

DEC 29 2023



DRC-2024-004023

December 29, 2023

CD-2023-264

Mr. Doug Hansen, Director
Division of Waste Management and Radiation Control
P.O. Box 144880
Salt Lake City, UT 84114-4880

**Subject: Federal Cell Facility Application: Responses to the Director's Request for Information –
DRC-2023-078530**

Dear Mr. Hansen:

EnergySolutions hereby responds to the Utah Division of Waste Management and Radiation Control's December 21, 2023 Request for Information (RFI) on our Federal Cell Facility Application.¹ A response is provided for each request using the Director's assigned reference number. Because each comment is applied to multiple Engineering Drawings, we have included Tables 1 through 3 to present summaries of the individual requests that are reflected on each Engineering Drawing appended to this response. All Engineering Drawings we received are attached to this response, inclusive of drawings 60801-G03, 14004-L01, 1-1, and Subdivision Plat Map, which did not require any changes according to the director's RFI.

Appendix B: Federal I Cell Facility Engineering Drawings

B-3: The drawing exhibits the 11e.(2) embankment design layout as one monolithic embankment. Please revise sheet to accurately depict the proposed embankment layout.

The 11e.(2) embankment and proposed Federal Cell Facility layouts have been adjusted in Engineering Drawings 0801-G04, 07007-J01, 07007-J02, and 07007-J03 to reflect the smaller footprint authorized by the 2022 amendment 3 to Radioactive Material License UT2300478.

B-4: There is a lack of detail with the existing instrumentation in both the text and in the plans. Model, functionality, installation date, location (coordinates), minimum instrumentation parameters, etc. should be abundantly clear to the reader. A summary of instrumentation should be provided within the text or the plans for clarity. Please provide a summary that elaborates on these instruments' specifics, including notes on relative drawings.

Air quality sampling for airborne particles is accomplished using a continuous low flow pump with a flow rate of 60 liters per minute through a glass fiber filter that can demonstrate a minimum of a 95% dispersed oil particulate (DOP) collection efficiency for 0.3 μm particles. Specifications of the current pumps in service include:

- Air Mover: Oilless, Rotary Vane, Vacuum Pump with 1/4, or 3/4 HP, 115 or 230 VAC
- Control Valve: Mechanical, Heavy Duty, Differential Type Automatic Flow Controller.

Operation and calibration of the air quality sampling pump is addressed in EnergySolutions procedures CL-EV-PR-013, *Airborne Particulate (LoVol) and VTD Tritium Monitoring*

¹ Hansen, D.J. "Federal Cell Facility Application Request for Information." via DRC-2023-004939 from the Utah Division of Waste Management and Radiation Control to Vern Rogers of EnergySolutions, June 13, 2023.

(attached) and CL-IN-PR-422, *Air Sample Pump Maintenance and Calibration* (attached). Table B-4-1 summarizes the pump models used and the dates that the pumps were placed in service for each station. Information in this table is continuously revised throughout the year to reflect pump maintenance exchanges, calibrations, and replacements. The dynamic nature of this table makes it impractical to include in the Environmental Monitoring Plan. The geographic locations of the sampling stations listed in the Environmental Monitoring Plan are repeated in Table B-4-2.

Table B-4-1: LoVol Pumps In Use to Sample Atmospheric Particulates

Station	Current Equipment Inservice Date	Current Pump Model
A-10	8/25/2023	HI-Q VS23 Series
A-11	6/6/2023	HI-Q VS23 Series
A-13	4/18/2023	HI-Q VS23 Series
A-16	9/1/2023	HI-Q VS23 Series
A-17	8/4/2023	HI-Q VS23 Series
A-18	8/11/2023	HI-Q VS23 Series
A-19	8/4/2023	HI-Q VS23 Series
A-22	9/21/2023	HI-Q VS23 Series
A-28	8/18/2023	HI-Q VS23 Series
A-29	6/2/2023	HI-Q VS23 Series
A-30	6/6/2023	HI-Q VS23 Series
A-35	9/15/2023	HI-Q VS23 Series
A-36	9/8/2023	HI-Q VS23 Series

Table B-4-2: Geographic Air Sample Station Locations

NOTE: Point of Beginning is the Clive monument at the Southwest corner of Section 32

Station	North	East	Station	North	East	Station	North	East
A-1*	5163	2749	S-3*	4891	3463	S-38*	40	600
A-4*	-88	5252	S-4*	4883	3812	S-39	1050	200
A-5*	-14	2647	S-5*	4877	4204	S-40	1600	200
A-10	-10	4124	S-8*	3599	4209	S-50*	4440	4175
A-11	28	1196	S-12*	1992	4155	S-51*	4023	4168
A-13	499	198	S-13*	2002	3679	S-52*	3118	4149
A-16	2412	-6633	S-15*	2011	3111	S-53*	2659	4140
A-17	2167	5323	S-17*	5195	3399	S-54*	2367	4137
A-18	5417	4853	S-18*	5035	4015	S-56	2551	85
A-19	3965	5383	S-19	5213	5162	S-57	2963	91
A-20*	5084	5409	S-21*	4537	5359	S-58*	3339	99
A-21*	2162	71	S-22	3967	5356	S-59	3735	106
A-22	2962	88	S-23*	3347	5344	S-64	4038	272
A-26*	-129	3282	S-24	2764	5335	S-65	4430	286
A-27	-2701	3406	S-25*	2169	5322	S-66	4801	335
A-28	4043	104	S-26	1596	5375	S-71	5291	796
A-29	4636	115	S-27	379	5355	S-72	5282	1222
A-30	5287	319	S-28	-70	4754	S-73	5273	1658
A-33*	5501	2762	S-29	-229	3389	S-74	5256	2429
A-35	5280	1495	S-32*	2047	2690	S-75*	4471	2724
A-36	5256	2402	S-33*	3238	2694	S-76*	2784	2703
A-37*	658	5377	S-34*	3764	2717	S-77	5174	2678
A-38			S-81			S-83		
A-39			S-82			S-84		
B-2	2650	13200	S-36	-5	2200	S-78*	2162	76
S-1*	4892	2745	S-37	10	1600	S-79	-2709	3438
S-2*	4896	3126	F-37	9377	4541	F-38	6702	4355
F-39	6594	3198	F-40	6605	1437	F-41	6282	399

B-5: A groundwater monitoring well to the Southeast corner (above GW-136) is not labeled correctly. Please revise to reflect correct labeling.

The groundwater well label has been corrected on Engineering Drawing 07007-J02.

B-6: Green highlighting is noticeable on this sheet. If this coloring has significance, provide notes elaborating. Otherwise, please revise the sheet to remove green highlighting.

The licensed embankment outlines are placed correctly on Engineering Drawing 07007-J03. Similarly, the divisions of the scale marker are sized correctly. The Clive Site Engineer elected to apply green highlight to the scale marker and embankment licensed outlines as a location aid to the reader. The U.S. Nuclear Regulatory Commission (NRC) is silent in 10 CFR 61, NRC's NUREG-1999 and NUREG-1200 on a prohibition of the use of a colored scale marker or license outlines to assist readers. Additionally, no such prohibition has been promulgated in Utah Administrative Code R313-25. Even so, the green highlighted boundary, scale, and embankment outlines have been adjusted to black on Engineering Drawing 07007-J03 in response to the director's preference.

B-7: Section lines are not blue as shown in Legend. Please revise sheet to be consistent with Legend.

The legend to 07007-J03 has been adjusted to represent the section line depiction.

B-8: These lines are not depicted in Legend nor Notes. Please revise sheet to elaborate on the significance of these lines.

a. This line specifically appears to be different than the others (assuming this line is the same as the others).

The use of lines on Engineering Drawing 07007-J03 has been unified and included in the Legend.

B-9: Please revise sheet to indicate the correct orientation of the North arrow.

The depiction of north has been corrected on Engineering Drawing 07007-J03.

B-10: GW-38R, GW-37, GW-36 are not shown on the plan. Please ensure groundwater monitoring wells are displayed or provide a justification on this sheet indicating reasoning for excluding these wells from the plan.

The installation and monitoring of GW-36, GW-37, and GW-38R is governed by Groundwater Quality Discharge Permit UGW450005. Their location is described and displayed in the Engineering Drawings associated with that Permit. As is reflected in its title, the purpose of Engineering Drawing 14004-C01 to display the physical and geographic features of the Federal Cell Facility. Monitoring wells GW-36, GW-37, and GW-38R have been added to Engineering Drawing 14004-C01 in response to the director's preference.

B-11: Please provide details on the structure "OUTFALL DISPERSION DITCH" noted in the southwestern corner of the Federal Cell. Include the function and the minimum dimensions.

The function and dimensions details for the Outfall Dispersion Ditch are under development as part of a separate licensing action (than the proposed Federal Cell Facility) being considered by

the director. Additional function and dimensional details will be available as a function of that effort.

B-12: Crest length of 685.1' and approx. slope depicted in cross section B of sheet 14004-C02 is not delineated on this plan.

The crest length and slope notations have been added to Engineering Drawing 14004-C02.

B-13: Please elaborate with background information on "Clive Monument" or provide text language that gives clarity. It is unclear as to the datum used to establish this monument as a control point.

The Clive Monument was established as a positioning central point to support a separate radioactive material license granted prior in 1994 and is not being adjusted to support the proposed Federal Cell Facility. However, the legacy datum used to establish the Clive Monument as the positioning original control point has been summarized on Engineering Drawing 14004-C01 in response to the director's preference.

B-14: Does the calculated volume include the cover system and/or the clay liner? This conflicts with the language in Note (1) of this sheet in that information displayed is related to "CLEAN FILL." Expand to explain and/or breakdown this parameter.

Clean Fill is defined in the Federal Cell Facility Construction Quality Assurance/Quality Control Manual. The description of calculated volumes has been clarified and expanded on Engineering Drawing 14004-C01 in response to the director's preference.

B-15: It does not appear that the section line delineates the western side of the cell. Please revise the sheet to indicate the accurate section line and review all plans to ensure Property Lines and Section Lines are consistent with Sheet 18008-U04.

The western property and section lines have been noted on Engineering Drawings 14007-C01 and 14004-L01.

B-16: Please revise to indicate "11e.(2) CELL" (missing period after 'e').

The 11e.(2) embankment is already authorized under Radioactive Material License UT2300478 and not subject to authorization being sought in the Federal Cell Facility Radioactive Material License. Additionally, the absence of a minor punctuation mark does not impact the physical features of the Federal Cell Facility illustrated on Engineering Drawings 07007-J01, 007-J02, 07007-J03, 14004-C01, 14004-C02, 14004-L01, 14004-U01, 14004-U02, and 230007-G02 (engineering drawing package 23007 has been reindexed from package 20005). However, the minor punctuation mark has been added to the 11e.(2) embankment label in Engineering Drawings 07007-J01, 007-J02, 07007-J03, 14004-C01, 14004-C02, 14004-L01, 14004-U01, 14004-U02, and 23007-G02 (reindexed from 20005-G02) in response to the director's preference.

B-17: Please provide clarity on what these dimensions indicate.

The dimensions noted on Engineering Drawing 14004-C01 has been clarified.

B-18: *Given the lack of detail of 11e.(2) dimensions and present-day incompleteness of the 11e.(2) embankment, it is understood that Note (5) notifies the reader that more accurate detail can be given in 11e.(2) License Drawings. However, knowledge of the proposed completed construction conditions of the 11e.(2) cell is imperative in the development of the design of the Federal Cell to correlate geometric relations between the proposed Federal Cell and the existing 11e.(2) cell. Please provide accurate dimensions of proposed 11e.(2) final proposed construction dimensions, including accurate depictions of surrounding infrastructure, in tandem with the proposed design of the Federal Cell.*

The detail of 11e.(2) dimensions and its present-day completeness are the subject of Radioactive Material License UT2300478 and independent of the Federal Cell Facility Radioactive Material License Application. The process and timing for closure of the 11e.(2) embankment is solely governed by conditions in License UT2300478. If approved, construction and operation of the proposed Federal Cell Facility will proceed in accordance with the license granted in response to that Application and will similarly be independent of operation or closure of the 11e.(2) embankment. Even so, the final proposed construction dimensions, including depictions of surrounding infrastructure for the 11e.(2) embankment have been added to Engineering Drawing 14004-C01 in response to the director's preference.

B-19: *The term "NATURAL GRADE" is utilized in the plans. The elevations indicated appear to be elevations of the surrounding area; however, man-made infrastructure exists in these areas such as roads and berms. Please elaborate on the term "NATURAL GRADE."*

The term "Natural Grade" was established and has been in use on director-approved Engineering Drawings since 1988. Even so, the terminology has been clarified on Engineering Drawing 14004-C01 in response to the director's preference.

B-20: *The weight scale of the line for "LINER LIMITS (MINIMUM)" does not appear to be consistent with what is observed on the plan view. Please revise Legend item to be consistent as presented in the plan.*

The lines on Engineering Drawing 14004-C01 accurately display the appropriate geographic boundaries. The U.S. Nuclear Regulatory Commission (NRC) is silent in 10 CFR 61, NRC's NUREG-1999 and NUREG-1200 on a prohibition of the use of various line weight scales in Engineering Drawings. Additionally, no such prohibition has been promulgated in Utah Administrative Code R313-25. Even so, the legend of Engineering Drawing 14004-C01 has been revised to be consistent with the weight scale for the lines presented in the plan.

B-21: *Please update the sheet with a signature and seal.*

Professional Engineer seal and signature have been affixed to Engineering Drawings 07007-J03, 14004-C01, 14004-C02, 14004-C03, 14004-C04, 14004-C05, 14004-L01, 14004-U01, 14004-U02, 14004-U03, and 14004-U05.

B-22: *The centerline of the ditch appears to go off to the Northeast corner of the 11e.(2) cell. Please provide details on this anomaly.*

The centerline anomaly identified in Engineering Drawing 14004-C01 has been clarified.

B-23: *There appears to be a leader within the “DRAINAGE DITCH CENTERLINE” throughout this entire plan view. Please revise sheet to either remove the leader or explain significance.*

Even though the Clive Facility Site Engineers elected to add a leader within the drainage ditch centerline, the ditch centerline is accurately displayed on Engineering Drawing 14004-C01. The U.S. Nuclear Regulatory Commission (NRC) is silent in 10 CFR 61, NRC’s NUREG-1999 and NUREG-1200 on a prohibition of the use of additional illustration leaders. Additionally, no such prohibition has been promulgated in Utah Administrative Code R313-25. Even so, the leaders in question have been removed from Engineering Drawing 14004-C01 in response to the director’s preference.

B-24: *Please provide more detail on the location, purpose, and monitoring device information of B-2. Refer to RFI B-2 as an overarching comment on the lack of detail for specifications on the instrumentation.*

Air quality sampling for airborne particles is accomplished using a continuous low flow pump with a flow rate of 60 liters per minute through a glass fiber filter that can demonstrate a minimum of a 95% dispersed oil particulate (DOP) collection efficiency for 0.3 μm particles. Specifications of the current pumps in service include:

- Air Mover: Oilless, Rotary Vane, Vacuum Pump with 1/4, or 3/4 HP, 115 or 230 VAC
- Control Valve: Mechanical, Heavy Duty, Differential Type Automatic Flow Controller.

Operation and calibration of the air quality sampling pump is addressed in EnergySolutions procedures CL-EV-PR-013, *Airborne Particulate (LoVol) and VTD Tritium Monitoring* (attached) and CL-IN-PR-422, *Air Sample Pump Maintenance and Calibration* (attached). Table B-4-1 summarizes the pump models in use and the dates that the pumps were placed in service for each station. Information in this table is continuously revised throughout the year to reflect pump maintenance exchanges, calibrations, and replacements. In Section 4.4 of NUREG-1199, NRC suggests the location, purpose, and operational period monitoring device information be described in the Application and Environmental Monitoring Plan (Appendix E to the Application). Further details are documented and provided for the director’s review there in accordance with NRC guidance.

B-25: *Slopes are assumed to be approximated in other areas of these drawings. Why is this dimension considered to be not approximate? Please review RFI B-18 and consider consistent dimensions precision throughout these drawings.*

The precision noted on Engineering Drawing 14004-C02 has been revised.

B-26: *It is assumed that the overall approximated geometry of the Top of Waste correlates to Note (5) of Sheet 14004-C01. Please provide clarity on this sheet (14004-C02) reiterating that statement with consideration of RFI B-18.*

The correlation of the Top of Waste notation has been expanded and the precision adjusted on Engineering Drawing 14004-C02 has been revised.

B-27: Ditch invert measures to be a high point in between the Northeast corner invert and Southeastern corner invert. Please clarify or revise the dimensions with consideration of RFI B-18.

The Ditch measurements in between the Northeast and Southeastern corners has been revised and the precision adjusted on Engineering Drawing 14004-C02.

B-28: Leader indicates “GROUND LEVEL” and is inconsistent with the nomenclature used in sheet 14004-C01. Please refer to RFI B-19 and revise to maintain consistent language throughout these drawings.

Consistent nomenclature has been used in Engineering Drawings 14004-C02, and 14004-C03.

B-29: Detail callout should indicate “REVERSE” or similar. Please revise.

The orientation of the detail callout has been revised on Engineering Drawing 14004-C02.

B-30: Detail callout is not “REVERSE” orientation as indicated in Sheet 14004-C03. Please revise.

The orientation of the detail callout has been revised on Engineering Drawing 14004-C02.

B-31: Section view indicates North is to the left and South is to the right. Please revise title of section or reorient the section and associated callouts.

Section title on Engineering Drawing 14004-C02 has been revised.

B-32: It is unclear if Detail 2 on Sheet 14004-C05 also indicates the Cover Detail that will be implemented along the alignment of the CREST. Please callout Detail 2 at the crest (where and if applicable) and revise the title of Detail 2 or create a detail similarly to Detail 2 indicating the cover design and tie-ins.

Detail 2 has been called out at the crest and its title revised on Engineering Drawings 14004-C02 and 14004-C05.

B-33: It is unclear as to what dimension varies here. Are the Clay Liner and Liner Protective Cover the varying dimension keying into existing grade? Are these dimensions generally unknown? Please elaborate or provide notes on this sheet.

Engineering Drawing 14004-C03 has been revised to clarify the dimensional key ins.

B-34: Please elaborate on “natural soil” grade and slopes in Section C to establish minimum excavation dimensions. This can affect the constructability of the Borrow Material backfill and compaction operations as well as tie-ins with the cover system.

Engineering Drawing 14004-C03 has been revised to clarify the descriptions for grading and slopes.

B-35: Please revise to maintain consistency with nomenclature utilized throughout Application. Application text refers to “SIDE ROCK” as “side-slope riprap” and Appendix M utilizes “Side Rock.” This is particularly inconsistent when it comes to Detail 4 on this sheet where, technically, this is no longer part of the Side-Slope.

The nomenclature utilized on Engineering Drawings 14004-C03 and 14004-C05 have been revised.

B-36: *Please provide clarification as to the correct nomenclature of this fill. Throughout the plans the backfill has been denoted as “CLEAN FILL”; however, this note suggests that the “CLEAN FILL” contains engineered parameters or a potential for contamination. Additionally, consider renaming this backfill to not confuse assumptions that the fill is not contaminated nor possesses radiological contamination.*

Clean Fill is defined in the Federal Cell Facility Construction Quality Assurance/Quality Control Manual. The nomenclature has been clarified on Engineering Drawing 14004-C01.

B-37: *Please maintain consistent dimension call out with Detail C on Sheet 14004-C03.*

The dimensions on Engineering Drawing 14004-C03 have been revised.

B-38: *Detail C on Sheet 14004-C03 notes a minimum distance of 45’ from Ditch Centerline to Road Centerline. This suggests there should be a minimum distance required between the Ditch Centerline and the Inspection Road Centerline. If that is a correct assumption, a minimum criterion should be established here.*

The ditch and inspection road dimensions have been clarified and expanded on Engineering Drawing 14004-C03.

B-39: *Has grading the “shoulder” of these inspection roads to slope towards the ditches been considered? This cross section and other details have exhibited a visual of a slope. Please provide detail on the dimensions of these slopes to better visualize and understand the intent of a 12” raised roadway from “borrow material.”*

The dimensional detail for inspection road slopes has been revised and expanded on Engineering Drawing 14004-C03.

B-40: *Is there an assumption that all the material between the existing 11e.(2) embankment and the proposed footprint of the Federal Cell must be excavated to the edges of Clay Liner? There is no true delineation of what currently exists and how EnergySolutions intends to tie into existing conditions. Please provide information to clarify.*

The existing conditions between the existing 11e.(2) embankment and proposed Federal Cell Facility have been clarified and expanded on Engineering Drawing 14004-C03.

B-41: *Note (5) of sheet 14004-C01 should be reiterated on this sheet to provide clarity that the 11e.(2) dimensions displayed herein are approximated and will be clarified in the 11e.(2) License Drawings. Additionally, please see RFI B-18.*

The detail of 11e.(2) dimensions and its present-day completeness are the subject of Radioactive Material License UT2300478 and independent of the Federal Cell Facility Radioactive Material License Application. The process and timing for closure of the 11e.(2) embankment is solely governed by conditions in License UT2300478. If approved, construction and operation of the proposed Federal Cell Facility will proceed in accordance with the license granted in response to that Application and will similarly be independent of operation or closure of the 11e.(2) embankment. Even so, Note (5) from Engineering Drawing 14004-C01 has been repeated on Engineering Drawing 14004-C04 in response to the director’s preference.

B-42: *The “CLOSURE FENCE TYP” was called out per Detail C of Sheet 14004-C03; however, it is unclear where the fence line is located on this plan view. It is known that a present-day existing fence exists on the west and south sides of the cell but not on the north side. Please indicate where proposed fence line will be located. Additionally, elaborate on Detail C of Sheet 14004-C03 to note which sides of the cell the fence line should be considered for this detail.*

The fence line location and cell boundaries have been clarified on Engineering Drawings 14004-C01 and 14004-C03.

B-43: *The limits of construction that are under the 11e.(2) license and the Federal Cell license are not clearly defined in this cross section. Please provide clarity if the road and ditches between the cells are part of their respective licenses and/or showcase the delineation within this plan set.*

The limits of construction between the 11e.(2) and Federal Cell Facility have been clarified on Engineering Drawing 14004-C04.

B-44: *No cross-section nor detail suggests that the filter zone will rest on the “natural ground.” Criteria should be established for subgrade material upon which cover material shall be placed atop. Please review RFI B-34.*

Filter zone and subgrade detail have been added to Engineering Drawing 14004-C05.

B-45: *The “-8” and “-6” within these leaders should be an exponent.*

The exponentials noted are correct on Engineering Drawing 14004-C05 and of equivalent format to that used on legacy Engineering Drawings since 1990. The Clive Site Engineer elected to use this legacy design to make it clear to the reader. The U.S. Nuclear Regulatory Commission (NRC) is silent in 10 CFR 61, NRC’s NUREG-1999 and NUREG-1200 on a prohibition on the use of this exponential format to assist readers. Additionally, no such prohibition has been promulgated in Utah Administrative Code R313-25. Even so, the exponential notation has been adjusted on Engineering Drawing 14004-C05 in response to the director’s preference.

B-46: *Note (2) can potentially leave ambiguity to the seeding methodology. If EnergySolutions proposes seeding within the plan set, please provide additional information on “approved seed mixture and method” or reference where the reader may locate this information.*

Note (2) has been clarified on Engineering Drawing 14004-C05.

B-47: *Linework is not noted in the Legend or called out on the plan.*

Linework has been added to the legends on Engineering Drawings 14004-L01 and 14004-U01.

B-48: *The scale does not appear to be correct. Please provide full-size sheets to the Division to verify scale and/or revise sheet to correct scale.*

The scale notation has been corrected on Engineering Drawings 14004-L01 and 14004-U01.

B-49: Refer to RFI B-13. Additionally, please reiterate Note (2) of sheet 14004-C01 to provide clarity in this sheet of the characteristics of the Clive Monument as a control point for these coordinates.

The Clive Monument was established as a positioning central point to support a separate radioactive material license granted prior in 1994 and is not being adjusted to support the proposed Federal Cell Facility. However, the scale notation has been corrected and Note (2) added on Engineering Drawings 14004-U01 and 14004-U02.

B-50: According to Section 3.1.11 within the text of the Application, the “Buffer Zone” is defined as “[...] buffer zone must be no less than 100 ft between the rectangle defined by the four control points that define the cell limits on Engineering Drawing 14004-U01 (Appendix B) and the perimeter fence.” It is unclear on this Sheet if the Buffer Zone adequately meets this minimum requirement due to the questionable scale of the drawing (refer to B-48), lack of dimensional callouts, and any additional notes that may provide clarity on the requirements that are highlighted in the text or relating Appendices. Please provide clarity on these characteristics at a minimum.

The Buffer Zone location has been clarified on Engineering Drawing 14004-L01.

B-51: Please consider a different line weight and type for the “FEDERAL CELL LIMITS.” Line is utilized in incorrect ways within each of these cross sections.

This request includes a declarative statement that the “[...]ine is utilized in incorrect ways within each of these cross sections.” The U.S. Nuclear Regulatory Commission (NRC) is silent in 10 CFR 61, NRC’s NUREG-1999 and NUREG-1200 on a definition of a “correct way” lines are to be used within these cross sections. Similarly, no such definition has been promulgated in Utah Administrative Code R313-25. Even so, the line weights and types have been adjusted on Engineering Drawing 14004-U02 in response to the director’s preference.

B-52: It is unclear why these dimensions are approximated, and lack of dimensional call outs exists within these cross sections. These dimensions must indicate minimum/maximum dimensions to satisfy minimum/maximum design requirements as stated within the text of the Application and Appendices. Ambiguity within these dimensions can lead to misinterpretations of the limits of Depleted Uranium. Additionally, please provide clarifications of the dimensions and vertical offsets.

The dimensional precision has been unified and expanded on Engineering Drawing 14004-U02.

B-53: This text refers to two different lines; however, it is unclear which paragraph is referring to a specific line. Please revise this sheet to contain two separate leaders for each paragraph and lead to associated linework.

The leaders and linework have been revised on Engineering Drawing 14004-U05 (which has replaced 18008-U04).

B-54: This sheet lacks a Legend to provide clarification of the representation of the linework on this sheet.

A legend has been added to Engineering Drawings 14004-U05, 23007-C01, 23007-C02, 23007-C03, 23007-C04, 23007-C05, 23007-C06, 23007-C07, 23007-C08, 23007-C09, 23007-C10, and 23007-G02 (engineering drawing package 23007 has been reindexed from package 20005).

B-55: The scale appears to be green. Please revise scale or provide clarification as to the significance of having the scale in this format.

The licensed embankment scales are placed and graduated correctly on Engineering Drawings 14004-U05, 23007-C01, 23007-C02, 23007-C03, 23007-C04, 23007-C05, 23007-C06, 23007-C07, 23007-C08, 23007-C09, 23007-C10, and 23007-G02 (engineering drawing package 23007 has been reindexed from package 20005). The Clive Site Engineer elected to apply green highlight to the scale marker as an aid to the reader. The U.S. Nuclear Regulatory Commission (NRC) is silent in 10 CFR 61, NRC's NUREG-1999 and NUREG-1200 on a prohibition on such use of colored scale markers to assist readers. Additionally, no such prohibition has been promulgated in Utah Administrative Code R313-25. Even so, the scale appearance has been revised on Engineering Drawing 14004-U05, 23007-C01, 23007-C02, 23007-C03, 23007-C04, 23007-C05, 23007-C06, 23007-C07, 23007-C08, 23007-C09, 23007-C10, and 23007-G02 (engineering drawing package 23007 has been reindexed from package 20005) in response to the director's preference.

B-56: Font is very small and illegible for many of the callouts and text within linework. Please revise sheet to a consistent format scale so text is clear and legible.

The text format has been increased on Engineering Drawing 23007-C01, 23007-C02, 23007-C07, and 23007-C10 (engineering drawing package 23007 has been reindexed from package 20005).

B-57: Please identify this object.

Object descriptions have been added to Engineering Drawings 23007-C02 and 23007-C05 (engineering drawing package 23007 has been reindexed from package 20005).

B-58: Please provide the timeframe for when these aerial images were taken to provide insight to the timeline of construction of the utilities at the facility.

Condition 10.D of Radioactive Material License UT2300249 requires annual aerial surveys be performed. The timeframe for when aerial images were taken has been noted on Engineering Drawing 14004-U05, 23007-C01, 23007-C02, 23007-C03, 23007-C04, 23007-C05, 23007-C06, 23007-C07, 23007-C08, 23007-C09, and 23007-C10 (engineering drawing package 23007 has been reindexed from package 20005).

B-59: The purpose of this drawing sheet appears to be to orient the reader to match the linework through each map. Please consider the following:

a. Hide text and irrelevant linework on this sheet to provide a clearer picture for the reader of the facilities and delineated Utility Map sections.

b. Provide Matchlines on the respective sheets so that it is clear to the reader the orientation of each Utility Map.

The linework and matchlines have been revised on Engineering Drawing 23007-G02 (engineering drawing package 23007 has been reindexed from package 20005).

General Notes and Overarching RFIs:

- 1. The Groundwater monitoring plan does not address influences of the Federal Cell construction with existing surrounding infrastructure (such as CAW and 11e.(2)). No plan sheet suggests that new Groundwater Monitoring devices will be installed as a result of this new facility. If EnergySolutions proposes to install additional monitoring devices (of any kind), there should be a plan sheet indicating proposed installation location, device type, depths (if applicable), etc.**

A modification to Groundwater Quality Discharge Permit UGW450005 has been requested to reflect depiction of the Federal Cell Facility on the applicable Engineering Drawings. The modification requests that existing wells GW-57, GW-28, GW-58, and GW-63 be designated as upgradient to the Federal Cell Facility and existing wells GW-26, GW-94, GW-95, GW-27, and GW-27-D considered for downgradient compliance monitoring of the Federal Cell Facility (in accordance with UAC R315-308-2(2)).

- 2. Air monitoring radiological “array” is not clear. The array is depicted from the center of the Class A West Cell. For this application, there should be a focus on the Federal Cell and proposed monitoring instrumentation to justify the construction of the Federal Cell.**

The descriptions on Engineering Drawing 07007-J01 have been expanded to clarify the arrangement of the air monitoring array and monitoring instrumentation currently in use. Low-volume atmospheric dust monitoring stations are used to evaluate the effectiveness of radiation safety measures applied during bulk waste management within the Class A West embankment authorized by Radioactive Material License UT2300249. Since no bulk DU will be managed at the Federal Cell Facility, current instrumentation and monitoring locations are appropriate to support the Federal Cell Facility.

- 3. Based on delineated elevations, surface water appears to be flowing towards the Southeastern corner of the cell. What is EnergySolutions plan to manage this water from that point?**

Condition I.E.7 of the Groundwater Quality Discharge Permit UGW450005 designates as Priority 1, removal of precipitation falling and/or collecting within the licensed footprint of an active waste embankment when there is a potential that it may encounter waste. This approach will be required for the proposed Federal Cell Facility.

4. ***Drawings should be submitted in full size and originally stamped as an official submission. Some of the scales indicated in this plan sheet could not be verified though appear to be incorrect.***

Professional Engineering stamp and certifications have been added to all applicable Engineering Drawings. The accuracy of drawing scales, set appropriate to accurately represent each drawings information, have been confirmed.

5. ***What are the geotechnical characteristics for the “Clean Fill”? Does this “Clean Fill” have a potential to be contaminated? There needs to be additional elaboration as to the context of “Clean Fill” throughout these drawings. Additionally, the word “clean” can be misinterpreted as “non-contaminated.” What are the extents of contamination within the Clean Fill from the contact point of the Depleted Uranium placement? If it is within the Application, the Drawings do not indicate any notes or references to provide clarity.***

Along with other construction materials used at the Federal Cell Facility, fill characteristics are described in the Federal Cell Facility Construction Quality Assurance/Quality Control Manual (Appendix C to the Application).

6. ***The extents and limits of the Depleted Uranium (waste) placement are delineated on these plans; however, there is a lack of detail on methodologies of placing the waste within the cell. It is unclear in both the plans and the text how the waste will be stacked/oriented and backfilled to confirm that the material is in complete encapsulation from the surrounding environment, provide insight on the integrity of the backfill, and all additional considerations outlined in NUREG-1200 SRP 3.***

Controlled low-strength material (CLSM) and federally generated depleted uranium waste placement is described in Section 4.3 of the Application, and will proceed in accordance with Work Element, Depleted Uranium Waste Placement in the Federal Cell Facility Construction Quality Assurance/Quality Control Manual (see Appendix C of the Application) and procedures FCF-CH-PR-251 *Federal Cell Facility Container Management and Disposal* and FCF-LD-PR-020 *Management and Disposal of FCF* (found in Appendix I of the Application)

7. ***In light of RFI B-9, there is a question of appropriate scale and accurate geographical location and orientation throughout this Appendix. EnergySolutions should ensure that the drawings contain a high level of precision to orient objects and plan view. There are many dimensions on this sheet that are denoted as “~X”. It is assumed that EnergySolutions has approximated these dimensions. This is unacceptable in a plan set due to the high degree of ambiguity that can occur during construction and for reviewing information presented in the Application. It is imperative for EnergySolutions to consider RFI B-18 for this plan set and establish accurate or minimum and maximum dimensions for the Division to review with minimal uncertainty of EnergySolutions’ intentions of construction.***

Measurements on Engineering Drawings have been confirmed and precision unified. The “-X” notation has been removed from all Engineering Drawings.



Mr. Doug Hansen
CD-2023-264
December 29, 2023

If you have further questions regarding the response to the director's request of DRC-2023-004939, please contact me at (801) 649-2000.

Sincerely,

Vern C.
Rogers

Digitally signed by Vern C. Rogers
DN: cn=Vern C. Rogers,
o=EnergySolutions, ou=Waste
Management Division,
email=vcrogers@energysolutions.
com, c=US
Date: 2023.12.29 12:57:08 -07'00'

Vern C. Rogers
Director, Regulatory Affairs

enclosure

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Table 1 – Engineering Drawing Tracking (comments B-3 through B-25)

ENGINEERING DRAWING	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-20	B-21	B-22	B-23	B-24	B-25
0801-G04 –Radiologically Controlled Area;	X																						
07007-J01 –Environmental Monitors;	X	X												X									X
07007-J02 –Groundwater Monitoring Wells;	X	X	X											X									
07007-J03 –Fenceline TLDs;	X	X		X	X	X	X							X						X			
14004-C01 –Federal Cell Facility Embankment Features and Controls;								X	X	X	X	X	X	X	X	X	X	X	X	X	X		
14004-C02 –Federal Cell Facility Embankment Cross Sections;														X						X			X
14004-C03 –Federal Cell Facility –Sections and Details 1 of 3;																				X			
14004-C04 –Federal Cell Facility –Sections and Details 2 of 3;																				X			
14004-C05 –Federal Cell Facility –Sections and Details 3 of 3;																				X			
14004-L01 –Federal Cell Facility –Embankment Location Map and Topo;													X	X						X			
14004-U01 –Federal Cell Facility –Disposal Cell Buffer Zone;														X						X			
14004-U02 –Federal Cell Facility –Disposal Cell Waste Limits –Latitudes and Longitudes;														X						X			
14004-U03 –Federal Cell Facility –Disposal Cell Waste Limits –Cross Sections;																				X			
14004-U05 –Surrounding Property Ownership Map;																							



ENGINEERING DRAWING	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-20	B-21	B-22	B-23	B-24	B-25	
23007-C01-Site Utility Map 1 (reindexed from 20005-C01);																								
23007-C02-Site Utility Map 2 (reindexed from 20005-C02);																								
23007-C03-Site Utility Map 3 (reindexed from 20005-C03);																								
23007-C04-Site Utility Map 4 (reindexed from 20005-C04);																								
23007-C05-Site Utility Map 5 (reindexed from 20005-C05);																								
23007-C06-Site Utility Map 6 (reindexed from 20005-C06);																								
23007-C07-Site Utility Map 7 (reindexed from 20005-C07);																								
23007-C08-Site Utility Map 8 (reindexed from 20005-C08);																								
23007-C09-Site Utility Map 9 (reindexed from 20005-C09);																								
23007-C10-Site Utility Map 10 (reindexed from 20005-C10);																								
23007-G02 –General Site Utility Map (reindexed from 20005-G02);															X									

Table 2 – Engineering Drawing Tracking (comments B-26 through B-46)

ENGINEERING DRAWING	B-26	B-27	B-28	B-29	B-30	B-31	B-32	B-33	B-34	B-35	B-36	B-37	B-38	B-39	B-40	B-41	B-42	B-43	B-44	B-45	B-46	
0801-G04 –Radiologically Controlled Area;																						
07007-J01 –Environmental Monitors;																						
07007-J02 –Groundwater Monitoring Wells;																						
07007-J03 –Fenceline TLDs;																						
14004-C01 –Federal Cell Facility Embankment Features and Controls;																	X					
14004-C02 –Federal Cell Facility Embankment Cross Sections;	X	X	X	X	X	X	X															
14004-C03 –Federal Cell Facility –Sections and Details 1 of 3;			X					X	X	X	X	X	X	X	X		X					
14004-C04 –Federal Cell Facility –Sections and Details 2 of 3;																X		X				
14004-C05 –Federal Cell Facility –Sections and Details 3 of 3;							X			X									X	X	X	
14004-L01 –Federal Cell Facility –Embankment Location Map and Topo;																						
14004-U01 –Federal Cell Facility –Disposal Cell Buffer Zone;																						
14004-U02 –Federal Cell Facility –Disposal Cell Waste Limits –Latitudes and Longitudes;																						
14004-U03 –Federal Cell Facility –Disposal Cell Waste Limits –Cross Sections;																						
14004-U05 –Surrounding Property Ownership Map;																						



ENGINEERING DRAWING	B-26	B-27	B-28	B-29	B-30	B-31	B-32	B-33	B-34	B-35	B-36	B-37	B-38	B-39	B-40	B-41	B-42	B-43	B-44	B-45	B-46	
23007-C01-Site Utility Map 1 (reindexed from 20005-C01);																						
23007-C02-Site Utility Map 2 (reindexed from 20005-C02);																						
23007-C03-Site Utility Map 3 (reindexed from 20005-C03);																						
23007-C04-Site Utility Map 4 (reindexed from 20005-C04);																						
23007-C05-Site Utility Map 5 (reindexed from 20005-C05);																						
23007-C06-Site Utility Map 6 (reindexed from 20005-C06);																						
23007-C07-Site Utility Map 7 (reindexed from 20005-C07);																						
23007-C08-Site Utility Map 8 (reindexed from 20005-C08);																						
23007-C09-Site Utility Map 9 (reindexed from 20005-C09);																						
23007-C10-Site Utility Map 10 (reindexed from 20005-C10);																						
23007-G02 –General Site Utility Map (reindexed from 20005-G02);																						

Table 3 – Engineering Drawing Tracking (comments B-47 through B-58)

ENGINEERING DRAWING	B-47	B-48	B-49	B-50	B-51	B-52	B-53	B-54	B-55	B-56	B-57	B-58	B-58
0801-G04 –Radiologically Controlled Area;													
07007-J01 –Environmental Monitors;													
07007-J02 –Groundwater Monitoring Wells;													
07007-J03 –Fenceline TLDs;													
14004-C01 –Federal Cell Facility Embankment Features and Controls;													
14004-C02 –Federal Cell Facility Embankment Cross Sections;													
14004-C03 –Federal Cell Facility – Sections and Details 1 of 3;													
14004-C04 –Federal Cell Facility – Sections and Details 2 of 3;													
14004-C05 –Federal Cell Facility – Sections and Details 3 of 3;													
14004-L01 –Federal Cell Facility – Embankment Location Map and Topo;	X	X		X									
14004-U01 –Federal Cell Facility – Disposal Cell Buffer Zone;	X	X	X										
14004-U02 –Federal Cell Facility – Disposal Cell Waste Limits –Latitudes and Longitudes;			X		X	X							
14004-U03 –Federal Cell Facility – Disposal Cell Waste Limits –Cross Sections;													
14004-U05 –Surrounding Property Ownership Map;							X	X	X			X	
23007-C01-Site Utility Map 1 (reindexed from 20005-C01);								X	X	X		X	
23007-C02-Site Utility Map 2 (reindexed from 20005-C01);								X	X	X	X	X	
23007-C03-Site Utility Map 3 (reindexed from 20005-C01);								X	X			X	

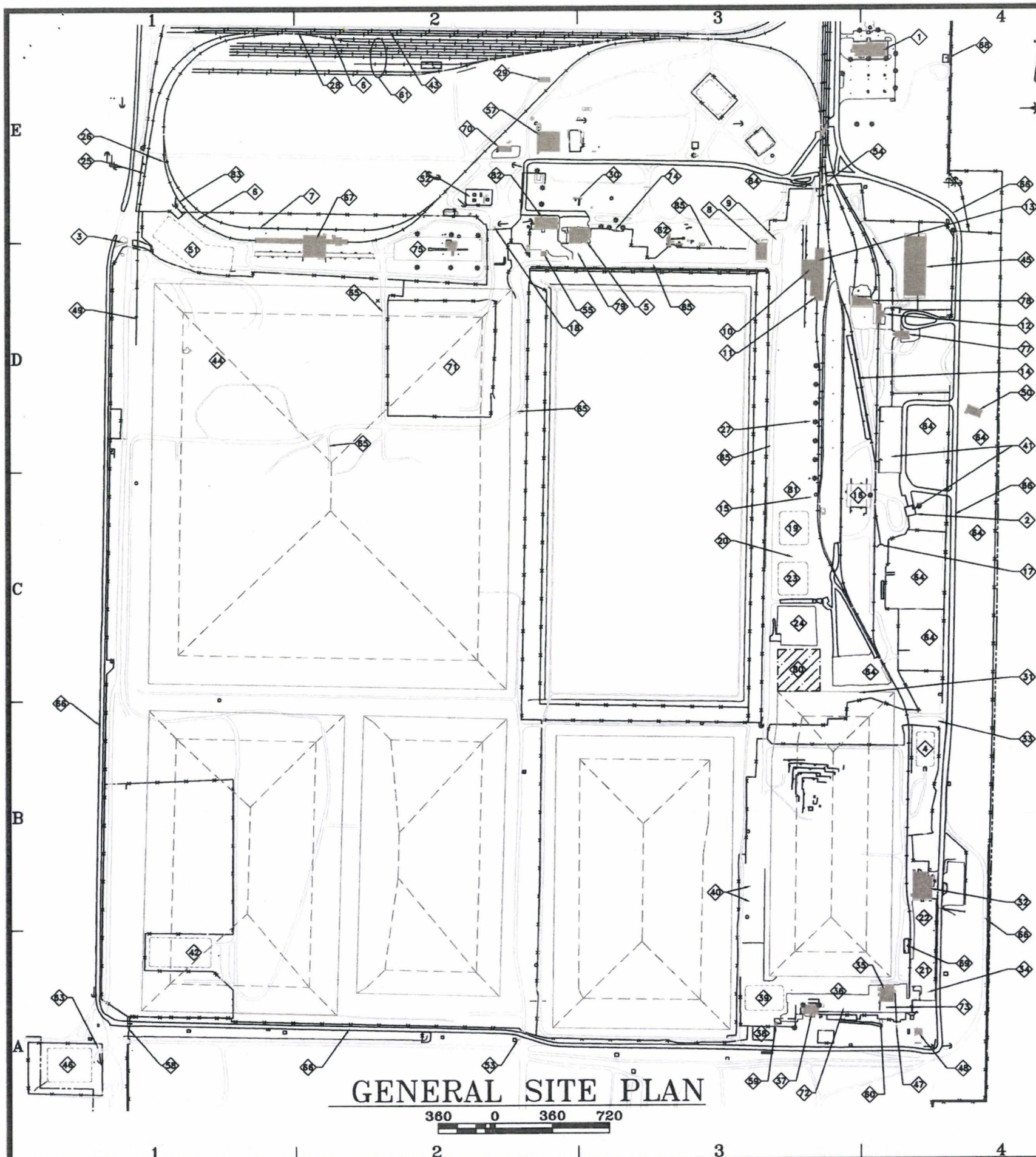


ENGINEERING DRAWING	B-47	B-48	B-49	B-50	B-51	B-52	B-53	B-54	B-55	B-56	B-57	B-58	B-58
23007-C04-Site Utility Map 4 (reindexed from 20005-C04);								X	X			X	
23007-C05-Site Utility Map 5 (reindexed from 20005-C05);								X	X		X	X	
23007-C06-Site Utility Map 6 (reindexed from 20005-C06);								X	X			X	
23007-C07-Site Utility Map 7 (reindexed from 20005-C07);								X	X	X		X	
23007-C08-Site Utility Map 8 (reindexed from 20005-C08);								X	X			X	
23007-C09-Site Utility Map 9 (reindexed from 20005-C09);								X	X			X	
23007-C10-Site Utility Map 10 (reindexed from 20005-C10);								X	X	X		X	
23007-G02—General Site Utility Map (reindexed from 20005-G02);								X	X				X



Mr. Doug Hansen
CD-2023-264
December 29, 2023

ENGINEERING DRAWINGS



GENERAL SITE PLAN

360 0 360 720

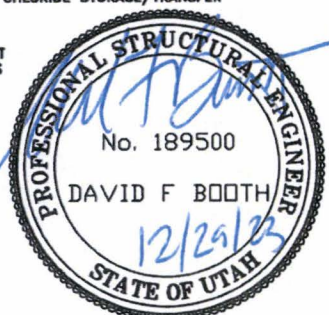
- 1 ADMINISTRATION BUILDING
DRAWING SERIES 05041
- 2 EAST LLRW TRUCK UNLOADING FACILITY
HP SHACK
- 3 NORTH ACCESS CONTROL SHACK
- 4 MIXED WASTE SURFACE IMPOUNDMENT
DRAWING SERIES 11014
- 5 LARW OPERATIONS BUILDING
DRAWING SERIES 9532, 03049, 04014, 04021
- 6 TRACK A RAIL LOOP
DRAWING SERIES 05024
- 7 TRACK B RAIL SIDING
DRAWING SERIES 05024
- 8 INSIDE LLRW MAINTENANCE SHOP
- 9 INSIDE LLRW MAINTENANCE BAY
- 10 FORMER RAIL CAR ROLLOVER, (DEMOLISHED 2013)
DWG SERIES 9512, 0133, 0221, 0244, 04001, 04018
- 11 TRACK #2 RAIL WASH FACILITY (DEMOLISHED OCTOBER
2011) DRAWING SERIES 9513
- 12 TRACK #4 RAIL WASH FACILITY
DRAWING SERIES 9906, 08007
- 13 EAST SIDE ROTARY FACILITY (NEW FOR 2023)
DWG SERIES 18004
- 14 RAIL CAR DIGGING FACILITY (DIGGING TRACK)
DRAWING SERIES 0107
- 15 INTERMODAL UNLOADING FACILITY LIFT STATION
DRAWING SERIES 9822
- 16 INTERMODAL UNLOADING FACILITY
DRAWING SERIES 9705, 04003
- 17 TRACK HOE RAMP
DRAWING SERIES 0107
- 18 CWF GUARD SHACK
- 19 97 LARW EVAPORATION POND
DRAWING SERIES 9718, 03063
- 20 POND DRAIN LIFT STATION
DRAWING SERIES 9817, 03063
- 21 MIXED WASTE CONTAINER HOLDING PAD
DRAWING SERIES 9803, 9834
- 22 MIXED WASTE EAST CONTAINER STORAGE AREA
DRAWING SERIES 9803, 9834
- 23 95 LARW EVAPORATION POND
DRAWING SERIES 9504, 03063, 08007
- 24 LARW CONTAINER STORAGE PAD
DRAWING SERIES 9514
- 25 WEST RAIL SPUR (LARGE COMPONENT TRACK)
DRAWING SERIES 0241
- 26 NW RAIL ACCESS CONTROL SHACK
- 27 STORM WATER LIFT SUMP
DRAWING SERIES 08007
- 28 EAST-WEST RAIL SIDING
DRAWING SERIES 05024
- 29 MAINTENANCE/STORAGE BUILDING
- 30 UTAH DWMRC OFFICE TRAILER
- 31 BOX WASHING FACILITY (DEMOLISHED 2014)
DRAWING SERIES 9821, 9822, 9822
- 32 MIXED WASTE OPERATIONS BUILDING
DRAWING SERIES 9713, 0240
- 33 MIXED WASTE SAND TRANSFER
ACCESS CONTROL SHACK
- 34 MIXED WASTE UNLOADING DOCK
DRAWING SERIES 9846
- 35 MIXED WASTE TREATMENT BUILDING
DWG SERIES 9317,9619,0132,0227,0249,0257,03023
- 36 MIXED WASTE CENTRAL CONTAINER STORAGE AREA
DRAWING SERIES 9516, 9922
- 37 MIXED WASTE STORAGE (VTD) BUILDING
DRAWING SERIES 9417, 9517, 0248
- 38 BOX COUNTING PAD
DRAWING SERIES 9833
- 39 MIXED WASTE EVAPORATION POND
DRAWING SERIES 9802
- 40 MIXED WASTE EVAPORATION TANKS #225 & #250
DRAWING SERIES 9816 (DEMOLISHED 2013)
- 41 EAST LLRW TRUCK UNLOADING FACILITY
DRAWING SERIES 03024, 04046, 05023
- 42 2000 LARW EVAPORATION POND
DRAWING SERIES 0006
- 43 LADDER TRACK #2
DRAWING SERIES 07010

- 44 CLASS A NORTH LARGE COMPONENT AREA
DRAWING SERIES 04080 & 10014
- 45 DU STORAGE BUILDING
DRAWING SERIES 10008
- 46 SOUTHWEST CORNER EVAPORATION POND
DRAWING SERIES 9721, 04047
- 47 PNEUMATIC REAGENT DELIVERY SYSTEM
DRAWING SERIES 9618
- 48 MIXED WASTE MAINTENANCE WELD SHOP
- 49 LARGE COMPONENT UNLOADING PAD
DRAWING SERIES 0241
- 50 TRUCK SURVEY FACILITY
DRAWING SERIES 15006
- 51 NORTHWEST CORNER EVAPORATION POND
DRAWING SERIES 06021
- 52 SUBSTATION
DRAWING SERIES 05056
- 53 SOUTH ACCESS CONTROL SHACK
- 54 EAST SIDE RAIL ACCESS CONTROL SHACK
- 55 SAFETY SUPPLY SHED
- 56 RESERVED
- 57 PURCHASING/ WAREHOUSE/ MAINTENANCE BUILDING
DRAWING SERIES 03096
- 58 SOUTH GATE SECURITY SHACK
- 59 WASTE ASSAY COUNTING SYSTEMS BUILDING
- 60 MIXED WASTE FIRE PUMP BUILDING
- 61 RAIL STORAGE & MAINTENANCE TRACKS
(CLIVE RAIL FACILITY), DRAWING SERIES 18006
- 62 BATCH PLANT (2008 RE-LOCATION SHOWN)
DRAWING SERIES 03055, 04022, 07009
- 63 VITRO STORM WATER OUTLET
DRAWING SERIES 9721, 04047
- 64 EMPTY CONTAINER STORAGE AREAS
- 65 WASTE HAUL ROADS
DRAWING SERIES 05049
- 66 PERIMETER ROAD
DRAWING SERIES 05049
- 67 ROTARY DUMP FACILITY (THAW, ROTARY & WASH)
DRAWINGS SERIES 05006
- 68 METEOROLOGICAL STATION
DRAWING SERIES 06020
- 69 MIXED WASTE RAIL UNLOADING DOCK
DRAWING SERIES 9402
- 70 QC & GW LABORATORIES BUILDING
DRAWING SERIES 08006
- 71 CLASS A WEST CONTAINERIZED WASTE AREAS
DRAWING SERIES 04080 & 10014
- 72 MIXED WASTE SOUTH CONTAINER STORAGE AREA
- 73 MIXED WASTE SOUTHEAST CONTAINER STORAGE AREA
DRAWING SERIES 03023
- 74 FUELING STATION
DRAWING SERIES 17004
- 75 SHREDDER FACILITY
DRAWING SERIES 05056
- 76 RESERVED
- 77 DECON ACCESS CONTROL BUILDING
DRAWING SERIES 05015, 06007
- 78 INTERMODAL CONTAINER WASH FACILITY
DRAWING SERIES 05008, 06007
- 79 LARW OPERATIONS TRUCK WASH PAD
DRAWING SERIES 04011
- 80 BULK STORAGE PAD (DEMOLISHED JUNE, 2006)
DRAWING SERIES 9412
- 81 LLRW BONE YARD
- 82 LLRW OPERATIONS BUILDING
DRAWING SERIES 07015
- 83 RAIL GUARD SHACK
- 84 WATER TOWER (WELL/SALT WATER SUPPLY)
- 85 MAGNESIUM CHLORIDE STORAGE/TRANSFER

LEGEND

FENCE	BUILDING
RAILROAD	ROAD, IMPROVED
SECTION LINE	ROAD, GRAVEL
PERMITTED EMBANKMENT LIMITS	PONDS
EMBANKMENT BREAK LINES	
PROPERTY LINE	

NOTE: THE NUMBERS LISTED ABOVE DO NOT REPRESENT THE ACTUAL BUILDING NUMBERS



DATE	BT	DESCRIPTION OF CHANGE
11/08/23 NC		2023 UPDATE - ADDED NOTE NUMBERS DO NOT REPRESENT ACTUAL BUILDING NUMBERS
11/23/22 GCB		2022 UPDATE - TO SHOW NEW EAST SIDE ROTARY FACILITY
04/27/22 RGD		2022 UPDATE
11/10/21 DFB		2021 UPDATE
4/5/21 DFB		UPDATED TO SHOW REVISED 11e(2) & PROPOSED FEDERAL CELLS
11/26/18 DFB		2019 UPDATE (ADDED STORAGE/MANT TRACKS & FUEL STATION) - FOR INFORMATION ONLY

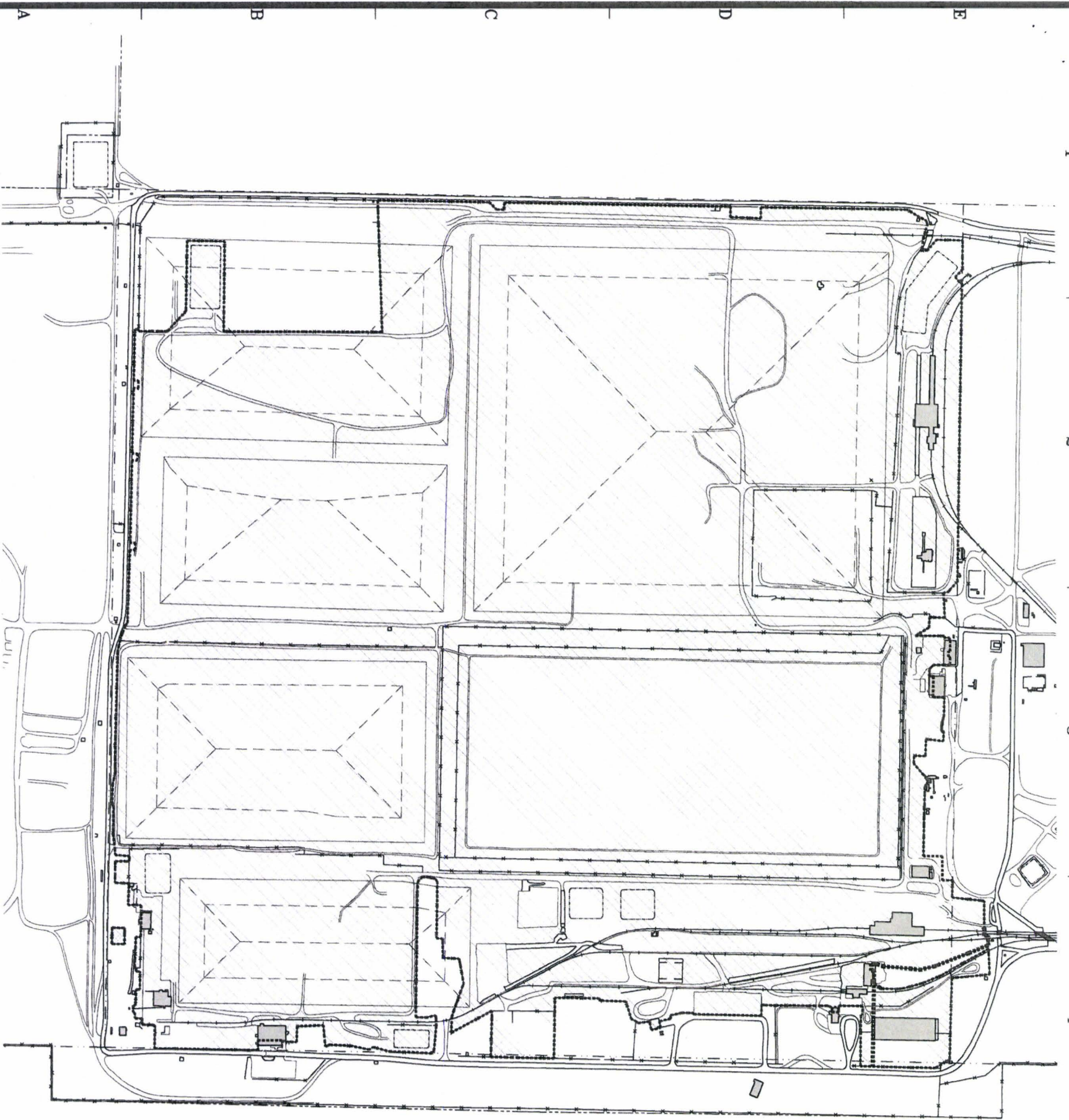
ENERGYSOLUTIONS

ENERGYSOLUTIONS "CLIVE" FACILITY
CLIVE DISPOSAL FACILITY
SITE LAYOUT AND FACILITY LEGEND
CLIVE, UTAH

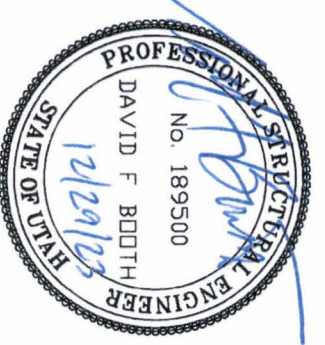
FOR INFORMATION ONLY

D. BOOTH
G. DUTSON
D. BOOTH
AS SHOWN 03/19/08

**0801
G03**



- LEGEND**
- FENCE
 - RAILROAD
 - SECTION LINE
 - PERMITTED EMBANKMENT LIMITS
 - EMBANKMENT BREAK LINES
 - PROPERTY LINE
 - BUILDING
 - ▭ ROAD, IMPROVED
 - ▭ ROAD, GRAVEL
 - ▭ PONDS
 - ▭ RADIOLOGICALLY CONTROLLED AREA (RCA)



NOTE:
RCA BOUNDARY IS CURRENT AS OF 12/29/2023.

DATE	BY	DESCRIPTION OF CHANGE
12/29/23	NC	REVISED FOR FEDERAL CELL APPLICATION RFI (B3) UPDATED EMBANKMENT LINES
11/09/23	NC	2023 UPDATE
11/23/22	GDD	REVISED FOR RELEASE OF ROTARY PROJECT AREA AND ANNUAL SUBMITTAL
1/17/22	DFB	REVISED FOR RELEASE OF ROTARY PROJECT AREA
11/10/21	DFB	2021 UPDATE
4/5/21	DFB	UPDATED TO SHOW REVISED 11e.(2) & PROPOSED FEDERAL CELLS
11/26/18	DFB	201 UPDATE (UPDATED FOR FUEL STATION) - FOR INFORMATION ONLY

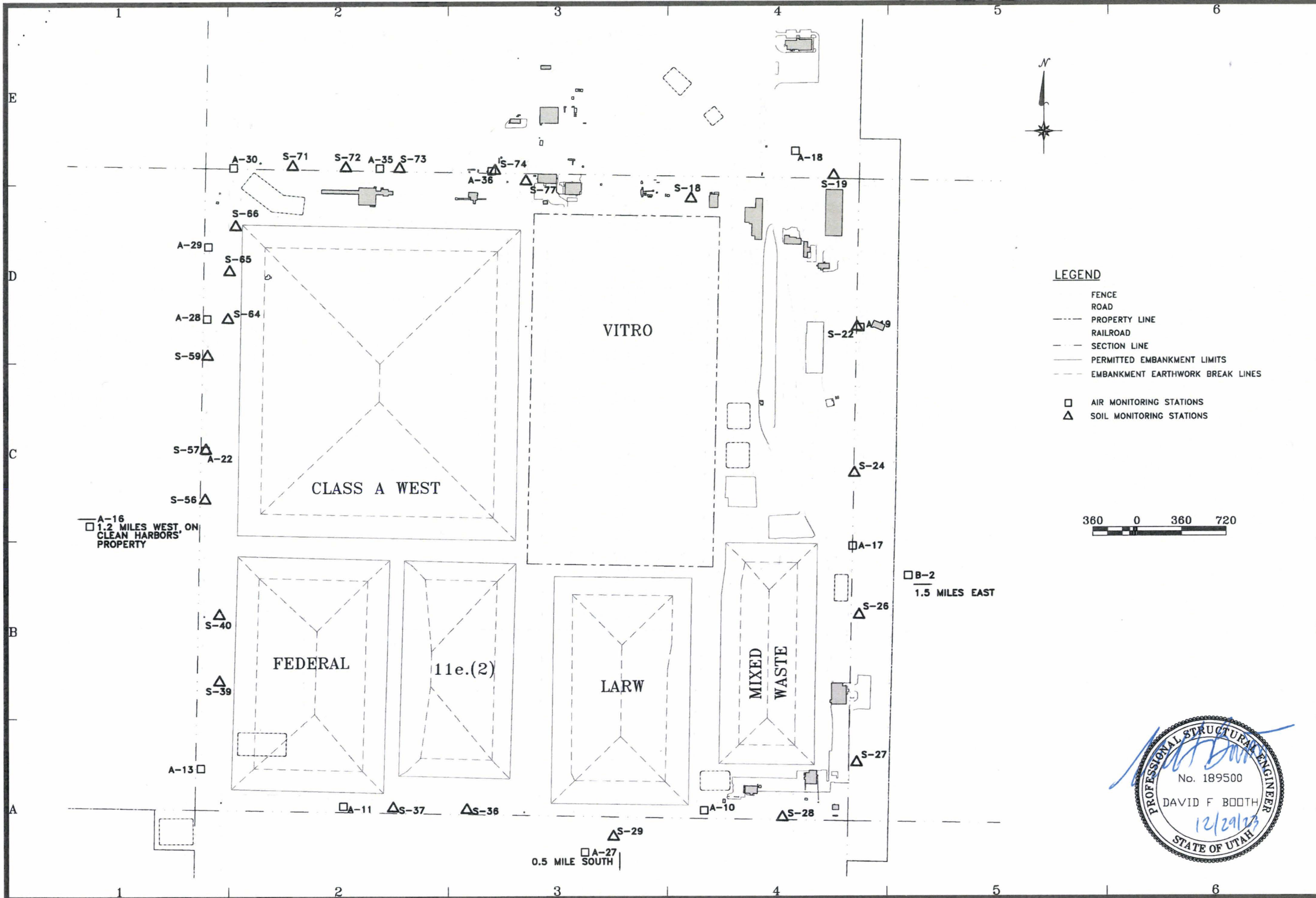
ENERGYSOLUTIONS

"CLIVE" FACILITY
ENERGYSOLUTIONS SITE FACILITIES
RADIOLOGICALLY CONTROLLED AREA
CLIVE, UTAH

FOR INFORMATION ONLY

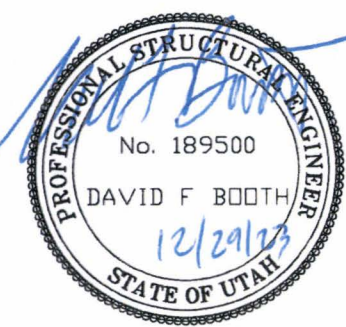
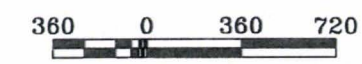
0801
G04

AS SHOWN 03/19/08 25



LEGEND

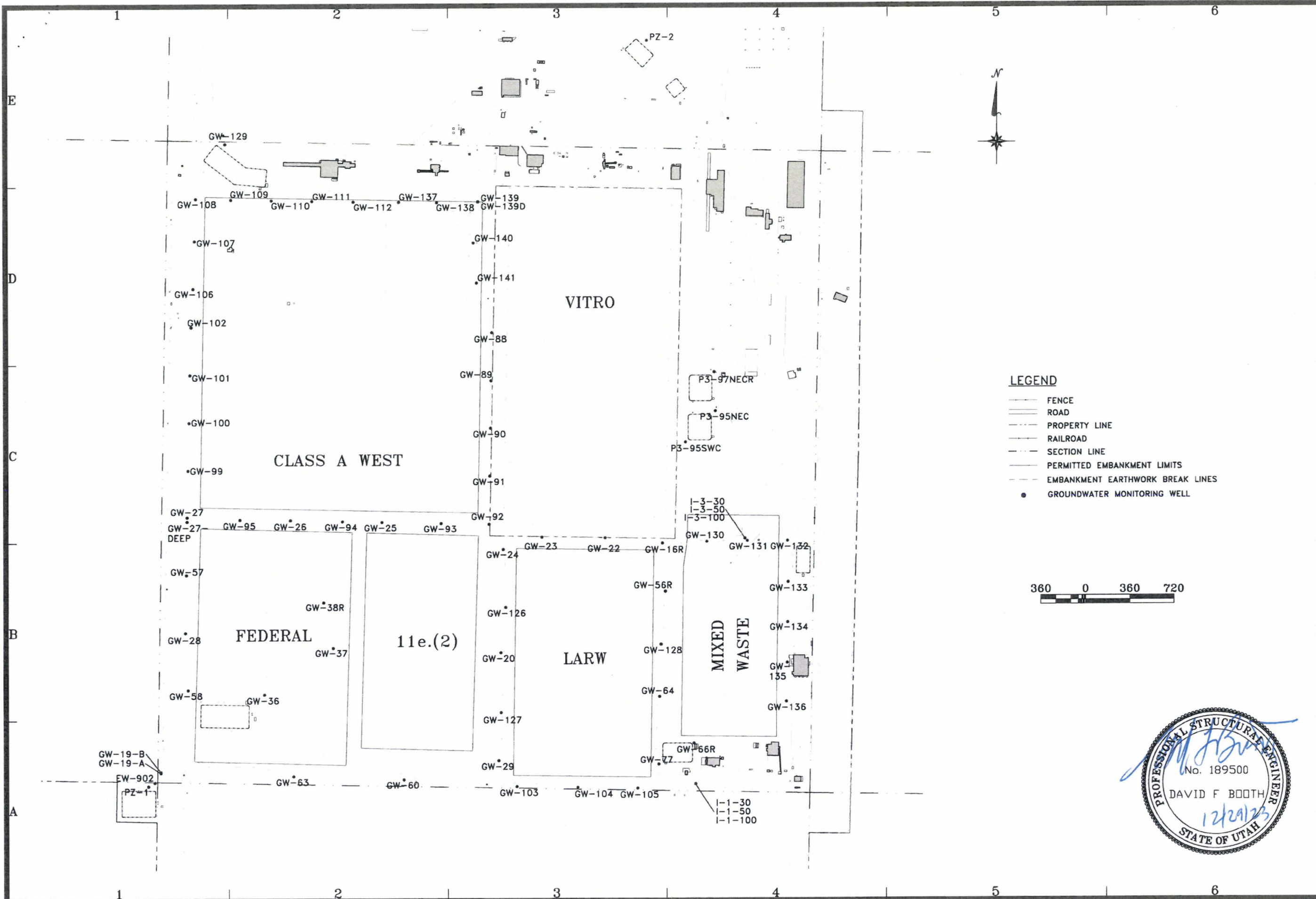
- FENCE
- ROAD
- - - PROPERTY LINE
- RAILROAD
- - - SECTION LINE
- PERMITTED EMBANKMENT LIMITS
- - - EMBANKMENT EARTHWORK BREAK LINES
- AIR MONITORING STATIONS
- △ SOIL MONITORING STATIONS



DATE	BY	DESCRIPTION OF CHANGE
12/29/23	DFB	FEDERAL CELL APPLICATION RFI (B-3, B-16, B-24, & B-4) UPDATES
11/08/23	DFB	2023 UPDATE
11/10/21	DFB	REVISED PROPERTY BOUNDARIES
12/29/14	DFB	2014 UPDATE

ENERGYSOLUTIONS
 "CLIVE" FACILITY
 ENERGYSOLUTIONS SITE FACILITIES
 ENVIRONMENTAL MONITORS
 CLIVE, UTAH

DESIGNED BY	D. BOOTH
DRAWN BY	N. CLARKE
CHECKED BY	D. BOOTH
SCALE	AS SHOWN
DATE	05/22/07
PROJECT NO.	07007 J01

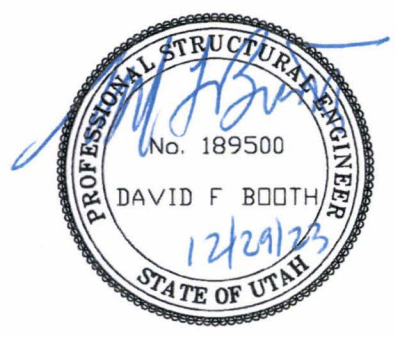


- LEGEND**
- FENCE
 - ROAD
 - PROPERTY LINE
 - RAILROAD
 - SECTION LINE
 - PERMITTED EMBANKMENT LIMITS
 - EMBANKMENT EARTHWORK BREAK LINES
 - GROUNDWATER MONITORING WELL

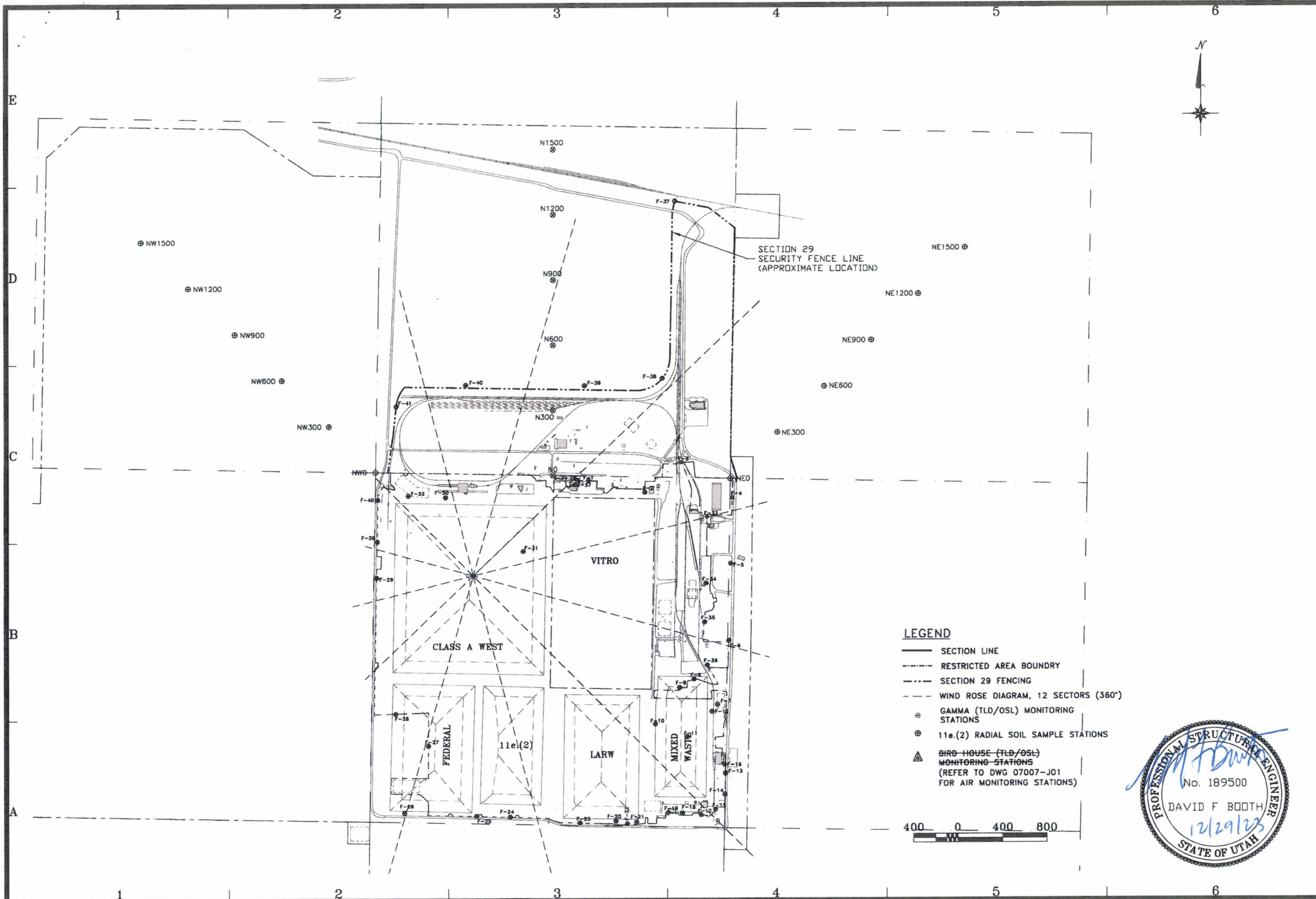
NO.	DATE	DESCRIPTION OF CHANGE
1	12/29/23	INC. FEDERAL CELL APPLICATION RT (0-1, R-1R, & B-5) UPDATES
2	11/09/23	INC. 2023 UPDATE
3	11/28/22	GOCC COMPLIANCE FOR WELL GW-135
4	11/10/21	DFBI UPDATED PROPERTY BOUNDARIES & 11e(2) CELL
5	11/27/18	DFBI REMOVED WELLS 61, 62, 63, 64, 65, 66, 67 & UNDATED 2018 SITE SURVEY
6	10/27/18	DFBI UPDATED FOR CW & WF EMBANKMENTS & 2015 SITE SURVEY
7	10/7/15	DFBI REMOVED GW 41, 42, 55, 67, 67R, 68, 68R, 70, 113, 114, 115, 116, 117, 118, 119, 121, 122, 123R, 124, 125
8	3/2/11	DFBI REMOVED WELLS GW-130 THROUGH GW-141
9	2/18/10	DFBI ADDED WELLS GW-130 THROUGH GW-129
10	10/15/07	DFBI ADDED GW-129
11	3/26/07	DCS FOR PERMIT ONLY

ENERGYSOLUTIONS

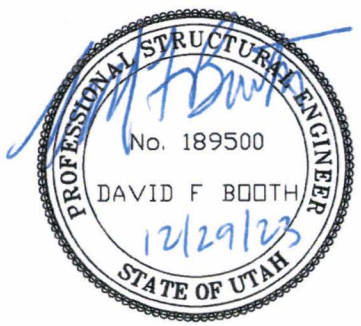
"CLIVE" FACILITY
 ENERGYSOLUTIONS SITE FACILITIES
 GROUNDWATER MONITORING WELLS
 CLIVE, UTAH



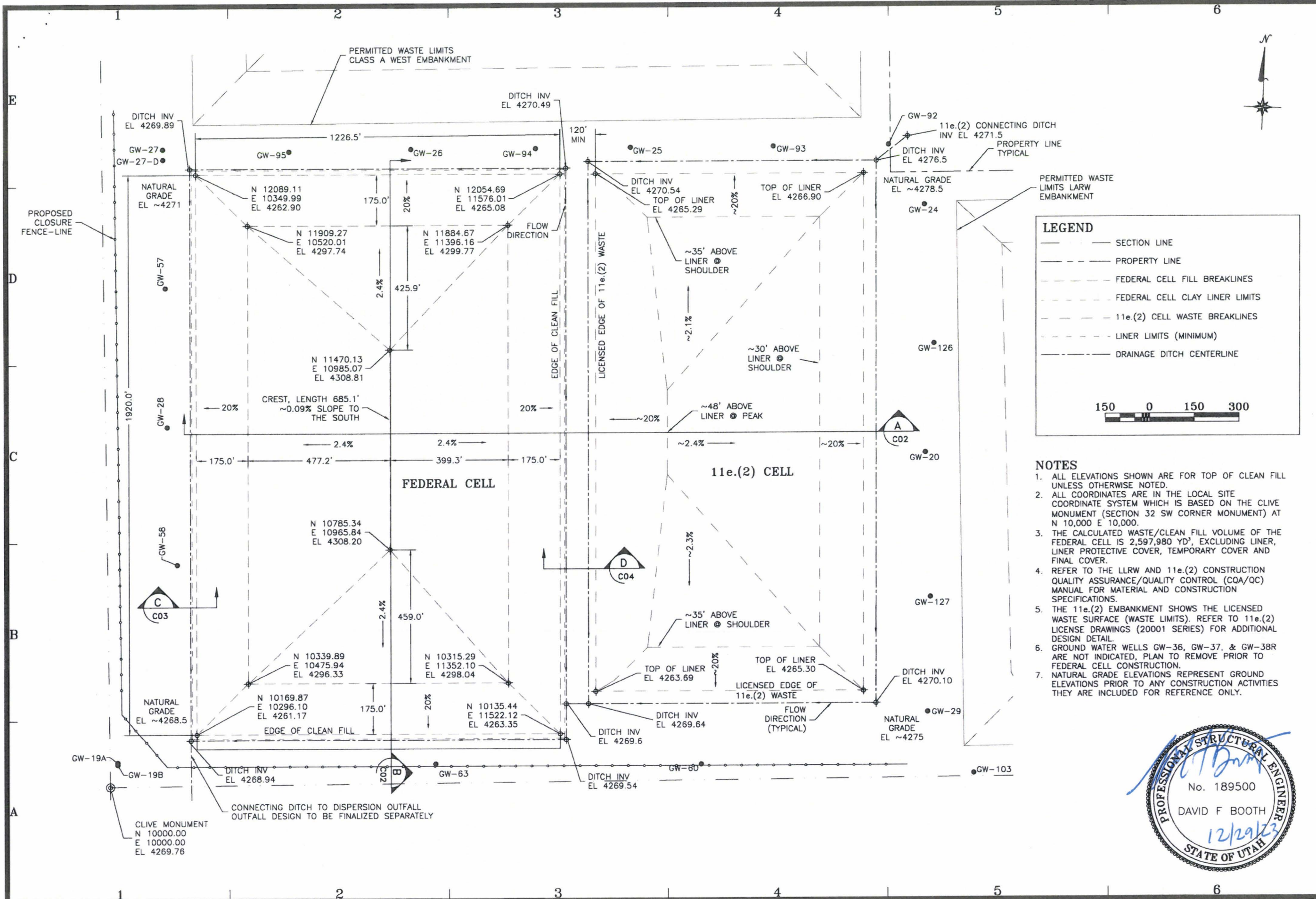
DESIGNED BY	D. BOOTH
CHECKED BY	N. CLARKE
APPROVED BY	D. BOOTH
SCALE	AS SHOWN
DATE	3/26/07
PROJECT NO.	07007 J02



- LEGEND**
- SECTION LINE
 - - - - RESTRICTED AREA BOUNDARY
 - - - - SECTION 29 FENCING
 - - - - WIND ROSE DIAGRAM, 12 SECTORS (360°)
 - ⊕ GAMMA (TLD/OSL) MONITORING STATIONS
 - ⊕ 11e.(2) RADIAL SOIL SAMPLE STATIONS
 - ▲ BIRD HOUSE (TLD/OSL) MONITORING STATIONS (REFER TO DWG 07007-J01 FOR AIR MONITORING STATIONS)



<p>“CLIVE” FACILITY ENERGYSOLUTIONS SITE FACILITIES FENCELINE TLDs CLIVE, UTAH</p>	<p>12/29/23 NC FEDERAL CELL APPLICATION RFT (B-3, B-4, B-6, B-8, B-60, B-16 & B-21) REVISED 5/18/18 [DFB] REVISED MONITORING PLAN (FORMERLY 0801-J03(R2))</p> <p>DATE BY DESCRIPTION OF CHANGE</p>
<p>DESIGNED BY: N. CLARKE CHECKED BY: G. DUTSON PROVIDED BY: D. BOOTH SCALE: AS SHOWN 01/21/19 DRAWING NO: 07007 J03</p>	

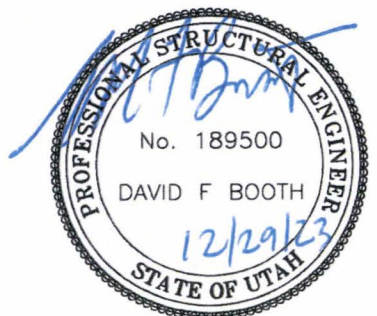


LEGEND

- SECTION LINE
- PROPERTY LINE
- FEDERAL CELL FILL BREAKLINES
- FEDERAL CELL CLAY LINER LIMITS
- 11e.(2) CELL WASTE BREAKLINES
- LINER LIMITS (MINIMUM)
- DRAINAGE DITCH CENTERLINE

150 0 150 300

- NOTES**
- ALL ELEVATIONS SHOWN ARE FOR TOP OF CLEAN FILL UNLESS OTHERWISE NOTED.
 - ALL COORDINATES ARE IN THE LOCAL SITE COORDINATE SYSTEM WHICH IS BASED ON THE CLIVE MONUMENT (SECTION 32 SW CORNER MONUMENT) AT N 10,000 E 10,000.
 - THE CALCULATED WASTE/CLEAN FILL VOLUME OF THE FEDERAL CELL IS 2,597,980 YD³, EXCLUDING LINER, LINER PROTECTIVE COVER, TEMPORARY COVER AND FINAL COVER.
 - REFER TO THE LLRW AND 11e.(2) CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL (CQA/QC) MANUAL FOR MATERIAL AND CONSTRUCTION SPECIFICATIONS.
 - THE 11e.(2) EMBANKMENT SHOWS THE LICENSED WASTE SURFACE (WASTE LIMITS). REFER TO 11e.(2) LICENSE DRAWINGS (20001 SERIES) FOR ADDITIONAL DESIGN DETAIL.
 - GROUND WATER WELLS GW-36, GW-37, & GW-38R ARE NOT INDICATED, PLAN TO REMOVE PRIOR TO FEDERAL CELL CONSTRUCTION.
 - NATURAL GRADE ELEVATIONS REPRESENT GROUND ELEVATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES THEY ARE INCLUDED FOR REFERENCE ONLY.

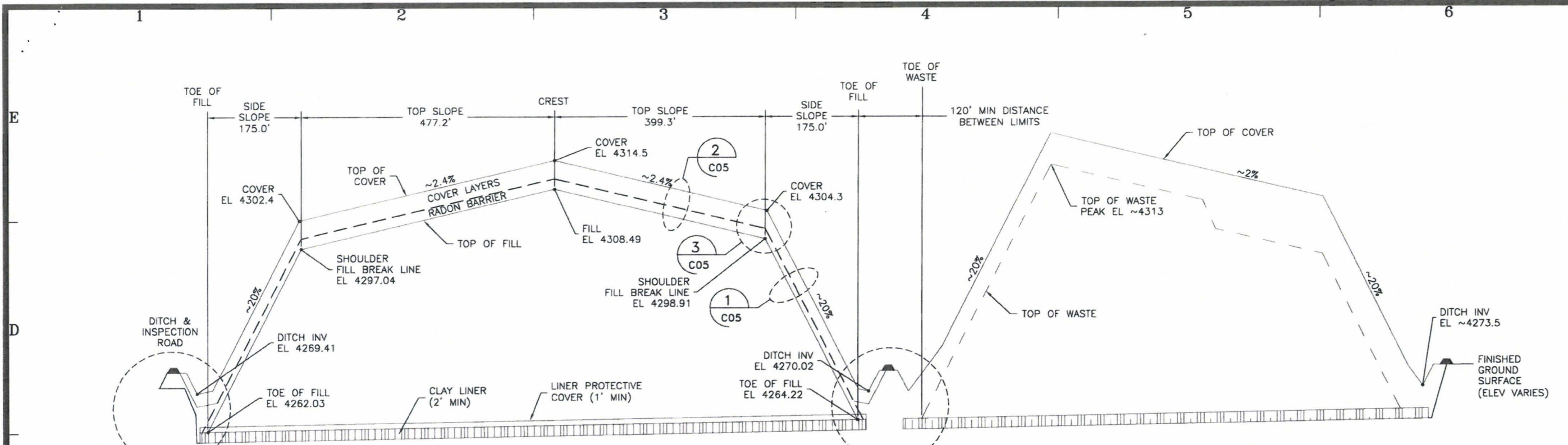


DATE	BY	DESCRIPTION OF CHANGE
12/29/23	NC	FOR LICENSE APPLICATION - CORRECTED RFI'S
6/22/21	DFB	FOR LICENSE APPLICATION - CORRECTED DIMENSION
2/19/21	DFB	FOR LICENSE APPLICATION - TEXT REVISIONS
1/12/21	DFB	FOR LICENSE APPLICATION - REVISED WASTE LIMITS
1/15/20	DFB	FOR LICENSE APPLICATION

ENERGYSOLUTIONS
CLIVE FACILITY
FEDERAL WASTE CELL
EMBANKMENT FEATURES AND CONTROLS
CLIVE, UTAH

DESIGNED BY: D. BOOTH
CHECKED BY: N. CLARKE
APPROVED BY: D. BOOTH
DATE: 01/08/20

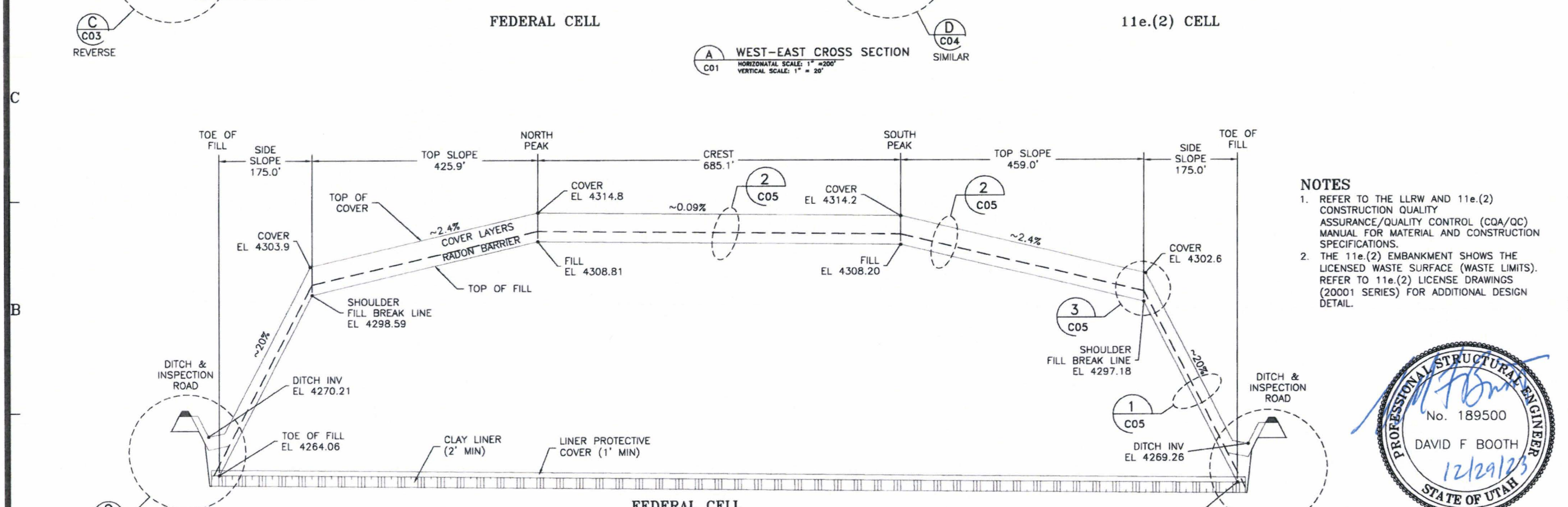
14004
C01



FEDERAL CELL

11e.(2) CELL

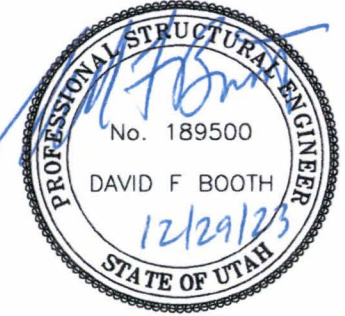
A WEST-EAST CROSS SECTION
 HORIZONTAL SCALE: 1" = 200'
 VERTICAL SCALE: 1" = 20'



FEDERAL CELL

B NORTH-SOUTH
 HORIZONTAL SCALE: 1" = 200'
 VERTICAL SCALE: 1" = 20'

- NOTES**
1. REFER TO THE LLRW AND 11e.(2) CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL (CQA/QC) MANUAL FOR MATERIAL AND CONSTRUCTION SPECIFICATIONS.
 2. THE 11e.(2) EMBANKMENT SHOWS THE LICENSED WASTE SURFACE (WASTE LIMITS). REFER TO 11e.(2) LICENSE DRAWINGS (20001 SERIES) FOR ADDITIONAL DESIGN DETAIL.



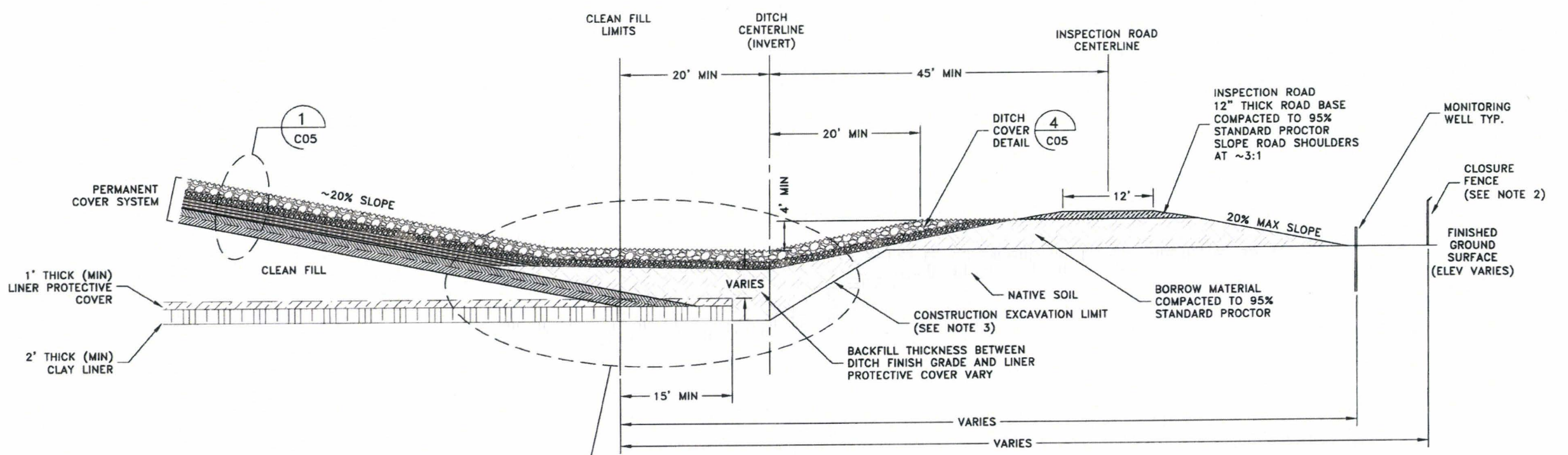
12/29/23	NC FOR LICENSE APPLICATION - CORRECTED RFT'S LISTED IN DRC-2023-078530
6/22/21	DFB FOR LICENSE APPLICATION - CORRECTED DIMENSION & TEXT REVISIONS
2/19/21	DFB FOR LICENSE APPLICATION - TEXT REVISIONS
2/12/21	DFB FOR LICENSE APPLICATION - REVISED WASTE LIMITS
1/16/20	DFB FOR LICENSE APPLICATION
	DATE BY DESCRIPTION OF CHANGE

ENERGYSOLUTIONS
 CLIVE FACILITY
 FEDERAL WASTE CELL
 EMBANKMENT CROSS SECTIONS
 CLIVE, UTAH

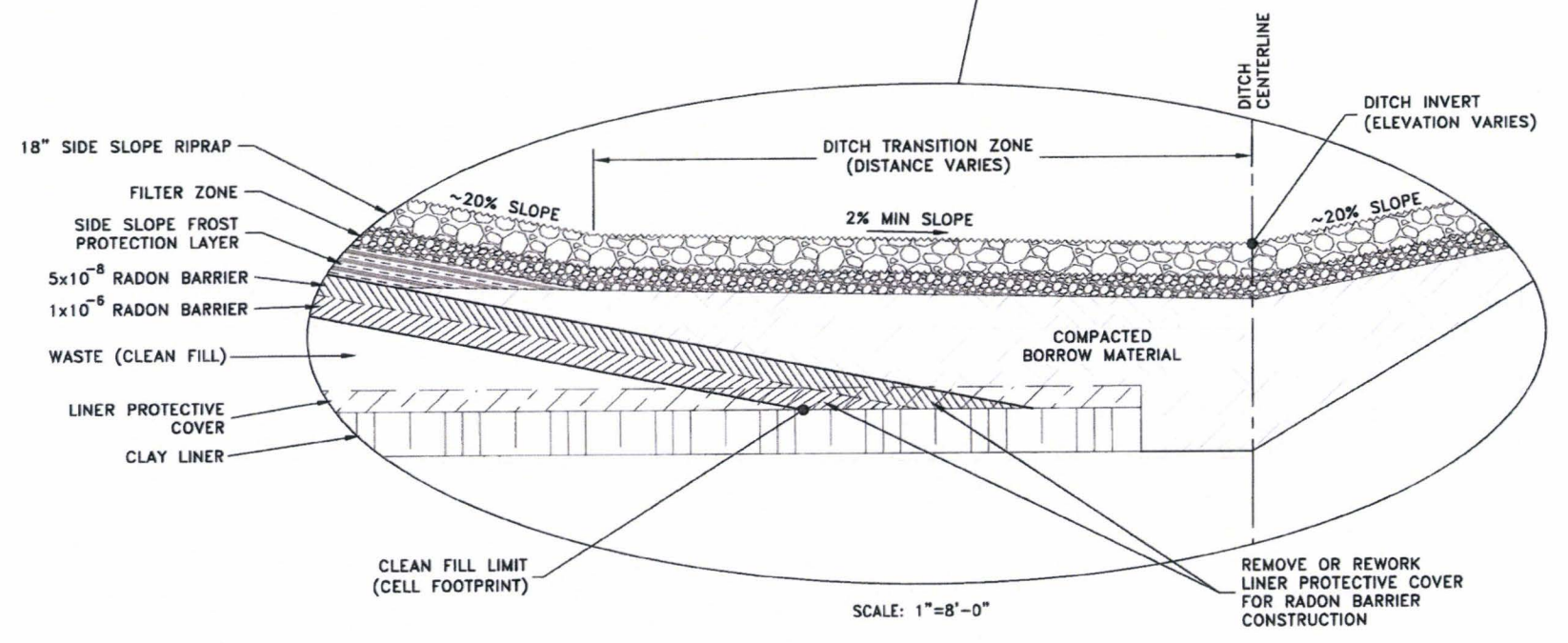
DESIGNED BY	D. BOOTH
REVISIONS BY	N. CLARKE
APPROVED BY	D. BOOTH
SCALE	AS NOTED
DATE	01/08/20

14004
 C02

1 2 3 4 5 6

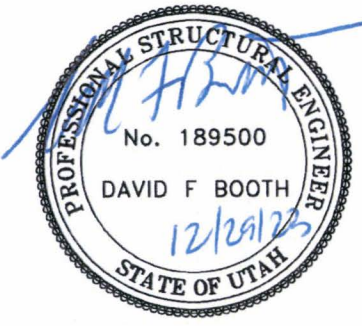


C DITCH & ROAD DETAIL TYP.
C01,C02 SCALE: 1"=16'-0"



SCALE: 1"=8'-0"

- NOTES**
1. REFER TO THE LLRW AND 11e.(2) CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL (CQA/QC) MANUAL FOR MATERIAL AND CONSTRUCTION SPECIFICATIONS.
 2. REFER TO 14004-C01 FOR CLOSURE FENCE ROUTING ALONG THE WEST AND SOUTH SIDES OF THE EMBANKMENT. CLOSURE FENCE CONNECTS TO THE CLASS A WEST AND 11e.(2) EMBANKMENT CLOSURE FENCES.
 3. EXCAVATION LIMITS AND SLOPES FOR LINER CONSTRUCTION VARY DEPENDING ON FIELD CONDITIONS. FOUNDATION EXCAVATION EXTENDS HORIZONTALLY A MINIMUM OF 3 FT BEYOND CLAY LINER LIMITS.

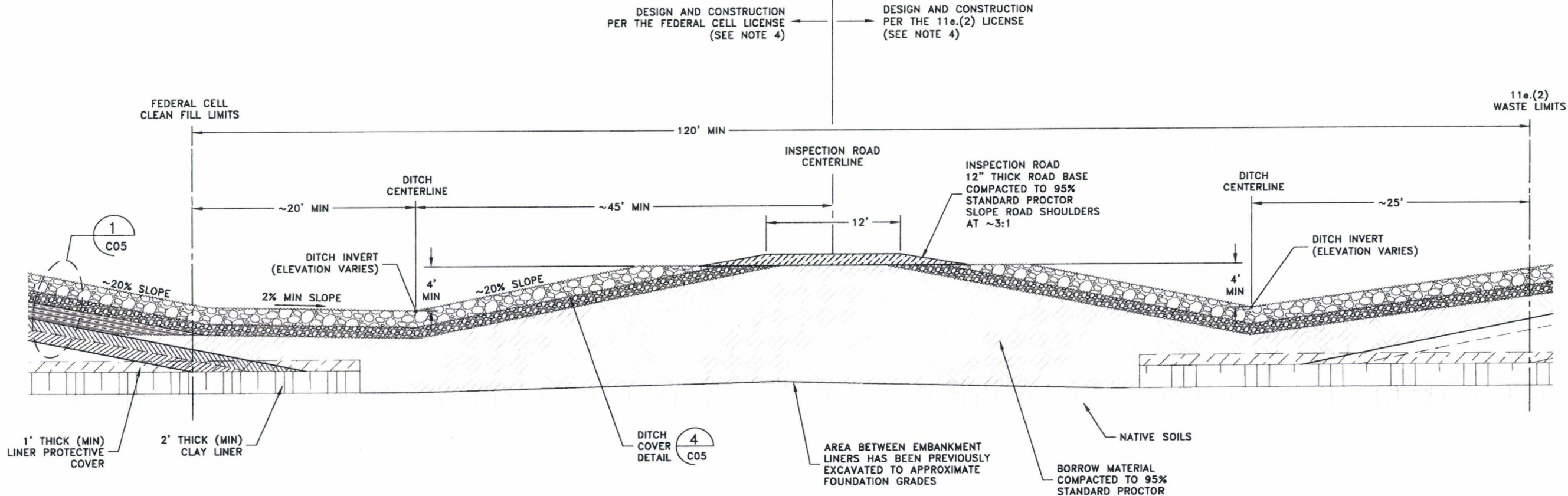


DATE	BY	DESCRIPTION OF CHANGE
12/29/23	NC	FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-078530
2/19/24	DFB	FOR LICENSE APPLICATION - REVISED TEXT
1/16/20	DFB	FOR LICENSE APPLICATION

ENERGYSOLUTIONS
ENERGYSOLUTIONS "CLIVE" FACILITY
FEDERAL WASTE CELL
SECTIONS AND DETAILS, 1 OF 3
CLIVE, UTAH

DESIGNED BY	D. BOOTH
CHECKED BY	N. CLARKE
APPROVED BY	D. BOOTH
DATE	01/13/20
PROJECT NO.	14004 C03

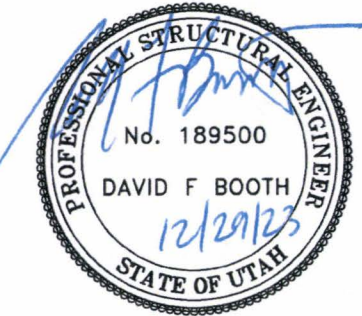
1 2 3 4 5 6



D DITCH DETAIL BETWEEN CELLS
 C01,C02 SCALE: 1"=8'-0"

NOTES

1. REFER TO THE LLRW AND 11e.(2) CONSTRUCTION QUALITY ASSURANCE/QUALITY CONTROL (COA/QC) MANUAL FOR MATERIAL AND CONSTRUCTION SPECIFICATIONS.
2. EXCAVATION LIMITS AND SLOPES FOR LINER CONSTRUCTION VARY DEPENDING ON FIELD CONDITIONS. FOUNDATION EXCAVATION EXTENDS HORIZONTALLY A MINIMUM OF 3 FT BEYOND CLAY LINER LIMITS.
3. THE 11e.(2) EMBANKMENT SHOWS THE LICENSED WASTE SURFACE (WASTE LIMITS). REFER TO 11e.(2) LICENSE DRAWINGS (20001 SERIES) FOR ADDITIONAL DESIGN DETAIL.
4. DEPENDING ON THE CONSTRUCTION SEQUENCE OF THE TWO EMBANKMENTS, THE INSPECTION ROAD AND UNDERLYING BORROW MAY BE CONSTRUCTED PER EITHER LICENSE. FURTHERMORE, THE INSPECTION ROAD WILL NEED TO BE REWORKED DURING THE CONSTRUCTION OF THE EMBANKMENT THAT IS COMPLETED LAST.

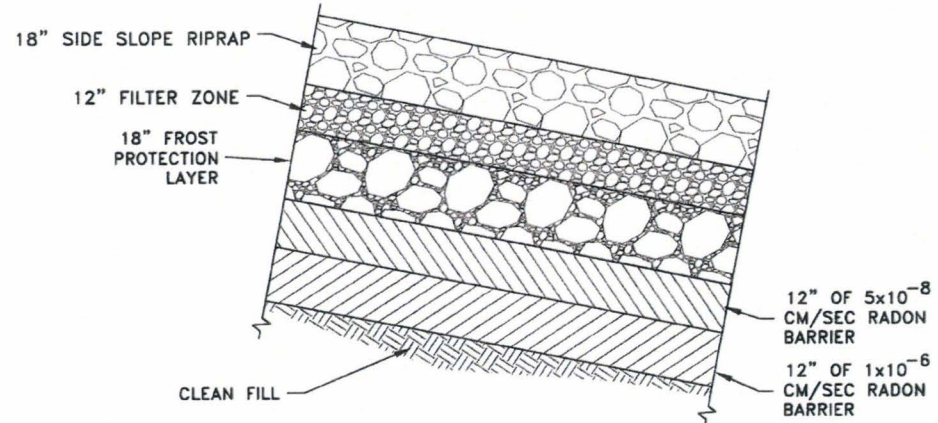


ENERGYSOLUTIONS
 ENERGY SOLUTIONS "CLIVE" FACILITY
 FEDERAL WASTE CELL
 SECTIONS AND DETAILS, 2 OF 3
 CLIVE, UTAH

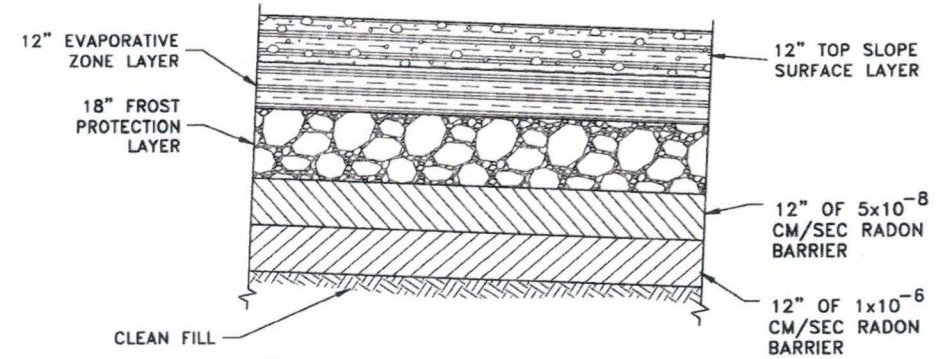
12/29/23	NC	FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-0785.30
2/19/21	DFBI	FOR LICENSE APPLICATION - REVISED TEXT
2/12/21	DFBI	FOR LICENSE APPLICATION - REVISED WASTE LIMITS
1/16/20	DFBI	FOR LICENSE APPLICATION
	DATE	BY DESCRIPTION OF CHANGE

DESIGNED BY	D. BOOTH
CHECKED BY	N. CLARKE
APPROVED BY	D. BOOTH
DATE	01/14/20

14004
 C04



1 DETAIL-SIDE SLOPE
C02 NTS TYPICAL SIDE SLOPE COVER DETAIL



2 DETAIL-TOP SLOPE & CREST
C02 NTS TYPICAL TOP SLOPE COVER DETAIL

COVER MATERIAL SPECIFICATIONS

SURFACE LAYER, TOP SLOPE LAYER:
85% UNIT 4 MATERIAL AMENDED WITH 15% (±3%), BY VOLUME, GRAVEL. GRAVEL IS SPECIFIED AS FOLLOWS.
D₁₀₀ ≤ 3 INCH
D₃₀ ≤ .85 INCH (40 mm)

EVAPORATIVE ZONE LAYER:
UNIT 4 CLAY MATERIAL. NO COMPACTION SPECIFICATION.

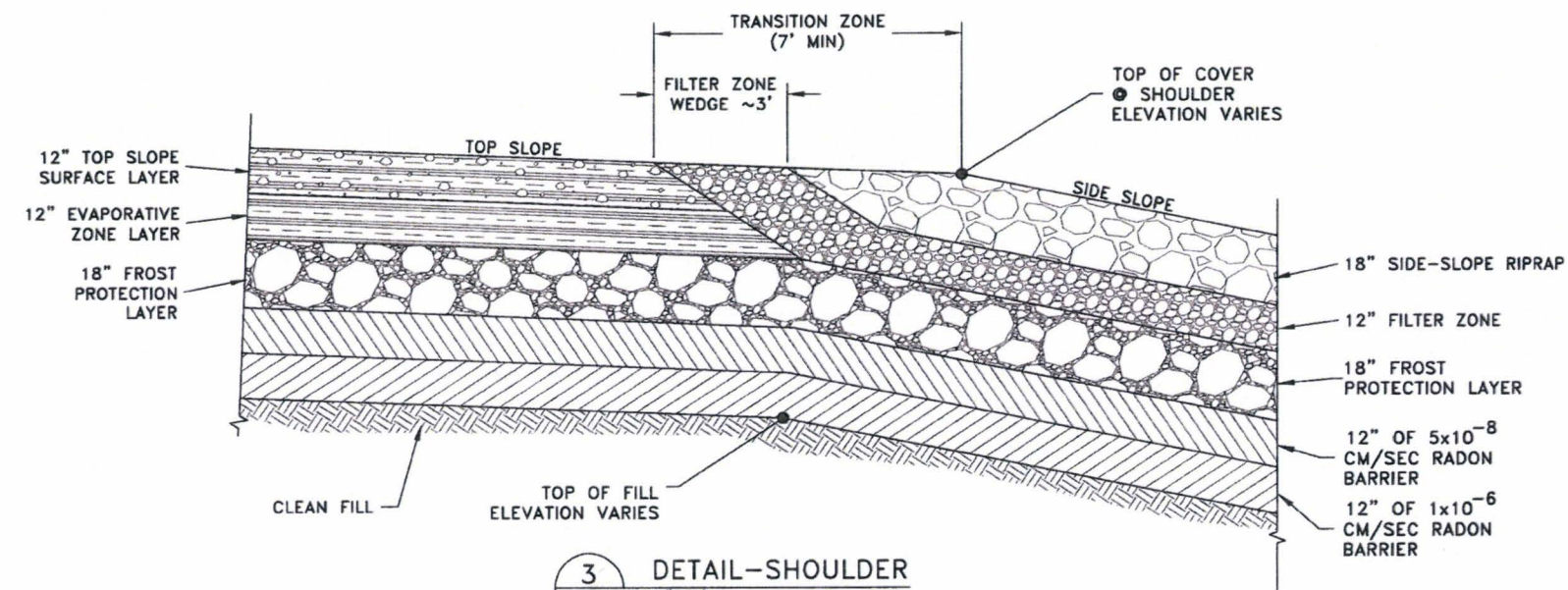
FROST PROTECTION LAYER:
BANK RUN COBBLE/GRAVEL/SOIL MATERIAL. WELL GRADED
D₁₀₀ ≤ 16 INCH

SIDE-SLOPE RIPRAP:
D₁₀₀ = 12 TO 16 INCH
D₉₅ = 8 TO 12 INCH
D₅₀ = 4.5 TO 8 INCH
D₁₅ = 2 TO 4 INCH
D₅ ≥ NO. 200 SIEVE

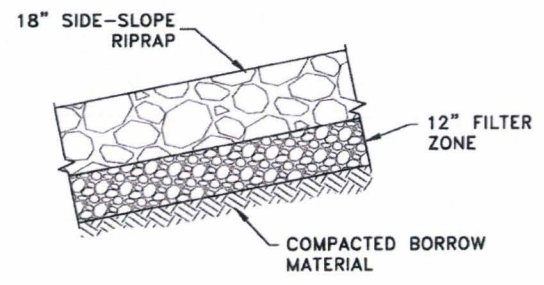
FILTER ZONE
D₁₀₀ = 1.5 TO 3 INCH
D₉₅ = 1 TO 2.5 INCH
D₅₀ = 0.75 TO 2 INCH
D₁₅ = 0.3125 TO 0.625 INCH
D₁₀ ≥ NO. 10 SIEVE (2mm)
D₅ ≥ NO. 200 SIEVE

NOTES:

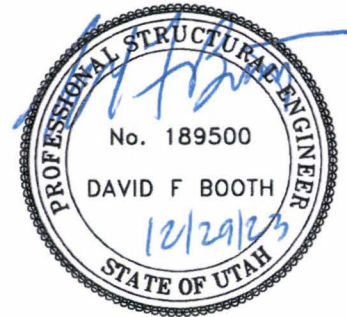
- REFER TO THE CURRENT APPROVED LLRW & 11a.(2) COA/QC MANUAL FOR ADDITIONAL MATERIAL SPECIFICATIONS, GRADATIONS, CONSTRUCTION AND TESTING REQUIREMENTS.
- SEED THE TOP SLOPE SURFACE LAYER WITH AN APPROVED SEED MIXTURE AND METHOD, PER THE ABOVE REFERENCED COA/QC MANUAL.



3 DETAIL-SHOULDER
C02 1"=10'



4 DETAIL-DITCH OUTER SLOPE
C03 NTS TYPICAL PERIMETER DITCH COVER DETAIL

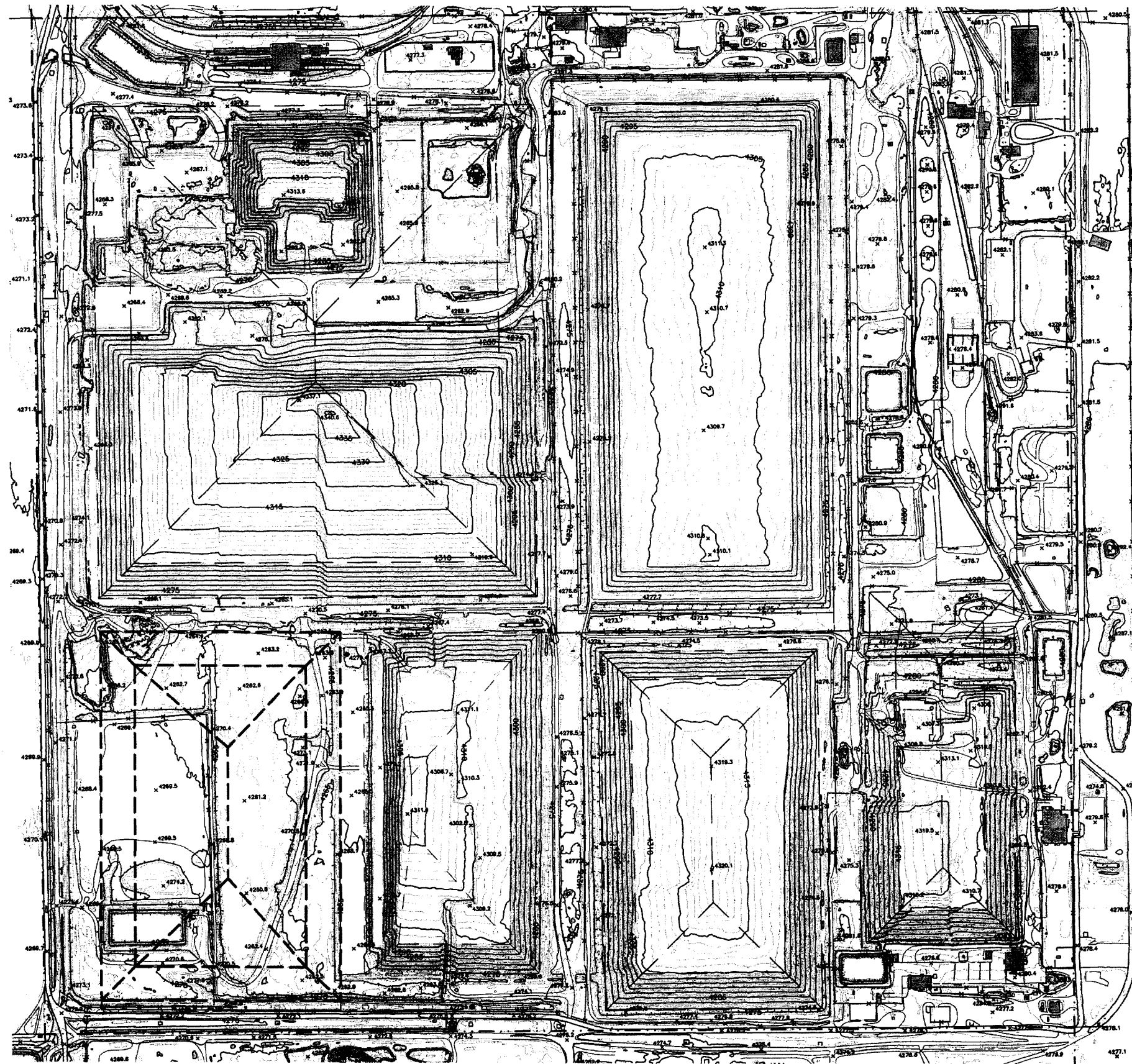


12/29/23	NC FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-078530	DATE	BY DESCRIPTION OF CHANGE
2/19/21	DFBI FOR LICENSE APPLICATION - REVISED TEXT	DATE	BY DESCRIPTION OF CHANGE
2/12/21	DFBI FOR LICENSE APPLICATION - REVISED COVER	DATE	BY DESCRIPTION OF CHANGE
1/16/20	DFBI FOR LICENSE APPLICATION	DATE	BY DESCRIPTION OF CHANGE

ENERGYSOLUTIONS

ENERGYSOLUTIONS "CLIVE" FACILITY
FEDERAL WASTE CELL
SECTIONS AND DETAILS, 3 OF 3
CLIVE, UTAH

DESIGNED BY	D. BOOTH
REVIEWED BY	N. CLARKE
APPROVED BY	D. BOOTH
DATE	AS NOTED 01/09/20
PROJECT NO.	14004 C05

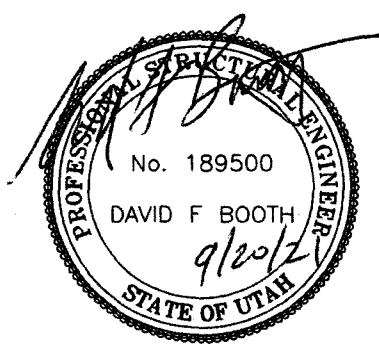


LEGEND

- SECTION LINE
- - - PROPERTY LINE
- - - FEDERAL CELL FILL BREAKLINES
- - - OTHER DISPOSAL EMBANKMENTS
- - - 11e.(2) CELL WASTE BREAKLINES

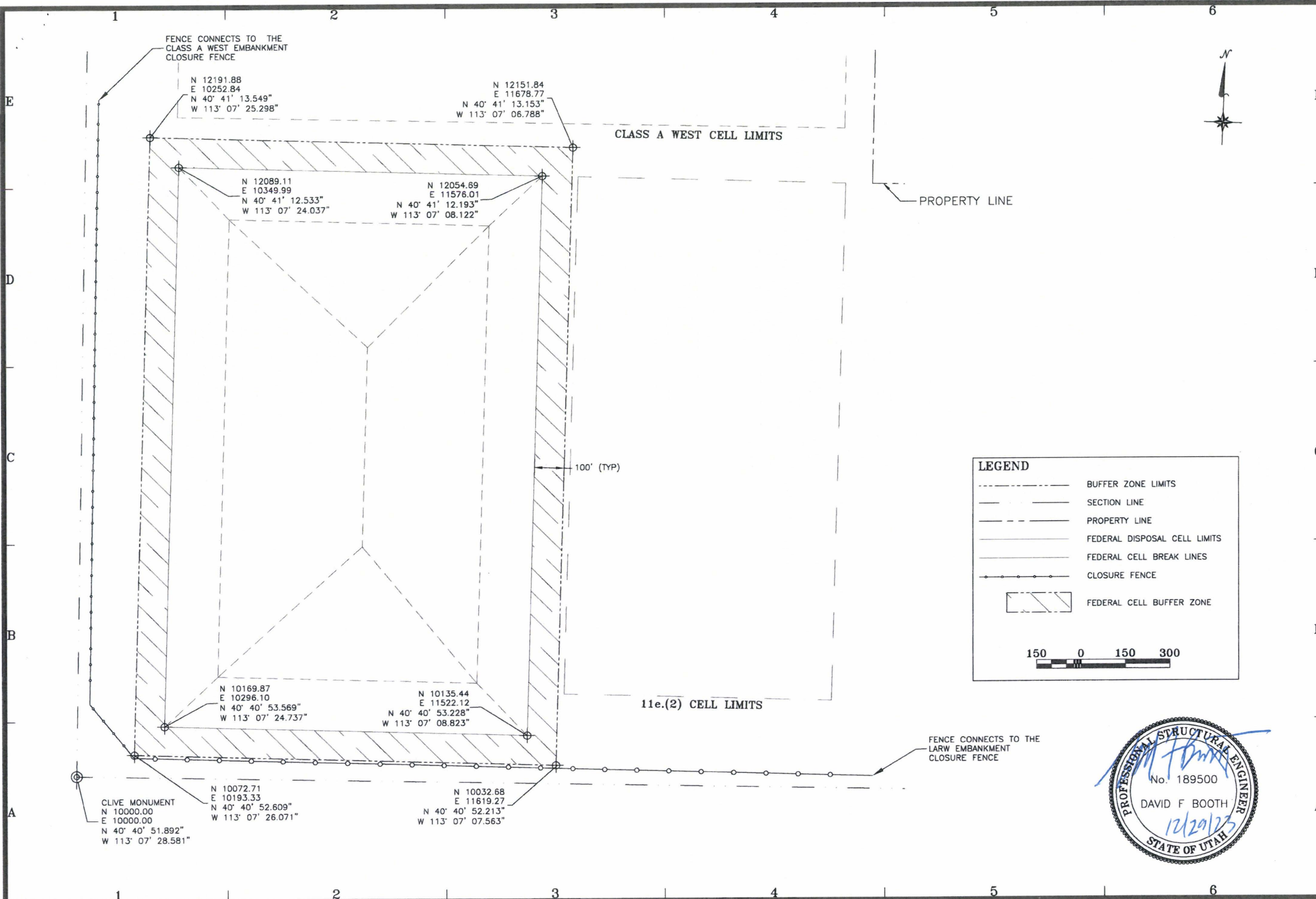
300 0 300 600

- NOTES**
1. TOPOGRAPHY IS BASED ON THE OCTOBER 1, 2020 ANNUAL AERIAL SURVEY.
 2. THE 11e.(2) EMBANKMENT IS SHOWN FOR REFERENCE ONLY. REFER TO 11e.(2) LICENSE DRAWINGS FOR ADDITIONAL DESIGN DETAIL.



ENERGYSOLUTIONS	CLIVE FACILITY FEDERAL WASTE CELL EMBANKMENT LOCATION MAP & TOPO CLIVE, UTAH			
FINAL DRAWING				
DRAWN BY D. BOOTH	DATE 9/20/21			
CHECKED BY V. ROGERS	DATE 09/20/21			
DESIGNED BY D. BOOTH	DATE 09/20/21			
14004 L01				

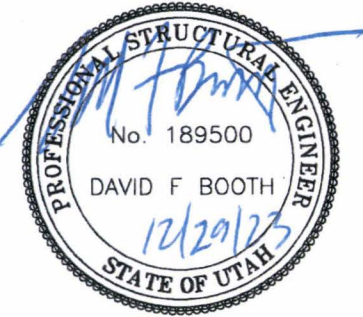
DATE 9/20/21 BY D. BOOTH FOR LICENSE APPLICATION



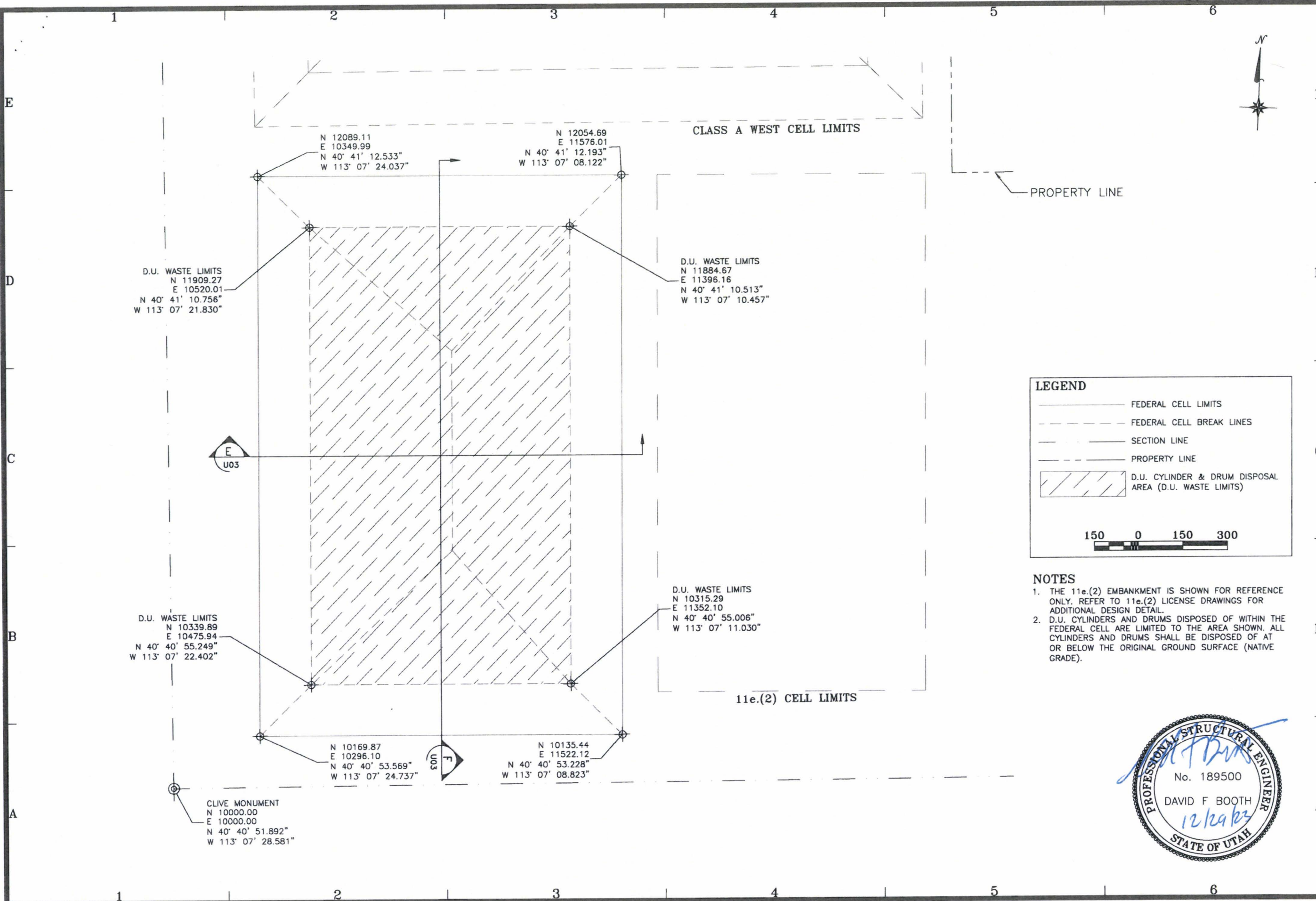
LEGEND

- BUFFER ZONE LIMITS
- SECTION LINE
- PROPERTY LINE
- FEDERAL DISPOSAL CELL LIMITS
- FEDERAL CELL BREAK LINES
- CLOSURE FENCE
- [Hatched Box] FEDERAL CELL BUFFER ZONE

150 0 150 300



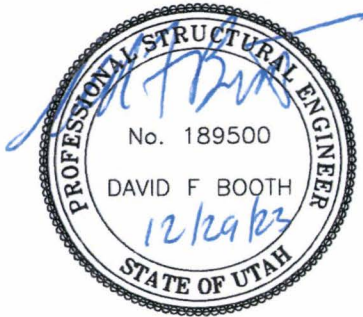
ENERGYSOLUTIONS	
CLIVE FACILITY	CLIVE, UTAH
FEDERAL WASTE CELL	
DISPOSAL CELL BUFFER ZONE	
DATE	BY DESCRIPTION OF CHANGE
12/29/23	NC FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-078530
4/5/21	DFBI CORRECTED WASTE SW CLIVE COORDINATE
2/19/21	DFBI FOR LICENSE APPLICATION--REVISED BOUNDARY
1/16/20	DFBI FOR LICENSE APPLICATION
D. BOOTH N. CLARKE D. BOOTH AS NOTED 01/14/20	
14004 U01	



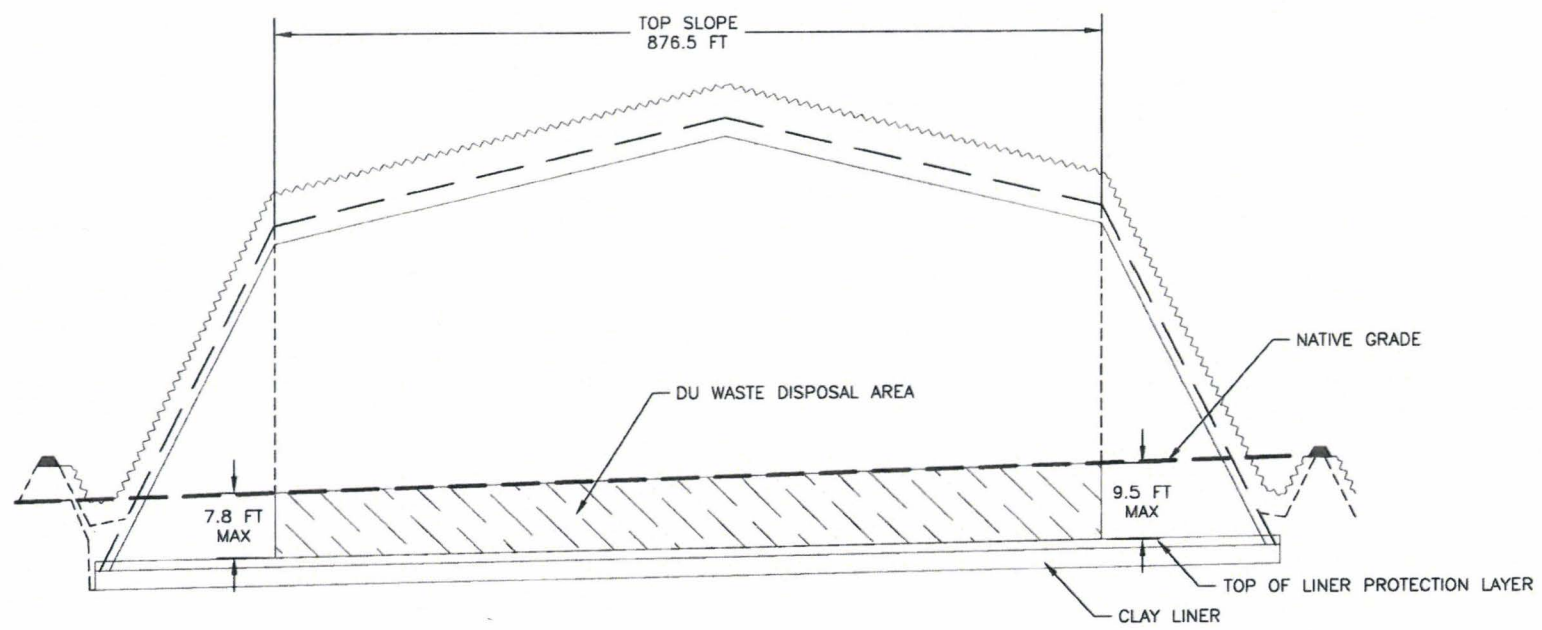
NO.	DATE	BY	DESCRIPTION OF CHANGE
1	12/29/23	NC	FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-078530
2	6/22/21	DFB	FOR LICENSE APPLICATION--ADDED CROSS SECTIONS
3	2/19/21	DFB	FOR LICENSE APPLICATION--REVISED WASTE LIMITS
4	1/16/20	DFB	FOR LICENSE APPLICATION

ENERGYSOLUTIONS

CLIVE FACILITY
FEDERAL WASTE CELL
DISPOSAL CELL WASTE LIMITS--LATITUDES & LONGITUDES
CLIVE, UTAH



DESIGNED BY	D. BOOTH
REVIEWED BY	N. CLARKE
APPROVED BY	D. BOOTH
DATE AS SHOWN	01/14/20
SCALE	AS SHOWN
PROJECT NO.	14004 U02



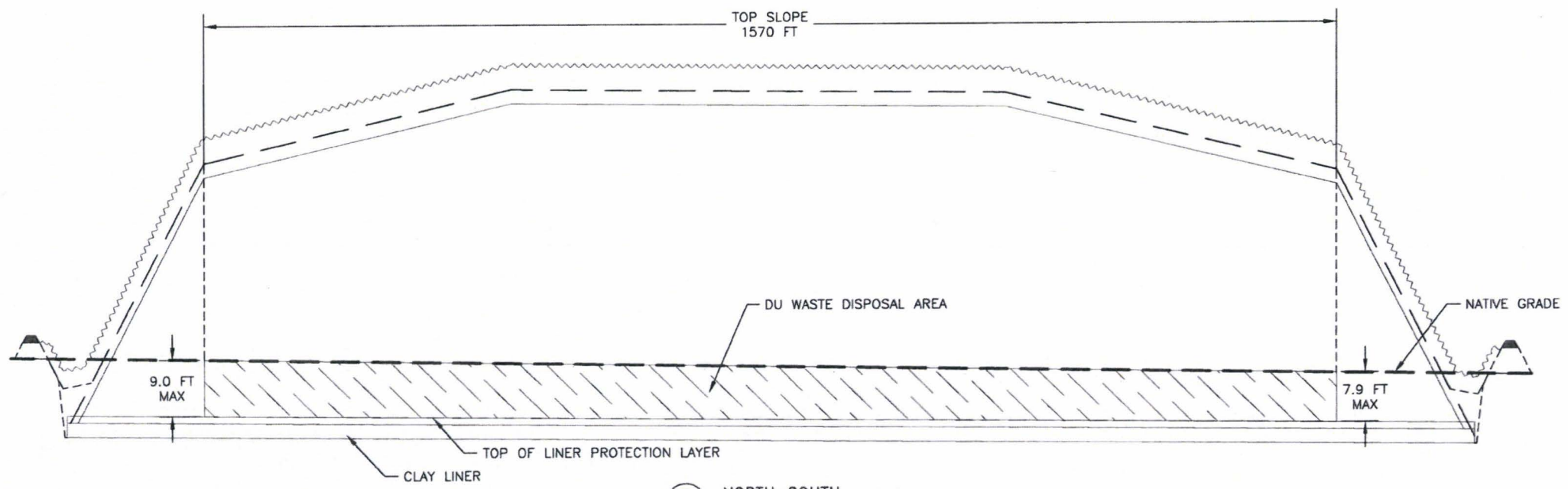
E WEST-EAST CROSS SECTION
 HORIZONTAL SCALE: 1" = 200'
 VERTICAL SCALE: 1" = 20'

LEGEND

- WASTE/CLEAN FILL LIMITS
- - - APPROXIMATE NATIVE GRADE
- - - TOP OF RADON BARRIER
- ~~~~~ TOP OF COVER
- D.U. CYLINDER & DRUM DISPOSAL AREA (D.U. WASTE LIMITS)

NOTES

1. D.U. CYLINDERS AND DRUMS DISPOSED OF WITHIN THE FEDERAL CELL ARE LIMITED TO THE AREA SHOWN. ALL CYLINDERS AND DRUMS SHALL BE DISPOSED OF AT OR BELOW THE ORIGINAL GROUND SURFACE (NATIVE GRADE) AND LIMITED TO THE HORIZONTAL AREA UNDER THE TOP SLOPES.



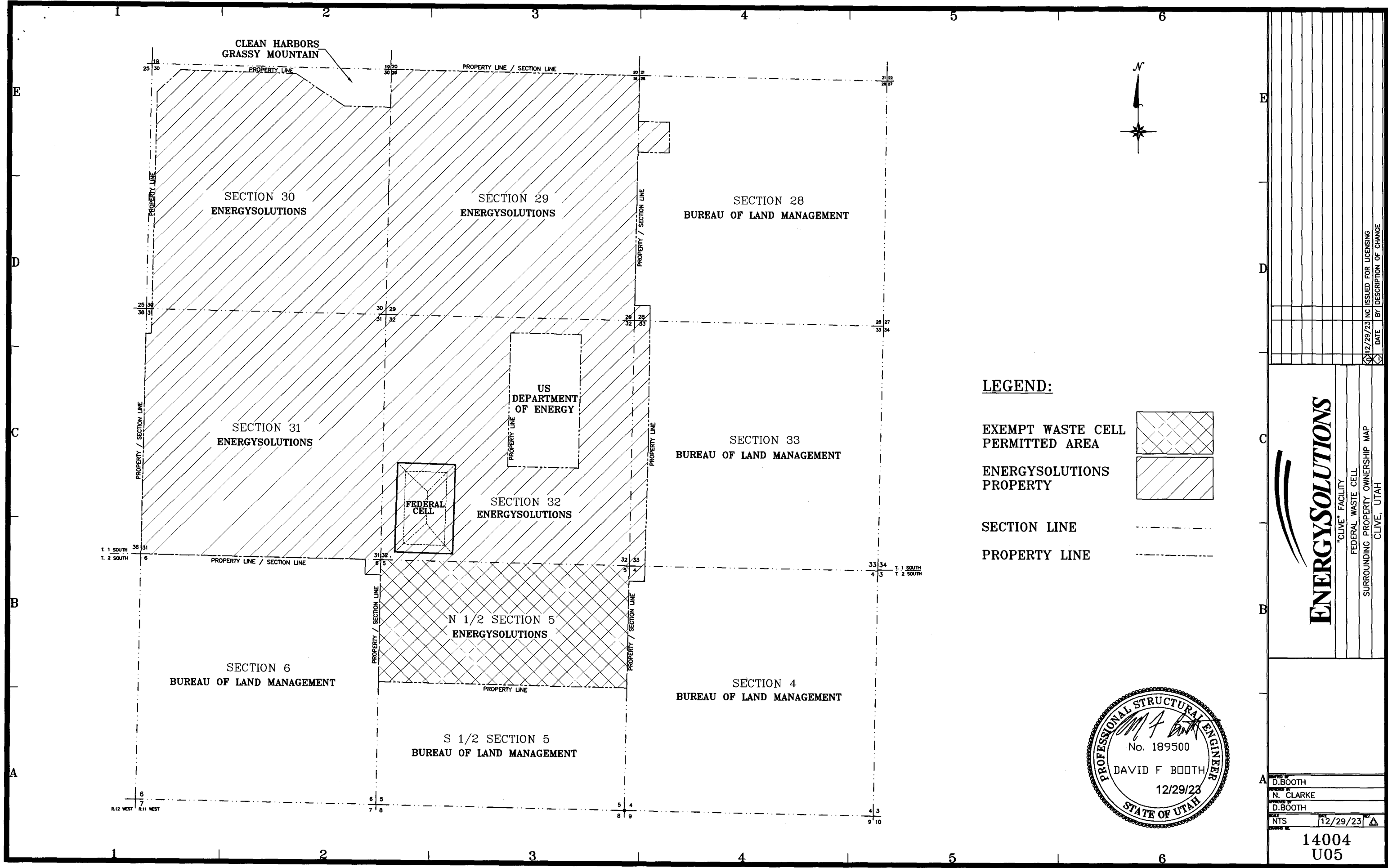
F NORTH-SOUTH
 HORIZONTAL SCALE: 1" = 200'
 VERTICAL SCALE: 1" = 20'




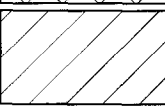


ENERGYSOLUTIONS
 CLIVE FACILITY
 FEDERAL WASTE CELL
 DISPOSAL CELL WASTE LIMITS - CROSS SECTIONS
 CLIVE, UTAH

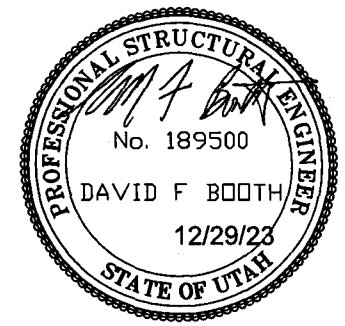
DESIGNED BY	D. BOOTH
CHECKED BY	N. CLARKE
APPROVED BY	D. BOOTH
DATE	AS SHOWN 06/22/21
PROJECT NO.	14004 U03


DATE	12/29/23	BY	D. BOOTH
DATE	06/22/21	BY	N. CLARKE
DATE	06/22/21	BY	D. BOOTH



LEGEND:

- EXEMPT WASTE CELL PERMITTED AREA 
- ENERGYSOLUTIONS PROPERTY 
- SECTION LINE 
- PROPERTY LINE 



	<p>"CLIVE" FACILITY FEDERAL WASTE CELL SURROUNDING PROPERTY OWNERSHIP MAP CLIVE, UTAH</p>
<p>DATE: 12/29/23 ISSUED FOR LICENSING: NC BY: DESCRIPTION OF CHANGE</p>	
<p>PREPARED BY: D. BOOTH CHECKED BY: N. CLARKE DESIGNED BY: D. BOOTH</p>	
<p>NTS 12/29/23</p>	
<p>14004 U05</p>	



UTILITY MAP 10

UTILITY MAP 1

UTILITY MAP 2

UTILITY MAP 3

UTILITY MAP 4

VITRO

CLASS A WEST

UTILITY MAP 5

UTILITY MAP 6

FEDERAL

11e.(2)

LARW

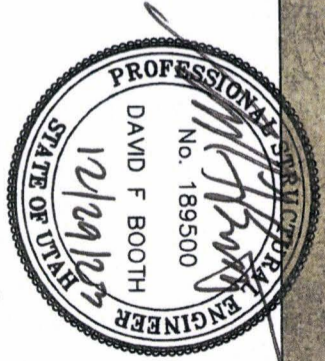
MIXED WASTE

UTILITY MAP 7

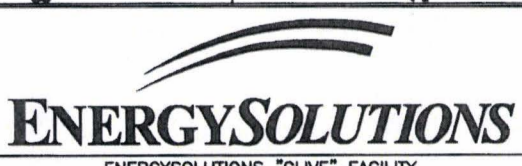
UTILITY MAP 8

UTILITY MAP 9

NOTES
1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.



FOR INFORMATION ONLY



ENERGYSOLUTIONS "CLIVE" FACILITY
2023 SITE UTILITIES
GENERAL SITE UTILITY MAP
CLIVE, UTAH

NO.	DATE	DESCRIPTION OF CHANGE
1	12/27/23	FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-078530
2		
3		
4		
5		
6		
7		
8		
9		
10		

N. CLARKE
G. DUTSON
D. BOOTH
AS NOTED 11/28/23
23007
G02

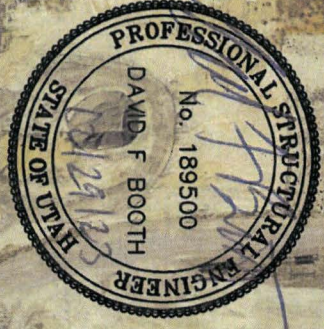


RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN INSTRUMENT BY THE UNITED STATES OF AMERICA, GRANTOR AND BROKEN ARROW INCORPORATED, GRANTEE, RECORDED FEBRUARY 24, 1995, AS ENTRY NO. 072175, IN BOOK 390, AT PAGE 798 OF OFFICIAL RECORDS. (TELEPHONE LINE)

NOTES
1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.

LEGEND:

- SECTION LINE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- PHONE LINE



DATE	BY	DESCRIPTION OF CHANGE
12/27/23	NC	FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530

ENERGYSOLUTIONS
 ENERGYSOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 1
 CLIVE, UTAH

FOR INFORMATION ONLY

N. CLARKE
 G. DUTSON
 D. BOOTH
 AS NOTED 11/28/23
 23007
 C01



LEGEND:

- SECTION LINE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- PHONE LINE
- WATER
- UNDERGROUND POWER
- CONDUIT
- DRAIN LINE
- GAS LINE
- SEWER

NOTES
 1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.



ADMINISTRATION BUILDING

UNDERGROUND WATER TANK

DWMRC OFFICE

UNDERGROUND WATER TANK

MAINTENANCE

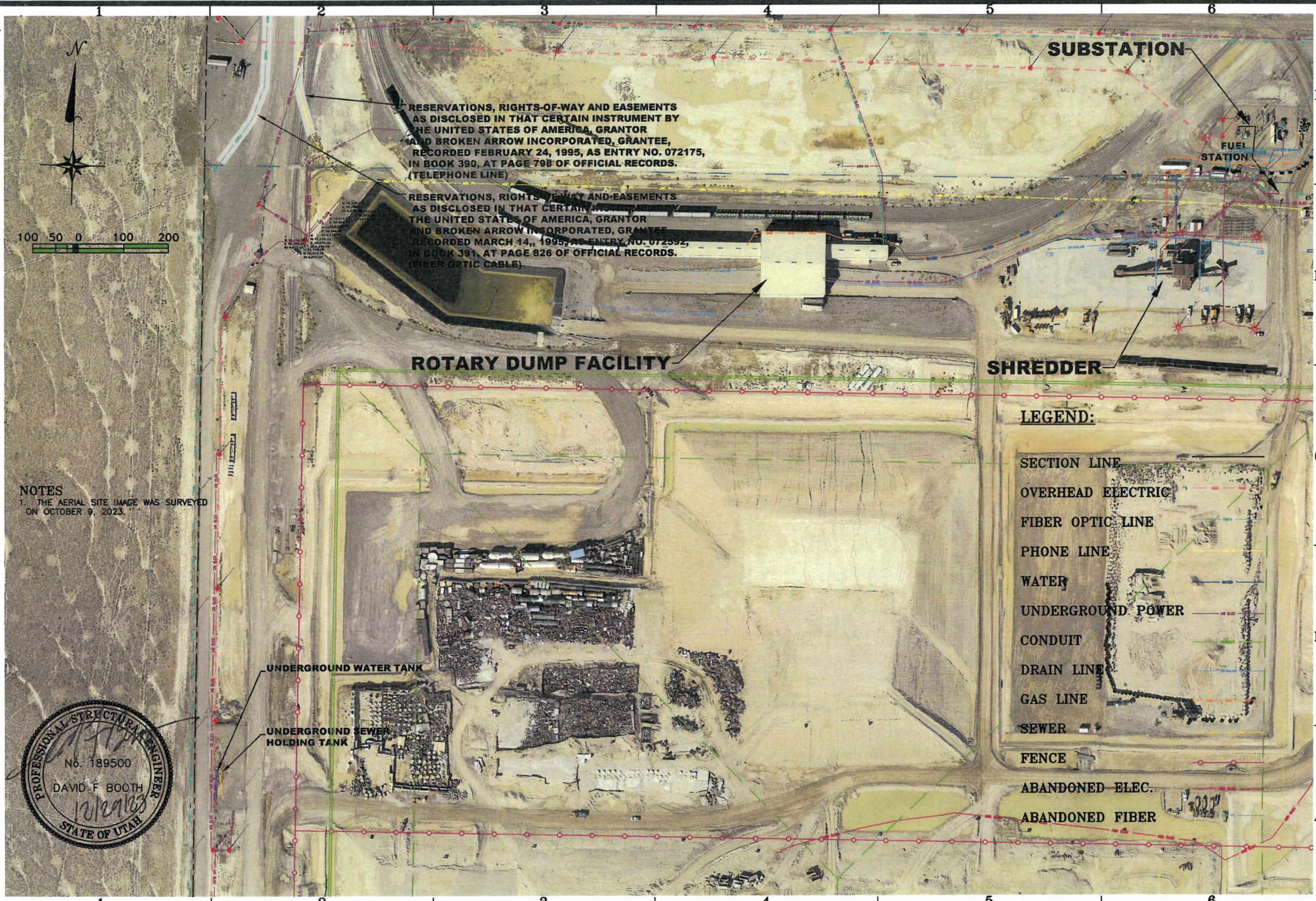
FOR INFORMATION ONLY

ENERGYSOLUTIONS

ENERGYSOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 2
 CLIVE, UTAH

DATE	DESCRIPTION OF CHANGE
12/27/23	NC FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-078530

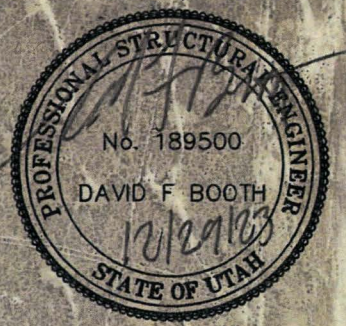
A. N. CLARKE
 G. DUTSON
 D. BOOTH
 AS NOTED 11/28/23
 23007
 C02



RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN INSTRUMENT BY THE UNITED STATES OF AMERICA, GRANTOR AND BROKEN ARROW INCORPORATED, GRANTEE, RECORDED FEBRUARY 24, 1995, AS ENTRY NO. 072175, IN BOOK 390, AT PAGE 798 OF OFFICIAL RECORDS. (TELEPHONE LINE)

RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN INSTRUMENT BY THE UNITED STATES OF AMERICA, GRANTOR AND BROKEN ARROW INCORPORATED, GRANTEE, RECORDED MARCH 14, 1995, AS ENTRY NO. 072592, IN BOOK 391, AT PAGE 826 OF OFFICIAL RECORDS. (FIBER OPTIC CABLE)

NOTES
1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.



LEGEND:

- SECTION LINE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- PHONE LINE
- WATER
- UNDERGROUND POWER
- CONDUIT
- DRAIN LINE
- GAS LINE
- SEWER
- FENCE
- ABANDONED ELEC.
- ABANDONED FIBER

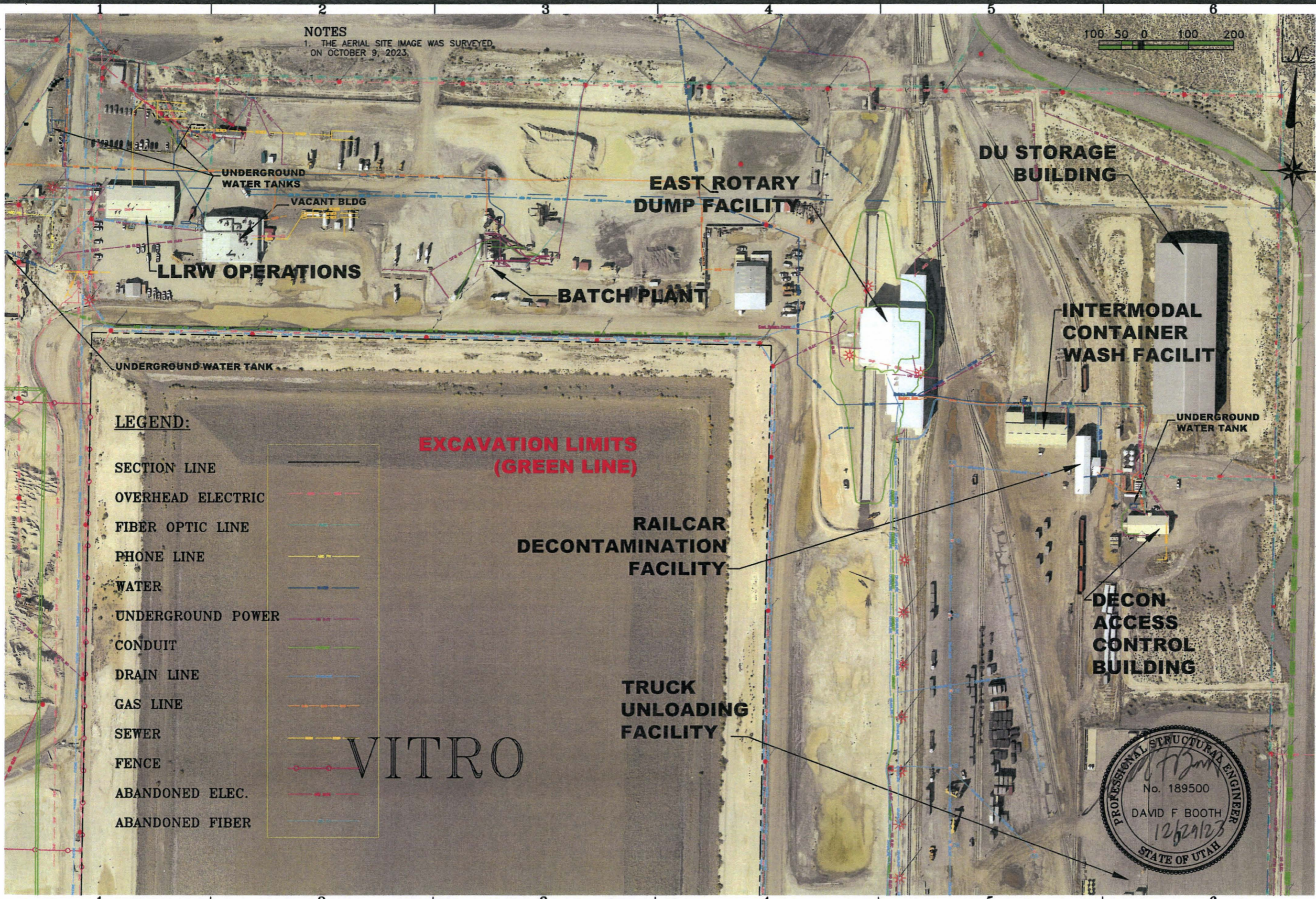
ENERGYSOLUTIONS
ENERGYSOLUTIONS "CLIVE" FACILITY
2023 SITE UTILITIES
UTILITY MAP 3
CLIVE, UTAH

INFO FOR INFORMATION ONLY

DESIGNED BY
N. CLARKE
G. DUTSON
D. BOOTH
AS NOTED 11/28/23
23007
C03

DATE: 12/27/23 BY: DESCRIPTION OF CHANGE: NC FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530

NOTES
 1. THE AERIAL SITE IMAGE WAS SURVEYED
 ON OCTOBER 9, 2023.

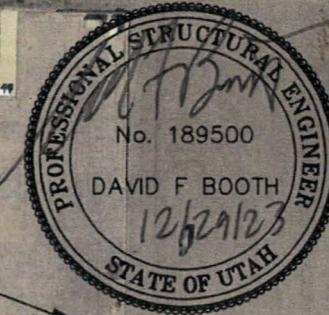


LEGEND:

- SECTION LINE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- PHONE LINE
- WATER
- UNDERGROUND POWER
- CONDUIT
- DRAIN LINE
- GAS LINE
- SEWER
- FENCE
- ABANDONED ELEC.
- ABANDONED FIBER

**EXCAVATION LIMITS
(GREEN LINE)**

VITRO



ENERGYSOLUTIONS

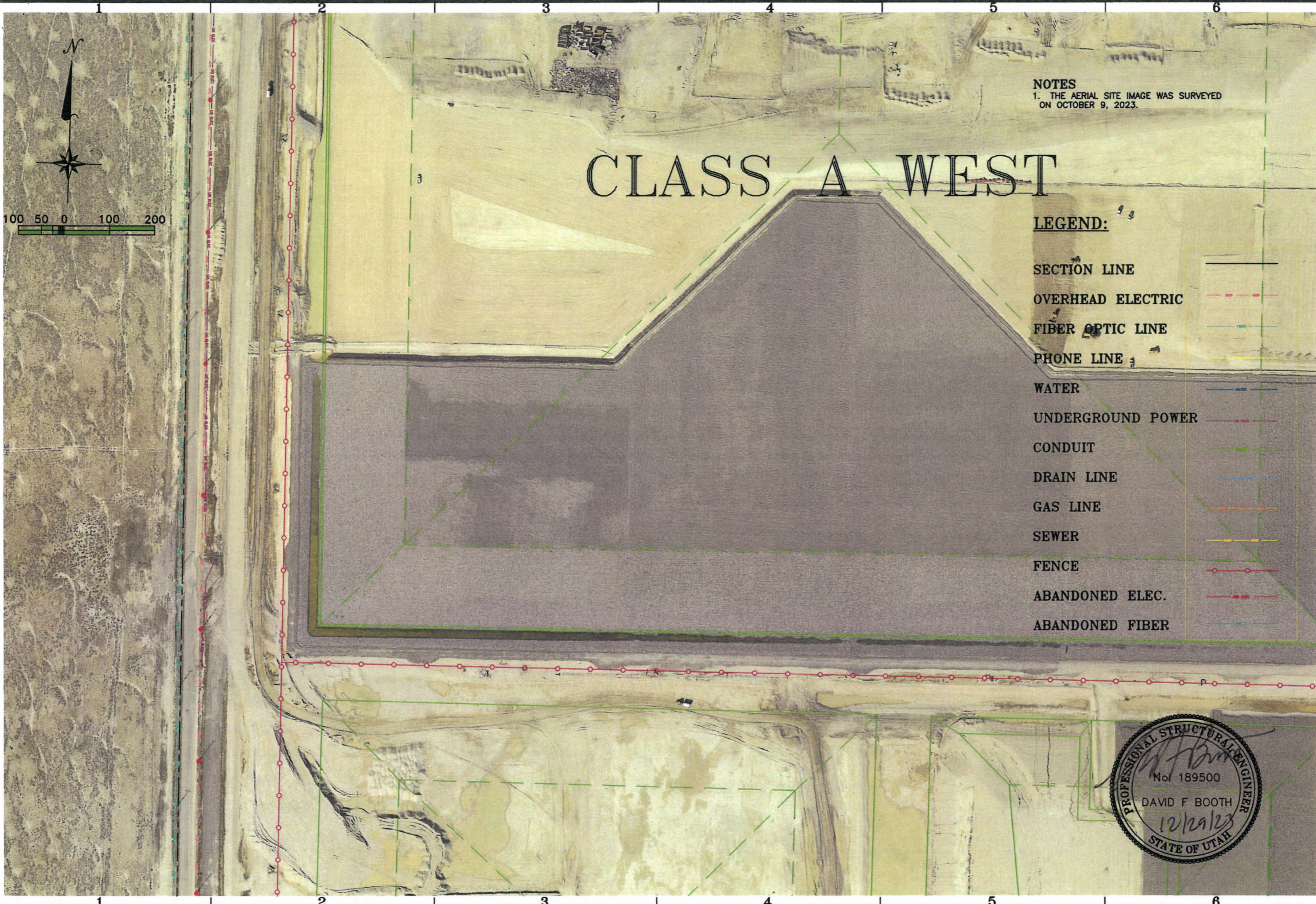
ENERGYSOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 4
 CLIVE, UTAH

**INFO
FOR
INFORMATION
ONLY**

A. N. CLARKE
 G. DUTSON
 D. BOOTH
 AS NOTED 11/28/23

23007
C04

DATE BY DESCRIPTION OF CHANGE
 11/27/23 NG FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530

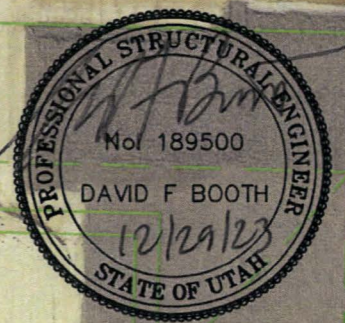


NOTES
 1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.

CLASS A WEST

LEGEND:

- SECTION LINE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- PHONE LINE
- WATER
- UNDERGROUND POWER
- CONDUIT
- DRAIN LINE
- GAS LINE
- SEWER
- FENCE
- ABANDONED ELEC.
- ABANDONED FIBER



ENERGYSOLUTIONS
 ENERGY SOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 5
 CLIVE, UTAH

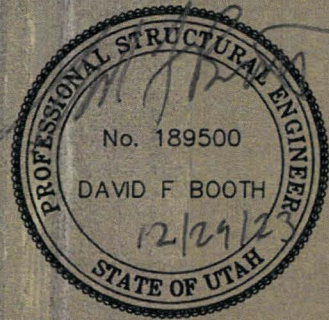
FOR INFORMATION ONLY

BY	N. CLARKE
BY	G. DUTSON
BY	D. BOOTH
AS NOTED	11/28/23

23007
C05

12/27/23 NC FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530
 DATE BY DESCRIPTION OF CHANGE

NOTES
 1. THE AERIAL SITE IMAGE WAS SURVEYED
 ON OCTOBER 9, 2023.



**INTERMODAL
 UNLOADING
 FACILITY**

97 EVAPORATION POND

95 EVAPORATION POND

UTILITY
 POWERPOLE

LEGEND:

SECTION LINE

OVERHEAD ELECTRIC

FIBER OPTIC LINE

PHONE LINE

WATER

UNDERGROUND POWER

CONDUIT

DRAIN LINE

GAS LINE

SEWER

FENCE

ABANDONED ELEC.

ABANDONED FIBER

N 12,495
 E 14,295
 (APPROX CAP
 LOCATION)

N 12,494
 E 14,290
 (APPROX CAP
 LOCATION)

N 12,469
 E 14,294
 (APPROX CAP
 LOCATION)

N 12,481
 E 14,558
 (APPROX CAP
 LOCATION)

**ALL DRAIN PIPES
 WITHIN BOX REMOVED
 AS OF JUNE 12, 2006**

ENERGYSOLUTIONS
 ENERGY SOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 6
 CLIVE, UTAH

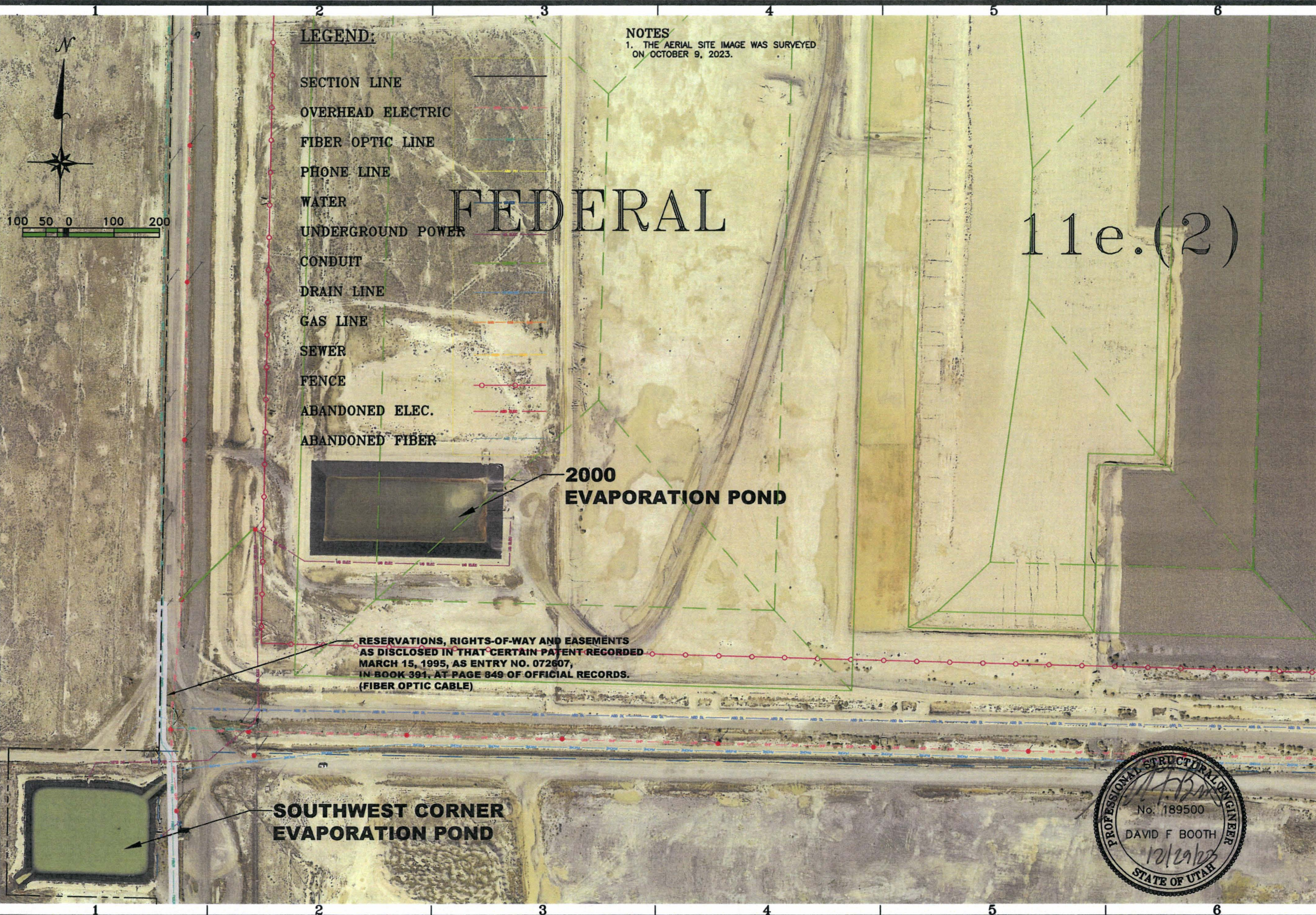
**FOR
 INFORMATION
 ONLY**

N. CLARKE
 G. DUTSON
 D. BOOTH
 AS NOTED 11/28/23

23007
 C06

DATE BY DESCRIPTION OF CHANGE
 11/27/23 NC FOR LICENSE APPLICATION - REVISED RFI'S LISTED IN DRC-2023-078530





NOTES
 1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.

- LEGEND:**
- SECTION LINE
 - OVERHEAD ELECTRIC
 - FIBER OPTIC LINE
 - PHONE LINE
 - WATER
 - UNDERGROUND POWER
 - CONDUIT
 - DRAIN LINE
 - GAS LINE
 - SEWER
 - FENCE
 - ABANDONED ELEC.
 - ABANDONED FIBER

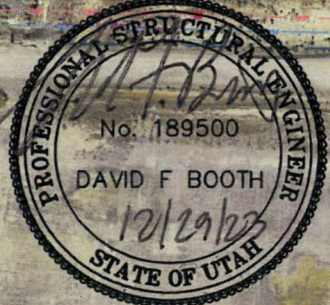
2000 EVAPORATION POND

RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN PATENT RECORDED MARCH 15, 1995, AS ENTRY NO. 072607, IN BOOK 391, AT PAGE 849 OF OFFICIAL RECORDS. (FIBER OPTIC CABLE)

SOUTHWEST CORNER EVAPORATION POND

11e.(2)

FEDERAL



ENERGYSOLUTIONS

ENERGYSOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 7
 CLIVE, UTAH

INFO FOR INFORMATION ONLY

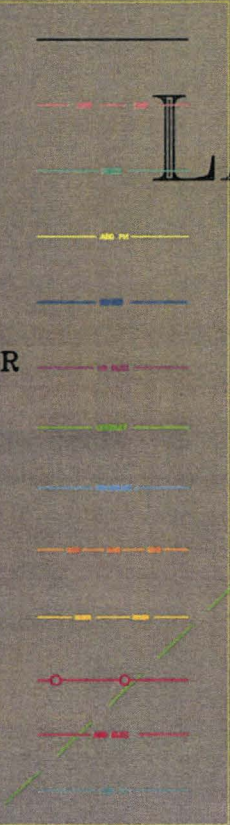
BY	N. CLARKE
CHECKED BY	G. DUTSON
DATE	D. BOOTH
AS NOTED	11/28/23
PROJECT NO.	23007 C07

12/27/23 NC FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530
 DATE BY DESCRIPTION OF CHANGE

NOTES
 1. THE AERIAL SITE IMAGE WAS SURVEYED
 ON OCTOBER 9, 2023.

LEGEND:

- SECTION LINE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- PHONE LINE
- WATER
- UNDERGROUND POWER
- CONDUIT
- DRAIN LINE
- GAS LINE
- SEWER
- FENCE
- ABANDONED ELEC.
- ABANDONED FIBER



LARW

MIXED WASTE
EVAPORATION POND

MIXED
WASTE

MIXED WASTE
OPERATIONS
VACANT OFFICES

MIXED WASTE
TREATMENT

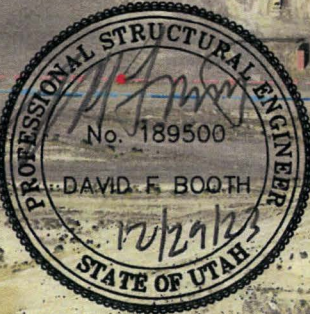
VTD BUILDING

UNDERGROUND
TANK

FIRE WATER
AB IN PLACE
(APROX LOCATION)

FIRE WATER
AB IN PLACE
(APROX LOCATION)

UNDERGROUND
WATER TANK



ENERGYSOLUTIONS
 ENERGYSOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 8
 CLIVE, UTAH

INFO
 FOR
 INFORMATION
 ONLY

N. CLARKE
 G. DUTSON
 D. BOOTH
 AS NOTED 11/28/23
 23007
 C08

12/27/23 NC FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530
 DATE BY DESCRIPTION OF CHANGE

LEGEND:

SECTION LINE

OVERHEAD ELECTRIC

FIBER OPTIC LINE

PHONE LINE

WATER

UNDERGROUND POWER

CONDUIT

DRAIN LINE

GAS LINE

SEWER

FENCE

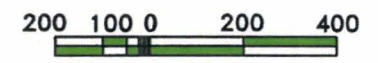
ABANDONED ELEC.

ABANDONED FIBER



NOTES

1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.



DATE BY DESCRIPTION OF CHANGE
 12/27/23 NC FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530

ENERGYSOLUTIONS
 ENERGYSOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 9
 CLIVE, UTAH

INFO
 FOR
 INFORMATION
 ONLY

N. CLARKE
 G. DUTSON
 D. BOOTH
 AS NOTED 11/28/23
 23007
 C09



RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN INSTRUMENT BY THE UNITED STATES OF AMERICA, GRANTOR AND BROKEN ARROW INCORPORATED, GRANTEE, RECORDED FEBRUARY 24, 1995, AS ENTRY NO. 072175, IN BOOK 390, AT PAGE 798 OF OFFICIAL RECORDS. (FIBER OPTIC CABLE AND TELEPHONE LINE)

RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN INSTRUMENT BY THE UNITED STATES OF AMERICA, GRANTOR AND BROKEN ARROW INCORPORATED, GRANTEE, RECORDED MARCH 14, 1995, AS ENTRY NO. 072992, IN BOOK 391, AT PAGE 828 OF OFFICIAL RECORDS. (FIBER OPTIC CABLE AND TELEPHONE LINE)

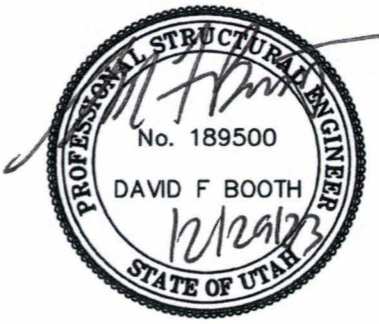
RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN INSTRUMENT BY THE UNITED STATES OF AMERICA, GRANTOR AND BROKEN ARROW INCORPORATED, GRANTEE, RECORDED FEBRUARY 24, 1995, AS ENTRY NO. 072175, IN BOOK 390, AT PAGE 798 OF OFFICIAL RECORDS. (FIBER OPTIC CABLE AND TELEPHONE LINE)

RESERVATIONS, RIGHTS-OF-WAY AND EASEMENTS AS DISCLOSED IN THAT CERTAIN INSTRUMENT BY THE UNITED STATES OF AMERICA, GRANTOR AND BROKEN ARROW INCORPORATED, GRANTEE, RECORDED MARCH 14, 1995, AS ENTRY NO. 072992, IN BOOK 391, AT PAGE 828 OF OFFICIAL RECORDS. (FIBER OPTIC CABLE AND TELEPHONE LINE)

LEGEND:

- SECTION LINE
- OVERHEAD ELECTRIC
- FIBER OPTIC LINE
- PHONE LINE
- WATER
- UNDERGROUND POWER
- CONDUIT
- DRAIN LINE
- GAS LINE
- SEWER
- FENCE
- ABANDONED ELEC.
- ABANDONED FIBER

NOTES
 1. THE AERIAL SITE IMAGE WAS SURVEYED ON OCTOBER 9, 2023.

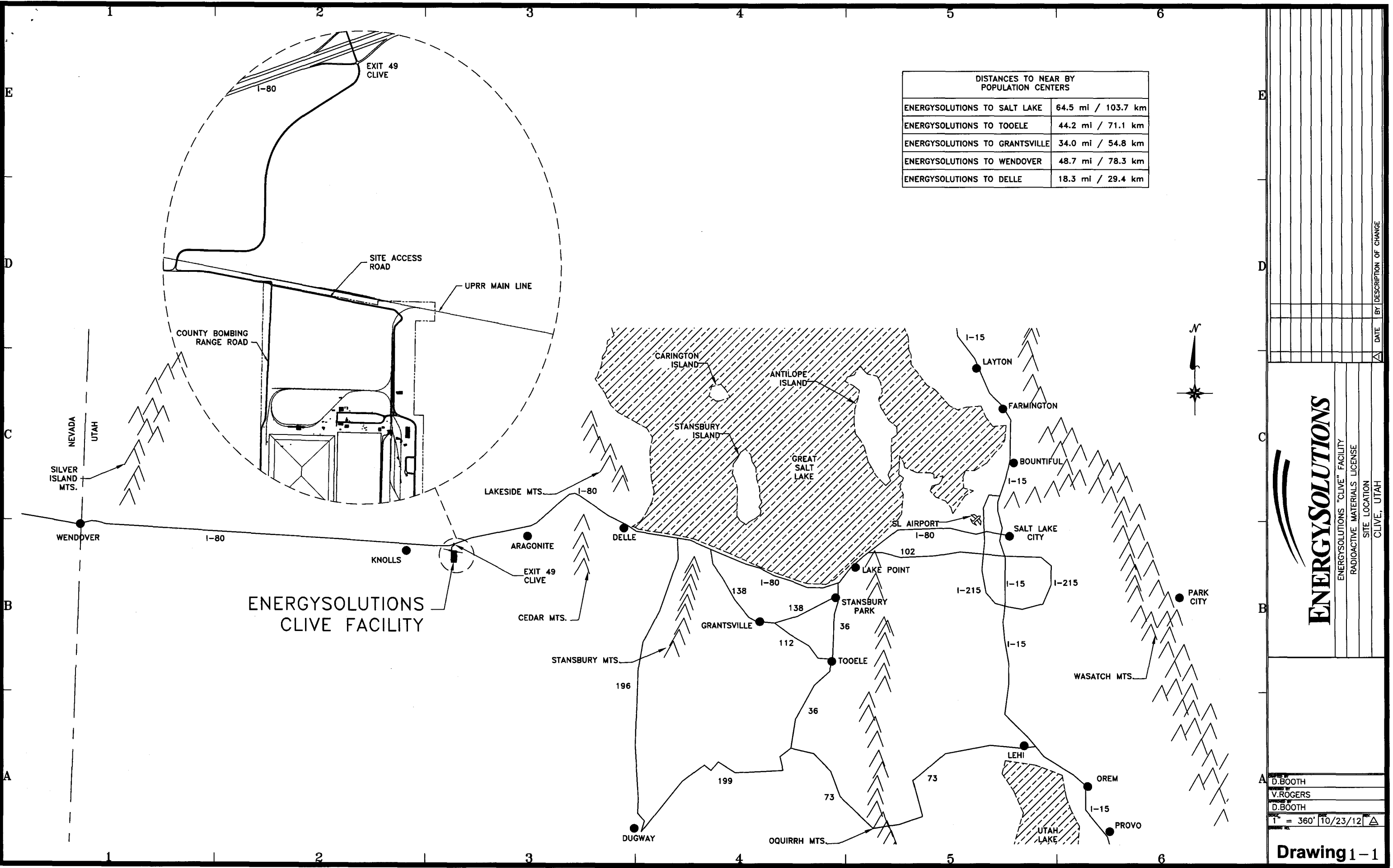


ENERGYSOLUTIONS
 ENERGYSOLUTIONS "CLIVE" FACILITY
 2023 SITE UTILITIES
 UTILITY MAP 10
 CLIVE, UTAH

FOR INFORMATION ONLY

N. CLARKE
 G. DUTSON
 D. BOOTH
 AS NOTED 11/28/23
 23007
 C10

DATE: 11/27/23 BY: DESCRIPTION OF CHANGE: NC FOR LICENSE APPLICATION - REVISED RPT'S LISTED IN DRC-2023-078530



DISTANCES TO NEAR BY POPULATION CENTERS	
ENERGYSOLUTIONS TO SALT LAKE	64.5 mi / 103.7 km
ENERGYSOLUTIONS TO TOOELE	44.2 mi / 71.1 km
ENERGYSOLUTIONS TO GRANTSVILLE	34.0 mi / 54.8 km
ENERGYSOLUTIONS TO WENDOVER	48.7 mi / 78.3 km
ENERGYSOLUTIONS TO DELLE	18.3 mi / 29.4 km

**ENERGYSOLUTIONS
CLIVE FACILITY**

ENERGYSOLUTIONS
ENERGYSOLUTIONS "CLIVE" FACILITY
RADIOACTIVE MATERIALS LICENSE
SITE LOCATION
CLIVE, UTAH

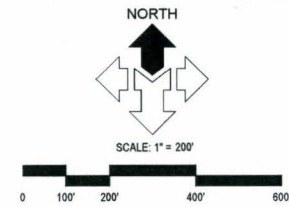
DESIGNED BY
D. BOOTH
CHECKED BY
V. ROGERS
DRAWN BY
D. BOOTH
SCALE
1" = 360' 10/23/12

Drawing 1-1

DATE BY DESCRIPTION OF CHANGE

FEDERAL CELL FACILITY SUBDIVISION PLAT

LOCATED IN THE SOUTHWEST QUARTER
OF SECTION 32, TOWNSHIP 1 SOUTH,
RANGE 11 WEST, SALT LAKE BASE & MERIDIAN
TOOELE COUNTY, UTAH



SURVEYOR'S CERTIFICATE

I, DAVID B. DRAPER DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 6861599 IN ACCORDANCE WITH TITLE 64, CHAPTER 22, PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS ACT. I HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17-23-17 AND HAVE VERIFIED ALL MEASUREMENTS AND HAVE PLACED MONUMENTS AS REPRESENTED ON THIS PLAT. AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH, I FURTHER CERTIFY THAT BY THE AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED HEREON, AND HAVE SUBDIVIDED SAID TRACT INTO A LOT HEREAFTER TO BE KNOWN AS:

FEDERAL CELL FACILITY SUBDIVISION

AND THAT AT THE SAME HAS BEEN CORRECTLY SURVEYED AND MONUMENTED ON THE GROUND AS SHOWN ON THIS PLAT.

SUBDIVISION DESCRIPTION

A PARCEL OF LAND BEING A PORTION OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 1 SOUTH, RANGE 11 WEST, SALT LAKE BASE & MERIDIAN, SAID PARCEL BEING DESCRIBED MORE PARTICULARLY AS FOLLOWS:
BEGINNING AT A FOUND 1913 G.L.O. BRASS CAP MONUMENT MARKING THE SOUTHWEST CORNER OF SAID SECTION 32, AND RUNNING THENCE NORTH 1°00'42" EAST ALONG THE SECTION LINE 2198.25 FEET, THENCE SOUTH 88°23'30" EAST 1640.63 FEET, THENCE SOUTH 1°00'42" WEST 2198.25 FEET TO THE SOUTH LINE OF SAID SECTION 32, THENCE NORTH 88°55'07" WEST ALONG SAID SOUTH SECTION LINE 1617.81 FEET TO THE POINT OF BEGINNING.
CONTAINS 3,568.125 SQ. FT. OR 81.596 ACRES (1 LOT)



APPROVED
By Steven J. Dale, P.L.S. at 1:06 pm, Sep 10, 2022

DAVID B. DRAPER
L.S. LICENSE NO. 6861599

OWNER'S DEDICATION AND CONSENT TO RECORD

KNOWN ALL MEN BY THESE PRESENT THAT THE UNDERSIGNED ARE THE OWNERS OF THE ABOVE DESCRIBED TRACT OF LAND, AND HEREBY CAUSE THE SAME TO BE DIVIDED INTO A LOT AS SET FORTH THE BE HEREAFTER KNOWN AS:

FEDERAL CELL FACILITY SUBDIVISION

AND DO HEREBY CONSENT TO THE RECORDING OF THIS PLAT

IN WITNESS WHEREOF I (WE) HAVE HEREUNTO SET OUR HAND(S) THIS _____ DAY OF _____ A.D. 20__

ENERGYSOLUTIONS, LLC

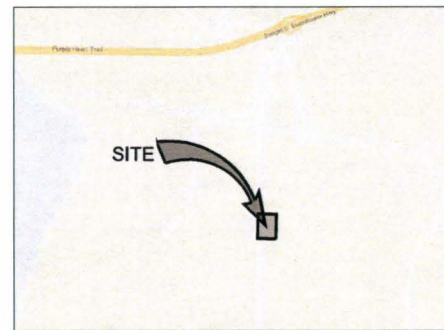
BY: _____ (PRINT NAME)

ITS: _____ (TITLE)

BY: _____ (SIGNATURE)

LEGEND

- SUBDIVISION BOUNDARY
- SECTION LINE
- SUBDIVISION BOUNDARY CORNER, COPPER PLUG OR 5/8" X 24" REBAR & CAP OR NAIL & WASHER STAMPED "MCNEIL ENGR"



VICINITY MAP
SCALE: N.T.S.

NOTES

- SUBJECT TO IRREVOCABLE EASEMENT FOR DISPOSAL CAPACITY, ENTRY NO. 346469, ENTRY NO. 431736, ENTRY NO. 486589, ENTRY NO. 517264 AND ENTRY NO. 531762

SHEET
1
OF
1

CORPORATE ACKNOWLEDGMENT

STATE OF UTAH }
COUNTY OF _____ } S.S.
ON THE _____ DAY OF _____ A.D. 20__ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR SAID COUNTY OF _____ IN SAID STATE OF UTAH, _____ WHO AFTER BEING DULY SWORN, ACKNOWLEDGED TO ME THAT _____ A UTAH CORPORATION, AND THAT _____ SIGNED THE OWNERS DEDICATION FREELY AND VOLUNTARILY FOR AND IN BEHALF OF SAID CORPORATION FOR THE PURPOSES THEREIN MENTIONED AND THAT SAID CORPORATION ESCUTED THE SAME.
MY COMMISSION EXPIRES: _____ NOTARY PUBLIC
RESIDING IN _____ COUNTY

FEDERAL CELL FACILITY SUBDIVISION

LOCATED IN THE SOUTHWEST QUARTER
OF SECTION 32, TOWNSHIP 1 SOUTH,
RANGE 11 WEST, SALT LAKE BASE & MERIDIAN
TOOELE COUNTY, UTAH

TOOELE COUNTY RECORDER

RECORD NO. _____
STATE OF UTAH, COUNTY OF TOOELE, RECORDED AND FILED AT THE REQUEST OF _____
DATE _____ TIME _____ BOOK _____ PAGE _____
FEE \$ _____ TOOELE COUNTY RECORDER

<p>NORTH TOOELE FIRE DISTRICT</p> <p>APPROVED AS TO FORM THIS _____ DAY OF _____ A.D. 20__</p>	<p>TOOELE COUNTY TREASURER</p> <p>APPROVED THIS _____ DAY OF _____ A.D. 20__</p> <p>TOOELE COUNTY TREASURER</p>	<p>TOOELE COUNTY PLANNING COMMISSION</p> <p>APPROVED THIS _____ DAY OF _____ A.D. 20__</p> <p>BY THE TOOELE COUNTY PLANNING COMMISSION</p> <p>CHAIRMAN TOOELE COUNTY PLANNING COMMISSION</p>	<p>PREPARED BY:</p> <p>McNEIL ENGINEERING™ Economic and Sustainable Designs, Professionals You Know and Trust 8610 South Sandy Parkway, Suite 200 Sandy, Utah 84070 801.255.7700 mcnellengineering.com Civil Engineering • Consulting & Landscape Architecture Structural Engineering • Land Surveying & HDS</p>
<p>TOOELE COUNTY ENGINEER</p> <p>I HEREBY CERTIFY THAT I HAVE HAD THIS PLAT EXAMINED BY THIS OFFICE AND IT IS CORRECT AND IN ACCORDANCE WITH INFORMATION ON FILE AND IS HEREBY APPROVED.</p> <p>DATE _____ COUNTY ENGINEER</p>	<p>TOOELE COUNTY HEALTH DEPARTMENT</p> <p>APPROVED AS TO FORM THIS _____ DAY OF _____ A.D. 20__</p> <p>TOOELE COUNTY HEALTH DEPARTMENT</p>	<p>TOOELE COUNTY ATTORNEY</p> <p>APPROVED THIS _____ DAY OF _____ A.D. 20__</p> <p>TOOELE COUNTY ATTORNEY</p>	<p>COUNTY SURVEY DEPARTMENT</p> <p>APPROVED AS TO FORM THIS _____ DAY OF _____ A.D. 20__</p> <p>RECORD OF SURVEY FILE #022-0042</p> <p>TOOELE COUNTY SURVEY DEPT. DIRECTOR</p>

NORTHWEST CORNER OF SECTION 32, TOWNSHIP 1 SOUTH, RANGE 11 WEST, SALT LAKE BASE AND MERIDIAN (FOUND BRASS CAP MONUMENT SET IN 1996 BY DED SURVEYING, L.S. 329172)

N 1°00'42" E 2198.25' (MEASURED)

WEST QUARTER CORNER OF SECTION 32, TOWNSHIP 1 SOUTH, RANGE 11 WEST, SALT LAKE BASE AND MERIDIAN (FOUND BRASS CAP MONUMENT IN CONCRETE)

ENERGYSOLUTIONS LLC
04-101-A-0004
QUIT CLAIM DEED
ENTRY NO. 034941

S 88°23'30" E 1640.63'

LOT 1
CONTAINS 3,568.125 SQUARE FEET
OR 81.596 ACRES

SW 1/4 SECTION 32 T.1S., R.11W.

ENERGYSOLUTIONS LLC
04-101-A-0004
QUIT CLAIM DEED
ENTRY NO. 034941

S 1°36'30" W 2183.25'

TOWNSHIP 1 SOUTH
TOWNSHIP 2 SOUTH

SOUTH QUARTER CORNER OF SECTION 32, TOWNSHIP 1 SOUTH, RANGE 11 WEST, SALT LAKE BASE AND MERIDIAN, FOUND TOOELE COUNTY MONUMENT MARKINGS UNREADABLE

N 88°55'07" W 1617.81'

ENERGYSOLUTIONS LLC
05-100-D-0001
SPECIAL WARRANTY DEED
ENTRY NO. 128248

SOUTHWEST CORNER OF SECTION 32, TOWNSHIP 1 SOUTH, RANGE 11 WEST, SALT LAKE BASE AND MERIDIAN (FOUND 1913 G.L.O. BRASS CAP MONUMENT)

ENERGYSOLUTIONS LLC
05-100-D-0001
SPECIAL WARRANTY DEED
ENTRY NO. 128248

SECTION 6 T.2S., R.11W.

ENERGYSOLUTIONS LLC
04-100-M-0001
SPECIAL WARRANTY DEED
ENTRY NO. 543609

SECTION 31 T.1S., R.11W.

BAISIS OF BEARING N 1°00'42" E 2198.25' (MEASURED) N 1°00'42" W 2198.25' (MEASURED)