TOPSOIL PROTECTION PLAN

BNL | ENTERPRISE

Bolling 04 SESW 2960

Sec. 4 T29S R60W (SE/4 SW/4)

Las Animas County, Colorado

Surface: Fee

Submitted as an accompaniment to the Form 2A Application, this Topsoil Protection Plan is consistent with the requirements of Rule 1002.c.

May 17, 2023

UPSTREAM Petroleum Management, Inc.

BNL (Enterprise) Inc.
Las Animas County, Colorado

Topsoil Protection Plan

Project Summary:
BNL (Enterprise) Inc.'s ("BNL's") proposed Bolling 04 SESW 2960 "Location" is in Sec. 4 T29S R60W in Las Animas County, Colorado. BNL plans to drill and test one ***helium*** well. If the well produces commercial quantities of helium the well will be shut-in until helium production/processing facilities can be constructed at an offsite facility location. The helium facility will be on lands outside of the Oil and Gas Development Plan. The facility will be constructed on private surface. The landowner agreement provides for the installation of the gas gathering line. The production/processing facilities will not require an Oil and Gas Development Plan. The well will be drilled vertically and will not require hydraulic fracturing. The proposed location is fee surface and fee minerals with a total pad disturbance of ±1.2 acres. The graded site elevation is expected to be approximately 5,451'. No federal surface or minerals are involved in this project. All operations would be conducted in compliance with all federal, state, and local applicable laws, rules, and regulations.

Plan

Purpose:
Topsoil protection and stabilization is key to successful reclamation. The objective of BNL's topsoil protection and stabilization is to ensure as much topsoil can remain intact with minimal erosions caused by wind, storm events, traffic, and other activities that might cause topsoil erosion or degradation. Good topsoil protection and stabilization ensures successful reclamation and the restoration of the natural vegetative community, hydrology, and wildlife habitats. Salvaging and reuse of all topsoil in a timely manner will not only maintain viable topsoil but will allow for successful reclamation. Best Management Practices (BMPs), where applicable, mixed with other protection and stabilization measures ensure topsoil is maintained in its best condition to be used for both interim and final reclamation.

In areas that are disturbed by construction, topsoil will be stripped and stockpiled near the site. All brush, limbs, and other woody material will be stockpiled separately from the topsoil. Soil materials will be managed so that erosion and sediment transport are minimized.

Bolling 04 SESW 2960:
Topsoil will be monitored throughout all phases of the helium project, including construction, production, and reclamation. The surrounding topography is relatively flat. As construction progresses, BMPs will be assessed, installed, and/or replaced as needed.

During active construction and drilling the following BMPs will be implemented on the Bolling 04 SESW 2960 Location:

- Silt Fence or Straw Wattles: There shall be a silt fence or straw wattles installed on the northern portion, east side, and the southeast corner of the location to control run-on to the pad, and any stormwater flow to runoff the pad uncontrolled.
- Culverts will be installed along the County Road as directed by Las Animas County. No culverts are anticipated at the entrance to the wellpad. If needed, an 18" culvert will be placed at the proposed access road into the wellpad.
- Rock Rip-Rap: Rock rip-rap placed on both sides of the culvert, per Las Animas requirements at the entrance to the road from County Road 111.1. If necessary, a culvert will be placed in the road to the pad and will slow/filter any stormwater runoff from the road itself.
- Mulch/Seed: Topsoil stockpiles that will be exposed for more than six months will be mulched and/or seeded as a stabilization technique to control sediment loss.
- New roads will be minimally constructed until the well is drilled and tested.
    - New access - 376' (0.4 acres)
    - Total road for productive well - 376' x 50' ROW = 0.4 acres
- During wellpad construction topsoil should be piled no higher than 3 to 5 feet high and slopes of the stockpiles should not exceed 2:1 (horizontal:vertical) to minimize erosion potential and facilitate interim stabilization. Perimeter control measures such as sediment control logs, rock socks, straw bales, ditch and/or berm with sediment trap(s) or sand bags will be used around the base of unstabilized stockpiles or where there is potential for sediment to come in contact with run off and leave the site.
- The working pad surface area is 250' x 170'. Please see wellsite diagrams. Topsoil material will be placed on the west side of the cleared pad and will be approximately 841 CY.
- Topsoil stockpiled for more than six months will be seeded and mulched with a temporary grass cover or will be stabilized using structural and/or non-structural control measures.
- To negate surface disturbance 12" x 12" test pits will be dug in the middle-west and the southwest corners of the wellpad. The pits will be dug in a manner prior to wellpad construction so that will not require any compaction post construction. The wellpad is small and the soil types are all the same so both pits are representative of the location.
- Training: Those persons responsible for inspections and monitoring will be trained on the contents of the Plan and the requirements herein.
- Minimize Compaction: BNL will limit traffic outside of the well pad footprint but within the disturbed area, to the extent possible, to reduce compaction.
- Stockpile Tracking: To prevent erosion, stockpiles will be tracked perpendicular to runoff direction.

General Construction Guidelines for Producing Well

No facilities will be on location until after the well has been drilled and tested. If the well is deemed a "dry hole" the well will be plugged within six months. If the well is favorable for completion and production, the well will be shut in for a period of six to nine months until production facilities have been procured and installed. At this point, the wellpad and road will be fully constructed with gravel to protect the surface and all topsoil. If the well is a dry hole, the access road will be left in its original state and per surface use agreement.

Following the drilling and completion activities, the well pad may be reduced, thus minimizing the area of disturbance for the production life of the well. The pad will be recontoured, topsoil reapplied, and the reduced area stabilized with seed, hydro-seed, bonded fiber matrix, mulch, etc. as deemed appropriate for the site.

- To negate topsoil erosion from storm events, the first site inspection must be completed within seven (7) calendar days of the commencement of construction activities.
- Active construction sites will be inspected at one of the two following frequencies:
    - At least one inspection every 7 calendar days;
    - At least one inspection every 14 calendar days, if post-storm event inspections are conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion. Note that post-storm inspections may be used to fulfill the 14-day routine inspection requirement.

Wellpad and access road construction will be performed using conventional cut and fill construction. BNL will begin with the clearing of vegetation and removal of available topsoil material to a depth of six inches or maximum available. Basic construction activities conducted during this phase include clearing and grubbing, grading and excavation, compaction, final grading and contouring, and installation of surfacing materials such as gravel or road-base.

To the extent feasible, surface vegetation would be cleared by mowing, raking, and burning in preference to scraping to facilitate topsoil protection and stabilization and reclamation potential. If removed, topsoil will be windrowed on either side of the alignment adjacent to the construction limits as staked. Upon commencement of road construction, the topsoil will be replaced in the borrow ditches. Removed soil and overburden would be stored for reclamation purposes. No removed soil or overburden would be pushed into drainages or stored where transport into drainages could occur.

The wellpad may be recontoured, topsoil reapplied, and the reduced area stabilized with seed, hydro-seed, bonded fiber matrix, mulch, etc. as deemed appropriate for the site. The borrow ditches will be reseeded to promote topsoil stabilization and will reduce the area utilized by this location. All seed mix will be done per surface owner request.

Topsoil would be segregated from cut areas for use in reclamation.

Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts more than four inches deep, the soil will be deemed too wet.

The wellpad would be constructed of native materials with application of gravel as required to allow all-weather operations. Signs will be placed on the topsoil pile and the pile will be clearly separated. Topsoil not needed for interim reclamation on wellpads with favorable wells will be seeded and crimped with straw to promote vegetative growth until final reclamation. All seed mix will be done per surface owner request.

Test pits for topsoil determination will be hand dug to a depth of one-foot or less. Topsoil in this area is not expected to exceed six-inches. Photos will be submitted of the test pits via Form 4 when weather allows and prior to construction.

NRCS Information

WV – Almagre-Villedry complex, 1 to 4 percent slopes

Soils are comprised of 47% of Almagre and similar soils, 35% of Villedry and similar soils, and 18% minor components.

Almagre drainage class is "Well Drained" with a (0.06 to 0.20 in/hr) capacity to transmit water; lithic bedrock can be found anywhere from 40-59" in depth. Please see NRCS attachments.

The Almagre predominant plant species includes Blue grama (35%), Western wheatgrass (20%), Galleta (10%), Green needlegrass (5%), Fourwing saltbush (5%), Threeawn (5%), Winterfat (5%), Plains pricklypear (3%), and Tree cholla (2%).

Typical profile

A - 0 to 5 inches: silt loam
BA - 5 to 9 inches: silt loam
Bt - 9 to 23 inches: silty clay loam
Btk - 23 to 30 inches: silty clay loam
Bk1 - 30 to 40 inches: silt loam
Bk2 - 40 to 50 inches: loam
R - 50 to 79 inches: bedrock

Villedry drainage class is "Well Drained" with a (0.06 to 0.20 in/hr) capacity to transmit water; lithic bedrock can be found anywhere from 40-59" in depth. Please see NRCS attachments.

The Villedry predominant plant species includes Blue grama (35%), Western wheatgrass (20%), Galleta (10%), Threeawn (5%), Winterfat (5%), Fourwing saltbush (5%), Green needlegrass (5%), Plains pricklypear (3%), and Tree cholla (2%).

Typical profile

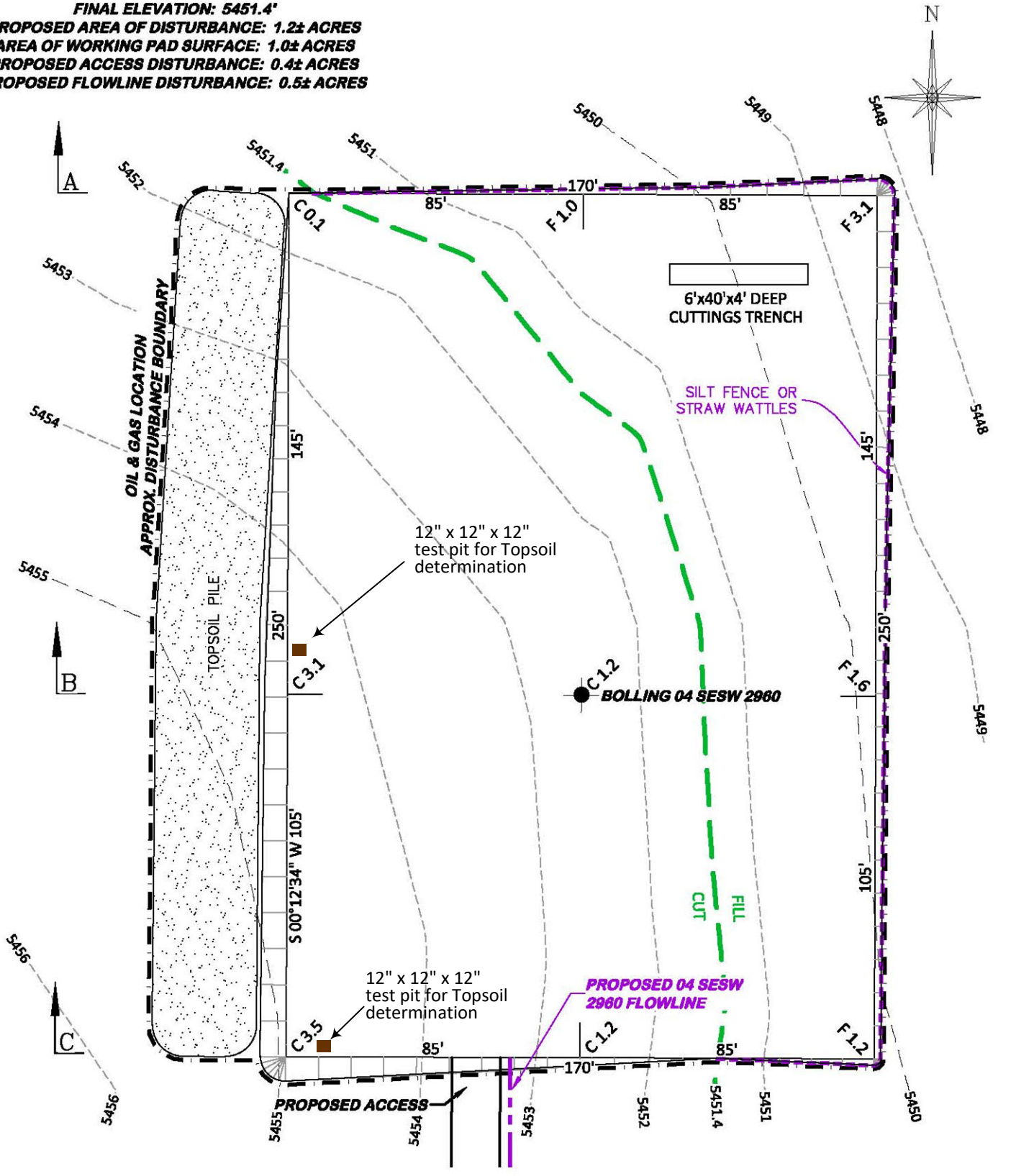
A - 0 to 4 inches: silt loam
BA - 4 to 7 inches: silt loam
Bt - 7 to 15 inches: silty clay loam
Btk - 15 to 25 inches: silty clay loam
Bk1 - 25 to 33 inches: clay loam

2Bk2 - 33 to 38 inches: gravelly loam
R - 38 to 70 inches: bedrock

Additional Best Management Practices that may be used for General Topsoil Protection and Stabilization:

- Employee Training
- Seeding
- Mulching
- Mulch Tackifier
- Soil Binder
- Construction Phasing/Sequencing
- Rock Sock
- Rolled Erosion Control Products
- Silt Fence
- Stockpile Management
- Erosion Bale
- Grading Techniques
- Surface Roughening
- Berm/Diversion
- Temporary Drainage Swale
- Temporary and Permanent Seeding
- Terracing
- Vegetative Buffer
- Wind Erosion/Dust Control

UNGRADED ELEVATION: 5452.6'
FINAL ELEVATION: 5451.4'
PROPOSED AREA OF DISTURBANCE: 1.2± ACRES
AREA OF WORKING PAD SURFACE: 1.0± ACRES
PROPOSED ACCESS DISTURBANCE: 0.4± ACRES
PROPOSED FLOWLINE DISTURBANCE: 0.5± ACRES



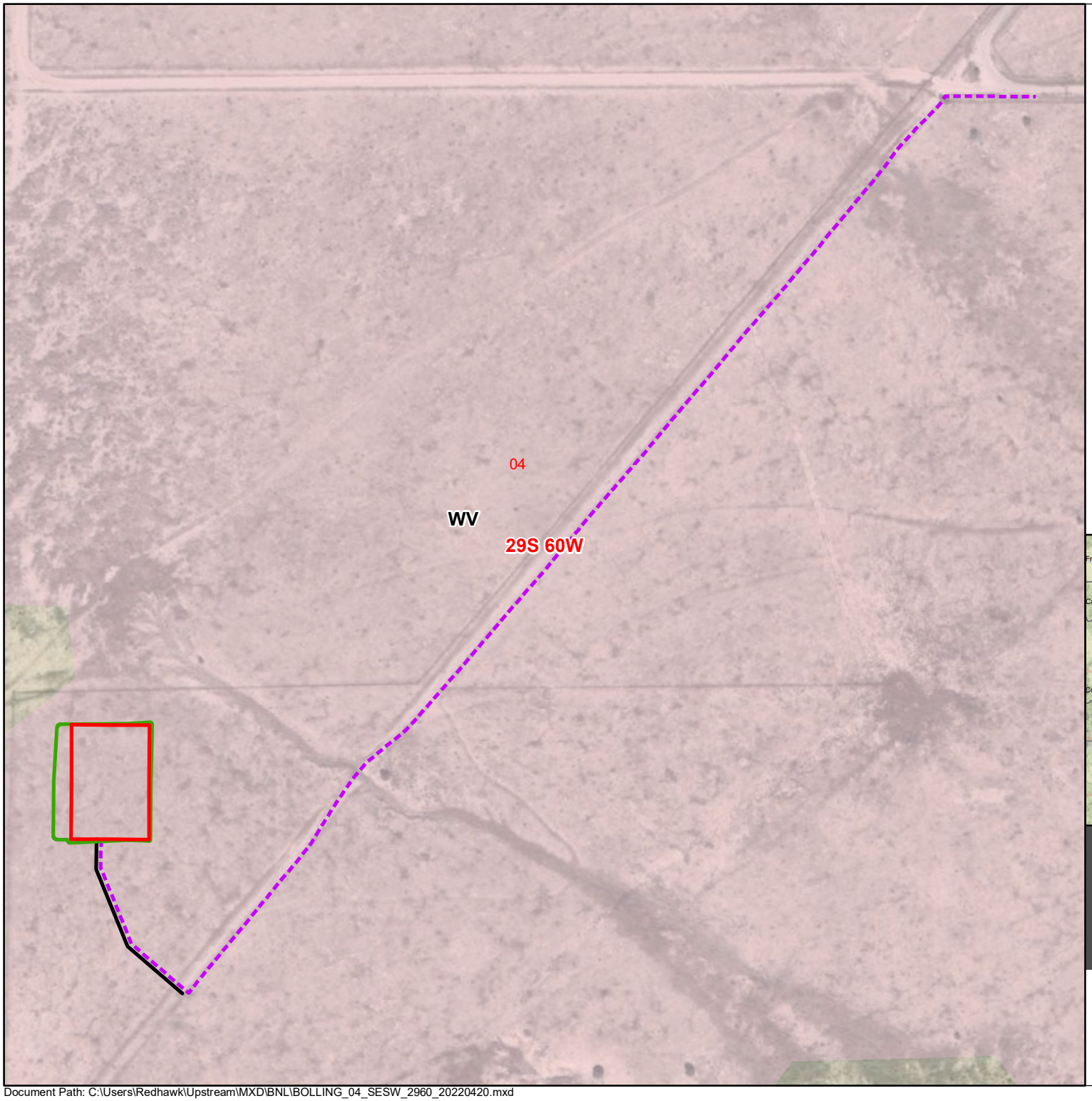
BEFORE DIGGING
CALL FOR
UTILITY LINE LOCATION

BOLLING 04 SESW 2960

DRIFFIN & ASSOCIATES, INC.
(307) 362-5028
1414 ELK ST., ROCK SPRINGS, WY 82901

DRAWN: 3/22/22 - JMB	SCALE: 1" = 40'
REVISED: 5/4/23 - DWB	DRG JOB No. 22206
MOVED WELL	304c(15) BMP

STORMWATER AND EROSION CONTROL PLAN
BNL (ENTERPRISE) INC.
BOLLING 04 SESW 2960
SESW, SECTION 4, T. 29 S., R. 60 W., 6th P.M., LAS ANIMAS COUNTY, COLORADO



Legend

- Proposed Disturbance Area
- Proposed Working Pad Surface
- Proposed Access Road
- Proposed Pipeline

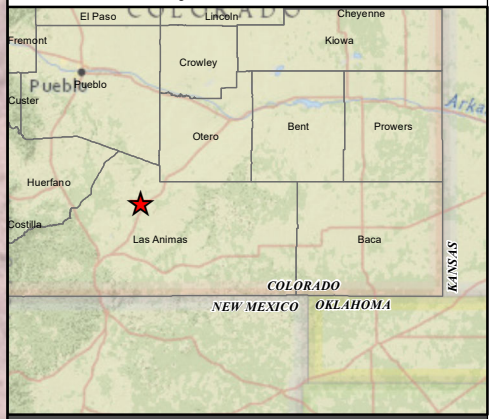
Soil Types

- WV

SOURCE: NRCS July 2020

Date: 4/23/2022

Project Location



BNL (ENTERPRISE) INC.
BOLLING 04 SESW 2960
SEC 04 T29S R60W (SE/4 SE/4)
LAS ANIMAS COUNTY, CO
SOIL TYPES

N

0 250 500 Feet

Prepared By: Redhawk GIS, LLC

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