FAST TRACK LOW PRESSURE MANIFOLD DOSING
FOR A
25% REDUCTION SEPTIC SYSTEM
FOR
SUBSURFACE WASTEWATER DISPOSAL
FALLS PARK SUBDIVISION
___ STILLWATER ROAD – LOT 14
TROUTMAN NC

Prepared for
Live Well Homes
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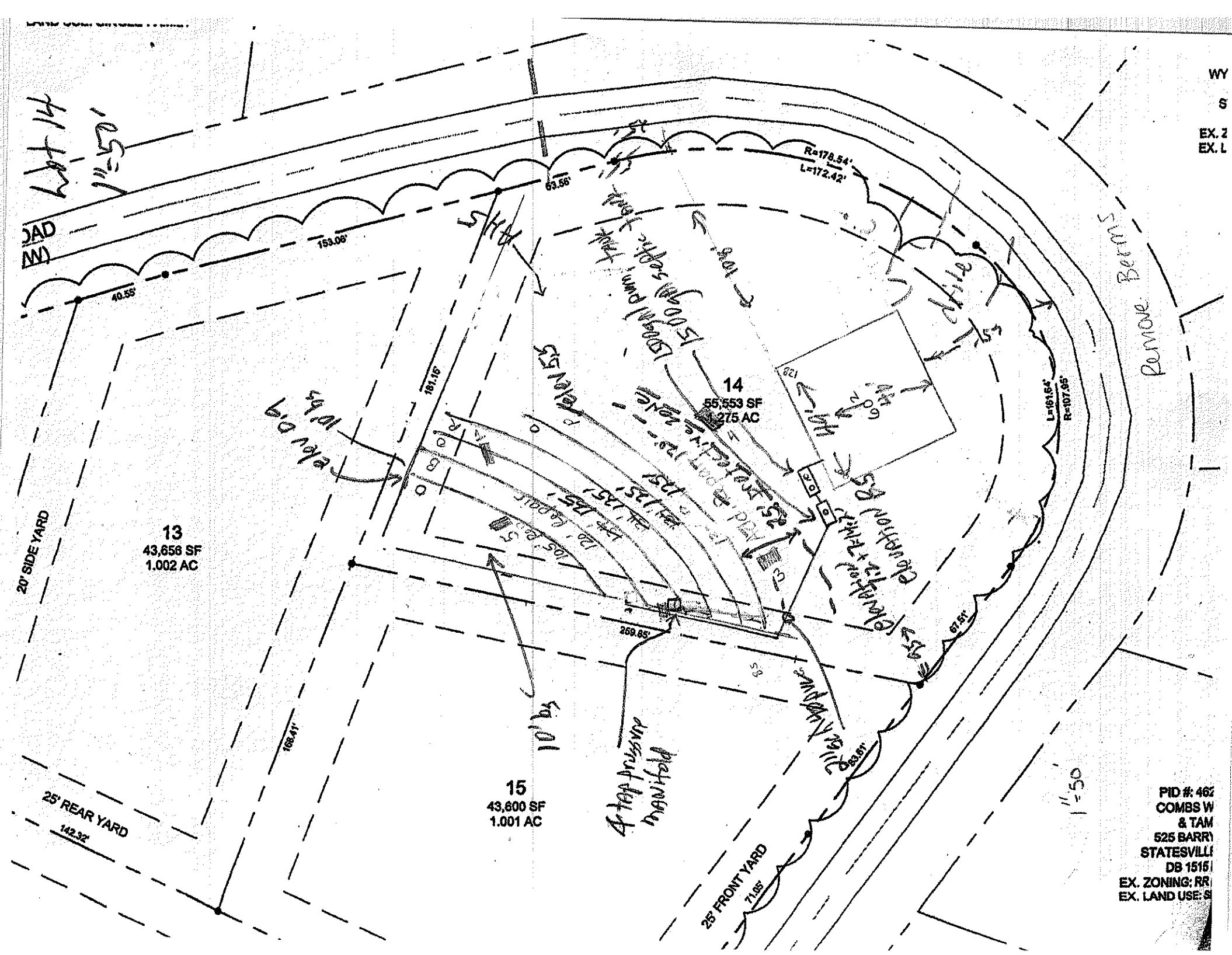
July 21, 2014
Revised: October 17, 2014
Request for Authorization to Construct at 5 bedrooms



Copy: Justin Henderson, RS
Iredell County Health Dept.
Statesville, NC
704-902-3741

Toney C. Jacobs, LSS

Kathleen M. Saunders, LSS


R=178.54'
L=172.42'
63.56'
153.08'
40.55'
181.16'
14
55,553 SF
1.275 AC
13
43,656 SF
1.002 AC
15
43,600 SF
1.001 AC
20' SIDE YARD
25' REAR YARD
142.32'
168.41'
269.85'
25' FRONT YARD
71.85'
83.61'
67.51'
L=161.54'
R=107.95'
1"=50'
PID #: 462
COMBS W
& TAM
525 BARR
STATESVILL
DB 1515
EX. ZONING: RR
EX. LAND USE: S

DESIGN SPECIFICATIONS

___ Stillwater Road – Lot 14 Falls Park Subdivision

Daily design flow	600 gpd. (5) bedroom
Septic tank size	1500 gal.
Pumping tank size	1500 gal.
Initial system	500' of 25% reduction, 4 @ 125'
Effluent loading rate, Initial system	0.3 gpd/ft^2
Total length and diameter of supply pipe	approx. 125 ft. 2" sch 40 PVC
Number and length of laterals	4 @ 125' end-fed
Trench depth	27" maximum on high side
Flow rate through the system	22.0 gpm from 4 each ½" sch 80 taps from a 3" manifold
Tank depth	7.0'
Elevation head	approx. 12.8' (to be verified by installer after tanks are set)
Pressure head	2.0'
Friction head	3.2'
20% contingency	3.6'
Total head	21.6'
Pump requirements	22.0 gpm at 21.8' of head; use Goulds WE03M pump, pump and compatible panel or equivalent
Dosing volume	300 gal. – 2.0 doses/day at design flow
Depth 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. 13.6 min.
Check valve	yes
Siphon break hole	no
Effluent loading rate, Repair system	0.3 gpd/ft^2
Repair system	pressure distribution 50% reduction designated on site plan as 105', 120', 120'= 345' (required 334')
Design constraints	remove old berms/terraces
Protected zone	there has to be a 25' protected zone between the lowest septic line and any drain, and 15' to any cut greater than 2'.

On-site Wastewater Section

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Lot #: 14
File #:
AppID:

Owner: Falls Park, LLC
Address:
Proposed Facility: SFR
Design Flow (.1949) 480
Location of Site: Lot 14 Falls Park

Applicant: Same
Date Evaluated: 5/29/14
Property Size: 1.275
Property Recorded:

Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #:	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY 1941 Structure/ Texture	1941 Consistence/ Mineralogy	PROFILE FACTORS: 1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Saprolite Class	1944 Restr. Horiz.	Profile Class & LTAR
1	19% L	0-2	MoGR SL	FR NS/NP	Br				0.3
		2-16	Mo SBK C	FR SS/SP	Red; F/C sap				
		16-39	WK SBK CL	FR SS/SP	Red; C/M sap				
		39-48	MA L sap	FR SS/SP	multi				
2	6% L	0-22	Mo SBK C	FR SS/SP	Red; F sap				0.3
		22-53	WK SBK CL	FR SS/SP	Red; C sap; FWR				
3	19% L	0-26	Mo SBK C	FR SS/SP	Red				0.3
		26-41	WK SBK CL	FR SS/SP	Red; F sap				
		41-49	MA L sap	FR SS/SP	Red				
4	6% L	0-4	MoGR SL	FR NS/NP	Br				0.3
		4-17	Mo SBK C	FR SS/SP	Red				
		17-48	WK SBK CL	FR SS/SP	Red; C sap				

Description	Initial System	Repair System
Available Space (.1945)		~~25% and~~
System Type(s)	25% Red	~~LPP~~ PBPS
Site LTAR	0.3	0.3

Other Factors (.1946): Remove Berms
Soil Evaluation By: KMS
Others Present:
Site Classification (.1948): PS
Site Evaluation By: KMS
Others Present:

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Lot #:
File #:
AppID:

Owner:
Address:
Proposed Facility:
Design Flow (.1949)
Location of Site: Lot 14

Applicant:
Date Evaluated:
Property Size:
Property Recorded:

Water Supply: [ ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [ ] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 Structure/ Texture	.1941 Consistence/ Mineralogy	PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr. Horiz	Profile Class & LTAR
5	6% L	0-4	MO GR SL	FR NS/NP	Br				0.3
		4-27	MO SBK C	FR SS/SP	Red; CWR (vein) in sidewalls of pit		<½ pit		
		27-48	WK SBK CL	FR SS/SP	Red; C sap		soil around it		

Description	Initial System	Repair System
Available Space (.1945)		
System Type(s)		
Site LTAR		

Other Factors (.1946):
Soil Evaluation By:
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present: