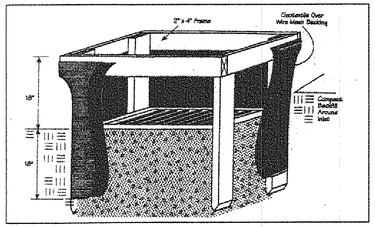
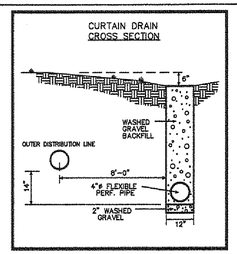
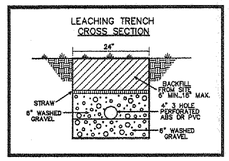
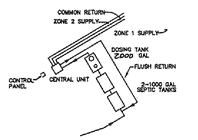
SHEET / OF

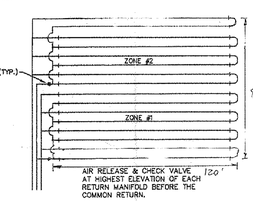






KATHRYN DAUGHTERS
No. 1996R039157
1A-44-11





AIR RELEASE & CHECK VALVE AT HIGHEST ELEVATION OF EACH RETURN MANIFOLD BEFORE THE COMMON RETURN. 120'

EACH LATERAL WILL FEED FROM THE LOWER RUN IN THE LATERAL AND RETURN FROM THE HIGHER RUN IN THE LATERAL.

ANONIMA COLROLEL SOCIEDAD
VOL 670 – PG 986
1A-44-8

S 89°26'42" E 778.45'

5/8" IP SET

N 25°40'00" W 288.70'

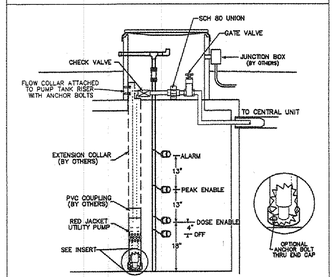
GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

AERMOTOR MODEL: TEP20-50-115

1.25" DISCHARGE	1/16" MAX. SOLIDS HANDLING
0.5 HORSEPOWER	1 PHASE
115 VOLT	60 HZ
12.0 AMPS	MULTI-STAGE CENTRIFUGAL



DOSING CHAMBER DETAIL
FOR 15 GPM AMERICAN LAMINAR FLOW COLLAR (LFC15)
NTS

NOTES:

1). DRIP INSTALLER TO CONSULT WITH DRIP DESIGNER FOR ANY CHANGES

2). DRIP SYSTEM AND DUPLICATION AREAS HAVE BEEN MARKED OFF TO PROHIBIT DISTURBANCE OF AREA DURING HOME CONSTRUCTION.

3). INSTALLER TO PROVIDE AS-BUILT OF DRIP SYSTEM TO HOME OWNER AND LAKE COUNTY HEALTH DEPARTMENT.

4). SEPTIC APPROVAL IS GOOD FOR A 1 YEAR PERIOD.

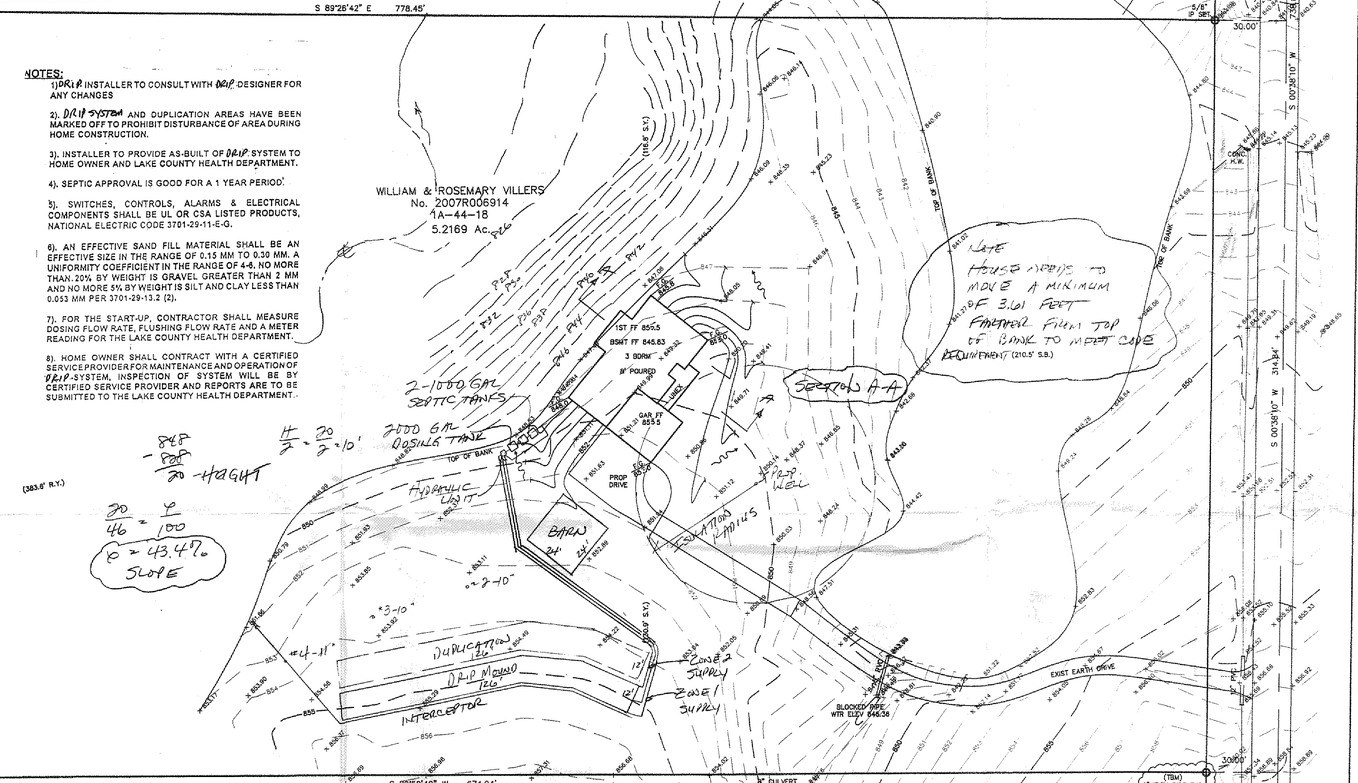
5). SWITCHES, CONTROLS, ALARMS & ELECTRICAL COMPONENTS SHALL BE UL OR CSA LISTED PRODUCTS, NATIONAL ELECTRIC CODE 3701-29-11-E-G.

6). AN EFFECTIVE SAND FILL MATERIAL SHALL BE AN EFFECTIVE SIZE IN THE RANGE OF 0.15 MM TO 0.30 MM. A UNIFORMITY COEFFICIENT IN THE RANGE OF 4-6. NO MORE THAN 20% BY WEIGHT IS GRAVEL GREATER THAN 2 MM AND NO MORE 5% BY WEIGHT IS SILT AND CLAY LESS THAN 0.053 MM PER 3701-29-13.2 (2).

7). FOR THE START-UP, CONTRACTOR SHALL MEASURE DOSING FLOW RATE, FLUSHING FLOW RATE AND A METER READING FOR THE LAKE COUNTY HEALTH DEPARTMENT.

8). HOME OWNER SHALL CONTRACT WITH A CERTIFIED SERVICE PROVIDER FOR MAINTENANCE AND OPERATION OF DRIP SYSTEM. INSPECTION OF SYSTEM WILL BE BY CERTIFIED SERVICE PROVIDER AND REPORTS ARE TO BE SUBMITTED TO THE LAKE COUNTY HEALTH DEPARTMENT.

WILLIAM & ROSEMARY VILLERS
No. 2007R006914
1A-44-18
5.2169 Ac.±



LATE HOUSE MODELS TO MOVE A MINIMUM OF 3.61 FEET FARTHER FROM TOP OF BANK TO MEET CODE REQUIREMENTS (210.5' S.B.)

H/L = 20/2 = 2:10'

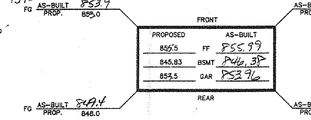
20 - HEIGHT

20/46 = Y/100
Y = 43.47%
SLOPE

LCR = 3.0
360/3.0 = 120'
3.0/0.4 × 7.5+3'+3'+13.5 - WIDTH
TOTAL LENGTH = 120'+3'+3'+5' = 126'
TOTAL LINES = 16 × 120' = 1920'

DRAINAGE AREA = 2.07AC
SLOPE = 5.74%
L = 45.0'
Q = C·I·A
Q = (0.60)(3.45)(2.07)
Q = 4.29 CFS

Need 24" @ 0.75% Q = 7.00 CFS



TBM – 1" IRON PIPE FND
ELEV – 860.00

EMERSON ROAD - 60'

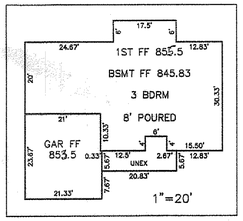
Stormwater Management Plan
Approved as shown and/or noted
JAMES R. GILLS, P.E.
County Drainage Engineer
By J.S. Date 6-26-10
ORIGINALLY APPROVED 12.17.09
BARN ADDED

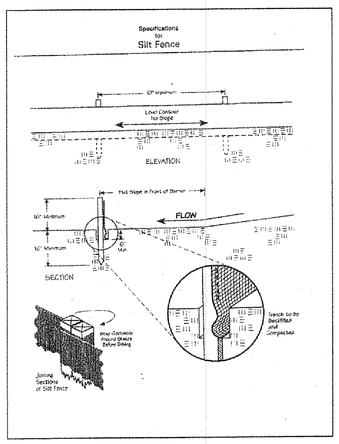
"I, the undersigned hereby certify that this topography indicated by 6', 1', or 2' contours, and elevations shown hereon represent an actual field survey made by me on this 23RD day of DEC 20 09 and that the elevations were taken at appropriate intervals and that as of that date they existed as indicated hereon."

Harry Jones #6343
Name Reg. No.

Temporary Seeding Species Selection			
Seeding Dates	Species	Lb./1,000 ft.²	Per Ac.
March 1 to August 15	Oats	3	4 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
August 16 to November 1	Rye	3	2 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Wheat	3	2 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
November 1 to Spring Seeding	Use mulch only, sodding practices or dormant seeding.		

Note: Other approved seed species may be substituted.





Erosion and Sediment Control Schedule

Ingress–Egress
A stone access drive complete with under lying geo–textile fabric (20 feet wide and 50 feet long) for ingress and egress at the site shall be installed. This drive shall be the only entrance and exit to the site.

Silt Fence
A silt fence shall be installed prior to any earthwork activities at the site in the locations shown on the site plan as well as along the front of any lot that slopes towards the street.

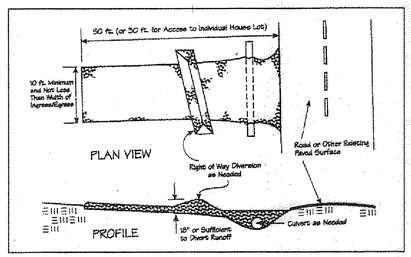
Temporary Seeding
Disturbed areas of the site that are to remain idle for more than twenty–one(21) days shall be properly seeded and straw mulched within seven(7) days of completion of intitial grading.
Temporary seeding and mulching ao a thirty(30) foot strip of the entire front of the lot shall be maintained on the site once initial grading is complete.

Stabilization of critical areas within fifty(50) feet of any stream or wetland shall be complete within two(2) days of the disturbance if the site is to remain inactive for longer than fourteen(14) days.

Mulching
Straw–mulch shall be applied at a rate of 1 bale per every ten (10) feet of curb, at a width of thirty(30) feet to the entire length of the lot. Wood chips may also be used but must be spread at a minimum depth of four inches over the thirty–foot width and must be accompanied by a properly installed silt

Maintenance
Erosion and sediment controls shall be inspected every seven(7) days or within 24 hours of a 0.5" or greater rainfall event. Necessary repairs shall be made at this time.

JAMES & THEODORA ROBINSON
No. 1997R003456
1A-44-12



"AS BUILT" CERTIFICATION
I, HEREBY CERTIFY THAT THE CIRCLED GRADES ARE EXISTING FINISH GRADES CHECKED IN THE FIELD ON JUNE 28, 2010 AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Harry Jones #6343
REGISTERED SURVEYOR REG. NO.

50' ISOLATION RADIUS

"I CERTIFY THIS SEWAGE SYSTEM DESIGN MEETS THE MINIMUM REQUIREMENTS ESTABLISHED BY THE LCGHD IN THE HSTS GUIDANCE MANUAL, AND THE REQUIREMENTS AND RECOMMENDATIONS OF THE SYSTEM MANUFACTURER."

Harry Jones #6343
Name Reg. No.

EXISTING UTILITIES NOTE:
THE SIZE AND LOCATION, BOTH HORIZONTAL AND VERTICAL OF THE UNDERGROUND UTILITIES SHOWN HEREON, HAVE BEEN OBTAINED BY A SEARCH OF AVAILABLE RECORDS. VERIFICATION BY FIELD OBSERVATION HAS BEEN CONDUCTED WHERE PRACTICAL, HOWEVER, BABCOCK, JONES AND ASSOCIATES INC. DOES NOT GUARANTEE THE COMPLETENESS NOR ACCURACY THEREOF.

STATE OF OHIO HARRY S. JONES JR. S-6343 REGISTERED PROFESSIONAL SURVEYOR

REV NO.	DESCRIPTION	DATE	BY	CHK'D
1	REVISED LCHD HEALTH DEPT	11-9-09	HJ	HJ
2	REVISED PER L.C. BLDG DEPT	12-15-09	HJ	HJ
3	REVISED FINISH FLOOR	12-21-09	HJ	HJ

BABCOCK, JONES AND ASSOCIATES, INC
CIVIL ENGINEERS – SURVEYORS – LAND PLANNERS
PAINESVILLE OHIO 44077

DATE	10/14/09
DESIGN BY	H.J.
DRAWN BY	B.P.
APPROVED BY	H.J.
CREW CHIEF	R.B.

SITE PLAN
FOR
BILL VILLERS

EMERSON ROAD (P.P.# 1A-44-18)
MADISON TOWNSHIP LAKE COUNTY STATE OF OHIO

SCALE	1"=30'
JOB NO	05-012-T
SHEET	OF
1	2