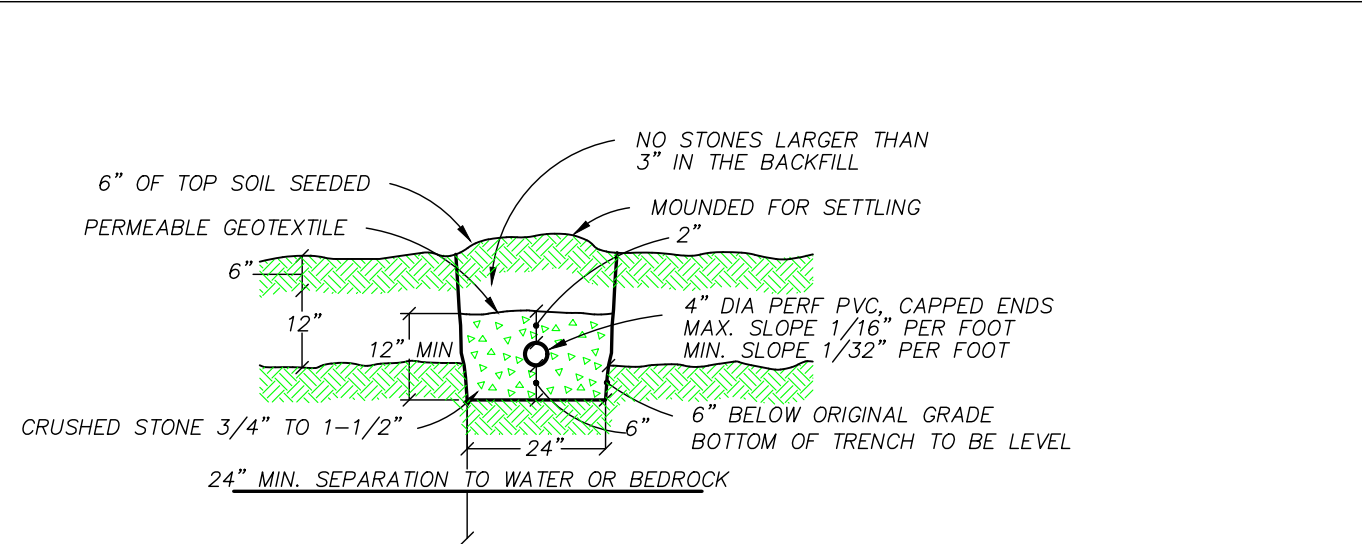
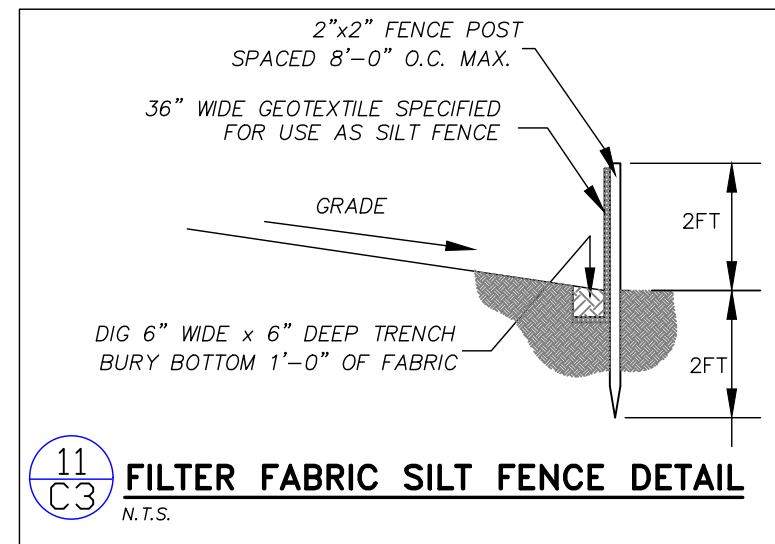
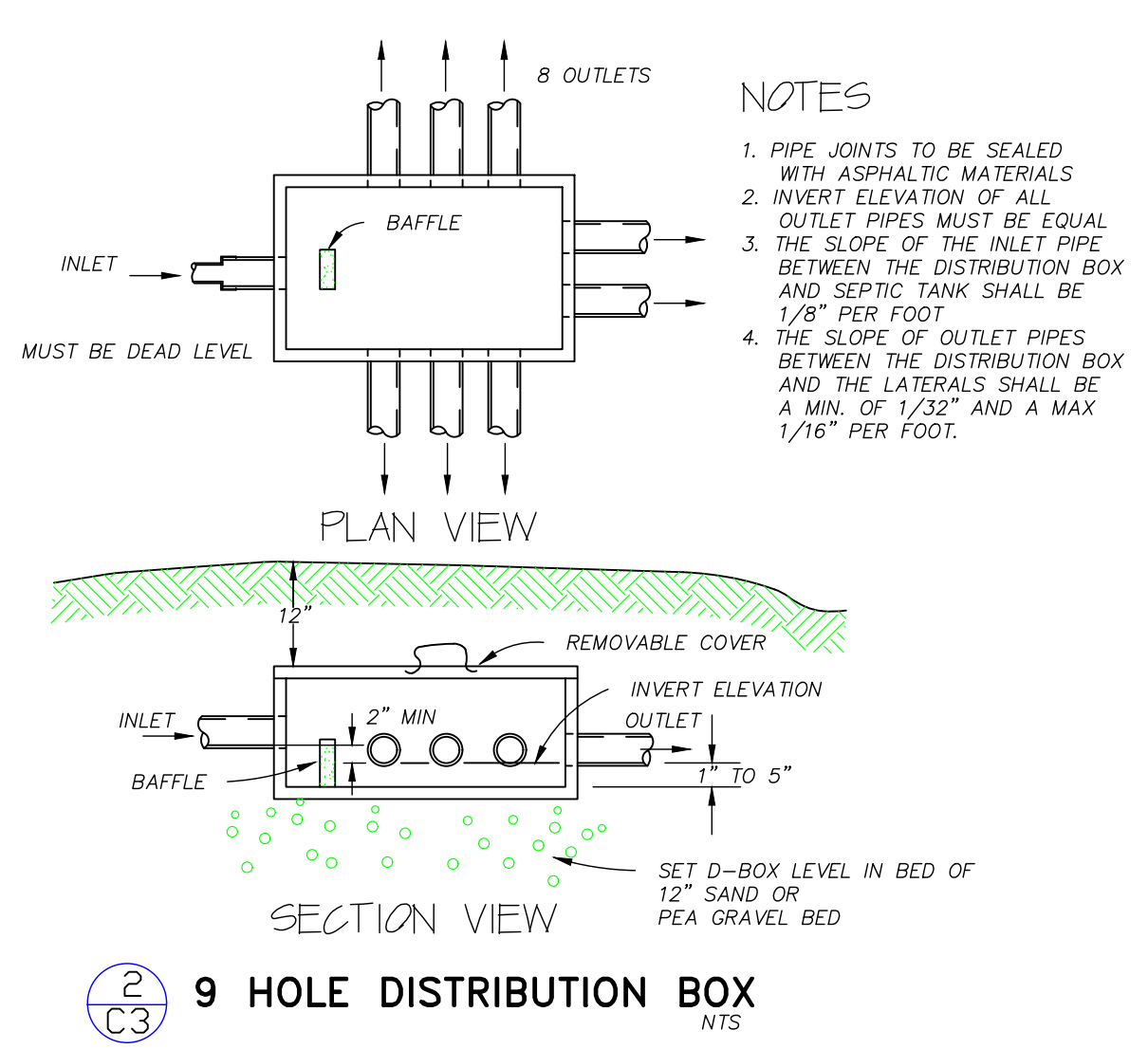
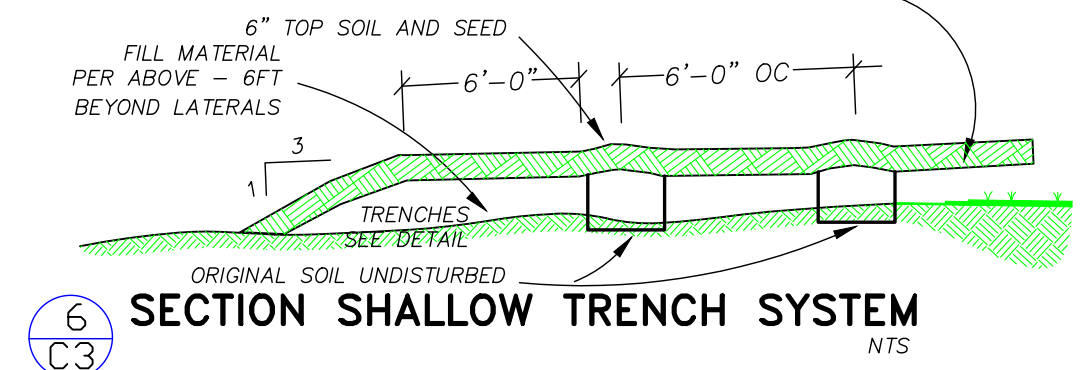


SLOPE STABILIZATION, SEEDING METHOD & MULCHING

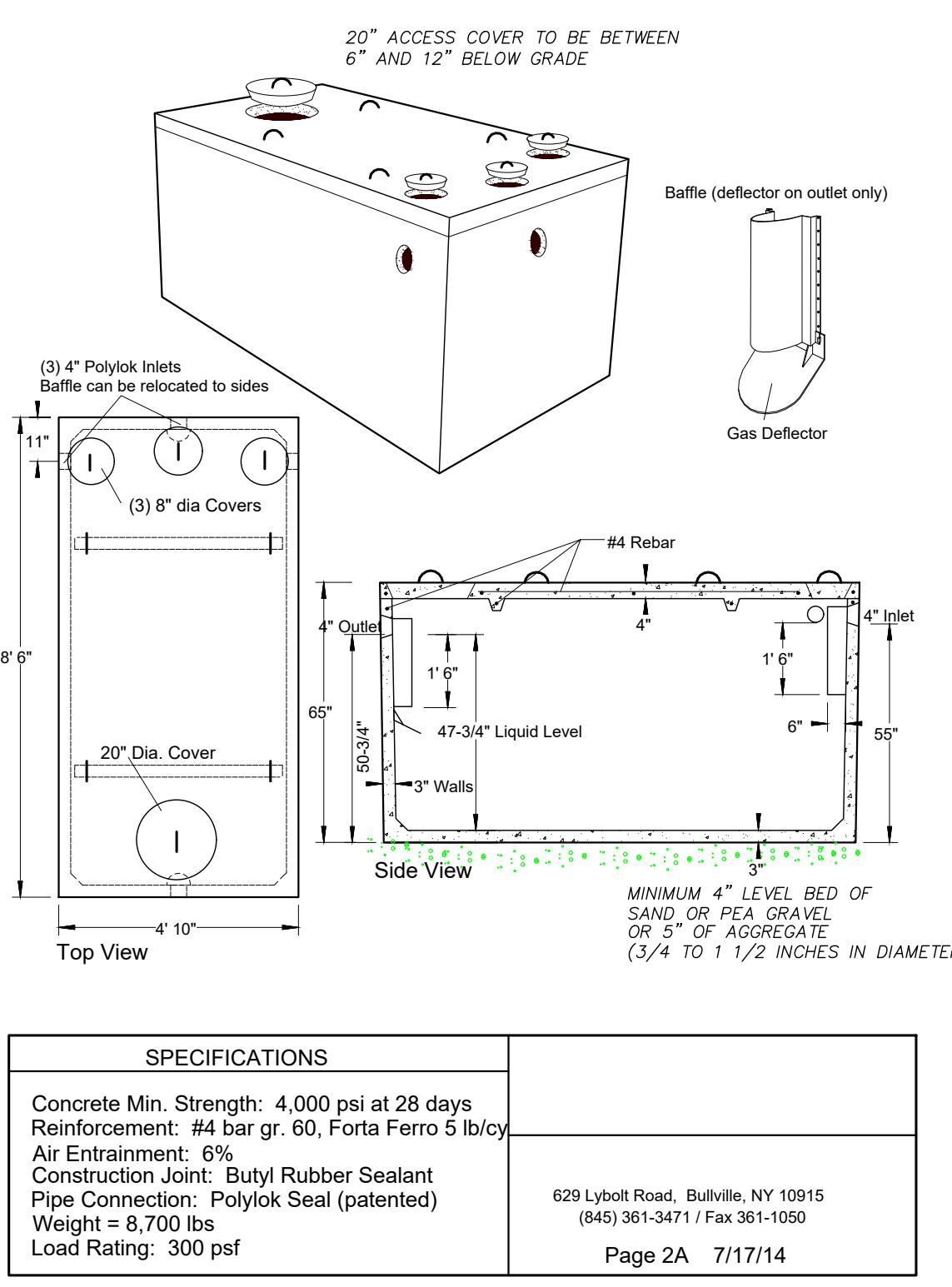
SLOPES OR 4:1 OR GREATER (HORIZONTAL : VERTICAL). SLOPES SHALL BE HYDROSEEDED WITH THE MIXTURES AND RATES INDICATED IN THE PERMANENT SEEDING MIXTURE SCHEDULE. STRAW OR HAY MULCH SHALL BE APPLIED AT A RATE OF 2,000 LBS./ACRE. STRAW OR HAY MULCH SHALL BE ANCHORED WITH BIRD-MESH NETTING AS MANUFACTURED BY ROLANKA INTERNATIONAL OR APPROVED EQUIVALENT. NETTING TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS. GENTLE SLOPE AND FLAT AREAS. AREA SHALL BE SEED BY HYDROSEEDING OR BROADCASTING WITH THE MIXTURES AND RATES INDICATED ON THE PERMANENT SEEDING MIXTURE SCHEDULE. HYDROSEEDED AREAS SHALL BE MULCHED WITH A WOOD FIBER MULCH APPLIED AT A RATE OF 500 LBS./ACRE. BROADCAST AREAS SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 2,000 LBS./ACRE. AREAS SEED BY BROADCASTING SHALL BE LIGHTLY RAKED AND PAVED PRIOR TO PLACING MULCH. AREAS REMAINING DISTURBED FOR 20 DAYS OR MORE SHALL BE STABILIZED AS FOLLOWS.



NOTES:
TRENCHES TO BE CONSTRUCTED PARALLEL TO GROUND CONTOURS. DIVERSION OF SURFACE RUNOFF AROUND THE FILL AREA BY MEANS OF DITCHING/BERMING MAY BE REQUIRED UP HILL ON SLOPED SITES. HEAVY EQUIPMENT SHALL NOT ENTER THE ABSORPTION AREA. GRADE STAKES MAY BE USED TO DELINEATE THE LIMITS OF FILL AND PREVENT OVER-EXCAVATION OF ABSORPTION TRENCHES. THE DEPTH OF THE FILL MATERIAL, INCLUDING A SIX INCH TOPSOIL LAYER, SHALL NOT EXCEED 30 INCHES ABOVE ORIGINAL GROUND ELEVATION. ALL TREES SHALL BE CUT AT GRADE. FILL SHOULD HAVE A PERCOLATION RATE SIMILAR TO, BUT NOT FASTER THAN, THE EXISTING SOIL PERCOLATION RATE. MAX 15% SLOPE.



NOTES:
1. PIPE JOINTS TO BE SEALED WITH ASPHALTIC MATERIALS.
2. INVERT ELEVATION OF ALL OUTLET PIPES MUST BE EQUAL TO THE SLOPE OF THE INLET PIPE BETWEEN THE DISTRIBUTION BOX AND SEPTIC TANK SHALL BE 1/8" PER FOOT.
3. THE SLOPE OF THE INLET PIPE BETWEEN THE DISTRIBUTION BOX AND THE LATERALS SHALL BE A MIN. OF 1/32" AND A MAX. 1/16" PER FOOT.
4. THE SLOPE OF OUTLET PIPES BETWEEN THE DISTRIBUTION BOX AND THE LATERALS SHALL BE A MIN. OF 1/32" AND A MAX. 1/16" PER FOOT.



SPECIFICATIONS	
Concrete Min. Strength: 4,000 psi at 28 days	
Reinforcement: #4 bar gr. 60, Forta Ferro 5 lb/cy	
Air Entrainment: 6%	
Construction Joint: Butyl Rubber Sealant	
Pipe Connection: Polylok Seal (patented)	
Weight = 8,700 lbs	
Load Rating: 300 psf	
	629 Lybott Road, Bulville, NY 10915 (845) 361-3471 / Fax 361-1050
	Page 2A 7/17/14

PERMANENT SEEDING MIXTURES

MODERATE TO STEEP SLOPES AND LOW MAINTENANCE AREAS	
SPECIES	APPLICATION RATE
EMPIRE BIRD'SFOOT TREFOIL	8 LBS./ACRE
TALL FESCUE	20 LBS./ACRE
RYEGRASS	5 LBS./ACRE
GENERAL RECREATION AREAS AND LAWNS	
SPECIES	APPLICATION RATE
SUNNY SITES (WELL, MODERATELY WELL AND SOMEWHAT POORLY DRAINED SOILS)	85-114 LBS./ACRE
65% KENTUCKY BLUEGRASS BLEND	26-35 LBS./ACRE
20% PERENNIAL RYEGRASS	19-26 LBS./ACRE
15% FINE FESCUE	114-143 LBS./ACRE
SUNNY DROUGHT SITES (SOMEWHAT TO EXCESSIVELY DRAINED SOILS)	69-91 LBS./ACRE
65% FINE FESCUE	26-33 LBS./ACRE
15% PERENNIAL RYEGRASS	26-33 LBS./ACRE
20% KENTUCKY BLUEGRASS BLEND	33-44 LBS./ACRE
SHADY DRY SITES (WELL TO SOMEWHAT POORLY DRAINED SOILS)	
80% SHADE TOLERANT KENTUCKY BLUEGRASS BLEND	25-37 LBS./ACRE
20% PERENNIAL RYEGRASS	25-37 LBS./ACRE
SHADY WET SITES (WELL TO SOMEWHAT POORLY DRAINED SOILS)	
60-91 LBS./ACRE	
70% ROUGH BLUEGRASS	69-91 LBS./ACRE
80% SHADE TOLERANT KENTUCKY BLUEGRASS BLEND	25-39 LBS./ACRE

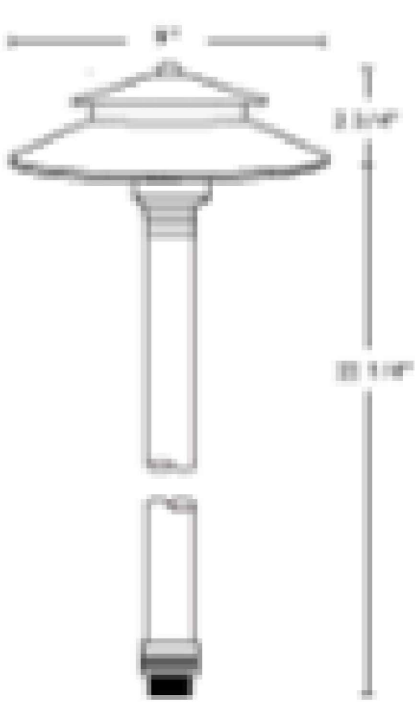
VOLT® Low Voltage Landscape Lighting
Stratum 9" Brass Two-Tier Area Light, 300 series

Product Description

The VOLT® Stratum 9" Two Tier Area Light is a high-quality outdoor lighting fixture that produces a very wide beam. At 9 inches in diameter, this fixture has a large oriental style hat that really stands out. The traditional double tiered pagoda style shape makes this fixture look great in almost any setting. The hat shape sheds water with ease, while also allowing the most light to escape from below as possible. The inside of the hat is coated with a white reflective enamel for increased lumen efficiency. The solid brass material makes this luminaire both heavyweight and rugged. You will never have to worry about corrosion or rust with this fixture!



Product Dimensions



Specifications

- Construction: Brass
- Finish: Bronze
- Lead Wire: 4' (standard) or 25' (optional) 18AWG
- Mounting: 10" Hammer Stake with outcut for wire exit
- Lens: Clear Polycarbonate Lens
- Light Source (sold separately): Bi-Pin (LED or Halogen)
- Operating Voltage: 12VAC
- Powered by: VOLT's Low Voltage Transformer

Warranty

Lifetime Warranty

Certifications

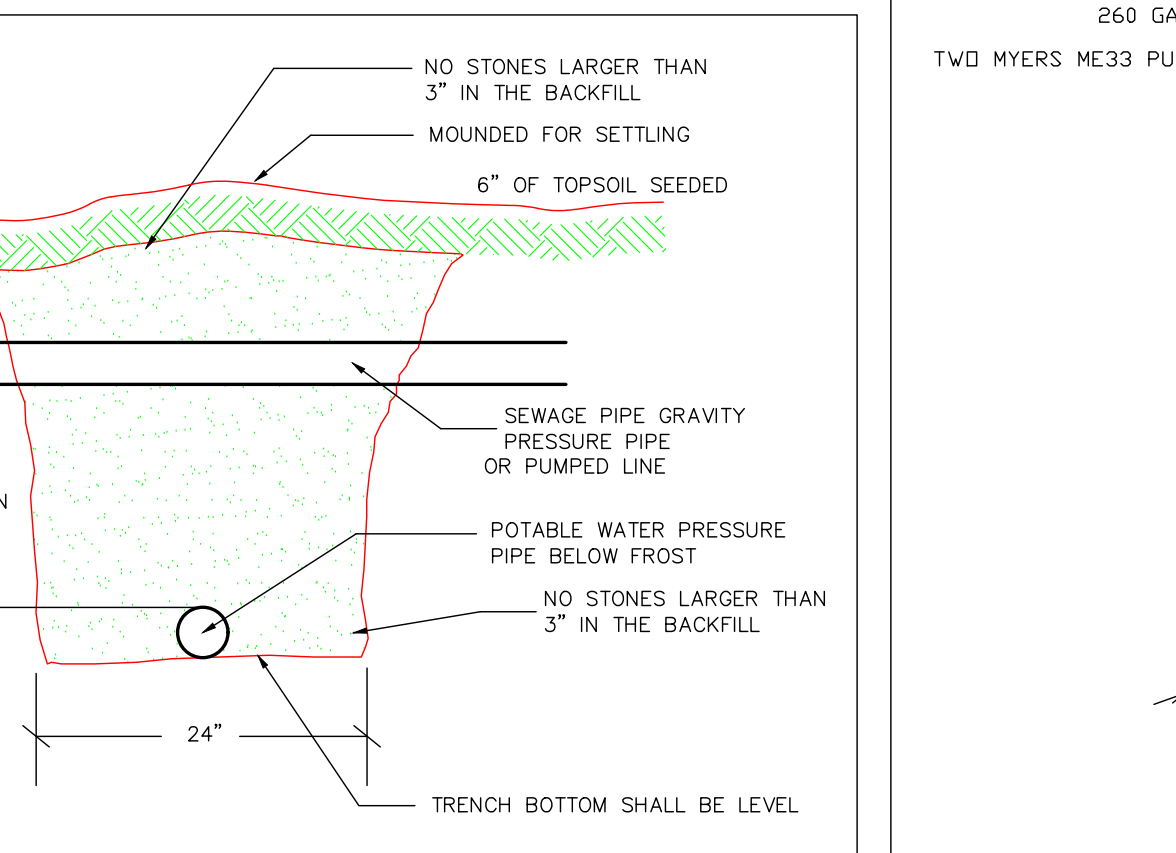
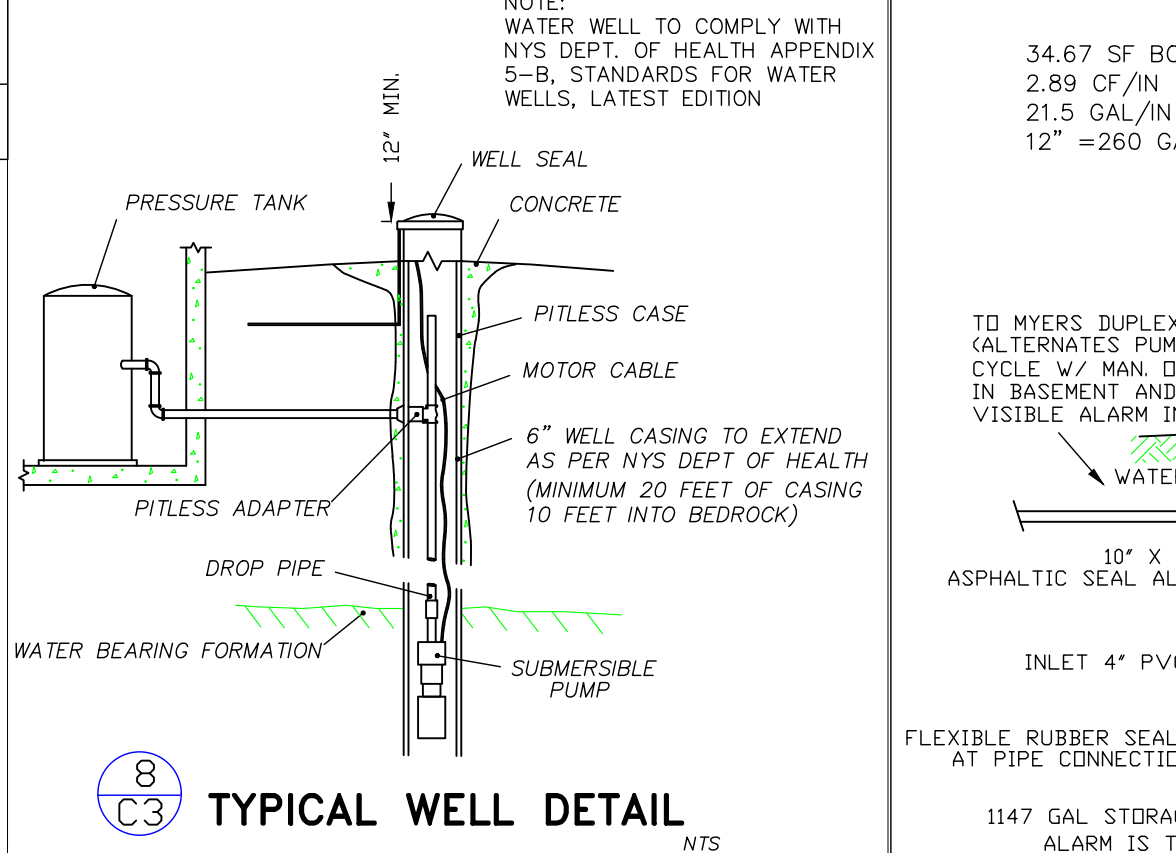
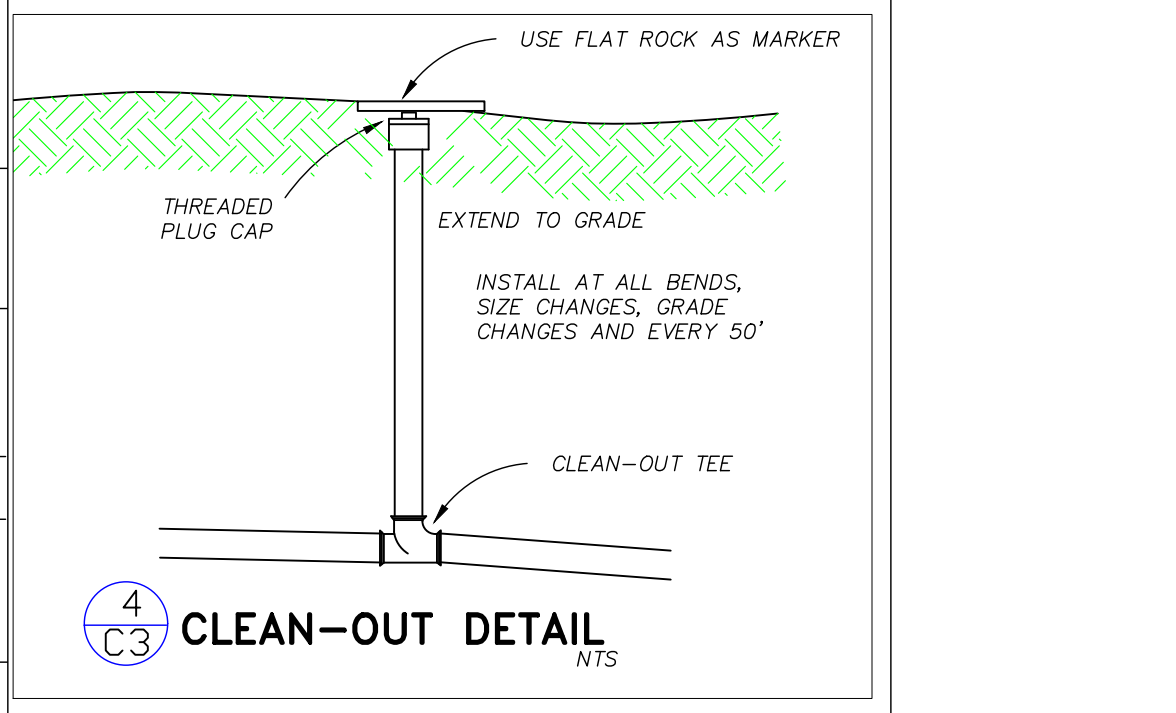
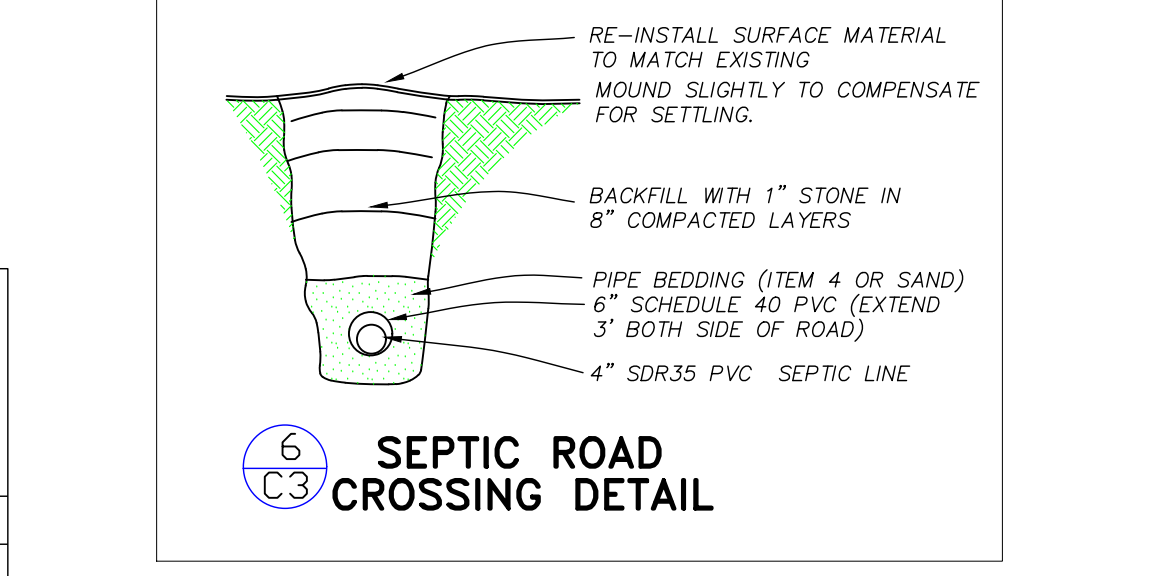
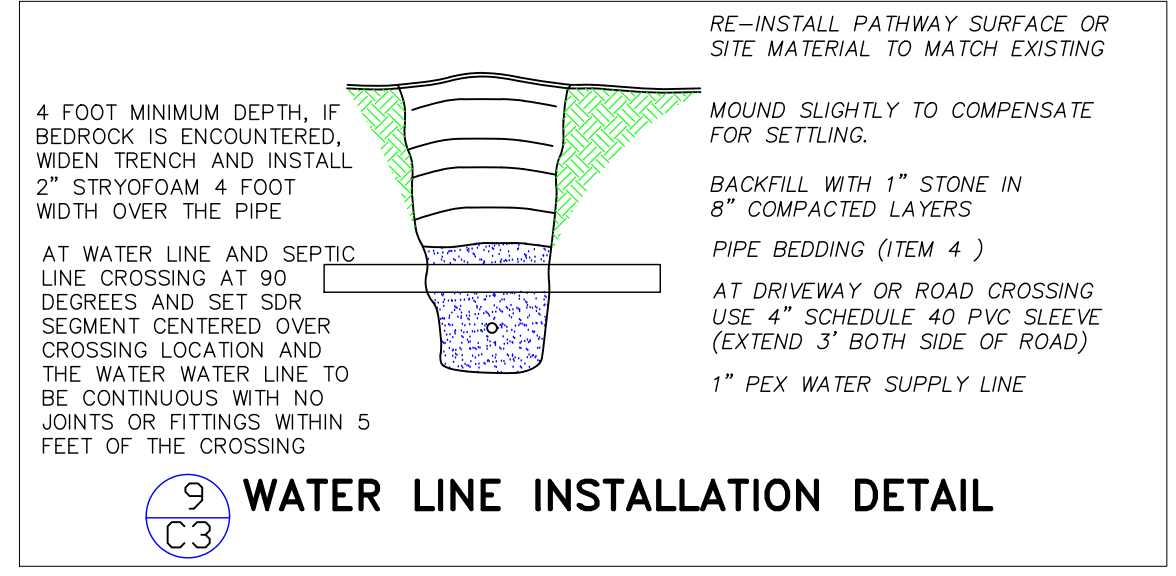


Features & Benefits

- Solid Brass
- Pre-aged finish; a natural patina
- Stem is 1-inch thick and includes extra-long (1-inch) strip resistant threading for greater stability.
- Beryllium copper socket - more corrosion resistant than copper.
- Silicone plug at lead wire exit prevents ground moisture and insects from entering luminaire through the stem.

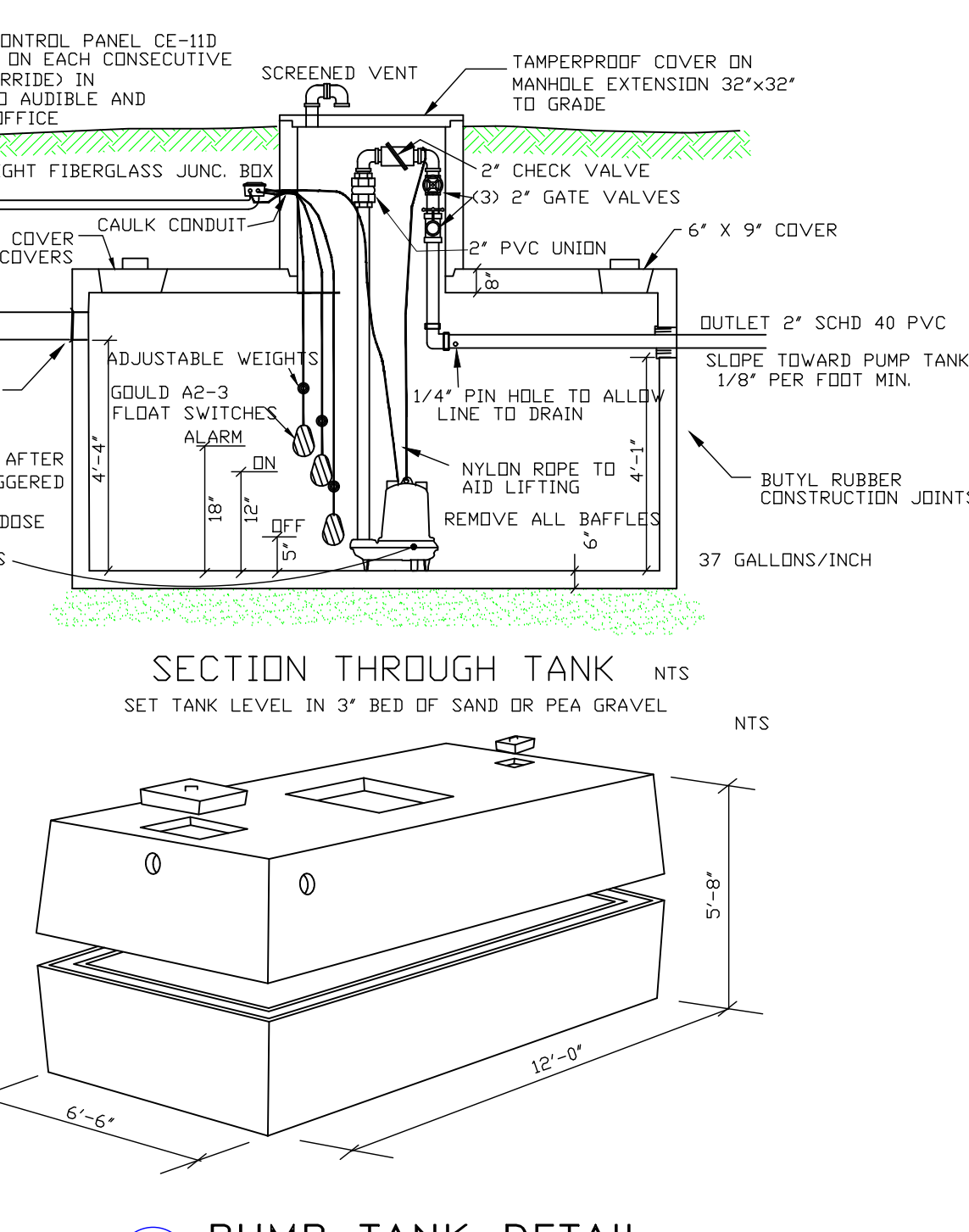
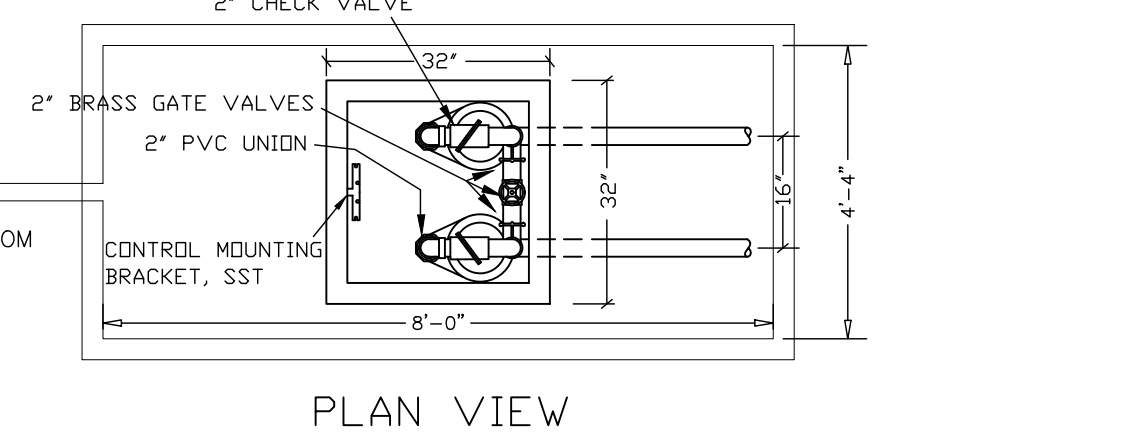
REQUIRED SEPTIC SYSTEM INSPECTIONS

1. SITE MEETING WITH CONTRACTOR	1. LOCATE AND PLACE CORNER STAKES FOR FIELD.
2. INSPECTION OF THE FILL IN PLACE. PERC. TEST TO BE DONE BY ENGINEER PRIOR TO TRENCH INSTALLATION AT THE ENGINEER'S DISCRETION.	2. TREES IN FIELD AREA TO BE CUT. GROUND TO REMAIN UNDISTURBED. STUMPS TO BE CUT FLUSH TO THE GROUND.
3. INSPECTION BY ENGINEER OF LATERALS IN PLACE.	3. CONTRACTOR SHALL OBTAIN A PERC. RATE TEST OF ACCEPTABLE RANGE FROM THE SOURCE PIT OF THE INTENDED FILL MATERIAL - PRIOR TO EXCAVATION AT THE PIT AND DELIVERY TO THE SITE.
4. INSPECTION BY ENGINEER OF TANK(S) IN PLACE.	4. FILL MATERIAL TO BE PLACED ON SEPTIC FIELD SITE ACCORDING TO GUIDELINES PER THIS DESIGN AND DETAILS.
5. INSPECTION BY ENGINEER OF FINISHED SYSTEM.	5. TRENCHES TO BE CUT INTO FILL MATERIAL AND EXISTING GRADE. SEE DETAIL FOR DEPTH.
	6. BASE AGGREGATE TO BE PLACED IN TRENCHES. SEE PLAN FOR DEPTH.
	7. LATERAL DISTRIBUTION PIPES AND DISTRIBUTION BOX TO BE INSTALLED AND LEFT EXPOSED.
	8. AGGREGATE COVER LAYER AND FILTER CLOTH COVER TO BE INSTALLED OVER LATERALS IN TRENCHES. SEE PLAN FOR DEPTH OF AGGREGATE COVER LAYER.
	9. SEPTIC TANK TO BE SET IN HOLE AND LEFT EXPOSED.
	10. INLET AND OUTLET LINES TO TANK TO BE INSTALLED AND LEFT EXPOSED.
	11. COVER TANKS, LINES AND SEPTIC FIELD WITH FINISH COVER MATERIAL.
	12. FINISH GRADING AND SEEDING.



PUMP CALCULATIONS

PRIMARY AREA:
450' OF 4" LATERAL PIPE @ 0.653 GAL/FT x 75% = 220.4
200' OF 2" FORCE MAIN PIPE @ 0.163 GAL/FT = 32.6
75% FILL TOTAL DOSE = 253.0 GAL
450' OF 4" LATERAL PIPE @ 0.653 GAL/FT x 85% = 249.8
125' OF 2" FORCE MAIN PIPE @ 0.163 GAL/FT = 20.4
85% FILL TOTAL DOSE = 270.2 GAL
21.6 GAL/IN CAPACITY x 4-1/4 IN = 90 GALLON DOSE
SET PUMP ON FLOAT 10-1/4" FROM BOTTOM OF TANK



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Design Associates
160 GOAT HILL RD
SAUGERTIES, NY 12477
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Michael E. North PE
NORTHENG@GMAIL.COM
www.northengineers.com



RESTFUL RETREAT SITE
SBL-25.11-1-22.311

5305 Route 212,
MT TEMPER N.Y.

DETAILS
Scale: AS NOTED
Drawn By: M. North
DATE: DEC 17, 2025

DESIGN PLANS

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