



**DESIGN NOTES**

1. ADDITIONAL DESIGN GUIDANCE PROVIDED IN BIORETENTION FACILITY FIGURE 4.1 & 4.2 OF THE BASMAA POST CONSTRUCTION MANUAL.
2. OVERFLOW STRUCTURE REQUIRED FOR IN-LINE SYSTEMS WITHOUT AN OVERFLOW BYPASS, CITY STD. SWQ-140.
3. PROVIDE SPOT ELEVATIONS AT INLETS ON CIVIL PLANS (FE, OE, GIE, SE). SEE CITY STD. SWQ-121.
4. MAX. LONGITUDINAL SLOPE 6% WITH CHECK DAMS. SEE CITY STD. SWQ-130 AND SWQ-131.
5. EDGE CONDITION WILL VARY FOR NEW AND RETROFIT PROJECTS. CURB AND SIDEWALK DETAILS MAY BE MODIFIED FOR PROJECT BY CIVIL AND GEOTECHNICAL ENGINEERS AND APPROVED BY PUBLIC WORKS DEPARTMENT.
6. IF CALTRANS CLASS 2 PERMEABLE IS NOT AVAILABLE, SUBSTITUTE CLASS 3 PERMEABLE WITH AN OVERLYING 3" DEEP LAYER OF 3/4" (NO. 4) OPEN-GRADED AGGREGATE. (VERIFY WITH CITY OF NAPA CONSTRUCTION DIVISION)
7. BIORETENTION SOIL MEDIA (BSM) SPECIFICATION PER BASMAA POST CONSTRUCTION MANUAL.
8. PLANTING DESIGN AND IRRIGATION PER BASMAA POST CONSTRUCTION MANUAL APPENDIX F PLANT MATRIX.
9. MULCH (OPTIONAL) PER BASMAA POST CONSTRUCTION MANUAL APPENDIX F PLANT MATRIX.
10. LOCATE ENERGY DISSIPATION COBBLE ONLY AS SPECIFIED IN INLET DETAILS - AVOID DECORATIVE USE.

**CONSTRUCTION NOTES**

1. SCARIFY SUBGRADE BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BSM.
2. FACILITY EXCAVATION TO ALLOW FOR SPECIFIED SOIL AND MULCH DEPTHS TO ACHIEVE FINISHED ELEVATIONS ON CIVIL PLANS.
3. INSTALL UNDERDRAIN WITH HOLES FACING DOWN. UNDERDRAIN DISCHARGE ELEVATION SHALL BE NEAR TOP OF AGGREGATE LAYER. UNDERDRAIN SLOPE MAY BE FLAT.
4. COMPACT EACH 6" LIFT OF BSM WITH LANDSCAPE ROLLER OR BY LIGHTLY WETTING. IF WETTING, LET DRY OVERNIGHT BEFORE PLANTING.
4. DO NOT WORK WITHIN BIORETENTION AREA DURING RAIN OR UNDER WET CONDITIONS.
5. KEEP HEAVY MACHINERY OUTSIDE BIORETENTION AREA LIMITS.

CITY OF NAPA

PUBLIC WORKS DEPARTMENT

**STREET BIORETENTION FACILITY**

(SLOPED SIDED, WITH ON-STREET PARKING, SIDEWALK, WITH UNDERDRAIN)

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 APPROVED BY: JBL  
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