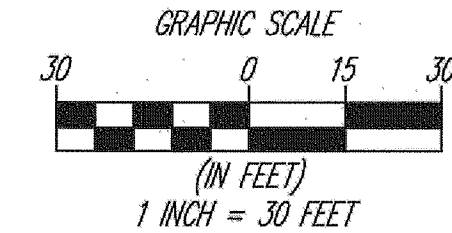


CONCORD TOWNSHIP ZONING OFFICE  
Zoning Permit # 08-14-15430  
Date Issued 8/12/2014  
Subject to Approval By:  
Lake Co. Engineer/Storm Water Mgmt.  
Lake Co. Utilities Dept.  
Lake Co. Soil + Water District  
Lake Co. Health District  
Lake Co. Building Dept.

William & Laurie Deitman  
PPN: 08-A-002-0-00-053-0  
Doc # 2014R014555

REVIEWED AND ACCEPTED  
LAKE COUNTY GENERAL  
HEALTH DISTRICT  
8-14-14

SEWAGE DISPOSAL PERMIT MUST BE  
OBTAINED BY A LAKE COUNTY LICENSED  
INSTALLER BEFORE INSTALLATION IS  
COMPLETED



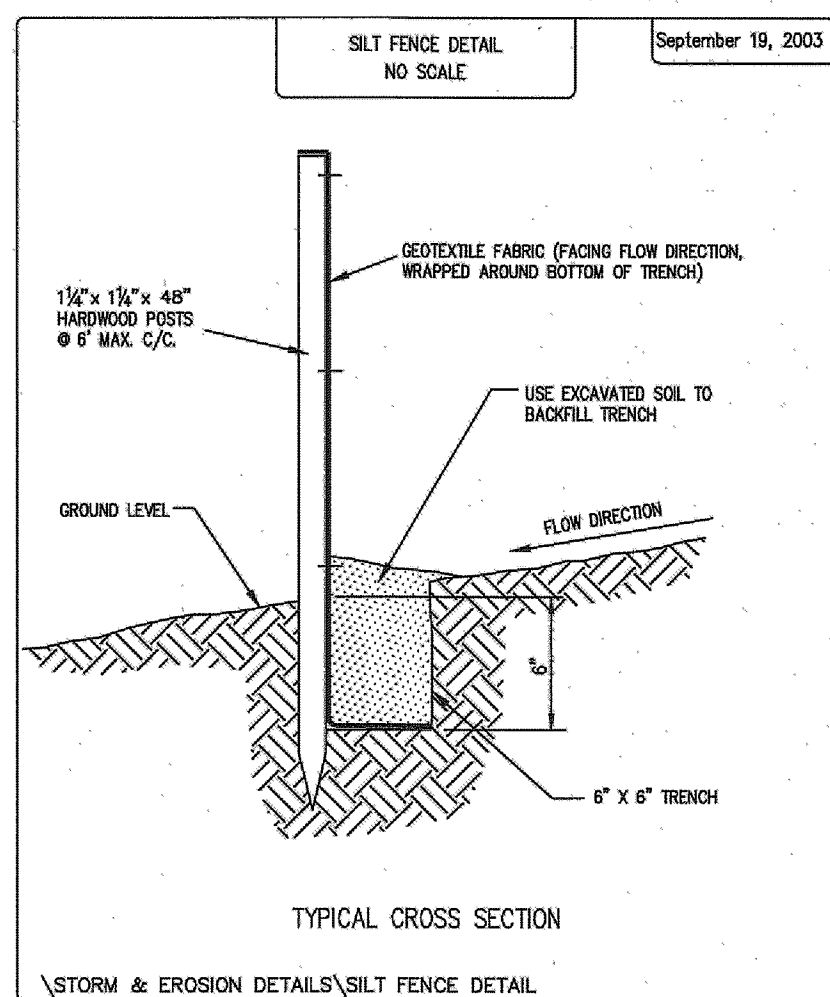
BUILDER INFO:  
JEMM CONSTRUCTION, LLC  
200 BLACKBROOK ROAD  
PAINESVILLE, OH 44077  
440-358-0008

NOTES:  
SEPTIC INSTALLER AND DESIGNER TO  
COORDINATE AS REQUIRED TO PROVIDE  
AN ACCURATE AS-BUILT.  
SEPTIC SYSTEM AND ALL COMPONENTS  
SHALL BE NEC COMPLIANT.

### House Grading Summary

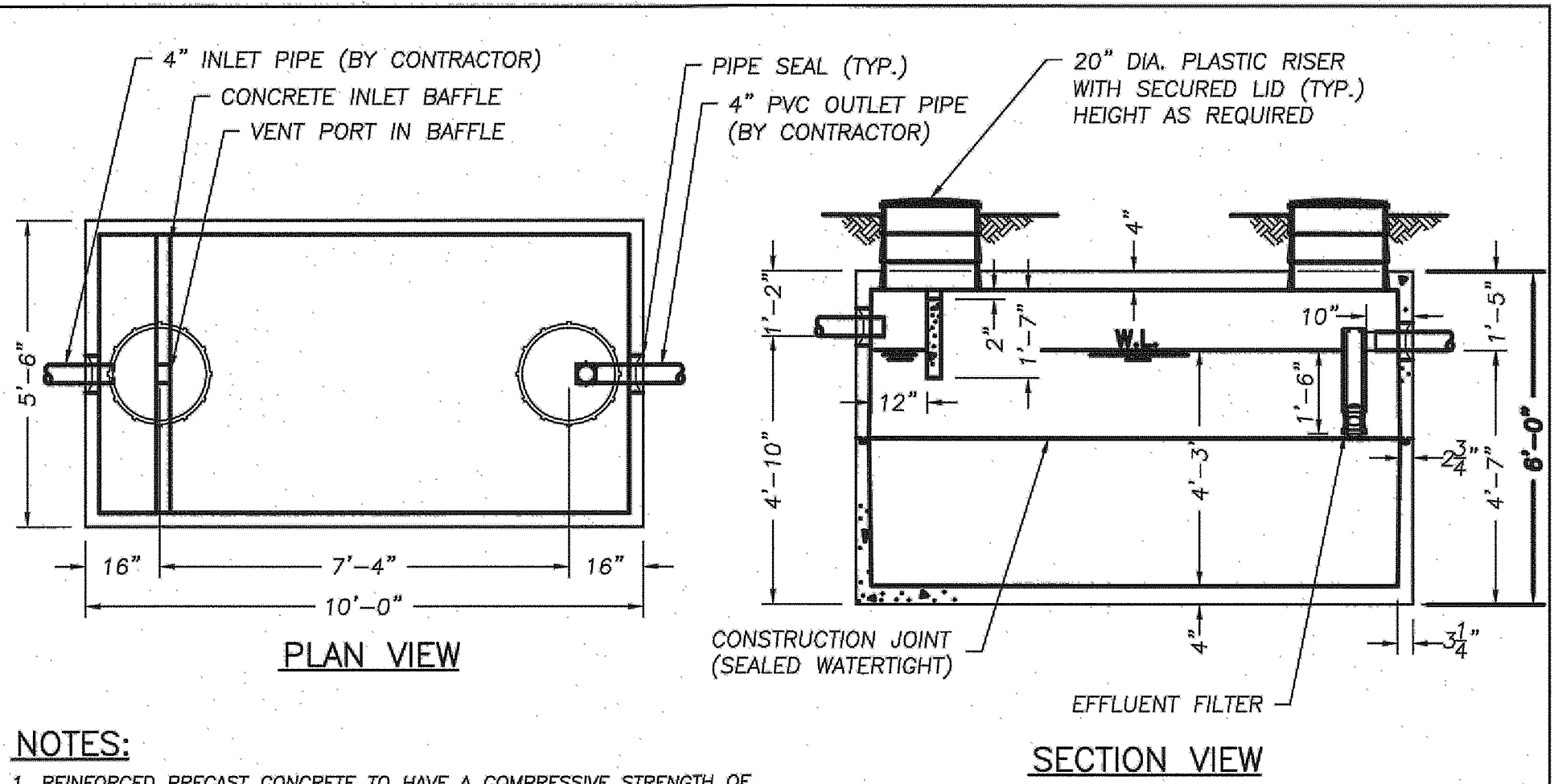
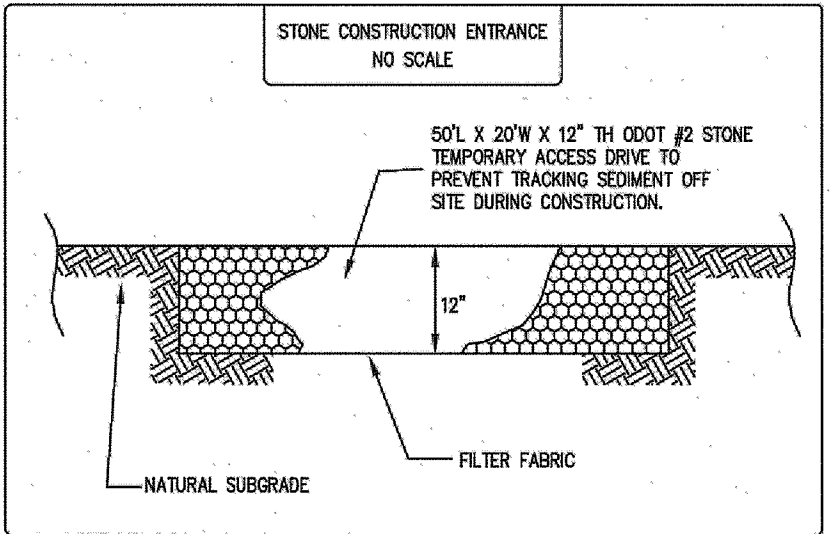
Elevations Used To Establish  
House Floor Grades:  
-Gar.Ftr.+2'4"=Top/Wall  
-Top/Wall+1'2"=Fst.Flr.  
-Top/Wall-8'8"=Top/Ftr. (13 Course Bemt Wall)  
-Top/Ftr.+4'(0.33)=Bemt.Flr.

NOTES:  
- DOWNSPOUTS TO BE SPLASH BLOCKED AND SUMP  
PUMP TO DAYLIGHT TO EX. DITCH (SEE PLAN)  
-GRINDER PUMP REQUIRED FOR BASEMENT PLUMBING



| Temporary Seeding Specifications |                    |                |          |
|----------------------------------|--------------------|----------------|----------|
| Seeding Dates                    | Species            | Lb. / 1000sqft | 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.   |
| August 16 to November 1          | Rye                | 1              | 2 bushel |
|                                  | Tall Fescue        | 1              | 40 lb.   |
|                                  | Annual Ryegrass    | 1              | 40 lb.   |
|                                  | Perennial Ryegrass | 1              | 40 lb.   |
| November 1 to Spring Seeding     | Wheat              | 1              | 40 lb.   |
|                                  | Tall Fescue        | 1              | 40 lb.   |
|                                  | Annual Ryegrass    | 1              | 40 lb.   |
|                                  | Perennial Ryegrass | 1              | 40 lb.   |

Note: other approved seed species may be substituted.



- 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"

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                                   |                     |                              |
|----------------------------------------------------------|---------------------|------------------------------|
| 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)463-3111 |                     |                              |

### TOPOGRAPHIC CERTIFICATION:

I, the undersigned, hereby certify that this topography, indicated by 1' contours, and elevations shown hereon, represent an actual field survey made by me on the 7th day of July, 2014, and that the elevations were taken at appropriate intervals and that as of that date they existed as indicated hereon. Vertical datum is based on NAVD88.

RICHARD A. THOMPSON, JR., P.S. #7388

### SEWAGE SYSTEM DESIGN CERTIFICATION

I CERTIFY THAT THIS SEWAGE SYSTEM DESIGN MEETS THE MINIMUM REQUIREMENTS ESTABLISHED BY THE REGULATIONS OF THE BOARD OF HEALTH OF LAKE COUNTY GENERAL HEALTH DISTRICT PART (CHAPTER) 29, "SEWAGE TREATMENT SYSTEM RULES" AND THE RECOMMENDATIONS OF THE SYSTEM MANUFACTURER.

BY: Dustin R. Keeney  
DUSTIN R. KEENEY

REG. NO. 65515

2 WORKING DAYS  
BEFORE YOU DIG  
CALL 8-1-1

OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS MUST BE CALLED DIRECT

### EXISTING UNDERGROUND UTILITIES NOTE:

THE SIZE AND LOCATION, BOTH HORIZONTAL AND VERTICAL OF THE UNDERGROUND UTILITIES SHOWN HEREON, HAVE BEEN OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED HEREON. VERIFICATION BY FIELD OBSERVATION HAS BEEN CONDUCTED, WHERE PRACTICAL. HOWEVER, POLARIS ENGINEERING & SURVEYING, INC. DOES NOT GUARANTEE THE COMPLETENESS NOR ACCURACY THEREOF.

### Erosion and Sediment Control Schedule

General  
Any sediment-laden groundwater encountered during construction shall be treated prior to discharge.

Ingress-Egress  
A stone access drive complete with under lying geo-textile fabric (20 feet wide and 50 feet long) for ingress and egress at the site shall be installed if there is not already an existing access drive. This drive shall be the only entrance and exit to the site.

Silt Fence  
All silt fence shall be installed prior to any earthwork activities at the site in the locations shown on the site plan as well as along the front of any lot that slopes towards the street.

Temporary Seeding  
Disturbed areas of the site that are to remain idle for more than thirty (30) days shall be properly seeded and straw mulched within seven (7) days of completion of initial grading. Temporary seeding and mulching of a thirty (30) foot strip of the entire front of the lot shall be maintained on the site once initial grading is complete.

Stabilization of critical areas within fifty (50) feet of any stream or wetland shall be complete within two (2) days of the disturbance if the site is to remain inactive for longer than fourteen (14) days.

Mulching  
Straw-mulch shall be applied at a rate of 1 bale per every ten (10) feet of curb, at a width of thirty (30) feet of the entire length of the lot. Wood chips may also be used but must be spread at a minimum depth of four inches over the thirty-foot width and must be accompanied by a properly installed silt fence.

Maintenance  
Erosion and sediment controls shall be inspected every seven (7) days or within 24 hours of a 0.5" or greater rainfall event. Necessary repairs shall be made at this time.

Notes:  
All erosion and sediment control specifications, applications, and timetables are based on the descriptions and standards of The Ohio Department of Natural Resources Rainwater and Land Development Manual.

The specified erosion and sediment control standards are the general guidelines and shall not limit the right of the county to impose, at any time, additional, more stringent requirements. Nor shall the standards limit the right of the county to waive, in writing, individual requirements.

| SEPTIC DESIGN DATA:                                |  |
|----------------------------------------------------|--|
| -Linear Loading Rate = 2.7 Gal/Day/Ft              |  |
| -Infiltration Loading Rate = 0.6 Gal/Day/Ft.Sq'd   |  |
| -Perched Seasonal Water Table @ 12"                |  |
| -Bedrock > 46"                                     |  |
| -3 Bedroom House = 360 Gal/Day                     |  |
| -See Drip Design calculations for additional info. |  |

### PERMANENT SEEDING SPECIFICATIONS

| Seed Mix                  | Lb./ac. | Lb. / 1000sqft | Notes:                         |
|---------------------------|---------|----------------|--------------------------------|
| General Use               |         |                |                                |
| Creeping Red Fescue       | 20-40   | 1/2-1          |                                |
| Domestic Ryegrass         | 10-20   | 1/4-1/2        |                                |
| Kentucky Bluegrass        | 10-20   | 1/4-1/2        |                                |
| Tall Fescue               | 40      |                |                                |
| Dwarf Fescue              | 40      |                |                                |
| Steep Banks or Cut Slopes |         |                |                                |
| Tall Fescue               | 40      | 1/4            | Do not seed later than August. |
| Crown Vetch               | 10      | 1/2            |                                |
| Tall Fescue               | 20      | 1/2            | Do not seed later than August. |
| Flat Pea                  | 20      | 1/2            |                                |
| Tall Fescue               | 20      | 1/2            |                                |
| Road Ditches and Swales   |         |                |                                |
| Tall Fescue               | 40      | 1              |                                |
| Dwarf Fescue              | 40      | 1/4            |                                |
| Kentucky Bluegrass        | 5       |                |                                |
| Lawns                     |         |                |                                |
| Kentucky Bluegrass        | 60      | 1 1/2          |                                |
| Perennial Ryegrass        | 60      | 1 1/2          |                                |
| Kentucky Bluegrass        | 60      | 1 1/2          | For Shaded areas.              |
| Creeping Red Fescue       | 60      | 1 1/2          |                                |

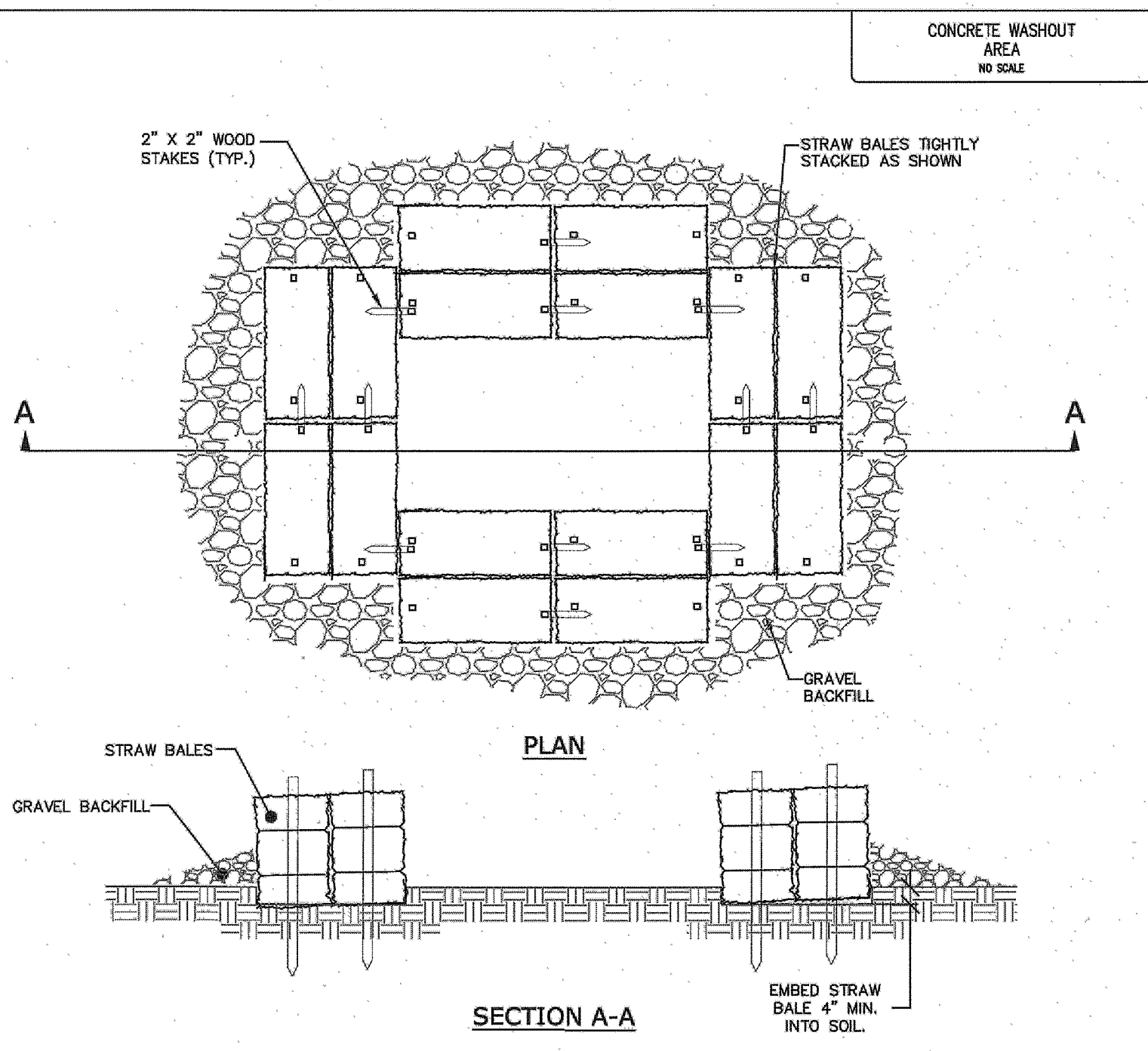
Note: other approved seed species may be substituted.

Mulching  
Straw mulch shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread two 45-lb. bales of straw in each section.

### SITE RESTRICTIONS AND SITING CONSIDERATION NOTES

- 1) ALL TUBING TO BE INSTALLED PARALLEL WITH THE CONTOURS.
- 2) TUBING TO BE PLACED LEVEL BED OF SAND AND HELD DOWN WITH LANDSCAPE STAPLES. TUBING TO BE COVERED WITH A MINIMUM OF 8" OF TOPSOIL.
- 3) EXISTING TREES TO BE CUT LEVEL WITH GROUND AND ABSORPTION AREA TO BE CHISEL PLOWED TO A DEPTH OF 3" TO 4" INCHES.
- 4) UPSLOPE INTERCEPTOR DRAIN TO BE INSTALLED TO REDUCE THE INFLUENCE OF STORM WATER FROM THE HILLSLOPE.

NOTE:  
OPERATION AND MAINTENANCE OF DRIP DISTRIBUTION SEPTIC SYSTEM SHALL BE PER MANUFACTURER'S SPECIFICATIONS.



### 3. CONCRETE WASH OUT AREAS:

THE RESIDUE OR CONTENTS OF ALL CONCRETE MIXERS, DUMP TRUCKS, OTHER CONVEYANCE EQUIPMENT AND FINISHING TOOLS SHALL BE WASHED INTO CONCRETE CLEAN-OUT STRUCTURES CONSISTING OF A STRAW BALE BARRIER WITH GRAVEL BACKFILL. THE LENGTH AND WIDTH OF THESE STRUCTURES SHALL BE AS DETERMINED BY THE CONTRACTOR TO FACILITATE THE PARTICULAR EQUIPMENT USED. THESE STRUCTURES SHALL BE CONSTRUCTED ON LEVEL GROUND AT LEAST 100' FROM THE NEAREST WATERCOURSE, DRAINAGE SWALE OR INLET. AT NO TIME SHALL THE STRUCTURE BE ALLOWED TO BE MORE THAN 50% FULL. THE CONTRACTOR SHALL MAINTAIN THESE PONDS UNTIL ALL CONCRETE PLACEMENT IS COMPLETE FOR THE PROJECT.

EMBED THE STRAW BALES 4" INTO THE SOIL. PROVIDE TWO ROWS OF BALES, AS SHOWN ON THE DETAIL, WITH ENDS AND CORNERS TIGHTLY ABUTTING. ORIENT THE STRAW BALES LENGTHWISE WITH BUNDLES AROUND THE SIDES OF THE BALES SO THE WIRE DOES NOT CONTACT THE SOIL. DRIVE 2"x2" WOOD STAKES THROUGH EACH BALE, TO SECURELY ANCHOR THE BALE AND CONNECT ADJACENT BALES. GRAVEL BACKFILL SHALL BE PROVIDED AND TAMPED AROUND THE OUTSIDE PERIMETER OF THE BALES TO PREVENT EROSION AND FLOW AROUND THE BALES.

THE INTENT OF THESE STRUCTURES IS TO COLLECT ALL CONCRETE WASH OUT WATER AND ALLOW IT TO DRY TO A SOLID MATERIAL. AFTER DRYING, THE SOLID MATERIAL CAN BE REMOVED WITH A LOADER OR EXCAVATOR FOR PROPER DISPOSAL. WASH OUT WILL NOT BE PERMITTED IN ANY OTHER AREAS.

USE THE MINIMUM AMOUNT OF WATER TO WASH THE VEHICLES AND EQUIPMENT. NEVER DISPOSE OF WASH OUT INTO THE STREET, STORM INLET, DRAINAGE SWALE OR WATERCOURSE. DISPOSE OF SMALL AMOUNTS OF EXCESS DRY CONCRETE, GROUT AND MORTAR IN THE TRASH. ANY SOAPS THAT ARE UTILIZED SHALL BE PHOSPHATE-FREE AND BIODEGRADABLE.

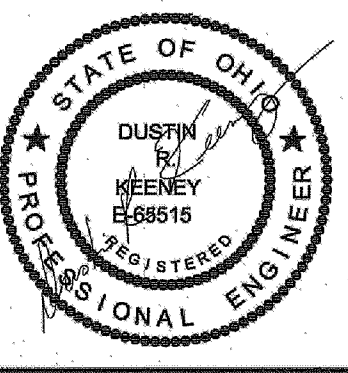
ADDITIONAL CONCRETE CLEAN-OUT STRUCTURES SHALL BE CONSTRUCTED WITHIN THE SPECIFIED AREA AS NEEDED BASED UPON THE VOLUME OF WASH OUT GENERATED DAILY.

NOTE:  
OPERATION AND MAINTENANCE OF PROPOSED SEPTIC SYSTEM SHALL BE PER MANUFACTURER'S SPECIFICATIONS.

PROPOSED SEPTIC DISTRIBUTION AREA MUST BE STAKED AND FENCED OFF PRIOR TO ANY SITE DISTURBANCE. ANY DISTURBANCE OR DAMAGE TO THE SEPTIC DISTRIBUTION AREA MAY RESULT IN THE INVALIDATION OF THE DESIGN PLAN.

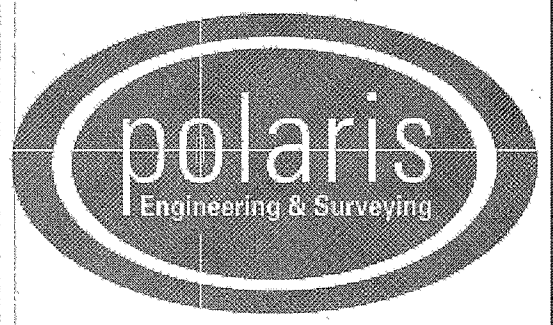
NOTE: THIS SURVEY SUBJECT TO CHANGE UPON RECEIPT OF ANY ADDITIONAL AVAILABLE UNDERGROUND UTILITY INFORMATION.

| REV. No. | DATE | BY | CHK'D |
|----------|------|----|-------|
|          |      |    |       |
|          |      |    |       |
|          |      |    |       |
|          |      |    |       |
|          |      |    |       |



|             |           |
|-------------|-----------|
| DATE:       | 07/09/14  |
| SCALE: HOR. | 1"=30'    |
| VERT.       | 1"=0'     |
| FOLDER:     | Site Plan |
| FILENAME:   | Site Plan |
| TAB:        | Site Plan |
| DRAWN:      | DRW       |

PPN: 08-A-002-0-00-052-0  
NUTI RESIDENCE  
CONCORD TOWNSHIP - LAKE COUNTY - OHIO



POLARIS ENGINEERING & SURVEYING, INC.  
34600 CHARDON ROAD - SUITE D  
WILLOUGHBY HILLS, OHIO 44094  
(440) 944-4433 (440) 944-3722 (Fax)  
www.polaris-es.com

ALTERNATE  
SEPTIC SITE PLAN  
& DETAILS

| CONTRACT No. |    |
|--------------|----|
| 14118        |    |
| SHEET        | OF |
| 1            | 2  |

Stormwater Management Plan  
Approved as shown and/or noted  
JAMES R. GILLIS, P.E.  
County Drainage Engineer  
By: J.S. Date: 8/12/14