STORMWATER MANAGEMENT PLAN

SEELEY OIL COMPANY

June 16, 2021

SEELEY
OIL COMPANY

PREPARED FOR

Seeley Oil Company

P.O. Box 1058

Cortez, CO 81321

(970) 565-2136

PREPARED BY

ECOPOINT, INC

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Revisions

Revisions to the document occur often as this is a living document. This section will document the date of the revision, control measures removed, control measures modified, location(s) of control measures, and inspection status of the site(s) in the project area. The revisions will be signed by the Qualified Stormwater Manager.

1.0 Administration and Certification

1.1 Operator and Owner

The Operator and of the Stormwater Management Plan (SWMP) is the Seeley Oil Company. The Operator has operational control over day-to-day activities at the project site and ensures compliance with this permit. The Operator is authorized to direct individuals at the site to carry out activities required by the permit. The Owner of the site has control of the activities and has funded the implementation of the construction plans and specifications.

Name / Title: Nate Seeley / Operations Manager

Main Office: P.O Box 1058 Cortez, CO 81321

Mobile: (970) 565-2136

Email: nathaniel@seeleyoil.com

1.2 Qualified Stormwater Manager

The Qualified Stormwater Manager for Seeley Oil Company is Kenny Sperle. The person has the skills to assess conditions that could be impacted by stormwater and effectiveness of stormwater controls implemented at construction sites. The qualified stormwater manager or trained designee will conduct stormwater inspections at the site and be designated by the operator.

Name / Title: Kenny Sperle / Stormwater Manager

Mobile: 970-946-8752

Other designated personnel may assist in stormwater inspection and maintenance of records. The personnel will be trained in stormwater inspections and be able to assess areas of stormwater concern and effectiveness of stormwater controls.

1.1 Records

This SWMP will be retained at Seeley Oil Company's Cortez, Colorado office and updated with any changes to stormwater BMP’s. Inspection records should be available at request and can be sent electronically. Stormwater inspection records will be kept for three years after the site has achieved stormwater release.

1.1 Certification

Seeley Oil Company has prepared this Stormwater Management Plan (SWMP) for post construction site management for their Cortez, Colorado area fields. The project areas are in Dolores and Montezuma County, Colorado.

Prepared By: Wesley Collins

Date: June 16, 2021

Title: Geospatial Ecologist

Transportation Erosion Control Supervisor

2.0 Spill Prevention and Response Plan

All spills will be cleaned up immediately, regardless of size. For smaller spills, Seeley Oil Company personnel will clean up the spill and for larger spills Seeley Oil Company will hire a contractor to clean up the spill. Proper notification procedures will be followed depending the on the size of the spill, see section 2.1.

Spill kits are provided in the fueling and maintenance areas at storage and processing facilities. The spill kits provide materials, and absorbents to clean up small spills. The used absorbents will be disposed of in appropriate containers (located in the spill kit) and taken offsite to a certified location. Other information regarding spills can be found in the Seeley Oil Company's SPCC.

2.1 Notification Procedures Used in the Event of a Spill

In the event of an accidental spill or catastrophic failure in a control measure, the Qualified Stormwater Manager and Owner Designee will be notified as soon as possible. Depending on the nature of the spill and the material involved, the Colorado Department of Public Health and Environment (CDPHE) (24-hour spill reporting line – 877-518-5608), will be notified within 24 hours and written notification within 5 days. Other stakeholders may also be notified, depending on the severity of the spill, including, downstream water users and other federal/state agencies. The following circumstances require notification to CDPHE:

- Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;
- Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the Construction Stormwater Permit;
- Circumstances leading to any upset which causes an exceedance of any effluent limitation in the Construction Stormwater Permit;
- Daily maximum violations for any of the pollutants limited by Part I of the Construction Stormwater Permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.

Specifically, a release of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the State of Colorado (which include surface water, ground water and dry gullies or storm sewers leading to surface water) must be reported.

3.0 Materials Handling

Storage of hazardous chemicals will either be covered and/or placed in secondary containment to minimize impact to stormwater runoff. Hazardous materials onsite may include drilling fluids, completion fluids, fuels, paints, solvents, condensate, etc. Safety Data Sheets (SDS) for all materials used or produced at the site are in the project area where activities are taking place and Seeley Oil Company's office in Cortez, Colorado. Seeley Oil Company's Waste Management Plan details how waste generated from cuttings, drilling fluids, completions, and production will be handed, found in Appendix B-Waste Management Plan.

3.1 Production

Flowback and stimulation fluids will be sent to tanks, separators, or other containment/filtering equipment before the fluids will be placed into any pipeline, storage vessel located on the well pad, or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment will be placed on the well pad in an area with additional down gradient perimeter berms.

4.0 Potential Sources of Pollution

A list of all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with the construction of a well pad and/or road within the project area is listed below:

- Disturbed and stored soil;
- Vehicle tracking of sediments;
- Management of contaminated soil;
- Loading and unloading operations;
- Outdoor storage activities;
- Vehicle and equipment maintenance and fueling;
- Significant dust or particulate generating processes or activities;
- Routine maintenance activities;
- On-site waste management;
- Non-industrial waste sources such as worker trash, portable toilets, and non-potable water.

5.0 Implementation of Control Measures

This section provides control measures that will control all pollutant sources at the site. Table 1 shows if the potential pollution source is present in the project area, the pollution source associated activities, and control measures to be used.

Table 1: Potential Pollution Sources and Associated Control Measures

Potential Pollution Source	Potential within the Project Area		Activities associated with this pollution source and control measures selected to control the source
	Yes	No	
Disturbed and stored soil including topsoil stockpiles, dry cutting areas, and staging areas	X		Disturbed soil and stored soils occur during the active construction and plugged/abandoned phases. Disturbed soil occurs during excavation, grading, cutting, filling, and reclamation. Potential pollutants include eroded sediment entering waterways and adjacent undisturbed areas. Structural Control Measures: Stockpile containment and sediment controls include silt fence and temporary berms. Sediment traps or sediment basins are used to control erosion from disturbed soils. Check dams, silt fence, ditches, sediment traps, and swales can be used to control erosion across roadside ditches. Reclamation of disturbed soil includes soil roughening, seeding, mulch, tackifiers, erosion control blankets, and erosion control logs. Nonstructural Control Measures: Site management will include using proper signage regarding the location of soil stockpiles and cutting areas.
Vehicle tracking of sediments	X		Vehicle tracking of sediment occurs during active construction and plugged/abandoned phases. Structural Control Measures: Vehicle tracking pads will be utilized to reduce sediment transportation. Nonstructural Control Measures: Site management will include signage on areas to stay within during construction and plugged/abandoned phases of disturbance activities. The site will have one entry and exit location and the access road entrance will be fenced off after the well is plugged/abandoned.

Potential Pollution Source	Potential within the Project Area		Activities associated with this pollution source and control measures selected to control the source
	Yes	No	
Management of contaminated soil		X	Will not occur in project area.
Loading and unloading operations	X		Delivery of and staging of materials, equipment, soil, etc. will be placed according to the construction layout (Map 1). Structural Control Measures: All construction activities will occur within the disturbance limits of the pad berms. Nonstructural Control Measures: Site management will include a specific area for loading/unloading equipment, materials, etc.
Outdoor storage activities	X		Outdoor storage of materials, chemicals, fuels, etc. occurs during construction, production, and plugged/abandonment of well pad. Maps 1 and 2 show the construction area and facility layout. No fertilizers are stored onsite. Structural Control Measures: Temporary berms will be used for storage and staging areas. Secondary containment will be used for storage of petroleum products and chemicals. No chemicals stored, used, or stockpiled within 50 feet of a water source. Nonstructural Control Measures: Site management will include limiting the amount of chemicals and petroleum products stored at the site. Communication with contractors to ensure materials are not stored at the site for more than they needed. Using proper signage regarding the location of soil stockpiles and cutting areas.

Potential Pollution Source	Potential within the Project Area		Activities associated with this pollution source and control measures selected to control the source
	Yes	No	
Vehicle and equipment maintenance and fueling	X		Vehicle and equipment fueling, and maintenance may occur at all phases of construction. Structural Control Measures: Use of drip pans, and dirt berms will be used to contain fluids. Nonstructural Control Measures: Fueling and equipment maintenance will occur in only designated areas. All fueling and maintenance will not be conducted within 50 feet of a water source. There are no water sources within one mile of the project area. Spill response kits are provided in the fueling and equipment maintenance areas.
Significant dust or particulate generating processes or activities	X		Travel on access road during construction activities, ground disturbing activities including clearing, grubbing, cut/fill activities, and reclamation generate dust. Structural Control Measures: Water trucks will be used as needed to minimize dust product. The surface of the road is dirt.
Routine maintenance activities	X		Routine maintenance activities include fueling and lubrication of equipment. Equipment will be transported offsite for major maintenance or overhauls, when practical. Structural Control Measures: Use of drip pans will be used to contain fluids. Nonstructural Control Measures: Fueling and equipment maintenance will occur in only designated areas. All fueling and maintenance will not be conducted within 50 feet of a water source. There are no water sources within one mile of the project area. Spill response kits are provided in equipment maintenance areas.
On-site waste management	X		All waste generated on the site will be removed and disposed of offsite. Waste will be disposed of in waste disposal containers and containers will be replaced as necessary. No waste materials will be dumped or discharged into waters of the state. Nonstructural Control Measures: Proper signage regarding onsite waste management will be present.

Potential Pollution Source	Potential within the Project Area		Activities associated with this pollution source and control measures selected to control the source
	Yes	No	
Concrete truck/equipment washing		X	Will not occur in project area.
Dedicated asphalt and concrete batch plants		X	Will not occur in project area.
Non-industrial waste sources	X		Non-industrial waste sources include trash, port-a-potties, and non-potable water. Trash and other discarded materials will be picked up at least daily and disposed of in waste disposal containers. Port-a-potties are self-contained sewage facilities that will be maintained and anchored by a certified contractor. Structural Control Measures: The port-a-potties will be anchored to the ground to prevent any spillage of sewage. Nonstructural Control Measures: Proper signage regarding onsite waste management will be present. Employees will conduct daily trash pickups around the site.

The control measures include silt fence, temporary berms, erosion control logs, rock check dams, sediment traps, sediment basins, temporary swales, soil roughening, seeding, mulch, tackifiers, and erosion control logs. Each type of control measure will be described, timing of implementation, installation procedures, installation expectations, maintenance requirements, and a control measure diagram, if applicable. The information regarding each control is from Colorado Department of Transportation (CDOT) *Erosion Control and Stormwater Quality Guide. Chapter 5 Construction Best Management Practices*, Revised 2014 (https://www.codot.gov/programs/environmental/water-quality/documents/erosion-storm-quality/chapter-5/view) and *CDOT Erosion Control and Stormwater Quality Field Guide,* 2011 (https://www.codot.gov/programs/environmental/water-quality/documents/CDOT%20Pocket%20Guide%20122211.pdf). Text in italics is taken directly from the CDOT Guides. Some other resources were also used in this section and are referenced in the specific control measure sub-section.

5.1 Silt Fence

5.1.1 Description

Silt fence is a temporary vertical barrier of filter fabric attached to and supported by posts and entrenched into the ground.

5.1.2 Implementation

Silt fence can be used on the outer boundary of the well pad or road to intercept sediment from the disturbance to the adjacent undisturbed areas. Silt fences are also *used to filter sheet flow.* Silt fence is typically only used during the construction phases of stormwater inspections.

5.1.3 Installation Procedures

5.1.3.1 Materials

The filter fabric shall conform to the requirements described in Section 420 of CDOT's Standard Specifications for Road and Bridge Construction. Minimum height of the filter fabric shall be 36 inches. The use of joints will not be used*. Posts for silt fences shall be metal or hard wood with a minimum length of 42 inches. Wooden posts shall have a minimum diameter or cross section of 1-¼ inches. Metal posts shall be "studded tee" or "U" type with a minimum weight of 1.33 lbs/ft, and they shall be protected against corrosion. Metal posts shall have projections for fastening wire.*

5.1.3.2 Installation

Silt fences should be installed using the following procedures:

- *Drive posts vertically into the ground to a minimum depth of 18 inches and excavate a trench approximately 6 inches wide and 6 inches deep along the line of posts and upslope from the barrier (*see Figure 1: Silt Fence Installation). *Not less than the bottom 1 foot of the filter fabric shall be buried into this trench. The trench shall be backfilled and the soil compacted.*
- *The filter materials shall be fastened securely to metal or wooden posts using wire ties, or to the wood posts with ¾-inch long #9 heavy duty staples. The filter fabric shall not be stapled to existing trees.*
- *Posts shall be spaced a maximum of 10 feet apart.*
- *Along the toe of fills, install the silt fence along a level contour and provide an area behind the fence for runoff to pond and sediment to settle. A minimum distance of 5 feet from the toe of the fill is recommended. The height of the silt fence from the ground surface shall be minimum of 24 inches and*

shall not exceed 36 inches; higher fences may impound volumes of water sufficient to cause failure of the structure

5.1.4 Inspection Expectations

Silt fences should be inspected to be sure there is not accumulated material (silt/soil) on the silt fence and that there are no tears in the fabric.

5.1.5 Maintenance Requirements

Silt fences shall be periodically maintained to prevent sediment from passing over or under the fence. Sediment shall be removed from behind the silt fence when it accumulates to one-half the exposed fabric height. Sediments removed must be properly disposed. Silt fence damaged by wind or other factors should be promptly repaired. Silt fences shall be removed when they have served their useful purpose. The area with the silt fences shall be stabilized after removal of the fence.

5.1.6 Control Measure Diagram

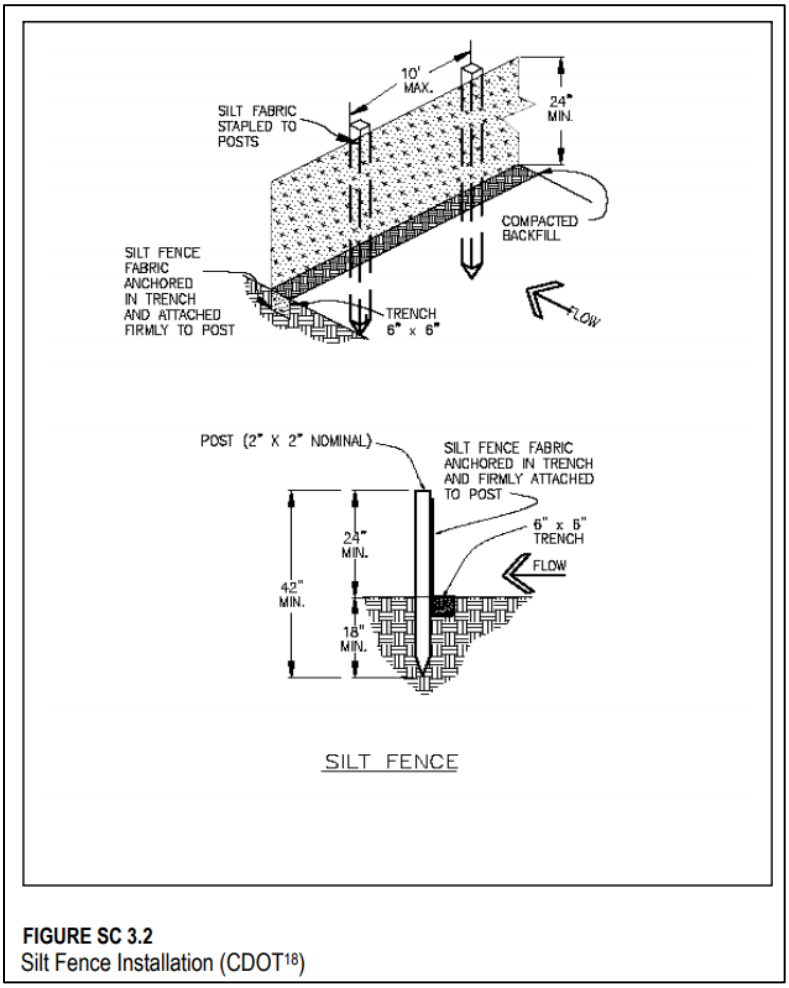


Figure 1: Silt Fence Installation

5.2 Temporary Berms and Dirt Berms

5.2.1 Description

A temporary berm or ridge made of soil (or coarse aggregate). Berms to intercept and divert runoff should not be used where the drainage area exceeds 10 acres. Berms should not be used in areas with slopes steeper than 10 percent. Berms shall have a minimum height of 18 inches, side slopes of 2:1 or flatter, and a minimum base width of 4.5 feet (see Figure 2: Berm Installation*).*

5.2.2 Implementation.

Temporary berms and dirt berms are used to intercept and divert runoff to desired location such as towards a sediment trap or a slope drain. Berm are used to divert runoff from areas where it might damage property, cause erosion, or interfere with the establishment of vegetation. Berm are used along the top edges of cuts and fills to protect the embankment.

5.2.3 Installation Procedures

Berms and diversions should be constructed of compacted soil or coarse aggregate. All berms shall have an uninterrupted positive grade to a stabilized outlet. The outlet should be capable of conveying concentrated runoff into an undisturbed, stabilized area at a non-erosive velocity. Berms shall be compacted as needed to prevent unequal settlement. Berms should be stabilized with riprap, turf reinforcement or appropriate measure for protection against erosion and failure.

5.2.4 Inspection Expectations

Inspection must be provided periodically and after each rain or snowfall event that causes runoff.

5.2.5 Maintenance Requirements

Sediments accumulated against the berm should be removed periodically and properly disposed of. Erosion along the berm should be repaired with the stabilization measure re-established. Maintenance must be provided periodically and after each rain or snowfall event that causes runoff.

5.2.6 Control Measure Diagram

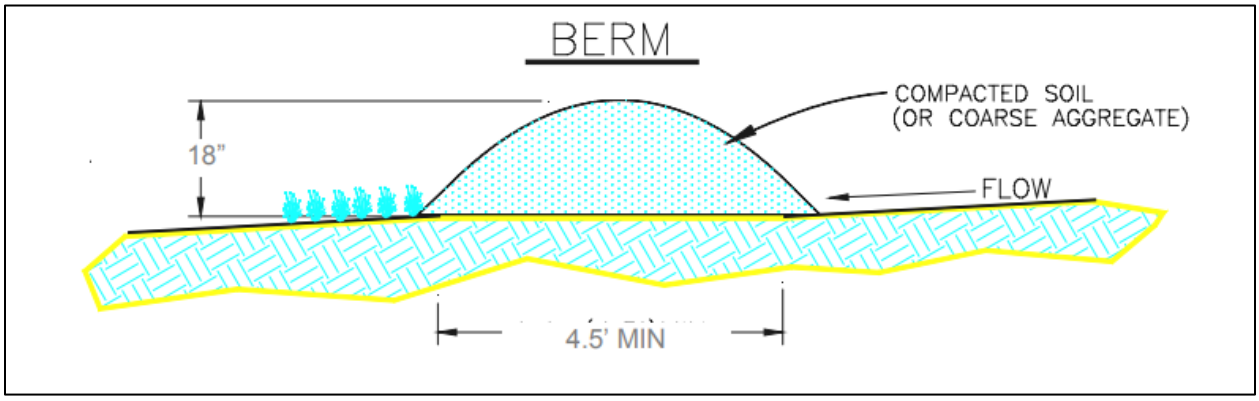


Figure 2: Berm Installation

5.3 Roadside Ditches

Information in italics about roadside ditches was obtained from CDOT Drainage Design Manual (https://www.codot.gov/programs/environmental/water-quality/documents/drainage-design-manual/drainagedesignmanual_chapter08_channels.pdf) and Bureau of Land Management (BLM)

Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development, Chapter 4- Construction and Maintenance https://www.blm.gov/sites/blm.gov/files/Chapter%204%20-%20Construction%20and%20Maintenance.pdf

5.3.1 Description

A roadside channel is defined as an open channel usually paralleling the roadway *embankment and within the limits of the right of way. It is normally trapezoidal or V-shaped in cross-section and lined with grass or a special protective lining. The primary function of roadside channels is to collect surface runoff from the* roadway *and areas that drain onto the right of way and convey the accumulated runoff to acceptable outlet points. The alignment, cross-section and grade of roadside channels are usually constrained to a large extent by the geometric and safety standards applicable to the project. These channels should accommodate the design runoff in a manner that assures the safety of motorists and minimizes future maintenance, damage to adjacent properties, and adverse environmental or aesthetic effects. Erosion protection is important for these types of ditches. (CDOT)*

5.3.2 Implementation

Roadside ditches will be implemented in accordance with good engineering, hydrologic, and pollution control practices. Roadside ditches are implemented during the construction phase.

5.3.3 Installation Procedures

Roadside ditches should conform to the slope, grade, and shape of the required cross-section with no projections of roots, stumps, rocks, or similar debris. Side ditches must be excavated to a depth of 1-foot minimum below the finished road surface. Drainage turnout spacing on these ditches should not exceed 500 feet; slopes greater than 5 percent may require closer spacing of turnout furrows (wing ditches or relief ditches). Ditch grades should be no less than 0.5 percent to provide positive drainage and to avoid siltation. The types of ditches normally used are drainage, trap, interception, and outlet. All culverts must be sized in accordance with accepted engineering practices and any special environmental concerns. The minimum size culvert in any installation is 18 inches. (BLM)

5.3.4 Inspection Expectations

Roadside ditches will be inspected on a regular basis. Ditches should be free of sediment or trash, and all other erosion control measures in the ditches should be functioning. Erosion control measures can include erosion control logs, rock check dams, vegetation, and erosion control blankets.

5.3.5 Maintenance Requirement

Roadside ditches need to be cleaned on a regular basis. The clearing of sediment or trash blocking ditches needs to be removed and disposed of properly.

5.4 Erosion control logs

5.4.1 Description

Erosion logs filled with rock or other filter material used for erosion and sediment control.

5.4.2 Implementation.

Erosion control logs are used as a temporary feature. The logs are used as check dams in ditches and swales for erosion control until vegetative cover is established. Do not use in ditches and swales with continuous flow. Logs are manufactured BMPs. Refer to the manufacturer for guidelines on limitations.

Several types of logs exist. A "gravel" log is typically a cylindrical shaped filter with ¼ inch mesh or burlap filter cover filled with ¾ inch gravel. Refer to the manufacturer for specific material specifications.

5.4.3 Installation Procedures

Refer to manufacturer's installation procedures. Generally, when using as a check dam, it should be placed in straight sections to minimize the potential for erosion in the channel bend. Figure 3 and Figure 4 show the staking pattern for the logs and installation location of erosion control logs in ditches.

5.4.4 Inspection Expectations

Inspect logs daily for cuts, abrasions, and proper installation, replace or reposition daily. Remove sediment and dispose in a proper manner.

5.4.5 Maintenance Requirements

Remove logs that create traffic hazard. Remove sediment behind logs on a regular basis, dispose of sediment in a proper manner.

5.4.6 Control Measure Diagram

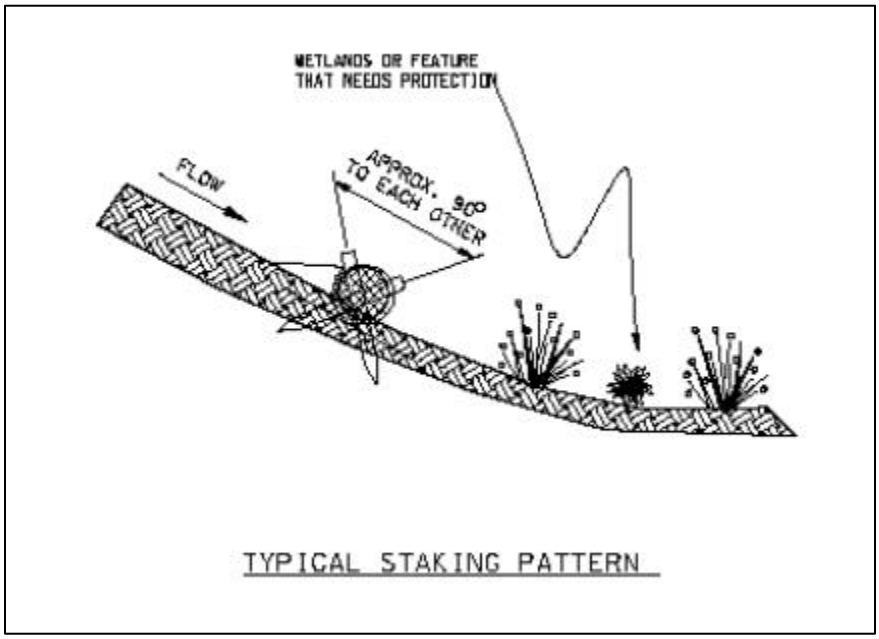


Figure 3: Typical Staking Pattern for Erosion Control Logs

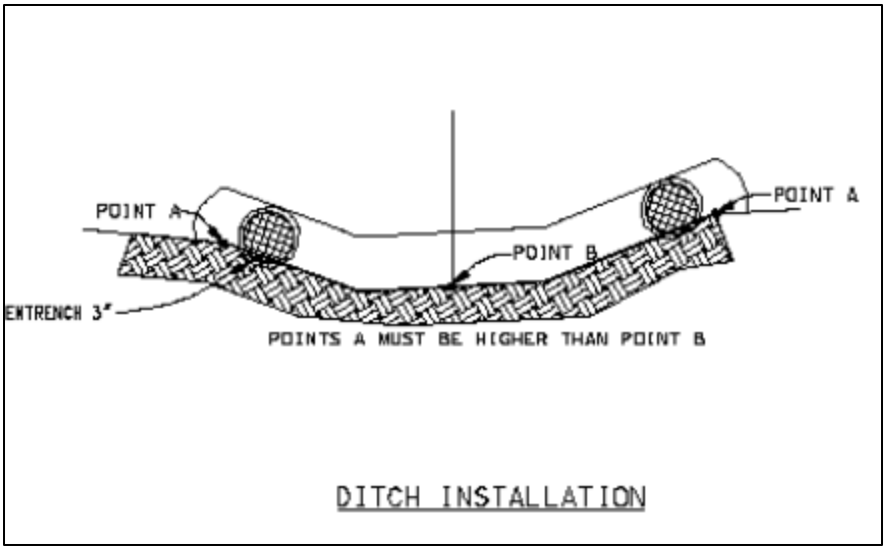


Figure 4: Installation of Erosion Control Logs in Ditches

5.5 Rock Check Dams

5.5.1 Description

Small dams constructed across a swale or drainage ditch, often along access roads.

5.5.2 Implementation

Rock check dams are used on a temporary or permanent ditches or swales to reduce erosion. Rock check dams are used for the purpose of reducing the velocity of concentrated stormwater flows to non-erosive velocities, thereby reducing erosion in swales or ditches. Rock check dams should not be used in continuous flow streams and only used in small open channels which drain 10 acres or less.

5.5.3 Installation Procedures

The check dam should be placed in reasonably straight ditch sections to minimize the potential for erosion in the channel bend. In locating the check dam, consideration should be given to the effects and reach of the impounded water and sediment. Standard check dams are 2 feet high with 2:1 side slopes and a weir section at the center of the dam at least 6 inches lower than the existing ground at the outer edges of the check dams. These dimensions may be modified based on individual needs (see Figure 5*). The maximum height of the check dam at the center should not exceed 2 feet or one-half the depth of the ditch or swale. The check dam shall be wide enough to reach from bank to bank of the ditch or swale.*

Check dams should be constructed of 4- to 6-inch stone. Hand or mechanical placement will be necessary to achieve complete coverage of the ditch or swale and to ensure that the center of the dam is lower than the edges. Erosion bales and other types of materials can be considered for check dams. Erosion bale check dams will be used only as temporary erosion control measures.

A weir section shall be located at the center of the dam. This weir shall be at least 6 inches lower than the outer edges as shown in Figure 6*. Check dams should be keyed into the sides and bottom of the channel, minimum of 4- to 6-inches. Erosion bales used as check dams must be placed in rows, lengthwise, oriented perpendicular to the contour, with ends of adjacent bales tightly abutting one*

another as shown in Figure Figure 6*. The maximum spacing between barriers should be such that the toe of the upstream barrier is at the same elevation as the top of the downstream barrier (see* Figure 6*).*

5.5.4 Inspection Expectations

Inspect for erosion along the edges of the check dams and repair as required immediately. Also inspect for sediment accumulations behind check dams.

5.5.5 Maintenance Requirements

Sediment accumulations behind check dams should be removed when it was accumulated to one-half of the original height of the dam and properly disposed of. Check dams should be removed when their useful life has been completed. In temporary ditches and swales, check dams should be removed and the ditch filled in when it is no longer needed. In the case of grass-lined ditches, check dams should be removed when the grass has matured sufficiently to protect the ditch or swale. The area beneath the check dams should be seeded and mulched immediately after the check dams are removed.

5.5.6 Control Measure Diagram

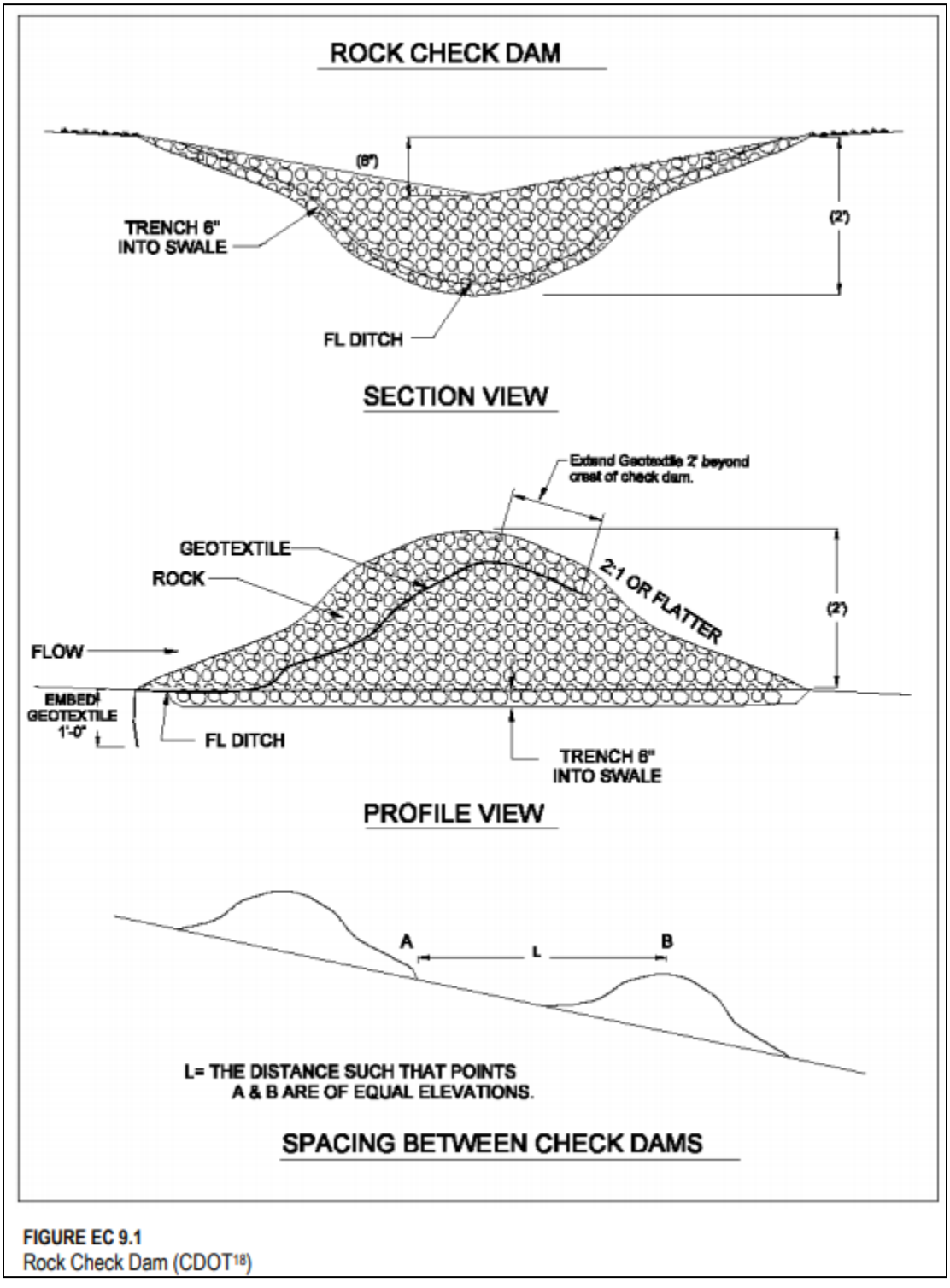


Figure 5: Rock Check Dam Dimensions and Spacing

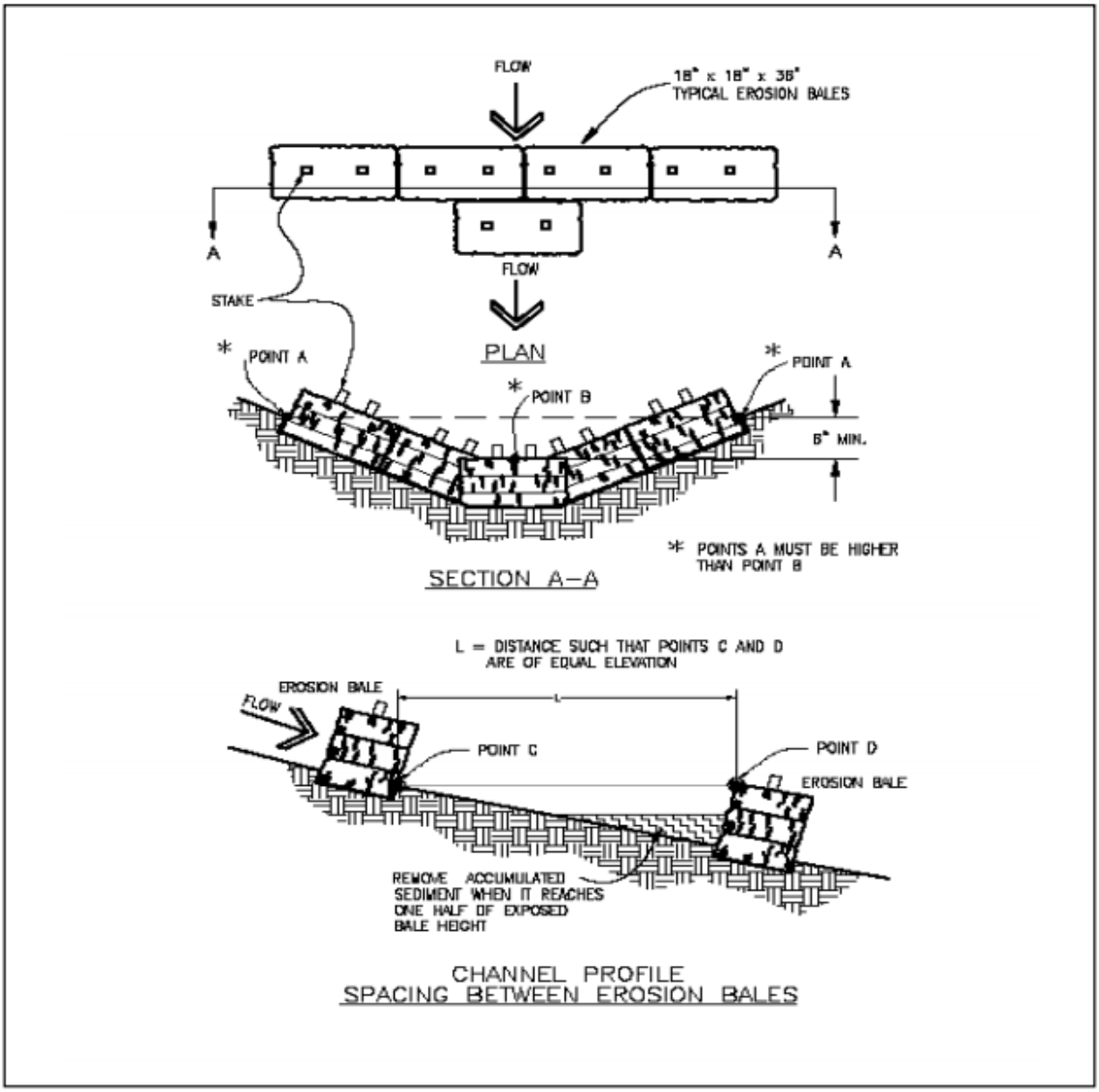


FIGURE EC 9.2
Erosion Bale Check Dams (CDOT[18])

Figure 6: Erosion Bale Check Dams Installation Procedure

5.6 Sediment Traps

5.6.1 Description

A small temporary ponding area formed by excavating below grade and/or by constructing an earthen embankment with a hard-lined spillway. The shape is a rectangular and shallow trap, with a length-to-width ratio of 2:1 or greater is recommended. See Figure 7 *for the sediment trap design.*

Traps should be located at points of discharge from disturbed areas. The location will be determined by the natural terrain, drainage pattern of the runoff, and the accessibility for maintenance. Traps should not be located closer than 20 feet from a proposed building foundation or highway edge of road.

Sediment traps shall have a storage volume of 3,600 ft3/acre of contributing drainage area. Half of this volume shall be in the form of wet storage or a permanent pool. The other half shall be in the form of dry storage. When possible, the wet storage volume should be contained within the excavated portion of the trap. The wet volume is measured from the low point in the trap to the base of the embankment. The dry volume should be measured from the base of the embankment to the crest of the spillway. The depth within the wet storage area should be a maximum of 4 feet, although 2 feet is preferred.

Maximum embankment height shall be 5 feet measured on the downstream side. The minimum top embankment width shall be 4 feet. Side slopes for the embankment and the excavated areas shall be 2:1 or flatter. Fill material for the embankment shall be free of roots or other vegetation, organic material, large stones, and other objectionable material. The spillway shall consist of a stone section in the embankment formed by a combination coarse aggregate/riprap to provide for filtering/detention capability. Riprap shall be 4- to 8-inch rock, while the coarse aggregate shall be 1/2 to 3/4 inches. The spillway crest shall be at least 1 foot below the top of the embankment.

5.6.2 Implementation

Sediment traps are used to detain sediment-laden runoff from small disturbed areas to allow sediments to settle out. Sediment traps will only be used for treatment of onsite runoff and only used if the contributing drainage area to the trap is 5 acres or less.

5.6.3 Installation Procedures

Sediment traps, along with other perimeter controls, shall be installed before any land disturbance takes place in the drainage area. The area under the embankment shall be cleared and stripped of any vegetation and roots. A geotextile should be placed at the stone-soil interface to act as a separator.

5.6.4 Inspection Expectations

Spillway should be regularly inspected; rocks clogged with sediment shall be cleaned or replaced.

5.6.5 Maintenance Requirements

Sediment shall be removed from the trap when the wet storage volume is reduced by half. Sediments removed must be properly disposed.

5.6.6 Control Measure Diagram

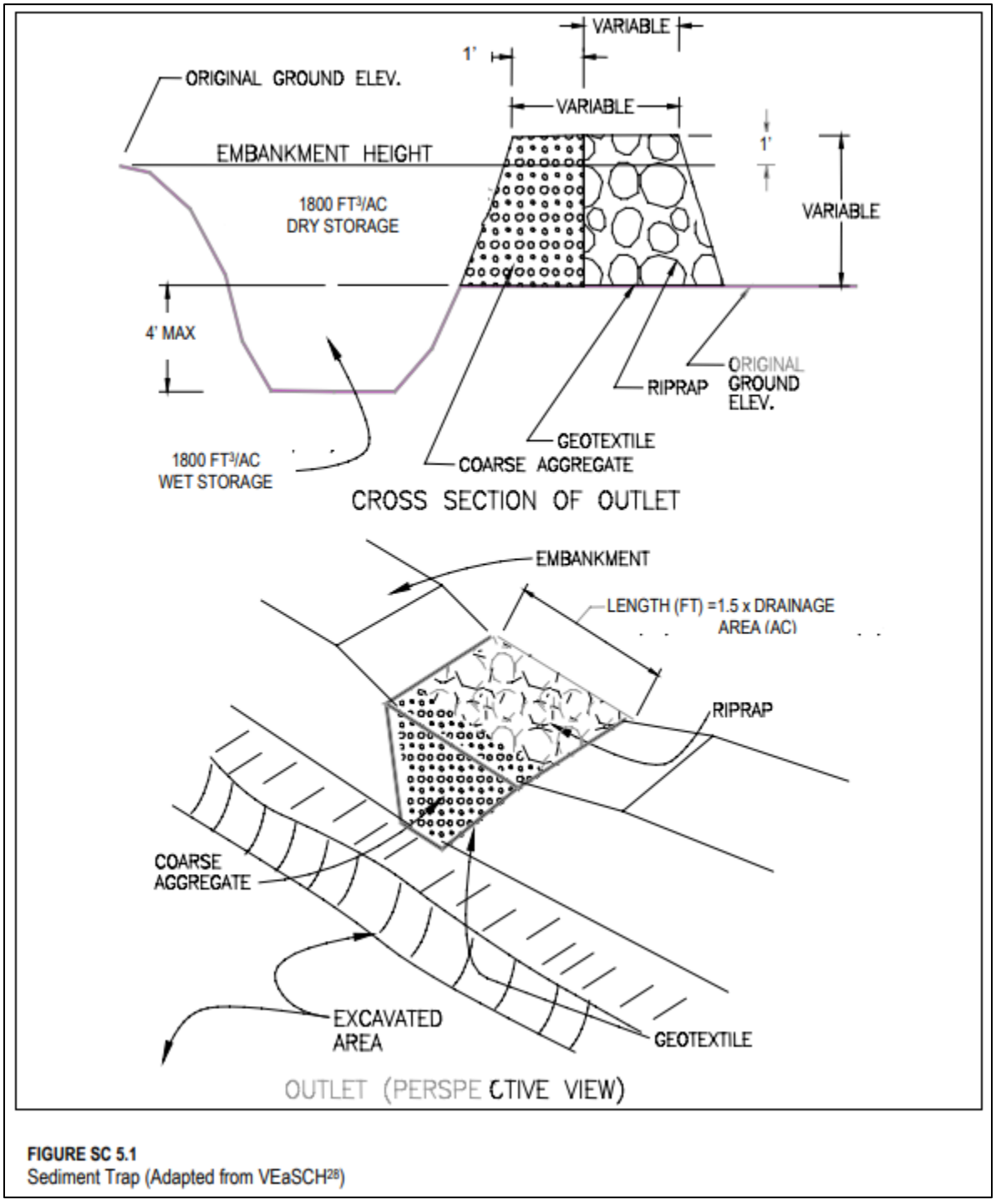


FIGURE SC 5.1
Sediment Trap (Adapted from VEaSCH[28])

Figure 7: Sediment Trap Design

5.7 Sediment Basin

5.7.1 Description

A temporary basin with a controlled outlet. Differs from a sediment trap in that it is designed for larger drainage areas and has a controlled release structure. Sediment basins should involve an engineer in the design. *This basin can also be constructed as a combination of embankment and excavation. Sediment basins are used to treat onsite runoff only.*

5.7.2 Implementation

Sediment basins are used to detain sediment-laden runoff from disturbed areas long enough for sediment to settle out. Sediment basins may be designed to be upgraded to a permanent structure after construction is completed. Sediment basins will be used in conjunction with other erosion control practices such as temporary seeding, mulching, drainage dike etc. to reduce the amount of sediment flowing into the basin. Sediment basins will never be constructed on a flowing stream.

5.7.2.1 Location

The location of the sediment basin should be such that the basin intercepts the largest possible amount of runoff from the disturbed area. Appropriate locations are generally low areas and natural drainageways below disturbed areas. Location shall be such as to minimize interference with construction activities. Ease of maintenance access for cleanout should be considered when selecting a location. Total basin capacity shall be 3,600 ft3/acre of contributing drainage area. Half of this volume shall be in the form of a permanent pool or wet storage. The other half of this volume shall be in the form of dry storage available for runoff storage (see Figure 8: Sediment Basin Capacity).

5.7.2.2 Shape

The basin shall be long and narrow, with a length-to-width ratio of 2:1 or greater. Appropriate basin shape may be attained by properly selecting the site of the basin, by excavation, or by the use of baffles. If the 2:1 ratio cannot be achieved, baffles should be placed halfway between the inflow point and the outflow. Figure 9: Sediment Basin Baffle Location *shows recommended baffle locations to attain length-to-width ratios of 2:1 or greater. A plywood (or equivalent) fence can be used for the baffle. Posts for this fence should be buried at least 3 feet into the ground. The fence should be at least 4 feet high. In large basins, CDOT Type IV concrete barriers can be used as baffles.*

5.7.2.3 Embankment

Maximum embankment height shall be 9 feet. Measures should be incorporated in the embankment to protect against failure due to seepage. A geotechnical engineer should be consulted for specific design considerations.

5.7.2.4 Outlet

The basin outlet shall consist of a principal outlet (perforated vertical pipe) and an emergency spillway (see Figure 8).

5.7.2.5 Principal Outlet

The principal outlet shall consist of a perforated vertical pipe joined by a watertight connection to a horizontal outlet pipe extending though the embankment and outletting beyond the downstream toe of the fill (see Figure 8). The outlet pipe shall be designed to pass the peak flow expected from a 2- year storm. The outlet pipe diameter can be determined using Table SC 6.3 below. For the purposes of the table, Q (cfs) is the flow for the 2-year storm; H (ft) is the difference in elevation between the crest of the principal outlet and the crest of the emergency spillway (see Figure 8); and D (inches) is the pipe diameter.

TABLE SC 6.3
Outlet Pipe Diameter (inches)

H	$D = 6.171(Q/H)^{1/2}$	$D = 1.232(QH)^{-1.5}$
1.0	Q < 24 cfs	Q > 24 cfs
1.5	Q < 75 cfs	Q > 75 cfs
2.0	Q < 135 cfs	Q > 135 cfs
2.5	Q < 250 cfs	Q > 250 cfs
3.0	Q < 400 cfs	Q > 400 cfs

The principal outlet shall be designed to drain the dry storage volume in a period of no less than the required drain time. Refer to Chapter 6 for design guidance of the perforations and drain time. The top of the principal outlet shall be set at an elevation at least (1 foot) below the crest of the emergency spillway. A trash rack and an anti-vortex device should be attached to the top of the principal outlet to prevent floating debris from being carried out of the basin and to improve the hydraulic performance at the entrance to the principal outlet. The base of the principal outlet shall be firmly anchored to prevent flotation. As a minimum, a safety factor of 1.25 shall be used (downward forces = 1.25 x upward forces). Anchoring can be done through a concrete base or square steel plate covered with stone, gravel, or compacted soil. The outlet pipe, which extends through the embankment, shall be designed to carry the flow provided by the principal outlet with the water level at the crest of the emergency spillway. The connection between the principal outlet pipe (perforated vertical pipe) and the outlet pipe shall be watertight.

5.7.2.6 Emergency Spillway

The emergency spillway shall consist of an open channel constructed in the embankment over undisturbed material (not fill). If conditions do not allow for the construction of the spillway over undisturbed material, the spillway may be constructed of non-erodible material such as riprap. The emergency spillway shall be designed to carry the peak rate of runoff expected from a 10-year storm, less the flow conveyed through the principal outlet. A Geotech engineer shall be consulted regarding spillway stability. The design high-water elevation through the emergency spillway shall be at least 1 foot below the top of the embankment. The crest of the emergency spillway channel shall be at least 1 foot above the crest of the principal outlet.

5.7.3 Installation Procedures

Areas under the embankment and any structural works shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots, or other objectionable material. To facilitate cleanout and restoration, the pool area (measured at the top of the principal outlet) shall be cleared of all brush and trees. Design elevations, widths, and entrance and exit channel slopes are critical to the successful operation of the spillway and must be constructed within a tolerance of +/- 2.4 inches. The embankment shall be constructed on undisturbed ground. For earthen-fill embankments, a cutoff trench shall be excavated along the centerline of the embankment. The cutoff trench shall extend up both abutments to the top of the perforated vertical pipe. The riser and barrel of the principal outlet shall be placed on a firmly compacted soil foundation. The base of the riser shall be firmly anchored according to design criteria to prevent flotation. Pervious material such as sand, gravel, or crushed stone shall not be used as backfill around the outlet pipe.

5.7.4 Inspection Expectations

Inspection of the basin shall take place at the end of each working day, and damages shall be repaired immediately.

5.7.5 Maintenance Requirements

Sediment shall be removed from the basin when the wet storage volume has been reduced by half. The elevation of the sediment cleanout level shall be calculated and clearly marked on the riser. Sediments removed must be properly disposed.

5.7.6 Control Measure Diagrams

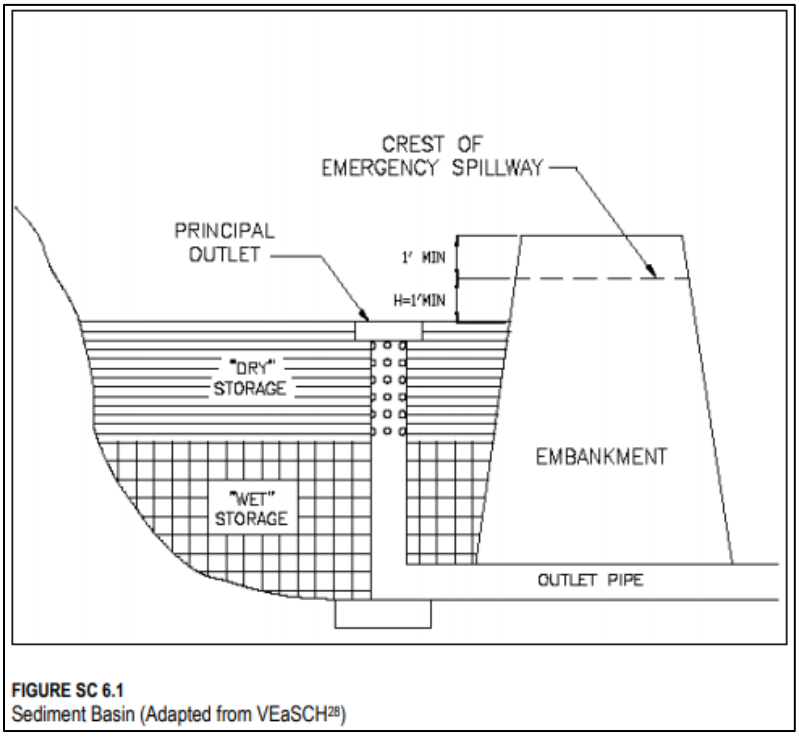


FIGURE SC 6.1
Sediment Basin (Adapted from VEaSCH[28])

Figure 8: Sediment Basin Capacity

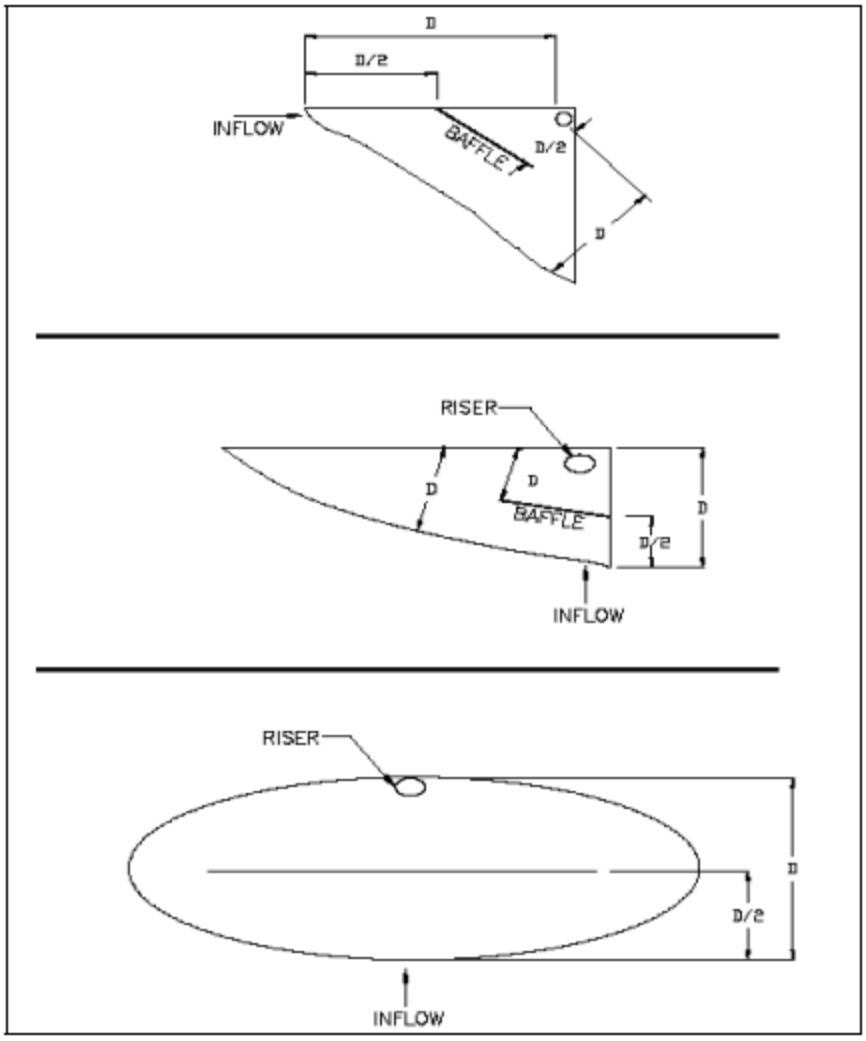


FIGURE SC 6.2
Sediment Basin Baffle Location (Adapted from UDFCD[16])

Figure 9: Sediment Basin Baffle Location

5.8 Temporary Drainage Swale

5.8.1 Description

Temporary drainage swales are implemented to intercept, divert, collect surface runoff, and convey the accumulated runoff to acceptable outlet points to prevent sediment from entering the storm drainage system. Swales are not effective sediment trapping measures.

5.8.2 Implementation

Temporary drainage swales can be installed along the bottom or mid-slope of steep grades to intercept sheet flow and direct the concentrated runoff towards an acceptable outlet point. Temporary drainage swales can also be installed at the top of slopes to divert and direct offsite runoff from adjacent slopes. These can also be installed along roads to intercept and convey runoff or can be used as an alternative to silt fence.

5.8.3 Installation Procedures

At a minimum, the swale should conform to predevelopment drainage patterns and provide stabilized drainage channels and outlets. Permanent dikes and swales should be installed where possible. The pollutant removal efficiency of a swale can be improved through enhancing filtering by grass in the channel. To enhance grass filtering, the swale should be designed as a triangle, with at least 1V:3H side slopes, or a parabola, with a 6:1 top width-to-depth ratio. The grass in the swale should be dense, deep rooted and water tolerant. The grass should be high enough to cover the depth of runoff in the swale but not so high that it is flattened by the flowing stormwater.
(https://www.codot.gov/programs/environmental/water-quality/documents/drainage-design-manual/drainagedesignmanual_chapter12_storagefacilities.pdf)

5.8.4 Inspection Expectations

Inspect temporary swales weekly and after rainfall and snowfall events for washouts, lost riprap, damaged lining, erosion, and accumulation of debris and sediment in the swale.

5.8.5 Maintenance Requirements

Repair damaged sediment control measures and remove accumulated sediment as soon as possible. Remove temporary sediment control measures once the project areas has been stabilized.

5.9 Soil Roughening and Grading Techniques

5.9.1 Description

Soil surface roughening, terracing and rounding at tops of cuts, transitions, and roadway ditches to facilitate plant establishment and minimize soil erosion.

5.9.2 Implementation

Soil roughening is used to temporarily stabilize disturbed areas and protect from wind and water erosion. Soil roughening and grading are used as a temporary practice during construction.

5.9.3 Installation Procedures

Round channel bottoms to avoid V-shaped ditches and top of cut of cut slopes. Avoid angles in cut-and-fill transition areas by rounding transition line. Roughen, terrace, scarify or disc parallel to the contours. Scarify or disc to maintain 1- to 3-inch minimum variation in soil surface. Grading techniques are BMPs that must be implemented in conjunction with other BMPs such as mulching or soil binders. Use of only grading techniques are not adequate erosion control BMPs.

5.9.4 Inspection Expectations

Inspection must be provided periodically and after each rain or snowfall event that causes runoff to ensure roughed state is maintained.

5.9.5 Maintenance Requirements

Maintenance must be provided periodically and after each rain or snowfall event that causes runoff to ensure roughed state is maintained. Rills developed should be filled and the area re-graded immediately.

5.9.6 Control Measure Diagram

Figures 10 and 11 show slope rounding diagrams as grading techniques.

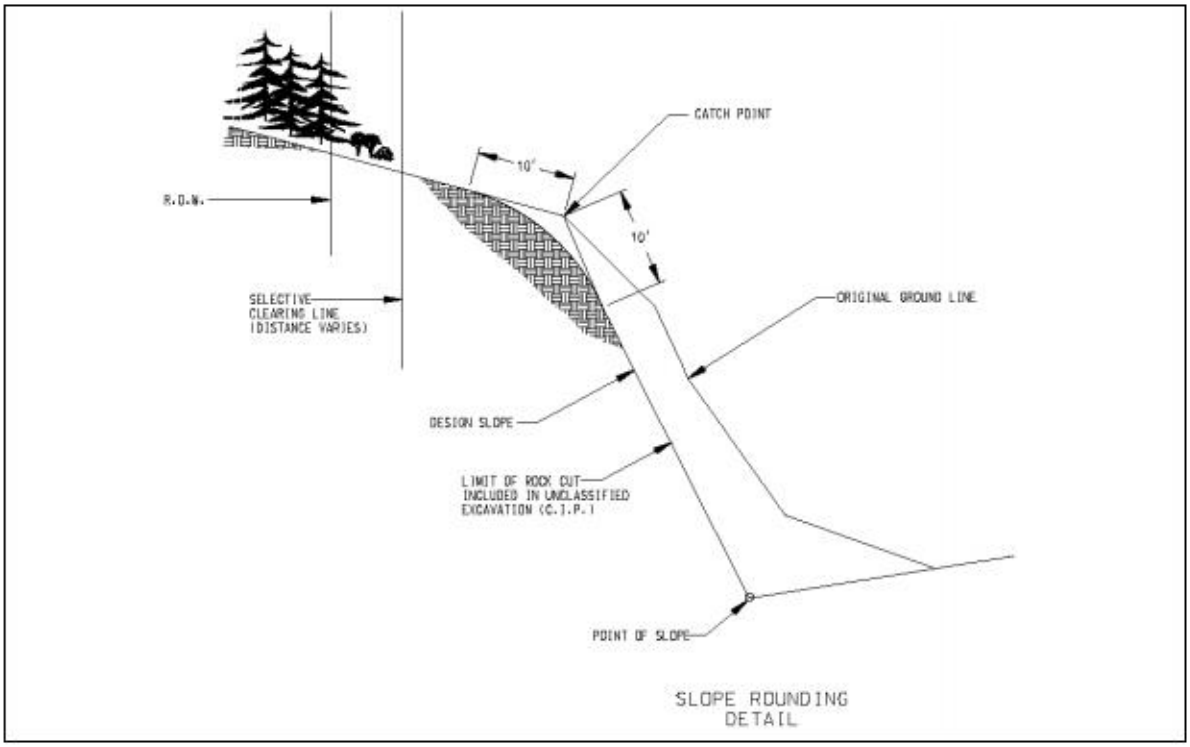


FIGURE EC 12.1
Slope Rounding Flatter than 2:1(CDOT[18])

Figure 10: Slope Rounding Flatter than 2:1

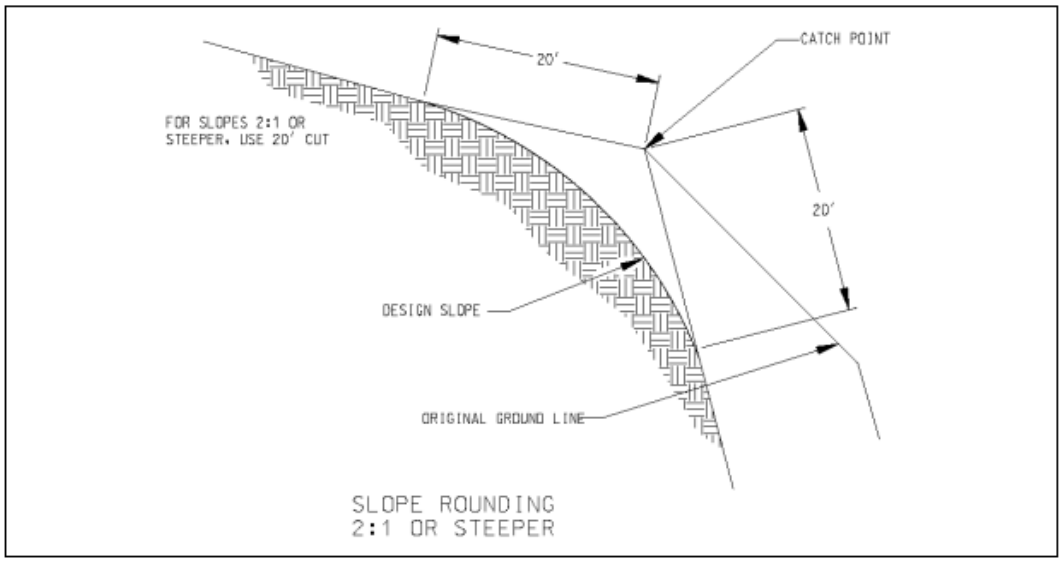


FIGURE EC 12.2
Slope Rounding 2:1 or Steeper (CDOT[18])

Figure 11: Slope Rounding 2:1 or Steeper

5.10 Seeding

5.10.1 Description

Seeding with a diverse seed mix of grasses, forbs, and shrubs to match the surrounding undisturbed area. Seeding establishes plant cover in a disturbed area. Seeding can be used for interim and final vegetative cover. The establishment of plant cover is needed to comply with regulatory requirements, provide wildlife habitat, and general aesthetics.

5.10.2 Implementation.

Seeding is best done in the spring or fall. *Seeding should not be applied when the ground is frozen or during the summer when moisture is not available.* The seed mixes for sites in this plan will be a native grass seed mix appropriate for either Sagebrush or Pinyon Juniper communities depending on the vegetation at the site.

5.10.3 Installation Procedures

Soil should be prepared by roughening. *Drill seed disturbed areas flatter than 2:1. Broadcast seed and rake into the soil on slopes 2:1 or steeper, double to triple drill seeding rates. Hydroseed only where 20 inches per year or more of precipitation occur and when slopes are 2:1 or steeper. Double to triple the hydroseeding rates.* Seeding will be conducted as soon as possible after disturbance is completed. Seeding should only be conducted in the spring or fall.

5.10.4 Inspection Expectations

Seeded areas should be inspected frequently to assess plant growth. Interim reclamation monitoring should be completed in the spring and fall to determine areas that need noxious weed spraying and additional seeding. Noxious weeds inhibit the establishment of native species.

5.10.5 Maintenance Requirements

If seeded areas have not established, soil tests are recommended. Areas should be re-seeded.

5.11 Mulching

5.11.1 Description

Application of plant residues to the soil surface. Mulching material includes certified weed free hay or straw, certified under the Colorado Department of Agriculture Weed Free Forage Certification Program and inspected as regulated by the Weed Free Forage Act, Title 35, Article 27.5, CRS and wood cellulose fiber.

5.11.2 Implementation.

Mulching is used to cover permanent or temporary seeded areas. Mulching can also be used in combination with mulch tackifier for temporary erosion control on soil stockpiles (including topsoil).

5.11.3 Installation Procedures

- *Mulch shall be applied at a rate of 1 ½ to 2 tons per acre.*
- *At a minimum, 50% of the mulch, by weight, should be 10 inches or more in length.*
- *Depth of the applied mulch should not be less than 1 inch and mot more than 2 inches.*
- *Applied mulch should be uniformly distributed so that no more than 10% of the soil surface is exposed.*

- *Applied mulch should be anchored to the soil surface by using tackifier and mechanically crimping immediately after mulching or at least within 4 hours.*
- *Apply hydromulch immediately after seeding. Hydromulch mixture shall be applied at 2000 pounds per acre wood cellulose fiber mulch; 100 pounds per acre tackifier.*

5.11.4 Inspection Expectations

Inspect frequently and reapply mulching in areas where the mulching has been loosened or removed. Mulch tackifier must be applied with additional applications of mulching.

5.11.5 Maintenance Requirements

Reapply mulch in areas where mulch has been removed or loosened, based on inspection results.

5.12 Mulch Tackifiers

5.12.1 Description

Tackifiers are a temporary measure. An organic soluble powder adhesive used in the form of a water slurry to adhere native hay, straw, hydromulch, or seed to a surface and together. Derivative of plant material phyllium or Guar.

5.12.2 Implementation.

Mulch tackifiers have several uses including:

- *Used in combination with a native forage material for mulching applications.*
- *Used in combination with seed to adhere seed to soil.*
- *Used to adhere wood cellulose material (hydro mulch) to surface.*
- *Used to cover disturbances as temporary cover for wind erosion.*

5.12.3 Installation Procedures

Mulch tackifiers should be designed per the manufacturer's instruction. The tackifiers should be applied within four hours of mulch application, always in the liquid state, and can be applied in combination with organic fertilizers and humates. Tackifiers cannot be applied during a precipitation event or over snow. Tackifiers are water soluble and must be reapplied in six to 12 months after initial application if plants have not stabilized the soils.

5.12.4 Inspection Expectations

Inspect by touching mulch surface to determine if adhesion has occurred. Proper application will bond mulch material together and to soil. Mulch movement indicates poor application and product mixture.

5.12.5 Maintenance Requirements

Reapply tackifiers if needed, based on inspection results.

5.13 Erosion Control Blankets

5.13.1 Description

Erosion control blankets (soil retention blankets (SRB)) used on slopes and in swales to control erosion and promote the establishment of vegetation. The blankets are also used in transition areas before and after hard armor to provide for stable and non-erosive transition. The maximum slope is dictated by the soil stability (less than 1.5:1 slope ratio). Soils must be conducive to the establishment of vegetation. If

the velocity in the ditch is greater than 14 ft/second design velocity in ditches requires approval by the Hydraulic Engineer.

5.13.2 Implementation

In environmentally sensitive areas such as those with small animals and snakes, wetlands and streams, and other areas as directed by the Local Agencies, US Army Corps of Engineers (COE), US Forest Service, US Fish and Wildlife, and Colorado Division of Parks & Wildlife; biodegradable ECB is required. All slopes exceeding 3:1 grade shall receive SRB. Use grade stabilization on top of blankets to reduce the slope angle and spread runoff as sheet flow.

5.13.3 Installation Procedures

SRBs should be installed in accordance with CDOT standard M-208 details. All vegetation, roots, rocks, and other objectionable material shall be removed and disposed of so as not to create loss of soil contact by the SRB when installed.

5.13.4 Inspection Expectations

Inspection shall be performed periodically especially after a storm event that results in runoff and any required repairs or maintenance shall be executed immediately.

5.13.5 Maintenance Requirements

Re-anchor loosened matting and replace missing matting and staples as required. Do not mow blankets or drive large equipment over SRBs. If mowing is required, then use a line trimmer or equipment with low ground pressure (turf mower). Avoid any construction or maintenance traffic over blankets when soil is wet.

5.13.6 Control Measure Diagram

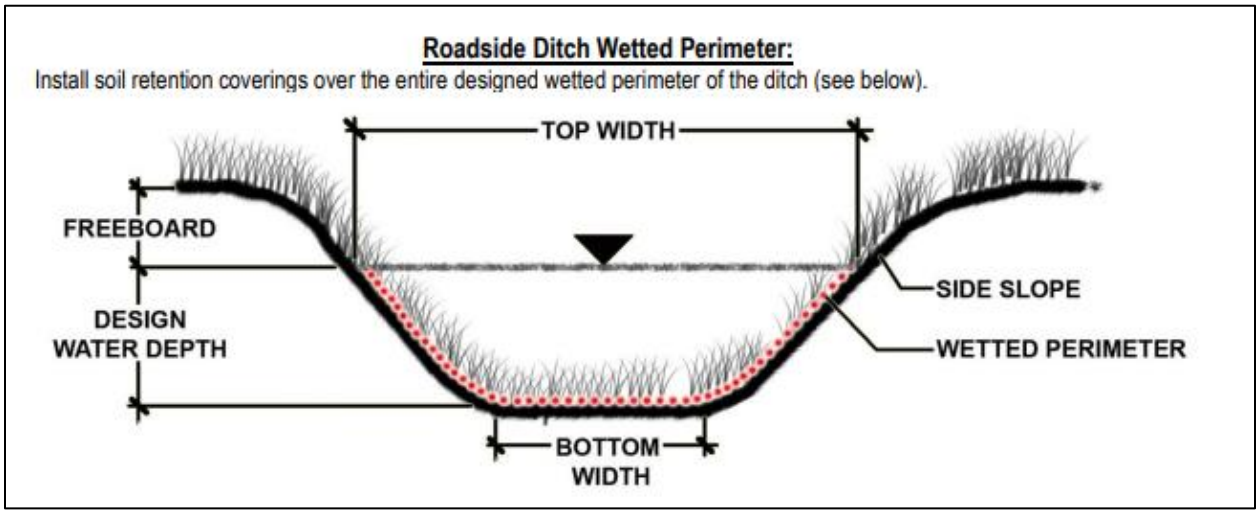


Figure 12: Erosion Control Blankets Control Measure Diagram

5.14 Vehicle Tracking Pads

5.14.1 Description

The purpose of a Vehicle Tracking Pad is to minimize the amount of sediment leaving the area as mud attached to vehicle tires. As a vehicle drives over the construction entrance BMP, it removes mud and

sediment from the tires and reduces soil transport off the site. Geotextile fabric separates the gravel from the soil below, keeping the gravel from being ground into the soil. The geotextile fabric also reduces the amount of rutting caused by vehicle tires by spreading the vehicle's weight over an area larger than the tire width. (CDOT 2011).

5.14.2 Implementation

The vehicle tracking pad will be installed at the start of the access road to the pad.

5.14.3 Installation Procedures

The vehicle tracking pad will be a minimum of 70 feet long and 12 feet wide. The tracking pad will consist of coarse aggregate on top of a geotextile base that is at least six inches in height. See control measure diagram. Table 2 shows the tracking pad aggregate gradation based on the percent by weight passing square mesh sieves.

Table 2: Vehicle Tracking Pad Aggregate Gradation Table

Sieve Save	***Percent by Weight Passing Square Mesh Sieves***
75mm (3 inch)	*100*
50mm (2 inch)	*0-25*
19mm (3/4 inch)	*0-15*

5.14.4 Inspection Expectations

Be sure the vehicle tracking pad is the proper length and width as specified in the installation procedures. Check to see if more aggregate is needed to prevent tracking mud and debris outside the pad/access road areas.

5.14.5 Maintenance Requirements

Add more aggregate as needed to prevent tracking mud and debris outside the pad/access road areas.

5.14.6 Control Measure Diagram

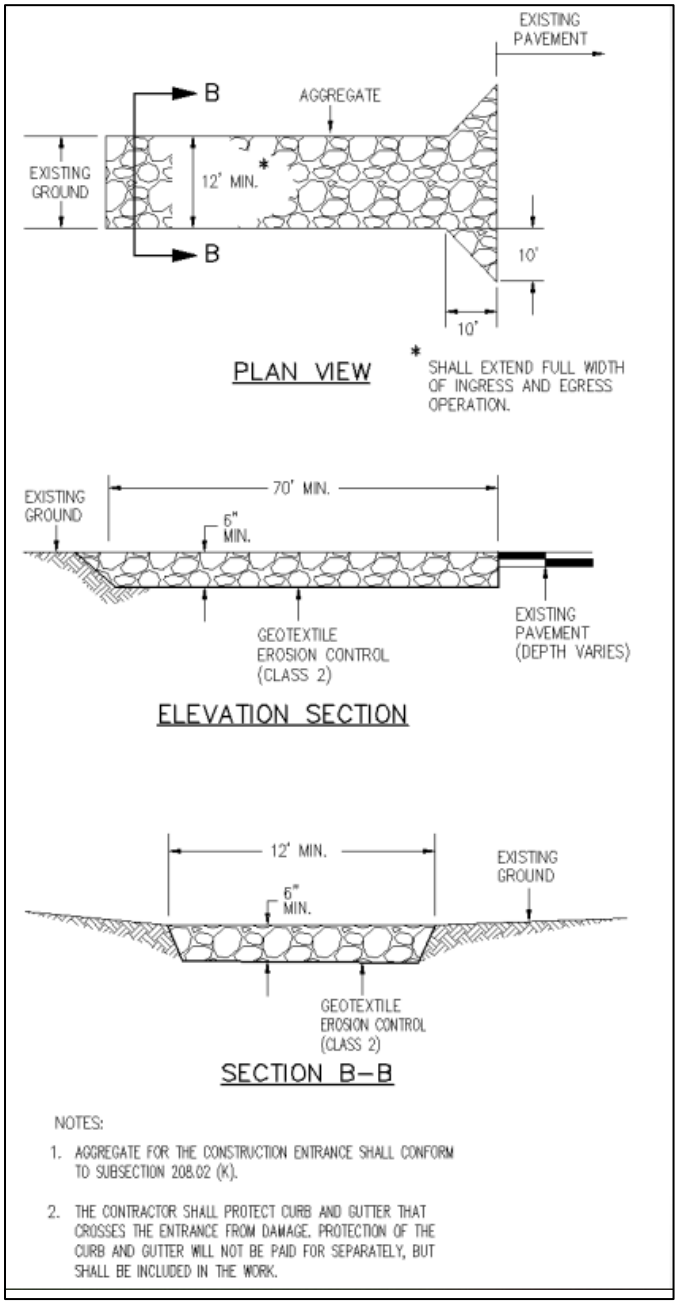


Figure 13: Vehicle Tracking Pad Design (CDOT 2011)

6.0 Site Descriptions

6.1 Soil Descriptions

Natural Resource Conservation Service (NRCS) soil mapping is available for this area. Soil types for each well pad and facility contained in this plan can be found below in Table 3. The soil maps for the project area are also labeled in the maps in Appendix A.

Table 3: Soil types present at each asset.

Pad Name	Soil Map Unit Type 1	Soil Map Unit Type 2	Soil Map Unit Type 3
SE Spargo	Romberg-Crosscan complex, 6 to 25 percent slopes, very stony	Romberg, extremely stony-Crosscan, very bouldery-Rock outcrop complex, 25 to 80 percent slopes	Gladel-Pulpit complex, 3 to 9 percent slopes
Cutthroat A	Rizno-Gapmesa complex, 3 to 9 percent slopes	Barx loam, 6 to 12 percent slopes	Romberg, extremely stony-Crosscan, very bouldery-Rock outcrop complex, 25 to 80 percent slopes
Spargo 2	Cahona-Pulpit complex, 3 to 9 percent slopes	Gladel-Pulpit complex, 3 to 9 percent slopes	
Island Butte 8	Ramper loam, 0 to 3 percent slopes	Gladel-Pulpit complex, 3 to 9 percent slopes	
Island Butte 1	Wetherill loam, 6 to 12 percent slopes	Gladel-Pulpit complex, 3 to 9 percent slopes	
Cutthroat 8	Wetherill loam, 3 to 6 percent slopes	Sharps, dry-Gapmesa complex, 6 to 12 percent slopes	
Cutthroat B Facility	Wetherill loam, 3 to 6 percent slopes	Sharps-Pulpit complex, 6 to 12 percent slopes	
Cutthroat 9	Ramper loam, 0 to 3 percent slopes	Wetherill loam, 3 to 6 percent slopes	
Cutthroat 14	Barx loam, 3 to 6 percent slopes		
Cutthroat 12	Barx loam, 3 to 6 percent slopes		
McClean 2	Barx loam, 6 to 12 percent slopes		
Island Butte 3	Gladel-Pulpit complex, 3 to 9 percent slopes		
Cutthroat 4	Rizno-Gapmesa complex, 3 to 9 percent slopes		
Island Butte 7-AH	Wetherill loam, 1 to 3 percent slopes		
Island Butte A	Wetherill loam, 3 to 6 percent slopes		
Canyon 1	Wetherill loam, 3 to 6 percent slopes		
Spargo 1-36	Wetherill loam, 3 to 6 percent slopes		
Island Butte 5	Wetherill loam, 3 to 6 percent slopes		
Island Butte B	Wetherill loam, 3 to 6 percent slopes		
Island Butte 12	Wetherill loam, 3 to 6 percent slopes		
Cutthroat 3	Wetherill loam, 3 to 6 percent slopes		

6.2 Vegetation Cover

Vegetation cover across all sites varies between native communities such as Sagebrush steppe and Pinyon Juniper Woodland as well as some dry land agricultural areas.

Figure 14: Typical Plant Communities in the Cortez Area

6.3 Allowable Non-Stormwater Discharges at the Site

Non-stormwater discharges which are allowed under the stormwater permit include discharges from emergency fire-fighting activities or a fire hydrant, landscape irrigation or return flow, and uncontaminated springs. Seeley Oil Company does not anticipate any non-stormwater discharges at the site.

6.4 Areas Receiving Discharge from the Site

There are several large drainages and canyons within the project area classified as Riverine Intermittent Stream Bed (R4SB) or Palustrine emergent persistent wetland, seasonally flooded (PEM1C) in the National Wetlands Inventory. Drainages include Yellow Jacket Canyon, Squaw Canyon, Ruin Canyon, and Cross Canyon. All these areas are generally extremely dry and would only receive discharges during very heavy precipitation events. All pad BMP's have been designed to contain pollutants on-site even during a catastrophe, so it is not expected there would be discharged from any sites to the R4SB and PEM1C drainages. A table of distances to receiving water body and water body type can be found below in Table 4 and wetlands are also included in Appendix A- BMP Maps.

Table 4 Distance to receiving body, and water body type.

Pad Name	Distance to Receiving Body of Water (yards)	Type of Wetland
Island Butte 8	47	R4SB
Cutthroat 9	68	PEM1C
Canyon 1	83	R4SB
Cutthroat 8	90	R4SB
McClean 2	90	R4SB
Cutthroat A	130	R4SB
Island Butte B	226	R4SB
Cutthroat 4	248	R4SB
Spargo 2	266	R4SB
Island Butte 12	272	R4SB
Cutthroat B Facility	291	R4SB
Cutthroat 14	352	R4SB
Island Butte 5	362	R4SB
SE Spargo	386	R4SB
Island Butte 1	389	R4SB
Spargo 1-36	392	R4SB
Cutthroat 3	554	R4SB
Island Butte 7-AH	635	R4SB
Island Butte A	656	R4SB
Cutthroat 12	674	R4SB
Island Butte 3	823	R4SB

6.5 Stream Crossings (Receiving Water) located within the Site Boundaries

There are no stream crossings across any of the site boundaries.

7.0 Final Stabilization and Long-Term Stormwater Management

Final stabilization is reached when all ground surface disturbing activities at the site have been completed, erosion is controlled at the site, and vegetative cover has been established, on all disturbed areas, with an individual plant density of at least 80% percent of pre-disturbance levels or adjacent undisturbed.

7.1 Practices Used to Achieve Final Stabilization

Reclamation will begin as soon as practice after the site has been stabilized. Reclamation includes removing any gravel, roughening the soil, spreading the topsoil, seeding, and mulching. Topsoil that was stockpiled during any construction will be used for reclamation. The reclamation seed mixes for this project will be selected based on the plant community they will be used in, either Pinyon-Juniper woodland or Sagebrush steppe. These seed mixes were provided by a local native seed vendor (Southwest Seed, Cortez CO.). Agricultural areas will be reclaimed to the proper crop with approval by the farmer. Table 5 shows the seed mixture and % of each species in the mix. Rockier and steeper areas may need to be broadcast. Areas should be mulched with a weed free straw to aid in soil stabilization during vegetation establishment, see BMP section above. Soil testing may also be necessary during certain situations, especially in agricultural areas.

Table 5: Example Seed Mixes

Sage Mix	Percent of Mix	Pinyon Juniper Mix	Percent of Mix
Indian Ricegrass	48	Sand Dropseed	4
Squirreltail Bottlebrush	20	Antelope Bitterbrush	2
Blue Grama Alma	4	Four Wing Saltgrass	2
Mutton Grass	8	Indian Ricegrass Rimrock	22
Needle & Thread Grass	16	Blue Grama	4
Sanddrop Seed	4	Bottlebrush Squirreltail	17
		Prairie Junegrass	4
		Sideoats Grama	17
		Western Wheatgrass	26

7.2 Long Term Stormwater Management

(1). All oil and gas location are subject to the Best Management Practices requirements of Rule 1002.f.(2). In addition, upon the termination of a construction stormwater permit issued by the Colorado Department of Public Health and Environment for an oil and gas location, such oil and gas location is subject to the Post-Construction Stormwater Program requirements of Rule 1002.f.(3), except that such requirements are not applicable to Tier 1 Oil and Gas Locations.

(2). Oil and gas operators shall implement and maintain Best Management Practices(BMPs) at all oil and gas locations to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and degradation. BMPs shall be maintained until the facility is achieved pursuant to Rule 1004.

Operators shall employ BMPs, as necessary to comply with this rule, at all oil and gas locations, including, but not limited to, well pads, soil stockpiles, access roads, tank batteries, compressor stations, and pipeline right of way. BMPs shall be selected based on site-specific conditions, maintaining in-place some or all the BMPs installed during the construction phase of the facility. Where applicable based on site-specific conditions, operators shall implement BMPs in accordance with the good engineering practices.

Seeley Oil Company Post Construction Stormwater Program

1. Transport of chemicals and materials, including loading and unloading operations.

Seeley oil company will transport chemicals and materials for maintenance and production, including loading and unloading operations, on multiple locations.

Structural Control Measures:

Secondary containment berms or structures will be manufactured around all chemicals and materials storage. Loading and unloading access points will only be manufactured within the secondary containment perimeter designed for storage equipment. If this is not possible a containment structure will be manufactured around loading and unloading access points.

Nonstructural Control Measures:

On a regular basis Seeley employees and contractors will inspect transportation equipment, loading/unloading equipment, and chemical/materials storage containers/areas to ensure no pollutants will spill or leave the site. Site management will include a specific area for loading/unloading equipment, materials, etc. at each location needed. Contractors and employees will be educated on safe practices pertaining to the transportation, loading, and unloading of chemicals and materials.

2. Vehicle/equipment fueling.

Equipment fueling will continue on-location when necessary, throughout production.

Structural Control Measures:

Use of drip pans, dirt berms, and any adequate form of secondary containment will be used to contain fluids, as necessary.

Nonstructural Control Measures:

Fueling and equipment maintenance will occur only in designated areas. All fueling and maintenance will not be conducted within 50 feet of a water source. Spill response kits will be available at every facility and on every pump truck.

3. Outdoor Storage activities, including those for chemical and additives.

Chemicals and additives will be stored on location throughout production as needed. In some cases, other materials may be stored on site.

Structural Control Measures:

Secondary containment berms or structures will be manufactured around all outdoor storage of chemicals and additives.

In the event other materials are stored on site, such materials will be covered to minimize contact with precipitation. Temporary 360-degree containments will be manufactured around temporary materials piles until materials are used, redistributed, or removed from location.

Nonstructural Control Measures:

Communication with contractors and employees will ensure no more than the amount of chemicals and additives that are needed are stored on site at any time. All storage equipment and locations where chemicals and additives are held will include proper signage. All chemicals and additives will not be stored, used, or stockpiled within 50 feet of a water source.

Materials storage piles will only remain on site for the duration they are needed. If materials are no longer needed on site, they shall be promptly removed or redistributed to ensure no contaminants leave the site.

4. Produced water and drilling fluids storage.

Produced water will be stored on site as a byproduct of mineral production. Produced water will also be injected into the at designated injection wells.

Structural Control Measures:

Produced water will be stored in above ground tanks and partially buried open evaporation tanks. Secondary containment berms and structures will be manufactured around all primary produced water containment equipment. Secondary containment will also be manufactured around all equipment used for produced water injection.

Nonstructural Control Measures:

All tanks and primary containment equipment will be inspected regularly. All secondary containment berms and structures will be inspected regularly to ensure no produced water will leave the site in the event of primary containment failure. If berms or structures need repair, the site supervisor will be notified immediately, and repairs will begin promptly after notification.

All produced water injection equipment will also be inspected regularly to ensure no produced water is released on or offsite because of equipment failure.

5. Outdoor processing activities and machinery.

Outdoor processing activities will occur on location using machinery including compressors, pumps, scrubbers, separators, and treaters.

Structural Control Measures:

Secondary containment berms and structures will be manufactured around all outdoor processing activities and machinery.

Nonstructural Control Measures:

All secondary containment berms and structures will be inspected regularly to ensure no pollutants or byproducts from outdoor processing activities and machinery leave the site. All locations and equipment used for outdoor processing activities and machinery will include proper signage.

6. Significant dust or particulate generating processes.

Transportation will be the primary source of significant dust or particulate generating processes.

Structural Control Measures:

NA

Nonstructural Control Measures:

If significant dust or particulate generating processes become an issue, Seeley Oil Company will be notified by contractors and employees, and the situation will be addressed using adequate methods of suppression for each case.

7. Erosion and vehicle tracking from well pads, road surfaces, and pipelines.

Seeley Oil Company will monitor all locations with vehicle traffic to ensure that no contaminants are leaving the site.

Structural Control Measures:

Vehicle tracking pads or wash racks may be installed if necessary.

Nonstructural Control measures:

If problems arise supervisors will be notified, and action will be taken immediately. These practices include but are not limited to road and pad design and maintenance to minimize rutting and tracking, controlling site access, street sweeping or scraping, education, or other sediment controls.

8. Waste disposal practices.

All waste generated on the site will be removed and disposed of offsite.

Structural Control Measures:

Waste receptacles will be placed on location at active sites with regular traffic.

Nonstructural Control Measures:

Waste will be disposed of in waste disposal containers and containers will be replaced, as necessary. Contractors and employees of Seeley Oil Company will be educated where locations of waste receptacles exist, as well as help monitor when waste removal is needed. No waste materials will be dumped or discharged into waters of the state.

9. Leaks and spills.

All spills and leaks will be cleaned up immediately, regardless of size.

Structural Control Measures:

Spill response kits will be stationed on location.

Nonstructural Control Measures:

For smaller spills, Seeley Oil Company personnel will clean up the spill. For larger spills Seeley Oil Company will hire a contractor to clean up the spill. Proper notification procedures will be followed depending the on the size of the spill.

Spill kits provide materials, and absorbents to clean up small spills. The used absorbents will be disposed of in appropriate containers (located in the spill kit) and taken offsite to a certified location.

Seeley Oil Company's SPCC addresses in depth how the company will handle leaks and spills.

10. Ground-disturbing maintenance activities.

In the event of ground-disturbing maintenance activities, Seeley Oil Company will generate a site specific SWMP. These site specific SWMPs will provide guidance to ensure no contamination leaves the site because of ground disturbing maintenance activities.

Erosion controls will be implemented as needed. Regular inspections will provide insight into the status of BMPs and the overall of the active SWMP prescriptions.

8.0 Inspection Reports

Stormwater inspections are needed to visually verify if control measures are effective and are working as designed, to determine if there are new sources of pollutants, assess the adequacy of the control measures, identify areas of non-compliance, and implement corrective actions as needed. Routine inspections are conducted during all construction activities and after a storm-related event. The Inspection Report should be conducted using the Inspection Report Template found in Appendix C and includes a signature line. All completed inspection reports are kept on file at the Seeley Oil Company Cortez Colorado office and should be available upon request for the COGCC. All stormwater related records will be filed and stored for a minimum of three years after each individual site achieves final stabilization.

The qualified stormwater manager or designee will conduct all stormwater inspections. All inspectors will possess the skills of a qualified stormwater manager, such that the inspector is knowledgeable in the principles and practices of erosion and sediment control and pollution prevention, and the skills to assess conditions that could impact stormwater quality. All inspectors are trained to evaluate stormwater management concerns, erosion, and sediment control structures, and to evaluate construction sites.

During inspections, the following portions of the site are observed for sediment and erosion issues:

- Construction site perimeter(s);
- All disturbed areas;
- Existing BMPs;
- Designated haul routes (access road);
- Material and water storage areas exposed to precipitation;
- Locations where stormwater has the potential to discharge offsite; and
- Locations where vehicles exit the site.

There are four stages to stormwater inspections in the project area. The stages are Interim Reclamation, Interim Release, Plugged/Abandoned, and Release. These stages are applicable to the variety of construction activities in the project area including pads and roads.

1. The Interim Reclamation stage occurs after the completion of ground-disturbing activities and the well pad is active. Areas not needed for active production are seeded and reclaimed in order to provide erosion control.
2. Interim Release is when the interim reclamation area has achieved final stabilization. Final stabilization is defined as “a uniform vegetative cover has been established with an induvial plant density of at least 70% pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed” (CDPHE). Weeds are counted towards the 70% vegetative cover.
3. Plugged/Abandoned is another disturbance phase of the well pad where all production items are removed, and the well is plugged and abandoned. After the deconstruction of the active portion of the pad, reclamation once again commences, and the site is monitored for release criteria.
4. Final Release occurs after the well pad or linear feature is wholly reclaimed and achieves final stabilization.

8.1 Inspection Frequency

There is no required inspection frequency during post-construction stormwater management. The COGCC only requires that BMP's be kept in functional condition and repairs are made in a timely manner should there be a precipitation event. COGCC inspectors will file FIR violations for stormwater violations during the post-construction phase. A recommended inspection frequency for the Cortez Area is once every two months, or within 24 hours following a precipitation event that is large enough to create runoff. Below are the general inspection Frequencies during each stage of post-construction stormwater management.

8.1.1 Interim Reclamation Stage / Once Every 30 Days

The Interim Reclamation stage occurs after the completion of ground-disturbing activities and once production has started. Areas not needed for active production have been seeded and reclaimed to provide erosion control. Sites remain in this stage until they have reached 80% of vegetation cover relative to off-site.

8.1.2 Interim Release Stage / No Required Frequency

The Interim Release Stage occurs when the interim vegetation at the site has reached final stabilization criteria of 80% vegetation cover relative to off-site. Scheduled inspections are not required by the COGCC. The site should be inspected at a reduced frequency but often enough to fix problems expeditiously.

8.1.3 Plugged and Abandoned Stage / Once Every 14 Days / Once Every 30 days

During the P&A phase, the site reenters active construction status and will need to be inspected every 14 days or within 24 hours of a storm event which has the potential to create runoff. Once active deconstruction is complete, the entire site is reclaimed, and the site is monitored for release criteria. The monitoring frequency during this phase is every 30 days until the site reaches 80% vegetation cover relative to off-site conditions.

8.1.4 Final Release / No Further Inspections

Final Release occurs after the well pad or linear feature is fully reclaimed and achieves final stabilization, as defined above. Further inspections are not required. All temporary site-specific BMPs no longer required will be removed.

8.1.5 Winter Conditions Exclusion

Inspections are not required in the winter for sites that meet all the following criteria:

- Construction activities are temporarily halted,
- Snow cover exists over the entire site for an extended period, and
- Melting conditions posing a risk of surface erosion do not exist.

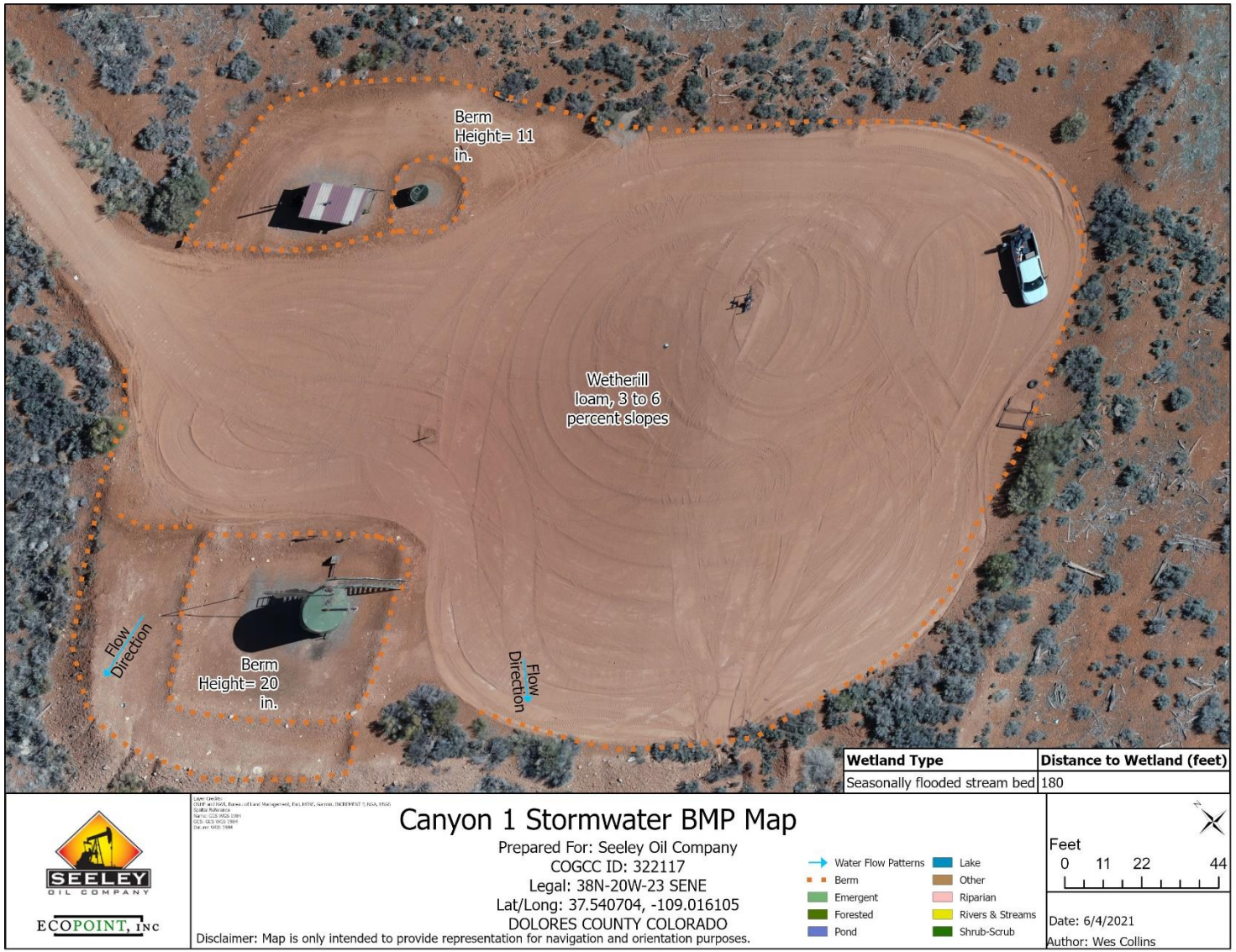
During the time of winter condition, inspection reports must include dates when snow cover existed, date of when construction activities ceased, and date when melting conditions began.

8.2 Inspection Documentation

Inspection observations are recorded on the site inspection report. The report provides a standardized format for noting inspection observations and includes a signature line for the inspector. An example of the Site Inspection is included in Inspection Reporting and Communication Procedures Following an

inspection, inspection reports are provided to Seeley Oil Company with a summary of any actionable items. Actionable items include control measures that require routine maintenance, recommended corrective actions, additional or modified control measure recommendations, and any new potential sources of pollutants. Seeley Oil Company will communicate with appropriate personnel and act.

Appendix A- BMP Maps



Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	1600

SEELEY OIL COMPANY

ECOPOINT, INC

Cutthroat 3 Stormwater BMP Map

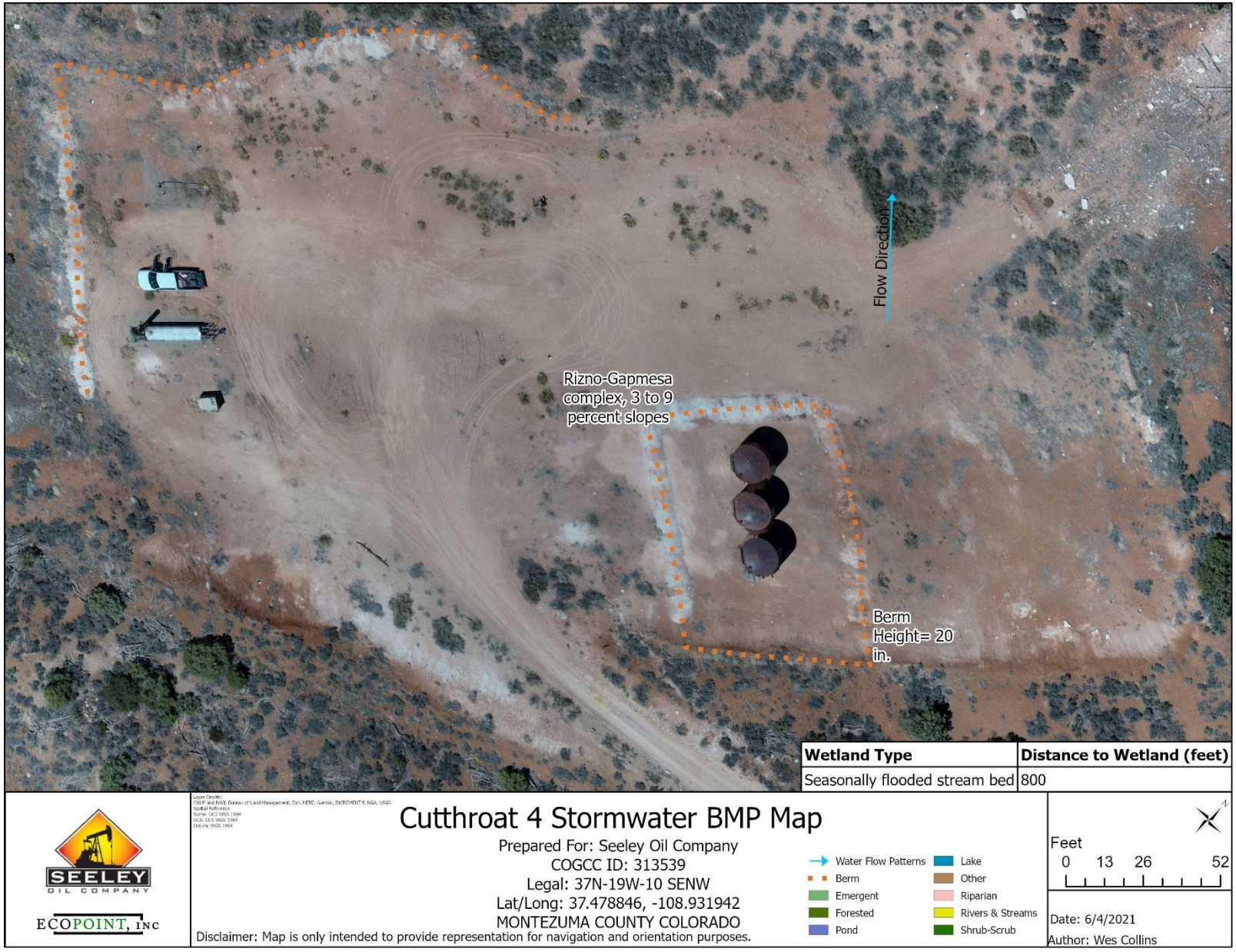
Prepared For: Seeley Oil Company
COGCC ID: 313536
Legal: 37N-19W-23 SESW
Lat/Long: 37.443756, -108.914932
MONTEZUMA COUNTY COLORADO

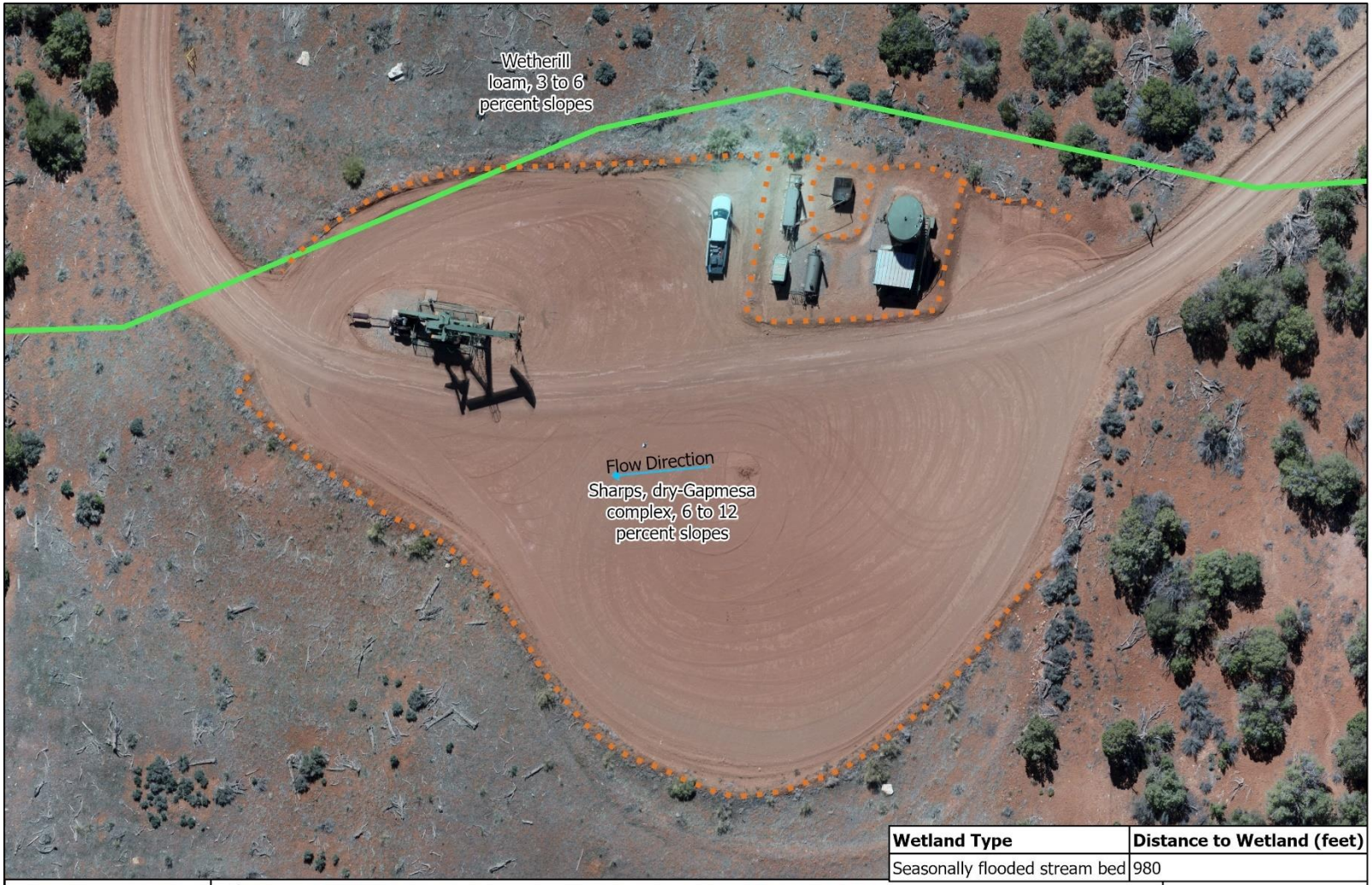
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 8.75 17.5 35

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.


Flow Direction
Rizno-Gapmesa complex, 3 to 9 percent slopes
Berm Height= 20 in.
Wetland Type
Distance to Wetland (feet)
Seasonally flooded stream bed
800
SEELEY OIL COMPANY
ECOPOINT, INC
Cutthroat 4 Stormwater BMP Map
Prepared For: Seeley Oil Company
COGCC ID: 313539
Legal: 37N-19W-10 SENW
Lat/Long: 37.478846, -108.931942
MONTEZUMA COUNTY COLORADO
Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub
Feet
0 13 26 52
Date: 6/4/2021
Author: Wes Collins



Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	980

SEELEY OIL COMPANY

ECOPOINT, INC

Cutthroat 8 Stormwater BMP Map

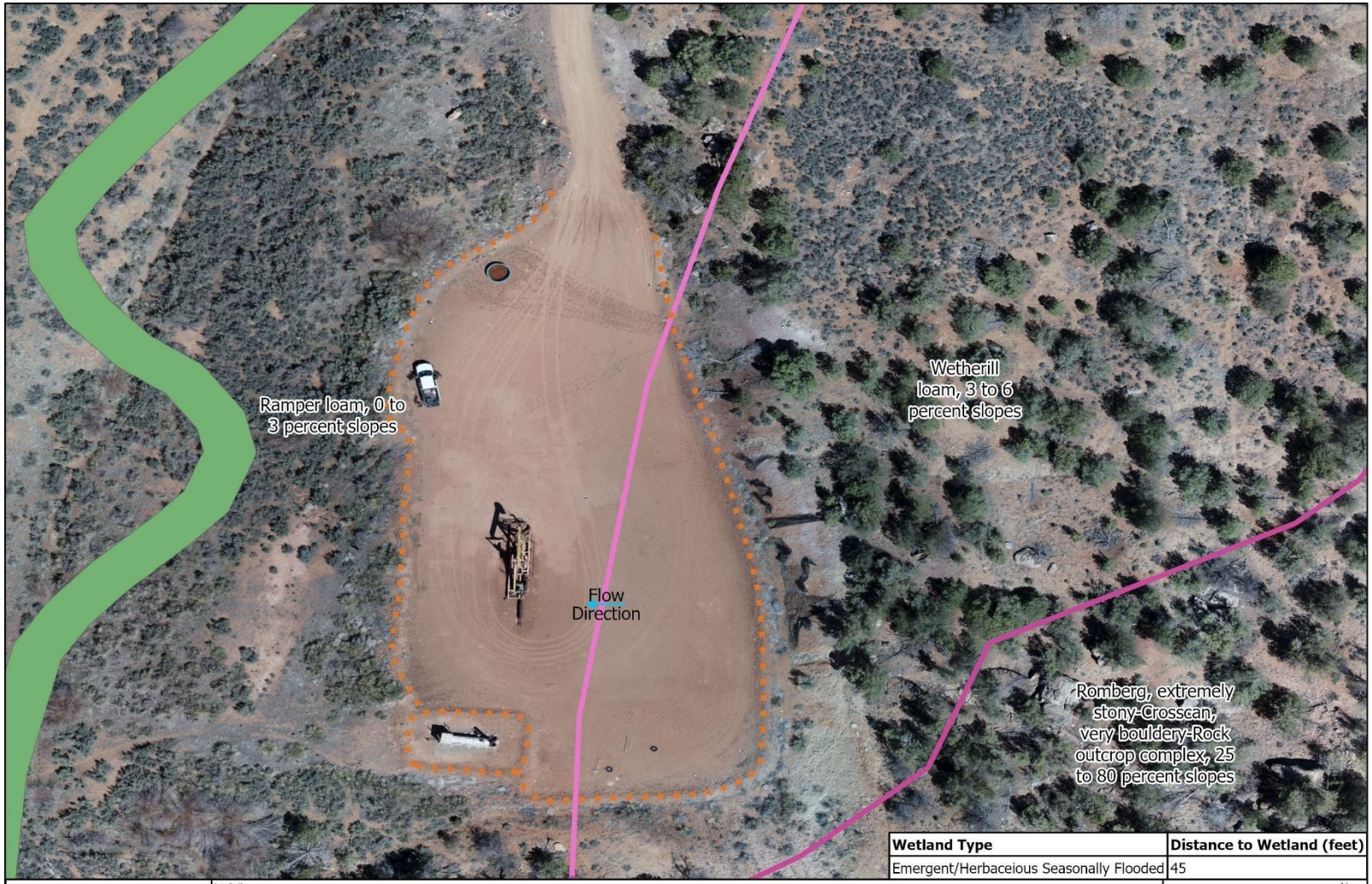
Prepared For: Seeley Oil Company
COGCC ID: 313553
Legal: 37N-19W-26 SWSE
Lat/Long: 37.429939, -108.910920
MONTEZUMA COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 10 20 40

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.



Wetland Type	Distance to Wetland (feet)
Emergent/Herbaceious Seasonally Flooded	45

SEELEY OIL COMPANY

ECOPOINT, INC

Cutthroat 9 Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 313563
Legal: 37N-19W-3 SENW
Lat/Long: 37.495475, -108.932143
MONTEZUMA COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

N

Feet
0 17 34 68

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.

Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	2200

SEELEY OIL COMPANY

ECOPOINT, INC

Cutthroat 12 Stormwater BMP Map

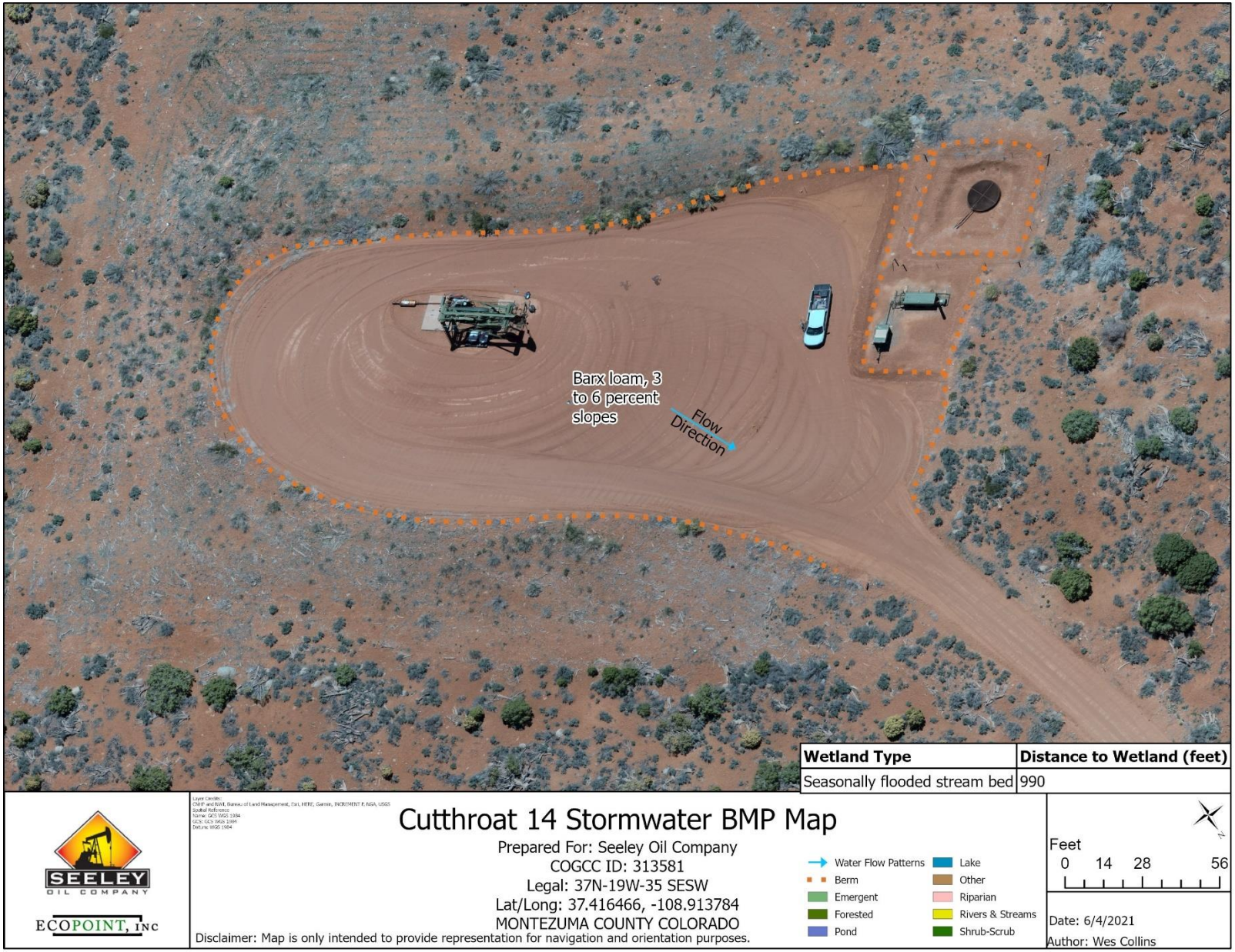
Prepared For: Seeley Oil Company
COGCC ID: 313578
Legal: 37N-19W-35 SWNE
Lat/Long: 37.424060, 108.912433
COUNTY COLORADO

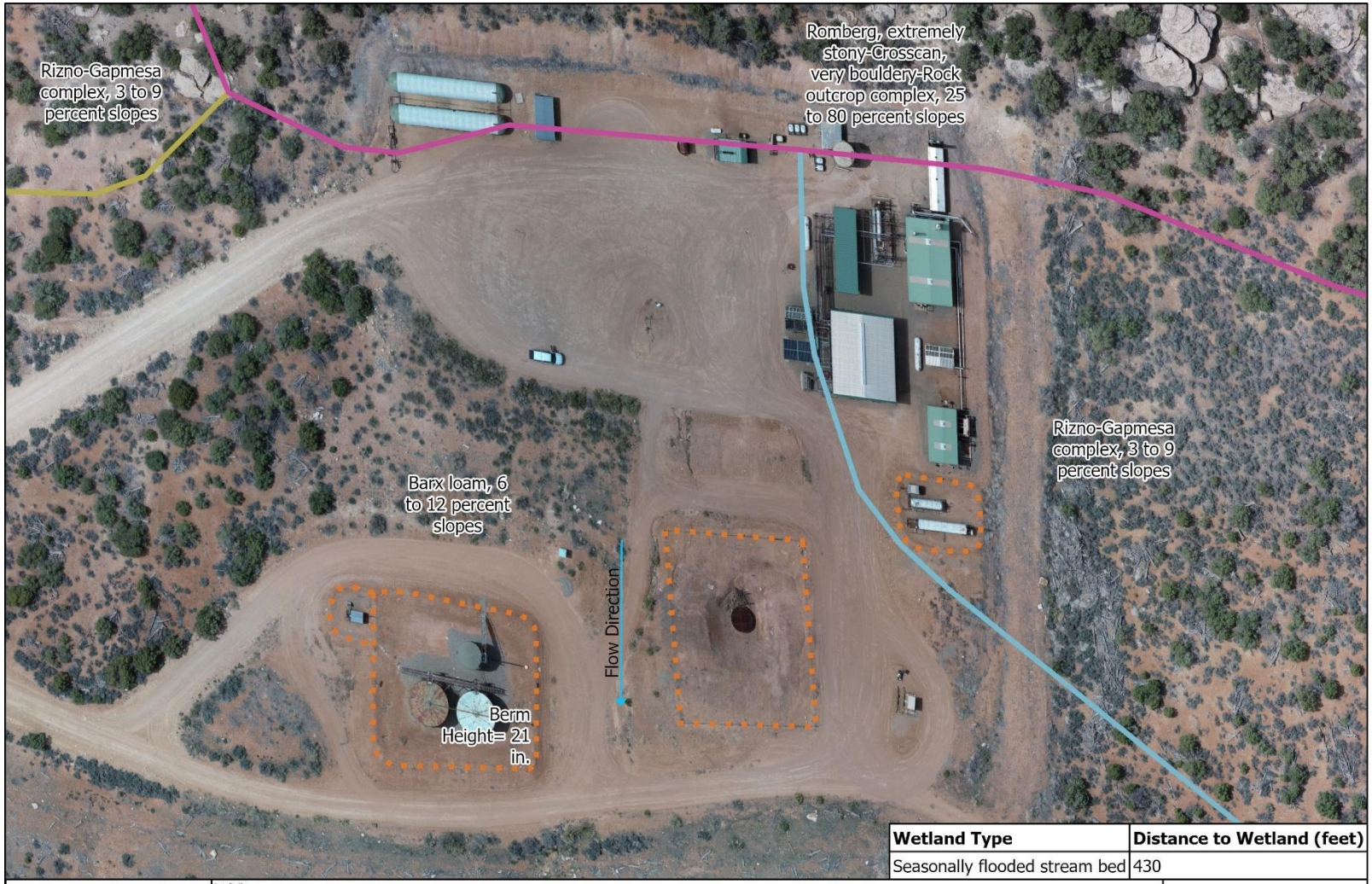
Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 10 20 40

Date: 6/4/2021
Author: Wes Collins


Barx loam, 3 to 6 percent slopes
Flow Direction
Wetland Type
Distance to Wetland (feet)
Seasonally flooded stream bed
990
SEELEY OIL COMPANY
ECOPOINT, INC
Cutthroat 14 Stormwater BMP Map
Prepared For: Seeley Oil Company
COGCC ID: 313581
Legal: 37N-19W-35 SESW
Lat/Long: 37.416466, -108.913784
MONTEZUMA COUNTY COLORADO
Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub
Feet
0 14 28 56
Date: 6/4/2021
Author: Wes Collins



Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	430

SEELEY OIL COMPANY

ECOPOINT, INC

Cutthroat A Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 313527
Legal: 37N-19W-10 SWSE
Lat/Long: 37.471226, -108.929262
MONTEZUMA COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 19 38 76

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.

Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	850

SEELEY OIL COMPANY

ECOPOINT, INC

Cutthroat B Stormwater BMP Map

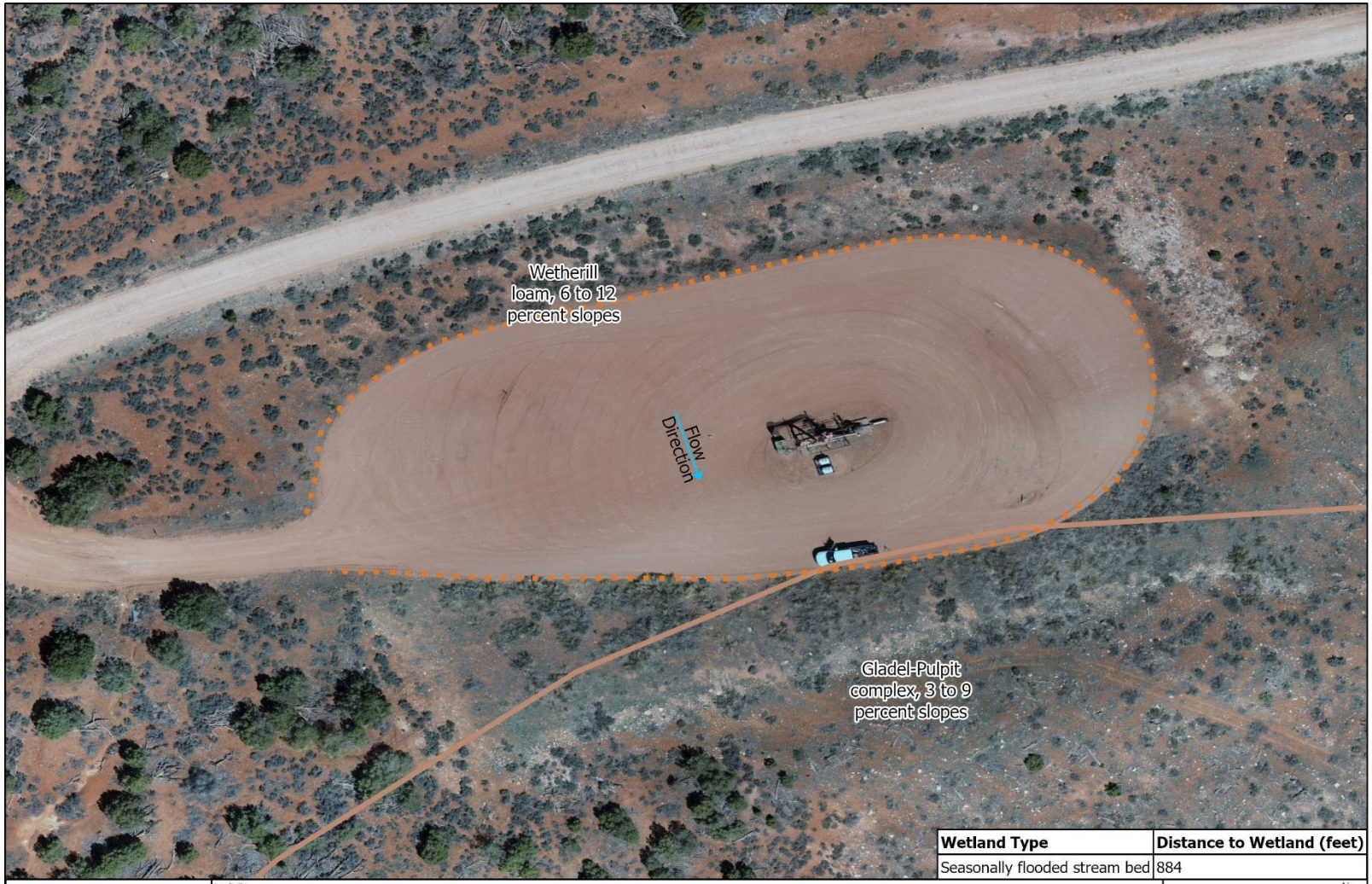
Prepared For: Seeley Oil Company
COGCC ID: 313548
Legal: 37N-19W-26 SWNE
Lat/Long: 37.436686, -108.910681
MONTEZUMA COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 21.5 43 86

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.



Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	884

SEELEY OIL COMPANY

ECOPOINT, INC

Island Butte 1 Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 381605
Legal: 38N-20W-13 NENE
Lat/Long: 37.557374, -108.998475
DOLORES COUNTY COLORADO

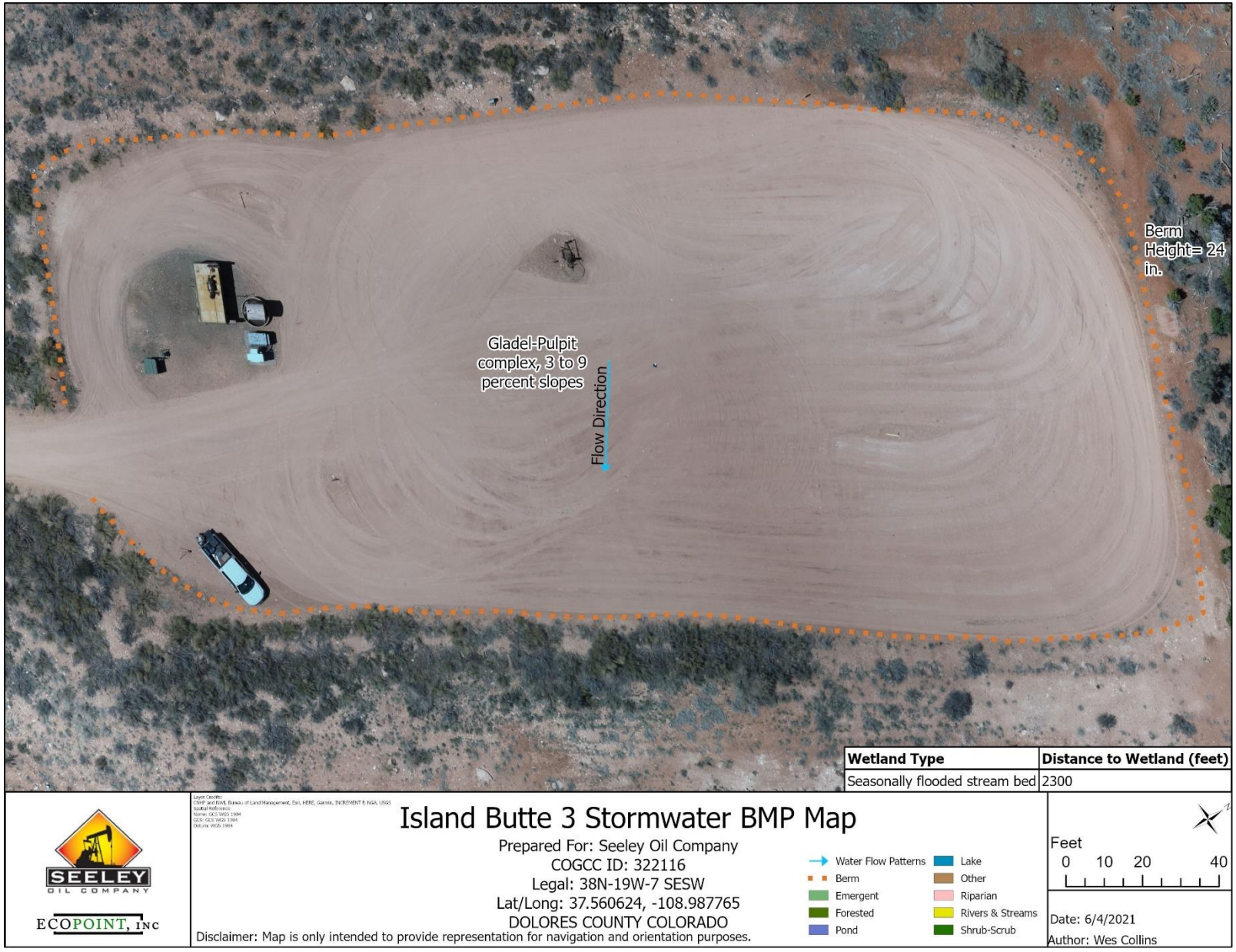
Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

N

Feet
0 15 30 60

Date: 6/4/2021
Author: Wes Collins


Berm Height= 24 in.
Gladel-Pulpit complex, 3 to 9 percent slopes
Flow Direction
Wetland Type
Distance to Wetland (feet)
Seasonally flooded stream bed
2300
SEELEY OIL COMPANY
ECOPOINT, INC
Island Butte 3 Stormwater BMP Map
Prepared For: Seeley Oil Company
COGCC ID: 322116
Legal: 38N-19W-7 SESW
Lat/Long: 37.560624, -108.987765
DOLORES COUNTY COLORADO
Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub
Feet
0 10 20 40
Date: 6/4/2021
Author: Wes Collins

Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	540

SEELEY OIL COMPANY

ECOPOINT, INC

Island Butte 5 Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 313557
Legal: 38N-19W-20 NENE
Lat/Long: 37.541434, -108.959774
MONTEZUMA COUNTY COLORADO

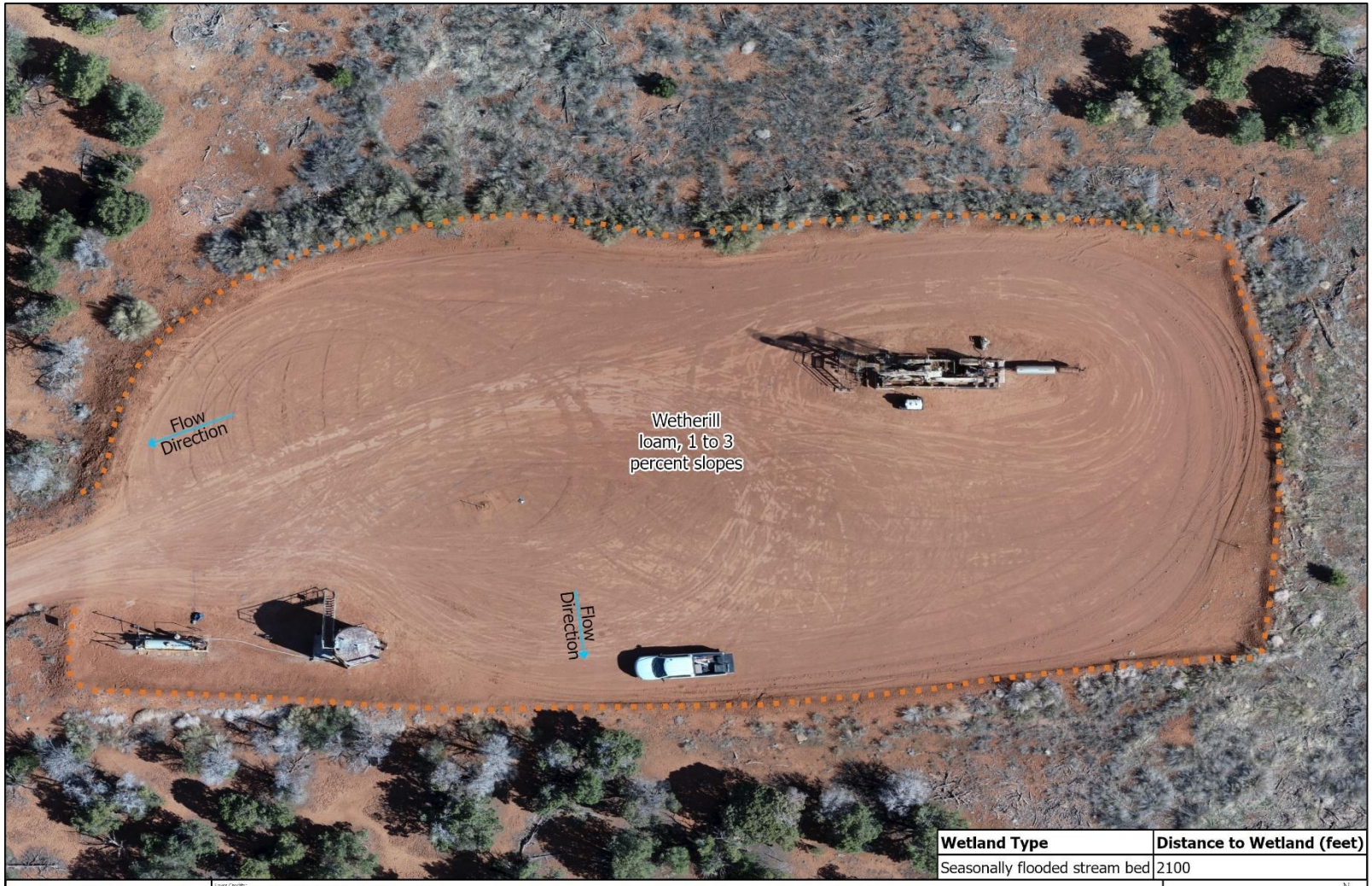
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

N

Feet
0 9.5 19 38

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.



Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	2100

SEELEY OIL COMPANY

ECOPOINT, INC

Island Butte 7-AH Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 313561
Legal: 38N-19W-20 NENE
Lat/Long: 37.543344, -108.962264
MONTEZUMA COUNTY COLORADO

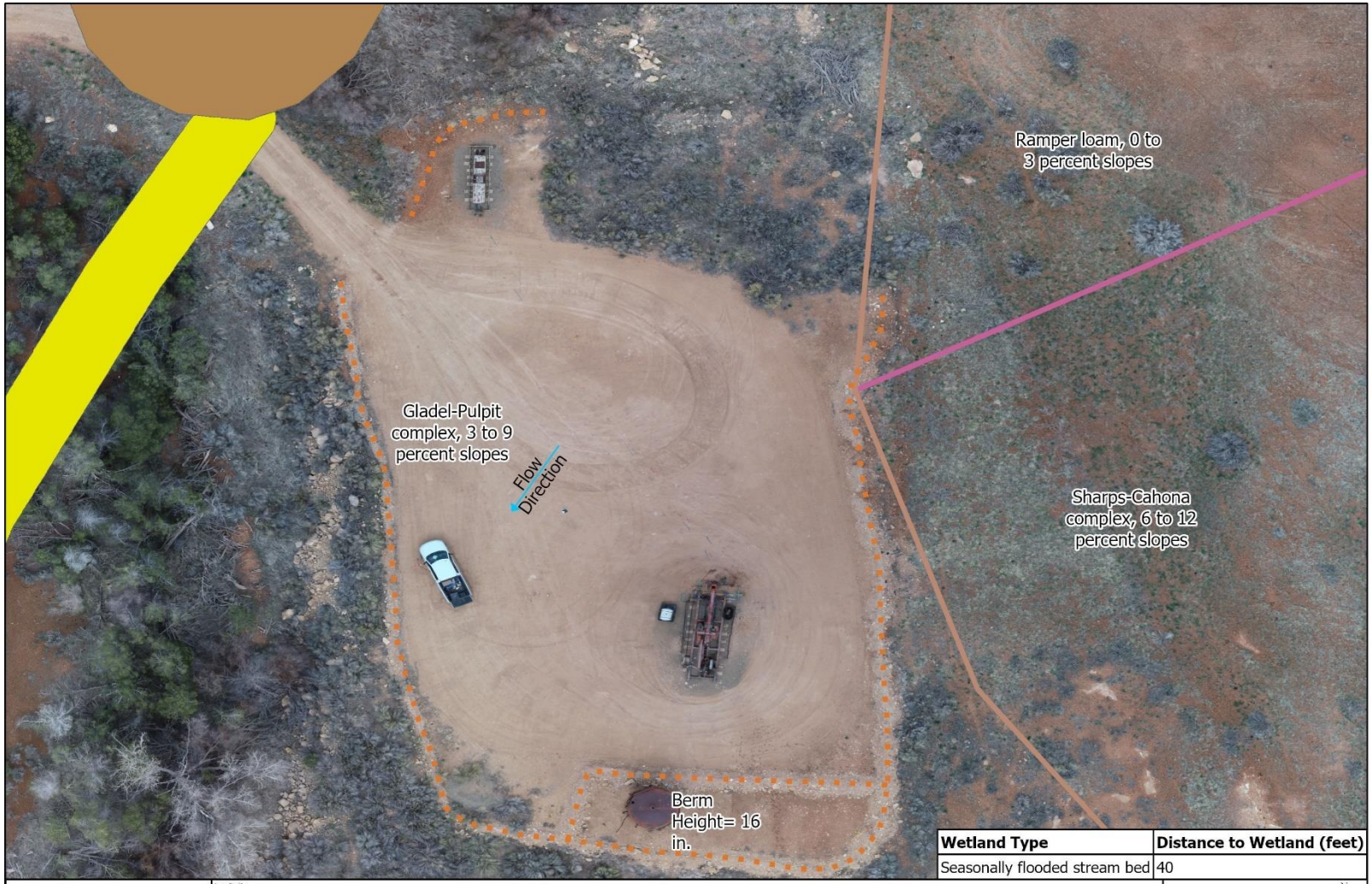
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

N

Feet
0 9.5 19 38

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.



Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	40

SEELEY OIL COMPANY

ECOPOINT, INC

Island Butte 8 Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 313558
Legal: 38N-19W-21 NWNE
Lat/Long: 37.541314, -108.946173
MONTEZUMA COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 10.5 21 42

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.

Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	800

SEELEY OIL COMPANY

ECOPOINT, INC

Island Butte 12 Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 313571
Legal: 38N-19W-21 NENW
Lat/Long: 37.541044, -108.951864
MONTEZUMA COUNTY COLORADO

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

N

Feet
0 9.5 19 38

Date: 6/4/2021
Author: Wes Collins

Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	700

SEELEY OIL COMPANY

ECOPOINT, INC

Island Butte A Stormwater BMP Map

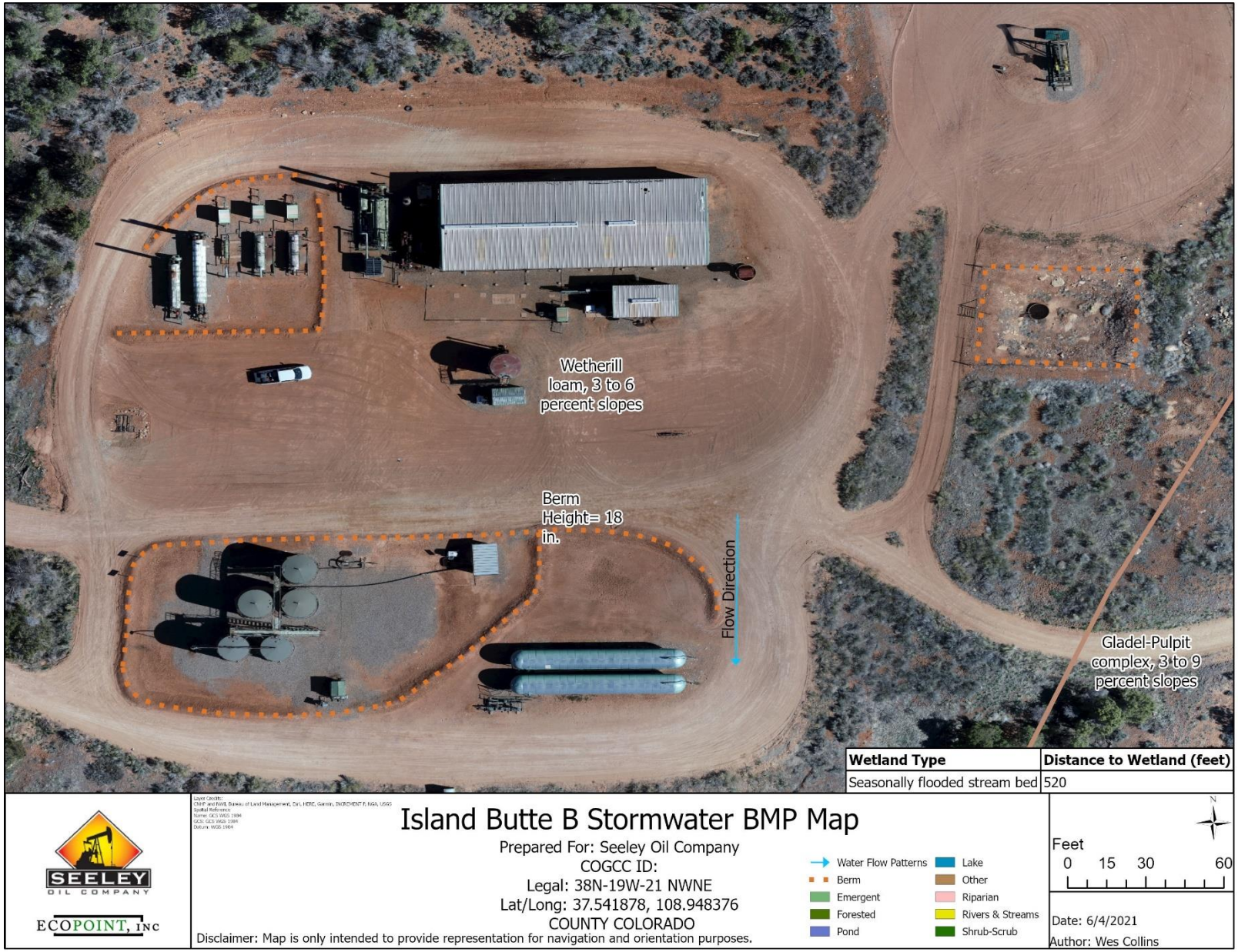
Prepared For: Seeley Oil Company
COGCC ID: 322115
Legal: 38N-19W-7 SWNW
Lat/Long: 37.566794, -108.993015
DOLORES COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 16.25 32.5 65

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.


Wetherill loam, 3 to 6 percent slopes
Berm Height= 18 in.
Flow Direction
Gladel-Pulpit complex, 3 to 9 percent slopes
Wetland Type
Distance to Wetland (feet)
Seasonally flooded stream bed
520
SEELEY OIL COMPANY
ECOPOINT, INC
Island Butte B Stormwater BMP Map
Prepared For: Seeley Oil Company
COGCC ID:
Legal: 38N-19W-21 NWNE
Lat/Long: 37.541878, 108.948376
COUNTY COLORADO
Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub
N
Feet
0 15 30 60
Date: 6/4/2021
Author: Wes Collins

Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	200

SEELEY OIL COMPANY

ECOPOINT, INC

McClean 2 Stormwater BMP Map

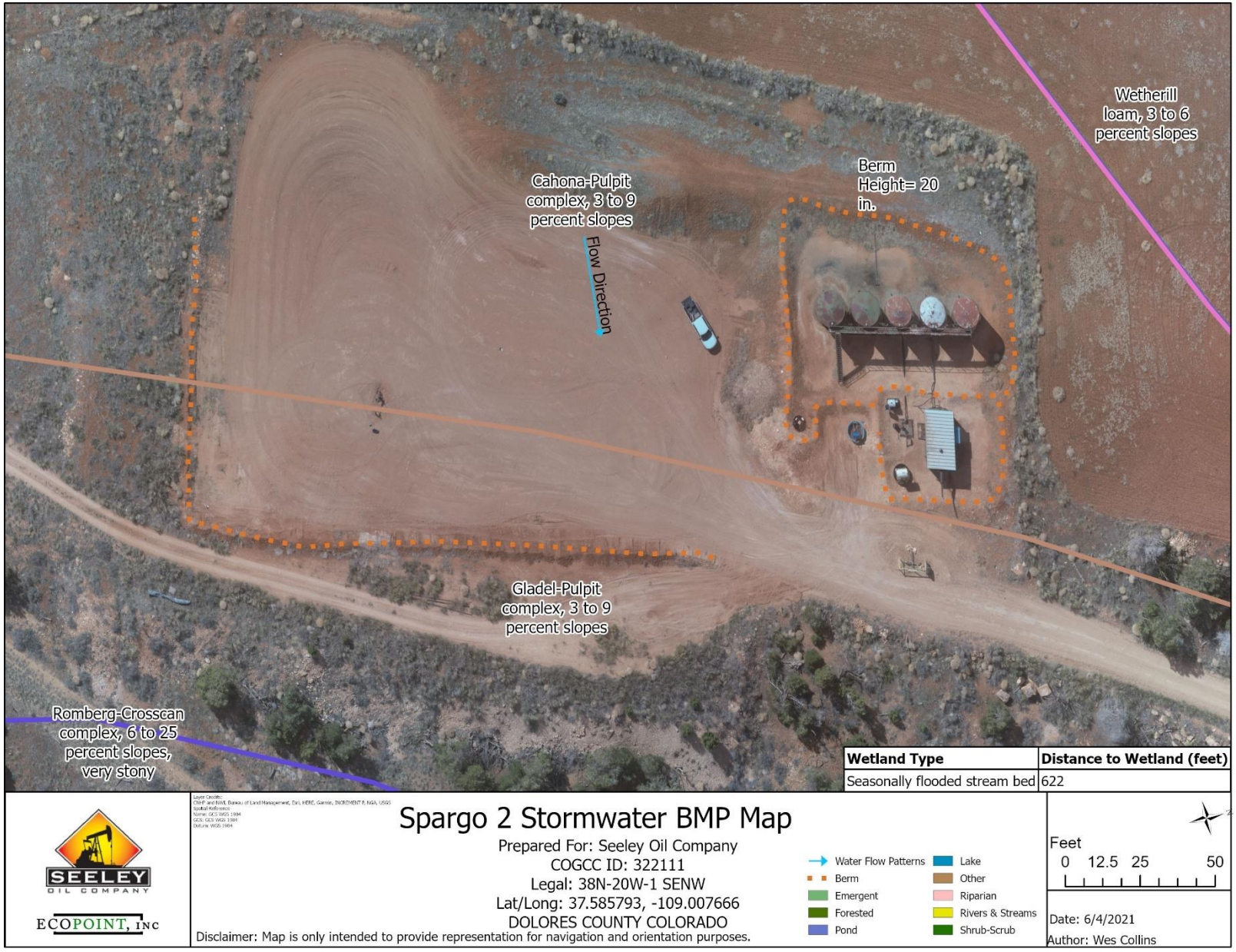
Prepared For: Seeley Oil Company
COGCC ID: 313455
Legal: 37N-19W-15 SWNE
Lat/Long: 37.465446, -108.928372
MONTEZUMA COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 9.5 19 38

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.


Wetherill loam, 3 to 6 percent slopes
Berm Height= 20 in.
Cahona-Pulpit complex, 3 to 9 percent slopes
Flow Direction
Gladel-Pulpit complex, 3 to 9 percent slopes
Romberg-Crosscan complex, 6 to 25 percent slopes, very stony
Wetland Type
Distance to Wetland (feet)
Seasonally flooded stream bed
622
SEELEY OIL COMPANY
ECOPOINT, INC
Spargo 2 Stormwater BMP Map
Prepared For: Seeley Oil Company
COGCC ID: 322111
Legal: 38N-20W-1 SENW
Lat/Long: 37.585793, -109.007666
DOLORES COUNTY COLORADO
Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub
Feet
0 12.5 25 50
Date: 6/4/2021
Author: Wes Collins

Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	1100

SEELEY OIL COMPANY

ECOPOINT, INC

Spargo 1-36 Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 322109
Legal: 39N-20W-36 SESW
Lat/Long: 37.593063, -109.007306
DOLORES COUNTY COLORADO

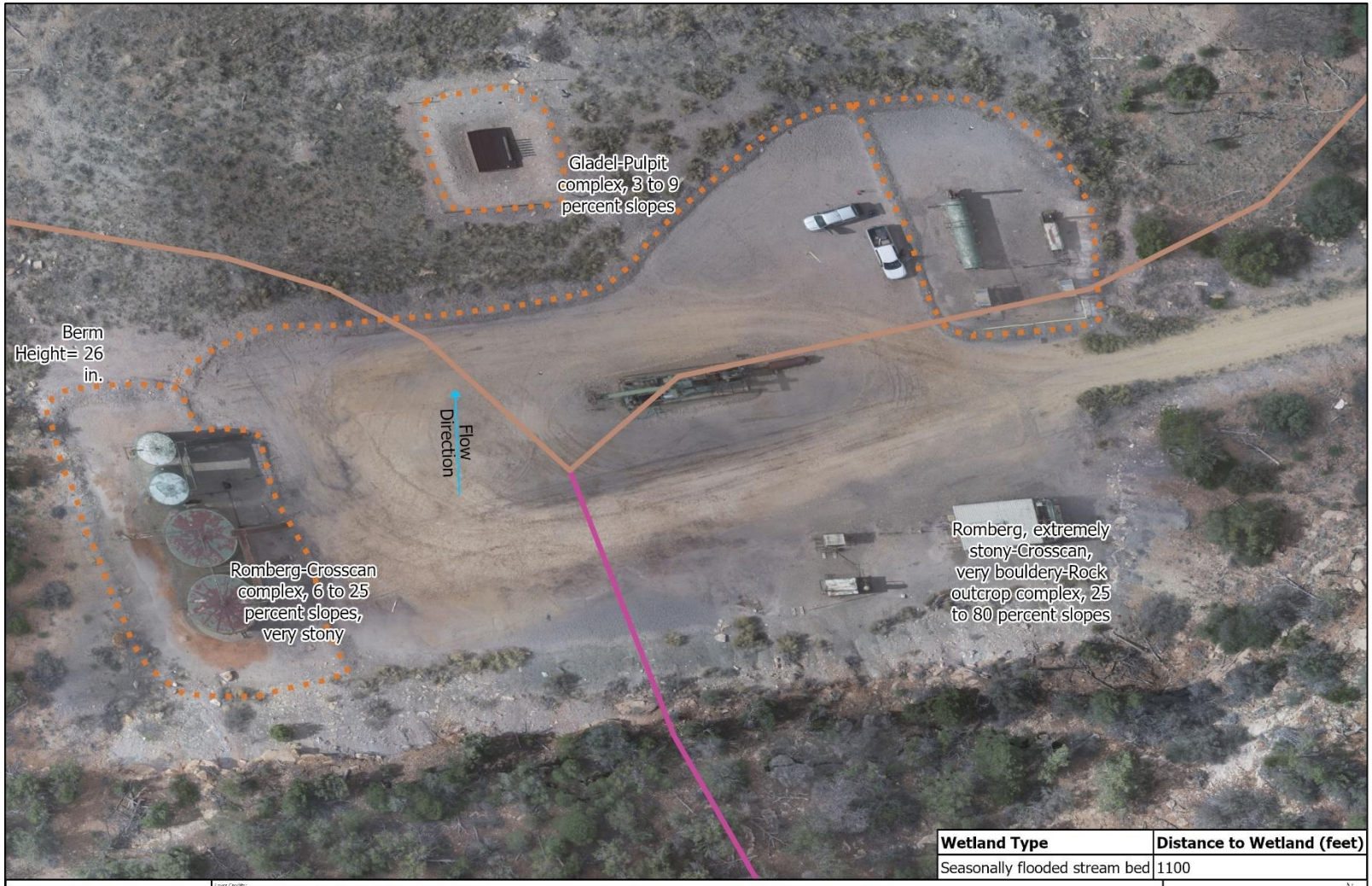
Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

N

Feet
0 23 46 92

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.



Wetland Type	Distance to Wetland (feet)
Seasonally flooded stream bed	1100

SEELEY OIL COMPANY

ECOPOINT, INC

SE Spargo Stormwater BMP Map

Prepared For: Seeley Oil Company
COGCC ID: 322118
Legal: 38N-20W-1 SESE
Lat/Long: 37.577983, -108.997365
COUNTY COLORADO

Water Flow Patterns
Berm
Emergent
Forested
Pond
Lake
Other
Riparian
Rivers & Streams
Shrub-Scrub

Feet
0 14 28 56

Date: 6/4/2021
Author: Wes Collins

Disclaimer: Map is only intended to provide representation for navigation and orientation purposes.

Appendix B- Waste Management Plan

Flowback and stimulation fluids will be sent to tanks, separators, or other containment/filtering equipment before the fluids will be placed into any pipeline, storage vessel located on the well pad, or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment will be placed on the well pad in an area with additional down gradient perimeter berms sufficient to contain any spill plus 10%. Any fluids or contaminated soils that need to be disposed of will be taken to the appropriate landfill in either Utah or New Mexico.

Appendix C- Site Inspection Template

Facility Name:	Permittee: Seeley Oil Company
Inspection date:	Inspector:
Land type: No	Inspector Title:
Weather Conditions:	Is the above inspector a qualified stormwater manager? YES or NO
Disturbed acreage:	Inspection Frequency: 14 Day
Inspection Phase (Construction, Interim Reclamation, Interim Release, P&A, Final Release):	Receiving Body of water/Distance/Direction:
Site is in compliance?	Stormwater Runoff Risk:
In the last 24 hours has there been overland flow that has caused erosion:	

General Site Conditions

BMP repaired/added since last inspection?	Yes/No	
Signs of sediment leaving the site?	Yes/No	
Signs of offsite tracking at access point?	Yes/No	
Are surface waters being impacted by site runoff?	Yes/No	
Have simple repairs been made today?	Yes/No	
Is the port-o-let secured?	Yes/No	

General Site Questions

1. Are tanks and/or drums present?

Comments

2. Are tanks and/or drums placed in secondary containment areas?

Comments:

3. Is pad area graveled (offsite tracking control)?

Comments:

4. Is access road graveled (offsite soil tracking control)?

Comments:

5. Is there 70% vegetation coverage?

Comments:

6. Is the pad area reseeded?
7. Is reseeding needed?

Comments:

8. Are there signs of vegetation regrowth?

Comments:

9. General Site Comments:

BMPs In Use or Required

BMP	In use (Yes/No)	Required (Yes/No)	Notes
Earth Berms			
Culvert			
Conveyance Channel			
Slope Drain			
Mulches			
Geotextiles			
Erosion Control Blanket			
Cut-Ditch			
Grade Work			
Port-o-Let			
Silt Fence			
Straw Bale			
Vehicle Tracking Pad			
Sediment Trap			
Sediment Basin			
Check Dam			
Rock Lined Ditch			
Straw Wattle Log			
Ripped Perimeter			
Ripped Perimeter			
Trench			
Cattle Guard			
Filtrexx			
General Site Maintenance			

Areas to be Inspected

Is there evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system or discharging to state waters at the following locations?

	Yes/No	If Yes, describe discharge or potential for discharge below
Construction site perimeter		
All disturbed areas		
Designated haul roads (access roads)		
Material and waste storage areas exposed to precipitation		
Locations where stormwater has the potential to discharge offsite		
Locations where vehicles exit the site		
Other:		

Certification of Corrective Action

After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the individual(s) designated as the Qualified Stormwater Manager, shall sign and certify the below statement:

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

_____ _____

Name of Qualified Stormwater Manager Title of Qualified Stormwater Manager

_____ _____

Signature of Qualified Stormwater Manager Date

MAP of Site with BMP locations and Problem Areas (may be hand drawn)