

DEQ Requests Comments on Proposed Water Quality Certification for Marcola Meadows



State of Oregon
Department of
Environmental
Quality

401 Water Quality Certification Program

700 NE Multnomah St.
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Portland, OR 97232
Phone: 503-229-5623
800-452-4011
Contact: Anne Kim

www.oregon.gov/DEQ

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

The Oregon Department of Environmental Quality invites the public to submit written comments on a proposed Section 401 water quality certification for the Marcola Meadows project in Springfield, a city in Lane County.

Summary

Marcola Meadows Neighborhood LLC proposes to construct a residential subdivision north of Marcola Road and west of North 31st Street.

Where can I get more information?

The proposed agreement is provided below. You can review the file in its entirety at the DEQ Northwest Region office located at 700 NE Multnomah St., Suite 600 in Portland. For a review appointment, contact DEQ Permit Coordinator Anne Kim at 503-229-5623 or email anne.kim@deq.state.or.us.

How do I participate?

You may submit your comments by mail or email to:

401 Public Comments
Northwest Region DEQ
700 NE Multnomah St., Suite 600
Portland, OR 97232

Email: 401publiccomments@deq.state.or.us

All comments are due by 5 p.m., Oct. 21, 2021. All comments will become part of the public record.

About the project

Marcola Meadows Neighborhood proposes to impact approximately 875 linear feet of the Pierce Ditch channel by removing about 533 cubic yards of native soil and discharging approximately 400 cubic yards of aggregate bedding and streambed material to develop residential lots on about 40 acres. The construction project will also include associated streets, sidewalks, curbs and gutters, as well as multiuse pathways, stormwater treatment and underground utilities. The applicant is proposing to remove an existing 36-inch culvert crossing to restore a 20-foot-long section of the Pierce Ditch channel for onsite mitigation.

What does a water quality certification do?

One way DEQ protects Oregon's water quality is by issuing Section 401 certifications. Section 401 of the federal Clean Water Act requires federal agencies to obtain a water quality certification from the state if the proposed activity may result in a discharge to surface waters. The certification states that the discharge will comply with applicable sections of the Clean Water Act.

What legal authorities apply?

- Federal Clean Water Act, Section 401
- Oregon Revised Statutes 468B
- Oregon Administrative Rules Chapter 340, Divisions 041 and 048

What happens next?

DEQ may hold a public hearing on the proposal if one is requested by 10 or more people or an organization representing 10 or more members. DEQ will review and consider all comments received. The certification may be issued as proposed, modified or denied.

You will be notified of DEQ's final decision if you submit written comments during the comment period. Otherwise, if you would like to receive notification, please contact Anne Kim at 503-229-5623 or anne.kim@deq.state.or.us.

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.



Oregon

Kate Brown, Governor

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MONTH DAY, YEAR

Kiril Ivanov
Marcola Meadows Neighborhood, LLC
27375 SW Parkway Ave.
Wilsonville, OR 97070

RE: 2020-347; Marcola Meadows 401 Water Quality Certification

The Department of Environmental Quality (DEQ) has reviewed the U.S. Army Corps of Engineers (USACE) Permit application #2020-347 (Department of State Lands [DSL] #63363), pursuant to a request for a Clean Water Act Section 401 Water Quality Certification (WQC) received on June 2nd, 2021. The 401 WQC public comment opportunity was circulated with the DEQ public notice and DEQ received **no** water quality comments.

According to the application, Marcola Meadows Neighborhood LLC (“the Applicant”) proposes to impact “other waters” in order to construct a residential subdivision. The project is located adjacent to Pierce Ditch in, Springfield, Lane County, Oregon (Section 30 / Township 17 South / Range 02 West).

Project Description: The Applicant proposes to develop residential lots on approximately 40 acres (ac) with associated streets, sidewalks, curbs and gutters, multi-use pathways, stormwater treatment, and underground utilities to create affordable residential housing. The project proposes to impact approximately 875 linear feet (lf) of Pierce Ditch and create approximately 7.1 ac of new or redeveloped impervious surface. The applicant is proposing to remove an existing 36-inch culvert crossing to restore a 20-foot-long section of the Pierce Ditch channel as a component of the mitigation plan for onsite mitigation.

Status of Affected Waters of the State: The Pierce Ditch channel is classified as water quality limited under the Federal Clean Water Act and is listed on the Section 303(d) list of impaired water bodies for the parameters of *E. coli* and dissolved oxygen.

In addition, the entire Willamette Basin has a TMDL for all perennial streams and fish-bearing intermittent streams for temperature, bacteria, mercury, Dieldrin, DDT, and turbidity.

The above listed parameters impair the following beneficial uses in the Pierce Ditch channel: Private domestic water supply and public domestic water supply. Additional beneficial uses include: Fishing.

Certification Decision: Based on the information provided by the Applicant and USACE, DEQ is reasonably assured that implementation of the project will be consistent with applicable provisions of Sections 301, 302, 303, 306 and 307 of the federal Clean Water Act, state water quality standards set forth in Oregon Administrative Rules Chapter 340 Division 41 and other appropriate requirements of state law, provided the following conditions are incorporated into the USACE permit and strictly adhered to by the Applicant.

401 WQC GENERAL CONDITIONS

- 1) **Responsible parties:** This 401 WQC applies to the Applicant. The Applicant is responsible for the work of its contractors and subcontractors, as well as any other entity that performs work related to this Water Quality Certification.
Rule: 40 CFR 121, OAR 340-048-0015
Justification: DEQ must be aware of responsible parties to ensure compliance.
- 2) **Work Authorized:** Work authorized by this Order is limited to the work described in the Joint Permit Application signed on May 27, 2021 and additional application materials (hereafter “the permit application materials”), unless otherwise authorized by DEQ. If the project is operated in a manner that’s not consistent with the project description contained in the permit application materials, the Applicant is not in compliance with this Order and may be subject to enforcement.
Rule: OAR 340-048-0015
Justification: To ensure the project will comply with water quality standards, DEQ must understand all work involved in the construction and operation of the project.
- 3) **Duration of Certificate:** This 401 Water Quality Certification for impacts to waters, including dredge and fill activities, is valid for **five** years from the date of issuance of the USACE 404 permit. A new or modified 401 WQC must be requested before any modification of the USACE 404 permit. Post construction stormwater facilities must be maintained for the life of the facility.
Rule: 40 CFR 121
Justification: Certification is required for any license or permit that authorizes an activity that may result in a discharge.
- 4) **401 WQC on Site:** A copy of this 401 Water Quality Certification letter must be kept on the job site and readily available for reference by the Applicant and its contractors and subcontractors, as well as by DEQ, US Army Corps of Engineers, National Marine Fisheries Service, Oregon Department of Fish and Wildlife and other state and local government inspectors.
Rule: OAR 340-012
Justification: All parties must be aware of and comply with the 401 WQC, including on-site contractors.
- 5) **Modification:** Any approved modifications to this certification, including a change of ownership, will incur a Tier 1 fee of \$985 at a minimum. A higher fee may be assessed for complex modifications.
Rule: OAR 340-048-0050
Justification: To ensure the project will comply with water quality standards, DEQ must understand all work involved in the construction and operation of the project.
- 6) **Notification:** The Applicant must notify DEQ of any change in ownership or control of this project within 30 days, and obtain DEQ review and approval before undertaking any change to the project that might affect water quality.

Rule: OAR 340-048-0050

Justification: To ensure the project will comply with water quality standards, DEQ must understand all work involved in the construction and operation of the project.

- 7) **Project Changes:** DEQ may modify or revoke this certification, in accordance with Oregon Administrative Rules 340-048-0050, if the project changes or project activities are having an adverse impact on state water quality or beneficial uses, or if the Applicant violates any of the conditions of this certification.

Rule: OAR 340-048-0050

Justification: To ensure the project will comply with water quality standards, DEQ must understand all work involved in the construction and operation of the project.

- 8) **Access:** The Applicant and its contractors must allow DEQ access to the project site with or without prior notice, including staging areas, and mitigation sites to monitor compliance with these certification conditions, including:

- a. Access to any records, logs, and reports that must be kept under the conditions of this certification;
- b. To inspect best management practices, monitoring or equipment or methods; and
- c. To collect samples or monitor any discharge of pollutants.

Rule: OAR 340-012

Justification: DEQ must inspect facilities for compliance with all state rules and laws.

- 9) Failure of any person or entity to comply with this order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.

Rule: OAR 340-012

Justification: If the project is not being constructed or operated as proposed, it may not be consistent with water quality requirements.

CONSTRUCTION SPECIFIC CONDITIONS

- 10) **Erosion Control:** During construction, erosion control measures must be implemented to prevent soil from reaching waters of the state. The Applicant is required to develop and implement an effective erosion and sediment control plan. Refer to DEQ's Oregon Sediment and Erosion Control Manual, January, 2013 at:

<https://www.oregon.gov/deq/FilterPermitsDocs/ErosionSedimentControl.pdf>

A project that disturbs one acre or more may be required to obtain a National Pollutant Discharge Elimination System 1200-C construction stormwater general permit. Contact the DEQ Stormwater Program for more information at:

<https://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Construction.aspx>

In addition, the Applicant, unless otherwise authorized by DEQ in writing must:

- a. Maintain an adequate supply of materials necessary to control erosion at the construction site
- b. Prohibit erosion of stockpiles. Deploy compost berms, impervious materials, or other effective methods during rain or when stockpiles are not moved or reshaped for more than 48 hours.

- c. Inspect erosion control measures daily and maintain erosion control measures as often as necessary to ensure the continued effectiveness of measures. Erosion control measures must remain in place until all exposed soil is stabilized;
 - i. If monitoring or inspection shows that the erosion and sediment controls are ineffective, the Applicant must act immediately to make repairs, install replacements, or install additional controls as necessary.
 - ii. If sediment has reached a third of the exposed height of a sediment or erosion control, the Applicant must remove the sediment to its original contour.
- d. Use removable pads or mats to prevent soil compaction at all construction access points through, and staging areas in, riparian or wetland areas to prevent soil compaction, unless otherwise authorized by DEQ.
- e. Flag or fence off wetlands not specifically authorized to be impacted to protect from disturbance and/or erosion.
- f. Place dredged or other excavated material on upland areas with stable slopes to prevent materials from eroding back into waterways or wetlands.
- g. Place clean aggregate at all construction entrances, and utilize other best management practices, including, but not limited to truck or wheel washes, when earth-moving equipment is leaving the site and traveling on paved surfaces. Vehicles are prohibited from tracking sediment off site.
- h. This certification does not authorize the placement of best management practices into waters of the state unless specifically outlined in the application and authorized by DEQ.
- i. Upon completion of construction activities, stormwater facilities must be inspected and adequately prepared for post-construction stormwater treatment.
- j. Upon completion of construction activities, stormwater facilities must be tested to ensure they are working and adequately prepared for post-construction stormwater treatment.

Rule: OAR 340-041-0007(8), ORS 468B.050, CWA Section 402, OAR 340-045
Justification: DEQ must ensure that pollution does not enter waterways.

- 11) **Deleterious waste materials:** The Applicant is prohibited from placing biologically harmful materials and construction debris where they could enter waters of the state, including wetlands (wetlands are waters of the state). This includes, but is not limited to: petroleum products; chemicals; cement cured less than 24 hours; welding slag and grindings; concrete saw cutting by-products; sandblasted materials; chipped paint; tires; wire; steel posts; asphalt; and waste concrete.

The Applicant must:

- a. Cure concrete, cement, or grout for at least 24 hours before any contact with flowing waters;
- b. Use only clean fill, free of waste and polluted substances;

- c. Employ all practicable controls to prevent discharges of spills of harmful materials to surface or groundwater;
- d. Maintain at the project construction site, and deploy as necessary, an adequate supply of materials needed to contain deleterious materials during a weather event;
- e. Remove all foreign materials, refuse, and waste from the project area; and
- f. Employ general good housekeeping practices at all times.

Rule: OAR 340-041-0007(8), ORS 468B.050, CWA Section 402

Justification: DEQ must ensure that pollution does not enter waterways.

12) **Spill Prevention:** The Applicant must have a spill prevention and control plan. The Applicant must fuel, operate, maintain and store vehicles and equipment, and must store construction materials, in areas that will not disturb native habitat directly or result in potential discharges. In general, reasonable precautions and controls must be used to prevent any discharges of petroleum products or other harmful or toxic materials from entering the water as a result of any in-water activities. In addition, the following specific requirements apply:

- a. Vehicle and motorized equipment staging, cleaning, maintenance, refueling, and fuel storage must take place in a vehicle staging area 150 feet or more from any waters of the state. DEQ may approve in writing exceptions to this distance if all practical prevention measures are employed and this distance is not possible because of any of the following site conditions:
 - i. Physical constraints that make this distance not feasible (e.g., steep slopes, rock outcroppings)
 - ii. Natural resource features would be degraded as a result of this setback
 - iii. Equal or greater spill containment and effect avoidance is provided even if staging area is less than 150 feet away from waters of the state.
- b. If staging areas are within 150 feet of any waters of the state, as allowed under subsection (a)(iii) of this condition, full containment of potential contaminants must be provided to prevent soil and water contamination, as appropriate.
- c. All vehicles operated within 150 feet of any waters of the state must be inspected daily for fluid leaks before leaving the vehicle staging area. Any leaks detected in the vehicle-staging area must be repaired before the vehicle resumes operation.
- d. Before operations begin and as often as necessary during operation, equipment must be steam cleaned (or undergo an approved equivalent cleaning) until all visible oil, grease, mud, and other visible contaminants are removed if the equipment will be used below the bank of a waterbody.
- e. All stationary power equipment (e.g., generators, cranes, stationary drilling equipment) operated within 150 feet of any waters of the state must be covered by an absorbent mat to prevent leaks, unless other suitable containment is provided to prevent potential spills from entering any waters of the state.

- f. An adequate supply of materials (such as straw matting/bales, geotextiles, booms, diapers, and other absorbent materials) needed to contain spills must be maintained at the project construction site and deployed as necessary.
- g. All equipment operated in state waters must use bio-degradable hydraulic fluid.
- h. A maintenance log documenting equipment maintenance inspections and actions must be kept on-site and available upon request.

Rule: ORS 466.645(1); OAR 340-142-0030(1)(b)(B), OAR 340-041

Justification: DEQ must ensure that pollution does not enter waterways and must be protective of beneficial uses, including fish.

13) **Spill & Incident Reporting:**

- a. In the event that petroleum products, chemicals, or any other harmful materials are discharged into state waters, or onto land with a potential to enter state waters, the Applicant must promptly report the discharge to the Oregon Emergency Response System (800-452-0311). The Applicant must immediately begin containment and complete cleanup as soon as possible.
- b. If the project operations cause a water quality problem which results in distressed or dying fish, the Applicant must immediately:
 - i. Cease operations;
 - ii. Take appropriate corrective measures to prevent further environmental damage;
 - iii. Note condition of fish (dead, dying, decaying, erratic, or unusual behavior);
 - iv. Note the number, species, and size of fish in each condition;
 - v. Note the location of fish relative to operations;
 - vi. Note the presence of any apparently healthy fish in the area at the same time;
 - vii. Collect fish specimens and water samples; and
 - viii. Notify DEQ, Oregon Department of Fish and Wildlife, National Marine Fisheries Service and U.S. Fish and Wildlife Service as appropriate (reporting of listed fish mortality to National Marine Fisheries Service is required).

Rule: ORS 466.645(1); OAR 340-142-0030(1)(b)(B), OAR 340-041

Justification: DEQ must ensure that pollution does not enter waterways and must be protective of beneficial uses, including fish.

14) **Vegetation Protection and Restoration:**

- a. The Applicant must protect riparian, wetland, and shoreline vegetation in the authorized project area (as defined in the permit application materials) from disturbance through one or more of the following:
 - i. Minimization of project and impact footprint
 - ii. Designation of staging areas and access points in open, upland areas
 - iii. Fencing and other barriers demarcating construction areas
 - iv. Use of alternative equipment (e.g., spider hoe or crane)
- b. If authorized work results in vegetative disturbance and the disturbance has not been accounted for in planned mitigation actions, the Applicant must successfully reestablish vegetation to a degree of function equivalent or better than before the disturbance. The standard for success is 80 percent cover for native plant species. The vegetation must be reestablished by the completion of authorized work and include:
 - i. Restoring damaged streambanks to a natural slope, pattern, and profile suitable for establishment of permanent woody vegetation, unless precluded by pre-project conditions (e.g., a natural rock wall)
 - ii. Replanting or reseeding each area requiring revegetation before the end of the first planting season following construction
 - iii. Planting disturbed areas with native plants and trees in all cases except where the use of non-native plant materials may be essential for erosion control
 - iv. The use of invasive species to re-establish vegetation is prohibited
 - v. Herbicides, pesticides and fertilizers must be applied per manufacturer's instructions, and only if necessary for vegetation establishment. If chemical treatment is necessary, the Applicant is responsible for ensuring that pesticide application laws, including with the National Pollutant Discharge Eliminations System 2300-A general permit are met. Please review the information on the following website for more information:
<https://www.oregon.gov/deq/wq/wqpermits/Pages/Pesticide.aspx>

Additionally:

1. Unless otherwise approved in writing by DEQ, applying surface fertilizer within stormwater treatment facilities or within 50 feet of any stream channel is prohibited.
2. Other than spot application to cut stems, no herbicides are allowed within stormwater treatment facilities or within 150 feet of waters of the state. Mechanical, hand, or other methods may be used to

control weeds and unwanted vegetation within stormwater treatment facilities or within 150 feet of waters of the state; and

3. No pesticides may be used within stormwater treatment facilities or within 150 feet of waters of the state.
- vi. Install wildlife-friendly fencing as necessary to prevent access to revegetated sites by livestock or unauthorized persons
- vii. Minimize soil compaction, especially in areas that are designated for replanting. If soils are compacted, decompact staging areas and work construction areas prior to replanting. Leave topsoil when possible. Chip materials from clear and grub operation and spread on soil surface, unless cleared areas contained invasive species.

Rule: OAR 340-041, OAR 340-012, OAR 340-041-0033

Justification: Riparian, wetland, and shoreline vegetation help ensure excess sediment does not enter a waterway, and helps offset potential temperature impacts. DEQ must ensure that pollution does not enter waterways.

- 15) **Buffers:** The Applicant shall avoid and protect from harm, all wetlands and provide a 50 foot buffer to waters of the state, unless proposed, necessary, and approved as part of the project. If a local jurisdiction has a more stringent buffer requirement, that requirement will override this certification requirement.

Rule: OAR 340-041, OAR 340-012

Justification: Riparian, wetland, and shoreline buffers help ensure excess sediment does not enter a waterway, and helps offset potential temperature impacts. DEQ must ensure that pollution does not enter waterways.

- 16) **Previously Contaminated Soil and Groundwater:** If any contaminated soil or groundwater is encountered, it must be handled and disposed of in accordance with the soil and groundwater management plan for the site, as well as local, state and federal regulations. The Applicant must notify the Environmental Cleanup Section of DEQ at 800-452-4011 Ex.6258.

Rule: OAR 340-041, OAR 340-012, OAR 340-122, OAR 340-040

Justification: DEQ must ensure that pollution does not enter waterways. As sediments are disturbed, pollutants could become redistributed.

- 17) **Notification to DEQ:** The Applicant must provide pre-construction notification to DEQ one week before construction starts. Contact information can be found at the end of the certification.

Rule: OAR 340-012

Justification: DEQ must inspect facilities for compliance with all state rules and laws.

SPECIFIC CONDITIONS FOR IN-WATER WORK

- 18) **Fish Protection/ Oregon Department of Fish and Wildlife Timing:** The Applicant must perform in-water work only within the Oregon Department of Fish and Wildlife preferred time window as specified in the *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources* (https://www.dfw.state.or.us/lands/inwater/Oregon_Guidelines_for_Timing_of_InWater_Work2008.pdf) or as authorized otherwise under a Department of State Lands

removal/fill permit. Exceptions to the timing window must be recommended by Oregon Department of Fish and Wildlife and/or the National Marine Fisheries Services as appropriate.

Rule: OAR 340-041-0011

Justification: DEQ must be protective of all water quality standards, including beneficial uses such as fish and aquatic life.

- 19) **Aquatic Life Movements:** Any activity that may disrupt the movement of aquatic life living in the water body, including those species that normally migrate through the area, is prohibited. The Applicant must provide unobstructed fish passage at all times during any authorized activity. Exceptions must be reviewed and recommended by Oregon Department of Fish Wildlife and/or the National Marine Fisheries Service as appropriate.
Rule: OAR 340-041-0016; OAR 340-041-0028
Justification: DEQ must be protective of all water quality standards, including beneficial uses such as fish.
- 20) **Cessation of Work:** The Applicant must cease project operations under high-flow conditions that will result in inundation of the project area. Only efforts to avoid or minimize turbidity or other resource damage as a result of inundation of the exposed project area are allowed during high-flow conditions.
Rule: OAR 340-041, OAR 340-012
Justification: DEQ must ensure that pollution does not enter waterways.
- 21) **Turbidity:** The Applicant must implement best management practices to minimize turbidity during in-water work. Any activity that causes turbidity to exceed 10 percent above natural stream turbidity is prohibited except as specifically noted below:
- a. **Monitoring:** Turbidity monitoring must be conducted and recorded as described below. Monitoring must occur at two hour intervals each day during daylight hours when in-water work is being conducted, including while dewatering or work area isolation measures are in place. A properly calibrated Turbidimeter is required.
 - i. **Representative Background Point:** The Applicant must take and record a turbidity measurement every two hours during in-water work at an undisturbed area 100 feet up-current from the in-water disturbance, in order to establish background turbidity levels. The background turbidity, location, date, tidal stage (if applicable) and time must be recorded immediately prior to monitoring down-current at the compliance point described below.
 - ii. **Compliance Point:** The Applicant must monitor every two hours, 100 feet down current from the disturbance, at approximately mid-depth of the waterbody and within any visible plume. The turbidity, location, date, tidal stage (if applicable) and time must be recorded for each measurement.
 - b. **Compliance:** The Applicant must compare turbidity monitoring results from the compliance points to the representative background levels taken during each two hour monitoring interval. Pursuant to Oregon Administrative Rules 340-041-0036, short-term exceedances are allowed as followed:

MONITORING WITH A TURBIDIMETER EVERY 2 HOURS	
TURBIDITY LEVEL	Restrictions to Duration of Activity
0 to 4 NTU above background	No Restrictions
5 to 29 NTU above background	Work may continue maximum of 4 Hours. If turbidity remains 5-29 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
30 to 49 NTU above background	Work may continue maximum of 2 Hours. If turbidity remains 30-49 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
50 NTU or more above background	Stop work immediately and inform DEQ

If an exceedance over the background level occurs, the Applicant must modify the activity and continue to monitor every two hours. **If an exceedance over the background level continues after the second monitoring interval, the activity must stop.** If, however, turbidity levels return to background at or after second monitoring level due to implementation of best management practices or natural attenuation, work may continue with appropriate monitoring as above.

If an exceedance occurs at: 50 NTU or more over background; 30 NTU over background for two hours; or 5-29 NTU over background for eight hours, the activity must stop immediately for the remainder of that 24-hour period.

c. Reporting:

- i. Record all turbidity monitoring required by subsections (a) and (b) above in daily logs which must include: calibration documentation; background NTUs; compliance point NTUs; comparison of the points in NTUs; and location; date; time; and tidal stage (if applicable) for each reading.
- ii. Keep records on file for the duration of the permit cycle.
- iii. Prepare a narrative must be prepared discussing all exceedances with subsequent monitoring, actions taken, and the effectiveness of the actions. The Applicant must make available copies of daily logs for turbidity monitoring to regulatory agencies including DEQ, USACE, NMFS, USFWS, and ODFW upon request. An example turbidity log is attached to this certification.

If turbidity monitoring cannot be conducted due to dry conditions, the Applicant must provide photo documentation with a date and time stamp.

d. Best Management Practices to Minimize In-stream Turbidity: The Applicant must implement the following best management practices, unless accepted in writing by DEQ:

- i. Sequence/Phasing of work – The Applicant must schedule work activities to minimize in-water disturbance and duration of in-water disturbances.

- ii. Bucket control - All in-stream digging passes by excavation machinery and placement of fill in-stream using a bucket must be completed to minimize turbidity. All practical techniques such as employing an experienced equipment operator, not dumping partial or full buckets of material back into the wetted stream, adjusting the volume, speed, or both of the load, or using a closed-lipped environmental bucket must be implemented.
- iii. The Applicant must limit the number and location of stream-crossing events. Establish temporary crossing sites as necessary at the least sensitive areas and amend these crossing sites with clean gravel or other temporary methods as appropriate, to discharge sediments to the waterbody.
- iv. Machinery may not be driven into the flowing channel, unless authorized in writing by DEQ.
- v. Excavated material must be placed so that it is isolated from the water's edge or wetlands, and not placed where it could re-enter waters of the state uncontrolled.
- vi. Containment measures such as silt curtains, geotextile fabric, and silt fences must be in place and properly maintained in order to minimize in-stream sediment suspension and resulting turbidity.

Rule: OAR 340-041-0036, OAR 340-041

Justification: DEQ must ensure that pollution does not enter waterways.

SPECIFIC CONDITIONS FOR POST-CONSTRUCTION STORMWATER MANAGEMENT

- 23) **Post Construction Stormwater Management:** The Applicant must implement and comply with the terms of the approved post-construction stormwater management plan, which describes best management practices to prevent or treat pollution in stormwater anticipated to be generated by the project, in order to comply with state water quality standards. The Applicant must implement best management practices as proposed in the stormwater management plan, including operation and maintenance, dated May 18, 2021. If proposed stormwater facilities change due to site conditions, the Applicant must receive approval in writing from DEQ to make changes.

Stormwater will be treated and infiltrated by the following 3 LID stormwater facilities: LID Facility 3E (202,200 sq. ft.), LID Facility 3W (597,070 sq. ft.), and LID Facility 4 (556,960 sq. ft.). The bottom of the LID facilities will be covered with a 24-inch thick layer of growing medium and planted with grasses, shrubs, and trees. Stormwater runoff up to the 10-year (4.3 inch) design storm will be filtered and infiltrated.

Within 30 days of project completion, the Applicant must submit a copy of the "as-builts" or red-lined construction drawings showing all stormwater management facilities.

Rule: ORS 468B.050, OAR 340-045, OAR 340-041

Justification: DEQ must ensure that pollution does not enter waterways.

- 23) **Stormwater Management & System Maintenance:** The Applicant is required to implement effective operation and maintenance practices for the lifetime of the proposed facility. These include but are not limited to:
- a. Monitoring facilities for signs of groundwater interception, and reconstructing the facilities as needed to prevent interception of sub-surface flow.
 - b. Maintenance techniques and frequency for each system component must follow appropriate recommendations in accepted manuals.
 - c. Long-term operation and maintenance of stormwater treatment facilities will be the responsibility of Marcola Meadows Neighborhood, LLC unless and until an agreement transferring that responsibility to another entity is submitted to DEQ.

Rule: OAR 340-041, OAR 340-012, OAR 340-045

Justification: DEQ must ensure that pollution does not enter waterways.

- 24) **Corrective Action May Be Required:** DEQ retains the authority to require corrective action in the event the stormwater management facilities are not built or performing as described in the plan.

Rule: OAR 340-041, OAR 340-012

Justification: DEQ must ensure that pollution does not enter waterways.

If the Applicant is not satisfied with the conditions contained in this certification, a contested case hearing may be requested in accordance with Oregon Administrative Rule 340-048-0045. Such requests must be made in writing to the DEQ Office of Compliance and Enforcement at 700 NE Multnomah St, Suite 600, Portland Oregon 97232 within 20 days of the mailing of this certification.

The DEQ hereby certifies this project in accordance with the Clean Water Act and state rules, with the above conditions. If you have any questions, please contact Chance Plunk at chance.plunk@deq.state.or.us, by phone at (541) 972-5463, or at 165 E. 7th Ave, Suite 100, Eugene, OR 97404.

Sincerely,

Steve Mrazik
Water Quality Manager
Northwest Region

cc: Daniel Griffith, USACE
Charles Redon, DSL
Julie Wirth-McGee, AKS Engineering & Forestry, LLC



401 Water Quality Certification Turbidity Monitoring Report

Project Name:	USACE Project #	DSL Project #
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Name of Inspector(s):	Turbidimeter Model:	Calibration Standard Type (Circle One) Formazin Solution or Gelex	Calibration Standard Expiration Date:
Sampling Date:	Calibration Values: _____ NTU (Standard) = _____ NTU (Reading) _____ NTU (Standard) = _____ NTU (Reading) _____ NTU (Standard) = _____ NTU (Reading)	*Upstream (Background) Point Location: Latitude: Longitude:	*Downstream (Compliance) Point Location: Latitude: Longitude:

In-Water Work Start Time:	In-Water Work End Time:	Description of In-Water Work:
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Upstream Sample	Downstream Sample		Change in Turbidity (NTU)	Observation of waterbody		NOTES (Describe any modifications made to BMPs)
	Time	Turbidity (NTU)		Tidal Stage	Note any plume, sheen, floatables, color	

* Include a figure with the turbidity sampling forms showing the sampling locations.

Turbidity: The Applicant must implement appropriate Best Management Practices (BMPs) to minimize turbidity during in-water work. Any activity that causes turbidity to exceed 10% above natural stream turbidity is prohibited except as specifically provided below:

Monitoring: Turbidity monitoring must be conducted and recorded as described below. Monitoring must occur at two hour intervals each day during daylight hours when in-water work is being conducted, including while dewatering or work area isolation measures are in place. A properly calibrated turbidimeter is required unless another monitoring method is proposed and authorized by DEQ.

Representative Background Point: The Applicant must take and record a turbidity measurement every two hours during in-water work at an undisturbed area. A background location shall be established at a representative location approximately 100 feet upcurrent of the in water activity unless otherwise authorized by DEQ. The background turbidity, location, date, tidal stage (if applicable) and time must be recorded immediately prior to monitoring downcurrent at the compliance point described below.

Compliance Point: The must monitor every two hours. A compliance location shall be established at a representative location approximately 100 feet downcurrent from the disturbance at approximately mid-depth of the waterbody and within any visible plume. The turbidity, location, date, tidal stage (if applicable) and time must be recorded for each measurement.

Compliance: The Applicant must compare turbidity monitoring results from the compliance points to the representative background levels taken during each two – hour monitoring interval. Pursuant to OAR 340-041-0036, short term exceedances of the turbidity water quality standard are allowed as shown in the monitoring table shown here.

Reporting: The Applicant must record all turbidity monitoring required by subsections (a) and (b) above in daily logs, kept on file for the duration of the permit cycle. The daily logs must include calibration documentation; background NTUs; compliance point NTUs; comparison of the points in NTUs; location; date; time; and tidal stage (if applicable) for each reading. Additionally, a narrative must be prepared discussing all exceedances with subsequent monitoring, actions taken, and the effectiveness of the actions. Applicant must make available copies of daily logs for turbidity monitoring to DEQ, USACE, NMFS, USFWS, and ODFW upon request.

BMPs to Minimize In-stream Turbidity: The Applicant must implement the following BMPs, unless otherwise accepted by DEQ:

- i. Sequence/Phasing of Work – The Applicant must schedule work activities so as to minimize in-water disturbance and duration of in-water disturbances;
- ii. Bucket control - All in-stream digging passes by excavation machinery and placement of fill in-stream using a bucket must be completed so as to minimize turbidity. All practicable techniques such as employing an experienced equipment operator, not dumping partial or full buckets of material back into the wetted stream, adjusting the volume, speed, or both of the load, or using a closed-lipped environmental bucket must be implemented;
- iii. The Applicant must limit the number and location of stream-crossing events. Establish temporary crossing sites as necessary in the least sensitive areas and amend these crossing sites with clean gravel or other temporary methods as appropriate;
- iv. Machinery may not be driven into the flowing channel, unless authorized by DEQ; and
- v. Excavated material must be placed so that it is isolated from the water edge or wetlands, and not placed where it could re-enter waters of the state uncontrolled.

MONITORING WITH A TURBIDIMETER EVERY 2 HOURS	
TURBIDITY LEVEL	Restrictions to Duration of Activity
0 to 4 NTU above background	No Restrictions
5 to 29 NTU above background	Work may continue maximum of 4 hours. If turbidity remains 5-29 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
30 to 49 NTU above background	Work may continue maximum of 2 hours. If turbidity remains 30-49 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
50 NTU or more above background	Stop work immediately and inform DEQ