

261 Mabry Rd
Project No. 1989-1

<u>LINE #</u>	<u>FLAG COLOR</u>	<u>BS (ft)</u>	<u>HI (ft)</u>	<u>FS (ft)</u>	<u>ELEVATION (ft)</u>	<u>FLAGGED LINE LENGTH (ft)</u>	<u>DESIGN LINE LENGTH (ft)</u>
TBM		1.4			100.00		
INSTR. 1			101.40				
1	Yellow			3.25	98.15	57	0
2	Blue			3.65	97.75	72	70
3	Red			4.20	97.20	98	95
4	Not Flagged			4.60	96.80	0	55
5	White			5.00	96.40	137	105
6	Pink			5.50	95.90	106	105
7	Yellow			6.00	95.40	134	110
8	Blue			6.45	94.95	122	110
9	Red			6.95	94.45	96	95
10	Pink			7.60	93.80	73	70
11	Yellow			8.05	93.35	63	60
12	Blue			8.55	92.85	58	0
13	Red			9.00	92.40	48	0
						Total	875

	<u>DESIGN LINE LENGTH (ft)</u>	<u>SOIL LTAR</u>	<u>SYSTEM TYPE</u>	<u>DESIGN LTAR*</u>	<u>DISTRIBUTION MEDIA</u>	<u>DISTRIBUTION METHOD</u>	<u>DESIGN FLOW (GPD)</u>
System	430	0.30	Accepted	0.28	EZ-Flow At Grade	Pressure Manifold	480
Repair	445	0.30	Accepted	0.27	EZ-Flow At Grade	Pressure Manifold	480

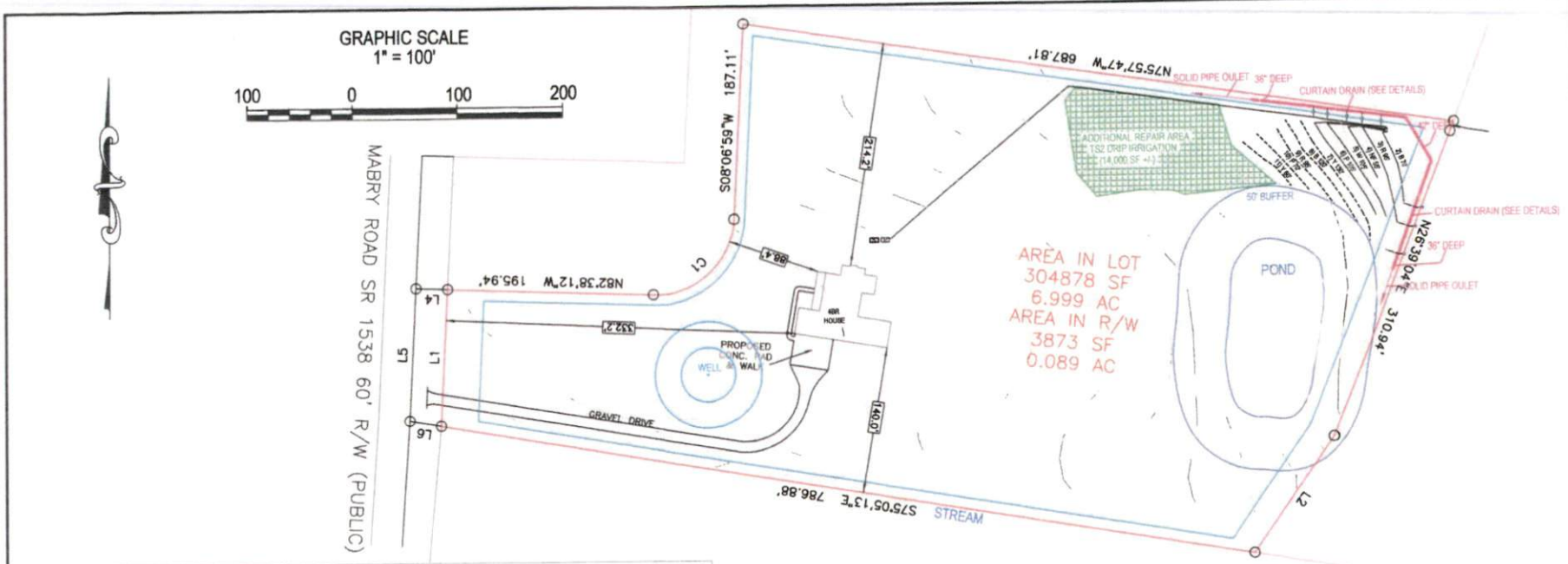
- Notes:**
- 1) TBM on ground AT TREE.
 - 2) TBM is assumed to be 100.00'.
 - 3) All measures in feet.
 - 4) Nitrification lines are demonstrated on contour via colored pin flags.
 - 5) BS, FS indicate rod readings.
- * Design LTAR = Design Flow / ((Design Line Length x Trench Width) / (1-%Reduction))

**261 Mabry Rd
Project No. 1989-1
SYSTEM TAP CHART**

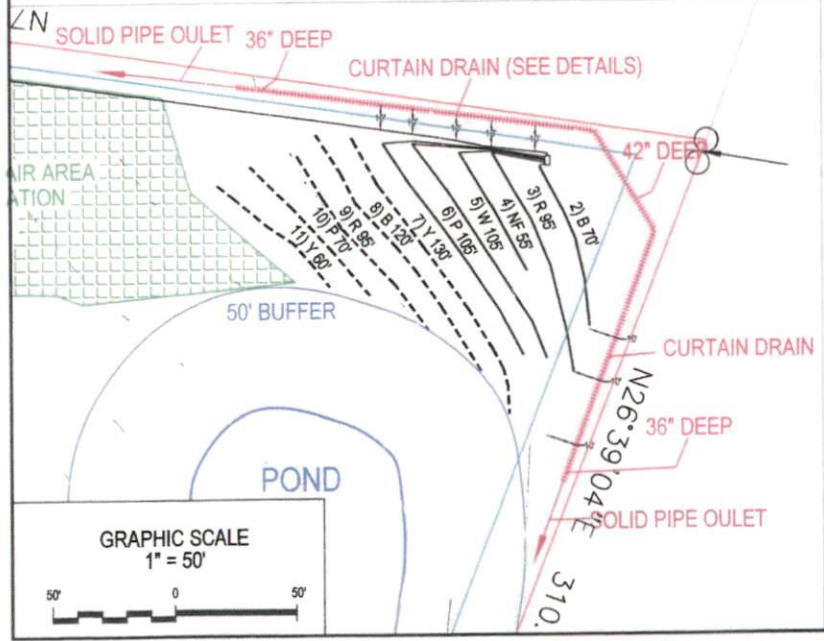
Line #	Color	Field Elev. (ft)	Length (ft)	Hole Size (in)	Flow/Tap (gpm)	gpd	Trench Area (sq ft)	Line LTAR (gpd/sq ft)
2	Blue	97.75	70	1/2" SCH. 40	7.11	71.60	210	0.341
3	Red	97.20	95	3/4" SCH. 80	10.12	101.90	285	0.358
4	Not Flagged	96.80	55	1/2" SCH. 80	5.48	55.17	165	0.334
5	White	96.40	105	3/4" SCH. 40	12.48	125.66	315	0.399
6	Pink	95.90	105	3/4" SCH. 40	12.48	125.66	315	0.399

total feet = 430 gal/min = 47.88

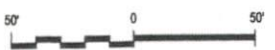
Des. Flow 480 gpd
Pump Run= 10.07 min
soil LTAR 0.30 gpd/sq ft
(1tar +5%) 0.315 gpd/sq ft
INNOV. Product Reduction 25%
LTAR with INNOV. 0.40 gpd/sq ft
LTAR with INNOV. + 5% 0.420 gpd/sq ft
100% Dose Volume 279.83 gal
Percent Dose Volume 75%
Total 209.87 gal
Pump Run Time 4.40 min



GRAPHIC SCALE
1" = 100'



GRAPHIC SCALE
1" = 50'

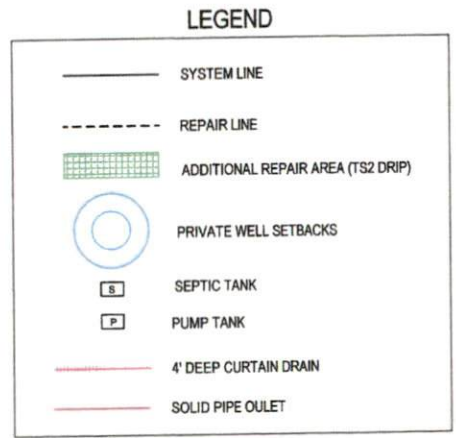


SYSTEM:

- LINES 2-6 (430' OF EZ-FLOW)
- PRESSURE MANIFOLD
- AT-GRADE (12" TRENCH DEPTH MAX.)
- 6-8" OF APPROVED COVER MATERIAL
- CURTAIN DRAIN IS REQUIRED AS SHOWN

NOTES:

- 1) SITE DATA TO INCLUDE PROPERTY BOUNDARIES, STRUCTURE LOCATION, UTILITIES, ROADS, AND OTHER SITE FEATURES WERE PROVIDED BY TRUELINE SURVEYING AND ARE SHOWN TO DISPLAY GENERAL SITE CONDITIONS.
- 2) ALL SEPTIC SYSTEM COMPONENTS TO INCLUDE TANKS, PUMPS, MANIFOLDS, AND SYSTEM AND REPAIR LINES HAVE BEEN GPS LOCATED BY SOIL SERVICES, PLLC. ALL LOCATIONS, ELEVATIONS, AND DIMENSIONS ARE APPROXIMATE AND AS SUCH NO SPECIFIC ACCURACY EITHER VERTICAL OR HORIZONTAL IS IMPLIED.
- 3) PROPERTY AND EASEMENT BOUNDARIES SHOWN ON THIS SITE SKETCH ARE APPROXIMATE AND ARE NOT INTENDED FOR LOCATING PROPERTY OR IDENTIFYING PROPERTY OR EASEMENT CORNERS. THIS IS NOT A SURVEY.



Project No.: 1966-1	Drawn: SM	Field Note: SM	Scale: AS SHOWN	Sheet No.: 1 of 1
Project Manager: SM	Client: JABIER CUELLAR AGRUETA	Location: HARNETT CO., NC	Project: 261 MABRY RD	
SEPTIC SYSTEM SITE PLAN				

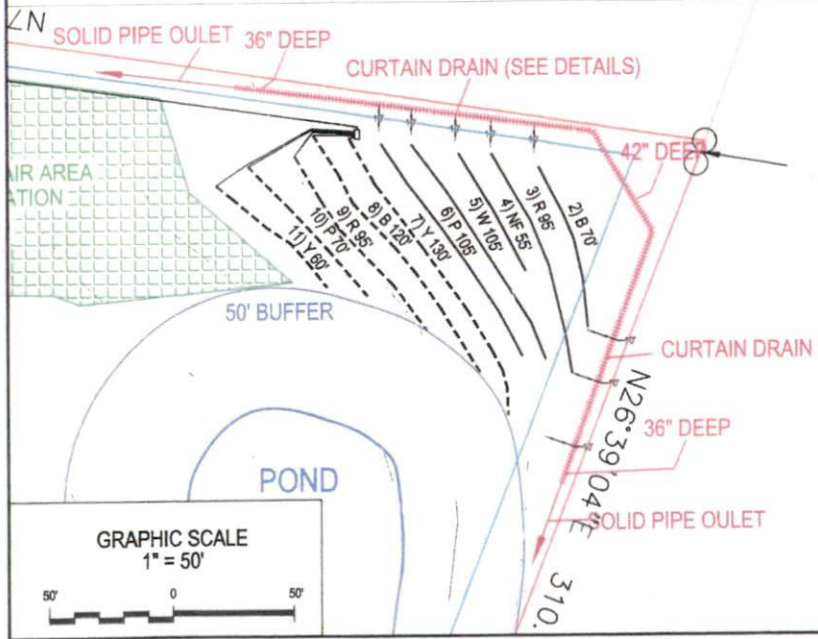
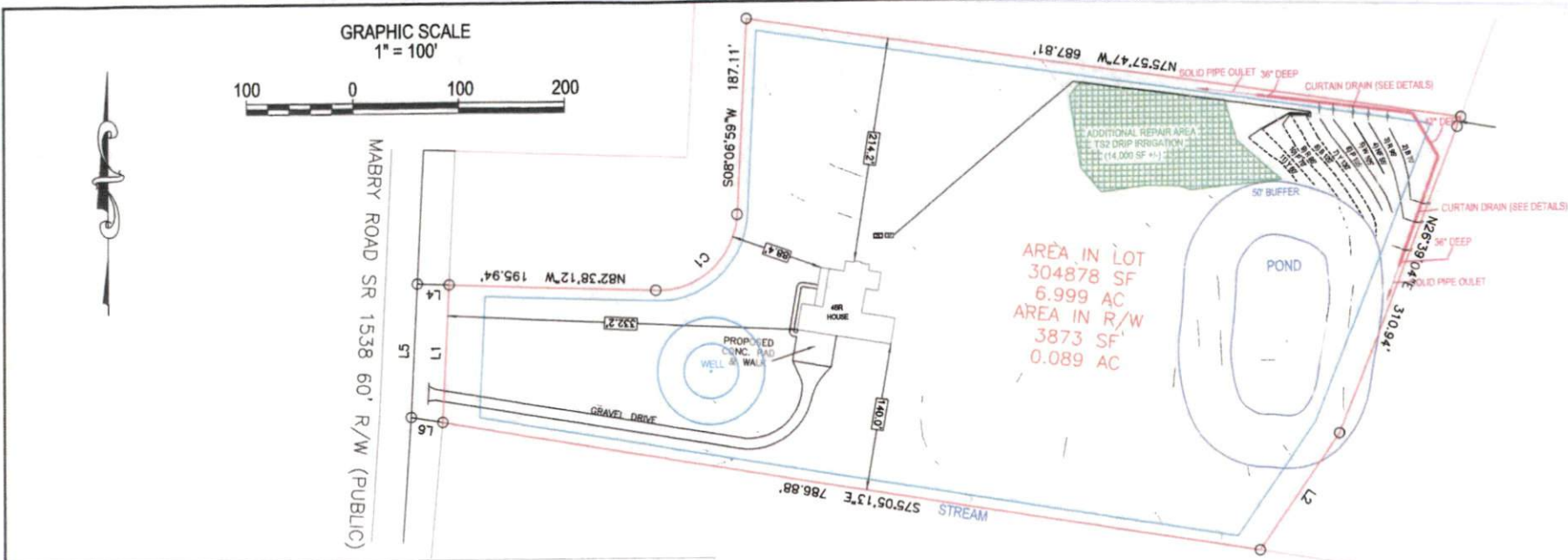
SOIL SERVICES, PLLC
 PO BOX 91115, RALEIGH, NC 27675
 OFFICE: (919) 745-1928 FAX: (919) 375-3889
 WWW.SOILSERVICES.US

**261 Mabry Rd
Project No. 1989-1
REPAIR TAP CHART**

Line #	Color	Field Elev. (ft)	Length (ft)	Hole Size (in)	Flow/Tap (gpm)	gpd	Trench Area (sq ft)	Line LTAR (gpd/sq ft)
7	Yellow	95.40	110	3/4" SCH. 40	12.48	125.66	330	0.381
8	Blue	94.95	110	3/4" SCH. 40	12.48	125.66	330	0.381
9	Red	94.45	95	3/4" SCH. 80	10.12	101.90	285	0.368
10	Pink	93.80	70	1/2" SCH. 40	7.11	71.60	210	0.341
11	Yellow	93.35	80	1/2" SCH. 80	5.48	55.17	180	0.307

total feet = 445 gal/min = 47.68

Des. Flow 480 gpd
Pump Run= 10.07 min
soil LTAR 0.30 gpd/sq ft
(itar +5%) 0.315 gpd/sq ft
INNOV. Product Reduction 25%
LTAR with INNOV. 0.4 gpd/sq ft
LTAR with INNOV. + 5% 0.42 gpd/sq ft
100% Dose Volume 289.59 gal
Percent Dose Volume 75%
Total 217.19 gal
Pump Run Time 4.56 min

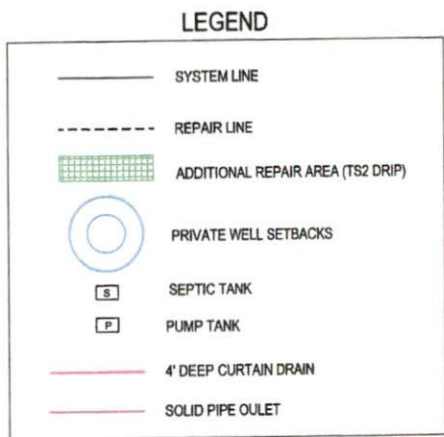


REPAIR:

- LINES 7-11 (445' OF EZ-FLOW)
- PRESSURE MANIFOLD
- AT-GRADE (12" TRENCH DEPTH MAX.)
- 6-8" OF APPROVED COVER MATERIAL
- CURTAIN DRAIN IS REQUIRED AS SHOWN

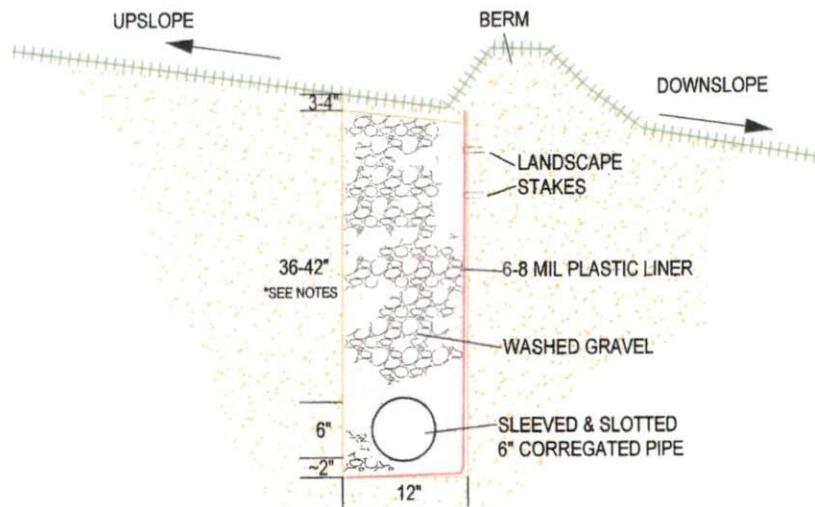
NOTES:

- 1) SITE DATA TO INCLUDE PROPERTY BOUNDARIES, STRUCTURE LOCATION, UTILITIES, ROADS, AND OTHER SITE FEATURES WERE PROVIDED BY TRUELINE SURVEYING AND ARE SHOWN TO DISPLAY GENERAL SITE CONDITIONS.
- 2) ALL SEPTIC SYSTEM COMPONENTS TO INCLUDE TANKS, PUMPS, MANIFOLDS, AND SYSTEM AND REPAIR LINES HAVE BEEN GPS LOCATED BY SOIL SERVICES, PLLC. ALL LOCATIONS, ELEVATIONS, AND DIMENSIONS ARE APPROXIMATE AND AS SUCH NO SPECIFIC ACCURACY EITHER VERTICAL OR HORIZONTAL IS IMPLIED.
- 3) PROPERTY AND EASEMENT BOUNDARIES SHOWN ON THIS SITE SKETCH ARE APPROXIMATE AND ARE NOT INTENDED FOR LOCATING PROPERTY OR IDENTIFYING PROPERTY OR EASEMENT CORNERS. THIS IS NOT A SURVEY.



Project No.: 1988-1	Drawn: SM	Field Work: SM	1 of 1
Project Manager: SM	Scale: AS SHOWN	Sheet No.:	
SEPTIC SYSTEM SITE PLAN			Client: JABIER CUELLAR AGRIETA
Project: 261 MABRY RD			
Location: HARNETT CO., NC			

SOIL SERVICES, PLLC
 PO BOX 91115, RALEIGH, NC 27675
 OFFICE: (919) 745-1928 FAX: (919) 375-3969
 WWW.SOILSERVICES.US



NOTES:

- 1) INSTALLATION DEPTH OF DRAIN SHOULD BE 36-42" AS SHOWN ON THE PLAN.
- 2) 2% SLOPE SHALL BE MAINTAINED THROUGHOUT THE LENGTH OF THE DRAIN AND OUTLET PIPE.
- 3) DOWNSLOPE SIDE OF THE CURTAIN DRAIN SHALL BE LINED WITH PLASTIC LINER.
- 4) OUTLET PIPE SHALL BE 4" OR 6" SOLID PIPE (NON-PERF) OR EQUIVALENT.
- 5) CURTAIN DRAIN PIPE SHALL BE PERFERATED/SLOTTED 6" CORRUGATED PIPE OR EQUIVALENT.
- 6) THE DRAIN AGGREGATE SHALL BE CAPPED WITH 3-4" OF TOPSOIL AND SOD.
- 7) THE DRAIN SHALL BE INSTALLED DURING DRY CONDITIONS.
- 8) THE DRAIN WIDTH SHALL BE 12" AND SHALL NOT BE OVER DUG AND THEN BACKFILLED TO 12".
- 9) THE OUTLET SHALL BE EXTENDED PAST THE DRAINFIELD AND TO THE GROUND SURFACE.
- 10) OUTLET PIPE SHALL NOT DISCHARGE INTO A WETLAND.
- 11) THE OUTLET PIPE TRENCH SHALL BE BACKFILLED WITH NATIVE SOIL.
- 12) A DIVERSION BERM SHALL BE CONSTRUCTED TO DIVERT SURFACE FLOW AWAY FROM THE SEPTIC DRAINFIELD AND TO ENCOURAGE INFILTRATION INTO THE CURTAIN DRAIN.



SOIL SERVICES, PLLC

PO BOX 91115, RALEIGH, NC 27675
 OFFICE: (919) 745-1928 FAX: (919) 375-3999
 WWW.SOILSERVICES.US

Sheet Title:		CURTAIN DRAIN DETAIL	
Project:		261 MABRY RD	
Location:		HARNETT CO., NC	Client: JAVIER CUELLAR ARGUETA
Project No.:		1999-1	Drawn:
Project Manager:		DM	DM
Scale:		DM	Field Work:
Scale:		DM	DM
Sheet No.:		1 of 1	