SEE SHEET C1602 FOR ADDITIONAL NOTES

ISSUED FOR CONSTRUCTION
Proposed Work: Project entrance to be constructed within shaded area. Construction entrance to be constructed in accordance with ODOT specifications (i.e., placement of geotextile fabric and a minimum of 8" of aggregate). The entrance will be approximately 50-100' feet from OR66 and 18 feet wide. Two trees will be removed on the west side and 3 trees on the east side of the proposed entrance.

SEE SHEET C1602 FOR ADDITIONAL NOTES

<table>
<thead>
<tr>
<th>Site Condition</th>
<th>Minimum Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active period</td>
<td>On initial date that construction activities commence.</td>
</tr>
<tr>
<td></td>
<td>After 30 days, no construction activities.</td>
</tr>
<tr>
<td></td>
<td>After 90 days, no construction activities.</td>
</tr>
<tr>
<td></td>
<td>After 180 days, no construction activities.</td>
</tr>
</tbody>
</table>

The inspector may require the frequency of inspections in any area of the site where the following activities are scheduled to take place: excavation, backfilling, placement of utility lines, placement of asphalt, concrete, or other materials, and placement of vegetation or other materials. The inspector may also require the frequency of inspections in any area of the site where the following activities are scheduled to take place: excavation, backfilling, placement of utility lines, placement of asphalt, concrete, or other materials, and placement of vegetation or other materials.

Trees to Be Removed
Gravel Coverage
Access Routes

Lower Klamath Project
OR-66 and North Access Rd #3 (Intersection 3)
<table>
<thead>
<tr>
<th>Site Condition</th>
<th>Minimum Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Active points</td>
<td>Every 10 days at the beginning of construction.</td>
</tr>
<tr>
<td>2. Engineered or temporary non-engineered ditches</td>
<td>Every 10 days at the beginning of construction.</td>
</tr>
<tr>
<td>3. Geosynthetic or other temporary ditches</td>
<td>Once per month.</td>
</tr>
<tr>
<td>4. Trenches and other tree stumps</td>
<td>As needed.</td>
</tr>
<tr>
<td>5. Ditch stabilization</td>
<td>Every 10 days at the beginning of construction.</td>
</tr>
</tbody>
</table>

NOTES:
- **1.** The permitting and design phase is the responsibility of the general contractor, which is a prerequisite to the issuance of the permit. (Sections 2.1.1 and 2.2.16)
- **2.** Erosion and sedimentation controls in the studies for the Oregon Department of Environmental Quality. (Section 2.2.20 and 2.2.21)
- **3.** The permit requirements are applicable to all temporary and permanent sediment control measures. (Section 2.2.17)
- **4.** The ESCP must be submitted to DEQ or Agent within 10 days. (Section 4.9)

Klamath River Renewal Project
Recreation Facility Temporary & Permanent Erosion & Sediment Control Plan

### Key Map

- **PLAN**
- **ISSUED FOR CONSTRUCTION**

![Map of KCARD Renewal Project]

**KLAMATH RIVER RENEWAL PROJECT**

**J.C. ROYLE RECREATION FACILITY TEMPORARY & PERMANENT EROSION & SEDIMENT CONTROL PLAN**

**ISSUED FOR CONSTRUCTION**
SEE SHEET C7600 FOR ADDITIONAL NOTES
TRANSMISSION POLES REMOVAL:

1. POLES TO BE ACCESSED VIA ALL-TERRAIN VEHICLES AND CREW MEMBERS. NO BLADING OR GRADING TO BE PERFORMED.

2. POLES WILL BE CUT APPROXIMATELY 6 INCHES BELOW SURFACE AND REMOVED. SURFACE WILL BE BACKFILLED AND COMPACTED WITH NATIVE SOIL.

3. POLES WILL BE CARRIED OR DRAGGED DOWN THE HILLSIDE TO AN EXISTING ACCESS POINT OR ROAD.
EROSION AND SEDIMENT CONTROL PLAN

JC BOYLE RESERVOIR - PIONEER PARK WEST/PIER REMOVAL AND SPENCER CREEK STAGING

KLAMATH, OREGON

SITE INFORMATION

TYPE OF DEVELOPMENT:

RESTORATION (KLAMATH RIVER AND RIPARIAN AREAS)

CONSTRUCTION ACTIVITY WILL CONSIST OF:

A. RESTORATION OF KLAMATH RIVER AND RESERVOIR AREAS BELOW THE EXISTING NORMAL OPERATING POOL ELEVATION (NOPE).
B. CLEARING AND GRADING OF SELECT WORK AREAS, STAGING AREAS, AND ACCESS ROADS

PROJECT TIMELINE

BEGINNING DATE: MARCH (TB), 2023
COMPLETION DATE: MONTH/TB), 2026

PROJECT SITE AREAS:

TOTAL AREA: 103.0 AC
DISTURBED AREA: 9.8 AC
PERCENT OF SITE DISTURBED: 9.8%

ONSITE SOIL TYPES:

MUD HORT COMPLEX: 11.7 35 PERCENT SLOPES
GRAYTONE PINEHURST COMPLEX: 13 TO 35 PERCENT
NORTH SLOP
RAIN GAUGE

PALER PARK, OR ARTIFICIAL RAIN GAUGE

HYPERLINK:


BUSINESS DAYS/HOURS:

MONDAY TBD
TUESDAY TBD
WEDNESDAY TBD
THURSDAY TBD
FRIDAY TBD
SATURDAY TBD
SUNDAY TBD

LEGEND:

1. SECURITY FENCE
2. SILT FENCE
3. STRAW BALE
4. PROPOSED ACCESS ROAD
5. LIMITS OF DISTURBANCE
6. EROSION SAPPILS
7. CONSTRUCTION WIRE/WIRE EMBARKMENT DESIGNER
8. RESERVOIR DEPENDENT WETLANDS
9. RESERVOIR INDEPENDENT WETLANDS
10. RESERVOIR RESTORATION AREA
11. VEGETATION RESTORATION AREA
12. ABOVE GROUND STORAGE CONTAINER AND WASTE STORAGE
13. CONCRETE WASHOUT AREA
14. PUMPED SEDIMENT FENCE
15. STRAW WATELLS
16. ROAD SWEEPING
17. SPILL KIT ONSITE
18. STABILIZATION
19. VEGETATION
20. DUST CONTROL
21. TEMPERED STABILIZATION (STRAW Mulch-Hydroseeded)
22. PERMANENT STABILIZATION
23. BUFFER ZONE (FROM WETLANDS)
24. PRESERVE NATURAL VEGETATION
25. PREVENTATIVE SEDIMENT CONTROL

BMP MATRIX FOR CONSTRUCTION PHASE

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PHASE/BMP</th>
<th>CLEARING AND GRADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023-2025</td>
<td>C</td>
<td>X</td>
</tr>
</tbody>
</table>

PROJECT SITE AREAS:

BLY-ROYST COMPLEX, 1 TO 35 PERCENT SLOPES
PARKER MOUNTAIN, OR ARFO3 RAIN GAUGE

TOTAL AREA: 50.63 AC
DISTURBED AREA: 4.59 AC

ONSITE SOIL TYPES:

GREYSTOKE-PINEHURST COMPLEX, 12 TO 35 PERCENT
KLAMATH RIVER RENEWAL

BMP INSTALLER/MAINTAINER:

GEOTECHNICAL ENGINEER

RESOURCES ENVIRONMENTAL SOLUTIONS (RES)

CONSTRUCTION ACTIVITY WILL CONSIST OF:

A. RESTORATION OF KLAMATH RIVER AND RESERVOIR
B. CLEARING AND GRADING OF SELECT WORK AREAS, STAGING AREAS, AND ACCESS ROADS

SITE INFORMATION

TYPE OF DEVELOPMENT:

KLAMATH RIVER RENEWAL

INSPECTION FREQUENCY:

SITE CONDITION

MINIMUM FREQUENCY

ACTIVE PERIOD

THE PERIOD DURING WHICH CONSTRUCTION ACTIVITIES OCCUR. CONSTRUCTION ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, CLEARING, GRADING, STABILIZATION, EROSION CONTROL, SITE PREP, AND UTILITIES INSTALLATION. THE PERIOD DURING WHICH CONSTRUCTION ACTIVITIES OCCUR MAY REQUIRE INCREASED MONITORING DUE TO THE FREQUENCY AND VOLUME OF CONSTRUCTION ACTIVITIES.

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THE PERIOD DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.

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THE PERIOD DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER MAY REQUIRE INCREASED MONITORING DUE TO THE FREQUENCY AND VOLUME OF CONSTRUCTION ACTIVITIES.
1. Hold a pre-construction meeting of project construction personnel that includes the inspector to discuss erosion and sediment control measures and construction limits.

2. All inspections must be made in accordance with permit requirements (Section 6.5).

3. Inspection logs must be kept in accordance with permit requirements (Section 6.5).

4. Retain a copy of the ESCP and all revisions on site and make available on request to agent or designated representative (Section 4.7).

5. All permit revisions must implement the ESCP failure to implement any of the control measures or practices described in the ESCP is a violation of the permit (Section 4.9 and 4.11).

6. The ESCP must be accurate and reflect site conditions (Section 2.2.19).

7. Submission of all ESCP revisions is not required. Submittal of the ESCP revisions is only under specific conditions. Submit all necessary revision to DEQ at or before 10 days (Section 4.8).

8. Phase clearing and grading to the maximum extent practical to prevent erosion of inactive areas from becoming a source of erosion (Section 2.2).

9. Identify, mark, and protect (by fencing off or other means) critical riparian areas and vegetation including important trees and associated rooting zones and vegetation areas to be preserved. Identify vegetation buffer zones between the site and sensitive areas (e.g. wetlands) and other areas to be preserved, especially in perimeter areas (Section 2.2).  

10. Preserve existing vegetation when practical and re-vegetate open areas. Re-vegetate open areas when practicable before and after grading or construction. Identify the type of vegetation seeded used (Section 2.2.6).

11. Maintain and delineate any existing natural buffer within the 50 feet of waters of state Section 2.2.4 except as noted where maintaining buffer zones for the reservoir are necessary in infill areas (depending on schedule and phasing).

12. Install perimeter sediment control, including storm drain inlet protection as well as sediment basins, traps, and filters prior to the start of construction (Section 2.3).  

13. Control peak flow rates and total stormwater volume, to minimize erosion at outlet and downstream channels and streambanks (Section 2.1.1 and Section 2.2).

14. Control sediment as needed along the site perimeter and at all operational internal storm drain inlets at all times during construction, both internally and at the site boundary (Section 2.1.2 and Section 2.1.3).

15. Apply temporary and/or permanent soil stabilization measures immediately on all disturbed areas as grading progresses. Temporary or permanent stabilization measures are not required for areas that are intended to be left unvegetated such as dirt access roads or utility pole pads (Section 2.2.20 and Section 2.2.21).

16. Establish material and waste storage areas, and other non-stormwater controls (Section 2.3.1).  

17. Prevent tracking of sediment onto public of private roads using BMPs such as: gravelled (or paved) exits and parking areas, gravel all unpaved roads located onsite, or use an exit tire wash. These BMPs must be in place to prevent land-disturbing activities (Section 2.2.7).

18. When trucking saturated soils from the site, either use water-tight trucks or drain landslots on site (Section 2.2.7).

19. Control prohibited discharges from leaving the construction site, i.e., concrete washout, wastewater from cleanout of storm, paint and curing compounds (Section 1.5 and Section 2.2.9).

20. Use BMPs to prevent or minimize stormwater discharge to pollutants from spills. Vehicle and equipment fueling, maintenance, and storage, other cleaning and maintenance activities: waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils and chemicals. 

21. Implement the following BMPs when applicable: written spill prevention and response procedures, employee training on spill procedures, spills in area designated spill recovery stations, waste storage, and spill equipment (Section 2.2.10).

22. If an active treatment system for example, electrocoagulation, flocculation, filtration, etc., for sediment or other pollutant removal, is employed. Submit an operation and maintenance plan including system schematics, manufacturer’s specifications, and system efficacy data (Section 2.2.12).

23. The application rate of fertilizers to reestablish vegetation must be within the manufacturer’s recommendations to minimize nutrient releases to surface waters (Section 2.2.14).

24. If a hydraulic treatment system (for example, electrocoagulation, flocculation, filtration, etc.) for sediment or other pollutant removal, is employed. Submit an operation and maintenance plan including system schematics, manufacturer’s specifications, and system efficacy data (Section 2.2.12).

25. Temporarily stabilize soils at the end of the shift before holding and/or adjacent grading or construction. Site soils must be responsible for ensuring that soils are stable during rain events at all times of the year (Section 2.3).

26. As needed based on weather conditions, at the end of each workday soil stockpiles must be stabilized or covered. Other BMPs must be implemented to prevent discharges to surface waters or conveyance systems leading to surface water (Section 2.3).

27. Segment fence, remove trapped sediment before it reaches one third of the above ground height and before fence removal (Section 2.3).

28. Security fence, remove trapped sediment before it reaches one third of the above ground height and before fence removal (Section 2.3).

29. Other sediment barriers (such as bioaobs): remove sediment before it reaches two inches depth above ground height and before BMP removal (Section 2.3).  

30. With in 24 hours, significant sediment that has left the construction site, must be remediated. Investigate the cause of the sediment release and implement steps to prevent recurrence of the discharge within the same 24 hours. Any in-stream cleanup of sediment shall be performed according to the Oregon division of state lands required time frame (Section 2.3.10).

31. The intentional washing of sediment into storm sewers or drainage ways must not occur. Vaccuubing or dry sweeping and material pickup must be used to clean up released sediments (Section 2.3.19).

32. Provide temporary sediment control practices until permanent sediment control or other cover of base areas are established. Once construction is complete and the site is stabilized, all temporary erosion controls and retained soils must be removed and disposed of properly. Unless required for long-term use following termination of permit coverage (Section 2.2.21).

33. Keep waste container lids closed when not in use and close lids at the end of the business day for those containers that are actively used throughout the day. For waste containers that do not have lids, provide either (i) a cover (e.g., a tarp, plastic sheeting, temporary roof) to prevent exposure of wastes to precipitation; or (b) a similar effective means designed to prevent the discharge of pollutants (e.g., secondary containment) (Section 2.3.2).

34. Ensure that steep slope areas where construction activities are not occurring are not disturbed (Section 2.3.3).

35. Provide a dewatering plan for accumulated water from precipitation and uncontaminated groundwater seepage due to shallow excavation activities (See section 2.4).

36. If implementing a sediment basin, provide plans for sediment basins that have been designed for Section 2.3.4 and stpped by an Oregon professional engineer (See section 2.3.4).

37. Document any portions of the site where land disturbing activities have permanently ceased or will be temporarily inactive for no more than 24 hours (Section 2.3.4).

38. Document any portion(s) of the site where land disturbing activities have permanently ceased or will be temporarily inactive for no more than 24 hours (Section 2.3.4).

39. Provide the following:

   1. Base ESC measures (inlet protection, perimeter sediment control, gravel, construction entrance, etc.) must be in place, functional, and approved in accordance with commencement of construction activities (Section 2.2.1).  

   2. Sediment barriers approved for use include sediment fence, straw wattles, flexible sediment controls such as tarp, berms, or other similar materials (Section 2.2.1).

   3. Sensitive resources including, but not limited to, trees, wetlands, and riparian protection areas shall be clearly delineated with orange fencing (Section 2.2.1).

   4. Construction entrances shall be installed at the beginning of construction and maintained for the duration of construction activities. In addition, all other activities including, but not limited to, street, parking, and construction activities must be designed to prevent erosion and sedimentation (Section 2.2.4).

   5. Run-on and run-off shall be in place and functioning prior to beginning substantial construction activities (run-on control, run-off control, check dams, water bars, fiber rolls, diversion pipes, ditches, and down spout) (Section 2.2.5).

Erosion & Sediment Control BMP Implementation:

1. All base ESC measures (inlet protection, perimeter sediment control, gravel, construction entrance, etc.) must be in place, functional, and approved in accordance with commencement of construction activities (Section 2.2.1).  

2. Sediment barriers approved for use include sediment fence, straw wattles, flexible erosion controls such as tarp, berms, or other similar materials (Section 2.2.1).

3. Sensitive resources including, but not limited to, trees, wetlands, and riparian protection areas shall be clearly delineated with orange fencing (Section 2.2.1).

4. Construction entrances shall be installed at the beginning of construction and maintained for the duration of construction activities. In addition, all other activities including, but not limited to, street, parking, and construction activities must be designed to prevent erosion and sedimentation (Section 2.2.4).

5. Run-on and run-off shall be in place and functioning prior to beginning substantial construction activities (run-on control, run-off control, check dams, water bars, fiber rolls, diversion pipes, ditches, and down spout) (Section 2.2.5).
1. IF VEGETATIVE COVER EXISTS, THEN REESTABLISH VEGETATIVE COVER PER BMP MANUAL 2.3. AREA TO BE RESTORED THROUGH PRESERVATION OR REPLACEMENT OF TOPSOIL OR NATIVE SEED.

2. EXISTING ACCESS ROAD TO BE STABILIZED WITH GRAVEL AGGREGATE PER 1200-C SECTION 2.2.20 AND 2.2.21.

3. ALL PERIMETER SEDIMENT FENCING AND STRAW WATTLES TO BE REMOVED UPON COMPLETION OF THIS PHASE. BIODEGRADABLE WATTLES AND/OR WATER BARS TO REMAIN IN PLACE ON THE ROADS.

4. PHASE SCHEDULE:
START: TBD
FINISH: 2030

LEGEND:
- SECURITY FENCE
- SILT FENCE
- OPEN WATTLE
- PROPOSED ACCESS ROAD
- LIMITS OF DISTURBANCE
- LIMITS OF WORK
- SLOPE DRAIN
- ALIGNED DIRECTION
- VEGETATION RESTORATION AREA
- PROPOSED STAGING AREA
- PROPOSED DISPOSAL CUT AREA
- CONSTRUCTION ENTRANCE
- RESERVOIR DEPENDENT WETLANDS
- ENERGY DISSIPATOR

EXISTING DUCK HIDE
SPENCER CEMETERY
EXISTING ACCESS ROAD TO BE STABILIZED WITH GRAVEL AGGREGATE (1200-C SECTION 2.2.20 AND 2.2.21)

UNNAMED ACCESS ROAD TO KENO ROAD
PROPOSED STAGING AREA TO BE RETURNED TO PREEXISTING CONDITIONS

JC BOYLE RESERVOIR

1. REESTABLISH VEGETATIVE COVER (BMP 2.3)
PROPOSED TEMPORARY ACCESS ROAD. ROAD TO BE RETURNED TO PREEXISTING CONDITIONS

ALL FENCING AND BMPS TO BE REMOVED

CAN YOU SEE THE AIRPLANES? THE ADJACENT SAMPLES SHOW THREE DIFFERENT LEVELS OF SHADING. SETTINGS FOR VIEWING AND PRINTING DRAWING CONTENT ARE OPTIMIZED WHEN ALL THREE PLANES ARE VISIBLE. THIS GUIDANCE IS PROVIDED FOR REFERENCE ONLY.
RESTORATION AND CONSTRUCTION - FINAL

STABILIZATION NOTES:

1. If vegetative cover exists, then reestablish.
   Vegetative cover may be removed if it is no longer needed.
2. All existing access roads to be stabilized per 1200-C Section 2.2.20 and 2.2.21.
3. All perimeter sediment fences and straw wattles to be removed upon completion of this phase.
4. All perimeter sediment fences and straw wattles to remain in place on the roads.
5. All biodegradable wattles and/or water bars to remain in place on the roads.

SPECIFICATIONS:

1. If vegetation cover exists, then reestablish.
2. All existing access roads to be stabilized per 1200-C Section 2.2.20 and 2.2.21.
3. All perimeter sediment fences and straw wattles to be removed upon completion of this phase.
4. All perimeter sediment fences and straw wattles to remain in place on the roads.
5. All biodegradable wattles and/or water bars to remain in place on the roads.
Can you see the airplanes? The adjacent samples show three different levels of shading. Settings for viewing and printing drawing content are optimized when all three planes are visible. This guidance is provided for reference only.
Can you see the airplanes? The adjacent samples show three different levels of shading. Settings for viewing and printing drawing content are optimized when all three planes are visible. This guidance is provided for reference only.

Effective Date: June 1, 2021 - November 30, 2021

TIRE WASH - TYPE 2

Existing Lake Bed

NOTE: Tire wash to drain to existing lake bed