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## NOTICE OF NSA DECISION

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**Case File:** T2-2021-15349                      **Permit:** National Scenic Area (NSA) Site Review  
Geologic Hazards (GH)

**Applicant:** Terra Lingley, Oregon Department of Transportation (ODOT)

**Owner:** **Property #1, #2, #3:** Oregon Department of Transportation (ODOT)  
**Property #4:** Oregon State Parks and Recreation (OSPR)

**Location:** Within the right of way of East Historic Columbia River Highway and the following:

<b>Property #1:</b> No Situs Address	Map, Tax Lot: 1N5E -00500
Alternate Account #: R945130030	Property ID #: R322873
- and -	
<b>Property #2:</b> No Situs Address	Map, Tax Lot: 1N5E -00600
Alternate Account #: R945130120	Property ID #: R322879
- and -	
<b>Property #3:</b> No Situs Address	Map, Tax Lot: 1N5E12C -00200
Alternate Account #: R945120060	Property ID #: R503995
- and -	
<b>Property #4:</b> No Situs Address	Map, Tax Lot: 1N5E28B -00100
Alternate Account #: R945280160	Property ID #: R323022

**Zoning:** Gorge Special Open Space (GSO)                      **Overlays:** Geologic Hazards (GH)

**Key Viewing Areas:** Beacon Rock, Cape Horn, Columbia River, Crown Point, Historic Columbia River Highway, Highway I-84 including rest stops, Larch Mountain Road, Portland Women’s Forum State Park, Rooster Rock, Washington State Route 14

**Landscape Setting:** **Property #1, #2, #3:** River Bottomlands; Coniferous Woodlands; Gorge Walls, Canyonlands and Wildlands  
**Property #4:** River Bottomlands

**Recreation Intensity:** **Property #1, #2, #3:** Recreation Class 1 and 2  
**Property #4:** Recreation Class 1

**Proposal Summary:** The applicant requests a National Scenic Area (NSA) Site Review and Geologic Hazards (GH) permit to authorize ground-disturbing activities to construct diversion berms, a gabion wall, construct a driveway (“access road”), remove vegetation, and install new culverts within the Mosquito Creek basin. The applicant also proposes off-site mitigation at the Mirror Lake Restoration Site located on Property #4.

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**Decision:** **Approved with Conditions**

This decision is final and effective at the close of the appeal period, unless appealed. The deadline for filing an appeal is **Monday, August 22, 2022, at 4:00 pm.**

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**Opportunity to Review the Record:** The complete case file, including the Planning Director Decision containing Findings, Conclusions, Conditions of Approval, and all evidence associated with this application are available for review by contacting Rithy Khut, Staff Planner at 503-988-0176 or [rithy.khut@multco.us](mailto:rithy.khut@multco.us). Copies of all documents are available at the rate of \$0.40/per page.

**Opportunity to Appeal:** An appeal requires a \$250.00 fee and must state the specific legal grounds on which it is based. To obtain appeal forms or information on the procedure, contact the Land Use Planning office at 1600 SE 190th Avenue (Phone: 503-988-3043). This decision is not appealable to the Columbia River Gorge Commission until all local appeals are exhausted.

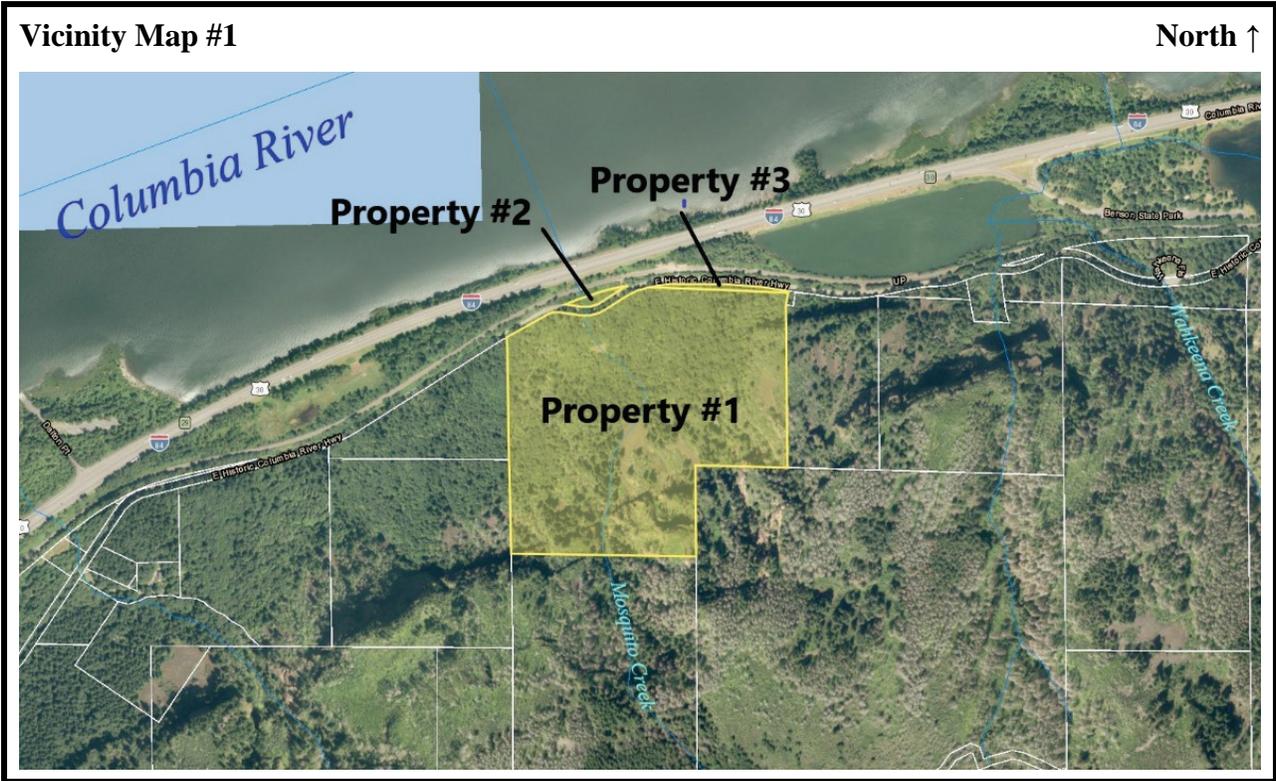
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**Issued By:**

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Rithy Khut, Planner

**For:** Carol Johnson, AICP  
Planning Director

**Date:** Monday, August 8, 2022





**Applicable Approval Criteria:**

**For this application to be approved, the proposal will need to meet the applicable approval criteria below:**

Multnomah County Code (MCC): General Provisions: MCC 38.0015 Definitions, MCC 38.0560 Code Compliance and Applications

Gorge Special Open Space (GSO): MCC 38.2625(D)(5) Review Uses - Placement of Structures necessary for continued public safety...

National Scenic Area (NSA) Site Review Approval Criteria: MCC 38.7040 SMA Scenic Review Criteria, MCC 38.7050 SMA Cultural Resource Review Criteria, MCC 38.7075 SMA Natural Resource Review Criteria, MCC 38.7085 SMA Recreation Resource Review Criteria

Geologic Hazards: MCC 38.5503 Definitions, MCC 38.5505 Permits Required, MCC 38.5515 Geologic Hazards Permits Application Information Required, MCC 38.5520 Geologic Hazards Permit Standards

Copies of the referenced Multnomah County Code sections are available by contacting our office at (503) 988-3043 or by visiting our website at <https://multco.us/landuse/zoning-codes/> under the link

**Chapter 38: Columbia River Gorge National Scenic Area**

## **Conditions of Approval**

The conditions listed are necessary to ensure that approval criteria for this land use permit are satisfied. Where a condition relates to a specific approval criterion, the code citation for that criterion follows in brackets.

1. Permit Expiration – This land use permit shall expire as follows:
  - a. Within three (3) years of the date of the final decision, the development project approved in Exhibit A.2, A.17, A.18, A.32, and A.33 on Property #1, #2 & #3, shall be completed in its entirety and all screening and ground stabilization vegetation be planted
  - b. Within four (4) years of the date of the final decision, the Mitigation Work at Property #4 shall be completed in its entirety and all mitigation plantings installed. [MCC 38.0690(D)]

**Note:** Expiration of the permit is automatic. Failure to give notice of expiration shall not affect the expiration of this approval. The property owner may request one (1) 12-month extension to the timeframe within which this permit is valid, as provided under MCC 38.0700, as applicable. The request for a permit extension must be submitted prior to the expiration of the approval period. [MCC 38.0700]

2. Approval of this land use permit is based on the submitted written narrative(s) and plan(s). No work shall occur under this permit other than that, which is specified within Exhibits A.2, A.14, A.17, A.18, A.25, A.32, and A.33, except as modified by the conditions of approval. It shall be the responsibility the Oregon Department of Transportation (ODOT) or the property owner(s) to comply with the Decision and the conditions of approval. [MCC 38.0580 and MCC 38.0660(B)]
3. This permit authorizes the ground disturbing activities and construction of structures that have occurred and have been completed:
  - a. Ground disturbing activities relating to an emergency/disaster event that occurred in January of 2021;
  - b. The construction of a diversion berm made of earth materials, which is classified as a structure; and
  - c. Installation of a 12-inch culvert [MCC 39.5505 and MCC 38.5520(A)]
4. Within ninety (90) days of the date of the final decision, ODOT, the property owner(s), or their representative(s) shall:
  - a. Acknowledge in writing that they have read and understand the conditions of approval and intend to comply with them. A Letter of Acknowledgement has been provided to assist you. The signed document shall be sent to Rithy Khut at [rithy.khut@multco.us](mailto:rithy.khut@multco.us). [MCC 38.0660(A) & (B)]
  - b. Apply for and obtain a Flood Development (FD) permit for encroachment and alteration of a watercourse and culvert installation. [MCC 38.0560]

5. The ODOT or their representative(s) shall comply with the following limitations on the development and ground disturbing activities:
  - a. No more than 10 acres of total ground disturbance area is to be disturbed as described or shown in Exhibit A.2, A.17, A.18, A.32, and A.33. [MCC 38.5515(B) and MCC 38.5515(C)]
  - b. No more than 25,000 cubic yards of earth material that will be disturbed, stored, disposed of, or used as fill as described or shown in Exhibit A.2, A.17, A.18, A.32, and A.33. All structural fill and any other fill used in this project will be composed of earth materials as defined in MCC 38.0015. All fill shall not contain putrescible wastes, construction and demolition wastes, hazardous waste, and/or industrial solid wastes. Any excess soil not used as fill within the ground disturbance area shall be removed from the project area and taken to a location approved for the disposal of such material by applicable Federal, State and local authorities. [MCC 38.5515(B), and MCC 38.5515(C)]
  - c. 5,870 square feet of “ultrablocks,” 838 cubic yards of class 700 riprap, 147 feet of gabion berm, and 18 cubic yards of construction riprap as described or shown in Exhibit A.2, A.17, A.18, A.32, and A.33 is permitted to be imported to the project site. No riprap shall contain putrescible wastes, construction and demolition wastes, hazardous waste, and/or industrial solid wastes. [MCC 38.5515(B), MCC 38.5520(B), and MCC 38.5515(C)]
6. When ground-disturbing activities authorized by this permit are ready to commence, ODOT or their representative(s) shall:
  - a. Post the Erosion Control notice card. The notice card shall be posted at all driveway entrances in a clearly visible location. This notice is to remain posted until such time as the ground disturbing work is completed. In the event the notice is lost, destroyed, or otherwise removed prior to completion of the grading work, the applicant shall immediately contact the Land Use Planning office to obtain a replacement. [MCC 38.0660(A)]
  - b. Install erosion control measures consistent with the approved erosion control plan. Flag, fence, or otherwise mark the project area as described in the Exhibit A.33. These measures shall remain in place and in good working order. Such flagging, fencing, and/or markings shall be maintained until construction is complete. [MCC 38.5520(K), MCC 38.5520(L), MCC 38.5520(M), MCC 38.5520(P) and MCC 39.6210(F)(2)]
    - i. For the purposes of 6.b above, notification shall be sent to Multnomah County Land Use Planning Division a minimum of seven (7) days prior to date of installation of erosion control measures. The notification shall be e-mailed to [rithy.khut@multco.us](mailto:rithy.khut@multco.us) and reference the case number. [MCC 38.0690(B)(3)]
      1. Upon notification, an Erosion and Sediment Control Inspection will be scheduled, so the measures can be inspected. The County’s inspector will be visiting the project site to ensure that Best Management Practices are occurring. [MCC 39.6210(F)(2) and MCC 39.6225(B)]

7. During construction, ODOT or their representative(s) shall:
- a. Maintain best erosion control practices through all phases of development. Erosion control measures are to include the installation of sediment fences/barriers at the toe of all disturbed areas and post construction re-establishment of ground cover. Straw mulch, erosion blankets, or 6-mil plastic sheeting shall be used as a wet weather measure to provide erosion protection for exposed soils. All erosion control measures are to be implemented as prescribed in the current edition of the City of Portland's Erosion Control Manual, copies of which are available through the City of Portland. [MCC 38.5520(K), MCC 38.5520(L), MCC 38.5520(M), MCC 38.5520(P) and MCC 39.6210(F)(2)]
  - b. Remove any sedimentation caused by development activities from all neighboring surfaces and/or drainage systems. If any features within adjacent public right-of-way are disturbed, the property owner shall be responsible for returning such features to their original condition or a condition of equal quality. [MCC 39.6210(E)(1) and MCC 39.6210(E)(2)]
  - c. Locate any stockpiled soil more than 100 feet from any waterbody and utilize Best Management Practices for the covering of stockpiled soil. [MCC 38.5520(Q)]
  - d. Prevent any non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters from leaving the construction site through proper handling, disposal, continuous site monitoring, and clean-up activities. [MCC 38.5520(R)]
  - e. Construct, load, cover, or otherwise manage fill trucks to prevent any of their load from dropping, sifting, leaking, or otherwise escaping from the vehicle. No fill shall be tracked or discharged in any manner onto any public right-of-way. [MCC 38.5520(U)]
  - f. Use appropriate BMPs or seed with native grasses and mulch all disturbed soils left exposed overnight to prevent erosion and sedimentation. Monitor daily to ensure vegetation is sprouting and that no erosion or sedimentation is occurring. Monitoring may cease when vegetation on the disturbed soils have stabilized the disturbed soils. [MCC 38.5520(H)]
  - g. Implement the following procedures, if any Cultural Resources and/or Archaeological Resources are located or discovered on the property during this project, including but not limited to finding any evidence of historic campsites, old burial grounds, implements, or artifacts. Additionally all survey and evaluation reports and mitigation plans shall be submitted to the Planning Director and the SHPO. Native American tribal governments shall also receive a copy of all reports and plans if the cultural resources are prehistoric or otherwise associated with Native Americans.:
    - i. Halt Construction – All construction activities within 100 feet of the discovered cultural resource shall cease. The cultural resources shall remain as found; further disturbance is prohibited.
    - ii. Notification – The project applicant shall notify the County Planning Director and the Gorge Commission within 24 hours of the discovery. If the cultural resources are prehistoric or otherwise associated with Native Americans, the project applicant shall also notify the Native American tribal governments within 24 hours. Procedures required in MCC 38.7045(L) shall be followed.

- iii. Survey and Evaluation – The Gorge Commission will survey the cultural resources after obtaining written permission from the landowner and appropriate permits from Oregon State Historic Preservation Office (SHPO) (see ORS 358.905 to 358.955). It will gather enough information to evaluate the significance of the cultural resources. The survey and evaluation will be documented in a report that generally follows the standards in MCC 38.7045(C)(2) and MCC 38.7045(E).
  - iv. Mitigation Plan – Mitigation plans shall be prepared according to the information, consultation, and report standards of MCC 38.7045(J). Construction activities may recommence when the conditions in the mitigation plan have been executed. [MCC 38.7050(H)]
- h. Implement the following procedures, if human remains are discovered during excavation or construction (human remains means articulated or disarticulated human skeletal remains, bones, or teeth, with or without attendant burial artifacts):
- i. Halt Activities – All survey, excavation, and construction activities shall cease. The human remains shall not be disturbed any further.
  - ii. Notification – Local law enforcement officials, the Multnomah County Planning Director, the Gorge Commission, and the Native American tribal governments shall be contacted immediately.
  - iii. Inspection – The State Medical Examiner shall inspect the remains at the project site and determine if they are prehistoric/historic or modern. Representatives from the Indian tribal governments shall have an opportunity to monitor the inspection.
  - iv. Jurisdiction – If the remains are modern, the appropriate law enforcement officials will assume jurisdiction and the cultural resource protection process may conclude.
  - v. Treatment – Prehistoric/historic remains of Native Americans shall generally be treated in accordance with the procedures set forth in Oregon Revised Statutes, Chapter 97.740 to 97.760.
    - 1. If the human remains will be reinterred or preserved in their original position, a mitigation plan shall be prepared in accordance with the consultation and report standards of MCC 38.7045(I).
    - 2. The plan shall accommodate the cultural and religious concerns of Native Americans. The cultural resource protection process may conclude when the conditions set forth in the standards of MCC 38.7045(J) are met and the mitigation plan is executed. [MCC 38.7050(H)]
8. The County may supplement described erosion control techniques if turbidity or other down slope erosion impacts results from on-site grading work. The Gresham Building Bureau (Special Inspections Section), the local Soil and Water Conservation District, or the U.S. Soil Conservation Service can also advise or recommend measures to respond to unanticipated erosion effects. [MCC 39.6210(F)(2)]

9. At the conclusion of construction, ODOT or their representative(s) shall:
- a. Seed with native grasses all disturbed areas within five (5) days of the date ground disturbing activities are concluded as discussed or shown in Exhibit A.2, A.25, and A.33. Notice of completion shall be provided to Rithy Khut within five (5) days of completion. The Notice shall be e-mailed to [rithy.khut@multco.us](mailto:rithy.khut@multco.us) and reference the case number. [MCC 38.5520(J), MCC 38.7075(B), MCC 38.7075(Z)]
  - b. Commence within ten (10) days, the mitigation measures as outlined and discussed in Exhibit A.25 and A.33. [MCC 38.5520(J) and MCC 38.7075(B), MCC 38.7075(J), MCC 38.7075(Z)]
  - c. Submit within 90 days of commencement of mitigation measures as required in Condition 9.b above, a post-mitigation report. The report shall be prepared and signed by Ben White, ODOT Region 1 Biologist or someone of similar educational and vocational training.
    - i. The post-mitigation report shall confirm the mitigation has been completed in compliance with approved designs. Any variation from approved designs or conditions of approval shall be clearly indicated. The post-mitigation report shall include:
      1. Dated pre- and post-mitigation photos taken of the Mitigation Planting Area. The photos should clearly show the site conditions before and after construction.
      2. A narrative that describes any deviation from the approved plans and measures to return the mitigation deviations back into compliance with this permit. [MCC 38.5520(J) and MCC 38.7075(B), MCC 38.7075(J), MCC 38.7075(Z)]
  - d. Submit to Multnomah County Land Use Planning a post-construction report and as-built plans stamped and certified by an Oregon Professional Engineer that the physical improvements are consistent with this Geologic Hazards permit. The post-construction report and as-built plans shall be submitted within 90 days of completion of the project. The post-construction report shall confirm the project has been completed in compliance with approved designs and all conditions of this land use permit. Any variation from approved designs or conditions of approval shall be clearly indicated and specify how the variation is in compliance with the Geologic Hazards codes. The post-construction report shall include:
    - i. Dated pre- and post-ground disturbing photos taken of the areas of disturbance.
    - ii. A narrative that describes any deviation from the approved plans.
    - iii. Remedial action needed to bring the completed project into compliance with the Geologic Hazards regulations, if applicable. [MCC 39.6210(F)(1) and [MCC 39.6210(F)(2)]
10. At the completion of mitigation work (ground preparation, nuisance plant removal, and plant installation), the ODOT or their representatives shall:
- a. Monitor the Mitigation Area as described in Biological Resources Memorandum to determine whether each type of vegetation planted continues to live, thrive, and grow. The monitoring shall be for a minimum period of six (6) growing seasons after

completion of all the initial plantings. Monitoring reports are required. [MCC 38.7075(X)]

- i. For any replanted area that falls below the 80% threshold, the property owner(s) shall be replant the area during the next planting season. [MCC 38.0660 and MCC 38.7075(X)]
- ii. Monitoring Report Due Date: Monitoring reports are due by November 30th of the 3<sup>rd</sup> year after completion of the mitigation work. A second mitigation report shall be due by November 30<sup>th</sup> of the 6<sup>th</sup> year after completion of the mitigation work. It shall be sent to [LUP-submittal@multco.us](mailto:LUP-submittal@multco.us) and include the subject line: "T2-2021-15349." [MCC 38.0660 and MCC 38.7075(X)]
  1. Extension of the Monitoring Period: The monitoring period may be extended, at the discretion of Land Use Planning for failure to provide monitoring reports, failure of the site to meet performance standards for two consecutive years (without irrigation or replanting), or when needed to evaluate replanting or other corrective or remedial actions. [MCC 38.0660 and MCC 38.7075(X)]
  2. Release of Monitoring Obligation: Monitoring is required until Land Use Planning has officially released the site from further monitoring. [MCC 38.0660 and MCC 38.7075(X)]
  3. Failure to Submit Monitoring Reports: Failure to submit the required monitoring report by the due date may result in an extension of the monitoring period, forfeiture of the financial security and/or enforcement action. [MCC 38.0660 and MCC 38.7075(X)]
- iii. The monitoring report shall include the following information:
  1. The permit number, monitoring date, report year, and a determination or whether the site is meeting performance standard of Condition #10.a.iii.3 through #10.a.iii.5 below.
  2. Current photographs of the Mitigation Area taken within the last 60 day prior to the report date.
  3. A brief narrative that describes maintenance activities and recommendations to meet performance standard. This includes when irrigation occurred and when the above ground portion of the irrigation system was or will be removed from the site.
  4. The number and location of any Mitigation Plantings that have been replaced or need to be replaced each year due to death or disease and planting date for their replacements.
  5. Any other information necessary or required to document compliance with the performance standard listed in Condition #X and #X. [MCC 38.0660 and MCC 38.7075(X)]

**Note:** Once this decision is final, the applicant shall complete the following steps:

1. Read your land use decision, the conditions of approval and modify your plans, if necessary, to meet any condition that states, “Prior to commencement of construction...” Be ready to demonstrate compliance with the conditions.
2. Contact Rithy Khut, Planner, at 503-988-0176 or [rithy.khut@multco.us](mailto:rithy.khut@multco.us), **for an appointment** for review of the conditions of approval. Please ensure that any items required under, “Within ninety (90) days of the date of the final decision...” or “When ground-disturbing activities authorized by this permit are ready to commence...” are ready for land use planning review.

**Notice to Mortgagee, Lien Holder, Vendor, or Seller:**

ORS Chapter 215 requires that if you receive this notice it must be promptly forwarded to the purchaser.

## **Findings of Fact**

**FINDINGS:** Written findings are contained herein. The Multnomah County Code (MCC) criteria and Comprehensive Plan Policies are in **bold** font. Staff analysis and comments are identified as ‘**Staff:**’ and address the applicable criteria. Staff comments may include a conclusionary statement in *italic*.

### **1.0 Project Description:**

**Staff:** The applicant requests a National Scenic Area (NSA) Site Review and Geologic Hazards (GH) permit. The Site Review and GH permit will authorize development activities that were not previously reviewed by the County to authorize previous ground disturbing activities relating to the creation of a diversion berm and installation of a 12-inch culvert. The applicant is also requesting new ground disturbing activities to construct additional diversion berms, construct a driveway (“access road”), remove vegetation, and install a new 36-inch culvert within the Mosquito Creek basin. Lastly, the applicant proposes off-site mitigation at the Mirror Lake Restoration Site located on Property #4.

### **2.0 Property Description & History:**

**Staff:** This application is located within the right of way of East Historic Columbia River Highway and the following properties:

1. 1N5E -00500
2. 1N5E -00600
3. 1N5E12C -00200
4. 1N5E28B -00100

The East Historic Columbia River Highway, Property #1, #2, and #3 are owned by the Oregon Department of Transportation (ODOT). Property #4 is owned by Oregon State Parks and Recreation (OSPR). The project areas are located within the Gorge Special Open Space (GSO) zoning districts in the Columbia River Gorge National Scenic Area (CRGNSA). Property #1 has a Geologic Hazards (GH) overlay, which covers most of the property.

There have been no previous land use cases or building permits associated with the subject properties.

### **3.0 Public Comment:**

**Staff:** Staff mailed a notice of application and invitation to comment on the proposed application to the required parties pursuant to MCC 38.0530 as Exhibited in C.6. Staff did receive public comments during the 14-day comment period.

#### **3.1 Cultural Resources Survey Determination Letter from Chris Donnermeyer, Heritage Resources Program Manager, Columbia River Gorge National Scenic Area**

**Staff:** Chris Donnermeyer submitted a Cultural Resource Survey Determination on January 10, 2022 stating that “A Cultural Resource Reconnaissance Survey is: Required” and “A Historic Survey is: Not required” (Exhibit D.1).

**3.2 Letter of Concurrence of Archaeological Resources Survey and Section 106 Level of Effect from Chris Donnermeyer, Heritage Resources Program Manager, Columbia River Gorge National Scenic Area**

**Staff:** Chris Donnermeyer submitted a letter stating that, “[they] have reviewed the cultural resources survey letter...and Section 106 Level of Effect Form.” They conclude that for cultural resources, “Sites 1 and 2 are recommended ‘not eligible’ for the National Register of Historic Places (NRHP). I concur with this recommendation.” For Section 106, they concur with the, “recommendation for the undertaking of ‘No adverse effect.’” Lastly, they recommend procedures for unanticipated discoveries during the project implementation, which will be incorporated into this Decision. (Exhibit D.2)

**3.3 Steven D. McCoy, Staff Attorney, Friends of the Columbia Gorge provided a letter digitally by e-mail (Exhibit D.3)**

**Staff:** Steven D. McCoy submitted an e-mail and letter on May 20, 2022 on behalf of the Friends of the Columbia Gorge. The letter contained comments intended to identify application requirements, procedural requirements, resource protection standards, and provide recommendations to the County and the public regarding legal requirements.

**4.0 Administrative Procedures Criteria:**

**4.1 § 38.0560 CODE COMPLIANCE AND APPLICATIONS.**

**Except as provided in subsection (A), the County shall not make a land use decision approving development, including land divisions and property line adjustments, or issue a building permit for any property that is not in full compliance with all applicable provisions of the Multnomah County Land Use Code and/or any permit approvals previously issued by the County.**

**(A) A permit or other approval, including building permit applications, may be authorized if:**

- (1) It results in the property coming into full compliance with all applicable provisions of the Multnomah County Code. This includes sequencing of permits or other approvals as part of a voluntary compliance agreement; or**
- (2) It is necessary to protect public safety; or**
- (3) It is for work related to and within a valid easement over, on or under an affected property.**

**(B) For the purposes of this section, Public Safety means the actions authorized by the permit would cause abatement of conditions found to exist on the property that endanger the life, health, personal property, or safety of the residents or public. Examples of that situation include but are not limited to issuance of permits to replace faulty electrical wiring; repair or install furnace equipment; roof repairs; replace or repair compromised utility infrastructure for water, sewer, fuel, or power; and actions necessary to stop earth slope failures.**

**Staff:** This standard provides that the County shall not make a land use decision approving development for a property that is not in full compliance with County Code or previously issued County approvals, except in the following instances: approval will result in the property coming into full compliance, approval is necessary to protect public safety, or the approval is for work related to or within a valid easement.

A finding of satisfaction of this standard does not mean that a property is in full compliance with the Zoning Code and all prior permit approvals (and, accordingly, does not preclude future enforcement actions relating to uses and structures existing at the time the finding is made). Instead, a finding of satisfaction of this standard simply means that there is not substantial evidence in the record affirmatively establishing one or more specific instances of noncompliance. As such, an applicant has no initial burden to establish that all elements of the subject property are in full compliance with the Zoning Code and all previously approved permits; instead, in the event of evidence indicating or establishing one or more specific instances of noncompliance on the subject property, the applicant bears the burden to either rebut that evidence or demonstrate satisfaction of one of the exceptions in MCC 38.0560.

For purposes of the current application, staff is not aware of any open compliance cases on the subject properties, however there is evidence in the record of non-compliance on the subject properties. The applicant did not meet the requirements of the Post-Emergency/Disaster Response and conducted development that was not reviewed by the County. The purpose of this application is to review the development that occurred in addition to reviewing the development that will occur. Additionally, the current application is necessary to protect public safety as the applicant; the Oregon Department of Transportation (ODOT) is seeking to construct structures created of earth material to block and hinder debris flows from reaching the East Historic Columbia River Highway and Interstate I-84. Lastly, the applicant is constructing a culvert that is located within a valid easement over, on or under an affected property. The property owner, Union Pacific Railroad (formerly Oregon-Washington Railroad & Navigation Company) granted the County an easement for the construction of Columbia River Highway, which is now known as the Historic Columbia River Highway in 1913 (Exhibit B.9). Subsequently, the highway was transferred from the County to the current owner, ODOT. *This criterion is met.*

## **5.0 Gorge Special Open Space (GSO) Criteria:**

### **5.1 § 38.2625 REVIEW USES**

#### **5.1.1 (D) The following uses may be allowed on lands designated GSO, pursuant to MCC 38.0530 (B), when consistent with an open space plan approved by the U.S. Forest Service and upon findings that the NSA Site Review standards of MCC 38.7000 through 38.7085 have been satisfied:**

**(5) Placement of Structures necessary for continued public safety, or the protection of essential public services or protection of private or public existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements damaged during an emergency/disaster event. This includes replacement of temporary structures erected during such events with permanent structures performing an identical or related function. Land use proposals for such structures shall be submitted within 12 months following an emergency/disaster event. Applicants are responsible for all other applicable local, state and federal permitting requirements.**

**Staff:** The applicant is requesting authorization for development that occurred under an emergency declaration in the winter of 2021 and was not reviewed by the County under a Post Emergency/Disaster Site Review Permit and new development in the same area to provide for the protection of public roads and the Union Pacific Railroad line.

The development that occurred without review by the County includes:

1. Ground disturbing activities relating to an emergency/disaster event that occurred in January of 2021;
2. The construction of a diversion berm made of earth materials, which is classified as a structure; and
3. Installation of a 12-inch culvert

The development that is proposed includes:

1. Ground disturbing activities;
2. Removal of vegetation;
3. Construction of an additional diversion berm made of concrete “ultrablocks” and earth materials;
4. Construction of a private driveway that will be used as an access road;
5. Construction of a gabion berm;
6. Installation of a 36-inch culvert; and
7. Off-site mitigation through planting of vegetation

The development that occurred and the development that will occur include multiple structures. The structures include the construction of diversion berms and installation of culverts. Those structures are proposed to ensure that debris and water from the creek is managed to protect essential public services including the E. Historic Columbia River Highway and the Union Pacific Railroad. As required above, the proposed structures and development must be found to be consistent with NSA Site Review standards of MCC 38.7000 through 38.7085. Those standards are discussed below.

## **6.0 Geologic Hazards Criteria:**

### **6.1 § 38.5505 PERMITS REQUIRED**

**Unless exempt under this code; no development, or ground disturbing activity shall occur (1) on land located in hazard areas as identified on the Geologic Hazards Overlay map, or (2) where the disturbed area or the land on which the development will occur has average slopes of 25 percent or more, except pursuant to a Geologic Hazards permit (GH).**

**Staff:** The applicant is requesting a permit for development and ground disturbing activities to authorize previous construction of a berm and installation of a culvert and authorize proposed construction of a new berm, private driveway, and installation of a new culvert. The development is located on land identified on the Geologic Hazards Overlay map and is located on land that has an average slope of 25% or more. Therefore, the applicant is required to obtain a Geologic Hazards permit, which is discussed below.

### **6.2 § 38.5515 GEOLOGIC HAZARDS PERMIT APPLICATION INFORMATION REQUIRED**

**An application for a Geologic Hazards permit shall include two copies of each of the following:**

**(A) A scaled site plan showing the following, both existing and proposed;**

- (1) Property lines;**
- (2) Buildings, structures, driveways, roads and right-of-way boundaries;**
- (3) Location of wells, utility lines, site drainage provisions, stormwater disposal system, sanitary tanks and drainfields (primary and reserve);**
- (4) Trees and vegetation proposed for removal and planting and an outline of wooded areas;**
- (5) Water bodies;**
- (6) Boundaries of ground disturbing activities;**
- (7) Location and height of unsupported finished slopes;**
- (8) Location for washout and cleanup of concrete equipment;**
- (9) Storage location and proposed handling and disposal methods for potential sources of non-erosion pollution including pesticides, fertilizers, petrochemicals, solid waste, construction chemicals, and wastewaters;**
- (10) Soil types;**
- (11) Ground topography contours (contour intervals no greater than 10-feet); and**
- (12) Erosion and sediment control measures.**

**(B) Calculations of the total area of proposed ground disturbance (square feet), volume of proposed cut and fill (cubic yards), and existing and proposed slopes in areas to be disturbed (percent slope);**

**(C) Written findings, together with any supplemental plans, maps, reports, or other information necessary to demonstrate compliance of the proposal with all applicable provisions of the Geologic Hazards standards in MCC 38.5520 (A). Necessary reports, certifications, or plans may pertain to: engineering, soil characteristics, stormwater drainage control, stream protection, erosion and sediment control, and replanting. The written findings and supplemental information shall include:**

**(1) With respect to fill:**

**(a) Description of fill materials, compaction methods, and density specifications (with calculations). The planning director may require additional studies or information or work regarding fill materials and compaction.**

**(b) Statement of the total daily number of fill haul truck trips, travel timing, loaded haul truck weight, and haul truck travel route(s) to be used from any fill source(s) to the fill deposit site.**

**(2) A description of the use that the ground disturbing activity will support or help facilitate.**

**(3) One of the following:**

**(a) Additional topographic information showing that the proposed development to be on land with average slopes less than 25 percent, and located more than 200 feet from a known landslide, and that no cuts or fills in excess of 6 feet in depth are planned. High groundwater conditions shall be assumed unless documentation is available, demonstrating otherwise; or**

**(b) A geological report prepared by a Certified Engineering Geologist or Geotechnical Engineer certifying that the site is suitable for the proposed development; or,**

**(c) An GHP Form– 1 completed, signed and certified by a Certified Engineering Geologist or Geotechnical Engineer with their stamp and signature affixed indicating that the site is suitable for the proposed development.**

**(i) If the GHP Form– 1 indicates a need for further investigation, or if the Director requires further study based upon information contained in the GHP Form– 1, a geotechnical report as specified by the director shall be prepared and submitted.**

**[a] A geotechnical investigation in preparation of a geotechnical report shall be conducted at the applicant’s expense by a Certified Engineering Geologist or Geotechnical Engineer. The report shall include specific investigations required by the director and recommendations for any further work or changes in proposed work which may be necessary to ensure reasonable safety from landslide hazards.**

**[b] Any development related manipulation of the site prior to issuance of a permit shall be subject to corrections as recommended by the geotechnical report to ensure safety of the proposed development.**

**[c] Observation of work required by an approved geotechnical report shall be conducted by a Certified Engineering Geologist or Geotechnical Engineer at the applicant’s expense; the geologist’s or engineer’s name shall be submitted to the director prior to issuance of the permit.**

**[d] The director, at the applicant’s expense, may require an evaluation of GHP Form– 1 or the geotechnical report by another Certified Engineering Geologist or Geotechnical Engineer.**

**(4) Documentation of approval by each governing agency having authority over the matter of any new stormwater discharges into public right-of-way.**

**(5) Documentation of approval by the City of Portland Sanitarian and any other agency having authority over the matter of any new stormwater surcharges to sanitary drainfields.**

**Staff:** As required, the applicant has provided all the applicable application information materials listed above. The applicant’s site plans are found in Exhibits A.8, A.9, A.19 - Debris Basin Conceptual Layout, A.32, and A.33). Calculations of the total area of proposed ground disturbance (square feet), volume of proposed cut and fill (cubic yards and tons), and existing and proposed slopes in areas to be disturbed (percent slope) are found in Exhibit A.17, A.18 and A.33. The applicant is proposing 10 acres of total ground disturbance and 25,000 cubic yards of earth material that will be disturbed, stored, disposed of, or used as fill (Exhibit A.18).

A GHP Form-1 (“HDP Form-1”) was prepared Michael J. Zimmerman, Registered Professional Engineer, Geotechnical Engineer, and Certified Engineering Geologist certifying that the site is suitable for the proposed development (Exhibit A.18). A geological report was prepared by Michael J. Zimmerman, PE, GE, and CEG (Exhibit A.17). The HDP Form-1 and report also contain written findings that demonstrate compliance of the proposal with all applicable provisions of the Geologic Hazards standards. The applicant also included a contour map with additional topographic information (Exhibit A.8, A.9, A.19 - Debris Basin Conceptual Layout, A.32, and A.33). *These application requirements are met.*

**6.3 § 38.5520 GEOLOGIC HAZARDS PERMIT STANDARDS**

**6.3.1 (A) A Geologic Hazards (GH) permit shall not be issued unless the application for such permit establishes compliance with MCC 39.6210 and satisfaction of the following standards:**

**Staff:** As required, a GH permit shall not be issued unless the application for such permit establishes compliance with MCC 39.6210. The standards in MCC 39.6210 state:

**§ 39.6210 PERMITS REQUIRED.**

**(A) Unless exempt under this Code, whether under MCC 39.6215, 39.5080, 38.5510 or otherwise, no ground disturbing activity shall occur except pursuant to one of the following permits: a Minimal Impact Project (MIP) permit, an Erosion and Sediment Control permit (ESC), an Agricultural Fill permit (AF), a Geologic Hazards permit (GH), or a Large Fill permit (LF).**

**(B) The permits referenced in subsection (A) are required in addition to and not in lieu of any other local, state or federal permit, including but not limited to permits required for ground disturbing activities within a water body regulated by the Oregon Department of State Lands, the U.S. Army Corps of Engineers or the Oregon Department of Fish and Wildlife.**

**(C) No ground disturbing activity shall occur except in support of a lawfully established use or in support of the lawful establishment of a use.**

**(D) No permit identified in subsection (A) shall be issued in any case where the planning director or a building official determines that the proposed ground disturbing activity will be hazardous by reason of flood, geological hazard, seismic hazard, or unstable soils; or is liable to endanger any other adjacent property; or result in the deposition of debris on any public right-of-way or property or water body; or otherwise create a nuisance.**

**(E) Responsibility. For any ground disturbing activity authorized under a permit listed in subsection (A):**

**(1) Whenever sedimentation is caused by ground disturbing activity, the person, corporation or other entity shall be responsible to remove that sedimentation from all adjoining surfaces and drainage systems prior to issuance of occupancy or final approvals for the project.**

**(2) It is the responsibility of any person, corporation or other entity doing ground disturbing activity on, in, under or around a water body, or the floodplain or right-of-way, to maintain as nearly as possible in its present state the water body, floodplain, or right-of-way during such activity, and to return the same to a functional condition equal to or better than the condition existing immediately prior to the ground disturbing activity.**

**(F) Implementation.**

**(1) Performance bond. A performance bond may be required in the amount of the full cost of the establishment and maintenance of all erosion, sedimentation and stormwater control measures for activity authorized through any permit listed in subsection (A). The bond may be used to provide for the installation of the measures if not completed by the contractor. The bond shall be released upon determination the control measures have or can be expected to perform satisfactorily. The bond may be waived if the director determines the scale and duration of the project and the potential problems arising therefrom will be minor**

**(2) Inspection and enforcement.** The director may take steps to ensure compliance with the requirements of Part 6, Geologic Hazards permit requirements, and Large Fill permit requirements, including but not limited to, inspections, peer review of engineering analysis (at the applicant's expense), post construction certification of the work, and the posting of a notice providing County contact information in the event that questions arise concerning work occurring on-site. The requirements of this subpart of MCC Chapter 39 shall be enforced by the planning director. If inspection by county staff reveals erosive conditions which exceed those prescribed by the permit, work may be stopped until appropriate correction measures are completed.

**(G) Final approvals.** A certificate of occupancy or other final approval shall be granted for development subject to the provisions of this subpart of MCC Chapter 39 only upon satisfactory completion of all applicable requirements.

As discussed in Section 5.0 and as required by subsection (A) & (B) above, the applicant is requesting the construction of two berm structures and two culverts that are necessary for continued public safety, and protection of essential public existing structures (roadways). This ground disturbing activity will occur on lands that are located in the GH overlay and have an average slope of 25 percent or more. As such, a Geologic Hazards (GH) permit is required.

*The ground disturbing activities are not exempt under MCC 39.6215, 39.5080, 38.5510, or otherwise; therefore the applicant is required to obtain a Geologic Hazards permit.*

As required by subsection (C), the berms and culverts are essential for the protection of essential public existing structures. The construction of these structures and ground disturbance is reviewed as a Review Use under MCC 38.2625(D). Therefore, the ground disturbing activities that have occurred and will occur are in support of a lawfully established use.

*This criterion is met.*

As required by subsection (D), the applicant has provided a GHP Form 1 and Geotechnical Report reviewing the ground disturbing activities. The GHP Form 1 and report, both written by Michael J. Zimmerman, PE, GE, and CEG did not find the ground disturbing activity to be hazardous by reason of flood, geological hazard, seismic hazard, or unstable soils (Exhibit A.17 and A.18)

*This criterion is met.*

As required by subsection (E), for any ground disturbing activity authorized under this permit, the person, corporation or other entity shall be responsible to remove that sedimentation from all adjoining surfaces and drainage systems prior to issuance of occupancy or final approvals for the project. The person, corporation or other entity is also responsible to maintain as nearly as possible in its present state the water body, floodplain, or right-of-way during such activity, and to return the same to a functional condition equal to or better than the condition existing immediately prior to the ground disturbing activity, if activities occurred in those areas. A condition of approval will be required to ensure that this criterion is met.

*As conditioned, these criteria are met.*

**6.3.2 (B) Fill shall be composed of earth materials only.**

**Staff:** To construct the berms, up to 25,000 cubic yards of fill have been utilized or will be utilized. The initial emergency response resulted in the importation of fill to the site. The fill that was placed was primarily silty sand with gravel and cobbles in addition to boulders. The proposed ground disturbance and construction of the new berms will be constructed with crushed rock and mechanically stabilized earth fill (Exhibit A.2, A.17, A.18, A.32, and A.33). Lastly landscaping fill will be placed as a top layer. Based on the proposed description of work, all of the fill previously brought to the site and the new proposed fill that will be utilized as part of this portion of the project will be comprised of earth materials. *This criterion is met.*

**6.3.3 (C) Cut and fill slopes shall not exceed 33 percent grade (3 Horizontal: 1 Vertical), unless a Certified Engineering Geologist or Geotechnical Engineer certifies in writing that a grade in writing that a grade in excess of 33 percent is safe (including, but not limited to, not endangering or disturbing adjoining property) and suitable for the proposed development.**

**Staff:** As described in the in the site plans, the GHP Form 1, and Geotechnical Report, cut and fill slopes did exceed 33 percent grade. During the initial emergency response, the excavation to channelize Mosquito Creek and the placement of fill to create the diversion berms created cut and fill slopes that exceeded 33 percent grade (3H:1V). For the side slopes of the diversion berm built in 2021, those side slopes are as steep as 66 percent grade (1.5H:1V). For the proposed berms, the side slopes will also be 1.5H:1V. In both cases, Michael J. Zimmerman, PE, GE, and CEG found that the excavation to channelize Mosquito Creek and the construction of the berms were/will be safe and suitable for the proposed development (Exhibit A.8, A.9, A.19 - Debris Basin Conceptual Layout, A.32, and A.33). *This criterion is met.*

**6.3.4 (D) Unsupported finished cuts and fills greater than 1 foot in height and less than or equal to 4 feet in height at any point shall meet a setback from any property boundary of a distance at least twice the height of the cut or fill, unless a Certified Engineering Geologist or Geotechnical Engineer certifies in writing that the cuts or fills will not endanger or disturb adjoining property. All unsupported finished cuts and fills greater than 4 feet in height at any point shall require a Certified Engineering Geologist or Geotechnical Engineer to certify in writing that the cuts or fills will not endanger or disturb adjoining property.**

**Staff:** As described previously in subsection (C), during the initial emergency response, the excavation to channelize Mosquito Creek resulted in unsupported finished cuts and fills greater than 4 foot in height (Exhibit A.10, A.12, A.17, A.18, A.32, and A.33). Michael J. Zimmerman, PE, GE, and CEG found that the cuts and fills to channelize Mosquito Creek will not endanger or disturb adjoining property. *This criterion is met.*

**6.3.5 (E) Fills shall not encroach on any water body unless an Oregon licensed Professional Engineer certifies that the altered portion of the water body will continue to provide equal or greater flood carrying capacity for a storm of 10-year design frequency.**

**Staff:** The application requests encroachment into a water body, Mosquito Creek. As part of a separate permit, the applicant is requesting a Flood Development that must be approved prior to the any ground disturbing activities. A condition will be required that the Flood Development permit be issued to ensure that altered portions of the water body will continue to provide equal

or greater flood carrying capacity for a storm of 10-year design frequency. *As conditioned, this criterion is met.*

**6.3.6 (F) Stripping of vegetation, ground disturbing activities, or other soil disturbance shall be done in a manner which will minimize soil erosion, stabilize the soil as quickly as practicable, and expose the smallest practical area at any one time during construction.**

**Staff:** The applicant has provided an Erosion and Sediment Control plan that shows the location ground disturbing activities and other soil disturbances. The Erosion Control Plan shows that silt fencing will be installed on the northern extent of the project area to protect the Historic Columbia River Highway and railroad tracks owned by Union Pacific Rail Road Company that are downslope (Exhibit A.8, A.9, A.19 - Debris Basin Conceptual Layout, A.32, and A.33). The applicant will also install compost socks, sediment traps, and check dams through the project site. Lastly, the applicant also plans to work during the summer months to allow for in-water work. *This criterion is met.*

**6.3.5 (G) Development Plans shall minimize cut or fill operations and ensure conformity with topography so as to create the least erosion potential and adequately accommodate the volume and velocity of surface runoff.**

**Staff:** The applicant has provided a site plan that shows the location of the cut and fill operations that will be a part of this project. The project area will be recontoured to create two relatively flat areas that will catchment basins. The recontouring of the project area to create the two catchment basins will be designed to slow the velocity of Mosquito Creek as it travels from through the two basins (Exhibit A.10, A.12, A.17, A.18, A.32, and A.33). *This criterion is met.*

**6.3.6 (H) Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development;**

**Staff:** The applicant has indicated that mulch and tackifier was used to stabilize the initial ground disturbance. For the newly proposed ground disturbance, the applicant is proposing to apply hydro-seed as a temporary measure to protect exposed critical areas during development. As a condition, these measures will be required to be implemented. *As conditioned, this criterion is met.*

**6.3.7 (I) Whenever feasible, natural vegetation shall be retained, protected, and supplemented;**  
**(1) A 100-foot undisturbed buffer of natural vegetation shall be retained from the top of the bank of a stream, or from the ordinary high watermark (line of vegetation) of a water body, or within 100-feet of a wetland;**  
**(2) The buffer required in (I)(1) may only be disturbed upon the approval of a mitigation plan which utilizes erosion, sediment and stormwater control measures designed to perform as effectively as those prescribed in the most recent edition of the City of Portland Erosion and Sediment Control Manual and the City of Portland Stormwater Management Manual and which is consistent with attaining equivalent surface water quality standards as those established for the Tualatin River Drainage Basin in OAR 340-041-0345(4).**

**Staff:** The previous ground disturbance and proposed ground disturbance will encroach within the 100-foot buffer from the top of bank of a waterbody. The applicant has provided an Erosion and Sediment Control plan that shows that silt fencing, compost socks, sediment traps, and check dams through the project site. The applicant also plans to work during the summer

months to minimize water quality concerns for in-water work. Use of these measures aligns with the most recent edition of the City of Portland Erosion and Sediment Control Manual and the City of Portland Stormwater Management Manual. *This criterion is met.*

**6.3.8 (J) Permanent plantings and any required structural erosion control and drainage measures shall be installed as soon as practical.**

**Staff:** The applicant is electing to apply hydroseed to the project area. To ensure that this criterion is met, a condition will be required that permanent plantings within the mitigation areas be installed as soon as practical. Additional permanent plantings in the project area are not feasible as this area is located within an area of consistent debris flow. *This criterion is met.*

**6.3.9 (K) Provisions shall be made to effectively accommodate increased runoff caused by altered soil and surface conditions during and after development. The rate of surface water runoff shall be structurally retarded where necessary.**

**Staff:** The applicant has provided an Erosion and Sediment Control plan that shows the location ground disturbing activities. The Erosion Control Plan shows that provisions to accommodate increased runoff through the use of silt fencing, compost socks, sediment traps, and check dams. The project area will also be recontoured to create two relatively flat areas that will catchment basins. The recontouring of the project area to create the two catchment basins will be designed to slow the velocity of Mosquito Creek as it travels from through the two basins (Exhibit A.10, A.12, A.17, A.18, A.32, and A.33). *This criterion is met.*

**6.3.10 (L) Sediment in the runoff water shall be trapped by use of debris basins, silt traps, or other measures until the disturbed area is stabilized.**

**Staff:** As stated previously, the applicant has provided an Erosion and Sediment Control plan that shows that provisions to trap sediment. The provisions include silt fencing, compost socks, sediment traps, and check dams (Exhibit A.10, A.12, A.17, A.18, A.32, and A.33). These measures will ensure that sediment is controlled until the disturbed areas are stabilized. *This criterion is met.*

**6.3.11 (M) Provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills by installation of temporary or permanent drainage across or above such areas, or by other suitable stabilization measures such as mulching or seeding.**

**Staff:** As stated previously, the applicant has provided an Erosion and Sediment Control plan that shows that provisions to prevent surface water from damaging the cut face of excavations and the sloping surface of fills. The applicant will only work in the summer months and upon completion of the project will place landscaping fill for application of hydroseed. The application of hydroseed will stabilize the ground disturbance (Exhibit A.10, A.12, A.17, A.18, A.32, and A.33). *This criterion is met.*

**6.3.12 (N) All drainage measures shall be designed to avoid erosion and adequately carry existing and potential surface runoff to suitable drainageways such as storm drains, natural water bodies, drainage swales, or an approved drywell system.**

**Staff:** The Erosion and Sediment Control plan is designed to carry surface runoff to the newly contoured Mosquito Creek. The project area will be recontoured to create two relatively flat

areas that will act as catchment basins. The recontouring of the project area to create the two catchment basins will be designed to slow the velocity of Mosquito Creek as it travels from through the two basins (Exhibit A.10, A.12, A.17, A.18, A.32, and A.33)). *This criterion is met.*

**6.3.13 (O) Where drainage swales are used to divert surface waters, they shall be vegetated or protected as required to minimize potential erosion.**

**Staff:** Drainage swales are not proposed to be used; therefore, this criterion is not applicable. *This criterion is not applicable.*

**6.3.14 (P) Erosion and sediment control measures must be utilized such that no visible or measurable erosion shall occur on-site and no visible or measurable sediment shall exit the site, enter the public right-of-way or be deposited into any water body or storm drainage system. Control measures which may be required include, but are not limited to:**

- (1) Energy absorbing devices to reduce runoff water velocity;**
- (2) Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule;**
- (3) Dispersal of water runoff from developed areas over large undisturbed areas.**

**Staff:** As stated previously, the applicant has provided an Erosion and Sediment Control plan that silt fencing, compost socks, sediment traps, and check dams through the project site. The applicant also plans to work during the summer months to minimize water quality concerns for in-water work. Using these measures will ensure that erosion caused by runoff water will be reduced and sedimentation will be trapped. *This criterion is met.*

**6.3.15 (Q) Disposed spoil material or stockpiled topsoil shall be prevented from eroding into water bodies by applying mulch or other protective covering; or by location at a sufficient distance from water bodies; or by other sediment reduction measures.**

**Staff:** The applicant does not indicate that spoil materials or topsoil will be stockpiled. However if there are spoil material or topsoil stockpiled at the project site, a condition will be required that any disposed spoil material or stockpiled topsoil shall have either mulch applied to cover the material/topsoil or some other protective covering be utilized to ensure that sedimentation is reduced. *As conditioned, this criterion is met.*

**6.3.16 (R) Such non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters shall be prevented from leaving the construction site through proper handling, disposal, continuous site monitoring and clean-up activities.**

**Staff:** A condition will be required that if there is any non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters, that they be prevented from leaving the construction site through proper handling, disposal, continuous site monitoring and clean-up activities. *As conditioned, this criterion is met.*

**6.3.17 (S) Ground disturbing activities within a water body shall use instream best management practices designed to perform as prescribed in the City of Portland Erosion and Sediment Control Manual. To the extent that there is a conflict between the Manual and the requirements of the National Scenic Area (NSA) Permit, the requirements in the NSA will apply; and**

**Staff:** The previous ground disturbance and proposed ground disturbance will encroach within a waterbody. The applicant has provided an Erosion and Sediment Control plan that shows that silt fencing, compost socks, sediment traps, and check dams through the project site. The applicant also plans to work during the summer months to minimize water quality concerns for in-water work. Using these measures are BMPs that align with the most recent edition of the City of Portland Erosion and Sediment Control Manual. *This criterion is met.*

**6.3.18 (T) The total daily number of fill haul truck trips shall not cause a transportation impact (as defined in the Multnomah County Road Rules) to the transportation system or fill haul truck travel routes, unless mitigated as approved by the County Transportation Division.**

**Staff:** Both routes, E. Historic Columbia River Highway and Interstate I-84, that could be used for fill haul trips are not part of the Multnomah County transportation system. Further, Multnomah County Transportation Division did not provide comment that they had concerns about the proposed project; therefore, this criterion is not applicable. *This criterion is not applicable.*

**6.3.19 (U) Fill trucks shall be constructed, loaded, covered, or otherwise managed to prevent any of their load from dropping, sifting, leaking, or otherwise escaping from the vehicle. No fill shall be tracked or discharged in any manner onto any public right-of-way.**

**Staff:** To ensure that fill used for this project does not escape from a vehicle, a condition of approval will be required fill trucks will be constructed, loaded, covered, and otherwise managed to prevent any of their load from dropping, sifting, leaking, or otherwise escaping from the vehicle. Additionally, at no time will fill from vehicles be tracked or discharged in any manner onto any public right-of-way. *As conditioned, this criterion is met.*

**6.3.20 (V) No compensation, monetary or otherwise, shall be received by the property owner for the receipt or placement of fill.**

**Staff:** To ensure no compensation, monetary or otherwise, will be received by the property owner for the receipt or placement of fill, a condition of approval will be required. *As conditioned, this criterion is met.*

## **7.0 National Scenic Area (NSA) Site Review Criteria:**

### **7.1 § 38.7040 SMA SCENIC REVIEW CRITERIA**

**The following scenic review standards shall apply to all Review and Conditional Uses in the Special Management Area of the Columbia River Gorge National Scenic Area with the exception of rehabilitation or modification of historic structures eligible or on the National Register of Historic Places when such modification is in compliance with the national register of historic places guidelines:**

**7.1.1 (A) All Review Uses and Conditional Uses visible from KVAs. This section shall apply to proposed development on sites topographically visible from KVAs::**

**(1) New developments and land uses shall be evaluated to ensure that the scenic standard is met and that scenic resources are not adversely affected, including cumulative effects, based on the degree of visibility from Key Viewing Areas.**

**Staff:** The applicant is authorization for both development that was not reviewed by the County and new development. The development that occurred without review by the County includes:

1. Ground disturbing activities relating to an emergency/disaster event that occurred in January of 2021;
2. The construction of a diversion berm made of earth materials, which is classified as a structure; and
3. Installation of a 12-inch culvert

The development that is proposed includes:

1. Ground disturbing activities;
2. Removal of vegetation;
3. Construction of an additional diversion berm made of concrete “ultrablocks” and earth materials;
4. Construction of a private driveway that will be used as an access road;
5. Construction of a gabion berm;
6. Installation of a 36-inch culvert; and
7. Off-site mitigation through planting of vegetation

Each of the developments is evaluated within this section to ensure that the applicable scenic standards are met and that scenic resources are no adversely affected. Some of the constructed development and some of the proposed development are visible from Key Viewing Areas. The KVAs are Beacon Rock, Cape Horn, Columbia River, Crown Point, Historic Columbia River Highway, Highway I-84 including rest stops, Larch Mountain Road, Portland Women’s Forum State Park, Rooster Rock, and Washington State Route 14.

**(2) The required SMA scenic standards for all development and uses are summarized in the following table.**

<b>REQUIRED SMA SCENIC STANDARDS</b>		
<b>LANDSCAPE SETTING</b>	<b>LAND USE DESIGNATION</b>	<b>SCENIC STANDARD</b>
<b>Coniferous Woodland, Oak-Pine Woodland</b>	<b>Forest (National Forest Lands), Open Space</b>	<b>NOT VISUALLY EVIDENT</b>
<b>River Bottomlands</b>	<b>Open Space</b>	<b>NOT VISUALLY EVIDENT</b>
<b>Gorge Walls, Canyonlands, Wildlands</b>	<b>Forest, Agriculture, Public Recreation, Open Space</b>	<b>NOT VISUALLY EVIDENT</b>

**Staff:** The development that occurred without review by the County and the proposed development are located in areas with a land use designation of Open Space. In all landscape settings the scenic standard is “not visually evident” for development that is topographically visible from the following KVAs: Beacon Rock, Cape Horn, Columbia River, Crown Point, Historic Columbia River Highway, Highway I-84 including rest stops, Larch Mountain Road, Portland Women’s Forum State Park, Rooster Rock, and Washington State Route 14.

To meet the not visually evident standard, the development must be not visually noticeable to the casual visitor. The developments also need to repeat form, line, color, and texture that are frequently found in the natural landscape, while changes in their qualities of size, amount, intensity, direction, pattern, etc., shall not be noticeable.

As proposed, the applicant has provided maps and photos showing imagery from various KVAs to demonstrate that the development does meet the not visually evident standard. In most cases, individuals visiting the area will not notice the development as the project location is located in a debris flow area. From the Historic Columbia River Highway and Highway I-84, the topography from both highways climbs rather steeply obscuring the view from those KVAs. Secondly, the proposed landform changes and the construction of the berms, if they are seen will primarily appear as bare soil or seeded grassy areas (Exhibit A.2 and A.17). Lastly, trees and other vegetation will provide additional screening and break up the landscape form, line, color, and texture of the development (Exhibit A.15: Photo 3 and Photo 6 through 8). *This criterion is met.*

**(3) In all landscape settings, scenic standards shall be met by blending new development with the adjacent natural landscape elements rather than with existing development.**

**Staff:** The development that occurred without review by the County and the proposed development are ground-disturbing activities that will alter the landscape within a debris flow area. The applicant is also proposing multiple berms that will be located throughout the project area. The berms are designed so that the armored portion of the berm is on the upslope side, whereas the downslope side will be vegetated with hydro-seed to blend in with the natural landscape. *This criterion is met.*

**(4) Proposed developments or land use shall be sited to achieve the applicable scenic standards. Development shall be designed to fit the natural topography and to take advantage of vegetation and land form screening, and to minimize visible grading or other modifications of landforms, vegetation cover, and natural characteristics. When screening of development is needed to meet the scenic standard from key viewing areas, use of existing topography and vegetation shall be given priority over other means of achieving the scenic standard such as planting new vegetation or using artificial berms.**

**Staff:** The development that occurred without review by the County and the proposed development are ground-disturbing activities that will alter the landscape within a debris flow area. The grading and modifications of landforms are a major component of the project to ensure that future debris flows from the Mosquito Creek drainage are controlled and prevented from damaging the two highways and injuring people traveling through the Gorge. The ground disturbance is designed to utilize the existing landforms to direct debris flows towards a settling area (Exhibit A.2). The construction of the berms is in areas where the existing landform is being used to maximize the benefit. Lastly, new vegetation by hydro-seeding will be planted so all downslope sides will blend in with the natural landscape. *This criterion is met.*

**(5) The extent and type of conditions applied to a proposed development or use to achieve the scenic standard shall be proportionate to its degree of visibility from key viewing areas.**

**(a) Decisions shall include written findings addressing the Primary factors influencing the degree of visibility, including but not limited to:**

1. The amount of area of the building site exposed to key viewing areas,
  2. The degree of existing vegetation providing screening,
  3. The distance from the building site to the key viewing areas from which it is visible,
  4. The number of key viewing areas from which it is visible, and
  5. The linear distance along the key viewing areas from which the building site is visible (for linear key viewing areas, such as roads).
- (b) Conditions may be applied to various elements of proposed developments to ensure they meet the scenic standard for their setting as seen from key viewing areas, including but not limited to:
1. Siting (location of development on the subject property, building orientation, and other elements),
  2. Retention of existing vegetation,
  3. Design (color, reflectivity, size, shape, height, architectural and design details and other elements), and
  4. New landscaping.

**Staff:** As discussed above, the applicant has designed the project to achieve the scenic standards. The development as proposed and discussed in this Decision ensure that the project will be visually subordinate from the nearby Beacon Rock, Cape Horn, Columbia River, Crown Point, Historic Columbia River Highway, Highway I-84 including rest stops, Larch Mountain Road, Portland Women’s Forum State Park, Rooster Rock, and Washington State Route 14 key viewing areas.

**(6) Sites approved for new development to achieve scenic standards shall be consistent with guidelines to protect wetlands, riparian corridors, sensitive plant or wildlife sites and the buffer zones of each of these natural resources, and guidelines to protect cultural resources.**

**Staff:** As discussed below, the applicant is required to be consistent with guidelines to protect wetlands, riparian corridors, sensitive plant or wildlife sites and the buffer zones of each of these natural resources, and guidelines to protect cultural resources. Those standards are discussed in Section 6.2 and 6.3.

**(7) Proposed developments shall not protrude above the line of a bluff, cliff, or skyline as seen from Key Viewing Areas.**

**Staff:** The proposed development and ground disturbing activities are located at the base of cliffs of the Columbia River Gorge. The terrain climbs steeply from an elevation of less than 600 feet, where the project site is located, to over 1,400 feet at the cliff’s edge (A.32 and A.33). The elevation increase of over 800 feet from the project site ensures the development will not be seen protruding above the skyline. *This criterion is met.*

**(8) Structure height shall remain below the average tree canopy height of the natural vegetation adjacent to the structure, except if it has been demonstrated that compliance with this standard is not feasible considering the function of the structure.**

**Staff:** The trees in the area are all mature trees that are taller than the already built berm structure, the proposed berm structure, and the proposed gabion wall. All of the structures are

less than 30 feet in height (Exhibit A.10, A.15, A.32, and A.33). The trees on average are generally taller than 40 feet in height. *This criterion is met.*

**(9) The following guidelines shall apply to new landscaping used to screen development from key viewing areas:**

- (a) New landscaping (including new earth berms) to achieve the required scenic standard from key viewing areas shall be required only when application of all other available guidelines in this chapter is not sufficient to make the development meet the scenic standard from key viewing areas. Development shall be sited to avoid the need for new landscaping wherever possible.**
- (b) If new landscaping is necessary to meet the required standard, existing on-site vegetative screening and other visibility factors shall be analyzed to determine the extent of new landscaping, and the size of new trees needed to achieve the standard. Any vegetation planted pursuant to this guideline shall be sized to provide sufficient screening to meet the scenic standard within five years or less from the commencement of construction.**
- (c) Landscaping shall be installed as soon as practicable, and prior to project completion. Applicants and successors in interest for the subject parcel are responsible for the proper maintenance and survival of planted vegetation, and replacement of such vegetation that does not survive.**
- (d) The Scenic Resources Implementation Handbook shall include recommended species for each landscape setting consistent with the Landscape Settings Design Guidelines in this chapter, and minimum recommended sizes of new trees planted (based on average growth rates expected for recommended species).**

**Staff:** The applicant is proposing new landscaping to screen the development that occurred without review by the County and the proposed development. As discussed in Section 7.1.1, a bulk of the existing vegetation screening the development will be retained. The proposed landscaping will aid in helping the development meet the required visual standard. The area will be hydro-seeded on all downslope sides so the development will blend in with the natural landscape. *This criterion is met.*

**(10) Unless expressly exempted by other provisions in this chapter, colors of structures on sites visible from key viewing areas shall be dark earth-tones found at the specific site or the surrounding landscape. The specific colors or list of acceptable colors shall be included as a condition of approval. The Scenic Resources Implementation Handbook will include a recommended palette of colors as dark or darker than the colors in the shadows of the natural features surrounding each landscape setting**

**Staff:** The construction of the berm that occurred without review by the County and the proposed berm and gabion wall will not be visible from KVAs. All of the visible faces of the development will appear as vegetated areas as those faces will be constructed with landscape fill and then hydroseeded. (Exhibit A.2). *This criterion is met.*

**(11) The exterior of structures on lands seen from key viewing areas shall be composed of non-reflective materials or materials with low reflectivity. The Scenic Resources Implementation Handbook will include a recommended list of exterior materials. These recommended materials and other materials may be deemed**

**consistent with this guideline, including those where the specific application meets approval thresholds in the “Visibility and Reflectivity Matrices” in the Implementation Handbook. Continuous surfaces of glass unscreened from key viewing areas shall be limited to ensure meeting the scenic standard. Recommended square footage limitations for such surfaces will be provided for guidance in the Implementation Handbook.**

**Staff:** The construction of the berm that occurred without review by the County and the proposed berm and gabion wall will not be visible from KVAs. All of the visible faces of the development will appear as vegetated areas as those faces will be constructed with landscape fill and then hydroseeded (Exhibit A.2). *This criterion is met.*

**(12) Any exterior lighting shall be sited, limited in intensity, shielded or hooded in a manner that prevents lights from being highly visible from Key Viewing Areas and from noticeably contrasting with the surrounding landscape setting except for road lighting necessary for safety purposes.**

**Staff:** The applicant is not proposing any exterior lighting; therefore, this criterion is not applicable. *This criterion is not applicable.*

**(13) Seasonal lighting displays shall be permitted on a temporary basis, not to exceed three months duration.**

**Staff:** The applicant is not proposing any seasonal lighting displays; therefore, this criterion is not applicable. *This criterion is not applicable.*

**7.1.2 (B) The following shall apply to all lands within SMA landscape settings regardless of visibility from KVAs (includes areas seen from KVAs as well as areas not seen from KVAs):**

**(1) Gorge Walls, and Canyonlands and Wildlands: New developments and land uses shall retain the overall visual character of the natural appearing landscape.**

**Staff:** The already built structure and proposed structures have and will have natural appearing visual character as all of the visible faces of the development will appear as vegetated areas as those faces will be constructed with landscape fill and then hydroseeded (Exhibit A.2). *This criterion is met.*

**(a) Structures, including signs, shall have a rustic appearance, use non-reflective materials, and have low contrast with the surrounding landscape and be of a Cascadian architectural style.**

**Staff:** The already built structure and proposed structures will have a rustic appearance and have a low contrast with the surrounding landscape as all of the visible faces of the development will appear as vegetated areas as those faces will be constructed with landscape fill and then hydroseeded (Exhibit A.2). *This criterion is met.*

**(b) Temporary roads shall be promptly closed and revegetated.**

**Staff:** The applicant is not proposing any temporary roads as part of this project; therefore, this criterion is not applicable. *This criterion is not applicable.*

**(c) New utilities shall be below ground surface, where feasible.**

**Staff:** The applicant is not proposing any new utilities as part of this project; therefore, this criterion is not applicable. *This criterion is not applicable.*

**(d) Use of plant species non-native to the Columbia River Gorge shall not be allowed.**

**Staff:** The applicant will be utilizing a “Gorge-approved” seed mix to revegetate the disturbed areas (Exhibit A.2). *This criterion is met.*

**(2) Coniferous Woodlands and Oak-Pine Woodland: Woodland areas shall retain the overall appearance of a woodland landscape. New developments and land uses shall retain the overall visual character of the natural appearance of the Coniferous and Oak/Pine Woodland landscape.**

**Staff:** The already built structure and proposed structures have and will have natural appearing visual character of a coniferous and oak/pine woodland landscape as all of the visible faces of the development will appear as vegetated areas as those faces will be constructed with landscape fill and then hydroseeded (Exhibit A.2). *This criterion is met.*

**(a) Buildings in the Coniferous Woodland landscape setting shall be encouraged to have a vertical overall appearance and a horizontal overall appearance in the Oak-Pine Woodland landscape setting.**

**Staff:** The applicant is not proposing any buildings as part of this project; therefore, this criterion is not applicable. *This criterion is not applicable.*

**(b) Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native appearing characteristics.**

**Staff:** The applicant will be utilizing a “Gorge-approved” seed mix to revegetate the disturbed areas (Exhibit A.2). *This criterion is met.*

**(3) River Bottomlands: River bottomland shall retain the overall visual character of a floodplain and associated islands.**

**Staff:** The portion of the project located in the River Bottomlands will be primarily mitigation plantings. The plantings will maintain the visual character of a floodplain and associated islands (Exhibit A.2). *This criterion is met.*

**(a) Buildings should have an overall horizontal appearance in areas with little tree cover.**

**Staff:** The applicant is not proposing any buildings as part of this project; therefore, this criterion is not applicable. *This criterion is not applicable.*

**(b) Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native appearing characteristics.**

**Staff:** The mitigation planting that are proposed for the mitigation site are native to the landscape setting, which include the planting of Oregon ash, black cottonwood, and pacific willow (Exhibit A.2 and A.25). *This criterion is met.*

\* \* \*

### **7.1.3 (C) SMA Requirements for KVA Foregrounds and Scenic Routes**

**(1) All new developments and land uses immediately adjacent to the Historic Columbia River Highway, Interstate 84, and Larch Mountain Road shall be in conformance with state or county scenic route standards.**

**Staff:** The development that occurred without review from the County and the proposed development are located immediately adjacent to the Historic Columbia River Highway and Interstate 84. The HCRH and Interstate 85 Scenic Route Standards are administered by ODOT, the applicant. In their opinion, the development that has occurred and the proposed development will not compromise the scenic quality and landscape character of the HCRH or Interstate 84 (Exhibit A.2 and A.25). *This criterion is met.*

**(2) The following guidelines shall apply only to development within the immediate foregrounds of key viewing areas. Immediate foregrounds are defined as within the developed prism of a road or trail KVA or within the boundary of the developed area of KVAs such as Crown Pt. and Multnomah Falls. They shall apply in addition to MCC 38.7040(A).**

**(a) The proposed development shall be designed and sited to meet the applicable scenic standard from the foreground of the subject KVA. If the development cannot meet the standard, findings must be made documenting why the project cannot meet the requirements of 38.7040(A) and why it cannot be redesigned or wholly or partly relocated to meet the scenic standard.**

**(b) Findings must evaluate the following:**

**1. The limiting factors to meeting the required scenic standard and/or applicable provisions of 38.7040(A),**

**2. Reduction in project size;**

**3. Options for alternative sites for all or part of the project, considering parcel configuration and on-site topographic or vegetative screening;**

**4. Options for design changes including changing the design shape, configuration, color, height, or texture in order to meet the scenic standard.**

**(c) Form, line, color, texture, and design of a proposed development shall be evaluated to ensure that the development blends with its setting as seen from the foreground of key viewing areas:**

**1. Form and Line-Design of the development shall minimize changes to the form of the natural landscape. Development shall borrow form and line from the landscape setting and blend with the form and line of the landscape setting. Design of the development shall avoid contrasting form and line that unnecessarily call attention to the development.**

- 2. Color-Color shall be found in the project's surrounding landscape setting. Colors shall be chosen and repeated as needed to provide unity to the whole design.**
- 3. Texture-Textures borrowed from the landscape setting shall be emphasized in the design of structures. Landscape textures are generally rough, irregular, and complex rather than smooth, regular, and uniform.**
- 4. Design-Design solutions shall be compatible with the natural scenic quality of the Gorge. Building materials shall be natural or natural appearing. Building materials such as concrete, steel, aluminum, or plastic shall use form, line color and texture to harmonize with the natural environment. Design shall balance all design elements into a harmonious whole, using repetition of elements and blending of elements as necessary.**
- (3) Right-of-way vegetation shall be managed to minimize visual impact of clearing and other vegetation removal as seen from Key Viewing Areas. Roadside vegetation management should enhance views out from the highway (vista clearing, planting, etc.).**
- (4) Encourage existing and require new road maintenance warehouse and stockpile areas to be screened from view from Key Viewing Areas.**
- (5) Development along Interstate 84 and the Historic Columbia River Highway shall be consistent with the scenic corridor strategies developed for these roadways.**

**Staff:** The project is located within the immediate foreground of the Historic Columbia River Highway KVA. Although the project is located in the immediate foreground, the project must occur in this location, as the debris flow from Mosquito Creek is specific to this area. Additionally, the applicant is unable to be reduce the size of the project or alter the design due to the unique characteristics of managing future potential debris flows (Exhibit A.2). As discussed previously in Section 7.1.1 and 7.1.2, the applicant has met the not visually evident standard that ensures the development's form, line, color, texture, and design blends into its landscape setting and meets the visual setting. *This criterion is met.*

**(D) SMA Requirements for areas not seen from KVAs**

**Unless expressly exempted by other provisions in MCC 38.7040, colors of structures on sites not visible from key viewing areas shall be earth-tones found at the specific site. The specific colors or list of acceptable colors shall be approved as a condition of approval, drawing from the recommended palette of colors included in the Scenic Resources Implementation Handbook.**

**Staff:** The already built structure and proposed structures that are not visible from KVAs are proposed to be earth-tone colors that are found at the specific site. The berms will be comprised of gray tones that match the palette of colors included in the Scenic Resources Implementation Handbook (Exhibit A.2). *This criterion is met.*

## 7.2 § 38.7050 SMA CULTURAL RESOURCE REVIEW CRITERIA

- 7.2.1 (A) The cultural resource review criteria shall be deemed satisfied, except MCC 38.7050 (H), if the U.S. Forest Service or Planning Director does not require a cultural resource survey and no comment is received during the comment period provided in MCC 38.0530 (B).**

**Staff:** The US Forest Service conducted a Cultural Resources Survey to determine if a Cultural Resource Reconnaissance Survey or a Historic Survey is required. The determination found that a Cultural Resource Reconnaissance Survey was required and a Historic Survey was not required (Exhibit D.1). No substantive comment was received during the comment period, however.

- 7.2.2 (B) If comment is received during the comment period provided in MCC 38.0530 (B), the applicant shall offer to meet with the interested persons within 10 calendar days. The 10 day consultation period may be extended upon agreement between the project applicant and the interested persons.**

**(1) Consultation meetings should provide an opportunity for interested persons to explain how the proposed use may affect cultural resources. Recommendations to avoid potential conflicts should be discussed.**

**(2) All written comments and consultation meeting minutes shall be incorporated into the reconnaissance or historic survey report. In instances where a survey is not required, all such information shall be recorded and addressed in a report that typifies a survey report; inapplicable elements may be omitted.**

**Staff:** As no substantive comment was received during the comment period, these requirements are not applicable. *These criteria are not applicable.*

- 7.2.3 (C) The procedures of MCC 38.7045 shall be utilized for all proposed developments or land uses other than those on all Federal lands, federally assisted projects and forest practices.**

**Staff:** As the project is not located on Federal lands, is a federally assisted project, or a forest practice, the procedures of MCC 38.7045 were utilized for the development. After the initial Cultural Resources Survey Determination, the US Forest Service reviewed the report entitled, "HCRH: Milepost 166 Debris Flow Mitigation Archaeological Resources Survey, Multnomah County," prepared by Jamie L. Kennedy and Christopher L. Ruiz, the Section 106 Level of Effect Form prepared by Robert Hadlow and Finding of Effect (FOE) prepared by ODOT (Exhibit A.21 through A.24). After the review, the US Forest Service concurred with the recommendations and with the "no adverse effect" finding (Exhibit D.2). Upon completion of this review, additional notification was sent on February 4, 2022 (Exhibit C.4 and C.6). After the completion of the additional review timeline, no substantiated comment was received during the 30-day comment period. *This criterion is met.*

- 7.2.4 (D) All cultural resource information shall remain confidential, according to the Act, Section 6(a)(1)(A). Federal agency cultural resource information is also exempt by statute from the Freedom of Information Act under 16 USC 470 hh and 36 CFR 297.18.**

**Staff:** No confidential cultural resource information was provided during the review; therefore, this criterion is not applicable. *This criterion is not applicable.*

**7.2.5 (E) Principal investigators shall meet the professional standards published in 36 CFR part 61.**

**Staff:** All principal investigators meet the professional standards published in 36 CFR part 61 (Exhibit A.21, A.22, D.1, and D.2). *This criterion is met.*

**7.2.6 (F) The U.S. Forest Service will provide for doing (1) through (5) of subsection (G) below for forest practices and National Forest system lands.**

**Staff:** The project is not a forest practice or located on National Forest system lands, therefore this criterion is not applicable. *This criterion is not applicable.*

**6.2.7 (G) If the U.S. Forest Service or Planning Director determines that a cultural resource survey is required for a new development or land use on all Federal lands, federally assisted projects and forest practices, it shall consist of the following:**

\* \* \*

**Staff:** The development is not located on Federal lands, is a federally assisted project, or a forest practice, therefore, these criteria are not applicable. *These criteria are not applicable.*

**7.2.8 (H) Discovery During Construction**

**All authorizations for new developments or land uses shall be conditioned to require the immediate notification of the Planning Director in the event of the inadvertent discovery of cultural resources during construction or development.**

**(1) In the event of the discovery of cultural resources, work in the immediate area of discovery shall be suspended until a cultural resource professional can evaluate the potential significance of the discovery pursuant to MCC 38.7050 (G) (3).**

**(2) If the discovered material is suspected to be human bone or a burial, the following procedure shall be used:**

**(a) Stop all work in the vicinity of the discovery.**

**(b) The applicant shall immediately notify the U.S. Forest Service, the applicant's cultural resource professional, the State Medical Examiner, and appropriate law enforcement agencies.**

**(c) The U.S. Forest Service shall notify the tribal governments if the discovery is determined to be an Indian burial or a cultural resource.**

**(d) A cultural resource professional shall evaluate the potential significance of the discovery pursuant to MCC 38.7050 (G) (3) and report the results to the U.S. Forest Service which shall have 30 days to comment on the report.**

**(3) If the U.S. Forest Service determines that the cultural resource is not significant or does not respond within the 30 day response period, the cultural resource review process shall be complete and work may continue.**

**(4) If the U.S. Forest Service determines that the cultural resource is significant, the cultural resource professional shall recommend measures to protect and/or recover the resource pursuant to MCC 38.7050 (G) (4) and (5)**

**Staff:** A condition will be required that these procedures be followed if there is an inadvertent discovery of cultural resources during construction or development. *As conditioned, these criteria are met.*

**7.3 § 38.7075 SMA NATURAL RESOURCE REVIEW CRITERIA**

**7.3.1 All new developments and land uses shall be evaluated using the following standards to ensure that natural resources are protected from adverse effects. Proposed uses and development within wetlands, streams, ponds, lakes, riparian areas and their buffer zones shall be evaluated for cumulative effects to natural resources and cumulative effects that are adverse shall be prohibited. Comments from state and federal agencies shall be carefully considered.**

**(A) All Water Resources shall, in part, be protected by establishing undisturbed buffer zones as specified in MCC 38.7075(A)(2)(a) and (2)(b). These buffer zones are measured horizontally from a wetland, stream, lake, or pond boundary as defined in MCC 38.7075(A)(2)(a) and (2)(b).**

**(1) All buffer zones shall be retained undisturbed and in their natural condition, except as permitted with a mitigation plan.**

**(2) Buffer zones shall be measured outward from the bank full flow boundary for streams, the high water mark for ponds and lakes, the normal pool elevation for the Columbia River, and the wetland delineation boundary for wetlands on a horizontal scale that is perpendicular to the wetlands, stream, pond or lake boundary. On the main stem of the Columbia River above Bonneville Dam, buffer zones shall be measured landward from the normal pool elevation of the Columbia River. The following buffer zone widths shall be required:**

**(a) A minimum 200 foot buffer on each wetland, pond, lake, and each bank of a perennial or fish bearing stream, some of which can be intermittent.**

**(b) A 50-foot buffer zone along each bank of intermittent (including ephemeral), non-fish bearing streams.**

**(c) Maintenance, repair, reconstruction and realignment of roads and railroads within their rights-of-way shall be exempted from the wetlands and riparian guidelines upon demonstration of all of the following:**

**1. The wetland within the right-of-way is a drainage ditch not part of a larger wetland outside of the right-of-way.**

**2. The wetland is not critical habitat.**

**3. Proposed activities within the right-of-way would not adversely affect a wetland adjacent to the right-of-way.**

**(3) The buffer width shall be increased for the following:**

**(a) When the channel migration zone exceeds the recommended buffer width, the buffer width shall extend to the outer edge of the channel migration zone.**

**(b) When the frequently flooded area exceeds the recommended riparian buffer zone width, the buffer width shall be extended to the outer edge of the frequently flooded area.**

**(c) When an erosion or landslide hazard area exceeds the recommended width of the buffer, the buffer width shall be extended to include the hazard area.**

**(4) Buffer zones can be reconfigured if a project applicant demonstrates all of the following:**

**(a) The integrity and function of the buffer zones is maintained.**

**(b) The total buffer area on the development proposal is not decreased.**

**(c) The width reduction shall not occur within another buffer.**

**(d) The buffer zone width is not reduced more than 50% at any particular location. Such features as intervening topography, vegetation, man made**

features, natural plant or wildlife habitat boundaries, and flood plain characteristics could be considered.

**(5) Requests to reconfigure buffer zones shall be considered if an appropriate professional (botanist, plant ecologist, wildlife biologist, or hydrologist), hired by the project applicant (1) identifies the precise location of the sensitive wildlife/plant or water resource, (2) describes the biology of the sensitive wildlife/plant or hydrologic condition of the water resource, and (3) demonstrates that the proposed use will not have any negative effects, either direct or indirect, on the affected wildlife/plant and their surrounding habitat that is vital to their long-term survival or water resource and its long term function.**

**(6) The local government shall submit all requests to re-configure sensitive wildlife/plant or water resource buffers to the U.S. Forest Service and the appropriate state agencies for review. All written comments shall be included in the project file. Based on the comments from the state and federal agencies, the local government will make a final decision on whether the reconfigured buffer zones are justified. If the final decision contradicts the comments submitted by the federal and state agencies, the local government shall justify how it reached an opposing conclusion.**

**Staff:** The development that was not reviewed by the County and new development is located within the riparian buffer zone for Mosquito Creek. The Creek is intermittent stream located between two perennial tributaries on the north side of Devils Rest Mountain. The stream's buffer zone is 50 feet on either side of creek. However, because of the erosion and landside hazards of the area, the buffer is extended to upwards of 200 feet.

The development includes rechanneling and relocating the stream, so it must encroach within the buffer zone (Exhibit A.2, A.25, and B.10). Additionally, the applicant is requesting reconfiguration of the buffer zone and has provided a Biological Resources Memorandum written by an appropriate professional. The Biological Resources Memorandum was written by Ben White, ODOT Region 1 Biologist (Exhibit A.25). The Biological Resources Memorandum and Joint Permit Application contain the required information needed in MCC 38.7075(A)(5).

The US Forest Service was contacted during the drafting of the Memorandum. They reviewed the work by the applicant's Biologist and their comments incorporated into the Memorandum. The application materials and request to reconfigure the buffer was sent to the US Forest Service and Oregon Department of Fish and Wildlife. Agency Review was sent on December 27, 2021 and an Opportunity to Comment was sent on May 6, 2022 (Exhibit C.1 and C.6). No comments were received from either agency. *These criteria are met.*

**7.3.2 (B) When a buffer zone is disturbed by a new use, it shall be replanted with only native plant species of the Columbia River Gorge.**

**Staff:** The applicant's Biological Resources Memorandum contains an extensive list of plant species that will be used for replanting. All of the proposed plant species are native plant species of the Columbia River Gorge (Exhibit A.25). *This criterion is met.*

**7.3.3 (C) The applicant shall be responsible for identifying all water resources and their appropriate buffers.**

**Staff:** The applicant's Biological Resources Memorandum and Joint Permit Application identified all water resources, which include the stream, Mosquito Creek, and two wetland

areas. Additional off-site mitigation will occur at Young Creek near Mirror Lake. (Exhibit A.25 and B.10). *This criterion is met.*

**7.3.4 (D) Wetlands Boundaries shall be delineated using the following:**

- (1) The approximate location and extent of wetlands in the Scenic Area is shown on the National Wetlands Inventory (U. S. Department of the Interior 1987). In addition, the list of hydric soils and the soil survey maps shall be used as an indicator of wetlands.**
- (2) Some wetlands may not be shown on the wetlands inventory or soil survey maps. Wetlands that are discovered by the local planning staff during an inspection of a potential project site shall be delineated and protected.**
- (3) The project applicant shall be responsible for determining the exact location of a wetlands boundary. Wetlands boundaries shall be delineated using the procedures specified in the '1987 Corps of Engineers Wetland Delineation Manual (on-line Edition)'.**
- (4) All wetlands delineations shall be conducted by a professional who has been trained to use the federal delineation procedures, such as a soil scientist, botanist, or wetlands ecologist.**

**Staff:** The applicant's Biological Resources Memorandum and Joint Permit Application identified all wetland boundaries within the project area. There are two wetland areas (Exhibit A.25 and B.10). *This criterion is met.*

**7.3.5 (E) Stream, pond, and lake boundaries shall be delineated using the bank full flow boundary for streams and the high water mark for ponds and lakes. The project applicant shall be responsible for determining the exact location of the appropriate boundary for the water resource.**

**Staff:** The applicant's Biological Resources Memorandum and Joint Permit Application identified stream boundaries as prescribed above. Mosquito Creek is comprised of two adjacent water channels (Exhibit A.25 and B.10). *This criterion is met.*

**7.3.6 (F) The local government may verify the accuracy of, and render adjustments to, a bank full flow, high water mark, normal pool elevation (for the Columbia River), or wetland boundary delineation. If the adjusted boundary is contested by the project applicant, the local government shall obtain professional services, at the project applicant's expense, or the county will ask for technical assistance from the U.S. Forest Service to render a final delineation.**

**Staff:** Land Use planning agrees with the bank full flow and wetland boundary delineations. *This criterion is met.*

**7.3.7 (G) Buffer zones shall be undisturbed unless the following criteria have been satisfied:**

- (1) The proposed use must have no practicable alternative as determined by the practicable alternative test. Those portions of a proposed use that have a practicable alternative will not be located in wetlands, stream, pond, lake, and riparian areas and/or their buffer zone.**
- (2) Filling and draining of wetlands shall be prohibited with exceptions related to public safety or restoration/enhancement activities as permitted when all of the following criteria have been met:**

**(a) A documented public safety hazard exists or a restoration/ enhancement project exists that would benefit the public and is corrected or achieved only by impacting the wetland in question.**

**(b) Impacts to the wetland must be the last possible documented alternative in fixing the public safety concern or completing the restoration/enhancement project.**

**(c) The proposed project minimizes the impacts to the wetland.**

**(3) Unavoidable impacts to wetlands and aquatic and riparian areas and their buffer zones shall be offset by deliberate restoration and enhancement or creation (wetlands only) measures as required by the completion of a mitigation plan.**

**Staff:** The development that occurred and the proposed development must be located in the buffer zones as the project is designed to route Mosquito Creek into a new channel and protect the two highways (Exhibit A.2). Using the practicable alternatives test as outlined in MCC 38.7075(Q), there is not an alternative to locating the project in another location. The project must encroach into the buffer zones due to the public safety hazard of debris flows falling from the upper reaches of Mosquito Creek on the highways. In the Biological Resources Memorandum, the impacts to the wetland will be minimal and no filling or draining of the wetland will occur (Exhibit A.25). Additionally, the applicant is proposing to offset the impacts by restoration and enhancement of the riparian areas after the temporary impacts of construction. *These criteria are met.*

**7.3.8 (H) Protection of sensitive wildlife/plant areas and sites shall begin when proposed new developments or uses are within 1000 feet of a sensitive wildlife/plant site and/or area. Sensitive Wildlife Areas are those areas depicted in the wildlife inventory and listed in Table 2 of the Management Plan titled “Types of Wildlife Areas and Sites Inventoried in the Columbia Gorge”, including all Priority Habitats Table. Sensitive Plants are listed in Table 3 of the Management Plan, titled “Columbia Gorge and Vicinity Endemic Plant Species.” The approximate locations of sensitive wildlife and/or plant areas and sites are shown in the wildlife and rare plant inventory.**

**Staff:** The applicant provided a Biological Resources Memorandum documenting the plant and animal species in the area. The study identified potential sensitive wildlife and sensitive plants that could be in the area. It then looked at the various habitats that exist within the project area and identified sensitive species that could exist. The study found that thirteen (13) difference species could occur within 1,000 feet of the project (Exhibit A.25). The Biological Resources Memorandum was provided to the US Forest Service, Oregon Department of Fish and Wildlife (ODFW) and Oregon Natural Heritage Program (ONHP) for review and comment (Exhibit C.1 and C.6). No comments were received from USFS, ODFW, or ONHP. *These criteria are met.*

**7.3.9 (I) The local government shall submit site plans (of proposed uses or development proposed within 1,000 feet of a sensitive wildlife and/or plant area or site) for review to the U.S. Forest Service and the appropriate state agencies (Oregon Department of Fish and Wildlife for wildlife issues and by the Oregon Natural Heritage Program for plant issues).**

**Staff:** The Biological Resources Memorandum was provided to the US Forest Service, Oregon Department of Fish and Wildlife (ODFW) and Oregon Natural Heritage Program (ONHP) for review and comment (Exhibit C.1 and C.6). No comments were received from USFS, ODFW, or ONHP. *This criterion is met.*

**7.3.10 (J) The U.S. Forest Service wildlife biologists and/or botanists, in consultation with the appropriate state biologists, shall review the site plan and their field survey records. They shall:**

- (1) Identify/verify the precise location of the wildlife and/or plant area or site.**
- (2) Determine if a field survey will be required.**
- (3) Determine, based on the biology and habitat requirements of the affected wildlife/plant species, if the proposed use would compromise the integrity and function of or result in adverse affects (including cumulative effects) to the wildlife or plant area or site. This would include considering the time of year when wildlife or plant species are sensitive to disturbance, such as nesting, rearing seasons, or flowering season. Cumulative effects that are adverse shall be prohibited.**
- (4) Delineate the undisturbed 200 ft buffer on the site plan for sensitive plants and/or the appropriate buffer for sensitive wildlife areas or sites, including nesting, roosting and perching sites.**

**(a) Buffer zones can be reconfigured if a project applicant demonstrates all of the following: (1) the integrity and function of the buffer zones is maintained, (2) the total buffer area on the development proposal is not decreased, (3) the width reduction shall not occur within another buffer, and (4) the buffer zone width is not reduced more than 50% at any particular location. Such features as intervening topography, vegetation, man made features, natural plant or wildlife habitat boundaries, and flood plain characteristics could be considered.**

**(b) Requests to reduce buffer zones shall be considered if an appropriate professional (botanist, plant ecologist, wildlife biologist, or hydrologist), hired by the project applicant, (1) identifies the precise location of the sensitive wildlife/plant or water resource, (2) describes the biology of the sensitive wildlife/plant or hydrologic condition of the water resource, and (3) demonstrates that the proposed use will not have any negative effects, either direct or indirect, on the affected wildlife/plant and their surrounding habitat that is vital to their long-term survival or water resource and its long term function.**

**(c) The local government shall submit all requests to re-configure sensitive wildlife/plant or water resource buffers to the U.S. Forest Service and the appropriate state agencies for review. All written comments shall be included in the record of application and based on the comments from the state and federal agencies, the local government will make a final decision on whether the reduced buffer zones is justified. If the final decision contradicts the comments submitted by the federal and state agencies, the local government shall justify how it reached an opposing conclusion.**

**Staff:** The applicant has completed a Biological Resources Memorandum that involved field surveying for identified plants and animals. The Biological Resources Memorandum identified the location of wildlife/plant and water resources in the project area and described the biology of the wildlife/plant and water resource. In their Memorandum, they discuss the encroachment into the buffer zone and a list of mitigation strategies to ensure that the proposed development will not have any negative effects on the affected wildlife/plant and water resources (Exhibit A.25). Their mitigation strategies will ensure the long-term survival of the wildlife/plant and long-term function of the water resource.

The US Forest Service was contacted during the drafting of the Memorandum. They reviewed the work by the applicant's Biologist and their comments incorporated into the Memorandum.

Additional notice was also provided as part of this application. No further comments were provided about the Memorandum (Exhibit C.1 and C.6). Therefore, Land Use Planning finds that provided information satisfies the Natural Resource criteria. *These criteria are met.*

**7.3.11 (K) The local government, in consultation with the State and federal wildlife biologists and/or botanists, shall use the following criteria in reviewing and evaluating the site plan to ensure that the proposed developments or uses do not compromise the integrity and function of or result in adverse affects to the wildlife or plant area or site:**

- (1) Published guidelines regarding the protection and management of the affected wildlife/plant species. Examples include: the Oregon Department of Forestry has prepared technical papers that include management guidelines for osprey and great blue heron; the Washington Department of Wildlife has prepared similar guidelines for a variety of species, including the western pond turtle, the peregrine falcon, and the Larch Mountain salamander (Rodrick and Milner 1991).**
- (2) Physical characteristics of the subject parcel and vicinity, including topography and vegetation.**
- (3) Historic, current, and proposed uses in the vicinity of the sensitive wildlife/plant area or site.**
- (4) Existing condition of the wildlife/plant area or site and the surrounding habitat and the useful life of the area or site.**
- (5) In areas of winter range, habitat components, such as forage, and thermal cover, important to the viability of the wildlife must be maintained or, if impacts are to occur, enhancement must mitigate the impacts so as to maintain overall values and function of winter range.**
- (6) The site plan is consistent with the "Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources" (Oregon Department of Fish and Wildlife 2000).**
- (7) The site plan activities coincide with periods when fish and wildlife are least sensitive to disturbance. These would include, among others, nesting and brooding periods (from nest building to fledgling of young) and those periods specified.**
- (8) The site plan illustrates that new developments and uses, including bridges, culverts, and utility corridors, shall not interfere with fish and wildlife passage.**
- (9) Maintain, protect, and enhance the integrity and function of Priority Habitats (such as old growth forests, talus slopes, and oak woodlands) as listed in the Priority Habitats Table. This includes maintaining structural, species, and age diversity, maintaining connectivity within and between plant communities, and ensuring that cumulative impacts are considered in documenting integrity and function.**

<b>PRIORITY HABITATS TABLE</b>	
<b>Priority Habitats</b>	<b>Criteria</b>
<b>Aspen stands</b>	<b>High fish and wildlife species diversity, limited availability, high vulnerability to habitat alteration.</b>
<b>Caves</b>	<b>Significant wildlife breeding habitat, limited availability, dependent species.</b>
<b>Old-growth forest</b>	<b>High fish and wildlife density, species diversity, breeding habitat, seasonal ranges, and limited and declining availability, high vulnerability.</b>

<b>Oregon white oak woodlands</b>	<b>Comparatively high fish and wildlife density, species diversity, declining availability, high vulnerability</b>
<b>Prairies and steppe</b>	<b>Comparatively high fish and wildlife density, species diversity, important breeding habitat, declining and limited availability, high vulnerability.</b>
<b>Riparian</b>	<b>High fish and wildlife density, species diversity, breeding habitat, movement corridor, high vulnerability, dependent species.</b>
<b>Wetlands</b>	<b>High species density, high species diversity, important breeding habitat and seasonal ranges, limited availability, high vulnerability.</b>
<b>Snags and logs</b>	<b>High fish and wildlife density, species diversity, limited availability, high vulnerability, dependent species.</b>
<b>Talus</b>	<b>Limited availability, unique and dependent species, high vulnerability.</b>
<b>Cliffs</b>	<b>Significant breeding habitat, limited availability, dependent species.</b>
<b>Dunes</b>	<b>Unique species habitat, limited availability, high vulnerability, dependent species.</b>

**Staff:** The applicant provided a Biological Resources Memorandum that considered the various habitats in the project area. The habitat involved in mostly riparian. The report contained the items listed in (2) through (9). The proposed project is site specific and cannot be moved out of the buffer zone. The development that occurred and the proposed development that is proposed will be subject to the No Practical Alternative test in MCC 38.7075(Q) below.

**7.3.12 (L) The wildlife/plant protection process may terminate if the local government, in consultation with the U.S. Forest Service and state wildlife agency or Heritage program, determines (1) the sensitive wildlife area or site is not active, or (2) the proposed use is not within the buffer zones and would not compromise the integrity of the wildlife/plant area or site, and (3) the proposed use is within the buffer and could be easily moved out of the buffer by simply modifying the project proposal (site plan modifications). If the project applicant accepts these recommendations, the local government shall incorporate them into its development review order and the wildlife/plant protection process may conclude.**

**Staff:** The wildlife/plant protection process is not being terminated. The proposed project is site specific and cannot be moved out of the buffer zone. The development that occurred and the proposed development that is proposed will be subject to the No Practical Alternative test of MCC 38.7075(Q) below in Section 7.3.17 and requires a mitigation plan. The mitigation plan is reviewed under MCC 38.7075(R) in Section 7.3.18.

**7.3.13 (M) If the above measures fail to eliminate the adverse affects, the proposed project shall be prohibited, unless the project applicant can meet the Practicable Alternative Test and prepare a mitigation plan to offset the adverse effects by deliberate restoration and enhancement.**

**Staff:** The development that occurred and the proposed development that is proposed will be subject to the No Practical Alternative test of MCC 38.7075(Q) below in Section 7.3.17 and requires a mitigation plan. The mitigation plan is reviewed under MCC 38.7075(R) in Section 7.3.18.

**7.3.14 (N) The local government shall submit a copy of all field surveys (if completed) and mitigation plans to the U.S. Forest Service and appropriate state agencies. The local government shall include all comments in the record of application and address any written comments submitted by the state and federal wildlife agency/heritage programs in its development review order. Based on the comments from the state and federal wildlife agency/heritage program, the local government shall make a final decision on whether the proposed use would be consistent with the wildlife/plant policies and guidelines. If the final decision contradicts the comments submitted by the state and federal wildlife agency/heritage program, the local government shall justify how it reached an opposing conclusion.**

**Staff:** As part of the initial drafting of the Biological Resources Memorandum, the applicant's Biologist worked with the US Forest Service. The US Forest Service reviewed the work by the applicant's Biologist and their comments were incorporated into the Memorandum (Exhibit A.25). Then as part of the procedural requirements of this case, all studies including the Biological Study were provided to the US Forest Service, Oregon Natural Heritage Program and Oregon Department of Fish and Wildlife for review and comment (Exhibit C.1 and C.6). The US Forest Service and the Oregon agencies did not comment on the reports.

**7.3.15 (O) The local government shall require the project applicant to revise the mitigation plan as necessary to ensure that the proposed use would not adversely affect a sensitive wildlife/plant area or site.**

**Staff:** The US Forest Service and other Oregon agencies did not request any revisions; therefore, finding the mitigation plan acceptable.

**7.3.16 (P) Soil productivity shall be protected using the following guidelines:**

- (1) A description or illustration showing the mitigation measures to control soil erosion and stream sedimentation.**
- (2) New developments and land uses shall control all soil movement within the area shown on the site plan.**
- (3) The soil area disturbed by new development or land uses, except for new cultivation, shall not exceed 15 percent of the project area.**
- (4) Within 1 year of project completion, 80 percent of the project area with surface disturbance shall be established with effective native ground cover species or other soil-stabilizing methods to prevent soil erosion until the area has 80 percent vegetative cover.**

**Staff:** The applicant has submitted grading and erosion plans as part of the Geologic Hazards (GH) permit requirements. The approval criteria, as found in Section 6.0 have been met. Some of the criteria are met through the use of conditions of approval. If the applicant implements the conditions of approval as required, it will ensure that any potential soil movement will be controlled within the project area. Additional conditions of approval, as required above, will be required to be met. *These criteria are met.*

**7.3.17 (Q) An alternative site for a proposed use shall be considered practicable if it is available and the proposed use can be undertaken on that site after taking into consideration cost, technology, logistics, and overall project purposes. A practicable alternative does not exist if a project applicant satisfactorily demonstrates all of the following:**

- (1) The basic purpose of the use cannot be reasonably accomplished using one or more other sites in the vicinity that would avoid or result in less adverse effects on wetlands, ponds, lakes, riparian areas, wildlife or plant areas and/or sites.**
- (2) The basic purpose of the use cannot be reasonably accomplished by reducing its proposed size, scope, configuration, or density, or by changing the design of the use in a way that would avoid or result in less adverse effects on wetlands, ponds, lakes, riparian areas, wildlife or plant areas and/or sites..**
- (3) Reasonable attempts were made to remove or accommodate constraints that caused a project applicant to reject alternatives to the proposed use. Such constraints include inadequate infrastructure, parcel size, and land use designations. If a land use designation or recreation intensity class is a constraint, an applicant must request a Management Plan amendment to demonstrate that practicable alternatives do not exist.**

**Staff:** The proposed use is for the placement of structures necessary for continued public safety, protection of essential public services, and protection of public existing roadways. The applicant also conducted ground disturbing development and is proposing further ground disturbing development to abate conditions found to exist on the property that endanger the life, health, and safety the public due to debris flows that occur from the upper portions of Mosquito Creek. The basic purpose of the use cannot be accomplished at another site as the debris flow is directly related to the Mosquito Creek drainage. The development that will occur is designed to route Mosquito Creek into a new channel and protect the two highways and cannot be reasonably accomplished by reducing the size and scope of the project (Exhibit A.2). Reasonable attempts were made to remove and accommodate constraints; however, those were not successful due to the geotechnical requirements of the specific site. *No practicable alternative exists for the proposed use.*

**7.3.18 (R) The Mitigation Plan shall be prepared when:**

- (1) The proposed development or use is within a buffer zone (wetland, pond, lakes, riparian areas, wildlife or plant areas and/or sites).**
- (2) There is no practicable alternative as determined by MCC 38.7075 (Q).**

**Staff:** The development that occurred and the proposed development that is proposed will be subject to the No Practical Alternative test of MCC 38.7075(Q) above in Section 7.3.17 and a mitigation plan was provided (Exhibit A.25). *This criterion is met.*

**7.3.19 (S) In all cases, Mitigation Plans are the responsibility of the applicant and shall be prepared by an appropriate professional (botanist/ecologist for plant sites, a wildlife/fish biologist for wildlife/fish sites, and a qualified professional for water resource sites).**

**Staff:** The development includes rechanneling and relocating the stream, so it must encroach within the buffer zone (Exhibit A.2, A.25, and B.10). The applicant provided a Biological Resources Memorandum written by Ben White, ODOT Region 1 Biologist (Exhibit A.25). *This criterion is met.*

**7.3.20 (T) The primary purpose of this information is to provide a basis for the project applicant to redesign the proposed use in a manner that protects sensitive water resources, and wildlife/plant areas and sites, that maximizes his/her development options, and that mitigates, through restoration, enhancement, and replacement measures, impacts to the water resources and/or wildlife/plant area or site and/or buffer zones.**

**Staff:** Based on the Biological Resources Memorandum completed by Ben White, ODOT Region 1 Biologist, the biologist was able to prepare a mitigation plan to offset any adverse impacts to the Mosquito Creek drainage and recommend restoration, enhancement, and replacement measures (Exhibit A.25). *This criterion is met.*

**7.3.21 (U) The applicant shall submit the mitigation plan to the local government. The local government shall submit a copy of the mitigation plan to the U.S. Forest Service, and appropriate state agencies. If the final decision contradicts the comments submitted by the state and federal wildlife agency/heritage program, the local government shall justify how it reached an opposing conclusion.**

**Staff:** As part of the initial drafting of the Biological Resources Memorandum, the applicant's Biologist worked with the US Forest Service. The US Forest Service reviewed the work by the applicant's Biologist and their comments were incorporated into the Memorandum (Exhibit A.25). Then as part of the procedural requirements of this case, all studies including the Biological Study were provided to the US Forest Service, Oregon Natural Heritage Program and Oregon Department of Fish and Wildlife for review and comment (Exhibit C.1 and C.6). The US Forest Service and the Oregon agencies did not comment on the reports.

**7.3.22 (V) A project applicant shall demonstrate sufficient fiscal, technical, and administrative competence to successfully execute a mitigation plan involving wetland creation.**

**Staff:** The applicant is not proposing the creation of any wetlands; therefore, this criterion is not applicable. *This criterion is not applicable.*

**7.3.23 (W) Mitigation plans shall include maps, photographs, and text. The text shall:**

- (1) Describe the biology and/or function of the sensitive resources (e.g. Wildlife/plant species, or wetland) that will be affected by a proposed use. An ecological assessment of the sensitive resource to be altered or destroyed and the condition of the resource that will result after restoration will be required. Reference published protection and management guidelines.**
- (2) Describe the physical characteristics of the subject parcel, past, present, and future uses, and the past, present, and future potential impacts to the sensitive resources. Include the size, scope, configuration, or density of new uses being proposed within the buffer zone.**
- (3) Explain the techniques that will be used to protect the sensitive resources and their surrounding habitat that will not be altered or destroyed (for examples, delineation of core habitat of the sensitive wildlife/plant species and key components that are essential to maintain the long-term use and integrity of the wildlife/plant area or site).**
- (4) Show how restoration, enhancement, and replacement (creation) measures will be applied to ensure that the proposed use results in minimum feasible impacts to sensitive resources, their buffer zones, and associated habitats.**
- (5) Show how the proposed restoration, enhancement, or replacement (creation) mitigation measures are NOT alternatives to avoidance. A proposed**

**development/use must first avoid a sensitive resource, and only if this is not possible should restoration, enhancement, or creation be considered as mitigation. In reviewing mitigation plans, the local government, appropriate state agencies, and U.S. Forest Service shall critically examine all proposals to ensure that they are indeed last resort options.**

**Staff:** The Biological Resources Memorandum completed by Ben White, ODOT Region 1 Biologist provides all of the required listed information above. (Exhibit A.25). *This criterion is met.*

**7.3.24 (X) At a minimum, a project applicant shall provide to the local government a progress report every 3-years that documents milestones, successes, problems, and contingency actions. Photographic monitoring stations shall be established and photographs shall be used to monitor all mitigation progress.**

**Staff:** As required above, the applicant will be required to provide a progress report every 3-years that documents milestones, successes, problems, and contingency actions. The applicant will need establish photographic monitoring stations and include photographs showing the monitoring of mitigation progress in the report. The above criterion does not provide a time limit on reporting. The end of progress reporting is dependent on the resource recovery and enhancement occurring. If problems are encountered, they must be fixed and the reporting timeline extended. The monitoring program will be extended if it is determined by either Land Use Planning or the US Forest Service it is needed to ensure success with the mitigation plan. *As conditioned, this criterion is met.*

**7.3.25 (Y) A final monitoring report shall be submitted to the local government for review upon completion of the restoration, enhancement, or replacement activity. This monitoring report shall document successes, problems encountered, resource recovery, status of any sensitive wildlife/plant species and shall demonstrate the success of restoration and/or enhancement actions. The local government shall submit copies of the monitoring report to the U.S. Forest Service; who shall offer technical assistance to the local government in helping to evaluate the completion of the mitigation plan. In instances where restoration and enhancement efforts have failed, the monitoring process shall be extended until the applicant satisfies the restoration and enhancement guidelines.**

**Staff:** As required above, the applicant will be required to provide a final monitoring report. The final report will be provided at the end of the progress reports required in Section 7.3.24. *As conditioned, this criterion is met.*

**7.3.26 (Z) Mitigation measures to offset impacts to resources and/or buffers shall result in no net loss of water quality, natural drainage, fish/wildlife/plant habitat, and water resources by addressing the following:**

**(1) Restoration and enhancement efforts shall be completed no later than one year after the sensitive resource or buffer zone has been altered or destroyed, or as soon thereafter as is practicable.**

**(2) All natural vegetation within the buffer zone shall be retained to the greatest extent practicable. Appropriate protection and maintenance techniques shall be applied, such as fencing, conservation buffers, livestock management, and noxious weed control. Within five years, at least 75 percent of the replacement vegetation must survive. All plantings must be with native plant species that replicate the original vegetation community.**

**(3) Habitat that will be affected by either temporary or permanent uses shall be rehabilitated to a natural condition. Habitat shall be replicated in composition, structure, and function, including tree, shrub and herbaceous species, snags, pool-riffle ratios, substrata, and structures, such as large woody debris and boulders.**

**(4) If this standard is not feasible or practical because of technical constraints, a sensitive resource of equal or greater benefit may be substituted, provided that no net loss of sensitive resource functions occurs and provided the County, in consultation with the appropriate State and Federal agency, determine that such substitution is justified.**

**(5) Sensitive plants that will be destroyed shall be transplanted or replaced, to the maximum extent practicable. Replacement is used here to mean the establishment of a particular plant species in areas of suitable habitat not affected by new uses. Replacement may be accomplished by seeds, cuttings, or other appropriate methods. Replacement shall occur as close to the original plant site as practicable. The project applicant shall ensure that at least 75 percent of the replacement plants survive 3 years after the date they are planted**

**(6) Nonstructural controls and natural processes shall be used to the greatest extent practicable.**

**(a) Bridges, roads, pipeline and utility corridors, and other water crossings shall be minimized and should serve multiple purposes and properties.**

**(b) Stream channels shall not be placed in culverts unless absolutely necessary for property access. Bridges are preferred for water crossings to reduce disruption to hydrologic and biologic functions. Culverts shall only be permitted if there are no practicable alternatives as determined by MCC .38.7075 (Q).**

**(c) Fish passage shall be protected from obstruction.**

**(d) Restoration of fish passage should occur wherever possible.**

**(e) Show location and nature of temporary and permanent control measures that shall be applied to minimize erosion and sedimentation when riparian areas are disturbed, including slope netting, berms and ditches, tree protection, sediment barriers, infiltration systems, and culverts.**

**(f) Groundwater and surface water quality will not be degraded by the proposed use. Natural hydrologic conditions shall be maintained, restored, or enhanced in such a manner that replicates natural conditions, including current patterns (circulation, velocity, volume, and normal water fluctuation), natural stream channel and shoreline dimensions and materials, including slope, depth, width, length, cross-sectional profile, and gradient.**

**(g) Those portions of a proposed use that are not water-dependent or that have a practicable alternative will be located outside of stream, pond, and lake buffer zones.**

**(h) Streambank and shoreline stability shall be maintained or restored with natural revegetation.**

**(i) The size of restored, enhanced, and replacement (creation) wetlands shall equal or exceed the following ratios. The first number specifies the required acreage of replacement wetlands, and the second number specifies the acreage of wetlands altered or destroyed.**

**Restoration: 2: 1**

**Creation: 3: 1**

**Enhancement: 4: 1**

**(7) Wetland creation mitigation shall be deemed complete when the wetland is self-functioning for 5 consecutive years. Self-functioning is defined by the expected function of the wetland as written in the mitigation plan. The monitoring report shall be submitted to the local government to ensure compliance. The U.S. Forest Service, in consultation with appropriate state agencies, shall extend technical assistance to the local government to help evaluate such reports and any subsequent activities associated with compliance.**

**(8) Wetland restoration/enhancement can be mitigated successfully by donating appropriate funds to a non-profit wetland conservancy or land trust with explicit instructions that those funds are to be used specifically to purchase protection easements or fee title protection of appropriate wetlands acreage in or adjacent to the Columbia River Gorge meeting the ratios given above in MCC 38.7075(Z)(6)**

**(i). These transactions shall be explained in detail in the Mitigation Plan and shall be fully monitored and documented in the monitoring report.**

**Staff:** The Biological Resources Memorandum written by Ben White, ODOT Region 1 Biologist detail measures to offset the impacts to the resource and resource buffers. Through the implementation of the resource plan, the applicant will restore portions of the project area that will be altered or destroyed. Due to the ground disturbing activities that will move Mosquito Creek into a new channel and the construction of the berms, the applicant is electing to provide sensitive resource of greater benefit at an off-site location. The off-site location is at Young Creek, which flows into Mirror Lake. In total, the applicant is proposing a total of 1.37 acres of wetland impacts, which will result in 5.03 acres at the off-site mitigation, which exceeds the 2:1 and 3:1 ratios (Exhibit A.25).

Lastly, additional conditions of approval will be required to ensure this criterion is met. The restoration and enhancement efforts must be completed no later than one year after the sensitive resource or buffer zone has been altered or destroyed, or as soon thereafter as is practicable. Additionally, within five years, at least 75 percent of the replacement vegetation must survive. *As conditioned, these criteria are met.*

#### **7.4 § 38.7085 SMA RECREATION RESOURCE REVIEW CRITERIA**

**(A) The following shall apply to all new developments and land uses:**

**(1) New developments and land uses shall be natural resource-based and not displace existing recreational use.**

\* \* \*

**Staff:** The proposed use is for the placement of structures necessary for continued public safety, protection of essential public services, and protection of public existing roadways. No recreation uses exist on the Historic Columbia River Highway or the subject properties. Further, no existing recreation uses will be affected by the proposed project. *These criteria are met.*

## **8.0 Conclusion**

Based on the findings and other information provided above, the applicant has carried the burden necessary for the National Scenic Area (NSA) Site Review and Geologic Hazards (GH) permit in the Gorge Special Open Space (GSO) zone to authorize the following development that has occurred:

1. Ground disturbing activities relating to an emergency/disaster event that occurred in January of 2021;
2. The construction of a diversion berm made of earth materials, which is classified as a structure; and;
3. Installation of a 12-inch culvert

This Site Review and permit will also authorize the following development that has not yet occurred:

1. New ground disturbing activities and removal of vegetation;
2. Construction of an additional diversion berm made of concrete “ultrablocks” and earth materials;
3. Construction of a private driveway that will be used as an access road;
4. Construction of a gabion berm;
5. Installation of a 36-inch culvert; and
6. Off-site mitigation through planting of vegetation

This approval is subject to the conditions of approval established in this report.

## 9.0 Exhibits

- ‘A’ Applicant’s Exhibits
- ‘B’ Staff Exhibits
- ‘C’ Procedural Exhibits
- ‘D’ Comments Received

Exhibits with a “\*” after the exhibit # have been included as part of the mailed decision. Those exhibits have been reduced to a size of 8.5” x 11” for mailing purposes. All other exhibits are available for review in Case File T2-2021-15349 by contacting Rithy Khut, Staff Planner at 503-988-0176 or [rithy.khut@multco.us](mailto:rithy.khut@multco.us).

Exhibit #	# of Pages	Description of Exhibit	Date Received / Submitted
A.1	1	NSA Application Form	12/21/2021
A.2	34	Narrative	12/21/2021
A.3	1	Table of Figures	12/21/2021
A.4	1	Location Map	12/21/2021
A.5	1	Mitigation Location Map	12/21/2021
A.6	1	Project Site Map	12/21/2021
A.7	1	Table of Site Plan Figures	12/21/2021
A.8	1	Site Plan	12/21/2021
A.9	3	Site Plan Detail for Phase 1	12/21/2021
A.10	3	Plan Elevations for Phase 1	12/21/2021
A.11	8	Site Plan Detail and Elevations for Phase 1 and 2 Berms (reduced to 8.5” x 11”)	12/21/2021
A.12	2	Debris basin profiles	12/21/2021
A.13	1	Culvert Plan and Profile (reduced to 8.5” x 11”)	12/21/2021

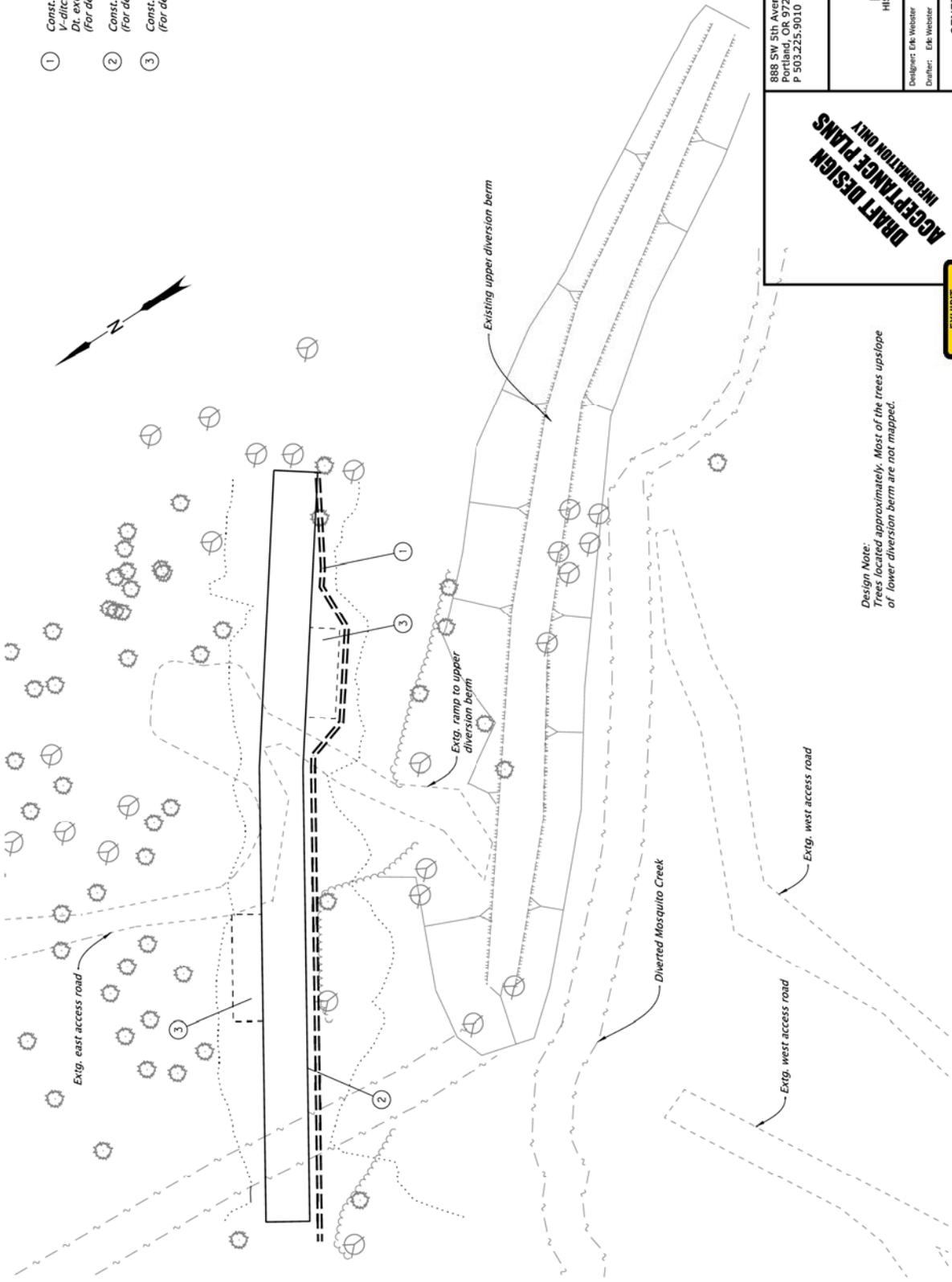
A.14*	1	Mitigation Site Plan	12/21/2021
A.15	5	Key Viewing Areas Map and Photos	12/21/2021
A.16	12	Pre-file Meeting Notes	12/21/2021
A.17	8	Geotechnical Memorandum written by Michael Zimmerman, Oregon Registered Professional Engineer, Geotechnical Engineer, and Oregon Certified Engineering Geologist on December 9, 2021	12/21/2021
A.18	4	Geologic Hazards Permit (GHP) Form 1: Geotechnical Reconnaissance and Stability Preliminary Study	12/21/2021
A.19	7	Erosion and Sediment Control Plans (reduced to 8.5" x 11") - Title Page - Sheet No. FB01 – Erosion and Sediment Control - Sheet No. FB02 – Erosion and Sediment Control - Sheet No. FB03 – Erosion and Sediment Control - Sheet No. FB04 – Erosion and Sediment Control - Sheet No. GA00 – Foundation Grading Plan - Debris Basin Conceptual Layout	12/21/2021
A.20	4	Consultation Record	12/21/2021
A.21	14	Section 106 Level of Effect Form: Finding of No Effect - Historic	12/21/2021
A.22	14	Amended Request for Concurrence Joint Finding of No Adverse Effect from the State Historic Preservation Office	12/21/2021
A.23	2	State Historic Preservation Office Concurrence	12/21/2021
A.24	9	Archaeological Inadvertent Discovery Plan	12/21/2021
A.25	39	Biological Resources Memorandum written by Ben White, ODOT Region 1 Biologist	12/21/2021
A.26	2	Deed and Ownership Information	12/21/2021
A.27	2	Quitclaim Deed recorded as instrument #95-159696 on December 26, 1995	12/21/2021
A.28	1	Sticky Note relating to deed information	12/21/2021
A.29	3	Quitclaim Deed recorded as instrument #96-182575 on December 4, 1996	12/21/2021
A.30	2	Quitclaim Deed recorded as instrument #95-159696 on December 26, 1995	12/21/2021
A.31	2	Warranty Deed recorded on September 5, 1958	12/21/2021
A.32*	8	Site Plan Detail and Elevations for Phase 1 and 2 Berms (11" x 17")	05/31/2022
A.33*	64	Revised Plans (11" x 17") - *A01 – Title Sheet - *A02 – Index of Sheets Cont'd & Standard Drawings - *A03 – Plan Sheet Layout - EA01-EA04 – Traffic Control Plan - FA01 – Tree Protection General Notes - *FA02-FA04 – Tree Removal Plan - FB01 – Erosion and Sediment General Notes - *FB02-FB04 – Erosion and Sediment Control Plan - *FC01-FC03 – Permanent Seeding & Matting	05/31/2022

		<ul style="list-style-type: none"> <li>- GA01 – Alignment &amp; General Construction Foundation Bench</li> <li>- GA01A – Alignment &amp; General Construction Lower Diversion MSE Berm</li> <li>- GA01B – Alignment &amp; General Construction Lower Diversion Access Road</li> <li>- *GA02 – Foundation Bench Grading Plan Lower Diversion MSE Berm</li> <li>- *GA03 – Lower Diversion MSE Berm Plan</li> <li>- GA03A-GA03D – Lower Diversion MSE Berm Elevation</li> <li>- *GA03E – Lower Diversion MSE Berm Plan</li> <li>- GA03F-GA03H – Lower Diversion MSE Berm Elevation</li> <li>- *GA04 – Diversion Ditch Plan (1 of 2)</li> <li>- GA04A – Diversion Ditch Elevation (1 of 2)</li> <li>- *GA048 – Diversion Ditch Plan (2 of 2)</li> <li>- GA04C – Diversion Ditch Elevation (2 of 2)</li> <li>- *GA04D – Lower Diversion MSE Berm &amp; Ditch Grading Plan</li> <li>- GAD05-GA05L – Lower Diversion MSE Berm Details</li> <li>- GB01 – Alignment Debris Basins</li> <li>- GB01A – General Construction Debris Basins</li> <li>- CB01B – Basin Access Road Profile</li> <li>- GB01C – Basin Berm Profiles</li> <li>- GB02 – Debris Basins Phase I Excavation</li> <li>- GB03 – Access Road &amp; Debris Basins Phase II Berm Embankments</li> <li>- 8GB04-GB04D – Basin/Channel Details</li> <li>- GC01 – Disposal Site Coopey Pit</li> <li>- GC02 – Staging/Processing Site Jordan Rd</li> <li>- GC03 – Riprap Stockpiles Wyeth Site</li> <li>- *HA01 – Culverts</li> <li>- HB01 – Temporary Water Management</li> </ul>	
<b>‘B’</b>	<b>#</b>	<b>Staff Exhibits</b>	<b>Date</b>
B.1	2	Division of Assessment, Recording, and Taxation (DART): Property Information for 1N5E -00500 (Alt Acct #: R945130030)	12/21/2021
B.2	2	Division of Assessment, Recording, and Taxation (DART): Property Information for 1N5E -00600 (Alt Acct #: R945130120)	12/21/2021
B.3	2	Division of Assessment, Recording, and Taxation (DART): Property Information for 1N5E12C -00200 (Alt Acct #: R945120060)	12/21/2021
B.4	2	Division of Assessment, Recording, and Taxation (DART): Property Information for 1N5E28B -00100 (Alt Acct #: R945280160)	12/21/2021
B.5	1	Division of Assessment, Recording, and Taxation (DART): Map with 1N5E (Alt Acct #: R945130030) highlighted	12/21/2021
B.6	1	Division of Assessment, Recording, and Taxation (DART): Map with 1N5E (Alt Acct #: R945130120) highlighted	12/21/2021

B.7	1	Division of Assessment, Recording, and Taxation (DART): Map with 1N5E12C (Alt Acct #: R945120060) highlighted	12/21/2021
B.8	1	Division of Assessment, Recording, and Taxation (DART): Map with 1N5E28B (Alt Acct #: R945280160) highlighted	12/21/2021
B.9	23	Historic contracts between Oregon-Washington Railroad & Navigation Company and Multnomah County and then Multnomah County and Oregon State Highway Commission	05/26/2022
B.10	61	U.S. Army Corps of Engineers, Oregon Department of State Lands, and Oregon Department of Environmental Quality Joint Permit Application	05/26/2022
<b>‘C’</b>	<b>#</b>	<b>Administration &amp; Procedures</b>	<b>Date</b>
C.1	200	Agency Review	12/27/2021
C.2	3	Incomplete Letter	01/18/2022
C.3	1	Applicant’s Acceptance of 180 Day Clock	01/25/2022
C.4	45	Cultural Resources Review Letter	02/02/2022
C.5	2	Complete Letter (Day 1)	03/15/2022
C.6	32	Opportunity to Comment and mailing list	05/06/2022
C.7	72	Administrative Decision and mailing list	08/08/2022
<b>‘D’</b>	<b>#</b>	<b>Comments Received</b>	<b>Date</b>
D.1	2	Cultural Resources Survey Determination from Chris Donnermeyer, Heritage Resources Program Manager, Columbia River Gorge National Scenic Area	01/10/2022
D.2	3	Letter of Concurrence from Chris Donnermeyer, Heritage Resources Program Manager, Columbia River Gorge National Scenic Area	01/26/2022
D.3	7	Letter and e-mail from Steven D. McCoy on behalf of Friends of the Columbia Gorge	05/20/2022

??V-???

- ① Const. ditch  
V-ditch  
Dt. exc. - X cu. yd.  
(For details, see sht. (to follow))
- ② Const. lower diversion berm  
(For details, see shts. (to follow))
- ③ Const. ramp - 2  
(For details, see shts. (to follow))



*Design Note:  
Trees located approximately. Most of the trees upslope  
of lower diversion berm are not mapped.*

**DRAFT DESIGN  
INFORMATION ONLY**

EXHIBIT  
**A.32**

  
888 SW 5th Avenue, Suite 1170  
Portland, OR 97204  
P 503.225.9010

**MOSQUITO CREEK  
DEBRIS FLOW MITIGATION**  
HISTORIC HIGHWAY  
MULTNOMAH COUNTY

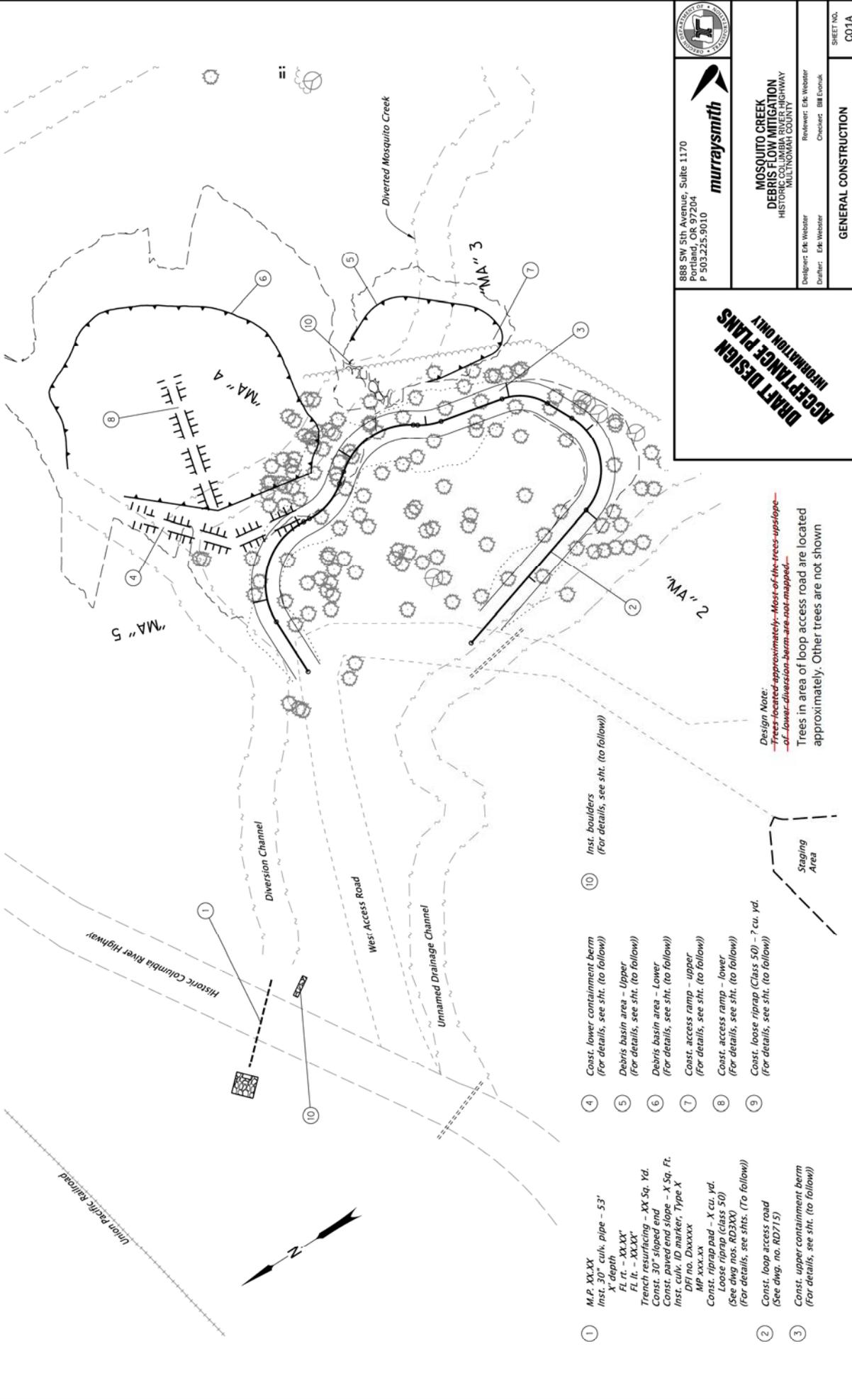
Designer: Erik Webster  
Drafter: Erik Webster  
Reviewer: Erik Webster  
Checker: Bill Eonok

GENERAL CONSTRUCTION  
SHEET NO. C02

Rotation: 327.353° Scale: 1"=50'

FINAL ELECTRONIC DOCUMENT  
AVAILABLE UPON REQUEST

??V-???



**murraysmith**

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Portland, OR 97204  
P 503.225.9010

**MOSQUITO CREEK  
DEBRIS FLOW MITIGATION**  
HISTORIC COLUMBIA RIVER HIGHWAY  
MULTNOMAH COUNTY

Designer: Erik Webster  
Draftler: Erik Webster  
Reviewer: Erik Webster  
Checker: Bill Eonok

**GENERAL CONSTRUCTION**

SHEET NO.  
C01A

Rotation: 327.353° Scale: 1"=50'

**DRAFT DESIGN  
ACCEPTANCE PLANS**  
INFORMATION ONLY

*Design Note:*  
 - Trees located approximately - Most of the trees upslope  
 - of lower diversion berm are not mapped.  
 Trees in area of loop access road are located  
 approximately. Other trees are not shown

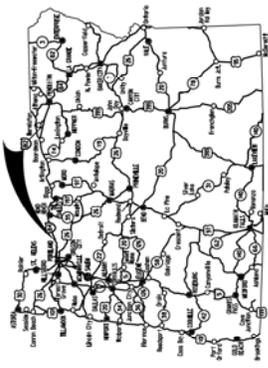
- 1 M.P. XX.XX  
Inst. 30" culv. pipe - 53'  
Fl. - XX.XX'  
Fl. - XX.XX'
- 2 Const. loop access road  
(See dwg. no. AD71.5)
- 3 Const. upper containment berm  
(For details, see sht. (to follow))
- 4 Const. lower containment berm  
(For details, see sht. (to follow))
- 5 Debris basin area - upper  
(For details, see sht. (to follow))
- 6 Debris basin area - lower  
(For details, see sht. (to follow))
- 7 Const. access ramp - upper  
(For details, see sht. (to follow))
- 8 Const. access ramp - lower  
(For details, see sht. (to follow))
- 9 Const. loose riprap (Class 50) - ? cu. yd.  
(For details, see sht. (to follow))
- 10 Inst. boulders  
(For details, see sht. (to follow))

STATE OF OREGON  
 DEPARTMENT OF TRANSPORTATION  
 PLANS FOR PROPOSED PROJECT  
 MITIGATION

# MOSQUITO CREEK DEBRIS FLOW MITIGATION

HISTORIC COLUMBIA RIVER HIGHWAY  
 MULTNOMAH COUNTY  
 MAY 2022

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A01	Title Sheet
A02	Index Of Sheets Cont'd. & Standard Drawings
A03	Plan Sheet Layout



**ATTENTION:** Follow Rules Adopted By The Oregon Utility Notification Center. Those Rules Are Set Forth In OAR 952-001-0010 Through OAR 952-001-0090. You May Obtain Copies Of The Rules By Calling The Center. (Note: The Telephone Number For The Oregon Utility Center Is (503) 232-1987.)

LET'S ALL  
 WORK TOGETHER  
 TO MAKE THIS  
 JOB SAFE

PLANS PREPARED FOR  
 OREGON DEPARTMENT OF TRANSPORTATION  
**CORNFORTH**  
 CONSULTANTS  
 10250 S.W. Greenburg Road, Suite 111  
 Portland, Oregon 97223  
 Phone: 503-251-1100 Fax: 503-452-4528

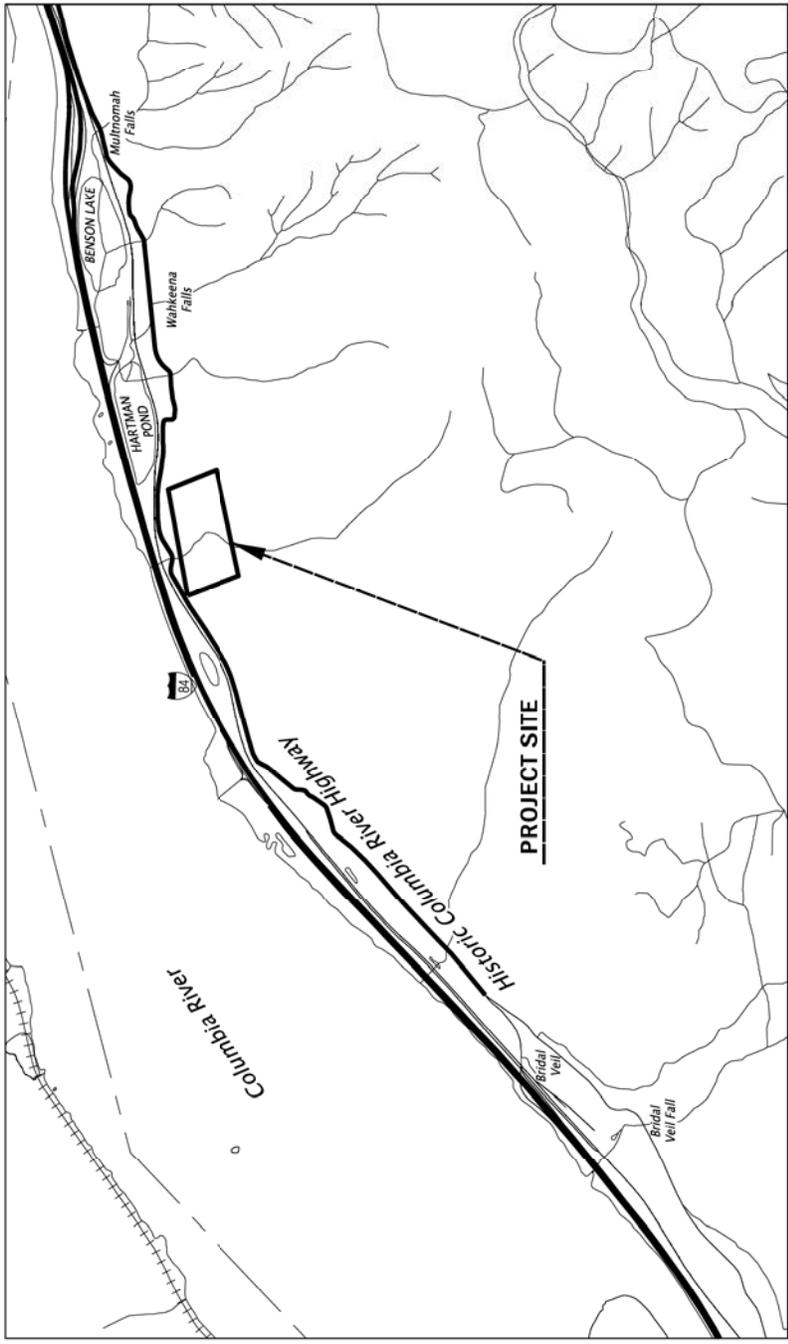
OREGON TRANSPORTATION COMMISSION  
 CLAIR  
 VICE CHAIR  
 COMMISSIONER  
 JULIE BROWN  
 COMMISSIONER  
 MARDIYNN BURKE  
 SHARON SMITH  
 COMMISSIONER  
 KRISTOPHER W. STRECKER  
 DIRECTOR OF TRANSPORTATION

These plans were developed using ODOT design standards. Exceptions to these standards, if any, have been submitted and approved by the ODOT Chief Engineer or their delegated authority.

Approving Authority: \_\_\_\_\_  
 Signature & date  
 \_\_\_\_\_  
 Print name and title  
 \_\_\_\_\_  
 Concurrence by ODOT Chief Engineer

MOSQUITO CREEK DEBRIS FLOW MITIGATION HISTORIC COLUMBIA RIVER HIGHWAY MULTNOMAH COUNTY	
FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER
OREGON DIVISION	M21009
	SHEET NO.
	A01

FINAL ELECTRONIC DOCUMENT  
 AVAILABLE UPON REQUEST



T. I. N., R. 5 E., W.M.



EXHIBIT  
**A.33**

Standard Dwg. Nos.

INDEX OF SHEETS, CONT.	
SHEET NO.	DESCRIPTION
EA01-EA04	Traffic Control Plan
FA01	Tree Protection General Notes
FA02 - FA04	Tree Removal Plan
FB01	Erosion and Sediment General Notes
FB02 - FB04	Erosion and Sediment Control Plan
FC01 - FC03	Permanent Seeding & Mating
GA01	Alignment & General Construction - Foundation, Bench
GA01A	Alignment & General Construction - Lower Diversion MSE Berm
GA01B	Alignment & General Construction - Lower Diversion Access Road
GA02	Foundation Bench Grading Plan - Lower Diversion MSE Berm
GA03	Lower Diversion MSE Berm Plan
GA03A-GA03D	Lower Diversion MSE Berm Elevation
GA03E	Lower Diversion MSE Berm Plan
GA03F-GA03H	Lower Diversion MSE Berm Elevation
GA04	Diversion Ditch Plan (1 of 2)
GA04A	Diversion Ditch Elevation (1 of 2)
GA04B	Diversion Ditch Plan (2 of 2)
GA04C	Diversion Ditch Elevation (2 of 2)
GA04D	Lower Diversion MSE Berm & Ditch Grading Plan
GA05 - GA05L	Lower Diversion MSE Berm Details
GB01	Alignment - Debris Basins
GB01A	General Construction - Debris Basins
GB01B	Basin Access Road Profile
GB01C	Basin Berm Profiles
GB02	Debris Basins Phase I Excavation
GB03	Access Road & Debris Basins Phase II Berm Embankments
GB04 - GB04D	Basin/Channel Details
CC01	Disposal Site - Coopey Pit
CC02	Staging/Processing Site - Jordan Rd
CC03	Riprap Stockpiles - Wyeth Site
HA01	Culverts
HB01	Temporary Water Management

- Slope Rounding
- Trench Backfill, Bedding, Pipe Zone And Multiple Installations
- Street Cut
- Sloped Ends For Metal Pipe
- Culvert Embankment Protection and Riprap Pads
- Sloped Ends For Concrete Pipe
- Miscellaneous Culvert Details
- Paved End Slope For Culverts 60" Maximum Pipe Size
- Safety End Section For Metal Pipe
- Safety End Section For Concrete, PVC, HDPE & Polypropylene Pipe
- Coupling Bands For Corrugated Metal Pipe
- Coupling Bands For Corrugated Metal Pipe
- Slotted CMP Drain Details
- Pipe Slope Anchors - Metal
- Pipe Slope Anchors - Concrete
- Locator Post
- Fill Height Tables For Aluminum & Steel Corrugated Pipe
- Fill Height Tables For Aluminum & Steel Arch Pipe
- Fill Height Tables For Circular Concrete Pipe
- Fill Height Tables For PVC Pipe
- Fill Height Table For Corrugated HDPE Pipe
- Fill Height Table For Steel Reinforced HDPE Pipe
- Fill Height Tables For Polypropylene Pipe
- Culvert ID Marker
- Construction Entrances
- Check Dams Type 1, 3, and 4
- Check Dams Type 2 and 5
- Sediment Barrier Type 2, 3 and 4
- Sediment Fence
- Slope and Channel Matting

- RD150
- RD300
- RD302
- RD316
- RD317
- RD318
- RD319
- RD320
- RD321
- RD322
- RD324
- RD325
- RD326
- RD327
- RD328
- RD330
- RD332
- RD334
- RD380
- RD382
- RD384
- RD386
- RD388
- RD390
- RD391
- RD393
- RD398
- RD1000
- RD1005
- RD1006
- RD1030
- RD1040
- RD1055



MOSQUITO CREEK DEBRIS FLOW MITIGATION  
CORVALLIS AREA HIGHWAY  
MULTI-COUNTY

FEDERAL HIGHWAY  
ADMINISTRATION

PROJECT NUMBER

SHEET  
NO.

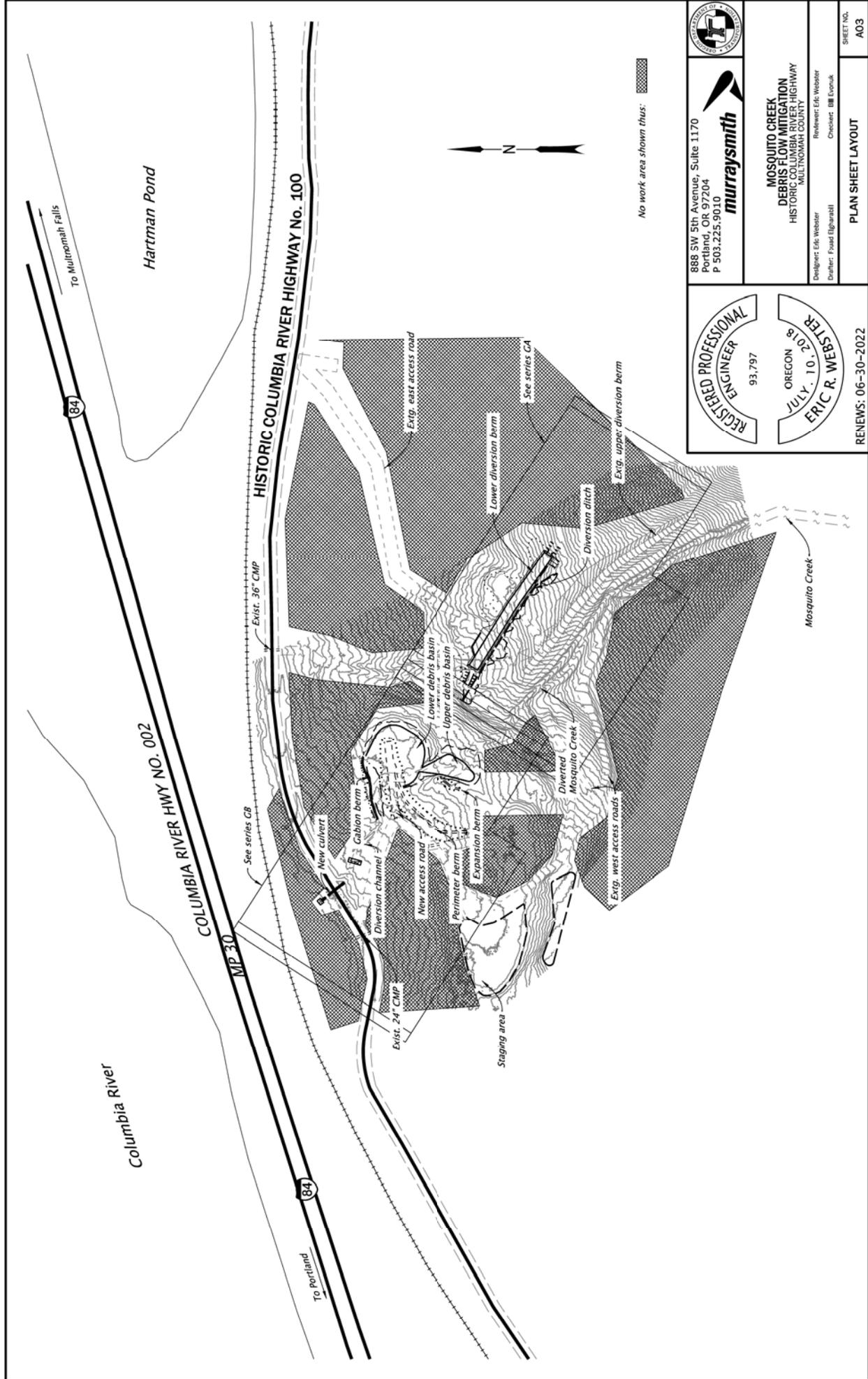
Standard Drawings located on the web at:  
<http://www.oregon.gov/ODOT/Engineering/Pages/Standards.aspx>

OREGON  
DIVISION

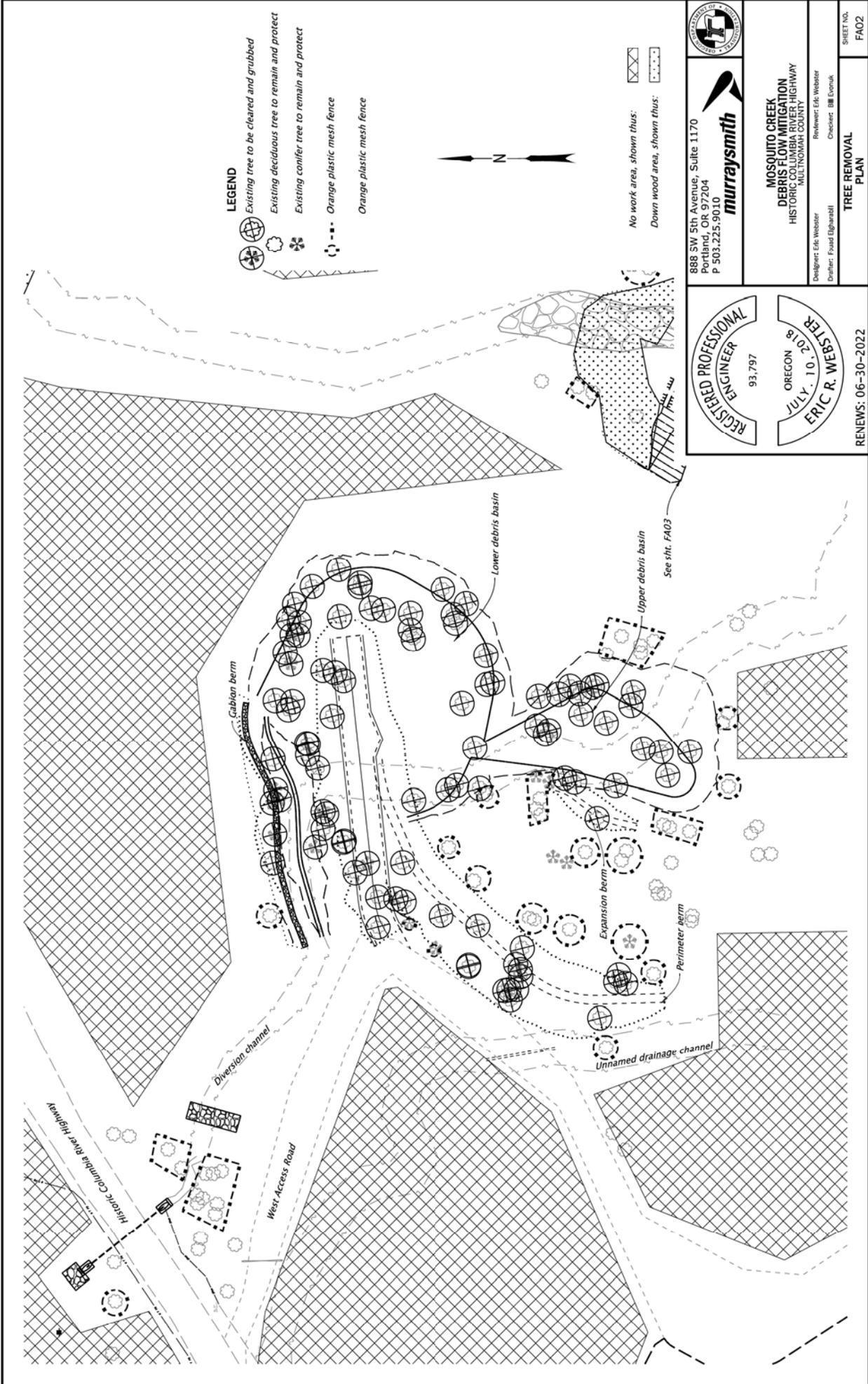
SEE SHEET A01

A02

FINAL ELECTRONIC DOCUMENT  
AVAILABLE UPON REQUEST



		888 SW 5th Avenue, Suite 1170 Portland, OR 97204 P 503.225-9010
		<b>MOSQUITO CREEK          DEBRIS FLOW MITIGATION</b> HISTORIC COLUMBIA RIVER HIGHWAY MULTNOMAH COUNTY
Designer: Eric Webster Drafter: Fouad Elgharabli	Reviewer: Eric Webster Checker: Bill Evonuk	<b>PLAN SHEET LAYOUT</b> SHEET NO. <b>A03</b>
REVIEWS: 06-30-2022 <small>FINAL ELECTRONIC DOCUMENT          AVAILABLE UPON REQUEST</small>		Scale: 1" = 200' Rotation: 0°



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 Portland, OR 97204  
 P 503.225-9010

**murraysmith**

MOSQUITO CREEK  
 DEBRIS FLOW MITIGATION  
 HISTORIC COLUMBIA RIVER HIGHWAY  
 MULTNOMAH COUNTY

Designer: Eric Webster  
 Drafter: Fouad Elgharabli

Reviewer: Eric Webster  
 Checker: Bill Evonuk

SHEET NO.  
 FA02

TREE REMOVAL  
 PLAN

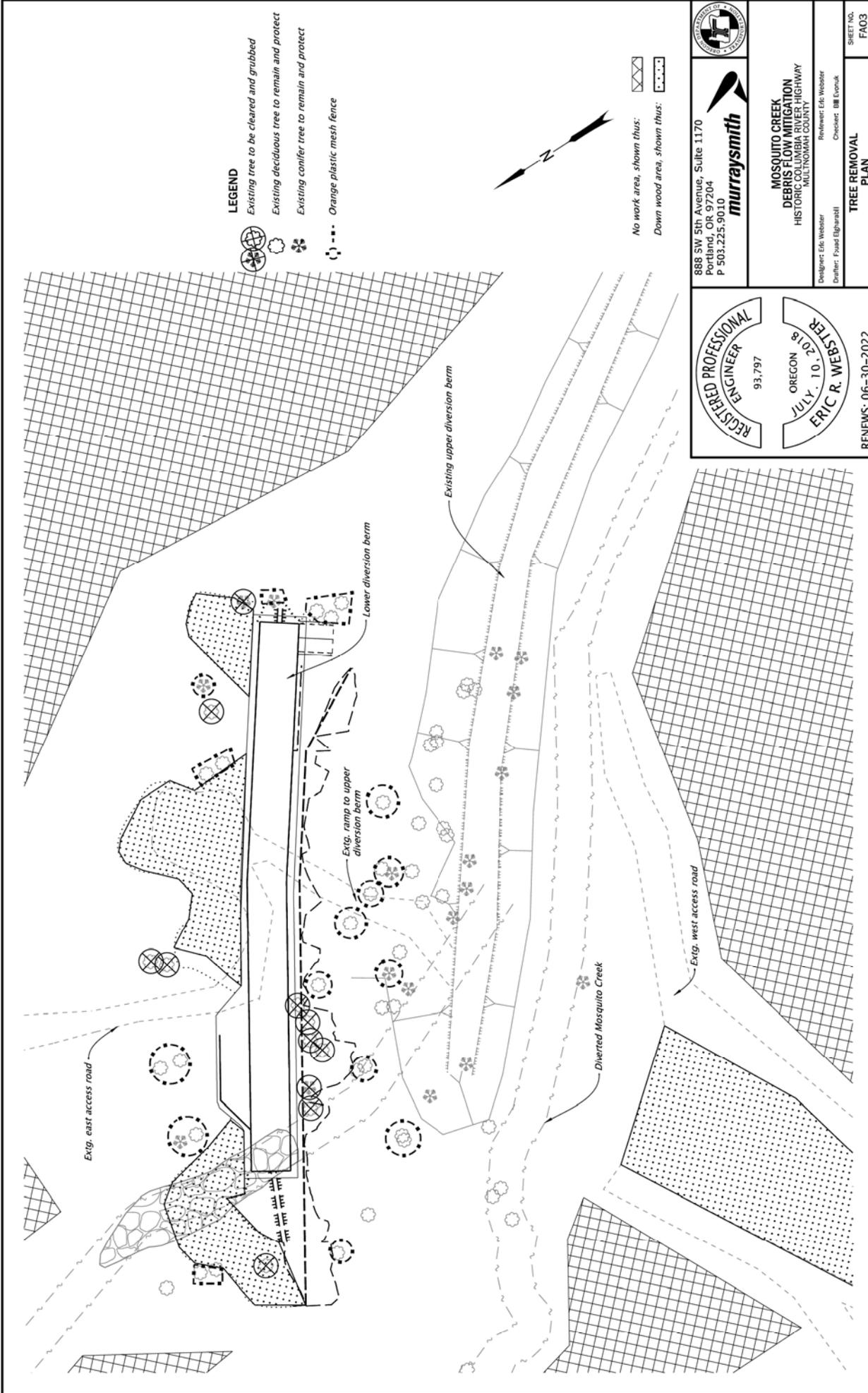
REGISTERED PROFESSIONAL  
 ENGINEER  
 93,797

OREGON  
 JULY 10, 2018

ERIC R. WEBSTER

REVIEWS: 06-30-2022

FINAL ELECTRONIC DOCUMENT  
 AVAILABLE UPON REQUEST



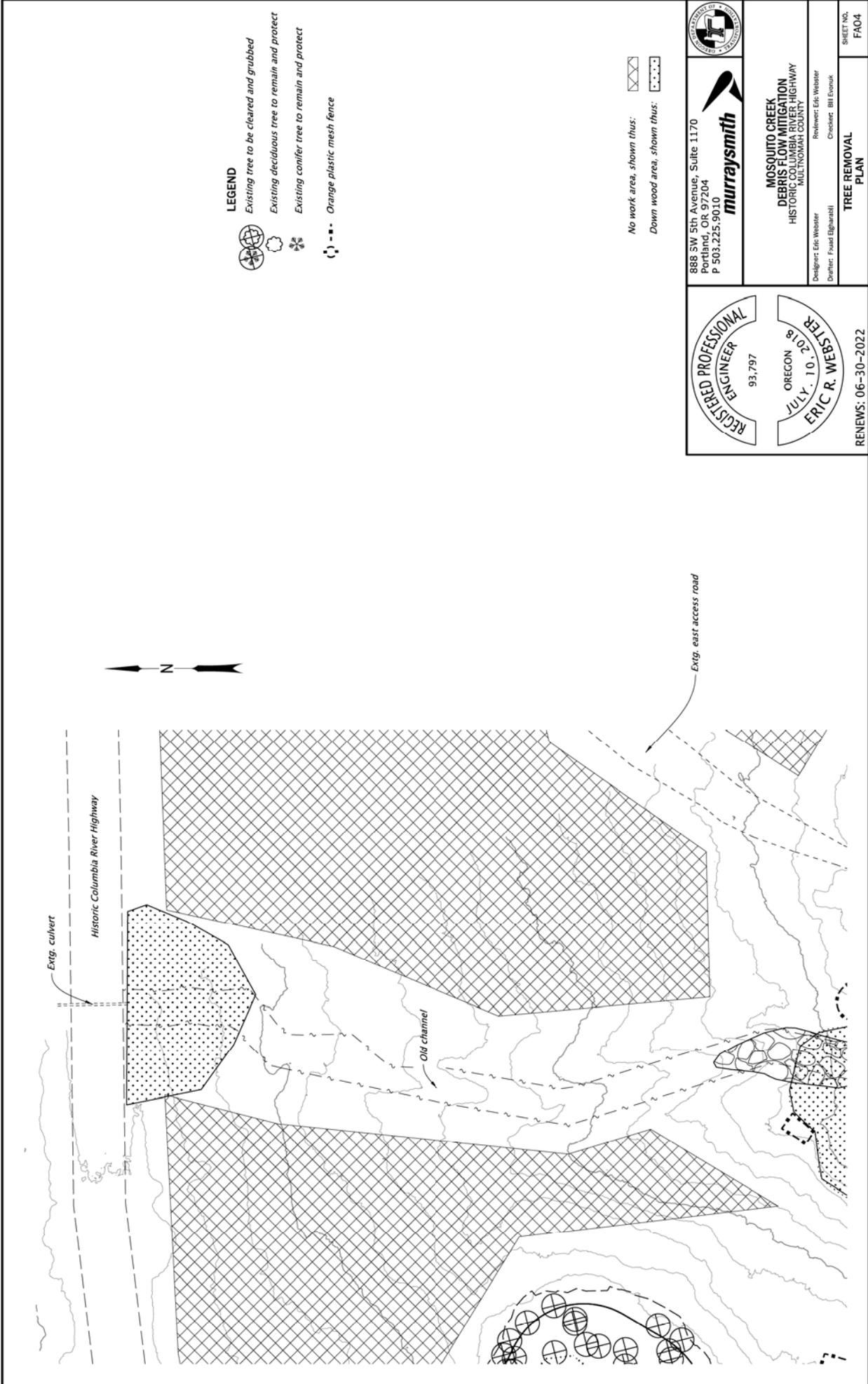
**LEGEND**

- Existing tree to be cleared and grubbed
- Existing deciduous tree to remain and protect
- Existing conifer tree to remain and protect
- Orange plastic mesh fence

No work area, shown thus: [diagonal hatching symbol]  
 Down wood area, shown thus: [dotted pattern symbol]



	888 SW 5th Avenue, Suite 1170 Portland, OR 97204 P 503.225.9010
<b>MOSQUITO CREEK        DEBRIS FLOW MITIGATION        HISTORIC HIGHWAY        MULTNOMAH COUNTY</b>	
Designer: Eric Webster Drafter: Fouad Elgharabli Reviewer: Eric Webster Checker: BBE Evonuk	
<b>TREE REMOVAL        PLAN</b>	
SHEET NO. FA03 Rotation: 327.353° Scale: 1"=50'	



**LEGEND**

-  Existing tree to be cleared and grubbed
-  Existing deciduous tree to remain and protect
-  Existing conifer tree to remain and protect
-  Orange plastic mesh fence

No work area, shown thus:   
 Down wood area, shown thus: 

			888 SW 5th Avenue, Suite 1170 Portland, OR 97204 P 503.225-9010	SHEET NO. <b>FA04</b>
			<b>MOSQUITO CREEK          DEBRIS FLOW MITIGATION          HISTORIC COLUMBIA RIVER HIGHWAY          MULTNOMAH COUNTY</b>	DESIGNER: Eric Webster REVIEWER: Eric Webster DRAFTER: Foad Eghbarali CHECKER: BRI Eronak

- ① Install sediment fence - 375' (See Sta. Dwg. RD1040)
- ② Install check dam, Type 1 - 2 (See Sta. Dwg. RD1005)
- ③ Install construction entrance, Type 1 (See Sta. Dwg. RD1000)



No work area, shown thus:

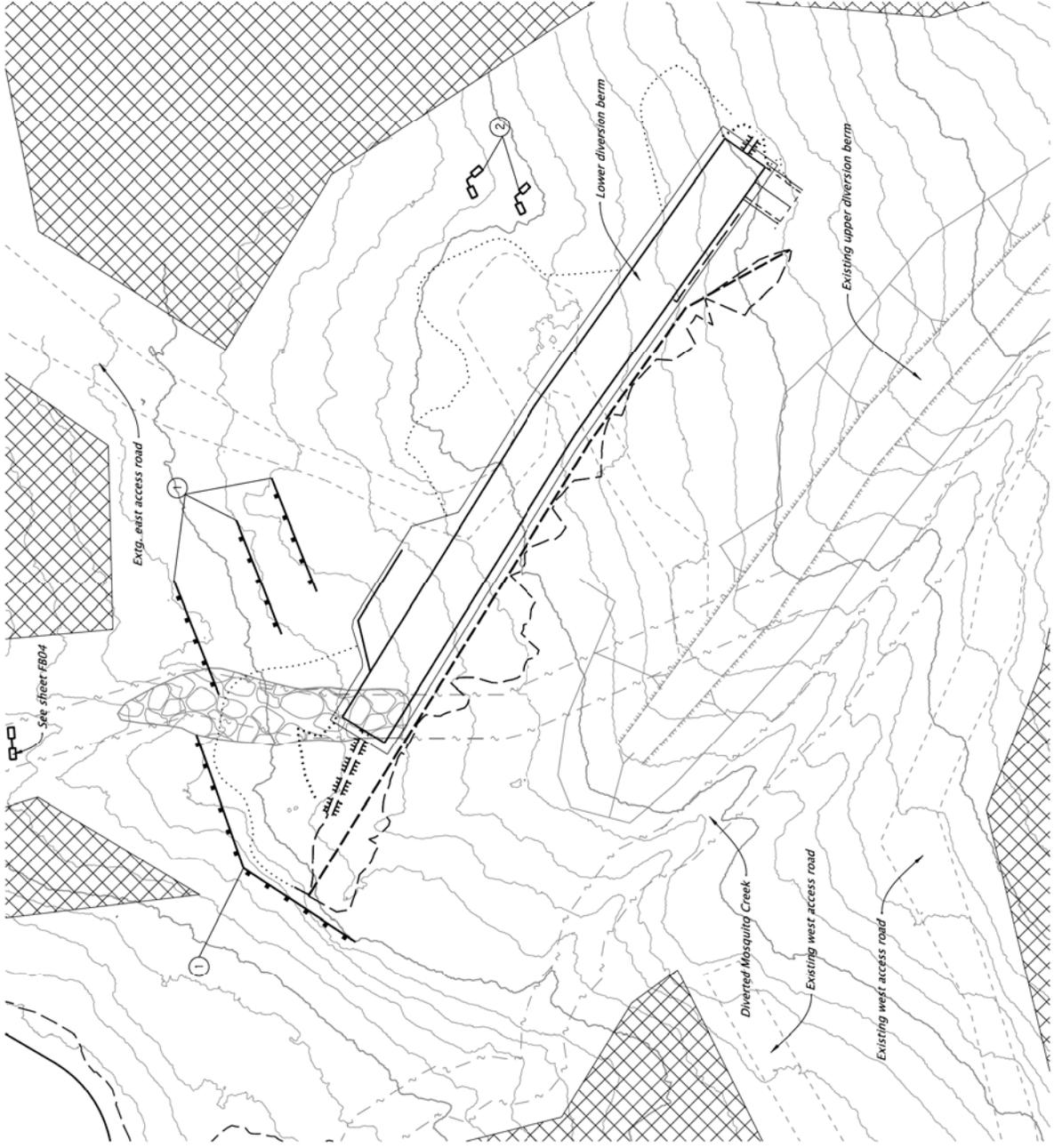


<p>888 SW 5th Avenue, Suite 1170 Portland, OR 97204 P 503.225-9010</p>		
<p><b>MOSQUITO CREEK DEBRIS FLOW MITIGATION HISTORIC COLUMBIA RIVER HIGHWAY MULTI-DRAINAGE COUNTY</b></p>		
<p>Designer: Eric Webster Drafter: Fouad Elgharabli</p>	<p>Reviewer: Eric Webster Checker: Bill Evonuk</p>	<p>SHEET NO. <b>FBO2</b></p>
<p><b>EROSION AND SEDIMENT CONTROL PLAN</b></p>		
<p>REVIEWS: 06-30-2022</p>		

- ① Install sediment fence - 290'
- ② Install check dam, Type 6 - 2  
(See Std. Dwg. RD1 006)



No work area, shown thus:



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Portland, OR 97204  
P 503.225-9010

**murraysmith**

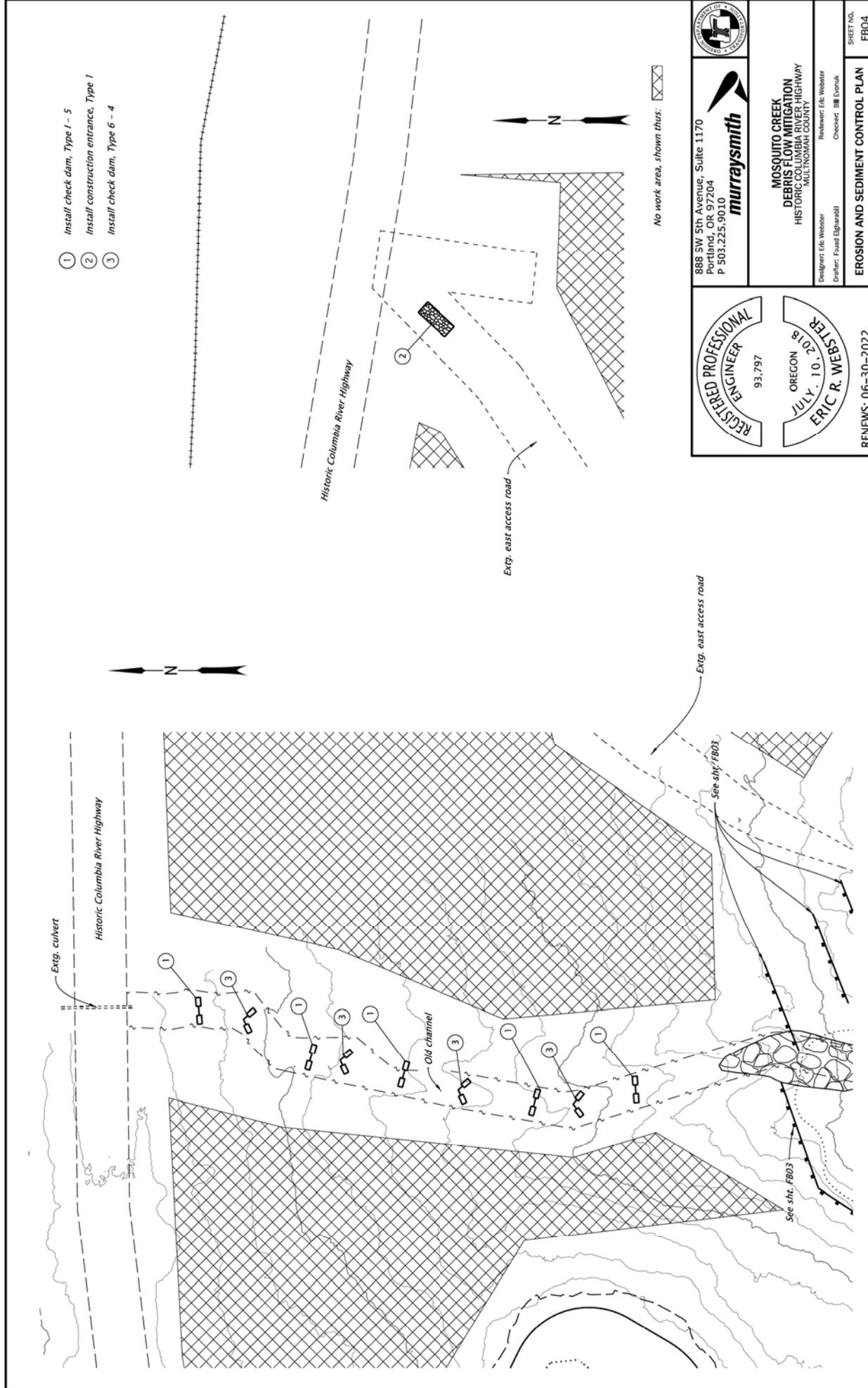
**MOSQUITO CREEK  
DEBRIS FLOW MITIGATION  
HISTORIC HIGHWAY  
MULTNOMAH COUNTY**

Designer: Eric Webster  
Drafter: Fouad Elgharabli  
Reviewer: Eric Webster  
Checker: Bill Evonuk

EROSION AND SEDIMENT CONTROL PLAN  
SHEET NO. FBO3

REVIEWS: 06-30-2022  
FINAL ELECTRONIC DOCUMENT  
AVAILABLE UPON REQUEST

- ① Install check dam, Type 1 - 5
- ② Install construction entrance, Type 1
- ③ Install check dam, Type 6 - 4



No work area, shown thus: [hatched box symbol]



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 Portland, OR 97204  
 P 503.225-9010  
**murraysmith**

**MOSQUITO CREEK  
 DEBRIS FLOW MITIGATION  
 HISTORIC COLUMBIA RIVER HIGHWAY  
 MULTNOMAH COUNTY**

Designer: Eric Webster  
 Drafter: Fouad Elgharabli  
 Reviewer: Eric Webster  
 Checker: Bill Evonuk

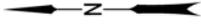
SHEET NO.  
**FBO4**



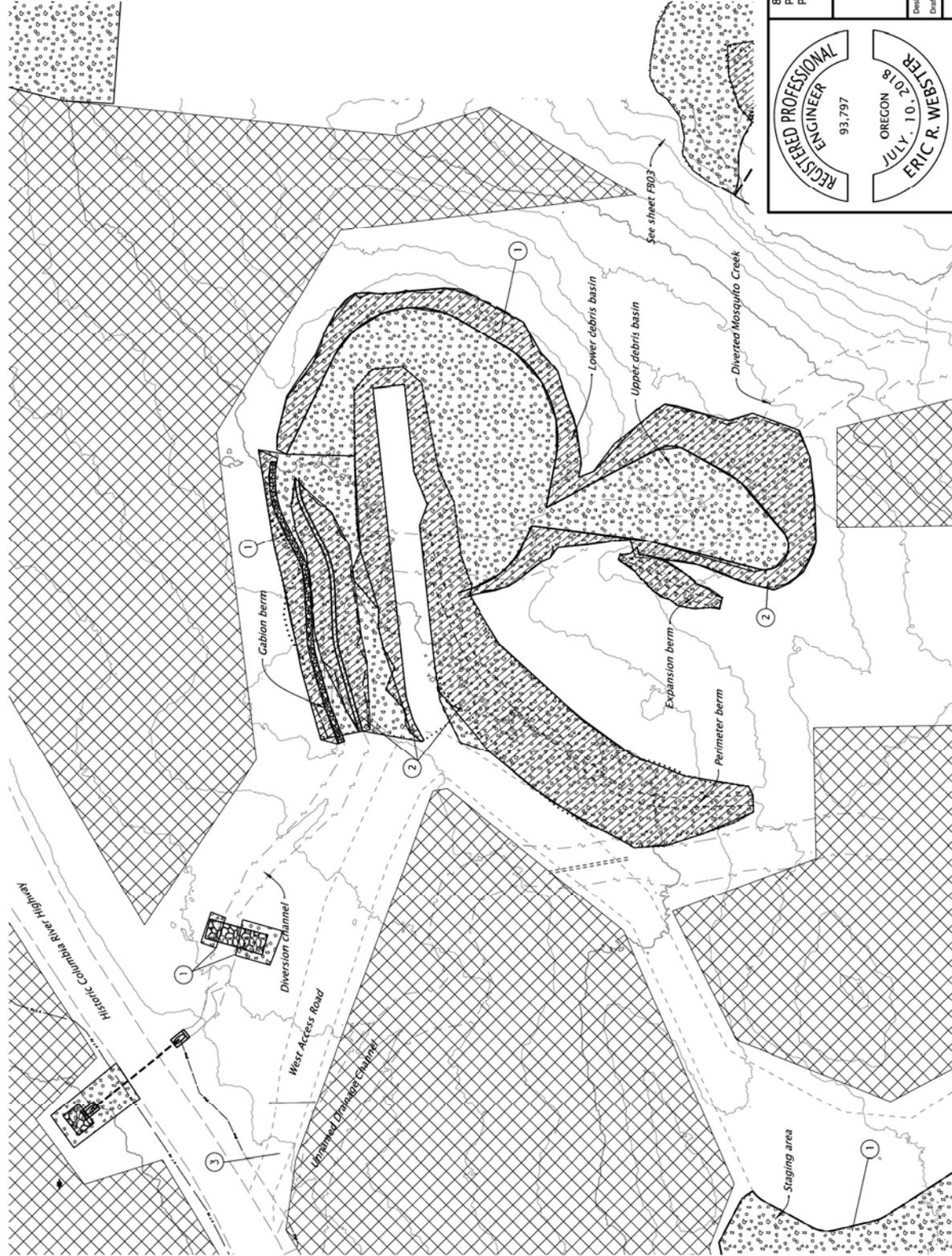
**REGISTERED PROFESSIONAL  
 ENGINEER  
 93,797  
 OREGON  
 JULY, 10, 2018  
 ERIC R. WEBSTER**

REVIEWS: 06-30-2022  
 FINAL ELECTRONIC DOCUMENT  
 AVAILABLE FOR REQUEST

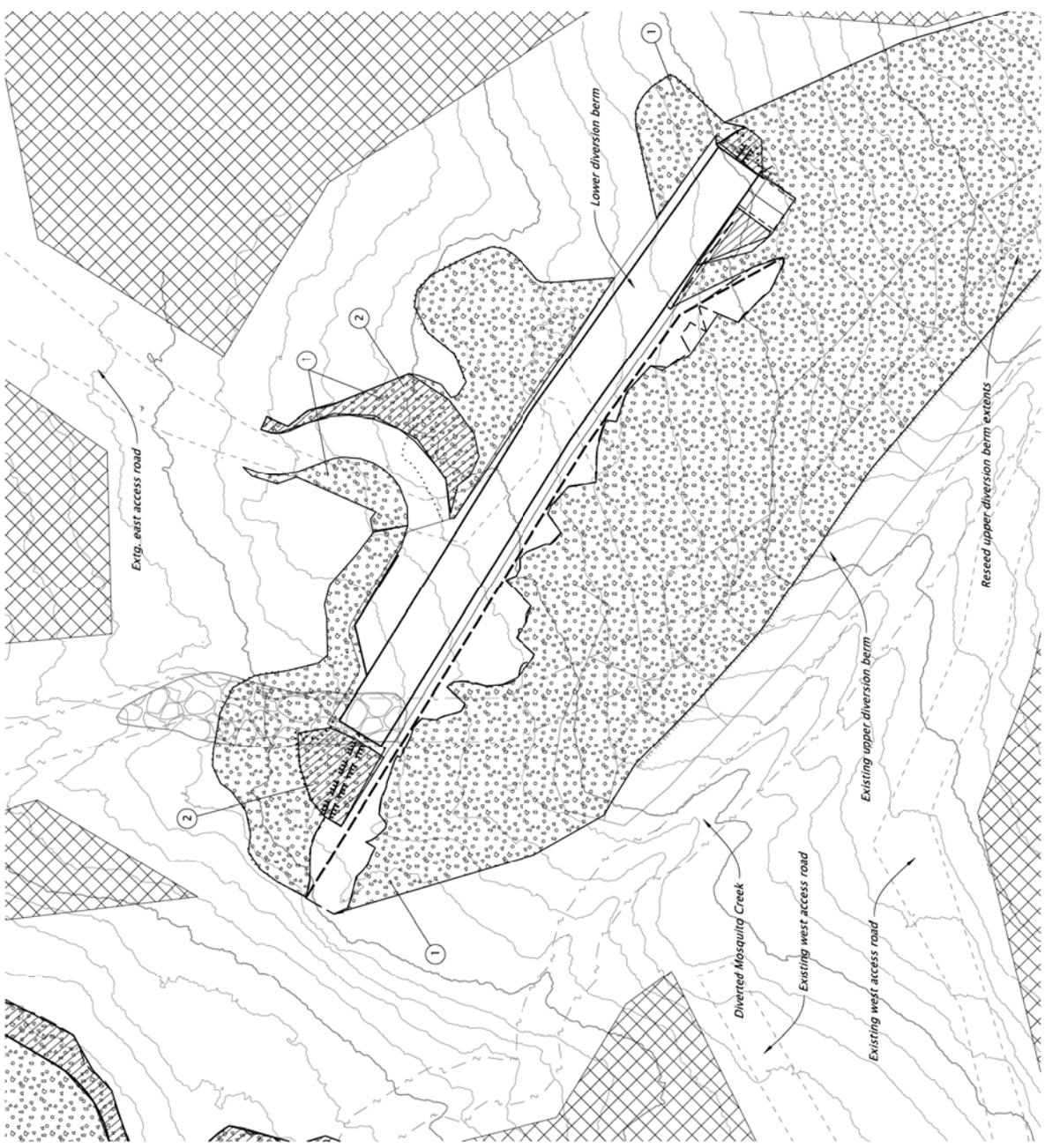
- ① Apply hydromulch FGM  
Apply permanent seeding  
with biotic soil amendment
- ② Install slope matting  
Type 'D' - 2,538 sq. yd.  
(See Sta. Dwg. RD1053)



Note:  
Apply permanent seeding prior to  
installing erosion control matting.  
No work area, shown thus:



	<p>888 SW 5th Avenue, Suite 1170 Portland, OR 97204 P 503.225-9010</p> <p><b>murraysmith</b></p>
<p><b>MOSQUITO CREEK DEBRIS FLOW MITIGATION HISTORIC COLUMBIA RIVER HIGHWAY MULTI-DRAINAGE</b></p>	
<p>Designer: Eric Webster Driller: Foad Egharasi</p>	<p>Reviewer: Eric Webster Checker: BB Evonuk</p>
<p><b>PERMANENT SEEDING</b></p>	
<p>SHEET NO. FCO1</p>	
<p>REVIEWS: 06-30-2022</p> <p style="font-size: small;">FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST</p>	



- ① Apply Hydromulch FGM  
Apply permanent seeding  
with biotic soil amendment
- ② Install slope and channel matting  
Type 'D' - 367 sq. yd.

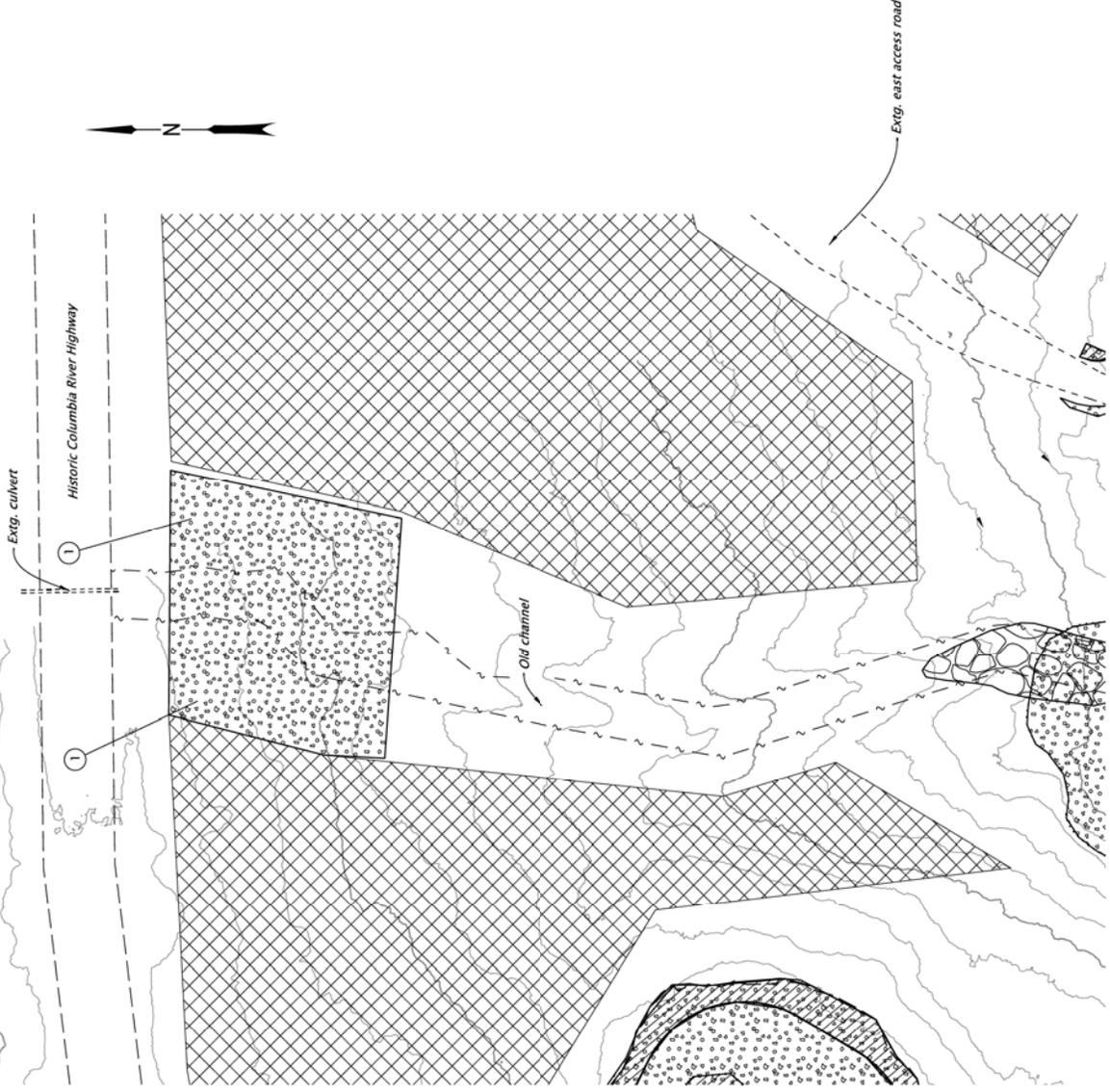


Note:  
Apply permanent seeding prior to  
installing erosion control matting.

No work area, shown thus:

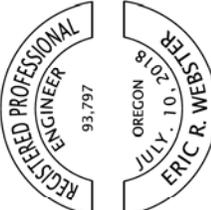
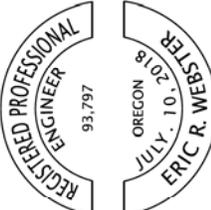
		<p>888 SW 5th Avenue, Suite 1170 Portland, OR 97204 P 503.225-9010</p>	<p>MOSQUITO CREEK DEBRIS FLOW MITIGATION HISTORIC HIGHWAY MULTNOMAH COUNTY</p>
<p>DESIGNER: Eric Webster DRAFTER: Fouad Egharasi</p>	<p>REVIEWER: Eric Webster CHECKER: Bill Evonuk</p>	<p>PERMANENT SEEDING</p>	
<p>REVIEWS: 06-30-2022</p> <p style="font-size: small;">FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST</p>			<p>SHEET NO. FC02</p>

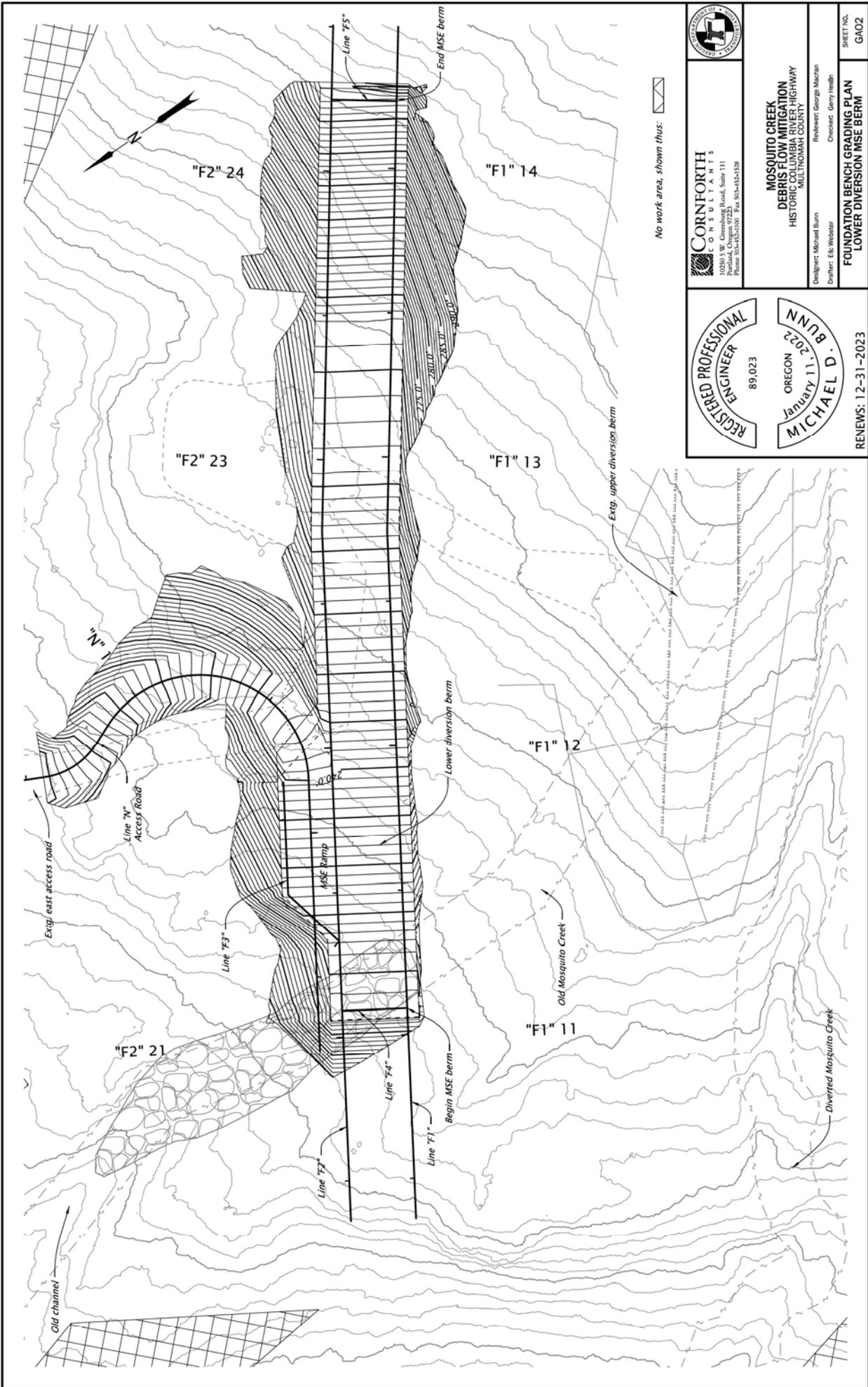
- ① Apply hydromulch FGM  
Apply permanent seeding  
with biotic soil amendment



Note:  
Apply hydromulch FGM and permanent seeding  
prior to installing erosion control matting.

No work area, shown thus:

		888 SW 5th Avenue, Suite 1170 Portland, OR 97204 P 503.225-9010		MOSQUITO CREEK DEBRIS FLOW MITIGATION HISTORIC COLUMBIA RIVER HIGHWAY MULTNOMAH COUNTY	Reviewer: Eric Webster Designer: Foad Elgharabli Checker: Bill Evonuk	SHEET NO. <b>FC03</b>



No work area, shown thus:

**CORNFORTH**  
CONSULTANTS  
10250 S.W. Greenberg Road, Suite 111  
Portland, Oregon 97225  
Phone: 503-452-1100 Fax: 503-452-1528

**MOSQUITO CREEK  
DEBRIS FLOW MITIGATION  
HISTORIC HIGHWAY  
MULTIDISCIPLINARY**

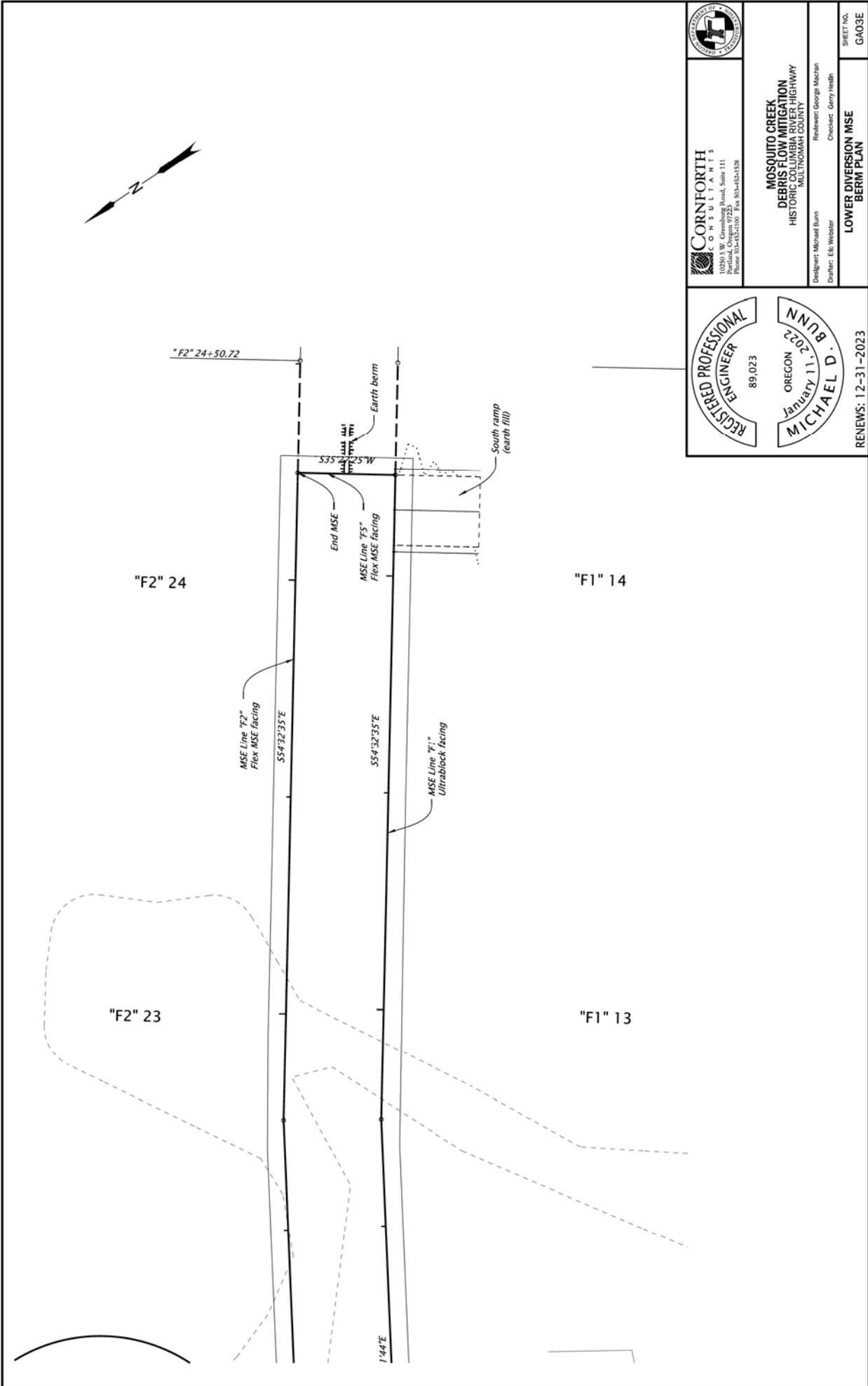
Designer: Michael Burn  
Reviewer: George MacLean  
Checker: Gerry Heblin

**FOUNDATION BENCH GRADING PLAN  
LOWER DIVERSION MSE BERM**

SHEET NO.  
GA02

REGISTERED PROFESSIONAL  
ENGINEER  
89,023  
OREGON  
January 11, 2022  
MICHAEL D. BURN

REVISIONS: 12-31-2023  
FINAL ELECTRONIC DOCUMENT  
FINAL BUILT FOR REQUEST



**MOSQUITO CREEK  
DEBRIS FLOW MITIGATION  
HISTORIC HIGHWAY  
RECONSTRUCTION**  
MULTNOMAH COUNTY

Designer: Michael Burn  
Draftler: Erik Webster

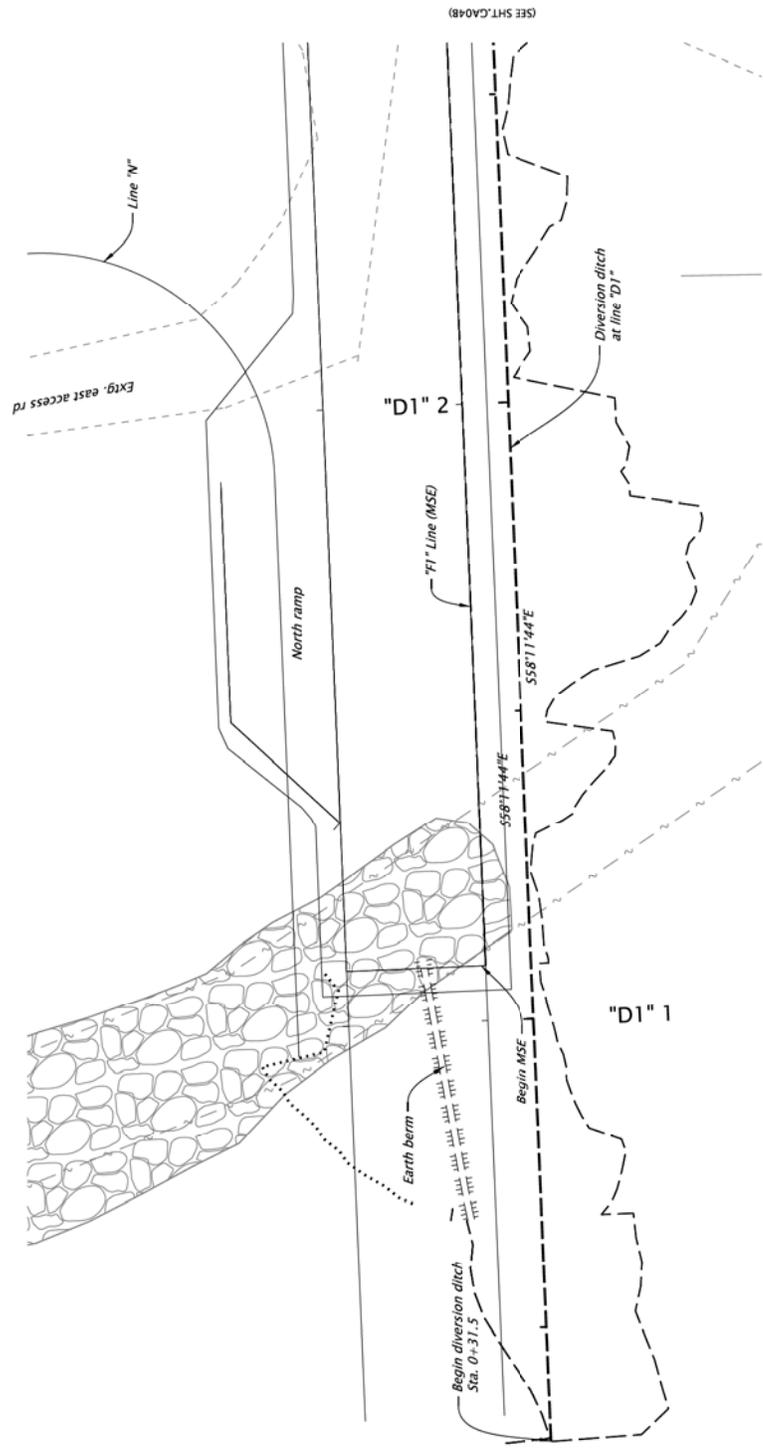
Reviewer: George Machan  
Checker: Gerry Healin



REVISIONS: 12-31-2023  
FINAL ELECTRONIC DOCUMENT  
PANEL FOR REQUEST

SHEET NO.  
**GA03E**

LOWER DIVERSION MSE  
BERM PLAN



**CORN FORTH CONSULTANTS**  
 10250 S.W. Greenberg Road, Suite 111  
 Portland, Oregon 97225  
 Phone: 503-452-1100 Fax: 503-452-1328

**MOSQUITO CREEK  
 DEBRIS FLOW MITIGATION  
 HISTORIC ROUTE 101 HIGHWAY  
 MULTNOMAH COUNTY**

Designer: Michael Bunn  
 Drafter: Erik Webster  
 Reviewer: George Machan  
 Checker: Gerry Healin

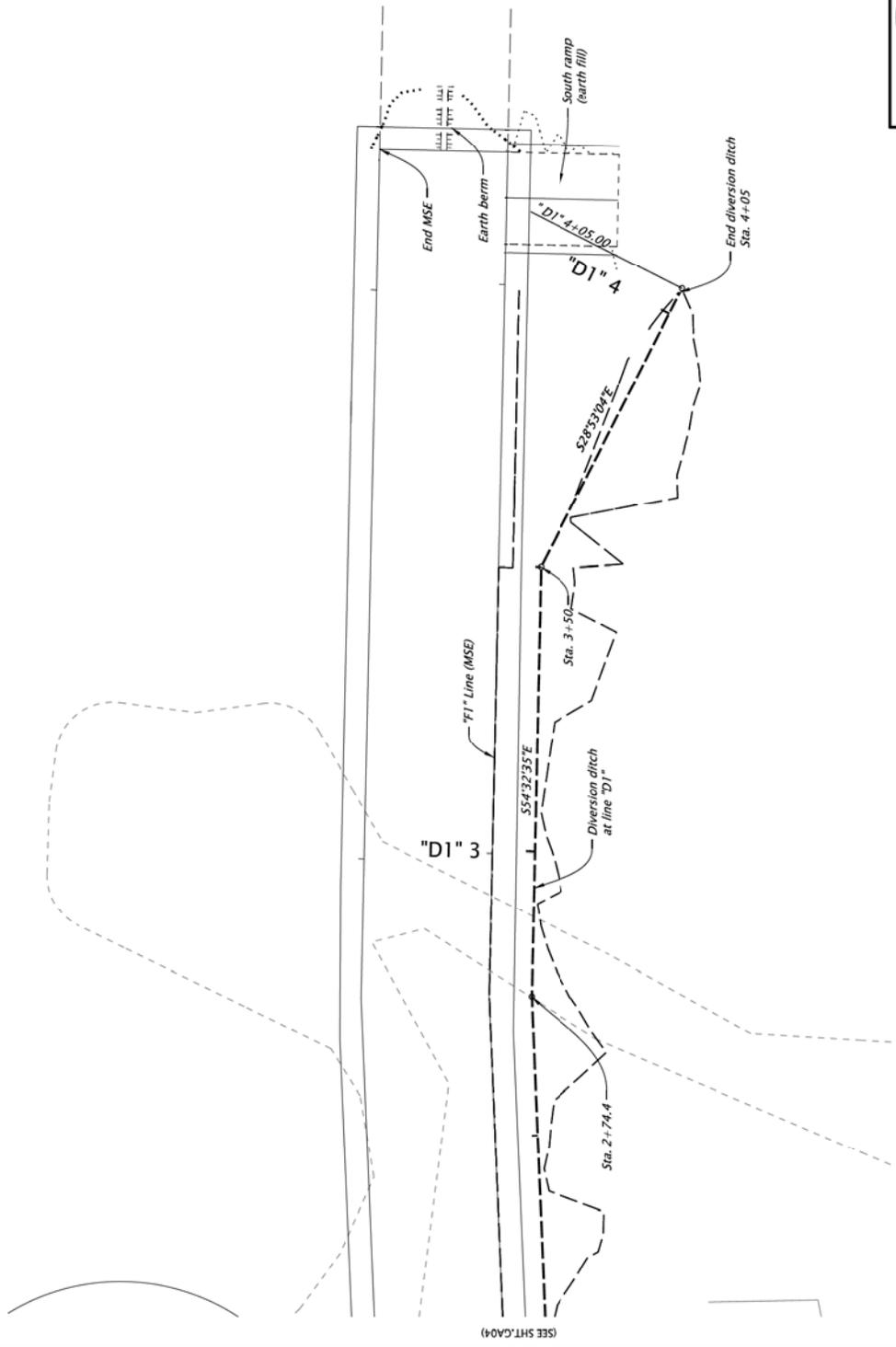
**DIVERSION DITCH PLAN**  
 SHEET NO.  
 GA04

Rotation: 325.799' Scale: 1"=20'

REGISTERED PROFESSIONAL  
 ENGINEER  
 89,023

MICHAEL D. BUNN  
 OREGON  
 January 11, 2022

REVISIONS: 12-31-2023  
 FINAL ELECTRONIC DOCUMENT  
 AVAILABLE FOR REQUEST



**CORN FORTH**  
CONSULTANTS  
10250 S.W. Greenberg Road, Suite 111  
Portland, Oregon 97225  
Phone: 503-654-1100 Fax: 503-484-1328

REGISTERED PROFESSIONAL  
ENGINEER  
89,023  
OREGON  
January 11, 2022  
MICHAEL D. BUNN

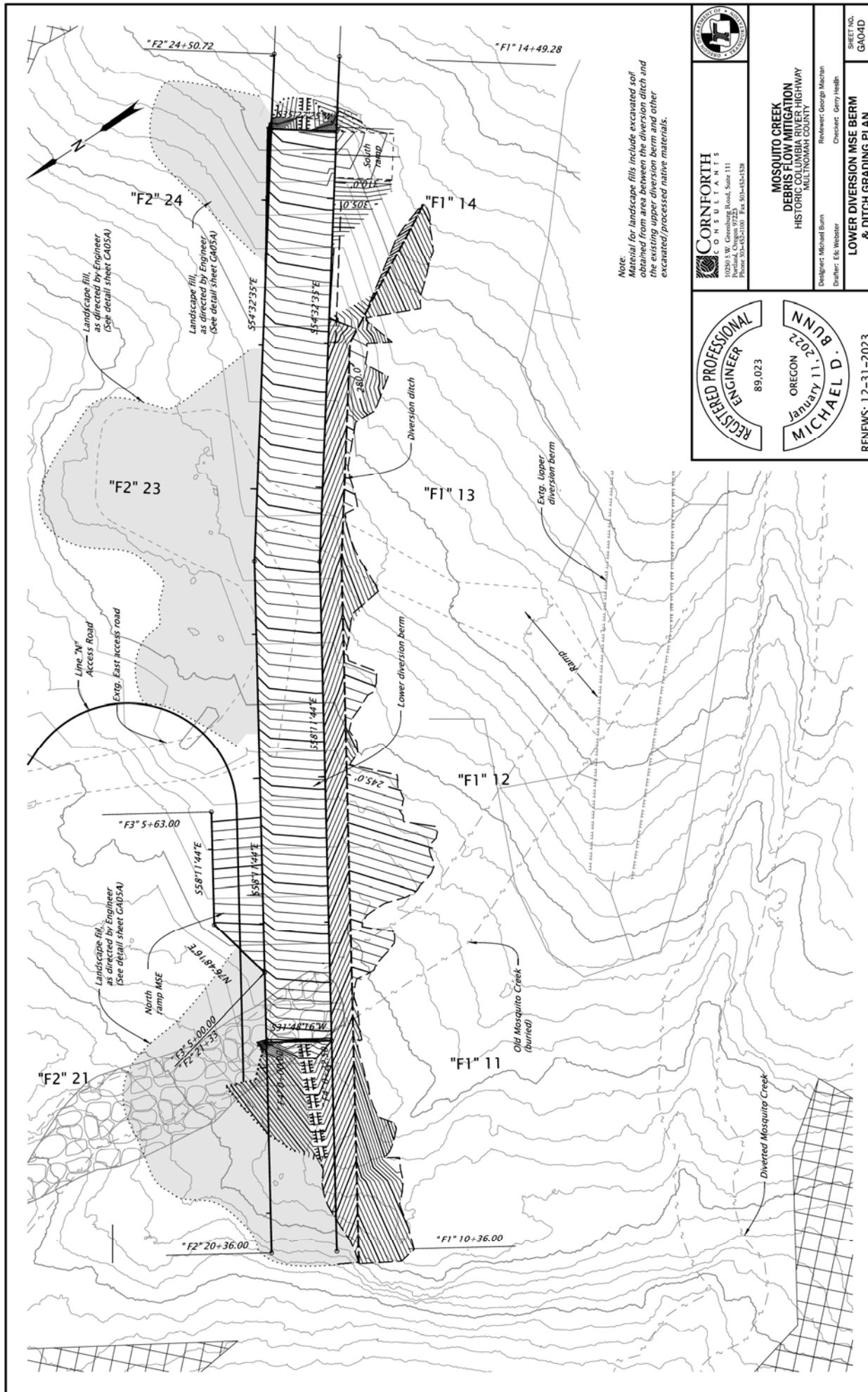
**MOSQUITO CREEK  
DEBRIS FLOW MITIGATION  
HISTORIC HIGHWAY  
RECONSTRUCTION**  
MULTNOMAH COUNTY

REVISIONS: 12-31-2023  
FINAL ELECTRONIC DOCUMENT  
AVAILABLE FOR REQUEST

Designer: Michael Bunn  
Draftsman: Erik Webster  
Reviewer: George Maclean  
Checker: Gerry Heblin

DIVERSION DITCH PLAN  
SHEET NO.  
GA04B

Rotation: 325.799' Scale: 1"=20'



Note: Material for landscape fills include excavated soil obtained from area between the diversion ditch and the existing upper diversion berm and other excavated/processed native materials.

**CORN FORTH CONSULTANTS**  
 10250 S.W. Greenberg Road, Suite 111  
 Portland, Oregon 97223  
 Phone: 503-452-1100 Fax: 503-452-1528

**MOSQUITO CREEK DEBRIS FLOW MITIGATION**  
 HISTORIC HIGHWAY MULTNOMAH COUNTY

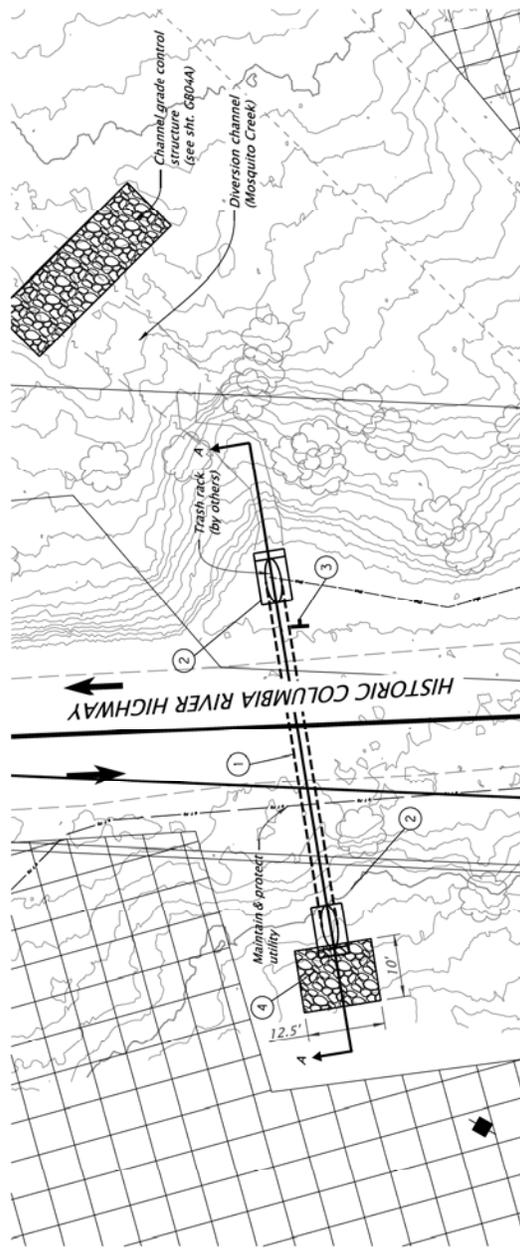
Designer: Michael Burn  
 Drafter: Erik Webster  
 Reviewer: George MacLean  
 Checker: Gerry Healin

**LOWER DIVERSION MSE BERM & DITCH GRADING PLAN**

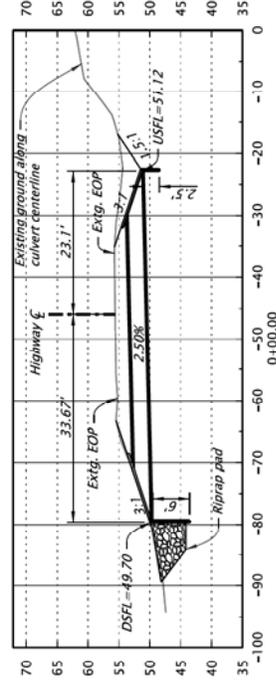
SHEET NO. GA04D

REGISTERED PROFESSIONAL ENGINEER  
 89,023  
 MICHAEL D. BURN  
 OREGON  
 January 11, 2022

REVISIONS: 12-31-2023  
 FINAL ELECTRONIC DOCUMENT  
 AVAILABLE UPON REQUEST



- ① M.P. 16.53  
Inst. 30" culv. pipe - 57"  
5' depth  
Class V conc.  
Watertight joints  
7.1' right forward skew  
Trench resurfacing - 12 Sq. Yd.
- ② Const. 30" sloped end - 2  
Const. paved end slope - 94 Sq. Ft.  
(Painted brown)
- ③ Inst. culv. ID marker, Type 2  
DFI no. D050416  
MP 16.51
- ④ Const. riprap pad - 18 cu. yd.  
Loose riprap (agency provided)  
(See Std. Dwg. RD317)



Section A-A  
Profile along 30" culvert centerline

No work area, shown thus:

2601 25th St. SE, Suite 450  
Salem, OR 97302  
P 503-485-5490

**MOSQUITO CREEK  
DEBRIS FLOW MITIGATION  
ALONG HISTORIC COLUMBIA RIVER HIGHWAY**  
MULTNOMAH COUNTY

Revised: Hans Hadley  
Checked: Chris Banner

REGISTERED PROFESSIONAL ENGINEER  
77.018  
OREGON  
JANUARY 9, 2007  
**HANS R. HADLEY**

SHEET NO.  
**HA01**

**CULVERTS**

Revision: 06-30-2023

Scale: 1"=20'