

ATTACHMENT 21

LTWP Preliminary Design Report – Appendix L – Basis of Estimate



Project Name: Long Term Water Program (LTWP) APEX RIVER PS

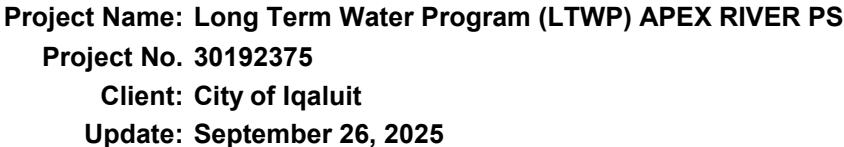
Project No. 30192375

Client: City of Iqaluit

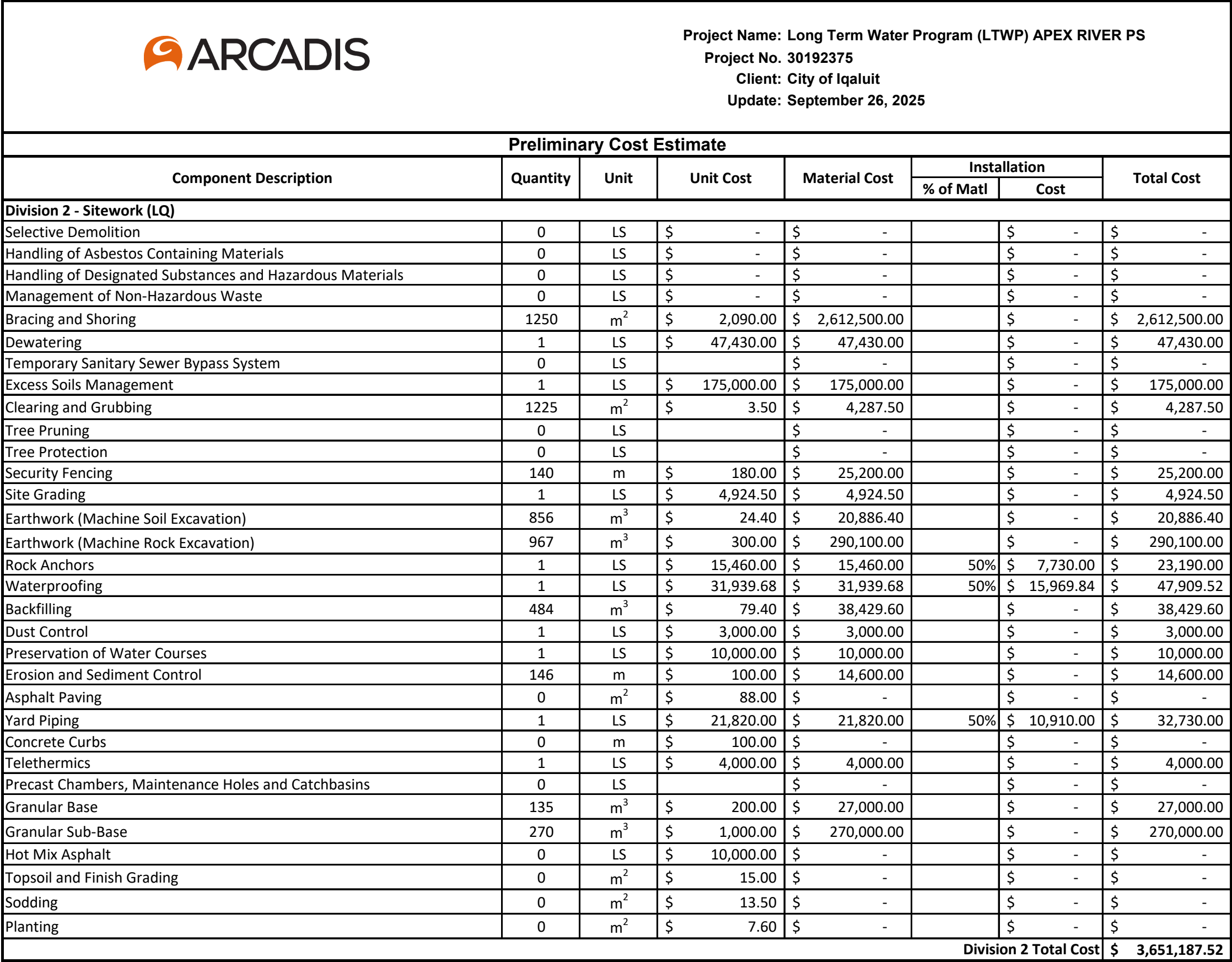
Date: September 26, 2025

Preliminary Opinion of Probable Cost

Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Division 1 - General Requirements							
							\$373,200.00
Division 2 - Sitework (LQ)							
							\$3,565,763.12
Division 3 - Concrete							
							\$2,213,285.00
Division 4 - Masonry							
							\$13,272.00
Division 5 - Metal Fabrication							
							\$125,710.00
Division 6 - Wood and Plastics							
							\$80,000.00
Division 7 - Thermal and Moisture Protection							
							\$325,500.00
Division 8 - Doors and Windows							
							\$67,500.00
Division 9 - Finishes							
							\$5,000.00
Division 10 - Specialties							
							\$0.00
Division 11 - Equipment							
							\$1,525,964.72
Division 13 Instrumentation & Controls							
							\$743,315.00
Division 14 Hoists and Cranes							
							\$180,000.00
Division 15A - Mechanical (Process)							
							\$1,264,247.50
Division 15B - Mechanical (Building Services)							
							\$219,000.00
Division 16A - Electrical							
							\$585,250.00
Sub-Total Basic Facility Costs (A)							\$11,287,007.34
General Contractor's Overhead		% of A	7%				\$790,090.51
General Contractor's Profit		% of A	3%				\$338,610.22
Mobilization, Bonds and Insurance		% of A	2%				\$225,740.15
Allowances (record drawings, final cleaning, commission, etc.)		% of A	1%				\$112,870.07
Design & Pricing Contingency		% of A	10%				\$1,128,700.73
Escalation Contingency (10% per year to mid point of construction - estimated construction in Summer 2024)		% of A					\$0.00
Market Contingency - Bidding Market		% of A	5%				\$564,350.37
Total Estimated Construction Costs (B) Comparable with the Bid Amount							\$14,447,369.39
Construction Contingency (Change Orders)		% of B	0%				\$ -
City's Utilities Allowance		% of B	0%				\$ -
City's Internal Costs		% of B					\$ -
City's Miscellaneous Allowance		% of B					\$ -
Total Estimated Construction Capital Costs - Excluding Engineering and HST							\$ 14,447,369.39
Notes:							
1) The Construction Document "Preliminary Opinion of Probable Cost" shown has been prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final "Opinion of Probable Cost" of the project will depend on actual labor and material costs, competitive market conditions, final project scope, implementation schedule and other variable factors. As a result, the tender pricing may from the "Preliminary Opinion of Probable Cost" presented herein. Because of this, project feasibility and funding needs must be carefully reviewed prior to making specific financial decisions to help ensure proper project evaluation and adequate funding. This "Opinion of Probable Cost" does not include any costs for acquiring the necessary permits or right-of-ways for the above-specified equipment.							
2) Percentage calculations are based on historical cost data from projects tracked over a span of many years.							
3) The "Opinion of Probable Cost" shown excludes engineering fees associated with design and services during construction.							



Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Division 1 - General Requirements							
General Requirements							
Performance, Labour and Material Bonds	1	LS	\$ -	\$ -	0%	\$ -	\$ -
Mobilization / Demobilization	1	LS	\$ 43,200.00	\$ 43,200.00	0%	\$ -	\$ 43,200.00
Other	1	LS	\$ 12,000.00	\$ 12,000.00	0%	\$ -	\$ 12,000.00
Regulatory Requirements	1	LS	\$ 24,000.00	\$ 24,000.00	0%	\$ -	\$ 24,000.00
Summary of Work	1	LS	\$ -	\$ -	0%	\$ -	\$ -
Operation Coordination and Sequence of Construction	1	LS	\$ -	\$ -	0%	\$ -	\$ -
Alternatives	1	LS	\$ -	\$ -	0%	\$ -	\$ -
Project Management and Coordination	1	LS	\$ 12,000.00	\$ 12,000.00	0%	\$ -	\$ 12,000.00
Construction Progress Documentation - Schedules	1	LS	\$ 6,000.00	\$ 6,000.00	0%	\$ -	\$ 6,000.00
Submittal Procedures - Shop Drawings	1	LS	\$ 42,000.00	\$ 42,000.00	0%	\$ -	\$ 42,000.00
Health and Safety	1	LS	\$ 3,600.00	\$ 3,600.00	0%	\$ -	\$ 3,600.00
Temporary Utilities	1	LS	\$ 12,000.00	\$ 12,000.00	0%	\$ -	\$ 12,000.00
Construction Facilities - Field Offices and Utilities	1	LS	\$ 120,000.00	\$ 120,000.00	0%	\$ -	\$ 120,000.00
Environmental Protection	1	LS	\$ 6,000.00	\$ 6,000.00	0%	\$ -	\$ 6,000.00
Basic Product Requirements	1	LS	\$ 1,200.00	\$ 1,200.00	0%	\$ -	\$ 1,200.00
Preparation	1	LS	\$ 1,200.00	\$ 1,200.00	0%	\$ -	\$ 1,200.00
Cleaning	1	LS	\$ 6,000.00	\$ 6,000.00	0%	\$ -	\$ 6,000.00
Warranty Work	1	LS	\$ 6,000.00	\$ 6,000.00	0%	\$ -	\$ 6,000.00
Closeout Procedures - Inspection and Report	1	LS	\$ 6,000.00	\$ 6,000.00	0%	\$ -	\$ 6,000.00
Closeout Submittals - O/M Manuals and Record Drawings	1	LS	\$ 24,000.00	\$ 24,000.00	0%	\$ -	\$ 24,000.00
Testing and Commissioning	1	LS	\$ 24,000.00	\$ 24,000.00	0%	\$ -	\$ 24,000.00
Demonstration and Training	1	LS	\$ 24,000.00	\$ 24,000.00	0%	\$ -	\$ 24,000.00
Division 1 Total Cost							\$ 373,200.00





Preliminary Cost Estimate	
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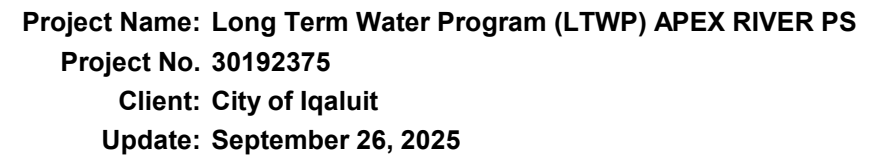
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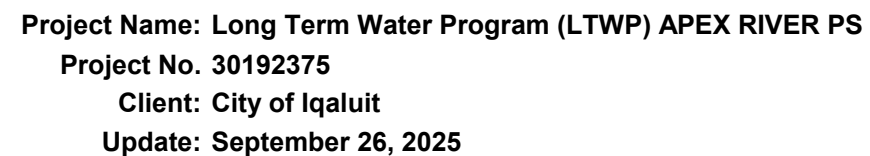
Component Description	Quantity	Unit	Unit Cost	Material Cost	% of Matl	Cost	Total Cost
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Division 3 - Concrete

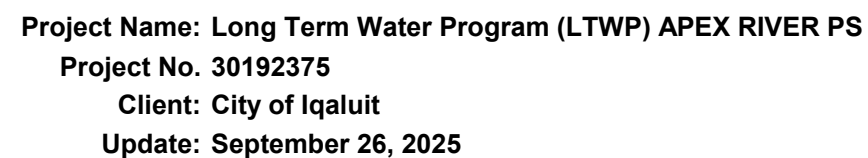
Wet Well Base Slab	35.4	m ³	\$ 1,500.00	\$ 53,100.00	50%	\$ 26,550.00	\$ 79,650.00
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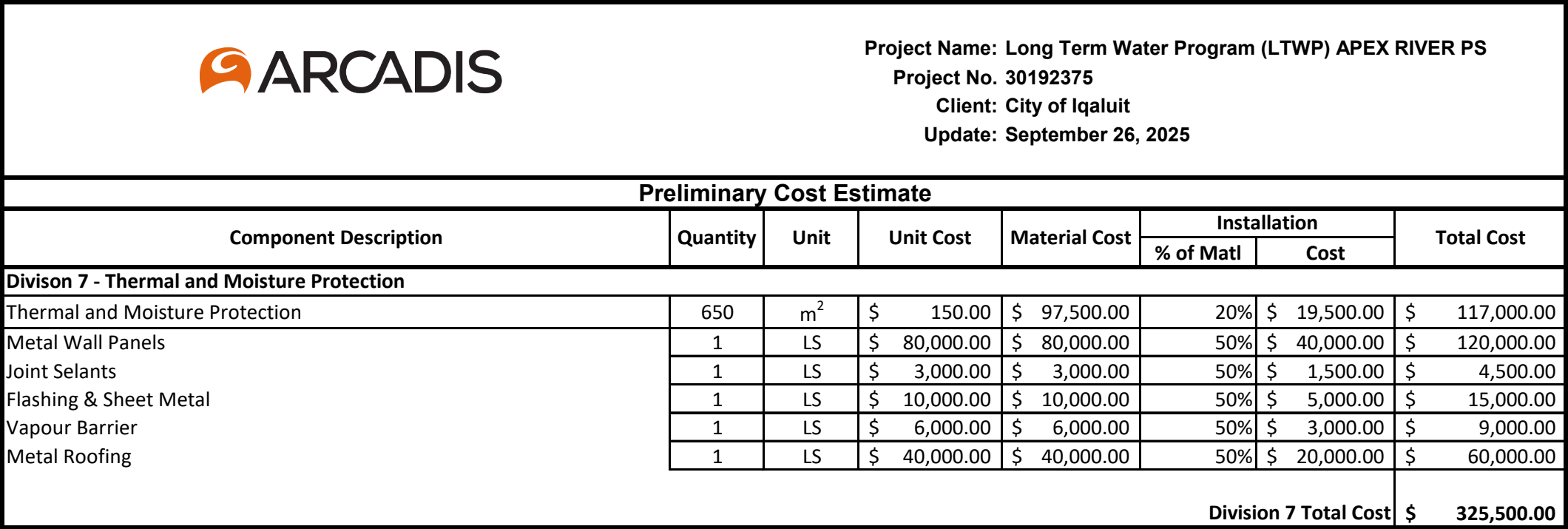


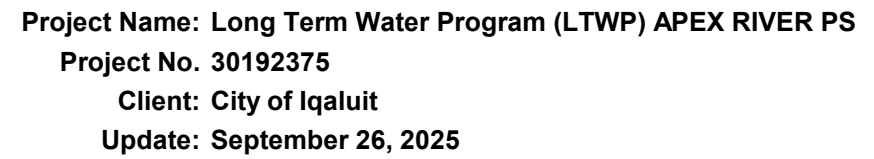
Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Division 5 - Metal Fabrication							
Welding-Quality Control	1	LS	\$ 1,500.00	\$ 1,500.00	50%	\$ 750.00	\$ 2,250.00
Hatches	6	ea	\$ 9,000.00	\$ 54,000.00	50%	\$ 27,000.00	\$ 81,000.00
Ladders	2	LS	\$ 3,000.00	\$ 6,000.00	50%	\$ 3,000.00	\$ 9,000.00
Alluminium Service Platform	4	m2	\$ 1,000.00	\$ 4,000.00	150%	\$ 6,000.00	\$ 10,000.00
Stairs Rail	16.4	m	\$ 100.00	\$ 1,640.00	50%	\$ 820.00	\$ 2,460.00
Guard Rail	6	m	\$ 1,000.00	\$ 6,000.00	250%	\$ 15,000.00	\$ 21,000.00
Division 5 Total Cost							\$ 125,710.00



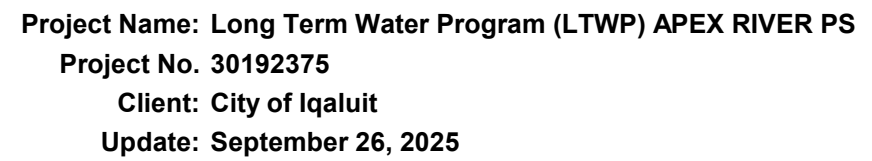
Preliminary Cost Estimate							
Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Divison 6 - Wood and Plastics							
Wood and Plastics	1	LS	\$ 80,000.00	\$ 80,000.00		\$ -	\$ 80,000.00
Division 6 Total Cost							\$ 80,000.00

Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Divison 6 - Wood and Plastics							
Wood and Plastics	1	LS	\$ 80,000.00	\$ 80,000.00		\$ -	\$ 80,000.00
Division 6 Total Cost							\$ 80,000.00

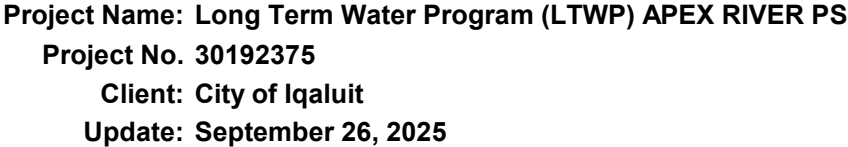




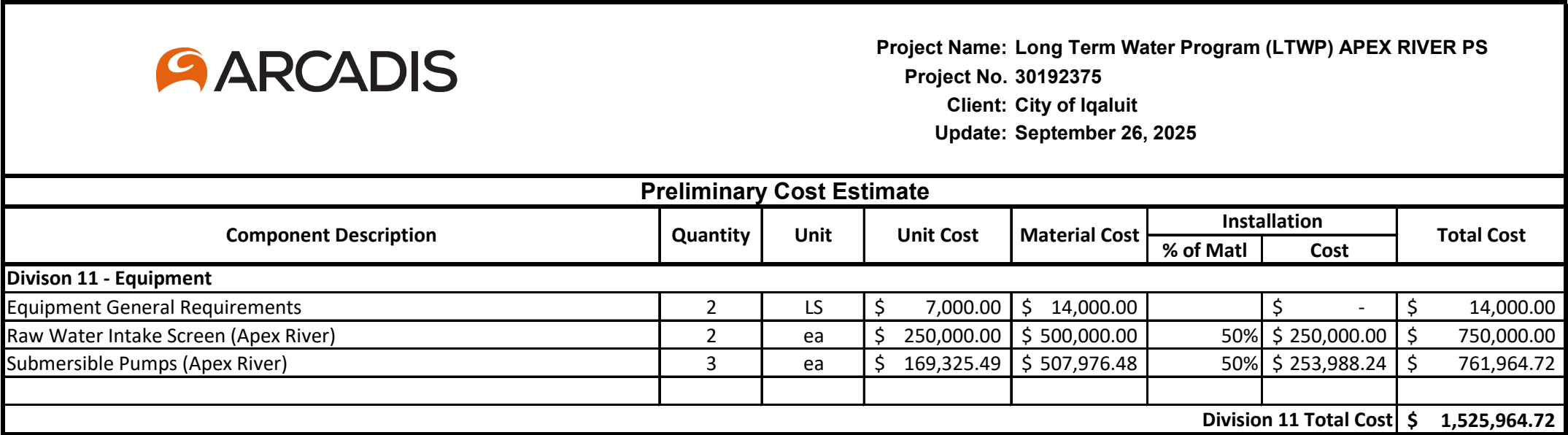
Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Divison 8 - Doors and Windows							
Doors and Windows	1	LS	\$ 45,000.00	\$ 45,000.00	50%	\$ 22,500.00	\$ 67,500.00
Division 8 Total Cost							\$ 67,500.00



Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Division 9 - Finishes							
Painting	1	LS	\$ 5,000.00	\$ 5,000.00		\$ -	\$ 5,000.00
Division 9 Total Cost							\$ 5,000.00



Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Divison 10 - Specialties							
Washroom Accessories	0	LS	\$ -	\$ -	50%	\$ -	\$ -
Division 10 Total Cost							\$ -





Update: September 26, 2025

Preliminary Cost Estimate	
1. Labor	1000
2. Materials	2000
3. Equipment	3000
4. Overhead	4000
5. Profit	5000
Total	15000

Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Division 13 Instrumentation & Controls							
Instrumentation and Control Documentation	1	LS	\$ 5,000.00	\$ 5,000.00		\$ -	\$ 5,000.00
General Instrumentation Requirements	1	LS	\$ 13,500.00	\$ 13,500.00		\$ -	\$ 13,500.00
Pressure Gauge	5	ea	\$ 925.00	\$ 4,625.00	20%	\$ 925.00	\$ 5,550.00
Pressure Transmitter	5	ea	\$ 5,000.00	\$ 25,000.00	20%	\$ 5,000.00	\$ 30,000.00
Smoke Detector	1	ea	\$ 1,000.00	\$ 1,000.00	20%	\$ 200.00	\$ 1,200.00
Access Door Switch	1	ea	\$ 500.00	\$ 500.00	20%	\$ 100.00	\$ 600.00
High/Low Level Float Switch (for each pump)	6	ea	\$ 1,500.00	\$ 9,000.00	20%	\$ 1,800.00	\$ 10,800.00
Sump Flood Float Switch	1	ea	\$ 1,000.00	\$ 1,000.00	20%	\$ 200.00	\$ 1,200.00
450 mm Magnetic Flow Meter	1	ea	\$ 20,000.00	\$ 20,000.00	20%	\$ 4,000.00	\$ 24,000.00
Room Temperature Switch	2	ea	\$ 600.00	\$ 1,200.00	20%	\$ 240.00	\$ 1,440.00
Ultrasonic Level Transmitter	1	ea	\$ 20,000.00	\$ 20,000.00	20%	\$ 4,000.00	\$ 24,000.00
Lake Level Monitoring (Apex River and Reservoir)	2	ea	\$ 20,000.00	\$ 40,000.00	20%	\$ 8,000.00	\$ 48,000.00
Instrument and Equipment Testing	1	LS	\$ 5,000.00	\$ 5,000.00		\$ -	\$ 5,000.00
Remote Network Switch Panels (VC11, VC12, VC15)	3	LS	\$ 5,175.00	\$ 15,525.00			\$ 15,525.00
PLC Control Panels	1	LS	\$ 120,000.00	\$ 120,000.00	50%	\$ 60,000.00	\$ 180,000.00
SCADA Equipment & Programming	1	LS	\$ 75,000.00	\$ 75,000.00		\$ -	\$ 75,000.00
Testing and Commissioning	1	LS	\$ 20,000.00	\$ 20,000.00		\$ -	\$ 20,000.00
Field Wiring	1	LS	\$ 35,000.00	\$ 35,000.00		\$ -	\$ 35,000.00
Radio Comms Study (including path study by others)	1	LS		\$ 30,000.00	0%		\$ 30,000.00
Fibre Optic Cable (on hydro poles, unit per meter)	2900	LS	\$ 60.00	\$ 174,000.00	25%	\$ 43,500.00	\$ 217,500.00
Division 13 Total Cost							\$ 743,315.00



Project Name: Long Term Water Program (LTWP) APEX RIVER PS

Project No. 30192375

Client: City of Iqaluit

Update: September 26, 2025

Preliminary Cost Estimate

Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Divison 16A - Electrical							
Electrical General Requirements	1	LS	\$ 30,000.00	\$ 30,000.00		\$ -	\$ 30,000.00
Short circuit & Protection Studies	1	LS	\$ 5,500.00	\$ 5,500.00		\$ -	\$ 5,500.00
Grounding	1	LS	\$ 2,000.00	\$ 2,000.00	50%	\$ 1,000.00	\$ 3,000.00
Underground Duct systems and Manholes	1	LS	\$ 10,000.00	\$ 10,000.00	50%	\$ 5,000.00	\$ 15,000.00
Wires and Cables (0 – 1000V)	1	LS	\$ 15,000.00	\$ 15,000.00	50%	\$ 7,500.00	\$ 22,500.00
Electrical Boxes	1	LS	\$ 4,000.00	\$ 4,000.00	50%	\$ 2,000.00	\$ 6,000.00
Conduit & Cable Tray Systems	1	LS	\$ 8,000.00	\$ 8,000.00	50%	\$ 4,000.00	\$ 12,000.00
Wiring Devices	1	LS	\$ 8,000.00	\$ 8,000.00	50%	\$ 4,000.00	\$ 12,000.00
Automatic Transfer Switch (APex)	1	LS	\$ 30,000.00	\$ 30,000.00	50%	\$ 15,000.00	\$ 45,000.00
Motor Control Centre	1	LS	\$ 80,000.00	\$ 80,000.00	50%	\$ 40,000.00	\$ 120,000.00
Disconnect Switches	1	LS	\$ 9,250.00	\$ 9,250.00	50%	\$ 4,625.00	\$ 13,875.00
Basic Electrical Equipment and Materials	1	LS	\$ 15,000.00	\$ 15,000.00	50%	\$ 7,500.00	\$ 22,500.00
Panelboards	1	LS	\$ 9,250.00	\$ 9,250.00	50%	\$ 4,625.00	\$ 13,875.00
Variable Frequency Drives	3	ea	\$ 30,000.00	\$ 90,000.0	50%	\$ 45,000.00	\$ 135,000.00
Generator (Diesel) - Apex	1	LS	\$ 80,000.00	\$ 80,000.00	50%	\$ 40,000.00	\$ 120,000.00
Lighting Equipment	1	LS	\$ 4,000.00	\$ 4,000.00	50%	\$ 2,000.00	\$ 6,000.00
Electrical Testing	1	LS	\$ 3,000.00	\$ 3,000.00		\$ -	\$ 3,000.00
Division 16A Total Cost							\$ 585,250.00



Project Name: Long Term Water Program (LTWP) APEX RIVER PS

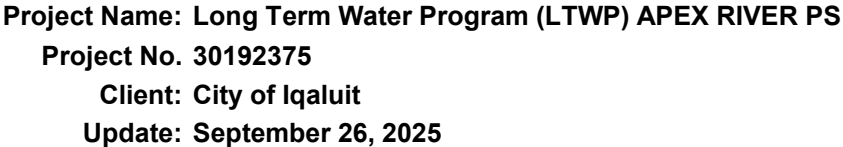
Project No. 30192375

Client: City of Iqaluit

Update: September 26, 2025

Preliminary Cost Estimate

Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Divison 14 Hoists and Cranes							
Hoists and Cranes	2	LS	\$ 60,000.00	\$ 120,000.00	50%	\$ 60,000.00	\$ 180,000.00
Division 14 Total Cost							\$ 180,000.00



Component Description	Quantity	Unit	Unit Cost	Material Cost	Installation		Total Cost
					% of Matl	Cost	
Divison 15A - Mechanical (Process)							
Process Mechanical Materials Methods and Requirements	1	LS	\$ 4,050.00	\$ 4,050.00		\$ -	\$ 4,050.00
Identification of Equipment, Piping and Valves	1	LS	\$ 4,050.00	\$ 4,050.00		\$ -	\$ 4,050.00
Process Piping, Valves and Fittings:						\$ -	\$ -
Plug Valve - 150 mm	1	ea	\$ 4,500.00	\$ 4,500.00	50%	\$ 2,250.00	\$ 6,750.00
350 mm Surge Buster Check Valves	3	ea	\$ 28,300.00	\$ 84,900.00	50%	\$ 42,450.00	\$ 127,350.00
Knife Gate Valve - 350 mm	4	ea	\$ 29,560.00	\$ 118,240.00	50%	\$ 59,120.00	\$ 177,360.00
Knife Gate Valve - 450 mm	2	ea	\$ 34,090.00	\$ 68,180.00	50%	\$ 34,090.00	\$ 102,270.00
100 mm Combination Air Release Valve	1	ea	\$ 6,300.00	\$ 6,300.00	50%	\$ 3,150.00	\$ 9,450.00
750 mm Fabricated Slide Gate	2	ea	\$ 33,196.00	\$ 66,392.00	50%	\$ 33,196.00	\$ 99,588.00
350 mm Vitalic Coupling	4	ea	\$ 2,809.00	\$ 11,236.00	50%	\$ 5,618.00	\$ 16,854.00
450 mm Vitalic Coupling	1	ea	\$ 3,907.00	\$ 3,907.00	50%	\$ 1,953.50	\$ 5,860.50
100 mm Surge Anticipating Valve	1	ea	\$ 21,148.00	\$ 21,148.00	50%	\$ 10,574.00	\$ 31,722.00
1000 mm Slide Gate	4	ea	\$ 31,378.00	\$ 125,512.00	50%	\$ 62,756.00	\$ 188,268.00
600 mm Butterfly Valve	2	ea	\$ 15,185.00	\$ 30,370.00	150%	\$ 45,555.00	\$ 75,925.00
Process Piping	1	LS	\$ 200,000.00	\$ 200,000.00	50%	\$ 100,000.00	\$ 300,000.00
Pressure and Leakage Testing	1	LS	\$ 6,750.00	\$ 6,750.00		\$ -	\$ 6,750.00
Process Piping Bases, Hangers and Supports	1	LS	\$ 40,000.00	\$ 40,000.00	50%	\$ 20,000.00	\$ 60,000.00
Valve Actuators	8	ea	\$ 4,000.00	\$ 32,000.00	50%	\$ 16,000.00	\$ 48,000.00
Division 15A Total Cost							\$ 1,264,247.50



				<i>Original Price</i>	
<i>Item #</i>	<i>Description</i>	<i>Bid Qty.</i>	<i>UM</i>	<i>Unit Bid Price</i>	<i>Total Bid Price</i>
1	Conveyance - Apex River Pipelines				
1.1	Conveyance - Mob/Demob	1	EACH	\$306,883.78	\$306,883.78
1.2	Conveyance - Site Prep	1	EACH	\$46,203.19	\$46,203.19
1.3	Conveyance - Grading	4,400	m2	\$13.98	\$61,512.00
1.4*	Conveyance - Access Road Construction	750	m	\$300.34	\$225,255.00
1.5	Conveyance - Pipeline Base	515	m3	\$237.68	\$122,405.20
1.6**	Conveyance - HDPE Pipeline Install	1,572	m	\$874.80	\$1,375,185.60
1.7**	Conveyance - Spiral Steel Pipeline Install	200	m	\$4,964.68	\$992,936.00
1.8	Conveyance - Pipeline Backfill	4,954	m3	\$47.03	\$232,977.21
1.9	Conveyance - Pipeline Piers	1	m3	\$1,400,000.00	\$1,400,000.00
1.10***	Conveyance - Valve Chambers	6	EACH	\$150,000.00	\$900,000.00
					\$5,663,357.98