



September 7, 2023

Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division  
811 S. First St.  
Artesia, New Mexico 88210

**Re: Request for Permit Modification to Change Approved C-147 ASTs to Earthen Containments at Select Earthstone Facility (1RF-505)**

Ms. Venegas,

Select Energy (OGRID #289068) would like to request permission to modify the permit issued for their Earthstone Facility (1RF-505). This is a request for Select to change the two (2) 60,000 BBL Above-Ground Storage Tanks (AST) to (2) 50,000 BBL earthen containments.

Enclosed in this submission are two (2) C-147s for the new containments, variance requests, engineering drawings, and a closure cost estimate that includes the earthen containments. These documents are all stamped by an engineer licensed in the State of New Mexico. A bond in the amount estimated will be filed accordingly.

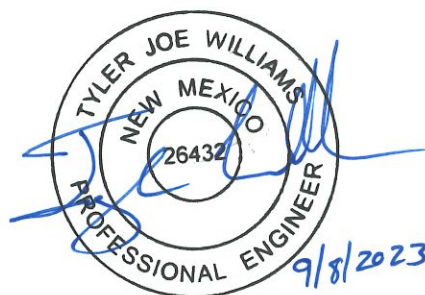
Should you have any questions or require additional information, please contact me by phone at 580-234-8780 or by email at [twilliams@envirotechconsulting.com](mailto:twilliams@envirotechconsulting.com) at your convenience.

Thank you for your consideration.  
Best regards,

ENVIROTECH ENGINEERING & CONSULTING, INC.

A handwritten signature in blue ink, appearing to read "Tyler Williams".

Tyler Williams, P.E.  
President and Principal Engineer





September 22, 2023

Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division  
811 S. First St.  
Artesia, New Mexico 88210

**Re:    *Response to V. Venegas Email Received 9/21/2023 Regarding Permit Modification Request for Select Energy Earthstone Recycle Facility (1RF-505)***

Ms. Venegas,

Select Energy (OGRID #289068) has requested a permit modification for their Earthstone Facility (1RF-505). Per request for clarification from V. Venegas of NM OCD Select agrees to the following conditions.

Select Energy Services will operate the Earthstone Recycle as originally permitted on 6/29/2023.

Select Energy Services will comply with all conditions previously approved for the Earthstone permit. No Changes to the operations procedures, maintenance, monitoring procedures, or closing procedures will be made aside from the requested modification. However, the total operational volume of 1RF-505 will be 2,344,529-BBL, 49,984-BBL per new, requested earthen containments, and 748,187-BBL per previously approved, earthen containments.

Should you have any questions or require additional information, please contact me by phone at 580-234-8780 or by email at [mratke@envirotechconsulting.com](mailto:mratke@envirotechconsulting.com) at your convenience.

Thank you for your consideration.  
Best regards,

ENVIROTECH ENGINEERING & CONSULTING, INC.

A handwritten signature in black ink, appearing to read "Mitchell Ratke".

Mitchell Ratke, EIT  
Project Engineer

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-147  
Revised April 3, 2017

## Recycling Facility and/or Recycling Containment

Type of Facility: ☒ Recycling Facility ☒ Recycling Containment\*

Type of action: ☒ Permit ☐ Registration  
☒ Modification ☐ Extension  
☐ Closure ☐ Other (explain) \_\_\_\_\_

\* At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.  
Operator: Select Energy Services (For multiple operators attach page with information) OGRID #: 289068  
Address: 1233 West Loop South, Suite 1400 Houston TX 77027  
Facility or well name (include API# if associated with a well): Earthstone Recycle Facility East Treatment Pit  
OCD Permit Number: 1RF-505 (For new facilities the permit number will be assigned by the district office)  
U/L or Qtr/Qtr SW/4 of NW/4 Section 28 Township 19 South Range 33 East County: Lea  
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.  
☐ **Recycling Facility:**  
Location of recycling facility (if applicable): Latitude 32.632713° Longitude -103.674202° NAD83  
Proposed Use: ☒ Drilling\* ☒ Completion\* ☒ Production\* ☒ Plugging\*  
*\*The re-use of produced water may NOT be used until fresh water zones are cased and cemented*  
☐ Other, requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.  
☐ Fluid Storage  
☒ Above ground tanks ☒ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type \_\_\_\_\_  
☐ Activity permitted under 19.15.36 NMAC explain type: \_\_\_\_\_ ☐ Other explain \_\_\_\_\_  
☒ For multiple or additional recycling containments, attach design and location information of each containment  
☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date: \_\_\_\_\_

3.  
☐ **Recycling Containment:**  
☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)  
Center of Recycling Containment (if applicable): Latitude 32.633100 Longitude -103.672392 NAD83  
☐ For multiple or additional recycling containments, attach design and location information of each containment  
☒ Lined ☐ Liner type: Thickness 60/40 mil ☐ LLDPE ☒ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☒ Welded ☐ Factory ☐ Other \_\_\_\_\_ Volume: 49,984 bbl Dimensions: L 200 x W 200 x D 19  
☐ Recycling Containment Closure Completion Date: \_\_\_\_\_

4.

**Bonding:**

- ☐ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC (These containments are limited to only the wells owned or operated by the owners of the containment.)
- ☒ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond \$ 2,587,513.10 (work on these facilities cannot commence until bonding amounts are approved)
- ☒ Attach closure cost estimate and documentation on how the closure cost was calculated.

5.

**Fencing:**

- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☒ Alternate. Please specify 8-ft Tall Wire Mesh Game Fence

6.

**Signs:**

- ☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.16.8 NMAC

7.

**Variances:**

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

*Check the below box only if a variance is requested:*

- ☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.
- If a Variance is requested, it must be approved prior to implementation.**

8.

**Siting Criteria for Recycling Containment**

*Instructions: The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.*

**General siting****Ground water is less than 50 feet below the bottom of the Recycling Containment.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No  
☐ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

☐ Yes ☒ No  
☐ NA

- Written confirmation or verification from the municipality; written approval obtained from the municipality

Within the area overlying a subsurface mine.

☐ Yes ☒ No

- Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division

Within an unstable area.

☐ Yes ☒ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map

Within a 100-year floodplain. FEMA map

☐ Yes ☒ No

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

☐ Yes ☒ No

- Topographic map; visual inspection (certification) of the proposed site

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

☐ Yes ☒ No

- Visual inspection (certification) of the proposed site; aerial photo; satellite image

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site

Within 500 feet of a wetland.

☐ Yes ☒ No

- US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site

9.

**Recycling Facility and/or Containment Checklist:**

Instructions: Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.

- ☒ Design Plan - based upon the appropriate requirements.
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements.
- ☒ Closure Plan - based upon the appropriate requirements.
- ☒ Site Specific Groundwater Data -
- ☒ Siting Criteria Compliance Demonstrations -
- ☒ Certify that notice of the C-147 (only) has been sent to the surface owner(s)

10.

**Operator Application Certification:**

I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): Drew Smith Title: Director of Projects  
Signature: Drew Smith Date: 09/08/2023  
e-mail address: dasmith@selectwater.com Telephone: 281-382-3078

11.

OCD Representative Signature: Victoria Venegas Approval Date: 09/22/2023

Title: Environmental Specialist OCD Permit Number: 1RF-505

- ☒ OCD Conditions
- ☒ Additional OCD Conditions on Attachment

District I  
1625 N. French Dr., Hobbs, NM 88240  
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- ☒ Siting Criteria Compliance Demonstrations -
- ☒ Certify that notice of the C-147 (only) has been sent to the surface owner(s)

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**Operator Application Certification:**

I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): Drew Smith Title: Director of Projects  
Signature: Drew Smith Date: 09/08/2023  
e-mail address: dasmith@selectwater.com Telephone: 281-382-3078

11.

OCD Representative Signature: Victoria Venegas Approval Date: 09/22/2023Title: Environmental Specialist OCD Permit Number: 1RF-505

- ☒ OCD Conditions
- ☒ Additional OCD Conditions on Attachment





September 6, 2023

Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division

RE: Rule 34 Variance Request –Produced Water Impoundment Bird Netting

Ms. Venegas:

Select Energy is requesting a variance to Rule 34-Part 12(E) Netting to ensure the recycling facility is protected from wildlife. Based on our experience from previous projects, we believe audible bird deterrents provide equal or better protection when compared to netting. In addition, they require less inspection, maintenance, and repair over the life of the facility.

Select is proposing to use the "Bird-X Mega Blaster Pro" system. This system will replace the netting required by the current rule and submitted with the original permit application. It should be noted that this variance has been granted on previous sites.

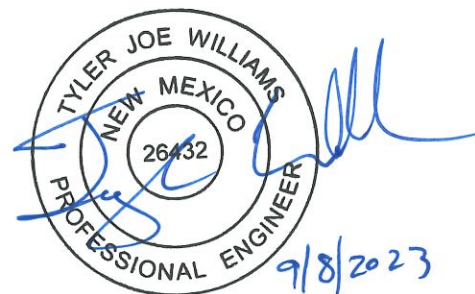
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Thank you for your consideration.  
Best regards,

ENVIROTECH ENGINEERING & CONSULTING, INC.

A handwritten signature in blue ink, appearing to read "Tyler Williams".

Tyler Williams, P.E.  
President and Principal Engineer





September 6, 2023

Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division

RE: Rule 34 Variance Request –Produced Water Recycling Containment Secondary Liner

Ms. Venegas:

Select Energy is requesting a variance to Rule 34 Part 12(A)(4) requiring secondary liners to be 30-mil string reinforced LLDPE. Select is requesting approval to use 40-mil HDPE in place of the specified material in the proposed Recycle Containments. Based on our experience, we feel that the requested material will allow us to provide equal environmental protection in our impoundments.

Due to the construction of the 30-mil reinforced LLDPE material, nondestructive QA/QC testing cannot be performed. The proposed 40-mil HDPE will be seamed in a manner that will allow nondestructive pressure testing of the seams to ensure proper sealing.

The proposed HDPE is appropriate material for the proposed use in the impoundment and is compatible with the material that will be stored. This material will provide equal or better environmental protection as the specified 30-mil reinforced LLDPE.

The proposed liner system cross-section for the earthen containment is as follows: prepare subgrade, 10 oz. geotextile, 40-mil HDPE, 200-mil geonet, 60-mil HDPE. This will replace the cross-section required by the current rule. It should also be noted that this variance has been granted on past sites.

Should you have any questions or require additional information, please contact me by phone at 580-234-8780 or by email at [twilliams@envirotechconsulting.com](mailto:twilliams@envirotechconsulting.com) at your convenience.

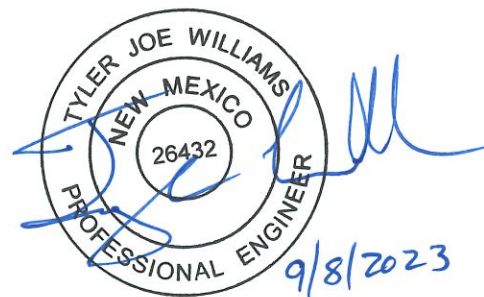
Thank you for your consideration.

Best regards,

**ENVIROTECH ENGINEERING & CONSULTING, INC.**

A handwritten signature in blue ink, appearing to read "Tyler Williams".

Tyler Williams, P.E.  
President and Principal Engineer



# EARTHSTONE RECYCLE SELECT ENERGY

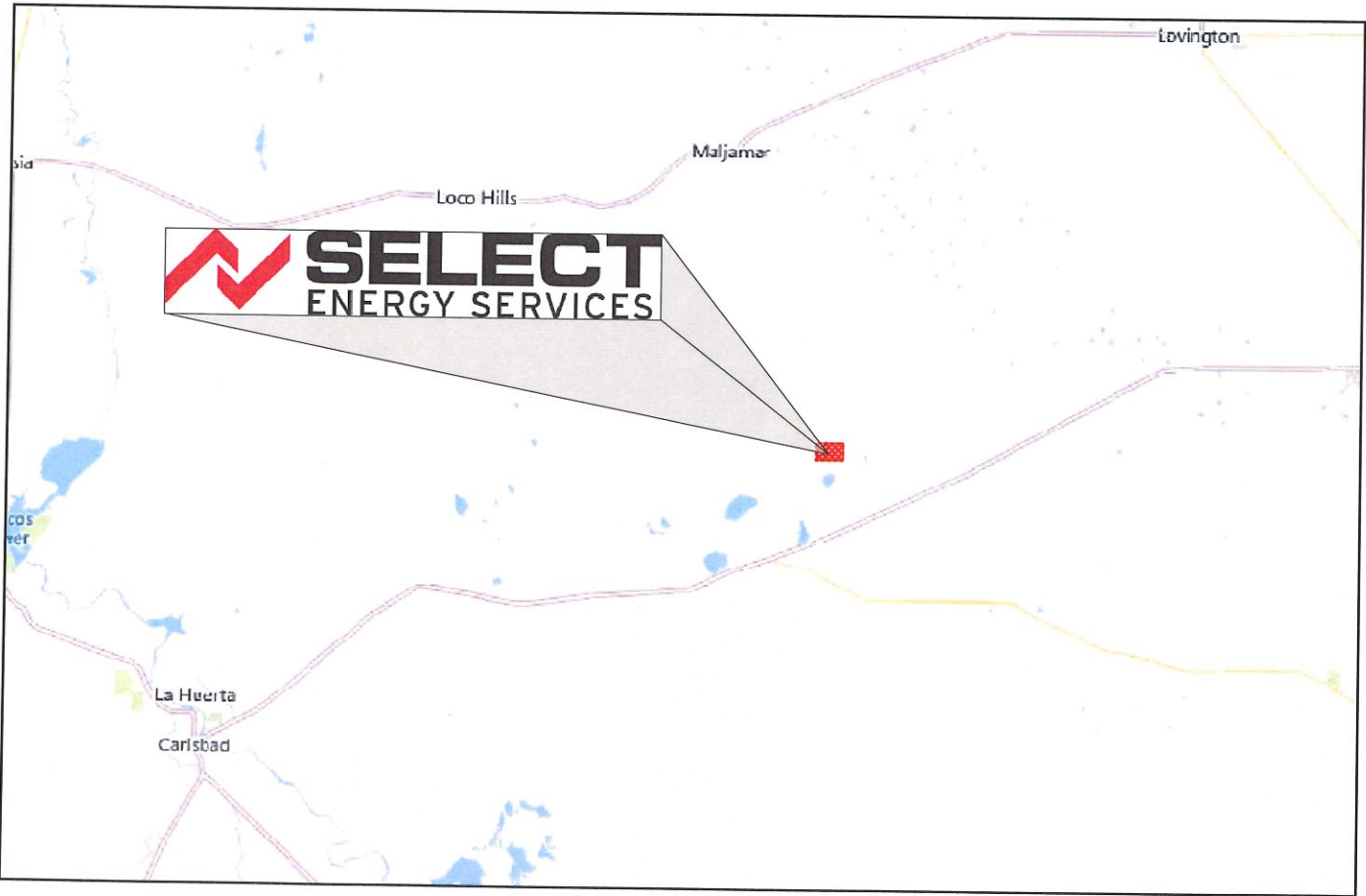
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 33 EAST

32° 37' 58.1124", -103° 40' 26.7594"  
32.632809°, -103.674100°



## INDEX TO DRAWINGS 11X17

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	PROJECT LOCATION
3.	SITE PLAN
4.	PIT CAPACITIES
5.	RUB SHEET PLAN
6.	CROSS SECTIONS
7.	CROSS SECTIONS
8.	SUMP DETAILS
9.	LINER DETAILS

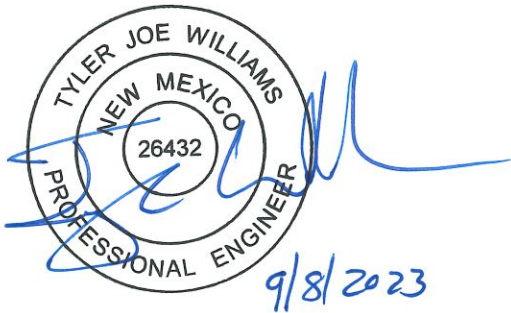


## CONTACTS

JOHN MCGILLIS - SELECT ENERGY SERVICES - (713) 806-0488


ENVIROTECH ENGINEERING & CONSULTING - MITCHELL RATKE, EIT (580)-234-8780  
(DESIGN ENGINEER)

ENVIROTECH ENGINEERING & CONSULTING - TYLER WILLIAMS, PE (580)-234-8780  
(SUPERVISING ENGINEER)



2500 N. Eleventh Street Enid, OK 73701 • 580.234.8780 • [envirotechconsulting.com](http://envirotechconsulting.com)  
License #26432 - Expiration Date: 12-31-2024





**ENVIROTECH  
ENGINEERING**  
2500 North Cleveland Street  
• Enid, Oklahoma •  
589.234.8700  
envirotechconsulting.com  
PE # 26432 - Expiration Date: 12-31-2024

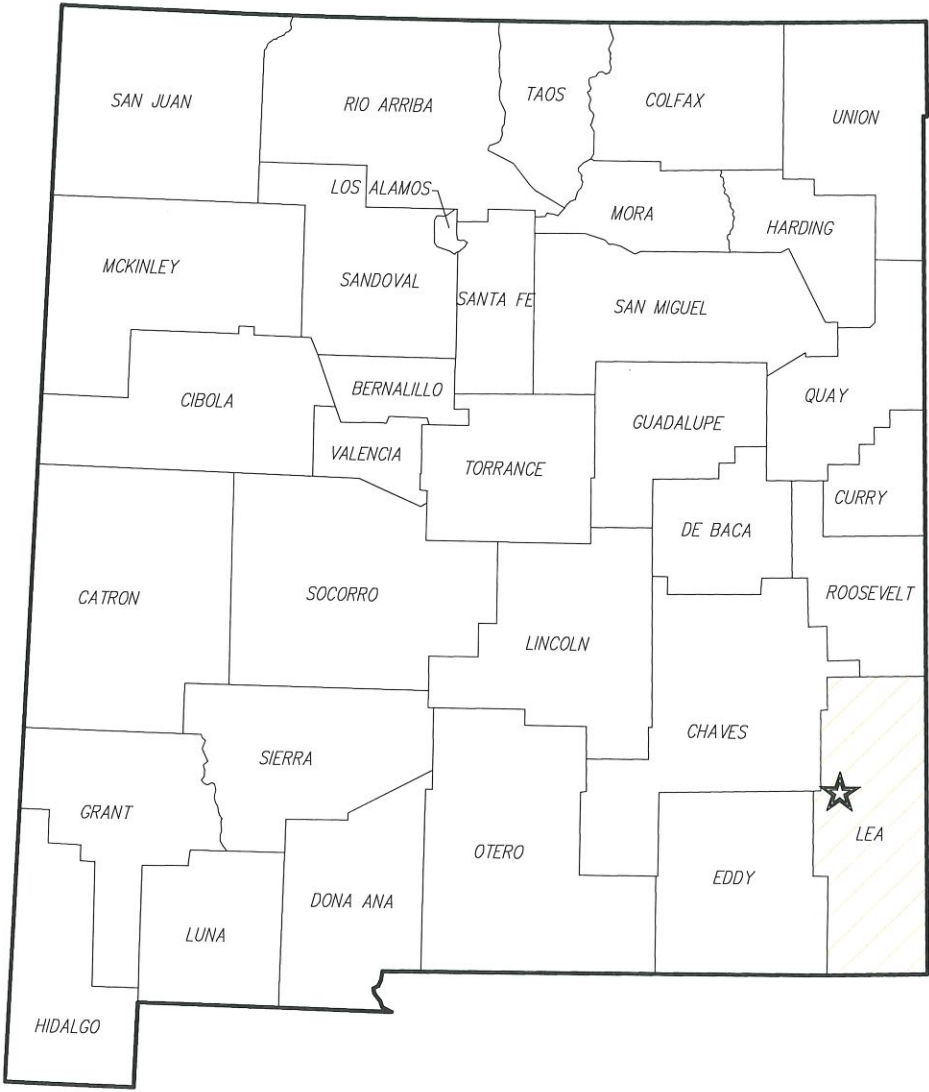
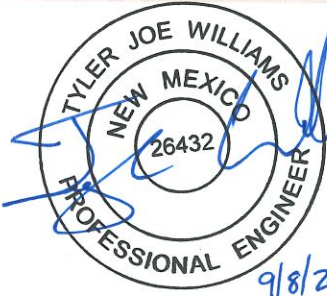
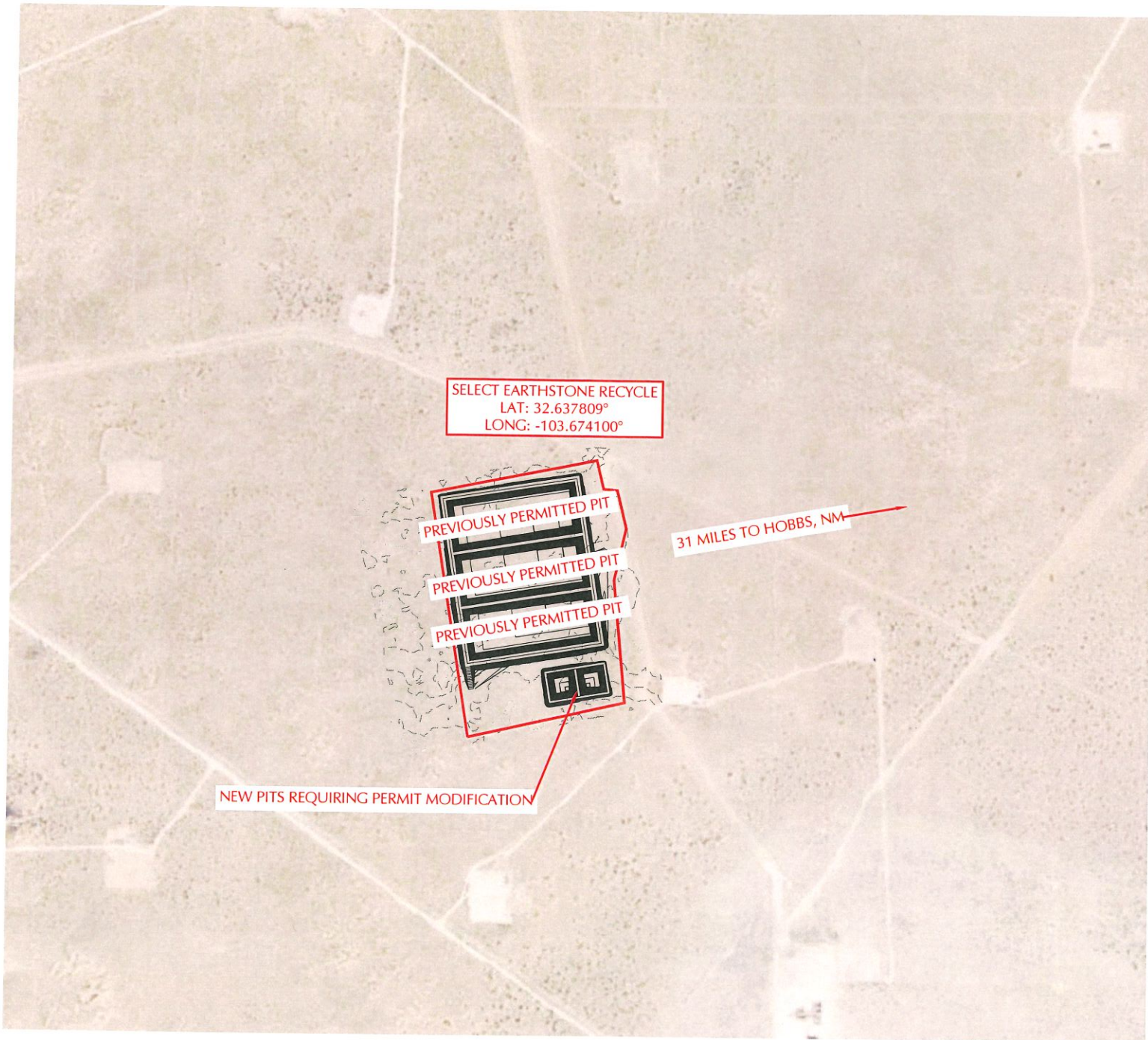
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NO.	DATE	DESCRIPTION

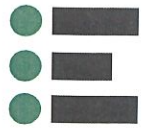


**PROJECT LOCATION**  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE:	SEPTEMBER 2023
SCALE:	NOT TO SCALE
DESIGNED BY:	M. RATKE
DRAWN BY:	M. RATKE
CHECKED BY:	T. WILLIAMS
PROJECT NO.	023241-00
SHEET NO.	2 of 9







**ENVIROTECH  
ENGINEERING**

2500 North Everett Street  
Tulsa, Oklahoma  
580.234.8700  
www.envirotechconsulting.com  
PE # 26432 - Expiration Date: 12-31-2024

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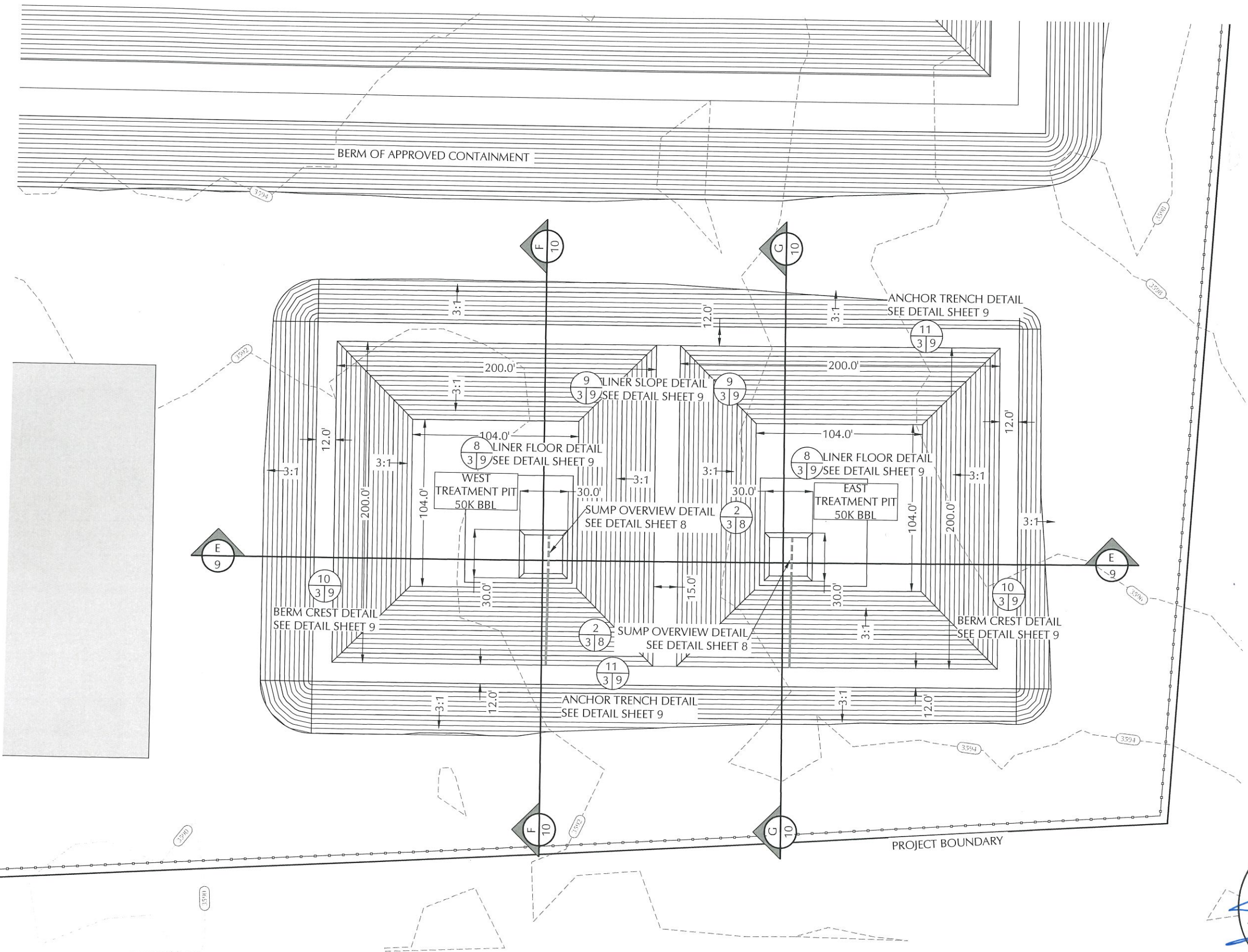
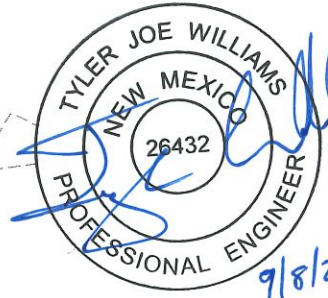
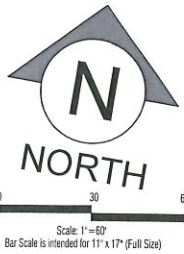
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NO.	DATE	DESCRIPTION

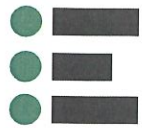


**SITE PLAN**  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE:	SEPTEMBER 2023
SCALE:	1" = 60'
DESIGNED BY:	M. RATKE
DRAWN BY:	M. RATKE
CHECKED BY:	T. WILLIAMS
PROJECT NO.	023241-00
SHEET NO.	3 of 9







ENVIROTECH  
ENGINEERING

2309 North Eleventh Street  
Oklahoma City, Oklahoma 73104  
509.234.8700  
envirotechconsulting.com  
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NO.	DATE	DESCRIPTION

SELECT  
ENERGY SERVICES



PIT CAPACITIES  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE: SEPTEMBER 2023

SCALE: 1" = 100'

DESIGNED BY: M. RATKE

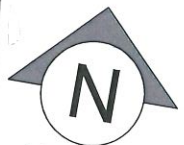
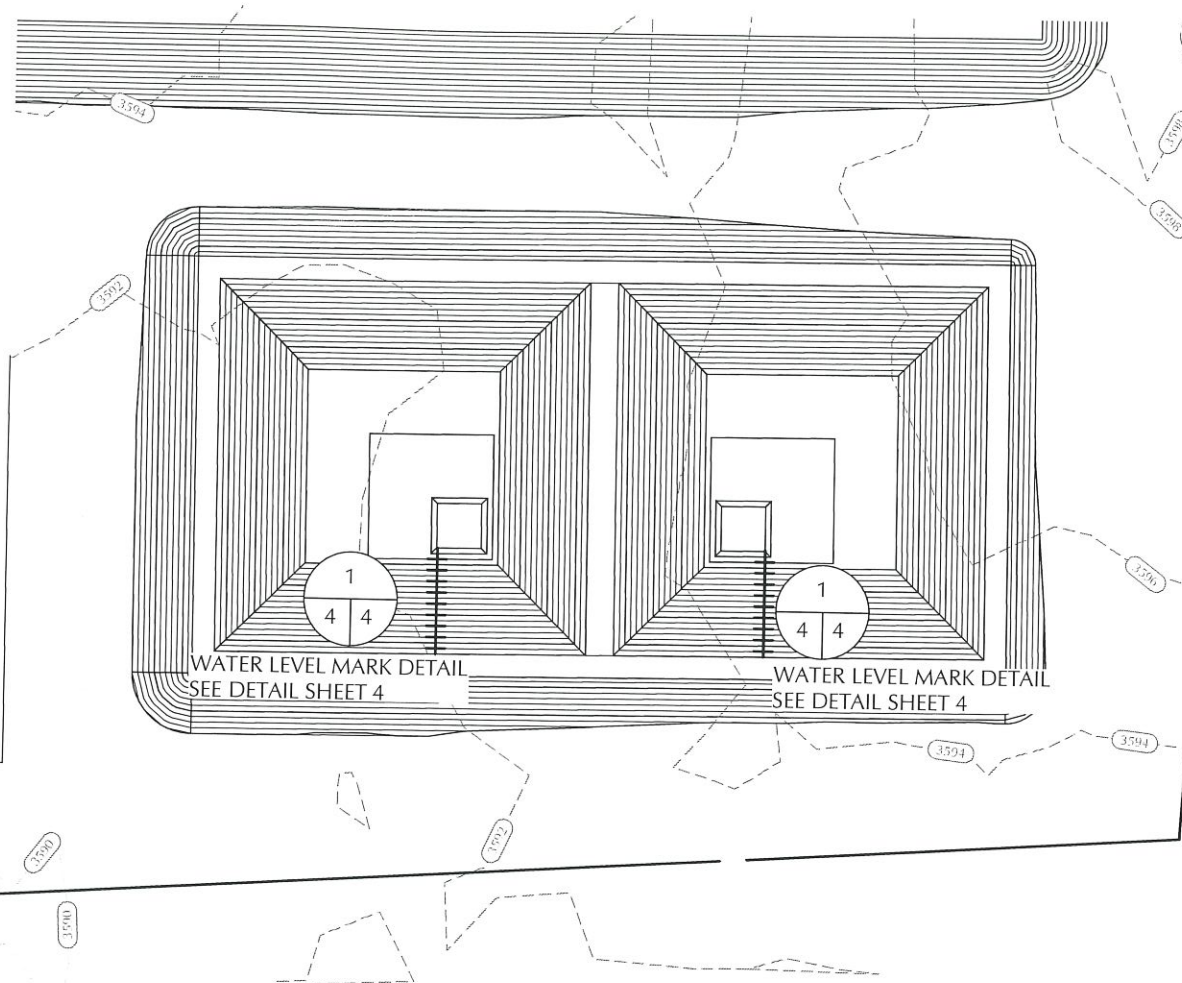
DRAWN BY: M. RATKE

CHECKED BY: T. WILLIAMS

PROJECT NO. 023241-00

SHEET NO.

4 of 9



Scale: 1"=100'  
Bar Scale is intended for 11"x17" (Full Size)

SURVEY ELEVATIONS



NOTE:

1. LEVEL MARKS TO BE LOCATED BY SURVEYOR.

2. MARKS TO BE MADE BY AN EXTRUSION WELDER USING BLACK FILAMENT (OR WHITE FILAMENT ON BLACK LINER).

3. MARKS SHOULD BEGIN AT THE TOP OF BERM AND CONTINUE TO THE BOTTOM OF THE SUMP. (TOP OF BERM SHOULD READ 19-FT, BOTTOM OF SUMP +1-FT SHOULD READ 1-FT)

WATER LEVEL MARKS  
Not to Scale

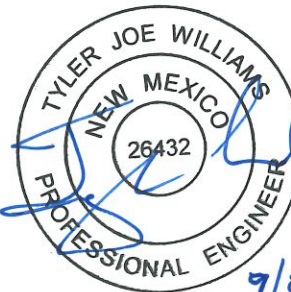


Owner **Select Energy**  
Site Name **Earthstone Recycle Treatment Pits**

Lagoon Features	Top FB	Bottom	Max Liq. Level
Side slope Ratio	3		3
Maximum Depth (ft)	19.0		16.0
Lagoon Top Width (ft)	200	104	182
Lagoon Top Length (ft)	200	104	182
Maximum Total Vol (ft <sup>3</sup> )	390,191		280,620
Maximum Total Vol (bbls)	69,491		49,984

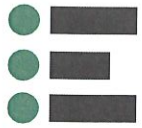
Freeboard
Maximum Volume
Storage Volume
Floor
Sump

Elevation	Lagoon Liq Depth ft	Storage ft	Remaining Stor Vol ft3	Gallons Storage gal	BBLS Storage bbls	Percent of Total Volume %	Vol in lagoon ft <sup>3</sup>	Gallons Storage gal	Vol in Lagoon bbls	Vol in Lagoon ac-ft
3602.0	19.0	0.0	-	-	-	0.0%	390,191	2,919,017	69,500	8.96
3601.0	18.0	1.0	81	390	9	0.0%	351,363	2,628,546	62,584	8.07
3600.0	17.0	2.0	2,114	10,169	242	0.5%	314,863	2,355,492	56,083	7.23
3599.0	16.0	3.0	12,488	60,067	1,430	3.2%	280,620	2,099,318	49,984	6.44
3598.0	15.0	4.0	30,315	145,813	3,472	7.8%	248,561	1,859,484	44,273	5.71
3597.0	14.0	5.0	50,195	241,439	5,749	12.9%	218,615	1,635,456	38,939	5.02
3596.0	13.0	6.0	72,241	347,480	8,273	18.5%	190,708	1,426,690	33,969	4.38
3595.0	12.0	7.0	96,565	464,478	11,059	24.7%	164,771	1,232,649	29,349	3.78
3594.0	11.0	8.0	123,278	592,969	14,118	31.6%	140,729	1,052,795	25,067	3.23
3593.0	10.0	9.0	123,278	592,969	14,118	31.6%	118,512	886,590	21,109	2.72
3592.0	9.0	10.0	184,322	886,590	21,109	47.2%	98,048	733,494	17,464	2.25
3591.0	8.0	11.0	218,876	1,052,795	25,067	56.1%	79,263	592,969	14,118	1.82
3590.0	7.0	12.0	256,268	1,232,649	29,349	65.7%	62,088	464,478	11,059	1.43
3589.0	6.0	13.0	296,609	1,426,690	33,969	76.0%	46,448	347,480	8,273	1.07
3588.0	5.0	14.0	340,012	1,635,456	38,939	87.1%	32,274	241,439	5,749	0.74
3587.0	4.0	15.0	386,587	1,859,484	44,273	99.1%	19,491	145,813	3,472	0.45
3586.0	3.0	16.0	436,449	2,099,318	49,984	111.9%	8,029	60,067	1,430	0.18
3585.0	2.0	17.0	489,707	2,355,492	56,083	125.5%	1,359	10,169	242	0.03
3584.0	1.0	18.0	546,475	2,628,546	62,584	140.1%	52	390	9	0.00
3583.0	0.0	19.0	606,864	2,919,017	69,500	155.5%	-	-	-	-



9/8/2023





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NO.	DATE	DESCRIPTION



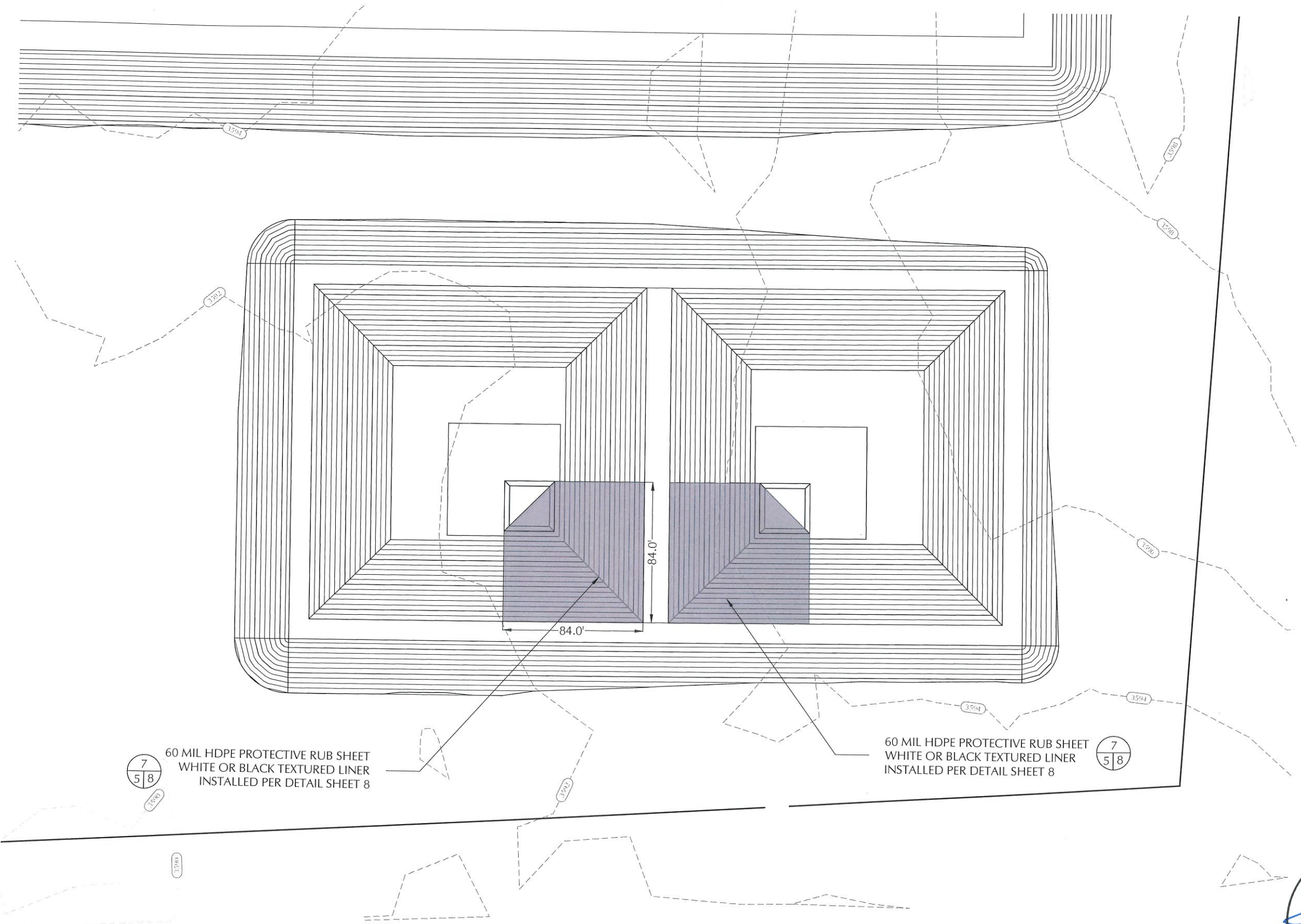
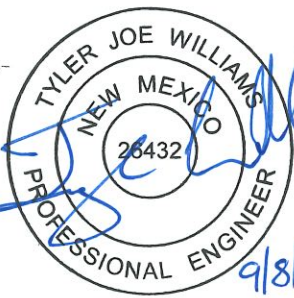
RUB SHEET PLAN  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE:	SEPTEMBER 2023
SCALE:	1" = 60'
DESIGNED BY:	M. RATKE
DRAWN BY:	M. RATKE
CHECKED BY:	T. WILLIAMS
PROJECT NO.	023241-00
SHEET NO.	5 of 9



N  
NORTH

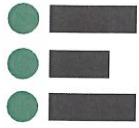
Scale: 1"=60'  
Bar Scale is intended for 11" x 17" (Full Size)



60 MIL HDPE PROTECTIVE RUB SHEET  
WHITE OR BLACK TEXTURED LINER  
INSTALLED PER DETAIL SHEET 8

60 MIL HDPE PROTECTIVE RUB SHEET  
WHITE OR BLACK TEXTURED LINER  
INSTALLED PER DETAIL SHEET 8





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Tulsa, Oklahoma  
74104-2348  
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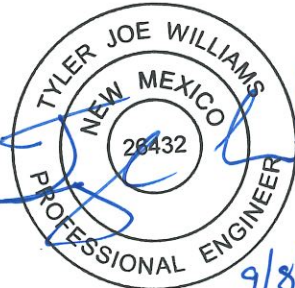
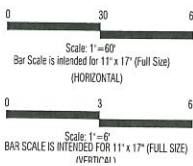
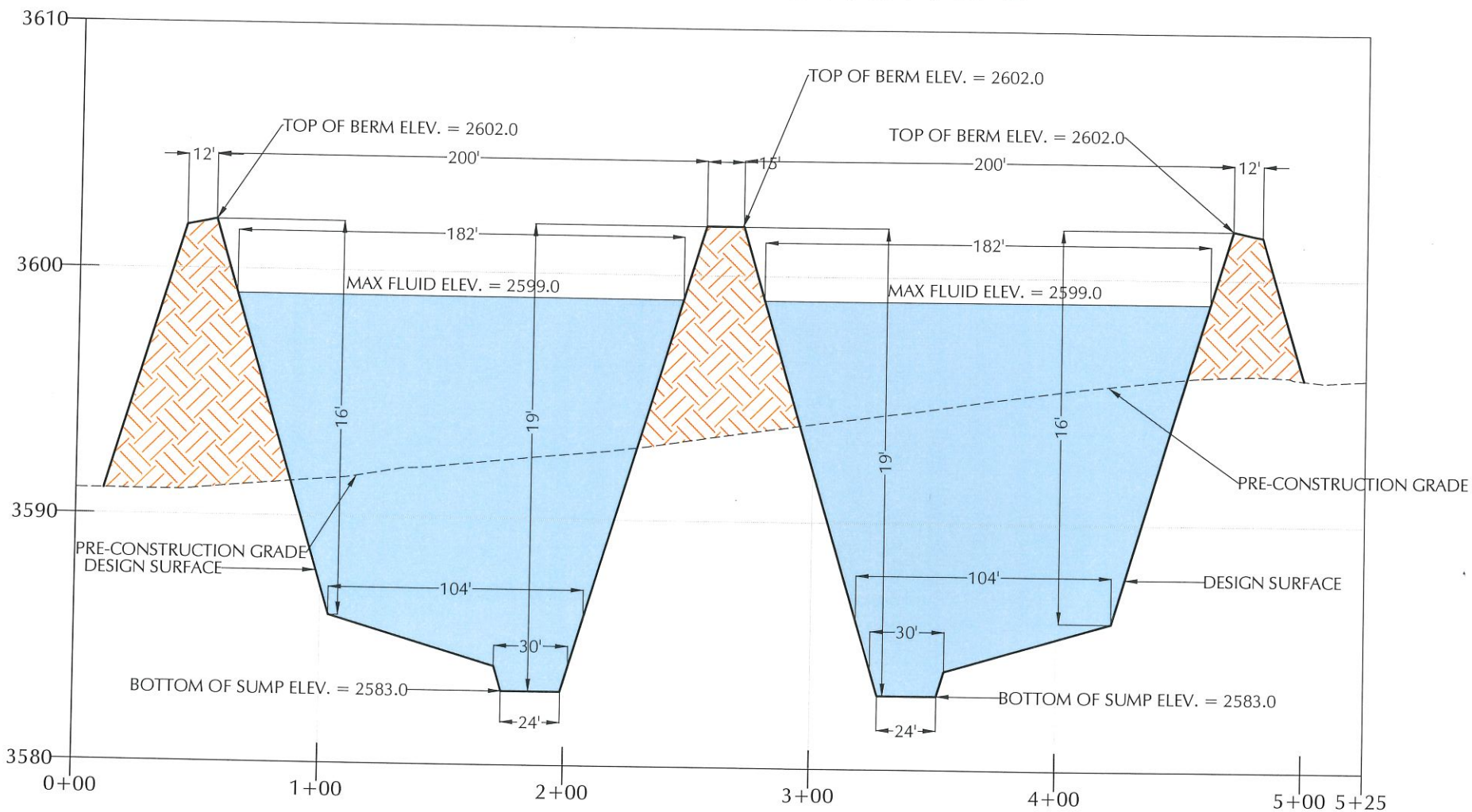
NO.	DATE	DESCRIPTION



CROSS SECTIONS  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE:	SEPTEMBER 2023
SCALE:	VERTICAL 1" = 6' HORIZONTAL 1" = 60'
DESIGNED BY:	M. RATKE
DRAWN BY:	M. RATKE
CHECKED BY:	T. WILLIAMS
PROJECT NO.	023241-00
SHEET NO.	6 of 9

CROSS SECTION E-E





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NO.	DATE	DESCRIPTION

**CROSS SECTIONS**  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE:	SEPTEMBER 2023
SCALE:	VERTICAL 1" = 6' HORIZONTAL 1" = 60'
DESIGNED BY:	M. RATKE
DRAWN BY:	M. RATKE
CHECKED BY:	T. WILLIAMS
PROJECT NO.	023241-00
SHEET NO.	

Diagram illustrating the cross-section of a stormwater pond, showing the design surface, pre-construction grade, and various elevations and dimensions.

**Elevations:**

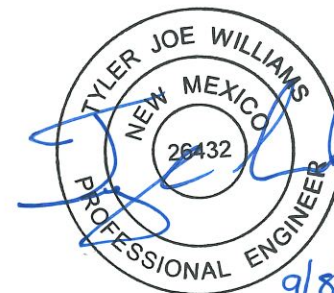
- TOP OF BERM ELEV. = 2602.0
- MAX FLUID ELEV. = 2599.0
- BOTTOM OF SUMP ELEV. = 2583.0

**Dimensions:**

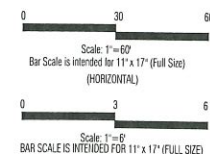
- Top width: 200'
- Top berm width (each side): 12'
- Fluid width: 182'
- Design surface width at fluid level: 104'
- Design surface width at bottom: 24'
- Depth from top of berm to fluid level: 19'
- Depth from fluid level to bottom of sump: 16'
- Depth from bottom of sump to design surface at bottom: 30'

**Labels:**

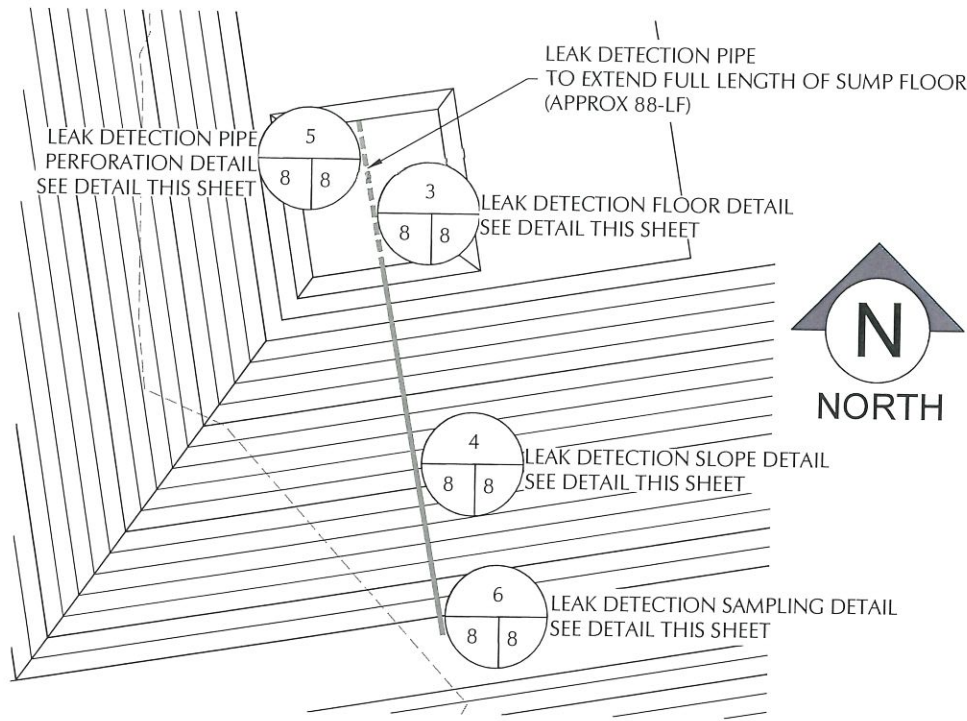
- PRE-CONSTRUCTION GRADE
- DESIGN SURFACE



9/8/2023



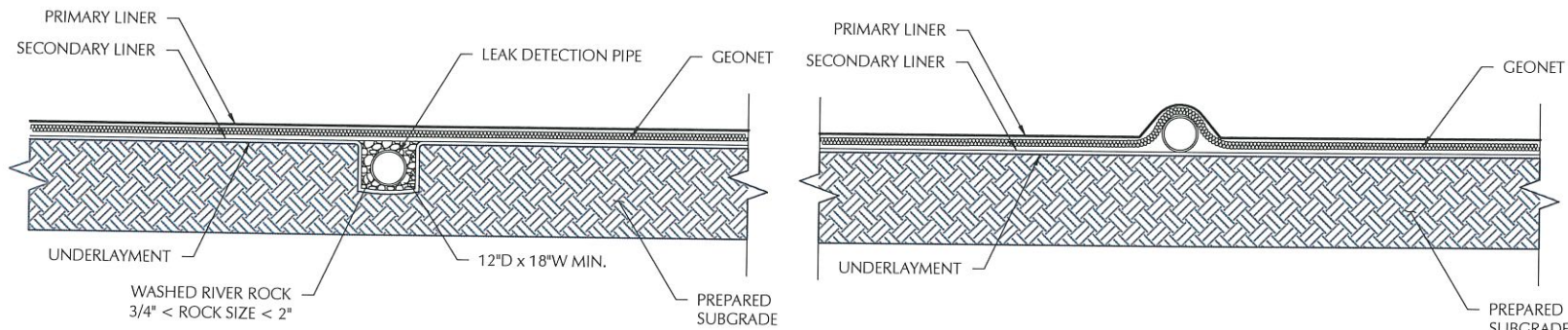




SUMP LEAK DETECTION PIPE DETAIL  
NOT TO SCALE

2

3 8



SUMP LEAK DETECTION PIPE DETAIL  
NOT TO SCALE

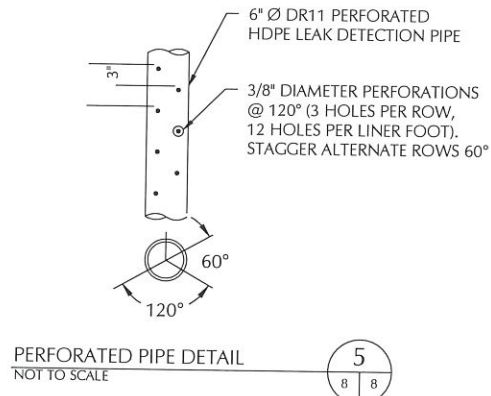
3

8 8

SIDE SLOPE LEAK DETECTION PIPE DETAIL  
NOT TO SCALE

4

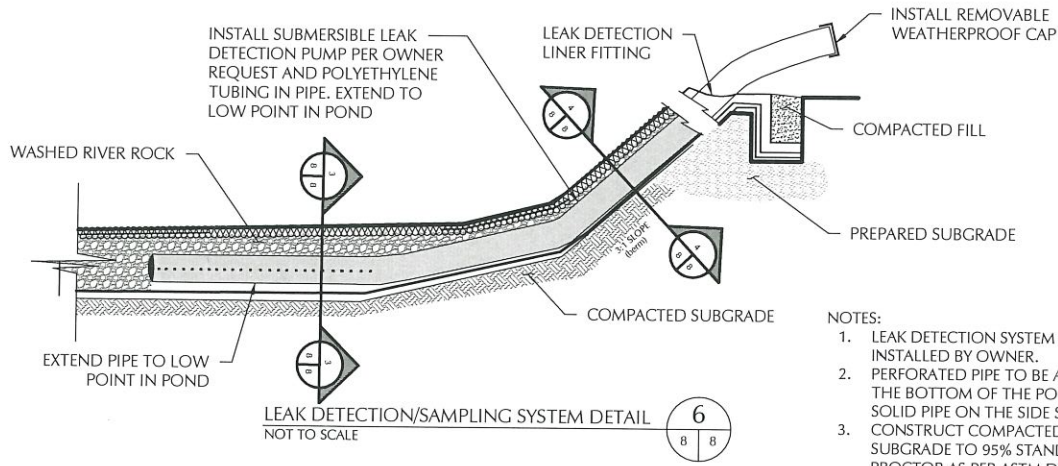
8 8



PERFORATED PIPE DETAIL  
NOT TO SCALE

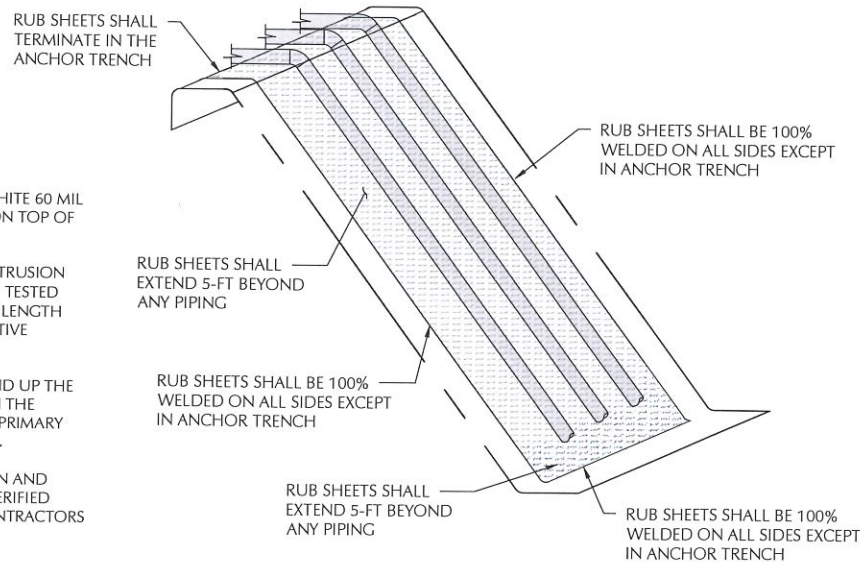
5

8 8



- NOTES:
1. LEAK DETECTION SYSTEM TO BE INSTALLED BY OWNER.
  2. PERFORATED PIPE TO BE ALONG THE BOTTOM OF THE POND. SOLID PIPE ON THE SIDE SLOPE.
  3. CONSTRUCT COMPACTED SUBGRADE TO 95% STANDARD PROCTOR AS PER ASTM D-698.
  4. EXTEND 60 MIL. RUB SHEET 1.0-FT PAST TOP OF SHOULDER OF SUMP.
  5. WASH RIVER ROCK SHALL BE 3/4" MIN. & 2" MAX.

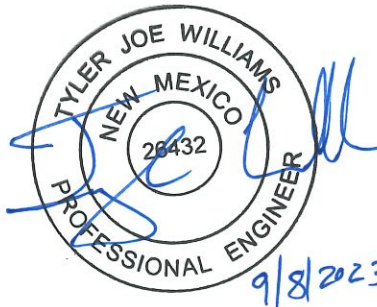
- NOTES:
1. RUB SHEETS SHALL BE WHITE 60 MIL HDPE TEXTURED LINER ON TOP OF BLACK PRIMARY LINER
  2. RUB SHEETS SHALL BE EXTRUSION WELDED 100%, VACUUM TESTED 100% AND INCLUDED IN LENGTH OF SEAMS FOR DESTRUCTIVE SAMPLE FREQUENCY.
  3. RUB SHEETS SHALL EXTEND UP THE SLOPE AND BE BURIED IN THE ANCHOR TRENCH WITH PRIMARY AND SECONDARY LINERS.
  4. ALL RUB SHEET LOCATION AND DIMENSIONS SHALL BE VERIFIED AGAINST THE PIPING CONTRACTORS PLANS.



RUB SHEET DETAIL  
NOT TO SCALE

7

5 8



SUMP DETAILS  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE:	SEPTEMBER 2023
SCALE:	NOT TO SCALE
DESIGNED BY:	M. RATKE
DRAWN BY:	M. RATKE
CHECKED BY:	T. WILLIAMS
PROJECT NO.	023241-00
SHEET NO.	8 of 9

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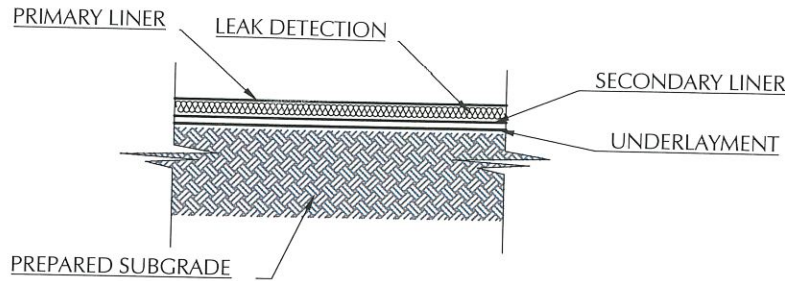
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NO.	DATE	DESCRIPTION

SELECT

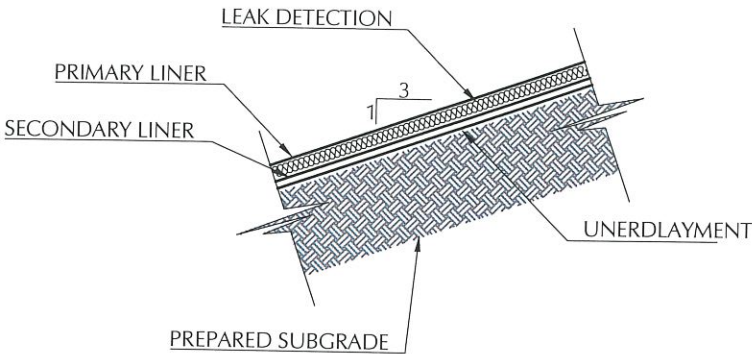
ENERGY SERVICES





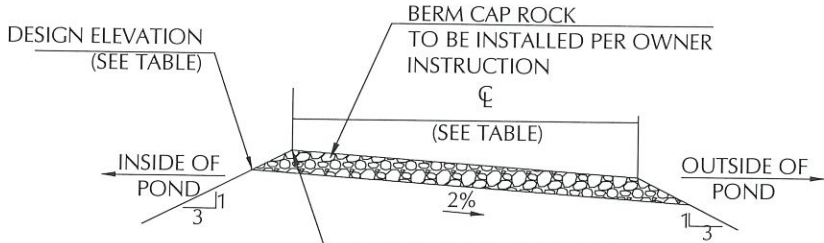
LINER SYSTEM FLOOR DETAIL  
NOT TO SCALE

8  
3 9



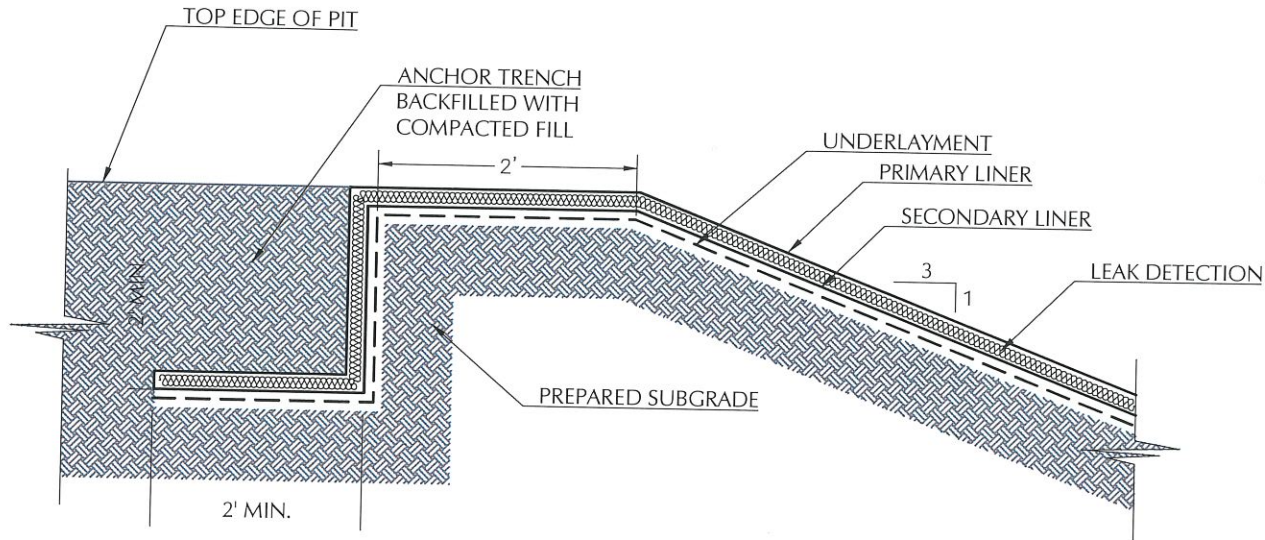
LINER SYSTEM SIDE SLOPE DETAIL  
NOT TO SCALE

9  
3 9



TYPICAL CREST DETAIL  
NOT TO SCALE

10  
3 9

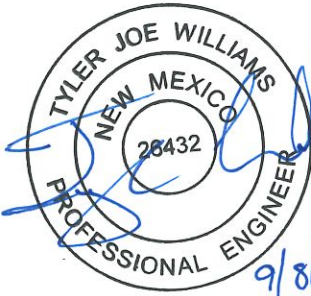


ANCHOR TRENCH DETAIL  
NOT TO SCALE

11  
3 9

PROPOSED PIT REFERENCE TABLE

DETAIL	DESCRIPTION
PRIMARY LINER	60-MIL HDPE SMOOTH LINER/TEXTURED RUB SHEETS
LEAK DETECTION	200-MIL GEONET
SECONDARY LINER	40-MIL HDPE SMOOTH LINER
UNDERLAYMENT	10OZ GEOTEXTILE
SUMP	30'x30'x1', BOTTOM ELEVATION 3583.0
BERM (ROAD CREST)	12' WIDE, TOP OF BERM ELEVATION 3602.0
LEAK DETECTION PIPING	6-IN SDR11. PIPE PERFORATED ON FLOOR, SOLID ON SLOPES



LINER DETAILS  
EARTHSTONE RECYCLE  
SELECT ENERGY  
SECTION 28, TOWNSHIP 19 SOUTH, RANGE 28 EAST  
LEA COUNTY, NEW MEXICO

DATE:	SEPTEMBER 2023
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SHEET NO.	9 of 9

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NO.	DATE	DESCRIPTION

SELECT  
ENERGY SERVICES

**Select Energy Services  
Earthstone Recycle Facility  
Closure Cost Estimate**

Item	Units	Quantity	\$/Unit	Estimate Cost
<b>Facility Closure</b>				
1 Fluid removal				
Earthstone Storage Pits (748K bbls Each)	bbls	2,244,561	\$ 0.50	\$ 1,122,280.50
Earthstone Treatment Pits (50K bbls Each)	bbls	99,968	\$ 0.50	\$ 49,984.00
2 Vac truck (final fluid removal)	hrs	24	\$ 125.00	\$ 3,000.00
3 Liner removal (fold-in-place)				
Covers removal and disposal	SF	4,911,270	\$ 0.18	\$ 884,028.60
4 Equipment removal				
Pit clean-out and residue haul-off	LS	1	\$ 10,000.00	\$ 10,000.00
Equipment removal (tanks, gun barrel, FWKO)	LS	1	\$ 7,500.00	\$ 7,500.00
Electrical decommissioning (pumps and panels)	LS	1	\$ 2,500.00	\$ 2,500.00
Misc equipment clean-up and removal	hr	120	\$ 125.00	\$ 15,000.00
5 Site Restoration				
Dozer - push in berms (bid)	CY	216,720	\$ 2.25	\$ 487,620.00
and final grading of the site				
Re-vegetation	ea	1	\$ 5,600.00	\$ 5,600.00

**Estimated Total**

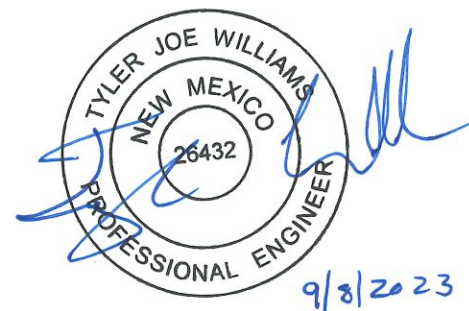
**\$ 2,587,513.10**

**Assumptions**

No Remediation will be necessary

Pit is full at time of closure

Pit berms above natural grade will be used to fill voids below natural grade



**Venegas, Victoria, EMNRD**

---

**From:** Venegas, Victoria, EMNRD  
**Sent:** Friday, September 22, 2023 2:28 PM  
**To:** Drew A. Smith; Mitchell Ratke  
**Subject:** 1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307]  
**Attachments:** C-147 1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307] Modification.pdf

**1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307]**

Mr. Smith,

NMOCD has reviewed the permit modification request and related documents, submitted by [289068] SELECT ENERGY SERVICES, LLC on 09/13/2023 for 1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307] in Unit Letter E, Section 28, Township 19S, Range 33E, Lea County, New Mexico. This modification request has been approved with the following conditions of approval:

The following variances have been approved:

- The variance from 19.15.34.13.E NMAC for the installation of an audible "Bird-X Mega Blaster Pro" bird deterrence system is approved.
- The variance to 19.15.34.12.A.(4) NMAC for the installation on the AST containment of a 40-mil non-reinforced LLDPE secondary liner is approved. The proposed liner system cross-section for the earthen containment is as follows: prepare subgrade, 10 oz. geotextile, 40-mil HDPE secondary liner, 200-mil geonet, 60-mil HDPE primary liner.

**[289068] SELECT ENERGY SERVICES, LLC will operate 1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307] as originally permitted on 6/29/2023.**

[289068] SELECT ENERGY SERVICES, LLC will comply with all conditions previously approved for the 1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307] permit.

No Changes to the operations procedures, maintenance, monitoring procedures, or closure procedures will be made aside from the requested modification. The total operational volume of 1RF-505 will be 2,344,529-BBL; 49,984-BBL per new, requested earthen containments, and 748,187-BBL per previously approved, earthen containments.

Please let me know if you have any additional questions,  
Regards,

**Victoria Venegas • Environmental Specialist**

Environmental Bureau

EMNRD - Oil Conservation Division

506 W. Texas Ave. Artesia, NM 88210

(575) 909-0269 | [Victoria.Venegas@emnrd.nm.gov](mailto:Victoria.Venegas@emnrd.nm.gov)

<https://www.emnrd.nm.gov/ocd/>



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 265102

CONDITIONS

Operator: SELECT ENERGY SERVICES, LLC PO Box 1715 Gainesville, TX 76240	OGRID: 289068
	Action Number: 265102
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	This modification request has been approved with the following conditions of approval: [289068] SELECT ENERGY SERVICES, LLC will operate 1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307] as originally permitted on 6/29/2023. [289068] SELECT ENERGY SERVICES, LLC will comply with all conditions previously approved for the 1RF-505 - EARTHSTONE RECYCLE FACILITY ID [fVV2317950307] permit. No Changes to the operations procedures, maintenance, monitoring procedures, or closure procedures will be made aside from the requested modification. The total operational volume of 1RF-505 will be 2,344,529-BBL; 49,984-BBL per new, requested earthen containments, and 748,187-BBL per previously approved, earthen containments.	9/22/2023