INTEGRATED PIPELINE PROJECT

MONTHLY EXECUTIVE SUMMARY

January 2016

S2X12 Factory inspection of Monolithic Isolation Joint in Gliwice, Poland

IPL PROGRAM MANAGEMENT

Tarrant Regional Water District

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@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

as of 1.31.16

CONTRACT DESIGN AND CONSTRUCTION	DESCRIPTION	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
PROGRAM WIDE PROFESSIONAL SERVICES		**$133,061,000**	**$87,879,977**	**$81,905,341**
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	$13,472,389	$12,698,715
Value Engineering	Expert review of design	$640,000	$472,248	$472,248
Surveying and Mapping	Control, property survey, legal descriptions, and Provide SUE Level A Survey, GIS	$14,600,000	$11,858,055	$10,228,294
Geotechnical	Initial Characterization of entire IPL Project	$12,037,000	$12,026,245	$11,798,959
Corrosion Engineering Services	Engineering Corrosion Control	$3,891,000	$4,885,562	$3,599,748
Land, Easement Acquisition, & Support	Right of Entry and Land Acquisition Support Services	$33,993,000	$3,464,526	$3,118,885
Studies		$3,500,000	$3,545,243	$3,277,569
SCADA System	Engineering of SCADA system	$640,000	$1,508,213	$117,601
Microwave System	Engineering of Communications System	$5,210,000	$1,522,785	$1,468,609
DESIGN		**$152,839,000**	**$126,622,303**	**$106,664,678**
Completed		**$87,444,000**	**$82,747,300**	**$81,511,476**
Active		**$38,937,000**	**$43,258,715**	**$25,153,203**
CH2M Hill	Project Operational Information and Operations Manual		$3,044,922	$596,568
CH2M Hill	Final Design of Lake Pump Stations	$15,443,000	$14,653,361	$13,640,469
CH2M Hill	Final Conformance of Design of JCC1	$728,000	$477,859	$203,757
MWH	Final Conformance of Design of Section 9/10/11	$506,000	$524,313	$287,318
Black & Veatch	Final Design of Section 12/13/14 - 28.1 miles of 84 - inch and 108 - inch pipeline	$11,292,000	$9,704,622	$9,663,410
Parsons	Final Conformance of Design of Section 17 Tunnel	$166,000	$244,204	$9,046
Brown & Gay	Final Design of Section 19-1	$5,770,000	$7,003,722	$74,267
HDR	Final Design of Section 19-2	$5,030,000	$6,989,876	$145,124
Burns & McDonnell Trans. Mgmt.	Development of Transportation Management Plan		$615,836	$533,243
Remaining		**$26,458,000**	**$616,288**	
CONSTRUCTION ADMINISTRATION		**$48,877,000**	**$13,203,094**	**$4,299,210**
CONSTRUCTION / OWNER FURNISHED EQUIPMENT		**$1,729,540,000**	**$451,445,379**	**$226,052,074**
Completed		**$3,700,000**	**$3,860,755**	**$3,644,051**
Active		**$616,879,000**	**$447,584,624**	**$222,408,023**
Pipeline Section 15-1		**$115,112,000**	**$93,517,546**	**$91,449,525**
Garney Construction	Construction of Section 15-1	$115,112,000	$93,517,546	$91,449,525
JB3		**$99,592,000**	**$85,280,597**	**$22,410,764**
MWH Constructors	Construction of JB3 Pump Station	$51,473,000	$56,808,072	$9,556,962
ASI Constructors	Construction of JB3 Reservoir	$16,579,000	$11,669,898	$11,669,898
Oncor Electric	Installation of JB3 Substation Transmission Lines	$1,066,000	$957,119	$923,119
Isolux Corsan	Construction of JB3 Substation	$7,400,000	$4,921,283	
Pentair Flow Technologies	Construction of JB3 Pumps, Motors, Drives	$23,074,000	$10,924,225	

PROGRAM SUPPORT SERVICES

as of 1.31.16

CONTRACT DESIGN AND CONSTRUCTION	DESCRIPTION	BUDGET	CONTRACTS ISSUED	TOTAL INVOICED
Pipeline Section 12/13/MBR/JB4 Bypass		$167,993,000	$153,626,237	$82,499,415
Thalle Midlothian	Construction of Sections 12/13/MBR/JB4 Bypass	$146,310,000	$142,985,837	$81,291,484
BAR Constructors	Construction of Richland-Chambers/Cedar Creek Interconnection Facility	$21,682,000	$10,552,400	$1,207,931
Hilco Electric	Relocation of Electrical Service Lines		$88,000	
Microwave System		$6,398,000	$4,492,310	$2,296,904
Huffman Communications	Construction of Microwave Towers	$6,398,000	$4,492,310	$2,296,904
Pipeline Section 15-2		$97,217,000	$51,979,390	$21,895,929
BAR Constructors	Construction of Section 15-2	$97,217,000	$51,979,390	$21,895,929
Pipeline Section 14		$107,113,000	$48,107,931	
Garney Construction	Construction of Section 14	$107,113,000	$48,107,931	
Valve Packages		$23,455,000	$10,580,613	$1,855,485
Garney Construction	Valve Package 1 - Section 15-1 Butterfly Valves	$518,000	$262,244	
Rodney Hunt	Valve Package 2 - Section 15-1 Interconnection Facility Valves	$474,000	$733,206	$664,995
Blackhall Engineering	Valve Package 3 - JB3, Section 15-2, MBR Yard Gate Valves	$5,500,000	$5,834,139	$838,485
Crispin Valves	Valve Package 4 - Section 12 RC/CC Interconnection, JB4 Bypass, MBR Yard Butterfly Valves	$3,999,000	$1,999,740	
Crispin Valves	Valve Package 5 - JB3 Butterfly Valves	$1,249,000	$1,224,944	
Ross Valves	Valve Package 6 - Section 12 RC/CC Interconnection Multi-Orifice Valves	$715,000	$526,340	$352,005
Remaining		$1,108,960,000		
CONSTRUCTION MANAGEMENT		$65,169,000	$25,454,844	$13,154,391
Program-Wide Construction Management			$25,404,352	$13,103,899
Pipeline Section 15 (Garney)		$139,000	$50,492	$50,492
CONSTRUCTION MATERIALS TESTING		$17,295,000	$9,326,261	$1,815,704
Pipeline Section 15-1		$1,198,000	$1,160,255	$741,241
JB3		$741,000	$1,056,751	$300,066
Pipeline Section 12/13/MBR		$1,734,000	$2,115,410	$670,002
Microwave System		$64,000	$48,899	$31,808
Pipeline Section 15-2		$983,000	$1,171,139	$72,587
Pipeline Section 14		$1,158,903	$650,000	$0
Program-Wide			$3,123,808	
ROCIP		$2,575,000	$32,875,390	$13,027,535
Willis of Texas	ROCIP Broker Admin / Insurance Premium	$2,575,000	$18,258,571	$9,950,811
Old Republic	Security Obligations		$14,616,819	$3,076,723
LAND COST		$107,384,000	$40,761,154	$40,761,154
PROGRAM LEVEL CONTINGENCY		$83,178,000		
MISCELLANEOUS		$2,000,000	$1,527,650	$1,527,650
GRAND TOTAL		$2,341,918,000	$789,096,052	$489,207,737
REMAINING BOND FUNDS				$760,792,263

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

ACCOMPLISHMENTS

through 02.29.16

PL151 (Pipeline Section 15.1 including the Richland-Chambers Pipeline Interconnect Facility)

- Completing electrical, instrumentation and control wiring at RC Interconnect
- Preparing to fill pipeline for hydrostatic pressure testing
- Preparing ROW for permanent grassing

JB3R (Pump Suction Reservoir for the JB3 Pump Station)

- Final grassing is scheduled for late March. Project is complete except for acceptance of final grassing

PL1213MBR (Pipeline Sections 12 and 13 combined with the Midlothian Balancing Reservoir)

- Continue placing and compacting embankment fill at MBR Cells 1 and 2
- Continue structural concrete encasement of Cell 3 outlet and pipe encasement
- Installed pipe in the 215' Mountain Creek Tunnel
- Installed 2,500 linear feet of 108" pipe in ROW

COM01 (Microwave Towers and Communication Facilities for SCADA Control of the IPL)

- Installed Radio Building at JB3 site and completed security fencing at JB4 (future pump station).
- Third-party inspections of new towers and existing tower modifications were performed

JB3 (250mgd Pump Station expandable to 350mgd)

- Completed lower level pump station walls and backfilling with flowable fill
- Resume electrical and instrumentation ductbank installation

PL152 (Pipeline Section15.2 that feeds the JB3 Reservoir)

- Installed 3,500+ linear feet of 108" pipe
- Continue tunnel at SH34 and completed tunnel at Waxahachie Creek
- Installed pipe in tunnels FM984D and FM985
- Continue clearing ROW and taking pipe and embedment deliveries

S2X12 (Interconnection Facility of IPL Phase 1 to existing Cedar Creek and Richland Chambers Pipelines)

- Completed new interconnect 90" pipe tee installations into existing RC Pipeline ahead of schedule during RC shutdown
- Began forming grade beams and installing drain lines for Interconnect Facility

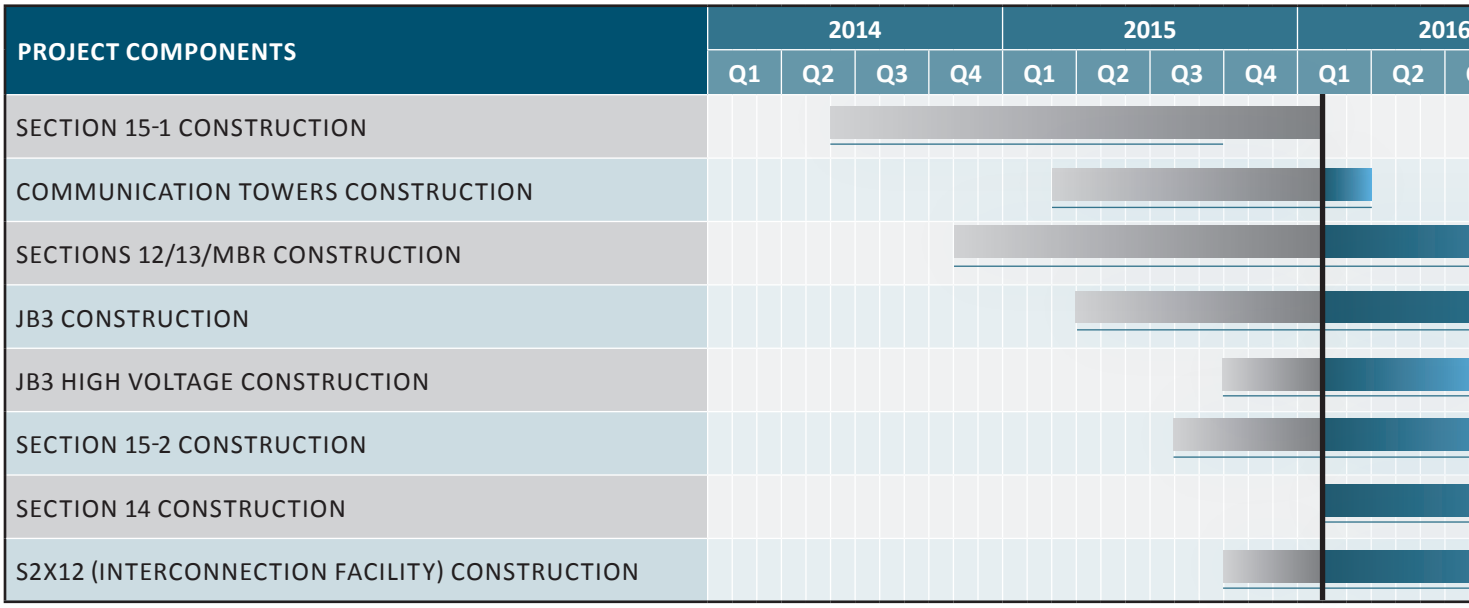
JB3HV (High Voltage Substation for the JB3 Pump Station and Data Center)

- Drilling foundation piers for sub-station structural steel, electrical equipment supports
- Continue submittal processing for long lead time equipment

PL14 (Pipeline Section 14 that conveys water from JB3 Pump Station to MBR)

- Began clearing ROW, installing silt fence for erosion control and installing temporary fences and gates
- Began tunnel shaft for IH35/US77 tunnel
- Pipe and tunnel submittals are being processed to begin pipe fabrication

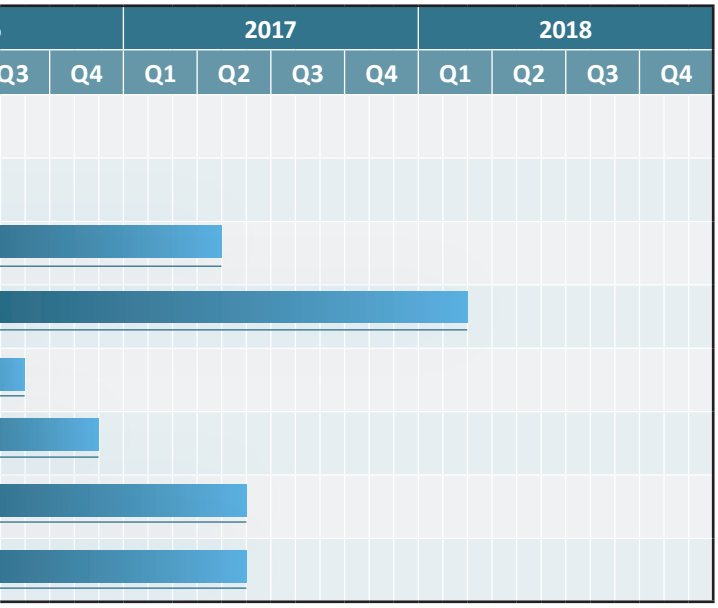
PROJECT SCHEDULE



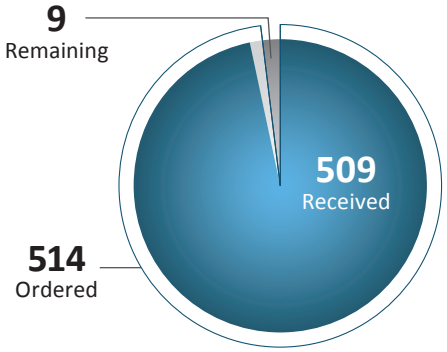
ACTIVITY STATUS

JB3 Factory inspection of pump bottom casting in Cincinnati, Ohio

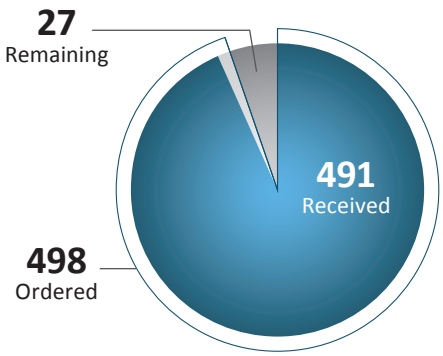
PL1213MBR Compaction of granular embedment on 108-inch pipe



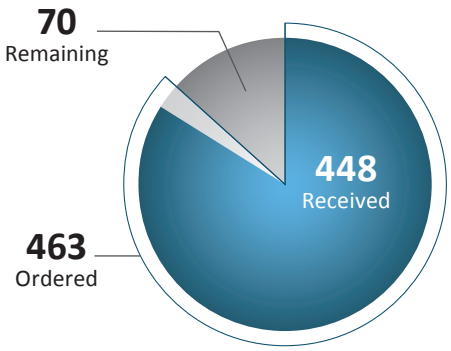
TITLE COMMITMENTS



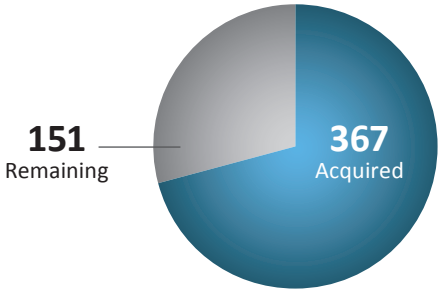
SURVEYS



APPRAISALS



LAND ACQUISITION



Total Parent Parcels: 518

M/WBE PARTICIPATION

as of 1.31.16

CONTRACT DESIGN AND CONSTRUCTION	M/WBE & HUB SUB-CONTRACTORS	CONTRACT COMMITMENT		M/WBE | HUB INVOICED TO DATE		TOTAL PROJECT COMPLETED TO DATE	
		$	%	$	% (PER COMMITMENT)	$	%
PROGRAM WIDE PROFESSIONAL SERVICES		**$19,800,463**	**23%**	**$19,329,647**	**98%**	**$81,905,341**	**93%**
Program Management		$6,828,350	19%	$6,636,687	97%	$35,124,711	100%
Conceptual Design / Environmental / Permitting		$2,700,278	20%	$2,701,505	100%	$12,698,715	94%
Value Engineering		$0	0%	$23,178	100%	$472,248	100%
Surveying and Mapping		$3,548,416	30%	$3,779,502	107%	$10,228,294	86%
Geotechnical		$3,572,334	30%	$3,518,305	98%	$11,798,959	98%
Corrosion Engineering Services		$1,053,764	22%	$761,434	72%	$3,599,748	74%
Land, Easement Acquisition, & Support		$1,201,457	35%	$1,417,664	118%	$3,118,885	90%
Studies		$41,717	1%	$41,717	100%	$3,277,569	92%
SCADA System		$384,444	25%	$0	0%	$117,601	8%
Microwave System		$469,702	31%	$449,654	96%	$1,468,609	96%
DESIGN		**$33,913,027**	**27%**	**$28,765,530**	**85%**	**$106,377,643**	**84%**
Completed		**$23,185,089**	**28%**	**$22,651,902**	**98%**	**$81,511,080**	**99%**
Active		**$10,727,939**	**25%**	**$6,113,628**	**57%**	**$24,866,563**	**57%**
CH2M Hill (Ops Manual)	NDM	$479,674	16%	$107,042	22%	$445,411	15%
CH2M Hill	JQ, Gupta, APM, HVJ, XENCO	$3,777,636	26%	$3,328,779	88%	$13,640,469	93%
CH2M Hill (JCC1)	JQ, Gupta, APM, HVJ, XENCO	$123,192	26%	$10,884	9%	$107,243	22%
MWH	Garzabury, Kevin Sloan	$226,705	28%	$0	0%	$305,475	38%
Black & Veatch	BDS, CAS, JQ, TME	$2,426,281	25%	$2,577,758	108%	$9,681,556	100%
Parsons	Criado, EPB, HVJ	$61,051	25%	$0	0%	$9,046	4%
Brown & Gay	AZB, TME, Lamb-Star, NDM	$1,750,930	25%	$586	0%	$57,430	1%
HDR	AZB, Daltech, Word Wizards, Gupta	$1,747,469	25%	$0	0%	$86,689	1%
Burns & McDonnell Trans. Mgmt.	Lamb-Star Engineering	$135,000	22%	$88,578	66%	$533,243	87%
Remaining		**$0**	**0%**	**$0**	**0%**	**$0**	**0%**
CONSTRUCTION ADMINISTRATION		**$3,347,398**	**25%**	**$1,032,651**	**31%**	**$4,299,210**	**33%**
CONSTRUCTION / OWNER FURNISHED EQUIPMENT		**$60,652,397**	**23%***	**$22,474,672**	**37%**	**$226,052,074**	**50%**
Completed		**$1,354,402**	**35%**	**$1,354,402**	**100%**	**$3,644,051**	**94%**
Active		**$59,297,995**	**23%***	**$21,120,270**	**36%**	**$222,408,023**	**50%**
Pipeline Section 15-1		**$9,415,226**	**29%***	**$6,311,815**	**67%**	**$91,449,525**	**98%**
Garney Construction	Danridge, SYB, Ricochet, Glenko, Carrasco, Cowboy, Gorrondona, Custom Fence, LKT, Astro Johnny, Pam, Father & Son, Bowden's Erosion	$9,415,226	29%*	$6,311,815	67%	$91,449,525	98%
JB3		**$16,474,218**	**21%***	**$2,263,681**	**14%**	**$20,389,051**	**24%**
MWH Constructors	Statewide, Cowboy, TX Enviro, Champion, Ram Tool, Rent-a-Fence, Soto Steel, A-Star, Ike, Greystone, LKT, Accurate, Green Scaping	$13,580,000	27%*	$781,594	6%	$9,556,962	17%
ASI Constructors	Champion Fuel, Desert Steel, Green Scaping	$1,417,833	13%*	$1,525,477	108%	$11,669,898	100%

M/WBE PARTICIPATION

as of 1.31.16

CONTRACT DESIGN AND CONSTRUCTION	M/WBE & HUB SUB-CONTRACTORS	CONTRACT COMMITMENT		M/WBE | HUB INVOICED TO DATE		TOTAL PROJECT COMPLETED TO DATE	
		$	%	$	% (PER COMMITMENT)	$	%
Isolux Corsan	Dyna Grid	$1,476,385	30%*	$10,894	1%	$260,785	5%
Oncor Electric		$0	0%	$0	0%	$923,119	96%
Pipeline Section 12/13/MBR/JB4 Bypass		**$22,054,002**	**24%***	**$7,861,389**	**36%**	**$82,499,415**	**54%**
Thalle Midlothian	LKT, Statewide, Granados, Desert Steel, ETTL, Glenko, A.N.A., Edwards, Buzz, Bradley-Douglas, Pinnacle	$21,209,810	27%*	$6,821,962	32%	$81,291,484	57%
BAR Constructors	Fraire's, DFW Aggregates, Ricochet, MMG, LKT, Brock, Garland Heating & Air, Texas Metal, Buzz, Rangel	$844,192	8%	$1,039,427	123%	$1,207,931	11%
Hilco Electric		$0	0%	$0	0%	$0	0%
Microwave System		**$1,162,817**	**26%**	**$760,669**	**65%**	**$2,296,904**	**51%**
Huffman Communications	Ricochet, Edwards, Chaffin Tower	$1,162,817	26%	$760,669	65%	$2,296,904	51%
Pipeline Section 15-2		**$4,122,200**	**16%***	**$3,868,433**	**94%**	**$21,895,929**	**42%**
BAR Constructors	Ricochet, Fraire's, DFW Aggregates, Brock, Tidy Toilets, KDAT, Juan Cantu, Buyer's, RAM, Rangel, LKT, Greenscaping, Environmental Safety	$4,122,200	16%	$3,868,433	94%	$21,895,929	42%
Pipeline Section 14		**$6,069,533**	**22%***	**$0**	**0%**	**$0**	**0%**
Garney Construction	AEA, Gorrondona, JC Welding, LKT, Statewide, Bowdens	$6,069,533	22%	$0	0%	$0	0%
Valve Packages		**$0**	**0%**	**$0**	**0%**	**$1,855,485**	**18%**
CONSTRUCTION MANAGEMENT		**$12,402,474**	**49%**	**$5,153,962**	**42%**	**$13,154,391**	**52%**
Program-Wide Construction Management		**$12,402,474**	**49%**	**$5,153,962**	**42%**	**$13,103,899**	**52%**
Pipeline Section 15 (Garney)		**$0**	**0%**	**$0**	**0%**	**$50,492**	**100%**
CONSTRUCTION MATERIALS TESTING		**$4,647,038**	**50%**	**$829,932**	**18%**	**$1,815,704**	**19%**
Pipeline Section 15-1		**$348,046**	**30%**	**$248,110**	**71%**	**$741,241**	**64%**
JB3		**$544,990**	**52%**	**$235,996**	**43%**	**$300,066**	**28%**
Pipeline Section 12/13/MBR		**$467,603**	**22%**	**$273,239**	**58%**	**$670,002**	**32%**
Microwave System		**$0**	**0%**	**$0**	**0%**	**$31,808**	**65%**
Pipeline Section 15-2		**$1,171,139**	**100%**	**$72,587**	**6%**	**$72,587**	**6%**
Pipeline Section 14		**$0**	**0%**	**$0**	**0%**	**$0**	**0%**
Program-Wide		**$2,115,260**	**68%**	**$0**	**0%**	**$0**	**0%**
ROCIP		**$1,499,307**	**5%**	**$159,139**	**11%**	**$13,027,535**	**40%**
Willis of Texas		**$1,499,307**	**8%**	**$159,139**	**11%**	**$9,950,811**	**54%**
Old Republic		**$0**	**0%**	**$0**	**0%**	**$3,076,723**	**21%**
TOTAL		**$136,262,105**	**24%***	**$77,802,652**	**57%**	**$446,918,933**	**60%**
LAND COST						**$40,761,154**	**38%**
MISCELLANEOUS						**$1,527,650**	
GRAND TOTAL		**$136,262,105**	**24%***	**$77,802,652**	**57%**	**$489,207,737**	**62%**

**Denotes participation percentage excluding cost of pipe and owner furnished equipment.*

PROJECT COMPONENTS

PIPELINE SEGMENTS	CORE PROJECT	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	CORE PROJECT	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	CORE PROJECT	DESCRIPTION
Reservoirs		Three reservoirs (80 – 400 mgd) two for booster pump stations and one for balancing
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