Construction Inspection Checklist

Inspection occurs at all stages of project construction. Field verification of LID/GI design assumptions should occur at the beginning of construction, materials should be verified/certified (e.g., engineered soil media, plants), and LID features should be inspected throughout project construction, and, ultimately, the form and function of LID practices should meet standards of construction prior to return of the contractor’s performance bond. The following list of items should be inspected and certified during construction.

Prior to Construction
☐ Divert runoff from adjacent areas.
☐ Clear the area where the LID practice will be constructed.
☐ Establish and protect a nearby project benchmark.
☐ Stake out and confirm grades of the practice location.
☐ In infiltration areas, test the soil for permeability to confirm design assumptions.
☐ Verify groundwater and bedrock design assumptions.
☐ Ensure temporary erosion and sediment controls have been properly installed.

Excavation
☐ Ensure the contractor has the right equipment.
☐ Discuss the goals of the project and purpose of the LID practices with the operators and crew.
☐ Ensure side slopes are stable and within design range.
☐ Stabilize stockpile locations with vegetation and/or silt fence. Stockpiles must not be adjacent to excavation area.
☐ Scarify soils compacted during excavation.
☐ If necessary, adjust the facility’s depth to meet soil type and permeability design assumptions.
☐ Put sufficient perimeter controls in place to protect the practice.

Structural Components
☐ Ensure materials (aggregate, perforated pipe, etc.) are per specifications.
☐ Ensure forms are adequately sized.
☐ Place and install geotextile drainage fabrics or impervious liners per plan.
☐ Install underdrain system to grade.
☐ Install anti-seep collars per plan.
☐ Install inlets/outlets and emergency overflows at correct elevations per plans.
☐ Install pretreatment measures per plans.
☐ Install materials, spacing and grade of check dams per plans.

Soils
☐ Ensure common borrow complies with specification for fill areas.
☐ Ensure topsoil complies with spec in composition and placement.
☐ Ensure the engineered soil composition and texture conform to specifications

Vegetation Establishment
☐ Stabilize the surrounding drainage area for permanent erosion control.
☐ Ensure seed or plants to be used conform to planting specifications.
Final Inspection
☐ Ensure the practice has been installed per plans.
☐ Ensure the pretreatment is operational.
☐ Ensure the inlet/outlet is operational and at the correct elevation.
☐ Verify the soil/filter medium permeability.
☐ Ensure vegetation been established to 85% cover.
☐ Remove construction generated sediments.
☐ Ensure the contributing watershed is stabilized before flow is diverted to the practice.
☐ Address any erosion around the practice slopes or channels.