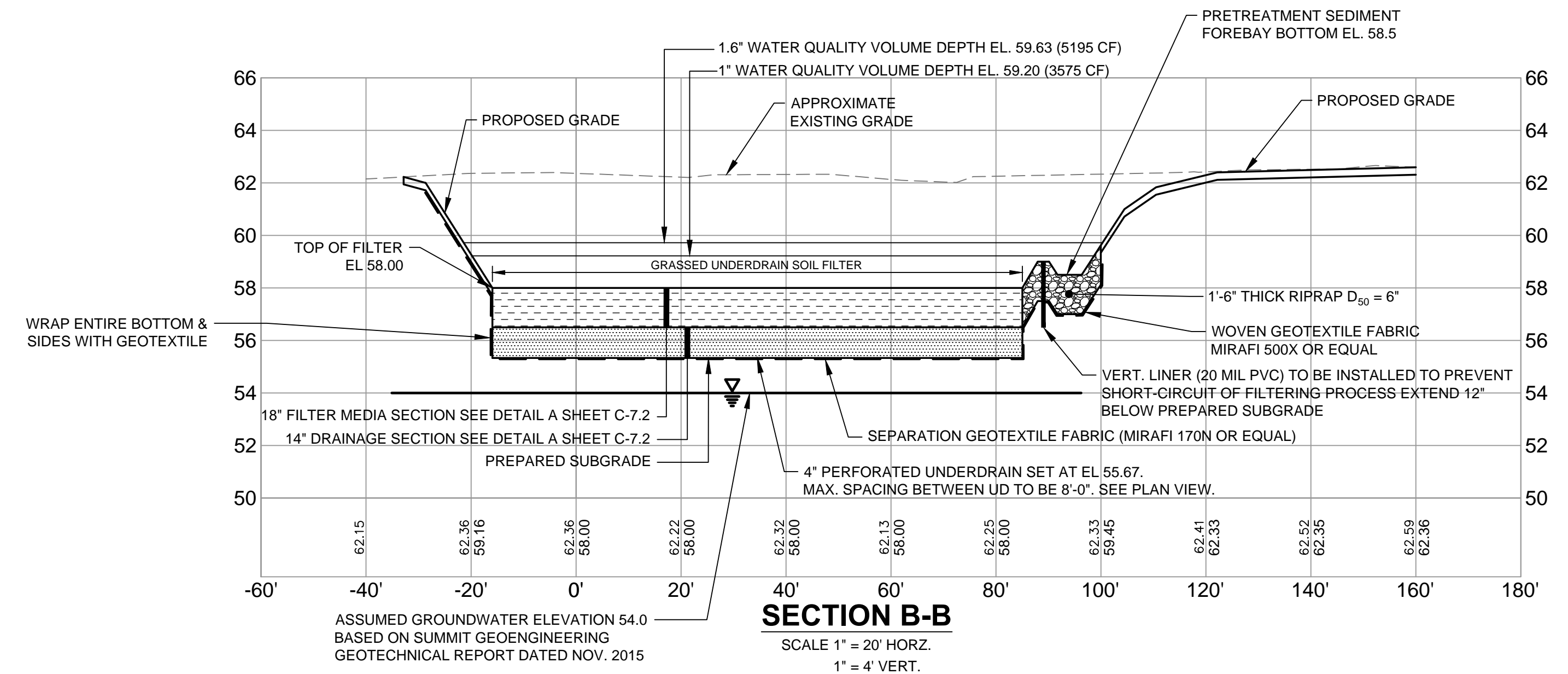
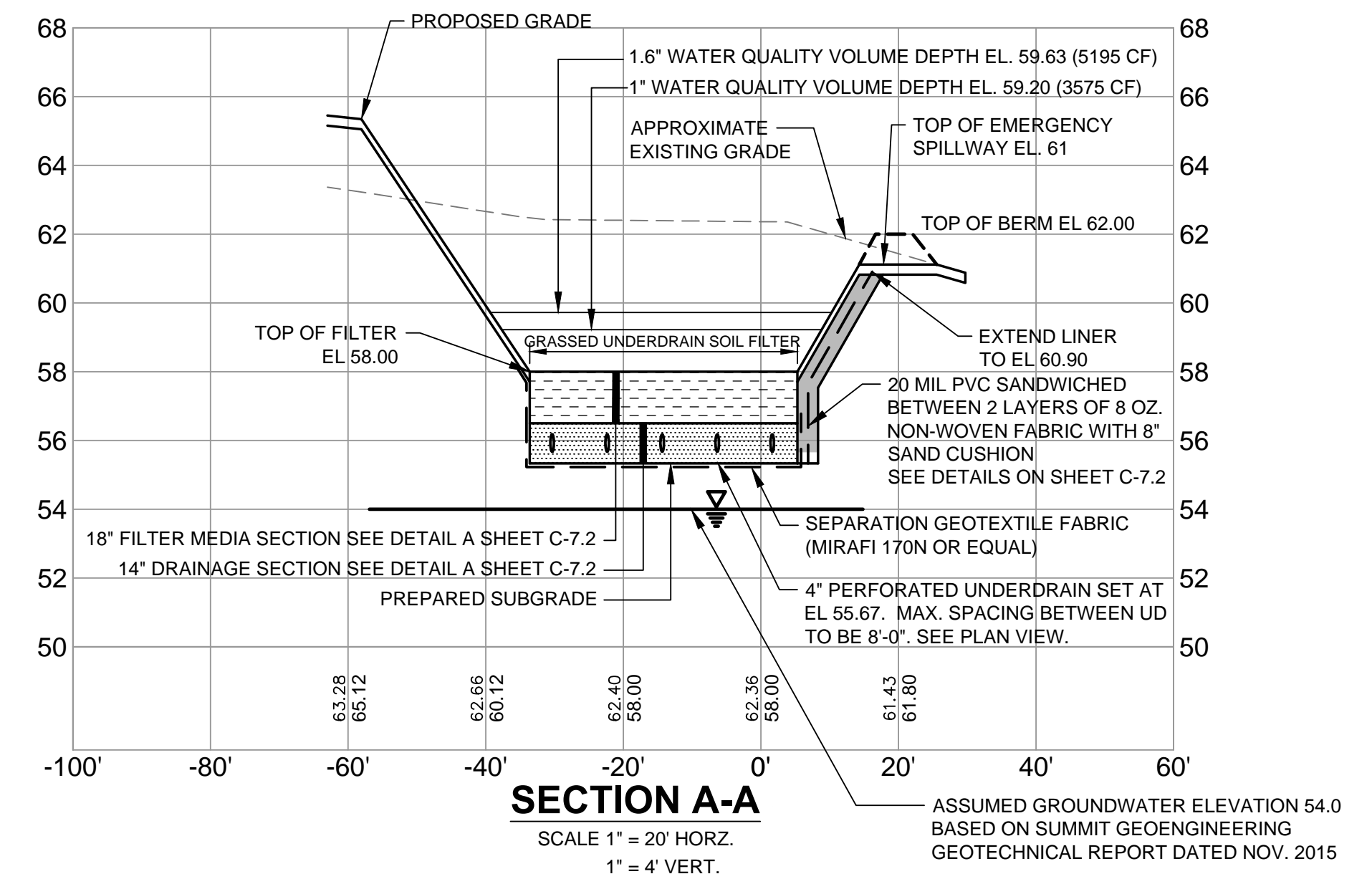


**GRASSED UNDERDRAINED FILTER PLAN**  
1" = 20'



**CONSTRUCTION OVERSIGHT**  
The applicant will retain the services of a professional engineer to inspect the construction and stabilization of all stormwater management structures. If necessary, the inspecting engineer will interpret the pond's construction plan for the contractor. Once all stormwater management structures are constructed and stabilized, the inspecting engineer will notify the city in writing within 30 days to state that the pond has been completed. Accompanying the engineer's notification must be a log of the engineer's inspections giving the date of each inspection, the time of each inspection, and the items inspected on each visit, and include any testing data or sieve analysis data of every mineral soil and soil media specified in the plans and used on site.

**UNDERDRAINED FILTER BASINS**  
**Construction Sequence:** The soil filter media and vegetation must not be installed until the area that drains to the filter has been permanently stabilized with pavement or other structure, 90% vegetation cover, or other permanent stabilization unless the runoff from the contributing drainage area is diverted around the filter until stabilization is completed.  
**Compaction of Soil Filter:** Filter soil media and underdrain bedding material must be compacted to between 90% and 92% standard proctor. The bed should be installed in at least 2 lifts of 9 inches to prevent pockets of loose media.  
**Construction Oversight:** Inspection by a professional engineer will occur at a minimum:  
• After the preliminary construction of the filter grades and once the underdrain pipes are installed but not backfilled,  
• After the drainage layer is constructed and prior to the installation of the filter media,  
• After the filter media has been installed and seeded. Bio-retention cells must be stabilized per the provided planting scheme and density for the canopy coverage of 30 and 50%.  
• After one year to inspect health of the vegetation and make corrections, and  
• All the material used for the construction of the filter basin must be confirmed as suitable by the design engineer. Testing must be done by a certified laboratory to show that they are passing DEP specifications.

**Testing and Submittals:** The contractor shall identify the location of the source of each component of the filter media. All results of field and laboratory testing shall be submitted to the project engineer for confirmation. The contractor shall:  
• Select samples for sampling of each type of material to be blended for the mixed filter media and samples of the underdrain bedding material. Samples must be a composite of three different locations (grabs) from the stockpile or pit face. Sample size required will be determined by the testing laboratory.  
• Perform a sieve analysis conforming to STM C136 (Standard Test Method for Sieve Analysis of fine and Course Aggregates 1996A) on each type of the sample material. The resulting soil filter media mixture must have 8% to 12% by weight passing the #200 sieve, a clay content of less than 2% (determined hydrometer grain size analysis) and have 10% dry weight of organic matter.  
• Perform a permeability test on the soil filter media mixture conforming to ASTM D2434 with the mixture compacted to 90-92% of maximum dry density based on ASTM D698.

PRELIMINARY - NOT FOR CONSTRUCTION

		PROJECT: SUBURBAN PROPANE RELOCATION SHEET TITLE: STORMWATER MANAGEMENT: GRASSED UNDERDRAINED FILTER DETAILS CLIENT: THOMPSON'S POINT DEVELOPMENT CO. INC.	<b>STANTEC CONSULTING SERVICES INC.</b> 778 MAIN ST, SUITE 8 SOUTH PORTLAND, ME 04106 WWW.STANTEC.COM 
2 02.29.16 FINAL SITE AND SUBDIVISION PLANS SUBMITTED TO CITY 1 01.22.16 SUBMITTED TO OWNER FOR REVIEW REV DATE DESCRIPTION	REVISIONS	LIC. # 11994	DRAWN: CDD DATE: JAN. 2016 DESIGNED: BEK SCALE: AS NOTED CHECKED: BEK JOB NO. 195350142 FILE NAME: SP-M157 POND SECTIONS SHEET C-7.0