

# MARION COUNTY PUBLIC WORKS TOTAL MAXIMUM DAILY LOAD Annual Report

July 1, 2021- June 30, 2022 Permit: #102905 | File: #113608



## TABLE OF CONTENTS

Table of Contents	3
Acronyms	4
Status Report	5
Overview	5
Outreach	6
Pet Wastes	6
Parks Facilities & Waste Reduction	6
Septic Installation & Maintenance	7
Vegetation Management	7
Riparian Restoration	7
Tables	8
Table A: TMDL BMPs for Middle Willamette and Pudding Molalla Watersheds	8
Table B: TMDL BMP Assessment Parameters	9
Goals	10
Implementation of Current & New Requirements	10
Appendices	11
Appendix A: Stormwater Management Area Map	12
Appendix B: 2021-2022 NPDES Annual Report	14

## ACRONYMS

- BMP Best Management Practice
- DEQ Department of Environmental Quality
- DMA Designated Management Agency
- MC Marion County
- MCPW Marion County Public Works
- MS4 Municipal Separate Storm Sewer System
- NPDES National Pollutant Discharge Elimination System
- O2WA Oregon Onsite Wastewater Association
- OWS Onsite Wastewater Specialist
- SWMP Stormwater Management Plan
- TMDL Total Maximum Daily Load

## STATUS REPORT

### OVERVIEW

Marion County (MC) is recognized by the Oregon Department of Environmental Quality (DEQ) as a Designated Management Agency (DMA) for the Total Maximum Daily Loads (TMDLs) of the Middle-Willamette, Molalla-Pudding, and North Santiam Subbasins. As such, the County is responsible for submitting a TMDL Implementation Plan that addresses actions that the County will take to reduce the impact of the named non-point source pollutants. Marion County is currently implementing the updated TMDL Implementation Plan for the Middle Willamette and Molalla-Pudding Basins. While the plans are created for specific watersheds, MC implements most BMPs countywide and therefore the BMPs will not be designated by watershed. Tables A and B show the Best Management Practices (BMPs) that are uniquely utilized in the TMDL Implementation Plan.

Additionally, the Oregon DEQ has recognized MC as an operator of a small Municipal Separate Storm Sewer System (MS4) under the National Pollutant Discharge Elimination System (NPDES) Phase II General Permit. The County has developed and implemented a Stormwater Management Plan (SWMP) to fulfill the requirements of the permit. Although the SWMP was principally written to manage stormwater in the Salem/Keizer urban growth boundary (UGB), many of the activities presented in the SWMP will successfully address the TMDL requirements. NPDES SWMP Control Measures relating to Public Education, Public Involvement and Participation, and Pollution Prevention and Good Housekeeping for Municipal Operations are implemented countywide and therefore are part of the County's TMDL report. Historically, the County has submitted the full NPDES Annual Report as part of the Annual TMDL report and the County will continue to do so. For specific information regarding MC's SWMP Control Measures relating to Public Education, Public Involvement and Participation, and Pollution Prevention and Good Housekeeping for Municipal Operations, refer to the NPDES report in Appendix B. In balancing the NPDES Permit and the TMDL Program, MC staff are regularly working to meet the needs of each.

#### OUTREACH

The County has continued education and outreach efforts by conducting demonstrations and providing learning activities in Salem-Keizer School District classrooms. The Marion County Public Works (MCPW) Communications Coordinator oversees and implements strategic social media campaigns aimed at educating the public about relevant water quality issues such as pollutants and hazards to the environment, best management practices, and methods of waste reduction. The County also participates in the Clean Water Partners, a group which produces and advertises water quality messaging on a regional scale with a large existing audience. Interpretive signs were present along the Powder House Trail at Niagara Park, prior to the Beachie Creek Fire; however, 6 MC parks were heavily damaged during the 2020 wildfires which included the Powder House Trail. Repair and restoration efforts are ongoing, and five of 18 MC parks remain closed. As they are restored, interpretive signage will be replaced and introduced. Signage is to include multi-lingual information regarding riparian buffers, salmon biology, hydrology, and stream ecology

#### PET WASTES

To address issues of bacteria, MC supplies pet waste stations at County Parks. A total of 8 dispensers are located at Spongs Landing (2), Scotts Mills, Rogers Wayside, Joryville, Eola Bend, Bonesteele, and Packsaddle. The MC Park locations that were selected were based on proximity to waterbody and whether pets were allowed. These stations include appropriate signage and a disposable (biodegradable) bag dispenser that visitors can use to pick up after their pets, then place the waste in the provided trash receptacle. Public use of these systems immediately followed installation.

#### PARKS FACILITIES & WASTE REDUCTION

All County parks, open to the public, have permanent or temporarily installed restroom facilities and provided refuse containers to reduce possible bacteria and litter contamination. These facilities and receptacles are maintained daily during peak attraction periods. During slower periods, these facilities are maintained on a weekly basis or at the discretion of the Parks Supervisor. Maintenance includes the removal of debris and refuse from waste containers as well as any materials left on the grounds.

#### SEPTIC INSTALLATION & MAINTENANCE

To prevent bacterial exposure from private septic systems, brochures and letters for septic care are distributed throughout the year and posted on the MC webpage. Other materials include videos, lecturing series, or pre-crafted sources like the EPA Septic Smart and DEQ Septic Smart materials. This last year, a Homeowner Education Class was held in Detroit as a part of an educational campaign for those developing/redeveloping in the Canyon in response to the destruction caused by the wildfires of 2020. The MCPW Building Inspection Division's Onsite Wastewater Specialists (OWS) also present at the O2WA (Oregon Onsite Wastewater Association) Annual Conference. Historically, conference presentations have included Soils and Septic 101, Fire and Septic, and roundtable discussions. The OWS' also host an annual septic installer training class in the Spring.

#### **VEGETATION MANAGEMENT**

Vegetation management is implemented through several programs under the Road Operations, Stormwater Operations, and Parks Divisions at Public Works. Herbicide applicators are licensed and receive regular training to maintain certification. The provided Best Management Practices for Clean Water Manual and associated training also outlines best practices when using herbicides; crews undergo training once upon hire and at intervals of every 5 years. The MCPW Engineering Division provides a list of applicable plant species for staff and contractors to use and encourages the use of native plant species near waterways and in water treatment facilities when conducting maintenance, developing, or redeveloping in the SWMA. The County also has a Noxious Weed Program that partners with Marion Soil and Water Conservation District to remove invasive plants from properties, parks, and rights-ofway. MCPW Environmental Specialists perform enforcement investigations for noxious weeds.

### **RIPARIAN RESTORATION**

Finally, to address issues of increasing temperature and stream bank erosion, the County has a program to provide native trees to Watershed councils for riparian restoration projects. The project load and work by these organizations was impacted by the wildfires in 2020. MC Parks was unable to plant this year due to the wildfire cleanup efforts; however, the division has slated 360,080 plantings in the next three years.

## TABLES

## TABLE A: TMDL BMPS FOR MIDDLE WILLAMETTE AND PUDDING MOLALLA WATERSHEDS

<b>Objective:</b> Improving water quality while meeting the obligations of the TMDL program by implementing BMPs within each watershed, countywide.				
BMP	MEASURABLE GOAL	IMPLEMENTATION	ONGOING	MODIFIED
Outreach	# of posts, events, campaigns	~	~	
Pet Wastes	# of Interpretative Signs in Parks. # of Pet Waste Bags used	~	~	
Parks Facilities & Waste Reduction	# of facilities added, installed, and/or maintained	~	~	
Septic Installation & Maintenance	# of events and materials created and distributed	~	~	
Vegetation Management	# of trainings	~	~	
Riparian Restoration	# of volunteer hours, # of native plants planted # of events; linear feet restored	~	~	

## TABLE B: TMDL BMP ASSESSMENT PARAMETERS

The table below shows the results of information collected during the reporting period (assessment parameters for the Willamette, North Santiam, & Pudding River Basins).

BMP	ASSESSMENT PERIOD: JULY 1, 2021 – JUNE 30, 2022
Outreach	Social media campaigns totaled 39. Water quality topics included invasive species, septic, fertilizers, car washing, pet waste, fall leave haul, lawn care, Earth Day, etc.
Pet Wastes	Nine pet waste stations with signage are installed at eight parks. Signage and stations that were damaged during the 2020 wildfires will be replaced as parks are restored. Estimated 7,000 pet waste bags dispensed.
Parks Facilities & Waste Reduction	There are 16 developed parks and 4 undeveloped parks in Marion County, maintained weekly.MC parks have permanent or temporary restroom facilities in place. During busy periods, additional restroom facilities will be added, and frequency of garbage removal will be increased as needed. Wildfire damaged facilities in the process of being repaired and replaced.
Septic Installation & Maintenance	OWS hosted an annual septic installer training class; brochures and letters for septic care distributed. This last year, a Homeowner Education Class was held in Detroit. The OWS's present at least once annually at the O2WA, Oregon Wastewater Association. Outreach materials are provided to educate homeowners about the proper techniques of septic system ownership. Materials include videos, lecturing series, or pre-crafted sources like the EPA Septic Smart and DEQ Septic Smart materials.
Vegetation Management	BMPs for Clean Water Manual updated. Crews attended IPM trainings totaling 69 hours this period.
Riparian Restoration	Since the Stream Tree Program's inception, a total of 27,030 native trees have been funded and planted. MC partnered with the Pudding River Watershed Council to plant 200 established plants. Going forward, MCPW Environmental Services staff have the intention of improving the program using outward-facing GIS databases. MC Parks intends on 360,080 new plantings in the next three years.

## GOALS

### **IMPLEMENTATION OF CURRENT & NEW REQUIREMENTS**

During the next reporting year, MC will continue making updates to meet compliance timelines for the MS4 NPDES Phase II General Permit as well as for the updated TMDL standards. The County will continue to provide educational materials through the website, social media outlets, events, and training and continue to collaborate with regional outreach groups and explore opportunities for further collaboration with surrounding cities and organizations to promote the awareness of water quality issues.

The County will continue to fund riparian restoration opportunities for community members through the Stream Tree Program. Watershed councils throughout MC have the ability to facilitate projects and/or supply free native trees for community members who aim to complete riparian projects as a way to promote stream coverage and temperature reduction throughout the basin.

The County will continue to fully implement the BMP Program countywide. The Environmental Services Division staff have updated the BMP for Clean Water Manual and are continuing to enforce the training program for all operational staff. Road maintenance crews will continue to receive this training and the appropriate supervision to ensure that their activities have minimal impacts on water quality in MC.

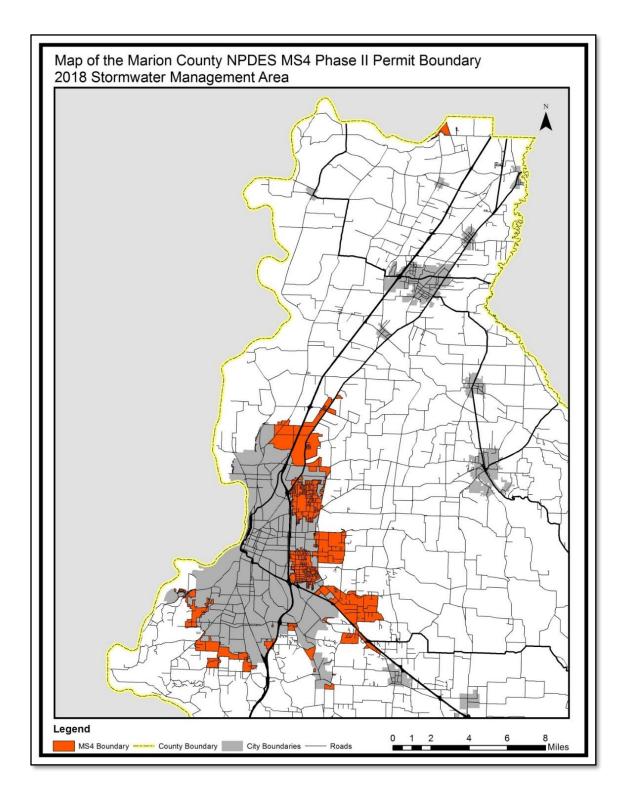
To minimize the occurrence of mercury-related discharges into County waterways, MC intends to bolster its existing Illicit Discharge Detection and Elimination program by redeploying educational social media campaigns and improved GIS tracking and reporting components. The County seeks to work in partnership with State agencies to improve efficiencies in the reporting and removal of illicit discharges. A countywide ordinance will be developed to implement the illicit discharge of turbid water into the county-maintained right-of-way. As an alternative, a proposal will be developed to extend the existing Illicit Discharge ordinance countywide. Erosion control within the SWMA has been established using ordinances and rules put in place by the Land Development Engineering and Permits Division. To satisfy upcoming TMDL requirements, MC intends to adopt the DEQ 1200-CN Permit Program countywide. Alternative actions include developing a strategy for high potential residential and commercial development, determine proper legal authority to require construction and erosion sediment control measures.

## APPENDICES

Appendix A: Stormwater Management Area Map

Appendix B: 2021-2022 NPDES Annual Report

## APPENDIX A: STORMWATER MANAGEMENT AREA MAP



APPENDIX B: 2021-2022 NPDES ANNUAL REPORT



# Annual Report

**MS4 Phase II General Permit** 

National Pollutant Discharge Elimination System MS4 Stormwater Discharge Permit

Monitoring Year: 2021-22 Permit Registrant: Marion County Date Prepared/Submitted:

DEQ File No.: 113608

## **Certification and Signature**

- 1. Permit Registrant(s): Marion County
- 2. Legally Authorized Representative: Brian Nicholas
- 3. Title: Public Works Director
- 4. Email: bnicholas@co.marion.or.us
- 5. Phone: (503) 588-7943

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations (40 CFR 122.22(d)).

Iria Michlen

Signature

10/17/2022

Date

## **Table of Contents**

Certification and Signature	1
General Information	4
Registrant Information	4
Municipal Separate Storm Sewer System (MS4) Information	4
MS4 Stormwater Discharge Information	4
Coordination Among Registrants and Joint Agreements	5
Stormwater Management Program Information	5
Stormwater Management Program Control Measures	6
Public Education and Outreach	6
Public Involvement and Participation	8
Illicit Discharge Detection and Elimination	10
Construction Site Runoff Control	14
Post-Construction Site Runoff for New Development and Redevelopment	16
Pollution Prevention and Good Housekeeping for Municipal Operations	20
Monitoring	22
Wood Village Monitoring Requirements	22
Water Quality Standards	23

## Instructions

At least once per year, the permit registrant must evaluate compliance with the requirements of the MS4 Phase II general permit using this Annual Report template. This self-evaluation includes assessment of progress made towards implementing the SWMP control measures in Schedule A, and implementation of actions to comply with any additional requirements identified pursuant to Schedule D.1 (Requirements for Discharges to Impaired Waterbodies).

For each SWMP control measure or activity listed below, please answer all the questions and in the comments field cite any relevant information and/or statistics that helps to illustrate implementation or compliance. If your answer is "No," in the comments field explain the reasons and outline the anticipated implementation timeline. If the requirement does not apply, explain why it is not applicable in the comments field.

No later than November 1 each year, beginning in 2020, the permit registrant must submit an Annual Report to DEQ. One signed copy and one electronic copy must be submitted to DEQ using the address provided in permit. DEQ can provide an FTP site for submittal of the electronic copy, upon request.

<b>General Information</b>						
Registrant Information						
6. Permit Registrant(s):						
7. Type(s): 🗌 City / 🔀 County / 🗌	Special Dis	trict / 🗌 C	)ther:			
8. Registrant Type:						
Existing Registrant: 🛛 New Re	gistrant: 🗌					
9. Community Type:		_				
	mmunity: 🛛					
10. DEQ Permit No: 113608						
11. EPA File No: ORS113608						
12. Physical Address: 5155 Silvertor	n Rd NE					
City: Salem		State:	OR			Zip: 97305
13. Point of Contact: Roxanne Toepf	er					
Title: Environmental Specialist		Email	rtoepfer@	co.marion	.or.us	Phone: (503) 365-3127
14. Mailing Address (if different):						
City:		State:				Zip:
Municipal Separate Storm Sewer System (MS4) Information						
15. Estimate the area in square mile	age served	by the MS	64: 43.6 s	quare mil	es	
16. Estimate the population served by the MS4: 30,000						
MS4 Stormwater Discharge Information						
Identify the names of all known waters that receive a discharge from your MS4.						
		Ir	Impaired waterbody			
Receiving Waterbody	Outfalls	303d	isted	TMDL is	ssued	Impairment(s)
a. Little Pudding River	131	Yes 🖂	No 🗌	Yes 🖂	No 🗌	DO, E. coli, chlorpyrifos, DDT, & DDE
b. Claggett Creek	68	Yes 🖂	No 🗌	Yes 🖂	No 🗌	Biological criteria, DO & E. coli
c. Mill Creek	5	Yes 🖂	No 🗌	Yes 🖂	No 🗌	Temperature, DO, & E. coli
d. Labish Ditch	8	Yes 🗌	No 🖂	Yes 🗌	No 🛛	
e. Jory Creek	0	Yes 🗌	No 🖂	Yes 🗌	No 🖂	
f. Fruitland Creek	10	Yes 🗌	No 🖂	Yes 🗌	No 🖂	
g. Powell Creek	0	Yes 🗌	No 🖂	Yes 🗌	No 🖂	
h. Battle Creek	2	Yes 🖂	No 🗌	Yes 🖂	No 🗌	DO & E. coli
i		Yes 🗌	No 🗌	Yes 🗌	No 🗌	
j.		Yes 🗌	No 🗌	Yes 🗌	No 🗌	

### Annual Report MS4 Phase II General Permit Page 5 of 23

Coordination Among Registrants and Joint Agreements
Required for permit registrants relying on another entity to satisfy one or more of the requirements of the permit.
17. Is there a joint agreement in place for the implementation of one or more stormwater management program control measures? <i>Schedule A.2</i> Yes □ No ⊠
18. If yes, has there been any change to the joint agreement(s) submitted previously? Yes No I If yes, include, as an attachment, a summary of the changes. The summary must identify the other co-registrants/co-implementers or other entities
Stormwater Management Program Information
19. Discuss the status and overall progress of establishing legal authority to control pollutant discharges into and discharges from the MS4 and to implement and enforce the conditions of this permit. <i>Schedule A.2.c</i>
Marion County has strong legal authority to respond to pollutant discharges within the Stormwater Management Area. Marion County Code Chapter 15.15 Stormwater Discharge Quality Control prohibits non-storm water discharges into and from the MS4 and surface water drainage system within the Storm Water Management Area. The code provides capability for escalating enforcement actions to promote compliance.
Stormwater Management Program Information
20. Is an updated SWMP Document attached? Schedule A.2.c
Yes 🛛 No 🗌 (must be submitted with the second Annual Report)
If necessary, provide an explanation: N/A
21. Identify the publicly accessible website where the SWMP Document is posted. <i>Schedule 2.c &amp; A.3.b.ii</i> <u>https://www.co.marion.or.us/PW/ES/waterquality/Pages/strmwtr.aspx</u> If necessary, provide an explanation: N/A
22. Does the SWMP Document include an implementation schedule for control measures that have yet to be or are partially implemented? <i>Schedule A.2.c</i>
Yes 🖾 No 🗌
If necessary, provide an explanation: N/A
23. Describe the method used to gather, track, and use SWMP information to set priorities or assess compliance: <i>Schedule A.2.d</i>
Assigned teams track required work tasks and goals. This information is centrally gathered by program staff for evaluation.
24. Have adequate finances, staff, equipment and other support capabilities been provided to implement the permit? Schedule A.2.e
Yes 🖂 No 🗌
If necessary, provide an explanation: N/A
25. During this monitoring year was compliance with the requirements of this permit evaluated? Schedule B.1
Yes 🖂 No 🗌
If necessary, provide an explanation: N/A
26. During this monitoring year was it determined or reported that discharge from the MS4 caused or contributed to an excursion of an applicable water quality standard? <i>Schedule A.1.b</i>
Yes 🗌 No 🖂
If "Yes", complete Water Quality Standards section (p. 21) of this template.

Stormwater Management Program Control Measures
Public Education and Outreach
27. Provide a brief summary of the ongoing public education and outreach program. Schedule A.3.a
Marion County is actively engaged with County residents through web media platforms such as the local county webpage, Facebook, Instagram, Twitter, and YouTube. Marion County Environmental Services has a robust outreach plan that includes a different outreach theme every month and various events throughout the year. Events, such as Water Festivals and Earth Day Celebrations, trainings related to recycling, materials management, and erosion/sediment, and educational videos (ex: onsite septic) were promoted. Marion County participates in the Clean Rivers Coalition, the Mid-Willamette Outreach Group, and the Clean Water Partnership (CWP). The CWP funds and directs the production of education and outreach materials that are distributed regionally by KPTV. Marion County is also a member of the Association of Clean Water Agencies; this organization also creates materials for distribution to educate on water quality.
28. Were the required components in place by the implementation date? Schedule A.3.a.i
Yes 🛛 No 🗌 (Implementation date: Feb. 28, 2020 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)
29. Provide the number of education and outreach activities conducted: <i>Schedule A.3.a.iii</i> During this reporting year: 43
30. During the permit term: 54 If necessary, provide an explanation: N/A
<ul> <li>31. Indicate target audiences addressed during this reporting year: Schedule A.3.a.iv</li> <li>☑ General public, homeowners, homeowner association, schoolchildren, and businesses</li> <li>☑ Local elected officials, land use planners and engineers</li> <li>☑ Construction site operators</li> </ul>
32. Have each target audience been addressed during the permit term? Schedule A.3.a.iv
Yes 🛛 No 🗌
<ul> <li>33. Indicate target topics addressed during this reporting year: Schedule A.3.a.iv</li> <li>Impacts of illicit discharges on receiving waters and how to report them</li> <li>Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts</li> <li>BMPs for proper use, application and storage of pesticides and fertilizer</li> <li>BMPs for litter and trash control</li> <li>BMPs for recycling programs</li> <li>BMPs for power washing, carpet cleaning and auto repair and maintenance</li> <li>Low impact development/green infrastructure</li> <li>Information pertaining to maintenance of septic systems</li> <li>Watershed awareness and how storm drains lead to local creeks and rivers, and potential impacts to fish and other wildlife</li> <li>Other:</li> </ul>

34.	Describe the types of educational messages or activities distributed and/or offered during this reporting year. Schedule A.3.a.iii
	<ul> <li>Social media posts</li> <li>Short YouTube videos</li> <li>Educational advertisements/web resources</li> <li>Erosion Control Summit</li> <li>Water Festival Elementary school outreach activity</li> <li>Community outreach events</li> </ul>
35.	Was outreach to construction site operators working within your community offered during this reporting year? Schedule A.3.a.v
	Yes 🛛 No 🗌
36.	Total number during the permit term: 3
37.	Identify and describe the assessment/evaluation of, at least, one education and outreach activity that occurred during this reporting year. Include the assessment process or metric for evaluation, and why this activity was considered successful. <i>Schedule A.3.a.vi</i>
	In April 2022, MC Environmental Services hosted a month-long Earth Day education event. The event included educational posts about water quality throughout the month, educational resources on our website, a "passport to sustainability" featuring 20 activities (5 of which were water focused) participants were encouraged to complete, and an Earth Day event on Friday, April 22. The event, which had more than 300 attendees, featured educational booths by partners focusing on green infrastructure, waste reduction/reuse, responsible pet ownership, native plants and noxious weeds, and more. The website created for the event had 3,363 views. 217 different activities were completed for the "passport to sustainability." Page views and attendees at the event exceeded expectations based on normal engagement for similar campaigns.
38.	Will the assessment be used to inform future stormwater education and outreach efforts? Schedule A.3.a.vi
	Yes 🖂 No 🗌
39.	Provide an explanation: The Earth Day/Month activities were successful. MCES will continue the event in the coming years. The "passport" program got a lot of interest, as well as the educational booths at the event. These are items that ES will repeat for the next year and hope to expand upon. In 2023, the event will include a survey to collect a baseline of the general public's knowledge on water quality, waste reduction, and natural resource topics.

Public Involvement and Participation
40. Provide a brief summary of the overall progress towards implementation of this control measure. Schedule A.3.b
We have a publicly accessible website that is reviewed and updated frequently. The website has information for IDDE reporting, MC's SWMP plan, links to ordinances and relevant documents, and contact information for program staff. Marion County Public Works has an adopt-a-road program and utilizes volunteers to mark storm drains with applied curb markers. Marion County also has a stencil kit which it provides to businesses and individuals for marking storm drains. Marion County also partners with other jurisdiction s and agencies to provide opportunities for public involvement. Marion County will continue to seek ways to engage the public to improve water quality.
41. Were the required components in place by the implementation date? Schedule A.3.b.i
Yes 🛛 No 🔲 (Implementation date: Feb. 28, 2020 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)
42. Is the SWMP Document posted on a publicly accessible website? Schedule A.3.b.ii
Yes 🛛 No 🗌
43. Was the publicly accessible website updated during this reporting year? Schedule A.3.b.ii
Yes 🛛 No 🗌
If necessary, provide an explanation: N/A
44. Does the publicly accessible website include illicit discharge complaint/reporting information or procedures? Schedule A.3.b.ii.A
Yes 🖂 No 🗌
If necessary, provide an explanation: N/A
45. Does the publicly accessible website include draft documents issued for public comment, final reports, plans and other official SWMP policy documents? <i>Schedule A.3.b.ii.B</i>
Yes 🖂 No 🗌
If necessary, provide an explanation: N/A
40. Describe sublish secondible website include links to all ordinances, policies and/or suideness desurgents related to
46. Does the publicly accessible website include links to all ordinances, policies and/or guidance documents related to the construction and post-construction stormwater management control programs, including education, training, licensing, and permitting? <i>Schedule A.3.b.ii.C</i>
Yes 🖂 No 🗌
If necessary, provide an explanation: N/A
47. Does the publicly accessible website include contact information for relevant staff, including phone numbers, mailing addresses and email addresses? <i>Schedule A.3.b.ii.D</i>
Yes 🖂 No 🗌
If necessary, provide an explanation: N/A

48. During this reporting year, was a stewardship opportunity created or partnered with another entity? *Schedule A.3.b.iii* 

Yes 🛛 🛛 No 🗌

If "Yes", summarize the stewardship opportunity(s).

Volunteers glue metal markers in place at storm drain inlets to raise awareness about the connectedness of the community to local waterways. In addition, Marion County also utilizes the Adopt-a-Road Program.

Illicit Discharge Detection and Elimination
49. Provide a brief summary of the overall progress towards implementation of this control measure. Schedule A.3.c Marion County has an established GIS database which contains mapped assets of the County stormwater control system. From this, a maintenance tracking system and a dry weather screening program was created using ArcGIS' Collector and Survey123. All controls have a unique identifier assigned. The database can be manipulated by field staff to add or edit existing records so that the County can continuously "ground-truth" as assets are added or removed.
50. Were the required components in place by the implementation date? <i>Schedule A.3.c.i</i>
Yes No (Implementation date: Feb. 28, 2022 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)
51. Is the MS4 map(s) current? Schedule A.3.c.ii.A
Yes 🖂 No 🗌
52. Describe the MS4 map(s) format(s):
ArcGIS
<ul> <li>53. Is the MS4 map(s) included as attachment? Yes □ No ⊠</li> <li>Or are the digital shapefiles available for electronic submittal? Yes ⊠ No □</li> <li>(Implementation date: Feb. 28, 2022 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)</li> <li>If necessary, provide an explanation: Marion County can provide access to the mapping system upon request.</li> </ul>
<ul> <li>54. Is the digital inventory of all known outfalls, with the associated receiving waterbody current? Schedule A.3.c.ii.B</li> <li>Yes ∑ No □</li> <li>If necessary, provide an explanation: N/A</li> </ul>
<ul> <li>55. Indicate if the following features are included on your MS4 map:</li> <li>Location of all known outfalls, including the requirements in <i>Schedule A.3.c.ii.B</i></li> <li>Stormwater collection and conveyance system, including the requirements in <i>Schedule A.3.c.ii.C</i></li> <li>Stormwater structural controls, including the requirements in <i>Schedule A.3.c.ii.C</i></li> <li>Location of known chronic discharges <i>Schedule A.3.c.ii.D</i></li> <li>If necessary, provide an explanation: Map link to outfalls, collection/conveyance system, and controls; MS4 has experienced no known chronic discharges.</li> </ul>
<ul> <li>56. Have non-stormwater discharges into the MS4 been prohibited through enforcement of an ordinance or other regulatory mechanism? <i>Schedule A.3.c.iii</i></li> <li>Yes No </li> <li>If necessary, provide an explanation: N/A</li> </ul>

	Indicate which of the following have an ordinance or other regulatory mechanism to prohibit discharge to the MS4: Schedule A.3.c.iii
	Septic, sewage, and dumping or disposal of liquids or materials other than stormwater into the MS4
	Discharges of washwater resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities
	Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.
	Discharges of washwater from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing, and carpet cleaning, etc.
	Discharges of washwater from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, or residential areas (including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.) where detergents are used and spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed)
	Discharges of runoff from material storage areas, which contain chemicals, fuels, grease, oil, or other hazardous materials from material storage areas
	Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water
	Discharges of sediment, unhardened concrete, pet waste, vegetation clippings, or other landscape or construction-related wastes
	<ul> <li>Discharges of trash, paints, stains, resins, or other household hazardous wastes</li> <li>Discharges of food-related wastes (grease, restaurant kitchen mat and trash bin washwater, etc.)</li> </ul>
	If necessary, provide an explanation: N/A
58.	Is the written escalating enforcement and response procedure included as an attachment? Schedule A.3.c.iv
	Yes 🛛 No 🗌
	(For Existing Registrant must be submitted with the third Annual Report, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)
	If necessary, provide an explanation: N/A
	Is there a phone number, webpage, and/or other communication channel publicized for the public use to report illicit discharges? <i>Schedule A.3.c.v.A</i> Phone number(s)
	✓ Prohe number(s) ✓ Webpage(s)
	Other communication channels
	If necessary, provide an explanation: N/A
60.	Provide the number of complaints received during this reporting year. <i>Schedule A.3.c.v.D</i> Number: 8 (complaints related to IDDE)
	On average, how long did it take to respond to complaints? <i>Schedule A.3.c.v.B</i> In working days: 1
62.	Provide the number of complaints that included notification of the Oregon Emergency Response System during this reporting year. <i>Schedule A.3.c.v.B</i>
	Number of notifications: 1
	Provide the number of complaints where staff performed an investigation during this reporting year. Schedule A.3.c.v
	Number: 8 (investigations related to IDDE)
64.	On average, how long did it take to conduct an initial investigation? <i>Schedule A.3.c.v.B</i> In working days: 1

65.	Provide the number of illicit discharges discovered and eliminated during this reporting year. Schedule A.3.c.v Number: 5
66.	On average, how long did it take to eliminate an illicit discharge? Schedule A.3.c.v.B
	In working days: 1
67.	Provide the number times escalating enforcement procedure was used to eliminate illicit discharge during this reporting year. <i>Schedule A.3.c.v.D</i> Number of times: 0
	Do any of the illicit discharges involve the repair or replacement of the wastewater and/or storm sewer conveyance systems? <i>Schedule A.3.c.v.B</i>
	Yes 🗌 No 🖾 NA 🗌
	If necessary, provide an explanation: N/A
68.	Provide the number of illicit discharges that were referred to another entity during this reporting year. <i>Schedule A.3.c.v.C</i> Number: 0
69.	On average, how long did it take to notify the entity(s)? In working days: N/A
	if necessary, provide an explanation: N/A
70.	Indicate which of the following are included in the complaints or reports tracking documentation: Schedule A.3.c.v.D
71.	Provide percentage of outfalls inspected. Schedule A.3.c.vi.A/B Known outfalls screened this reporting year: 100%
72.	Known outfalls screened during the permit term: 100%
	If necessary, provide an explanation: N/A
73.	Provide percentage of outfalls inspected as part of field screening of priority location. <i>Schedule A.3.c.vi.C</i> Priority location outfalls screened this reporting year: 100%
74.	Priority location outfalls screened during the permit term: 100%
	If necessary, provide an explanation: N/A

75.	<ul> <li>Indicate which of the following dry-weather field screening activities have been performed in the last year: Schedule A.3.c.vi</li> <li>General observation</li> <li>Field Screening and Analysis</li> <li>Pollutant Parameter Action Levels</li> <li>Laboratory Analysis</li> </ul> If necessary, provide an explanation: Field investigations revealed flow source identities without the need for lab
	testing.
76.	If flow is observed and the source is unknown, provide a brief description of the field investigation and analysis process. <i>Schedule A.3.c.vi.D-G</i>
	Observations will be made and documented at the outfall. Operators will then attempt to follow the flow upstream, looking in ditches, manholes, etc. as necessary to find a point as close to the origin as possible. A point closest to the source will be documented with any relevant observations and marked in GIS. If the source cannot be identified in this way, the flow will be screened in the field for pH, temperature, specific conductance, and dissolved oxygen. If action levels are exceeded, samples will be taken and analyzed at a laboratory to characterize and attempt to identify the source of the flow. These analyses will be determined on a case-by-case basis in collaboration with the laboratory and any other outside counsel that may be able to sharpen the focus of the investigation.
77.	Have pollutant parameter action levels been established and are they included as an attachment? <i>Schedule</i> A.3.c.vi.F
	Yes 🖂 No 🗌
	(For Existing Registrant must be submitted with the third Annual Report. New Registrants must submit by September 1, 2023 and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner))
	If necessary, provide an explanation: N/A
78.	Are all persons responsible for investigating and eliminating illicit discharges and illicit connections into the MS4 appropriately trained to conduct such activities? <i>Schedule A.3.c.vii</i>
	Yes 🖂 No 🗌
	If necessary, provide an explanation: N/A
79.	Are all new staff working to implement the IDDE program trained within 30 days of their assignment to this program? Schedule A.3.c.vii
	Yes 🖂 No 🗌
	If necessary, provide an explanation:

Construction Site Runoff Control	
80. Provide a brief summary of the overall progress towards implementation of this control measure. <i>Schedule A.3.d</i> Marion County has a strongly written Construction Erosion and Sediment Control Ordinance. We have recently	
developed a written policy for the escalating enforcement procedure to standardize our response. We are currently improving our inspection procedures to facilitate better tracking and documentation in accordance with permit requirement. The minimum size to require an erosion control plan, and inspections, needs to be updated in the ordinance, this must be approved by the Board of Commissioners, and is a process that we have begun.	
81. Were the required components in place by the implementation date? Schedule A.3.d.i	
Yes No (Implementation date: Feb. 28, 2023 for Existing Registrants, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)	
<ul> <li>82. Do ordinances or other regulatory mechanisms require erosion controls, sediment controls, and waste materials management controls to be used and maintained at all qualifying construction projects? <i>Schedule A.3.d.ii</i></li> <li>Yes ∑ No □ NA □</li> </ul>	
If necessary, provide an explanation: Yes; Ordinance 1307 - Marion County Code Chapter 15.10 - Construction Erosion Sediment Control	
83. Indicate the minimum land disturbance where construction site operators are required to complete and implement an Erosion and Sediment Control Plan (ESCP) for construction project sites: <i>Schedule A.3.d.ii</i>	
In square feet or portion of an acre: 1 ft <sup>2</sup> $\Box$ , acres $\boxtimes$	
If necessary, provide an explanation: N/A	
84. For construction projects that disturb one or more acres (or that disturb less than one acre, if it is part of a "common plan of development or sale" disturbing one or more acres), provide a brief description how these projects are referred to DEQ or the appropriate DEQ agent, to obtain a NPDES Construction Stormwater General Permit. <i>Schedule A.3.d.iii</i>	
Prior to issuance of Marion County permits (ex: Building, Right-of-Way, etc.), proof of coverage under DEQ, or appropriate administering agent, is required. If requested by the developer, contact information for the appropriate agency is provided. Marion County is an agent of the 1200-CN program.	
85. Provide the written specifications that address the proper installation and maintenance of such controls during all phases of construction activity as an attachment <i>Schedule A.3.d.iv</i>	
Attached: Yes 🖾 No 🗌	
If necessary, provide an explanation: N/A	
86. Provide the Erosion and Sediment Control Plan template as an attachment. Schedule A.3.d.iv.A	
Attached: Yes 🖾 No 🗌	
If necessary, provide an explanation: N/A	

### Annual Report MS4 Phase II General Permit Page 15 of 23

87. Inc	icate which of the following are required for qualifying construction projects: Schedule A.3.d.iv
	Site operator required to complete a ESCP template or worksheet prior to beginning construction/land
	turbance
	Site operator required to keep the ESCP on site
	Site operator required to maintain and update the ESCP as site conditions change, or as needed. Site operator required to provide the ESCP to the permit registrant, DEQ, or another administrating entity
	ecessary, provide an explanation: N/A
	ecessary, provide an explanation. WA
88 59	CPs [from construction projects that will result in land disturbance of one or more acres (or that disturb less than
on	e acre, if it is part of a "common plan of development or sale" disturbing one or more acres)] are reviewed using a ecklist or similar document to determine compliance. Schedule A.3.d.v
١	∕es ⊠ No 🗌
	ovide the ESCP review template or checklist as an attachment. Schedule A.3.d.v ached: Yes $\square$ No $\square$
	icate the minimum land disturbance where you require the ESCP to be reviewed, if different than one acre:
	$^{2}$ , acres $\boxtimes$
lt r	ecessary, provide an explanation: N/A
01 \	construction projects [that will regult in land disturbance of any or more serves (or that disturb lace there are serve
	construction projects [that will result in land disturbance of one or more acres (or that disturb less than one acre, is part of a "common plan of development or sale" disturbing one or more acres)] are expected or scheduled to
	inspected at least once per permit term. Schedule A.3.d.vi.A.1
Inc	icate the number of inspections completed to comply with this requirement during this reporting year: 15
Inc	icate the number of inspections completed to comply with this requirement during the permit term: 64
lf r	ecessary, provide an explanation: N/A
	e construction projects with visible sediment in stormwater/dewatering discharge or when a complaint is received pected? <i>Schedule A.3.d.vi.A.2</i>
١	′es ⊠ No 🗌
93. Inc	icate number of projects that were inspected based on this inspection trigger: 0
lf r	ecessary, provide an explanation: N/A
	icate the total number of construction projects that were inspected this monitoring year: 10
	icate the total number of construction projects that were inspected during the permit term: 49
	icate which of the following are documented during an inspection: Schedule A.3.d.vi.B
	Control measures were installed, implemented, and maintained appropriately
	Visual observation of any existing or potential non-stormwater discharges, illicit connections, and/or discharge of pollutants from the site
$\square$	Recommendations to the construction site operator for follow-up
	Education or instruction provided to the site operator related to stormwater pollution prevention practices
	ecessary, provide an explanation:
97. lf a	vailable, provide a copy of the written or electronic inspection report form. Schedule A.3.d.vi.B
ŀ	Nttached: Yes 🛛 No 🗌
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<ul> <li>98. For Existing Large Communities: Indicate the number of new construction projects inspected that disturb less one acre during this monitoring year. Is this number at least 25% of the qualifying new construction sites? <i>Schedule A.3.d.vi.C</i></li> <li>If necessary, provide an explanation: N/A</li> </ul>
99. Provide the written escalating enforcement and response procedure as an attachment. <i>Schedule A.3.d.vii</i>
Yes No
——————————————————————————————————————
If necessary, provide an explanation: N/A
100. Was the escalating enforcement procedure used to achieve compliance at any construction projects? <i>Schedule A</i> .3. <i>d</i> . <i>vii</i>
Yes 🗌 No 🖂
Indicate number of times during this reporting year: 0
101. Indicate number of times during the permit term: 1
If necessary, provide an explanation: N/A
102. Were all persons responsible for ESCP reviews, site inspections, and enforcement appropriately trained to conduct such activities? <i>Schedule A.3.d.viii</i>
Yes 🛛 No 🗌
If necessary, provide an explanation:
103. Were all new staff working to implement the construction site runoff control program appropriately trained within 30 days of their assignment to this program? <i>Schedule A.3.d.viii</i>
Yes 🖂 No 🗌

#### Post-Construction Site Runoff for New Development and Redevelopment

104. Provide a brief summary of the overall progress towards implementation of this control measure. Schedule A.3.e

The County has developed a new draft set of Engineering Standards. The consultant retained utilized best practices across the state to develop the draft standards. The outreach conducted in the name of the standards spanned a period of over a year. Several internal workshops were held in which the Marion Water Quality Advisory Committee (including members of the Home Builders and various watershed councils), the private development engineering community, and the Board of Commissioners were consulted. Through this outreach process, the draft engineering standards were effectively designed to meet standards set by the DEQ, to be clear and understandable, and to provide a pollutant reduction method to Marion County's receiving rivers and streams. The County plans to have it finished and approved by the Board of Commissioners with enough time to educate the development community about new requirements and standards.

105. Were the required components in place by the implementation date? Schedule A.3.e.i

Yes No ((Implementation date: Feb. 28, 2023 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

106.	For projects creating or replacing impervious area, indicate the area (or threshold) where the site is required to implement the post-construction site runoff program requirements: <i>Schedule A.3.e.ii</i> In square feet: 21,780 ft <sup>2</sup>
	If necessary, provide an explanation: Stormwater detention requirements are triggered at 0.5 acres of impervious surfaces per our 1990 Engineering Standards. Water quality treatment requirements are triggered at 1 acre of disturbance within the County's Stormwater Management Area. New standards are currently in development and will meet the updated permit requirements.
107.	Indicate which of the following are required at qualifying sites: <i>Schedule A.3.e.ii</i> The use of structural stormwater controls
	<ul> <li>A site-specific stormwater management approach that targets natural surface or predevelopment hydrological function through the installation and long-term operation and maintenance of stormwater controls</li> <li>Long-term O&amp;M of stormwater controls at project sites that are under the ownership of a private entity</li> <li>If necessary, provide an explanation: N/A</li> </ul>
	in necessary, provide an explanation. N/A
108.	Were ordinance(s), code(s) and development standards reviewed to identify, minimize or eliminate barriers that inhibit design and implementation techniques intended to minimize impervious surfaces and reduce stormwater runoff? <i>Schedule A.3.e.iii</i>
	Yes 🛛 No 🗌
109.	If barriers were identified or if necessary, provide an explanation:
	A preliminary review has been conducted to identify major potential barriers. A more broad-based review will be completed as the program implementation continues.
110.	Provide an explanation of the timeline for removal of barriers or if removal is outside your authority:
	Per our Stormwater Management Plan, we are looking to have the program meet permit requirements no later than February 2023.
111.	<ul> <li>Indicate which of the following technical standards are used to determine the retention requirement: Schedule A.3.e.iv.A</li> <li>Volume-based method</li> <li>Storm event percentile-based method</li> <li>Annual average runoff-based method</li> </ul>
	If necessary, provide an explanation: N/A
112.	For projects that are unable to meet the retention requirement, is the remainder of the rainfall/runoff treated prior to discharge with a structural stormwater control? <i>Schedule A.3.e.iv.B</i>
	Yes 🗌 No 🖾
113.	Was the stormwater structural control designed to remove, at minimum, 80 percent of the total suspended solids?
	If necessary, provide an explanation: The update to Marion County Stormwater Engineering Standards is underway, and the permit requirements will be met by the deadline.

114.	Are the allowable structural stormwater controls and specifications available for review? Schedule A.3.e.iv.C Yes $\square$ No $\square$
115.	Indicate if they are attached or the location where they can be viewed: Attached $\boxtimes$
	Location: https://www.co.marion.or.us/PW/Engineering/engineeringstandards
	If necessary, provide an explanation: N/A
116.	Have alternatives for projects complying with the retention requirement been approved? <i>Schedule A.3.e.iv.D</i> Yes D No X
117.	If yes, are the written technical justifications evaluated? <i>Schedule A.3.e.iv.D</i> Yes No
118.	Provide a brief description of the factors of technical infeasibility or site constraints that prevented the on-site management of the runoff amount stipulated in the stormwater retention requirement or a portion thereof. <i>Schedule A.3.e.iv.D</i>
	If necessary, provide an explanation: Not applicable at this time. Per Section V.A.2.a of the 1990 Engineering Standards "This requirement may be waived if the applicant can show that it is not effective for the basin as a whole." We currently have no other exemptions for the retention/detention requirement in the event it cannot be met. This will be updated to meet permit requirements as part of the Stormwater Engineering Standards project.
119.	Before the allowance of alternative compliance, were mitigation options established? <i>Schedule A.3.e.iv.D</i> Yes D No
	If necessary, provide an explanation: Not applicable at this time as no alternative compliance has been allowed.
120.	If applicable, indicate which of the following mitigation options have been used and provide a narrative description of the implementation of the mitigation option? <i>Schedule A.3.e.iv.D</i>
	<ul> <li>Off-Site Mitigation</li> <li>Off-Site Groundwater Replenishment Projects</li> </ul>
	If necessary, provide an explanation: Not applicable at this time as no alternative compliance has been allowed and therefore no mitigation options have been used.
121.	Was a procedure developed for the review and approval of structural stormwater control plans for new development and redevelopment projects? <i>Schedule A.3.e.v</i>
	Yes 🛛 No 🗌 If necessary, provide an explanation: N/A

122.	Indicate the minimum land disturbance or creation of new impervious area where plans are required to be reviewed: .5 ft <sup>2</sup> $\Box$ , acres $\boxtimes$ of land disturbance $\Box$ creation of new impervious area $\boxtimes$
123.	Are all sites that use alternative compliance to meet the retention requirement reviewed?
	Yes 🖾 No 🗌
	If necessary, provide an explanation: N/A
124.	Indicate if an inventory and implementation strategy is used to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv of the permit? Schedule A.3.e.vi
	Yes 🗌 No 🖂
	If necessary, provide an explanation: N/A
125.	Indicate which of the following strategies have been developed to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv. Schedule A.3.e.vi
	Legal authority to inspect and require effective operation and maintenance of privately owned and operated stormwater controls
	Inspection procedures and an inspection schedule to ensure compliance with the O&M requirements of each stormwater control operated by the permit registrant and by other private entities
	A tracking mechanism for documenting inspections and the O&M requirements for each stormwater control
	Reporting requirements for privately owned and operated stormwater controls that document compliance with the O&M requirement in Schedule A.3.f.
	If necessary, provide an explanation: N/A
126.	Are the location of all public and private stormwater controls installed during this permit term documented on the MS4 Map? <i>Schedule A.3.e.vi</i>
	Yes 🛛 No 🗌
	If necessary, provide an explanation: N/A
127.	Were all persons responsible for performing post-construction runoff site plan reviews, administrating the alternative compliance program, or performing O&M practices or evaluating compliance with long-term O&M requirements appropriately trained to conduct such activities? <i>Schedule A.3.e.vii</i>
	Yes 🖾 No 🗌
	If necessary, provide an explanation: N/A
128.	Were all new staff working to implement the post-construction site runoff for new development and redevelopment program appropriately trained within 30 days of their assignment to this program? <i>Schedule A.3.e.vii</i>
	Yes 🛛 No 🗌
	If necessary, provide an explanation: N/A

Pollution Prevention and Good Housekeeping for Municipal Operations	
129.	Provide a brief summary of the overall progress towards implementation of this control measure. Schedule A.3.f
	Staff created and launched a computerized training on Best Management Practices for Clean Water available to all Public Works staff, but mandatory for anybody in a maintenance position. This training covers clean water regulations, defines stormwater and pollutants, discusses beneficial uses for clean water, goes over best management practices for field/shop work, and has an entire section devoted to erosion and sediment control. The training is hosted on the County's learning management system and has each staff member scheduled to take the course within 30 days of hire (usually done in the first two days during new employee onboarding) and then again once every five years. A consultant has been hired to help identify standards for erosion control, which will be used for all operations and maintenance. In February 2022, MC also hosted a BMP field training for operational staff. The class covered BMPs for erosion and sediment control as well as how to properly contain spills.
130.	Were the required components in place by the implementation date? Schedule A.3.f.i
	Yes 🛛 No 🗌 (Implementation date: Feb. 28, 2022 for Existing Registrants, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner))
131.	Were O&M strategies for existing controls developed for both permit registrant-owned controls and controls owned and operated by another entity discharging to the MS4? <i>Schedule A.3.f.ii</i>
	Yes 🛛 No 🗌 N/A 🗌
	If necessary, provide an explanation: N/A
132.	Indicate the percentage of catch basins inspected/cleaned: Schedule A.3.f.iii
133	Percentage inspected this reporting year: 32%; Percentage cleaned: 32% If known, estimate of material removed: N/A units
	Percentage inspected during the permit term: 79%; Percentage cleaned: 79%
135.	If known, estimate of material removed: N/A units
	If necessary, provide an explanation: A total of 2,384 units were inspected and cleaned out of a total of 3,031 catch basins during this permit term.
136.	Indicate if a catch basin inspection prioritization system and/or an alternate inspection frequency has been established. Schedule A.3.f.iii
	Yes 🛛 No 🗌
	If necessary, provide an explanation: Operations staff routinely inspect catch basins, conduct maintenance and cleanings, and document pipe conditions annually. Prioritization is completed by targeting neighborhoods, trees, and age of system, with higher prioritization given to complaint-driven needs.
137.	During the permit term were existing procedures for inspection and maintenance schedules reviewed/updated to ensure pollution prevention and good housekeeping practices were conducted for the following activities? <i>Schedule A.3.f.iv</i>
	Pipe cleaning for stormwater and wastewater conveyance systems
	Cleaning of culverts conveying stormwater in roadside ditches
	<ul> <li>Ditch maintenance</li> <li>Road and bridge maintenance</li> </ul>
	Road repair and resurfacing including pavement grinding
	Dust control for roads and municipal construction sites
	Winter road maintenance, including salt or de-icing storage areas
	<ul> <li>Fleet maintenance and vehicle washing</li> <li>Building and sidewalk maintenance including washing</li> </ul>
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	Solid waste transfer and disposal areas
	Municipal landscape maintenance
	Material storage and transfer areas, including fertilizer and pesticide, hazardous materials, used oil storage, and fuel
	Firefighting training activities
	Maintenance of municipal facilities including public parks and open space, golf courses, airports, parking lots,
	swimming pools, marinas, etc.
	If necessary, provide an explanation: N/A
138.	Do any permit registrant-owned facilities have coverage under DEQ's 1200-Z Industrial Stormwater Discharge Permit? Schedule A.3.f.v
	Yes 🛛 No 🗌 NA 🗌
	If "Yes", provide DEQ File Number(s): 103964 (Not within SWMA)
	If necessary, provide an explanation: N/A
139.	Are practices in place to reduce the discharge of pollutants to the MS4 associated with the application and storage of pesticides and fertilizers? <i>Schedule A.3.f.vi</i>
	Yes 🛛 No 🗌
	If necessary, provide an explanation: N/A
140.	Are methods/practices in place to reduce the discharge of litter within the jurisdiction? Schedule A.3.f.vii
	Yes 🛛 No 🗌
	If necessary, provide an explanation: N/A
141.	Are practices in place to ensure that collected material or pollutants removed in the course of maintenance are managed and disposed of in a manner such as to prevent such pollutants from entering the waters of the state in accordance with state and federal rules? <i>Schedule A.3.f.viii</i>
	Yes 🛛 No 🗌
	If necessary, provide an explanation: N/A
142.	Were all persons responsible for evaluating O&M practices, evaluating compliance with long-term O&M requirements or ensuring pollution prevention at facilities and during operations appropriately trained to conduct such activities? <i>Schedule A.3.f.ix</i>
	Yes 🛛 No 🗌
	If necessary, provide an explanation: N/A
4.40	
143.	Were all new staff working to implement the pollution prevention and good housekeeping for municipal operations program appropriately trained within 30 days of their assignment to this program? <i>Schedule A.3.f.ix</i>
	Yes 🛛 No 🗌
	If necessary, provide an explanation: N/A

	nitoring requirement does not apply, mark "NA" and explain why it does not apply to you in the comments field.
144.	Was municipal stormwater monitoring performed at outfall locations, in the receiving waterbody, or to demonstrate compliance with this permit? <i>Schedule B.3</i>
	Yes 🗌 No 🖂
145.	If "Yes" is the data included in the Annual Report?
	Yes 🗌 No 🗌
	If necessary, provide an explanation: Not applicable; monitoring not performed.
	Wood Village Monitoring Requirements
146.	Provide a summary of the following to evaluate the control strategies established for the Lower Columbia Slough Phosphate, Lead, and Bacteria TMDLs: <i>Schedule D.1.b</i> Phosphate:
	Lead:
	Bacteria:
147.	Indicate which of the following were completed:
	<ul> <li>For phosphate, monitor influent and effluent dissolved orthophosphate concentrations and total phosphate concentrations at a representative site in Fairview Lake (Reach 4) and Fairview Creek (Reach 5)</li> <li>For lead, estimates of the effectiveness of controls to remove TSS</li> <li>For bacteria, measuring E. coli concentrations and its distribution over flows (for example, flow duration intervals) to demonstrate compliance with E. coli criteria</li> </ul>
	If necessary, provide an explanation:

Wa	ter Quality Standards
148.	During this monitoring year was it determined or reported that the MS4 discharge caused or contributed to an exceedance of an applicable water quality standard? <i>Schedule A.1.b</i>
	Yes 🗌 No 🖂
	If necessary, provide an explanation: N/A
149.	How and when did the exceedance of an applicable water quality standard occur? <i>Schedule A.1.b</i> If necessary, provide an explanation: Not applicable
150.	Was the exceedance self-reported or did DEQ send written notification? Schedule A.1.b
	Self-reported: Yes 🗌 No 🗌
	If necessary, provide an explanation: Not applicable
151.	Within 48 hours was an investigation started into the cause of the water quality exceedance? Schedule A.1.b.i
	Yes 🗌 No 🗌
	If necessary, provide an explanation: Not applicable
152.	Within 30 days of becoming aware of the exceedance, was DEQ notified in writing, if self-reporting? Schedule A.1.b.ii
	Yes 🗌 No 🗌
	If necessary, provide an explanation: Not applicable
153.	Within 60 days of becoming aware of or being notified of the exceedance, was a report submitted to DEQ that documents the following: <i>Schedule A.1.b.iii</i>
	The results of the investigation, including the date the exceedance was discovered
	<ul> <li>A brief description of the conditions that triggered the exceedance or the cause</li> <li>Corrective actions taken or planned, including the date corrective action was completed or is expected to be completed</li> </ul>
	If necessary, provide an explanation: Not applicable
154.	Were the corrective actions implemented in accordance with the schedule approved by DEQ? Schedule A.1.b
	Yes 🗌 No 🗌
	If necessary, provide an explanation: Not applicable
	Provide any additional comments or narrative description, if necessary: Not applicable

# MARION COUNTY STORMWATER MANAGEMENT PLAN



Marion County Public Works Environmental Services Division 5155 Silverton Rd NE Salem, OR 97305

2019-2024

(503) 588-5036

## Table of Contents

Background	1
Revisions	1
Control Measure: Public Education & Outreach	2
Goal	2
Permittee Intentions	2
Measurable Goals	2
BMPs	3
Control Measure: Public Involvement & Participation	5
Goal	5
Permittee Intentions	5
Measurable Goals	5
BMPs	6
Control Measure: Illicit Discharge Detection & Elimination	7
Goal	7
Permittee Intentions	7
Measurable Goals	7
BMPs	9
Control Measure: Construction Site Runoff Control	11
Goal	11
Permittee Intentions	11
Measurable Goals	12
BMPs	13
Control Measure: Post-Construction Site Runoff for New Development & Redevelopment	15
Goal	15
Permittee Intentions	15
Measurable Goals	16
BMPs	16
Control Measure: Pollution Prevention & Good Housekeeping for Municipal Operations	19
Goal	19
Permittee Intentions	19
Measurable Goals	19
BMPs	20

#### Background

Since 2007, Marion County has implemented the National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit (NPDES MS4). Currently under the Phase II General Permit and having changed at one point from an individual permit to a general permit, many of the program's Best Management Practices (BMPs) since inception have also undergone changes to fit within current permit requirements.

Marion County's Stormwater Management Area (SWMA) corresponds with the U.S. Census Bureau and is designated as an "Urbanized Area". These areas are developed based on census data relating to population densities and census blocks. Within this "Urbanized Area", Marion County has a specified Stormwater Management Area around the cities of Salem, Keizer, and Turner, and a small area in Butteville, but primarily located within the East Salem Service District (ESSD). Though it is designated as an urbanized area, the land use is inclusive of agricultural, commercial, multi-family residential, single-family residential, and rural-residential areas as well. The SWMA is comprised of 8,589 total acres containing a total of 11,412 property locations:

SWMA Area	Acres	Properties
Inside ESSD	3,407	9,344
Outside ESSD	5,182	2,068
Total:	8,589	11,412

The following watersheds can be found, whole or just partially, within the Marion County SWMA:

- Claggett Creek
- Little Pudding River
- Mill Creek (including Battle Creek)
- Croisan Creek

#### Revisions

The SWMP document must be reviewed and, if necessary, updated annually. Once reviewed, please sign and date when the necessary revisions are approved:

Due Date	Signature	Date
November 2021	Alex Wade	October 2021
November 2022	Roxanne Toepfer	October 2022
November 2023		
November 2024		

## Control Measure: Public Education & Outreach

#### Goal

The goal of the education and outreach program is to reduce the behaviors and practices of target audiences that cause or contribute to adverse stormwater impacts on receiving waters. The program should promote specific actions to increase understanding of how to reduce pollutant discharges in stormwater runoff and prevent illicit discharge from entering the MS4 and impacting receiving waters.

#### **Permittee Intentions**

- Inform the general public, homeowners, school children, construction site operators, elected officials, and other stakeholders about the impacts of stormwater pollution on our waterways.
- Provide these audiences with steps and/or actions that will reduce pollutants in stormwater runoff.
- Understand which local behaviors and practices cause and contribute to stormwater pollution and work to reduce those selected behaviors.

The program will utilize education and outreach methods that are appropriate for the desired audiences. Some of these methods may include social media messaging, brochures, flyers, handouts, in-person events, presentations, and/or trainings.

#### Responsible Person(s)

Most outreach activities are designed and implemented by an Environmental Specialist who is supervised by the Environmental Services Program Supervisor. Some outreach activities may involve other groups within Public Works or other entities but will be coordinated through an Environmental Specialist. All Environmental Services activities are approved and overseen by the Environmental Services Division Manager and the Public Works Director.

#### Measurable Goals

Milestones	lmp.	Deliverables			
1. Education and Outreach Program:	1. Education and Outreach Program:				
Stay abreast of new priority topics	Feb. 2020	Coordinate topics with target audience			
2. Educational Activities, Target Audiences,	2. Educational Activities, Target Audiences, Topics, & Construction Site Control Measures:				
Offer 2 messages annually (messaging	Feb.	Priority topic covered, method, audience			
should be offered in Spanish)	2020	type, estimated reach			
3. Tracking and Assessment:					
Determine type of assessment and activity	Nov.	Assessment metric, summary of how the			
to assess; implement assessment;	2020	activity was considered successful			
implement findings in following year	2020				

#### **BMPs**

- 1. <u>Education and Outreach Program</u>: Stay abreast of priority topics that impact water quality, universally and locally. The following will be classified as priority topics to be addressed during outreach campaigns over the course of the permit term:
  - a. Impacts from impervious surfaces and to avoid them
  - b. Practices for proper use and storage of pesticides, herbicides, and fertilizers
  - c. Practices to reduce litter
  - d. Practices for recycling programs
  - e. Practices for power washing, carpet, cleaning, auto repair and maintenance
  - f. Low impact development and green infrastructure
  - g. Potential impacts of septic systems and practices for maintenance
  - h. Watershed awareness
  - i. Storm drain awareness and connectivity to local rivers and streams
  - j. Other stormwater issues of significance
  - k. Mercury in sediments and impacts
  - I. Impacts of illicit discharges on receiving waters and how to report them

*Rationale:* The County has an established web presence and utilizes social media to share several water quality-related educational messages annually. Marion County Public Works has recently hired a Communications Coordinator who oversees and implements strategic social media campaigns aimed at educating the public on environmental messaging including pollutants and hazards to the environment, best practices for sustainable living, and what resources are available to them. In addition, Environmental Specialist staff are routinely working in coordination with the Communications Coordinator to specifically meet the targeted needs of the NPDES Permit. To promote behavioral change, staff will consider behaviors that negatively impact water quality locally. Staff will concentrate on creating in-depth messaging and activities that target those behaviors throughout the permit term. Focusing in-depth on a small number of topics will promote a lasting behavioral change.

- 2. <u>Educational Activities, Target Audiences, Topics, & Construction Site Control Measures</u>: Offer at least two educational messages or activities a year that address the County's priority topics created from the above list (messaging should be offered in Spanish):
  - a. Offer at least one educational message or activity from the priority list to the general public, homeowners, students, or businesses over the permit term.
  - b. Offer at least one educational message or activity from the priority list to local elected officials, land use planners or engineers over the permit term.

- c. Offer at least two educational messages or activities to construction site operators over the permit term that addresses any of the following topics:
  - i. Appropriate selection, design, installation and use of onsite stormwater controls as outlined by Marion County ordinances
  - ii. Appropriate maintenance of onsite stormwater controls as outlined by Marion County ordinances

*Rationale:* By distributing at least two educational messages or activities a year, the County will be fulfilling the general permit requirements. Additionally, by focusing messages on the County identified priority topics, the messaging will be more impactful.

The County currently focuses heavily on distributing most of their educational messages to the public using social media. During this permit term, staff should identify priority topics to promote through social media. Staff should also coordinate social media messaging with other activities to have a greater impact. Finally, staff should continue to provide messaging in Spanish.

Historically, the County has reached land use planners through the Point of Contact program by handing out brochures and informational pamphlets. During this permit term, staff should work with the Land Development Planning and Engineering group and the Marion Water Quality Advisory Committee (MWQAC) to identify priority topics to focus on annually and the best methods for distributing those messages. As updates are made to the engineering standards and thresholds tightened for construction erosion, these topics should be specifically targeted to construction operators.

Typically, methods for reaching elected officials have been through updates to the Board of Commissioners as issues or changes arise. This approach meets the permit requirements. However, staff should consider identifying other possible ways of sharing educational messages with County public officials in a less formal way, to keep them abreast of concerns and successes.

The County has been successful in reaching Construction Site Operators through the annual Erosion Control Summit, coordinated in partnership with the Mid-Willamette Outreach Group. Continued participation in the development of the summit should be pursued, but if other opportunities to reach this audience arise, they should be considered as well.

3. <u>Tracking and Assessment</u>: Assess or evaluate one education and outreach activity to determine effectiveness of the activity in conveying materials to the intended audience.

*Rationale:* While the County has conducted informal evaluations of outreach programs, these evaluations do not typically inform future outreach activities. At least one program, message, or activity shall be evaluated each year for effectiveness.

#### Control Measure: Public Involvement & Participation

#### Goal

Implement a public involvement and participation program that provides opportunities for the public to effectively participate in the development of the SWMP control measures.

#### Permittee Intentions

- Provide adequate opportunity for the public to participate in the development of the SWMP control measures and programs.
- The program will utilize a variety of methods to make the public aware of opportunities to participate in the development of implementation plans. It will also encourage participation from diverse groups within the community.

#### Responsible Person(s)

Many of the outreach activities are designed and implemented by an Environmental Specialist who is supervised by the Environmental Services Program Supervisor. All Environmental Services activities are approved and overseen by the Environmental Services Division Manager and the Public Works Director.

#### Measurable Goals

Milestones	Imp.	Deliverables		
1. Publicly Accessible Website:				
Conduct an annual revision and update	Feb. 2020	Date of revision and update		
2. Stewardship Opportunity:				
Develop stewardship opportunity; implement activity	Feb. 2024	Summary of opportunities, relevant dates, and number of participants		
Utilize the Marion Water Quality Advisory Committee (MWQAC) to develop the SWMP and SWMP programs: Host quarterly MWQAC meetings; provide opportunities for input	Feb. 2024	Meeting dates, agendas, number of attendees, and minutes		
3. Tracking and Assessment:				
Determine type of assessment and activity to assess; implement assessment; implement findings in following year	-	Assessment metric, summary of how the activity was considered successful		

#### **BMPs**

- 1. <u>Publicly Accessible Website:</u> Maintain and promote a publicly accessible website that includes the following information:
  - a. Illicit discharge reporting mechanism
  - b. Draft documents, final reports, plans and current SWMP document
  - c. Links to ordinances, policies related to stormwater control programs, and various educational materials
  - d. Contact information for current staff

*Rationale*: The County maintains and operates a publicly accessible website that meets current permit standards. Updates will be made as the relevance of contents shifts. Staff will periodically review the site and make updates that will add educational value as well as make the site easier to navigate. Additionally, the most recent versions of the SWMP, illicit discharge reporting protocol, and County Ordinances will be added as they are updated.

- 2. <u>Stewardship Opportunity</u>: Create stewardship opportunities for the public. These could include:
  - a. Stream team activities
  - b. Storm drain marking
  - c. Volunteer monitoring
  - d. Riparian plantings or stormwater facility enhancement
  - e. Neighborhood low-impact development
  - f. Adopt-a-Road
  - g. Citizen advisory committee
  - h. Other locally relevant opportunities

*Rationale*: The County has typically relied on the Adopt-a-Road program to fulfill the permit stewardship requirements; however, success has also been made in hosting volunteer opportunities for litter clean up events and storm drain marking. To see continued success and attendance at stewardship events, it will be important to continue to cultivate engagement of volunteers. Staff will work with the Marion County Volunteer Services Coordinator to develop a list of potential volunteers and will continue to implement at least one of those stewardship opportunities yearly.

Marion County will utilize the Marion Water Quality Advisory Committee (MWQAC) to develop the SWMP and SWMP programs:

*Rationale*: During previous permit cycles, County staff met with the MWQAC to develop and review proposed ordinance changes and found great value in their feedback. Staff should continue to utilize this public group by meeting with them quarterly. These meetings should provide updates and assess programmatic needs. Staff will rely heavily on the MWQAC for their input on the SWMP, ordinance updates and other protocol that are being updated as a result of the general permit.

3. Tracking and Assessment: Assess or evaluate one Public Involvement & Participation activity to determine effectiveness of the activity in engaging the to the intended audience.

*Rationale:* While the County has conducted informal evaluations of participatory programs, these evaluations do not typically inform future activities. At least one program or activity shall be evaluated each year for effectiveness.

### Control Measure: Illicit Discharge Detection & Elimination

#### Goal

Implement and enforce a program to detect and eliminate illicit discharges into the MS4.

#### Permittee Intentions

- Implement and enforce a program that detects and eliminates illicit discharges into the MS4.
- The program will prohibit non-stormwater discharges into the MS4 through the enforcement of a county ordinance or other regulatory method.

#### Responsible Person(s)

The illicit discharge program has traditionally been run as a coordinated effort between the Public Works Dispatch staff, the stormwater operations crew, and Environmental Specialists. Dispatch collects and documents complaints. Stormwater operations crews will investigate where appropriate. Environmental Specialists will investigate and respond.

#### Measurable Goals

Milestones	Imp.	Deliverables
1. MS4 Map:		
Create an outfall map and inventory	Aug. 2021	Outfall inventory created; refining information through ground-truthing; GIS; Stormwater operations crews update with identifiers as new items are installed

Continually update MS4 map, conveyance system, and stormwater assets	Aug. 2023	Updated maps; GIS; Stormwater operations crews update with identifiers as new items are installed
Create unique IDs for stormwater assets and structural stormwater control locations in GIS; conduct GIS analysis to determine missing information	Aug. 2022	Unique IDs created; percent of MS4 mapped; GIS; Stormwater operations crews update with identifiers as new items are installed
Map chronic illicit discharges	-	No known chronic discharges as of date; mechanism to capture through Survey123
2. Ordinance and/or Other Regulatory Mech	nanisms:	
Implement Ordinance	Jul. 2022	Internal Enforcement Procedure; Completed by way of MC Code Chapter 15.15 (Ordinance 1311)
3. Enforcement Procedures:		
Evaluate and update IDDE enforcement procedures (as needed)	Jul. 2020	IDDE Enforcement Procedure (Updated 02/24/2022)
4. Program to Detect and Eliminate Illicit Dis	scharges	
Review and update IDDE documentation procedures and reporting system	Jan. 2022	Through the public-facing website, complaints are routed (Report-a- Concern) to internal distribution group where complaint is forwarded to Dispatch Center and Environmental Specialist for appropriate tracking, response, and investigation; average response time within 24-hours. Maintain contact information for neighboring jurisdictions.
5. Dry Weather Screening Program:		
Develop a dry weather screening schedule to capture 60 percent of their MS4 outfalls each year.	Feb. 2022	Schedule completed; historically, 100% of outfalls are screened each permit year.
Develop priority locations for annual dry- weather field screening of outfalls to detect illicit discharges.	Feb. 2022	Annual survey: goal of 100% of outfalls screened. Historically, this is accomplished with ease.
Develop pollutant parameter action levels	Feb.	Pollutant parameter document
for response	2022	developed and employed.
Laboratory analysis	Feb. 2022	Site visit; sample and analysis.
6. Illicit Discharge Detection and Elimination	n Training	g and Education:
Develop IDDE training	Feb. 2022	Training is currently done in person; one- on-one.

7. Tracking and Assessment:			
Determine type of assessment and activity		Assessment metric: summary of how the	
to assess; implement assessment;	2022	implementation of the program was	
implement findings in following year	2022	considered successful.	

#### **BMPs**

- 1. <u>MS4 Map</u>: Update and maintain a current map and digital inventory of the MS4 including the following:
  - a. Outfalls
  - b. Conveyance system
  - c. Stormwater control locations
  - d. Chronic illicit discharges
  - e. Dry weather flows

In addition to the map, there must also be an outfall inventory with all the known outfall locations. The inventory must include a unique identifier (i.e., alphanumeric code), any geographic information necessary to find the outfall in the field and the name(s) of the receiving water(s).

*Rationale*: The County maintains a GIS database that includes features such as the storm drains, pipes, culverts, and outfalls. Staff will continue to work to update the mapping of new or discovered assets, create unique IDs for all features, and continue to map illicit discharge and dry weather monitoring sites.

2. <u>Ordinance and/or Other Regulatory Mechanisms</u>: Implement the existing Stormwater Discharge Quality Control Ordinance (#1311) to reflect the conditions of the general permit.

*Rationale*: In 2003 the County implemented East Salem Service District (ESSD) Ditch Maintenance Ordinance (#1174) which prohibits the dumping of solid waste, discarded items, or yard debris into ESSD ditches. This ordinance serves a large portion of the SWMA and can be used for IDDE purposes. It should be reviewed and updated in conjunction with general permit updates or revisions.

In 2011, the County implemented the Stormwater Discharge Quality Control Ordinance (#1311) to meet the illicit discharge terms of the permit. An escalating enforcement procedure has been developed and employed.

The requirements of Ordinances 1174 and 1311 are part of Marion County Code Chapter 15.15, "Stormwater Discharge Quality Control" which requires prohibitions within the

SWMA. The Water Quality Management Plan for the updated Willamette Basin Mercury TMDL does have extra provisions which should be met through expansion of this code, or a similar code to all county owned assets and property. This is currently be evaluated for the appropriate approach.

- 3. <u>Enforcement Procedures</u>: Develop and implement an IDDE Enforcement Plan that includes the following:
  - a. Timelines for compliance
  - b. Progressively stricter responses for repeat violations

*Rationale:* The County currently has a written escalating enforcement and response procedure that fulfills the requirements of the permit. This document will be used as guidance in enforcing a progressive response. Marion County Public Works Environmental Services staff will work in conjunction with the Marion County Code Enforcement Division to address repeated violations to achieve compliance.

- 4. <u>Program to Detect and Eliminate Illicit Discharges</u>: Develop and implement an IDDE response plan that includes the following:
  - a. An internal and external IDDE reporting system
  - b. Timelines for response and investigation
  - c. Documentation and tracking procedures

*Rationale:* Illicit Discharge Detection and Elimination complaints are received by phone, walk-in, or routed through the County website (Report-a-Concern) to an internal distribution group where complaint is forwarded to the Marion County Public Works Dispatch Center, operations crews, and Environmental Specialists for response and investigation. For consistency and proper documentation, a reporting and investigation mechanism through GIS is being developed. The County has a standard for responding to emergency situations where there is a threat to human health, welfare, or the environment; response time will be immediate, during and after office hours. Marion County typically has a current response rate within 1-day for all other complaints. An Environmental Specialist will ensure that contact will be made to notify neighboring jurisdictions when the authority has been misplaced.

5. <u>Dry Weather Screening Program</u>: Develop and implement a dry weather screening schedule.

*Rationale:* On an annual basis, during the dry season, stormwater operations crews will complete the established route to conduct dry weather screening for all outfalls which alleviates the need to establish a priority list. Documentation is gathered through the existing GIS system which documents timestamp and condition of each outfall. As the program develops and with each screening season, improvements will be made to enhance the collected data. The County has developed a pollutant parameter action level document if a response is necessary.

6. <u>Illicit Discharge Detection and Elimination Training and Education</u>: Implement an IDDE training program for all potential response staff.

*Rationale:* Illicit Discharge Detection and Elimination training has been an ongoing practice for all County operations crews. Trainings will undergo revisions and updates to reflect new expectations and evolving technologies. Stormwater operations crews within the SWMA specifically undergo an annual refresher training.

7. <u>Tracking and Assessment</u>: Evaluate to determine the effectiveness the implementation of the IDDE program.

*Rationale:* As an ongoing assessment, data throughout the permit year will be collected and monitored. Reports will be produced from the data collected where they can be further analyzed to ensure that the program is meeting permit requirements. This allows for the response to IDDE to be evaluated and improved upon and to be implemented in an efficient and resolute way.

### Control Measure: Construction Site Runoff Control

#### Goal

Implement and enforce a construction site runoff control program to reduce discharges of pollutants from construction sites in the coverage area.

#### Permittee Intentions

- Implement and enforce a program that reduces the discharge of pollutants from construction sites to the MS4.
- By an ordinance or other regulatory mechanism, the program will require erosion and sediment controls and waste materials management controls to be used at all qualifying construction sites.

#### Responsible Person(s)

The work involved in this control measure will be a collaborative effort between the County's LDEP Engineering staff and Environmental Specialists. LDEP is responsible for reviewing, permitting, and inspecting construction sites. To update ordinances and standards, they will need input from both Engineering and Environmental Specialist staff. LDEP staff will review and provide updates for ESCP templates, inspection checklists, and enforcement procedures. Engineering staff will review and provide updates to engineering standards and the Environmental Specialists will coordinate meetings, draft new language for ordinances, and review final documents to ensure compliance with the general permit.

Milestones	lmp.	Deliverables		
1. Ordinance and/or Other Regulatory Mechanism:				
Provide draft to BOC for review; public comment period; update Ordinance #1307	Aug. 2022	Updated ordinance		
2. Compliance with Other NPDES Permits:				
For construction projects that disturb one or more acres	Feb. 2023	Refer to DEQ or appropriate DEQ agent to obtain NPDES Construction Stormwater Permit coverage.		
3. Erosion and Sediment Control Plans (ESC	P):			
ESCP template established; develop updated internal procedures for ESCP documentation	Jan. 2021	Updated procedure		
Requirement for construction site operators to complete a site-specific ESCP prior to construction/land disturbance	Feb. 2023	Document will be used to verify that items on checklist are complete prior to approval from County.		
Requirement for ESCP to be maintained and updated as needed; develop updated inspection procedures.	Feb. 2023	Inspectors to be trained to ensure proper maintenance of ESCP; updated procedures and ordinance		
Maintain ESCPs on site during construction.	Feb. 2023	Inspectors to be trained to ensure ESCP on site.		
4. Erosion and Sediment Control Plans Revie	ew:			
Review ESCPs by checklist; consider potential water quality impacts	Feb. 2023	Inspectors to be trained to ensure completion of ESCP		
5. Construction Site Inspections:				
Inspect sites once during permit term, if sediment is visible/reported in stormwater, or a complaint is filed.	Feb. 2023	Updated inspection documentation procedure		
Train inspectors to adhere to minimum inspection requirements to maintain	Feb. 2023	Inspectors to be trained to meet the permit Construction Site Runoff Control requirements		

#### Measurable Goals

compliance and complete, comprehensive, inspection reports			
6. Enforcement Procedures:			
Develop updated enforcement procedures for qualifying construction sites	Feb. 2023	Updated ordinance and implemented escalating enforcement procedure	
7. Construction Runoff Control Training and	Educatio	on:	
Develop Construction Runoff Control Training for Marion County Staff	Feb. 2023	Training is currently done in person; one- on-one. Training to be developed on cloud-based training system and on regular intervals for existing staff and for new onboards.	
8. Tracking and Assessment:			
Track implementation of the Construction Site Runoff Program.	Feb. 2022	Assessment metric: summary of how the implementation of the program was considered successful.	

#### BMPs

1. <u>Ordinance and/or Other Regulatory Mechanism</u>: Revise and update the existing Construction Erosion Ordinance (#1307) to reflect the conditions of the general permit.

*Rationale:* In 2010 the County implemented the Construction Erosion Ordinance (#1307) to meet the construction erosion requirements of the previous individual permit. However, changes in the general permit such as size requirements for ESCP and requirements for enforcement procedures require the ordinance to be updated. During this update, the County will review the erosion and sediment control program to ensure new expectations and internal processes are effective and meet permit requirements.

2. <u>Compliance with Other NPDES Permits</u>: Refer to DEQ or appropriate DEQ agent to obtain NPDES Construction Stormwater Permit coverage

*Rationale*: For construction projects that disturb one or more acres (or that disturb less than one acre, if it is part of a "common plan of development or sale" disturbing one or more acres), project sites must be referred to DEQ, or the appropriate DEQ agent, to obtain NPDES Construction Stormwater Permit coverage. The NPDES Construction Stormwater General Permit requirements are in addition to the internal construction site runoff control requirements.

3. <u>Erosion and Sediment Control Plans</u>: Review and update ESCP requirements for site operators as well as the County's procedures for documentation and tracking.

*Rationale*: The Land Development Engineering and Planning (LDEP) Division currently uses a permitting system to ensure construction site operators and developers comply with ESCP requirements. To meet the conditions of the general permit, the threshold for submitting an ESCP must be updated, along with the supplementary materials provided to site operators. Staff will develop or update the ESCP template, inspection checklist, and internal procedures for ESCP review and approval as necessary.

4. <u>Erosion and Sediment Control Plans Review</u>: Review ESCPs from construction projects that will result in land disturbance of one or more acres using a checklist to determine compliance with the ordinance or other regulatory mechanism required. ESCP review procedures must include consideration of the construction activities' potential water quality impacts and remain in accordance with applicable state and local public notice requirements.

*Rationale*: This program is undergoing modification. The LDEP and Environmental Services Division will work together to review the current procedures and update them to meet the general permit guidelines.

5. <u>Construction Site Inspections</u>: Review and update the Construction Site Inspection procedure which should include triggers for inspection and minimum inspection documentation.

*Rationale*: The LDEP's inspection procedures were created in 2010 to fulfill the needs of the individual permit. To comply with the new general permit requirements, an updated procedure will need to be implemented. LDEP and Environmental Specialists will work to update the inspection procedures to meet the current permit expectations

6. <u>Enforcement Procedures</u>: Review and update the Construction Site enforcement procedures which should include an escalating enforcement procedure for repeat violations.

*Rationale*: The County's Construction Erosion ordinance has been updated to fulfill the current general permit and as such, the enforcement procedures are sufficient to meet the current requirements.

 <u>Construction Runoff Control Training and Education</u>: Provide orientation and training to all new LDEP staff working to implement the construction runoff control program within 30 days of hire. The staff must be trained and knowledgeable in the understanding of erosion, sediment, and waste material management controls to conduct ESCP reviews and inspections. All staff must receive training at least once during the permit term and provide follow-up training as procedures and technology change.

*Rationale*: All staff in the department who conduct work in this area are currently trained. Environmental Services staff will work with LDEP staff to establish a routine training mechanism that stays relevant to the standards and technology of the program. Training records should be retrievable within a reasonable timeframe through the county provided cloud-based management system.

8. <u>Tracking and Assessment</u>: Track implementation of the Construction Site Runoff Program. Evaluate to determine the effectiveness the implementation of the program.

*Rationale*: As an ongoing assessment, data throughout the permit year will be collected and monitored. Reports will be produced from the data collected where they can be further analyzed to ensure that the program is meeting permit requirements. This allows for the response to CSRC to be evaluated and improved upon and to be implemented in an efficient and resolute way.

# Control Measure: Post-Construction Site Runoff for New Development & Redevelopment

#### Goal

Implement post-construction stormwater pollutant control program to meet MS4 requirements to reduce discharges of pollutants and address stormwater runoff from new development and redevelopment project sites in the coverage area.

#### **Permittee Intentions**

- Implement and enforce a program that reduces the discharge of pollutants and controls stormwater runoff from new development and redevelopment to the MS4
- By an ordinance or other regulatory mechanism, the program will require that qualifying sites use stormwater controls and implement long term operation and maintenance for proper upkeep.

#### Responsible Person(s)

Implementing these BMPs will be a collaborative effort between the County's LDEP, Engineering staff and Environmental Specialists. LDEP is responsible for reviewing, permitting, and inspecting post construction sites. However, in order to update ordinances and standards they will need input from both Engineering and Environmental Services staff. LDEP will review and provide updates for internal documentation and procedures as well as enforcement. Engineering will review and

provide updates to engineering standards and Environmental Specialists will coordinate meetings, draft new language for ordinances and review final documents to ensure compliance with the general permit.

#### Measurable Goals

Milestones	lmp.	Deliverables
1. Ordinance and/or Other Regulatory Mec	hanism:	
Review and update current ordinance; Provide draft for BOC to review; Public comment period; update ordinance #1324	Feb. 2023	Updated ordinance
2. Removing Barriers to Low Impact Develo	pment:	
Develop a team to review codes, policy, and ordinances; review codes, policies, and ordinances for barriers to GI or LID implementation; provide recommendations to BOC	Feb. 2023	Barriers; recommendations and changes; updated codes, ordinances, or policies
3. Post-Construction Stormwater Managem	nent Requ	irements:
Develop a post construction standard review team; review and update post construction standards	Feb. 2023	Updated standards
Review and update enforcement procedures	Feb. 2023	Updated ordinance
4. Post-Construction Site Runoff Plan Review	w:	
Review and update the site plan review procedures	Feb. 2023	Updated procedures
5. Long-Term Operation and Maintenance:		
Implement a strategy to ensure that all structural stormwater controls installed in compliance and operated and maintained to meet the site performance standard.	Feb. 2023	Implemented Operations and Maintenance Strategy; updated Engineering Standards
6. Training and Education		
Develop Construction Runoff Control Training	Feb. 2023	Training developed
7. Tracking and Assessment:		
Track implementation of the Post- Construction Site Runoff for New Development & Redevelopment Program.	Feb. 2023	Assessment metric: summary of how the implementation of the program was considered successful.

#### **BMPs**

1. <u>Ordinance and/or Other Regulatory Mechanism</u>: Revise and update the existing Post Construction Runoff Ordinance #1324 to reflect the conditions of the general permit.

*Rationale:* In 2010, the County implemented Ordinance #1324 to meet the construction erosion requirements of the previous individual permit. However, changes in the general permit (ex: size requirements for stormwater controls) call for the ordinance to be updated. The enforcement procedures are not sufficient to meet the current requirements of the general permit. Staff will update the ordinance with the new enforcement procedures.

2. <u>Removing Barriers to Low Impact Development</u>: Review ordinances, code, and standards for any barriers to implementing green infrastructure or low impact development. If barriers are identified, work to minimize, or remove those barriers within three years.

*Rationale*: The County has a large list of codes, policies and ordinances that must be reviewed for barriers to LID and GI implementation. To review these policies, a team from Public Works will be gathered to identify barriers. Once barriers have been identified the group will propose recommendations to the County's management team and the Board of Commissioners for approval and implementation.

- **3.** <u>Post-Construction Stormwater Management Requirements</u>: Review and develop standards that meet the conditions of the general permit. These should include the following:
  - a. Structural stormwater control design and specifications
  - b. Site performance standards with a numeric stormwater retention requirement
  - c. Treatment standards for sites unable to meet the retention standards
  - d. Allowance for alternative compliance for sites unable to meet the retention requirements
  - e. Stormwater mitigation options for sites that qualify for alternative compliance

*Rationale*: The post construction standards are used by LDEP, capital projects and the general public during post-construction development. As such, to develop a set of standards that meet permit requirements and fulfill the needs and expectations of those who use them, a team from Public Works will be gathered to provide input in the changes. Representatives will assist in reviewing the County's 2012 Draft Interim Standards, review other jurisdiction's standards and propose updates.

4. <u>Post-Construction Site Runoff Plan Review</u>: Review and update the Post Construction Site Runoff Plan Review procedures. Review and approve plans for structural stormwater controls at new development and redevelopment sites

*Rationale:* LDEP is responsible for the review of all post construction plans submitted to the County. With multiple staff members potentially performing a review of the plans, it is important to have a documented procedure. This can be used by all staff performing the Site Runoff Plan Review to ensure consistency in evaluations and to provide site operators with a better understanding of County expectations. To comply with the general permit, this procedure will be reviewed and updated by staff.

5. <u>Long-Term Operation and Maintenance</u>: Implement a strategy to ensure that all structural stormwater controls installed in compliance and operated and maintained to meet the site performance standard.

*Rationale*: An Operations and Maintenance Strategy has been developed and implemented. The County's LDEP, Capital Projects, and Environmental Services staff have worked diligently to update the Engineering Standards. The draft is being proposed to county leadership and will potentially be instated prior to the February 28, 2023, deadline.

9. <u>Training and Education</u>: Provide orientation and training to all new LDEP staff working to implement the Post-Construction Site Runoff for New Development & Redevelopment Program within 30 days of hire. The staff must be trained and knowledgeable in the understanding of erosion, sediment, and waste material management controls to conduct ESCP reviews and inspections. All staff must receive training at least once during the permit term and provide follow-up training as procedures and technology change.

*Rationale*: All staff in the department who conduct work in this area are currently trained. Environmental Services staff will work with LDEP staff to establish a routine training mechanism that stays relevant to the standards and technology of the program. Training records should be retrievable within a reasonable timeframe through the county provided cloud-based management system.

6. <u>Tracking and Assessment</u>: Track implementation of the Post-Construction Site Runoff for New Development & Redevelopment Program. Evaluate to determine the effectiveness the implementation of the program.

*Rationale*: As an ongoing assessment, data throughout the permit year will be collected and monitored. Reports will be produced from the data collected where they can be further analyzed to ensure that the program is meeting permit requirements.

# Control Measure: Pollution Prevention & Good Housekeeping for Municipal Operations

#### Goal

Operate and maintain facilities, using prudent pollution prevention and good housekeeping to reduce the discharge of pollutants through the MS4 to waters of the state.

#### Permittee Intentions

- Implement a program that ensures prudent pollution prevention and good housekeeping practices are used to reduce the discharge of pollutants from municipal operations
- The program will utilize a variety of methods to train staff on pollution prevention practices and ensure that good housekeeping practices are being utilize during day-to-day municipal activities.

#### Responsible Person(s)

Implementing these BMPs will be a coordinated effort between Road Operations, Stormwater Operations and Environmental Specialists. Stormwater Operations will be responsible for mapping and inspecting stormwater controls as well as inspecting catch basins. Road and Stormwater Operations will be responsible for implementing all BMPs during day-to-day activities. Finally, Environmental Specialist will be responsible for updating the BMP procedures and implementing training programs. The Road Operations Division Manager and Supervisors along with the Environmental Services Program Supervisor are responsible for ensuring the implementation.

#### Measurable Goals

Milestones	lmp.	Deliverables				
1. Operation and Maintenance Strategy for Existing Structural Stormwater Controls:						
Document all existing stormwater controls	Feb.	Updated map; maintenance plan and				
in the MS4; develop an annual	2022	documented work				
maintenance plan for O&M						
2. Inspection and Cleaning of Catch Basins:						
Develop an annual maintenance plan;	Feb.	Updated map; documentation of				
inspect catch basins annually	2022	inspections				
3. Pollution Prevention in Facilities and Ope	rations:					
Review the existing BMP document;	Feb.	Updated BMP guide				
compare practices to other jurisdictions;	2022					
update BMPs as necessary	2022					
4. Registrant-owned NPDES Industrial Storm	nwater l	Permit Facilities:				
Ensure owned and operated industrial	Feb.	All qualifying sites covered under permit				
facilities are covered under NPDES						
Industrial Stormwater Permit	2022					
5. Requirements for Pesticide and Fertilizer Applications:						

Implement Pesticide and Fertilizer BMPs	Feb. 2022	BMP trainings held; BMP manual to be updated as needed
4. Litter Control:		
Document all solid waste removed from the MS4 through the course of daily operations; develop a plan to reduce most frequent materials	Feb. 2022	Documentation of waste; litter reduction plan
5. Materials Disposal:	-	
Implement proper disposal program for waste materials collected in the process of standard operations and maintenance.	Feb. 2022	BMP trainings held; BMP manual to be updated as needed
6. Stormwater Infrastructure Staff Training:	-	
Develop BMP training program; implement training program for new hires; train employees on BMPs once per year	Feb. 2022	Updated training program; documentation of participants
7. Tracking and Assessment		
Determine type of assessment and activity to assess; implement assessment; implement findings in following year	Feb. 2022	Assessment metric: summary of how the implementation of the program was considered successful.

#### BMPs

1. <u>Operation and Maintenance Strategy for Existing Structural Stormwater Controls</u>: Develop and implement an operations and maintenance strategy for all existing stormwater controls that discharge into the MS4.

*Rationale:* The County's post-construction requirements require certain sites to install stormwater controls within the MS4. However, documenting and inspecting these controls has been inconsistent in the past. To ensure compliance with the permit, LDEP and Capital Projects will develop a comprehensive list of stormwater controls in the MS4. Once all the controls have been documented, the Environmental Services Program Supervisor will develop an annual plan for the Stormwater Operations team to inspection and maintain.

2. <u>Inspection and Cleaning of Catch Basins</u>: Develop and implement a strategy to inspect and maintain at least 50% of the catch basins and inlets within the MS4.

*Rationale:* Stormwater operations crews already inspect and clean catch basins within the MS4 on a regular basis. However, to ensure that there is evidence of meeting the permit expectations, the Environmental Services Specialists are developing an annual plan and working in coordination with the Marion County IT Department to implement GIS tracking

mechanisms. Stormwater Operations will provide documentation upon inspection and cleaning each catch basin.

- 3. <u>Pollution Prevention in Facilities and Operations</u>: Revise and update the existing best management practices document and ensure proper procedures are in place for the following activities:
  - a. Pipe cleaning for stormwater and wastewater conveyance systems
  - b. Cleaning of culverts conveying stormwater in roadside ditches
  - c. Ditch Maintenance
  - d. Road and bridge maintenance
  - e. Road repair and resurfacing including pavement grinding
  - f. Dust control for roads and municipal construction sites
  - g. Winter road maintenance including salt or de-icing
  - h. Fleet maintenance and vehicle washing
  - i. Building and sidewalk maintenance including washing
  - j. Solid waste transfer and disposal areas
  - k. Municipal landscape maintenance
  - I. Material storage and transfer areas including fertilizer and pesticide, hazardous material, used oil storage and fuel
  - m. Firefighting training activities
  - n. Maintenance of municipal facilities including public parks and open space, golf courses, airports, parking lots, swimming pools, marinas, etc.
  - o. Application and disposal of pesticides and fertilizers
  - p. Material disposal that is removed during maintenance, treatment, control of stormwater or wastewater

*Rationale*: The County updated the Marion County Best Management Practices for Clean Water document in 2022. Since it covers many different municipal activities, it is important that those BMPs are reviewed and updated to meet current expectations. An Environmental Specialist will continue to review the BMP document and BMP activities and compare with current standards and outside agencies to update the document accordingly.

4. <u>Registrant-owned NPDES Industrial Stormwater Permit Facilities</u>: Ensure owned and operated industrial facilities are covered under NPDES Industrial Stormwater Permit.

*Rationale*: All qualifying sites under Marion County's authoritative jurisdiction are currently covered under the NPDES permit. The North Marion County Disposal Facility (File Number:

103964; EPA Number: ORR501463) is currently compliant with the 1200-Z Industrial Stormwater Permit. There are no other qualifying sites under the County's jurisdiction.

5. <u>Requirements for Pesticide and Fertilizer Applications</u>: Implement practices to reduce the discharge of pollutants to the MS4 associated with storage of pesticides and fertilizers. Focusing on County-owned right-of-way, parks, or other operational facilities, employees or contractors applying pesticides must follow all label requirements, including those regarding application methods, rates, number of applications allowed, and disposal of the pesticide, fertilizer and rinsate.

*Rationale:* Road operations crews abide by the rules written in the BMP manual regarding the storage of pesticides and fertilizers.

6. <u>Litter Control</u>: Implement a method to reduce litter within MS4 by working cooperatively with other departments and entities on a regular basis (example: Adopt-a-Road).

*Rationale:* Road operations crews remove solid waste and debris from roadways, ditches and catch basins throughout the county, including the MS4 areas. To show compliance with the general permit, staff who retrieve and dispose of wastes generally capture and track the materials that they remove through a Public Works Dispatch Log. An Environmental Specialist will review the data periodically and consider a litter reduction plan that would address the root causes of the most frequent materials being found.

7. <u>Materials Disposal</u>: Materials and pollutants removed in the course of maintenance, treatment, control of stormwater, or other wastewaters must be managed and disposed of in a manner to prevent pollutants from entering conveyance systems or open waterways.

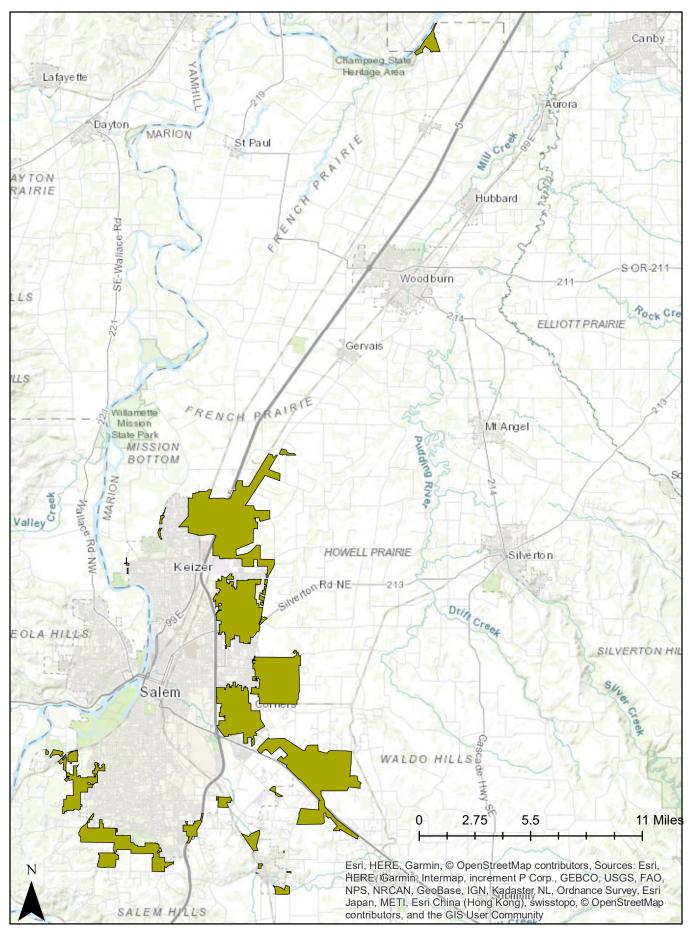
*Rationale*: The BMP manual addresses material disposal during the course of regular maintenance. Excess materials are deposited above the 100- year floodplain, at a supervisor approved site, and not within 75' of a stream, wetland, or riparian area. Crews are directed to follow the Erosion Control Table provided within the manual (Appendix A)

8. <u>Stormwater Infrastructure Staff Training</u>: Develop and implement a program to train all new staff working to implement pollution prevention for municipal operations within 30 days of hire and at least once during the permit term.

*Rationale*: Since 2009, the County has been implementing BMP training for all municipal operations crews. However, with newer technology and updated BMP strategies, there is

an opportunity to update how training is implemented. To meet permit requirements, staff should be trained once upon hire and once a year as a refresher. An Environmental Specialist will update these trainings and provide them to all appropriate employees.

## Marion County Stormwater Management Area



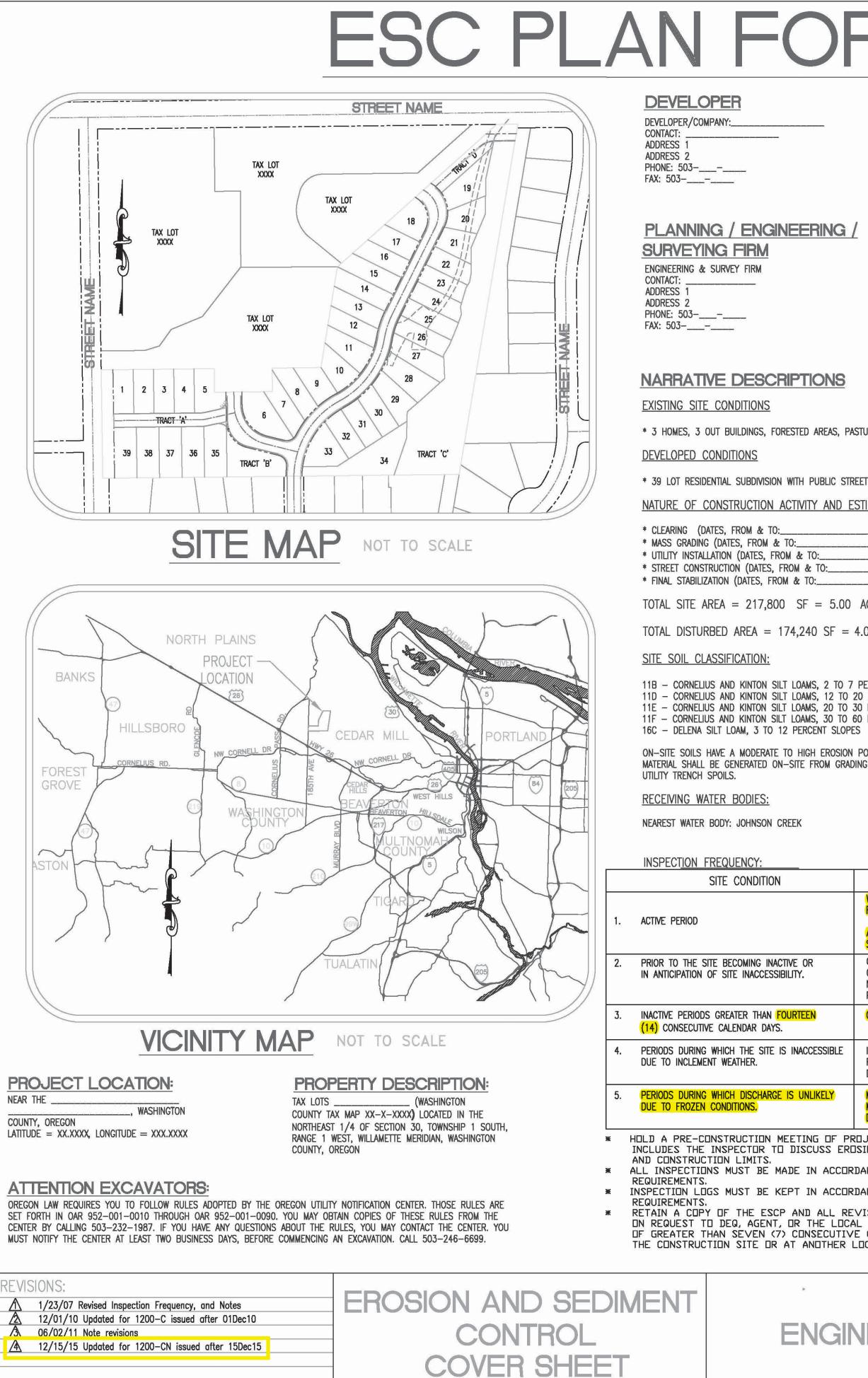
#### Illicit Discharge Detection & Elimination Enforcement Procedure Updated: February 24, 2022

In the event a violation of County Code Chapter 15.15, STORMWATER DISCHARGE QUALITY CONTROL, is identified, the following steps shall be followed with the objective of ending the violation and bringing the responsible party into compliance. If pollutant is observed and identified, refer to the Marion County Pollutant Parameter Action Level document. Once the source of the illicit discharge is discovered and the responsible party identified, the Public Works Director and/or their designee (investigator) will look at past records to determine if this is a repeat violation:

- Step 1. For repeat offenders and/or discharges involving hazardous materials, follow Steps 2 and 3 immediately and in full.
- Step 2. The investigator will attempt to make contact onsite with the property owner and any firm or individuals involved with the illicit discharge, if the firm or individuals can be identified, or by phone, and communicate verbally the nature of the violation. This verbal notification should include:
  - a. How the discharge violates MS4 permit requirements or impacts water quality.
  - b. The identified actions that must occur to end the discharge and remediate any impacts from the discharge.
  - c. The identified financial penalties and other impacts to which the property owner may be subject.
    - i. For first time violators, when the discharge does not involve hazardous materials (as defined in MCC 15.15.030), the responsible party will be given a 5-day deadline to eliminate the discharge and make a best reasonable effort to remediate any impacts caused by the illicit discharge.

- ii. For repeat offenders, or when the discharge involves hazardous materials, the Step 3 Notice of Violation (NOV) will be issued with no 5-day grace period.
- Step 3. If the violation(s) identified is not remediated by the deadline given in Step 2, or the responsible party is a repeat violator, or the discharge involves hazardous materials, a NOV letter will be issued in accordance with Marion County Codes 15.15.160, 15.15.180, and 15.15.190 and sent by certified mail to the property owner, any other responsible parties, and Marion County Code Enforcement. The NOV will include:
  - a. A requirement for pollutant remediation and the requirement to cease any continued illicit discharge.
  - b. A time frame, typically no longer than 7 business days from the date of the letter, in which the discharge is expected to be remediated.
  - c. The requirements set forth in Marion County Code 15.15.190.
  - d. The potential issuance of fines in accordance with Marion County Code 15.15.270.
- Step 4. If the investigator, or their agent, returns after the time frame given in Step 3 to find the illicit discharge has not been remediated or that the discharge is ongoing, Marion County staff will:
  - a. Pursue the issuance of fines in accordance with Marion County Code 15.15.270. Fines sought at this step constitute a continuing violation assessed from the date of the NOV.
  - b. Evaluate potential actions to repair and abate the issue in accordance with Marion County Code 15.15.200. If repair and abatement is possible, and the attempt to seek resolution through fines or other methods has not been successful, pursue repair and abatement.

*		rion County Pollutant		n Levels y to accurately identify potential illicit discharges.
Pollutant Parameter	Parameters and Action levels may be adap Potential Indicator of Illicit Discharge	Equipment	Action Level	Comments
Ammonia Nitrogen (NH3)	Used to distinguish between clean and contaminated water.	Lab	>0.5 mg/L	Levels at or above action levels likely indicate the presence of sewage, industrial wastewater or process water.
Color	Colors indicate different sources (ex: lime green color associates with anti-freeze). Brown, gray, yellow, green, orange or red water should be noted. Observations: Faint colors in sample bottle, clearly visible in sample bottle, clearly visible in outfall flow	Visual	Any presence prompts an investigation	Potable water has no color. Process water and wastewater may present a variety of colors. Used to distinguish between process or wastewater and potable or groundwater.
Conductivity	Conductivity can be strongly related with the total amount of dissolved material in water. Conductivity can have some value in detecting industrial discharges that have very high conductivity readings.	Oakton 54X002608C pH Meter	>250 µS	Action level indicates potential for unnatural sources of process water, leachate, or wastewater.
Floatables or Detergents (non-trash)	Floatables could include possuble petroleum sheens, soap suds, or floating sanitary materials.	Visual	Any presence prompts an investigation	Some floatables such as toilet paper are indicators of illicit sanitary sewer connections. A sheen's origin can sometimes be determined by touching it with a stick-like object. If sheen breaks up into platelets or clumps, then it is likely due to the presence of naturally occurring bacteria in the water. If the sheen swirls, separates, and reforms, petroleum is likely present in the water.
Flow	Presence of flow from unknown source may indicate illicit discharge.	Visual	Any presence prompts an investigation	Source could be groundwater, leaking potable water, or an illicit discharge.
Odor	An odor at the site may be indicative of a rancid, sour, sulfide, chemical, sewage or petroleum-related source.	Scent	Any presence prompts an investigation	Odors may indicate an illicit discharge has occurred.
рН	Used to identify presence of liquid wastes from industrial processes. pH can be a good indicator of liquid wastes from industries, which can have very high or low pH.	Oakton 54X002608C pH Meter	Outside of range from 6.0 to 8.5	Values less than 6.0 are acidic and may indicate discharges from textile mills, pharmaceutical manufacturers, metal fabricators, and companies that produce resins, fertilizers, or pesticides. Values greater than 9.0 are alkaline and may indicate discharges from industries such as textile mills, metal plating facilities, steel mills, ready mix concrete plants (including concrete truck wash out areas), and producers of rubber and plastic
Temperature	Used to identify presence of wastewater and/or process water.	Oakton 54X002608C pH Meter	>68°F	Average shallow groundwater temperatures in Oregon range from about 50°F to 59°F. Potable water is generally below 59°F. Extreme temperatures may indicate an illicit discharge. Extremely warm temperatures can be indicative of industrial or sanitary sewer discharges.
Total Chlorine	Used to identify presence of commercial and or industrial wastewater.	Hach Total Colormeter	>0.5mg/L	If chlorine is at or above action levels, likely sources include commercial or industrial wastewater, or discharges from pools and hot tubs.
Turbidity	Indicates particulates (ex: sediment) and may range from slightly cloudy to completely opaque. Observation: Slight cloudiness, cloudy, opaque.	Visual	>15 NTU	Groundwater and potable water are generally very clear. Could indicate illicit discharge or issues with a pipe condition. Turbidity values >15 NTU indicate something other than a natural source.



# ESC PLAN FOR SITES 1 TO 5 ACRES

## STANDARD EROSION AND SEDIMENT **CONTROL PLAN DRAWING NOTES:**

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D.

N	MINIMUM FREQUENCY
	WEEKLY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOW MELT, IS OCCURRING.
	AT LEAST ONCE EVERY MONTH, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
ACTIVE OR SIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
<mark>fourteen</mark> S.	ONCE EVERY MONTH.
IS INACCESSIBLE	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.
<mark>e is unlikely</mark>	MONTHLY. RESUME MONITORING IMMEDIATELY UPON Melt, or when weather conditions make Discharges likely.

- 1. All permit registrants must implement the ESCP. Failure to implement any of the control measures or practices described in the ESCP is a violation of the permit. 2. The ESCP measures shown on this plan are minimum requirements for anticipated site conditions. During the construction
- period, upgrade these measures as needed to comply with all applicable local, state, and federal erosion and sediment control regulations. 3. Submission of all ESCP revisions is not required. Submittal of the ESCP revisions is only under specific conditions. Submit
- all necessary revision to DEQ or Agent. 4. Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of
- erosion. 5. 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 vegetative buffer zones between the site and
- sensitive areas (e.g., wetlands), and other areas to be preserved, especially in perimeter areas. 6. Preserve existing vegetation when practical and re-vegetate open areas. Re-vegetate open areas when practicable before and

ASTURE AREAS, AND DRIVEWAYS REETS AND UTILITIES ESTIMATED TIME TABLE))) ACRES 4.00 ACRES 7 PERCENT SLOPES	<ol> <li>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 vegetative seed mix used.</li> <li>Erosion and sediment control mesures including perimetre sediment control must be in place before vegetation is disturbed and must remain in place and be maintained, repaired, and promptly implemented following pracedures established for the duration of construction, including protection for active storm drain inlets and catch basins and appropriate non-stormwater pollution controls.</li> <li>Establish concrete truck and other concrete equipment washout areas before beginning concrete work. Direct all wash water in the application for addives including gravel roadways.</li> <li>Establish concrete truck and other concrete equipment washout areas before beginning concrete work. Direct all wash water in roadways including gravel roadways.</li> <li>Establish material and waste storage areas, and other non-stormwater controls.</li> <li>Prevent tracking of sediment onto public or private roads using BWPs such as: graveld (or paved) exits and parking areas, gravel all unpaved roads located onsite, or use an exit tire wash. These BMPs must be in place prior to land-disturbing activities.</li> <li>When trucking saturated soils from the site, either use water-light trucks or drain loads on site.</li> <li>Use BMPs to prevent or minimize stormwater exposure to pollutarts from spills, vehicle and equipment fueling, maintenance, and storage; other cleaning and machinery, as well as debris, leftover pairs, solvents, and glues from construction operations.</li> <li>Implement the following BMPs when applicable: written spill prevention and reposce procedures expende for whices, sequent monintenance schedule for vehicles and machinery, material delivery and storage controls, training and signage, and covered storage areas for waste and supplies.</li> <li>Use water, soil-bind</li></ol>	EROSION PREVENTION PRESERVE NATURAL VEGETATION GROUND COVER HYDRAULIC APPLICATIONS PLASTIC SHEETING MATTING DUST CONTROL TEMPORARY/ PERMANENT SEEDING BUFFER ZONE OTHER: SEDIMENT FENCE (PERIMETER) SEDIMENT FENCE (INTERIOR) SEDIMENT FENCE (INTERIOR) SEDIMENT FENCE (INTERIOR) SEDIMENT TRAP NATURAL BUFFER ENCROACHMENT) OTHER: RUN OFF CONTROL CONSTRUCTION ENTRANCE PIPE SLOPE DRAIN OUTLET PROTECTION SURFACE ROUGHENING CHECK DAMS OTHER: POLLUTION PREVENTION PROPER SIGNAGE HAZ WASTE MGMT SPILL KIT ON-SITE CONCRETE WASHOUT AREA	CLEARING  **X  **X  **X  **X  **X  **X  **X  *	MASS GRADING	UTILITY INSTALLATION X X X X X X X X X X X X X X X X X X X	STREET CONSTRUCTION	FINAL         STABILIZATION         X	WET WEATHER (OCT. 1 - MAY 31ST)         X
20 PERCENT SLOPES 30 PERCENT SLOPES 60 PERCENT SLOPES PES N POTENTIAL. ALL FILL DING EXCAVATION AND	<ol> <li>Catch basins: clean before retention capacity has been reduced by fifty percent. Sediment basins and sediment traps: remove trapped sediments before design capacity has been reduced by fifty percent and at completion of project.</li> <li>Within 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 a recurrence of the discharge within the same 24 hours. Any in-stream clean up of sediment shall be performed according to the Oregon Division of State Lands required timeframe.</li> <li>The intentional washing of sediment into storm sewers or drainage ways must not occur. Vacuuming or dry sweeping and material pickup must be used to cleanup released sediments.</li> <li>Provide permanent erosion control measures on all exposed areas. Do not remove temporary sediment control practices until permanent vegetation or other cover of exposed areas is established. However, do remove all temporary erosion control measures as exposed areas become stabilized, unless doing so conflicts with local requirements. Properly dispose of construction materials and waste, including sediment retained by temporary BMPs.</li> <li>If vegetative seed mixes are specified, seeding must take place no later that September 1; the type and percentages of seed in the mix must be identified on the plans.</li> <li>All pumping of sediment loden water shall be discharged over an undisturbed, preferably vegetated area, and through a sediment control BMP i.e. (filter bag).</li> <li>All exposed soils must be covered during the wet weather period, October 01 - May 31.</li> <li>(ff water of the state is within the project site or within 50 feet of the project boundary, maintain the existing natural buffer</li> </ol>	GUIDANCE MANUA SOME OF THE AE EFFECTIVELY MAN SPECIFIC SITE CO	THAT WILL BI	AILABLE BES REVIEWED T PREVENTION CLUDING SOL D CONDITION	PRIOR TO ANY O TATEM ST MANAGEMENT O COMPLETE THIS O COMPLETE THIS N AND SEDIMENT IL CONDITIONS TO IS, AS THE PROJ	GROUND DISTURBING ENT PRACTICES (BMP) O S EROSION AND SEE ECAUSE THEY WERE CONTROL FOR THIS POGRAPHIC CONSTR ECT PROGRESSES A	PTIONS BASED ON DIMENT CONTROL PL DETERMINED TO NO PROJECT BASED C AINTS, ACCESSIBILIT	AN. DT DN Y TO
MINIMUM FREQUENCY         WEEKLY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF         FROM SNOW MELT, IS OCCURRING.         AT LEAST ONCE EVERY MONTH, REGARDLESS OF WHETHER         STORMWATER RUNOFF IS OCCURRING.         ONCE TO ENSURE THAT EROSION AND SEDIMENT         CONTROL MEASURES ARE IN WORKING ORDER. ANY         NECESSARY MAINTENANCE AND REPAIR MUST BE MADE         PRIOR TO LEAVING THE SITE.         ONCE EVERY MONTH.         IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A         RELEVANT AND ACCESSIBLE DISCHARGE POINT OR         DOWNSTREAM LOCATION.	within the 50-foot zone for the duration of the permit coverage, or maintain less than the entire existing natural buffer and provide additional erosion and sediment control BMPs.	COMPANY/AGE PHONE: FAX: EMAIL: DESCRIPTION 5 YEARS WERE	NCY: OF EXPERIE SPENT INSTAL E ON THE PF TTENDED IECA	NCE: <u>10 y</u> Ling and m Inciples an Conference	'EARS OF EXPERI AINTAINING EROSI ND PRACTICES OF		RUCTION INDUSTRY,	OF WHICH 8 HOUR
MONTHLY. RESUME MONITORING IMMEDIATELY UPON MELT, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY. REJECT CENSTRUCTION PERSENNEL THAT DSIGN AND SEDIMENT CONTROL MEASURES RDANCE WITH DEQ 1200-CN PERMIT RDANCE WITH DEQ'S 1200-CN PERMIT EVISIONS ON SITE AND MAKE IT AVAILABLE AL MUNICIPALITY. DURING INACTIVE PERIODS /E CALENDAR DAYS, RETAIN THE ESCP AT LOCATION.		C050 ERC C051 CLE C052 GRA ERC C053 ERC	DSION AN ARING AN ADING, ST DSION AN DSION AN	D SEDIM ND DEMC REET AN D SEDIM D SEDIM	IENT CONTR DLITION ERO	OL DETAILS	IEET DIMENT CONT	_
NEERING FIRM	DESIGNED BY:       XXX       DRAWING NO.:       XXXX         DRAWN BY:       XXX       SCALE:       XXXX         CHECKED BY:       XXX       CLEAN WATER SERVICES       2550 SW HILLSBORO HIGHWAY         HILLSBORO, OR 97123       PHONE: 503-681-3600       FAX: 503-681-3603       WASHINGTON		NAN ASHINGTON C	С	DREGC	PRELIN PRELIN PRELIN	N PLACE HO BODOCOCO MINARY DESIGN OREGON VEFOR STANKING E Month Day Year	JOB NUMBER XXXX SHEET XXXX

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200-CN PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200-CN PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200-CN PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

# **BMP MATRIX FOR CONSTRUCTION PHASES**

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S.

LEGEND	K K
EXISTING GROUND CONTOUR (2 FT)	
EXISTING GROUND CONTOUR (10 FT)	
EXISTING TREE TO REMAIN	0 茯
EXISTING TREE TO BE REMOVED	××
SEDIMENT BARRIER (PERIMETER)	X
SEDIMENT BARRIER (INTERIOR)	xx
ORANGE CONSTRUCTION FENCE	<del></del>
SEDIMENT TRAP	$\ge$
BRUSH BARRIER	$\sim$
CHECK DAM	
CONSTRUCTION ENTRANCE	
DIVERSION DIKE	
DIVERSION SWALE	
DIVERSION DIKE/SWALE	
INLET PROTECTION	
SEDIMENT MAT	
TEMPORARY SLOPE DRAIN	$\vdash \neg \neg$
ROCK FILTER BERM	
TEMPORARY SLOPE STABILIZATION MEASURES	
DRAINAGE FLOW DIRECTION	$\rightarrow$

THESE EROSION AND SEDIMENT CONTROL PLANS ASSUME "DRY WEATHER" CONSTRUCTION. "WET WEATHER" CONSTRUCTION MEASURES NEED TO BE APPLIED BETWEEN OCTOBER 1ST AND MAY 31ST.

REVISIO

\* NOTE: PRE-DEVELOPED RUN-OFF SHEET FLOWS EASTERLY INTO ON-SITE DRAINAGE AND NORTHERLY ONTO ADJACENT PROPERTIES.

NS:	CLEARING, DEMOLITION, MASS GRADING, EROSION AND SEDIMENT CONTROL PLAN	DESIGNED BY: DRAWN BY: CHECKED BY: PREPARED FOR:	DRAWING NO.: SCALE:

## PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

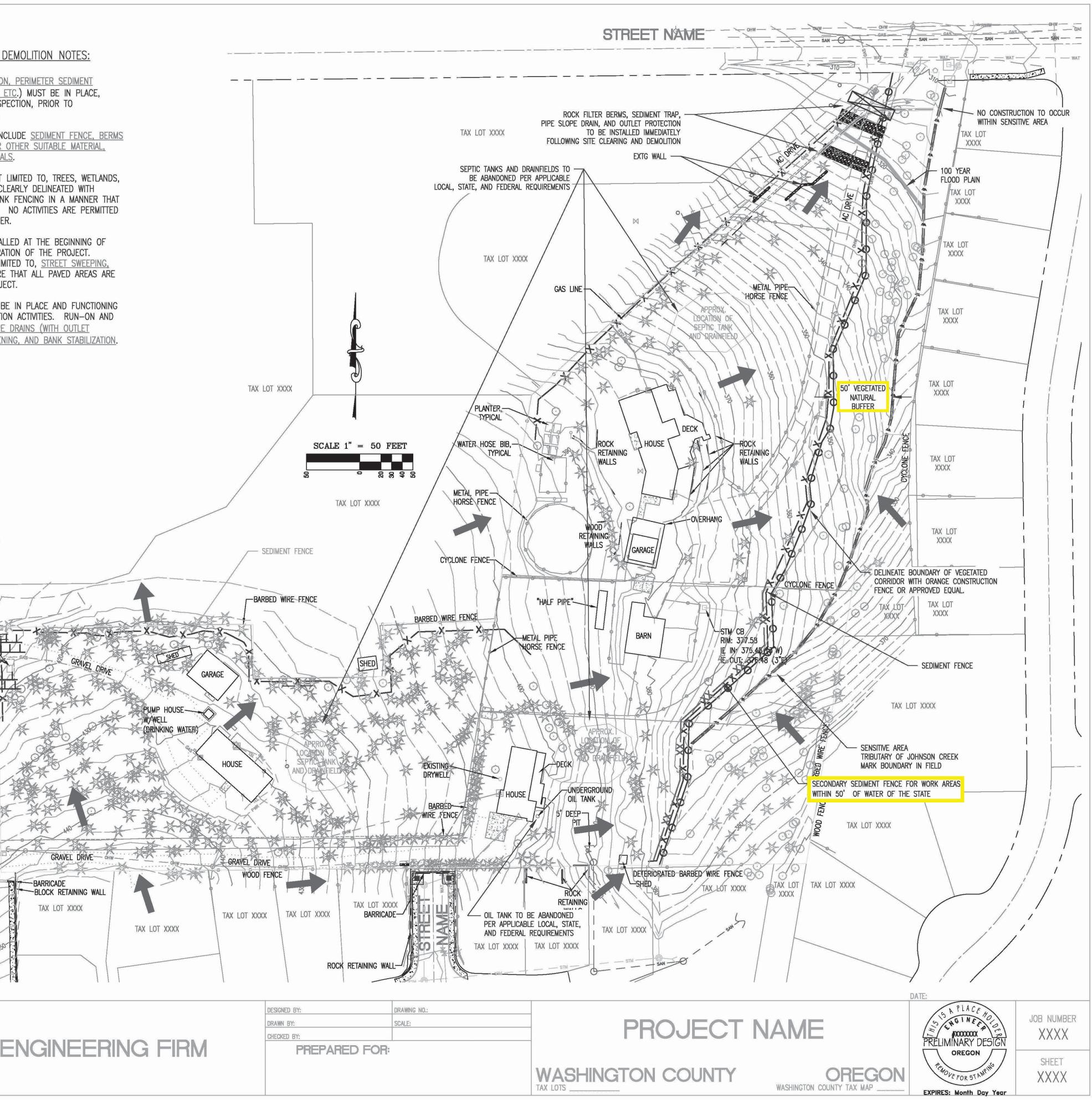
2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.

3. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.

4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

5. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.





FINISHED GRADE CONTOUR (2 FT)	102
FINISHED GRADE CONTOUR (10 FT)	
SEDIMENT BARRIER (PERIMETER)	X
SEDIMENT BARRIER (INTERIOR)	XX
ORANGE CONSTRUCTION FENCE	- <del></del>
BRUSH BARRIER CHECK DAM	
CONSTRUCTION ENTRANCE	
DIVERSION DIKE DIVERSION SWALE	
DIVERSION DIKE/SWALE	
INLET PROTECTION	
SEDIMENT MAT	
TEMPORARY SLOPE DRAIN	$\vdash \neg \triangleleft$
COMPOST BLANKET	
SEEDING & MULCHING	
CONCRETE WASH AREA	
OUTLET PROTECTION	
ROCK FILTER BERM	
TEMPORARY SLOPE STABILIZATION MEASURES	
LONG TERM SLOPE STABILIZATION MEASURES	
NEW IMPERVIOUS SURFACE	

THESE EROSION AND SEDIMENT CONTROL PLANS ASSUME "DRY WEATHER" CONSTRUCTION. "WET WEATHER" CONSTRUCTION MEASURES NEED TO BE APPLIED BETWEEN OCTOBER 1ST AND MAY 31ST. GRADING, STREET AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:

2. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.

3. LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.

4. TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.

5. STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.

6. EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.

7. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.

8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

9. ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.

10. SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.

11. AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.

12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.

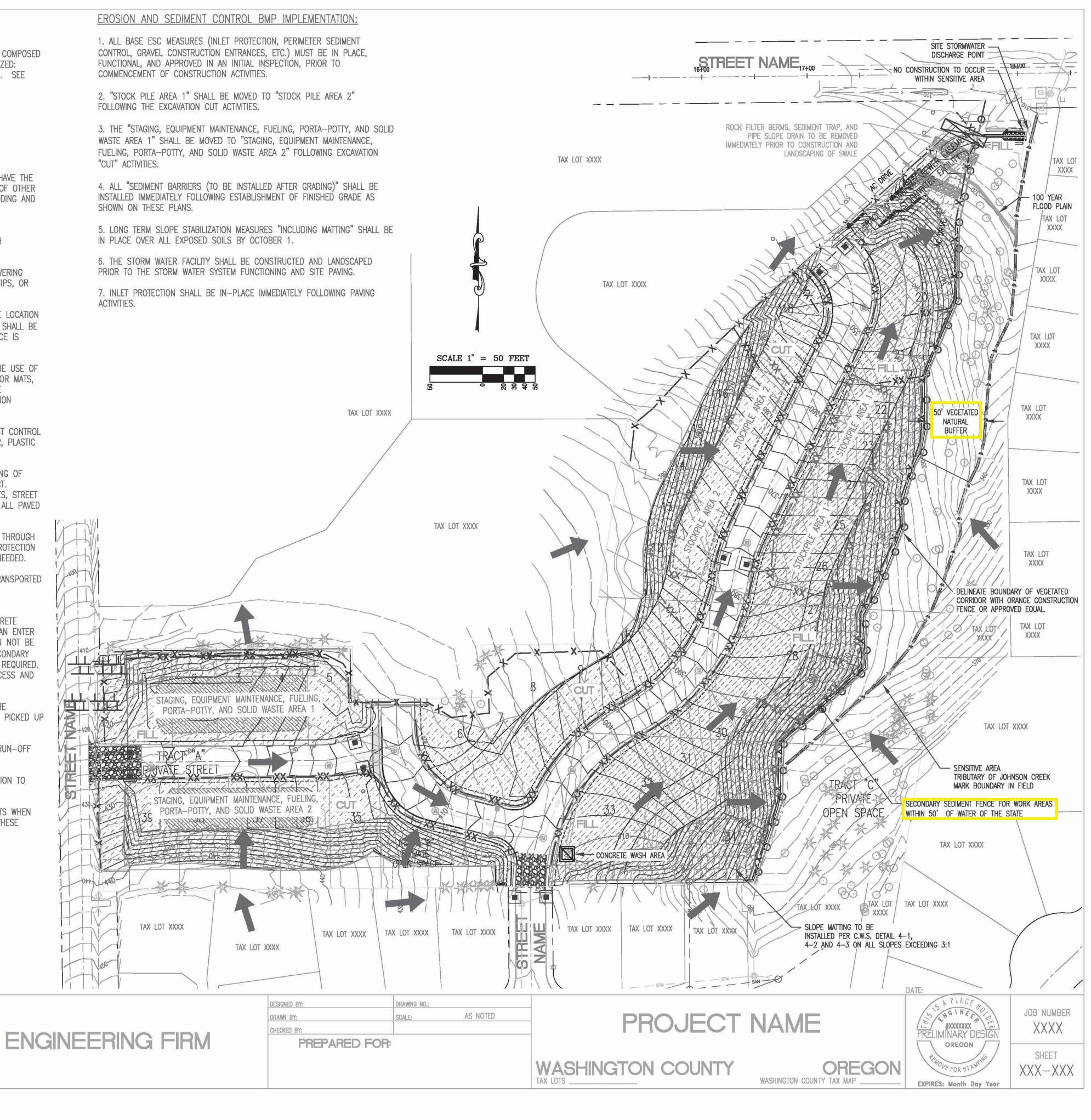
13. AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.

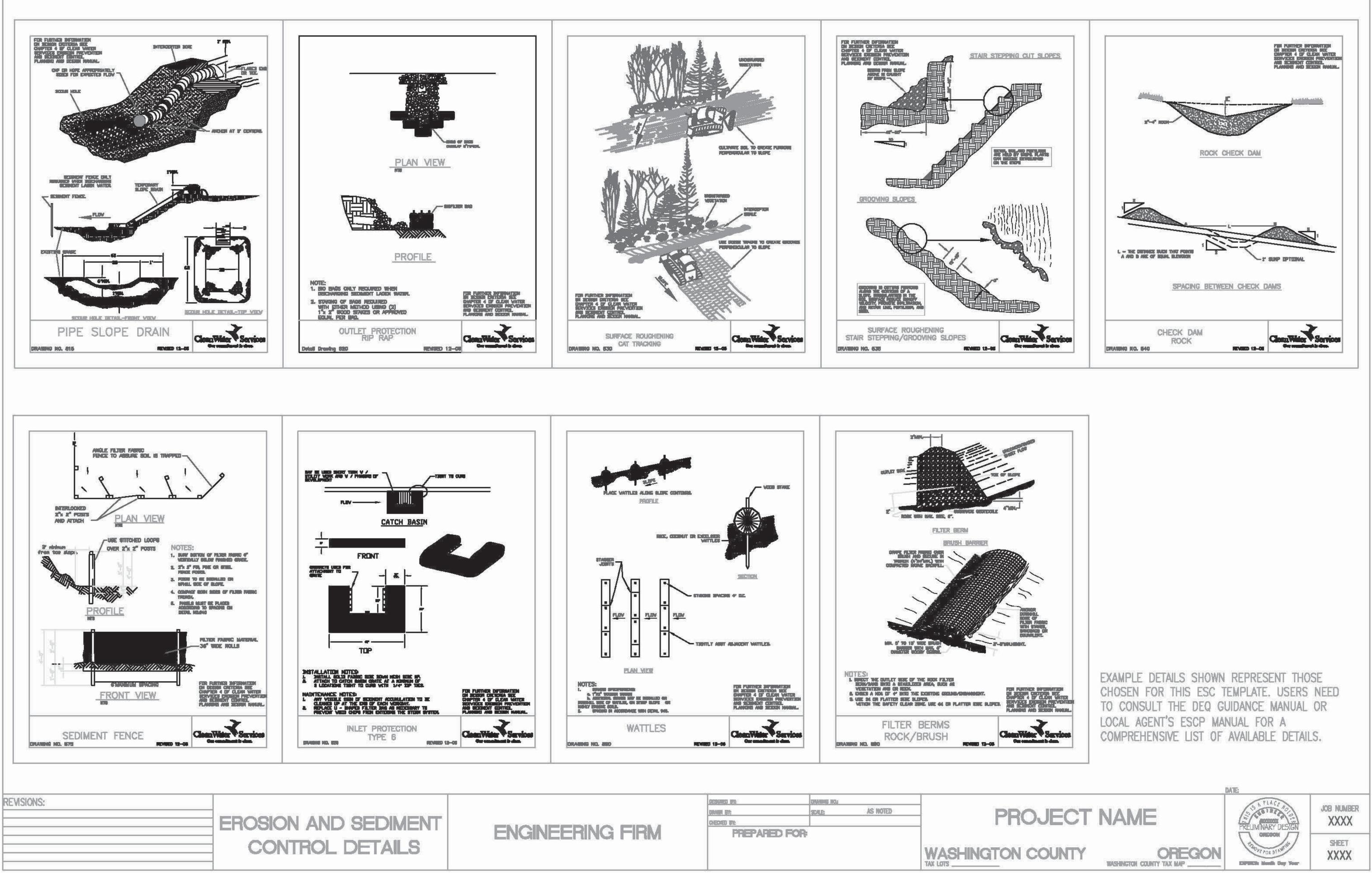
14. USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.

15. COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

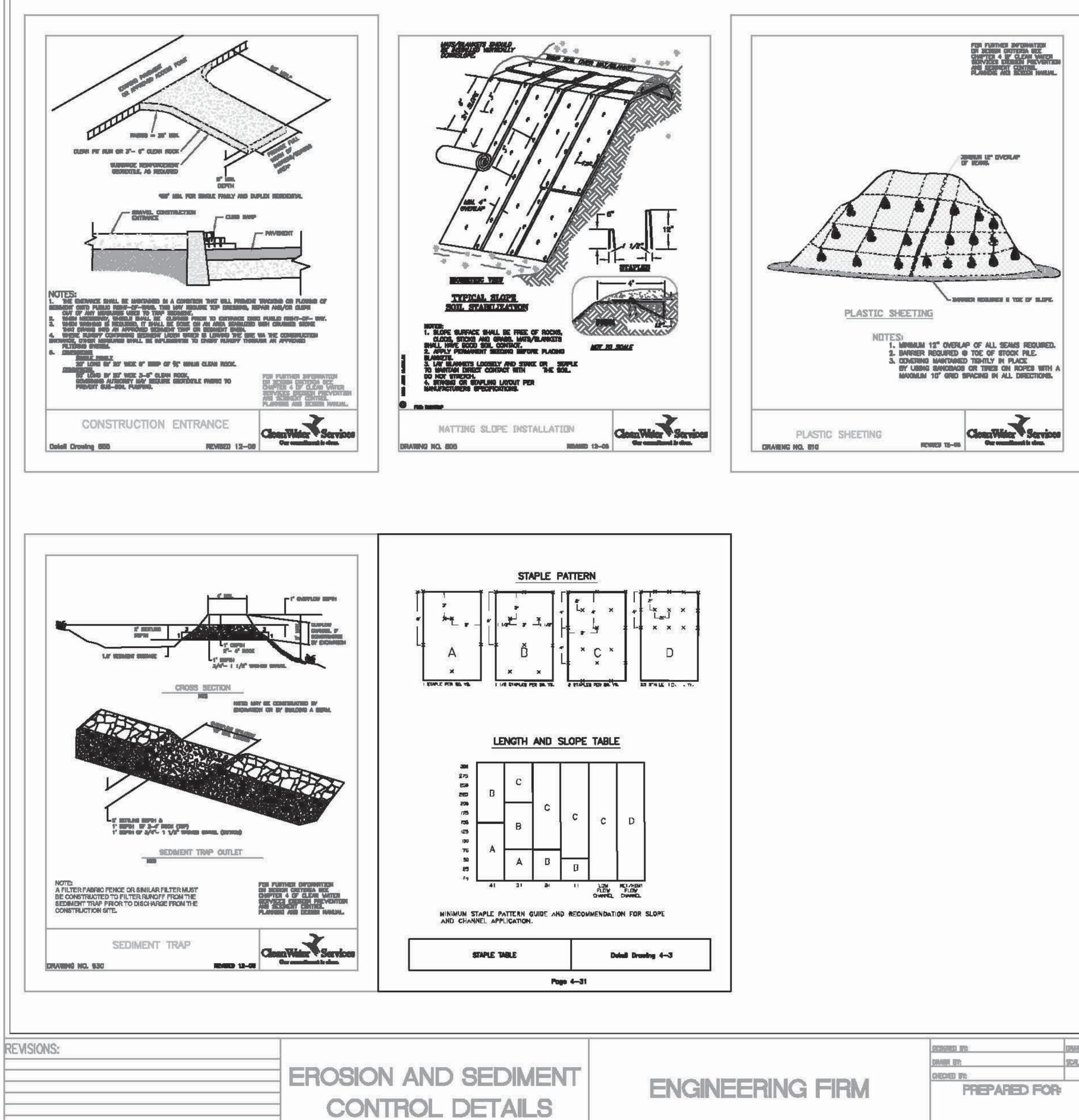
UTILITY + STREET CONST.
GRADING + STABILIZATION
EROSION/SED CONTROL PLAN

**REVISIONS:** 





ENGINEERING FIRM	DENNEL IN: DIMIN IN: DEDIED IN: PREPARED FOR:	TALIS	AS NOTED	PRO WASHINGTON C



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ENGINEERING FIRM	PREPARED FOR			
	N/102			



## MARION COUNTY PUBLIC WORKS EROSION & SEDIMENTATION CONTROL (ESC) PLAN CHECK LIST

## PLAN COVER SHEET

Before Public Works Land Development Engineering & Permits (PW-LDEP) will accept an ESCP Plan for review, the following list of ESC Plan elements must be checked-off as provided for on the Plan, and then signed/dated by the Applicant or their Authorized Agent.

U Vicinity Map
Site Map, including north arrow in correct orientation
Project Location (Address if available), including latitude and longitude
Property Description
□ Narrative Site Descriptions including Existing Site Conditions, Developed Conditions, Nature of Construction Site Activity, Phases (i.e. clearing, rough grading, foundation, final grading, landscaping), and estimated schedule
Define the estimated area of the permitted site and the estimated area to be disturbed, including square footage/acres
Site Soil Characterization – Including soil classifications and soil erosive potential
Contours on the existing conditions plan shall extend a minimum of 20' beyond all site boundaries
Receiving water body, as applicable (named if available), wetlands, named 100-year floodplain
Plans within urban areas shall be drawn at a scale of one-inch equals 20 or 30 feet, and for rural sites, at a scale of one-inch equals 40 or 50 feet
Provide stationing for linear projects within the public Right-of-Way. Stationing shall run from left to right of plan and profile and typically commence at the south or west end of project and end at the north or east end of project.
Inspection frequencies
Standard ESC Plan notes, with permit references when applicable
BMP Matrix for construction phases
Names and contact information for Applicant's agents such as Architect, Engineer, Prime Contractor, and Excavator
Name and contact information for Applicant's designated erosion control inspector
Initialed (wet ink) Rationale Statement

## MARION COUNTY PUBLIC WORKS ESC PLAN CHECK LIST

# PRE-DEVELOPMENT SHEET FOR CLEARING, DEMOLITION, AND MASS GRADING

Existing (pre-construction) conditions site plan

Elevations based on USGS vertical datum
Total property boundary including surface area of development
Perimeter of area to be disturbed
Existing contours extending a minimum of 20' beyond all site boundaries
Locations of receiving water body, as applicable (named if available), springs, wetlands, 100-year floodplain boundary
Drainage flow arrows depicting estimated overland and channelized pre-development flow directions
Locations of natural existing discharge points for overland and channelized flow to receiving stream or buffers
Location of temporary staging area
Locations of existing structures and indications of those to be removed
Location for temporary stockpile areas for soil and demo debris
Locations of septic tanks, drywells, and potable / irrigation wells
Identify areas where vegetation is to be protected and remain undisturbed (i.e. specimen trees). Delineate this boundary with erosion and sedimentation control base measures and orange construction fencing.
Clearly define (show and label) Sensitive Areas and Vegetated Corridors
Location of all ESC measures including but not limited to: gravel construction entrance, perimeter control BMPs, existing inlet protection, temporary diversion channels, settling ponds, etc.
Legend of ESC BMP elements. Element distribution can be assigned symbolically or alpha/numerically.
Site and phase specific ESC construction notes

## MARION COUNTY PUBLIC WORKS ESC PLAN CHECK LIST

## POST-DEVELOPMENT SHEET FOR UTILITY, STREET CONSTRUCTION, COMPLETION OF GRADING, AND FINAL STABILIZATION

Developed (post-construction) conditions site plans
Show onsite development boundary and any offsite work associated with the development. Include ESC for offsite areas.
Finished Floor Elevation (FFE) based on USGS vertical datum
Clearly identify areas or cuts and fills as well as show finished contours tying into existing contours
Drainage flow arrows depicting locations of natural and altered discharge points for overland and channelized flow. Show appropriate interior sediment control BMP's downslope of all disturbed areas above streets, parking areas, and water quality facilities.
Open / closed storm drain system and detention facilities, as applicable. Including all inlets and outlets.
Designated areas for solid waste, hazardous waste, concrete washout, fuel storage areas, and method of control, as applicable
Designated areas for soil stockpiles and method of control, as applicable
Landscaping plan, including areas to be stabilized by seeding and/or sodding with watering requirements
If seeding is specified as a BMP, specify dates in which seed is to be applied to ensure that vegetation becomes established prior to wet weather period.
Identify areas where vegetation is to remain undisturbed. Delineate this boundary with ESC base measures and orange construction fencing.
Relative locations of proposed features to receiving water body, as applicable (named if available), wetlands, 100-year floodplain boundary and how they will be protected from erosion
Locations of water features (listed above) plus septic tanks, drain fields, drywells, detention ponds, potable / irrigation wells
Show location of post development discharge points to receiving streams or buffers
Clearly define (show and label) Sensitive Areas and Vegetated Corridors
Include phase specific notes for dust control

☐ Indicate additional BMP's to be used when project boundary is within 50 feet of water of the state including but not limited to compost berms, compost blankets, compost socks, two parallel rows of sediment fence.

Location of all ESC measures including but not limited to: inlet protection, temporary diversion channels, settling ponds, etc.

Legend of ESC Plan BMP elements. Element distribution can be assigned symbolically or alpha/numerically.

Site and phase specific ESC construction notes and site and phase specific ESC BMP implementation rules

## MARION COUNTY PUBLIC WORKS ESC PLAN CHECK LIST

## **DETAILS SHEET**

Details for all proposed BMPs and installation techniques

General ESC Plan notes. Refer to Clean Water Services ESC planning and design manual for guidance on design criteria.

Notes pertaining to Non-Structural BMPs, if applicable, with descriptions and method of use

#### Prior to submittal, check that all the following are included:

Appropriate BMPs have been used

One set of approvable plans

Copy of this checklist

ESC Plan Designed by:	Date :
-----------------------	--------

Checklist Completed/Verified by: \_\_\_\_\_ Date : \_\_\_\_\_

Submit to: Land Development Engineering & Permits Marion County Public Works 5155 Silverton Road NE Salem, OR 97305

G:\Engineering\LDEng&Permits\Accela\Additional Documents\ESCP Checklist.docx



INSPECTION TYPE	Count(INSPECTION TYPE)
6010 Preliminary Erosion Control	6
6012 Mid Erosion Control	2
6047 Erosion Control - Miscellaneous	2
6050 Final Erosion Control	5

#### 555-20-000314-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6050 Final Erosion Control	11/10/2021	Approved

### 555-20-000457-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6012 Mid Erosion Control	1/26/2022	Denied

## 555-20-001112-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6010 Preliminary Erosion Control	11/19/2021	Approved
6050 Final Erosion Control	3/9/2022	Approved
6047 Erosion Control - Miscellaneous	11/19/2021	Approved
6047 Erosion Control - Miscellaneous	11/10/2021	Denied

#### 555-20-001318-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6012 Mid Erosion Control	1/12/2022	Approved
6050 Final Erosion Control	4/18/2022	Approved

#### 555-20-001345-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6050 Final Erosion Control	10/20/2021	Approved

## 555-20-001643-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6050 Final Erosion Control	12/6/2021	Approved

## 555-21-000635-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6010 Preliminary Erosion Control	9/15/2021	Denied
6010 Preliminary Erosion Control	9/22/2021	Approved

#### 555-21-000727-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6010 Preliminary Erosion Control	9/15/2021	Denied

## <u>555-21-000777-PW</u>

INSPECTION TYPE	DATE INSPECTION	RESULT
6010 Preliminary Erosion Control	8/3/2021	Denied

## 555-21-001007-PW

INSPECTION TYPE	DATE INSPECTION	RESULT
6010 Preliminary Erosion Control	12/7/2021	Approved

## Record ID: 555-19-000739-PW

	Forward	Cancel	Help		
	Importance Normal From				
0	Auto_Sender Sent 01/13/2020 1	@Accela.com			
() Accela Ad Hoc Reporting	To Mecaleahe Cc	ERRERA@GM/	AIL.COM		
()	Bcc				
() Building Reports	Title Inspection re Attachment(		9-000739-PW, Job S	ite Address 4645 UTAH AVE NE, SALEM, OF	२ 97305 have been posted
()	Content Inspection re	sults for 555-19	9-000739-PW		
() Inspections	Address: 464	15 UTAH AVE N	NE, SALEM, OR 973	305	
Inspections	Inspection: 6	010 Preliminar	y Erosion Control		
()	Inspection Dat	te: 01/13/2020			
Mara ()	Result: Denie	ed			
More ()	Comments: I	Needs more wa	attels around dirt pile	).	
	If you have a	iny questions re	egarding this inspec	tion, please contact the corresponding Marion	County department indicated below:
	Public Works	503) 588-5147 s at (503) 588-5 ement at (503)			
	Thank you,				
	Ph: 503-588- Email: <u>buildir</u>	ity on Rd NE Salen 5147 Fax: 503- <u>ng@co.marion.</u> s: <u>www.co.mari</u>	-588-7948 <u>or.us</u>		Supp

O R E G O N Worksite: 4645 UTAH AVE NE SALEM	Inspection Result 555-19-000739-PW Public Works Tracking OR 97305	Marion County Public Works 5155 Silverton Rd NE Salem, OR 97305 503-584-7714 Fax: 503-373-4418 mcldep@co.marion.or.us Website: co.marion.or.us/PW/Pages/default.aspx			
Parcel: 072W18AA06100	Subdivision: MIDDLEGROVE TRACTS	Lot: FR 11 Block: 4			
Owner: HERRERA, MECALEA					
Inspection type	Scheduled date	Inspector			
6010 Preliminary Erosion Control	January 13, 2020	Matt Ficek			
Work description: EROSION PERMIT FOR ADDITION AND GARAGE CONVERSION - ADDING KITCHEN AND MASTER SUITE CONV GARAGE TO LIV RM AND LAUNDRY					
Inspection result					
Approved      Approved w/condition	ns 🔲 Accepted 🔲 Partial approval 🔲	Not required  Holdover			
☑ Denied	☐ No access ☐ Information only ☐	] Wrong inspection requested □ Cancelled			

#### CORRECTIONS/COMMENTS

Needs more wattels around dirt pile.

Inspection completed by: Matt Ficek

Inspection completed date: January 13, 2020

Marion County O R E G O N	<b>Inspection Result</b> 555-19-000739-PW Public Works Tracking	5 <sup>.</sup> mclde	Marion County Public Works 5155 Silverton Rd NE Salem, OR 97305 503-584-7714 Fax: 503-373-4418 mcldep@co.marion.or.us Website: co.marion.or.us/PW/Pages/default.aspx	
Worksite: 4645 UTAH AVE NE SALEM O	R 97305			
Parcel: 072W18AA06100 S	ubdivision: MIDDLEGROVE TRACTS	Lot: FR 11	Block: 4	
Owner: HERRERA, MECALEA				
Inspection type 6010 Preliminary Erosion Control	Scheduled date January 29, 2020	Inspector Matt Ficek		
Work description: EROSION PERMIT FOR SUITE CONV GARAGE TO LIV RM AND LA		I - ADDING KITCHEN AND MAS	TER	
Inspection result				
Approved D Approved w/conditions	Accepted Dartial approval	Not required	☐ Holdover	
Denied Dot ready	□ No access □ Information only □	Wrong inspection requested	Cancelled	
	Inspection completed by:	Matt Ficek		
	Inspection completed date:	January 27, 2020		





OREGON



## LDEP POLICY & PROCEDURES MEMORANDUM

## **RE:** Construction Erosion and Sediment Control Enforcement Procedure

## POLICY

In the event that a violation of Marion County Code Chapter 15.10 is discovered, the following series of escalations shall be followed in an attempt to end the violation of Marion County's Construction Erosion and Sediment Control Code, and bring the responsible party/project into compliance. When a non-compliance of a construction site is discovered:

1. The inspector will look at past applicable records to determine if this is a repeat violation. This will impact the enforcement actions taken if a violation is confirmed to be occurring.

a) For repeat violations, follow the same procedure, but also initiate issuance of fine for violation in accordance with step 5.

2. The inspector will attempt to make contact onsite and communicate verbally the nature of the violation, why it matters, what needs to happen to end the non-compliance, a deadline for remediation not to exceed 5 business days, and what the potential consequences are, both for the construction project, and for the County as a whole.

a) If contact cannot be made onsite the Applicant of record for the permit will be contacted and the information mentioned previously will be communicated.

3. If the violation(s) identified are not remediated by the deadline given in Step 2 or the site is found to continually violate the CESC permit, a Stop Work Order (SWO) letter (in accordance with County Code 15.10.110) requiring the remediation of the violation(s) and non-compliant site conditions, sent by certified mail, shall be issued to the Applicant(s).

a) This Stop Work Order will include a deadline not to exceed 7 business days from the date of the letter in which it is anticipated the violation(s) will be corrected.

b) In addition to the certified mailing, an email containing a signed copy of the letter may be sent to the Applicant of record to ensure receipt of the letter.

c) In accordance with Marion County Code 15.10.110(B) a copy of the Stop Work Order will be posted at the project site.

d) Issuance of a SWO requires the prior approval of the LDEP Supervisor

4. If a SWO is issued, and the violation is not remedied by the deadline given in the SWO, the Sheriff's Office shall be notified to initiate issuance of a fine for a non-continuing violation in accordance with County Code 15.10.120.

a) If the violations noted in the SWO are corrected prior to the deadline provided in the SWO, and no other CESC violations need be corrected, then the Stop Work Order will be removed and the Sherriff's Office not notified.

b) If it is necessary to issue a second SWO for the same project this will be treated as a continuing violation per Step 5.

Memorandum RE: Construction Erosion and Sediment Control Enforcement Procedure August 17, 2020

5. If the SWO is violated (i.e. construction work other than that related to remedying the violation(s) is conducted prior to removal of the SWO), or it is necessary to issue multiple for the same project, contractor, developer or property owner, the Marion County Sheriff's office shall be notified to initiate the issuance of a penalty fine for a continuing violation in accordance with County Code 15.10.120. Fines shall be determined from the date the County was first made aware of the initial violation(s).

#### BACKGROUND

A written procedure for Construction Erosion and Sediment Control code violations provides staff guidance for a previously undefined process. This will ensure consistency and equity in how the County approaches developments that fail to meet County code for erosion and sediment control.

#### **ATTACHMENTS**

1. Marion County Code Chapter 15.10

#### Chapter 15.10 CONSTRUCTION EROSION AND SEDIMENT CONTROL

#### Sections:

15.10.010	Title.		
15.10.020	Purpose.		
15.10.030	Definitions.		
15.10.040	Repealed.		
15.10.050	Permit required.		
15.10.060	Erosion prevention and sediment control plan.		
15.10.070	Permit fee.		
15.10.080	Construction site deposits on public streets and into storm drains.		
15.10.090	Maintenance.		
15.10.100	Falsifying information.		
15.10.110	Stop work orders.		
15.10.120	Penalties.		
15.10.130	Enforcement.		
15.10.140	Other remedies.		

#### 15.10.010 Title.

This chapter shall be known as the construction erosion and sediment control ordinance of Marion County. [Ord. 1307 § 1, 2010.]

#### 15.10.020 Purpose.

The purpose of this chapter is to minimize the amount of sediment reaching waterways, wetlands, and the public storm drainage and surface water system for the duration of construction site activities. [Ord. 1307 § 2, 2010.]

#### 15.10.030 Definitions.

For the purposes of this chapter, the following words shall have the following meanings:

"Applicant" means the owner of real property or the owner's authorized agent. "Applicant" includes any person who would be required to obtain a Marion County permit or exemption approval, but who neglects or otherwise fails to do so.

"Authorized agent" means the developer, architect, contractor, engineer, builder, personal representative, or anyone designated by the owner to have control or supervision of a site involving construction site activity.

"Construction site activity" means ground disturbing activities at a location where a Marion County permit or exemption approval is required.

"Director" means the director of public works or the director's designee.

"Emergency" has the same meaning as found in ORS 401.025.

"Erosion" means the wearing away of the ground surface, or the movement, detachment or dislocation and transport of sediment including soil particles by the action of water or wind.

#### Chapter 15.10 CONSTRUCTION EROSION AND SEDIMENT CONTROL

"Exemption approval" means an exemption from the requirement to obtain a building permit for an agricultural building.

"Ground disturbing activities" means any activity that exposes soil, including, but not limited to, grading, excavating, filling, clearing, or working of land at a particular location.

"High-risk area" means an area that the board of commissioners has established by order to be at high risk for erosion or sediment dispersal to a water body due to the following conditions: erosive soils, steep slopes, or close proximity to a water body.

"Large development ground disturbing activities" means any activity that exposes soil covering one acre or more of land surface area, either in isolation or as part of a subdivision, partition, or planned unit development, including, but not limited to, construction, landscaping, removal of vegetation, stockpiling of soil or construction debris, grading, filling, excavating, trenching, drilling, transport or fill, or utility work at a particular location.

"Public storm drainage and surface water system" means natural or manmade drainage courses for the conveyance of surface water.

"Sediment" means finely divided loose material that can be suspended and transported in water or air and may originate from disturbed soil, landscaping, or construction activities or materials.

"Storm event" means one-half inch or more of precipitation in a 24-hour period.

"Stormwater management area" means an area designated as a stormwater management area by the Department of Environmental Quality. [Ord. 1316 § 3(I), 2011; Ord. 1307 § 3, 2010.]

#### 15.10.040 Exempt activity.

Repealed by Ord. 1316. [Ord. 1307 § 4, 2010.]

#### 15.10.050 Permit required.

A. An erosion prevention and sediment control permit is required inside a stormwater management area if construction site activity takes place within a high-risk area.

B. A large development erosion prevention and sediment control permit is required inside a stormwater management area for large development ground disturbing activities. [Ord. 1316 § 3(II), 2011; Ord. 1307 § 5, 2010.]

#### 15.10.060 Erosion prevention and sediment control plan.

A. An erosion prevention and sediment control plan is required for all erosion prevention and sediment control permits. The plan must be submitted by the applicant and approved by the director for issuance of the erosion prevention and sediment control permit, prior to the issuance of a Marion County permit or exemption approval and commencement of ground disturbing activities. The plan must contain protection techniques that will eliminate runoff siltation created from the construction activity both during and after construction. Site-specific considerations shall be incorporated.

B. The county may require that the applicant design and construct a temporary drainage system that will ensure any off-site impacts caused by the construction site activity can be mitigated.

C. The department of public works may perform inspections to ensure compliance with this chapter at the discretion of the director. [Ord. 1307 § 6, 2010.]

#### 15.10.070 Permit fee.

#### Chapter 15.10 CONSTRUCTION EROSION AND SEDIMENT CONTROL

The county may establish a fee for review of plans and inspections required by this chapter by order of the board of commissioners. The board of commissioners shall set the fee to recover the public works department costs of providing an applicant's erosion prevention and sediment control permit, inspections, and plan review. [Ord. 1307 § 7, 2010.]

#### 15.10.080 Construction site deposits on public streets and into storm drains.

No person shall cause or allow visible and measurable erosion or sediment related to construction site activity inside a stormwater management area as defined herein to enter the public storm drainage and surface water system. Any person causing visible and measurable erosion or sediment shall immediately abate or remove it. The removal shall be accomplished by hand labor or approved mechanical means. [Ord. 1307 § 8, 2010.]

#### 15.10.090 Maintenance.

A. The applicant shall maintain all erosion and sediment control measures in proper functioning order for the duration of the ground disturbing activities or until adequate ground cover has been established.

B. The applicant shall inspect, maintain, adjust, repair, and replace erosion and sediment control measures as necessary within 24 hours following a storm event to ensure that the measures are functioning properly.

C. During active ground disturbing activity, the applicant shall inspect and maintain erosion and sediment control measures weekly or within 24 hours of a storm event. [Ord. 1307 § 9, 2010.]

#### 15.10.100 Falsifying information.

No person shall knowingly make any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this chapter. [Ord. 1307 § 10, 2010.]

#### 15.10.110 Stop work orders.

A. In the event there is a violation of this chapter and it is necessary to obtain compliance with this chapter, the director may issue a stop work order requiring that all work, except work directly related to the elimination of the violation, be immediately and completely stopped. If the director issues a stop work order, the applicant shall not resume work until such time as the director gives specific approval in writing. The stop work order shall include:

1. The date of the stop work order;

2. The erosion prevention and sediment control permit and/or permit or exemption approval number if applicable;

3. The site address, legal description or location applicable to the stop work order;

- 4. A description of all violations; and
- 5. The conditions under which the work may resume.

B. The stop work order shall be in writing and posted in a conspicuous location at the site. Other means of communication of the stop work order may be exercised in the discretion of the director.

C. No person may remove, obscure, mutilate or otherwise damage a stop work order.

D. A stop work order shall be effective upon posting or upon verbal delivery under subsection (E) of this section.

Chapter 15.10 CONSTRUCTION EROSION AND SEDIMENT CONTROL

E. When an emergency condition exists, the director may issue a stop work order verbally. A written stop work order shall be posted in a conspicuous location at the site within 24 hours of the verbal order. [Ord. 1307 § 11, 2010.]

#### 15.10.120 Penalties.

A. Any person who is cited for a violation of this chapter shall be subject to a fine of not more than \$500.00 for a noncontinuing violation and a fine of not more than \$1,000 for a continuing violation.

B. Each day that this chapter is violated shall constitute a separate violation. [Ord. 1307 § 12, 2010.]

#### 15.10.130 Enforcement.

The provisions of this chapter are enforceable pursuant to Chapter 1.25 MCC. [Ord. 1307 § 13, 2010.]

#### 15.10.140 Other remedies.

The provisions of this chapter are in addition to and not in lieu of any other procedures and remedies provided by law including equitable relief and damages. [Ord. 1307 § 14, 2010.]

Mobile Version