

Agenda Item 4a



Water Treatment Plant 4


Quarterly Briefing Environmental Board

May 16, 2012





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WTP 4 – Approved GMPs

GMP	Scope of Work	Current Status	Approvals
GMP 1	Raw Water Intake, RW Tunnels	In Construction	December 2010
GMP 2	Raw Water Pump Station	In Construction	September 2011
GMP 3A	Procure Process Equipment	Fabrication/Delivery	May 2010
GMP 3B	Clearwells & Upflow Clarifiers	Nearing Completion	June 2010
GMP 3C	WTP Filter Complex and Site Walls	In Construction	November 2010
GMP 3D	WTP Washwater, Solids and Chemical Facilities	In Construction	April 2011
GMP 3E	WTP Electrical & Underground Mech and WTP & RWPS SCADA	In Construction	July 2011
GMP 3F	Lime Handling Facility	In Construction	December 2011
GMP 3G	Admin Bldg and Maint Bldg	Const. Start - May 2012	April 2012
GMP 5	Jollyville Transmission Main	In Construction	July 2011

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WTP 4 – Upcoming GMPs




GMP	Scope of Work	Current Status	Approvals
GMP 3H	Medium Service Pump Station (MSPS)	Advertises – May	July 2012 (negotiate GMP)
GMP 3I	Site Security & BHR Ductbank	Sole Source Negotiations (Security) In Progress	August 2012 (negotiate GMP)
GMP 4	RWPS & WTP Site Finishes	Advertises – September	November 2012 (negotiate GMP)


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Raw Water System
RW Intake Site





Raw Water System – Intake





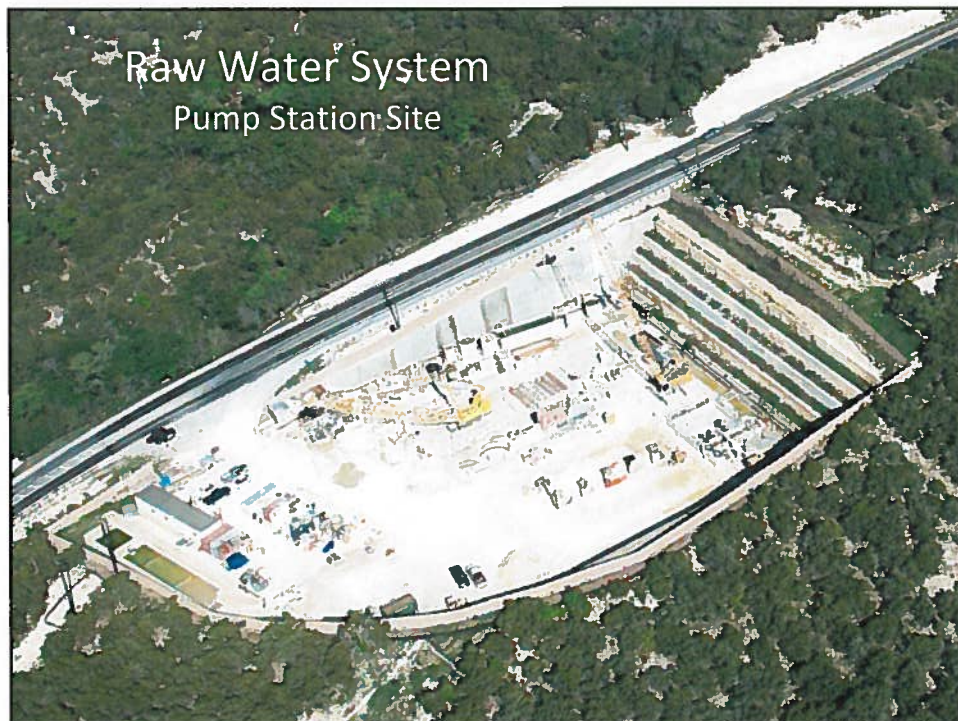
- Drilling of the Raw Water Intake Shaft in progress.







- Fabricating one (1) of three (3) permanent Intake Screens.

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Raw Water System – RWPS Site






- RW Tunnel shaft work continuing.
- RWTM tunneling complete.
- RWPS Construction beginning.


- RWPS foundation excavation in progress.



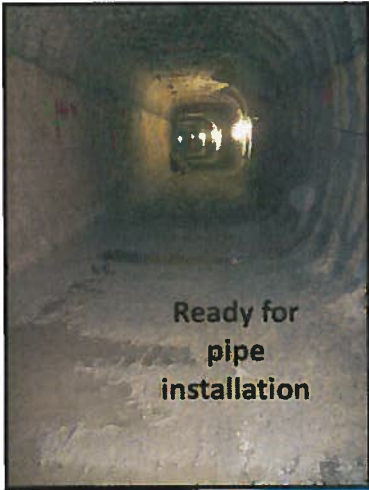
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Raw Water System - TM





End of RWTM tunnel
at WTP 4 site.



Ready for
pipe
installation

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WTP 4 – Plant Facilities





– Completed Design of Medium Service Pump Station (MSPS) and Bullick Hollow Road Electrical Ductbank

– GMPs

- 3A - Equipment: review/fabrication phase (varies)
- 3B - Clearwells & Clarifiers: 90% complete & on schedule.
- 3C - Filters & Site Walls: 50% complete & on schedule.
- 3D - Washwater, Solids & Chemical Facilities: 27% complete & on schedule.
- 3E - Electrical, SCADA and Underground Mechanical: 25% complete & on schedule.
- 3F - Lime Handling Building: Foundation work in progress.




WTP 4 Plant Site



Clearwells

- Floor, walls and roof are complete.
- Concrete finish work in progress.

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WTP 4 Plant Site

Upflow Clarifiers

- UFC 1 & 2: Successful completion of hydro-testing.
- Catwalk work in progress.

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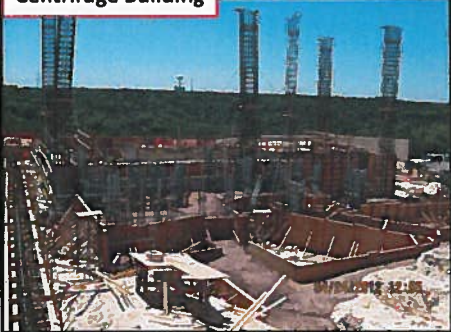
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Filter Complex


- In progress

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Centrifuge Building



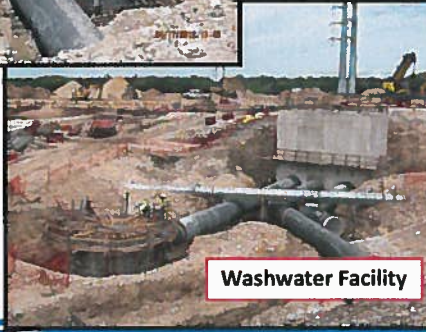
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Solids Handling Containment Area



Washwater Facility

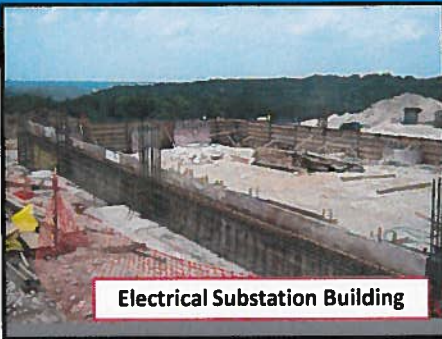
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WTP 4 Plant Site


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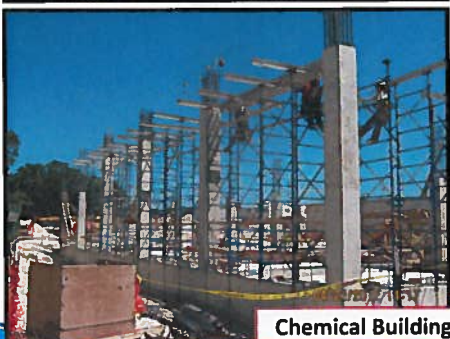
WTP 4 Plant Site



Electrical Substation Building



Sodium Hypochlorite Building



Chemical Building


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Jollyville TM Shaft Sites



Spicewood Springs Shaft Site



Four Points Shaft Site

WTP 4 – Finished Water System



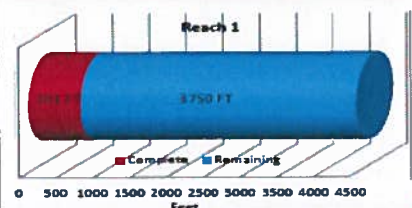
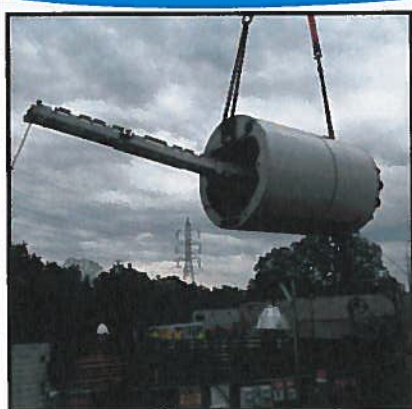
– Four Points Site

- Shaft excavation is complete.
- TBM delivered and tunneling to WTP 4 [Reach 1] is in progress (16% complete).

– Jollyville Reservoir Site

- Shaft excavation is in progress and scheduled to complete in May.
- Delivery of Reach 2 & 3 TBMs expected in June/July.

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Jollyville TM



Four Points Shaft





- Shaft excavation is complete.
- Tunneling to WTP 4 (Reach 1) is in progress with Tunnel Boring Machine (TBM).

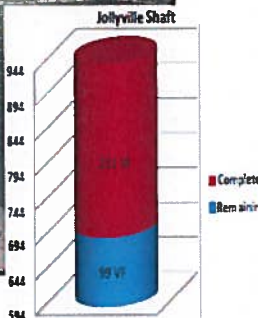
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Jollyville TM

Jollyville Reservoir Shaft



Elevation (ft)	Status
944	Complete
894	
844	
794	
744	
694	Remaining
644	
594	

- Shaft excavation is ongoing.
- Rings to 159'; balance is shotcrete (photo).

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Environmental Compliance

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Environmental Compliance



Plant and Raw Water System

- Received **X** amount of rain during May 5 – May **X**
 - Plant site stable. No offsite sediment discharges
 - Rain captured in large excavations/trenches or diverted into interior areas
- Weekly & post rain event inspections continue
 - SWP3 - Suggested BMP - Tree Protection
- Pre-trenching for process pipe (5.2 miles) continues
 - **6** voids mitigated
- RWPS water quality discharge continues to exceed Environmental Commissioning goal

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RWPS Water Quality



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Raw Water Intake



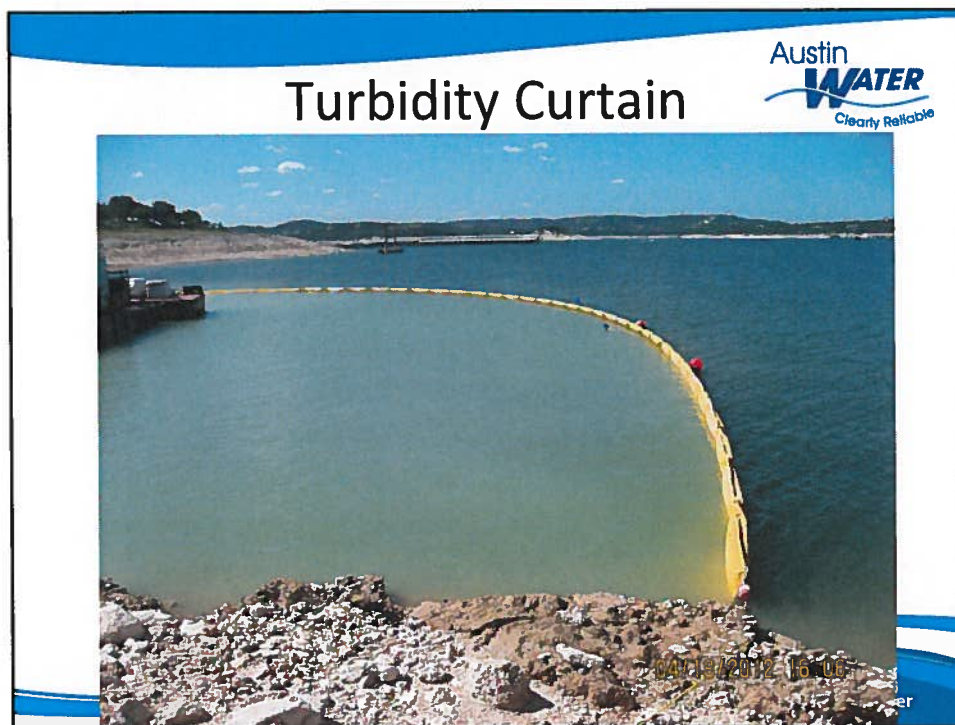
- Coordination with LCRA continues
 - Work plan submitted for sand blasting and painting operations
 - Spill plan revision for concrete pours on the lake
 - Spoils management and disposal plan for riser shaft drilling
 - Water quality monitoring and results submitted daily during dredging activities
 - Turbidity curtain installed at staging area (Keller Marina)

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Sand Blasting/Painting Tent



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Jollyville Transmission Main

- Four Points Shaft
 - Enhanced grouting program successful. JT-128 currently at 95% recovery to background level
 - Approximate cost \$280k
 - Tunnel inflow – zero/dry
- Spicewood Springs Shaft
 - Minor additions to erosion & sedimentation controls
 - Vegetative filter strip
 - No bulk fuel or chemical storage

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Spicewood Springs Shaft Site

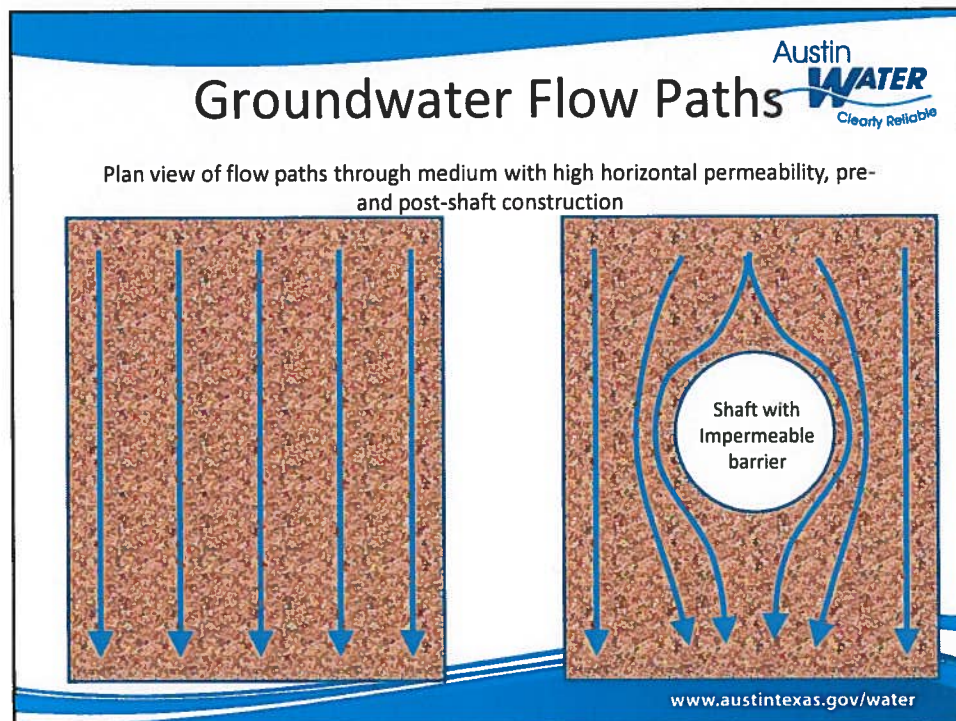
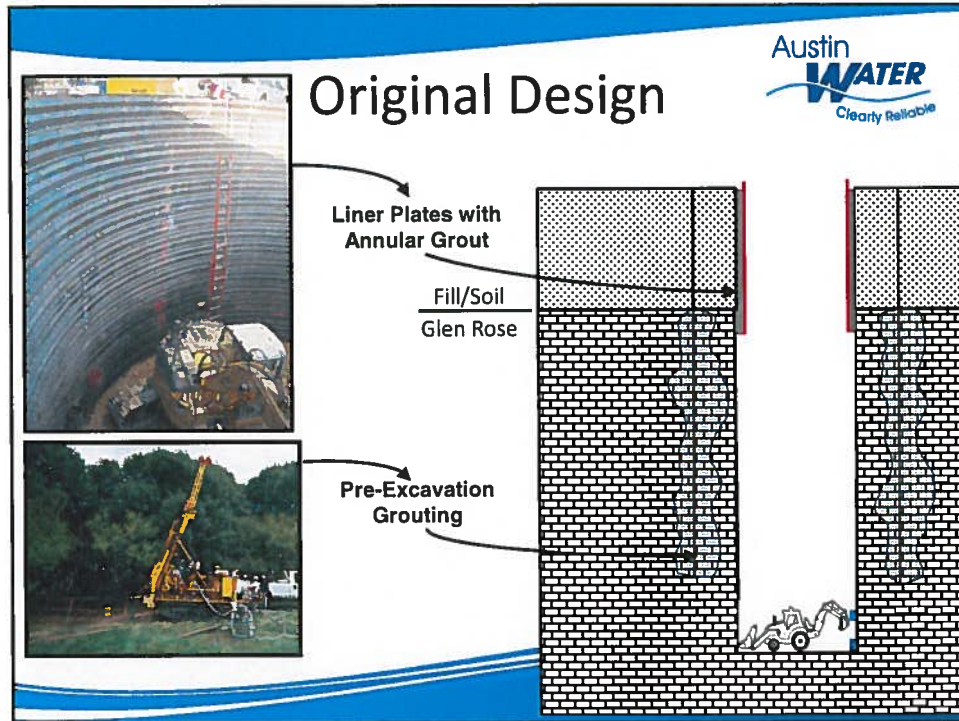
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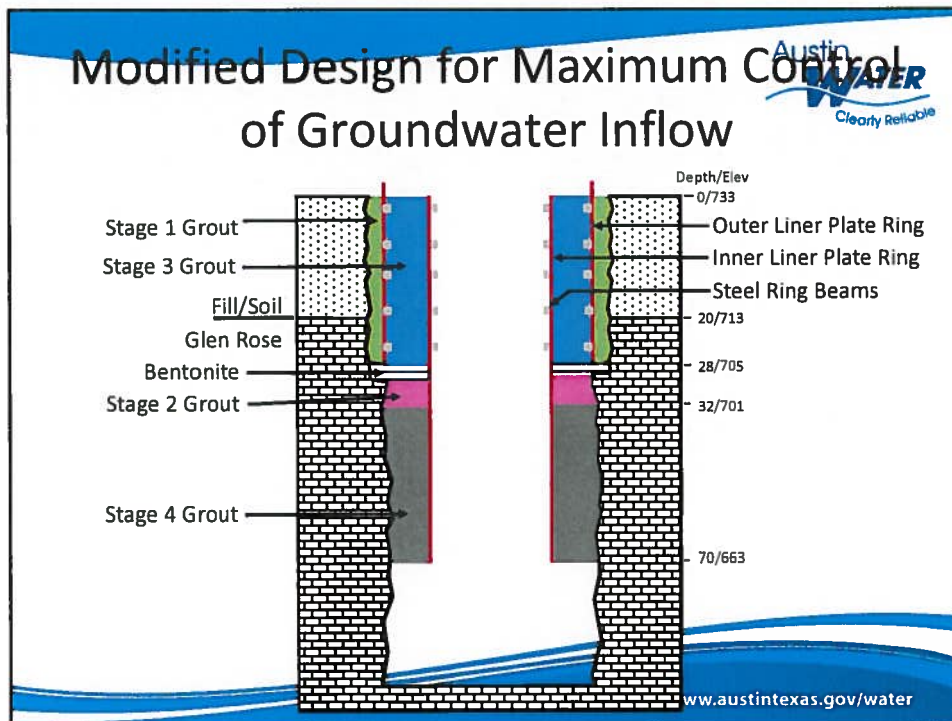
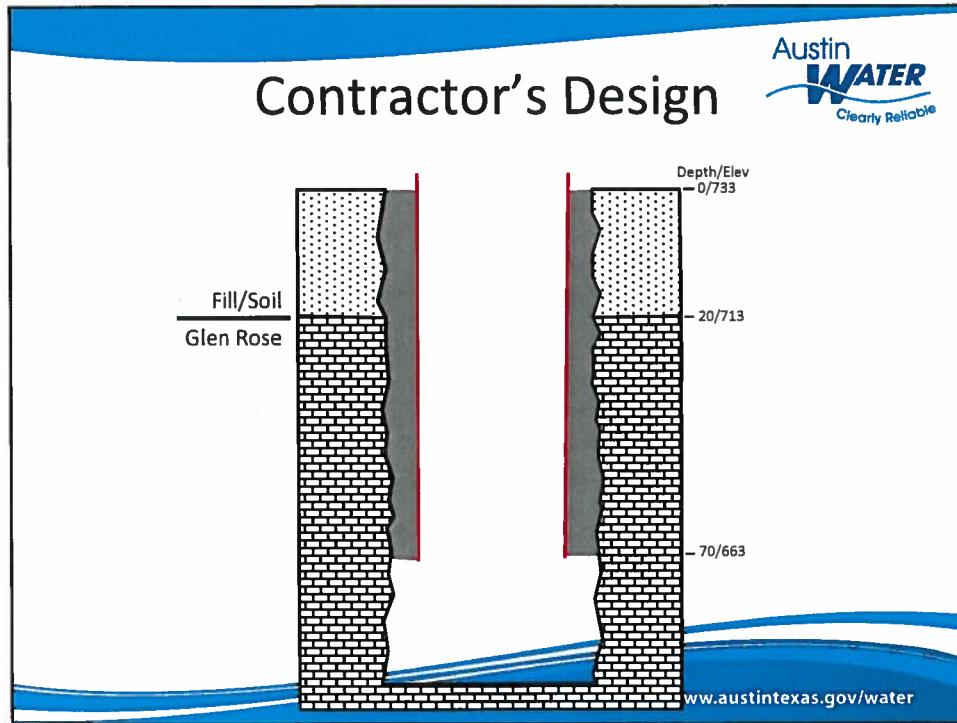
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Spicewood Springs Shaft Design

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Questions?

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