

**REQUEST FOR PROPOSAL  
FOR CORROSION MONITORING SYSTEM CONDITION  
ASSESSMENT FOR SAN JUAN WATER DISTRICT FACILITIES  
June 14, 2024**

**PROJECT DESCRIPTION**

San Juan Water District has cathodic protection/monitoring systems connected to following facilities (See Exhibit A):

- Cooperative Transmission Pipeline (CTP)
- Fair Oaks 40" Pipeline
- Auburn Folsom 24" Pipeline
- WTP Raw Water Pipelines
- Treated Water Pipelines at the WTP
- Los Lagos Tank

The purpose of the Corrosion Monitoring System condition assessment and testing program will be to:

- Determine the current status of the existing corrosion testing systems,
- Determine if any repairs or replacements are needed on the existing corrosion testing and monitoring system, and on the existing cathodic protection system,
- Determine if the mortar lined and coated pipelines are actively corroding by using the existing corrosion testing system,
- Determine the functionality of the various electrical isolation fittings that are installed on the system,
- Determine if there are any other utilities that have been installed since the facilities were constructed that may be inducing AC current or any other interference from a foreign structure that may contribute to any adverse corrosion effect on the facility.
- Determine if any corrosion testing, monitoring or protection system updates or new facilities are recommended for the CTP to provide economic benefit towards extending the life of the pipeline.

The assessment study will involve the rectifiers, test stations, joint isolation stations, etc. as defined in Exhibit B attached.

**SCOPE OF WORK**

The scope of services tasks will, at a minimum, include the following:

1. Review the available pipeline as-built drawings and documents.
2. Inspect the condition of the accessible corrosion monitoring system components.
3. Measure and record the pipe-to-soil potentials at each of the test stations.
4. Assess the electrical isolation of the pipelines from other pipelines and utilities.
5. Prepare and submit a final summary report that will include the following elements:
  - a. Description of the goals and objectives.
  - b. Summary description of the field-testing procedures employed for the project.

- c. Tabulation of the testing results.
- d. Analysis of the testing results and observations.
- e. Conclusions about the operational condition of the corrosion system, the test stations, and other systems.
- f. Recommendations on any necessary repairs, upgrades, and improvements for the corrosion protection and monitoring systems.
- g. Recommendations for future monitoring and testing frequency.
- h. Cost estimates for recommended corrosion system monitoring and protection system improvements.
- i. Projection of remaining pipeline life based on the available information, testing and inspection results, and expert opinion.
- j. Appendix containing copies of testing and investigation documents including but not necessarily limited to drawings, details, surveys, forms, data, and analysis.

### **SUBMITTAL OF PROPOSALS**

Interested firms should submit their technical and cost proposal(s) in Adobe Acrobat (.pdf, unlocked and printable) format to:

San Juan Water District  
Attention: Greg Turner  
[gturner@sjwd.org](mailto:gturner@sjwd.org)

The deadline for proposal submittals is **2:00 p.m. on Monday, July 8, 2024**. Late proposals will not be accepted. Firms are advised to verify District's receipt of their proposal prior to the due date and time. The District will not begin reviewing submitted proposals until after the due date and time as stated.

# **EXHIBIT A SITE MAP**

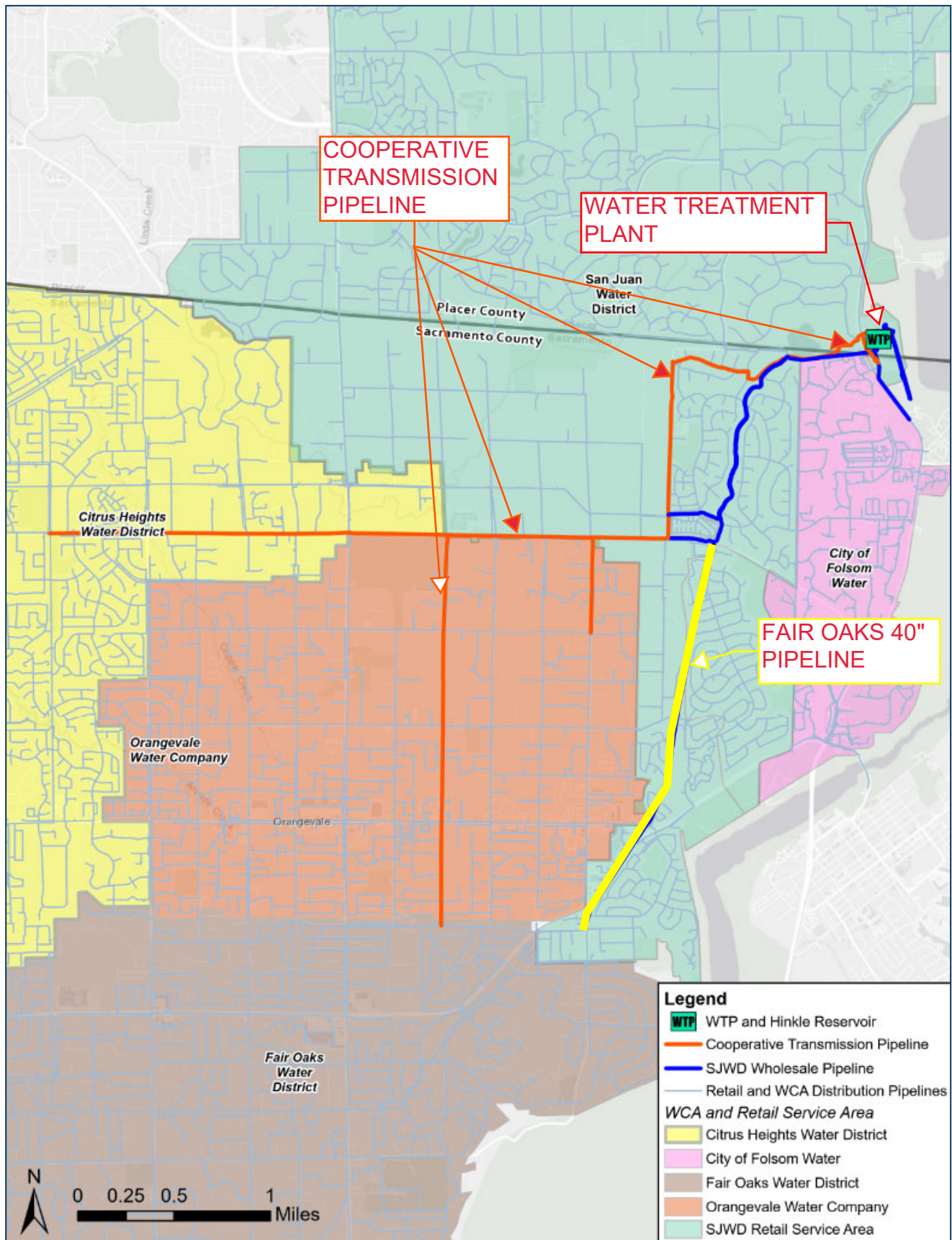
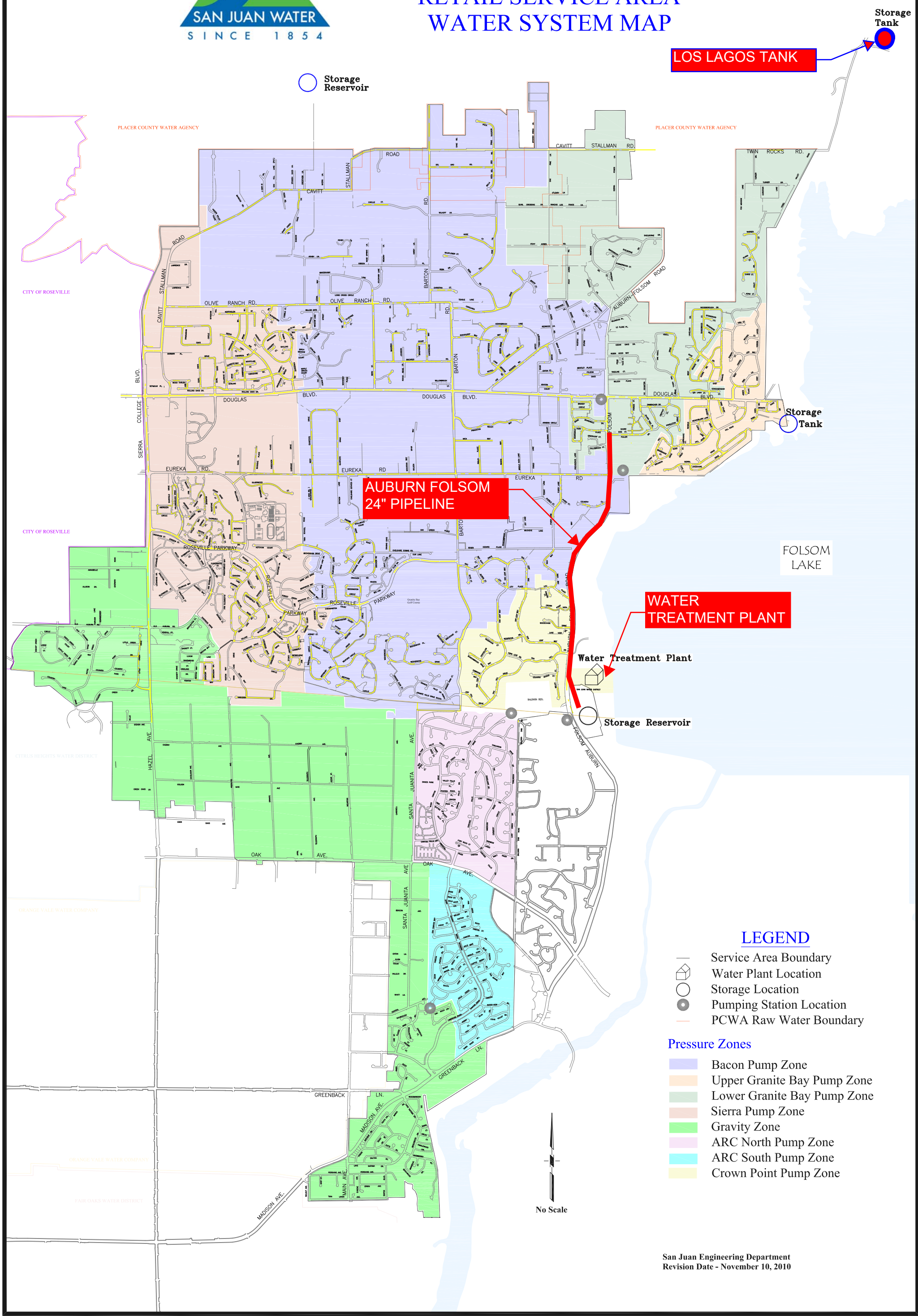


Figure 2-2. Wholesale Transmission System





# SAN JUAN WATER DISTRICT RETAIL SERVICE AREA WATER SYSTEM MAP



**LOS LAGOS TANK**

**AUBURN FOLSOM  
24" PIPELINE**

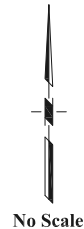
**WATER  
TREATMENT PLANT**

### LEGEND

- Service Area Boundary
- 🏠 Water Plant Location
- Storage Location
- Pumping Station Location
- PCWA Raw Water Boundary

### Pressure Zones

- 🟡 Bacon Pump Zone
- 🟠 Upper Granite Bay Pump Zone
- 🟢 Lower Granite Bay Pump Zone
- 🟤 Sierra Pump Zone
- 🟩 Gravity Zone
- 🟪 ARC North Pump Zone
- 🟦 ARC South Pump Zone
- 🟨 Crown Point Pump Zone



**EXHIBIT B**  
**CATHODIC PROTECTION/MONITORING TEST**  
**LOCATIONS**

**Exhibit B - Cathodic Protection/Monitoring Test Locations**

**6/14/2024**

VATS= Valve and Tee Anode Test

CTS = Corrosion Monitoring System

IJTS = Insulating Joint Test Station

Alignment Schedule	Stationing/Location	Type	Pipeline Diameter	Material of Construction
<b>Auburn Folsom 24" Pipeline</b>				
South Phase	0+32	CTS	24"	Ductile Iron Pipe (DIP)
	5+50	CTS	24"	
	11+50	CTS	24"	
	16+65	IJTA & VATS	24"	
	16+69	IJTA & VATS	24"	
	21+00	CTS	24"	
	25+74	IJTA & VATS	24"	
	25+78	IJTA & VATS	24"	
	30+50	CTS	24"	
Middle Phase	36+22	IJTA	24"x8"	
	36+26	IJTA	24"x8"	
	40+00	CTS	24"	
	46+00	CTS	24"	
	50+00	CTS	24"	
	54+50	CTS	24"	
	59+08	IJTA	24"	
	59+12	IJTA	24"	
	63+80	CTS	24"	
	68+50	CTS	24"	
	73+20	CTS	24"	
North Phase	76+45	VATS	24"x18"	
	77+21	VATS	18"	
	82+70	VATS (3)	18"x12"	
	85+05	VATS (2)	18"	
	87+55	VATS	18"x10"	
	90+38	VATS	18"x12"	
	93+27	VATS	18"x10"	
	96+12	VATS	18"x10"	
	0+13	VATS (2)	18"	
<b>Cooperative Transmission Pipeline (CTP)</b>				
Schedule A	15+50	CTS	78"	
	22+30	CTS	78"	
	45+00	CTS	72"	
	55+00	CTS	72"	
	66+80	CTS	72"	
Santa Juanita Ave – Sch.	75+00	CTS	72"	
	85+00	CTS	72"	
	95+00	CTS	72"	

Alignment Schedule	Stationing/Location	Type	Pipeline Diameter	Material of Construction
A	105+00	CTS	72"	CML&CS
	116+70	CTS	72"	
	121+25	CTS	72"	
Oak Ave – Sch. B	2+22	IJTS	72"	
	18+00	CTS	72"	
	30+00	CTS	72"	
	38+00	CTS	72"	
	47+70	CTS	72"	
	58+00	CTS	72"	
	69+00	CTS	72"	
	78+00	CTS	72"	
	88+00	CTS	72"	
	97+70	CTS	72"	
	108+00	CTS	72"	
	118+10	CTS	72"	
	128+30	CTS	72"	
	138+00	CTS	72"	
	148+40	CTS	72"	
	159+10	CTS	72"	
168+00	CTS	72"		
178+10	IJTS (2)	72"		
Filbert Ave. – Sch. C	4+90	CTS	48"	C-303 RCP
	15+00	CTS	48"	
	25+00	CTS	48"	
	35+00	CTS	48"	
	45+00	CTS	48"	
	55+00	CTS	48"	
	65+00	CTS	39"	
	75+00	CTS	39"	
	85+00	CTS	39"	
	95+00	CTS	39"	
	105+00	CTS	39"	
112+00	CTS	39"		
Main Ave.	10+00	CTS	30"	C-303 RCP
<b>Fair Oaks 40" Pipeline</b>				
1	0+00	TP	40"	COAL TAR COATED & MORTAR LINED STEEL PIPE
2	4+80	CP RECTIFIER STATION #1	40"	
3	8+50	TP	40"	
4	23+50	CTS	40"	
5	35+98	CTS	40"	
6	43+60	TP	40"	
7	50+50	CS RECTIFIER STATION #2	Rectifier	
8	56+80	TP	40"	



Alignment Schedule	Stationing/Location	Type	Pipeline Diameter	Material of Construction
9	69+55 & 70+10	CTS	40"	
10	74+64	CTS	40"	
11	77+95	CP RECTIFIER STATION #3	40"	
12	102+93	CTS	40"	
<b>Water Treatment Plant Piping</b>				
Rectifier	Inlet Structure	Rectifier	All Piping Below	CML&CS
Segment 1 to 3	Raw Water Cross Connection Pipeline	CTS	42" & 72"	
Segment 5	Raw Water (RW) Pipeline	CTS	54"	
Segment 5	RW Pipeline	CTS	54"	
Segment 6	RW Riser Pipe @ Sed. Basin	CTS	42"	
Segment 6	RW Riser Pipe @ Sed. Basin	CTS	42"	
Segment 8	TW Pipe @ Inlet	CTS	60"	
Segment 8	TW Pipe @ Inlet	CTS	60"	
Segment 8	TW Pipe @ Filter Outlet	CTS	60"	
Segment 8	TW Pipe @ Filter Outlet	CTS	60"	
Segment 9	North 72" Tee	IJTS	72"	
Segment 9	North 72" Tee	CTS	72"	
Segment 9	Connection to Hinkle PS	IJTS	30"	
Hinkle Wye	72" to 84" Connection (Exposed)	IJTS	72"	
Hinkle Wye	72" to 72" Connection (Exposed)	IJTS	72"	
Hinkle Wye	42" to 84" Connection (Exposed)	IJTS	42"	
Hinkle Wye	42" to 42" Connection (Buried)	IJTS	42"	
<b>Los Lagos Tank</b>				
Tank	Tank to Water Differential	Anode Control Box	1.65 Mgal Tank	Steel Tank