DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet 1 of
PROPERTY ID #:
COUNTY:

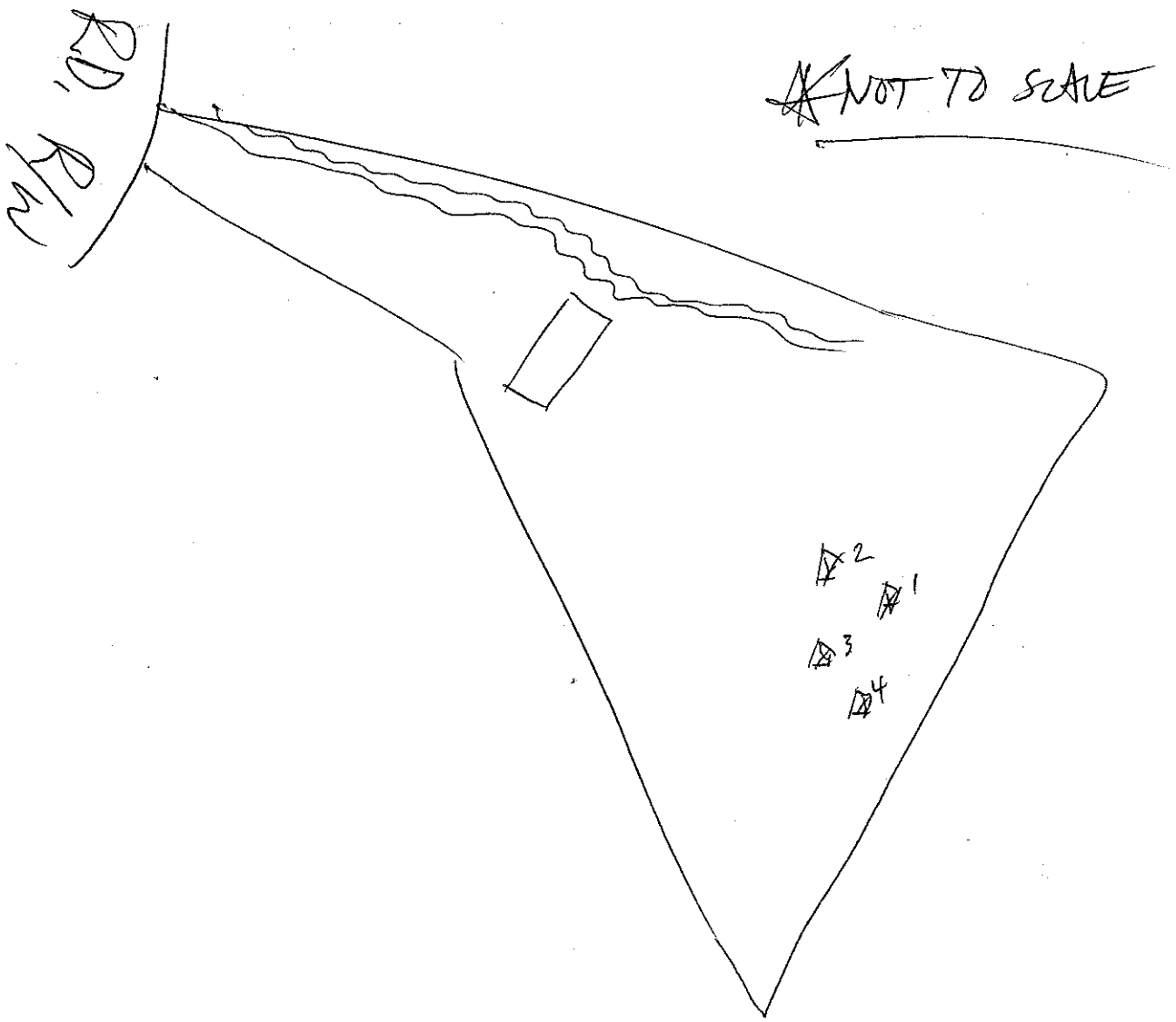
SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: John Murphy APPLICANT: Same
ADDRESS: APPLICATION DATE: DATE EVALUATED:
PROPOSED FACILITY: 3/4 PROPOSED DESIGN FLOW (.1949): 360/480 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	LS 12-15%	0-12	Br SL WSBK	V.Fri SS/SP (SLSP)	@ 33" SAP mica chnl.	46"	–	–	PS .3
		12-46	Red Cly SBK	Fri SS/SP (SLSP)					
2	LS 8-10%	0-8	Br SL Gr.	V.Fri SS/SP SLSP	Common Mica chnl.	44"	–	–	PS .3
		8-38	R Cly SBK/MSBK	Fri SS/SP SLSP					
		38-44	R SCL WSBK	Fri SS/SP SLSP					
3	LS 8-10%	0-9	Br SL Gr	V Fri SS/SP SLSP	Common Mica chnl	44"	–	–	PS .3
		9-35	R Cly SBK/MSBK	Fri SS/SP SLSP					
		35-44	R SCL WSBK	Fri SS/SP SLSP					
4	LS 6-8%	0-10	Br SL Gr.	V.Fri SS/SP SLSP	Common Mica chnl	44"	–	–	PS .3
		10-34	R Cly SBK/MSBK	Fri SS/SP SLSP					
		34-44	R SCL WSBK	Fri SS/SP SLSP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	~~II~~	~~III~~
Site LTAR	0.30	0.30

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: MA+GM P.M. Pickell
OTHER(S) PRESENT:


NOT TO SCALE
1
2
3
4

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL HEALTH

ON-SITE WASTEWATER SECTION

SHEET: 1 of 4

PERMIT #:

PROPERTY ID #:

COUNTY: Iredell

SOIL/SITE EVALUATION *for* ON-SITE WASTEWATER SYSTEM

OWNER/APPLICANT: John Murphy

ADDRESS:

APPLICATION DATE:

PROPOSED FACILITY: 3 BR SFD PROPOSED DESIGN FLOW (.1949): 360 GPD

DATE EVALUATED:

LOCATION OF SITE: Tuckr Rd., on left before Hunt Drive

PROPERTY SIZE: 6+ Acres

WATER SUPPLY: ☒ Private ☐ Public ☒ Well ☐ Spring ☐ Other

PROPERTY RECORDED:

EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut

TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LSCP PSTN/ SLOPE %	HORIZ 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	L	0-4	2, M, Gr, SCL	Fr, SP, SEXP	10YR 6/2 (Gray) 2.5YR 4/8 (Red) 2.5YR 4/1 (Drk Gy, Rd) (Common to Many)	38"	N/A	N/A	US
		4-38	Massive → 1, M, Ang, C	Fi, MP/VP, EXP					
2	L/SHM N	0-4	1, F, Gr, VFSCL	VFr, NP, NEXP	10YR 6/2 (Gray) 2.5YR 4/8 (Red) (Common)	14"	N/A (Need Pits)	N/A	US
		4-8	1, F, Gr, SCL	Fr/Fi, SP, SEXP					
		8-11	Massive, C	Fi, VP, EXP					
		11-27	Massive, C + SAP	MIX Fi/Fr, SP/VP, EXP					
		27-48	SL SAPROLITE	Fr					
3	L/N	0-6	2, M, Gr, SCL	VFr/Fi, SP/NP, SEXP	N/A	6"	N/A (Need Pits)	Need Pits 11"	US
		6-11	Massive C + SAP MIX	Fi, ~~VP~~, EXP					
		11+	Restrictive to Auger	borny. SL SAP?					
4	N	0-4	1, F, Gr, SL	VFr NP, NEXP	(Few) 2.5YR 4/8 (red) 5YR 5/8 (Org) (Common)	18"	N/A (Need Pits) [Likely US]	N/A	US
		4-8	2/1, M, Gr, SCL	VFr/Fr, NP/SP, SEXP					
		8-18	1, M, Gr/Sbk, SC	Fr, SP/MP, SEXP					
		18-22	Massive, C + SAP MIX	Fi, MP/VP, EXP/SEXP					
		22-48	Massive CL SAPROLITE	Fi, SP/MP					

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

OTHER FACTORS (.1946):

SITE CLASSIFICATION (.1948): US

EVALUATED BY: P. Mitchell

OTHER(S) PRESENT:

COMMENTS:

* PG. 2 ON REAR

County: Iredell

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4
CV (Convex Slope)		LS (Loamy Sand)		
D (Drainage Way)				
DS (Debris Slump)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3
FP (Flood Plain)		L (Loam)		
FS (Foot Slope)				
H (Head Slope)	III	Si (Silt)	0.6 - 0.3	0.3 - 0.15
L (Linear Slope)		SiCL (Silty Clay Loam)		
N (Nose Slope)		CL (Clay Loam)		
R (Ridge)		SCL (Sandy Clay Loam)		
S (Shoulder Slope)		SiL (Silt Loam)		
T (Terrace)				
	IV	C (Clay)	0.4 - 0.1	0.2 - 0.05
		SC (Sandy Clay)		
		SiC (Silty Clay)		
		O (Organic)	None	None

MINERALOGY/ CONSISTENCE
NEXP (Non-expansive)
SEXP (Slightly Expansive)
EXP (Expansive)

MOIST
VFR (Very Friable)
FR (Friable)
FI (Firm)
VFI (Very Firm)
EFI (Extremely Firm)

WET
NS (Non Sticky)
SS (Slightly Sticky)
MS (Mod. Sticky)
VS (Very Sticky)

NP (Non Plastic)
SP (Slightly Plastic)
MP (Mod. Plastic)
VP (Very Plastic)

STRUCTURE TYPE
G (Single Grain) [*Structureless*]
M (Massive) [*Structureless*]
CR (Crumb)
GR (Granular)
SBK (Subangular Blocky)
ABK (Angular Blocky)
PL (Platy)
PR (Prismatic)
COL (Columnar)
CMPD (Compound) [___ parting to ___]

STRUCTURE GRADE
0 (Strucutreless)
1 (Weak)
2 (Moderate)
3 (Strong)

STRUCTURE CLASS
VF (Very Fine)
F (Fine)
M (Medium)
C (Coarse)
VC (Very Coarse)

*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape position, wastewater flow and quality.

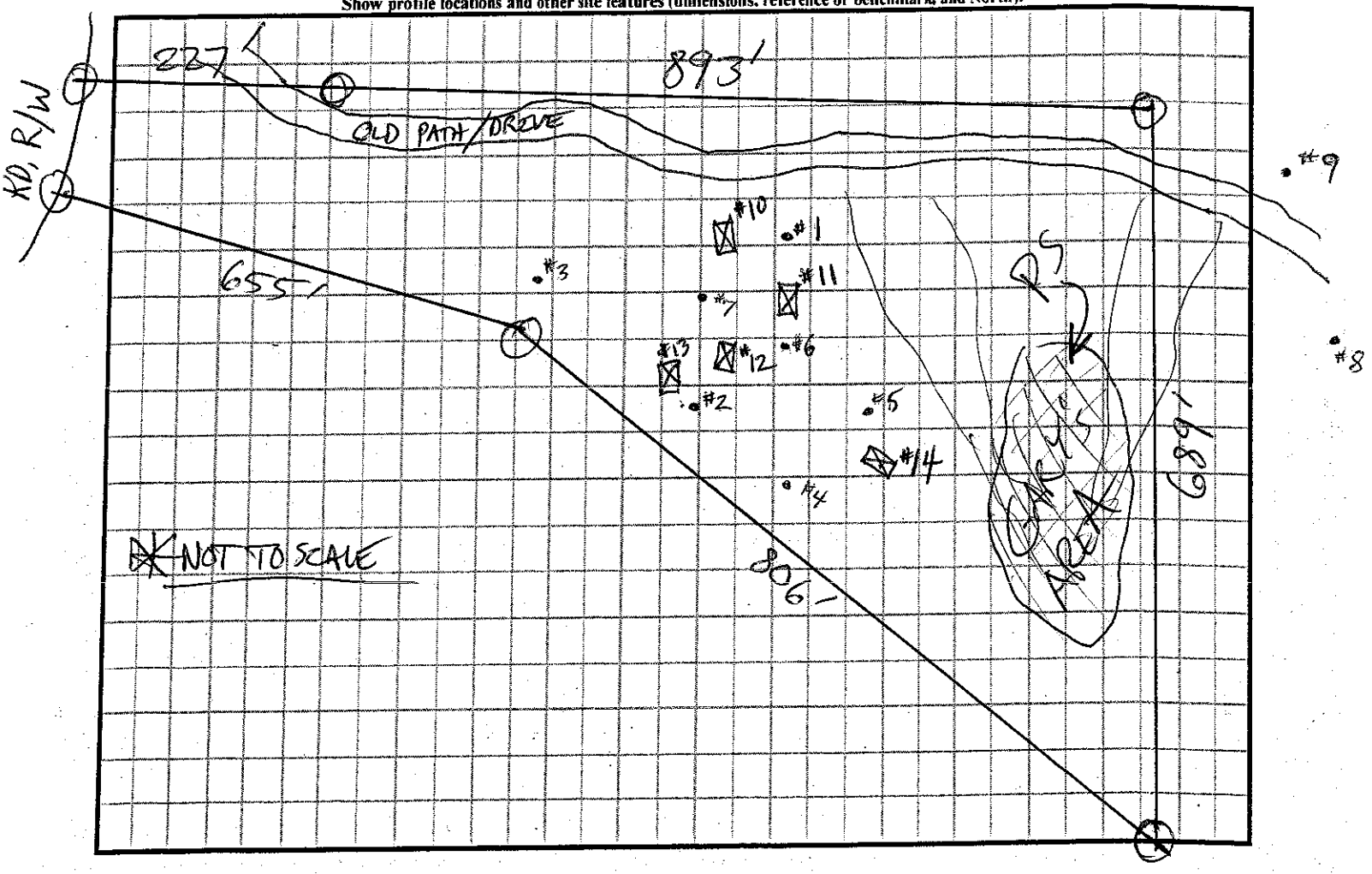
NOTES

HORIZON DEPTH	In inches below natural soil surface
DEPTH OF FILL	In inches from land surface
RESTRICTIVE HORIZON	Thickness and depth from land surface
SAPROLITE	S(suitable) or U(unsuitable)
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

*** Evaluation of saprolite shall be by pits.**

Long-term Acceptance Rate (LTAR): gal/day/ft^2

Show profile locations and other site features (dimensions, reference or benchmark, and North).



SOIL/SITE EVALUATION

(Continuation Sheet)

ARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

SHEET: 3 of 4

PROPERTY ID #:

COUNTY: Iredell

PROFILE #	.1940 LSCP 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
5	N/4S	0-4	1, M, Gr, SL	VFr, NP, NEXP	SEXP/EXP Few 10YR 4/8	20"	N/A (Need Pits)	30"	US
		4-23	1, M, Sbk to Massive C + SAP MIX	Fi, MP/VP,					
		23-30	Massive SL SAPROLITE						
		30+	Restrictive to Auger Boring						
6	L/S	0-10	1, M, Gr, SL	VFr, NP, NEXP	(10YR 5/2 @ 21"+)	17"	N/A (Need Pits)	N/A	US
		10-17	1, M, Gr, SCL	VFr/Fr, NP/SP, SEXP					
		17-36	Massive, SC/SCL SAP MIX	SP/MP SEXP/EXP					
		36-46	Massive SCL/SL SAPROLITE						
7	L	0-6	2/1, M, Gr, SCL	VFr/Fr, SP/NP, SEXP	+ SAP MIX (10YR 5/2 w/ red, org, brwn)	14"	N/A (Need Pits)	N/A	US
		6-18	1, M, Sbk to Massive	C Fi, MP/VP, EXP					
		18-24	Massive, SCL/CL SAPROLITE						
		24-48	Massive SL SAPROLITE						
8	L	0-5	1, M, Gr, CL	Fr, SP, SEXP	—	5"	N/A (Need Pits)	N/A	US
		5-26+	Massive CL SAPROLITE						
9	L	0-6	1, M, Sbk, CL	Fr, SP, SEXP	—	6"	N/A (Need Pits)	N/A	US
		6-30+	Massive CL SAPROLITE						

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

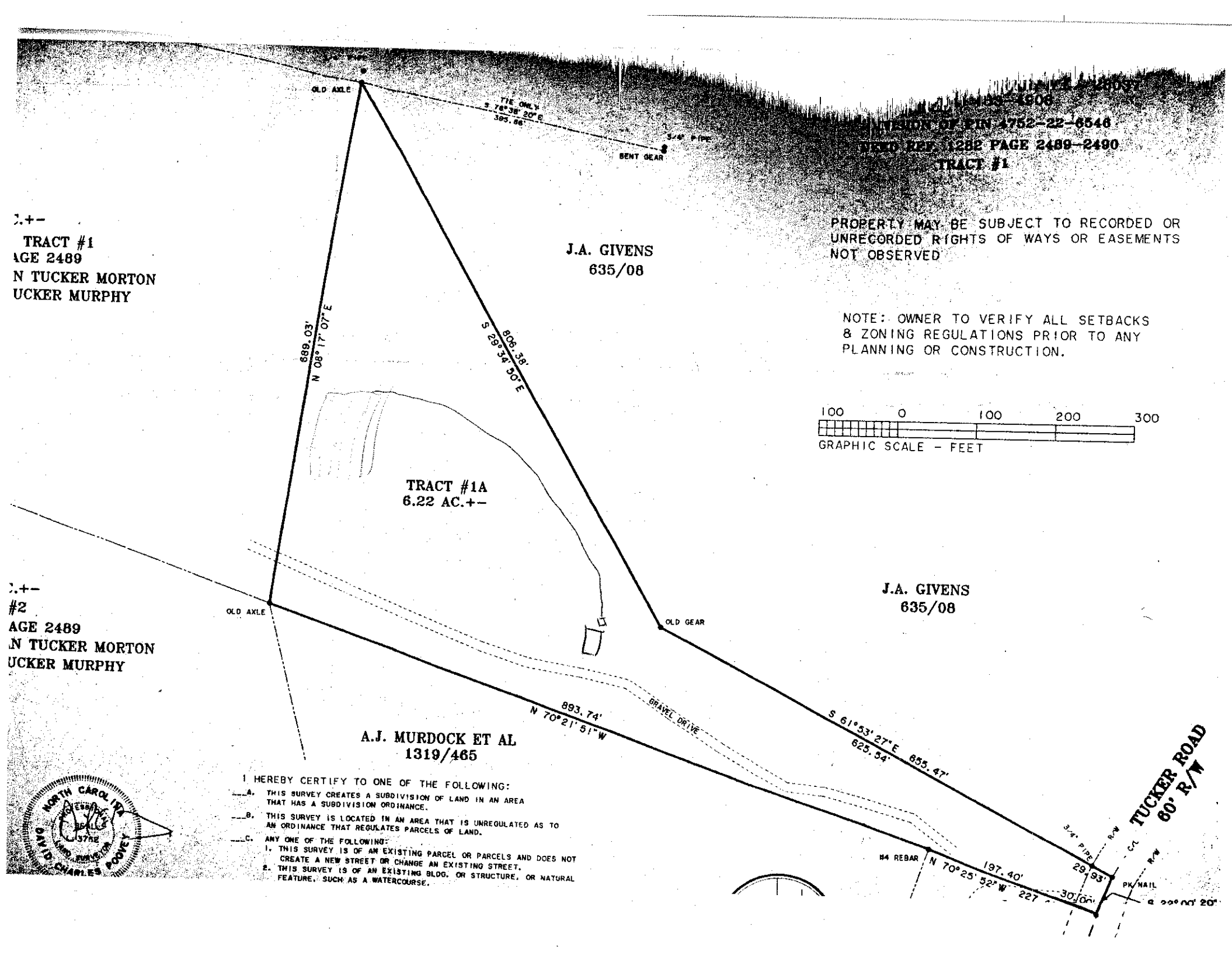
SHEET: 4 of 5

PROPERTY ID #:

COUNTY: Iredell

PROFILE #	.1940 LSCP POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
Pit 10		0-4	1, M, Gr, SL	VFr, NP, NEXP	[COMMON - MANY 7.5YR 5/1 (Gray) @ 6"-36"]	16"	PRS (LS, SL + L)	N/A	US
		4-16	2/1, M/C, AbK, C	Fr/Fi, VP, EXP w/ SAP INCLUS.					
		16-27	Massive, C + SAP MIX	Fi, VP, EXP					
		27-64	Massive, SAPROLITE w/ Weathered Rock In Places	(<20% ON ANY PIT WALL)					
Pit 11		0-3	1, M, Gr, SL	VFr, NP, NEXP	[COMMON 5YR 5/6 (Red)]	26"	US (CL, SL, + L)	N/A	US
		3-14	1, M, sbk, SC	Fr, SP, SEXP (w/ EXP INCLUS)					
		14-26	2/1, M/C, AbK, C	Fr/Fi, VP, EXP ←	[10YR 7/1 MATRIX]				
		26-45	1, M, sbk to Massive C + SAP MIX						
Pit 12		0-6	1, M, Gr, SL	VFr, NP, NEXP	(COMMON TO MANY 7.5YR 5/1)	19"	US (CL, SL, + L)	N/A	US
		6-19	2/1, M/C, AbK, C	Fr/Fi, VP, EXP ←					
		19-36	Massive, EXP C + SAP MIX						
		36-48	Massive, SAP w/ EXP C INCLUS.						
Pit 13		0-5	1, M, Gr, SL	VFr, NP, NEXP	[10YR 7/1 MOTTLS & MATRIX IN PLACES]	12"	US (CL + SL)	N/A	US
		5-12	1, M, AbK, C	Fr/Fi, MP/VP, SEXP/EXP ←					
		12-38	Massive, EXP C + SAP MIX						
		38-58	Massive SAP — Weathered Rock In Places	(<20% ON ANY PIT WALL)					
Pit 14		0-3	1, M, Gr, SL	VFr, NP, NEXP	10YR 7/2	14"	US (SiCL, CL, + L)	N/A	US
		3-14	1, M/C, AbK, SiC/C	MIX SP/VP, SEXP/VP ←					
		14-25	1, M, sbk. to Massive	C + SAP MIX					
		25-50	SAP MIX						

COMMENTS:


OLD AXLE
TIE ONLY
S 76°38' 20" E
393.86'
3/4" PIPE
BENT GEAR
DIVISION OF PIN 4752-22-6546
DEED REF. 1282 PAGE 2489-2490
TRACT #1
PROPERTY MAY BE SUBJECT TO RECORDED OR UNRECORDED RIGHTS OF WAYS OR EASEMENTS NOT OBSERVED
J.A. GIVENS
635/08
NOTE: OWNER TO VERIFY ALL SETBACKS & ZONING REGULATIONS PRIOR TO ANY PLANNING OR CONSTRUCTION.
689.03'
N 08° 17' 07" E
806.38'
S 29° 34' 50" E
100 0 100 200 300
GRAPHIC SCALE - FEET
TRACT #1A
6.22 AC.+-
J.A. GIVENS
635/08
OLD AXLE
OLD GEAR
893.74'
N 70° 21' 51" W
GRAVEL DRIVE
S 61° 53' 27" E
625.54'
655.47'
A.J. MURDOCK ET AL
1319/465
#4 REBAR
N 70° 25' 52" W
197.40'
227
3/4" PIPE
29.93'
30.00'
PK NAIL
TUCKER ROAD
60' R/W
I HEREBY CERTIFY TO ONE OF THE FOLLOWING:
___A. THIS SURVEY CREATES A SUBDIVISION OF LAND IN AN AREA THAT HAS A SUBDIVISION ORDINANCE.
___B. THIS SURVEY IS LOCATED IN AN AREA THAT IS UNREGULATED AS TO AN ORDINANCE THAT REGULATES PARCELS OF LAND.
___C. ANY ONE OF THE FOLLOWING:
1. THIS SURVEY IS OF AN EXISTING PARCEL OR PARCELS AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.
2. THIS SURVEY IS OF AN EXISTING BLDG. OR STRUCTURE, OR NATURAL FEATURE, SUCH AS A WATERCOURSE.
NORTH CAROLINA
L-3752
LAND SURVEYOR
DAVID CHARLES POVEY