

Basis for Design is the Texas Administrative Code (TAC), Title 30, Part 1, Chapter 285.

41530 Sand Hill Ln
Needville, TX 77461
0520 C KETTLER
ACRES 3, (405 X 322.66)
Fort Bend County
Property ID: 48260

Facility Type: Proposed Single Family Home
With 3 Bedrooms, ULF Fixtures, Less than 2500 Sq. Ft.
Wastewater Flow is rated at 240 Gallons Per Day
FRONT / EAST SYSTEM

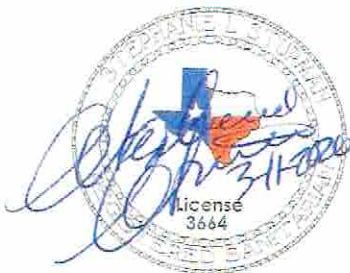
ON SITE SEWAGE FACILITY design is for Surface Application

Attached is a design for an On-Site Sewage Facility (OSSF) to be located at the property described above utilizing SURFACE APPLICATION as the means of effluent disposal. The OSSF is designed for 240 Gallons Per Day of normal household sewage, and any water usage over this amount invalidates this design. Changes in the design or installation must be discussed and approved by designer and the Authorized Agent prior to any construction of the OSSF. Due to many inherent variables in the installation/operation of an OSSF, **E. S. Designs** will not be held liable for any system malfunctions. The location of all structures, wells, OSSF components are proposed, unless otherwise noted at the time of this design. As Built drawings may be required if wells, tanks field or home location are different than shown here.

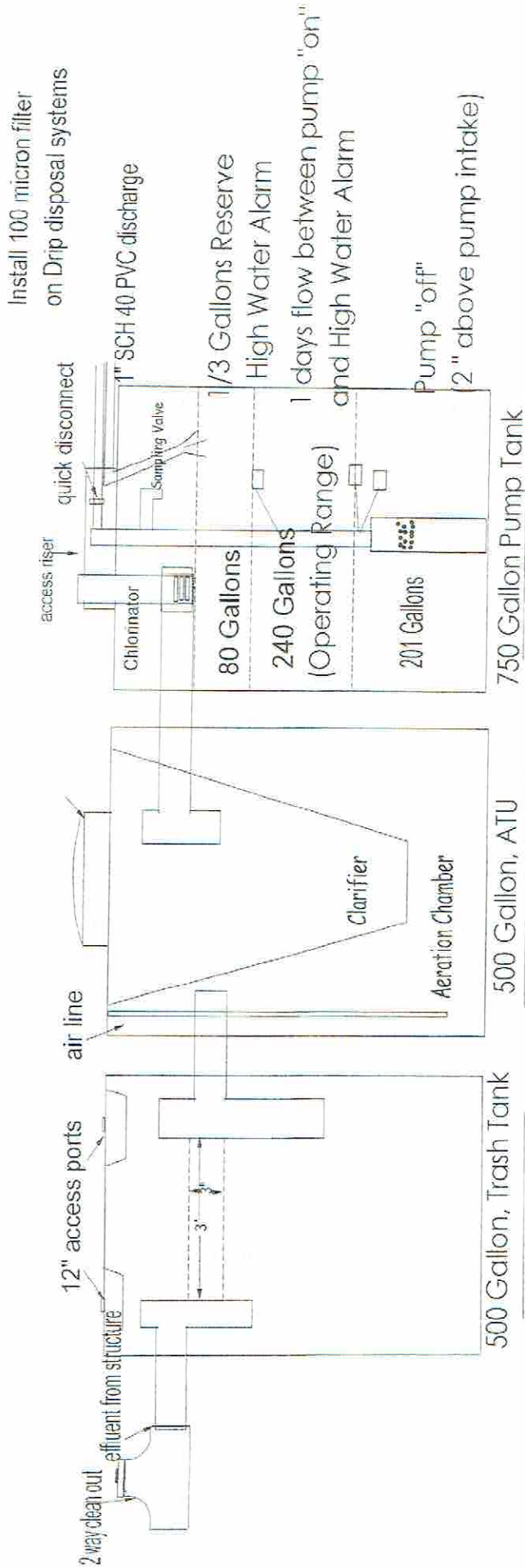


ON-SITE SEWAGE FACILITY GENERAL NOTES

1. An on-site sewage facility (OSSF) license must be obtained from your Authorized Agent prior to installing any portion of this system.
2. Installations must be performed by a Registered OSSF Installer in the State of Texas.
3. No components of installation may be covered without the approval of the Authorized Agent.
4. If any discrepancies exist between this design and actual field conditions, it is the Installer's responsibility to contact the Designer and Authorized Agent prior to any construction to remedy the discrepancy.
5. Re-draw fees may apply.
6. This design meets the minimum standards set forth by the TCEQ, and is based on information provided with the site evaluation as well as usage conditions provided to designer. Designer assumes no responsibility as to accuracy of provided information.
7. Any water usage over permitted design will invalidate this design. **Water meters may be required to ensure water usage limits.**
8. All construction materials and methods must be in accordance with state law. The Authorized Agent may impose more stringent requirements.
9. Disposal area shall be vegetated throughout the year and shall be graded to provide positive storm water runoff.
10. Designer does not guarantee that this OSSF will function in all conditions. Property owner/occupant should practice water conservation throughout the year. Also, property owner/occupant shall not dispose of non biodegradable materials, harsh chemicals, toxins or water softener discharge into this OSSF.
11. Based on my professional opinion, this system, if installed and operated in accordance with this plan, should not cause any nuisance conditions, threat of pollution or health hazards to the public or any existing/proposed water supply systems.
12. All underground utilities shall be located prior to construction. Call **Texas One Call at 1.800.245.4545** for line marking. Variances may be required by the utility provider if OSSF is to be located in their easement.
13. Pump tanks are sized to contain at least 1/3 daily wastewater flow (2/3 flow in Montgomery County) between the high water alarm activation and the pump tank inlet.
14. **Any stub-outs not found or noted plans shall be tied into main sewer line prior to the pretreatment tank.**
15. Sprinkler OSSF's (surface application) may not have anything (trees, buildings, etc.) within ten feet of a sprinkler head that will interfere with the uniform application of the effluent [TAC 285.33(d)(2)(A)].
16. All effluent to a surface application system must be disinfected prior to disposal.
17. Spraying shall be controlled by a 24 hour timer. **(ANY spray within 10 ft of property line shall spray from midnight to 5am)**
18. Pump tank shall be equipped with an audible and visible high water alarm, & must be installed on a separate circuit from the pump.
19. Electrical wiring must conform to the National Electric Code (1999), must be in approved electrical conduit, buried and must terminate at a main/sub breaker panel. Electrical connection are to be made in approved junction boxes with a disconnect in direct vision of device being serviced that is weatherproof and has a lock-out provision [TAC 285.34 (c)].
20. A Maintenance Contract shall be in effect for the life of the system.
21. Contact your local Authorized Agent for any local requirements or guidelines related to your septic system.



Tank Flow Diagram Not to Scale



Hoot 500
Gallons Per Inch = 14.61
Pump Off = 14" (205 gallons)
Pump On = 31" (453 gallons)
High Water Alarm = 46" 43"
Inlet = 52"

Aeris D-500
Gallons Per Inch = 14.39
Pump Off = 14" (201 gallons)
Pump On = 30.6" (241 gallons)
High Water Alarm = 46" (562 gallons)
Inlet = 53"

Clearstream NC3T
Gallons Per Inch = 12.5
Pump off = 14" (175 gallons)
Pump On = 21" (255 Gallons)
High Water Alarm = 40.5" (455 Gallons)
Inlet = 80" (750 Gallons)

ProFlo 500 SLPT
Gallons Per Inch = 14 gallons
Pump OFF = 14" (196 gallons)
Pump ON = 19" (266 gallons)
High Water Alarm = 36" (~506 gallons)
Inlet = 55"

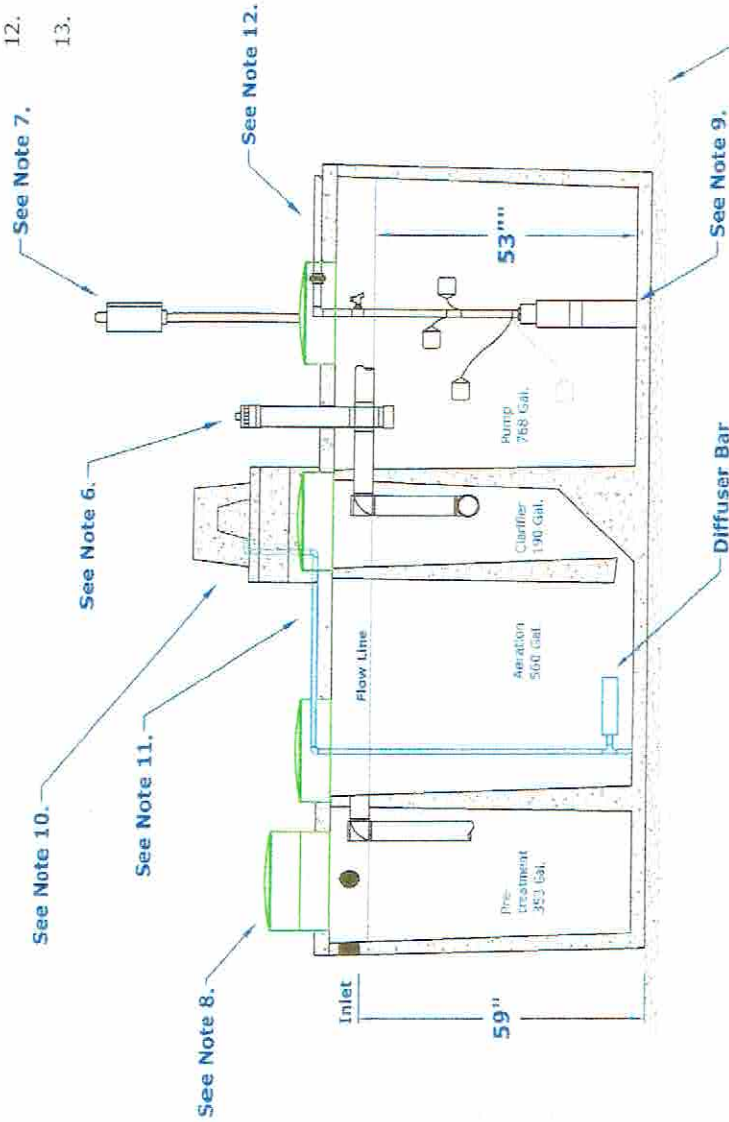
NUWater B550 = 14.48 gal. per inch
Pump Off = 14"
Pump On = 30"
High Water Alarm = 46"
Inlet = 53"

Solar Aire (Same as NuWater measurements)



GENERAL NOTES:

1. Plant structure material to be precast concrete and steel.
2. Maximum burial depth is 30" from slab top to grade.
3. Weight = 14,900 lbs.
4. Treatment capacity is 600 GPD.
5. BOD Loading = 1.62 lbs. per day.
6. Standard tablet chlorinator or Optional Liquid chlorinator.
7. NuWater B-550 Control Center w/ Timer for night spray application. Optional Micro Dose (min/sec) timer available for drip applications. Electrical Requirement to be 115 Volts, 60 Hz, Single Phase, 30 AMP, Grounded Receptacle.
8. 20" Ø access riser w/ lid (Typical 4). Optional extension risers available.
9. 20 GPM 1/2 HP, high head effluent pump.
10. HIBLOW Air Compressor w/ concrete housing.
11. 1/2" Sch. 40 PVC Air Line (Max. 50 Lft from Plant).
12. 1" Sch. 40 PVC pipe to distribution system provided by contractor.
13. 4" min. compacted sand or gravel pad by Contractor.



DIMENSIONS:
 Outside Height: 67"
 Outside Width: 63"
 Outside Length: 164"

MINIMUM EXCAVATION DIMENSIONS:
 Width: 76"
 Length: 176"



**NuWater B-550 (600 GPD)
 Aerobic Treatment Plant (Assembled)**

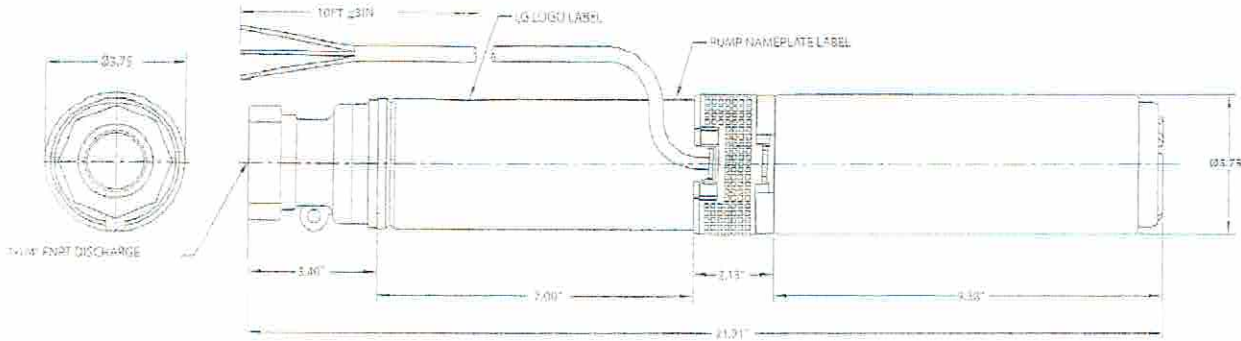
March, 2012
 By: A.S.
 Scale:
 * All dimensions subject to available application information.
 Dwg. #: NC-B550-3

**N.C. Pipe
 PRECAST PRODUCTS**

9235 Main Street #1
 P.O. Box 507
 Needville, Texas, 77461
 1-888-331-5871

" Providing Concrete Environmental Solutions "

Engineering Data



Item No.	Dimension A	Dimension B	Dimension C
558221	7.00	9.38	21.91
558222	7.00	9.38	21.91
558223	9.00	9.38	23.91
558224	9.00	9.38	23.91
558225	6.50	9.38	21.41
558226	6.50	9.38	21.41

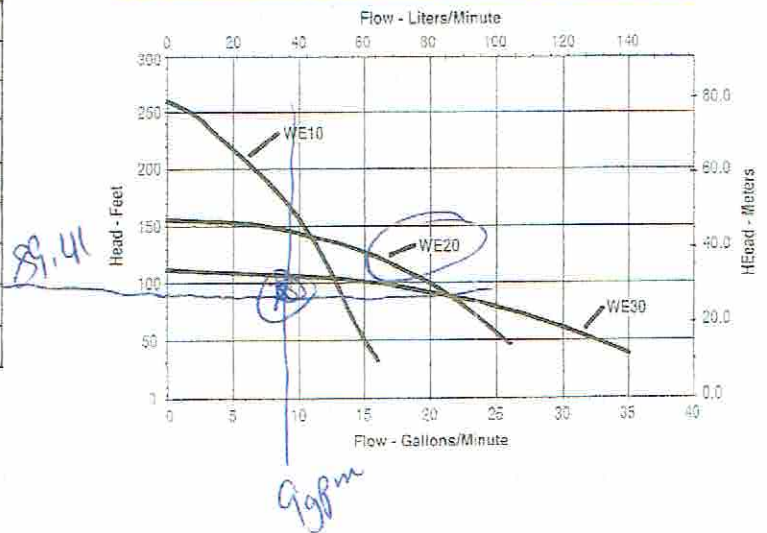
Specifications

Model No.	Item No.	HP	Volts/Hz	Discharge (dia. in)	Performance (GPM @ Head)					Wire	Cord
					50'	100'	150'	200'	250'		
WE10G05P4-21	558221	1/2	115/60	1-1/4	15	13	10	7	2	2 Wire	SJOW/300V/10' Stripped Leads
WE10G05P4-22	558222	1/2	230/60	1-1/4	15	13	10	7	2	2 Wire	SJOW/300V/10' Stripped Leads
WE20G05P4-23	558223	1/2	115/60	1-1/4	26	20	8	—	—	2 Wire	SJOW/300V/10' Stripped Leads
WE20G05P4-22	558224	1/2	230/60	1-1/4	26	20	8	—	—	2 Wire	SJOW/300V/10' Stripped Leads
WE30G05P4-21	558225	1/2	115/60	1-1/4	32	14	—	—	—	2 Wire	SJOW/300V/10' Stripped Leads
WE30G05P4-22	558226	1/2	230/60	1-1/4	32	14	—	—	—	2 Wire	SJOW/300V/10' Stripped Leads

Construction

Motor Housing	Stainless steel
Impeller Material	Calcon
Diffuser	Glass filled PPO
Power Cord	10' SJOW
Check Valve	Calcon
Fasteners	Stainless steel
Shaft	Stainless steel
Bearings	PEEK
Discharge	Glass filled polypropylene

Performance Data



P.O. Box 12010
 Oklahoma City, OK 73157-2010
 Phone: 1.800.701.7894
 Fax: 1.800.678.7867
 www.LittleGiantPump.com



SUPERPRO™ with Intelligent Flow Technology®

The SUPERPRO™ with patented Flow Shut-Off and Intelligent Flow Technology® allows the reduction of distance while simultaneously and proportionately reducing the flow rate down 50%! Water savings of up to 30% or more is achievable with this innovative feature. The SUPERPRO™ delivers even water distribution, eliminates dry spots and provides better zone performance.

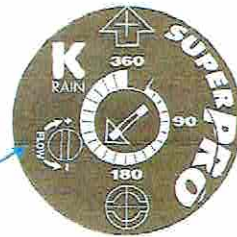
Water flow can be turned off during installation or adjustment, with the riser remaining in a popped up position for quick nozzle changes.

Easy Arc Setting

Arc Selection 40° to continuous 360°
Adjust From Left Start

 Intelligent Flow Technology®

- Reduces distance & flow rate proportionately
- Provides full On/Off control



Specifications

- Inlet: 3/4" (1.9 cm) Threaded NPT
- Arc Adjustment Range: 40° to Continuous 360°
- Flow Range: .5 – 9.5 GPM (1.9 – 36 LPM)
- Pressure Rating: 20 – 70 PSI (1.4 – 4.8 bar)
- Precipitation Rate: .21 – 1.17 in/hr (5.39 a 30.89 mm/hr) (Depending on Spacing and Nozzle Used)
- Overall Height (Popped Down): 7 1/2" (19 cm)
- Recommended Spacing: 28' – 44' (8.5 a 13.4 m)
- Radius: 26' – 49' (7.9 a 14.9 m)
- Nozzle Trajectory: 26°
- Low Angle Nozzle Trajectory: 12°
- Standard and Low Angle Nozzles Included
- Riser Height: 4" (10.2 cm)

How to Specify:

Model Number	Description
10003	-RCW

Performance Data

NOZZLE	PRESSURE			RADIUS		FLOW RATE			PRECIP in/hr		mm/hr	
	PSI	kPa	Bars	ft.	M.	GPM	L/M	M/H	■	▲	■	▲
#1	30	207	2.1	33	10.1	1.2	4.5	0.3	0.21	0.25	5	6
	40	276	2.8	33	10.1	1.3	4.9	0.3	0.23	0.27	6	7
	50	345	3.4	33	10.1	1.6	5.7	0.3	0.27	0.31	7	8
	60	414	4.1	33	10.1	1.8	6.5	0.4	0.32	0.37	8	9
#1.5	30	207	2.1	36	11.0	1.5	5.7	0.3	0.22	0.26	6	6
	40	276	2.8	37	11.3	1.6	6.0	0.4	0.25	0.29	6	7
	50	345	3.4	37	11.3	2.0	7.0	0.5	0.28	0.32	7	8
	60	414	4.1	38	11.6	2.2	7.9	0.5	0.29	0.34	7	8
#2	30	207	2.1	35	10.7	1.8	6.3	0.4	0.26	0.33	7	8
	40	276	2.8	35	10.7	2.2	8.3	0.6	0.35	0.40	8	10
	50	345	3.4	36	11.0	2.6	9.8	0.6	0.39	0.46	10	11
	60	414	4.1	38	11.6	2.8	11.0	0.7	0.39	0.46	10	11
#2.5 Pre- installed	30	207	2.1	37	11.3	2.5	9.5	0.6	0.35	0.41	9	10
	40	276	2.8	38	11.6	3.0	11.4	0.7	0.40	0.46	10	12
	50	345	3.4	40	12.2	3.4	12.8	0.8	0.41	0.47	10	12
	60	414	4.1	40	12.2	3.8	14.4	0.9	0.46	0.53	12	13
#3	30	207	2.1	36	11.0	3.0	11.4	0.7	0.45	0.51	11	13
	40	276	2.8	37	11.3	3.4	12.9	0.8	0.48	0.55	12	14
	50	345	3.4	38	11.6	4.0	15.1	0.9	0.53	0.62	13	15
	60	414	4.1	41	12.5	4.4	16.7	1.0	0.50	0.58	13	15
#4	30	207	2.1	37	11.3	4.0	15.1	0.9	0.56	0.65	14	16
	40	276	2.8	39	11.9	4.5	17.0	1.0	0.57	0.66	14	17
	50	345	3.4	39	11.9	5.3	19.7	1.2	0.63	0.73	17	19
	60	414	4.1	40	12.2	5.6	21.2	1.3	0.67	0.78	17	20
#5	30	207	2.1	37	11.3	4.8	18.2	1.1	0.68	0.78	17	20
	40	276	2.8	38	11.6	5.6	21.2	1.3	0.75	0.86	19	22
	50	345	3.4	41	12.5	6.5	24.6	1.6	0.74	0.86	19	22
	60	414	4.1	43	13.1	7.2	27.3	1.6	0.75	0.87	19	22
#6	30	207	2.1	40	12.2	6.0	22.7	1.4	0.72	0.83	18	21
	40	276	2.8	41	12.6	6.8	25.7	1.5	0.76	0.90	20	23
	50	345	3.4	42	12.8	7.5	28.4	1.7	0.82	0.95	21	24
	60	414	4.1	44	13.4	8.4	31.8	1.9	0.84	0.96	21	24
#8	30	207	2.1	38	11.6	7.9	29.9	1.8	1.05	1.22	27	31
	40	276	2.8	44	13.4	9.2	34.8	2.1	0.92	1.06	26	27
	50	345	3.4	45	13.7	10.4	39.4	2.4	0.99	1.14	26	29
	60	414	4.1	48	14.6	11.1	42.0	2.6	1.01	1.17	26	30

Low Angle Performance Data

NOZZLE	PRESSURE			RADIUS		FLOW RATE			PRECIP in/hr		mm/hr	
	PSI	kPa	Bars	ft.	M.	GPM	L/M	M/H	■	▲	■	▲
#1	30	207	2.1	28	7.9	1.1	4.2	0.2	0.31	0.36	8	9
	40	276	2.8	30	9.1	1.3	4.9	0.3	0.28	0.32	7	8
	50	345	3.4	30	9.1	1.4	5.3	0.3	0.30	0.35	8	9
	60	414	4.1	30	9.1	1.6	6.1	0.4	0.34	0.40	9	10
#1.5	30	207	2.1	27	8.2	1.4	5.3	0.3	0.37	0.43	9	11
	40	276	2.8	28	8.5	1.7	6.4	0.4	0.42	0.48	11	12
	50	345	3.4	31	9.4	1.8	7.2	0.4	0.38	0.44	10	11
	60	414	4.1	30	9.1	2.1	7.9	0.5	0.45	0.52	11	13
#2	30	207	2.1	30	9.1	2.1	7.9	0.5	0.45	0.52	11	13
	40	276	2.8	31	9.4	2.4	9.1	0.5	0.48	0.56	12	14
	50	345	3.4	33	10.1	2.8	10.6	0.6	0.50	0.57	12	14
	60	414	4.1	31	9.4	3.1	11.7	0.7	0.62	0.72	15	16
#3	30	207	2.1	32	9.8	3.0	11.4	0.7	0.56	0.65	14	16
	40	276	2.8	34	10.4	3.5	13.2	0.8	0.58	0.67	15	17
	50	345	3.4	35	10.7	3.9	14.3	0.9	0.61	0.71	15	18
	60	414	4.1	35	10.7	4.3	16.3	1.0	0.68	0.78	17	20

*All precipitation rates calculated for 180° operation.
For the precipitation rate for a 360° sprinkler, divide by 2.

Models

10003 SUPERPRO™

Other options add to part number:

- HP 12" High Pop
- SH Shrub Head
- CV Check Valve
- NN No Nozzle
- RCW Reclaimed Water Use
- OS On-site wastewater applications with #3 low angle nozzle pre-installed



Design Specification Summary

Street Address	Sand Hill Ln	Bedrooms (Actual)	3
Structure Type	Single Family Home	Bedrooms (Design)	3
Living Area	~1400 SF	Low Flow Fixtures	YES
Total Square Feet	~1400 SF	Soil Type-Class	Class IV

Spray Irrigation Absorption Area

Gallons Per Day	240 GPD	Sprinkler Head Radius	29' & 25'
Application Rate	.041	Sprinkler Head Type	Low angle, max. 40 psi
Absorption Area Required (Sq. Ft.)	5854 SF	Alternating Valve	NO
Absorption Area Shown (Sq. Ft.)	6261 SF	No. of Zones	One

Equipment Specifications

Component	SIZE REQUIRED (GAL)	SIZE ACTUAL (GAL)	MODEL NAME & NUMBER
Pretreatment Tank	500 Gallon	500 Gallon	NuWater B550
Dosing Tank	N-A	N-A	N-A
Aerobic Treatment Unit	500 Gallon	500 Gallon	NuWater B550
Pump Tank	750 Gallon	768 Gallon	NuWater B550
Timer	24 Hour Timer	24 Hour Timer	24 Hour Timer
Pump	1/2 hp	1/2 hp	Franklin Little Giant 1/2 hp or Equiv.
Disinfection Unit	Chlorination	Chlorination	Chlorination
Distribution Piping	1" SCH 40 Purple pipe	1" SCH 40 Purple pipe	1" SCH 40 Purple pipe

Landscape Plan

1. The On-Site Sewage Facility Disposal area shall be capable of vegetative growth at system start-up.
2. The disposal area shall have vegetation of native grasses, St. Augustine, Bermuda or Zoysia throughout the year, over-seeding with winter grasses may be necessary in dormant growing seasons. Shaded areas may require shade grasses.
3. No edible crops shall be grown in disposal area.
4. Disposal area shall be graded smooth to allow for positive storm water runoff.
5. The disposal area should be mowed to allow sunlight to reach the ground surface.



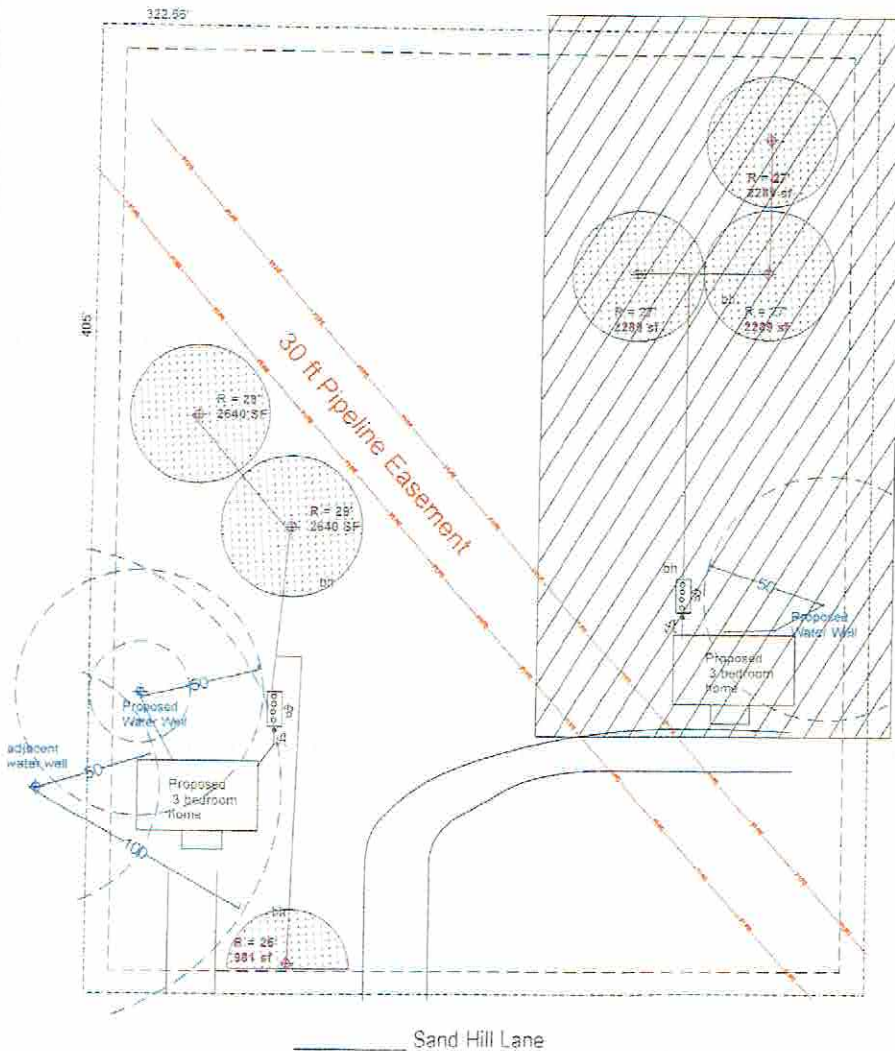
Sand Hill Ln
 Needville, TX 77461
 0520 C KETTLER
 ACRES 3. (405 X 322.66)
 Fort Bend County
 Property ID: 48260

Calculations:
 Proposed 3 bedroom home with
 ULF fixtures & less than 2500 SF
 Q: 240 Gallons Per Day
 Application Rate: .041
 Spray Area Required: 5854 SF
 Spray Area Shown: 6261 SF

Total Dynamic Head:
 $(1.2)(2.31)(1.97/100)(\sim 275 \text{ ft}) = 15.01$
 $15.01 + 5 + 69.4 = 89.41$
 Pump must deliver
 ~9 gpm @ 89.41 ft of head

Night Time Spray:
 Set timer to spray between 2am - 5am

Legend:
 A: 4" SCH 40 PVC sewer pipe
 & 4" SCH 40 PVC 2-way clean out
 B: Proposed septic tank battery
 -500 Gallon Pretreatment Tank
 -500 Gallon Aerobic Treatment Unit
 -Chlorinator
 -750 Gallon Pump Tank
 Supply Line: 1" SCH 40 Purple PVC
 Spray Heads: K-Rain SUPERPRO RCW
 bh: Bore Holes



SCALE: 1" = 80'

Slope: Less than 5%

Floodplain Determination:
 Site is NOT located in the
 100 YR Floodplain



SITE EVALUATION

ADDRESS: Sand Hill Ln, Needville, TX 77461 DATE: 2-15-2020

Survey: C Kettler Abstract: A-520

Acres: 3.0 Property Size: 405' x 322.66'

Structure to be served: Proposed 3 bedroom home

TOPOGRAPHY

SLOPE: 1. Level/Nearly Level (under 2%) 2. Very Gentle Slope (2%-5%) 3. Gentle Moderate (5%-9%) 4. Strong Slope (9%- 15%)
 VEGETATION: 1. Grass/ Brush 2. Lightly Wooded 3. Heavily Wooded
 SITE DRAINAGE: 1. Poor 2. Adequate 3. Good

FLOOD HAZARD: 1. Outside 100-Yr Flood Plain 2. Inside 100-Yr Flood Plain 3. In 100-Yr Flood Plain and Flood Way

WATER SUPPLY:

PUBLIC [] COMMUNITY [] PRIVATE [**XXX—to be drilled**]

NOTE: If the water supply is a completed well on site, provide the following well information:

Size of Well Casing		Sealing Block Present	
Year Drilled		Well House Protecting Well	
Depth of Well		Is a Well Log (Drilling Report) available (Attach Copy if Available)	
Cementing Depth		Are the Neighboring Wells within 100 feet of the property	Yes
Driller			

OTHER SET BACKS

Streams, Ponds, or Lakes within 50 feet of Property Line YES NO
 Sharp Slopes, Breaks or Dry Ditches YES NO

SOIL EVALUATION

A minimum of two soil samples must be performed on opposite sides of the proposed disposal area for all proposed OSSF construction sites to a depth of twenty-four inches (24") minimum below the proposed disposal depth or to a restrictive horizon if shallower. Test hole locations must be shown on the site plan. Describe soils textures using standard USDA Textural Descriptions:

SOIL TEST ONE

DEPTH	CLASS/TEXTURE	COLOR	WATER TABLE	GRAVEL
0"-24"	Class III, Clay Loam	Reddish Brown	No	<5%

SOIL TEST TWO

DEPTH	CLASS/TEXTURE	COLOR	WATER TABLE	GRAVEL
0"-24"	Class III, Clay Loam	Reddish Brown	No	<5%

EFFLUENT LOADING DETERMINATION

SOIL TEXTURE

--Course Sand, Gravel
 --Sand, Loamy Sand
 --Sandy Loam, Loam
 --Sandy Clay Loam, Sandy Clay, Clay Loam, Silty Clay
 Loam, Silty Loam, Silt
 --Clay, Silty Clay

SOIL CLASS

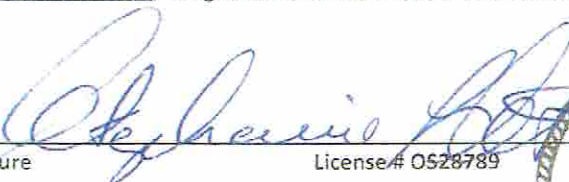
Ia
 Ib
 II
 III
 IV

LONG TERM LOADING RATE

>0.50 (Not Suitable for Standard Systems)
 0.38
 0.25
 0.20
 0.1 (Not Suitable for Standard Systems)

NOTE: If soil has an application rate of over 0.38 g/sqft/d or less than 0.10 g/sqft/d or a high seasonal water table then standard systems are prohibited by State Law.

I, Stephanie L Sturman, a registered site evaluator, conducted the site evaluation to the best of my ability.


 Signature License # OS28789



2-15-2020
 Date

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE)
 - With BFE or Depth (Zone AE, AO, AH, VE, AR)
 - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD**
 - 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone X)
 - Future Conditions 1% Annual Chance Flood Hazard (Zone X)
 - Area with Reduced Flood Risk due to Levee. See Notes. (Zone 2)
 - Area with Flood Risk due to Levee (Zone 2)
- OTHER AREAS**
 - NO SCREEN Area of Minimal Flood Hazard (Zone 1)
 - Effective LDMRs
 - Area of Undetermined Flood Hazard (Zone 3)
- GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- CROSS SECTIONS**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transsect
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transsect Baseline
 - Profile Baseline
 - Hydrographic Feature
- OTHER FEATURES**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped
- MAP PANELS**
 - The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



USGS The National Map Orthomagey, Data refreshed April 2015

0 250 500 1,000 1,500 2,000 Feet 1:6,000

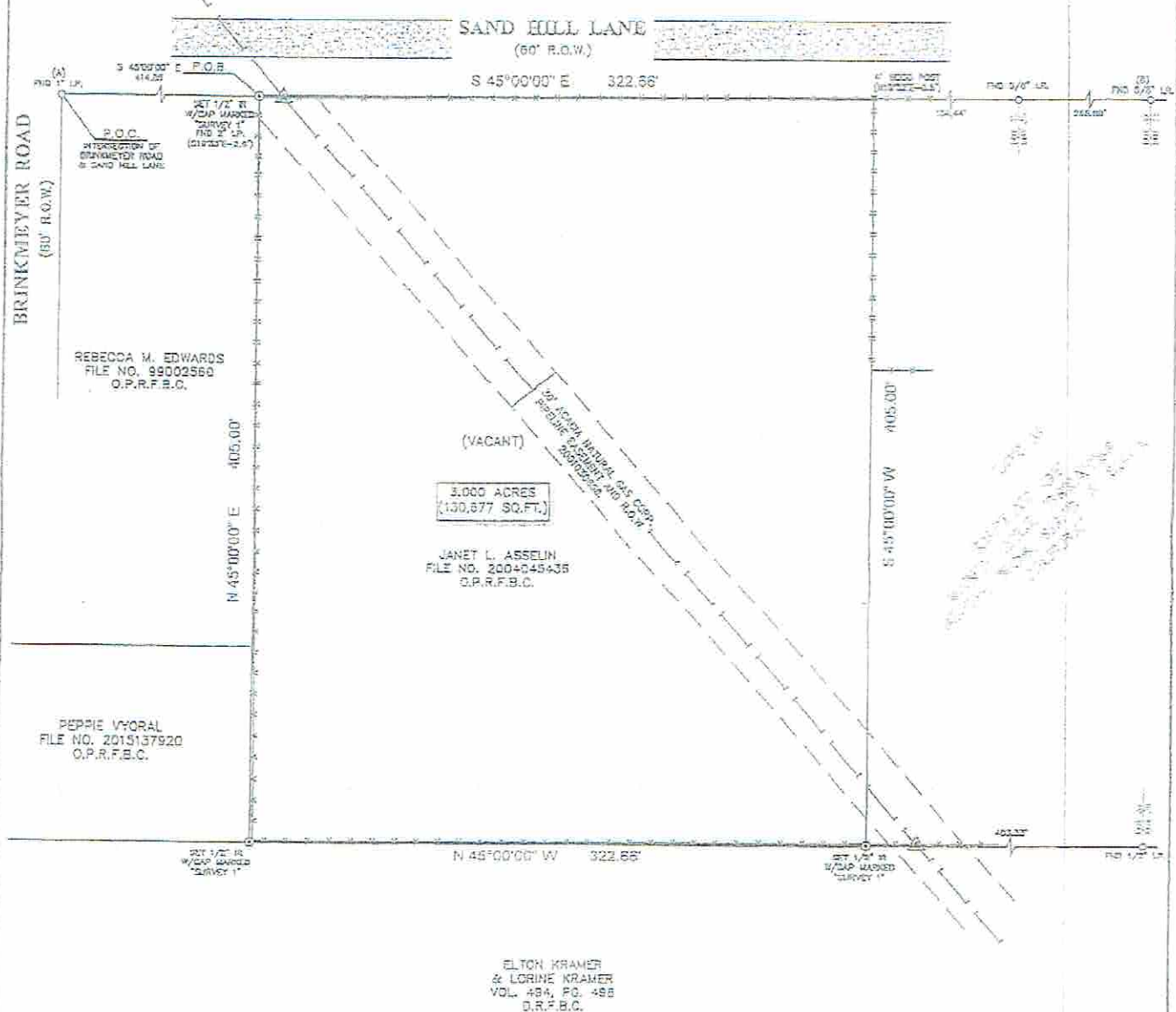
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2-22-2020 at 9:20:36 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

H.A.T.C. RAILROAD SURVEY, SECTION 76 (CHRISTOPHER KETTLER SURVEY ABSTRACT 520)

SCALE 1"=60'



LEGEND

	ASPHALT		FENCE
	WIRE		APPROXIMATE PIPELINE LOCATION

NOTES:
 1. ALL BEARINGS SHOWN HEREON ARE REFERENCED TO A PRIOR DEED CONVEYED UNTO JANET L. ASSELIN, RECORDED IN COUNTY CLERK'S FILE NO. 2004042423 OF THE OFFICIAL PUBLIC RECORDS OF FORT BEND COUNTY, TEXAS. POINTS (A) AND (B) WERE HELD UP HORIZONTAL CONTROL. ABSTRACT INFORMATION FOR THE QUANTUM TRACT WAS PREPARED BY THE TITLE INSURANCE COMPANY LISTED BELOW.
 2. THIS SURVEY IS REFERRED TO THE TITLE INSURANCE COMPANY LISTED BELOW FOR THIS TRANSACTION ONLY. IT IS NOT TRANSFERABLE TO ANOTHER INSTITUTION OR SUBSEQUENT OWNERS.
 3. ALL EASEMENTS AND BUILDING LINES SHOWN ARE FOR THE RECORDED PLAT UNLESS OTHERWISE NOTED.
 4. THERE ARE NO NATURAL DRAINAGE CHANNELS ON SUBJECT PROPERTY.

LEGAL DESCRIPTION: A TRACT OF LAND CONTAINING 3.000 ACRES (130,877 SQUARE FEET) SITUATED IN THE H.A.T.C. RAILROAD SURVEY, SECTION 76 (CHRISTOPHER KETTLER SURVEY, ABSTRACT 520), FORT BEND COUNTY, TEXAS. SAID TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS ATTACHED.

CLIENT: DONNA M. CANDELORI ADDRESS: SAND HILL LANE



SURVEYOR'S CERTIFICATE:
 I, MY PROFESSIONAL OPINION, THIS PLAT REPRESENTS THE FACTS FOUND ON THE GROUND DURING THE COURSE OF A CONDUIT SURVEY CONDUCTED UNDER MY SUPERVISION ON MAY 22, 2016 AND THAT THIS PLAT CONFORMS WITH THE PROFESSIONAL STANDARDS AND ETHICS OF THE TEXAS BOARD OF SURVEYING AND MAPPING. I CERTIFY THAT THERE ARE NO DISCREPANCIES OR CONFLICTING DATA AS SHOWN.



TITLE COMPANY: **StarTex** TITLE COMPANY

201-762-2222
 www.star-tex.com
 survey@star-tex.com
 P.O. Box 2243 | Ann Arbor, MI 48106

DATE: MAY 23, 2016	FIELD CREW: J.W.	TECH: E.F.
DATE: MAY 23, 2016	PROJECT: [blank]	FINAL CHECK: [blank]

Survey 1, Inc. Your Land Survey Company

Exhibit "A"

DESCRIPTION OF A TRACT OF LAND CONTAINING
3.000 ACRES (130,677 SQUARE FEET) SITUATED
IN THE H.&T.C. RAILROAD SURVEY, SECTION 76,
(CHRISTOPHER KETTLER SURVEY, ABSTRACT 520)
FORT BEND COUNTY, TEXAS

Being a tract of land containing 3,000 acres (130,677 square feet), situated in the H.&T.C. Railroad Survey, Section 76 (Christopher Kettler Survey, Abstract 520), Fort Bend County, Texas, being all of a tract of land conveyed unto Janet L. Asselin by deed recorded in County Clerk's File No. 2004045436 of the Official Public Records of Fort Bend County, Texas. Said 3,000-acre tract being more particularly described by metes and bounds as follows:

COMMENCING at a found 1-inch iron pipe at the intersection of the southeast right-of-way line of Brinkmeyer Road (60 feet wide) with the southwest right-of-way line of Sand Hill Lane (60 feet wide);

THENCE South 45° 00' 00" East along the southwest right-of-way line of said Sand Hill Lane, a distance of 414.86 feet to a set 1/2-inch iron rod with cap marked "Survey 1" for the north corner and POINT OF BEGINNING of said tract herein described;

THENCE continuing South 45° 00' 00" East along the southwest right-of-way line of said Sand Hill Lane, a distance of 322.66 feet to a point (from which a 4-inch wood post bears North 19° 32' East, a distance of 0.5 feet) for the north corner of Lot 35 of Replat of Sand Hill Estates, a subdivision recorded in Slide Nos. 813/B and 814/A of the Plat Records of Fort Bend County, Texas, and for the east corner of said tract herein described;

THENCE South 45° 00' 00" West along the northwest line of said Lot 35, a distance of 405.00 feet to a set 1/2-inch iron rod with cap marked "Survey 1" for the west corner of said Lot 35, and for the south corner of said tract herein described;

THENCE North 45° 00' 00" West, a distance of 322.66 feet to a set 1/2-inch iron rod with cap marked "Survey 1" for the west corner of said tract herein described;

THENCE North 45° 00' 00" East, a distance of 405.00 feet to the POINT OF BEGINNING and containing 3,000 acres (130,677 square feet), more or less.

FORT BEND CENTRAL APPRAISAL DISTRICT

Property Owner Property Address 2019 Assessed Value
 R48260 CANDELORI, DONNA M SAND HILL LN, NEEDVILLE, TX 77461 \$71,400

2019 GENERAL INFORMATION

Property Status Active
 Property Type Real Land
 Legal Description 0520 C KETTLER, ACRES 3, (405 X 322.66)
 Neighborhood Needville Abst Group 5
 Account 0520-00-000-2230-906
 Map Number Z-189

2019 VALUE INFORMATION

Improvement/Homesite Value \$0
 Improvement Non-Homesite Value \$0
 Total Improvement Market Value \$0
 Land Homesite Value \$0
 Land Non-Homesite Value \$71,400
 Land Agricultural Market Value \$0
 Total Land Market Value \$71,400
 Total Market Value \$71,400
 Agricultural Use \$0
 Total Appraised Value \$71,400
 Homestead Cap Loss \$0
 Total Assessed Value \$71,400

2019 OWNER INFORMATION

Owner Name Candelori, Donna M
 Owner ID 00656139
 Exemptions
 Percent Ownership 100%
 Mailing Address 20322 Jade Park DR Richmond, TX 77407-4173
 Agent -

2019 ENTITIES & EXEMPTIONS

TAXING ENTITY	EXEMPTIONS	EXEMPTIONS AMOUNT	TAXABLE VALUE	TAX RATE PER 100	TAX CEILING
CAD- Fort Bend Central Appraisal District		\$0	\$71,400	0	0
D01- Fort Bend Drainage		\$0	\$71,400	0.0153	0
G01- Fort Bend General		\$0	\$71,400	0.4447	0
J01- Wharton County Jr College		\$0	\$71,400	0.13934	0
S05- Needville ISD		\$0	\$71,400	1.466261	0
TOTALS				2.065601	

2019 LAND SEGMENTS

LAND SEGMENT TYPE	STATE CODE	HOMESITE	MARKET VALUE	AG USE	LAND SIZE
1 - Rural Acreage	C4 - Vacant Lots/Tracts Rural	No	\$71,400	\$0	3.000000 acres
TOTALS					130,680 Sq. ft / 3.000000 acres

VALUE HISTORY

YEAR	IMPROVEMENT	LAND	MARKET	AG MARKET	AG USE	APPRAISED	HS CAP LOSS	ASSESSED
2018	\$0	\$65,400	\$65,400	\$0	\$0	\$65,400	\$0	\$65,400
2017	\$0	\$50,160	\$50,160	\$0	\$0	\$50,160	\$0	\$50,160
2016	\$0	\$18,130	\$18,130	\$0	\$0	\$18,130	\$0	\$18,130
2015	\$0	\$13,050	\$13,050	\$0	\$0	\$13,050	\$0	\$13,050
2014	\$0	\$13,050	\$13,050	\$0	\$0	\$13,050	\$0	\$13,050

SALES HISTORY

DEED DATE	SELLER	BUYER	INSTR #	VOLUME/PAGE
2/7/2020	Candelori, Donna M	Ramos Ricardo & Carmen Romero-Ramos	2020015332	
5/25/2016	Asselin, Janet L	Candelori, Donna M	2016055657	
2/19/2004	WILTON JACK A & JANET L	Asselin, Janet L	2004045436	
	MEYER, ALBERT W	WILTON JACK A & JANET L	99046483	
	MEYER, ALBERT W	MEYER, ALBERT W	-	1476/202

