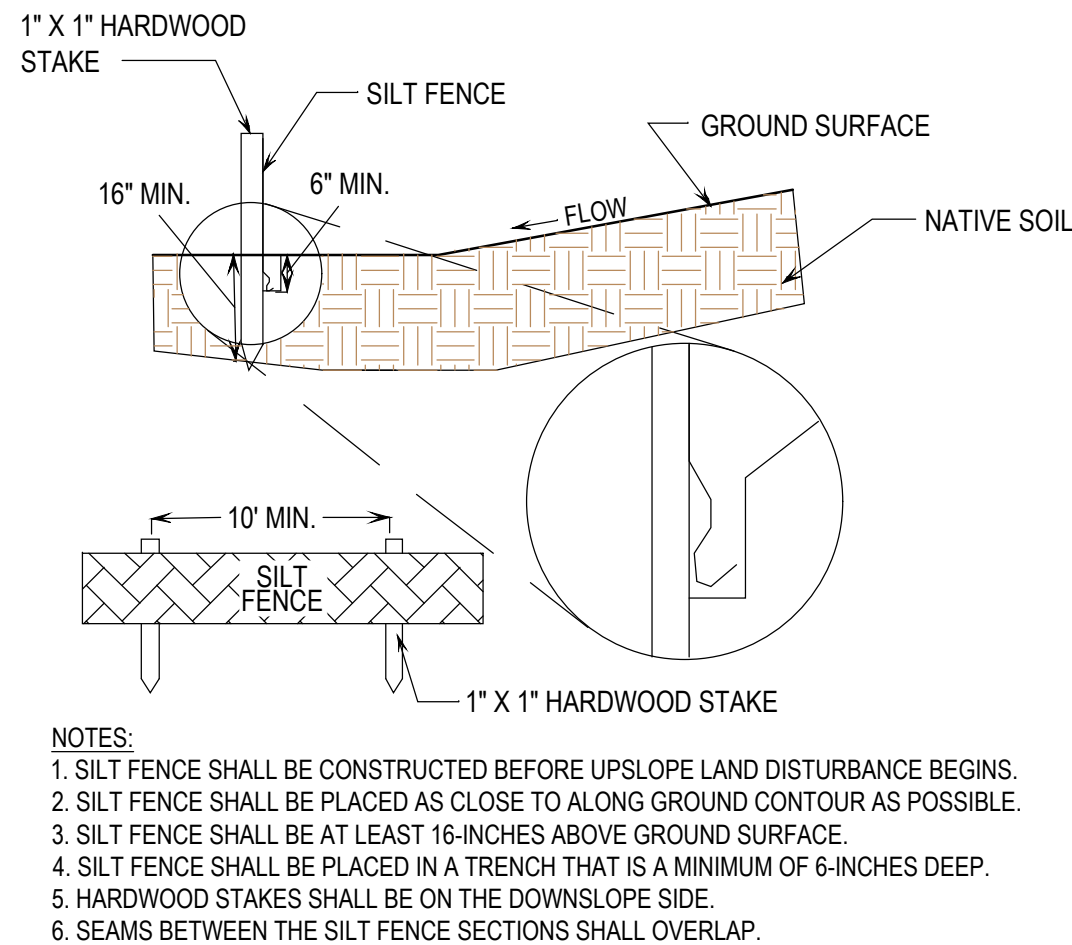
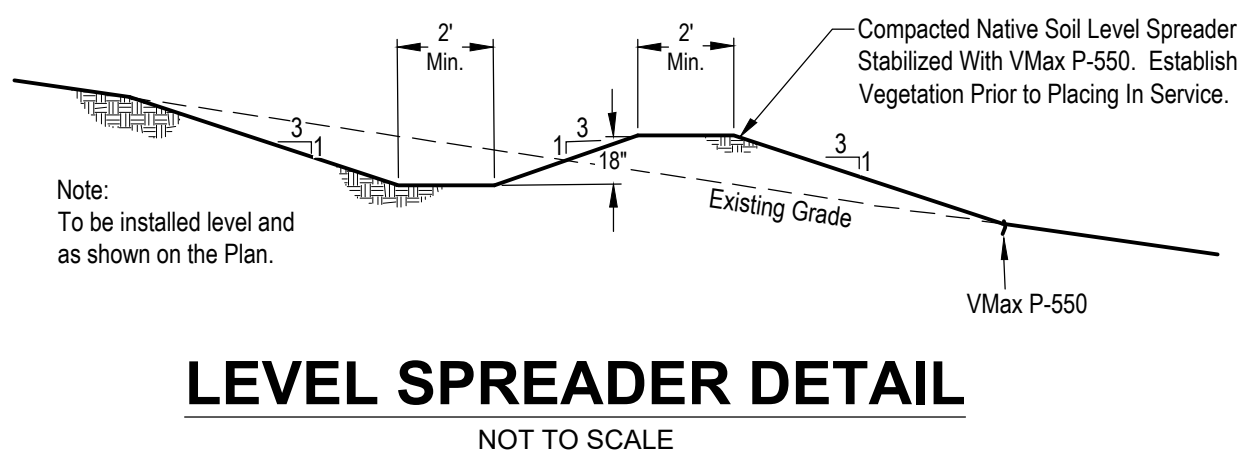
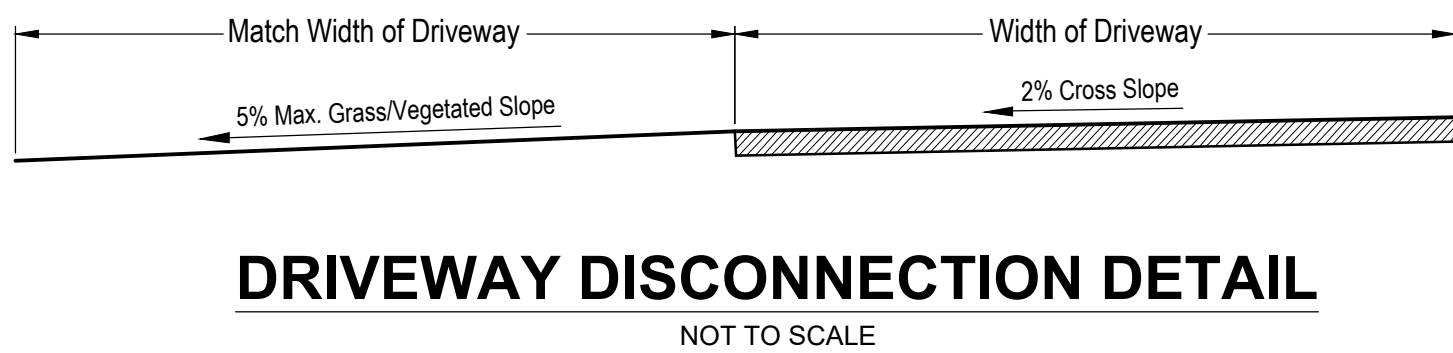
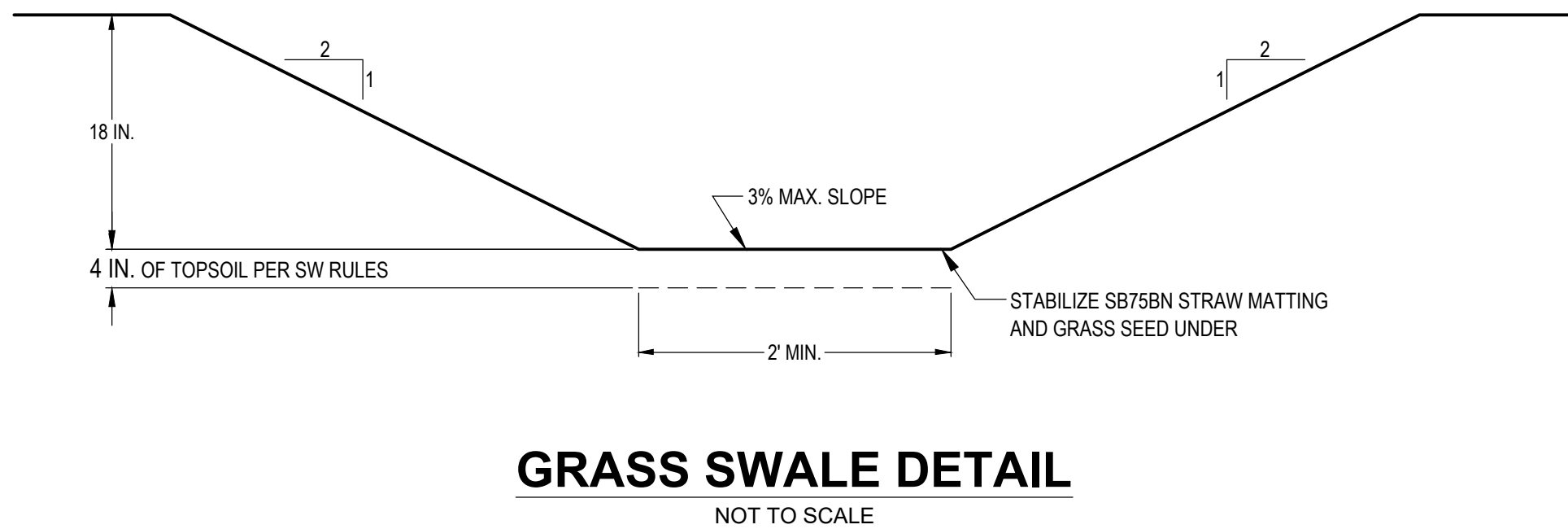
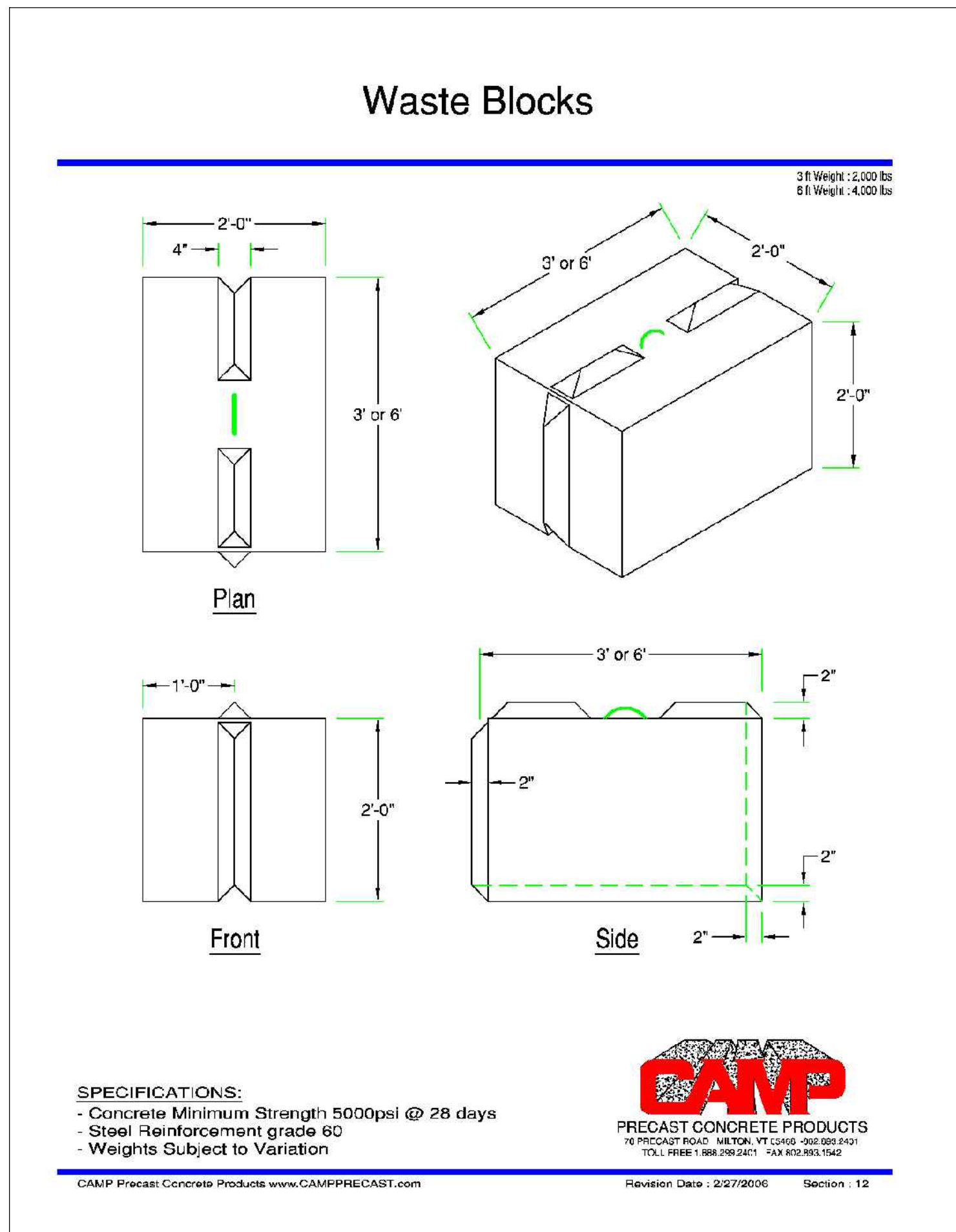
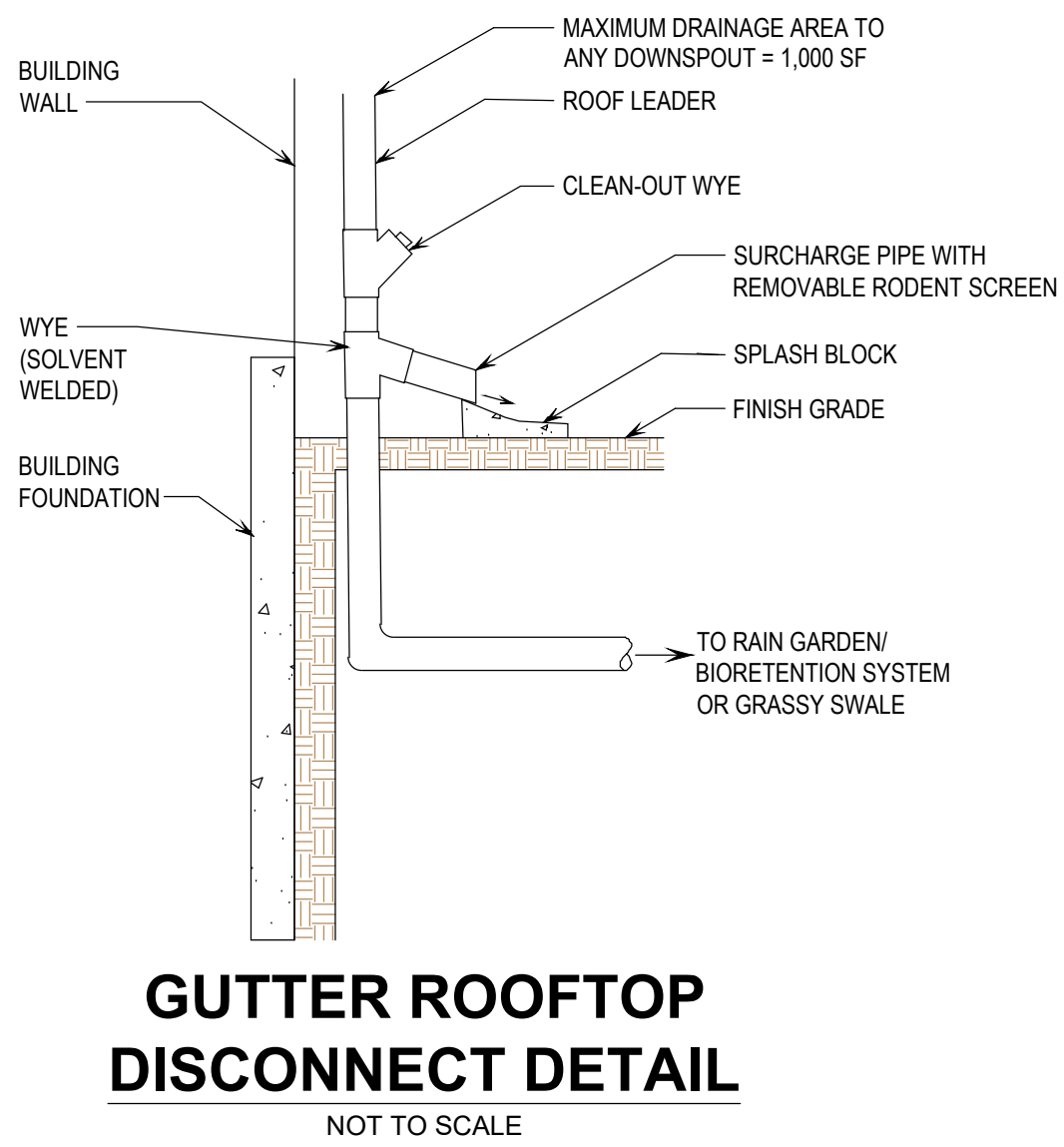
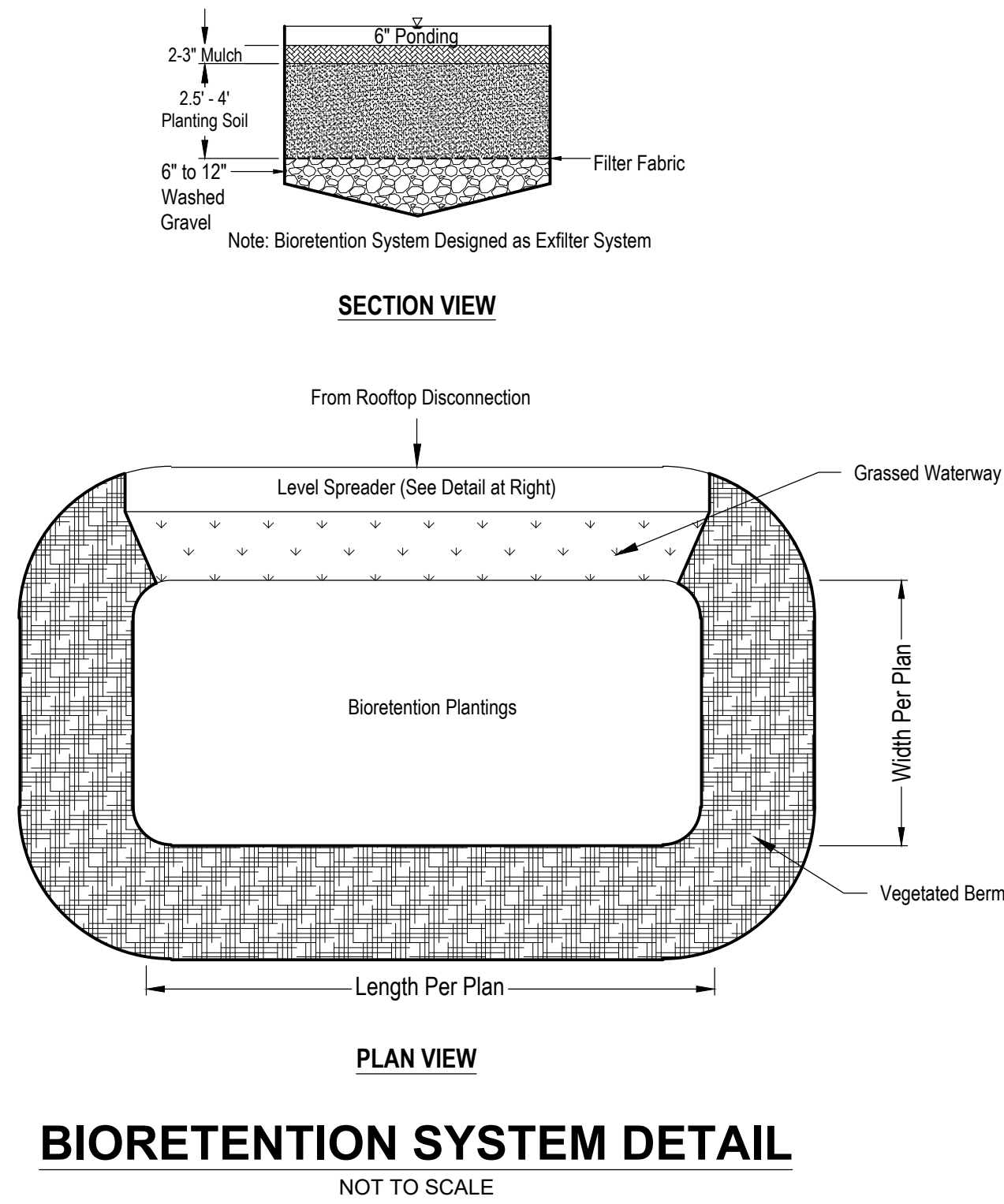


Bioretention Notes

- 1) The planting soil should be a sandy loam, loamy sand, loam, or a loam/sand mix (i.e. should contain a minimum 35 to 60% sand, by volume).
 - 2) The clay content for these soils should be less than 25% by volume.
 - 3) Soils should fall within the SM, or ML classifications of the Unified Soil Classification System (USCS).
 - 4) A permeability of at least 1.0 foot per day (0.5"/hr) is required (a conservative value of 0.5 feet per day is used for design).
 - 5) The soils should be free of stones, stumps, roots, woody material over 1" in diameter, and brush or seeds from noxious weeds.
 - 6) Planting soil characteristics:
- | Parameter | Value |
|----------------|---------------------------|
| pH | 5.2 to 7.0 |
| Organic matter | 1.5 to 4.0% |
| Magnesium | 35 lbs. per acre, minimum |
| Phosphorous | 75 lbs. per acre, minimum |
| Potassium | 85 lbs. per acre, minimum |
| Soluble salts | 500 ppm |
| Clay | 10 to 25% |
| Silt | 30 to 55% |
| Sand | 35 to 60% |
- 7) The mulch layer should be standard landscape style, single or double, shredded hardwood mulch or chips. The mulch should be well aged, uniform in color, and free of other materials.
 - 8) Plant material selection should be based on the goal of simulating a terrestrial forested community of native species.



SIGNATURE:

DAVID H. WHITNEY, P.E.
PROFESSIONAL ENGINEER #8830

DATE	DESCRIPTION	BY
REVISIONS		
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting		
167 Main Street, P.O. Box 820 Enosburg Falls, VT 05450 Telephone: (802) 833-5168	10523 VT Route 116, P.O. Box 133 Hinesburg, VT 05461 Telephone: (802) 482-2597	PROJECT NO. 19017
FIVE-LOT SUBDIVISION WATER SUPPLY AND WASTEWATER DISPOSAL SYSTEMS DESIGNS		DATE: 08-24-2020
SHANE SIZEN		SCALE: AS NOTED
146 KAYS WAY, FLETCHER, VERMONT		SURVEY: JG, AP
STORMWATER DETAILS		DRAWN: SB
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		CHECKED: MJG
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		DRAWING NO. SW-2
		SHEET 2 OF 2