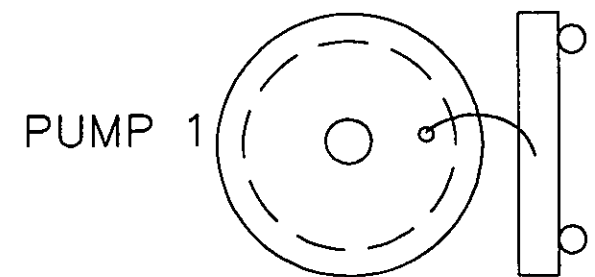
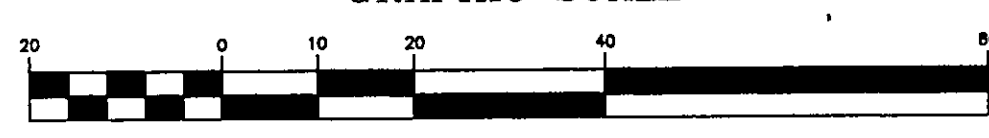


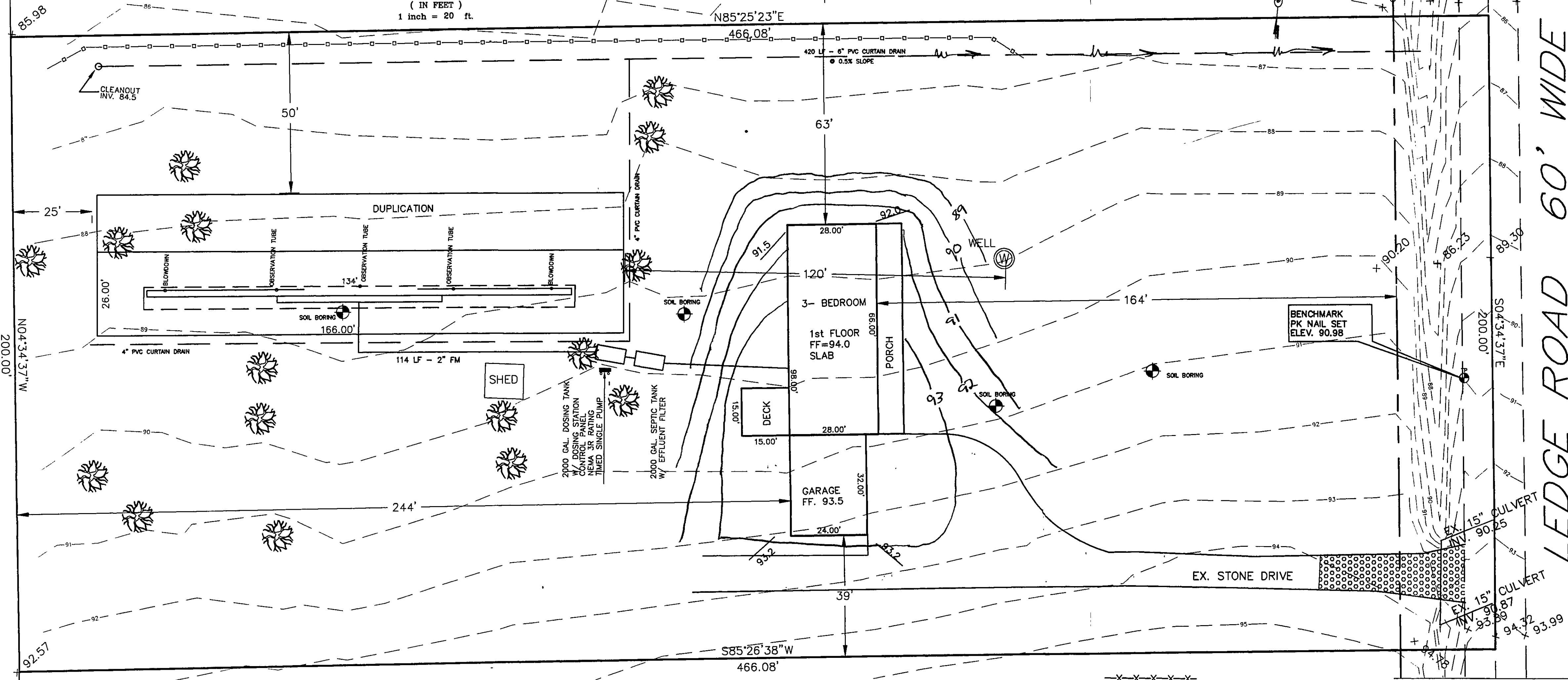
DOSING CHAMBER CONTROL PANEL



GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.



GENERAL NOTES:

1. The system will be installed in accordance with the rules and regulations of the Ohio EPA and the County Health Department.
2. The engineer shall be responsible for setting grades and elevations and for ensuring satisfactory installation of the treatment system.
3. The existing septic tank shall be pumped by a licensed septic disposal company. The tank will then be crushed and filled with sand to eliminate voids.
4. All pipe shall be SCH 40 PVC.

INSTALLATION PROCEDURES FOR MOUND SYSTEM CONSTRUCTION

1. Stake out mound so that absorption bed runs parallel to the contour.
2. Locate upslope edge of the absorption bed and then the lower.
3. Cut trees and remove vegetation from the site close to ground level. It is not necessary to remove the stumps unless a significant number of stumps exist. At which time the basal area may be enlarged.
4. Trench and lay the force main from the pumping chamber to the mound. Perpendicular to the side of the mound. Cut and cap the pipe one foot beneath the ground surface. Lay the pipe below the frost line or slope back to the pumping chamber. Backfill and compact soil around pipe to prevent back seepage of effluent along pipe. This step must be done before plowing to avoid compacting and disturbing the surface.
5. Till the basal area of the mound to improve infiltration at the sand / soil interface. Check soil moisture. Plowing may be done with a moldboard or chisel plow and should always be done along the contour. Backhoe bucket teeth are not satisfactory and are not to be used.
6. Extend the effluent pipe to several feet above the ground surface.
7. Place the fill material around the edge of the plowed area. * Keep wheels of truck off plowed area. ** Stay off downslope side, work from ends of upslope side.
8. Move fill into place with the tractor's blade. Always keep a minimum of six (6) inches of sand beneath the tracks to prevent compaction of the natural soil. Place fill to the required depth at the top of the absorption bed. Shape sides to the desired slope.
9. Form the bed with the blade of the tractor. The bottom of the absorption bed should be hand leveled and checked with a surveyors level.
10. Place the coarse aggregate in the bed to a minimum depth of six (6) inches and level. Place the distribution system on the aggregate, connecting to the pipe from the dosing chamber. Make sure the laterals are as level as possible. Place two (2) more inches of aggregate over the distribution system. Soft limestone should not be used since it dissolves and flakes with time.
11. Place a layer of synthetic fabric, such as Typar, Mirafit of the equivalent over the aggregate. The fabric will prevent soil particles from migrating through the aggregate / soil interface.
12. Place soil on top of the bed to a depth one (1) foot in the center and six (6) inches at the outer edges of the bed. This may be subsoil of topsoil.
13. Place an additional six (6) inches of good quality top soil over the entire mound surface. Finally, grade the mound and area with light weight equipment so that surface water moves away from the mound and does not accumulate.
14. Landscape the mound by planting grass, using the best vegetation available. Shrubs can be planted around the base and up the side slope. The shrubs should be moisture tolerant.

SEPTIC PRESSURE DISTRIBUTION SYSTEM:

DESIGN FLOW : 360 GALLONS PER DAY
FIELD WIDTH : 3.5'
FIELD LENGTH: 134'

LATERAL LENGTH : 134'
LATERAL SPACING: 3' O.C.
NO. OF LATERALS: 1
1/4" HOLES PER LATERAL: 42
LATERAL DIAMETER: 1"

MANIFOLD LENGTH: 6'
MANIFOLD SIZE : 2"

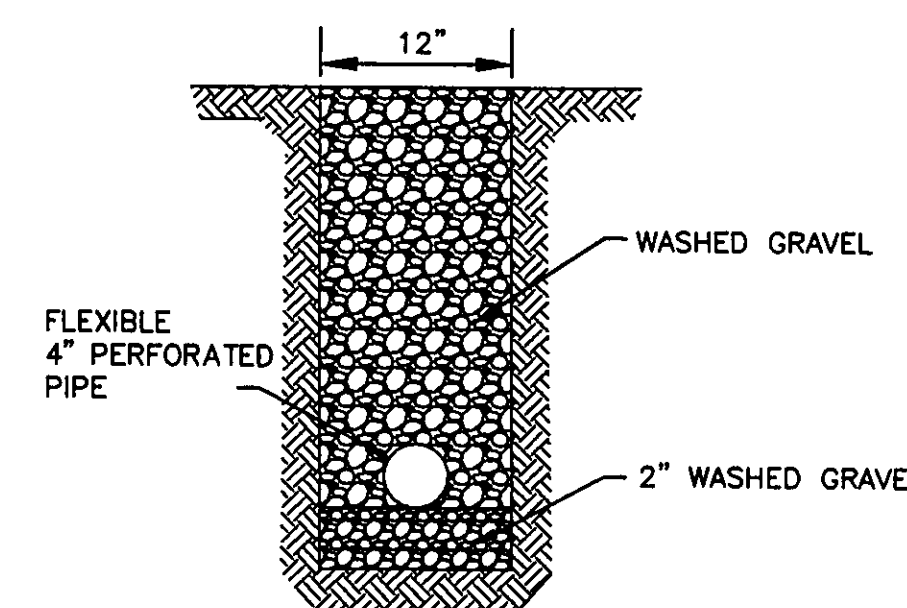
SYSTEM FLOW RATE: 44.14 GPM
STATIC LIFT : 8'
PIPE LOSSES : 0.6'
DOSING VOLUME : 63 GALLONS
SWITCH SEPARATION : 6"

USE MYERS MESO PUMP
WITH 1/2 HP MOTOR OR EQUAL.

Stormwater Management Plan
Approved as shown and/or noted
JAMES R. GILLS, P.E.
County Drainage Engineer

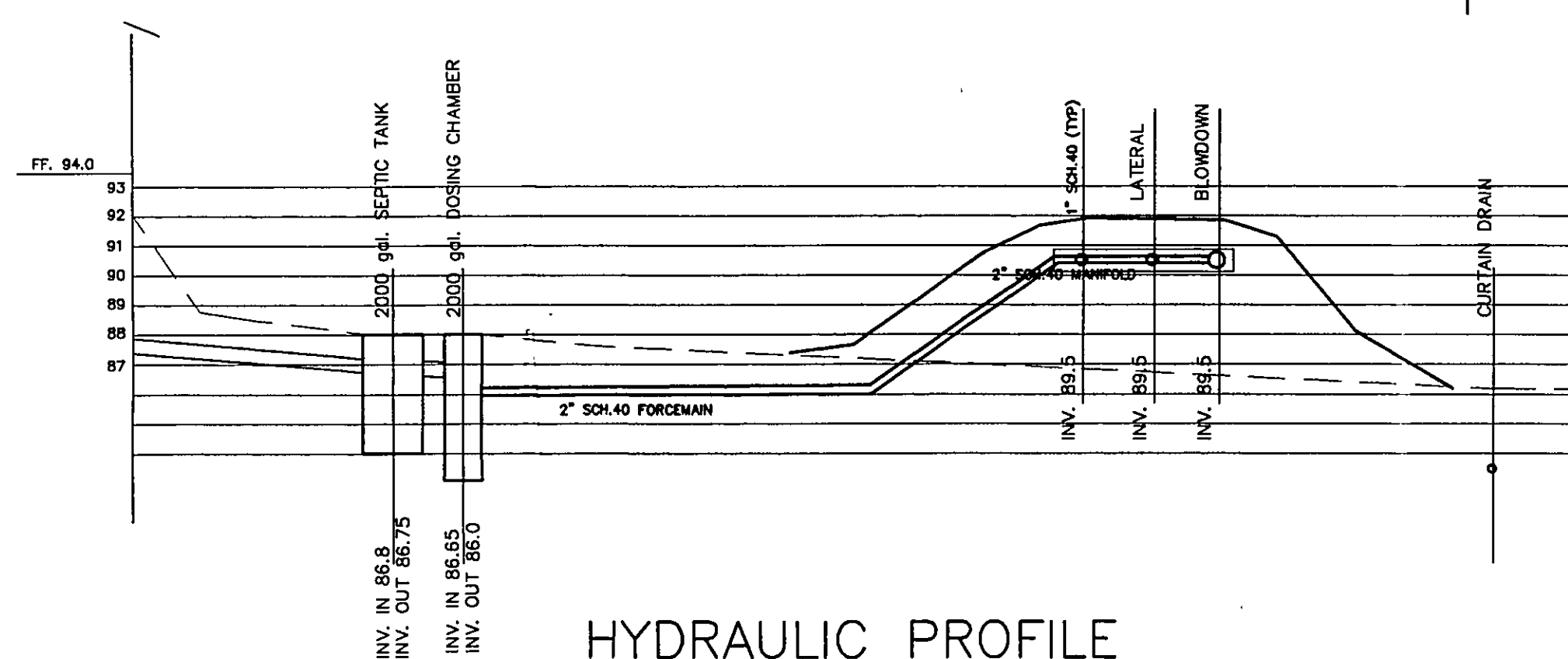
By J.R. Gills Date 10/19/06

ORIGINALY APPROVED 10/10/06



TYPICAL CURTAIN
DRAIN CROSS SECTION

NO SCALE



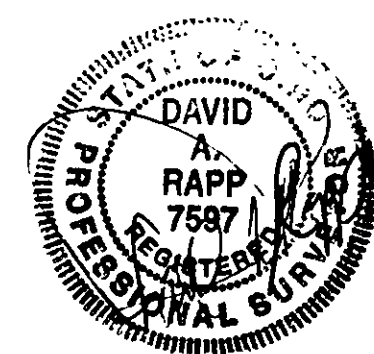
HYDRAULIC PROFILE

1. Gravel in the Absorption Bed shall be 3/4"-1 1/2" in size.
2. The Cap material shall be a well sifted Topsoil suitable for growing a cover material.

TYP. CROSS SECTION
NOT TO SCALE

I, the undersigned, hereby certify that the topography shown thereon, indicated by one foot contours and elevations represents an actual field topographic survey made by me in October, 2006 and that the elevations were taken at appropriate intervals and that as of that date they existed as indicated thereon.

DAVID A. RAPP
REGISTRATION NO. 14116



SAND FILL SPECIFICATIONS

< 20% greater than 2 mm
< 5% smaller than 0.053mm
plus

1. Total sample sieve analysis fits preferably between the solid lines of Fig. 6. Permissible to the dashed line or
2. ASTM C-33 Specifications or
3. Effective Diameter D10 = 0.15-0.30mm

Coefficient of Uniformity D60/D10 = 4-6

DAVID RAPP SERVICES

3406 DAYTON ROAD MADISON, OHIO 44057
440-983-1607

DATE: SEPT. 30, 2006

DRAWN BY: DAR

CHECKED BY:

APPROVED BY:

PE No. P.E. NO. 62081

CHARLES W. MACE

PP# 01A-049-0-00-035-0
MADISON TOWNSHIP, OHIO

SEPTIC SYSTEM IMPROVEMENTS

Hor. Scale Vert. Scale

CONTRACT No.

26064

SHEET No. OF

1 1