## **Oak Lodge Water Services Authority Engineering Stormwater Review Checklist for Public and Private** Construction



Disclaimer: This checklist does not prevent the designer from knowing and designing to all of the relevant standards. This checklist is to be used as a guide, not a replacement for the Stormwater  $Design \ Standards \ or \ Rules \ and \ Regulations. \ More \ information \ can \ be found \ within \ the \ standards.$ 

Column Column For Staff

Applicant

<u>Applicant Instructions</u>: Insert an "X" in the correct column for each applicable item submitted.

Legend:

X = OK

NA = NOT APPLICABLE

Stormwater Permit Triggers
Non-residential: 1,000 square feet of new or replaced impervious surface; or
Non-residential: 500 square feet of new impervious surface within natural resource or associated buffer; or
Residential: Three new lots created, or the parent parcel having the ability (area) to create three lots.
Exemption requests per Rules and Regulations and Design Standards with appropriate description.
Exemption requests per nates and negatiations and besign standards with appropriate description.
STORM REPORT
Report Includes: General
Project Description
Location of Project (Address/Parcel Number)
Zoning
Existing and Proposed drainage patterns and/or subbasin areas
Proposed Land Use(s) / occupancy / any hazardous chemical use or storage
Proposed Impervious Surfaces: types and areas of surfaces, e.g. area of vehicle maneuvering area and roof area
Proposed Landscaped Surfaces: pervious areas
Point(s) of discharge: directly to stream, public ROW, roadway surface, storm pipe, infiltration, other
Point(s) of connection: if different from points of discharge
Engineer's PE stamp and signature
Report Includes: Specifically
Stormwater Management Facility Design Calculations and/or Discussion
Stormwater Conveyance Calculations and/or Discussion
Source Controls Calculations and/or Discussion
Erosion Prevention and Sediment Control Exhibits and/or Discussion
Existing Conditions Description
Existing Conditions (based on Geotech report)
Soil (Hydrologic Soil Group A, B, C or D)
Groundwater information (Depth, seasonal, aquifer, etc.)
Infiltration rate (Infiltration Rate Testing Results, if applicable)
Site topography extending 100 feet beyond the property line
Describe Pre-Developed Hydrologic conditions
Drainage Conditions (i.e. major drainage basins, local streams or creeks, outfalls, wetlands, groundwater)
Points of Discharge (directly to stream, public ROW, roadway surface, storm pipe, infiltration, other )
Offsite Drainage
Natural resource, Geohazard, or Floodplain and/or associated buffers (established by Clack. Co. )
Locations of known wells on or within 250 feet of property
Vegetation (i.e. trees, other vegetation)
Utilities onsite and access points (i.e. electric, gas, sewer, water, phone, cable) FEMA Floodplain Analysis (if applicable)
TENIA Flooupiani Analysis (II applicable)
Developed Site Drainage Conditions
Describe the Stormwater Management Strategy being Implemented
Emergency Overflow and connection / Point(s) of discharge (existing & proposed)
Downstream Analysis
Drainage Basin Description and Delineation
Statistics Season Priori and Semication
Contributing Areas
Contributing Areas  Description of impact to downstream conveyance systems or natural waterways post development

#### **PLANS**

# All plans shall have the following:

Clackamas County Planning File Number (e g Z#### or SC####)

Project Engineer's Name, Address, Phone Number

Applicant's Name, Address, Phone Number

Owner's Name, Address, Phone Number

Revision number

Plot date

**Table of Contents** 

Vicinity Map

Map Scale

North Arrow

Engineer PE stamp and signature

## **Basin Map/Post-Developed Conditions Including**

**Project Boundaries** 

Offsite Contributing Basins

Onsite Drainage Basins (also known as "microbasins")

Approx. Locations of all Major Drainage Structures

Course of Stormwater from onsite to receiving body of water

Reference to the source of the topographic base map (e g USGS)

Points of connection and discharge

**Emergency Overflow** 

#### APPENDICES OF STORM REPORT

### **Specifically** Appendices should include:

Engineering Stormwater Review Checklist for Public and Private Construction this checklist with the legend completed with applicable ite

Soils Report (Geotech report) with infiltration rates or tests, groundwater

**BMP Sizing Tool Summary** 

On-site Hydraulic Design Computations

Basin map (showing proposed impervious area(s) & pervious areas in square feet)

**Runoff Calculations** 

Conveyance System Capacity Calculations

Downstream Analysis Hydraulic Design Computations

Runoff Calculations (Pre-development vs Post-development)

Conveyance System Capacity Calculations (Pre-development vs Post- development)

Curb and catch basin inlet sizing

**Energy Dissipater Calculations** 

Operations and Maintenance Plan

Landscape Plan

Operation and Maintenance Plan - Exhibits and/or Discussion

Landslide Hazard and Erosion Risk Areas Report, if applicable

UIC Registration Form, if applicable

### **Calculation Guidance**

Onsite Retention

2-year, 24-hour post-developed runoff rate to a ½ of the 2-year, 24-hourpre- developed discharge rate;

Onsite stormwater management using LID

minimum: the first one-half-inch of rainfall in 24 hours Max retention is 96 hours

Stormwater facilities sized using the BMP Sizing Tool

Use "Forest" for Pre-Developed Site Cover

Use correct Hydrologic Soil Group (Per NRCS report or geotechnical report)

## Reference Permits (if applicable, include them)

DEQ 1200C or UIC or NPDES or other

USCOE and/or DSL US Fish and Wildlife

Other

References to Relevant Reports

### Oak Lodge References

Oak Lodge <u>Standards</u> Link

Document Link

Oak Lodge Developmen Email and t Permit

Contact: Phone

Permits@O 503-654-LWSD org 7765

Updated Dec 19. 2022