Midwest Sewer Services

P.O. Box 10853 White Bear Lake, MN 55110 651-492-7550/Brian@Midwestsoiltesting.com

Brian Humpal

MPCA Licensed Advanced Inspector

SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

Date: January 27, 2023 **Time:** 10:00 AM **Owner:** Fred Entwistle

Inspection Address: 14371 Valley Creek Trail S, Afton, MN 55001

REPORT SUMMARY

I have performed an "MPCA Compliance Inspection" on this system. I have contacted Washington County and was advised that there are no records for this system. This very old system (installed in 1977) consists of a pre-cast septic tank and a rock trench drainfield. It should be noted that the average life expectancy of a septic system is approximately 30 years. Meyer Sewer Service pumped the septic tank on January 27, 2023.

My inspection indicates that this system is presently "non-compliant" in accordance with MPCA rules 7080.1500 Subp.4(B)(D) because of the lack of the required three foot separation between the bottom of the drainfield and seasonally saturated soils.

In accordance with MPCA rules, I am sending a copy of this complete report to Washington County. I cannot officially speak on behalf of the County relative to the upgrade requirements of these non-compliant systems. Please contact the Washington County Department of Public Health & Environment (651-430-6655) to verify the County's position.

Please advise buyer, agents, lender, etc. to contact me should they have any questions regarding this system.

Christopher Uebe

Brian Humpal



520 Lafayette Road North St. Paul, MN 55155-4194

Compliance inspection report form Existing Subsurface Sewage Treatment System (SSTS)

Doc Type: Compliance and Enforcement

Instructions: Inspector must submit completed form to Local Governmental Unit (LGU) and system owner within 15 days of final determination of compliance or noncompliance. Instructions for filling out this form are located on the Minnesota Pollution Control Agency (MPCA) website at https://www.pca.state.mn.us/sites/default/files/wq-wwists4-31a.pdf.

Property information	Local tracking	number:	
Parcel ID# or Sec/Twp/Range:	Reason for Inspection	Property Transfer	
Local regulatory authority info: Washington County			
Property address: 14371 Valley Creek Trail S, Afton, MN 5500	1		
Owner/representative: Fred Entwistle		Owner's phone: 651-280-0804	
Brief system description: A pre-cast septic tank and a rock trend	ch drainfield.		
System status			
System status on date (mm/dd/yyyy):1/27/2023			
☐ Compliant – Certificate of compliance*		ce of noncompliance	
(Valid for 3 years from report date unless evidence of an imminent threat to public health or safety requiring removal and abatement under section 145A.04, subdivision 8 is discovered or	Systems failing to protect ground water must be upgraded, replaced, or use discontinued within the time required by local ordinance.		
a shorter time frame exists in Local Ordinance.)	•	health and safety (ITPHS) must be	
*Note: Compliance indicates conformance with Minn. R. 7080.1500 as of system status date above and does not guarantee future performance.	upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance or under section 145A.04 subdivision 8.		
Reason(s) for noncompliance (check all applicate	ole)		
☐ Impact on public health (Compliance component #1) – Immi	nent threat to public health a	and safety	
☐ Tank integrity (Compliance component #2) – Failing to prote	ct groundwater		
☐ Other Compliance Conditions (Compliance component #3) -	- Imminent threat to public he	ealth and safety	
☐ Other Compliance Conditions (Compliance component #3) -	- Failing to protect groundwa	nter	
☐ System not abandoned according to Minn. R. 7080.2500 (Co	ompliance component #3) -	Failing to protect groundwater	
⊠ Soil separation (Compliance component #5) – Failing to prof	tect groundwater		
☐ Operating permit/monitoring plan requirements (Compliance	component #4) - Noncomp	liant - local ordinance applies	
Comments or recommendations			
Certification			
I hereby certify that all the necessary information has been gathered future system performance has been nor can be made due to unknow inadequate maintenance, or future water usage.			
By typing my name below, I certify the above statements to be true used for the purpose of processing this form.	and correct, to the best of my	knowledge, and that this information can be	
Business name: Midwest Sewer Services		Certification number: 5342/9852	
Inspector signature: Brian Humpal (After V		License number: L2896	
(This document has been electronically sign	nea)	Phone: 651-492-7550	
Necessary or locally required supporting do	cumentation (must b	e attached)	
☑ Soil observation logs☑ System/As-Built☑ Locally red☑ Other information (list): Report Summary, Property Information	· -	rity Assessment	

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npact on public health – Co	ompliance comp	oonent #1 of 5		
Compliance criteria:		Attached supporting of	locumentation:	
System discharges sewage to the ground surface	☐ Yes* ⊠ No	☐ Other:		
System discharges sewage to drain tile or surface waters.	☐ Yes* ⊠ No			
System causes sewage backup into dwelling or establishment.	☐ Yes* ☐ No			
Any "yes" answer above indicates imminent threat to public health a				
Describe verification methods and	l results:			
None of the above found.				
ank integrity – Compliance Compliance criteria:	component #2		locumentation:	
Compliance criteria:	· 	Attached supporting o		
<u> </u>	e component #2		by inspector	Meyer Se Service
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their	· 	Attached supporting o ☑ Empty tank(s) viewed b	business:	Service
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit?	Yes* ⊠ No	Attached supporting of ⊠ Empty tank(s) viewed by Name of maintenance	business:	-
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their	Yes* ⊠ No	Attached supporting of ⊠ Empty tank(s) viewed by Name of maintenance of License number of maintenance of	by inspector business: ntenance business	Service : L915 1/27/2023
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their	Yes* ⊠ No	Attached supporting of Empty tank(s) viewed by Name of maintenance License number of maintenance:	by inspector business: ntenance business	Service : L915 1/27/2023
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their	Yes* ⊠ No	Attached supporting of ⊠ Empty tank(s) viewed by Name of maintenance of License number of maintenance: □ Date of maintenance: □ Existing tank integrity a	by inspector business: ntenance business	Service : L915 1/27/2023
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their designed operating depth?	☐ Yes* ☒ No ☐ Yes* ☒ No ☐ Yes* ☒ No	Attached supporting of Empty tank(s) viewed by Name of maintenance of License number of maintenance: Date of maintenance: Existing tank integrity at Date of maintenance	business: ntenance business ussessment (Attach (must be within	Service : L915
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Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their designed operating depth? If yes, which sewage tank(s) leaks: Any "yes" answer above indices.	☐ Yes* ☒ No ☐ Yes* ☒ No ☐ Yes* ☒ No	Attached supporting of Empty tank(s) viewed by Name of maintenance of License number of maintenance: Date of maintenance: Existing tank integrity at Date of maintenance (mm/dd/yyyy): (See form instructions to Minn. R. 7082.0700 suit	by inspector business: Intenance business Issessment (Attach (must be within to ensure assessment)	Service : L915 1/27/2023 three years
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their designed operating depth? If yes, which sewage tank(s) leaks: Any "yes" answer above indices.	☐ Yes* ☑ No ☐ Yes* ☑ No ☐ Yes* ☑ No ☐ testes the system ter.	Attached supporting of ⊠ Empty tank(s) viewed by Name of maintenance of License number of maintenance: □ Existing tank integrity and Date of maintenance (mm/dd/yyyy): (See form instructions to Minn. R. 7082.0700 sufficients of Tank is Noncompliant (by inspector business: Intenance business Issessment (Attach (must be within to ensure assessment)	Service : L915 1/27/2023 three years
Compliance criteria: System consists of a seepage pit, cesspool, drywell, leaching pit, or other pit? Sewage tank(s) leak below their designed operating depth? If yes, which sewage tank(s) leaks: Any "yes" answer above indicing is failing to protect groundwate.	☐ Yes* ☐ No ☐ Yes* ☐ No ☐ Yes* ☐ No ☐ Attention of the system that the system	Attached supporting of ⊠ Empty tank(s) viewed by Name of maintenance License number of maintenance Date of maintenance Existing tank integrity at Date of maintenance (mm/dd/yyyy): (See form instructions to Minn. R. 7082.0700 suit □ Tank is Noncompliant (□ Other:	by inspector business: ntenance business assessment (Attach (must be within to ensure assessment) bp. 4 B (1)) pumping not necessar	Service : L915 1/27/2023 three years ent complie ary – explain
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Pro	operty Address: 14371 Valley Creek Trail S, Afton, MN 55001	
	siness Name: Midwest Sewer Services	Date: 1/27/2023
3.	Other compliance conditions – Compliance component #3 of 5	
	3a. Maintenance hole covers appear to be structurally unsound (damaged, cracked, etc.), or unso	ecured?
	☐ Yes* ☐ No ☐ Unknown	
	3b. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safe	ty? ☐ Yes* ☒ No ☐ Unknown
	*Yes to 3a or 3b - System is an imminent threat to public health and safety.	
	3c. System is non-protective of ground water for other conditions as determined by inspector?	☐ Yes* ☑ No
	3d. System not abandoned in accordance with Minn. R. 7080.2500?	☐ Yes* ☒ No
	*Yes to 3c or 3d - System is failing to protect groundwater.	
	Describe verification methods and results:	
	Attached supporting documentation: Not applicable	
4.	Operating permit and nitrogen BMP* – Compliance component #4 c	of 5 🛮 Not applicable
	Is the system operated under an Operating Permit? ☐ Yes ☐ No	If "yes", A below is required
	Is the system required to employ a Nitrogen BMP specified in the system design? ☐ Yes ☐ No	
	BMP = Best Management Practice(s) specified in the system design	
	If the answer to both questions is "no", this section does not need to be complete	d.
	Compliance criteria:	
	a. Have the operating permit requirements been met? ☐ Yes ☐ No	
	b. Is the required nitrogen BMP in place and properly functioning? ☐ Yes ☐ No	
	Any "no" answer indicates noncompliance.	
	Describe verification methods and results:	
	Attached supporting documentation:	

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siness Name: Midwest Sewer Services			Date: <u>1/</u>	2112023
Soil separation – Compliance cor Date of installation 1977 (mm/dd/yyyy)	nponei		† 5	
Shoreland/Wellhead protection/Food beverage lodging? Compliance criteria (select one):	⊠ Yes	□ No	Attached supporting documentation: ☑ Soil observation logs completed for th ☐ Two previous verifications of required	vertical separat
5a. For systems built prior to April 1, 1996, and not located in Shoreland or Wellhead Protection Area or not serving a food, beverage or lodging establishment: Drainfield has at least a two-foot vertical separation distance from periodically saturated soil or bedrock.	☐ Yes	□ No*	☐ Not applicable (No soil treatment area ☐	a)
5b. Non-performance systems built April 1, 1996, or later or for non- performance systems located in Shoreland or Wellhead Protection Areas or serving a food, beverage, or lodging establishment: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*	Yes	⊠ No*	Indicate depths or elevations A. Bottom of distribution media B. Periodically saturated soil/bedrock C. System separation D. Required compliance separation* *May be reduced up to 15 percent if allo Ordinance.	See Attached Boring Log(s)
5c. "Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules 7080. 2350 or 7080.2400 (Intermediate Inspector License required ≤ 2,500 gallons per day; Advanced Inspector License required > 2,500 gallons per day) Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	Yes	□ No*		

Upgrade requirements: (Minn. Stat. § 115.55) An imminent threat to public health and safety (ITPHS) must be upgraded, replaced, or its use discontinued within ten months of receipt of this notice or within a shorter period if required by local ordinance. If the system is failing to protect ground water, the system must be upgraded, replaced, or its use discontinued within the time required by local ordinance. If an existing system is not failing as defined in law, and has at least two feet of design soil separation, then the system need not be upgraded, repaired, replaced, or its use discontinued, notwithstanding any local ordinance that is more strict. This provision does not apply to systems in shoreland areas, Wellhead Protection Areas, or those used in connection with food, beverage, and lodging establishments as defined in law.

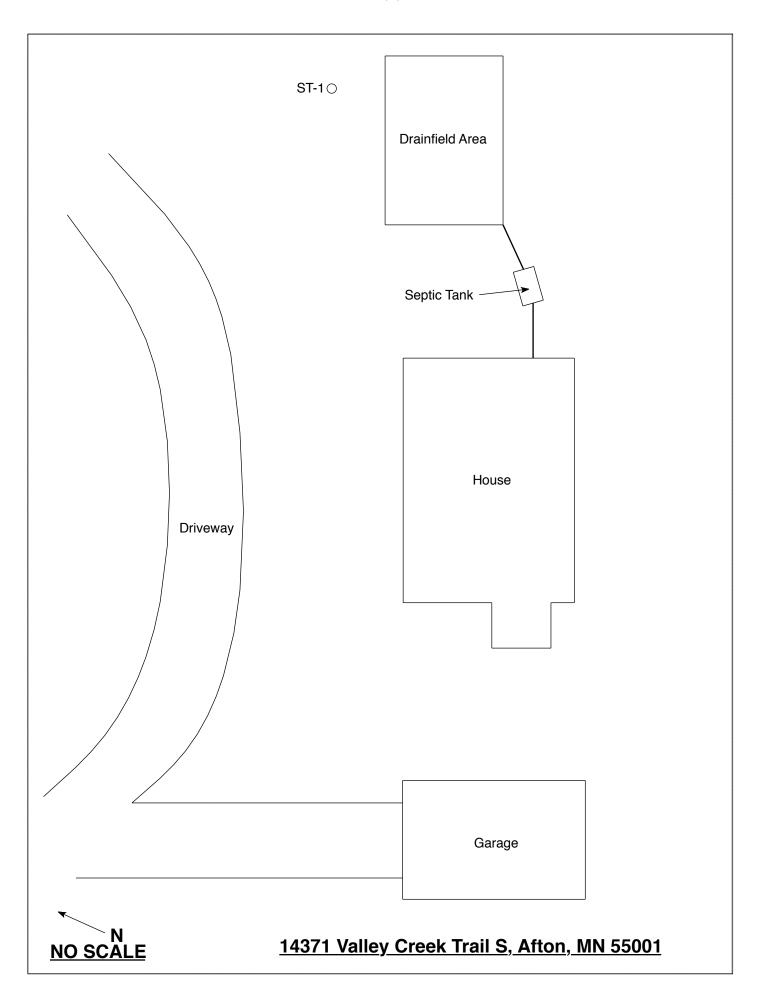
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<u>Midwest Sewer Testing</u> <u>Subsurface Sewage Treatment System Owner/Property Information</u>

This information will be used for the purpose of conducting an MPCA Compliance Inspection.					
Date of Inspection: January 27, 2023	Time: 10:00 AM				
Property Address: 14371 Valley Creek Trail S, Afton, MN	Zip: 55001				
Property Owner: Fred Entwistle	Phone: 651-280-0804				
Tank(s) Tank(s)Material Soil Treatment System Septic 1 Fiberglass ⊠Rock trench Aerobic Plastic Gravelless trench Lift Metal Chamber trench Holding ⊠Concrete Seepage bed Other: Block Mound Other At-grade	Other Alternative system Experimental system Cesspool system Other system				
Are the tank maintenance covers accessible? ⊠ Yes ☐ No *If:					
performed through the maintenance holes. Maintenance hole cover					
the ground surface to facilitate access and proper maintenance of t	the system.				
Year house built: 1977 Year septic installed: 1977	Tank size (gals.): 1250				
How long has seller owned the property? Number of re	sidents in home?				
Number of bedrooms? 4 Are all floors drained by g	ravity?				
Garbage disposal? Whirlpool bath?)				
More than one system (laundry, etc.)?					
Does this property have any footing drain tiles connected to the se	eptic system?				
Are any buildings on this property such as garages or out-buildings connected to this system?					
Are there any additional systems on this property serving other bu	Are there any additional systems on this property serving other buildings?				
Location of septic system on lot? Northeast Side					
	e well a deep well?				
Have you ever experienced any problems with the system such as: tree roots, sewage back-ups, surfacing of sewage onto the ground, septic tank overflowing, etc.; or have any repairs been made to the system? If yes, explain:					
When was the system last pumped? 1/27/2023 Name of pumper: Meyer Sewer Service					
How often pumped in previous years?					
Have you received notices from any government agency concerning this system?					
Is your property located in a shoreland management area? Y					
Do you have any additional information that should be given to the	e new owner?				
I hereby certify that the above information is correct to the best of my knowledge. I also understand that if the system is considered "non-compliant/failing" per MPCA rules, that the inspector must by law submit a copy of this report to the local government unit within 15 days of the date of inspection completion. I also agree that unless otherwise noted in					

this report, that I/we are ultimately responsible for payment of all fees for all work performed relative to this inspection by Inspect Minnesota and Midwest Soil Testing

Owner/Occupant:	Date:
*	



Soil Observations Log

	Locati	on of Proiect:	14371 Valley Creek	Trail S	, Afton,	MN 55001	
Obs		ions Made By: Midwest Sewer Se			,	Date:	1/27/2023
		ation System:	USDA				
	Soil Observation: ST-1			Soil C	bservation:		
Surfa Elevation Observa	on of	_	me ground surface as last drainfield trench		Surface		
Depth In Inches	Rock %	Soils E	ncountered	Depth In Inches	Rock %	Soils	<u>Encountered</u>
0-12 12-38 38-64 64-72 72-80		10YR 3/4 10YR 4/4 10YR 5/4 10YR 5/2 M 7.5YR 5/8 8	Soils Encountered OYR 2/2 Loamy Fine Sand 10YR 3/4 Medium Sand 10YR 4/4 Medium Sand 10YR 5/4 Medium Sand OYR 5/2 Medium Sand OYR 5/2 Medium Sand With SYR 5/8 & 10YR 6/2 Redox				
72" [Depth T	To End Of Soil Observation Or Redox			Depth T	o End Of Soil	Observation Or Redox
	Elevatio	on Of Observation Relative To System		Elevation Of Observation Relative To S		tion Relative To System	
		h To Bottom Of Distribution Media					Distribution Media
=24"	Of Sepa	ration			Of Sepa	iration	
Fnd O	of Soil (Observation At:	80"	Fnd Of	Soil Oh	servation At:	
		Conditions At:	72"			onditions At:	
		ter Present At:	None		_	r Present At:	
Standing Water Fresent At. None				J			

Bottom Of Distribution Medium At: 48 Inches		
Signature:	Offer Ula	

DISCLAIMER

Brian L. Humpal, Inc. dba. Midwest Sewer Services, Inspect Minnesota, Midwest Soil Testing Relative to Subsurface Sewage Treatment System (SSTS) Compliance Inspections

- 1. This inspection/report is being performed for only the seller/owner of the property on which the SSTS is located. In such case that another party is paying for the inspection, the contract is between only said party and Brian L. Humpal, Inc.; there is no contract between Brian L. Humpal, Inc. and any other party unless otherwise noted.
- 3. Brian L. Humpal, Inc. has not been retained to warranty, guarantee, or certify the proper functioning of the SSTS for any period of time beyond the date of inspection or into the future. Because of the numerous factors (usage, maintenance, soil characteristics, previous failures, etc.) which may affect the proper operation of an SSTS, as well as the inability of Brian L. Humpal, Inc. to supervise or monitor the use or maintenance of the SSTS, the report shall not be construed as a warranty by Brian L. Humpal, Inc. that the SSTS will function properly for any particular party for any period of time.
- 4. Brian L. Humpal, Inc. is unable to verify the frequency and/or, quality of prior or future maintenance of the SSTS. Maintenance of the tank(s) must be performed through the tanks maintenance hole. The removal of solids from any location other than the maintenance hole is not a compliant method of maintenance. It is strongly recommended that maintenance covers be made accessible to the ground surface to facilitate proper maintenance.
- 5. Minimum Compliance Inspection requirements relative to this inspection and this report include <u>only</u> verification that the SSTS has tank(s) (septic tanks, lift tanks, dosing tanks, stilling tanks, etc.) which are watertight below the designed operating depth, the required separation between the bottom of the subsurface soil distribution medium and seasonally saturated soils, no back-ups of sewage into the dwelling, no discharge of sewage/effluent to the ground surface or surface waters, and no imminent safety hazards. Brian L. Humpal, Inc. does not inspect plumbing or pumps prior to the first SSTS component as these are plumbing components. The performance of exterior pumps and associated components are not inspected as they are considered to be maintenance items. Additionally, no indications relative to compliance with electrical code requirements have been made. It is recommended that any other applicable plumbing, electrical, housing, etc. inspections be performed by a qualified inspection business. Sewage back-up verification is limited to observing the floor drain area and/or the information supplied by the last occupants of the building prior to inspection. Brian L. Humpal, Inc. cannot guarantee that the information given to them by the last occupants of the building prior to inspection relative to back-ups is accurate.
- 4. Certification of this SSTS does not warranty future use beyond the date of the inspection. Any SSTS, old or new, can become hydraulically overloaded or discharge sewage/effluent to the ground surface as a result of more people moving into the house than were previously occupying the house, improper maintenance, heavy usage, leaking plumbing fixtures, groundwater infiltration, tree roots, freezing conditions, surface drainage problems, poor initial design, poor construction practices, or unsuitable materials used in constructing the system; the system can also simply stop working because of its age. An SSTS that has been properly designed and installed, properly maintained, and used in the manner for which the system was designed can be expected to provide service for twenty to twenty-five years on average. Some parts of the SSTS such as alarms, switches, pumps, filters, etc. will most likely have to be repaired or replaced over the lifetime of the system.
- 5. A Compliance Inspection is not meant to be a test or inspection for longevity of the system; a Compliance Inspection is strictly for the purpose of determining if the SSTS is protective of public health and safety, as well as the groundwater at the date and time the inspection was performed. This inspection is not intended to determine if the SSTS was originally designed or installed to past or present MPCA or other Local Government Unit code requirements. This inspection is not intended to determine if the SSTS was designed and/or installed to support the anticipated flow from the building as the use of the building may have changed since the design and construction of the SSTS due to the addition of bedrooms, occupants, etc. In addition, this inspection is not intended to determine the quality of the original SSTS design, the quality of the construction practices used while installing the SSTS, or the quality of the materials used in constructing the SSTS.
- 6. Brian L. Humpal, Inc. cannot guarantee the performance of SSTS products/components such as: gravelless pipe, chamber trenches, effluent filters, tanks, sewage pre-treatment components, piping, etc. Products such as gravelless pipe are no longer approved for installation in the State of Minnesota and may have a significantly reduced performance and/or life expectancy.
- 7. WINTER WORK: By accepting this report, it is understood that inspections conducted during winter months (approximately November 1st through April 1st) are more difficult to perform because of possible snow cover and/or ground frost. SSTS components such as tanks, maintenance covers, tank inspection pipes, subsurface distribution medium inspection pipes, and soil treatment areas are more difficult or impossible to locate due to snow cover and/or ground frost. In addition, soil borings are more difficult to perform due to snow cover and/or ground frost. Brian L. Humpal, Inc. will attempt to use the same level of standards when performing work during winter periods as when performing work during non-winter periods. However, the recipient of this report understands that because of the aforementioned considerations, the same level of standards may not be possible.
- 8. By accepting this report, the client understands that Brian L. Humpal, Inc. will not be responsible for any monetary damages exceeding the fee for the services provided.