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| City of Tacoma Stormwater Management Manual – Infeasibility ChecklistSurface Type: Roofs or Other Hard SurfaceBMP L630: BioretentionVersion: 07/01/2021 | | | | |
| It is not necessary to answer all questions when determining if a BMP is feasible for Minimum Requirement #5 – The List Approach. Unless otherwise noted, a single answer of No means the BMP is considered infeasible for meeting Minimum Requirement #5 – The List Approach. Applicant may choose which questions to answer when determining feasibility. | | | | |
| Questions #1-18 relate to infeasibility criteria that are based onconditions such as topography and distances to predetermined boundaries. Citation of the following do not need site-specific written recommendations from a Washington State Licensed Professional Engineer or Washington State Licensed Professional Geologist though some criteria may require professional services to determine if the infeasibility criteria apply. | | | | |
| **Question Number** | **Question** | **Yes** | **No** | **NA** |
| **1** | **Can the bioretention facility be placed 10 feet or more from any building structure?** |  |  |  |
| 2 | Can the bioretention facility be placed 5 feet or more from any other structure or property line? |  |  |  |
| 3 | Can the bioretention facility be placed 50 feet or more from the top of any slope greater than 20%? |  |  |  |
| 4 | Can the bioretention facility be placed 50 feet or more from geologically hazardous areas? |  |  |  |
| 5 | Can the bioretention facility be located outside of designated erosion or landslide hazard areas? |  |  |  |
| 6 | Can the bioretention facility be located greater than 100 feet from an underground storage tank whose capacity including tank and underground connecting pipe is 1100 gallons or more? |  |  |  |
| 7 | Can the bioretention facility be located greater than 10 feet from an underground storage tank (tank used for petroleum product, chemical, or liquid hazardous waste storage) whose capacity including tank and underground connecting pipe is 1100 gallons or less? |  |  |  |
| 8 | Can the bioretention facility be located greater than 100 feet of a closed or active landfill? |  |  |  |
| 9 | Can the bioretention facility be located greater than 100 feet from drinking water well or a spring used for drinking water supply? |  |  |  |
| 10 | Can the bioretention facility be placed 10 feet or more from small on-site sewage disposal drainfields? (For large on-site sewage disposal setbacks see WAC Chapter 246-727B). |  |  |  |
| 11 | Can the bioretention facility be located on slopes less than 8%? |  |  |  |
| 12 | Is the bioretention facility compatible with the surrounding drainage system (e.g., project drains to an existing stormwater system whose elevation precludes proper connection to the bioretention facility)? |  |  |  |
| 13 | For properties with known soil or groundwater contamination, can the bioretention facility be located greater than 100 feet from an area known to have deep soil contamination? |  |  |  |
| 14 | For properties with known soil or groundwater contamination, can the bioretention facility be located such that infiltration will not increase or change the direction of the migration of pollutants in the groundwater? (Based upon groundwater modeling). |  |  |  |
| 15 | For properties with known soil or groundwater contamination, can the bioretention facility be located in an area that does not have contaminated surface soils that are proposed to remain in place? |  |  |  |
| 16 | For properties with known soil or groundwater contamination, can the bioretention facility be located in areas not prohibited by an approved cleanup plan under the state Model Toxics Control Act or Federal Superfund Law, or an environmental covenant under Chapter 64.70 RCW? |  |  |  |
| 17 | For bioretention facilities that are constructed with imported compost materials, can the bioretention facility be located greater than ¼ mile from a phosphorus-sensitive waterbody? (Does not apply to discharges to Wapato Lake). |  |  |  |
| 18 | Will installing a bioretention facility cause conflicts with any of the following? (An answer of yes means this BMP is infeasible.) Place a checkmark next to the applicable item (18a-18e). |  |  |  |
| 18a | Requirements of the Historic Preservation Laws and Archeology Laws, Federal Superfund or Washington State Model Toxics Control Act, Federal Aviation Administration requirements for airports, or Americans with Disability Act |  | | |
| 18b | Special zoning district design criteria adopted and being implemented through any City of Tacoma planning efforts |  | | |
| 18c | Public health and safety standards |  | | |
| 18d | Transportation regulations to maintain the option for future expansion or multi-modal use of public rights-of-way |  | | |
| 18e | Critical Area Preservation Ordinance |  | | |
| Questions #19-21 relate to infeasibility criteria that are based upon subsurface characteristics and require a soils report to determine infeasibility. | | | | |
| 19 | Is the depth from the lowest level of the bioretention soil mix or any underlying gravel layer to the seasonal high groundwater table or other impermeable layer equal to or greater than 1 foot? This applies only if the contributing area to the bioretention facility has less than 5,000 square feet of pollution-generating impervious surface, and less than 10,000 square feet of impervious surface, and less than ¾ acre pervious surface. |  |  |  |
| 20 | Is the depth from the lowest level of the bioretention soil mix or any underlying gravel layer to the seasonal high groundwater table or other impermeable layer equal to or greater than 3 feet? This applies only if the contributing area to the bioretention facility has: 5,000 square feet or greater of pollution-generating impervious surface, or 10,000 square feet or greater of impervious surface, or more ¾ acre pervious surface AND the bioretention facility cannot be broken down into amounts smaller than those listed above. |  |  |  |
| 21 | Was the soil classified as having a measured native soil saturated hydraulic conductivity of 0.3 in/hour or more*?* |  |  |  |
| **Questions 22-29 require evaluation of site specific conditions and a written recommendation from an appropriate Washington State Licensed Professional (e.g., Professional Engineer, Professional Geologist, Professional Hydrogeologist).** | | | | |
| 22 | Will the proposed bioretention facility location threaten the safety or reliability of preexisting underground utilities, preexisting underground storage tanks, preexisting structures, or preexisting road or parking lot surfaces? (An answer of yes means the BMP is infeasible). |  |  |  |
| 23 | Will the proposed bioretention facility location allow for a safe overflow pathway to the City stormwater system or a private stormwater system? |  |  |  |
| 24 | Are there reasonable concerns about erosion, slope failure, or downgradient flooding due to infiltration? (An answer of yes means the BMP is infeasible). |  |  |  |
| 25 | Is the project located in an area whose groundwater drains into an erosion hazard or landslide hazard area? (An answer of yes means the BMP is infeasible). |  |  |  |
| 26 | Will infiltrating water threaten existing below grade basements? (An answer of yes means the BMP is infeasible). |  |  |  |
| 27 | Will infiltrating water threaten shoreline structures such as bulkheads? (An answer of yes means the BMP is infeasible). |  |  |  |
| 28 | Is there lack of usable space onsite for bioretention facilities at redevelopment sites? (An answer of yes means the BMP is infeasible). |  |  |  |
| 29 | For public road projects, is there insufficient space within the ROW to install a bioretention facility? (An answer of yes means this BMP is infeasible). |  |  |  |