



INTEGRATED PIPELINE PROJECT QUARTERLY EXECUTIVE SUMMARY

September 2023



PL19TUN TRWD and
DWU TBM Site Visit

IPL PROGRAM MANAGEMENT

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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.

ACCOMPLISHMENTS

through 09.30.2023

GENERAL IPL PROGRAM OPERATIONAL STATUS

With the completion of all construction in Phase 1 and Phase 2 of the IPL Program, TRWD has now added redundancy and flexibility, as well as a new independent water supply source from Cedar Creek Reservoir.

As a standalone system, the new JCC1 Pump Station, together with the new IPL pipelines, reservoirs, booster pump station, interconnect facilities and pressure reduction station, has added 210 mgd capacity to TRWD’s water supply capability all the way to the Arlington Outlet.

In addition to acting independently, the water from JCC1 can connect to the existing Richland Chambers pipeline at the S5X15 Interconnect facility, and to both the Richland Chambers and Cedar Creek pipelines at the S2X12 Interconnect facility and the S1X10 Pressure Reduction facility.

The construction projects that are now complete and fully operational are:

- S5X15 Interconnect
- Pipeline Sections 15-1 and 15-2
- JB3R Suction Reservoir
- JB3 Booster Pump Station with Electrical Substation
- Pipeline Section 14
- Midlothian Balancing Reservoir
- Pipeline Sections 12 and 13
- S2X12 Interconnect Facility
- Pipeline Sections 10 and 11
- S1X10 Pressure Reduction Station
- JCC1 Pump Station with Electrical Substation
- Pipeline Sections 17 and 18
- Pipeline Section 17 Trinity River Tunnel

CURRENT PROJECT UPDATES

PL19TX (Tunnels at TxDOT Roadway Crossings for Pipeline Sections 19-1 & 19-2)

- Completed permanent ROW access driveways at all crossing locations.
- Completed installation of ROW fences and gates.
- Completed installation of CP anodes and test stations.
- Conducted project walkthrough and prepared project completion punchlist.
- Project has reached Substantial Completion

PL19TUN (Cedar Creek; SH 31; Hollywood Lake; Stream A; SH 151/ Frankston ISD Tunnels for Pipeline Sections 19-1 & 19-2)

- Open Cut
 - » Installed 2,353’ of 84” pipe for a total of 17,253’ installed to date.
 - » Continued welding and grouting pipe joints.
 - » Replaced topsoil on 14,900’ of ROW.
- Cedar Creek Tunnel
 - » Received, assembled, and launched EPB Tunnel Boring Machine and completed 390’ of tunnel.
 - » Continued delivery of precast concrete segment liners.
- Royal Blvd
 - » Completed launch and retrieval shafts.
 - » Began tunnel excavation – 31’ of 787’ excavated.
- Hollywood Lake Tunnel
 - » Completed the excavation of the launch portal.
 - » Completed placing base slab and sump pump dewatering system.
- Stream A
 - » Tunnel excavation is 99% complete.
- SH 155
 - » Completed mining and contact grouting of the 903’ tunnel.



PL19TUN Pushing casing pipe into Stream A

LP1 INTAKE (Intake Structure and Channel for Lake Palestine Pump Station)

- Proposals were received and evaluated, and contract was awarded to BAR Constructors.

PROJECT SCHEDULE

PROJECT COMPONENTS	2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PL19TX CONSTRUCTION																
PL19TUN CONSTRUCTION																

FINANCIALS

through 09.30.2023

Projects	Contractors Prime	Contract Price	Materials Exclusions	M/WBE Available Contract Value	M/WBE Completed Value	Completed %
Construction: Active and Completed		\$970,806,115	\$310,963,385	\$659,842,730	\$157,320,084	23.84%
Active-Construction		\$242,941,765	\$71,037,180	\$171,904,585	\$14,354,256	8.35%
Section 19 Long Tunnel Crossings	TRAYLOR SUNDT JOINT VENTURE	\$221,709,302	\$63,735,680	\$157,973,622	\$11,872,036	7.52%
Section 19 TXDOT HIGHWAY T/C	IPL PARTNERS	\$21,232,463	\$7,301,500	\$13,930,963	\$2,482,220	17.82%
Lake Palestine PS- LP1IN Package 1	BAR CONSTRUCTORS INC	\$53,826,721		\$53,826,721	\$1,658,475	3.08%
Completed-Construction		\$674,037,629	\$239,926,205	\$434,111,424	\$141,307,353	32.55%
Design Active and Completed		\$219,723,033	-	\$219,723,033	\$51,683,651	23.52%
Active Design		\$23,532,973	-	\$23,532,973	\$2,926,779	12.44%
Section 19.01	BROWN & GAY ENGINEERS INC	\$3,943,153	-	\$3,943,153	\$616,691	16%
Section 19.02	HDR ENGINEERING INC	\$5,950,376	-	\$5,950,376	\$882,989	15%
LP1 IN Pkg 1 & Pkg 2	CH2M HILL ENGINEERS INC	\$5,194,000	-	\$5,194,000	\$545,859	11%
Operation Manual	CH2M HILL ENGINEERS INC	\$3,044,922	-	\$3,044,922	\$486,259	16%
Operation Manual Phase 2	CH2M HILL ENGINEERS INC	\$3,434,922	-	\$3,434,922	\$331,473	10%
High Voltage	BURNS & MCDONNELL ENGINEERING	\$1,063,600	-	\$1,063,600	-	0%
Section 19 Transportation Management Plan	BURNS & MCDONNELL ENGINEERING	\$690,000	-	\$690,000	\$18,282	3%
Section 19 Long Tunnel	PARSONS WATER & INFRASTRUCTURE	\$75,000	-	\$75,000	\$9,135	12%
JB3 Record Drawings & JCC1 SCADA	CDM SMITH INC	\$137,000		\$137,000	\$36,091	26%
Completed Design		\$196,190,060	-	\$196,190,060	\$48,756,872	24.85%
Active and Completed: Rolling Owner Controlled Insurance Program		\$28,276,855	-	\$28,276,855	\$381,127	1.35%
Active-Rolling Owner Controlled Insurance Program		\$10,166,476	-	\$10,166,476	-	0.00%
ROICIP Ph 3 Admin Broker	WILLIS TOWERS WATSON INSURANCE	\$698,887		\$698,887	-	0%
Security Obligations	WILLIS TOWERS WATSON INSURANCE	\$9,467,589		\$9,467,589	-	0%
Completed ROICIP-Rolling Owner Controlled Insurance Program		\$18,110,379	-	\$18,110,379	\$381,127	2.10%
Active and Completed : Construction and Program Management Support Service		\$114,656,671	-	\$114,656,671	\$33,237,442	28.99%
Active-Construction and Program Management Support Service		\$24,269,755	-	\$24,269,755	\$3,595,474	14.81%
Program Management Support	PLUS SIX ENGINEERING LLC	\$11,933,000	-	\$11,933,000	\$1,192,484	10%
Program Management Support	FREESE & NICHOLS, INC.	\$7,395,236	-	\$7,395,236	\$53,096	1%
Program Management Support	AECOM TECHNICAL SERVICES INC	\$1,839,244	-	\$1,839,244	-	0%
Resident Project Rep	CAS CONSULTING & SERVICES INC	\$3,102,275	-	\$3,102,275	\$2,349,894	75.75%
Completed-Construction and Program Management Support Service		\$97,639,413	-	\$97,639,413	\$36,883,770	37.78%
Construction Materials Inspection and Testing-CMIT		\$13,728,427	-	\$13,728,427	\$6,431,009	46.84%
Active-Construction Materials Inspection and Testing-CMIT		\$2,464,098	-	\$2,464,098	\$816,023	33.12%
PL19 Long Tunnel Crossings CMIT	ACCURATE INSPECTIONS INC	\$717,000	-	\$717,000	\$247,207	34%
PL19 Long Tunnel Crossings CMIT	STEEL INSPECTORS OF TEXAS INC	\$375,000	-	\$375,000	\$16,615	4%
PL19 Long Tunnel Crossings CMIT	ETTL ENGINEERS AND CONSULTANTS INC	\$800,000	-	\$800,000	\$143,457	18%
PL19 TXDOT CMIT	ACCURATE INSPECTIONS INC	\$196,420		\$196,420	\$187,776	96%
PL19 TXDOT CMIT	STEEL INSPECTORS OF TEXAS INC	\$144,760		\$144,760	\$39,186	27%
PL19 TXDOT CMIT	ETTL ENGINEERS AND CONSULTANTS INC	\$230,918		\$230,918	\$181,782	79%
LP1in Package 1	ALLIANCE GEOTECHNICAL GROUP	\$879,703		\$879,703	-	0%
Completed-Construction Materials Inspection and Testing-CMIT		\$10,384,626	-	\$10,384,626	\$5,614,986	54.07%
Owner Furnished Equipment		\$37,687,293	\$37,687,293	-	0	0.00%
Study and Research		\$3,439,003	-	\$3,439,003	-	0.00%
Legal/Right of Entry/Land Acquisition/Admin		\$165,783,003	-	\$165,783,003	\$1,297,774	0.78%
GRAND TOTAL		\$1,561,352,897	\$348,650,678	\$1,212,702,219	\$257,592,889	21.24%

Note: Excluding Cost of Pipe, Owner Furnish Equipment, and Purchased Materials

PROJECT COMPONENTS

PIPELINE SEGMENTS

- **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:

- **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 (S one 347 mgd station - JB3)

SUPPORT FACILITIES:

- **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 (S two substations)
- **Microwave Communications and SCADA System:** Provides remote operations capability and system monitoring



PL19TUN Cedar Creek Tunnel TBM Mining Operations



PL19TX Chipsealing Access Drive at Crossroads



PL19TUN TBM Breakout into SH155 Retrieval Shaft

