DEPTH: NO FILTER FABRIC SHALL BE INSTALLED AS SHOWN ON APPROVED PLANS WITHIN BIORETENTION AREAS. SEE LANDSCAPE PLAN FOR PLANTING 85% to 88% SAND DETAILS. 8% to 12% SOIL FINES SEE GRADING AND DRAINAGE PLAN 3% to 5% ORGANIC MATTER FOR UNDERDRAIN LAYOUT. MAX 3:1 SLOPES INTO BIORETENTION AREA. 4:1 SLOPES PREFERRED. **OUTLET STRUCTURE** PRE-TREATMENT NOTES: PRE-TREATMENT REQUIRED OF PONDING OVER TOP OF SOIL TREATMENT DEPENDENT ON TYP. FLOW VARIES TYP. FLOW (SEE CITY DETAILS) SHEET FLOW 3" APPROVED GROUNDCOVER **VEGETATED FILTER STRIP** (SEE LANDSCAPE PLANS) GRAVEL/STONE DIAPHRAGM **VEGETATED LEVEL SPREADER** FILTER CONCENTRATED FLOW MEDIA PRE-TREATMENT (FOREBAY) CELL GRAVEL/STONE FLOW SPREADER 4" MINIMUM MINIMUM 2' SEPARATION 3" CHOKER STONE LAYER MINIMUM 3" COVER OF #57 6" MAXIMUM BETWEEN BOTTOM OF (WASHED #8 STONE) STONE AROUND UNDERDRAIN PERFORATED PVC **BIORETENTION AND UNDERDRAIN** BEDROCK/GROUNDWATER

- 1. EXCAVATORS SHALL WORK FROM THE OUTSIDE THE GREEN INFRASTRUCTURE PRACTICE (GIP) FOOTPRINT. EXCAVATED AREAS SHALL NOT BE COMPACTED OR LOADED IN ANY WAY AS TO CAUSE SOIL COMPACTION.
- 2. DURING EXCAVATION, MOIST CONDITIONS MAY CAUSE FINES TO CLOG THE NATIVE SOIL SURFACE OF THE FACILITY. IF THE NATIVE SOIL HAS BEEN EXPOSED TO RAINFALL OR IF SMEARING OCCURS, SCARIFY THE SURFACE TO A DEPTH OF 1' TO RESTORE INFILTRATION CAPACITY.
- 3. DURING CONSTRUCTION PHASE, CONTRACTOR SHALL DIVERT RUNOFF FLOW AROUND THE GIP AREAS TO ENSURE SEDIMENT DOES NOT ENTER.
- 4. RECYCLED MATERIAL IS NOT APPROVED FOR USE IN GIP FACILITIES.
- 5. UTILITIES AND IRRIGATION ARE PROHIBITED WITHIN THE GIP FOOTPRINT.
- 6. WATER QUALITY SIGNS SHALL BE INSTALLED IN ALL WATER QUALITY AREAS.

CONSTRUCTION SEQUENCING:

- 1. CONSTRUCT STORMWATER RUNOFF DIVERSIONS.
- EXCAVATE GIP AREAS.
- 3. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12" PRIOR TO STONE PLACEMENT.
- 4. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT (615) 791-3218.
- 5. INSTALL STONE SUBBASE AND UNDERDRAINS. CONNECT UNDERDRAIN TO OUTLET STRUCTURE.
- 6. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT (615) 791-3218.
- 7. INSTALL ADDITIONAL STONE ON AND FLAG THE UNDERDRAIN (3' EACH SIDE).
- 8. A SMALL SKID STEER LOADER MAY TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AVOIDING THE UNDERDRAIN PIPE INSTALLATIONS.
- 9. DELIVER AND STORE SOIL MEDIA ON PLASTIC SHEETING WITH APPROPRIATE EROSION CONTROL MEASURES.
- 10. SCHEDULE GIP INSPECTION WITH CITY STORMWATER INSPECTOR AT (615) 791-3218.
- 11. INSTALL SOIL MEDIA IN LIFTS. DO NOT COMPACT WITH EQUIPMENT.
- 12. ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE THE DESIGN ELEVATIONS.
- 13. INSTALL VEGETATION, AND WATER ACCORDINGLY. PERMANENT IRRIGATION IS PROHIBITED IN GIP.
- 14. INSTALL SPECIFIED GROUNDCOVER.
- 15. FLAG LIMITS OF GIP FOR SURVEY LOCATE AND SHOW ON AS-BUILT PLANS.

CITY OF FRANKLIN ENGINEERING BIORETENTION 109 THIRD AVE SOUTH LEVEL 1 FRANKLIN, TN 37064 FRANKLIN TITLE GIP-01 (01) 7/22/19 DWG.NO DATE DIRECTOR OF ENGINEERING 07/22/2019 7/22/19 EFFECTIVE DATE STORMWATER COORDINATOR