

## 4.0 Downspout Planter

### **4.5 DOWNSPOUT PLANTER BOX SPECIFICATIONS**

#### **CONSTRUCTION NOTES**

1. The planter box shall be built according to the dimensions in detail 4.1 and as indicated on the plans.
2. An existing downspout shall be modified to enter the 1st planter box in series. The downspout shall be fitted with a diverter allowing flow to be directed to the box or existing storm sewer connection.
3. Planter boxes in series shall be placed flush against each other as shown in the site plan.
4. The contractor shall discuss any modifications with the engineer and property owner before action is taken.
5. The paver stone base or approved alternative shall be positioned prior to any other construction.
6. The planter box shall be built as shown in detail 4.1. Supports shall be used on the inside of the box as shown.
7. The contractor shall position and level the planter box and then install waterproof liner prior to backfilling with materials.
8. All overflow piping shall be comprised of 3-inch diameter PVC piping. Overflow pipes shall be placed as shown and connected to planter boxes in series. Ends that are positioned inside the planter shall be capped with a PVC pipe grate. See specification items #12 and #13.
9. The underdrain pipe shall be a 2-inch perforated PVC pipe.
10. All pipes shall be fitted and secured with adhesive that is in conformance with local plumbing codes.
11. The existing downspout shall be directed into the first planter box in series.
12. The last box in series (farthest from downspout) shall have a 2-inch atrium grate for overflow. The overflow shall discharge to the existing storm sewer connection.
13. The contractor shall place and compact each aggregate and soil layer once the planter box is constructed.
14. Planter boxes connected in series shall have the overflow and underdrain connect throughout the entire system.

#### **SPECIFICATIONS**

1. The planter boxes shall be level when installed.
2. Prior to installation, the contractor shall provide engineer shop drawings of downspout connections and piping.
3. The gravel layer shall be comprised of No. 57 washed stone.
4. The sandy compost mix shall be comprised of 85% washed sand and 15% compost.
5. The diverter shall be 'Save the Rain' metal diverter or approved equivalent.
6. All PVC piping shall be schedule 40.
7. The erosion protection shall be comprised of 3-5-inch diameter washed river stone.
8. The plants shall be specified by the planting schedule.
9. All wood material is to be 2-inch dimensional lumber (2"x4", 2"x6", and/or 2"x8") and pressure treated for use in exterior applications.
10. The planter base shall be pressure treated or marine grade plywood suitable for use in exterior applications.
11. All connecting screws and hardware are to be galvanized or coated and approved for exterior use with treated lumber.
12. The overflow pipe grates shall be NDS 3-inch structural-foam polyolefin grate model #16 or equivalent.
13. The overflow atrium shall be NDS 2-inch atrium grate, part #270 or approved equivalent.

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14. Upon engineers request, the paver stone base may be replaced with 4'x4' pressure treated wood blocking or concrete formed pad.
15. The underdrain pipe (2-inch diameter) shall have holes drilled manually by the contractor. The perforations shall not be made in the sections of the underdrain that are exposed between planter boxes as shown in detail. Perforation hole size shall be 3/8"; hole spacing shall be 5"( $\pm 1/8$ "); number of rows shall be 2 @ 120° ( $\pm 5^\circ$ ).