

**Cost Estimate Summary
Water Supply Project Option
September 2023 Prices
Pharr - Raw Water Augmentation Potable Reuse**

**Cost based on ENR CCI 13485.67 for September 2023 and
a PPI of 278.502 for September 2023**

<i>Item</i>	<i>Estimated Costs for Facilities</i>
Off-Channel Storage/Ring Dike (Conservation Pool 43 acft, 14 acres)	\$3,571,000
Intake Pump Stations (0 MGD)	\$1,618,000
Transmission Pipeline (16 in. dia., 2.5 miles)	\$5,386,000
Transmission Pump Station(s) & Storage Tank(s)	\$1,293,000
Storage Tanks (Other Than at Booster Pump Stations)	\$1,129,000
Advanced Water Treatment Facility (3 MGD)	\$27,350,000
Integration, Relocations, Backup Generator & Other	\$40,000
TOTAL COST OF FACILITIES	\$40,387,000
- Planning (3%)	\$1,212,000
- Design (7%)	\$2,827,000
- Construction Engineering (1%)	\$404,000
Legal Assistance (2%)	\$808,000
Fiscal Services (2%)	\$808,000
Pipeline Contingency (15%)	\$808,000
All Other Facilities Contingency (20%)	\$7,000,000
Environmental & Archaeology Studies and Mitigation	\$203,000
Land Acquisition and Surveying (53 acres)	\$250,000
Interest During Construction (3.5% for 1.5 years with a 0.5% ROI)	<u>\$2,666,000</u>
TOTAL COST OF PROJECT	\$57,373,000
ANNUAL COST	
Debt Service (3.5 percent, 20 years)	\$3,672,000
Reservoir Debt Service (3.5 percent, 40 years)	\$241,000
Operation and Maintenance	
Pipeline, Wells, and Storage Tanks (1% of Cost of Facilities)	\$66,000
Intakes and Pump Stations (2.5% of Cost of Facilities)	\$73,000
Dam and Reservoir (1.5% of Cost of Facilities)	\$54,000
Water Treatment Plant	\$0
Advanced Water Treatment Facility	\$3,501,000
Pumping Energy Costs (655921 kW-hr @ 0.09 \$/kW-hr)	\$59,000
Purchase of Water (acft/yr @ \$/acft)	<u>\$0</u>
TOTAL ANNUAL COST	\$7,666,000
Available Project Yield (acft/yr)	3,360
Annual Cost of Water (\$ per acft), based on PF=1	\$2,282
Annual Cost of Water After Debt Service (\$ per acft), based on PF=1	\$1,117
Annual Cost of Water (\$ per 1,000 gallons), based on PF=1	\$7.00
Annual Cost of Water After Debt Service (\$ per 1,000 gallons), based on PF=1	\$3.43
<i>Note: One or more cost element has been calculated externally</i>	

