



TBPE Firm Registration Number F-13

DRAFT

City of Austin Water Reuse Feasibility Study
Plan Components of Drought Response Options

R-3 Opinion of Capital Costs: Indirect Potable Reuse - SAR to Lady Bird Lake

Item	Quantity	Unit Cost	Unit	Total Cost
36" Diameter Pipeline	27,900	\$276	LF	\$ 7,700,400
30" Diameter Pipeline	16,000	\$215	LF	\$ 3,440,000
24" Diameter Pipeline	1,900	\$174	LF	\$ 330,600
Pipeline Easement	45,800	\$28	LF	\$ 1,282,400
Outfall Structure	1	\$50,000	EA	\$ 50,000
Creek Crossings	75	\$650	LF	\$ 48,750
Road Crossings	2,100	\$875	LF	\$ 1,837,500
Additional Treatment at SAR (P Removal)			LS	\$ 300,000
Additional Ground Storage - 500kgal			LS	\$ 500,000
Discharge Modeling			LS	\$ 150,000
Pump Station: Total HP = 300			LS	\$ 2,540,000
Mobilization and De-Mobilization, Overhead, Bonds, Insurance			LS	\$ 4,545,000
The new pump station will supplement the existing pump station.				
Subtotal				\$ 22,724,650
Contingency (20%)				\$ 4,545,000
Project Subtotal				\$ 27,269,650
Engineering (10% Pipelines, 15% Other)				\$ 2,942,000
Permitting & Mitigation (1%)				\$ 273,000
Total Capital Cost				\$ 30,484,650

R-3 Opinion of Annual Costs: Indirect Potable Reuse - SAR to Lady Bird Lake

Item	Quantity	Unit Cost	Unit	Total Cost
Pipeline O&M	\$ 13,765,000	1%	%	\$ 137,650
Pump Station O&M	\$ 3,048,000	2.5%	%	\$ 76,200
Pump Station Power		\$0.10	kWh	\$ 1,129,000
Barge Rental			LS	\$ 400,000
Equipment Rental			LS	\$ 100,000
Debt Service (4% INT, 25 YRS)	\$ 30,484,650	4%	%	\$ 1,951,400
Total Annual Cost				\$ 3,794,250