



Public Health
Prevent. Promote. Protect.

Karen DeMarco, MPH
Health Officer/Director

April 19, 2023

Carla Conner, Secretary
Clinton Township Board of Health
1255 Route 31, Suite 411
Lebanon, NJ 08833

Re: Septic System Alteration Waiver
Municipality: Clinton Township
Block: 16 Lot: 40
Location: 24 Old Mountain Road

Dear Carla,

This department has septic alteration plans dated March 14, 2023 designed by Fine Engineering, LLC, to correct a malfunctioning system to an existing 4 bedroom dwelling with no expansion as stated on the application. The design is in full conformance with 7:9A "Standards for Individual Subsurface Sewage Disposal Systems" except for the following waivers that will need to be acted on by the Board:

1. The proposed disposal bed will be only 74 feet from the existing well, which does not meet the minimum 100-foot setback requirement by code. The distance can be reduced according to 7:9A-4.3 to 50 feet provided there is a minimum of 50 feet of casing in the well. Due to the age of the well, the engineer has proposed to install an Ultra Violet treatment device on the well for added protection and a water test for coliform after treatment has been installed.

Since this is a malfunctioning system and according to 7:9A 3.3(e) 2 i and ii and the system is closer to being in full conformance with the chapter than the original system, the Board can consider the waiver request.

If you have any questions, please call.

Very truly yours,

ORIGINAL IS SIGNED AND ON FILE AT HUNTERDON COUNTY HEALTH DEPARTMENT

Robert Vaccarella, REHS
Principal Environmental Health Specialist

RV:dv

cc: Doug Fine, PE

ct16_40r

Hunterdon County Department of Health



www.co.hunterdon.nj.us/health.html

SEPTIC SYSTEM ALTERATION DESIGN

BLOCK 16, LOT 40

IN THE TOWNSHIP OF CLINTON

COUNTY OF HUNTERDON

STATE OF NEW JERSEY

FOR

STEPHEN & BRIANNE SAHARIC

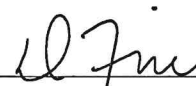

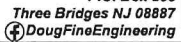
24 OLD MOUNTAIN RD.

LEBANON NJ 08833



KEY MAP

USDA NRCS WEB SOIL
SURVEY

| | | | SEPTIC SYSTEM ALTERATION DESIGN | | | |
|--|------|----------|--|--------------|-------------|------------------------|
| | | | DRAWN BY: | DESIGNED BY: | CHECKED BY: | MUNICIPALITY: |
| | | | DEF | DEF | DEF | CLINTON TWP. |
| REVISION DESCRIPTION | DATE | APPROVED |  DOUGLAS E. FINE, P.E. New Jersey PE License No. 24GE04311900 | | | |
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| | | | | | | |
| | | | | | | |
|  Certificate of Authorization No. 24GA28321700 | | | Douglas E Fine, P.E. Doug@DougFineNJ.com 908-399-4150 | | | BLOCK: 16 |
| | | | P.O. Box 253 Three Bridges NJ 08887  | | | LOT: 40 |
| | | | | | | DATE: MAR. 14, 2023 |
| | | | | | | SHEET: 1 of 11 |

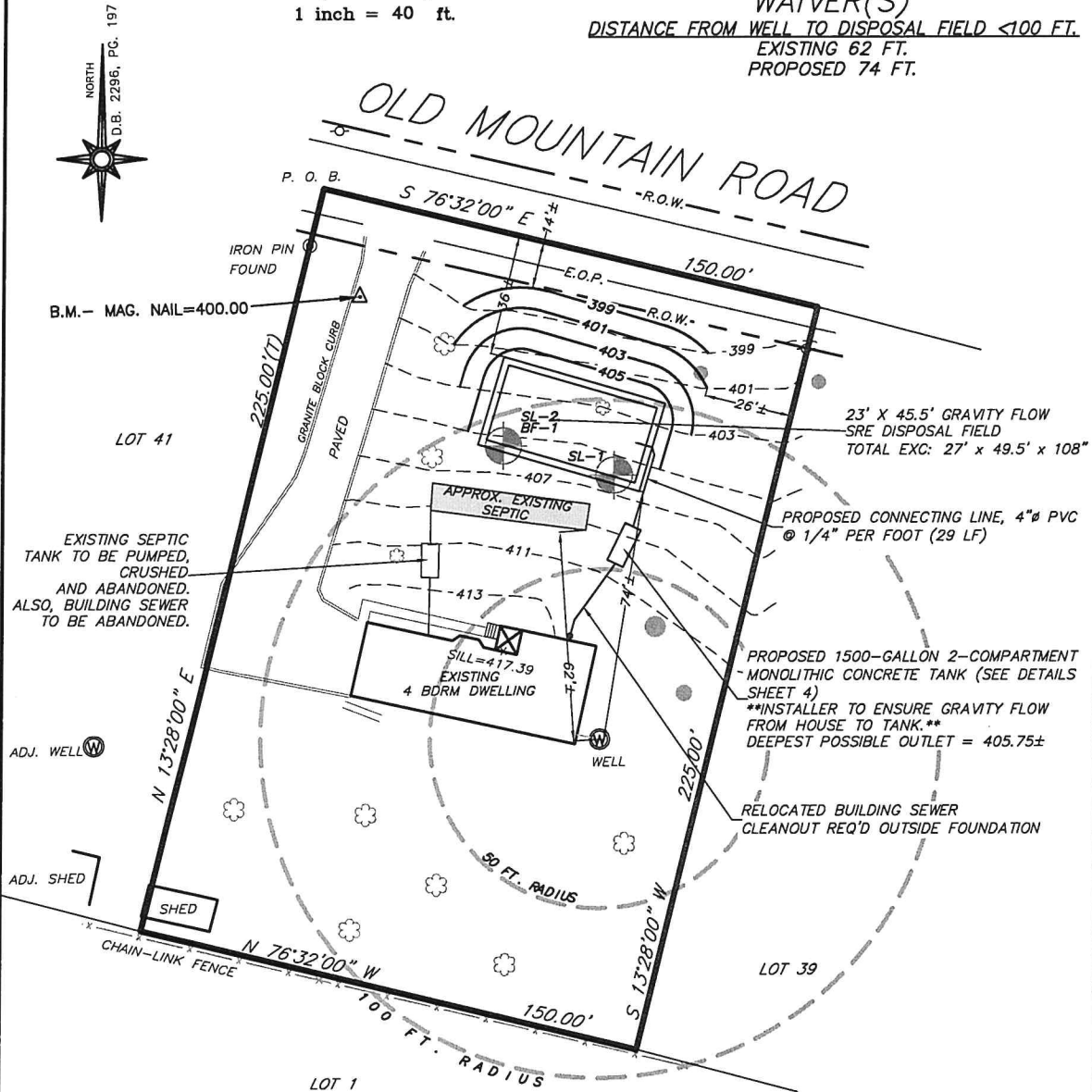
GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

BLOCK 16, LOT 40
0.775± ACRES

WAIVER(S)
DISTANCE FROM WELL TO DISPOSAL FIELD <100 FT.
EXISTING 62 FT.
PROPOSED 74 FT.



- NOTES:
1. ACCORDING TO NJDEP GEO-WEB, NO WETLANDS, TRANSITION AREAS, OR STATE OPEN WATERS ARE LOCATED WITH 100' OF THE PROPOSED SEPTIC SYSTEM.
 2. THERE ARE NO NEIGHBORING WELL OR SEPTIC SYSTEMS WITHIN 100 FT. OF THE PROPOSED DISPOSAL FIELD.
 3. EXISTING WELL TO BE UPGRADED WITH UV LIGHT SINCE IT IS LESS THAN 100 FT. TO EXISTING AND PROPOSED SEPTIC SYSTEMS.
 4. NO TREES TO REMAIN WITHIN 10 FT. OF PROPOSED EXCAVATION.
 5. ALL PIPING SHOWN SHALL BE 4" SCH. 40 PVC @ 1/4" PER FOOT UNLESS OTHERWISE SPECIFIED.
 6. BENCHMARK ELEVATION AS SHOWN.
 7. ALL PLUMBING SHALL BE TIED INTO NEW SEPTIC TANK.

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SEPTIC SYSTEM ALTERATION DESIGN

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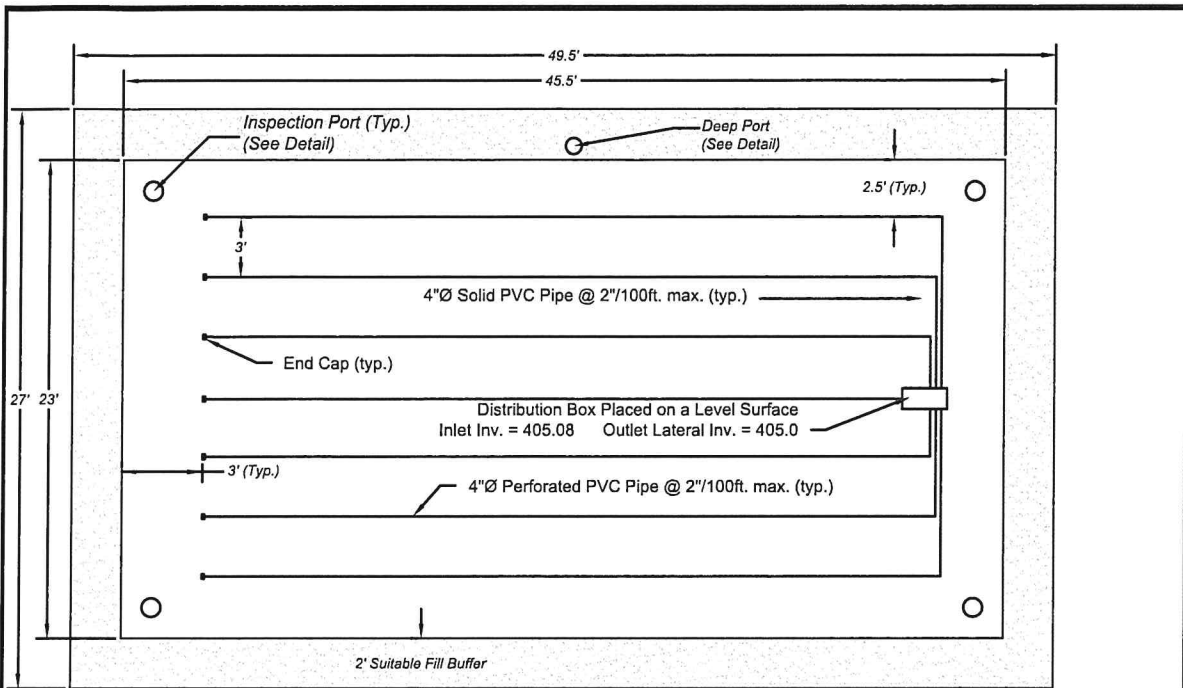


Douglas E Fine, P.E.
Doug@DougFineNJ.com
908-399-4150

P.O. Box 253
Three Bridges NJ 08887
DougFineEngineering

Signature 3/14/2023
DOUGLAS E. FINE, P.E.
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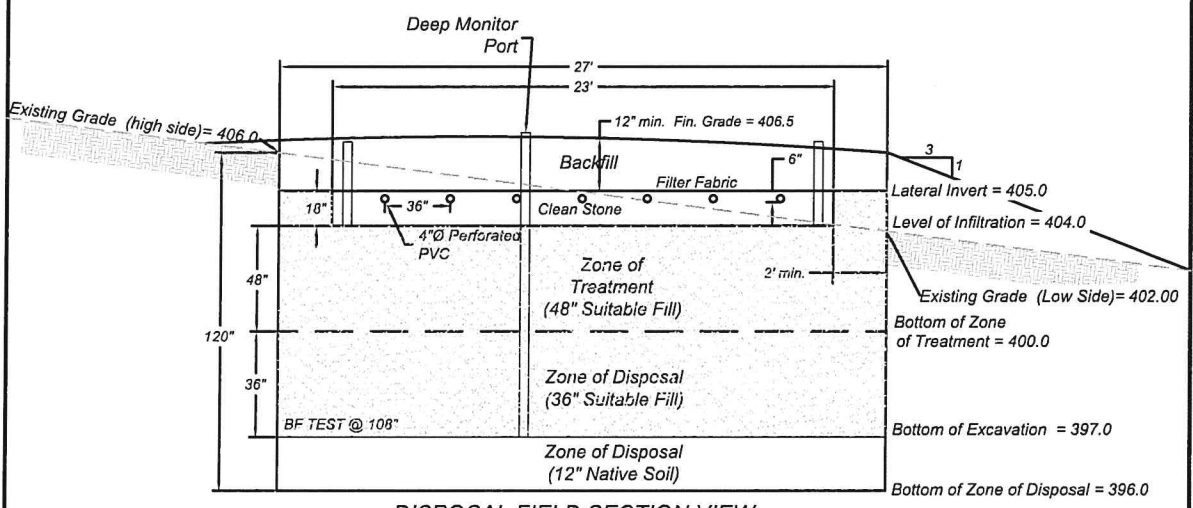
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Note:
 Laterals shall be installed approximately level.
 The maximum slope shall be 2 in. per 100 ft.

DISPOSAL FIELD PLAN VIEW
 Not To Scale

PROPOSED SEPTIC DISPOSAL FIELD – DETAILS



DISPOSAL FIELD SECTION VIEW
 Not to Scale

- NOTES (See Also General Notes):
1. Filter Fabric shall be a non-woven geotextile product
 2. Clean filter stone shall be NJDOT #3, 4, or 24

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SEPTIC SYSTEM ALTERATION DESIGN

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 Doug@DougFineNJ.com
 908-399-4150

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 DougFineEngineering

D E Fine 3/14/2023
DOUGLAS E. FINE, P.E.
 New Jersey PE License No. 24GE04311900

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PROPOSED SEPTIC TANK - DETAILS

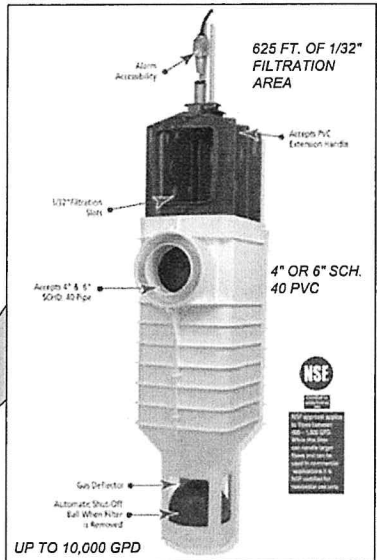
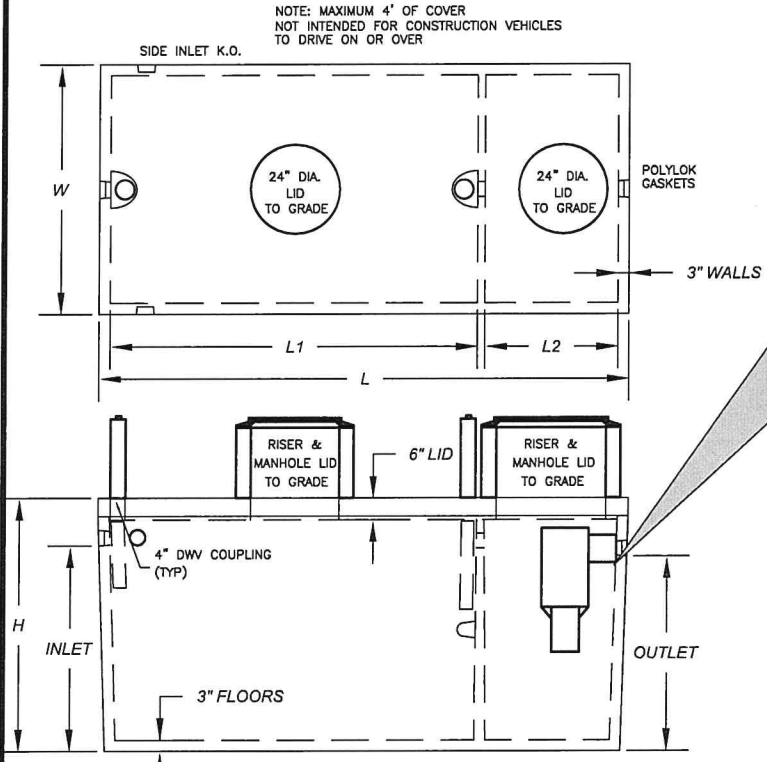
EXISTING SEPTIC TANK(S) TO BE PUMPED, CRUSHED AND BACKFILLED/ABANDONED TO THE SATISFACTION OF THE HEALTH DEPARTMENT.

PROPOSED TANK TO BE INSTALLED IN ACCORDANCE WITH NJAC 7:9A-8.2.

PROPER INLET, OUTLET, AND GAS DEFLECTION BAFFLES ARE REQUIRED AS WELL AS AN EFFLUENT FILTER.

4" SCH 40 PVC INSPECTION PORTS AND WATER-TIGHT BOLTED MANHOLE COVERS TO GRADE ARE REQUIRED.

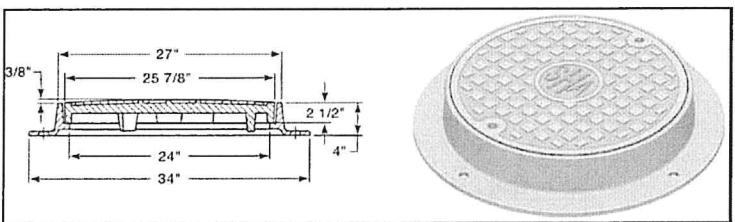
PLEASE NOTE THAT EFFLUENT FILTERS REQUIRE PERIODIC CLEANING.



POLYLOK PL-625 EFFLUENT FILTER

1300 GALLON TWO COMPARTMENT MONOLITHIC SEPTIC TANK

| TANK SIZE | L | L1 | L2 | W | H | INLET | OUTLET |
|-----------|------|-----|-----|-----|-----|-------|--------|
| 1000 | 142" | 82" | 42" | 68" | 68" | 54" | 51" |
| 1500 | 132" | 82" | 42" | 68" | 68" | 54" | 51" |
| 1750 | 144" | 86" | 39" | 68" | 60" | 57" | 54" |



A permanent non-corrosive marker a minimum of 6 square inches in size containing the following information shall be attached to the manhole cover or riser immediately below the cover.

- The administrative authority name and permit number
- Date of installation
- The type of system
- The total design criteria in gallons per day

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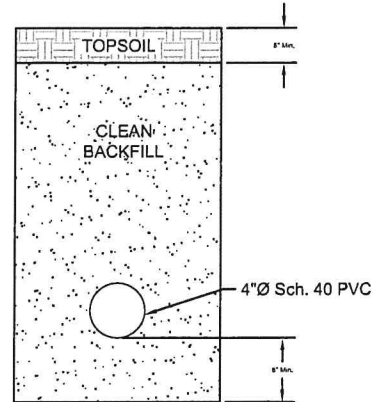
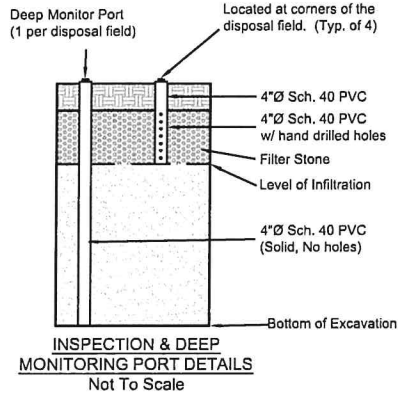
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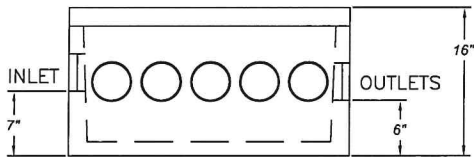
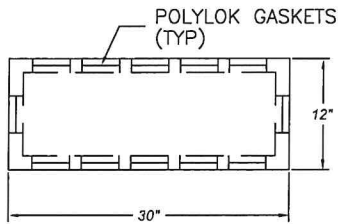
Douglas E. Fine 3/14/2023
DOUGLAS E. FINE, P.E.
 New Jersey PE License No. 24GE04311900

DETAILS



Note:
Clean Backfill shall be free of large stone and objectionable material. Clean Backfill shall be compacted in 12" max. lifts.

PIPE BEDDING DETAIL
Not To Scale



11 OUTLET DISTRIBUTION BOX

NOT INTENDED FOR CONSTRUCTION VEHICLES TO DRIVE ON OR OVER

As Manufactured By
M&W PRECAST

| REVISION DESCRIPTION | | | DATE | APPROVED |
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| | | | DATE: MAR. 14, 2023 | |
| | | | SHEET: 5 of 11 | |
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|--|--|--|
| <p style="font-size: small;">Certificate of Authorization No. 24GA28321700</p> | <p>Douglas E Fine, P.E. Doug@DougFineNJ.com 908-399-4150</p> <hr/> <p style="font-size: x-small;">P.O. Box 253 Three Bridges NJ 08887 DougFineEngineering</p> | |
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SOIL LOGS, PERMEABILITY TESTS, AND DESIGN NOTES

CLINTON TWP. - BLOCK 16, LOT 40

SOIL LOGS

ALL SOIL LOGS AND PERMEABILITY TESTING PERFORMED BY OR UNDER THE DIRECTION OF DOUGLAS E. FINE, P.E. (N.J. LICENSE NO. 43119) AND WITNESSED BY A REPRESENTATIVE OF THE CLINTON TOWNSHIP BOARD OF HEALTH.

SOIL LOG #1 2/9/23

0-10" 10YR 3/3 SILT LOAM TOPSOIL.
 10-36" 10YR 6/4 CLAY LOAM. SAB, MOIST, FRIABLE, 5% GRAVEL.
 36-120" NON-SOIL, FRACTURED SHALE. 60% GRAVEL, 20% COBBLE, 20% SANDY LOAM FILLINGS.
 > 120" STOPPED TEST NO MOTTLING NO GW

SOIL LOG #2 2/9/23

0-15" 10YR 3/3 SILT LOAM TOPSOIL.
 15-61" 10YR 6/4 CLAY LOAM. SAB, MOIST, FRIABLE, 5% GRAVEL.
 61-120" NON-SOIL, FRACTURED SHALE. 60% GRAVEL, 20% COBBLE, 20% SANDY LOAM FILLINGS.
 > 120" STOPPED TEST NO MOTTLING NO GW

PERMEABILITY TESTS

BF-1 IN SL-2 @ 108" RESULT = POSITIVE


DESIGN FLOW



Proposed Design Flow (4 Bedrooms)= 650 gpd
 This design shall include the use of a basement ejector pump for the existing basement bathroom.

DISPOSAL AREA AND SEPTIC TANK SIZING

1. All tanks shall be tested and certified watertight (by others) upon installation and prior to backfill. Certification shall be given to the health department.
2. The existing septic tank(s) shall be pumped, and abandoned. A licensed hauler shall pump the existing components and receipt of septage removed shall be submitted to the local Health Department.
3. A proposed septic tank must meet the sizing requirements at NJAC 7:9A-8.2b(1). 150% over-sizing to account for a basement ejector pump. A 1,500 gallon, 2-compartment, monolithic concrete tank shall be installed with a filter, inspection ports, and risers flush with grade. (See Septic Tank Detail) An effluent filter shall be installed at the outlet baffle as specified.
4. The disposal field shall be a soil replacement, fill-enclosed (SRE), gravity distribution system. The disposal field has been sized according to NJAC 7:9A @ 1.61 sf/gpd. Provide one (1) disposal field 23' x 45.5' (1046.5 ft²) [Minimum 650 gpd * 1.61 = 1046.5 ft²] plus a 2 ft. fill enclosure.
5. Use one (1) concrete distribution box with seven (7) 4" diameter perforated PVC laterals, 39.5 ft. long on 3 ft. centers (see detail).
6. 4" dia. Sch. 40 PVC Inspection ports shall be placed in the corners of the disposal field and shall extend down to the level of infiltration. A 4" dia. Sch. 40 PVC deep monitoring port shall be placed to the bottom of the excavation.

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|--|---|--|

GENERAL SEPTIC SYSTEM DESIGN NOTES


GENERAL NOTES

- (1) This Wastewater disposal system has been designed in accordance with the requirements of N.J.A.C. 7:9A, Standards for Individual Subsurface Sewage Disposal Systems, the requirements of the Hunterdon County Health Dept. and the Clinton Twp. Board of Health.
- (2) The plot plan contained herewith is not a property survey. Metes and bounds and existing information were obtained from a partial topographic survey prepared by Patrick H. Fatton, L.S. dated 2/23/2023.
- (3) All soil testing was performed by or conducted under the direction of Douglas E. Fine, P.E. and witnessed by a representative of Clinton Twp.
- (4) The Engineer and the Health Department shall be notified 48 hours prior to construction so that all inspections may be scheduled. All phases of the construction shall be inspected and approved by the Health Department prior to backfilling.
- (5) Inspection Schedule
 - (a) Stake out and stockpiling of suitable fill
 - (b) Open ditch
 - (c) Suitable fill emplacement, compaction, and percolation rate
 - (d) Stone emplacement
 - (e) Laterals and distribution network
 - (f) Tanks and final grading
- (6) In accordance with NJAC 7:9A-10.1(f)4 Suitable fill shall have:
 - (a) A coarse fragment content less than 15% by volume or less than 20% by weight;
 - (b) A textural analysis (composition by weight of the size fraction passing the particular sieve as stated):

| | |
|--------------------------|--------------------------|
| 100% pass 3/8" sieve | 25-60% pass No. 30 sieve |
| 80-100% pass No. 8 sieve | 10-30% pass No. 50 sieve |
| 50-85% pass No. 16 sieve | 2-10% pass No. 100 sieve |
 - (c) Permeability from 6 - 20 in/hr for design purposes.
- (7) All fill shall be stockpiled on-site and tested by the Engineer prior to placement into the disposal area. The fill must be tested for textural analysis and permeability. Placement and number shall be in conformance with NJAC 7:9A-6.1.
- (8) Suitable fill shall be compacted in conformance with N.J.A.C. 7:9A-10.4(3).
- (9) No wheeled vehicles are to be driven over any part of the disposal area.
- (10) The Engineer will oversee the entire installation and provide a Suitable Fill Certification and As-built Drawings to the Health Department after the system has been installed.
- (11) Prior to the disposal bed stake out by the Engineer and any construction activities by the installer, the installer shall require the owner to have all underground utilities located by the responsible utility company(ies). CALL 1-800-272-1000 BEFORE YOU DIG.
- (12) Construction information is based on topography of plan. Elevations may be modified after final survey.
- (13) Disposal area shall be graded so that surface runoff is diverted away from the disposal area.
- (14) Field changes to the design shall not be permitted. The Engineer and the Health Department shall review and approve any deviations from this design.
- (15) The installer shall be responsible for obtaining any and all of the required permits prior to construction.
- (16) After completion of backfilling and final grading, all disturbed areas shall be raked, seeded and mulched to establish a vegetative cover in a manner acceptable to the Administrative Authority.
- (17) The installer shall ensure that all materials used in the construction of the system are in accordance with N.J.A.C. 7:9A et. seq. and meet the specifications of the design.
- (18) Filter fabric shall be a non-woven geotextile product (TerraTex SD or approved equal).
- (19) No trees are to remain within ten feet (10') of the disposal area.
- (20) Septic tank(s) shall be located a minimum of ten feet (10') and disposal areas shall be located a minimum of twenty-five feet (25') from dwellings.
- (21) Septic tank(s) shall be located a minimum of fifty feet (50'), disposal area(s) shall be located a minimum of one hundred feet (100'), and building sewer(s) shall be located a minimum of twenty-five feet (25') from a well.
- (22) All septic disposal fields shall be constructed at least twenty-five feet (25') from excavated cuts (drop) greater than two feet (2').
- (23) Crushed stone filter material shall be NJDOT number 3, 4, or 24 size stone and be free of fines, dust, ashes, or clay.
- (24) There are currently no known off-site wells located within 100 feet and no off-site disposal fields within 50 feet of the proposed disposal field.
- (25) This design makes no representation as to the location and/or adequacy of the internal plumbing and electric service. The limits of this design are from the existing septic tank outlet to the disposal area.
- (26) This septic design has been based on the soil conditions and site constraints documented at the time of soil testing. If subsurface conditions present at the time of construction vary significantly from those documented during soil testing, the contractor shall immediately cease construction and notify the Engineer and the Health Department so that appropriate action may be taken.
- (27) This wastewater disposal system is designed to include the usage of a basement ejector pump.
- (28) Neither Water Softener backwash nor Pool Filter backwash shall discharge into the septic system.

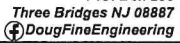
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| SHEET: 7 of 11 | | |

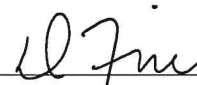
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FINE ENGINEERING, LLC
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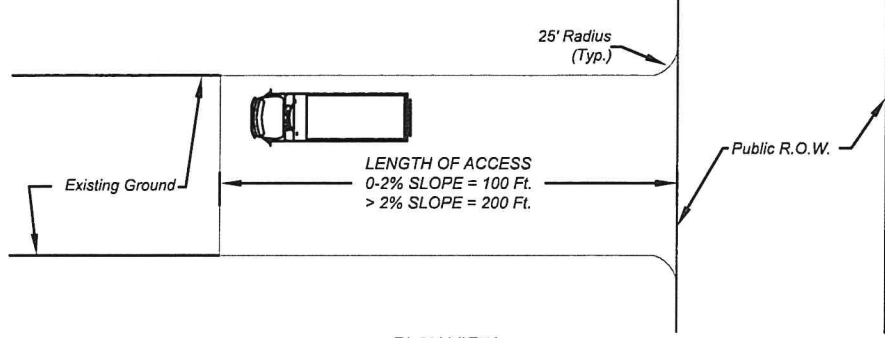
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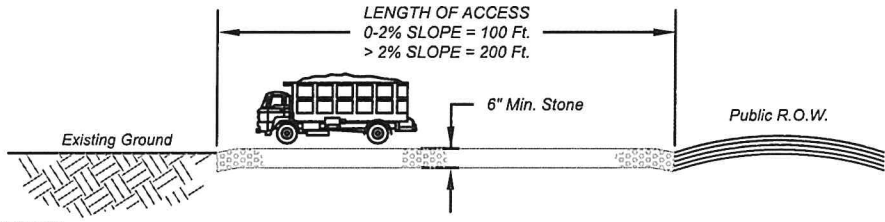


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SOIL EROSION & SEDIMENT CONTROL MEASURES – NOTES & DETAILS



PLAN VIEW



PROFILE VIEW

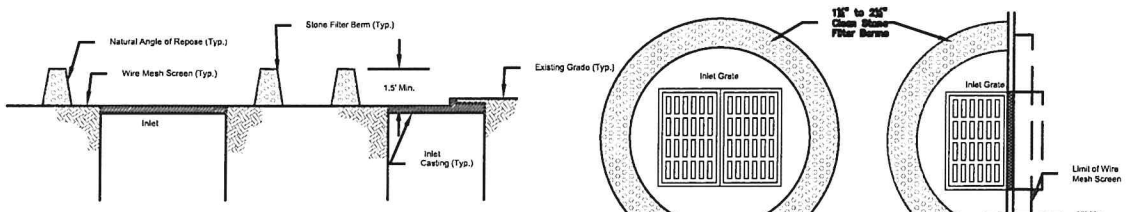
NOTES:

1. Stone is ASTM #2 or #3 (1.5" - 2") angular, not round.
2. Provide appropriate transition between stabilized construction entrance and public R.O.W.
3. If poor drainage conditions exist, underlay filter fabric on existing grade before placing stone.

MAINTENANCE

1. Periodic addition of stone to thickness and length to prevent flow of sediment or tracking.
2. All sediment tracked onto the public R.O.W. must be removed at the end of each day.

**STABILIZED CONSTRUCTION ENTRANCE
Not To Scale**



CROSS-SECTION

Type 'A' & 'E' Inlets

Type 'B' Inlets

PLAN VIEW

NOTES:

1. Berm shall be bales of straw/hay or clean gravel meeting ASTM C-33 #2 or #3 (1.5" - 2.5" stone). Straw or hay bales are to be securely tied, staked, or lashed together.
2. Berm shall encircle the inlet and have a perimeter length of at least 4x the perimeter length of the storm sewer inlet.
3. A wire mesh screen with 1/2" openings shall cover the inlet and shall be anchored by the filter berm.

**INLET PROTECTION DETAIL
Not To Scale**

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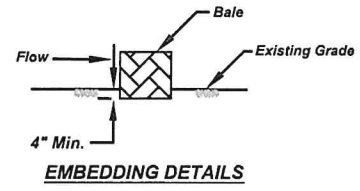
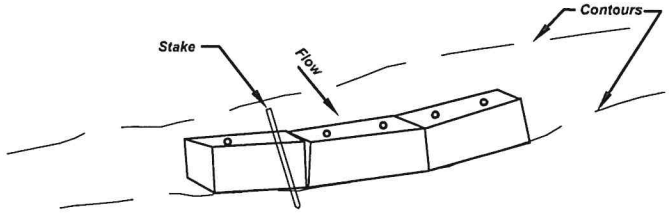
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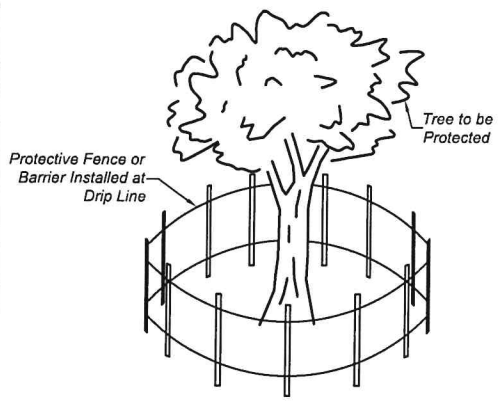
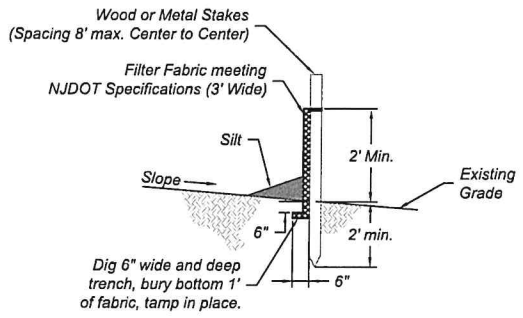
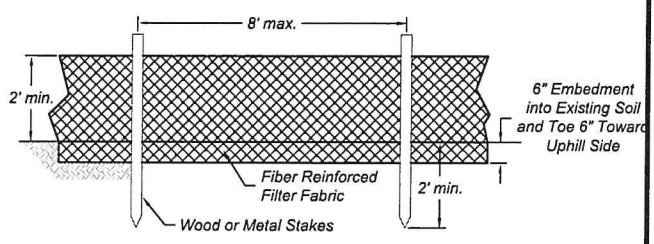
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| SHEET: 8 of 11 |

SOIL EROSION & SEDIMENT CONTROL MEASURES – NOTES & DETAILS



- NOTES:**
- ANCHORING DETAILS**
1. All bales shall be tied and staked along the contours.
 2. Bales shall be placed in rows with ends abutting adjacent bales.
 3. Stakes shall be either 2" x 2" wooden, steel, or rebar stakes driven 1-1/2 to 2ft. into existing grade. (Two stakes per bale)
 4. Angle first stake toward previously laid bale.

HAY BALE BARRIER
Not To Scale



TREE PROTECTION DETAIL
Not to Scale

- NOTES:**
1. Stakes shall be spaced 8' center to center or closer, extended 2' above and below grade.
 2. Filter Fabric shall be buried at least 6" deep in the ground and extended at least 2 ft. above the ground.

SILT FENCE DETAIL
Not To Scale

| REVISION DESCRIPTION | DATE | APPROVED |
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| | | |



Douglas E Fine, P.E.
Doug@DougFineNJ.com
908-399-4150

P.O. Box 253
Three Bridges NJ 08887
DougFineEngineering

Certificate of Authorization No. 24GA28321700

SEPTIC SYSTEM ALTERATION DESIGN

| | | | |
|------------------------|---------------------|--------------------|-------------------------------|
| DRAWN BY: DEF | DESIGNED BY: DEF | CHECKED BY: DEF | MUNICIPALITY: CLINTON TWP. |
| BLOCK: 16 | | | LOT: 40 |
| DATE: MAR. 14, 2023 | | | SHEET: 9 of 11 |

Douglas E Fine 3/14/2023
DOUGLAS E. FINE, P.E.
New Jersey PE License No. 24GE04311900

SOIL EROSION & SEDIMENT CONTROL MEASURES – NOTES & DETAILS

GENERAL AGRONOMIC SPECIFICATIONS FOR LAWNS AND CONSTRUCTION SITES

- (1) All disturbed areas that are not being graded, not under active construction, or not permanently seeded within 30 days shall be temporarily stabilized as per specifications below.
- (2) All exposed areas which are to be permanently vegetated shall be seeded and mulched within 10 days of final grading.
- (3) Straw mulch (hay mulch may be substituted if approved by the District) is to be applied to all seeding at a rate of 1.5 to 2 tons per acre (approx. 100 to 130 bales per acre).
- (4) Mulch anchoring is required after mulching to minimize loss by wind or water. This shall be done using one of the methods (crimping, liquid mulch binders, nettings, etc.) in the "Standards for Soil Erosion and Sediment Control in New Jersey".
- (5) Existing weedy and poorly-vegetated areas with less than 75% perennial grass cover shall receive permanent stabilization (as specified below).
- (6) All bags shall be saved for lime, fertilizer, seed, and liquid mulch binder (if used as mulch anchoring method). Such proofs shall be submitted to the district inspector for verification of materials and quantities used for all seeding.

SEED-BED PREPARATION FOR ALL SEEDINGS

- (1) **SUB-SOIL PREPARATION:** Immediately prior to seeding and topsoil application, the surface should be scarified to a depth of 6-12" where there has been soil compaction (e.g. areas of heavy construction traffic). This practice is to be applied to all compacted areas where there is no danger to underground utilities (cables, irrigation systems, etc.).
- (2) **TOPSOILING:** Areas to be seeded shall have a minimum of 5" of friable, loamy topsoil free of objectionable weeds, stones and debris.
- (3) **FINAL GRADING:** Grading shall be smooth of ruts and free of objectionable stones, depressions, vehicle tracks and rough edges. There shall be positive drainage away from all buildings and dwellings. Refuse from seedbed preparation (roots, sticks, stones, construction debris) must be disposed of properly.
- (4) **LIMING/FERTILIZING:** Apply limestone and fertilizer to soil test recommendations or as follows;
 - A. Lime shall applied at the rate of 2 tons (4,000 lbs) per acre. Lime may be any product type as long as the CCE Calcium Carbonate Equivalency = 2 tons/acre. Pelletized and liquid products may be preferred because of their lack of dust and ease of handling but must meet the fore-mentioned criteria.
 - B. Starter fertilizer, specified as 10-20-10, shall be applied at 500 lb. per acre.
 - C. Lime and fertilizer shall be worked into the soil to a depth of 4 inches.

TEMPORARY SEEDING

Temporary seeding shall be used on all disturbed areas where permanent stabilization will not be accomplished for a period up to 6 months.

| <u>Product</u> | <u>Rate</u> | <u>Recommended optimum seeding dates</u> |
|----------------------------|-------------------|--|
| Perennial Ryegrass | 100 lbs. per acre | 3/15 – 5/15 & 8/15 – 10/1 |
| Spring Oats | 86 lbs. per acre | 3/15 – 6/1 & 8/1-10/1 |
| Winter Cereal Rye | 112 lbs. per acre | 8/1 – 11/15 |
| Winter Barley | 96 lbs. per acre | 8/15 – 10/1 |
| Pearl Millet | 20 lbs. per acre | 5/15 – 8/15 |
| German or Hungarian Millet | 30 lbs. per acre | 5/15 – 8/15 |

TEMPORARY STABILIZATION WITH MULCH ONLY

Straw mulch (hay mulch may be substituted if approved by the District) shall be spread uniformly at the rate of 2 to 2.5 tons per acre (total ground surface coverage). This practice is limited to periods when vegetative cover can not be established due to the season or other conditions. Mulch must be anchored in accordance with New Jersey Standards for Soil Erosion and Sediment Control. Mulch alone can only be used for short periods and will require maintenance and renewal. Other mulch materials may be utilized if approved by the District.

STABILIZATION WITH SOD

Stabilization with sod is permitted in areas where maintenance and irrigation are adequate to insure proper establishment and longevity. Seedbed preparation shall be consistent with any other stabilization requirements. (Lime and fertilizer bags are to be retained for district inspections). On slopes greater than 3:1, sod must be properly anchored to the slope in accordance with the NJ Standards for Soil Erosion and Sediment Control.

PERMANENT SEEDING

- (1) Seed shall be incorporated into the soil 1/4" – 1/2".
- (2) Lawn seedings shall be a mixture of bluegrasses, turf-type rescues, and turf-type perennial ryegrasses to insure longevity, tolerance, and durability. No seed shall be accepted with a germination test date of more than 12 months old unless retested.
- (3) Professional seed mixtures are recommended rather than seed mixing by contractor.
- (4) Seed mixture (as specified below) shall be applied at a minimum rate of 200 lb. per acre of perennial seed.
- (5) Optimum seeding period for Hunterdon County is from March 1 to May 15 and August 15 to October 1. Outside of those periods, the seeding rates shall be increased by 50% (i.e.: 300 lb. per acre of perennial seed instead of the required 200 lb. per acre during optimum periods).
- (6) Seedings shall receive an application of fertilizer such as 10-10-10 or equivalent at 400 lb. per acre approximately 6 months after first application.

SEEDING MIXTURE FOR GENERAL SEEDING - (Example: lawns)


| | | |
|----------------------------------|----|----------------------------------|
| 40% turf-type tall fescue | | 60% Kentucky bluegrass |
| 10% creeping red fescue | | 20% turf-type perennial ryegrass |
| 10% chewing fescue | OR | 20% chewing fescue |
| 10% Kentucky bluegrass | | |
| 30% turf-type perennial ryegrass | | |

SEEDING MIXTURE FOR HIGH TRAFFIC & CRITICAL AREAS - (example: waterways, diversions, etc.)

| |
|----------------------------------|
| 80% turf-type tall fescue |
| 10% Kentucky, bluegrass |
| 10% turf-type perennial ryegrass |

Other seed mixtures, such as blended varieties of perennial turf-type ryegrass, turf-type tall fescues, or bluegrasses may also be acceptable if approved by the District.

| REVISION DESCRIPTION | | | DATE | APPROVED |
|----------------------|--|--|------|----------|
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ⓞ DougFineEngineering

SEPTIC SYSTEM ALTERATION DESIGN

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|------------------|---------------------|--------------------|-------------------------------|
| DRAWN BY: DEF | DESIGNED BY: DEF | CHECKED BY: DEF | MUNICIPALITY: CLINTON TWP. |
|------------------|---------------------|--------------------|-------------------------------|

Douglas E Fine 3/14/2023

DOUGLAS E. FINE, P.E.
New Jersey PE License No. 24GE04311900

BLOCK:
16

LOT:
40

DATE:
MAR. 14, 2023

SHEET:
10 of 11

SOIL EROSION & SEDIMENT CONTROL MEASURES – NOTES & DETAILS

SOIL EROSION & SEDIMENT CONTROL GUIDELINES FOR SEPTIC SYSTEM INSTALLATION & ALTERATIONS IN HUNTERDON COUNTY

1. The Hunterdon County Soil Conservation District requires an advanced 48-hour written notification prior to the start of any land disturbance. A failure of this notification prior to the start of construction will result in the issuance of a Stop Construction Order and may be cause for legal action. Notice may be faxed to (908) 788-0795 or mailed to:

Hunterdon County Soil Conservation District
 687 Pittstown Road, Suite #1
 Frenchtown, NJ 08825
2. Land disturbance and construction work start includes any demolition or clearing that takes place on the project site. Appropriate Soil Erosion and Sediment Control measures must be installed and maintained.
3. A sediment barrier of either silt fence or haybales (properly staked and embedded) must be installed below (downslope side) of the septic system construction area.
4. Stone tracking pads or other measures approved by the Soil Conservation District are to be installed at all construction accesses to pavement. All stone tracking pads (stabilized construction entrance) are to be installed at a minimum of 100 ft in length. Other reasonable methods or shorter lengths of tracking stone can be field determined and approved by the District Inspector. The contractor must keep all public roads and paved surfaces scraped and cleaned of sediment and tracking. All sediment spilled, dropped, washed, or tracked onto roadways (public or private) or other impervious surfaces must be removed immediately.
5. Stormwater inlets near the septic system construction area and not in an active public roadway may require protection if directed by the District Inspector. Stormwater inlet protection may include haybales or clean stone berms (stone sized 1 1/2" - 2 1/2") that completely encircle, but not block the inlets.
6. All trees that are to be protected from injury during construction of the septic system are to be adequately marked in fenced-off prior to construction and maintained during construction. Fencing/marking are to be erected around and outside of the tree dripline and root area.
7. If the excavated pit or trench area requires pumping/dewatering of rainfall or runoff, proper procedures are to be followed to remove suspended sediments in the water prior to discharge to downstream areas and/or watercourses. In most cases, a silt sack or haybale/stone ring can be used at the discharge end. The District has further information on these methods found in the Standards for Soil Erosion and Sediment Control in New Jersey, pages 14-1 to 14-7. Do not direct discharge pump water without employing an approved method. Call the District if you have questions. Health Department requirements are to be followed for dewatering of active disposal beds or leach field areas or any other area that may have contaminants other than sediment.
8. Steep banks, wetland buffers, waterways, and other sensitive areas are to be avoided by construction traffic. Wetland buffer and wetland areas are to be adequately marked in field prior to construction and maintained during construction.
9. If excess fill or any other material is to be removed from the site, the project owner/applicant shall be responsible for its proper disposal and will notify the Hunterdon County Soil Conservation District as to the planned disposal site location. Removal of any soil material from the septic system construction site without written authorization from the Hunterdon County Soil Conservation District is a violation of the state Soil Erosion and Sediment Control Act. **A Fill Disposal Worksheet and authorization** is required prior to any excess soil material leaving the site. The same applies to additional soil material (other than select fill or stone from an operating quarry) to be brought onto the septic system site. Health Department requirements are to be followed for hauling off of material from a previous disposal bed or leach field.
10. Health Department rules and regulations on grading and slope are to be followed for the area of the septic system and/or mound. For all other disturbed areas, the maximum allowable vegetated slope is 2:1. Slopes in excess of 3: 1 (between 2:1 and 3:1) require temporary erosion control matting, such as excelsior "cutflex" or equivalent, for stabilization. The matting is to be properly installed with specified overlap, check slots, anchoring spacing, and anchoring device type, gauge, and size.
11. The Hunterdon County Soil Conservation District certifies and inspects for soil erosion and sediment control measures and related resources only. District certification does not excuse or supercede any requirements, procedures, or permits of any other regulatory agency such as NJDEP, municipality, county, etc.
12. Hydroseeding/Hydrumulching are not acceptable practices in Hunterdon County due to the high failure rate of seedings, steep topography, poor seed-to-soil contact and poor ground surface coverage. All seed must be incorporated into the soil. Hydroseeding equipment may be used in conjunction with straw/hay mulch for the purpose of anchoring the mulch with liquid mulch binders.
13. The project applicant and contractor are to be aware that additional Soil Erosion and Sediment Control measures may be required by the Soil Conservation District if field conditions or unforeseen situations warrant them.
14. The owner/applicant acknowledges that a written Report of Compliance is required from the District at the completion and permanent stabilization of the project. Failure receive the Report of Compliance is a violation of the Soil Erosion and Sediment Control Act and may be cause for court action and penalties, pursuant to N.J.S.A. 4:24-53.
15. It is the policy of the Hunterdon County Soil Conservation District to periodically evaluate all projects to determine if the costs for review and inspection exceed the paid fees. Prior to the fees being exceeded an additional fee will be assessed.

OTHER IMPORTANT INFORMATION AND TERMS FOR SEPTIC SYSTEM INSTALLATION:

REPORTS OF COMPLIANCE: These are issued when the entire disturbed area for the septic system is permanently stabilized. Permanent stabilization means that the entire project area or lot is final graded, topsoil ed, limed, fertilized, seeded and mulched.




TOPSOILING: Areas to be seeded should have a minimum of 5" of topsoil free of objectionable stones and debris.

FINAL GRADING: Grading is to be smooth of ruts and free of objectionable stones, depressions and rough edges. Conventional mowing equipment should be able to mow the resulting vegetation.

PERMANENT SEEDING: All areas are to be limed and fertilized as per the above Agronomic Specifications for Lawns and Septic Systems. The seed mixture is to consist of perennial lawn type seed. Seed mixtures that have a high percentage of annual seed (annual ryegrass, etc.), sometimes labeled "contractors mix;" are not acceptable. Certified seed is to be used. The seed, fertilizer, lime, etc. labels/slips are to be saved, so that the District can verify the mixture and the application rates. These labels/slips may need to be presented at the time of the compliance inspection.

COMPLIANCE INSPECTION: The owner/applicant is responsible for calling the District office to schedule a final compliance inspection, a minimum of 2 working days in advance. We cannot guarantee an inspection on a particular date if less scheduling notice is given. The owner/applicant is also responsible for canceling the inspection, if work (stabilization) is not 100 percent completed, or act of nature (rain, wind, etc.) has disrupted stabilization efforts. A reinspection fee may be assessed (as per District Fee Schedule) for each additional inspection required until the project is stabilized satisfactorily.

TEMPORARY REPORTS OF COMPLIANCE: Temporary Reports of Compliance are generally not a procedure for septic system installations; however, there may be times when it is impossible to complete the septic system and permanently stabilize within the 30-day period. The District accepts seedings (permanent stabilization) at all times of the year as long as the lot/project area can be properly final graded. When seeding out of the optimal seeding periods (March 1 - May 15 or August 15 - Oct. 1), seeding rates are to be increased by 50 percent. Regardless if the lot/project is temporarily or permanently stabilized, a temporary report of compliance is issued when a cash performance guarantee is posted to assure and guarantee stabilization during the winter months, starting November 1st and ending April 1st. The cash bond amount plus an administration fee is determined by the District Board, and is based on the amount of acres disturbed (one acre being the minimum and rounded to the nearest acre thereafter). Bonding is only for stabilization. If not permanently stabilized, the disturbed acreage must be mulched (as a minimum) and maintained throughout the winter months as a temporary stabilization practice. Other practices (silt fence, hay bales, etc.) may also be required if field conditions warrant.

| | | | | |
|---|------|----------|--|---------------|
| | | | SEPTIC SYSTEM ALTERATION DESIGN | |
| | | | DRAWN BY: | DESIGNED BY: |
| | | | DEF | DEF |
| | | | CHECKED BY: | MUNICIPALITY: |
| | | | DEF | CLINTON TWP. |
| REVISION DESCRIPTION | DATE | APPROVED | | |
|  <p>Douglas E Fine, P.E. Doug@DougFineNJ.com 908-399-4150</p> | | |  <p style="text-align: right;">3/14/2023</p> <p>DOUGLAS E. FINE, P.E. New Jersey PE License No. 24GE04311900</p> | |
| Certificate of Authorization No. 24GA28321700 P.O. Box 253 Three Bridges NJ 08887  | | | BLOCK: | 16 |
| | | | LOT: | 40 |
| | | | DATE: | MAR. 14, 2023 |
| | | | SHEET: | 11 of 11 |



Hunterdon County Department of Health



Public Health
Prevent. Promote. Protect.

www.co.hunterdon.nj.us/health.html

Karen DeMarco, MPH
Health Officer/Director

March 20, 2023

Carla Conner, Secretary
Clinton Township Board of Health
1225 Route 31, Suite 411
Lebanon, NJ 08833

Re: Septic System Waiver Request
Municipality: Clinton Township
Block: 30 Lot: 40
Location: 332 Old Allerton Road

Dear Carla,

This department has received a septic alteration design dated February 10, 2023 with a revision date of March 10, 2023, by Finelli Consulting Engineers, for an existing 3-bedroom dwelling alteration with no expansion. The engineer proposes an Aquakleer ATU to address site constraints and for greater effluent treatment prior to discharge into the proposed disposal field. Soil logs 1, 2, and a pit bail test at 95 inches were completed on December 21, 2022. The proposed system is a pressure dosed, soil replacement bottom lined installation. The design meets all aspects of the code except for the following items which will need to be acted on by the Board:

The design is in full conformance with the code except for the following waiver requests which will need to be acted on by the Board:

1. The proposed disposal field will not have the required 50 feet to the watercourse (beaver brook). The proposed disposal field is shown approximately 28.2 feet to the watercourse.
2. The proposed disposal field will not have the required 25 feet to the existing dwelling. The existing dwelling is approximately 17.7 feet to the proposed disposal field.

The use of the Advanced Treatment Unit will require a maintenance contract for the life of the system, deed notice, and auto dialer notification.

The design engineer shall arrange to be at the next available Board meeting to present the design and waiver requests to the Board.

If you have any questions, please call.

Very truly yours,

ORIGINAL IS SIGNED AND ON FILE AT HUNTERDON COUNTY HEALTH DEPARTMENT

Dawn Faltings, REHS
Principal Environmental Health Specialist

DF:dv

cc: Michael S. Finelli, PE – Finelli Consulting Engineers

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