

# Post Construction Review Checklist

**Project Name** \_\_\_\_\_

**Project Type** \_\_\_\_\_ **Project Number** \_\_\_\_\_  
 (CIP/Development/Special)

**Developer/Design Consultant** \_\_\_\_\_

**Reviewer** \_\_\_\_\_ **Date of Review** \_\_\_\_\_

**Review Number** \_\_\_\_\_

## General Post Construction Items Checklist

Item	Yes	No	Not Applicable
1. Did we receive a properly completed Base Design Standards Sheet (separate or with an FDR/DCL)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Did the FDR(DCL) and/or Base Design Standards Sheet specify the Water Quality Standards being utilized?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was a Water Quality Exhibit included with the FDR(DCL) or Plan Set detailing how each part of the site is treated or excluded? If very little of site excepted or infeasible ok to waive the exhibit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. If the Applicable Development is part of a Larger Common Development happening now and will be using the 20%/1 acre exclusion through an appropriate standard, was proof provided there is allotment for this exclusion available? (For lots over 1 acre which will build their own treatment facility, discuss with Coordinator).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If Runoff Reduction was used as a Water Quality Standard, was a Runoff Reduction exhibit included which details at minimum the UIA:RPA?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. If Runoff Reduction was used was the feature free of an underdrain and NOT fully enclosed? (No infiltration systems not allowed, Partial Infiltration potential).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were all Permanent Stormwater Control Measures used to meet a Water Quality Standard labeled on the Plan Set (For Grass Swales and Buffers this can be covered by the note on over compaction/vegetative density)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were appropriate MHFD or CDOT details for features included in the plan set? (New MHFD Ch 4 details)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. If applicable was a location for Educational Signage chosen and sign type specified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. If applicable was the appropriate detail for Educational Signage included in the plan set?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Was a narrative reference for any nonstructural control measures included if applicable? (Satisfied by MS4 Notes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Was documentation regarding Operations and Maintenance included? (Satisfied by MS4 Notes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Was documentation regarding easements or ease of access agreements included? (Satisfied by MS4 Notes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Extended Detention Basin Checklist

Item	Yes	No	Not Applicable
1. If tributary is less than 20 acres, did we advise use of alternative control measures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are the WQCV/EURV elevations marked on the pond details?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are the steepest slopes in the pond no steeper than 4:1?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. If a vegetated low flow channel was used did we advise against its use and recommend a concrete channel?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were trickle channel inlet connections angled rather than at right angles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Did steep inlets to the pond include energy dissipation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do the elevations of the micropool WSE and invert of lowest orifice hole match?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. If orifice holes are less than 1.25" was a Well Screen used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. If orifice holes are greater than 1.25" was a Bar Grate used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does the orifice plate include a call out for a neoprene gasket?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Does the trash rack include a shovel gap?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Was a flood control Restrictor Plate included at the outfall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Is the maintenance access path material crushed, angular rock and include a geotextile liner underneath? (No recycled concrete)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Does the maintenance access path lead at a minimum to the Outlet Structure and avoid crossing the trickle channel?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Are all structures throughout the feature free of recycled concrete backfill (retaining walls, etc)? <i>*Requirement also appears on MS4 Erosion Control Notes.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Is the elevation of the overflow weir higher than the outlet structure and provide positive drainage away from the pond?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Does the pond include measures for final stabilization?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. For instances when EDB used as a regional future, does the feature have capacity (DCL/FDR) and at least a well screen and orifice plate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Ensure a note is included stating: City of Thornton recommends Temporary or Permanent irrigation where appropriate to achieve functionality. <i>(Fulfilled by MS4 Erosion Control Notes)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>			

## Rain Garden/Sand Filter Checklist

Item	Yes	No	Not Applicable
1. For Concentrated Flows into the feature, are proper inflow components installed? May include a Forebay with openings, level spreader, etc? Ensure openings in Forebay/spreader are sized appropriately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. For Sheet Flows into the feature are proper inflow components installed? May include curb cuts, concrete pads, vegetated areas, etc. Ensure openings in curb cuts or spreaders are sized appropriately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were energy dissipation measures installed beyond the inflow features? May include a concrete mow strip, rip rap, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Was the grade from inflow feature to media surface supportive of positive drainage and prevention of backflow? 2" minimum for slotted curb and level spreaders, 1-2" maximum from forebays.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. If partial or no infiltration, was an impermeable liner included under the system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the filter media layer at least 18" in depth?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are media specifications for the Biomedia (Table BR-3), Filter Sand (Table 4-5) and/or #8 Drain Gravel (Table 4-4) included in the plan? (MHFD Vol 3, Ch 4).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the underdrain pipe embedded in a trench of #8 clean, coarse aggregate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the underdrain trench at least 12" wide at its base and at least 15" deep with 1:1 slopes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is there a minimum 6" thick layer of sand (M43 Sand) over the underdrain layer which extends at least 12" beyond the edges of the trench?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Are underdrain perforations slots rather than holes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is the underdrain unwrapped?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Are clean out risers added at every hard angle of the underdrain system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Are clean out risers solid and not perforated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Is the overflow elevation 1ft or less above top of the filter media elevation? (Required for Bioretention but not Sand Filters)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. If the feature includes a water quality structure with an orifice plate does it include a neoprene gasket and orifice no less than 3/8" ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. If the feature includes a water quality structure with an upturned elbow PVC, is the orifice shown, the pipe capped, and the orifice no less than 3/8"?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Is the outfall pipe from the outlet structure a solid PVC?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Does the feature include measures for final stabilization?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. If feature to be vegetated in whole or in part, ensure a note is included: City of Thornton recommends Temporary or Permanent irrigation where appropriate to achieve functionality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Are all structures throughout the feature free of recycled concrete backfill (retaining walls, etc)? <i>*Requirement also appears on MS4 Erosion Control Notes.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>			

## Underground System Checklist

Item	Yes	No	Not Applicable
1. Was the entire system wrapped by a non-woven geotextile?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is at least one Isolator Row shown on the plan detail?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the Isolator Row(s) lined with a woven geotextile?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does each Isolator Row include a solid inspection port in the middle third of its length?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is all filter rock media called out as washed and angular?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are underdrain perforations slots rather than holes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the underdrain unwrapped?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Does the Underdrain have a clear location for cleanout? (May utilize outlet structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are all structures throughout the feature free of recycled concrete backfill (retaining walls, etc)? <i>*Requirement also appears on MS4 Erosion Control Notes.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Does the Outlet Structure include an orifice plate with neoprene gasket?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Proprietary Device Checklist:

Item	Yes	No	Not Applicable
1. If the device will treat public stormwater flows, will it be maintained by a private entity? (Proprietary Devices not accepted for City maintenance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the plan include a manufacturers detail for the feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>			

## Runoff Reduction Controls (Grass Swale, Grass Buffer, etc. ) Checklist

Item	Yes	No	Not Applicable
1. For Concentrated Flows into the feature, are proper inflow components installed? May include a Forebay with openings, level spreader, etc? Ensure openings in Forebay/spreader are sized appropriately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. For Sheet Flows into the feature are proper inflow components installed? May include curb cuts, concrete pads, vegetated areas, etc. Ensure openings in curb cuts or spreaders are sized appropriately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were energy dissipation measures installed beyond the inflow features? May include a concrete mow strip, rip rap, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Was the grade from inflow feature to vegetated surface supportive of positive drainage and prevention of backflow? 2" minimum for slotted curb and level spreaders, 1-2" maximum from forebays.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. For Grass Buffers and Grass Swales is there a note on the Initial/Interim phases stating "Grass Swale/Buffer Avoid over compaction".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. For Grass Buffers and Grass Swales is there a note on the Final Phase stating "Vegetative Density in Grass Swale/Buffer must reach 80%")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. For Grass Buffers and Grass Swales is there a note stating: City of Thornton recommends Temporary or Permanent irrigation where appropriate to achieve functionality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. For Grass Swales was the overall shape trapezoidal with slopes no steeper than 3:1?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. For Grass Swales, was an underdrain used only if the slope was very shallow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are all structures throughout the feature free of recycled concrete backfill (retaining walls, etc)? <i>*Requirement also appears on MS4 Erosion Control Notes.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>			

### Plan Approval

Does the checklist show that all required elements are addressed in the SECP?  Yes  No

- If No, ESC Plan must be resubmitted for review after correction.
- If Yes, reviewer shall submit and save a copy of the approved checklist in the project folder.

**Signature** \_\_\_\_\_

**Date of Approval** \_\_\_\_\_