SOIL CAP NOTES:

- PRIOR TO SOIL CAP PLACEMENT, CONTRACTOR TO REMOVE ALL TREES ON PRIMARY AND REPAIR FIELDS BY CUTTING HUB FLUSH WITH THE GROUND SURFACE AND REMOVE ALL REMAINING LEAF LITTER, ETC.
- CONTRACTOR TO INSTALL DRIP LATERALS 2 INCHES DEEP AND 2 FT CTS MIN. ON CONTOUR AS SHOWN.
- CONTRACTOR SHALL CONSULT WITH LSS FOR APPROVAL OF SOIL TYPE PRIOR TO PLACEMENT. SOIL TYPE SHALL BE A GROUP III CLAY LOAM OR LIGHTER.
- CONTRACTOR TO PLACE A 6-8 INCH SOIL CAP OVER THE PRIMARY AND REPAIR LATERAL LOCATIONS. THE SOIL CAP SHALL EXTEND A MINIMUM OF 10 FEET BEYOND THE DRAINFIELD AND BEGIN TO TAPER INTO THE EXISTING GROUND FIVE FEET BEYOND END OF LATERALS.
- DO NOT COMPACT SOIL CAP. DUE TO SETTLEMENT OVER TIME, THE SOIL CAP SHOULD SETTLE OUT OVER TIME TO 4 INCHES.
- CONTRACTOR TO INSTALL A PERMANENT DIVERSION SWALE UPSLOPE OF THE PROPOSED DRAINFIELD TO PREVENT EROSION TO THE DRAINFIELD AND PREVENT THE HYDRAULIC OVERLOADING OF THE SYSTEM.
- UPON PLACEMENT OF THE SOIL CAP, CONTRACTOR TO HAND RAKE AREA, SEED AND STRAW ACCORDING TO SPECIFICATIONS TAKING CARE TO HAVE A UNIFORM PLACEMENT OF THE SOIL CAP AND REMOVING ANY LOW SPOTS.

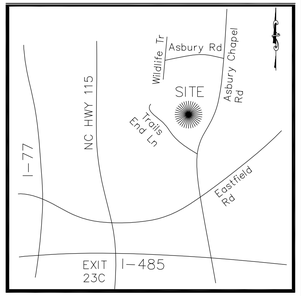
DEED BOOK 21206
PAGE 123
Dated: 10/13/2006

DESIGN NOTES:	
DESIGN FLOW:	480 G/D
LTAR:	0.32 G/D/SF
REPAIR LTAR:	0.32 G/D/SF
REPAIR AREA:	>3,000 SF PROVIDED 1,460 SF NEEDED
SEPTIC TANK SIZE:	1,000 GALLON (BAFFLED)
EFFLUENT FILTER:	OSI MODEL FTPS0436-28-NC
ADVANCED TREATMENT:	ORENCO ADVANTEX AX-20RT
RECIRCULATION PUMP:	ORENCO MODEL PF300512
TREATMENT STANDARD:	TS-I
FIELD DOSING PUMP:	ORENCO MODEL PF100712
SUBSURFACE DISTRIBUTION:	GEOFLOW WASTEFLOW DRIP
NUMBER OF ZONES:	1
NO. OF LATERALS (Z-1):	5 LATERALS (730 LF TOTAL)

1 ZONE
12 DOSES PER DAY
12.42 MINUTES PER DOSE
3.22 G/M (Z-1)
TOTAL PUMP RUN TIME PER DAY: 149.04 MIN.

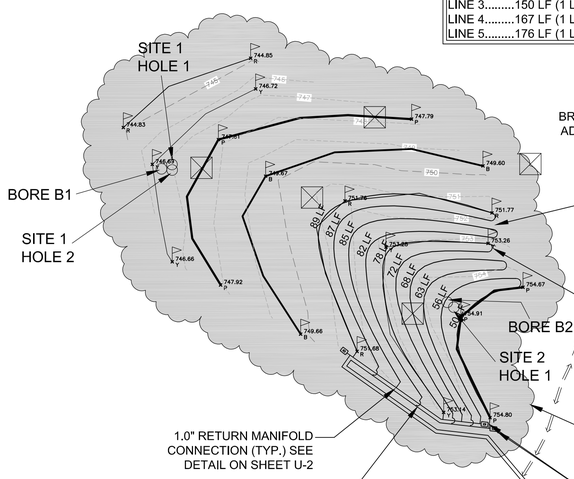
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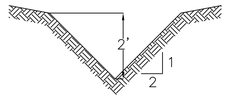
- SOILS WORK PROVIDED BY ADRIAN PRUETT, LSS
- REFER TO SHEET U-2 FOR SYSTEM DETAILS & ELEVATIONS.
- PRIOR TO ANY CONSTRUCTION, BARRICADE ALL DISPOSAL AREAS FROM CONSTRUCTION TRAFFIC.
- CLEAR DRIP FIELD OF ALL DEBRIS, LIMBS, ETC. LIGHTLY HAND SMOOTH ANY IRREGULAR SURFACES. PRIOR TO INSTALLATION OF DRIPLINES, ENSURE THAT DISPOSAL AREA IS CAPABLE OF SHEDDING RAINWATER AND FREE OF ANY LOW AREAS
- SEED ALL DISPOSAL AREAS.
- MAINTAIN 2' MINIMUM SEPARATION ON ALL DRIP LINES
- OBSERVE ALL SETBACKS.
- AREA IS AVAILABLE FOR REPAIR AND SHALL REMAIN UNDISTURBED



VICINITY MAP
NO SCALE

LINE 1.....106 LF (1 LOOP) UPPER LINE
LINE 2.....131 LF (1 LOOP)
LINE 3.....150 LF (1 LOOP)
LINE 4.....167 LF (1 LOOP)
LINE 5.....176 LF (1 LOOP) LOWER LINE





PERMANENT DIVERSION SWALE
NOT TO SCALE

CONTRACTOR TO REMOVE ALL TREES/ BRUSH IN WOODED AREA FOR DRAINFIELD. CONTACT ADRIAN PRUETT, LSS PRIOR TO TAKING OUT STUMPS FOR PROPER MEANS & METHODS OF REMOVAL.

PROP. 730 LF GEOFLOW DRIP TUBING. INSTALL AT 2.0' CTS MIN. ON CONTOUR. PER DETAIL ON SHEET U-2

PROP. FLEX TUBE LOOPBACKS PER DETAIL ON SHEET U-2

CONTRACTOR TO INSTALL A PERMANENT DIVERSION SWALE/BERM ACROSS TOP OF DRAINFIELD TO DIVERT SURFACE WATER OUT AND AROUND PROPOSED DRAINFIELD PER DETAIL ON THIS SHEET.

LIMITS OF 4-INCH SOIL CAP RECOMMENDED BY LSS. EXTEND 10' BEYOND DRAINFIELD LIMITS.

PROP. AIR RELEASE VALVE & CLEANOUTS IN RISERS TO GRADE PER DETAIL ON SHEET U-2

1.0" RETURN MANIFOLD CONNECTION (TYP.) SEE DETAIL ON SHEET U-2

1.5" SUPPLY MANIFOLD CONNECTION (TYP.) SEE DETAIL ON SHEET U-2

PROPOSED WELL LOCATION.
TO BE PERMITTED BY MECKLENBURG COUNTY HEALTH DEPARTMENT UNDER SEPARATE PERMIT.

Proposed Driveway

±30 LF 1-INCH PVC FLUSH RETURN FROM HEADWORKS ASSEMBLY TO SEPTIC TANK INLET RISER

(1) OSI ADVANTEX AX-20RT WITH INCORPORATED RECIRCULATION & PUMP CHAMBER

(1) 1,000 GALLON SEPTIC TANK WITH (1) EFFLUENT FILTER

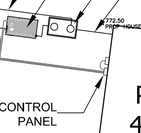
4" PVC FROM HOUSE

PROP. ±220 LF OF 1.5" SCH 40 PVC SUPPLY PIPE & ±220 LF OF 1.0" SCH 40 PVC RETURN PIPE (MEASURED FROM HEADWORKS TO DRAINFIELD) MIN. BURY SHALL BE 36-INCHES BGS

HEADWORKS ASSEMBLY

UGE TO PUMPS, FLOATS, & HEADWORKS

CONTROL PANEL



PROPOSED 4 BEDROOM HOUSE BOX

CONTRACTOR TO INSTALL HOSE BIB ADJACENT TO TREATMENT AREA FOR MAINTENANCE

10' SETBACK

N69°51'05"W 694.62'

35.04'

211.34'

10' SETBACK

Know what's below.
Call before you dig.

Feet
20 0 20 40
1:20

TAX PARCEL 01918159
DEED BOOK 11100 PAGE 571

CONSULTANTS:
ADRIAN PRUETT, LSS
CAROLINA SOIL & SEPTIC CONSULTING, PLLC
P.O. BOX 1703
MOORESVILLE, NC 28115
704-202-5791
adrianpruett@yahoo.com

JOEL PATTERSON, PLS
PATTERSON LAND SURVEYING
704-663-0110
pattersonlandsurveying@gmail.com

PIEDMONT DESIGN
ENGINEERING / SURVEYING / PLANNING
Associates, P.A.
Suite 101 Westfield Center - 125 East Plaza Drive
Mooresville, North Carolina 28115
Phone:(704) 664-7888 Fax:(704) 664-1775 www.pdapa.com
NCBELS License #: C-1007

PREPARED FOR:
SANDY YANDLE
803 SOUTHLAND ROAD
HUNTERSVILLE, NC 28078
704-201-5030

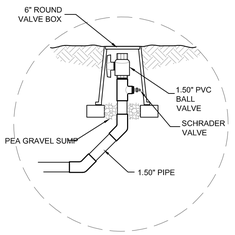
SUBSURFACE DRIP SEPTIC SYSTEM SITE PLAN
4 BEDROOM RESIDENCE
12300 ASBURY CHAPEL ROAD
HUNTERSVILLE, MECKLENBURG COUNTY, NORTH CAROLINA

REVISIONS	BY

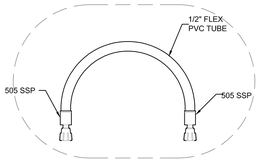
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Drawn: DMD
Checked: DLM
Project: 2017-02-01-EC
Job: 2017-02-01-EC
Sheet U-1
of 2 Sheets

Location: PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS WITHIN MUST BE WITH THE WRITTEN CONSENT OF PIEDMONT DESIGN ASSOCIATES, P.A. Owner: _____ Approved: _____ Date of Issue: _____

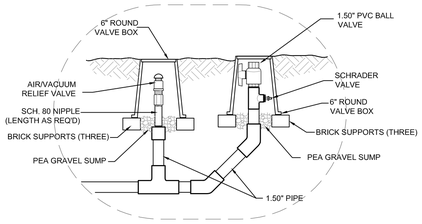
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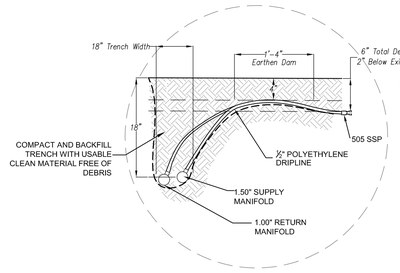
1 U2 CLEAN OUT DETAIL
N.T.S.



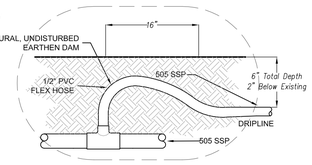
3 U2 LOOP CONNECTION
N.T.S.



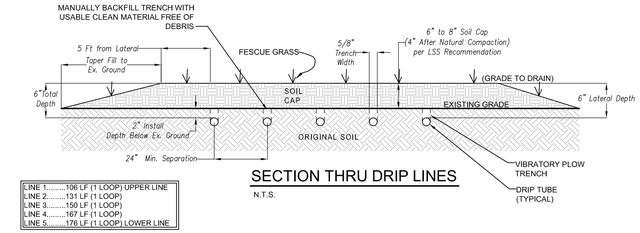
CLEAN OUT AND AIR/VACUUM RELIEF VALVE DETAIL (TYP.)
5 U2 N.T.S.



DRIP FIELD MANIFOLD DETAIL
2 U2 N.T.S.

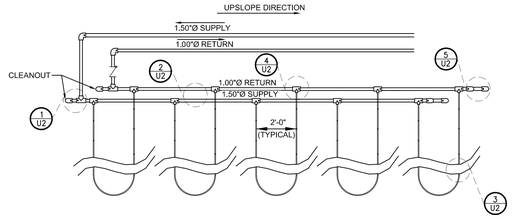


4 U2 SUB MAIN CONNECTION
N.T.S.



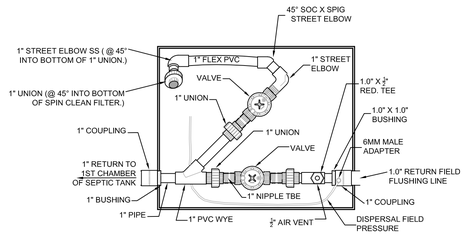
SECTION THRU DRIP LINES
N.T.S.

LINE 1	106 LF (1 LOOP) UPPER LINE
LINE 2	131 LF (1 LOOP)
LINE 3	150 LF (1 LOOP)
LINE 4	167 LF (1 LOOP)
LINE 5	176 LF (1 LOOP) LOWER LINE

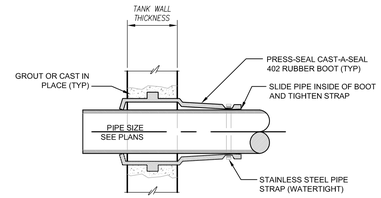


SINGLE ZONE DRIP FIELD (5 LATERALS @ VARIOUS LF EA) WITH A TOTAL OF 730 LF OF TUBING W/ EMITTERS SPACED @ 24" CTS. EACH WAY. SEE SITE PLAN FOR DRIP FIELD LAYOUT

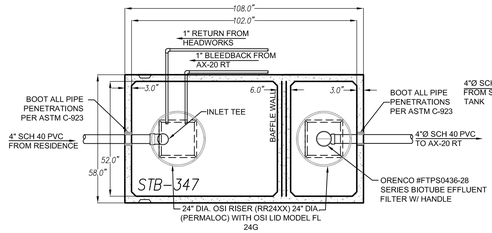
DRIP FIELD LAYOUT
N.T.S.



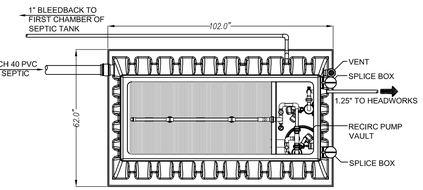
PLAN VIEW - HEADWORKS
N.T.S. BOTTOM LAYER



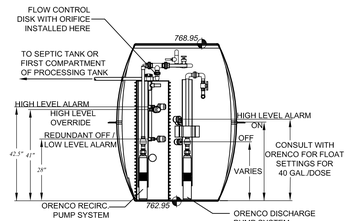
STANDARD PIPE PENETRATIONS
N.T.S.



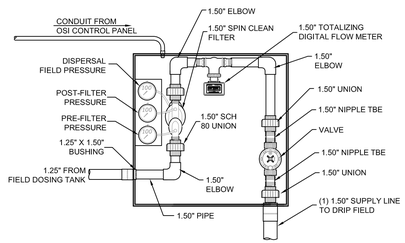
PLAN VIEW - 1,000 GAL SEPTIC TANK
N.T.S. TOP SEAM TANK ONLY



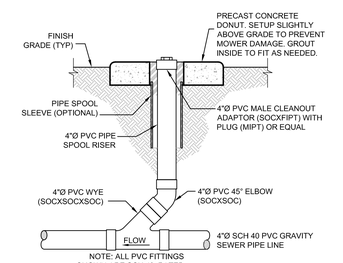
PLAN VIEW - ORENCO AX-20 RT
N.T.S. AX20RTUV Mode 3B



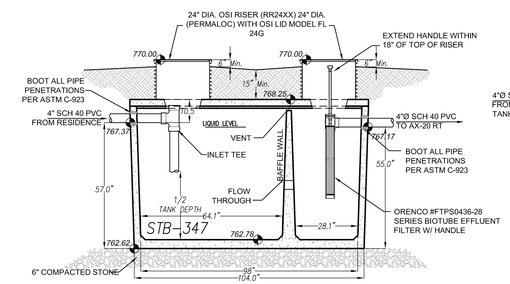
SECTION VIEW - ORENCO AX-20 RT
N.T.S. DISCHARGE CHAMBER



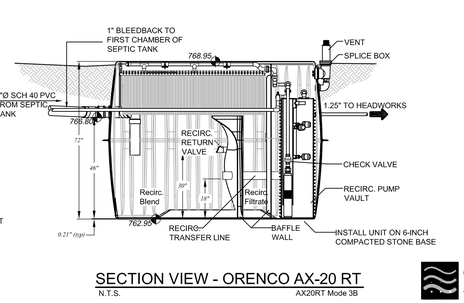
PLAN VIEW - HEADWORKS
N.T.S. MODEL NO. HEADWORKS-ASSY.-ONE ZONE



GRAVITY CLEANOUT
N.T.S.



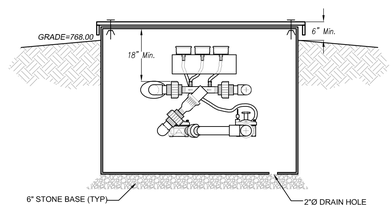
SECTION VIEW - 1,000 GAL SEPTIC TANK
N.T.S. TOP SEAM TANK ONLY



SECTION VIEW - ORENCO AX-20 RT
N.T.S. AX20RT Mode 3B



CONTROL PANEL DETAIL
N.T.S.



SECTION VIEW - HEADWORKS
N.T.S. MODEL NO. HEADWORKS-ASSY.-ONE ZONE

REFER TO SPECIFICATION PACKAGE FOR MATERIALS SELECTION AND INSTALLATION REQUIREMENTS

TANK ELEVATIONS

NOTE:TANK DIMENSIONS & ELEVATIONS BASED ON SHOAF PRECAST COMPANY, INC. OTHER STATE APPROVED TANKS MAY BE SUBSTITUTED BUT NOT WITHOUT PRIOR APPROVAL FROM THE ENGINEER. CONTRACTOR SHALL VERIFY DIMENSIONS AND ADJUST GRADES AND FLOAT SETTINGS AS REQUIRED TO CAUSE FLOW AND DOSING AS CALLED FOR. TANKS SHALL NOT BE PUMPED DURING EXTREMELY WET CONDITIONS.

Orenco Systems® Incorporated
Changing the Way the World Does Wastewater®

GENERAL NOTES:

1. NOTIFY UNDERGROUND UTILITIES LOCATOR PRIOR TO ANY EXCAVATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL TRADES AND SUBCONTRACTORS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS, ELEVATIONS, AND LOCATION OF ALL EXISTING CONDITIONS AND UTILITIES.
2. ALL PIPING SHALL BE SCH 40 PVC UNLESS OTHERWISE NOTED ON PLANS. ALL PVC PIPES SHALL BE BURIED A MINIMUM OF 3 FEET UNLESS SHOWN OTHERWISE.
3. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS.
4. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA, NCDOT, AND OTHER RELATED SAFETY REQUIREMENTS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL CONSTRUCTION DAMAGE EXPEDITIOUSLY AND AT NO ADDITIONAL COST TO THE OWNER.
6. SEPTIC TANK SHALL BE CONSTRUCTED WITH A BAFFLE WALL DIVIDING THE TANK INTERIOR 2/3rd TO 1/3rd. THE BAFFLE WALL SHALL BE CONSTRUCTED TO PERMIT PASSAGE OF EFFLUENT THROUGH A SLOT OR HOLES LOCATED BETWEEN 45 & 55 PERCENT OF THE INTERIOR DEPTH.
7. ALL TANKS SHALL HAVE A MINIMUM 28-DAY CONCRETE STRENGTH OF 4,500 PSI.
8. TANK SHALL MEET REINFORCING REQUIREMENTS TO ACCOMMODATE 3,000 POUNDS PER SQ. FT. EITHER STEEL REINFORCING WIRE. REBAR OR APPROVED FIBER MAY BE USED.
9. ALL SERVICE ACCESS OPENINGS SHALL BE A MINIMUM OF 24 INCHES.
10. RISERS TO BE CAST IN PLACE AT TIME OF TANK CONSTRUCTION
11. ALL TANKS AND EFFLUENT FILTERS SHALL BE APPROVED BY ENGINEER & NCDHHS. EFFLUENT FILTERS SHALL BE SIZED FOR DESIGN FLOW AND EXTEND DOWN TO 50-PERCENT OF LIQUID LEVEL.
12. ALL JOINTS (MID-SEAM, TOP-SEAM) SHALL BE SEALED USING CONCRETE SEALANTS BUTYL SEALANT # CS-102 MEETING ASTM C-990.
13. TANKS SHALL BE LEAK-TESTED PRIOR TO SYSTEM START UP BY APPLYING A VACUUM OF 5-INCHES OF MERCURY WITH RISER ASSEMBLIES IN PLACE OR A 24-HOUR STATIC WATER TEST IN ACCORDANCE WITH ASTM STANDARDS.
14. ALL PIPE PENETRATIONS THROUGH PRECAST CONCRETE TANKS SHALL BE PRESS-SEAL CAST-A-SEAL 402 RUBBER BOOTS AND GROUTED.
15. ALL TANK RISERS AND LIDS SHALL EXTEND A MINIMUM OF 6" ABOVE THE FINISHED GRADE.
16. ALL METAL INSTALLED IN TANKS SHALL BE STAINLESS STEEL.
17. ALL MANHOLES NOT INSTALLED NOT IN TRAFFIC AREAS SHALL HAVE TAMPER RESISTANT BOLTS ON LIDS.
18. CONTROL PANELS SHALL BE INSTALLED A MINIMUM OF 36 INCHES FROM FINISHED GRADE TO BOTTOM OF PANEL BOX. SEAL OFF ALL CONDUITS BETWEEN TANKS AND PANEL.
19. CONTRACTOR TO VERIFY EXISTING SITE POWER SUPPLY (VOLTAGE) BEFORE ORDERING PUMPS, CONTROLS, ETC.

PIEDMONT DESIGN ENGINEERING / SURVEYING / PLANNING
Associates, P.A.
Suite 101 Westfield Center, 125 East Plaza Drive
Mooresville, North Carolina 28115
Phone:(704) 664-7888 Fax:(704) 664-7778 www.pdapa.com
NCBELS License #: C-1007

PREPARED FOR:
SANDY YANDLE
803 SOUTHLAND ROAD
HUNTERSVILLE, NC 28078
704-201-5030

SUBSURFACE DRIP SEPTIC SYSTEM DETAILS
4 BEDROOM RESIDENCE
12300 ASBURY CHAPEL ROAD
HUNTERSVILLE, MECKLENBURG COUNTY, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 031781 ENGINEER DONALD L. MCCARON

REVISIONS	BY

Date: 2/1/2017
Scale: AS SHOWN
Drawn: DMD
Checked: DLM
Project: 2017-02-01-EC
Job: 2017-02-01-EC
Sheet U-2
of 2 Sheets

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