

Scity of atlanta department of watershed management

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Intrenchment Creek Decommissioning and South River Primary Clarifiers Virtual Site Visit

May __, 2020

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Overall Project Summary





Project Summary

Intrenchment Creek WRC

- Demolition and removal of existing treatment structures, as required
- Modifications to the existing headworks with new coarse screens
- Transfer pump station with pumps dedicated to both SRWRC and equalization tanks
- Electrical and instrumentation upgrades
- Conversion of an existing digester to equalization storage (as a bid additive alternate)

South River WRC

- Demolition and removal of select existing structures
- New covered junction box with mixing and primary clarifier distribution
- Two new circular primary clarifiers (a third clarifier as a bid additive alternative)
- New headhouse with primary sludge pumping, primary scum pumping, and drain pumps
- Upgrade of existing ferric chloride feed system
- Electrical and instrumentation upgrades
- Design prepared by BGR2 A/E Consultants







Intrenchment Creek WRC Elements







Intrenchment Creek WRC Elements

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Intrenchment Creek WRC Headworks 🛰

- Modifications to the existing headworks with removal/replacement of coarse screens
- Block channels & install new 48-inch effluent line
- Click on link below to access video:



Sideview of Headworks

- Conveyor to remain
- 48-inch effluent line to come out of channel lower left



Route of 48-inch Effluent Pipe

- Follow grassy strip from headworks around abandoned chlorine building
- Along grass next to road around Digester No. 1
- Click on link below to access video:





Reverse View of 48-inch Line Route

- Digester No. 1 is to left
- 48-inch effluent line to follow grassy area



Digester No. 1 (Bid Alternative)

- Bid alternative is to remove cover and use as EQ tank
- Will require demolition and piping modifications



Power Generation Building

- Current transfer pump station VFDs located here
- Power feed to new electrical building



Inside Power Generation Building

- Existing Switchboard EPS-300A to be demolished feeds existing transfer pump station VFDs
- Existing Switchgear #4 to feed new electrical building
- Click on link below to access video:



Existing Equalization Tank

- No major modifications
- New level indicators added



Transfer Pump Station Site

- Existing transfer pump station continues to operate
- Partial demolition of front right trickling filter
- New transfer pump station and electrical building site
- Click on link below to access video:













South River WRC Elements

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Top View of Demolition/Clarifier Area

- Polymer building, DAF tanks and building
- Old digester complex, control building, junction boxes
- Acetic acid facility, construction trailer
- Click on link below to access video:



Polymer Building

- Part of old DAF facility
- To be demolished



Inside Polymer Building

- Demolition of full building and contents
- Full disposal of contents no salvage for City
- Click on link below to access video:



DAF tanks

- Demolition of all tanks and contents
- Disposal of all liquid or solids in tanks
- Demolition of DAF building
- Click on link below to access video:



DAF Building

- Part of old DAF facility
- Includes demolition of stairs, loading area, etc.



Old Digester Complex

- Demolition of three 55-ft diameter digesters, Control building/headhouse, access, and all contents
- Demo all items right of blue washwater tank
- Click on link below to access video:



Digester Flares

Includes demolition of all piping, supports, and equipment



Valve Vault



• Next to flares and part of project demolition



Gravity Thickeners

- Demolition of two 30-ft diameter gravity thickeners vault between, and liquid and solid contents
- Demo all items including stairs, piping, handrails, etc.
- Click on link below to access video:



Control Building

- Also known as Gravity Thickening Building
- Circle driveway in area to be demolished also



Old Digester Complex

• Bottom entrance shown here



Lower Level View of Demolition Area

- Shows junction boxes, gravity thickeners, acetic acid facility, valve vaults, trailer, embankment
- Demo all items including structure, piping, handrails
- Click on link below to access video:



Valve Vault



• Building past tractors to be saved (no demo)



Concrete Wall



• Wall past valve vault NOT part of demolition



Chemical Building

- Demolition in this building includes ferric chloride feed pumps, air handling unit, heater, and plant water line
- Work will include new feed pumps and duct fan
- Click on link below to access video:



Connection at Headworks

 Looking northeast from Chemical Building to location of headworks effluent connection and new valve

vaults





Existing North Primary Headhouse

- Electrical tie-in for new chemical feed systems
- Existing MCC 8A/8B used



Transformers at N. Primary Headhouse 🛰

- Existing Substation #2 transformers SB-2A and SB-2B
- Used for additional power feed in this area



Route of 48-Inch Bypass Line

- Lower Left looking northeast toward admin building
- Lower right looking west toward Jonesboro Rd PS









Timeline





Timeline

- EPD Consent Order Substantial Completion by June 30, 2023
- DWM seeks to meet abovementioned deadline within the additional constraints posed by the Covid-19 pandemic





Conclusions





Conclusions

 Major work at 2 Water Reclamation Complexes

Intrenchment Creek WRC

South River WRC

• EPD Consent Order - Substantial Completion by June 30, 2023



THE END