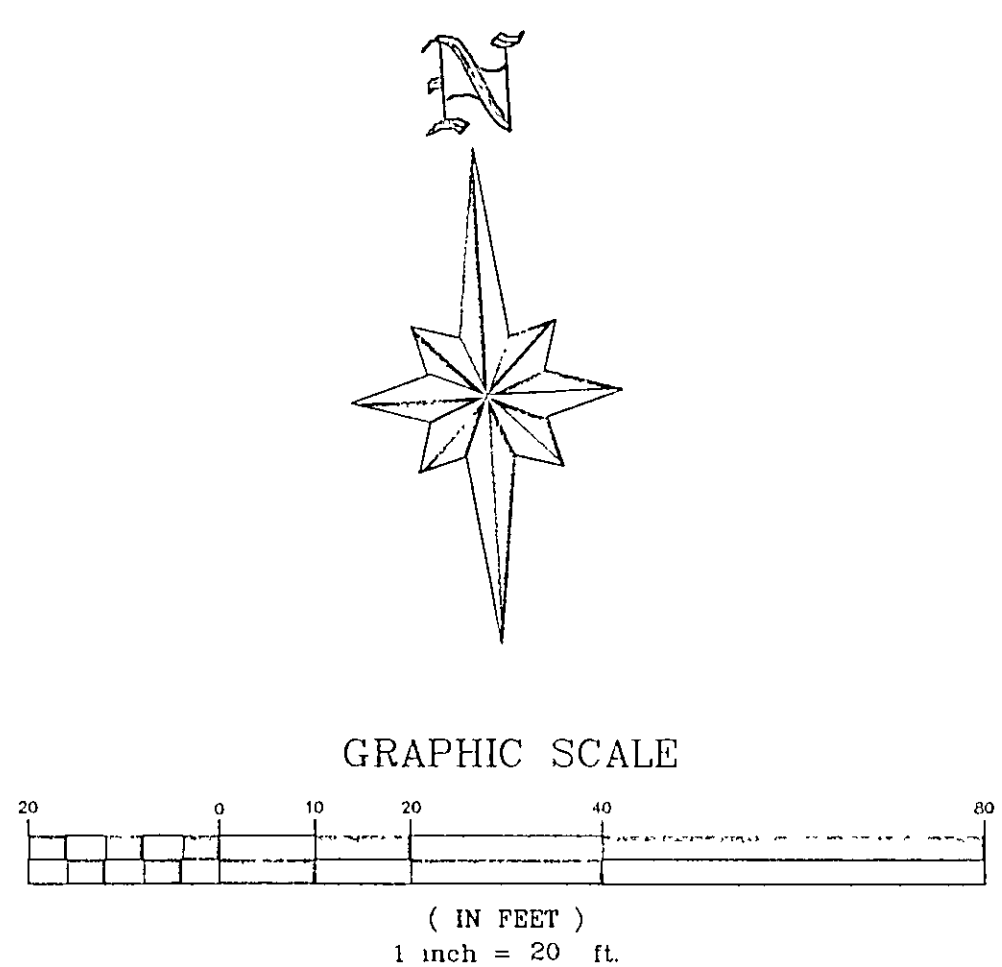
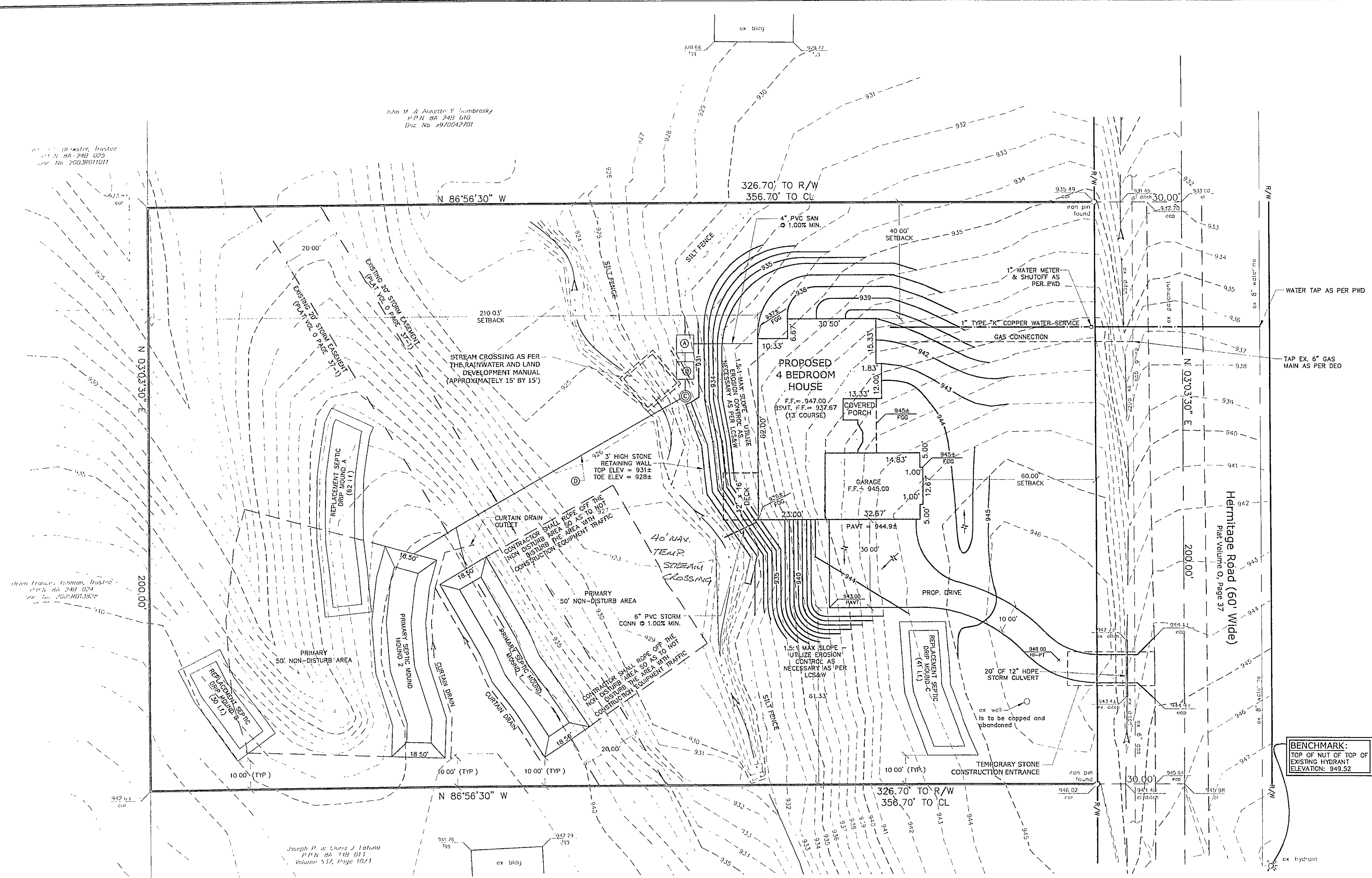




Property Data:

Owner: NCT Builders, LLC
Deed: 8A-24B-012
Doc No: 2005R022504
Area: 1.636 Acres to CL
1.488 Acres to R/W

Zoning: R-1 Residential
Required Setbacks:
Front: 50 feet
Side: 15 feet
Rear: 15 feet

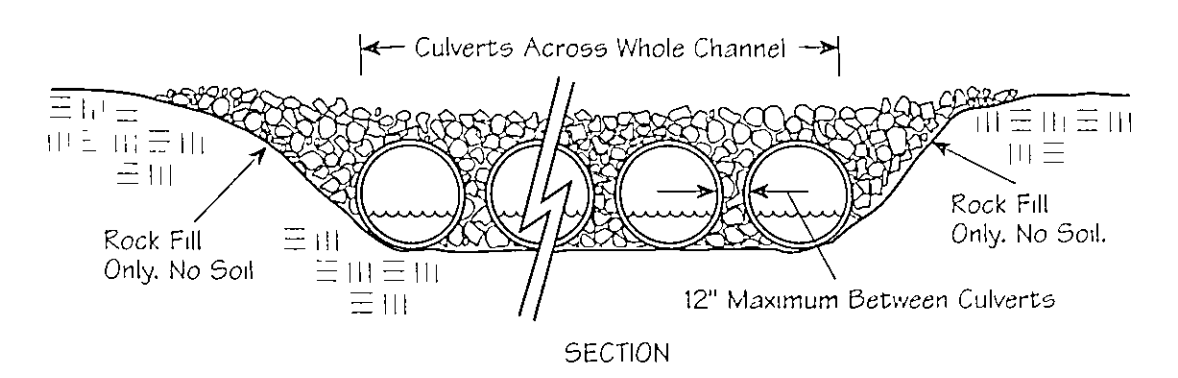
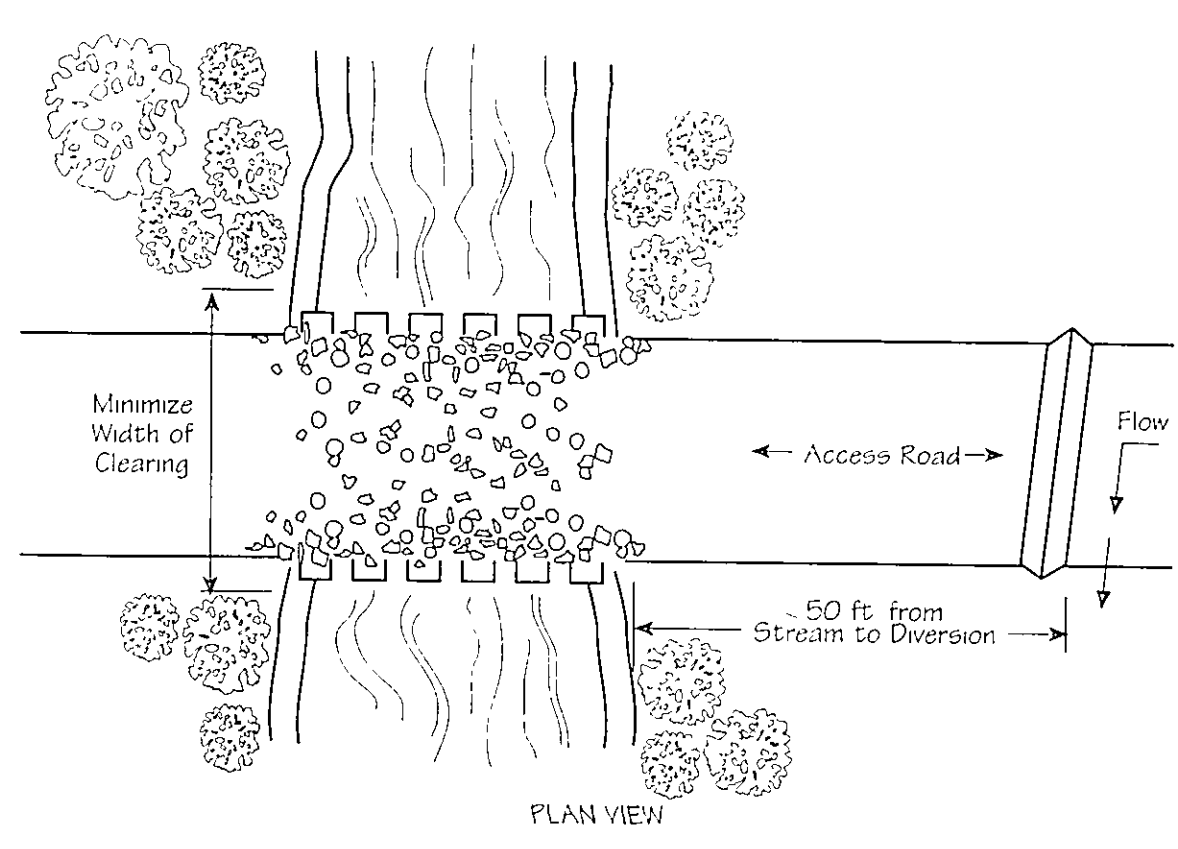
Survey data provided by John Skoneczny, P.S. No. 6356 on January 6, 2005.
Dimensions of the proposed home are shown for layout reference only. Contractor is to use the dimensions shown on the foundation plan for basement excavation and for basement footer / wall construction.
Foundation design near slopes may require the design certification of a licensed geotechnical / structural engineer.
The builder is to coordinate the electrical connection location with the power company.

Septic System Data:

- (A) - 2000 Gallon Septic Tank
- (B) - 2000 Gallon Dosing Tank
- (C) - Central Unit
- (D) - (2) 1" PVC Supply Lines and (2) 1" PVC Return Lines

Stormwater Management Plan
Approved as shown and/or noted by:
JAMES R. GILLS, P.E.
County Drainage Engineer
By: L.S. Date: 2/17/06
RE-SUBMITTAL REQUIRED WITH STREAM RELOCATION
STREAM ENCLOSURES IN EXCESS OF 40 FT
SHALL VOID THIS APPROVAL

Specifications
Culvert Stream Crossing



- Specifications for Culvert Stream Crossing
- Sieve Disturbance: Disturbance to the stream shall be kept to a minimum. Streambank vegetation shall be preserved to the maximum extent practical and the stream crossing shall be as narrow as practical.
 - Cleaning: Shall be done by cutting root grubbing. The mats and slumps shall be left in place to help stabilize the banks and accelerate revegetation.
 - Temporary Construction: Temporary construction shall be avoided when practical from March 15 through June 15.
 - Water: Shall not be allowed to flow along the road directly to the stream. Diversions and swales shall direct runoff away from the access road to a sediment control practice.
 - Placement: Culverts shall be placed on the existing streambed to avoid a drop or waterfall at the downstream end of the pipe, which would be a barrier to fish migration. Crossings shall be made in shallow areas rather than deep pools where possible.
 - Culvert Size: Culvert diameter shall be at least three times the depth of normal stream flow at the point of the stream crossing. If the crossing must be placed in deep, slow-moving pools, the culvert diameter may be reduced to twice the depth of normal stream flow. The minimum size culvert that may be used is 18 in.
 - Number of Culverts: There shall be sufficient number of culverts to completely cross the stream channel from streambank to streambank with no more than a 12 in. space between each one.
 - Fill and Surface Material: All material placed in the stream channel around the culverts and on the surface of the crossing shall be stone, rock or aggregate. 0007 No. 1 shall be the minimum acceptable size. To prevent washouts, larger stone and rock may be used and they may be placed in gully mattresses. NO SOIL SHALL BE USED IN THE CONSTRUCTION OF A STREAM CROSSING OR PLACED IN THE STREAM CHANNEL.
 - Removal: Aggregate stone and rock used for the structure shall not need to be removed. Care should be taken so that any aggregate left does not create an impediment or impede fish passage. All pipes, culverts, gabions or structures must be removed.
 - Stabilization: Streambanks shall be stabilized. Plantings shall include woody vegetation where practical.

Rev.	Description	Date	By	CHKD.
1	Revised as per the LCOB review	2-1-06	JL	
2	Revised as per the LCOB review	2-9-06	JL	
3	Eliminate culvert pipe as per owner	2-25-06	JL	

Site Plan

NCT Builders, LLC
P.P.N. 8A-24B-12
Concord Township ~ Lake County ~ Ohio



Drawn By: JML
Checked By:
Approved By:
Date: 06/29/06

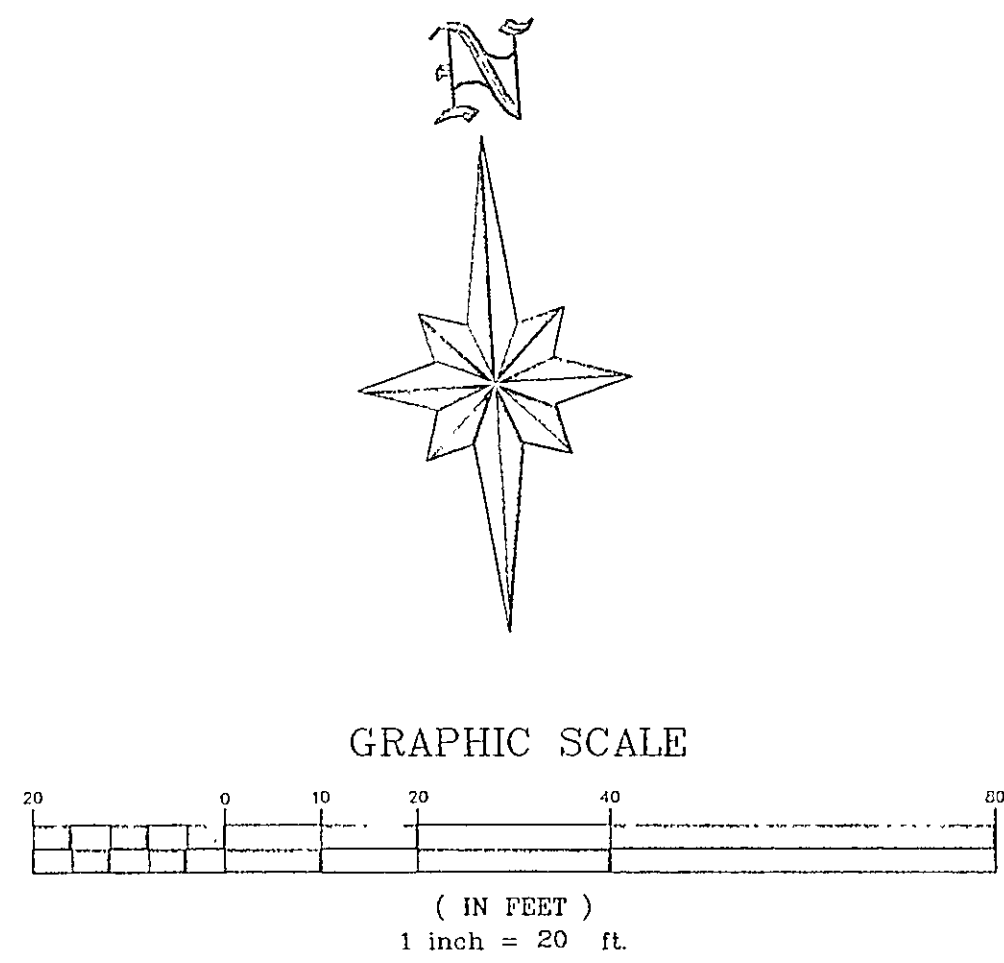
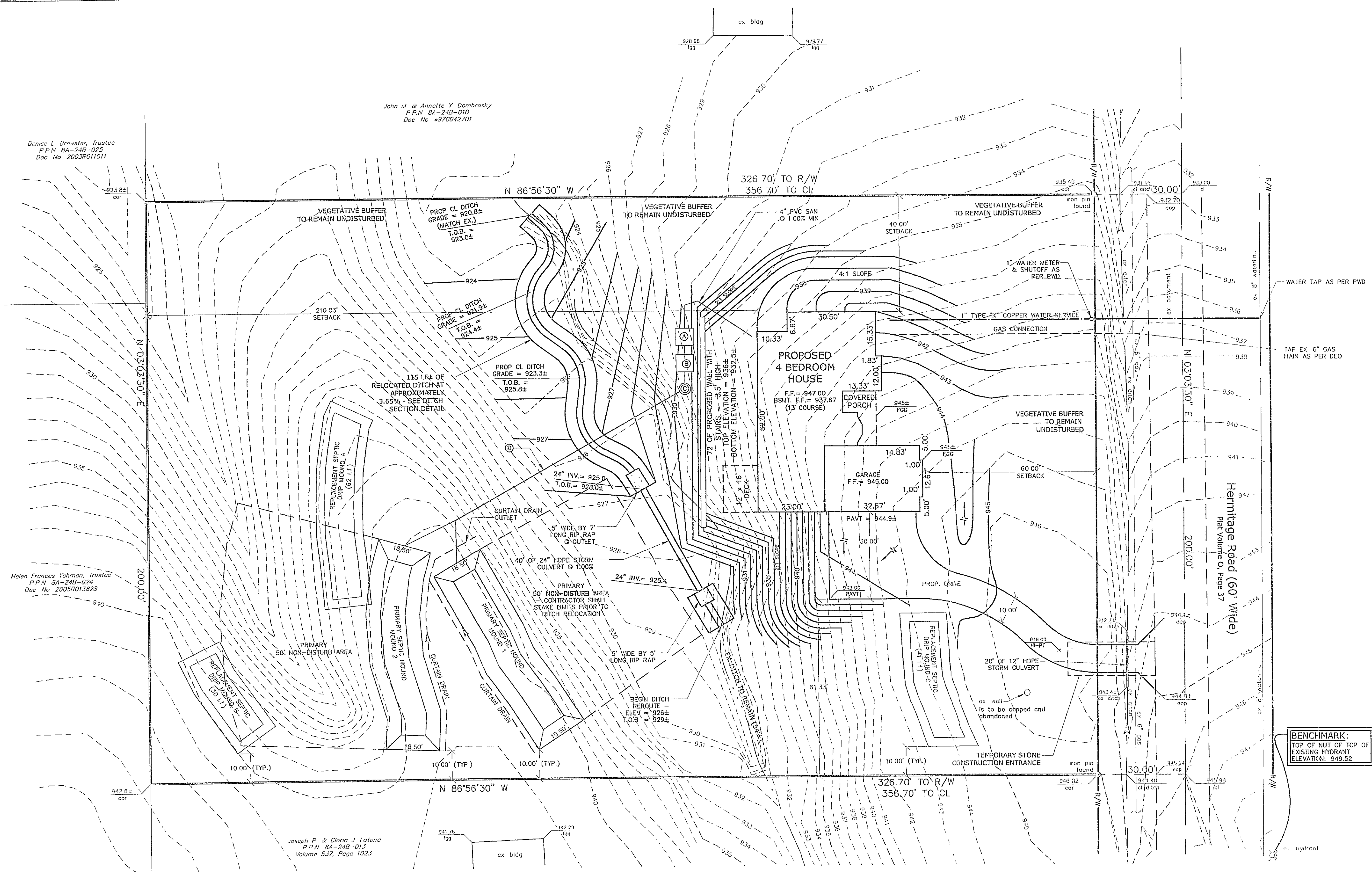
Greenland Consulting, Inc.

7757 Auburn Road, Unit #9, Concord, OH 44037
Phone: (440) 352-7290
E-Mail: greenland@csglobal.net

Scale: Horiz. 1"=20'
Vert. 1"= As Noted

Sheet No. 1 of 2

Filename: 05-102.dwg



Property Data:

Owner: NCT Builders, LLC
P.P.N.: 8A-24B-012
Doc No: 2005R022504
Area: 1.638 Acres to CL
1.498 Acres to R/W
Zoning: R-1 Residential
Required Setbacks:
Front: 50 feet
Side: 15 feet
Rear: 15 feet

Survey data provided by John Skowieczny, P.S. No. 6356 on January 6, 2006

Dimensions of the proposed home are shown for layout reference only. Contractor is to use the dimensions shown on the foundation plan for basement excavation and for basement footer / wall construction

Foundation design near slopes may require the design certification of a licensed geotechnical / structural engineer

The builder is to coordinate the electrical connection location with the power company.

Erosion Control Notes:

1. A TEMPORARY 2" STONE CONSTRUCTION ENTRANCE (6" THICK) SHALL BE INSTALLED AS PER SPECIFICATIONS FOUND IN THE RAINWATER & LAND DEVELOPMENT MANUAL.
2. ALL DISTURBED AREAS SHALL HAVE TEMPORARY SEEDING AS PER SPECIFICATIONS FOUND IN THE RAINWATER & LAND DEVELOPMENT MANUAL.

Septic System Data:

- ① - 2000 Gallon Septic Tank
- ② - 2000 Gallon Dosing Tank
- ③ - Control Unit
- ④ - (2) 1" PVC Supply Lines and (2) 1" PVC Return Lines

Ditch Relocation Information:

1. ALL DITCH RELOCATION WORK SHALL BE PERFORMED AS PER CURRENT COUNTY ENGINEER AND COUNTY SOIL & WATER MANAGEMENT REQUIREMENTS
2. TEMPORARY SEEDING SHALL BE REQUIRED IMMEDIATELY FOLLOWING THE RELOCATION OF THE DITCH TO ALL DISTURBED AREAS WITHIN 20 FEET OF BOTH SIDES OF THE DITCH AND OR PIPE INSTALLATION

Culvert Data:

Total watershed area = 10.42 acres

25 year storm peak discharge = 14.53 cfs

Capacity of the 24" HDPE (n=0.12) @ 1.00% = 24 cfs ±

Emergency overflow = Over the pipe @ elevation 928.5±. No storm water will back up onto the upstream property during emergency overflow. Elevation at the southerly property line = 930±.

FLEXIBLE PIPE NOTES:

1. BEDDING MATERIALS SHALL BE CLASS I, II, OR III MATERIALS AS DEFINED IN TABLE 1, ASTM D-2321. INSTALLATION OF THESE MATERIALS SHALL BE AS PER TABLE 2.
2. HAUNCH MATERIALS SHALL BE CLASS I, II, OR III MATERIALS AS REQUIRED ABOVE, RESTRICTED AS PER D-2321, TABLE 2.
3. INITIAL BACKFILL MATERIALS SHALL BE CLASS I, II, OR III MATERIALS AS REQUIRED ABOVE, RESTRICTED AS PER D-2321, TABLE 2.
4. MIN. TRENCH WIDTHS (AS REQUIRED BY ASTM D-2321), ARE AS FOLLOWS.

MIN. TRENCH WIDTH, CPEP	
8"	25"
10"	27"
12"	30"
15"	34"
18"	38"
24"	48"
30"	52"
36"	65"
48"	72"

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

By S. Date 7/24/06

5. A LESSER TRENCH WIDTH WILL BE PERMITTED ONLY WHERE IT IS DETERMINED THE CONTRACTOR CAN UTILIZE EQUIPMENT CAPABLE OF MEETING THE REQUIRED INSTALLED DENSITIES.
6. WHERE THE TRENCH BOTTOM IS UNSTABLE, CONTRACTOR SHALL EXCAVATE TO A DEPTH AS REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIALS. AS AN ALTERNATIVE, TRENCH BOTTOM MAY BE STABILIZED USING A GEOFABRIC.
7. STORM SEWER UNDER PAVEMENT AREAS REQUIRE PREMIUM BACKFILL TO TOP OF TRENCH.

PROPOSED DITCH CROSS SECTION DETAIL

THE ENTIRE SIDESLOPES OF THE DITCH ARE TO BE EXCAVATED AND SEEDED WITH 75% ESTABLISHED VEGETATION PRIOR TO FILLING AND REROUTING THE EXISTING DITCH. DITCH BOTTOM TO CONTAIN 75% COVERAGE OF ONSITE PIECES OF SHALE.

NOTE: LENGTH AND WIDTH OF RIP-RAP SECTION SHOWN ON PLANS.

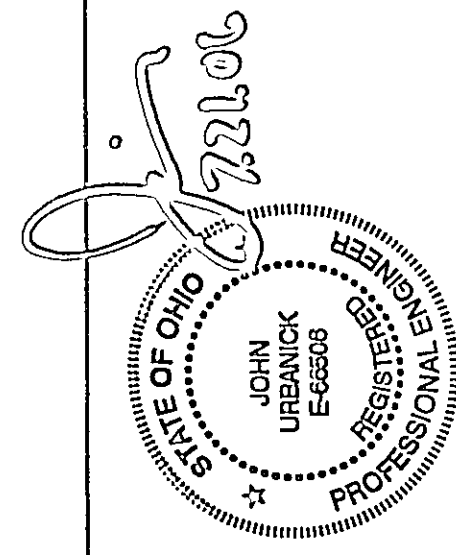
RIP-RAP DETAIL

STORM SEWER TRENCH DETAIL

(HDPE, CPEP, PVC, PE, ETC.)

Site Plan

NCT Builders, LLC
P.P.N. 8A-24B-45
Concord Township ~ Lake County ~ Ohio



Drawn By: JML

Checked By:

Approved By:

Date: 7-21-06

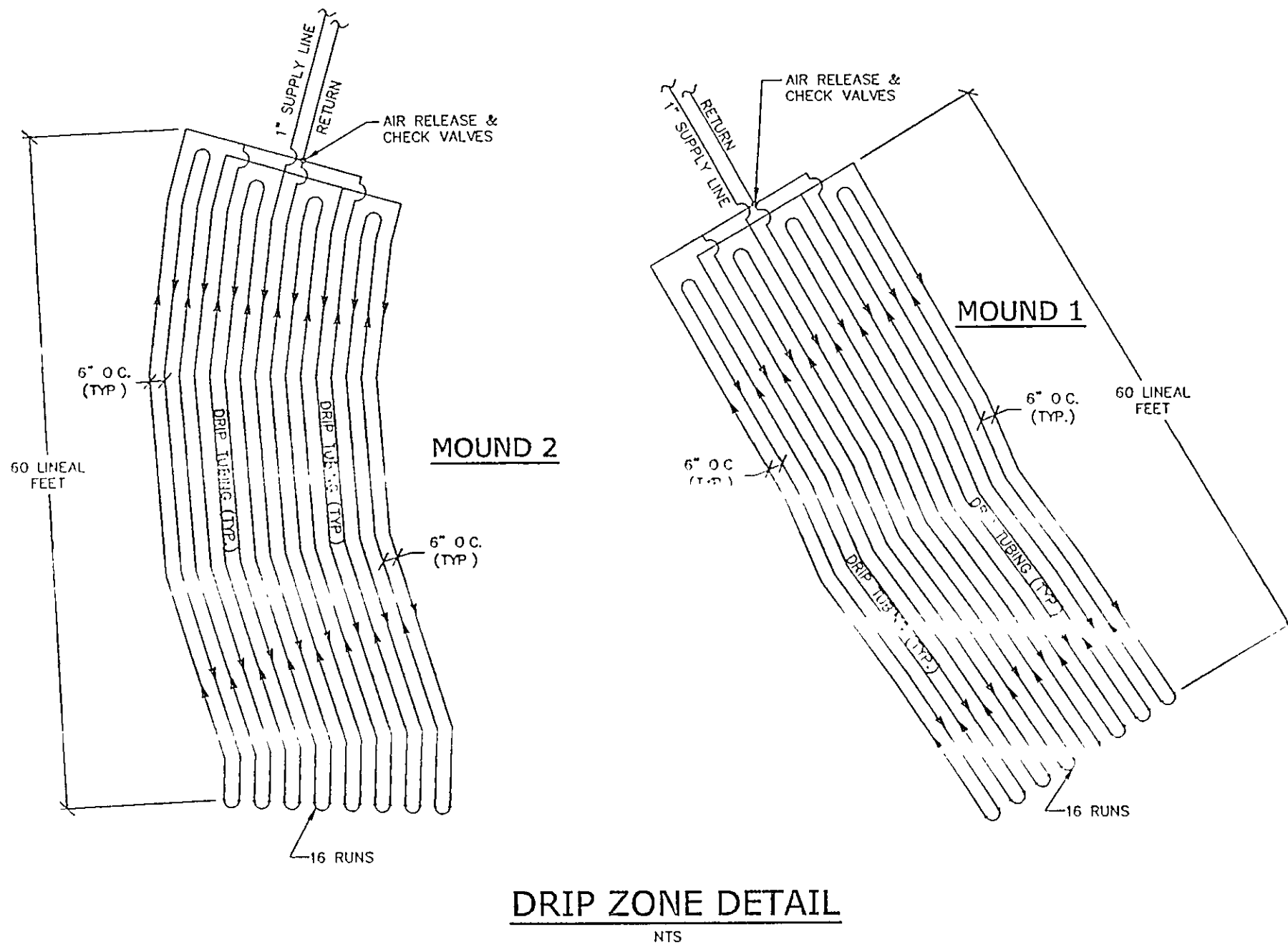
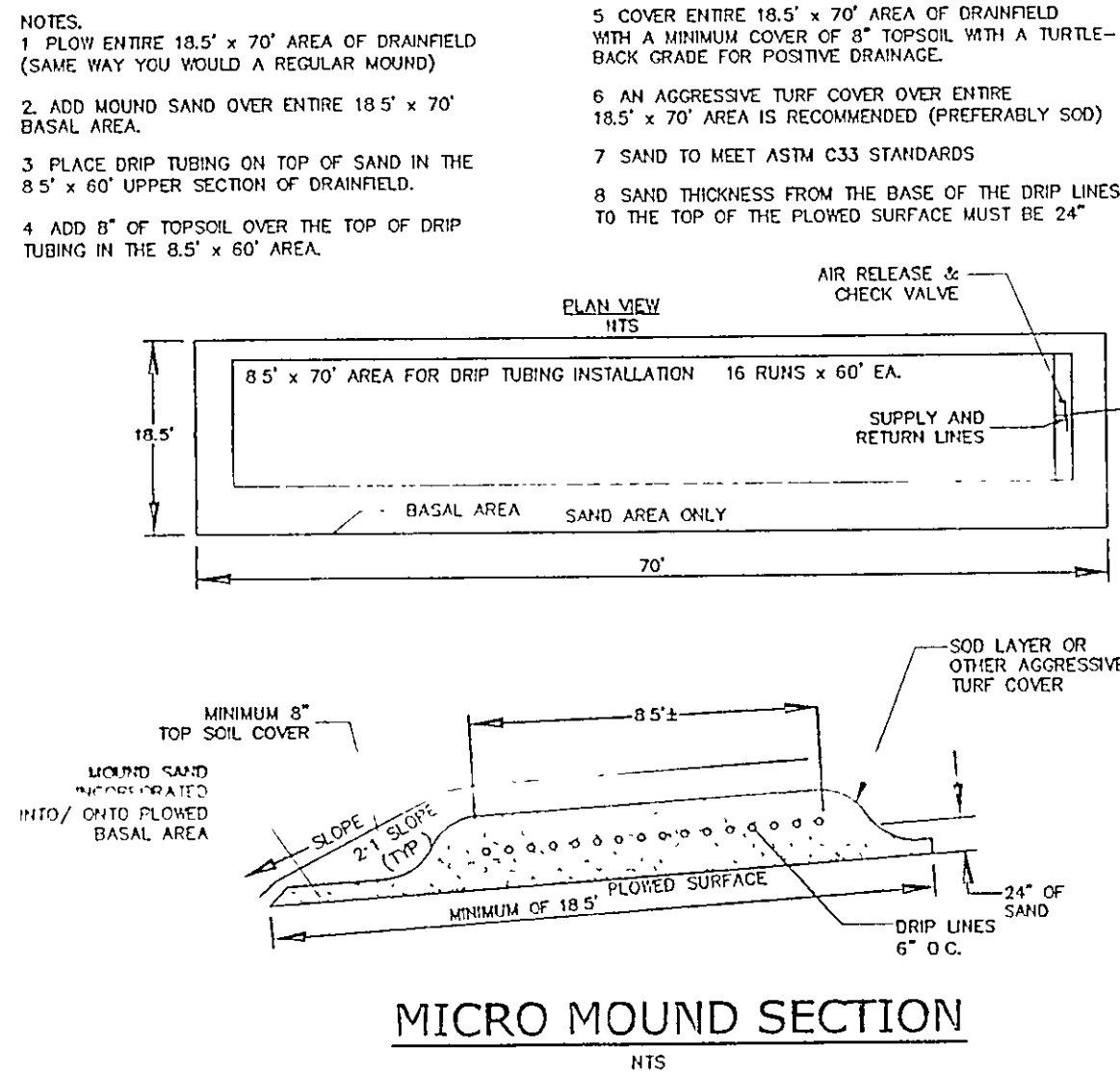
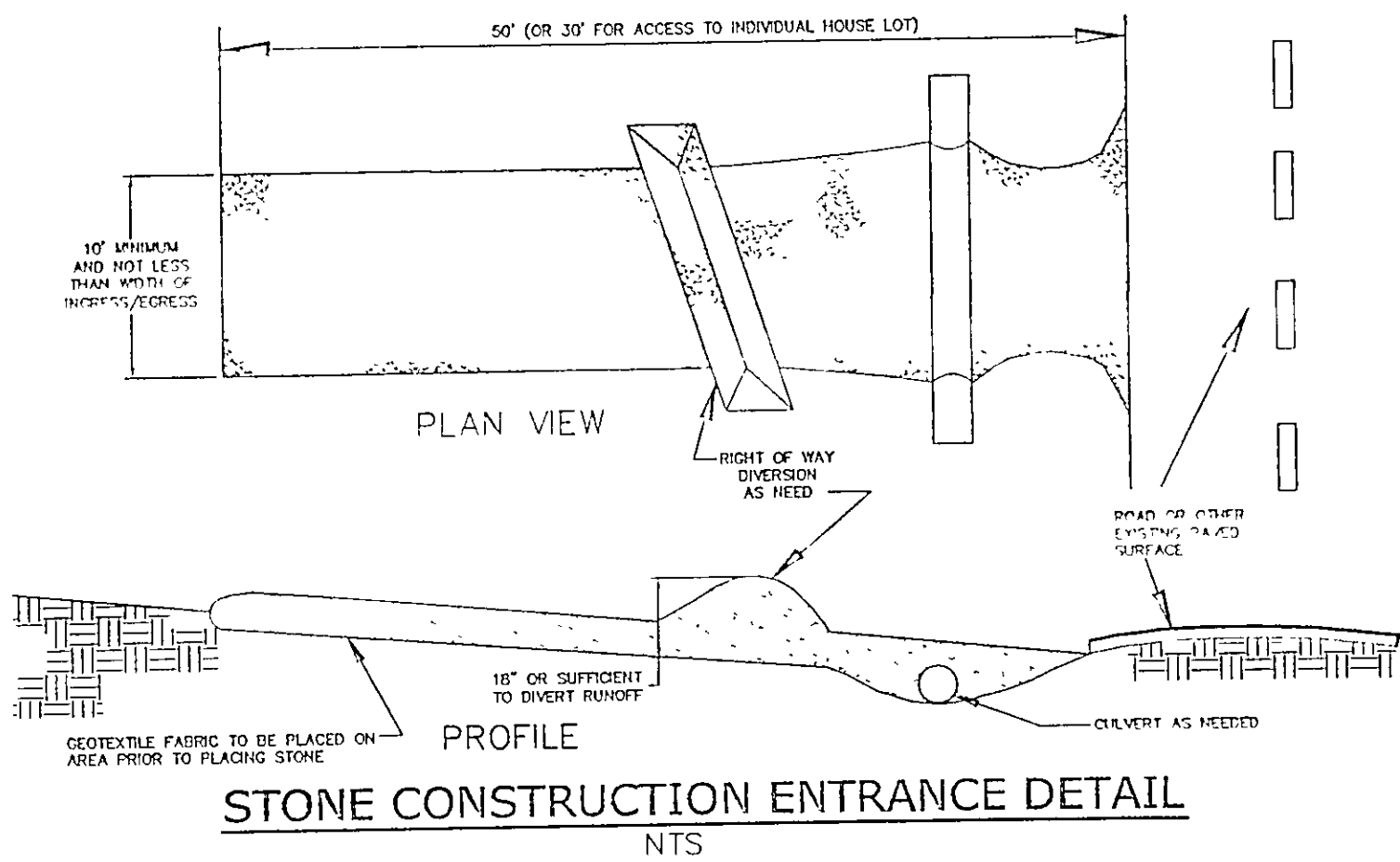
Greenland Consulting, Inc.

7757 Auburn Road, Unit #9, Concord, OH 44077
Phone: (440) 352-1794 Fax: (440) 352-1796
E-Mail: greenland@scglobal.net

Scale: Horiz. 1"=20'
Vert. 1"=As Noted

Sheet No. 1 of 2

Filename: 05-102.vb



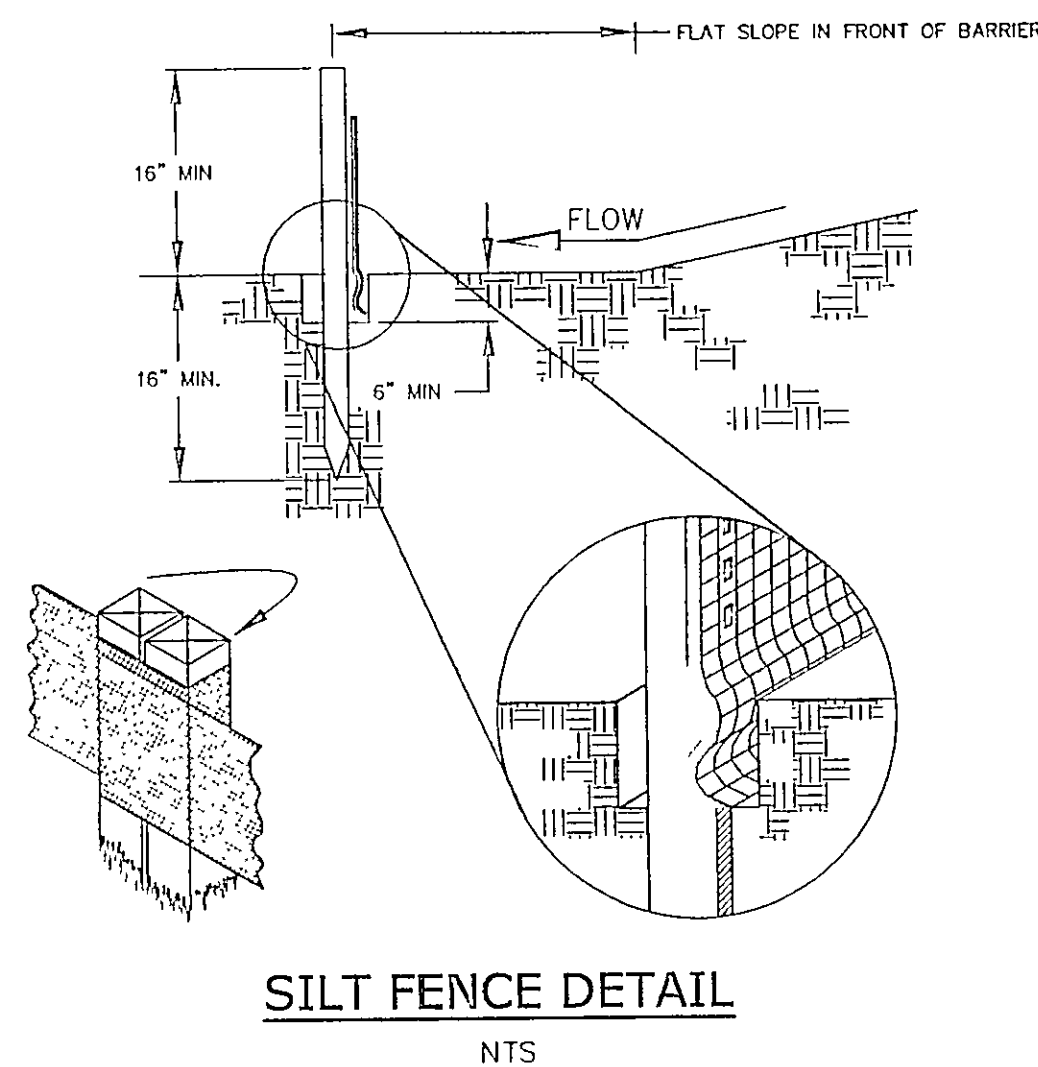
TEMPORARY SEEDING SPECIFICATIONS

SEEDING DATES	SPECIES	LB./1,000 FT.	PER ACRE
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
AUGUST 16 TO NOVEMBER 1	RYE	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
NOVEMBER 1 TO SPRING SEEDING	USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING		

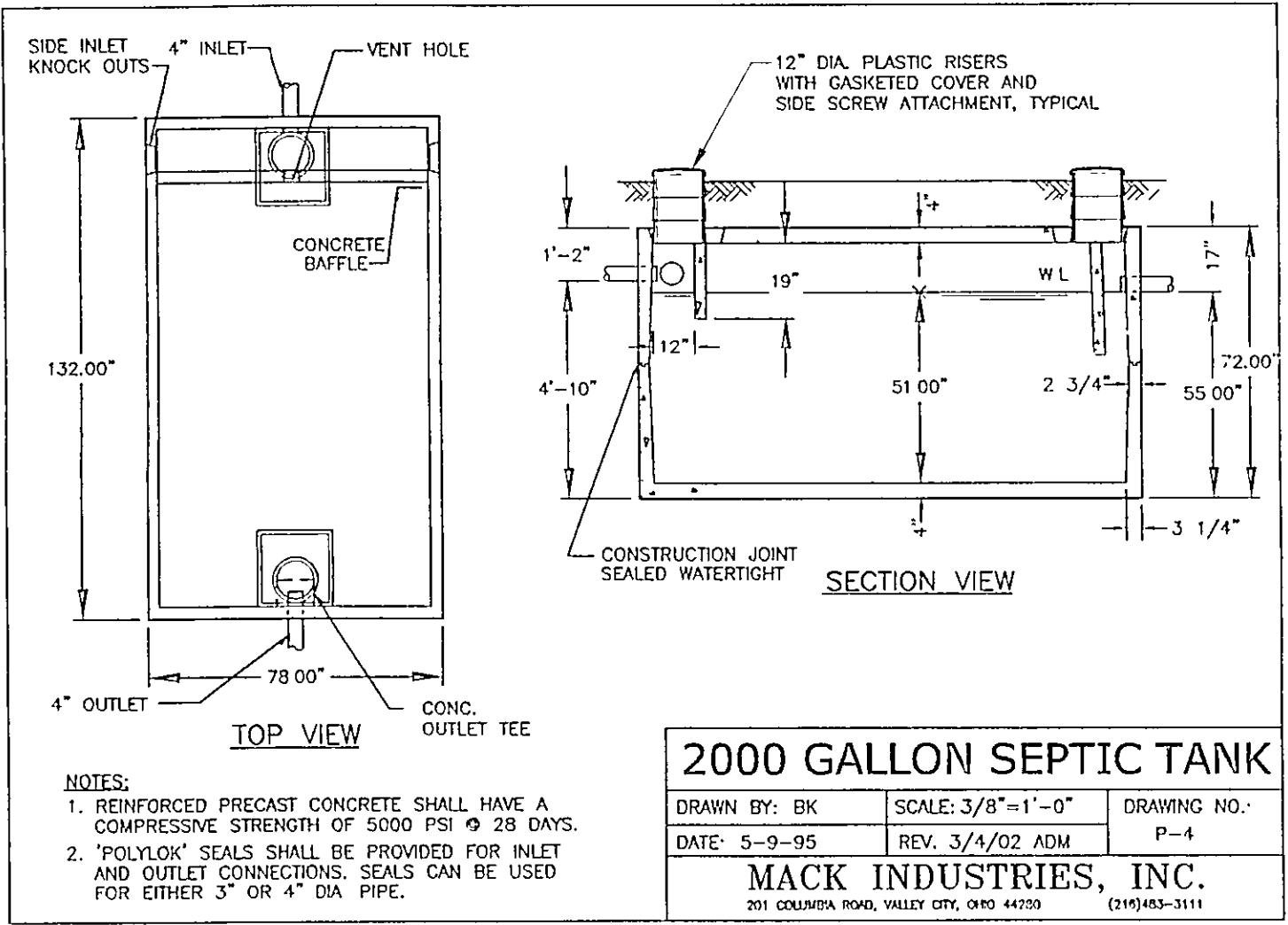
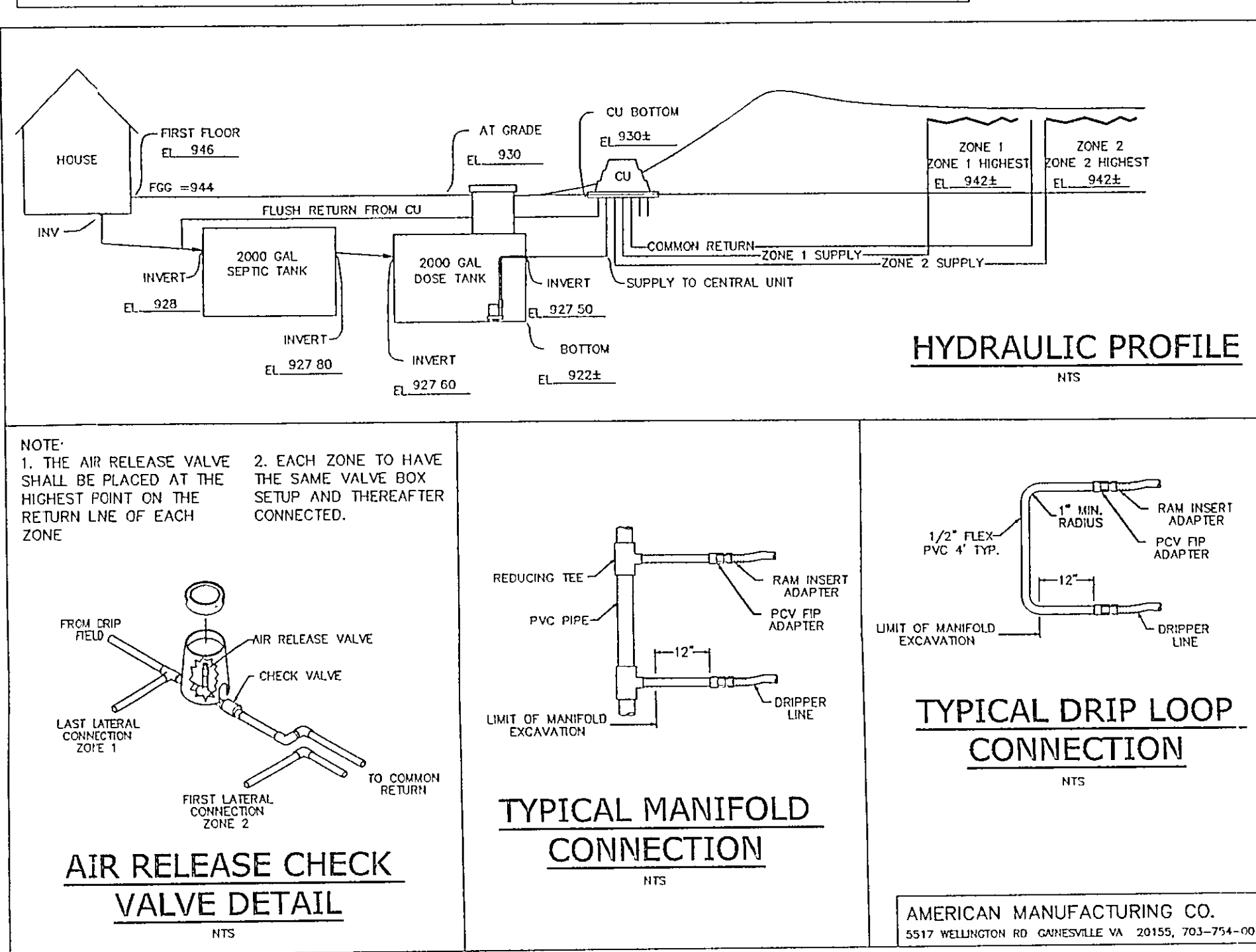
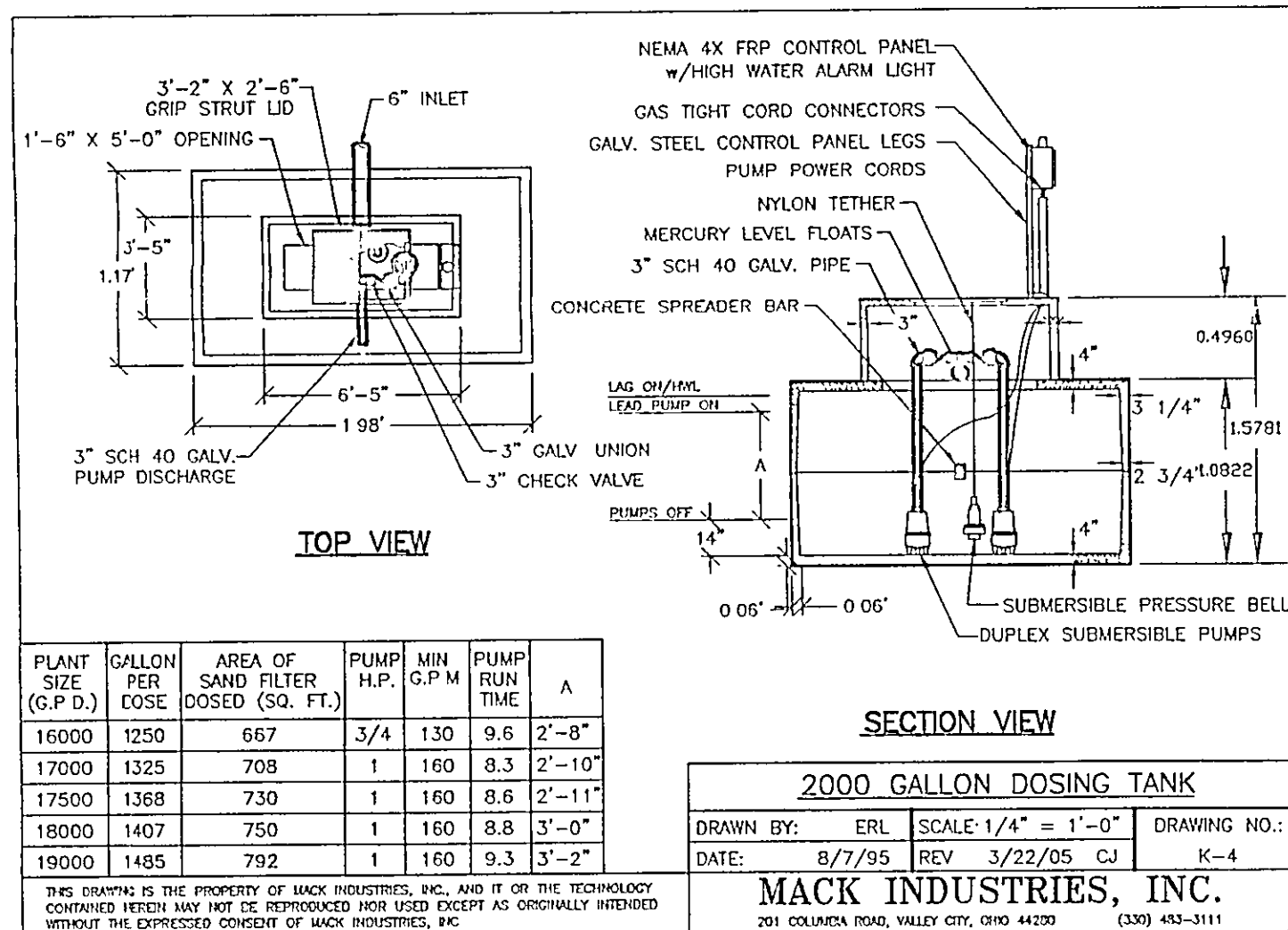
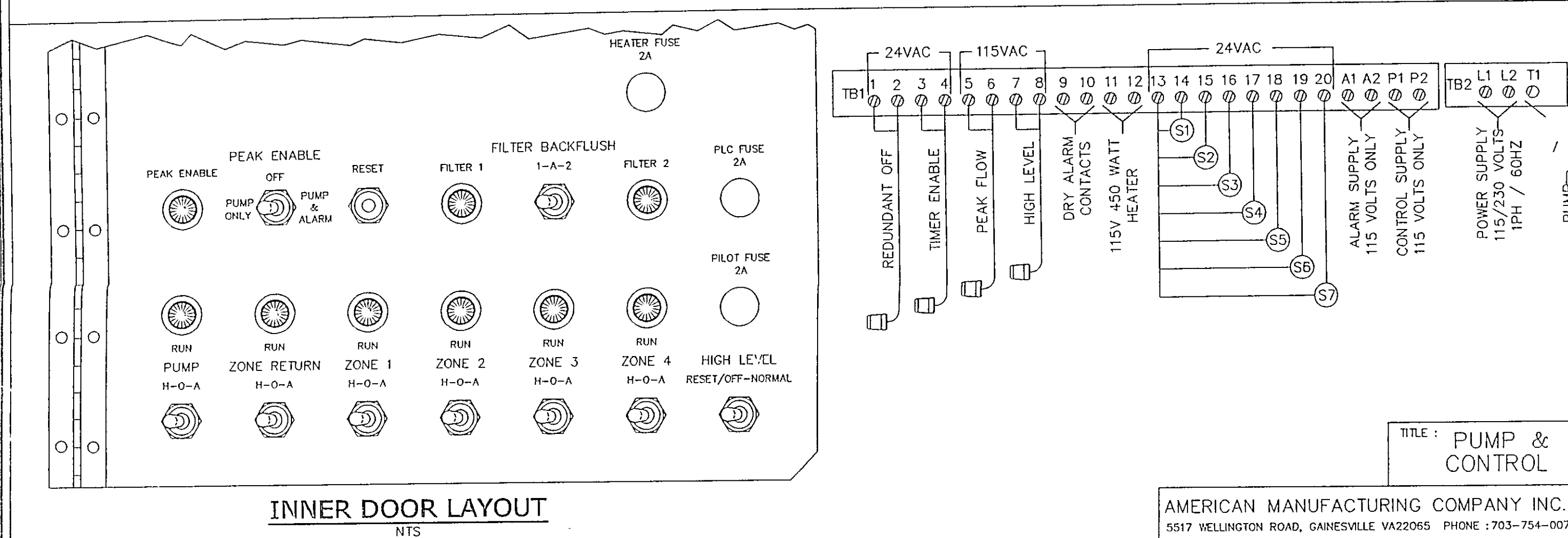
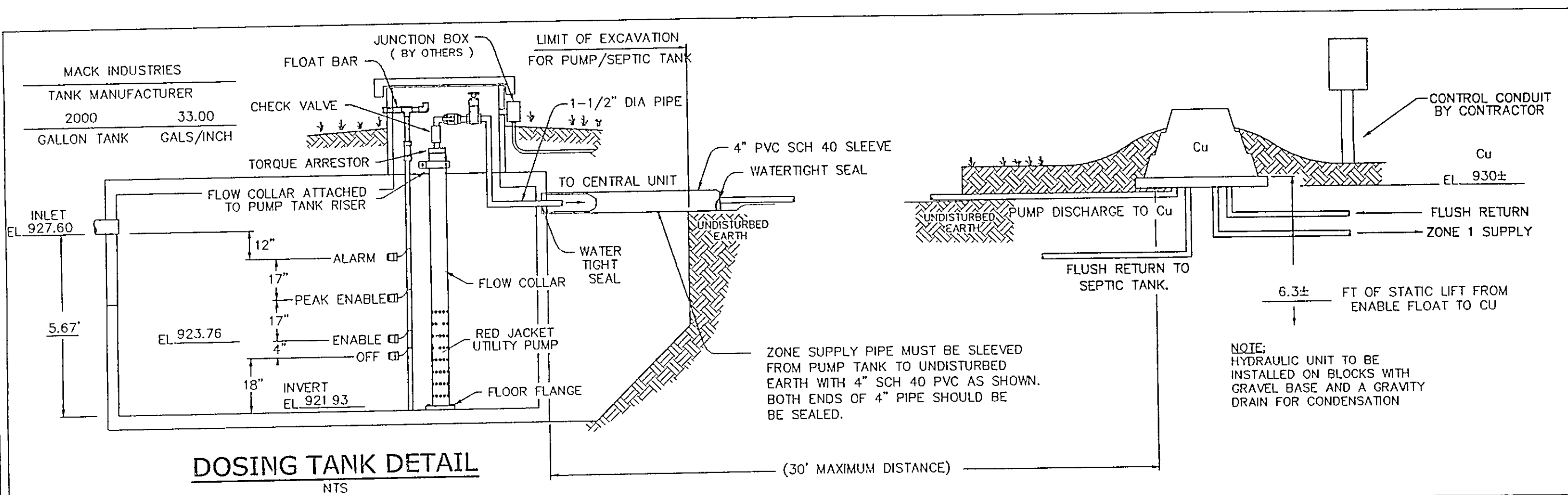
*NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.

ADDITIONAL TEMPORARY STABILIZATION NOTES:

- TEMPORARY SEEDING MUST BE APPLIED WITHIN 7 DAYS OF THE LAST DISTURBANCE OF ANY AREA THAT WILL BE DORMANT FOR 21 DAYS OR LONGER.
- TEMPORARY SEEDING IS REQUIRED WITHIN 7 DAYS OF LAST DISTURBANCE FOR ANY AREAS THAT WILL REMAIN BARE OVER THE WINTER.
- TEMPORARY SEEDING IS REQUIRED WITHIN 2 DAYS OF LAST DISTURBANCE FOR ANY WITHIN 50 FEET OF A STREAM.



MAXIMUM DRAINAGE AREA (IN ACRES) TO 100 LINEAR FEET OF SILT FENCE	RANGE OF SLOPE FOR A PARTICULAR DRAINAGE AREA (IN PERCENT)
0.5	< 2%
0.25	≥ 2% BUT < 20%
0.125	≥ 20% BUT < 50%



NOTE: 1. REINFORCED PRECAST CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 5000 PSI @ 28 DAYS. 2. "POLYLOK" SEALS SHALL BE PROVIDED FOR INLET AND OUTLET CONNECTIONS. SEALS CAN BE USED FOR EITHER 3" OR 4" DIA. PIPE.

Rev.	Description	Date	By	CHKD.
1	Revised as per the LCO review	6-1-06	JL	
2	"	6-9-06	JL	
3	"	6-27-06	JL	

Details
NCT Builders, LLC
P.P.N. 8A-24B-45
Concord Township ~ Lake County ~ Ohio

Drawn By: JML
Checked By:
Approved By:
Date: 6-29-06

Greenland Consulting, Inc.
7757 Auburn Road, Unit #9, Concord, OH 44077
Phone: (440) 352-1794 Fax: (440) 352-1796
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Scale: Horiz. 1"=N/A
Vert. 1"=N/A

Sheet No. 2 Of 2

Filename: 05-102\ufb

NOTE: ALL PUMP AND CONTROL INFORMATION TO BE SUPPLIED BY AMERICAN MANUFACTURING CO.