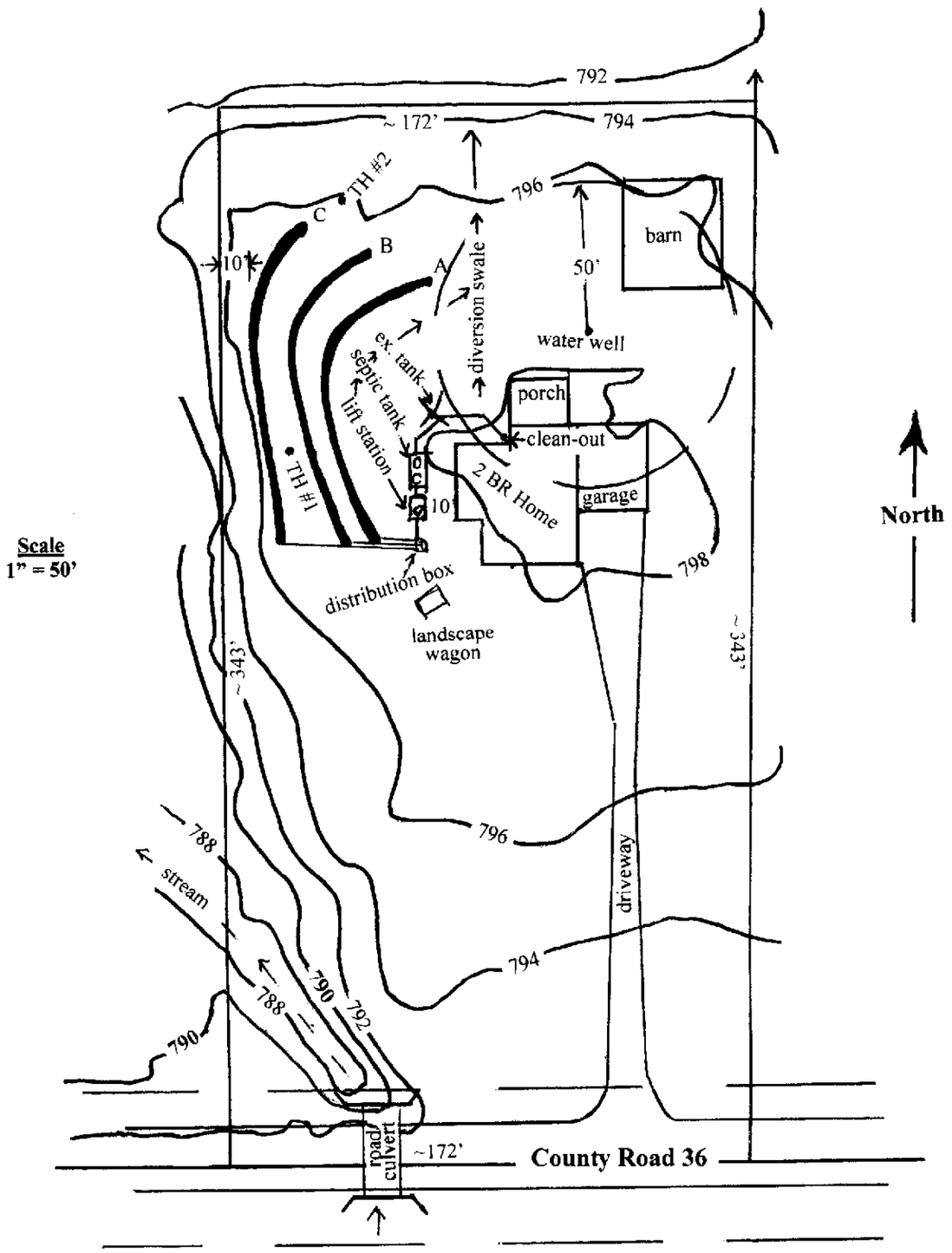
Moyer Replacement Septic System Site Plan

2487 E. Co. Rd. 36, Clinton Twp., Seneca Co., Tiffin, Ohio 44883
Septic Tank to Demand-Dosed Shallow Chambered Leaching Trenches



Moyer System Inverts Chart

Sanitary Exit	795.45(min.)-	796.95
Septic Tank	In	794.98
	Out	794.81
Lift Station	In	794.73
	Out	794.56
Pump in Lift Station (stop float level)	Out	791.62
Distribution Box	In	797.12
	Out	796.95
Trench Line A	In	796.87
B	In	796.54
C	In	795.88

(trench inverts are 3.3" above trench bottoms)

Benchmark is grade at NW corner of the porch off the rear of home at 798' above sea level.

Notes: Existing tank must be abandoned per code. Further details in written plan.

APPROVED

Septic Design by:

Accurate Onsite SEPTIC PLANNERS
161 Badger Circle, Wooster, OH 44691
1371 Twp. Rd. 956, Ashland, OH 44805
Bill 330-465-0964*Andy 419-651-1490
septicdesignohio.com

Accurate Onsite
SEPTIC PLANNERS

Moyer Site Visit

2487 E. Co. Rd. 36, Tiffin, Ohio

Considerations for a Replacement System

Terrain:	Lightly sloped mowed yard, driveway, barn, lots of trees, wooded to west, stream on front SW corner.
Owner's concerns :	Needs a simple replacement system for a 2 BR home.
Primary Area:	Northwest of home site, tank then discharges to ravine on property to west.
Replacement area:	On contour, northwest of the home.
Location concerns:	Must stay at least 10 feet from property lines, road right-of-way and hardscapes, and 50 feet from the water supply with all components.
Drainage concerns:	A diversion swale will be required above leaching trench field to route run-off around the area.
Observation:	Existing septic tank is off NW corner of home, top is caving in, must be abandoned per code..
Other:	Soils were done on this tract by Steve Ross, CPSSc. System options were discussed with Amy Moyer—we explained how our proposed system would be most cost-effective—especially over time, decision was easy for her. We did inform her of other options, but in his situation they were overkill—worst case soils used for design parameters.

APPROVED

Accurate Onsite
SEPTIC PLANNERS

Moyer Replacement System Profile

2487 Co. Rd. 36, Tiffin, Ohio

2 bedroom system

The sanitary line exits the home on the north side. The effluent will gravity flow to the septic tank. The septic tank will gravity flow to a 500 gallon lift station. The lift station will pump to a distribution box. The effluent will then gravity flow out to two 2 foot wide chamber lines 112.75 feet long that are end loaded. The field will consist of 3 chambered lines dug in 6 inches deep. This will allow for annual resting of one line.

APPROVED

Specifics--Replacement Chambered Leaching Trenches
Moyer, 2487 E. Co. Rd. 36, Tiffin, Ohio 44883

Existing Site: Northwest of home, runs to ravine west of P/L
Replacement Site: West and northwest of the house down-slope lawn area

ALL SPECIFIED COMPONENTS ARE TO BE USED OR REPLACED WITH EQUIVALENTS.

Specs for 2 Bedroom Home
1000 Gallon NCI Septic Tank
500 Gallon NCI Dosing Tank (package Champion Pump, Floats, Controls)
Champion CPS3 1/3rd HP float controlled effluent pump
84 sections of Quick 4 Infiltrator Low Profile Chambers 24 inches wide and 6 end caps

Soil Data at Primary Location
Limiting Layer at 18" (perched seasonal water table) 36" (dense till) Site Slope is 3 %
Linear Loading Rate: 2.4 gallons a day per foot (taken from Ohio Table)
Infiltration Rate: 0.4 gallons / day / square foot (taken from Ohio Table)

Sizing of Infiltrative Surface
Required on contour 100' Standard sizing for infiltrative surface would be 6' wide x 100' long = 600 sq. ft. The 25% fines free product credit of 25% reduces area required = 450 + 25% reserve. Due to available standard chamber sizing the infiltrative surface will be wider, split into 3 runs on contour. Using the specified Chamber provides an infiltrative surface width of **2 feet**, needing 450 sq. ft. of infiltrative surface plus a 25% reserve, will require a minimum of 281.25' of trench length. Trench lines will be end loaded. The dimensions and area of the infiltrative surface shall be 2' x 112.75' x 2 runs = 451 sq. ft. plus 225.5 sq. ft. in the 3rd/reserve line. Shallow Trench Leaching Specs—System is to be finished at 8-14 inches above grade from upslope chamber row over bottom chamber row. Distribution Width/ Inside Chamber Width 2 feet x 2 (contours per year). Distribution Length 112.75 feet Field Width 14 feet (width may be more at points due to varying slope along contour) Chamber Row Spacing 4 feet (6 feet center to center)

System Profile
Sanitary Exit gravity flow to Septic Tank, gravity flow to a lift station, pump to a distribution box and gravity flow to chambers. (3) 112.75 feet lines of 2 foot wide chambers. System will utilize 2 lines while resting one line. Sequential annual switching to rest one line is to take place in the distribution box. Chambers will be end fed.

Final Grade for Freeze Protection
The line where it exits the home will need at least 12 inches of soil covering. The Septic Tank must have at least 24 inches of soil covering to allow for gravity flow from where it comes through basement wall and for 1% fall in sanitary plumbing line. The line from the septic tank to the dosing chamber needs to be pitched to the dosing chamber. The 1.5" pressure line will need pitched back so it will drain back to the lift station after each dosing event to prevent freezing in pressure line. All lines between distribution box and chamber lines must be pitch to run to the chambers for complete drainage.

Pipe Sizes (all schedule 40)
4 inch PVC from Home to Septic Tank, from Septic Tank to Dosing Chamber, from D-Box to Chambers
1.5 inch PVC from Pump in Dosing Chamber to the Distribution Box

APPROVED

Pipe Lengths

From House to Septic Tank	46 feet
From Septic Tank to Dosing Chamber	5 feet
From Pump in Dosing Chamber to the Distribution Box	20 feet
From Dist. Box to Chamber Contours	6 to 43 feet

Elevations (at grade)

	Distance	Drop/+Rise
From House exit to Septic Tank	46 feet	5.6" (min.)
From Septic Tank to Dosing Chamber	5 feet	1 inch
Dosing Chamber to Distribution Box	20 feet	+ 5.5 feet
Distribution Box to Contour A	6 feet	1 inch
Distribution Box to Contour B	23 feet	5 inches
Distribution Box to Contour C	43 feet	13 inches

Leaching Trench Construction

6 inches of soil is to be removed 2' wide under the chamber area on the up-slope side and only what is required on the down-slope side to keep base of the chamber level. Chambers are to be level on and across contour. **A level infiltrative surface is critical.** The chamber trenches are to be covered and filled to 8-14 inches above current grade. The area is to be graded and sloped as original grade to promote runoff. The entire area is to be sown to grass. Special attention to this step is to be taken in order to protect the area against erosion. **An inspection port is required to be installed in each line of the system to monitor liquid levels.** The port should be installed through the distal end chamber. These need to be 4 inch PVC pipe mounted to a water closet ring at their base and secured to the ground. They need to extend to the trench bottom and be covered with removable caps accessible on the mounded surface. Holes need to be drilled in the sides around the bottom and up to the height of the chambers to allow for flow into the inspection area.

***A DIVERSION / INTERCEPTOR SWALE NEEDS TO BE INSTALLED UPHILL ABOVE THE TRENCHES** TO DIVERT RUNOFF AROUND THE TRENCH FIELD AREA. DRAIN NEEDS TO RUN TO NE ABOVE TRENCH AREA THEN N TO OUTLET—SEE DRAWING. SWALE SHOULD BE 8 FEET UPSLOPE OF TRENCHES AND IT MUST BE SOWN TO GRASS TO CONTROL EROSION.

Pump, Lift Tank and Dosing and Settings (500 Gallon Tank)

Champion CPS3 1/3rd HP Effluent Pump with a Demand Dose Control Panel & Floats. This control panel may be mounted on a pedestal on top of the dosing tank or remote mounted to the home—in both cases it will need to be at least 1 foot above grade. **THE ALARM AND THE PUMP MUST BE WIRED ON TWO SEPARATE CIRCUITS.** A 1.5" inch gate valve will need to be installed between the pump and the tank exit. It must be placed within easy access through the riser cover. Pump will meet system flow rate of 20 gallons per minute. The system will dose on a demand basis. The pump will dose 60 gallons per cycle and never more than 4 times per day to meet the 240 gallon daily design flow. The pump will be required to pump 61.84 gallons per cycle—the 1.84 gallons in the pressure line will drain back after each dose to prevent any freezing damage. **This will require the pump to run for about 3 minutes and 6 seconds on demand.** Septic tank will need to be buried to a depth of 2 feet of cover to allow for gravity flow and adequate cover. The lift station will need to be buried to a depth just over 2 feet to allow for gravity flow from the septic tank. One inch of tank volume is approximately 11.80 gallons. **On/Off Float** to be set to **ON at 17.24 inches above bottom of the tank and OFF at 12" above bottom of tank.** This is to keep the pump cool and always submerged as a dose will draw down about 5.24". **Alarm Float** to be **set at 20 inches above bottom of the tank. Reserve Capacity** will be approximately 318 gallons above high water alarm.

INSTALLER TO PREPARE AND FILE AN "AS BUILT DRAWING" WITH THE SENECA COUNTY HEALTH DEPARTMENT

APPROVED

Moyer Replacement Distribution

Chambered Shallow Trenches, 2487 Co. Rd. 36, Tiffin, Ohio

Designed For: Amy Jo Moyer & Seneca Co. WPCLF program

Number of Bedrooms: 2

Location: 2487 Co. Rd. 36, Clinton Twp., Seneca Co., Tiffin, Ohio 44883

Infiltration Rate: 0.4

Linear Loading Rate: 2.

Slope: 3 %

Depth to Limiting Layer: 18" (perched seasonal water table) & 36" (dense till)

Absorption Area Needed: 600 sq. ft. - 25% fines free product credit) = 450 sq. ft.

Chamber Width: 24 inches

System calculations:

120 gallons per bedroom per day (2 x 120 = 240)
240 / 0.4 infiltration rate = **600 square feet of infiltrative surface**
25% Fines Free Credit reduces the required infiltrative surface to **450 sq. ft.**
240 / 2.4 (linear loading rate) = **100 feet on contour**

Distribution Length:

24 inches x 12inches = 288 sq. inches
288 / 144 = 2 sq. ft. of distribution per running foot of chamber
3 runs x 112.75' length x 2' width = 676.5 square feet of infiltrative surface
This allows for using 2 chamber lines per year and annual resting of 1 line
(2 x 2 x 112.75 = 451 sq.ft.)
Infiltrative surface in 2 lines and will have a 50% reserve line.

Trench:

2 inches above grade to top of chambers. (8" chamber height – 6" inset in ground)
Finish at 8-14 inches above current grade.

Length: 112.75 feet distribution length

Width:

2 feet distribution area width (Chambers- 3 rows 2 foot wide plus 4 feet between chambers) (6 feet center to center) – Total Width **14 feet wide**
Due to varying slope along contour the system may be wider at points.
14' will be at its narrowest point (slope does vary a little at this site).

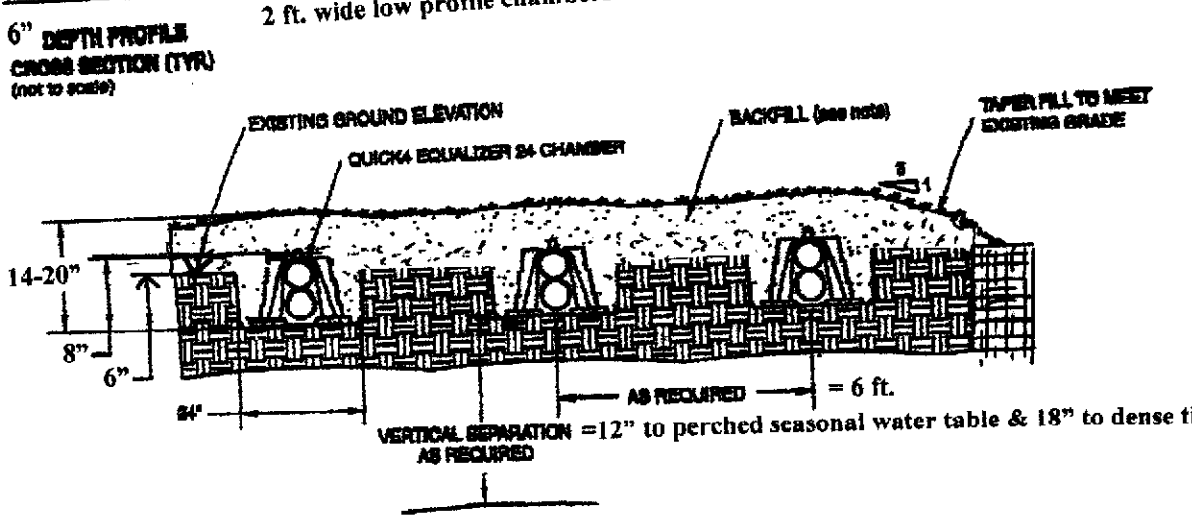
APPROVED

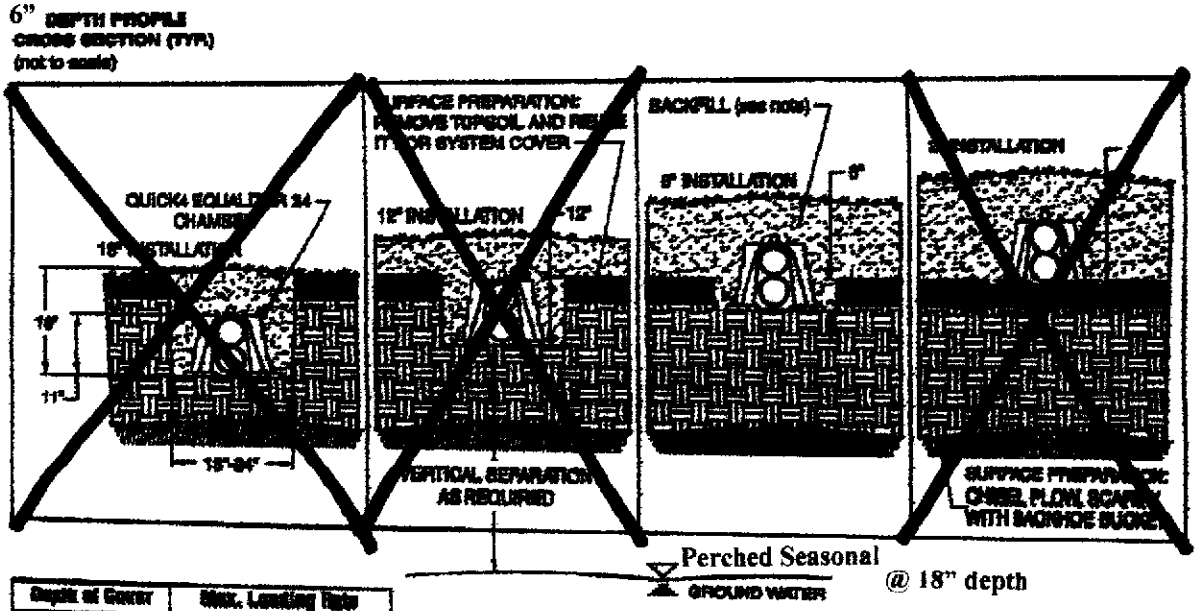
--Moyer--

CHAMBER CONFIGURATIONS

Quick4 Equalizer 24 Shallow Trench Configurations

2 ft. wide low profile chambers





Depth of Cover	Max. Loading Rate
12"	H-10 (16,000 lbs.)
8"	10 PSI
6-12"	this design

PSWT 18" – 12" VSD = 6" depth

Fragipan 36–18 = 18", design actual 36-6 = 30" VSD

Note:

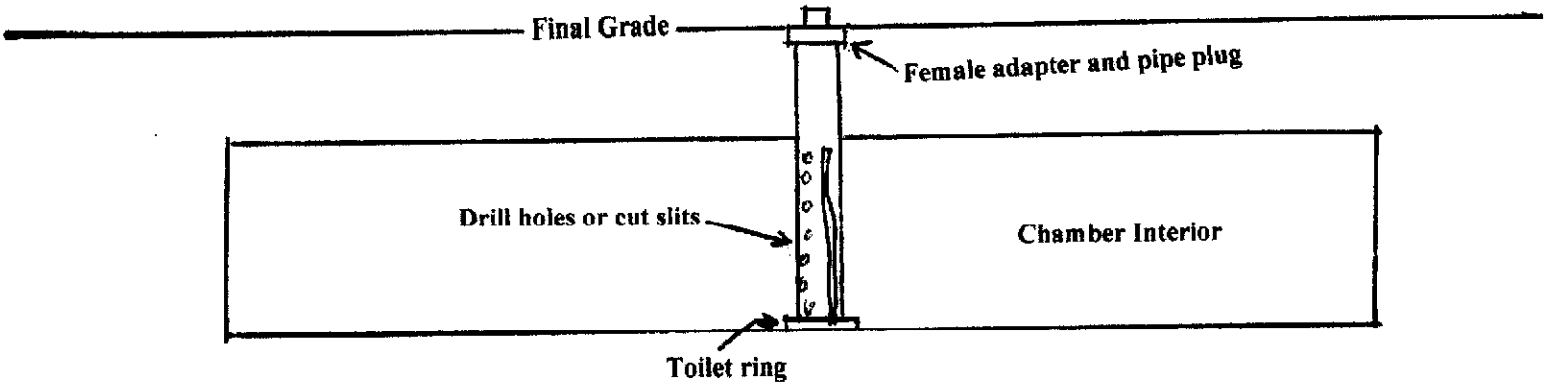
1) Excavation material can be used as backfill. Any additional material needed for backfilling must be of similar soil composition and permeability.

Contact Infiltrator Systems at 1-800-221-4436 for additional Ohio technical and product information.

APPROVED

Chamber Line Inspection Port

(Can also be used in sand-based mounds—Ohio, ATL, Presby, Eljen w/ geotextile fabric wrap)



Each chamber line is required to have an inspection port, code requires a 2" opening to view water levels in the trenches. We recommend a 4" port made of schedule 40 pipe. Knowing that contractors will have cut-offs from the job available and that often inspection ports suffer abuse we recommend something more substantial than the minimum be built. Our recommendation is to glue a PVC toilet flange to the bottom of the port and anchor it to the ground at the bottom of the trench w/ plastic stakes, re-bar, etc., drill holes or cut slits in the side so that any water level in the trench will be at an equivalent level in the port—then at grade install a female adapter and a pipe plug—below the level that it will be damaged by a mower, the most common cause of damage. Ports should be near the distal end of each trench, center-fed trenches will need ports at both ends. There are many different ways & materials that could be used to meet code, this is simply our recommendation. When this type of port is used in a sand-based mound we recommend that a geotextile fabric wrap be put around the pipe and it be zip-tied there, to prevent the port from being filled up with sand and render it worthless.

APPROVED

Moyer Pump Calculations
2487 E. Co. Rd. 36, Tiffin, Ohio

Flow Rate: set/ calculated at (flow restricted) 20 gallons per minute

Static Lift: 5.5 feet
1.5 inch pressure line length is 20 feet

Fittings	Qty		Length Add
Gate Vale	1		1.0
90 degree elbow	3		12.0
Couplings	1		1.5
		Total	**14.5**

Pipe 1.5 inch TDH per 100 ft. @ 20 gpm = 2.61 TDH

20' (length) + 14.5' (fittings) **= 34.5 feet**

34.5 / 100 x 2.61 = **0.90 loss**

0.90 + 5.5 = **6.40 TDH**

Pump selected is capable of pumping more gallons per minute and overcoming more head. Gate Valve will be used to restrict flow to allow for adjustments as pump degrades. Total pumped volume is controlled by the float(s) – control of time and flow rate by the gate valve.

Total Void Volume is **1.84 gallons** (20 ft. x 0.092 gallons per foot)
Dose is **60 gallons**
Total pumped per dose is **61.84 gallons**
Run Time is approximately 3 minutes and 6 seconds
1 inch of tank volume equals 11.80 gallons
Dose Draw Down **5.24 inches** (this is the reasonable to minimum recommended by suppliers and manufacturers—trying to tighten down a wide angle float to significantly less than 6" differential shortens its lifespan.)

APPROVED

— Moyer —

Friction Loss Flow Charts

Feet Of Head Pressure Loss Per 100 Ft. of Plastic Pipe

GPM	Pipe Diameter							
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
1	2.08	0.51						
2	4.16	1.02	0.55	0.14	0.07			
5	23.44	5.73	1.72	0.44	0.22	0.066	0.038	0.015
7	43.06	10.52	3.17	0.81	0.38	0.11	0.051	0.021
10	82.02	20.04	6.02	1.55	0.72	0.21	0.09	0.03
15		42.46	12.77	3.28	1.53	0.45	0.19	0.07
20		72.34	21.75	5.59	2.61	0.76	0.32	0.11
25			32.88	8.45	3.95	1.15	0.49	0.17
30			46.08	11.85	5.53	1.62	0.68	0.23
35				15.76	7.36	2.15	0.91	0.31
40				20.18	9.43	2.75	1.16	0.40
45				25.10	11.73	3.43	1.44	0.50
50				30.51	14.25	4.16	1.75	0.60

Accurate Onsite SEPTIC PLANNERS

Friction Loss In PVC Fittings = EQUIVALENT FEET OF STRAIGHT PIPE

PVC Type	Pipe Size							
	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
90° elbow	1.5	2.0	2.25	4.0	4.0	6.0	8.0	8.0
45° elbow	0.75	1.0	1.4	1.75	2.0	2.5	3.0	4.0
insert coupling	0.5	0.75	1.0	1.25	1.5	2.0	3.0	3.0
gate valve	0.3	0.4	0.6	0.8	1.0	1.5	1.6	2.0
male/female adapter	1.0	1.5	2.0	2.75	3.5	4.5	5.5	6.5
tee-flow (run)	1.0	1.4	1.7	2.3	2.7	4.3	5.1	6.3
tee-flow (branch)	4.0	5.0	6.0	7.0	8.0	12.0	15.0	16.0

APPROVED

Champion Pump CPS3

– Moyer –

1/3HP
SUMP/EFFLUENT

Every pump tested in water to ensure pump meets peformance curve.

SSPMA CERTIFIED

FEATURES/BENEFITS

PERFORMANCE
Heads up to 20' TDH
Flows up to 42 GPM

MOTOR
High efficient, 115v, oil filled, permanent split capacitor motor with upper and lower ball bearings and thermal overload protection
- Constant bearing lubrication
- Maximum motor cooling
- Runs cooler and lasts longer
- Internal overload protection
- Quiet operation
- Fasteners and shaft made from rugged, corrosion resistant stainless steel

SEAL DESIGN
Mechanical with secondary dynamic lip seal
- Provides added leakage protection

IMPELLER DESIGN
Non-clog style vortex impeller
- Designed to help reduce clogging by foreign material

POWER CORD
Sealed entry quick disconnect power cords
- Prevents water from entering the motor housing through a cut cord
- Available in lengths up to 100'

SWITCH
Piggy-back switch design
- Defective switches can be diagnosed over the phone
- Pump can be operated manually or supplied with other piggy-back switches
- Switch can be replaced without having to replace the pump

APPLICATIONS

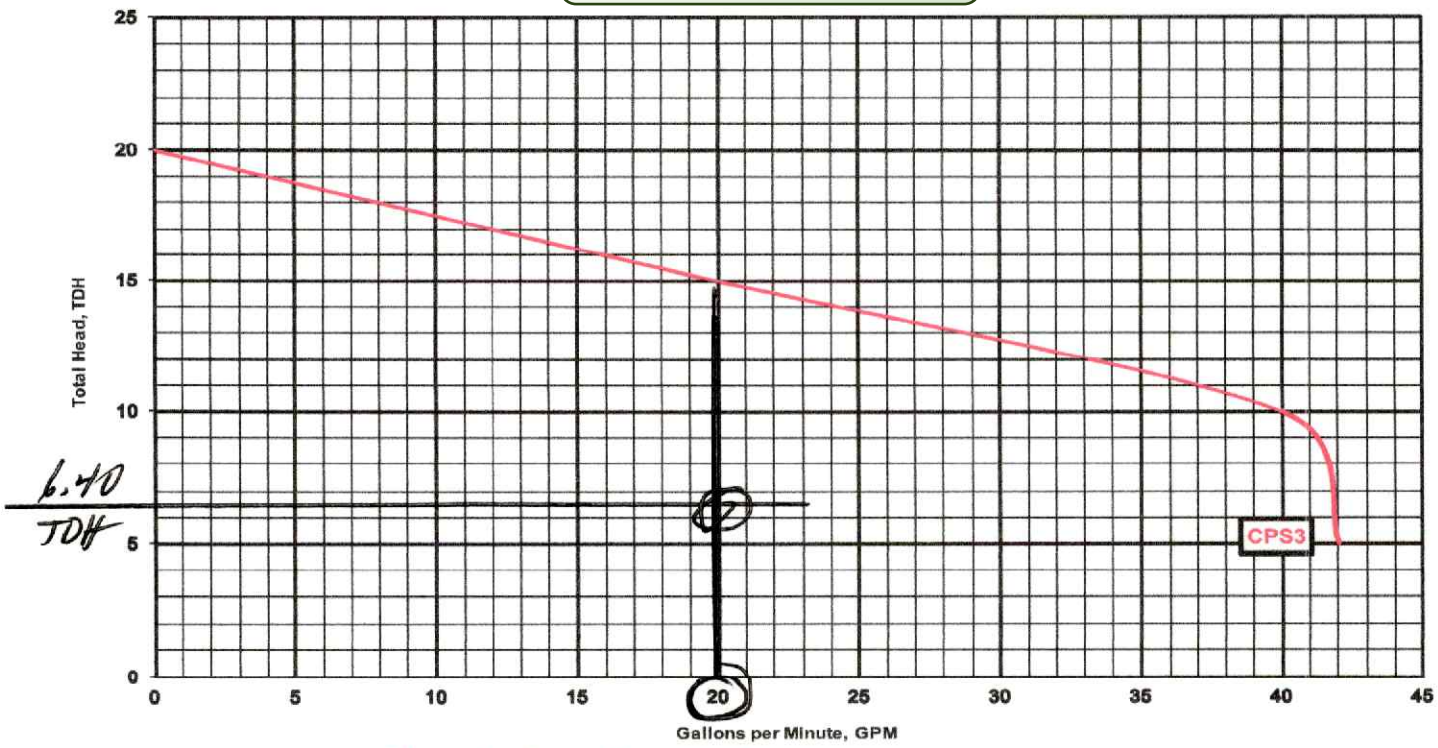
Basements, dewatering, and septic systems

Wide-Angle Float | Vertical Float

1/3 HP submersible pumps, built for reliability, handle up to 1/4" solids with 1 1/2" discharge

APPROVED

PERFORMANCE CURVE



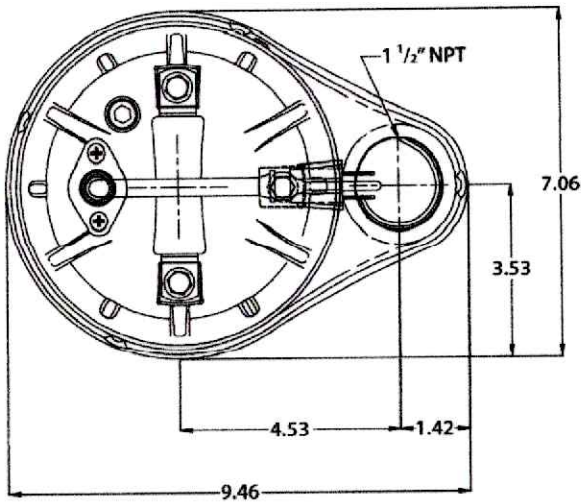
Champion Pump Company, Inc • P.O. Box 528 • Ashland, OH 44805
Phone 419-281-4500 • Fax 419-616-1100 • www.championpump.com

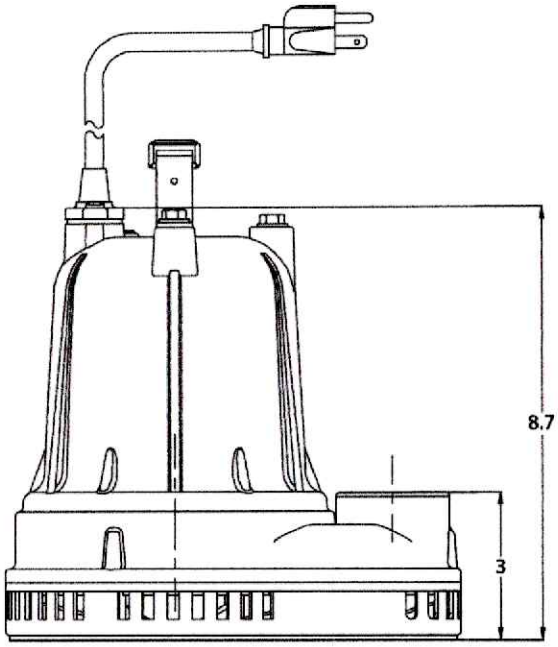
REV 0817

-Moyer-

TECHNICAL DATA

DISCHARGE	1-1/2" NPT. vertical standard
SOLIDS HANDLING	1/4"
LIQUID TEMPERATURE	140 Degrees F. (Intermittent)
MOTOR HOUSING	Cast Iron
VOLUTE	Cast Iron
SEAL PLATE	Cast Iron
IMPELLER	Engineered glass filled thermoplastic/ Vortex
SHAFT	Nickel plated steel
SHAFT SEAL (SINGLE SEAL)	Mechanical with secondary dynamic lip seal, carbon rotating face, ceramic stationary face, Buna-N elastomer, 300 series stainless steel hardware
BEARINGS (UPPER & LOWER)	Single row, ball, oil lubricated
HARDWARE	300 Series stainless steel
O-RINGS	Buna-N
CORD	10' Length standard. Up to 100' available. (UL/CUL) Listed 16 AWG, Type SJTW
MOTOR (SINGLE PHASE)	1/3 HP 1750 RPM, 60 Hz, NEMA L Includes overload protection in the motor, oil filled, class B permanent split capacitor
WEIGHT	25 lbs. (Manual)





APPROVED

MODEL(S) INFORMATION

MODEL	HP	VOLTS	PHASE	AMPS	CORD LENGTH	SWITCH
CPS3-11	1/3	115	1	4	10'	Manual
CPS3-12	1/3	115	1	4	20'	Manual
CPS3-13	1/3	115	1	4	30'	Manual
CPS3-15	1/3	115	1	4	50'	Manual
CPS3A-11	1/3	115	1	4	10'	Wide-Angle Float
CPS3A-12	1/3	115	1	4	20'	Wide-Angle Float
CPS3A-13	1/3	115	1	4	30'	Wide-Angle Float
CPS3V-11	1/3	115	1	4	10'	Vertical Float
CPS3V-12	1/3	115	1	4	20'	Vertical Float
CPS3V-13	1/3	115	1	4	30'	Vertical Float

Champion Pump Company, Inc • P.O. Box 528 • Ashland, OH 44805
Phone 419-281-4500 • Fax 419-616-1100 • www.championpump.com

- Moyer -

Demand-Dosed Lift Station Homeowner Instructions:
High Water Alarms

What to do if your Septic System high water alarm goes off?

1. **Don't panic**, alarms go off indicating some type of service is needed. The high water alarm can indicate several different potential issues (a) the pump is not functioning due to failure of it, a float, the controls or no electrical power to it, (b) other, more rare issues. Note: Alarms do not go off because the septic tank needs pumped.

2. **Go to were the alarm is sounding from**, you should see the red alarm illuminated, this light is situated on top of the gray control electrical panel box, put the toggle switch to the mute position or press the silence /mute button, this will silence your audible alarm but the red light will remain lit until serviced by your service provider.

3. **Check your breaker box** to see if the circuit supplying your pump has a tripped breaker and if so, reset the breaker—some problem/issue caused that to happen so you must still have it looked at by your service provider. Until the underlying issue is resolved it would likely happen again.

4. **Call your contracted / a service provider** and report your alarm, if closed leave a message indicating your name, address and phone number so someone can get back to you.

5. **Your alarm light will remain lit until serviced**; you can still use water however *be very conservative with your water use*—you should have some reserve capacity from the high water level to the tank filling up completely, if it does that could lead to a back-up—so you will want your service provider to visit in a timely fashion.

APPROVED

Accurate Onsite
SEPTIC PLANNERS

Septic Installation and Maintenance Concerns

Moyer, 2487 E. Co. Rd. 36, Tiffin, Ohio

This system works by gravity flow to the septic tank and on to dosing chamber. Special care is needed to make sure all lines are pitched to run from the home's sanitary exit to the Septic Tank and on to the Dosing Chamber. The pressure line from the dosing chamber to distribution box will drain back to the dosing chamber between doses—this is so effluent in the line won't freeze.

Distribution area is not to be driven on or compacted in any way.

The installer is to use a 24 inch wide bucket to dig the distribution trenches.

Distribution trenches are to be dug to a depth of 6 inches on the upslope side.

Distribution Lines must be minimum 4 feet apart (actual distance--not centerline to centerline--Minimum 6 feet center to center)

On the area over the chambers, care must be taken to stop erosion. The area is to be sown to grass. Straw and/or other measures to prevent erosion should be taken until grass cover is established.

There is not a lot of watershed above the trench lines, so a diversion swale on the portion not protected by the home will be adequate to move run-off to the end and around the leach field.

On an annual basis the filter in the exit pipe of the septic tank is to be cleaned, on a sequential basis the resting trench line is to be changed, and the septic tank is to be pumped on an as needed basis—use chart in Ohio State University Extension publication AEX-740-01 as a guideline at which time we recommend inspection of dosing chamber along with floats and pump.

Installer must prepare and file an "as built drawing" with the Seneca County Health Department.

APPROVED

Moyer Materials List

2487 E. Co. Rd. 36, Tiffin, Ohio

Tank

1	1000 Gallon NCI Septic Tank
1	500 Gallon NCI Dosing Tank Package
1	Distribution box

Pump

1	Champion CPS3 (Pump, Floats, Controls, Tank supplied as package from NCI)

Chambers

24 inch	Infiltrator Chamber	84 sections
24 inch	Infiltrator End Cap	6

Pipe

1.5 inch	PVC Schedule 40	20 ft.
1.5 inch	PVC Schedule 40	couplings/fittings
4 inch	PVC Schedule 40	160 ft.
4 inch	PVC Schedule 40	couplings/fittings
4 inch	PVC Toilet Ring	3
4 inch	PVC Female threaded end cap	3
4 inch	PVC male threaded plug	3

Other

Straw
Topsoil
Grass seed

Diversion Swale

Accurate Onsite does not intend this to be a complete list. Installers are encouraged to look over the job and make their own list prior to bidding the job. Equivalent products are acceptable.

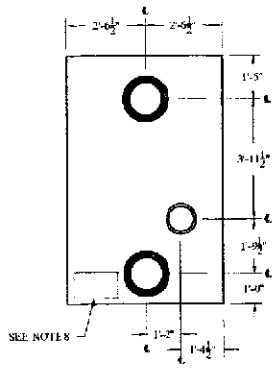
APPROVED

— Moyer —

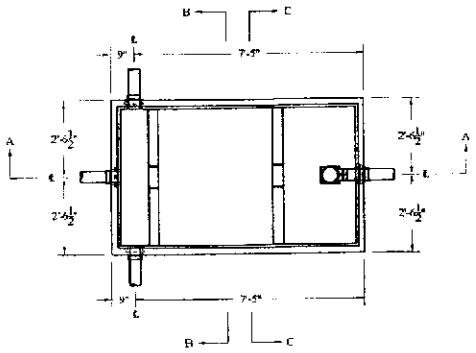
APPROVED

BUILD SHEET

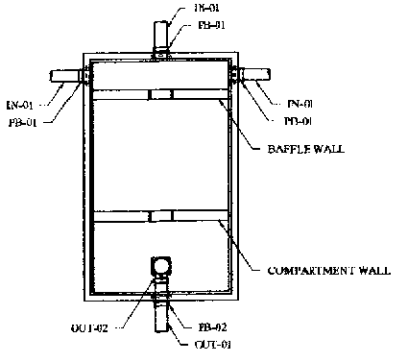
ITEM	QUANTITY	DESCRIPTION
IN-01	3	04" INLET PIPE BY OTHERS
OUT-01	1	04" OUTLET PIPE BY OTHERS
OUT-02	1	04" TUF-TITE EF-6 COMBO EFFLUENT FILTER (SHIPPED LOOSE FOR INSTALLATION BY OTHERS)
PB-01	3	PRESS-SEAL 4" CAST-A-SEAL 402F CAPPED BOOT (CONTRACTOR TO CUT INLET REQUIRED)
PB-02	1	PRESS-SEAL 4" CAST-A-SEAL 402 BOOT
TT-01	2	16"Ø TUF-TITE SAFETY PAN CAST-IN TOP
TT-02	2	14"Ø CONCRETE SAFETY CAP
TT-03	2	16"Ø X 6" TALL I.D. TUF-TITE RISER
TT-04	2	16"Ø TUF-TITE LID
	1	CON-SEAL CS-50 PRIMER APPLIED TO TANK JOINT (APPLIED BEFORE USING CON-SEAL CS-102)
	2	CON-SEAL CS-102 JOINT SEALANT (ROLLS) FOR TANK JOINT (INSTALLED BEFORE SHIPPING)
	1	TUF-TITE RISER SEALANT (ROLLS) FOR RISER JOINTS (INSTALLED BEFORE SHIPPING)



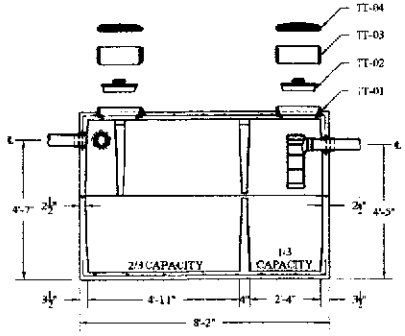
TOP LAYOUT



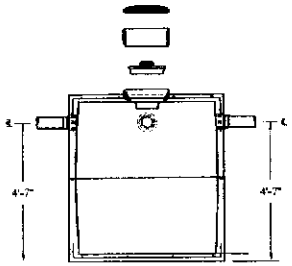
PLAN VIEW
TOP REMOVED FOR CLARITY



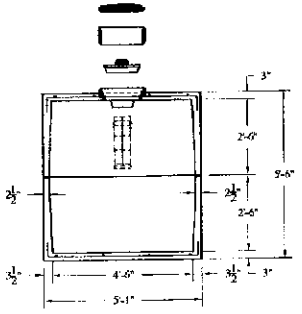
PIPING LAYOUT



SECTION VIEW A-A



SECTION VIEW B-B



SECTION VIEW C-C

1,000 GALLON SEPTIC TANK DETAILS

DESCRIPTION	UOM	QUANTITY	WEIGHT (lbs)
4'-6" X 7'-7" X 2'-6" I.D. BASE WITH BAFFLE	EA.	1	4,340
4'-6" X 7'-7" X 2'-6" I.D. TOP WITH (2 EA.) BAFFLES	EA.	1	4,645
16"Ø I.D. TUF-TITE SAFETY PAN CAST-IN TOP	EA.	2	2.5 (EA.)
14"Ø CONCRETE SAFETY CAP	EA.	2	33 (EA.)
16"Ø X 0'-6" OR 1'-0" TALL I.D. TUF-TITE RISER	EA.	2	2.5 (EA.)
16"Ø I.D. TUF-TITE LID	EA.	2	2.5 (EA.)
TOTAL STRUCTURE			9,066

NOTES:
1. CONCRETE: 5000 PSI @ 28 DAYS, AIR 6% ± 2%.
2. REINFORCING: #3 @ 15" O.C. TOP AND BOTTOM, POLYPROPYLENE FIBER 1.5 LB. PER CUYD.
3. CAST-IN BOOT SEALS PER SITE REQUIREMENTS CONFORMING TO ASTM C-1227, ASTM C-1644, ASTM C-923.
4. PLANT VACUUM TESTED PER ASTM C-1227 OR ON SITE PER ASTM C-1719 WHERE REQUIRED.
5. MAXIMUM BURIAL DEPTH WITHOUT ADDITIONAL REINFORCING IS 36".
6. TOTAL CAPACITY 1,023 GAL OR 21.3 GAL PER INCH. WITH NO BACKFILL IN PLACE TANK REQUIRES 39" INTERNAL WATER DEPTH TO PREVENT FLOTATION.
7. EFFLUENT FILTER MEETING ANSI/NSF STANDARD $\frac{1}{16}$" FILTRATION.
8. TANK MARKED AS:
   - NORWALK CONCRETE INDUSTRIES
   - 1,000 GALLON, 2-COMPARTMENT SEPTIC TANK
   - VAC CHECK CERTIFICATION
9. ADDITIONAL 6" (2.5 LBS. EACH) OR 12" (4.1 LBS. EACH) TALL RISERS AVAILABLE UPON REQUEST. EACH ADDITIONAL RISER WILL REQUIRE SEALANT. ONE ROLL OF SEALANT WILL SEAL (4 EA.) 16"Ø JOINTS

NCI
Norwalk Concrete Industries
80 Commerce Drive
Norwalk, Ohio 44857
www.ncipreast.com
Toll Free 800.733.3624
Phone 419.668.8167
Fax 419.663.0677

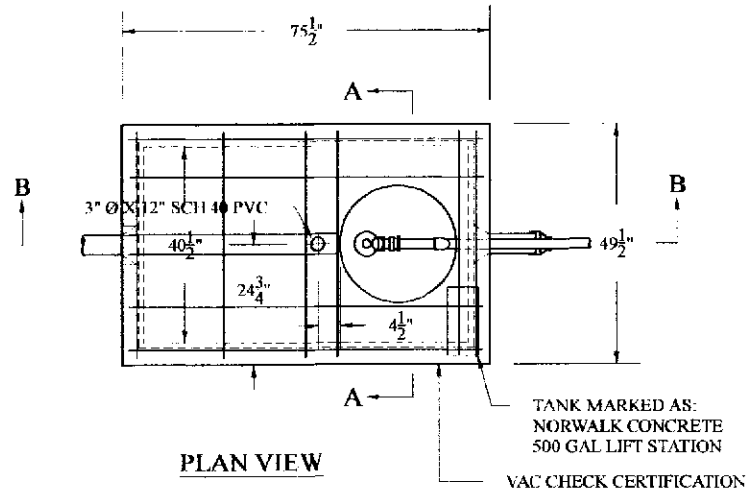
1,000 GALLON PRECAST CONCRETE SEPTIC TANK/TRASH TRAP

REVISIONS:	DWG:	DATE:	SHT. -
01-31-19	W-0035-07	05-28-09	OF -
			JDH

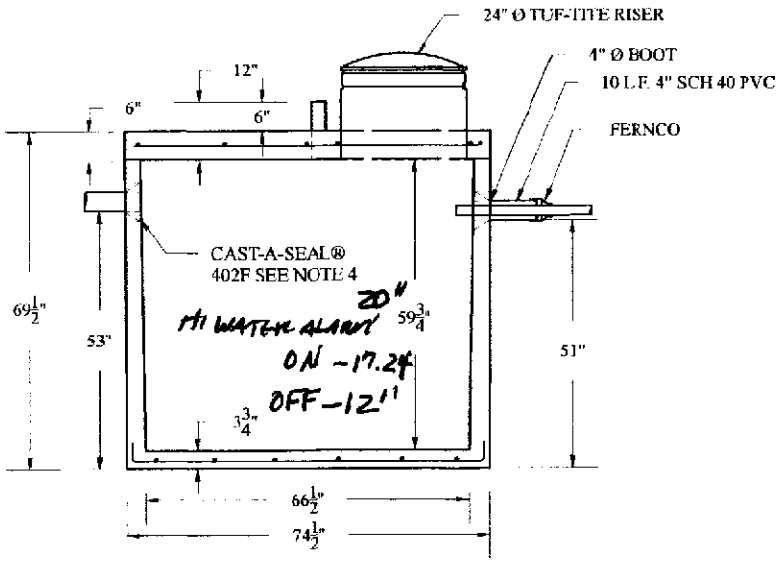
— Moyer —

APPROVED

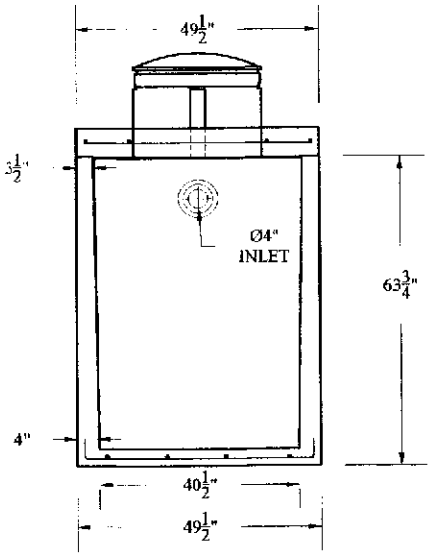
NOTES:
1. CONCRETE = 5000 PSI @ 28 DAYS, AIR 6% ± 2%.
2. REINFORCING #3 @ 15" O.C. TOP AND BOTTOM, POLYPROPYLENE FIBER 1.5# PER CY.
3. CAST IN BOOT SEALS PER SITE REQUIREMENTS CONFORMING TO ASTM C-1227, ASTM C-1644, ASTM C-923.
4. TANK WEIGHT 5,900 LBS
5. PLANT VACUUM TESTED PER ASTM C-1227 OR ON SITE PER ASTM C-1719 WHERE REQUIRED.
6. MAXIMUM BURIAL DEPTH WITHOUT ADDITIONAL REINFORCING IS 36"
7. TOTAL CAPACITY BELOW INLET 568 GAL OR 11.8 GAL PER INCH. WITH NO BACKFILL IN PLACE TANK REQUIRES 36" INTERNAL WATER DEPTH TO PREVENT FLOTATION.
8. PUMP AND CONTROLS PER SITE REQUIREMENTS.
9. CONSEAL CS-102 JOINT SEALANT.



PLAN VIEW



SECTION B-B



SECTION A-A

NCI
Norwalk Concrete Industries
80 Commerce Drive
Norwalk, Ohio 44857
www.nciprecast.com
Toll Free 800.733.3624
Phone 419.668.8167
Fax 419.663.0627

DOSE TANK
500 GAL RESIDENTIAL

REVISIONS:	DWG. NO.	DATE	SHT. -
12.22.15	W-0038-07	1.11.06	OF -
			JP

INFILTRATOR®
systems inc.

– Moyer –

Quick4 PLUS™ CHAMBER SYSTEMS

The Quick4® Plus Equalizer 36 Low Profile (LP) Chamber

Quick4 Plus™ Series

The Quick4 Plus Equalizer 36 Low Profile (LP) offers maximum strength through its two center structural columns. This chamber can be installed in a 24-inch-wide trench. It is 4 inches shorter in height than other Equalizer 36 model chambers, allowing for shallower installation. Like the original line of Quick4 chambers, it offers advanced contouring capability with its Contour Swivel Connection™, which permits turns up to 15°, right or left. The Quick4 Plus All-in-One 8 and Quick4 Plus Endcaps provide increased flexibility in system design and configurations.

Maximum Strength

Quick4 Plus Equalizer 36 LP Chamber Specifications

Size 22"W x 53"L x 8"H (559 mm x 1346 mm x 203 mm)
Effective Length 48" (1219 mm)
Louver Height 6.3" (160 mm)
Storage Capacity 20 gal (76 L)
Invert Height 3.3" (84 mm), 9.6" (244 mm)

Quick4 Plus Equalizer 36 Low Profile (LP) Chamber Benefits:

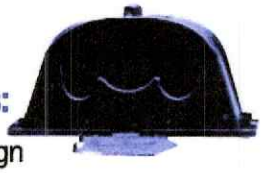
- Low profile design makes this chamber ideal for shallow applications
- Reduces imported fill needed for cap and fill systems
- Two center structural columns offer superior strength
- Advanced contouring connections
- Latching mechanism allows for quick installation
- Four-foot chamber lengths are easy to handle and install
- Supports wheel loads of 16,000 lbs/axle with 12" of cover

Quick4 Plus All-in-One Periscope Benefits:

- Allows for raised invert installations
- 180° directional inletting
- 12" raised invert is ideal for serial applications

Quick4 Plus All-in-One 8 Endcap Benefits:

- May be used at the end of chamber row for an inlet/outlet or can be installed mid-trench
- Mid-trench connection feature allows center feed inletting of chamber rows
- Center-feed connection allows for easy installation of serial distribution systems
- Variable pipe connection options allow for side, end or top inletting
- Piping drill points are set for gravity or pressure pipe



Quick4 Plus Endcap Benefits:

- Simple, flat design
- Allows installation of a pipe from the end only
- Piping drill points are set for gravity or pressure pipe

Certified by the International Association of Plumbing and Mechanical Officials (IAPMO)

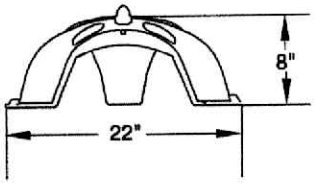
IAPMO R&T

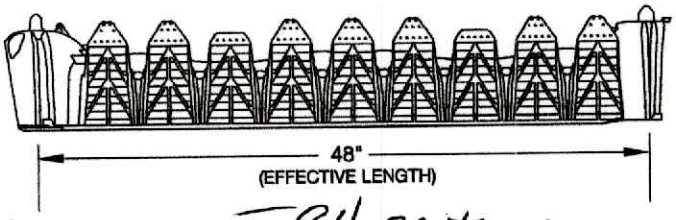
APPROVED

~ Moyer ~

Quick4 Plus™ Series

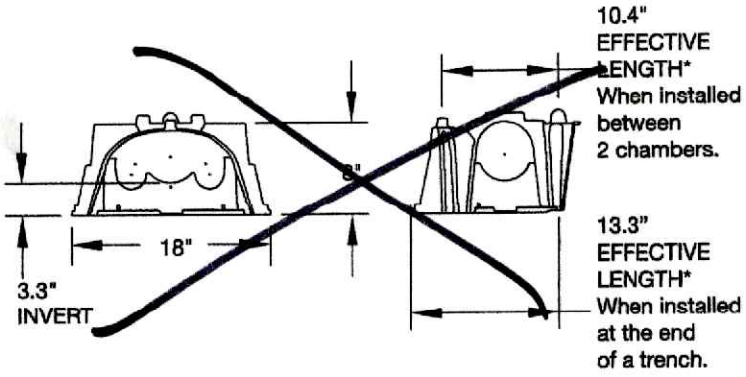
Quick4 Plus Equalizer 36 Low Profile Chamber



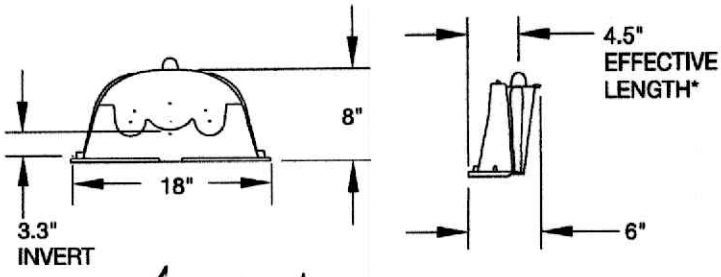


84 sections

Quick4 Plus All-in-One 8 Endcap

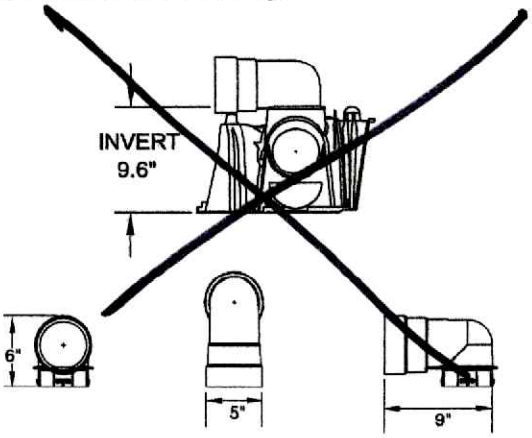


Quick4 Plus Endcap



6 end caps

Quick4 Plus All-in-One Periscope



APPROVED

INFILTRATOR systems inc.

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorsystems.com

INFILTRATOR SYSTEMS, INC. STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, endcap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty. Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending.
Infiltrator, Equalizer, Quick4, and SideWinder are registered trademarks of Infiltrator Systems Inc. Infiltrator is a registered trademark in France. Infiltrator Systems Inc. is a registered trademark in Mexico.
Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickCut, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Systems Inc.
PolyLok is a trademark of PolyLok, Inc. TUF-TITE is a registered trademark of TUF-TITE, INC. Ultra-Rib is a trademark of IPEX Inc.
© 2013 Infiltrator Systems Inc. All rights reserved. Printed in U.S.A.

Contact Infiltrator Systems' Technical Services Department for assistance at 1-800-221-4436

Table 3. Soil Infiltration Loading Rates

Soil Characteristics			Soil Infiltration Loading Rate (gpd/ft²)		
Texture	Structure		CBODs		
	Shape	Grade	>25mg/L (septic tank effluent)	≤25mg/L (Pretreated effluent)	Row
COS, S, LCOS, LS	–	0SG	0.8	1.6	1
FS, VFS, LFS, LVFS	–	0SG	0.4	1	2
CSL, SL	–	0M	0.2	0.6	3
	PL	1	0.2	0.5	4
		2, 3	0	0	5
	PR/BK/GR	1	0.4	0.7	6
		2, 3	0.6	1	7
FSL, VFSL	–	0M	0.2	0.5	8
	PL	1, 2, 3	0	0	9
	PR/BK/GR	1	0.2	0.6	10
		2, 3	0.4	0.8	11
L	–	0M	0.2	0.5	12
	PL	1, 2, 3	0	0	13
	PR/BK/GR	1	0.4	0.6	14
		2, 3	0.6	0.8	15
SIL	–	0M	0	0.2	16
	PL	1, 2, 3	0	0	17
	PR/BK/GR	1	0.4	0.6	18
		2, 3	0.6	0.8	19
SCL, CL, SICL	–	0M	0	0	20
	PL	1, 2, 3	0	0	21
	PR/BK/GR	1	0.2	0.3	22
		2, 3	0.4	0.6	23
SC, C, SIC	–	0M	0	0	24
	PL	1, 2, 3	0	0	25
	PR/BK/GR	1	0	0	26
		2, 3	0.2	0.3	27

Accurate Onsite SEPTIC PLANNERS

2 bedroom home, 2×120 = 240 gal/day

240 ÷ 0.4 = 600 sq. ft.

-25% fines free product credit = 450 sq. ft.

APPROVED

3701-29-15 —Moyer—

Table 4: Hydraulic Linear Loading Rate Table

Soil Characteristics			Hydraulic Linear Loading Rate (gpd/ft)									
			Slope 0-4%			Slope 5-9%			Slope >10%			
Texture	Structure		Infiltrative Distance (inches)			Infiltrative Distance (inches)			Infiltrative Distance (inches)			
	Shape	Grade	8-12	12-24	24-48	8-12	12-24	24-48	8-12	12-24	24-48	Row
COS, S, LCOS, LS	–	0SG	4.0	5.0	6.0	5.0	6.0	7.0	6.0	7.0	8.0	1
FS, VFS, LFS, LVFS	–	0SG	3.5	4.5	5.5	4.0	5.0	6.0	5.0	6.0	7.0	2
CSL, SL	–	0M	3.0	3.5	4.0	3.6	4.1	4.6	5.0	6.0	7.0	3
	PL	1	3.0	3.5	4.0	3.6	4.1	4.6	4.0	5.0	6.0	4
		2, 3										5
	PR/BK/GR	1	3.5	4.5	5.5	4.0	5.0	6.0	5.0	6.0	7.0	6
		2, 3	3.5	4.5	5.5	4.0	5.0	6.0	5.0	6.0	7.0	7
FSL, VFSL	–	0M	2.0	2.3	2.6	2.4	2.7	3.0	2.7	3.2	3.7	8
	PL	1, 2, 3										9
	PR/BK/GR	1	3.0	3.5	4.0	3.3	3.8	4.3	3.6	4.1	4.6	10
		2, 3	3.3	3.8	4.3	3.6	4.1	4.6	3.9	4.4	4.9	11
L	–	0M	2.0	2.3	2.6	2.4	2.7	3.0	2.7	3.2	3.7	12
	PL	1, 2, 3										13
	PR/BK/GR	1	3.0	3.5	4.0	3.3	3.8	4.3	3.6	4.1	4.6	14
		2, 3	3.3	3.8	4.3	3.6	4.1	4.6	3.9	4.4	4.9	15
SiL	–	0M	2.0	2.5	3.0	2.2	2.7	3.2	2.4	2.9	3.4	16
	PL	1, 2, 3										17
	PR/BK/GR	1	2.4	2.7	3.0	2.7	3.0	3.3	3.0	3.5	4.0	18
		2, 3	2.7	3.0	3.3	3.0	3.5	4.0	3.3	3.8	4.3	19
SCL, CL, SICL	–	0M										20
	PL	1, 2, 3										21
	PR/BK/GR	1	2.0	2.5	3.0	2.2	2.7	3.2	2.4	2.9	3.4	22
		2, 3	2.4	2.9	3.4	2.7	3.0	3.3	3.0	3.5	4.0	23
SC, C, SIC	–	0M										24
	PL	1, 2, 3										25
	PR/BK/GR	1										26
		2, 3	2.0	2.5	3.0	2.2	2.7	3.2	2.4	2.9	3.4	27

240 ÷ 2.4 = 100 ft.

APPROVED

County: Seneca
Township / Sec.: Clinton
Property Address/Location: 2487 East County Road 36, Tiffin, OH 44883

Applicant Name: Amy Jo Moyer
Address: 2487 East County Road 36, Tiffin, OH 44883

Phone #: Contact: Bill Walker, 330-465-0964
Lot #: ---
Test Hole #: 1
Latitude/Longitude: 41.095894°, -83.122305°
Method: ___ Pit __X__ Auger __X__ Probe

Land Use / Vegetation: Lawn/Grass
Landform: Ground Moraine
Position on Landform: Backslope
Percent Slope: 2-4
Shape of Slope: Linear-Linear
Bedrooms or GPD: 2 bedrooms existing

Date: 01/24/2024
Evaluator: Steve Ross, CPSS
Soil & Site LLC
3344 Township Road 26
Cardington, OH 43315
Job Number: ----
Soil Series: ----

ARCPACS #: 03477

Signature:
Phone#: 1-419-718-4301
Email: steve.s.ross@gmail.com

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
			Redoximorphic Features		Texture			Structure				
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	
Fill	0-3	10YR 3/3			sil	25	2-3	1	f	sbk	fr	Slight Effervescence
Fill	3-8	10YR 5/6			sicl	32	2-3	1	f	sbk	fi	Slight Effervescence
Ap	8-16	10YR 4/3			sil	25	2-3	2	f	sbk	fr	
Bt1	16-22	10YR 5/6			sicl	32	2-3	2	m	sbk	fi	
Bt2	22-36	10YR 5/6		10% 10YR 6/2	sicl	35	2-3	2	m	sbk	fi	
Bt3	36-54	7.5YR 5/8		15% 10YR 7/1	sicl	32	2-3	2	m	sbk	fi	
Cd	54-60	10YR 5/4	5% 10YR 6/6	5% 10YR 6/2	sicl	30	2-3	0	---	m	vfi	Strong Effervescence

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	22	Perched on Cd	NOTE: surface water must be diverted away from STS.
Apparent Water Table	>60		
Highly Permeable Material	>60		
Bedrock	>60		
Restrictive Layer	54	Dense Till	

APPROVED

County: Seneca
Township / Sec.: Clinton
Property Address/Location: 2487 East County Road 36, Tiffin, OH 44883

Applicant Name: Amy Jo Moyer
Address: 2487 East County Road 36, Tiffin, OH 44883

Phone #: Contact: Bill Walker, 330-465-0964
Lot #: —
Test Hole #: 2
Latitude/Longitude: 41.096071°, -83.122268°
Method: ___ Pit __X__ Auger __X__ Probe

Land Use / Vegetation: Lawn/Grass
Landform: Ground Moraine
Position on Landform: Backslope
Percent Slope: 2-4
Shape of Slope: Linear-Linear
Bedrooms or GPD: 2 bedrooms existing

Date: 01/24/2024
Evaluator: Steve Ross, CPSS
Soil & Site LLC
3344 Township Road 26
Cardington, OH 43315
Job Number: ----
Soil Series: ----

ARCPACS #: 03477

Signature:
Phone#: 1-419-718-4301
Email: steve.s.ross@gmail.com

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							Other Soil Features
		Munsell Color (hue, value, chroma)										
			Redoximorphic Features		Texture			Structure				
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	
Ap	0-8	10YR 4/3			sil	25	2-3	2	m	gr	fr	
Bt1	8-18	10YR 5/6			sicl	32	2-3	2	m	sbk	fi	
Bt2	18-36	10YR 4/6		15% 10YR 5/2	sicl	35	2-3	2	m	sbk	fi	
Cd	36-48	10YR 5/4	5% 10YR 5/6	15% 10YR 6/2	sicl	30	2-3	0	—	m	vfi	Strong Effervescence

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	18	Perched on Cd	NOTE: surface water must be diverted away from STS.
Apparent Water Table	>48		
Highly Permeable Material	>48		
Bedrock	>48		
Restrictive Layer	36	Dense Till	

APPROVED

Abbreviations:

Horizon Nomenclature

Master Horizons

O	Predominantly organic matter (litter & humus)
A	Mineral, organic matter (humus) accumulation, loss of Fe, Al, clay
E	Mineral, loss of Si, Fe, Al, clay, organic matter
B	Subsurface accumulation of clay, Fe, Al, Si, humus; sesquioxides; loss of $CaCo_3$; subsurface soil structure
C	Little or no pedogenic alteration, unconsolidated earthy material, soft bedrock
R	Hard bedrock

Horizon Suffixes

a	Highly decomposed organic matter
b	Buried genetic horizon
d	Densic layer (physically root restrictive)
e	Moderately decomposed organic matter
g	Strong gley
i	Slightly decomposed organic matter
p	Plow layer or artificial disturbance
r	Weathered or soft bedrock
t	Illuvial accumulation of silicate clay
w	Weak color or structure within B
x	Fragipan characteristics

Horizon Modifiers

Numerical Prefixes: Used to denote lithologic discontinuities.

Numerical Suffixes: Used to denote subdivisions within a master horizon.

Soil Texture

Texture Class Abbreviations		Textural Class Modifiers	
Course Sand	cos	Gravelly	GR
Sand	s	Fine Gravelly	FGR
Fine Sand	fs	Medium Gravelly	MGR
Very Fine Sand	vfs	Coarse Gravelly	CGR
Loamy Coarse Sand	lcos	Very Gravelly	VGR
Loamy Sand	ls	Extremely Gravelly	XGR
Loamy Fine Sand	lfs	Cobbly	CB
Loamy Very Fine Sand	lvfs	Very Cobbly	VCB
Coarse Sandy Loam	cosl	Extremely Cobbly	XCB
Sandy Loam	sl	Stony	ST
Fine Sandy Loam	fsl	Very Stony	VST
Very Fine Sandy Loam	vfsl	Extremely Stony	XST
Loam	l	Bouldery	BY
Silt Loam	sil	Very Bouldery	VBY
Silt	si	Extremely Bouldery	XBY
Sandy Clay Loam	scl	Channery	CN
Clay Loam	cl	Very Channery	VCN
Silty Clay Loam	sicl	Extremely Channery	XCN
Sandy Clay	sc	Flaggy	FL
Silty Clay	sic	Very Flaggy	VFL
Clay	c	Extremely Flaggy	XFL

*Estimate approximate clay percentage within 5 percent

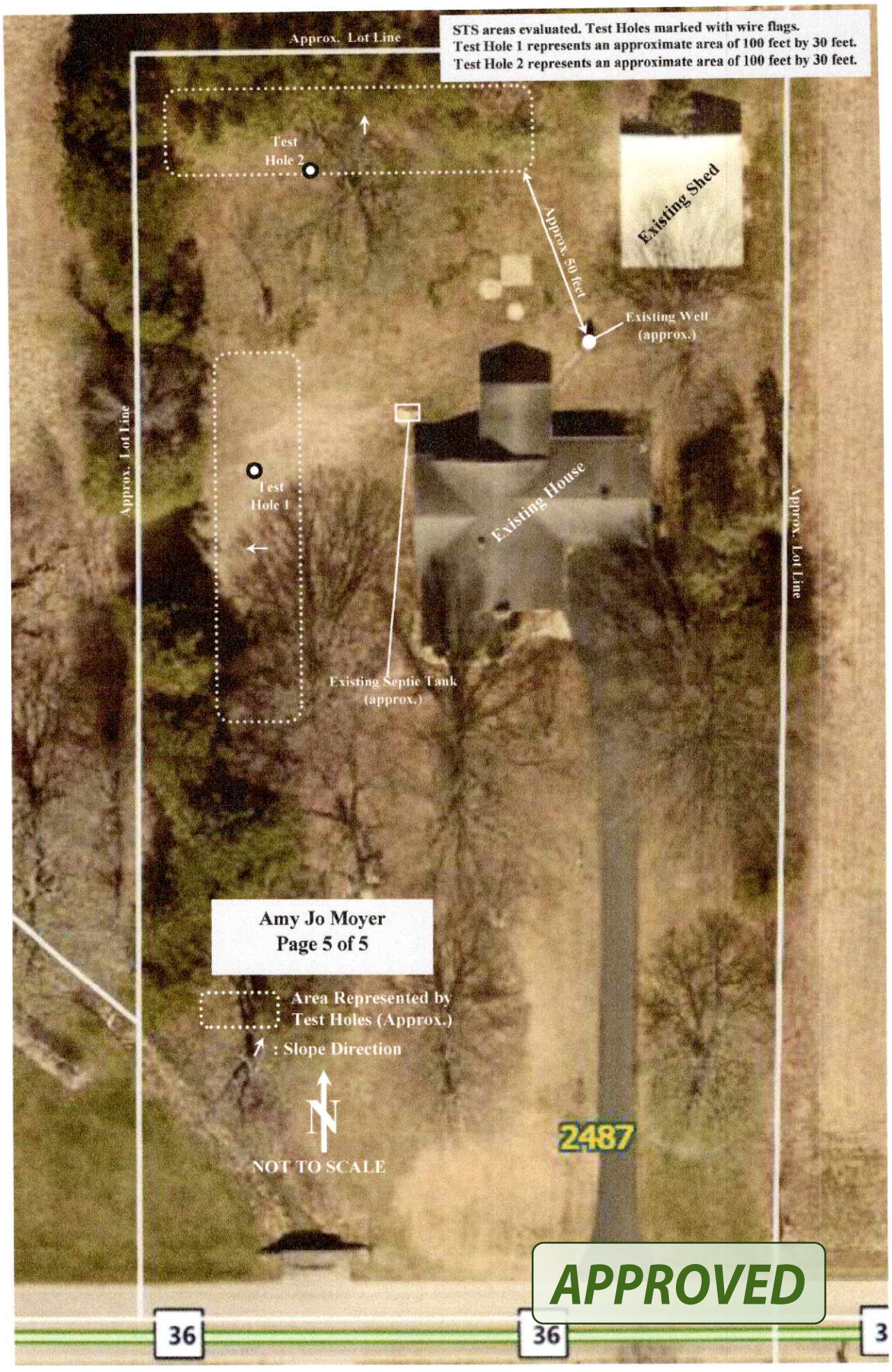
Soil Structure

Grade		Size		Type (Shape)	
Structureless	0	Very Fine	vf	Granular	gr
Weak	1	Fine	f	Angular Blocky	abk
Moderate	2	Medium	m	Subangular Blocky	sbk
Strong	3	Coarse	co	Platy	pl
		Very Coarse	vc	Prismatic	pr
		Extr. Coarse	ec	Columnar	cpr
		Very Thin*	vn	Single Grain	sg
		Thin*	tn	Massive	m
		Thick*	tk	Cloddy	CDY
		Very Thick*	vk		

* The sizes Very Thin, Thin, Thick, and Very Thick, are used when describing platy structure only. Substitute thin for fine, and thick for coarse when describing platy structure.

Moist Consistence

Loose	l
Very Friable	vfr
Friable	fr
Firm	fi
Very Firm	vfi
Extremely Firm	efi


STS areas evaluated. Test Holes marked with wire flags.
Test Hole 1 represents an approximate area of 100 feet by 30 feet.
Test Hole 2 represents an approximate area of 100 feet by 30 feet.
Approx. Lot Line
Test Hole 2
Existing Shed
Approx. 50 feet
Existing Well (approx.)
Approx. Lot Line
Test Hole 1
Existing House
Approx. Lot Line
Existing Septic Tank (approx.)
Amy Jo Moyer
Page 5 of 5
Area Represented by Test Holes (Approx.)
: Slope Direction
N
NOT TO SCALE
2487
APPROVED
36
36