APPROVED MAY 12 2016

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Reference: Data Sheet for 115 Sandy Cove Ct., Chesapeake Pt. Lot 59
House Footprint: See attached
Building Setbacks: 108' front, 15' side, 35' rear
Number of Bedrooms: 4/480 GPD
Predetermined LTAR: 0.3 GPD/FT2 (ICHD)
Proposed System Type: 25% Reduction
Proposed Repair System Type: PPBPS
Distribution: Pressure manifold
Flow per Tap: 7.11 GPM
Tap Size and Material: ½" SCH40
System Flow: 175 gallons
Dosing Volume: 21.33 GPM
Pump Run Time: 8.2 minutes
Elevation Head: 10'
Friction Head: 1.1'
Pressure Head: 2'
Total Dynamic Head: 13.1'
Supply Line Length: 80'-2" PVC
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 36" maximum

Line	Design Length	Actual Length	Elevation
White 1		164'	5.8'
Orange 2		70'	7.3'
Blue 3	**136'**	**145'**	**8.3'**
Pink 4	**136'**	**139'**	**8.9'**
Yellow 5	**128'**	**133'**	**9.1'**
Orange 6		95'	9.4'

Initial System: 400' **Repair System:** 329'
Pump Tank: 13.3' **House Corner:** 11.8' **Benchmark:** 2.4'

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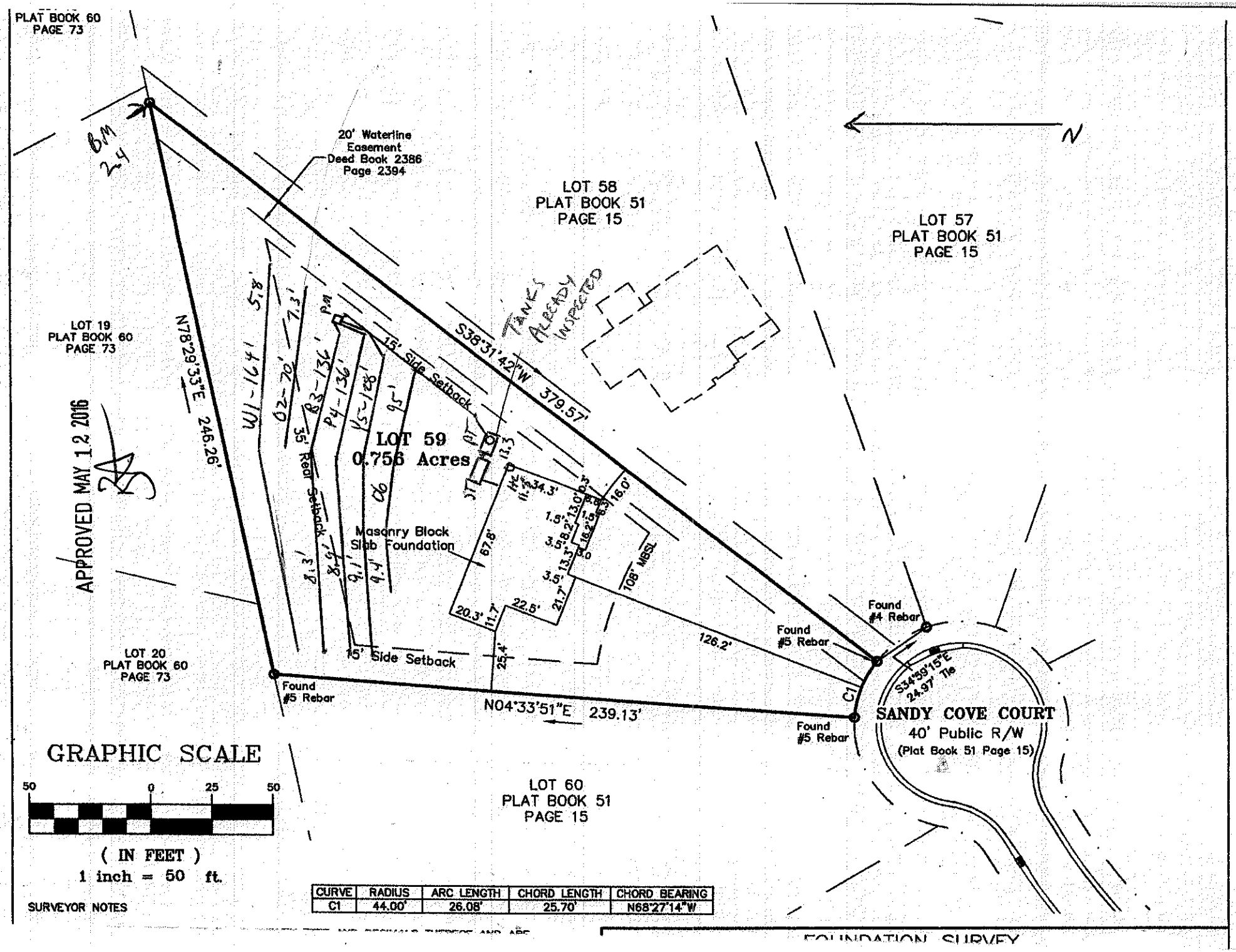
Comments:

MA&A redesigned this system because a water line easement that was not on the prior permit did not allow the installation as previously designed. At the time of evaluation, the septic and pump tanks were installed. The initial lines are within 10% of each other, therefore, the tap size will not change.



Lot 59 Chesapeake Pointe Fast Track Septic System Information

Number of Bedrooms	**4**
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.3**
Primary System Type	**25% Reduction**
No. Lines	3 (See Table)
Total Linear Feet	402
Trench Width	3' min.
Trench Spacing	9' min.
Pump Required	Yes
Distribution Device	Pressure Manifold
Maintenance Agreement Required	No
Length and Diameter of Supply Pipe	110' of 2" SCH 40 PVC
Flow Rate through the system	16.5 gpm
Elevation head	Approx. 12.5'
Pressure head	2.0'
Friction head	1.0'
20% Contingency	3.1'
Total Head	18.6'
Pump Requirements	16.5 gpm @ 18.6' of head; use Goulds WE03L pump or equivelent with compatible electrical
Maximum Dosing Volume	240 gal -2.0 doses/day @ design flow
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 14.5 min.
Check Valve	No
Siphon Break hole	Yes
Repair System	**25% Reduction**
Total Linear Feet	414
Repair Loading Rate	0.3



CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	44.00'	26.08'	25.70'	N68°27'14"W

Table: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elevation (Ft.)
1	Repair	Pink	25% Reduction	160	2.5
2	System	White	25% Reduction	134 endfed	3.9
3	System	Orange	25% Reduction	134 endfed	
4	Repair	Red	25% Reduction	58	5
5	System	Blue	25% Reduction	134 endfed	5.4
6	Repair	Pink	25% Reduction	132	5.2
7	Repair	White	25% Reduction	64	6.5
				Total System: 402'	
				Total Repair: 414'	

Tank	Red	1000 gal (2 compartment)	9
Pump Tank	Red	1000 gal.	9
House	Blue		6.2

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	3
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

Note: Remove old Berm