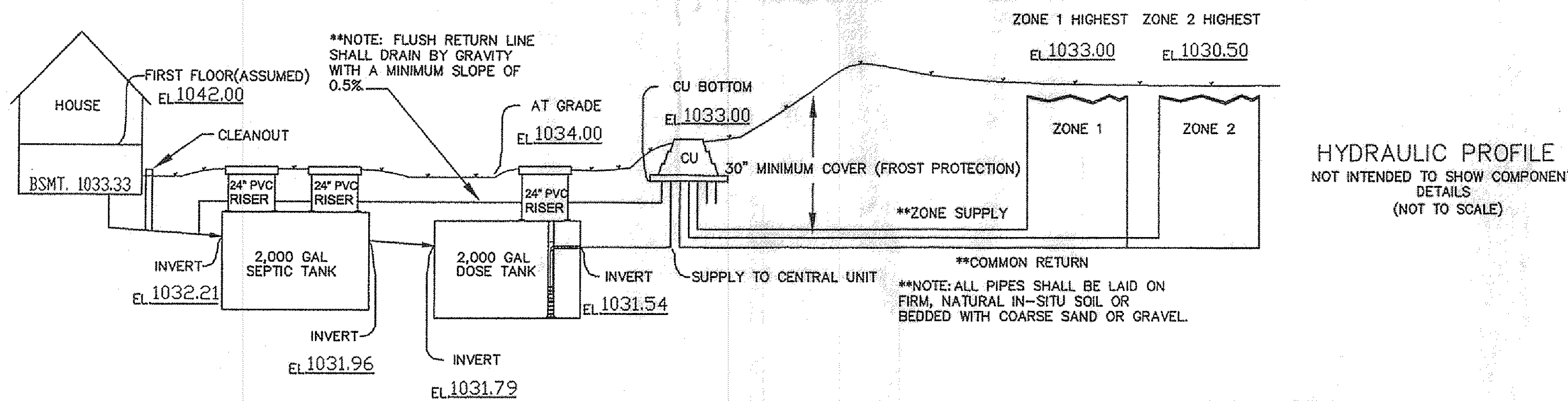




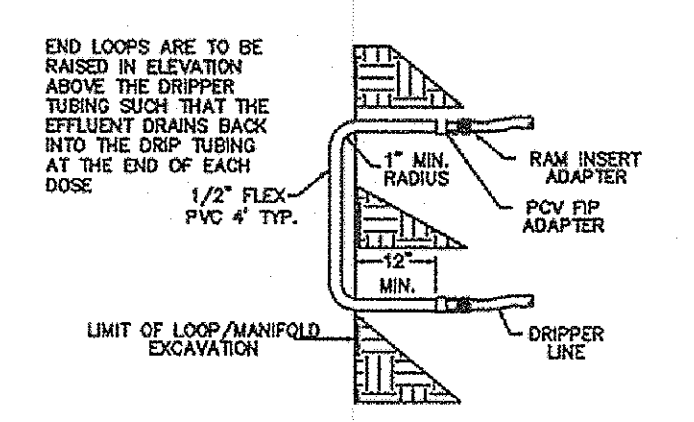
HYDRAULIC PROFILE
NOT INTENDED TO SHOW COMPONENT
DETAILS
(NOT TO SCALE)

****IMPORTANT TANK NOTES**

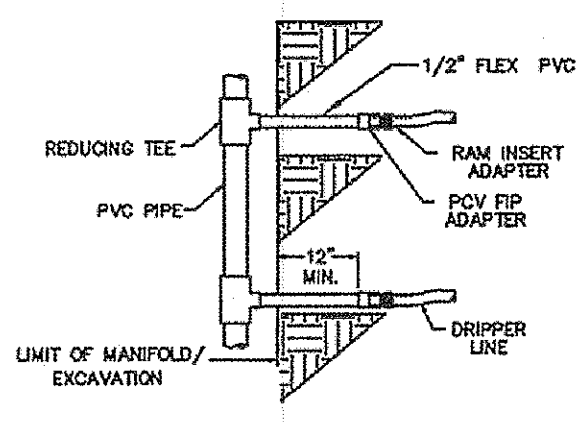
THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR PROVIDING WATERPROOF TANKS. BOTH THE SEPTIC TANK AND THE DOSING TANK SHALL BE FITTED WITH FLEXIBLE BOOTS ON THE INLETS AND OUTLETS. TANK OPENINGS ARE TO HAVE ADAPTER RINGS CAST IN THE TOP TO ACCEPT PVC RISERS. TANKS SHALL BE WATER TIGHT PER OHIO ADMINISTRATIVE CODE CHAPTER 3701-29 "SEWAGE TREATMENT SYSTEM RULES".

****SYSTEM DESCRIPTION**

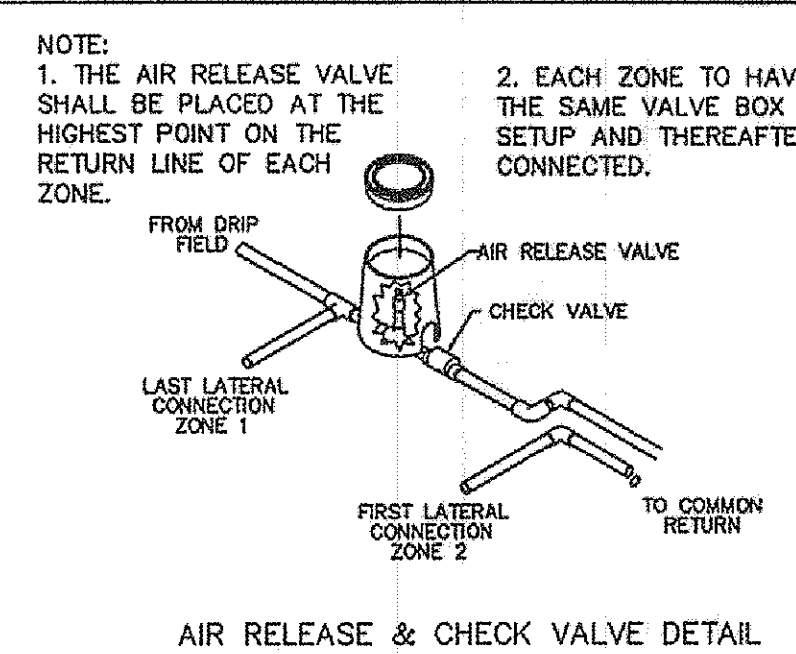
DOMESTIC SEWAGE WILL FLOW BY GRAVITY THROUGH THE SEPTIC TANK THEN INTO A FINAL DOSING TANK. THE CENTRAL UNIT WILL DISPOSE OF THE EFFLUENT BY ALTERNATELY DOSING MULTIPLE ZONES IN THE ABSORPTION AREA. THE CENTRAL UNIT COMPRISES BOTH THE CONTROLS AND THE HYDRAULIC UNIT. THE HYDRAULIC UNIT INCLUDES WASTEWATER FILTRATION, FLOW MEASUREMENT AND VALVING TO ISOLATE FLOWS TO ZONES.



TYPICAL DRIP LOOP CONNECTION
NTS



TYPICAL MANIFOLD CONNECTION
NTS



AIR RELEASE & CHECK VALVE DETAIL

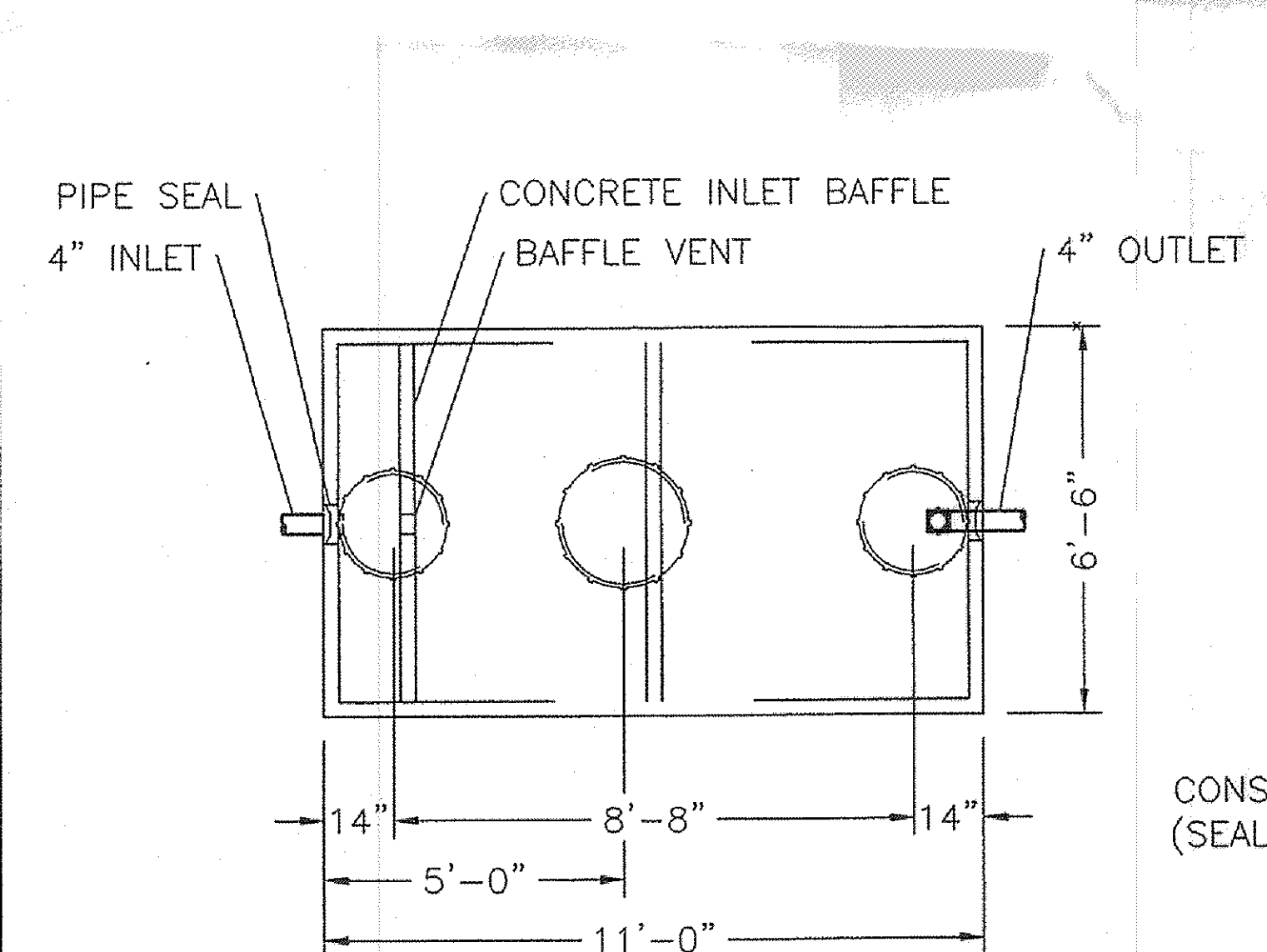
TITLE: HYDRAULIC PROFILE & TYPICAL DRIP DETAILS
MOUND INSTALLATION

Homeowner
Location
County, Ohio

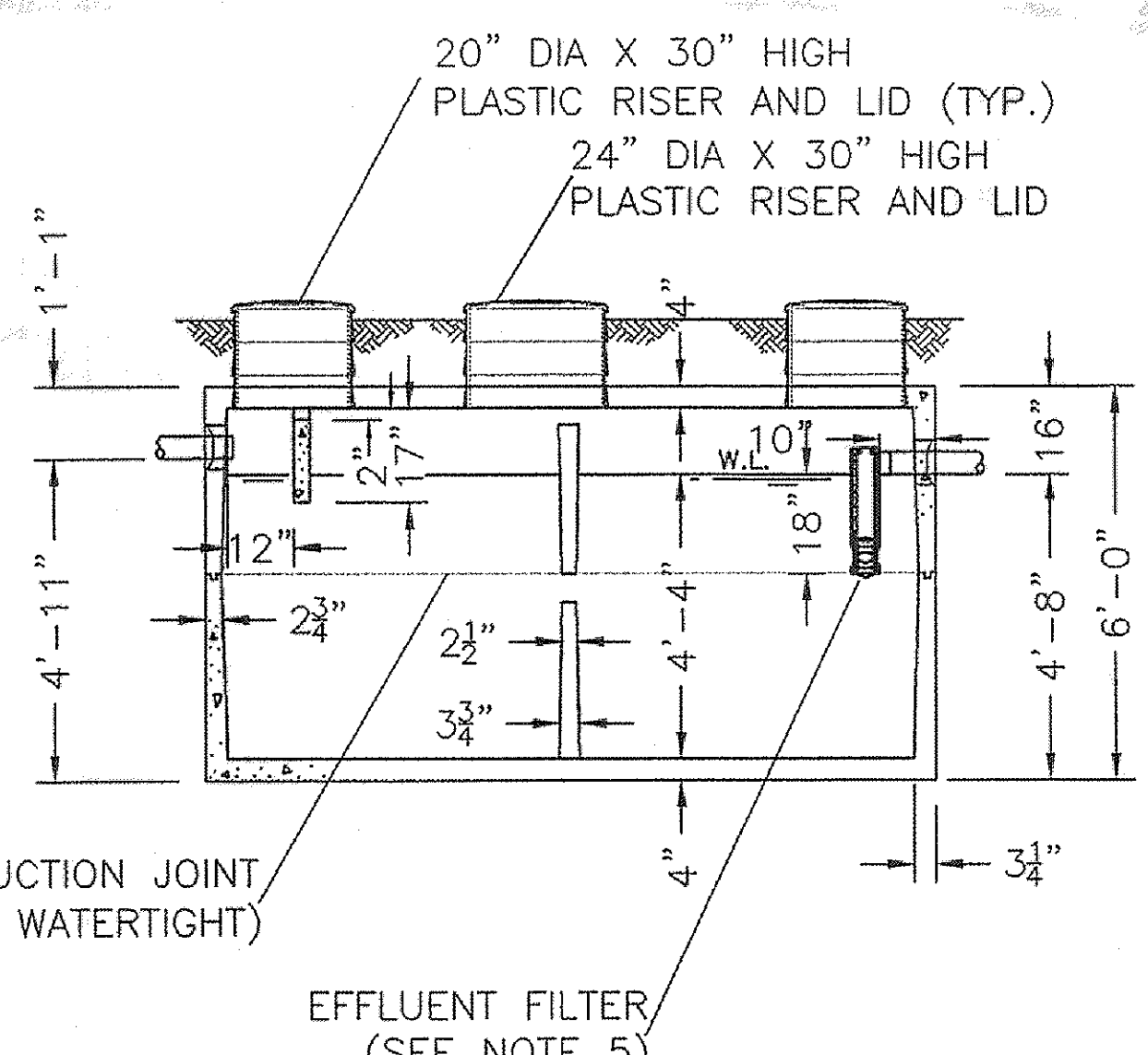
DR. BY: RKM
CK BY: EJK
DATE:
SCALE: None
FILE:

Engineered By
StreamKey
Engineered Plumbing & Wastewater Solutions
10515 Reading Road
Cincinnati, OH 45241
513-792-1221

Appendix 1, Section C, 2



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

THIS DRAWING IS THE PROPERTY OF MACK INDUSTRIES, INC., AND IT OR THE TECHNOLOGY CONTAINED HEREIN MAY NOT BE REPRODUCED NOR USED EXCEPT AS ORIGINALLY INTENDED WITHOUT THE EXPRESSED CONSENT OF MACK INDUSTRIES, INC.

STATE APPROVAL PENDING

DUAL COMPARTMENT 2000 GALLON SEPTIC TANK			
O.D.H. 2007 COMPLIANCE, OAC RULE 3701-29-11			
DRAWN BY:	CJ	SCALE:	1/4"=1'-0"
DATE:	4/5/07	REV:	
DRAWING NO.:		D 1000 GAL	
MACK INDUSTRIES, INC.			
201 COLUMBIA ROAD, VALLEY CITY, OHIO 44280 (330) 483-3111			

AMERICAN MANUFACTURING COMPANY

SEPTIC DRIP CALCULATION SHEET

Job Name:	W.R. Dawson Construction, LLC.	Location:	Concord, Ohio
Project No.:	09094	Date:	2/2/2010

1	360	GALLONS PER DAY	3	NO. OF BEDROOMS
2	140	FT. (Length)	17	FT. (Width) AREA FOR DISPOSAL LAYO 2380 FT2
3	2	ZONES		
4	1400	TOTAL DRIPPER LINE PROVIDED		(Zone 1 + Zone 2)
5	2000	SEPTIC TANK SIZE (gallons)		
6	2000	DOSING TANK SIZE (gallons)		
7	36.4	GALLONS PER INCH IN DOSING TANK (Provided From Manufacturer)		

9	ZONE ONE			
10	1190	TOTAL ABSORPTION AREA (FT2)		
11	700	LINEAR FEET OF DRIP TUBING (Total Tubing for Zone 1)		
12	188	LONGEST LATERAL LENGTH (FT)	31.85	Minimum Dose Volume (Gal/Dose)
13	3.56	DOSING FLOW RATE (GPM) (Length of tubing / 2) x (0.01 Gal/Hr) / (60 Min/Hr)		
14	5	NO. RETURN FIELD FLUSH CONNECTIONS (#/zone)		
15	8.00	FIELD FLUSH FLOW RATE (GPM) (1.6 gpm/Connection) x (no. of field flush connections)		
16	1156	TOTAL FLOW REQUIRED (GPM) (Dosing flowrate + Field flushing flowrate)		

17	ZONE TWO			
18	1190	TOTAL ABSORPTION AREA (FT2)		
19	700	LINEAR FEET OF DRIP TUBING (Total Tubing for Zone 2)		
20	140	LONGEST LATERAL LENGTH (FT)	31.85	Minimum Dose Volume (Gal/Dose)
21	3.56	DOSING FLOW RATE (GPM) (Length of tubing / 2) x (0.01 Gal/Hr) / (60 Min/Hr)		
22	5	NO. RETURN FIELD FLUSH CONNECTIONS (#/zone)		
23	8.00	FIELD FLUSH FLOW RATE (GPM) (1.6 gpm/Connection) x (no. of field flush connections)		
24	1156	TOTAL FLOW REQUIRED (GPM) (Dosing flowrate + Field flushing flowrate)		

25	12	MAXIMUM DESIGN TOTAL FLUSHING FLOW (GPM)		
26	11	FEET OF HEAD LOSS FROM HYDRAULIC UNIT (TDH) (Based Chart 2A)		

27	HYDRAULIC UNIT SUPPLY LINE			
28	1.5"	PIPE DIAMETER, (Inches) (From pump to Hydraulic Unit)		
29	15	LENGTH SUPPLY PIPE (FT) (From pump to Hydraulic Unit)		
30	5	FEET OF STATIC LIFT (From pump to Hydraulic Unit)		
31	7	TOTAL FEET HEAD LOSS IN LINE (Dynamic Head Loss + 430)		

32	FORCE MAIN SUPPLY LINE PIPE SIZE & LENGTH:			
33	1"	ZONE 1 SIZE	75	ZONE 1 LENGTH
34	1"	ZONE 2 SIZE	150	ZONE 2 LENGTH

35	RETURN FLUSH LINE SIZE & RETURN:			
36	1"	ZONE 1 SIZE	75	ZONE 1 LENGTH
37	1"	ZONE 2 SIZE	150	ZONE 2 LENGTH

38	STATIC HEAD:			
39	3	FEET OF TOTAL STATIC HEAD LOSS (Vertical Lift) (From the base of the Hydraulic Unit to the highest run of dripper tubing)		

40	TOTAL PRESSURE LOSS (Add Items 26, 31, 33/34, 36/37, 39 + Flushing):			
41	46	ZONE 1 HEAD LOSS, INCLUDES	16	FEET FLUSHING (Chart 3A)
42	55	ZONE 2 HEAD LOSS, INCLUDES	16	FEET FLUSHING (Chart 3A)

43	PUMP SIZING:			
44	55	MAXIMUM TOTAL PRESSURE LOSS (Highest 41 or 42)		
45	122	DISC FILTER BACKFLUSH (#31 + 1156 @ 15 GPM)		
46	15	GPM @	122	FEET

47	TIMED DOSING PER ZONE:			
48	ZONE ONE:			
49	3.56	Dosing GPM	8.95	Min/Dose
50	3.4	Ave. Cycles	31.85	Gallons Per Dose (Minimum Fill Ratio 3.5)
51	3.4	Ave. Cycles	5.7	Peak Cycles (Run Frequencies)

51	ZONE TWO:			
52	3.56	Dosing GPM	8.95	Min/Dose
53	3.4	Ave. Cycles	31.85	Gallons Per Dose (Minimum Fill Ratio 3.5)
54	3.4	Ave. Cycles	5.7	Peak Cycles (Run Frequencies)

54	AVERAGE DOSING REST TIMES:			
55	127	Minutes		

56	LANDSCAPE LINEAR LOADING RATE:			
57	0.15	GPD/Sq. Ft.	0.40	GPD/Sq. Ft.

Title: CALCULATION SHEET - MOUND			
W.R. Dawson Construction, LLC.			
Concord Twp., Ohio			
DR. BY:	W.S.O.	Engineered by:	StreamKey
CK BY:	EJK		
DATE:			
SCALE:	None		
10515 Reading Road, Cincinnati, Ohio 45241			
513-792-1221 phone / 513-792-1223 fax			

SHEET NO.	FILE:
-----------	-------

REVISIONS	BY
REVISED SEPTIC FEB. 02, 2010	W.S.O.

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CONSULTING GROUP, INC.
9114 TYLER BLVD., MENTOR, OHIO 44060
PHONE 440.205.1260 FAX 440.205.1262
BCG@BarringtonCGL.com

W.R. DAWSON CONSTRUCTION, LLC.
BILL DAWSON JR.
759 LAKESHORE BLVD. UNIT F
PAINESVILLE, OHIO 44077
PH. 440.223.4466/FAX: 440.639.9775

SITE PLAN
PARCEL "B" CONCORD-HAMBDEN RD.
CONCORD TWP., OHIO 44077

DRAWN
W.S.O.
CHECKED
DWN
DATE
JAN. 26, 2010
SCALE
1" = 20'
JOB NO.
09094
SHEET
3/3
OF SHEETS
09094