



# Hunterdon County Department of Health



**Public Health**  
Prevent. Promote. Protect.

[www.co.hunterdon.nj.us/health.html](http://www.co.hunterdon.nj.us/health.html)

Karen DeMarco, MPH  
Health Officer/Director

March 2, 2022

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

Re: Septic System Alteration Waivers  
Municipality: Clinton Township  
Block: 30 Lot: 13.16  
Location: 5 Madonna Lane

Dear Carla,

This department has septic alteration plans dated February 14, 2022 designed by Kurt Hoffman Engineering, LLC, to correct a malfunctioning system to an existing 4 bedroom dwelling with no expansion as stated on the application. The engineer has designed a seepage pit due to lot limitations.

The design is in full conformance with 7:9A "Standards for Individual Subsurface Sewage Disposal Systems" except for the following waiver requests that will need to be acted on by the Board:

1. The soil log was not dug to 8 feet below bottom of seepage pit depth and 4 foot above fractured rock as per 7:9A-11.1.
2. The code requires a percolation test when seepage pits are proposed, however soil permeability class rating samples were taken. Engineer shall explain why percolation tests could not be done on this property to the Board.
3. The proposed seepage pits will be only 100 feet from the existing well on this property, which does not meet the minimum set back requirement of 150 feet from seepage pits. The Board has approved similar waivers with the condition that ultra violet treatment device be installed on the well for added protection and a passing water test for coliform.

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 requests.

The engineer will present the waiver requests to the Board at the next available meeting.

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

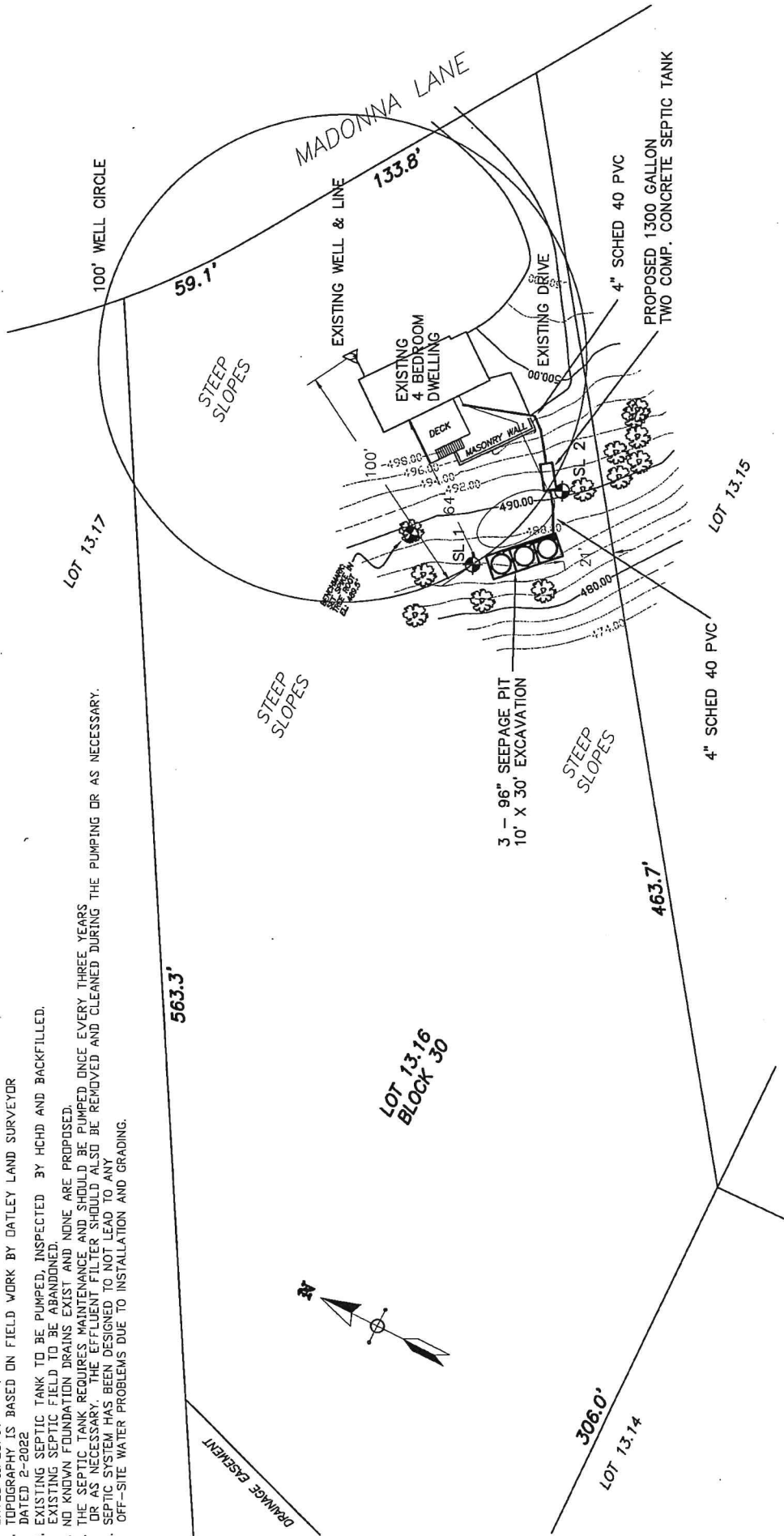
RV:dv

cc: Kurt Hoffman, PE

ct30\_1316

**GENERAL NOTES:**

1. PROPERTY LINES TAKEN FROM SURVEY BY DONALD STIRES, ASSOC.
2. DATED 11/25/97
3. TOPOGRAPHY IS BASED ON FIELD WORK BY DATLEY LAND SURVEYOR
4. DATED 2-2022
5. EXISTING SEPTIC TANK TO BE PUMPED, INSPECTED BY HCHD AND BACKFILLED.
6. EXISTING SEPTIC FIELD TO BE ABANDONED.
7. NO KNOWN FOUNDATION DRAINS EXIST AND NONE ARE PROPOSED.
8. THE SEPTIC TANK REQUIRES MAINTENANCE AND SHOULD BE PUMPED ONCE EVERY THREE YEARS OR AS NECESSARY. THE EFFLUENT FILTER SHOULD ALSO BE REMOVED AND CLEANED DURING THE PUMPING OR AS NECESSARY.
9. SEPTIC SYSTEM HAS BEEN DESIGNED TO NOT LEAD TO ANY OFF-SITE WATER PROBLEMS DUE TO INSTALLATION AND GRADING.



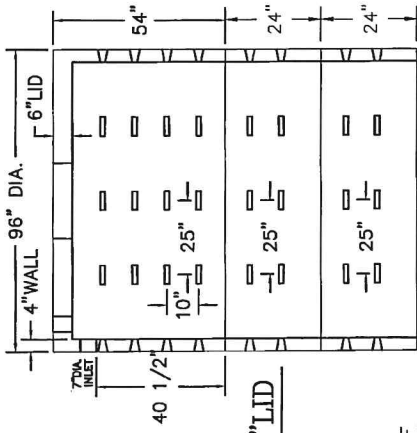
SL 1-0 SOIL LOG BY KURT HOFFMAN ENGINEERING

DATE: 2-14-2022	SCALE: 1" = 40'				
DESIGNED BY: K.R.H.	FILE #: 2022-003				
DRAWN BY: K.R.H.	SHEET 1 OF 5				
CHECKED BY: K.R.H.	REVISIONS				
	DATE				
SEPTIC DESIGN FOR KAPLAN		KURT HOFFMAN, P.E. NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 0644302			
BLOCK 30, LOT 13.16 CLINTON TOWNSHIP HUNTERDON COUNTY, NJ		KURT HOFFMAN ENGINEERING, LLC P.O. BOX 149 ASBURY, NJ 08802 CERTIFICATE OF AUTHORIZATION NUMBER 240A2813300			

LID TO BE PER NJAC 7-9A-9.2(d)7 TO BE CAST IRON AND BOLTED OR LOCKED TO PREVENT ACCESS BY CHILDREN

As Manufactured By M&W PRECAST PRODUCTS COMPANY

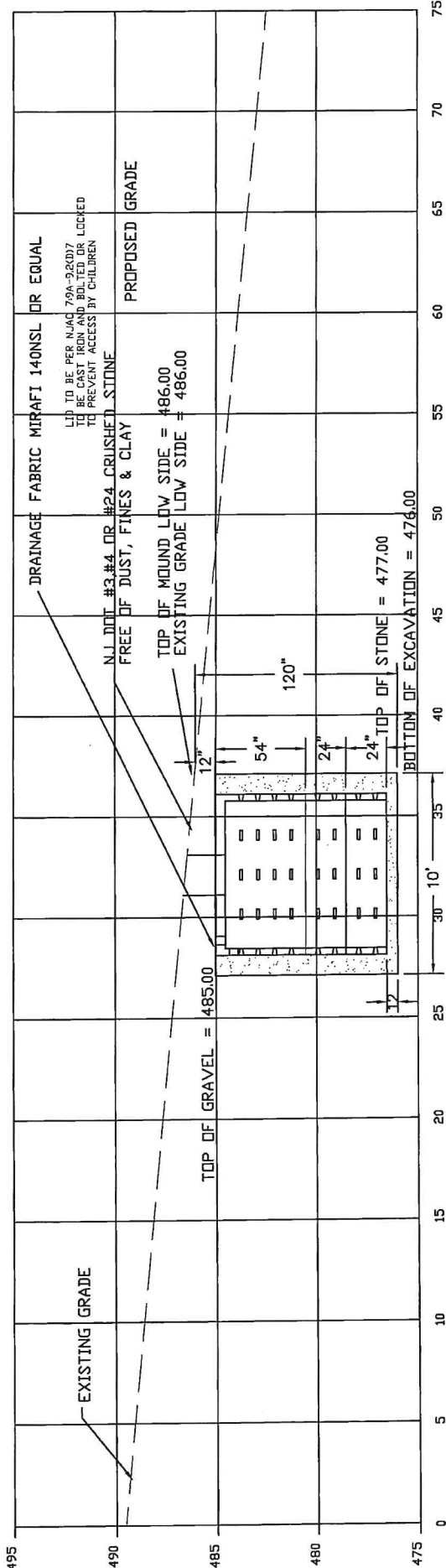
SEPTIC FACTOR	ELEVATION
INVERT OUT HOUSE	498.00±
SEPTIC TANK IN INVERT	486.00
SEPTIC TANK OUT INVERT	485.75
PUMP TANK IN INVERT	NA
PUMP TANK OUT INVERT	NA
D-BOX IN INVERT	NA
D-BOX OUT AND LATERAL INVERT	NA
INVERT IN	483.88
TOP OF BIT	485.00
TOP OF GRAVEL	477.00
BOTTOM OF SELECT FILL (BOTTOM EXCAVATION)	476.00
EXISTING GROUND ELEV. - HIGH SIDE	486.00
EXISTING GROUND ELEV. - LOW SIDE	486.00
TOP OF MOUND - HIGH SIDE	486.00
TOP OF MOUND - LOW SIDE	486.00
REGIONAL WATER TABLE - HIGH SIDE	NA
REGIONAL WATER TABLE - LOW SIDE	NA



**96" SEEPAGE TANK w/ 6" LID**

DESIGN CALCULATIONS SEEPAGE PIT NOT TO SCALE

4 Bedroom Dwelling Septic Design  
 First Bedroom(200) + Additional Bedrooms 3(150) = 650 GPD  
 Design Permeability = K3 (108 sf / bedroom)  
 PIT Area Required = 108 X 4 = 432 SF  
 PIT Area Provided = ((3.14\*8) X ((40.5+24+24)/(12))) x 3 = 555.8 SF  
 TOTAL AREA PIT

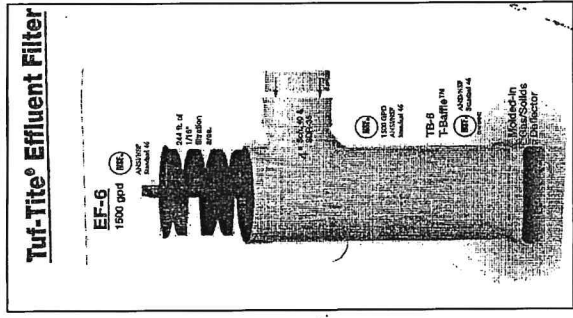


**CROSS SECTION - PROPOSED DISPOSAL PITS**

NOT TO SCALE

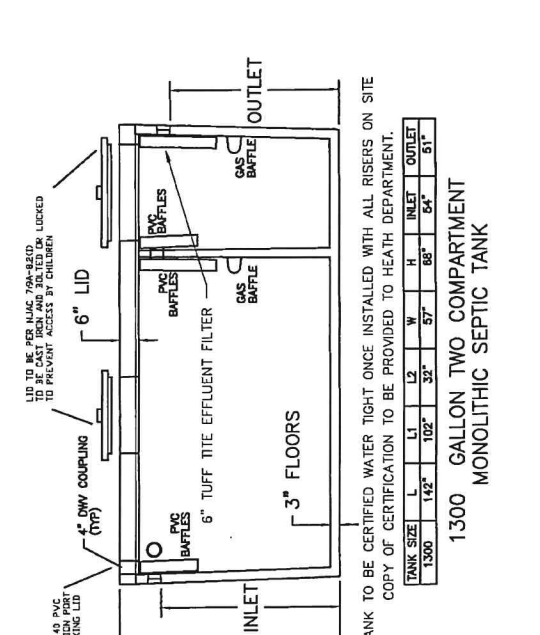
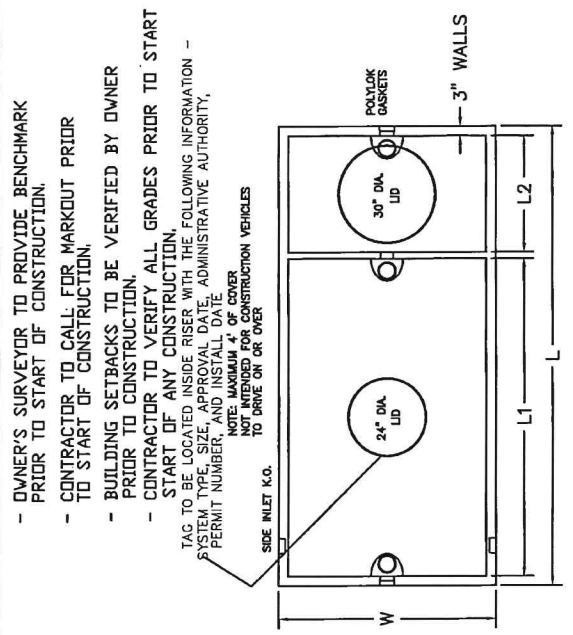
DATE: 2-14-2022	SCALE: 1' = 40'	SEPTIC DESIGN FOR KAPLAN	KURT HOFFMAN, P.E. NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 064432
DESIGNED BY: K.R.H.	FILE # 2022-003	REVISIONS	DATE
DRAWN BY: K.R.H.	SHEET 2 OF 5		
CHECKED BY: K.R.H.			

**KH ENGINEERING, LLC**  
 P.O. BOX 149  
 ASBURY, NJ 08802  
 CERTIFICATE OF AUTHORIZATION NUMBER 2403811300



**CONSTRUCTION NOTES:**

- DO NOT USE THIS PLAN UNLESS IT HAS BEEN CERTIFIED BY THE APPROPRIATE APPROVING AGENCY AND STAMPED ACCORDINGLY.
- THE ENGINEER IS TO BE NOTIFIED IF ANY DIMENSION OR CONDITION IS FOUND WHICH WOULD RENDER THIS PLAN INCAPABLE OF BEING CONSTRUCTED AS SHOWN.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE AND BE FAMILIAR WITH THE REQUIREMENTS OF THE ADMINISTRATIVE CODE AND N.J.A.C. 7:9A ET. SEC.
- THE PROPOSED DISPOSAL SYSTEM SHOWN ON THIS PLAN SHALL BE CONSTRUCTED, OPERATED AND MAINTAINED IN STRICT CONFORMANCE WITH N.J.A.C. 7:9A ET. SEC. AND THESE NOTES.
- IT IS THE OWNER'S OR CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF ALL ABOVE GROUND AND UNDER GROUND STRUCTURES AND UTILITIES PRIOR TO CONSTRUCTION. LOCATIONS OF ALL STRUCTURES SHOWN ON PLAN ARE APPROXIMATE.
- THE SOILS INVESTIGATIONS PERFORMED FOR THIS DESIGN ARE APPLICABLE ONLY TO THE CONDITIONS AT THE LOCATIONS OF THOSE INVESTIGATIONS.
- THIS SYSTEM IS NOT DESIGNED FOR THE USE WITH A GARBAGE DISPOSAL UNIT OR ANY "ELECTOR" TYPE PUMPS. FLUSH WATER FROM WATER SOFTENERS SHALL NOT BE DISCHARGED INTO THIS SYSTEM. OWNER AND EXCAVATOR TO VERIFY ALL EFFLUENT IS DIRECTED TO THE DISPOSAL SYSTEM.
- TORSOIL SHALL BE STRIPPED FROM ALL AREA TO BE EXCAVATED, FILLED OR DISTURBED AND SHALL BE STOCKPILED ON SITE. BACKFILL MATERIAL OVER THE DISPOSAL SHALL BE TOPSOIL FORM THE STRIPPING.
- THE CONNECTING PIPE SHALL HAVE A MINIMUM GRADE OF ONE-QUARTER INCH PER FOOT.
- THE SLOPE OF THE DISTRIBUTION LINES SHALL BE NO GREATER THAN TWO INCHES PER 100 FEET.
- LATERALS AND LOOPING PIPE SHALL BE 4" SCHEDULE 20 SOLID PIPE.
- NO EQUIPMENT SHALL BE DRIVEN OVER OR OPERATED ON THE INFILTRATIVE SURFACE OF THE DISPOSAL SYSTEM. ALL EXCAVATION SHALL BE CARRIED OUT WITH A BACKHOE OUTSIDE OF THE PERIMETER OF THE PREVIOUSLY EXCAVATED PORTIONS OF THE DISPOSAL SYSTEM.
- COMPACTION OF FILL OUTSIDE THE DISPOSAL SYSTEM SHALL BE TO 90% OF MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D988-78, METHOD D.
- COMPACTION OF SELECT FILL WHEN PLACED BELOW THE DISPOSAL SYSTEM SHALL BE APPROVED BY AN ENGINEER. COMPACTON SHALL BE BY MECHANICAL MEANS ONLY.
- THE END OF ALL LATERALS SHALL BE CAPPED WITH CAPS OF THE SAME MATERIAL AS THE LATERALS OR SHALL BE CONNECTED ACROSS THE END AS SHOWN ON THE PLAN.
- AN INSPECTION PORT EXTENDING TO FINISHED GRADE SHALL BE PROVIDED OVER EACH TANK OR COMPARTMENT INLET AND OUTLET WHICH IS NOT DIRECTLY BELOW A MANHOLE. TANK INSPECTION PORTS SHALL BE CONSTRUCTED OF 4" SCHEDULE 40 PVC AND SHALL HAVE A LOCKING OR BOLTED CAP.
- INSPECTION PORTS SHALL BE LOCATED AS SHOWN ON PLAN AND SHALL BE CONSTRUCTED OF 4" SCHEDULE 40 PVC PERFORATED PIPE AND SHALL HAVE A REMOVABLE CAP. THE INSPECTION PORT SHALL EXTEND FROM THE LEVEL OF INFILTRATION TO THE FINISHED GRADE SURFACE.
- AFTER COMPLETION OF BACKFILLING AND FINAL GRADING, ALL DISTURBED AREAS SHALL HAVE TOPSOIL REPLACED AND SHALL BE SEEDED TO ESTABLISH A VEGETATIVE COVER IN A MANNER ACCEPTABLE TO THE ADMINISTRATIVE AUTHORITY.
- ADJOINING WELLS WITHIN 150' OF THE PROPOSED DISPOSAL SYSTEM HAVE BEEN LOCATED ON THE PLAN.
- ADJOINING DISPOSAL SYSTEMS WITHIN 150' OF THE PROPOSED DISPOSAL SYSTEM HAVE BEEN LOCATED ON THE PLAN.
- IT SHALL BE THE OWNER'S RESPONSIBILITY TO VERIFY THE PRESENCE OF ANY FLOOD PLAINS, WETLANDS OR WETLAND TRANSITION AREAS WITHIN THE AREA OF CONSTRUCTION OF ANY ITEM ON THIS PLAN.
- THE ENGINEER'S LIABILITY FOR THIS DESIGN ENDS AT ITS ACCEPTANCE OR CERTIFICATION BY THE ADMINISTRATIVE AUTHORITY UNLESS THE ENGINEER IS RETAINED TO INSPECT THE INSTALLATION OF THE ENTIRE SYSTEM. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE SAFETY OF ANY PERSONS DUE TO THE PERFORMANCE OF WORK BY THE OWNER, OWNERS' AGENT, CONTRACTOR OR BUILDER.
- THIS PLAN IS NOT A SURVEY AND IS TO BE USED FOR CONSTRUCTION OF A SEPTIC SYSTEM ONLY. IT IS NOT INTENDED TO BE USED AS A PLOT PLAN FOR CONSTRUCTION OF ANY STRUCTURES OR PROPOSED IMPROVEMENTS.
- PROPERT LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PLAN PROVIDED BY OWNER.
- PRIOR TO START OF ANY INSTALLATION THE INSTALLER MUST VERIFY ALL WASTE LINES ARE DIRECTED TO THE PROPOSED DISPOSAL SYSTEM.



**6" EFFLUENT FILTER OR LARGER**

4" SCHEDULE 40 PVC OBSERVATION PORT WITH LOCKING LID

4" DWV COUPLING (TYP)

6" LID

6" TUFF TITE EFFLUENT FILTER

PVC BAFFLES

GAS BAFFLE

3" FLOORS

INLET

OUTLET

TANK TO BE CERTIFIED WATER TIGHT ONCE INSTALLED WITH ALL RISERS ON SITE. COPY OF CERTIFICATION TO BE PROVIDED TO HEALTH DEPARTMENT.

TANK SIZE	L	L1	L2	W	H	INLET	OUTLET
1300	142"	102"	32"	57"	85"	64"	51"

1300 GALLON TWO COMPARTMENT MONOLITHIC SEPTIC TANK

**Requirements for fill material - Zone of Treatment & Zone of Disposal**

- Textual analysis (composition, by weight of size fraction passing each sieve)
 

# 8 sieve	80-100%
# 16 sieve	50-85%
# 30 sieve	25-60%
# 50 sieve	10-30%
# 100 sieve	2-10%
- Coarse fragment (material retained on the #8 sieve) content less than 15 percent by volume or 20 percent by weight.
- Permeability rate from 6 to 20 inches per hour or percolation rate from 3 to 15 minutes per inch.

**Compaction of fill material -**

- Fill material shall be spread and compacted in layers one foot or less in thickness.
- Compaction may be accomplished manually or mechanically, by tamping or rolling, or by driving over the filled area in a controlled pattern using tracked vehicles.

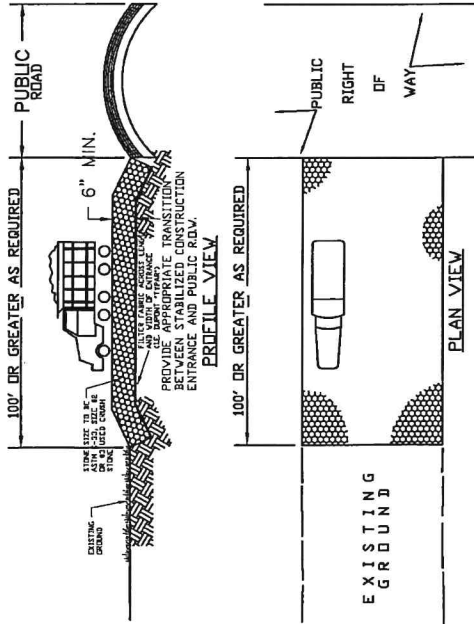
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- PROPERT LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PLAN PROVIDED BY OWNER.
- PRIOR TO START OF ANY INSTALLATION THE INSTALLER MUST VERIFY ALL WASTE LINES ARE DIRECTED TO THE PROPOSED DISPOSAL SYSTEM.

DATE: 2-14-2022	SCALE: 1" = 40'	DESIGNED BY: KR.H.	FILE #: 2022-003	REVISIONS	DATE
DRAWN BY: KR.H.	SHEET 3 OF 5	CHECKED BY: KR.H.			

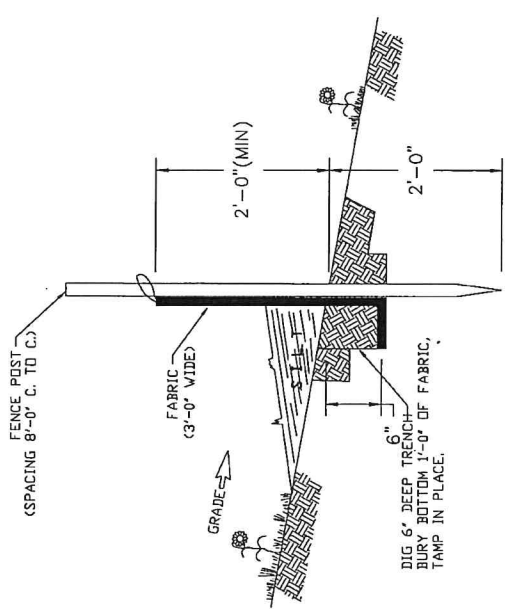
SEPTIC DESIGN FOR KAPLAN

KURT HOFFMAN, P.E.  
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 6544302

KH KURT HOFFMAN ENGINEERING, LLC  
P.O. BOX 149  
ASBURY PARK, NJ 08802  
908-735-0464  
CERTIFICATE OF AUTHORIZATION NUMBER 24CA2811300



**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE



**SILT FENCE DETAIL**  
NOT TO SCALE

- NOTES**
1. THERE ARE TO NO SLOPES STEEPER THAN 2:1 (HORIZONTAL:VERTICAL), SLOPES BETWEEN 2:1 AND 3:1 REQUIRE TEMPORARY EROSION CONTROL MATING FOR STABILIZATION.
  2. SILT FENCE OR HALFBAL BURN TO BE INSTALLED DOWN GRADIENT OF ANY EXCAVATED OR FILLED AREAS.
  3. A REPORT OF COMPLIANCE IS REQUIRED FROM THE HUNTERDON COUNTY SOIL CONSERVATION DISTRICT AT THE COMPLETION OF THE PROJECT.
  4. IF EXCESS FILL 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. IF APPLICABLE, A SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO, REVIEWED AND CERTIFIED BY THE HUNTERDON COUNTY SOIL CONSERVATION DISTRICT PRIOR TO ANY FILL REMOVAL FROM THE PROJECT SITE.
  5. IT SHALL BE THE OWNER'S RESPONSIBILITY TO VERIFY THE PRESENCE OF ANY FLOOD PLAINS, WETLANDS OR WETLAND TRANSITION AREAS WITHIN THE AREA OF CONSTRUCTION OF ANY ITEM ON THIS PLAN. (PERMITS TO BE OBTAINED AS NECESSARY)
  6. ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY SOIL CONSERVATION DISTRICT OR TOWNSHIP ENGINEER IF FIELD CONDITIONS WARRANT THEM.
  7. ANY PLAN REVISIONS (FOR ANY REASON) IS TO BE REVIEWED BY THE SOIL EROSION DISTRICT BEFORE AND AFTER CERTIFICATION. ANY UNDOCUMENTED CHANGES TO THE CERTIFIED PLAN WILL NULLIFY THE DISTRICT'S CERTIFICATION.

**SCHEDULE OF SITE DEVELOPMENT**

DESCRIPTION OF WORK	2021	DAYS										
	1	2	3	4	5	6	7	8	9	10	11	12
STABILIZE EXISTING DISTURBED AREAS												
TEMPORARY EROSION AND SEDIMENT CONTROLS												
SITE CLEARING												
CUT/ FILL/GRADE PROPERTY/IMPROVEMENTS												
FINAL GRADE SEED & MULCH												
PERMANENT STABILIZATION												

DATE: 2-14-2022	SCALE: 1" = 40'		
DESIGNED BY: K.R.H.	FILE #: 2022-003		
DRAWN BY: K.R.H.	SHEET 4 OF 5	REVISIONS	DATE
CHECKED BY: K.R.H.			

**SEPTIC DESIGN FOR KAPLAN**

**KH ENGINEERING, LLC**  
KURT HOFFMAN  
P.O. BOX 148  
ASBURY, NJ 08802  
908-735-6464  
CERTIFICATE OF AUTHORIZATION NUMBER 2402611300

BLOCK 90, LOT 13.16  
CLINTON TOWNSHIP  
HUNTERDON COUNTY, NJ

KURT HOFFMAN, P.E.  
NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 0514392

**AGRONOMIC SPECIFICATIONS FOR LAWNS AND CONSTRUCTION SITES**

- All disturbed areas that are not being graded, not under active construction, or not scheduled to be permanently seeded within 30 days must be temporarily stabilized as per specifications below.
- All exposed areas which are to be permanently vegetated, are to be seeded and mulched within 10 days of final grading.
- Straw mulch (hay mulch may be used if approved by the district) is to be applied to all seedings at a rate of 1-1/2 to 2 tons per acre (approx. 100-130 bales per acre).
- Mulch anchoring is required after mulching to minimize loss by wind or water. This is to be done using one of the methods (crimping, liquid mulch binders, netting, etc.) in the "standards for soil erosion and sediment control in New Jersey".
- Existing weedy and poorly vegetated areas with less than 80 percent perennial grass cover must receive permanent stabilization (as specified on back).
- All bags need to be saved for lime, fertilizer, seed, and liquid mulch binder (if mulch anchoring method). Such proofs need to be submitted to the district inspector for verification of materials and quantities used for all seedings.
- An additional fee of \$125.00 per inspection will be assessed on those sites where additional inspections are necessitated as a result of non-compliance with the approved plan. This includes additional inspections. The entire project site is inspected at the time of a request for report of compliance.

**SEED-BED PREPARATION FOR ALL SEEDINGS**

- SUB-SOIL PREPARATION:** Immediately prior to seeding and topsoiling application, the surface should be scarified to a depth of 6" - 12" where there has been soil compaction (areas of heavy traffic). This practice is to be applied to all compacted areas where there is no danger to underground utilities (cables, irrigation systems etc.)
- TOPSOILING:** Areas to be seeded should have a minimum of 5" or friable, loamy, topsoil free of objectionable weeds, stones and debris.
- FINAL GRADING:** Grading is to be smooth of ruts and free of objectionable stones, depressions, vehicle tracks, and rough edges. Refuse from seedbed preparation (roots, sticks, stones, construction debris) must be disposed of properly.
- LIME/FERTILIZING:** Apply limestone and fertilizer to soil test recommendations or as follows:
- A. Lime is to be applied at a rate of 2 tons (4,000 lbs) per acre. Lime may be any product
  - B. Starter fertilizer, specified as 10-20-10, is to be applied at 500 lbs per acre.
  - C. Lime and fertilizer are to be worked into the soil to a depth of 4".

- GENERAL SEEDING rate and mixture (ex. - lawn)**
- 40% turf type tall fescue
  - 10% creeping red fescue
  - 10% chewings fescue
  - 10% Kentucky bluegrass
  - 30% turf type perennial ryegrass
- HIGH TRAFFIC AND CRITICAL AREA SEEDING rate and mixture** (ex. - athletic fields, waterways, diversions, etc.). This mixture may be also used for lawns but has a coarser texture than mixture above. Rate of 200 lbs. per acre or Athletic field mixture or the equivalent containing 80% Turf Type Tall Fescue 10% Kentucky Blue Grass 10% Turf Type Perennial Ryegrass

**GENERAL NOTES FOR SOIL EROSION AND SEDIMENTATION CONTROL**

- Place topsoil and excavation material from any excavation on the downhill side of the site whenever possible to trap runoff from scalped areas.
  - All soil erosion and sedimentation control practices on this plan are to be constructed in accordance with STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, supplemental criteria supplied by the local Soil Conservation District.
  - A minimum of two weeks written notice shall be given to the appropriate Soil Conservation District and/or municipal engineer prior to any land disturbance.
  - All soil erosion and sediment control devices shall be in place prior to any major soil disturbance and shall be maintained and checked on a regular basis.
- Temporary stabilization with mulch only:
- Straw mulch or equivalent spread uniformly at the rate of 2-2 1/2 tons per acre (total ground surface coverage). This practice is applicable in areas where the season or other conditions may not be suitable for establishing vegetative cover. Mulch only is to be used only for short periods and will require maintenance and renewal.
- Temporary Vegetative Cover- for soil to be exposed for a period of up to 6 months:
- Plant as follows:
- |                            |                   |
|----------------------------|-------------------|
| Winter Cereal Rye          | 112 lbs. per acre |
| Perennial Ryegrass         | 100 lbs. per acre |
| German or Hungarian Millet | 30 lbs. per acre  |
| Spring Oats                | 88 lbs. per acre  |
| Pearl Millet               | 20 lbs. per acre  |
| Winter Barley              | 96 lbs. per acre  |
- STABILIZATION WITH SOD**
- Stabilization with sod is permitted in areas where maintenance and irrigation are adequate to insure proper establishment and longevity. Seeded preparation is to be consistent with any other stabilization requirements. (lime and fertilizer bags are to be retained for district inspections) On slopes greater than 3 to 1, sod must be properly anchored to the slope in accordance with the NJ standards for soil erosion and sediment control.

**PERMANENT SEEDING**

- Sod is to be incorporated into the soil to a depth of 1/4" to 1/2".
  - Lawn seedings are to be mixture of bluegrass, turf-type fescues, and turf-type perennial ryegrass to insure longevity, tolerance, and durability. No seed shall be accepted with a germination test date of more than 12 months old unless restated.
  - Professional seed mixtures are recommended rather than mixing seeds yourself.
  - Seed mixture (as specified below) is to be applied at a minimum rate of 200 lbs. per acre of perennial seed.
  - Optimum seeding period for HUNTERDON County is from March 1 to May 15 and August 15 to October 1. Outside these periods, the seeding rates are to be increased by 50%.
  - Seedings should receive an application of fertilizer such as 10-10-10 or equivalent at 400 lbs. per acre approximately 6 months after first application.
- GENERAL SEEDING rate and mixture (ex. - lawn)**
- 50% Kentucky bluegrass
  - 20% turf type perennial ryegrass
  - 20% seedlings fescue
  - 10% creeping red fescue
  - 10% Kentucky bluegrass
  - 30% turf type perennial ryegrass

**HUNTERDON COUNTY SOIL CONSERVATION DISTRICT NOTES**

- REPORTS OF COMPLIANCE:** These are issued when a site or individual lot or permanently stabilized. Permanent stabilization means that the entire project area or lot is final graded, topsoiled, fertilized, seeded and mulched. All other items specified in the certified Soil Erosion and Sediment Control Plan (swales, rip-rap, special grading, etc.) must also be completed. Individual lots must also have driveways either paved or stabilized with stone.
- 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.
- PERMANENT SEEDING:** All areas are to be limed and fertilized as per plan specifications. The seed mixture is to consist of perennial lawn type seed. Mixtures are specified in Plan. Seed mixtures that have a high percentage of annual seed (annual ryegrass, etc.) are not acceptable. Certified seed is to be used. The seed, fertilizer, lime etc. labels/bags are to be saved, so that the labels/slips may be presented at the time of the compliance inspection.
- HYDROSEEDING/HYDROMULCHING:** These are not acceptable practices in Hunterdon County due to the high failure rate of seeding, 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.
- MULCH:** All seeding (permanent or temporary) are to be mulched with straw or hay. This mulch is to be applied at a rate of 1 1/2 to 2 tons per acre (approximately 100-130 bales/acre) in order to achieve a minimum of 90 percent ground surface coverage.
- MULCH ANCHORING:** All mulch must be anchored immediately after mulching to minimize loss by wind or water. This is to be done by one of the methods (crimping, liquid mulch binders, netting, etc.) in the "Standards for Soil Erosion and Sediment Control in New Jersey". If the mulch washes or blows off the seeding prior to District inspection, it will not pass. You are responsible to see to it that the mulch properly is anchored.
- WEEDY AND POORLY VEGETATED AREA:** (if applicable) Any area with less than 75 percent perennial grass cover must receive permanent stabilization (as specified above), if they are within the property boundaries of the project or lot. These areas must be properly scarified prior to seeding to assure seed to soil contact.
- COMPLIANCE INSPECTION:** You are responsible for calling the District office to schedule a compliance inspection, a minimum of 2 working days in advance (4 to 5 days would be appreciated). We cannot guarantee an inspection if less than 100 percent completed, or act of nature (rain, wind, etc.) has occurred. The fee for an inspection is \$125.00. The fee is to be assessed for each additional inspection required until the project or lot is stabilized satisfactorily. When the project is inspected, you are required to provide the remaining project area will be looked at for deficiencies in following the Erosion and Sediment Control Practices, such as tracking pad, inlet protection, keeping roads clean of sediment, silt fence, etc., will constitute a compliance failure on the requested individual lot.
- TEMPORARY REPORTS OF COMPLIANCE:** The District office seeding (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 - October 1), seeding rates are to be increased by 50 percent. A temporary report of compliance is issued when a cash performance guarantee is posted to assure stabilization (sewers, winter, months only). The bonding period, 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. Permanent improvements such as rip-rap, piping, paving, etc. cannot be bonded. The disturbed acreage must be mulched (as a minimum) and maintained throughout the winter months as a temporary stabilization practices. Other practices (silt fences, hay bales, etc.) may also be encouraged if field conditions warrant.
- You are required to get as much site/lot stabilization as possible completed during favorable weather.

**SEPTIC DESIGN FOR KAPLAN**

**KURT HOFFMAN, P.E.**  
 NEW JERSEY PROFESSIONAL ENGINEER LICENSE NUMBER 0244302

**SEPTIC DESIGN FOR KAPLAN**  
 BLOCK 90, LOT 18.16  
 CLINTON TOWNSHIP  
 HUNTERDON COUNTY, NJ

**KH ENGINEERING, LLC**  
 P.O. BOX 149  
 ASBURY, NJ 08802  
 PHONE: 732-946-4644  
 CERTIFICATE OF REGISTRATION NUMBER 24042813100

DATE: 2-14-2022	SCALE: 1" = 40'	REVISIONS
DESIGNED BY: K.R.H.	FILE #: 2022-003	
DRAWN BY: K.R.H.	SHEET 5 OF 5	
CHECKED BY: K.R.H.	DATE	