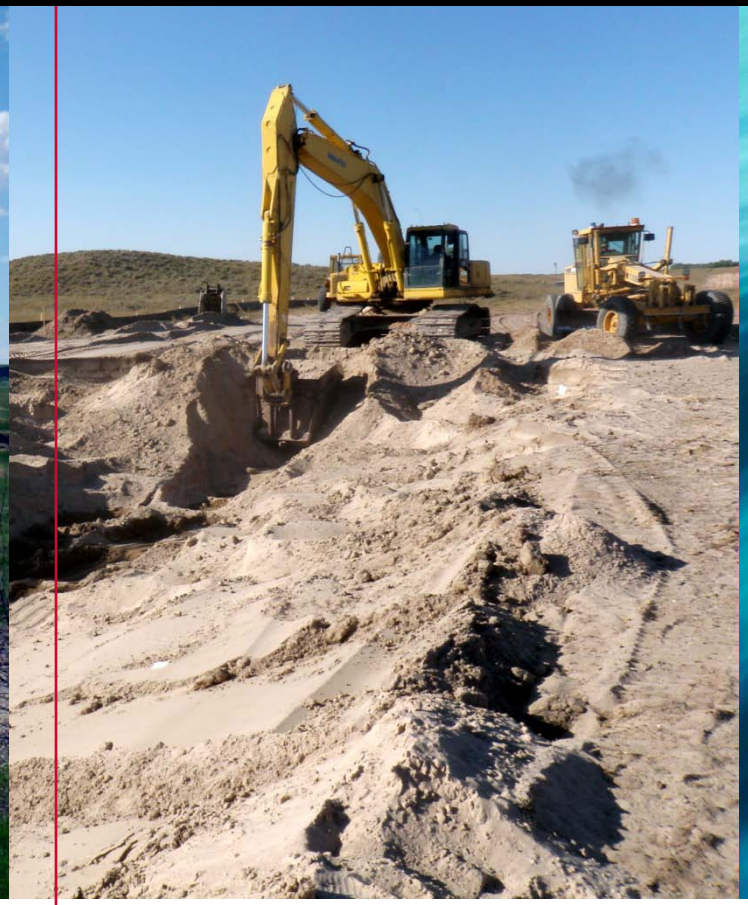
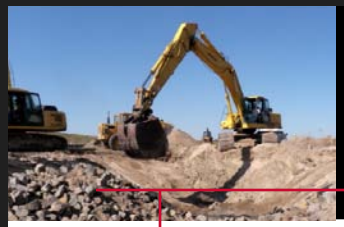
RRWCD Board Meeting Presentation



Republican River Compact Compliance Pipeline Project

July 12, 2012
Holyoke, CO

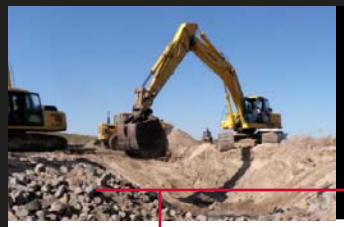
GEI Consultants



Project History – Inception

- 1942 Republican River Compact
- Final Settlement Stipulation accepted in 2003
- Water Activity Enterprise created
- Compact Pipeline concept conceived

GEI Consultants

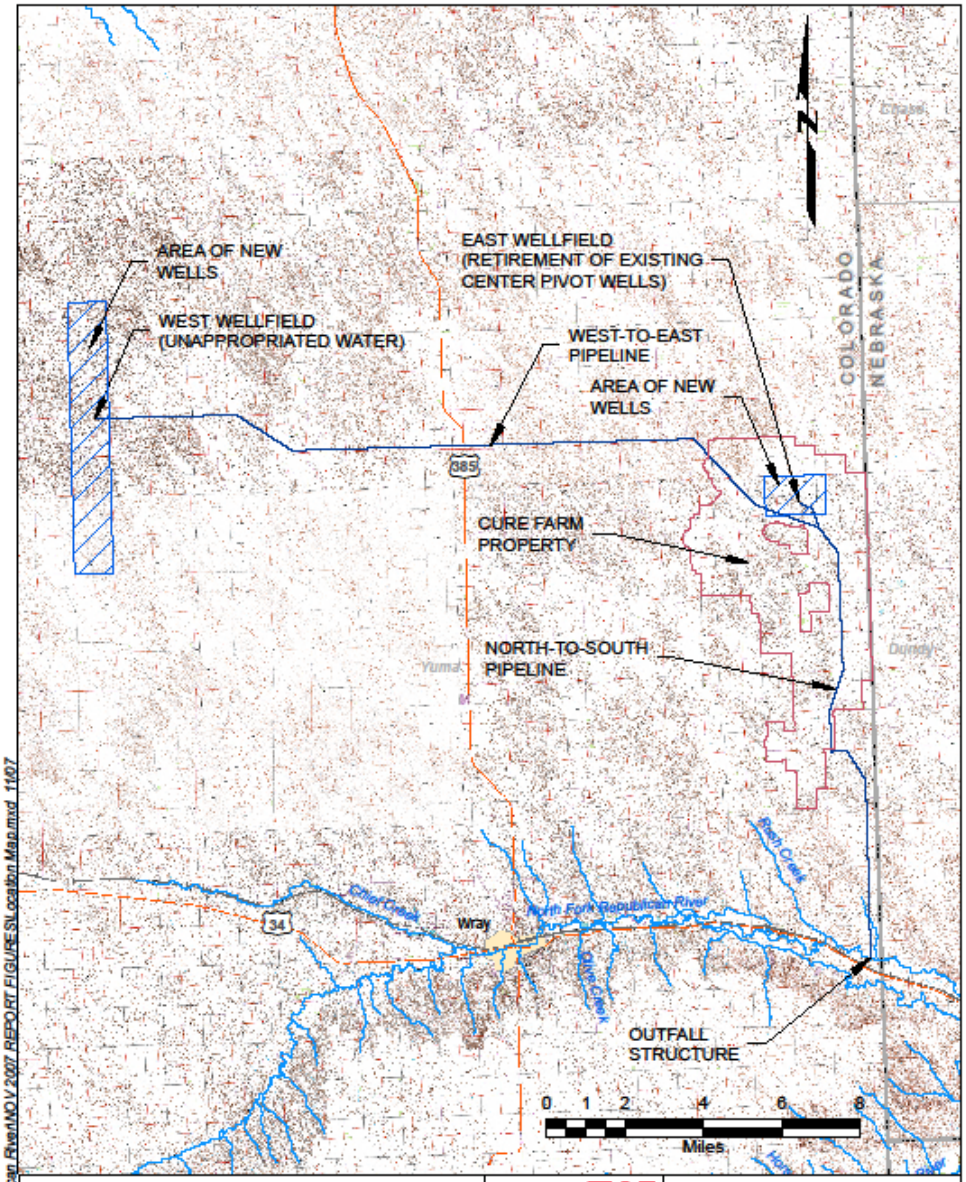


Project History – Alternative Evaluation

- Conceptual Pipeline Project Layout
  - Retirement of 8 existing wells
  - Two alternative alignments
  - Storage tank to regulate water head
  - Outlet structure to control flows

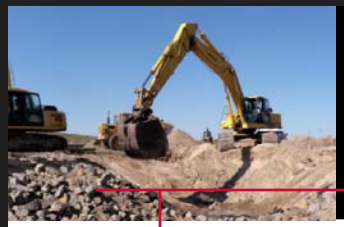
- Groundwater modeling to estimate depletions
  - Used to select appropriate wells

GEI Consultants



P:\072670 Republican River\NOV 2007 REPORT FIGURES\Location Map.mxd 11/07

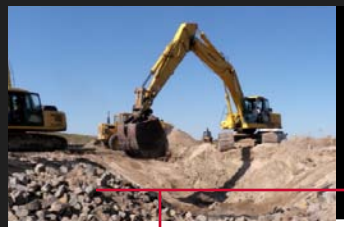
Republican River Compact Compliance Pipeline Yuma County, Colorado	GEI Consultants	FACILITIES LOCATION MAP	
Republican River Water Conservation District	072670	November 2007	Figure 1



Project History – Preliminary Design

- Preliminary Design Began in 2008
  - Selection of north-south alignment
- Several alignment adjustments
  - Land ownership
  - Hydraulics
- Aerial Photography and Surveying
- Began Obtaining Easements
- PTAC Meetings to Review Technical Matters

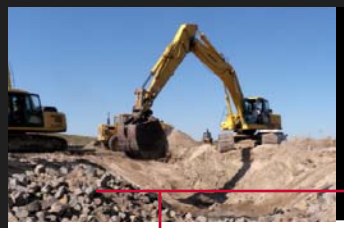
GEI Consultants



Project History – 90% Design

- Completed Specifications and Drawings in March 2009
- Performed Feasibility of Hydroelectric Analysis
- Pipeline Material Selection: PVC vs. DI

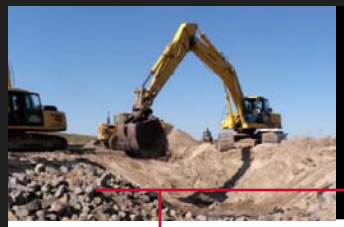
GEI Consultants



Project History – 2009-2011

- Project Delayed for Two Years due to Kansas/Nebraska Denying Compact Credits From the Pipeline
- Deb Daniel Selected as New District Manager
- Material Costs Fluctuations Throughout Project Delay
  - Cost of scrap metal and oil costs
  - 2008 Olympics
  - 2011 prices “ideal” for project

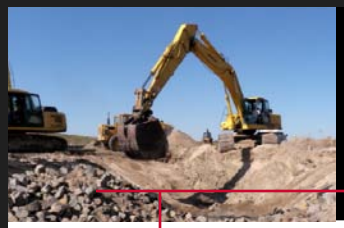
GEI Consultants



Project History – 2011 “Go Time”

- RRWCD and Legal Council Determine to Move Forward With Project
- Finalize Specifications and Drawings in April 2011
- Begin Obtaining County Land Use and Road Permits

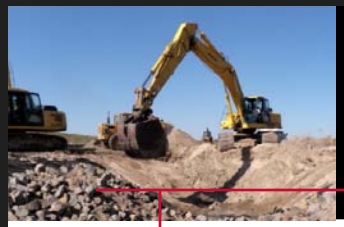
GEI Consultants



Project History – 2011 “Go Time”

- May 2011 – Issue Advertisements for Pre-qualifications
  - Scoring system including local participation, cost and approach
  - 11 Contractors submit qualifications
  - 6 Contractors pre-qualified to bid on project
- June 2011 – Receive Contractor Bids
- July 2011 – Award Contract to Garney Construction as Low Bid and With Highest Weighted Score

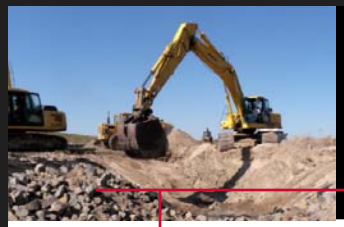
GEI Consultants



Project History – 2011 “Go Time”

- August 2011 – Begin Working With Garney
  - Review submittals
  - Answer RFI’s
  - Garney mobilization to site
- Drill Wells for Temporary Water During Construction
- Ground Breaking Ceremony – August 29
- Begin Construction September 14, 2011

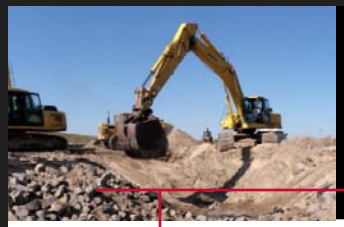
GEI Consultants



Summary of Work

- Outfall Structure and Channel
  - 95% Complete
- Transmission Pipeline
  - 100% Complete
- Collection Tank and Tank Site
  - 97% Complete
- Wellfield Collection Pipes
  - 97% Complete
- Wells and Well Buildings
  - 100% Complete

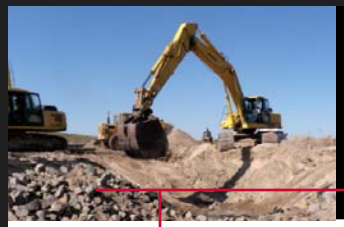
GEI Consultants



Contract Summary

Contract Summary	Amount
Original Contract Amount	$13,542,985
• Approved Change Orders	$589,398
Revised Contract Amount	$14,132,383
• Work Completed Through March	$11,674,041
• Previous Payments	$10,867,760
Remaining Contract Amount	$2,458,342
Percent Of Contract Paid	82%

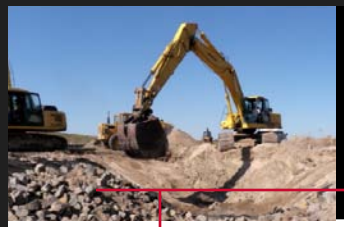
GEI Consultants



Change Order Summary

1	Addition of penta-head security bolts; Carsonite markers at AR/AV valve manholes; Dampproofing and vapor barrier at outfall structure
2	Revised wellfield structures, electrical, mechanical, and site work
3	Additional riprap lining in discharge channel
4	Sonar jetting at wells A8, A2, and B5; Valve modifications in outfall structure
5	Modifications to electrical system at the collection tank; Repair of existing 8” diameter PVC irrigation line on Corsica property
6	Acceleration of wellhouse construction schedule to meet April 15 “soft” deadline

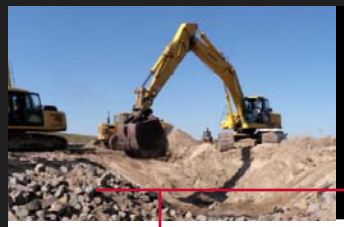
GEI Consultants



Change Order Summary (Cont.)

7a	Modifications to revegetation specifications; Revegetation by Shaw Equipment
7b	Change motor at well A6 from 100 hp to 125 hp per Directive No. 10
7c	Change from Stevens Type F recorder to Sutron SDR at Parshall flume stilling well per Directive No. 9
7d	Flow fill encasement of PVC collection lines at intersections with Cure private roads at two locations
7e	Electrical Modifications for center pivot sprinkler hookups (Eckstine scope of work only)
8a	Store and forward site
8b	Spare tools and maintenance equipment
9	Final change order to “equalize” all unit price line items at project completion

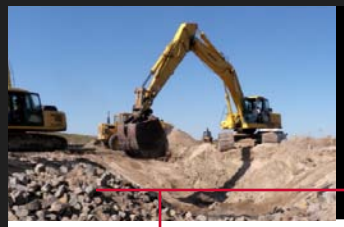
GEI Consultants



Change Order Summary (Cont.)

Change Order No.	Change Order Amount	New Contract Amount	Notes
-	$ -	$ 13,542,985.00	Original Contract
1	$ 5,295.98	$ 13,548,280.98	Executed January 16, 2012
2	$ 478,010.99	$ 14,026,291.97	Executed February 24, 2012
3	$ 49,266.00	$ 14,075,557.97	Executed February 15, 2012
4	$ 23,189.03	$ 14,098,747.00	Executed February 15, 2012
5	$ 33,635.76	$ 14,132,382.76	Executed March 20, 2012
6	$ 40,514.25	$ 14,172,897.01	In review
7	$ 62,114.00	$ 14,235,011.01	C.O.7 Subtotal ~ $98,464.00
	$ 11,050.00	$ 14,246,061.01	Approximate
	$ 1,300.00	$ 14,247,361.01	Approximate
	$ 4,000.00	$ 14,251,361.01	Approximate
	$ 20,000.00	$ 14,271,361.01	Approximate
8	$ 30,000.00	$ 14,301,361.01	Approximate
	$ 10,000.00	$ 14,311,361.01	Approximate
9	TBD	TBD	
Total	**$ 768,376.01**	**$ 14,311,361.01**	**5.67%**

GEI Consultants



Construction Schedule

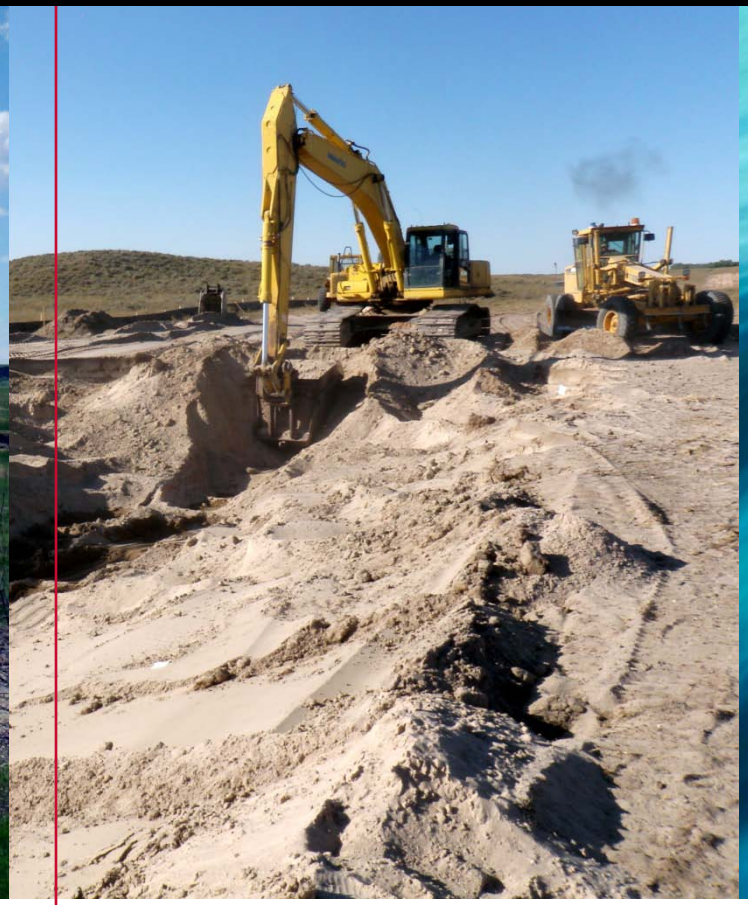
Construction

Task	2011 Aug	Sep	Oct	Nov	Dec	2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
1.0 Access Roads		100%													
2.0 Outfall Channel		100%													
3.0 Outfall Structure				100%											
4.0 Wellfield Piping					100%										
5.0 Pump Rehabilitation				100%											
6.0 Well Site Construction								98%					ETC Jul 27		
7.0 Main Transmission Pipe				100%											
8.0 Collection Tank				95%									ETC Jul 27		
9.0 Outfall Structure Mechanical						100%									
10.0 Control Building							95%						ETC Aug 1		
11.0 Reclamation								100%							
12.0 Startup and Testing										50%				ETC Sept 1	

Task Schedule

Completed

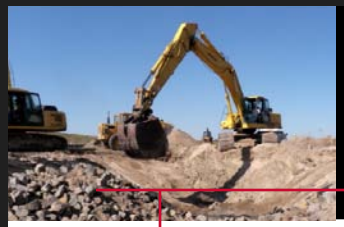
GEI Consultants



Construction Photos

Project Beginning Through Present

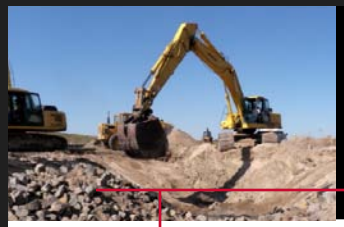
GEI Consultants



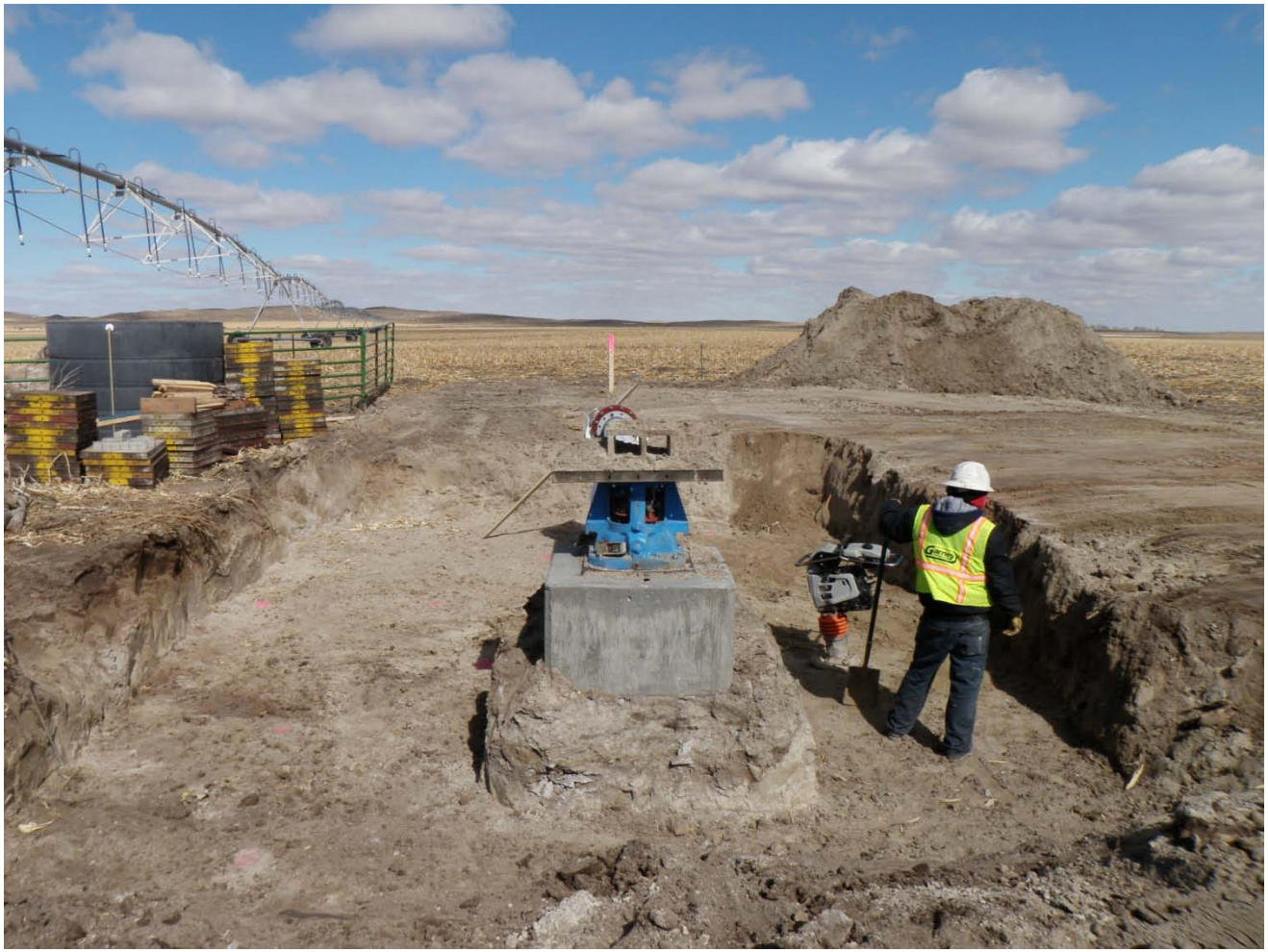
Well Sites and Well Buildings

Quality Irrigation removing existing column pipe at well site A8.

GEI Consultants

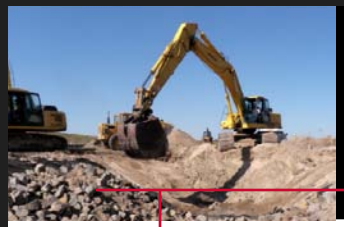


Well Sites and Well Buildings



Garney preparing ground to set footing forms for well house at site A3.

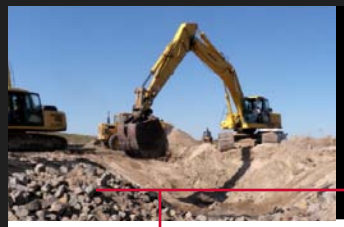
GEI Consultants



Well Sites and Well Buildings

Installing steel anchor plates in concrete after screeding slab at well site A4.

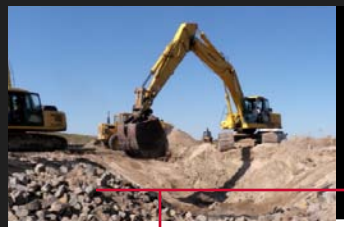
GEI Consultants



Well Sites and Well Buildings

Colorado Precast installing a wall panel of well house B5.

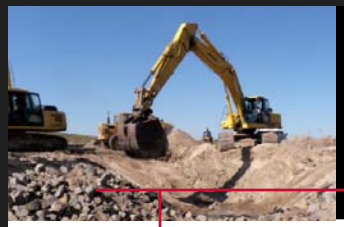
GEI Consultants



Well Sites and Well Buildings

Well house A5 after Colorado Precast has completed the installation.

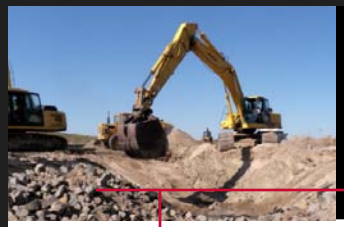
GEI Consultants



Well Sites and Well Buildings

Well house piping, showing air valve and irrigation pipe stub.

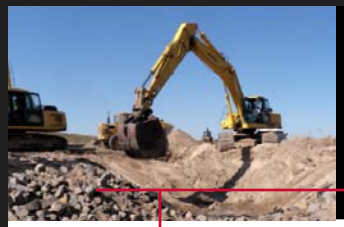
GEI Consultants



Well Sites and Well Buildings

Installation of hydropneumatic tank in well house.

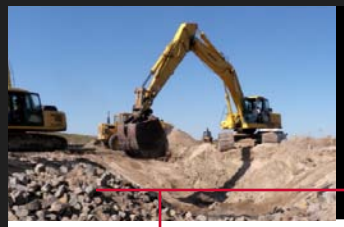
GEI Consultants



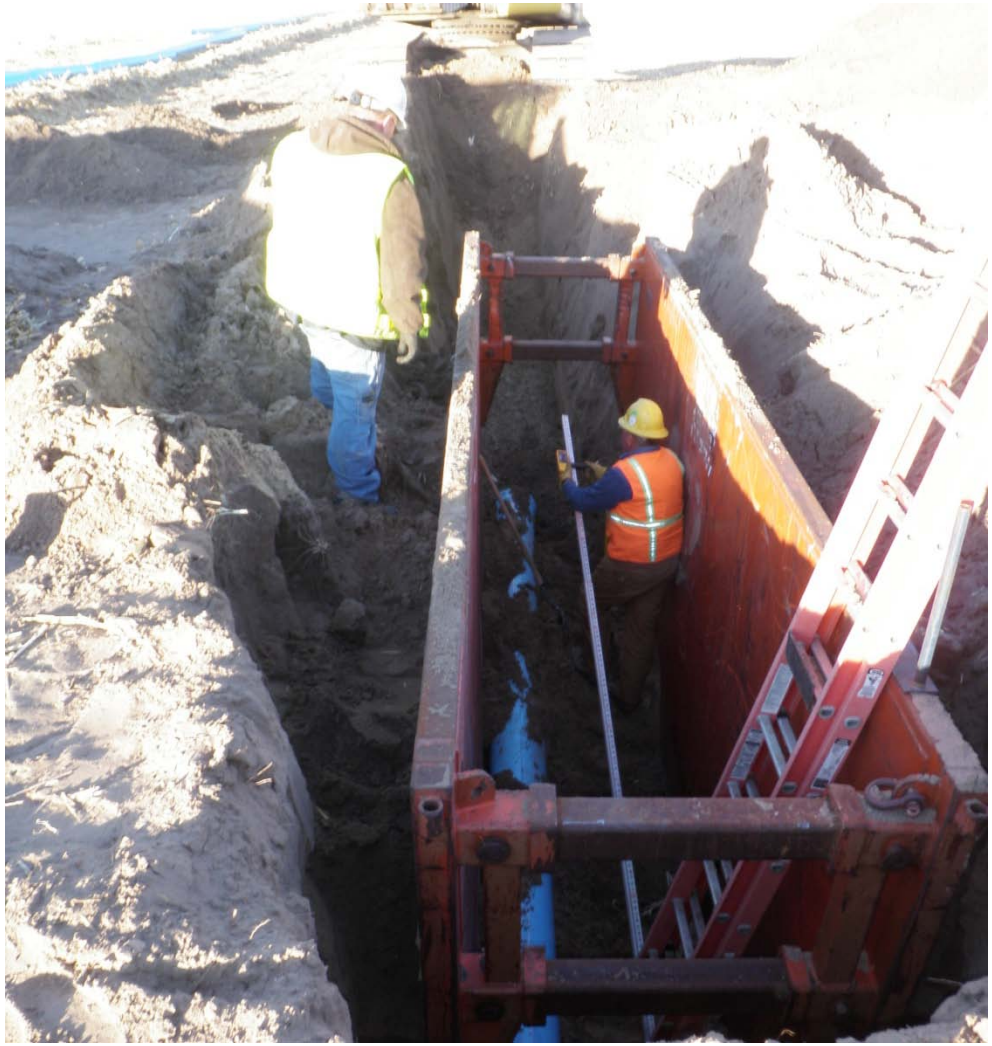
Well Sites and Well Buildings

Completed interior of a well house.

GEI Consultants

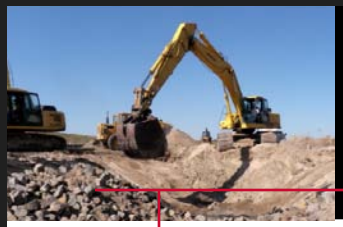


Wellfield Collection Pipeline



Sessions installing first stick of PVC collection pipe on line A7.

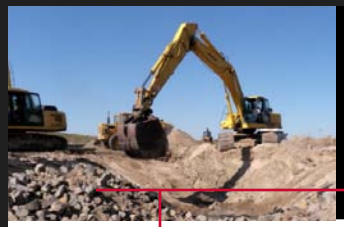
GEI Consultants



Wellfield Collection Pipeline

Sessions excavating trench for installation of PVC pipe on collection line A5.

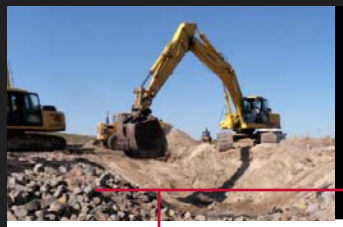
GEI Consultants



Wellfield Collection Pipeline

Sessions making a bell and spigot connection on a PVC well collection line.

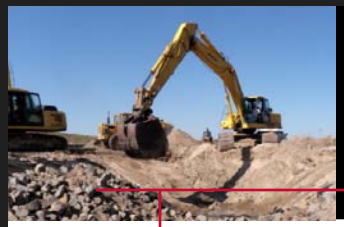
GEI Consultants



Wellfield Collection Pipeline

Sessions installing 12-inch PVC pipe along collection line A8, looking west.

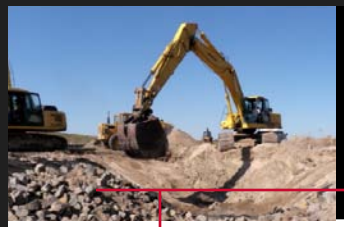
GEI Consultants



Wellfield Collection Pipeline

Sessions compacting backfill over PVC line A8 at County Road RR crossing.

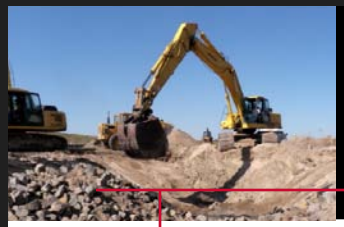
GEI Consultants



Wellfield Collection Pipeline

Sessions installing blowoff manhole at Station A5 44+50 on collection line.

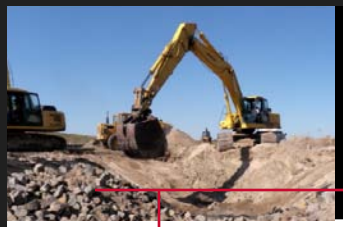
GEI Consultants



Wellfield Collection Pipeline

Pipe and gate valve installation at well field manifold.

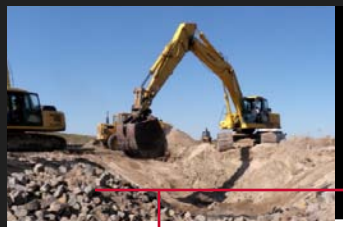
GEI Consultants



Collection Tank and Tank Site

Access road leading to collection tank, looking west from County Road RR.

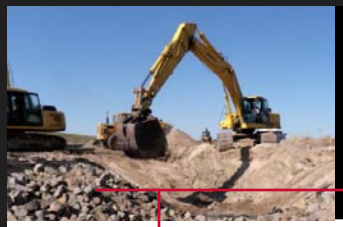
GEI Consultants



Collection Tank and Tank Site

Sessions overexcavating soil underneath collection tank.

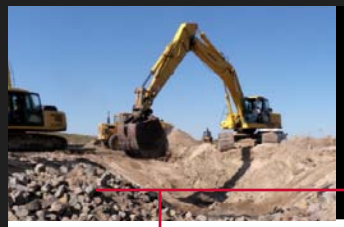
GEI Consultants



Collection Tank and Tank Site

Spreading backfill under collection tank foundation before compacting lift.

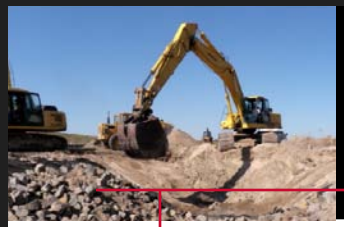
GEI Consultants



Collection Tank and Tank Site

Sessions installing rebar and formwork for control building footer.

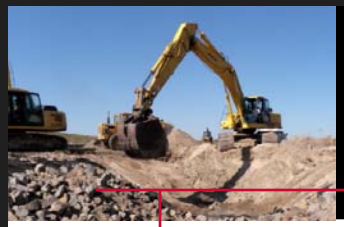
GEI Consultants



Collection Tank and Tank Site

Collection tank and control building after placing both concrete slabs.

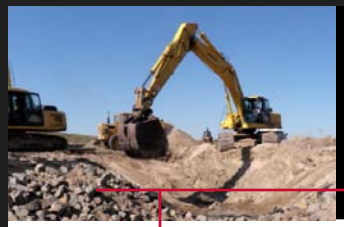
GEI Consultants



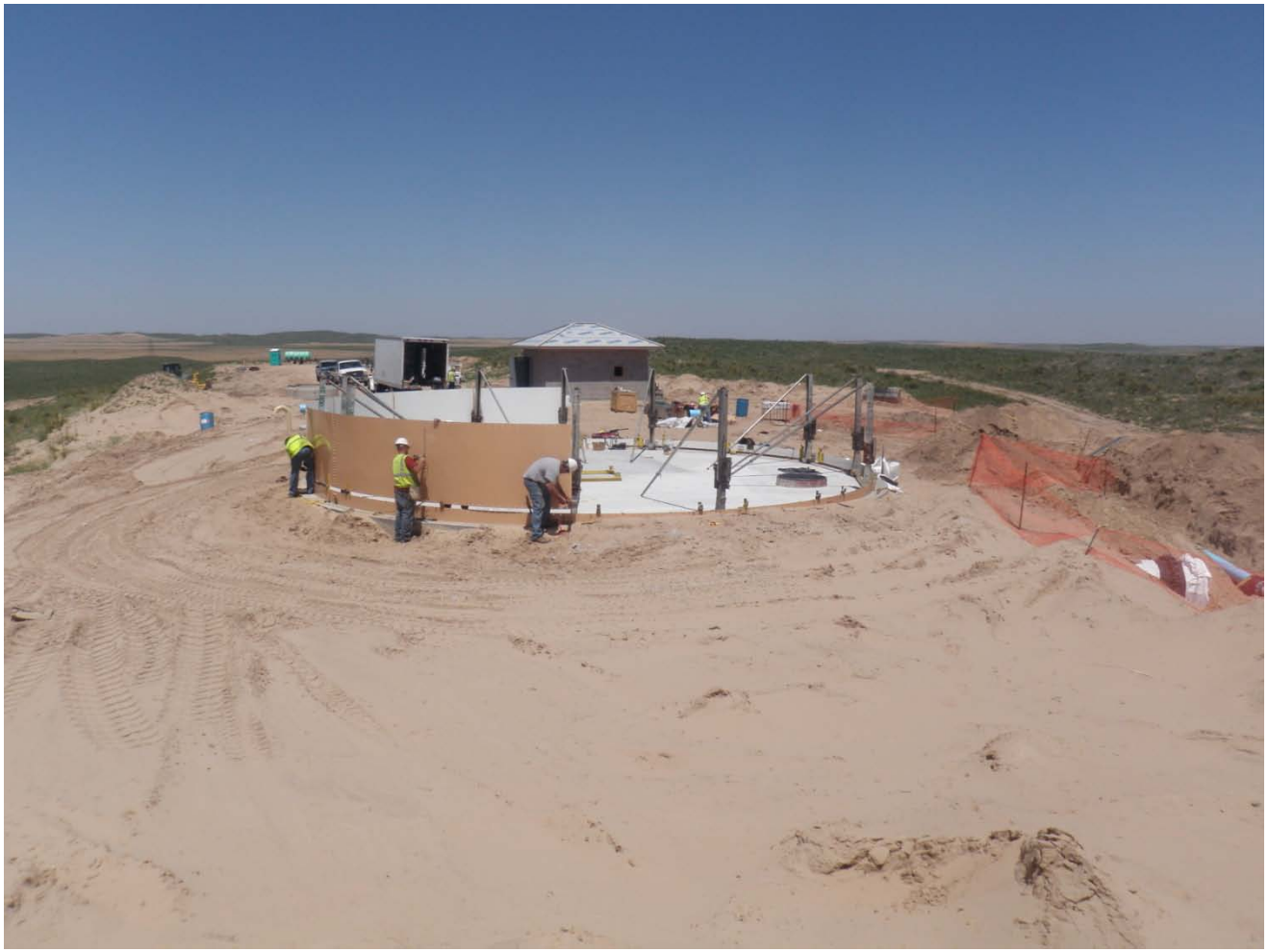
Collection Tank and Tank Site

Construction of the masonry control building at the tank site.

GEI Consultants

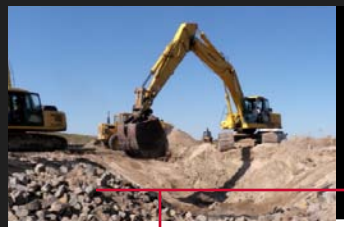


Collection Tank and Tank Site



Installation of the steel panels for the collection tank.

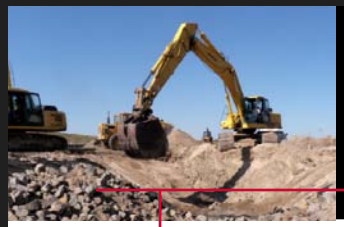
GEI Consultants



Collection Tank and Tank Site

Assembly of the domed roof for the collection tank.

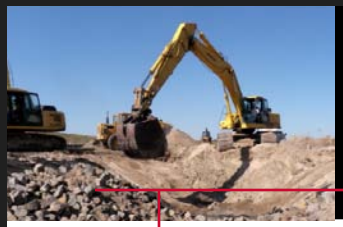
GEI Consultants



Collection Tank and Tank Site

Completed collection tank.

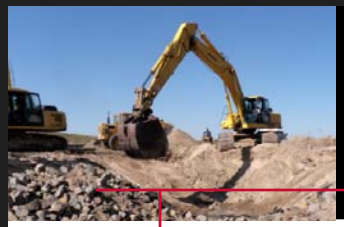
GEI Consultants



Collection Tank and Tank Site

Completed control building at collection tank site.

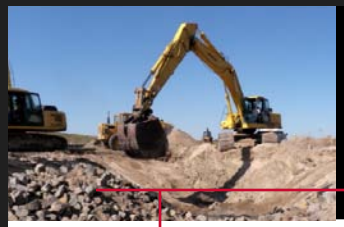
GEI Consultants



Main Ductile Iron Transmission Pipeline

Garney unloading ductile iron pipes from delivery trailer.

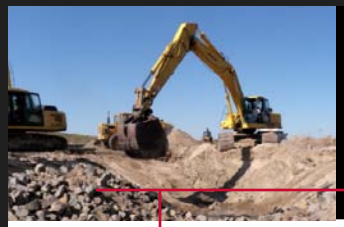
GEI Consultants



Main Ductile Iron Transmission Pipeline

Garney placing first stick of ductile iron pipe in the ground at Station 9+68.

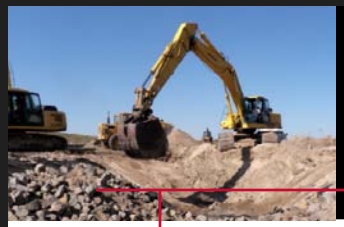
GEI Consultants



Main Ductile Iron Transmission Pipeline

Garney installing ductile iron pipe, showing bell and spigot installation style.

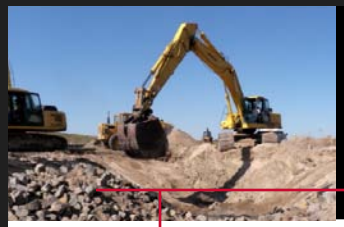
GEI Consultants



Main Ductile Iron Transmission Pipeline

Air release on main pipeline installed at approximately Station 607+05.

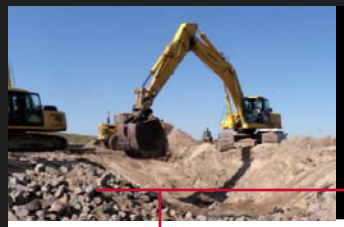
GEI Consultants



Main Ductile Iron Transmission Pipeline

Garney installing manhole over air release at Station 45+28.

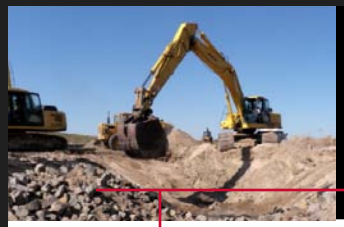
GEI Consultants



Main Ductile Iron Transmission Pipeline

View of 42”x36” reducer at Station 442+60 on main transmission pipeline.

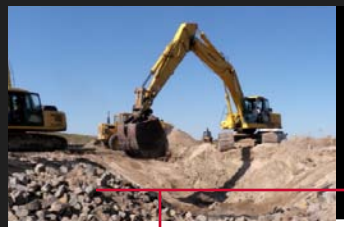
GEI Consultants



Main Ductile Iron Transmission Pipeline

Garney backfilling trench over 42-inch ductile iron pipeline.

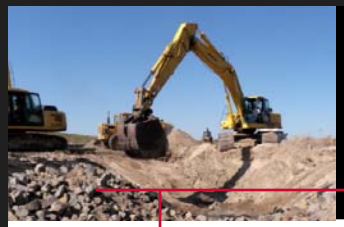
GEI Consultants



Main Ductile Iron Transmission Pipeline

Garney placing final piece of DI pipe at collection tank site.

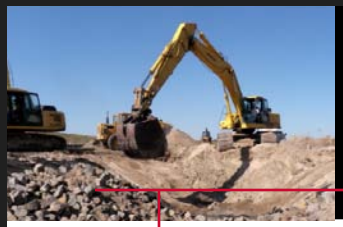
GEI Consultants



Main Ductile Iron Transmission Pipeline

Shaw Equipment performing site reclamation within temporary easement.

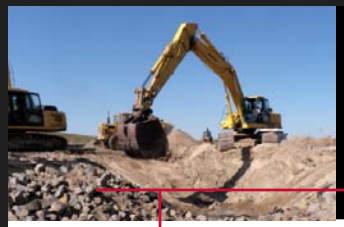
GEI Consultants



Outfall Structure and Discharge Channel

Sessions excavating discharge channel near Station 0+00.

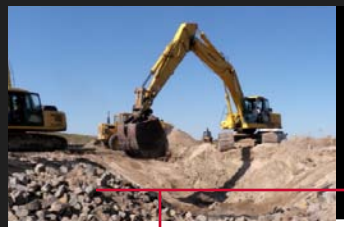
GEI Consultants



Outfall Structure and Discharge Channel

Sessions excavating discharge channel, riprap placement has begun.

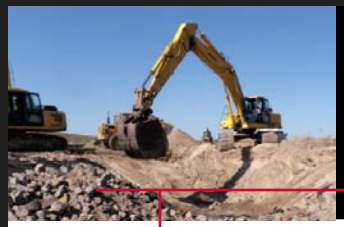
GEI Consultants



Outfall Structure and Discharge Channel

Concrete slab under Parshall flume after placement and finishing.

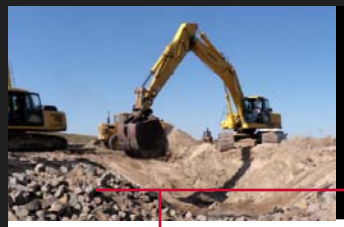
GEI Consultants



Outfall Structure and Discharge Channel

Sessions placing concrete with hopper bucket in Parshall flume wing walls.

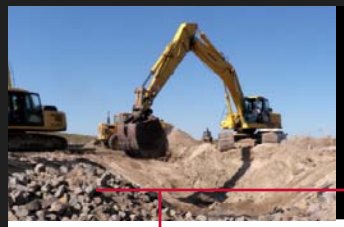
GEI Consultants



Outfall Structure and Discharge Channel

Outfall structure slab rebar mat tied and ready for concrete placement.

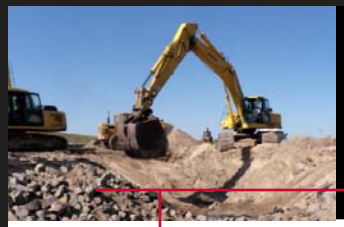
GEI Consultants



Outfall Structure and Discharge Channel

Sessions working on concrete placement in the walls of the outfall structure.

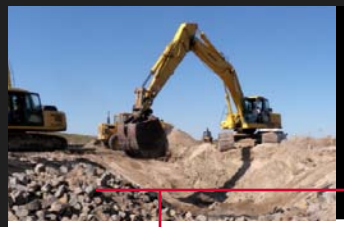
GEI Consultants



Outfall Structure and Discharge Channel

Sessions installing piping inside the outfall structure.

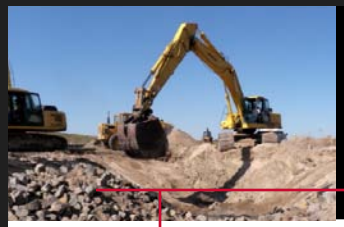
GEI Consultants



Outfall Structure and Discharge Channel

Outfall structure after roof placement with trashrack partially installed.

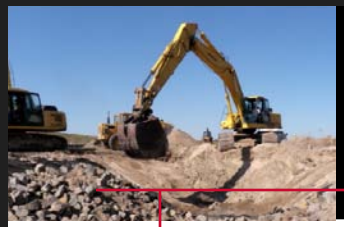
GEI Consultants



Outfall Structure and Discharge Channel

Rip rap lined outfall channel.

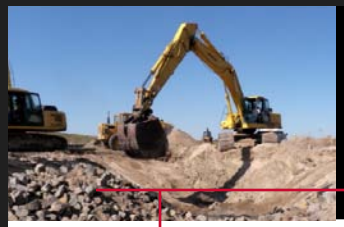
GEI Consultants



Look Ahead to Project Completion

- July 2012
  - Complete Installation of SCADA System
  - Complete Hydrostatic Testing of Wellfield Piping
  - Final Site Grading and Clean-up at Tank and Outfall Structure
  - Complete Punchlist Items
- August 2012
  - Dedication Ceremony on August 16
- September 2012
  - Perform Pump Tests on Wells

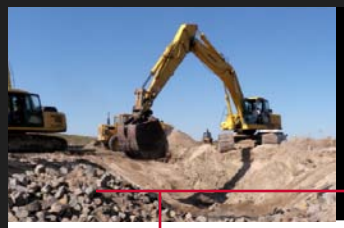
GEI Consultants



Look Ahead – Contract Administration

- Release Retainage to Garney. Paid Through CWCB
- Determine Date of Substantial Completion
  - Contractor will submit request for substantial completion
  - Begins 1-year warranty period
- Application for Final Payment
  - Garney must pass the final inspection
  - Claim releases from suppliers and subcontractors
  - Surety release signed on the labor & material bond
  - Garney submits final as-built drawings to GEI
  - Advertise for final payment, at least 10-days before settlement, twice in a local newspaper.

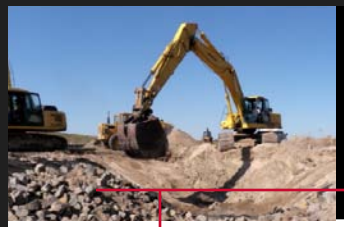
GEI Consultants



Look Ahead – Contract Administration

- CWCB Loan
  - Date of Substantial Completion is When Interest That Has Accrued on Loan is Paid
  - This Date is Different Than Construction Substantial Completion
  - Based on Financial Completion Rather Than Work Completion
  - CWCB Estimate ~ $3.5 million.
  - Payments on Loan Start 1-year from Substantial Completion

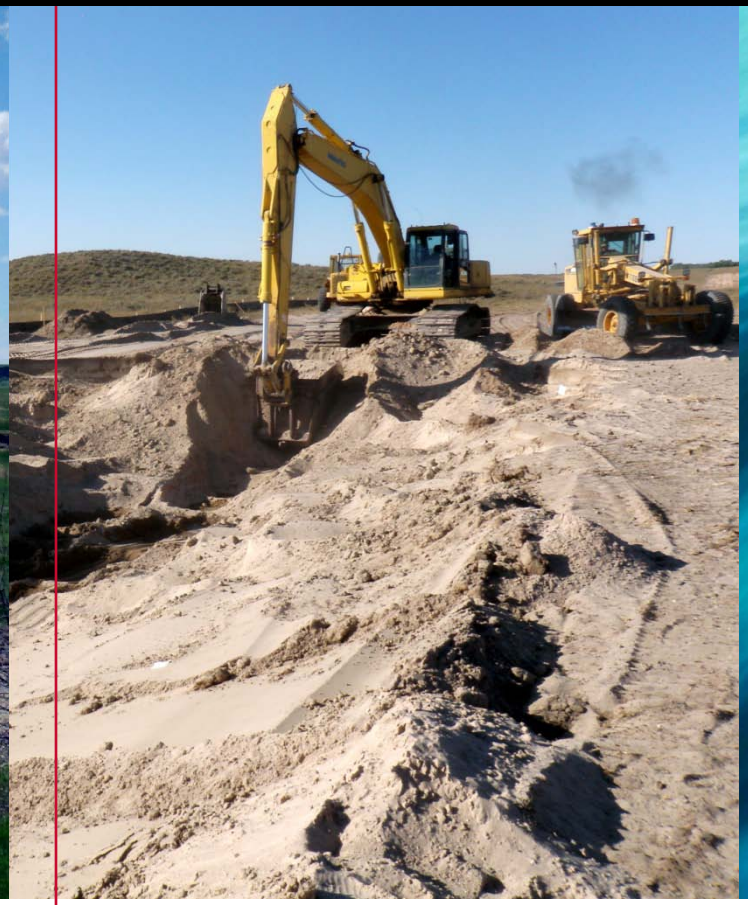
GEI Consultants



Look Ahead – O&M

- Training of Pipeline Operations Manager
  - Tracy XXXX
  - Interviewed by PTAC and GEI
  - Training Performed by Timberline, Ed Serfozo and GEI
- Complete Operating Procedures Manual – GEI
- Deliver Water….2013?

GEI Consultants



Thank you.

GEI Consultants