	n/a

(Feet refer to distance from water main to meter)

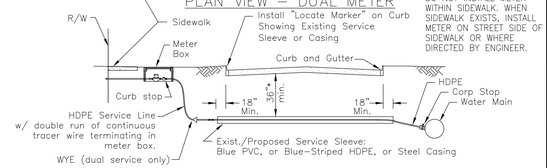
TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	SINGLE & DUAL METERED SERVICE – SHORT SIDE 3/4", 1", 1–1/2" AND 2"	5.04



PLAN VIEW – SINGLE METER



PLAN VIEW – DUAL METER



DO NOT INSTALL METER WITHIN SIDEWALK. WHEN SIDEWALK EXISTS, INSTALL METER ON STREET SIDE OF SIDEWALK OR WHERE DIRECTED BY ENGINEER.

PROFILE VIEW (TYP.)

CASING SPECIFICATION:
1. If pushed–SCH 40 steel pipe (min.)
2. If layed in open trench–SCH 40 steel pipe or SCH 80 PVC solvent weld pipe.

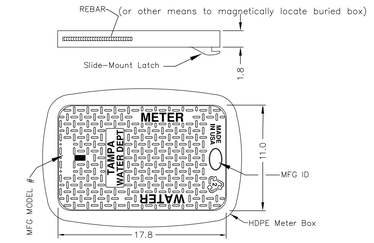
*Or greater, if required by ROW controlling agency
**Line sizes applicable for 2" DDCV

SINGLE METER SIZE (inches)	SERVICE LINE SIZE (inches) (15'–80')	SERVICE LINE SIZE (inches) (80'–150')	CASING SIZE (inches)
3/4	1	2	2 / 4
1	2	2	4
1–1/2	2	2	4
2**	4" D.I.P.	4" D.I.P.	12

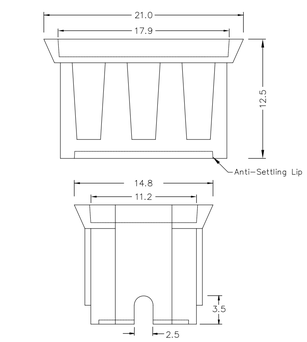
DUAL METER SIZE (inches)	SERVICE LINE SIZE (inches) (15'–80')	SERVICE LINE SIZE (inches) (80'–150')	CASING SIZE (inches)
3/4	2	2	4
1	2	4" D.I.P.	4 / 12
1–1/2	n/a	n/a	n/a
2	n/a	n/a	n/a

(Feet refer to distance from water main to meter)

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED	SINGLE & DUAL METERED SERVICE – LONG SIDE 3/4", 1", 1–1/2" AND 2"	5.05



Anti-Float Lid w/Rebar & AMR Snap-lock Slide Mount

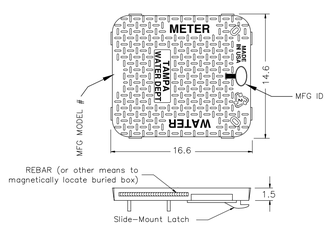


HDPE METER BOX w/LIP

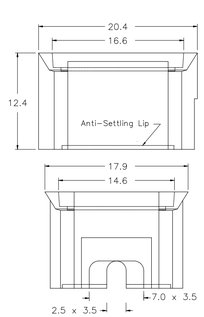
Units = inches (NTS)

#37 HDPE METER BOX w/ COVER

TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED RNM 12/2/16	3/4" OR 1" SINGLE SERVICE HDPE METER BOX	5.10A



Anti-Float Lid w/Rebar & AMR Snap-lock Slide Mount

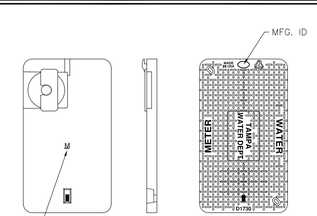


HDPE METER BOX w/LIP

Units = inches (NTS)

"DUAL-H" HDPE METER BOX w/ COVER

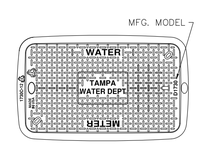
TAMPA WATER DEPARTMENT	APPROVED Sept. 2011	REVISED RNM 12/2/16	3/4" OR 1" DUAL SERVICE HDPE METER BOX	5.11A



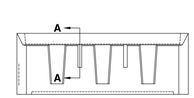
BODY KEY	
H	HEAVY WALL, 1/2"

LID KEY	
AF	ANTI–FLOAT MATERIAL
1	BLACK COLOR
M	MAGNET
A	AMR SLIDE MOUNT
TPA	TAMPA WATER

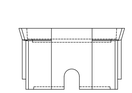
1730C-AF1MA TPA-LID



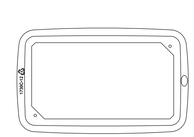
1730CH-12-AF1MA TPA



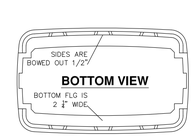
1730CH-12-BODY



LIFT STRUCTURE
SECTION A-A



1730CH-12-BODY



NOTES
1) DIM'S ± 1/8" U.N.O.
2) LID MATERIAL: HDPE
3) BODY MATERIAL: LLDPE
4) WALL THICKNESS: 1/2" MINIMUM
5) I.W.A. = INSIDE WORK AREA.
6) SNAP LOCK POCKET WILL RECEIVE AMR/AMI DEVICE ENDPOINT. SNAP LOCK SLOT IS 1.80" ± .015" TO ALLOW FOR A FINGER FORCE INSTALL. POCKET HEIGHT IS 15/16" FOR MIN 1/8" AIR GAP.

#66 HDPE METER BOX W/COVER

TAMPA WATER DEPARTMENT	APPROVED Aug. 2017	REVISED	1–1/2" & 2" SINGLE SERVICE HDPE METER BOX	5.12A

City to provide neighborhood symbol decal

Project Manager:
Harry Glenn
Water Dept. Chief Construction Engineer
City of Tampa

Phone: (813) 635-3432
Email: harry.glenn@tampagov.net

contractor name here

City of Tampa Improvement Project

total appropriated cost (round off) – duration of construction

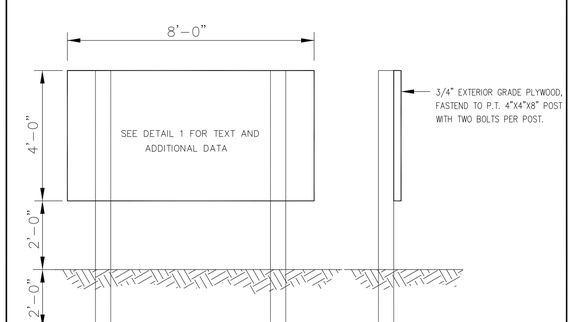
Scheduled for completion in (date)

supplemental project description (max. 2 lines)

For information, please call : (813) 635-3400

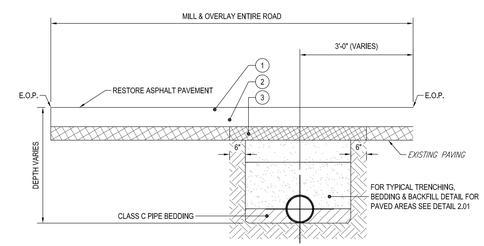
DETAIL 1

NOTES:
1. Letter Color : Black Font : Times New Roman, bold
2. Background Color (front, back and edges) : Benjamin Moore Paint, Natural Wicker OC–1.
3. Post Color: Black
4. Contractor shall verify text with the City prior to sign fabrication.



DETAIL 2
NOT TO SCALE

TAMPA WATER DEPARTMENT	APPROVED April, 2009	REVISED JRD 4/09	CITY OF TAMPA PROJECT SIGN	9.01



PAVEMENT LAYERS (SEE SPECIFICATIONS)

1. TYPE SP 9.5 ASPHALT (1") MILL & OVERLAY
2. TYPE SP 9.5 OR SP 12.5 ASPHALT (2")
3. CRUSHED CONCRETE BASE (6")

(ASPHALT)

NOTES:

1. PAVEMENT SHALL BE MECHANICALLY SAWED.
2. THE NEW BASE MATERIALS SHALL BE EITHER OF THE SAME TYPE AND COMPOSITION AS THE MATERIALS REMOVED OR OF EQUAL OR GREATER STRUCTURAL ADEQUACY, BASE, INSTALLED TO A THICKNESS OF THE EXISTING BASE OR 8" WHICHEVER IS GREATER, CRUSHED CONCRETE BASE SHALL FOLLOW FDOT STANDARD SPECIFICATIONS FOR RECYCLED CONCRETE AGGREGATES, LATEST EDITION. LAYER COEFFICIENT (SN) SHALL BE 0.18 WITH LIMEROCK BEARING RATIO (LBR) 150 OR GREATER. GRADATION AND SIZE REQUIREMENTS SHALL CONFORM TO FDOT LATEST SPECIFICATIONS.
3. THE SURFACE COURSE WITHIN THE TRENCH LIMITS SHALL BE FDOT TYPE SP 9.5 OR SP 12.5 WITH A THICKNESS EQUAL TO THE EXISTING OR 2", WHICHEVER IS GREATER, LIFT TO BE $\frac{3}{4}$" MIN. AND 1 $\frac{1}{2}$" MAX. TO 1" MAX. FOR SP 12.5.
4. FOR COLLECTOR/ARTERIALS ROADS, 1" MILL AND OVERLAY 10' IN EACH DIRECTION OF THE TRENCH AND FULL WIDTH OF THE LANE, FOR RESIDENTIAL ROADS, 1" MILL AND OVERLAY 10' IN EACH DIRECTION OF THE TRENCH AND FULL WIDTH OF THE ROAD (CURB TO CURB). FDOT TYPE SP 9.5 ASPHALT SHALL BE USED. LIFT TO BE $\frac{3}{4}$" MIN. AND 1 $\frac{1}{2}$" MAX.

TYPICAL PAVING SECTION (MILL & OVERLAY)
NTS

Water Department	FY17 CIP CAST IRON MAIN REPLACEMENT	DETAIL SHEET	CULBREATH BAYOU	Atlas Page 18	No. / Date / REVISION / By / Approved / Date	Des: RNM / Dwn: MGL / Ckd: RAJ	W.O. 8397 / File: Culbreath Bayou (CIP 2017) / FILE NUMBER / SHEET 22 OF 22 SHEETS