LID Site Assessment and Planning Packet

Instructions for completing this packet:

- This packet is to be completed as part of a preliminary site assessment by the applicant per RZC 21.17.10E and as specified in the Stormwater Technical Notebook (STN).
- For documentation purposes, all projects that result in 2,000 square feet or greater of new, replaced, or new plus replaced hard surface area or have land disturbing activity of 7,000 square feet or greater must complete an LID assessment and include this packet as an appendix to the project drainage report submitted as part of the site plan entitlement process.
- This packet is to be completed early in the site development process. Please complete all sections of this packet to the best of your ability. Some sections may not apply. You may state "Not Applicable" only when you can explain why it does not apply and not when the answer is unknown. Consulting with a qualified consultant may be necessary to determine ascertain certain features of the property (i.e. depth to groundwater/ infiltration rates). Please consult with a geotechnical engineer or civil engineer if your project meets the thresholds identified above.
- This is a fillable PDF form. The forms will expand and allow you to enter more text than the space indicates. If you should run out of space, attach a separate sheet and write "continued from" and include the section and number (i.e. D.1).

The goal of this assessment is to:

- Document how projects propose to minimize:
  - Impervious areas
  - Loss of native vegetation
  - Stormwater runoff
- Demonstrate how the project proposes to comply with Minimum Requirement #5: On-site Stormwater Management.
- Some of the below requirements are modified based on whether the project is located within an urban center or an area draining to a flow control exempt water body. To determine how your site's location in the City influences On-site Stormwater Requirements (Minimum Requirement #5) refer to Map 1- MR 5: Stormwater Management Custom Areas at end of this packet and then look for the corresponding symbol for where requirements are modified. (This map is also found as Appendix F in the Redmond Stormwater Technical notebook). The custom flow control areas in Redmond include:
  - Downtown
  - Overlake
  - SR520 Drainage Basin
  - 40th Street Basin
  - SE Redmond (some properties)

APPLICANT INFORMATION

Company/Agency/Owner: _____

Contact Person: _____

Address: _____

_____

Phone: _____

Email: _____

Signature: _____

Date: _____

A PROJECT INFORMATION

Project Number: _____

Project Address or Boundaries: _____

Parcel Number: _____

Is the site in a Flow Control Exempt area? (Refer to Section 2.5.7 of the STN): ☐ Yes ☐ No

If yes, note the items that are footnoted in the tables in Section F "F. Potential LID BMP Matrix" and refer to that footnote at the bottom of each table.

Is the site located within the Marymoor Subarea as depicted on Map 1? (Refer to Map 1at the end of this packet): ☐ Yes ☐ No

If yes, Sections B, C, D and E do not need to be completed as the intent of this packet will be exceeded through the infiltration of 100% of site runoff.

Is the site located within a Critical Aquifer Recharge Area? (Refer to Map 2: Critical Aquifer Recharge Areas at the end of this packet): ☐ Yes ☐ No

If yes, refer to Section 8.3.2 of the STN. Single-family residential projects in Critical Aquifer Recharge Area I may infiltrate runoff from pollution generating hard surfaces only after enhanced treatment using a BMP that is exposed to the surface (such as bioretention visible from public sidewalks or roads). In the Marymoor Subarea there is no stormwater conveyance available, so development is required to infiltrate stormwater, even if it lies within CARA I. Stormwater must receive enhanced treatment prior to infiltration. Infiltration of runoff from non-pollution generating surfaces is encouraged where feasible.

Project Type: ☐ Residential ☐ Commercial ☐ Industrial ☐ Public ☐ New Development ☐ Redevelopment ☐ Remodel ☐ Retrofit

☐ Combination (explain) _____

Project Description: _____

_____

_____

_____

B LOW IMPACT DEVELOPMENT GOALS

In the spaces below, please document project efforts to:

Minimize Impervious Surface Coverage: _____

_____

Minimize Loss of Native Vegetation: _____

_____

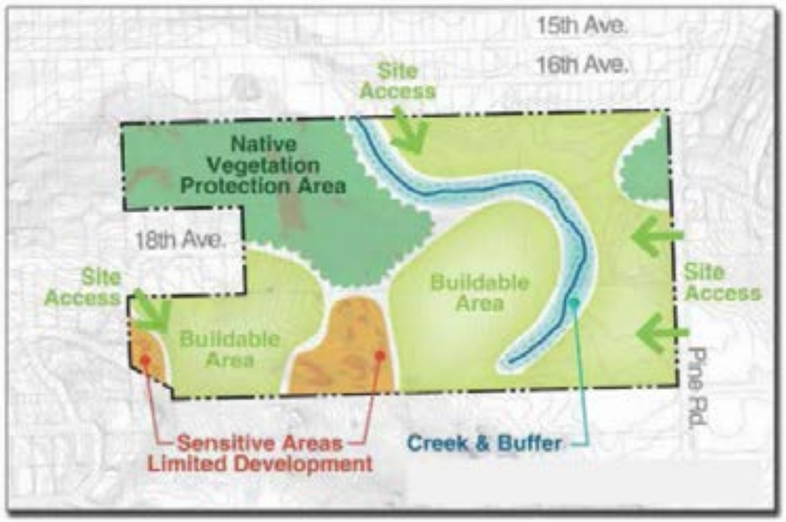
Minimize Stormwater Runoff: _____

_____

C CREATE SITE COMPOSITE MAP

Develop a composite site map as you collect site information in Section D. See the example below. This map must be submitted as part of the completed packet, and will be used as the basis for the site design.

Example Site Composite Map



D EXISTING SITE INVENTORY AND ANALYSIS CHECKLIST

Use this portion of the packet to document the site inventory and analysis. For additional information on each portion of the analysis, refer to Chapter 2 of the City of Redmond Stormwater Technical Notebook 8.

1. PROJECT BOUNDARIES AND STRUCTURES

- ❑ Identify/delineate on map:
  - ❑ Project Site boundaries (limits of disturbance)
  - ❑ Existing and proposed buildings
  - ❑ Required Infiltration setbacks (please describe)_____
  - ❑ Location and extent of proposed foundations and footing drains

2. SOILS

- ❑ Characterize existing soil type(s) (Refer to Section 10.5.3 of the Stormwater Technical Notebook):_____
- ❑ What is the depth to seasonal average high groundwater (feet) as determined by a geotechnical investigation? (Refer to Section 2.9.3.9 of the Stormwater Technical Notebook)_____
- ❑ Is bedrock present? ☐ Yes ☐ No If yes, depth (feet) _____
- ❑ What is the measured long-term native soil infiltration rate (inch/hour) _____
- ❑ Identify source(s) of information used:_____

3. CRITICAL AREAS

- ❑ Identify and map any Critical Areas and associated buffers located on the project site and within the project vicinity
  - ❑ Erosion Hazard Areas_____
  - ❑ Fish and Habitat Conservation Areas_____
  - ❑ Floodplains_____
  - ❑ Frequently Flooded Area/Special Flood Hazard Area_____
  - ❑ Critical Aquifer Recharge Areas_____
  - ❑ Landslide hazard Areas_____
  - ❑ Seismic Hazard Areas_____
  - ❑ Shoreline Environments_____
  - ❑ Streams_____
  - ❑ Wetlands_____
  - ❑ Other_____

4. TOPOGRAPHY

- ❑ Describe site topography and slopes:_____
- ❑ Identify/Delineate on map:
  - ❑ Areas of flat(≤5%), moderate (5%-20%), moderate-steep (20%-40%) and steep(≥40%)slopes
  - ❑ Closed depressions

5. HYDROLOGIC PATTERNS & FEATURES

- ❑ Identify/Delineate on map:
  - ❑ Sub-basin(s)_____
  - ❑ Existing drainage swales and ditches (please describe)_____
  - ❑ Location(s) if any natural seeps or springs (please describe)_____
  - ❑ Existing discharge location(s) from each sub-basin and overall project site: (please describe)_____
  - ❑ Signs of existing erosion (please describe)_____
  - ❑ Existing flooding or drainage complaints on site or vicinity_____
  - ❑ Other_____

6. VEGETATION

- ❑ Native vegetation type(s):_____
- ❑ Approximate tree canopy coverage (acres):_____
- ❑ Number of trees (greater than 6-inch diameter at breast height)_____
- ❑ Identify source(s) of information used:_____

7. LAND USE CONTROLS

- ❑ What is the project site zoning?_____
- ❑ Describe landscaping requirements:_____
- ❑ Describe parking requirements:_____
- ❑ Describe any applicable comprehensive plan designation, zoning classification, and/or overlay districts that apply to the site:

  _____
- ❑ Does a Shoreline Master Plan apply to the site? ☐ Yes ☐ No
  - ❑ If yes, describe_____

8. ACCESS

- ❑ Identify/Delineate on map:
  - ❑ Roads, driveways, and other points of ingress and egress within 50 feet of the project site_____
  - ❑ Identify frontage improvement requirements:_____

9. UTILITY AVAILABILITY AND CONFLICTS

A complete understanding of existing and proposed buried utilities is necessary to properly plan for infiltration.

- ❑ Identify/Delineate on map:
  - ❑ Existing utilities and easements present on and adjacent to the project site, including utility owner. Also note any utility or easement setback requirements that affect site planning:_____
  - ❑ Existing utilities that may need to be moved and new utilities that may need to be extended to the site:

    _____

EXISTING SITE CONDITIONS

	EXISTING CONDITIONS	PROPOSED CONDITIONS
Vegetated Areas		
Tree Canopy (acres)		
Landscape (acres)		
Total project vegetated area		
Impervious Area		
Total roof impervious area (sq. feet)		
Total site impervious area (acres)		
Change		
% Increase/decrease in vegetated area		
% Increase/decrease in impervious area		

POTENTIAL LID BMP MATRIX

For each of the following surfaces proposed, complete the following matrices evaluating the BMPs in the order as specified in Lists #1 and #2 contained within the Stormwater Technical Notebook*:*

- ❑ Lawn and landscaped areas
- ❑ Roads
- ❑ Other hard surfaces

SURFACE TYPE:_____

For each LID BMP being evaluated, use the infeasibility criteria for each BMP in the SWMMWW to determine whether the LID BMP is infeasible for your project. You must use the first BMP that is feasible in accordance with Lists #1 and List#2 of the STN.

	FEASIBILITY/INFEASIBILITY EVALUATION			
	FEASIBLE	INFEASIBLE	NOT APPLICABLE/ NOT KNOWN	If infeasible provide justification as stated by the Infeasibility Criteria in the SWMMWW
Post Construction Soil Quality and Depth	○	○	○	
Full Dispersion[1]	○	○	○	
Downspout Full Infiltration (Roofs, only)	○	○	○	
Rain Gardens/Bioretention[1]	○	○	○	
Permeable Pavement or Functional Equivalent[1]	○	○	○	
Downspout Dispersion	○	○	○	
Perforated Stubout Connection (Roofs, only)	○	○	○	
Sheet Flow Dispersion	○	○	○	
Concentrated Flow Dispersion	○	○	○	

[1]Not Required in Flow Control Exempt Areas

SURFACE TYPE:_____

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Full Dispersion[1]	○	○	○	
Downspout Full Infiltration (Roofs, only)	○	○	○	
Rain Gardens/Bioretention[1]	○	○	○	
Permeable Pavement or Functional Equivalent[1]	○	○	○	
Downspout Dispersion	○	○	○	
Perforated Stubout Connection (Roofs, only)	○	○	○	
Sheet Flow Dispersion	○	○	○	
Concentrated Flow Dispersion	○	○	○	

[1]Not Required in Flow Control Exempt Areas

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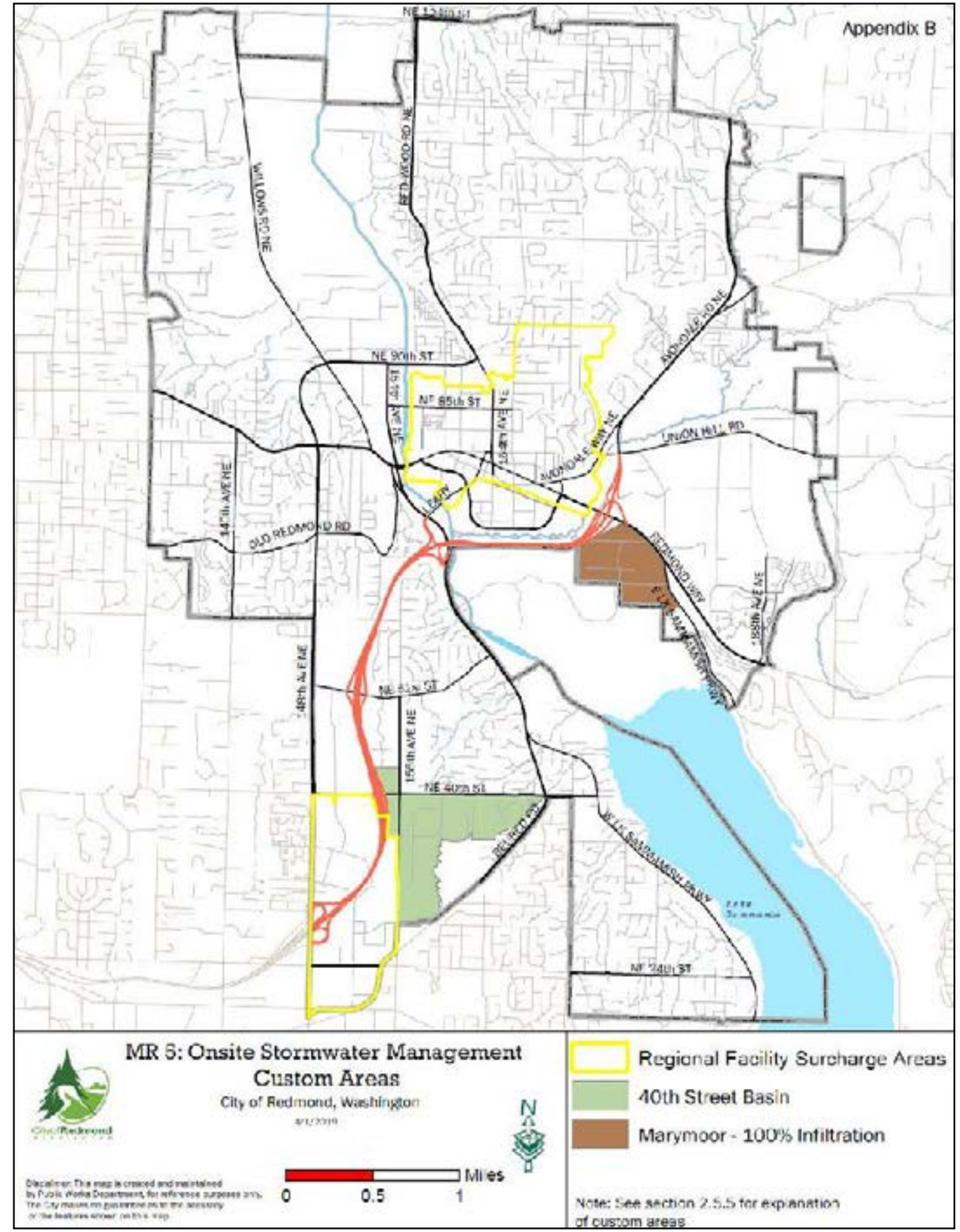
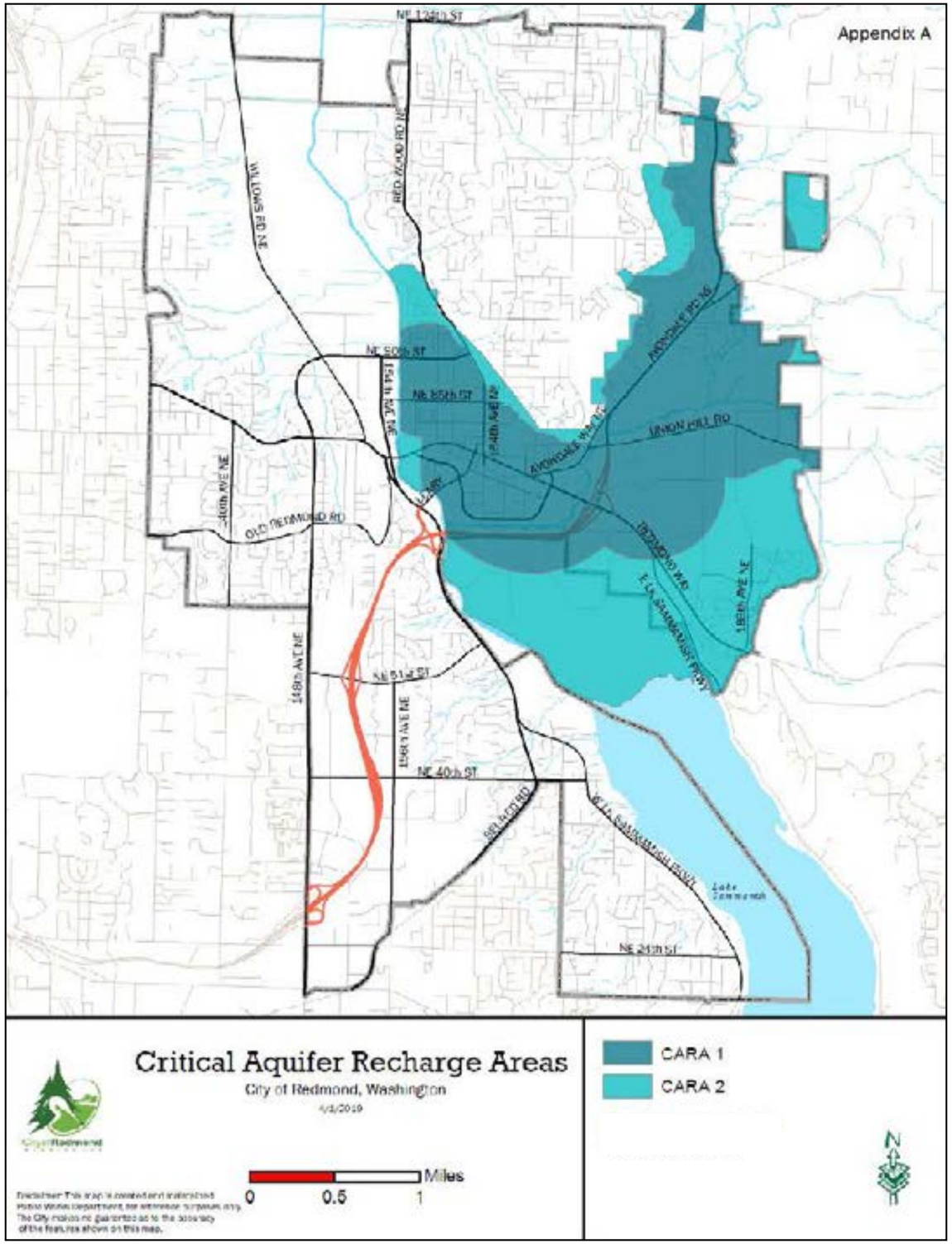
Full Dispersion[1]	○	○	○	
Downspout Full Infiltration (Roofs, only)	○	○	○	
Rain Gardens/Bioretention[1]	○	○	○	
Permeable Pavement or Functional Equivalent[1]	○	○	○	
Downspout Dispersion	○	○	○	
Perforated Stubout Connection (Roofs, only)	○	○	○	
Sheet Flow Dispersion	○	○	○	
Concentrated Flow Dispersion	○	○	○	

[1]Not Required in Flow Control Exempt Areas

Map 1: Onsite Stormwater Management Custom Areas



Map 2: Critical Aquifer Recharge Areas



ATTACH COMPLETED SITE COMPOSITE MAP HERE.