SUNTREE TECHNOLOGIES INC.™ NUTRIENT SEPARATING BAFFLE BOX™ MODEL NO: NSBB–3–6–70

FLOW & BY–PASS SPECIFICATIONS FOR BIOMASS
SEPARATING SCREEN SYSTEM, SEDIMENT COLLECTION
CHAMBERS, AND SKIMMER SPECIFICATIONS:

1. Inflow Pipe Area (18” RCP AS DRAWN) — 1.77 sq.ft.
2. Open orifice area in screen system — 3.95 sq.ft.
3. Open orifice area in screen system with 50% blockage — 1.977 sq.ft.
4. Open orifice area in screen system with 75% blockage — 0.99 sq.ft.
5. By-pass through screen system — 1.52 sq.ft. below the ceiling of the pipe
6. Minimum by-pass around screen system — 1.56 sq.ft. below the ceiling of the pipe
7. Screen system storage volume — 7.25 cu.ft.

SEDIMENT STORAGE:
8. Volume of first chamber — 25.50 cu.ft.
10. Volume of total sediment storage — 51.00 cu.ft.

SKIMMER SPECIFICATIONS:
11. Flow area under skimmer — 2.25 sq.ft.
12. Area of pipe in line with skimmer — 1.05 sq.ft.
13. Area between skimmer and outflow pipe — 2.93 sq.ft. parallel with the surface of the pipe

NOTES:
1. CONCRETE 28 DAY COMpressive STRENGTH 2000 PSI
2. REINFORCING: ASTM A–615 GRADE 60
3. SUPPORTS AN H2O LOADING AS INDICATED BY MIGGIO.
4. JIINT SEALANT: BUTYL RUBBER SS–5–00210
5. ALL WALLS TO BE 6” THICK, BOTTOM TO BE 6” THICK, TOP TO BE 8” THICK.
6. TREATMENT DESIGN FLOW FOR BOX REMOVAL EFFICIENCY OF 15% IS 8 CYL.
7. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CANNOT INTRUDE BEYOND FLUSH)
8. BAFFLES ARE TO BE SEALED WITH GROUT TO FORM 2 WATER TIGHT CHAMBERS.

INSTALLATION NOTES:
1. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CANNOT INTRUDE BEYOND FLUSH)
2. INVERT OF OUTFLOW PIPE SHOULD BE EVEN WITH THE TOP OF THE BAFFLES.
3. BAFFLES SHOULD BE SEALED WITH GROUT.
4. HEAVIEST PICK POINT TO BE TBD.
5. INVERT OF THE INFLOW PIPE SHOULD NOT BE BELOW THE INVERT OF THE OUTFLOW PIPE.