



Replace South Rim Wastewater Treatment Plant and Reclaim Plant

GRCA – 257282 (N055)



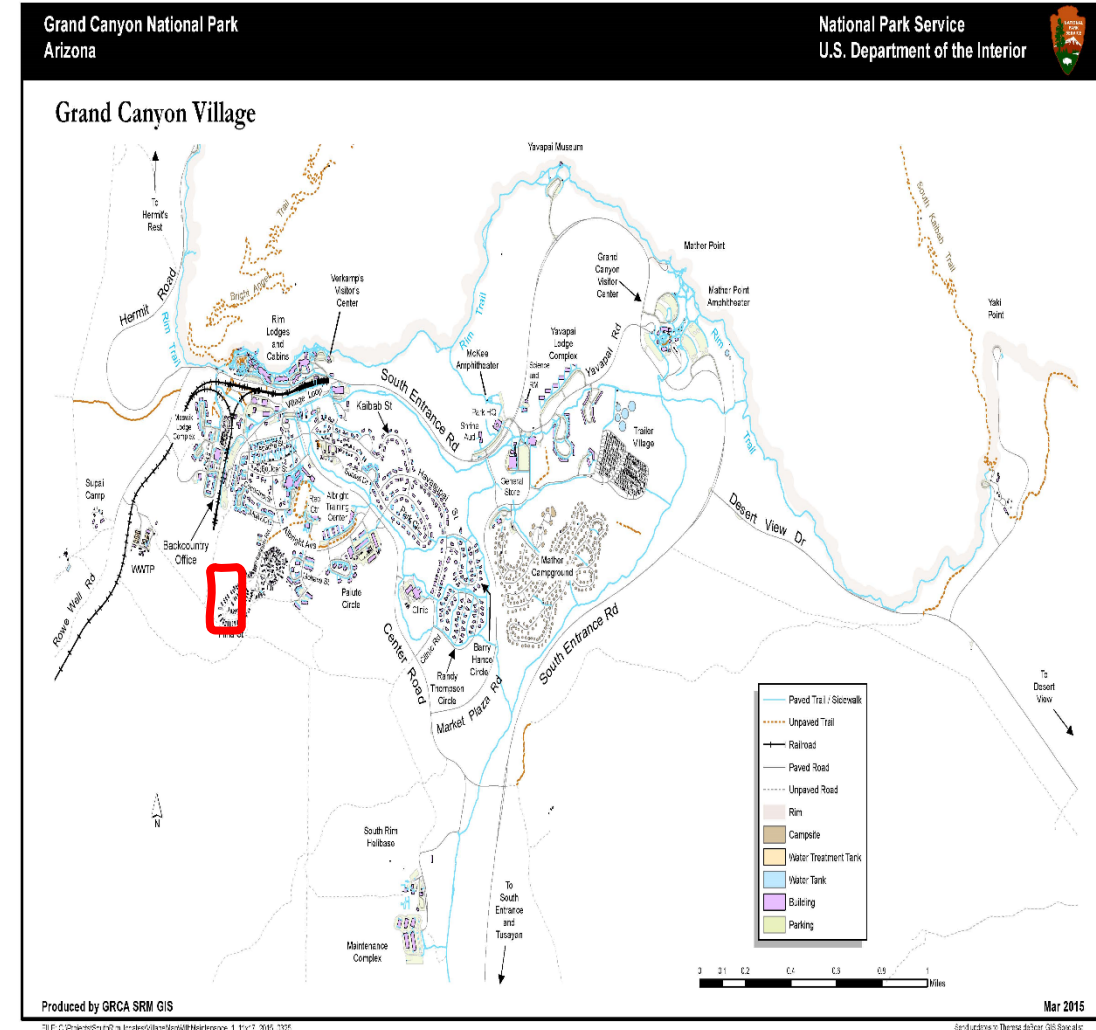


Replace South Rim Wastewater Treatment Plant and Reclaim Plant

- **Brief Description**

Design and construction of an approximate 0.75MGD membrane bioreactor wastewater treatment plant at the same location as the existing plant and providing reclaim water to existing reclaim distribution system. Demolish existing 0.5MGD activated sludge wastewater treatment plant and reclaim water treatment plant. Maintain operation, with minimal outages, of existing plant.

- Location: South Rim Grand Canyon National Park
- Estimated Price: \$25M - \$45M



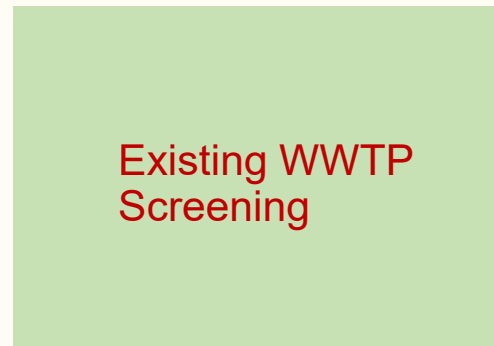


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- Design & Construction Method
Design – Build
- Procurement Method:
Full & Open / Small Business Set-aside
- Schedule (Approximate):
Solicitation Date:
Phase I: 06/01/2022
Phase II: 08/01/2022
Award Date: 09/15/2022
Period of Performance: appx 2.5 years

Flow	Historical flows, 2016-2018, mgd
Average	0.28
Maximum-month	0.36
Maximum day	0.47

Historic Flows



Existing WWTP Screening



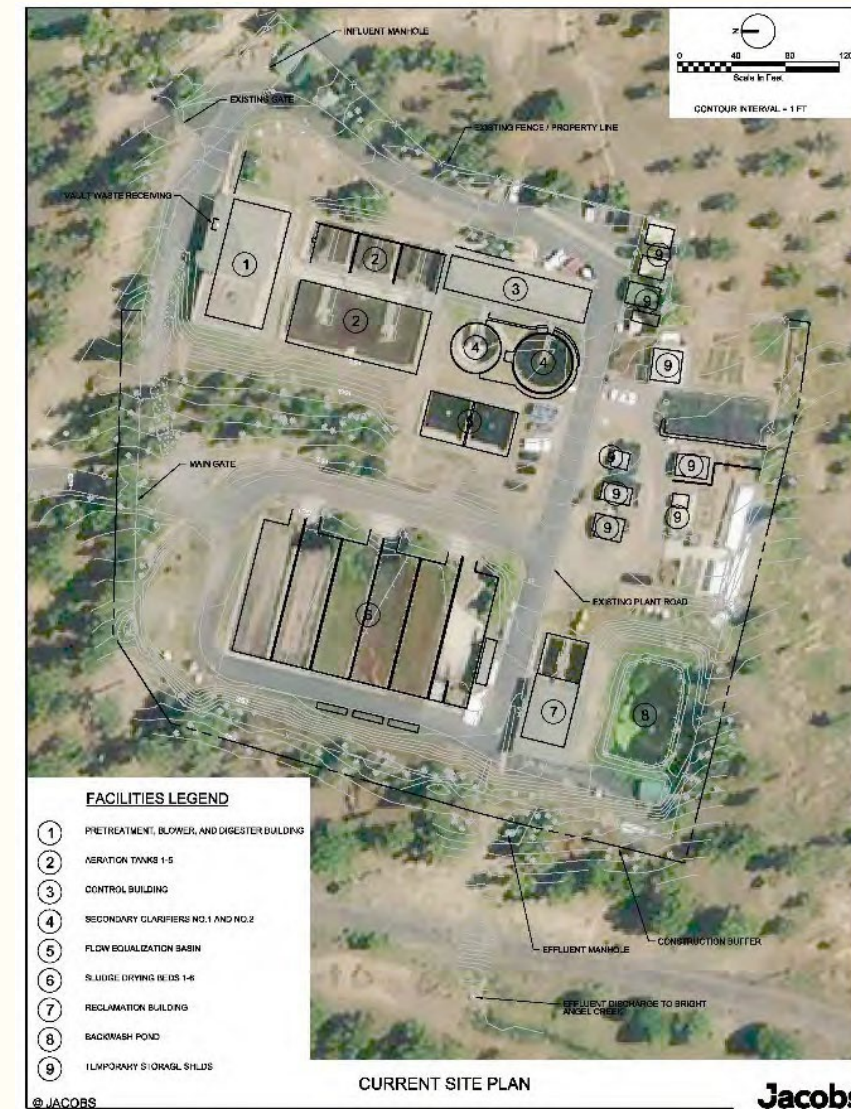
Existing WWTP Pipe Gallery





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- New plant to be designed-built within existing fence perimeter at the existing plants; minimize service outages during construction.
- Underground utilities located by third party locator and picked up on topo survey base map
- Plant sizing based on actual flow and loading data to include projection for visitor growth
- Space utilization plan developed by functional area and size
- SCADA programming to be done by others
- Line item for operations of the plant for one year upon commissioning and acceptance of the plant





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- Performance Objectives
 - Two stage screening and grit removal at headworks
 - Secondary treatment: 0.75MGD membrane bioreactor
 - Effluent: Class A+ for unrestricted reuse
 - Biosolids stabilization (aerobic digestion)
 - Biosolids: Class B with composting side stream (Class A)
 - Mechanical dewatering
 - Copper Treatment
 - UV and chlorine disinfection (surface discharge and reclaim distribution system ~ 30/70)



Vault Toilet Waste

Composting Toilet Waste

