PIEDMONT DESIGN ASSOCIATES, P.A.
125 East Plaza Drive, Suite 101
Mooresville, North Carolina 28115-8812
Telephone (704) 664-7888 Fax (704) 664-1778
NCBELS License #: C-1007 - www.pdapa.com

Engineering
Surveying
Planning

Job No.: 2014-05-17-EH
Project: Tomlin Mill One Stop

Date: 05/28/2014
Revised Date: 05/28/2014

Daily Flow Data				
Date of Reading	**Time of Reading**	**Meter Reading**	**Usage**	**Weekly Total**
Monday, February 24, 2014	11:15	603330		
Tuesday, February 25, 2014	11:00	603600	270	
Wednesday, February 26, 2014	11:05	603820	220	
Thursday, February 27, 2014	11:00	604190	370	
Friday, February 28, 2014	11:00	604570	380	
Saturday, March 01, 2014	11:30	604820	250	
Sunday, March 02, 2014	11:10	605030	210	1,700.00
Monday, March 03, 2014	11:00	605280	250	
Tuesday, March 04, 2014	11:00	605540	260	
Wednesday, March 05, 2014	11:05	605720	180	
Thursday, March 06, 2014	11:00	606020	300	
Friday, March 07, 2014	11:15	606410	390	
Saturday, March 08, 2014	11:02	606870	460	
Sunday, March 09, 2014	12:00	607320	450	2,290.00
Monday, March 10, 2014	11:00	607570	250	
Tuesday, March 11, 2014	11:00	608020	450	
Wednesday, March 12, 2014	11:35	608230	210	
Thursday, March 13, 2014	11:05	608590	360	
Friday, March 14, 2014	11:03	608840	250	
Saturday, March 15, 2014	11:35	609300	460	
Sunday, March 16, 2014	11:02	609560	260	2,240.00
Monday, March 17, 2014	11:30	609870	310	
Tuesday, March 18, 2014	11:03	610190	320	
Wednesday, March 19, 2014	11:17	610440	250	
Thursday, March 20, 2014	11:00	610870	430	
Friday, March 21, 2014	11:15	611480	610	
Saturday, March 22, 2014	11:04	611820	340	
Sunday, March 23, 2014				2,260.00
Monday, March 24, 2014	11:00	612150	330	
Tuesday, March 25, 2014	11:00	612520	370	
Wednesday, March 26, 2014	11:00	612770	250	
			9440	Gallons (Monthly Total)
			314.67	Daily Average

Average of highest 10%: 510.00

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Job No.: 2014-05-17-EH Date: 05/28/2014
Project: Tomlin Mill One Stop Revised Date: 05/28/2014

Monthly Flow Data

Month	Days in Bill	Meter Reading	Monthly Usage	Water Consumption (G/D)
1/26/2012		364,200		
2/24/2012	29.00	369,930	5,730	197.59
3/26/2012	31.00	377,530	7,600	245.16
4/25/2012	30.00	386,960	9,430	314.33
5/24/2012	29.00	394,230	7,270	250.69
6/26/2012	33.00	404,290	10,060	304.85
7/25/2012	29.00	414,520	10,230	352.76
8/24/2012	30.00	427,960	13,440	448.00
9/26/2012	33.00	436,410	8,450	256.06
10/25/2012	29.00	444,120	7,710	265.86
11/26/2012	32.00	450,950	6,830	213.44
12/26/2012	30.00	458,460	7,510	250.33
1/24/2013	29.00	466,050	7,590	261.72
2/26/2013	33.00	473,790	7,740	234.55
3/26/2013	28.00	483,430	9,640	344.29
4/25/2013	30.00	493,090	9,660	322.00
5/23/2013	28.00	500,880	7,790	278.21
6/24/2013	32.00	512,190	11,310	353.44
7/25/2013	31.00	522,620	10,430	336.45
8/26/2013	32.00	534,930	12,310	384.69
9/25/2013	30.00	555,850	20,920	697.33
10/24/2013	29.00	563,800	7,950	274.14
11/25/2013	32.00	573,920	10,120	316.25
12/23/2013	28.00	581,760	7,840	280.00
1/23/2014	31.00	591,390	9,630	310.65

** September 2013 monthly reading was not used in the peaking factor calculation due to abnormally high water usage compared to the other twenty three months.

ROLLANS *Soil & Environmental Services, PA.*

P.O. Box 832, Mooresville, NC 28115 Phone: (704) 746-5046 Fax: (704) 278-0989

Ashley Rollans, *NC Licensed Soil Scientist, Certified Septic Installer, Certified Wastewater Operator & Certified Septic Inspector* **Contacts**: *704.746.5046*
Email: *rollans.ashley@yahoo.com*

Project Number: *01-1953*
Date: *10/6/14*

FRIENDSHIP HOLDING CORP.
Attn: *Karen Schulz*
Email: kschulz@yadtel.net

Re: On-Site Wastewater Evaluation for an expansion of an Existing Service Station (Tomlin Mill One Stop) to accommodate Food Service on Parcels (4749934637, 4749932604 & 4749932446) located on Tomlin Mill Road, Iredell County, NC.

Dear Ms. Schulz,

Rollans Soil & Environmental Services, PA has performed a Preliminary Soil Evaluation on the above mentioned property in Iredell County, NC. The purpose of the evaluation was to determine available space requirement for an expansion of an existing system for the Tomlin Mill One Stop Service Station to incorporate food service. The evaluation was performed in August, 2014.

The findings from our evaluation are illustrated on the attached Site Plan. Additional documentation of the soil evaluation is detailed in the NCDENR for Soil Profile Descriptions.

Soil/Site Suitability

Six soil borings (B1 – B6) were performed throughout the property to determine the overall soil suitability for an onsite wastewater system installation. Of these six boring all were found to be provisionally suitable for Conventional, Modified Conventional and/or Accepted subsurface wastewater systems. These soil profile descriptions are most similar to the Cecil/Pacolet Soil Series'. Soil LTAR is 0.275 – 0.3gpd/ft2 but recommended LTAR is 0.25gpd/ft2 due to the restaurant strength waste.

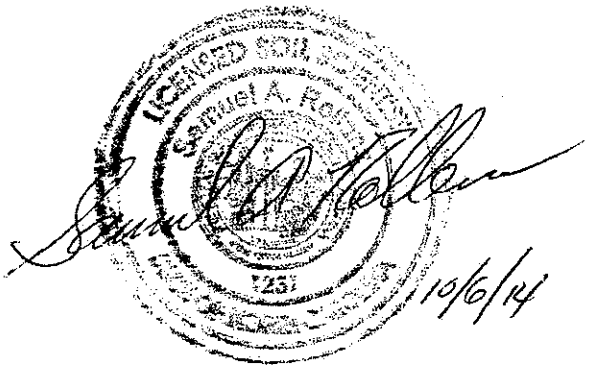
Available Space Requirement

The existing Conventional System (Permit#: 077039; 6 lines totaling 555') is proposed to be the receiver of the restaurant waste (reduced flow = 132 GPD). **This system is adequately sized to support the proposed reduced flow.** The existing Accepted System (Permit#: 147800; Lines 1 - 5 @~105' or 525') is to receive the domestic waste. We laid out two additional 105' lines (6 & 7) for a total of 735'. This will accommodate the proposed reduced flow (724.2 GPD) from the facility. We are proposing to add these lines using Accepted Trench Technology. Soil Borings 1 & 2 are located in this area. Please note that lines 8 & 9 are additional repair lines for that drainfield. A full repair (Lines 8 – 17) has also been demonstrated where Soil Borings 3 – 6 are located. The total linear footage of proposed Conventional or Accepted Trenches in this area

is 1302. This repair area will support the proposed combined reduced flow of 856.2 GPD at an LTAR of 0.25gpd/ft2.

We have determined that there is sufficient available space to support the proposed flows from the facility that was provided by Piedmont Design Associates, PA. The proposed flow from the facility will be split based upon the strength of the waste and treated utilizing two separate drainfields as previously mentioned. There is also a full repair demonstrated for the combined waste generated by the facility that has a recommended LTAR of 0.25gpd/ft2. Piedmont Design Associates, PA will provide detailed design plans illustrating the modifications required to divide the restaurant strength and domestic strength wastestreams as well as all system component modifications.

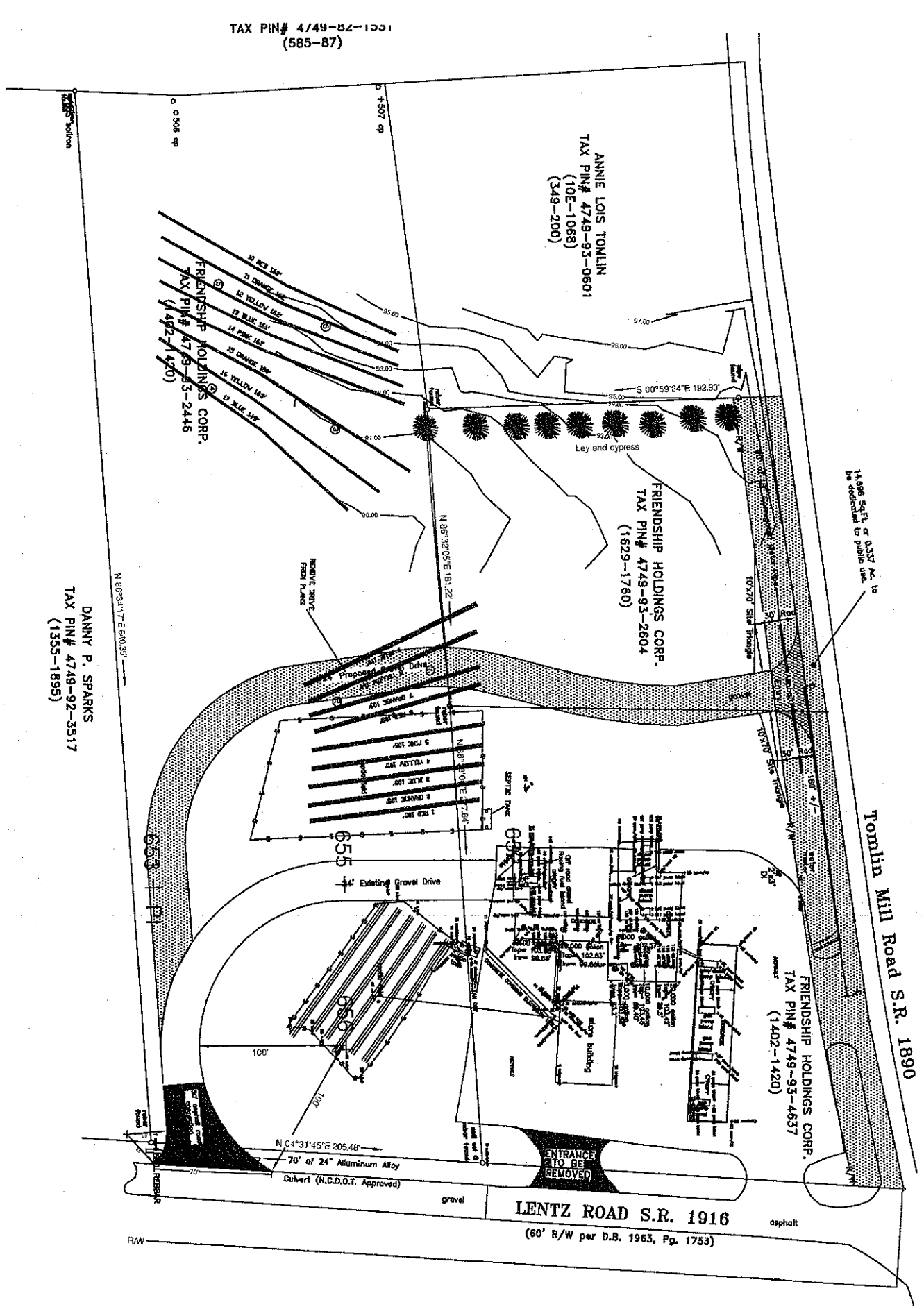
Rollans Soil & Environmental Services, PA has appreciates your business and looks forward to working with you in the future. Please let us know if you need any further assistance or have questions in regards to this project.



10/6/14

Thank you
S. Ashley Rollans
NC Licensed Soil Scientist #1231
NC Certified Operator
NC Certified Septic Installer
NC Certified Septic Inspector

See Attached: *Site Plan*
Soil Profile Descriptions


TAX PIN# 4749-82-1551
(585-87)
ANNIE LOIS TOMLIN
TAX PIN# 4749-93-0601
(10E-1068)
(349-200)
FRIENDSHIP HOLDINGS CORP.
TAX PIN# 4749-93-2446
(1402-1420)
FRIENDSHIP HOLDINGS CORP.
TAX PIN# 4749-93-2604
(1629-1760)
FRIENDSHIP HOLDINGS CORP.
TAX PIN# 4749-93-4637
(1402-1420)
DANNY P. SPARKS
TAX PIN# 4749-92-3517
(1355-1895)
Tomlin Mill Road S.R. 1890
LENTZ ROAD S.R. 1916
(60' R/W per D.B. 1963, Pg. 1753)
S 00°59'24"E 192.93'
N 86°32'05"E 181.22'
N 86°34'17"E 540.35'
N 04°31'45"E 205.48'
Leyland cypress
14,696 Sq.Ft. or 0.337 Ac. to be dedicated to public use.
Proposed Gravel Drive
Existing Gravel Drive
SEPTIC TANK
70' of 24" Alluminum Alloy
Culvert (N.C.D.O.T. Approved)
ENTRANCE TO BE REMOVED
REBAR
R/W
gravel
asphalt
100'
MAP ORIENTATION
See Note #1

PIEDMONT DESIGN ASSOCIATES, P.A.
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Mooresville, NC 28115
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Email: dmunday@pdapa.com

Engineering
Surveying
Planning

January 6, 2015

Iredell County Health Department
Environmental Health Section
318 Turnersburg Highway
Statesville, NC 28625
Attn: Mr. Justin Henderson, R.S.

RE: Expansion of Subsurface Sewage Effluent Disposal System
Tomlin Mill One Stop, 1025 Tomlin Mill Road
Statesville, Iredell County, North Carolina

Dear Mr. Henderson:

ENGINEERS CERTIFICATION

I, **Donald L. Munday**, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe periodically the construction of the referenced project, an expansion of the Subsurface Sewage Effluent Disposal System; Tomlin Mill One Stop, Statesville, Iredell County, NC, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the approved plans and specifications.

It is my understanding, that upon completion of the upfit of the interior of the facility and prior to placing new system into service, the owner will install plantings, bollards or approved alternate form of barrier between the drive/parking area at rear of building and the new grease tank and existing septic tank to prevent vehicular traffic in tank area.

Sincerely,

PIEDMONT DESIGN ASSOCIATES, P.A.



Donald L. Munday, P.E.
N.C. Registration No. 17327

cc: Ms. Karen Schultz, Owner