

### INTEGRATED PIPELINE PROJECT

### QUARTERLY EXECUTIVE SUMMARY

December 2020



#### IPL PROGRAM MANAGEMENT

Tarrant Regional Water District 804 East Northside Drive Fort Worth, TX 76102 817.720.4469 p 817.720.4397 f

iplproject.com

@IPL\_Project

TARRANT REGIONAL WATER DISTRICT (TRWD) and the CITY OF DALLAS WATER UTILITIES (DWU) have partnered to finance, plan, design, construct and

operate the Integrated Pipeline (IPL) Project. The IPL Project is an integrated water delivery transmission system connecting Lake Palestine to Lake Benbrook with connections to Cedar Creek and Richland-Chambers Reservoirs integrating TRWD's existing pipelines and creating flexibility in delivery as well as quick response to fluctuating customer water demands. The IPL Project consists of 150 miles of pipeline, three new lake pump stations, and three new booster pump stations delivering a required capacity of 350 million gallons per day (MGD) of raw water to North Central Texas. TRWD and DWU currently serve over 4.1 million residents and the IPL will allow these agencies to continue supporting regional community and economic growth.

## **PROGRAM SUPPORT SERVICES**

through 11.30.2020

CONTRACT DESIGN AND CONSTRUCTION	DESCRIPTION	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
PROGRAM WIDE PROFESSIONAL SERVI	CES	\$133,062,000	\$87,563,706	\$85,339,146
Program Management	Overall program management services for implementation of the IPL Project. (Extension of TRWD staff)	\$45,000,000	\$35,124,711	\$35,124,711
Conceptual Design / Environmental / Permitting	Operations plan & Prepare 404 permit application, Envision Application Completion	\$13,551,000	\$13,248,701	\$13,248,699
Value Engineering	ering Expert review of design		\$472,248	\$472,248
Surveying and Mapping	Control, property survey, legal descriptions, and Provide SUE Level A Survey, GIS	\$14,600,000	\$11,854,388	\$10,786,352
Geotechnical	Initial Characterization of entire IPL Project	\$12,037,000	\$12,026,275	\$12,026,276
Corrosion Engineering Services	Engineering Corrosion Control	\$3,891,000	\$5,326,362	\$4,662,268
Land, Easement Acquisition, & Support	Right of Entry and Land Acquisition Support Services	\$33,993,000	\$3,464,526	\$3,433,831
Studies		\$3,500,000	\$3,683,743	\$3,587,584
SCADA System	Engineering of SCADA system	\$640,000	\$0	\$0
Microwave System	Engineering of Communications System	\$5,210,000	\$2,362,752	\$1,997,177
DESIGN & CONSTRUCTION ADMINISTR	ATION	\$201,714,000	\$154,007,175	\$141,262,099
Completed		\$122,733,000	\$103,809,850	\$102,629,900
Active		\$23,326,000	\$50,197,324	\$38,632,199
CH2M Hill	Project Operational Information and Operations Manual		\$6,479,844	\$5,192,749
CH2M Hill	Final Conformance of Design of JCC1	\$728,000	\$9,288,681	\$7,517,273
мwн	Final Conformance of Design of Section 9/10/11	\$506,000	\$1,307,780	\$1,025,773
Black & Veatch	Engineering during Construction of Section 10/11		\$810,000	\$460,732
Black & Veatch	Final Design of Section 12/13/14	\$11,292,000	\$12,338,807	\$12,278,728
Brown & Gay	rown & Gay Final Design of Section 19-1		\$8,130,200	\$3,465,187
HDR	Final Design of Section 19-2		\$8,358,000	\$5,347,753
Burns & McDonnell Trans. Mgmt. Development of Transportation Management Plan			\$905,203	\$866,643
Burns & McDonnell High Voltage Design			\$2,578,809	\$2,477,360
Remaining		\$55,655,000		
CONSTRUCTION / OWNER FURNISHED	EQUIPMENT	\$1,729,540,000	\$711,368,104	\$694,002,655
Completed		\$346,119,000	\$212,008,946	\$211,792,242
Active		\$875,818,000	\$499,359,158	\$482,210,413
JB3		\$83,013,000	\$75,779,477	\$71,211,755
MWH Constructors	Construction of JB3 Pump Station	\$51,473,000	\$57,995,805	\$56,660,813
Oncor Electric	Installation of JB3 Substation Transmission Lines	\$1,066,000	\$957,119	\$923,119
Isolux Corsan	Construction of JB3 Substation	\$7,400,000	\$4,864,888	\$4,864,888
R E Monks	R E Monks Construction of JB3R Restoration		\$675,782	\$675,782
Pentair Flow Technologies Construction of JB3 Pumps, Motors, Drives		\$23,074,000	\$11,285,883	\$8,087,153
Pipeline Section 12/13/MBR/JB4 Bypass		\$167,992,000	\$153,555,743	\$153,532,318
Thalle Midlothian	Construction of Sections 12/13/MBR/JB4 Bypass	\$146,310,000	\$143,253,968	\$143,230,542
BAR Constructors	Construction of Richland-Chambers/Cedar Creek Interconnection Facility	\$21,682,000	\$10,177,546	\$10,177,546
Hilco Electric	MBR Radio Tower Power		\$33,312	\$33,312
Oncor Electric	Provide Power to IPL 2X12		\$90,918	\$90,918

## PROGRAM SUPPORT SERVICES

through 11.30.2020

CONTRACT DESIGN AND CONSTRUCTION	DESCRIPTION	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
Pipeline Section 17		\$109,944,000	\$94,295,830	\$89,984,26
IPL Partners	Construction of Section 17 Tunnel	\$12,252,000	\$48,500,000	\$47,229,718
Thalle Midlothian	Construction of Sections 17/18/JB2 Bypass	\$97,692,000	\$45,795,830	\$42,754,54
JCC1		\$106,582,000	\$105,875,879	\$97,979,33
BAR Constructors	Construction of JCC1 Intake	\$21,564,000	\$18,960,214	\$18,960,21
BAR Constructors	Intake Facility & OFE Installation Package 2	\$63,900,000	\$63,690,600	\$57,186,563
Ebara	Construction of JCC1 Pumps, Motors, Drives	\$17,775,000	\$12,694,890	\$11,680,768
Lambda Construction	High Voltage		\$5,773,925	\$5,395,54
Oncor Electric	Construction of JCC1 HV Transmission Lines	\$3,343,000	\$4,756,250	\$4,756,25
Pipeline Section 10/11		\$73,679,000	\$55,545,935	\$55,545,32
IPL Partners	Construction of Section 10/11	\$72,362,000	\$42,022,945	\$42,022,33
Oncor Electric	Construction of KBR S1X10 HV Transmission Lines		\$17,452	\$17,452
BAR Constructors	Construction of KBR S1X10	\$1,317,000	\$13,505,537	\$13,505,53
Valve Packages		\$15,166,000	\$14,306,294	\$13,957,41
Garney Construction	Valve Package 1 - Section 15-1 Butterfly Valves	\$518,000	\$0	\$(
Rodney Hunt	Valve Package 2 - Section 15-1 Interconnection Facility Valves	\$474,000	\$733,206	\$733,20
Blackhall Engineering	Blackhall Engineering  Valve Package 3 - JB3, Section 15-2, MBR Yard Gate Valves		\$6,278,388	\$6,228,59
Crispin Valves	vispin Valves Valve Package 4 - Section 12 RC/CC Interconnection, JB4 Bypass, MBR Yard Butterfly Valves		\$2,269,140	\$2,191,12
Crispin Valves	Valve Package 5 - JB3 Butterfly Valves	\$1,249,000	\$1,249,222	\$1,175,87
Ross Valves	Valve Package 6 - Section 12 RC/CC Interconnection Multi-Orifice Valves	\$715,000	\$526,340	\$478,83
Crispin Valves	Valve Package 8 - Section 10 & 11 Bypass Butterfly Valves	\$1,391,000	\$1,461,040	\$1,393,96
Blackhall Engineering	Valve Package 11 - JCC1 Gate Valve	\$1,320,000	\$1,788,958	\$1,755,80
Remaining		\$507,603,000		
CONSTRUCTION MANAGEMENT		\$65,170,000	\$54,074,009	\$48,266,07
Completed		\$15,777,000	\$15,747,552	\$15,747,55
Active		\$17,665,000	\$38,326,457	\$32,518,52
Remaining		\$31,728,000		
CONSTRUCTION MATERIALS TESTING		\$17,296,000	\$12,931,086	\$10,210,24
Completed		\$203,000	\$225,133	\$225,13
Active		\$7,791,000	\$12,705,953	\$9,985,11
Remaining		\$9,302,000		
ROCIP		\$2,575,000	\$31,847,084	\$23,093,73
LAND COST		\$107,384,000	\$78,289,597	\$78,289,59
PROGRAM LEVEL CONTINGENCY		\$83,178,000		
MISCELLANEOUS		\$2,000,000	\$3,883,792	\$3,883,79
GRAND TOTAL		\$2,341,919,000	\$1,133,964,553	\$1,084,347,342
REMAINING BOND FUNDS				\$131,000,000

Note: Total Bonds issued to date \$1,250,000,000

### **ACCOMPLISHMENTS**

through 12.31.2020

#### **IPL PROGRAM GENERAL OPERATIONAL STATUS**

The IPL System is currently able to deliver water from Richland Chambers Reservoir to the cross-connections with the existing Richland Chambers and Cedar Creek pipelines at the S2X12 Interconnect Facility near Joe Pool Lake and the future DWU connection point. The IPL System is also able to deliver water to the Arlington Outlet via the S1X10 Pressure Reduction Station, the KBR Bypass pipeline and the Line J Pipeline. Water can be delivered via the IPL system and the existing pipelines to the Rolling Hills Water Treatment Plant and to Lake Benbrook

The IPL pipelines and facilities that have been completed to accomplish this delivery are:

- S5X15 Interconnect
- Pipeline Sections 15-1 and 15-2
- JB3R Suction Reservoir
- JB3 Booster Pump Station
- Pipeline Section 14
- Midlothian Balancing Reservoir
  - Pipeline Sections 12 and 13
  - S2X12 Interconnect Facility
- Pipeline Sections 10 and 11
- S1X10 Pressure Reduction

#### **CURRENT PROJECT UPDATES**

#### PL12, 13, MBR (Pipeline Sections 12 and 13 combined with the Midlothian Balancing Reservoir)

Project is complete and operational pending contract closeout.

#### JB3 (250mgd Pump Station expandable to 350mgd)

Project is complete and operational pending contract closeout.

#### PL17TUN (Trinity River Tunnel on Pipeline Section 17)

- Completed pipe installation and joint welding in the Trinity River tunnel.
- Completed tie-in of open cut portion of pipeline at the West tunnel portal and backfilled the portal excavation.
- Began installation of East portion of the open cut piping.

#### JCC1 (Cedar Creek Lake Pump Station)

- Continued electrical and control wiring to panels, equipment and
- Installed air compressor and dryer system and piping.
- Installed potable water heaters in chemical building and filled softener tanks with gravel and resin.
- Manufacturer checked out the 108-inch gate valve HPU.
- Completed installation of acoustical panels in pump station.
- Completed cooling water piping to Chillers.
- Completed coating exterior discharge piping and continued coating interior piping
- Performed startup of Electrical Room air handling units.
- Moved T-screens to guide rails for storage.
- Completed ribbon curb, site fencing, and installation of light poles

#### PL10, 11 (Pipeline Sections 10 and 11 from the JB4 Pump Station to the **KBR Pressure Reduction Facility)**

Project is complete and operational pending contract closeout.

#### PL17-18 (Pipeline Sections 17 and 18 from east end of PL15-1 to JCC1 Pump Station)

• Completed final coatings of appurtenances and installation of cathodic protection anodes.

#### PL19TX (Tunnels at TxDOT Roadway Crossings)

- Notice To Proceed issued for 10/19/2020.
- Equipment mobilized to site and Field Offices set up CR4530, near intersection with FM2588.
- ROW, access drive, launch and receiving shaft locations were surveyed and staked.
- ROW clearing and preparation, temporary fences and temporary access drives were completed at FM753, FM59 and Crossroads.
- Tunnel excavation began at FM753 site and 27 l.f of the 220 l.f. tunnel

### PL19TUN (Cedar Creek; SH 31; Hollywood Lake; SH 151/Frankston

- Continue geotechnical investigation and collaborative data sharing with
- Conducted geotechnical core/sample viewing for all contractors.

## potential contractors.

## **PROJECT SCHEDULE**

PROJECT COMPONENTS		2019			2020				2021			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SECTION 17 TUNNEL CONSTRUCTION												
JCC1 PUMP STATION INTAKE WET WELL CONSTRUCTION  SUBSTANTIALLY COMPLETE												
SECTION 17, 18 CONSTRUCTION  SUBSTANTIALLY COMPLETE												
JCC1 HIGH VOLTAGE SUBSTATION CONSTRUCTION SUBSTANTIALLY COMPLETE												
JCC1 CONSTRUCTION												
PL19TX CONSTRUCTION												

JCC1 December aerial of complete pump station facility



PL19TUN Design team assessing exposed rock face in vicinity of Hollywood Lake



### **ACTIVITY STATUS**

through 12.31.2020

#### TITLE COMMITMENTS



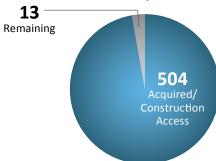
### **SURVEYS**



#### **APPRAISALS**



#### **LAND ACQUISITION**



Total Parent Parcels: 517

# M/WBE PARTICIPATION

through 11.30.2020

CONTRACT DESIGN	M/WBE & HUB SUB-	CONTRACT		M/WBE   H INVOICED 1		TOTAL PROJECT COMPLETED TO DATE		
AND CONSTRUCTION	CONTRACTORS	\$	%	\$	% (PER COMMITMENT)	\$	%	
PROGRAM WIDE PROFESSIONAL S	SERVICES	\$20,397,014	23%	\$19,869,650	97%	\$85,339,146	97%	
Program Management		\$6,636,687	19%	\$6,636,687	100%	\$35,124,711	100%	
Conceptual Design / Environmental	I / Permitting	\$2,655,444	20%	\$2,827,564	106%	\$13,248,699	100%	
Value Engineering		\$23,178	5%	\$23,178	100%	\$472,248	100%	
Surveying and Mapping		\$3,939,403	33%	\$3,831,616	97%	\$10,786,352	91%	
Geotechnical		\$3,545,033	29%	\$3,545,033	100%	\$12,026,276	100%	
Corrosion Engineering Services		\$1,441,900	27%	\$764,938	53%	\$4,662,268	88%	
Land, Easement Acquisition, & Supp	port	\$1,294,837	37%	\$1,534,531	119%	\$3,433,831	99%	
Studies		\$41,717	1%	\$41,717	100%	\$3,587,584	97%	
Microwave System		\$818,814	35%	\$664,386	81%	\$1,997,177	85%	
DESIGN		\$40,047,084	26%	\$37,944,197	95%	\$141,262,099	92%	
Completed		\$28,488,819	27%	\$28,479,842	100%	\$102,629,900	99%	
Active		\$10,946,709	22%	\$8,921,901	82%	\$38,632,199	77%	
CH2M Hill (Ops Manual)	NDM	\$1,063,611	16%	\$825,126	78%	\$5,192,749	80%	
CH2M Hill (JCC1)	JQ, Gupta, APM, HVJ, XENCO	\$2,322,170	25%	\$2,955,488	127%	\$7,517,273	81%	
мwн	Garzabury, Kevin Sloan	\$364,871	28%	\$221,635	61%	\$1,025,773	78%	
Black & Veatch	Texas Design	\$0	0%	\$2,100	0%	\$460,732	57%	
Black & Veatch	BDS, CAS, JQ, TME	\$3,056,800	25%	\$3,023,302	99%	\$12,278,728	100%	
Brown & Gay	AZB, TME, Lamb-Star, NDM	\$2,032,550	25%	\$720,078	35%	\$3,465,187	43%	
HDR	AZB, Daltech, Word Wizards, Gupta	\$1,944,207	23%	\$1,052,673	54%	\$5,347,753	64%	
Burns & McDonnell Trans. Mgmt.	Lamb-Star Engineering	\$162,500	18%	\$121,498	75%	\$866,643	96%	
Burns & McDonnell	HVJ, JQ, Multatech	\$611,556	24%	\$542,455	89%	\$2,477,360	96%	
Burns & McDonnell	HVJ, JQ, Multatech	\$611,556	24%	\$542,455	89%	\$2,477,360	96%	
Remaining		\$0	0%	\$0	0	\$0	0%	
CONSTRUCTION / OWNER FURNIS	SHED EQUIPMENT	\$115,094,118	16%	\$174,380,470	152%	\$694,002,655	98%	
Completed		\$23,389,458	11%	\$38,680,042	165%	\$211,792,242	100%	
Active		\$91,704,660	40%	\$135,700,428	148%	\$482,210,413	97%	
JB3		\$15,259,759	26%	\$12,849,193	84%	\$71,211,755	94%	
MWH Constructors	Statewide, Cowboy, TX Enviro, Champion, Ram Tool, Rent-a-Fence, Soto Steel, A-Star, Ike, Greystone, LKT, Accurate, Green Scaping	\$13,809,839	27%	\$11,399,273	83%	\$56,660,813	98%	
Oncor Electric		\$1,449,920	3%	\$1,449,920	100%	\$4,864,888	8%	
Isolux Corsan	Dyna Grid	\$0	0%	\$0	0%	\$923,119	96%	
RE Monks		\$0	0%	\$0	0%	\$675,782	14%	
Pentair Flow Technologies		\$0	0%	\$0	0%	\$8,087,153	72%	

\$22,270,125

\$16,449,587

\$22,020,463 24%

\$21,207,345 27%

\$153,532,318 100%

78% \$143,230,542 100%

101%

## M/WBE PARTICIPATION

through 11.30.2020

CONTRACT DESIGN	M/WBE & HUB SUB-	CONTRACT COMMITMENT		M/WBE   H INVOICED 1		TOTAL PROJECT COMPLETED TO DATE		
AND CONSTRUCTION	CONTRACTORS	\$	%	\$	% (PER COMMITMENT)	\$	%	
Pipeline Section 12/13/MBR/JB4 By	pass	\$22,020,463	24%	\$22,270,125	101%	\$153,532,318	1009	
Thalle Midlothian	LKT, Statewide, Granados, Desert Steel, ETTL, Glenko, A.N.A., Edwards, Buzz, Bradley- Douglas, Pinnacle	\$21,207,345	27%	\$16,449,587	78%	\$143,230,542	100%	
BAR Constructors	Fraire's, DFW Aggregates, Ricochet, MMG, LKT, Brock, Garland Heating & Air, Texas Metal, Buzz, Rangel	\$813,119	8%	\$5,820,538	716%	\$10,177,546	100	
Hilco Electric		\$0	0%	\$0	0%	\$33,312	1009	
Oncor Electric		\$0	0%	\$0	0%	\$90,918	100	
Pipeline Section 17		\$15,153,548	23%	\$6,928,302	46%	\$89,984,265	95%	
IPL Partners	LKT, Industry Junction, Eagle Aggregate, Suncoast Res, ATS Drilling, RECS, ANA, Alliance,Ram, JC Welding, Luis Moreno	\$9,736,346	23%	\$3,827,282	39%	\$47,229,718	97%	
Thalle Midlothian	Fleet Lube, Rambo Controls, AE Trucking, MKI Construction, Stome Water Management, Industy Junction, Ortega Land Clearing	\$5,417,203	24%	\$3,101,021	57%	\$42,754,547	93%	
JCC1	, , ,	\$17,081,405	19%	\$76,119,658	446%	\$97,979,337	93%	
BAR Constructors	Industry Junction, K&A Steel, Ricochet Fuel, Ricochet Fuel, Tidy Toilets, Buzz Custom Fence	\$961,990	6%	\$18,008,980	1872%	\$18,960,214	100%	
BAR Constructors	Industry Junction, K&A Steel, Ricochet Fuel, Ricochet Fuel, Tidy Toilets	\$14,011,932	23%	\$57,186,563	408%	\$57,186,563	90%	
Ebara	mesenetrael, ne, isnets	\$0	0%	\$0	0%	\$11,680,768	2029	
Lambda Construction	High Voltage	\$2,107,483	37%	\$924,115	44%	\$5,395,542	93%	
Oncor Electric		\$0	0%	\$0	0%	\$4,756,250	100%	
Pipeline Section 10/11		\$6,929,726	20%	\$17,533,150	253%	\$55,545,326	100%	
IPL Partners	LKT, Industry Junction, Eagle Aggregate, Suncoast Res, ATS Drilling, RECS, ANA, Alliance,Ram, JC Welding, Luis Moreno	\$5,525,491	25%	\$4,027,614	73%	\$42,022,337	100%	
Oncor Electric	/ manee, ram, se werding, Edis Moreno	\$0	0%	\$0	0%	\$17,452	1009	
BAR Constructors	Industry Junction,VSG Trucking, Ricochet, MMG Disposal,Garland HVAC,CMC Rebar, Buzz Custum Fence, K&A Steel, Rangle Land Surveying	\$1,404,235	11%	\$13,505,536	962%	\$13,505,536	100%	
Valve Packages		\$0	0%	\$0	0%	\$13,957,413	98	
CONSTRUCTION MANAGEMENT		\$18,034,224	33%	\$19,232,868	107%	\$48,266,072	89	
Completed		\$5,928,803		\$5,954,412	100%	\$15,747,552	100	
Active		\$12,105,421	32%	\$13,278,457	110%	\$32,518,520	85	
CONSTRUCTION MATERIALS TEST	'ING	\$6,610,919	51%	\$5,322,237	81%	\$10,210,243	79	
Completed		\$219,036	97%	\$219,036	100%	\$225,132	100	
Active		\$6,391,882	50%	\$5,103,201	80%	\$9,985,111	79	
ROCIP		\$900,661	3%	\$370,813	41%	\$23,093,737	73	
TOTAL  LAND COST		\$207,694,938 \$0	26%	\$257,120,236 \$61,892	124% 0%	\$1,002,173,952 \$78,289,597	95 246	
MISCELLANEOUS		\$0	0%	\$01,892	0%	\$3,883,792	5	
GRAND TOTAL		\$207,694,938	26%*	\$257,182,128	124%	\$1,084,347,342		
GRAND TOTAL		\$201,034,330	2070	M/WBE/HUB Invo			7,182,1	
Denotes participation	percentage excluding cost of pipe	e and owner		Grand Total Invoic			4,347,3	
furnished equipment.	, 5 5 9,			* Exclusions Invoic			2,115,6	
,				-xelasions mivole		732	_,,_,	

Pipeline Section 12/13/MBR/

JB4 Bypass

Thalle Midlothian

LKT, Statewide, Granados, Desert Steel, ETTL, Glenko, A.N.A., Edwards, Buzz, Bradley-

## **PROJECT COMPONENTS**

PIPELINE SEGMENTS	DESCRIPTION	
Section 9	KBR Turn-Out Tee to existing Benbrook Connection Pipeline (10.6 mi. 84" dia. Pipe + 5 mi. 120" Tunnel)	
Section 10	KBR Turn-Out Tee to KBR (2.4 mi. 84" dia. Pipe)	
Section 11	JB4 to KBR Turn-Out Tee (10 mi. 84" dia. Pipe)	
Section 12	JB4 to existing CC and RC Pipelines (2.2 mi. 108" dia. Pipe)	
Section 13	MBR2 (Midlothian Balancing Reservoir) to JB4 (11 mi. 108" dia. Pipe)	
Section 14	JB3 to MBR2 (Midlothian Balancing Reservoir) (14.9 mi. 108" dia. Pipe)	
Section 15	JB2 to JB3 (28.5 mi 108" dia. Pipe)	
Section 16	JRC1 (Joint Richland Chambers Lake Pump Station) to JB2 (12.3 mi. 96" dia. Pipe)	
Section 17	Cedar Creek Connection to JB2 (11.2 mi. 108" dia. Pipe)	
Section 18	JCC1 (Joint Cedar Creek Lake Pump Station) to Cedar Creek Connection (0.2 mi. 108" dia. Pipe)	
Section 19	LP1 (Lake Palestine Pump Station) to Cedar Creek Connection (42.3 mi. 84" dia. Pipe)	

PUMP STATIONS	DESCRIPTION	
Palestine Pump Station	150 mgd with new intake	
Cedar Creek Pump Station	277 mgd with new intake	
Richland Chambers Pump Station	250 mgd Ultimate Design Capacity	
Booster Pump Stations	Two @ 347 mgd and one @ 197 mgd (♦ one 347 mgd station - JB3)	

SUPPORT FACILITIES	DESCRIPTION
Reservoirs	Three reservoirs (80 $-$ 400 mgd) - two for booster pump stations and one for balancing. Two of the reservoirs are core projects $-$ JB3R and MBR
Deep Tunnels	5 mi of 10' dia. tunnel @ Crowley (included in length of Section 9)
Substations & High Voltage Transmission Lines	Six substations and 4 mi. of high voltage transmission lines (♦ two substations)
Microwave Communications and SCADA System	Provides remote operations capability and system monitoring

