R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996 Artesia ▲ Carlsbad ▲ Durango ▲ Midland

October 16, 2019

Mr. Bradford Billings 1220 South St. Francis Drive Santa Fe, New Mexico 87505 Via E-Mail

RE – Financial Assurance Cost Estimate Gamma Ridge Containments #1 and #2 Section 14, T24-S, R34-E, Lea County

Dear Mr. Billings:

On behalf of Solaris Water Midstream LLC, we are pleased to present the cost estimate for closure and reclamation of the containments.

Closure Cost Estimate

Sampling beneath the (in-ground) Gamma Ridge Containment #1 and AST Containment #2 in accordance with Subsection C of 19.15.34.14 Rule is required. The sampling program would include an EM survey at a cost about \$6500. The EM survey would identify any high salinity soil beneath the liner and levee of Gamma Ridge #1 and beneath the footprint of the AST-Containment, Gamma Ridge #2. EM evaluation of the nearby pasture would provide a baseline to compare findings. Sampling below the liner would occur in areas wherever the EM survey suggests high salinity. Sampling would also include a 5-point composite sample in conformance with the Rule. The sampling program with laboratory analysis would cost less than \$5,000. Thus, the total cost of closure for both containments is no more than \$11,500

Reclamation Cost Estimate

OCD has determined that, in the absence of an approved variance, the financial assurance for closure of the Gamma Ridge produced water containment must comply with Subsection E of 19.15.34.14, which states [emphasis added]:

E. Once the operator has closed the recycling containment, the operator shall reclaim the containment's location to a safe and stable condition that blends with the surrounding undisturbed area. Topsoils and subsoils shall be replaced to their original relative positions and contoured so as to achieve erosion control, long-term stability and preservation of surface water flow patterns. The disturbed area shall then be reseeded in the first favorable growing season following closure of a recycling containment. The operator shall <u>substantially restore the impacted surface area to the condition that existed prior to the construction of the recycling containment</u>.

Although the Gamma Ridge #1 Containment occupies the same space as a previously constructed and lined fresh water "frac pond" of COG Operating, this estimate includes closure and restoration as outlined in the Rule. Removal and disposal/recycling of the liner system will be conducted by Mustang-Extreme Environmental Services (MEES) or a similar contactor. As shown in the attachment from Mustang, the cost for this work element is \$203,660.00. MEES

October 24, 2019 Page 2

installed the liner system at the Gamma Ridge Containment. They are familiar of the level of effort required to remove and dispose/recycle the liner system.

The second cost estimate of \$112,600.00 is from Durrett Transport LLC, the contractor who performed the earthwork to convert the Gamma Ridge freshwater pond to a Rule 34 Containment. Note that the work elements in their estimate conform to the requirements of the Rule shown in yellow above.

Thus, the total estimate cost for closure and reclamation of the Gamma Ridge Containment and \$327,760. Solaris is securing bonding for this amount.

Please contact me if you have any questions.

Sincerely, R.T. Hicks Consultants

Randall T. Hicks Principal

Copy: Solaris Water Midstream LLC





Job Site Address Solaris Midstream Jal NM 88252

Ordered By Todd Carpenter **Exp. Close** 10/5/2019 Est. Project Start Date 10/10/2019

Sales Rep Bobbi Jo McKean

Notes:

Thank you for the opportunity to provide pricing for this project!

* Applicable state and local taxes will be added to the invoice. Liner Removal:

*\$350/hr. travel rate will be charged if pond is not ready for removal operations.

*Price includes Labor and equipment for removal(patented Rolling machine)

*Bid is based on estimated size of pond-not actual.Actual measurements and number of layers will be taken on site at time work is performed and may result in different amounts for quantity and total.

*Standby rates will be charged for time not associated with liner removal, water removal, or/but not limited to, fencing removal.

*Bid is assumes material is free of water or heavy sediment/debris.Anything over 2" deep may cause additional charges.

*Material is in reasonable condition, not twisted/piled, blown out of pond or buried in sediment. No prehandling into piles. * Removal of Primary, Secondary, Leak Detection Layer, Cushion Layer, and/or Floating Cover

cut at point of trenching.

* If Recycle or Disposal are not available, Owner and/or Contractor are responsible for material disposal.

Additional charges of \$.01-\$.02 per sq ft will apply if conditions are otherwise.







Job Site Address Solaris Midstream Jal NM 88252

Ordered By	Exp. Close	Est. Project Start Date	Sales Rep
Todd Carpenter	10/5/2019	10/10/2019	Bobbi Jo McKean

Item Details:

Quantity	Units	Item	Rate	Amount
200,000	Each	9044-services-Liner Removal(***) Liner Removal(***) Liner Removal	\$0.20	\$40,000.00
100,000	Sq. Ft.	20010709 Textile 10oz Standard Black Custom/ Mustang Deliver & Supply Textile 10oz Standard Black Custom/Mustang	\$0.1045	\$10,450.00
100,000	Sq. Ft.	9045-labor-TNC Labor - TNC Labor to install Geotextile	\$0.06	\$6,000.00
100,000	Sq. Ft.	10040000 Liner 40mil HDSmooth Black Nominal Deliver & Supply Liner 40mil HDSmooth Black Nominal	\$0.2299	\$22,990.00
100,000	Sq. Ft.	9045-labor-Liner Labor - Liner Labor to install Liner	\$0.16	\$16,000.00
100,000	Sq. Ft.	40200009 GeoNet 200mil(220) Smooth Black Deliver & Supply GeoNet 200mil(220) Smooth Black	\$0.2241	\$22,410.00
100,000	Sq. Ft.	9045-labor-TNC Labor - TNC Labor to install Geotextile	\$0.14	\$14,000.00
100,000	Sq. Ft.	10060000 Liner 60mil HDSmooth Black Nominal Deliver & Supply Liner 60mil HDSmooth Black Nominal	\$0.36	\$36,000.00
100,000	Sq. Ft.	9045-labor-Liner Labor - Liner Labor to install Liner	\$0.16	\$16,000.00
2,000	Sq. Ft.	10060110 Liner 60mil HDSST White Nominal Deliver & Supply Liner 60mil HDSST White Nominal	\$0.50	\$1,000.00
2,000	Sq. Ft.	9045-labor-Liner Labor - Liner Labor to install Liner	\$1.00	\$2,000.00
1,184	LF	9044-services-Anchor Trench Anchor Trench Anchor Trench Dug Per Linear Foot	\$2.50	\$2,960.00
250	Each	70200999 OtherTracked Sand Bags (20lb/ea) Sand Bags (20lb/ea)	\$5.00	\$1,250.00





Quantity	Units	Item	Rate	Amount
1	Each	9044-services-Ladder/Gauge Combo Ladder/ Gauge Combo Ladder/Gauge Combo	\$2,000.00	\$2,000.00
24	Each	9044-services-Air Vents Air Vent Cut in Walls of Pond to Allow for Ventilation Air Vents	\$50.00	\$1,200.00
1	Each	9044-services-Leak Detection System Leak Detection System (6" Piping, River Rock and Geotextile) Leak Detection. Includes 6" HDPE perforated pipe, drain rock, bullet pump, and flow meter	\$9,400.00	\$9,400.00
			Subtotal	\$203,660.00
			Tax (5.5%)	\$0.00





Durrett Transport, LLC.

276 PR 2002

Gonzales, TX 78629

ESTIMATE SHEET

Bid To: Solaris Midstream 9811 Katy Freeway, Suite 700 Houston, TX 77024

Attention: Todd Carpenter

Job Site: Gamma Ridge Produced Water Recycling Facility

Nature of Work: Close recycle pit

Description	Amount
Mobilization	\$10,000.00
Remove levees and fill excavation	
Grade surface to blend with surrounding area, which contains small depressions	
Replace topsoil and subsoil	\$97,800.00
Seed disturbed area with native grass	\$4,800.00
Bid Price	<u>\$112,600.00</u>

Price does not include NM Gross Receipts Tax