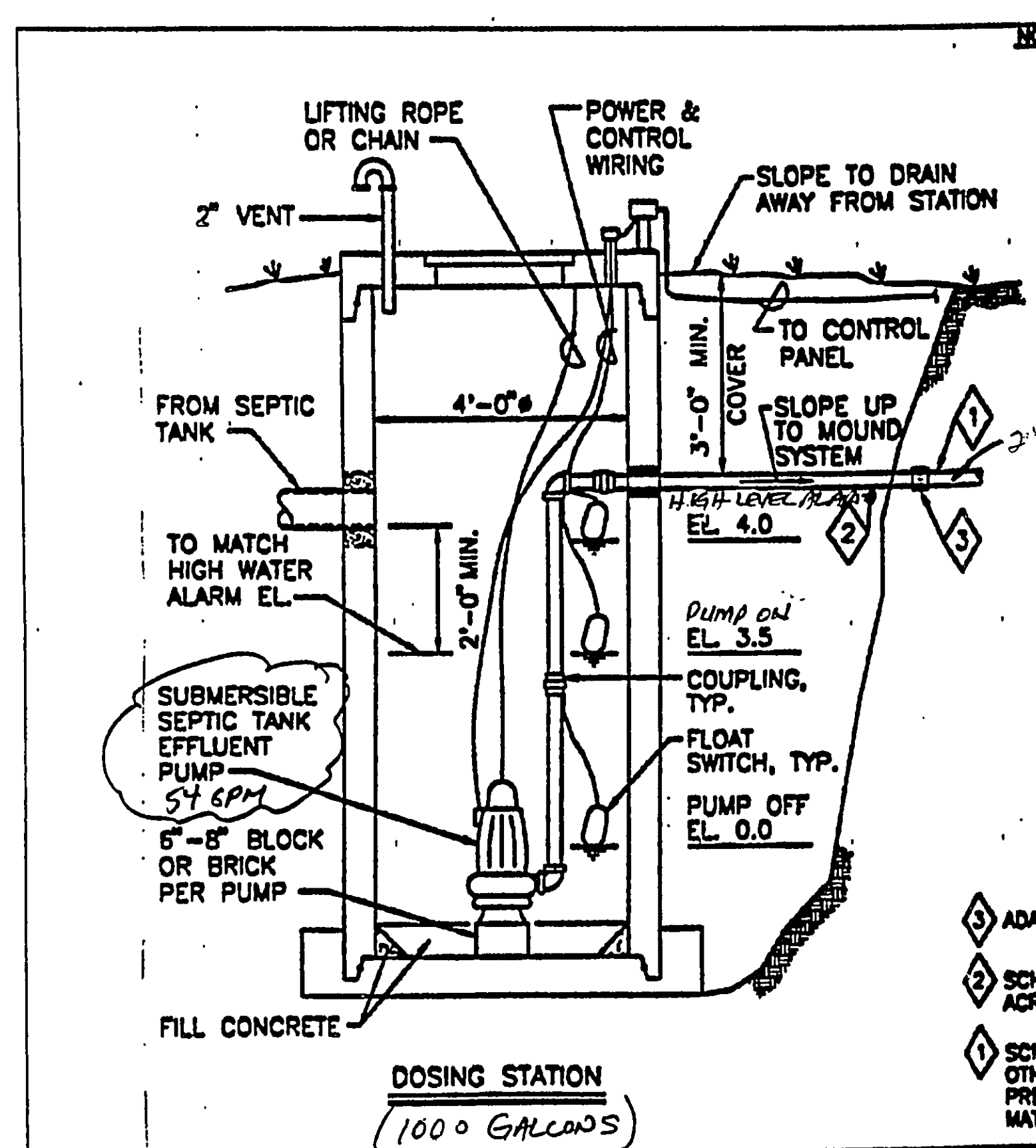




- NOTES:
1. DESIGN STATION AND BASE TO PREVENT FLOTATION IN AREAS OF HIGH GROUND WATER.
 2. ALL JOINTS AND PENETRATIONS SHALL BE WATERTIGHT TO PREVENT INFILTRATION OF GROUND/SURFACE WATER.
 3. STATION PUMP SHALL BE DESIGNED TO DOSE MOUND BASED ON THE TABLE BELOW.
 4. FORCE MAIN, DISTRIBUTION LATERAL 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.
 8. WET WELL CAPACITY TO ACCOUNT FOR PIPING DRAINING BACK TO DOSING STATION.

TIME BETWEEN MIN. GALLONS PER DOSE		
3 BEDROOM	4 HOUR	~50
4 BEDROOM	3 HOUR	~40
>4 BEDROOM	3 HOUR	~50

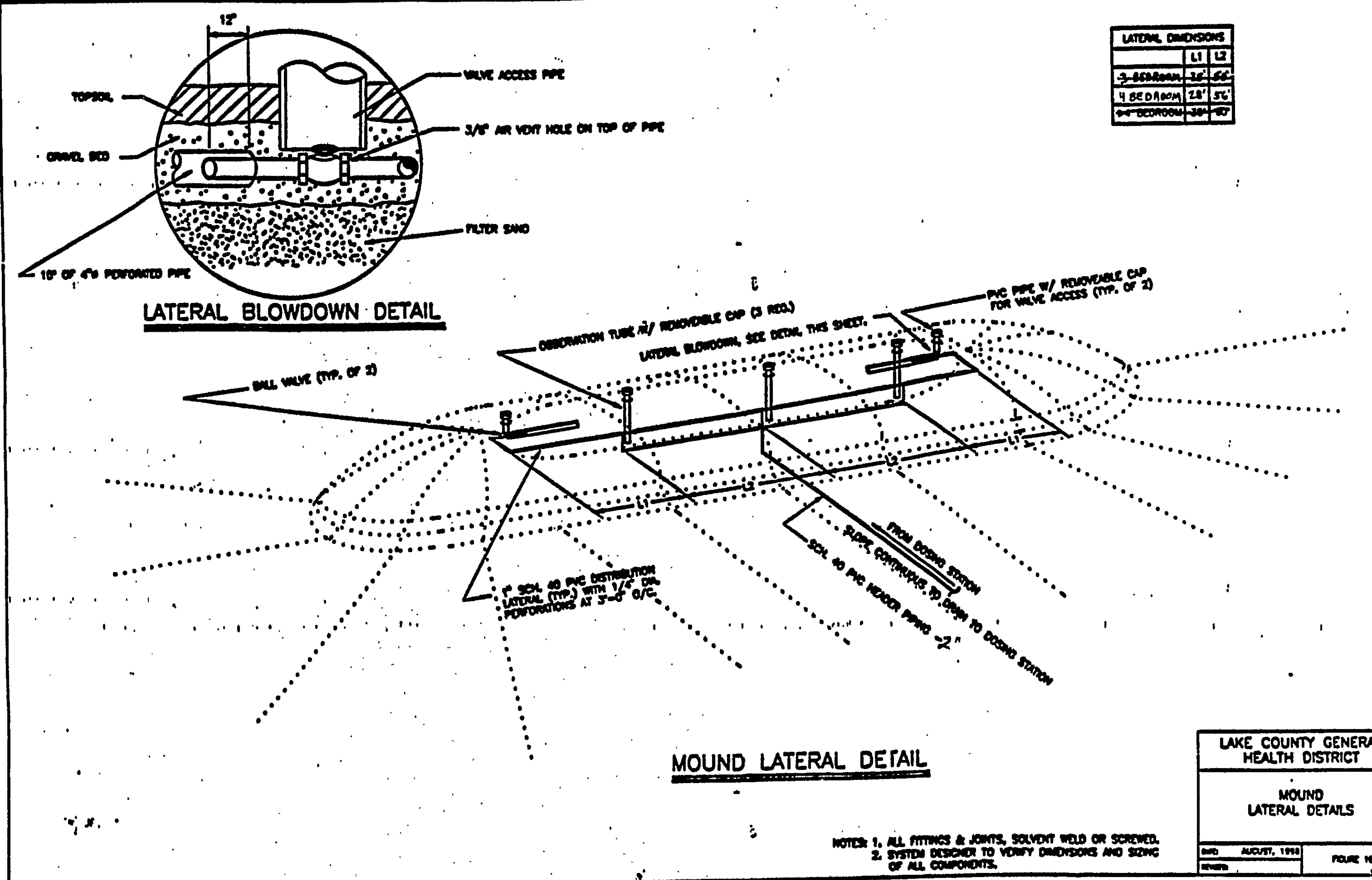
- 1 ADAPTER COUPLING.
- 2 SCHED. 40 GALV. STL. ACROSS EXCAVATION.
- 3 SCHED. 40 PVC OR OTHER APPROVED PRESSURE PIPE MATERIAL.

LAKE COUNTY GENERAL HEALTH DISTRICT

LAKE COUNTY MOUND SYSTEM DOSING STATION

DATE: AUGUST, 1998

FIGURE 11



LATERAL DIMENSIONS	
11	12
3-600mm	1-1/2
4-600mm	1-1/2
6-600mm	1-1/2

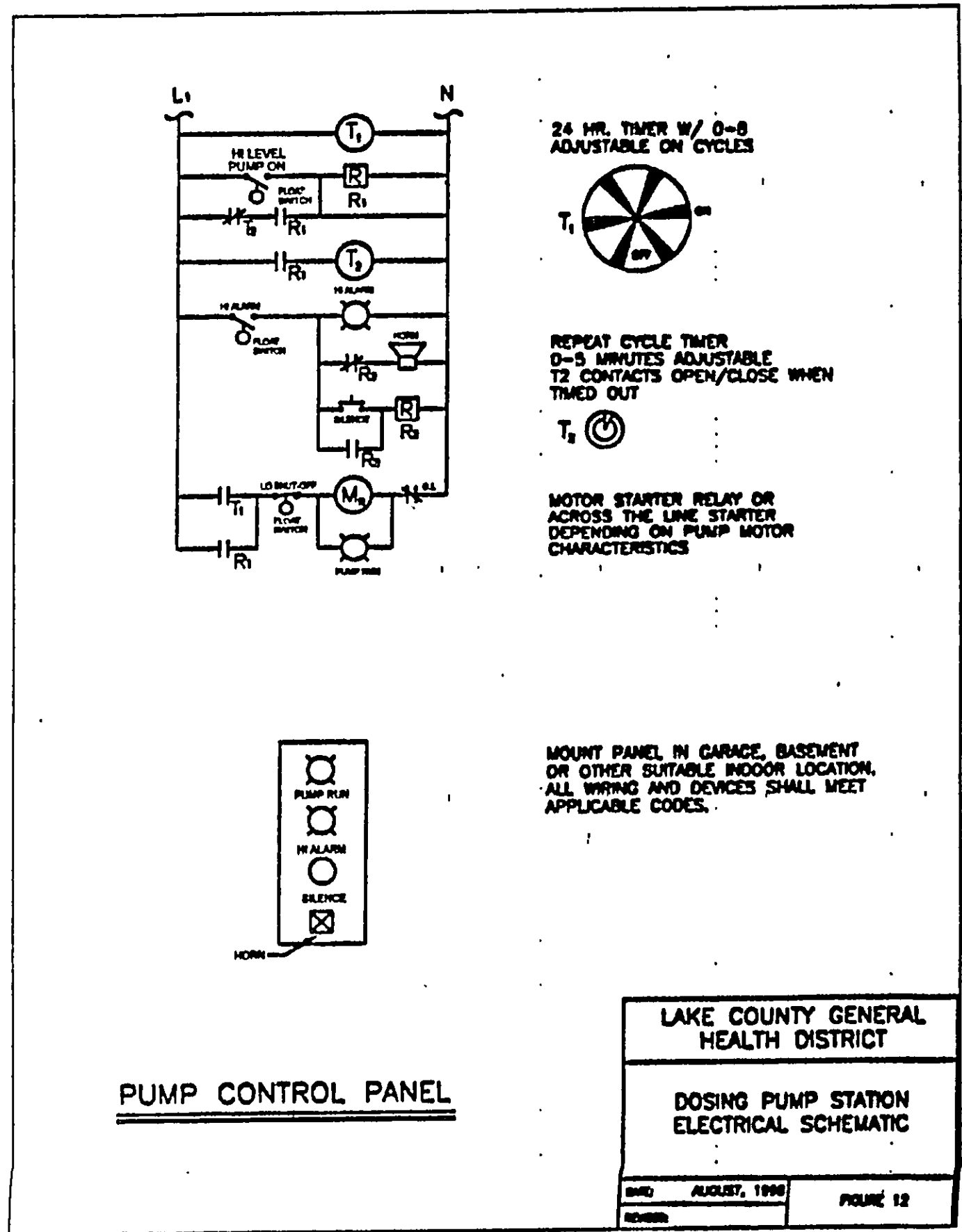
- NOTES:
1. ALL FITTINGS & JOINTS, SOLVENT WELD OR SWEATED.
 2. SYSTEM DESIGNED TO VERIFY DIMENSIONS AND SIZING OF ALL COMPONENTS.

LAKE COUNTY GENERAL HEALTH DISTRICT

MOUND LATERAL DETAILS

DATE: AUGUST, 1998

FIGURE 10



REPEAT CYCLE TIMER
0-8 MINUTES ADJUSTABLE
12 CONTACTS OPEN/CLOSE WHEN
TIMED OUT

MOTOR STARTER RELAY OR
ACROSS THE LINE STARTER
DETERMINED ON PUMP MOTOR
CHARACTERISTICS

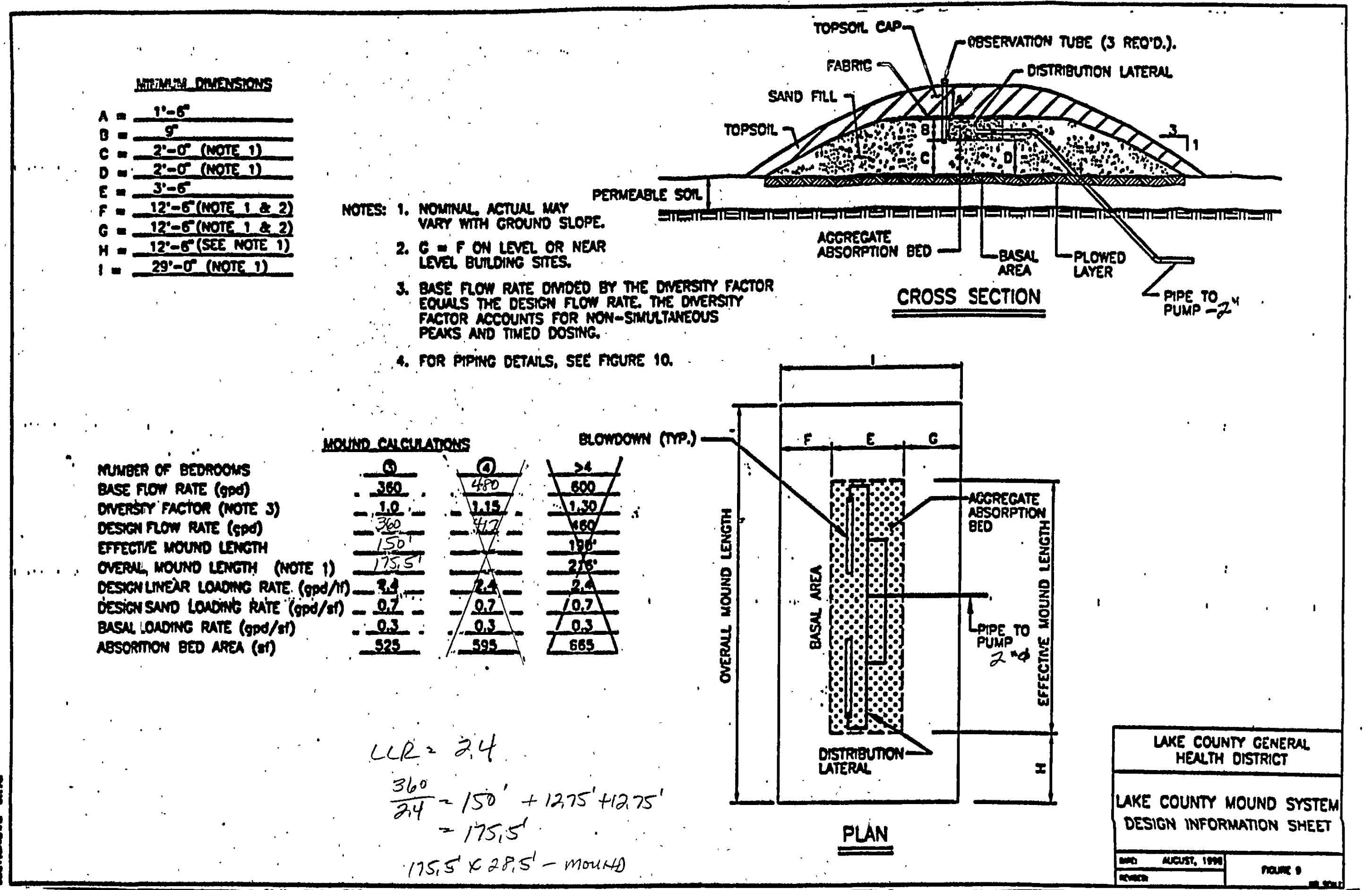
MOUNT PANEL IN GARAGE, BASEMENT
OR OTHER SUITABLE INDOOR LOCATION.
ALL WIRING AND DEVICES SHALL MEET
APPLICABLE CODES.

LAKE COUNTY GENERAL HEALTH DISTRICT

DOSING PUMP STATION ELECTRICAL SCHEMATIC

DATE: AUGUST, 1998

FIGURE 12



MINIMUM DIMENSIONS	
A	1'-6"
B	9"
C	2'-0" (NOTE 1)
D	2'-0" (NOTE 1)
E	3'-6"
F	12'-6" (NOTE 1 & 2)
G	12'-6" (NOTE 1 & 2)
H	12'-6" (SEE NOTE 1)
I	29'-0" (NOTE 1)

- NOTES:
1. NOMINAL, ACTUAL MAY VARY WITH GROUND SLOPE.
 2. C = F ON LEVEL OR NEAR LEVEL BUILDING SITES.
 3. BASE FLOW RATE DIVIDED BY THE DIVERSITY FACTOR EQUALS THE DESIGN FLOW RATE. THE DIVERSITY FACTOR ACCOUNTS FOR NON-SIMULTANEOUS PEAKS AND TIMED DOSING.
 4. FOR PIPING DETAILS, SEE FIGURE 10.

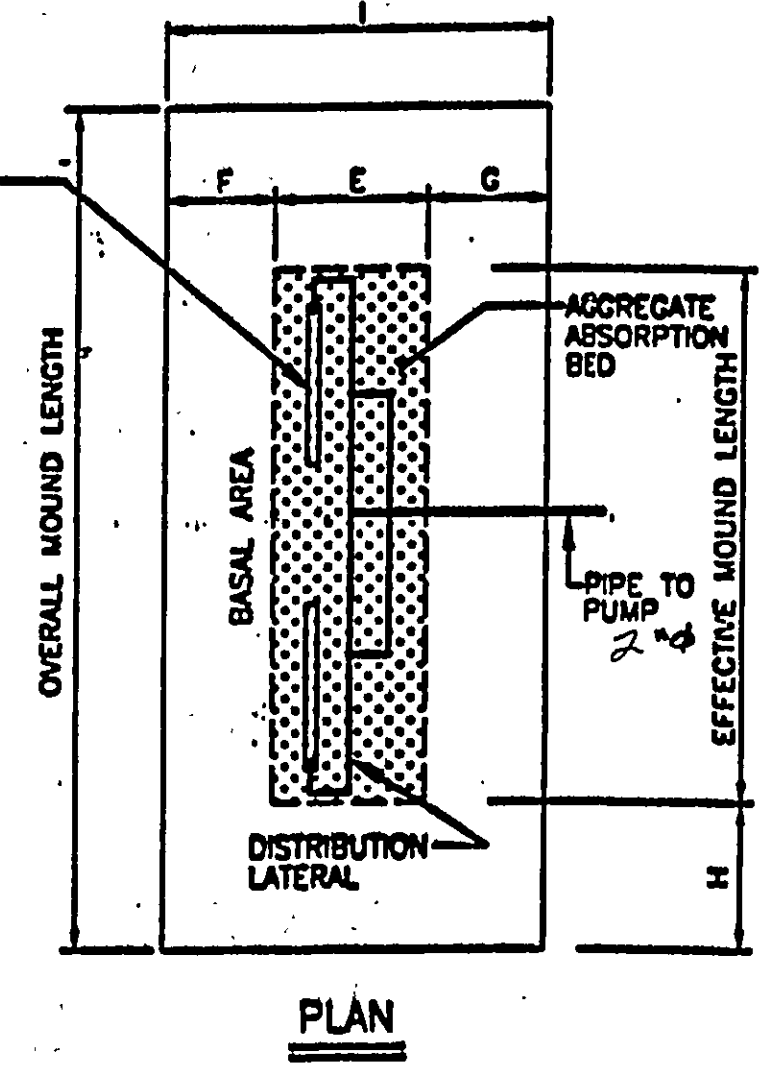
MOUND CALCULATIONS		
NUMBER OF BEDROOMS	3	4
BASE FLOW RATE (gpd)	360	480
DIVERSITY FACTOR (NOTE 3)	1.0	1.15
DESIGN FLOW RATE (gpd)	360	447
EFFECTIVE MOUND LENGTH	150'	196'
OVERALL MOUND LENGTH (NOTE 1)	175.5'	225'
DESIGN LINEAR LOADING RATE (gpd/ft)	2.4	2.4
DESIGN SAND LOADING RATE (gpd/sf)	0.7	0.7
BASAL LOADING RATE (gpd/sf)	0.3	0.3
ABSORPTION BED AREA (sf)	325	665

LLR = 2.4

$\frac{360}{2.4} = 150' + 12.75' + 12.75'$

$= 175.5'$

$175.5' \times 2.4 \text{ P.P.S.} = \text{mound}$



LAKE COUNTY GENERAL HEALTH DISTRICT

LAKE COUNTY MOUND SYSTEM DESIGN INFORMATION SHEET

DATE: AUGUST, 1998

FIGURE 9

REV NO.	DESCRIPTION	DATE	BY	CHK'D

bj BABCOCK, JONES AND ASSOCIATES, INC

CIVIL ENGINEERS - SURVEYORS - LAND PLANNERS

PAINESVILLE OHIO 44077

DATE: 4/5/04

DESIGN BY: H.J.

DRAWN BY: T.R.

APPROVED BY: H.J.

SITE PLAN FOR JOHN GARVEY

CONCORD TOWNSHIP

OFFICE

LAKE COUNTY

SCALE: None

FIG NO: 03-153

SHEET 2 OF 2