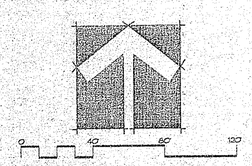
NUMBER	RADIUS	CENTRAL ANGLE	ARC	TAN	CHORD	CHORD BEARING
C-1	434.94'	15°- 44'- 33"	119.51'	60.13'	119.13'	N. 43°- 16'- 33" E.
C-2	434.94'	19°- 26'- 03"	147.53'	74.48'	146.82'	N. 25°- 41'- 18" E.
C-3	60.00'	57°- 54'- 18"	60.64'	33.19'	58.09'	N. 44°- 55'- 33" E.
C-4	100.00'	34°- 51'- 15"	60.83'	31.39'	59.90'	N. 56°- 27'- 07" E.
C-5	434.94'	03°- 58'- 38"	30.19'	15.10'	30.18'	N. 33°- 24'- 59" E.



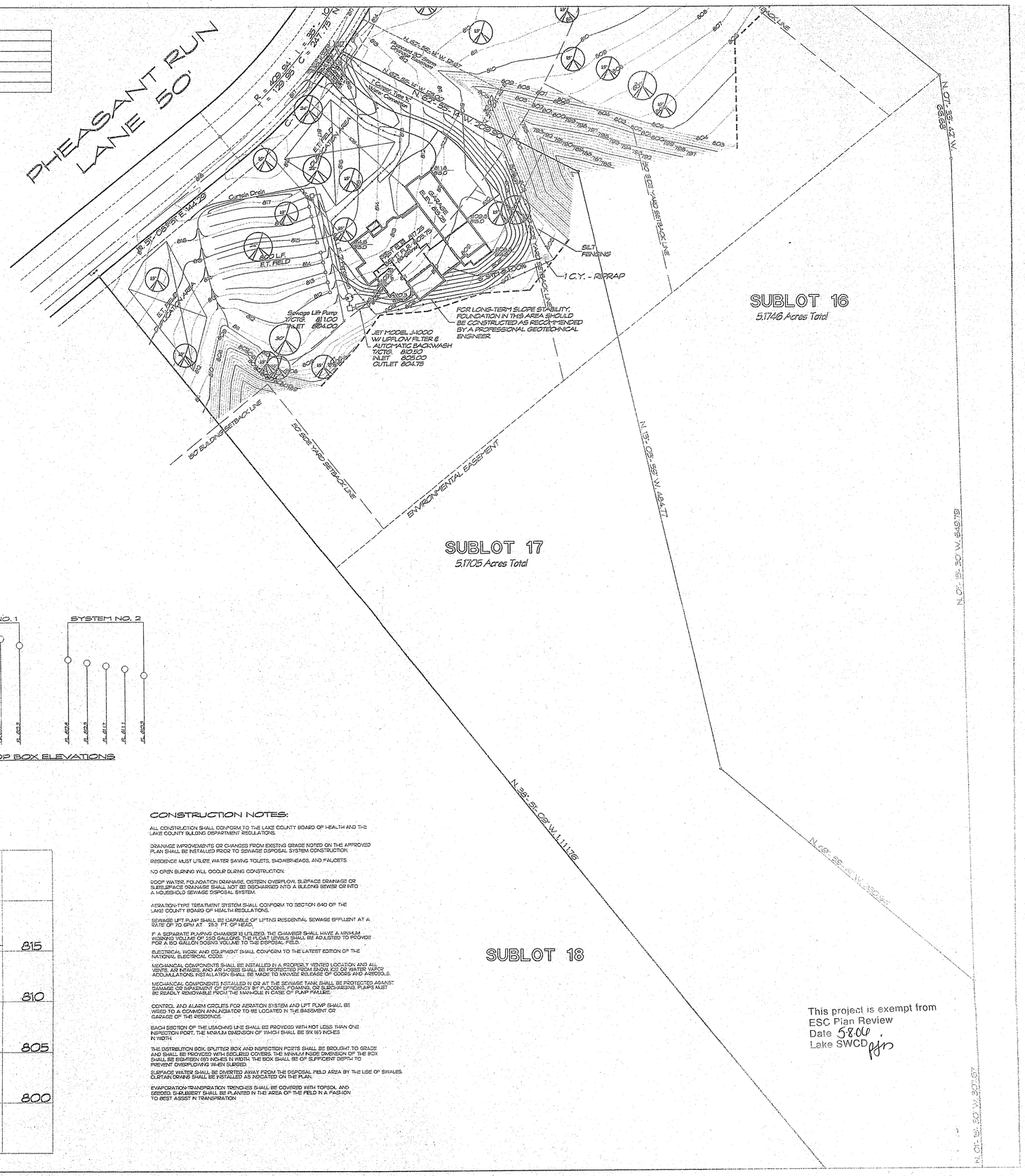
THIS IS TO CERTIFY THAT I HAVE PREPARED THE ON-SITE SANITARY SEWERAGE DISPOSAL SYSTEM SHOWN HEREON.

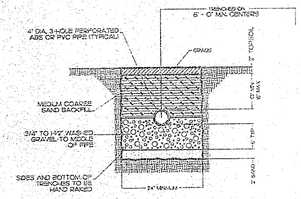
STATE OF OHIO
MICHAEL W. BENDER
E-57913
REGISTERED
PROFESSIONAL ENGINEER

MICHAEL W. BENDER, Ohio Professional Engineer No. 57913

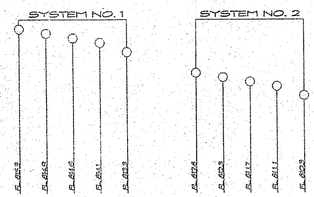
SYMBOL LEGEND

- SPOT ELEVATION LOCATION
- (EXISTING TREE 18" AND OVER)
- AERATION SYSTEM
- SEWAGE LIFT PUMP
- FIRE HYDRANT
- SILT FENCE
- Exist. 1" Iron Pipe Monument
- 3/4" Iron Pin Monument Set
- Exist. 1" Iron Pin in Monument Box

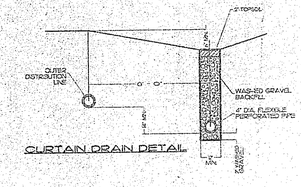




EVAPORATION-TRANSPIRATION TRENCH DETAIL

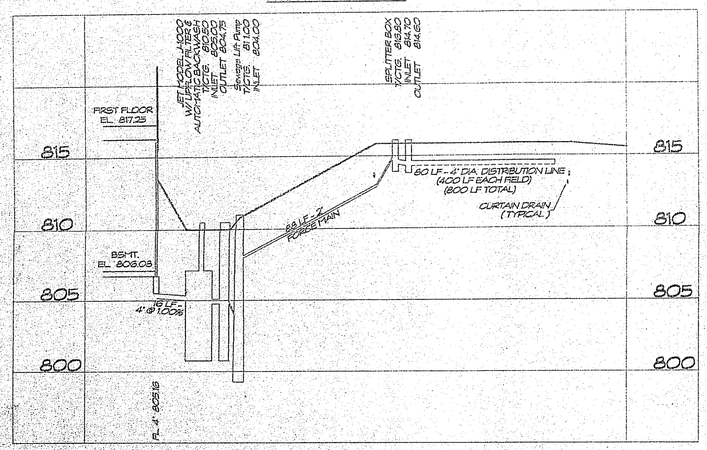


DROP BOX ELEVATIONS



CURTAIN DRAIN DETAIL

HYDRAULIC PROFILE



CONSTRUCTION NOTES:

ALL CONSTRUCTION SHALL CONFORM TO THE LAKE COUNTY BOARD OF HEALTH AND THE LAKE COUNTY BUILDING DEPARTMENT REGULATIONS.

DRAINAGE IMPROVEMENTS OR CHANGES FROM EXISTING GRADE NOTED ON THE APPROVED PLAN SHALL BE INSTALLED PRIOR TO SEWAGE DISPOSAL SYSTEM CONSTRUCTION.

RESIDENCE MUST UTILIZE WATER SAVING TOILETS, SHOWERHEADS, AND FAUCETS.

NO OPEN BURNING WILL OCCUR DURING CONSTRUCTION.

ROOF WATER, FOUNDATION DRAINAGE, CISTERN OVERFLOW, SURFACE DRAINAGE OR SUBSURFACE DRAINAGE SHALL NOT BE DISCHARGED INTO A BUILDING SEWER OR INTO A HOUSEHOLD SEWAGE DISPOSAL SYSTEM.

AERATION-TYPE TREATMENT SYSTEM SHALL CONFORM TO SECTION 640 OF THE LAKE COUNTY BOARD OF HEALTH REGULATIONS.

SEWAGE LIFT PUMP SHALL BE CAPABLE OF LIFTING RESIDENTIAL SEWAGE EFFLUENT AT A RATE OF 70 GPM AT 25.3 FT. OF HEAD.

IF A SEPARATE PUMPING CHAMBER IS UTILIZED, THE CHAMBER SHALL HAVE A MINIMUM WORKING VOLUME OF 250 GALLONS. THE FLOAT LEVELS SHALL BE ADJUSTED TO PROVIDE FOR A 150 GALLON DOSING VOLUME TO THE DISPOSAL FIELD.

ELECTRICAL WORK AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.

MECHANICAL COMPONENTS SHALL BE INSTALLED IN A PROPERLY VENTED LOCATION AND ALL VENTS, AIR INTAKES, AND AIR HOSES SHALL BE PROTECTED FROM SNOW, ICE OR WATER VAPOR ACCUMULATIONS. INSTALLATION SHALL BE MADE TO MINIMIZE RELEASE OF ODORS AND AEROSOLS.

MECHANICAL COMPONENTS INSTALLED IN OR AT THE SEWAGE TANK SHALL BE PROTECTED AGAINST DAMAGE OR IMPAIRMENT OF EFFICIENCY BY FLOODING, FOAMING, OR SLEDGEHAMMERING. PUMPS MUST BE READILY REMOVABLE FROM THE MANHOLE IN CASE OF PUMP FAILURE.

CONTROL AND ALARM CIRCUITS FOR AERATION SYSTEM AND LIFT PUMP SHALL BE WIRED TO A COMMON ANNUNCIATOR TO BE LOCATED IN THE BASEMENT OR GARAGE OF THE RESIDENCE.

EACH SECTION OF THE LEACHING LINE SHALL BE PROVIDED WITH NOT LESS THAN ONE INSPECTION PORT. THE MINIMUM DIMENSION OF WHICH SHALL BE SIX (6") INCHES IN WIDTH.

THE DISTRIBUTION BOX, SPLITTER BOX AND INSPECTION PORTS SHALL BE BROUGHT TO GRADE AND SHALL BE PROVIDED WITH SECURED COVERS. THE MINIMUM INSIDE DIMENSION OF THE BOX SHALL BE EIGHTEEN (18") INCHES IN WIDTH. THE BOX SHALL BE OF SUFFICIENT DEPTH TO PREVENT OVERFLOWING WHEN SURGED.

SURFACE WATER SHALL BE DIVERTED AWAY FROM THE DISPOSAL FIELD AREA BY THE USE OF SWALES. CURTAIN DRAINS SHALL BE INSTALLED AS INDICATED ON THE PLAN.

EVAPORATION-TRANSPIRATION TRENCHES SHALL BE COVERED WITH TOPSOIL AND SEEDED. SHRUBBERY SHALL BE PLANTED IN THE AREA OF THE FIELD IN A FASHION TO BEST ASSIST IN TRANSPIRATION.

This project is exempt from ESC Plan Review
Date 5-8-00
Lake SWCD

ISSUED FOR BIDDING		
	DATE	BY

ADDENDA REVISIONS		
NO.	DATE	BY

ISSUED FOR CONSTRUCTION	
DATE	BY

REVISIONS			
NO.	DESCRIPTION	DATE	BY

TOPOGRAPHIC SURVEY & SITE IMPROVEMENT PLAN

RODAK RESIDENCE

BEING PART OF SUBLOTS NOS. 16 & 17
IN THE SANCTUARY SUBDIVISION - PHASE 1
THE VILLAGE OF KIRTLAND HILLS
LAKE COUNTY, OHIO

LISSMAN, BENDER & ASSOCIATES
Engineers ~ Surveyors ~ Planners
7398 Chardon Road
Kirtland, Ohio 44094
Phone: (440) 256-7201
36 River Fifth Road S.E.
Fort Washington, Ohio 43147
Fax: (740) 281-0515

THIS IS TO CERTIFY THAT AT THE REQUEST OF THE OWNER, I HAVE SURVEYED AND PLOTTED THE PROPERTY AS SHOWN HEREON, AND CONTAINING SITE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, SEWAGE DISPOSAL SYSTEM, DRAINAGE SWALES, AND ROADWAY IMPROVEMENTS, AND THE DIGITAL PRINTS THEREOF, BEARING MY SEAL, TO AN ACCURACY TERRAIN AND CARE FOR THE SOLE PURPOSE OF USE DURING THE PLANNING AND ENGINEERING DEVELOPMENT OF THE PROPERTY. THE TOPOGRAPHY SHOWN HEREON IS BASED ON 2' CONTOUR INTERVALS, CONSTRUCTED FROM FIELD SURVEY DATA AND MEETS OR EXCEEDS AS OF JANUARY 1, 2000, ALL CURRENT STANDARDS AND SPECS TO THE BEST OF MY KNOWLEDGE AND BELIEF.

LISSMAN BENDER 7078

DATE	OCT. 05	TRACING BY	S.J.
DRAWN BY	MWB	JOB NO.	05-2238
SCALE	1" = 40'		

SUBJECT: SITE IMPROVEMENT PLAN
RODAK RESIDENCE

Stormwater Management Plan
Approved as shown and/or noted
JAMES R. GILLS, P.E.
County Drainage Engineer
By J.S. Date 5/10/00