S&ME, INC.
SITE/SOIL EVALUATION

Project No. 1588-07-0 **Phone No.** _____ **Date:** 10/8/07
Location Spaina Rd Lot 100 Corneliys Estates **Pin** _____ **County:** Iredell **Property Size** _____
Proposed Facility: 3 BDR House **Water Supply:** **On-Site Well** ☒ **Community** ☐ **Public** ☐ **Evaluation:** **Auger Boring** ☐ **Pit** ☒ **Cut** ☐
Weather: 90° F sunny clear **Antecedent Moisture** V. Dry **Surface Water:** None

FACTORS	PROFILE 1	PROFILE 2	PROFILE 3	PROFILE 4
Landscape Position %	L	L 8-10%	L	L
Horizon Depth I	0-10	0-4	0-5	0-4
Color Munsell	Br	Mo GR	Br	Br
Texture	SL	SL	SL	SL
Structure	MO GR	Br	MO GR	MO GR
Consistence	FR NS/NP	FR SS/SP	FR NS/NP	FR SS/NP
Boundary				
Horizon Depth II	10-19	4-20	5-14	4-24
Color – Munsell	Br Red	Red	Red	Red
Texture	C	C	SCL	C
Mottles	F-Sap	F Sap	F. Sap, F-Rock	F-Sap
Structure	MO SBK	Mo SBK	MO SBK	MO SBK
Consistence	FR SS/SP	FR SS/SP	FR SS/SP	FR SS/SP
Boundary				
Horizon Depth III	19-30	20-48	14-27	24-48
Color – Munsell	Red	Red	Red	Red
Texture	C	CL/SCL	C	CL
Mottles	C-Sap, F-WR	C Sap inc	C-Sap C-WR	C-Sap
Structure	WK SBK	WK SBK	WK SBK	WK SBK
Consistence	FR SS/SP	FR SS/SP	FR SS/SP	FR SS/SP
	Vein of C-Sap	F Sap veins (FR/Fi)	R vein from 29"-27"	
Boundary				Down-Rock
Horizon Depth IV	30-48		27-38	Vein runs diagonal 6" wise
Color – Munsell	Red	Opp. wall 20-31" Rock	Red	16" - 32"
Texture	C	(4" wide) Pocket (Fi)	CL	Back - 16-24"
Mottles	C-Sap C-WR	Diggable w/ backhoe, Can	C-Sap C-Rock	uniform across
Structure	WK SBK	Chip w/hand tools	WK SBK	
Consistence	FR SS/SP		FR SS/SP	
			Ran w/slope wall @ 38"	
Boundary				
Soil Wetness				
Restrictive Horizon				
Bedrock				
SHWT	0.25	0.25-0.3	0.25-0.30	0.25
Classification				

Kathleen Saunders
Karen Wallace

up ☐ Down

LEGEND

LANDSCAPE POSITION

R	Ridge Interfluve
S	Shoulder
L	Linear Slope
S	Foot Slope
N	Nose Slope
H	Head Slope
Cc	Conclave Slope
Cv	Convex Slope
T	Terrace
P	Flood Plain

TEXTURE

s	sand
ls	Loamy sand
sl	sandy loam
l	loam
si	silt
sil	silt loam
sicl	silty clay loam
cl	clay loam
scl	sandy clay loam
sc	sandy clay
sic	silty clay
c	clay

CONSISTENCE WET

Ns	non-sticky
Ss	slightly sticky
S	sticky
Vs	very sticky
Np	non-plastic
Sp	slightly plastic
P	plastic
Vp	very plastic

MOIST

vfr	Very friable
fr	friable
fi	firm
vfi	Very firm

STRUCTURE

sg	single grain
m	massive
cr	crumb
gr	granular
sab	subangular blocky
ab	angular blocky
pl	platy

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Location _____ **Pin** _____ **County:** _____ **Property Size** _____

Proposed Facility: _____ **Water Supply:** **On-Site Well** ☐ **Community** ☐ **Public** ☐ **Evaluation:** **Auger Boring** ☐ **Pit** ☐ **Cut** ☐

Weather: _____ **Antecedent Moisture** _____ **Surface Water:** _____

FACTORS	PROFILE 5	PROFILE 6	PROFILE 7	PROFILE 8
Landscape Position %	L	L	L	L
Horizon Depth I	0-4	0-5	0-7	0-7
Color Munsell	Br	Br	Br	Br
Texture	SL	SL	SL	SL
Structure	mo GR	mo GR	mo GR	mo GR
Consistence	FR NS/NP	FR NS/NP	FR NS/NP	FR NS/NP
Boundary				
Horizon Depth II	4-31	5-22	7-16	7-19
Color – Munsell	Red	Red	Red	Red
Texture	C	C	C	C
Mottles	F/C Sap	f-Sap	F Sap	f-Sap-WR
Structure	WK SBK	mo SBK	Mo SBK	mo SBK
Consistence	FR SS/SP	FR SS/SP	FR SS/SP	FR SS/SP
	C Rock inc. 17"			
Boundary	WAVY 31" R			
Horizon Depth III		22-35	16-40	19-24
Color – Munsell		Red	Red	Red
Texture		C	CL	C
Mottles	Soil depths	C-m Sap	C Sap	C-m-f Sap
Structure	to Rock	WK SBK	FR SS/SP	WK SBK
Consistence	vary from	FR SS/SP	WK SBK	FR SS/SP
	26" to 37"			
	across the			
Boundary	pit.	Wavy 35" R	Rock Pocket 16-22" & 16-30"	21" R
Horizon Depth IV				
Color – Munsell				Same as
Texture		Many Stks		many stks
Mottles		Light C P	None in	twigs
Structure		Stocks @ 32"	opp. wall	
Consistence				
Boundary				
Soil Wetness				
Restrictive Horizon				
Saprolite			"	
LTAR	0.3 to 31"	C Sap to 32-35	0.3	0.3 to 24"
Classification			PS	

Pit side described

LEGEND

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S&ME, INC.
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Weather: _____ **Antecedent Moisture** _____ **Surface Water:** _____

FACTORS	PROFILE 9	PROFILE 10	PROFILE 11	PROFILE 12
Landscape Position %	L 8-12%	L-	L	L
Horizon Depth I	0-6	0-7	0-12	0-8
Color Munsell	Br	Br	Br	Br
Texture	SL	SL	SL	SL
Structure	Mo GR	mo GR	Mo GR	Mo GR
Consistence	FR SS/SP	FR SS/SP	FR SS/SP	FR NS/NP
Boundary				
Horizon Depth II	6-32	7-18	12-32	8-17
Color – Munsell	Red	Red	Red	Red
Texture	C	SCL	C	SCL
Mottles	F/C Sap	F-Sap	F Sap	F-Sap
Structure	Mo SBK	WK SBK	Mo SBK	WK SBK
Consistence	FR SS/SP	FR SS/SP	FR SS/SP	FR SS/SP
Boundary				
Horizon Depth III	32-42	18-28	32-44	17-27
Color – Munsell	Red	Red	Red	Red
Texture	CL	C	CL	CL
Mottles	C Sap	C-Sap	C Sap	C-Sap + Rock
Structure	WK SBK	WK SBK	WK SBK	WK SBK
Consistence	Fi/FR SS/SP	FR SS/SP	FR SS/SP	FR SS/SP
Boundary			44" Rock	27" Rock
Horizon Depth IV		28" R	Vein	
Color – Munsell				
Texture			pit ends @	
Mottles			44" deep	
Structure				
Consistence				
Boundary				
Soil Wetness				
Restrictive Horizon				
Saprolite				
SHWT	0.25-0.3	0.3 & 22"	0.3	0.25 to 27"
Classification				

LEGEND

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Community ☐ **Pit** ☐
Public ☐ **Cut** ☐

Weather: _____ **Antecedent Moisture** _____ **Surface Water:** _____

FACTORS	PROFILE 13	PROFILE	PROFILE	PROFILE
Landscape Position %	L			
Horizon Depth I	0-8			
Color Munsell	BY			
Texture	SL			
Structure	mo gr			
Consistence	FR SS/SP			
Boundary				
Horizon Depth II	8-32			
Color – Munsell	BY			
Texture	SCL			
Mottles	C-Sap			
Structure	mk SBK			
Consistence	FR-FI SS/SP			
Boundary				
Horizon Depth III	32-40			
Color – Munsell	BY			
Texture	SL Sap			
Mottles				
Structure	mA			
Consistence	FR-FI SS/SP			
	C Rock Inclusions			
Boundary				
Horizon Depth IV				
Color – Munsell				
Texture				
Mottles				
Structure				
Consistence				
Boundary				
Soil Wetness				
Restrictive Horizon				
Saprolite				
LTAR	0.25			
Classification				

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Original House Area (2) (1)

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

(4) Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION (3)
for ON-SITE WASTEWATER SYSTEM

OWNER: _____ APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED: 9-13-07
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: _____
LOCATION OF SITE: Cornelius Est. #60 PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☐ Public ☒ 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) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
1a	11%	0-8	wk grsl						
		8-33	mosbk cl	Cr ss sp				C-rock @ 33"	.3 to 33"
		33-40	wk sbk scl						.25 @ 22" TB
2a		0-10	scl						
		10-32	mosbk c	Cr/fi ss sp	Red				.25 deep firm c/cl
		32-52	wk sbk cl						
3a		0 10	sl						
		10-25	mosbk c						.25
		25-48	wk sbk cl					C-rock starting @ 15"	
4a		0-6	sl						
		6-26	mosbk c	Cr ss sp		26			U
		26	50%	Rock					14" TB at Grade

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

COMMENTS: _____

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: _____
OTHER(S) PRESENT: Tim Kibler

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Summerwood Homes (Ted) APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED: 9-7-07
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): 480 gpd PROPERTY SIZE: _____
LOCATION OF SITE: _____ PROPERTY RECORDED: _____

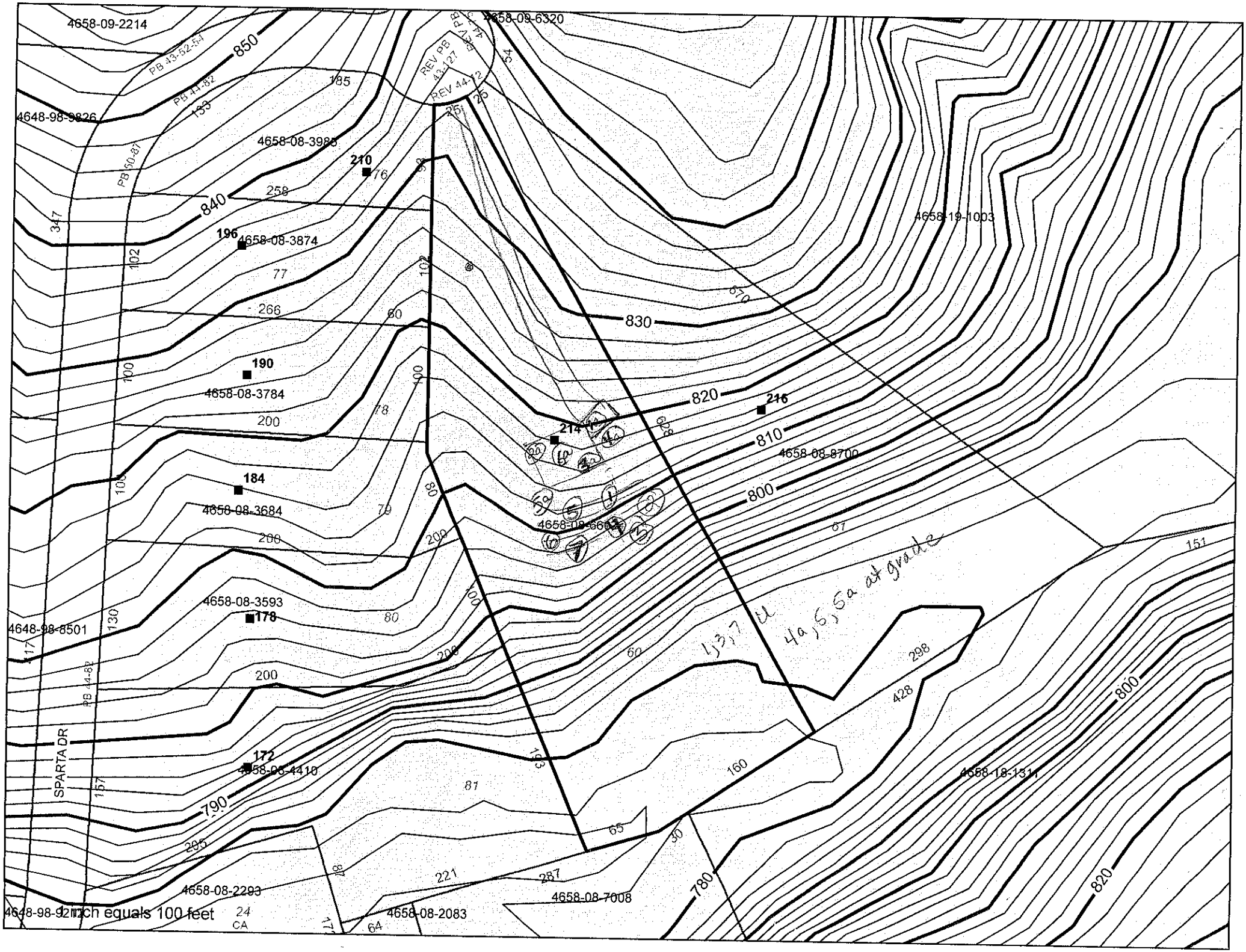
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1		0-9	wkgrscl	fr ss sp		24			U
		9-24	mo sbkc						
		24	Rock						
2		0-12	grsl	fr sss sp		f-rock			.3 @ 24" TB
		12-36	wk sbk sl	fr ss sp	Red	f-sap	f-rock		
		36	Rock						
3	20%	0-24	wk sbk scl	fr ss sp	Reddish				U
		24	Rock						
4		0-6	wk gr brscl	fr ss sp					.3 @ 24" TB
		6-24	mo sbk RC	fr ss sp					
		24-36	wk sbk c	fr sss p	f-c sap				
		36	Rock						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): U
EVALUATED BY: J McNille
OTHER(S) PRESENT: _____

COMMENTS: Soil too shallow & slope too steep
20" soil depth w/ adjustment slope to design any system except Drip


4658-09-2214
4658-09-6320
4648-98-9826
4658-08-3986
4658-19-1003
4658-08-3874
4658-08-3784
4658-08-3684
4658-08-8700
4658-08-3593
4658-08-4410
4658-08-2293
4658-08-2083
4658-08-7008
4658-18-1311
4648-98-8501
4648-98-9211
SPARTA DR
PB 60-87
PB 44-82
PB 43-52
REV PB 43-127
REV 44-72
210
196
190
184
178
172
214
216
850
840
830
820
810
800
790
780
1 inch equals 100 feet
4a,5,5a at grade
1,3,7 at