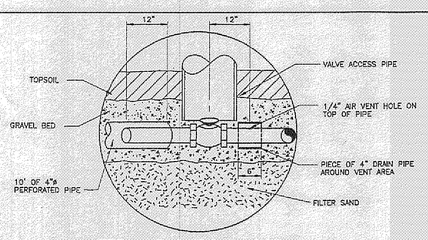
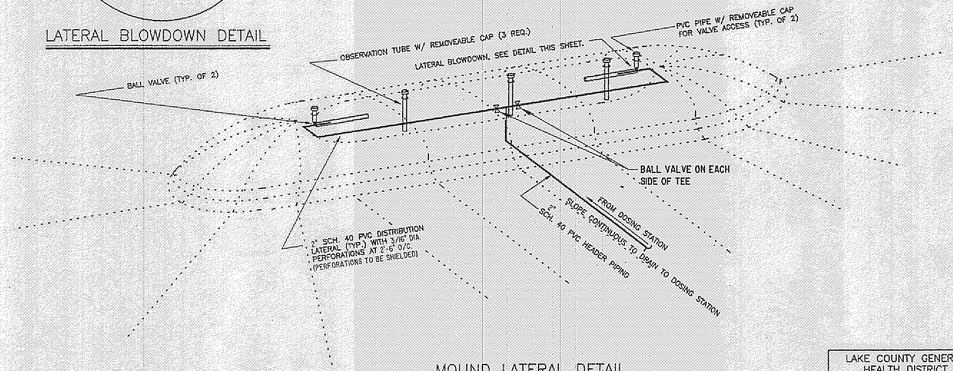


LATERAL BLOWDOWN DETAIL



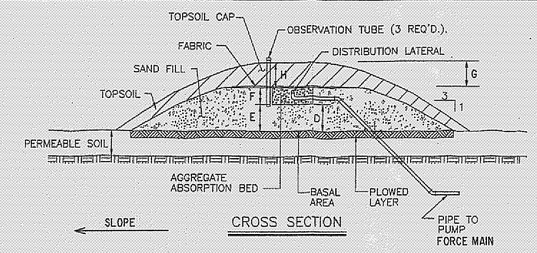
MOUND LATERAL DETAIL

NOTES: 1. ALL FITTINGS & JOINTS, SOLVENT WELD OR SCREWED.
2. SYSTEM DESIGNER TO VERIFY DIMENSIONS AND SIZING OF ALL COMPONENTS.

LAKE COUNTY GENERAL HEALTH DISTRICT	
MOUND LATERAL DETAILS	
DATE: AUGUST, 1998	FIGURE 10
REVISED: JANUARY, 1999	NO SCALE

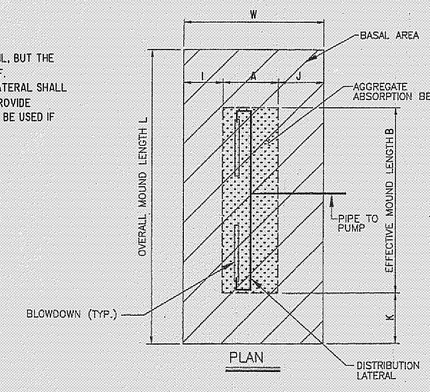
MOUND CALCULATIONS

NUMBER OF BEDROOMS	3	
BASE FLOW RATE (gpd)	360	
DIVERSITY FACTOR	-	
DESIGN FLOW RATE (gpd)	360	
EFFECTIVE MOUND LENGTH	134.00'	
OVERALL MOUND LENGTH	154.68'	
DESIGN LINEAR LOADING RATE (gpd/lf)	2.70	
DESIGN SAND LOADING RATE (gpd/sf)	1.00	(0.90 PROPOSED)
MAXIMUM ALLOWABLE BASAL LOADING RATE (gpd/sf)	0.60	(0.36 PROPOSED) BASAL AREA =
ABSORPTION BED AREA (sf)	402	134.00' X (3.00' + 0.5(8.93) = 1000.3 SF



CROSS SECTION

NOTE: 1. THE ENTIRE MOUND SHALL HAVE 8" OF SETTLED TOPSOIL, BUT THE CENTER SHALL BE CROWNED TO 10"± TO PROMOTE RUNOFF.
2. PERFORATIONS SHALL BE PLACED DOWNWARD. EACH LATERAL SHALL BE PLACED INSIDE A 4" PERFORATED PIPE IN ORDER TO PROVIDE PERFORATION SHIELDING. OTHER SHIELDING METHODS MAY BE USED IF APPROVED BY THE LAKE COUNTY HEALTH DEPARTMENT.



PLAN

MINIMUM DIMENSIONS

A =	3.00'
B =	134.00'
D =	14"
E =	14.72"
F =	9"
G =	8"
H =	10"(SEE NOTE 1)
I =	8.93'
J =	8.75'
K =	10.34'
L =	154.68'
W =	20.68'

LAKE COUNTY GENERAL HEALTH DISTRICT	
LAKE COUNTY MOUND SYSTEM DESIGN INFORMATION SHEET	
DATE: AUGUST, 1998	FIGURE 9
REVISED: MARCH, 1999	NO SCALE

NOTES:

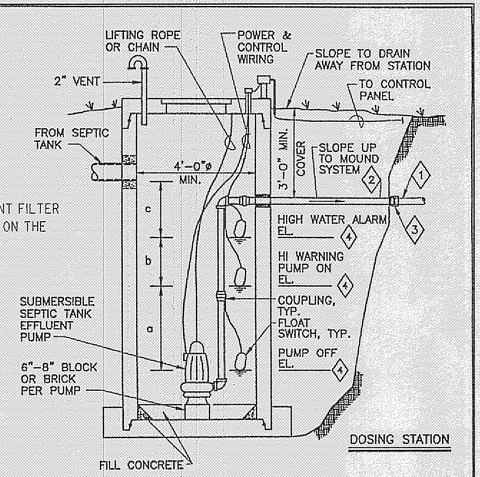
1. DESIGN STATION AND BASE TO PREVENT FLOTATION IN AREAS OF HIGH GROUND WATER.
2. ALL JOINTS AND PENETRATIONS SHALL BE WATERTIGHT TO PREVENT INFILTRATION OF GROUND/SURFACE WATER.
3. STATION PUMP SHALL BE DESIGNED TO DOSE THE MOUND BETWEEN 4–8 CYCLES.
4. FORCE MAIN, DISTRIBUTION LATERAL DESIGN AND DETAILED STATION INCLUDING DIMENSIONS, AND ELEVATIONS SHALL BE SUPPORTED BY CALCULATIONS AND OTHER APPROPRIATE DOCUMENTATION IN PLAN SUBMITTALS.
5. INSTALLATION SHALL MEET ALL APPLICABLE CODES/CRITERIA.
6. CONTROL PANEL WITH VISUAL AND AUDIBLE HIGH LEVEL ALARM SHALL BE LOCATED IN THE GARAGE, BASEMENT OR OTHER SUITABLE INDOOR LOCATION.
7. SPECIAL CONSIDERATION SHALL BE GIVEN WHEN DESIGNING A DOWNHILL PUMPING APPLICATION TO PREVENT SIPHONING. PROVIDE A BLEEDER HOLE TO PREVENT SIPHONING.
8. WET WELL CAPACITY TO ACCOUNT FOR PIPING DRAINING BACK TO DOSING STATION.
9. THE FOLLOWING TABLE INDICATES THE NECESSARY VOLUME CAPACITY BETWEEN FLOATS:

LOCATION	RECOMMENDED MINIMUM VOLUME CAPACITY
BETWEEEN PUMP OFF FLOAT & WARNING PUMP	.75*DDF+DPV (a)
BETWEEN WARNING PUMP FLOAT & HIGH WATER ALARM FLOAT	.25*DDF+DPV (b)
ALARM FLOAT TO THE DOSING CHAMBER INLET	DDF (c)

DDF – DAILY DESIGN FLOW
DPV – DISCHARGE PIPE VOLUME

MODIFY 1500 GAL. SEPTIC TANK TO USE AS DOSING TANK

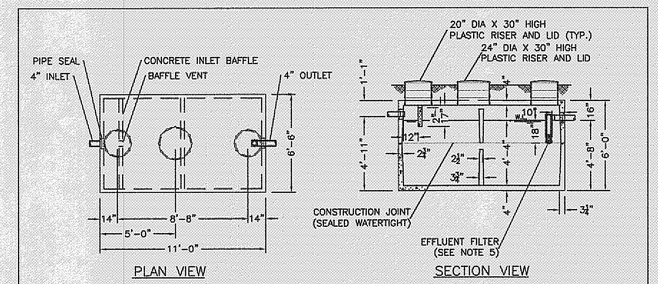
A SECOND EFFLUENT FILTER SHALL BE PLACED ON THE PUMP OUTLET



DOSING STATION

4 DESIGN ELEVATIONS BY ENGINEER/DESIGNER.
3 SCHD. 40 PRESSURE RATED ADAPTER COUPLING.
2 SCHD. 40 GALV. STL. ACROSS EXCAVATION.
1 SCHD. 40 PVC OR OTHER APPROVED PRESSURE PIPE AND FITTINGS MATERIAL.

LAKE COUNTY GENERAL HEALTH DISTRICT	
LAKE COUNTY MOUND SYSTEM DOSING STATION	
DATE: AUGUST, 1998	FIGURE 11
REVISED: JULY, 1999	NO SCALE



PLAN VIEW

SECTION VIEW

NOTES:

1. REINFORCED PRECAST CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 5000 PSI @ 28 DAYS.
2. PRECAST CONCRETE TANK SHALL MEET OR EXCEED SPECIFICATIONS AS SET BY O.A.C. RULE 3701–293–11.
3. CONCRETE JOINT SEALANT CONFORMS TO ASTM C–990.
4. TANK SEALS CONFORM TO ASTM C–923.
5. EFFLUENT FILTER RETAINS SOLIDS GREATER THAN 1/16" AND CONFORMS TO ASTM C–1227.
6. STAMP OR LABEL TOP OF TANK AS FOLLOWS:
   MACK INDUSTRIES LOGO
   2000 GAL. TANK CAPACITY
   DATE OF MANUFACTURE

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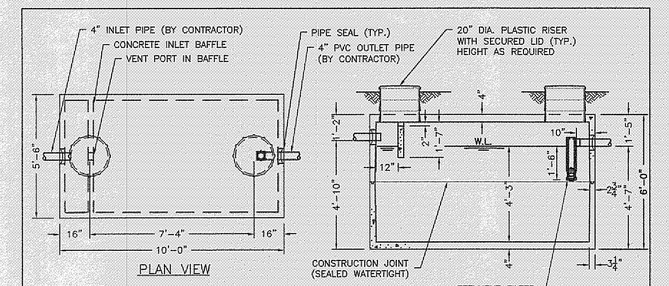
DUAL COMPARTMENT 2000 GALLON SEPTIC TANK		
O.D.H. 2007 COMPLIANCE, OAC RULE 3701–29–11		
DRAWN BY: CJ	SCALE: 1/4"=1'–0"	DRAWING NO.:
DATE: 4/5/07	REV:	D 1000 GAL

MACK INDUSTRIES, INC.
201 COLUMBIA ROAD, VALLEY CITY, OHIO 44280 (330) 483–3111



PLAN VIEW

(TO BE MODIFIED & USED AS DOSING TANK)

SECTION VIEW

NOTES:

1. REINFORCED PRECAST CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 5000 PSI @ 28 DAYS.
2. PRECAST CONCRETE TANK SHALL MEET OR EXCEED SPECIFICATIONS AS SET BY O.A.C. RULE 3701–293–11.
3. CONCRETE JOINT SEALANT CONFORMS TO ASTM C–990.
4. INLET AND DISCHARGE PIPE SEALS CONFORM TO ASTM C–923.
5. EFFLUENT FILTER RETAINS SOLIDS GREATER THAN 1/16" AND CONFORMS TO ASTM C–1227.
6. LABEL TOP OF TANK AS FOLLOWS:
   MACK INDUSTRIES LOGO
   1500 GAL. TANK CAPACITY
   DATE OF MANUFACTURE
   MAXIMUM BURIAL DEPTH OF 2'–0"

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STATE APPROVAL PENDING

1500 GALLON SEPTIC TANK		
DRAWN BY: DWH	SCALE: 3/8"=1'–0"	DRAWING NO.: 1500 GAL. SEPTIC
DATE: 3–10–07	REV:1.) 4/12/07 DWH	
REV:1.) O.D.H. 2007 COMPLIANCE,O.A.C. RULE 3701–29–11		

MACK INDUSTRIES, INC.
201 COLUMBIA ROAD, VALLEY CITY, OHIO 44280 (216)483–3111

REVISIONS	BY
11/21/11	TDR

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SITE PLAN

P.P. No. 08-A-015-D-00-028-0 PALMER ROAD
CONCORD TWP., OHIO 44077

ONOFREY RESIDENCE

DRAWN	WSO
CHECKED	DWN
DATE	NOV. 9, 2011
SCALE	NONE
JOB NO.	11096-004
SHEET	2/2
OF	SHEETS

11096-004

FORM C:\BOIZ\LIBRARY\FORMS\24X36JM.DWG