#### **Midwest Sewer Services**

P.O. Box 10853 White Bear Lake, MN 55110

Brian Humpal

651-492-7550/Brian@Midwestsoiltesting.com

MPCA Licensed Advanced Inspector

#### SUBSURFACE SEWAGE TREATMENT SYSTEM (SSTS) COMPLIANCE REPORT

**Date:** July 30, 2020 Time: 1:15 PM Owner: Bill & Beth Resemius

Inspection Address: 5080 Jamaca Ave N, Lake Elmo, MN 55042

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system, have reviewed the history of the system with the owner, Beth Resemius, and have reviewed the original design/permit records, along with a previous compliance inspection from 2017, which were on file at Washington County. This very old system (installed in 1979) 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.

Predicated on my inspection of the system, my review of the history of the system with the owner, and my review of the records, it is my opinion that this system <u>presently meets</u> MPCA minimum compliance inspection requirements.

Midwest Sewer Services have been hired to perform a compliance inspection of this SSTS for compliance with local ordinances pursuant to Minn. Stat. § 115.55 (2013). This compliance inspection covers only the criteria required by Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011). A compliance inspection is an indication of the current compliance status of the system and does not guarantee the performance or longevity of this system beyond the date of inspection, as it is impossible to determine the future performance of any system. Midwest Sewer Services disclaim any use of this compliance inspection beyond determining SSTS compliance pursuant to Minn. Stat. § 115.55 Subd. 5a (2013) and Minn. R. 7080.1500 (2011).

Please contact me should you have any questions.

Christopher Uebe

Brian Humpal

Brian Humpal



# **Compliance Inspection Form**

# Existing Subsurface Sewage Treatment Systems (SSTS)

Doc Type: Compliance and Enforcement

<b>Instructions:</b> Inspection results based on Minnesota Pollution Control Agency (MPCA) requirements and attached forms – additional local requirements may also apply.	For local tracking purposes:							
Submit completed form to Local Unit of Government (LUG) and system owner within 15 days								
System Status								
System status on date (mm/dd/yyyy):7/30/2020								
<u> </u>	(Valid for 3 years from report date, unless shorter time (See Upgrade Requirements on page 3)							
Reason(s) for noncompliance (check all applicable)  Impact on Public Health (Compliance Component #1) – Imminent threat to Other Compliance Conditions (Compliance Component #3) – Imminent threat to Tank Integrity (Compliance Component #2) – Failing to protect groundwate Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwate Soil Separation (Compliance Component #4) – Failing to protect groundwate Operating permit/monitoring plan requirements (Compliance Component #4)	reat to public health and safety ter otect groundwater vater							
Property Information Parcel ID# or Sec/Twp/Rang	ge:							
	or inspection: Property Transfer							
· · ·	phone: 651-308-9694							
Owner's representative: Represer	Representative phone:							
Local regulatory authority: Washington County Regulator	Regulatory authority phone: 651-430-6655							
Brief system description: A pre-cast septic tank and a rock trench drainfield.								
Comments or recommendations:								
Certification								
I hereby certify that all the necessary information has been gathered to determine the of determination of future system performance has been nor can be made due to unknown possible abuse of the system, inadequate maintenance, or future water usage.								
Inspector name: Brian Humpal/Christopher Uebe Certificati	ion number: <u>C5342/C9852</u>							
Business name: Midwest Sewer Services Licer	nse number: _L2896							
Inspector signature: Brian Thempal Iffice the Pho	one number: 651-492-7550							
Necessary or Locally Required Attachments								
	local ordinance							
☐ Other information (list): Report Summary, Property Information, Disclaimer, Lice								

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Property address: 5080 Jamaca Ave N, Lake Elmo, MN 55042

Inspector initials/Date: \_7/30/2020 **BA** 

1.	Impa	act on Public Health – Cor	mpliance componer	ıt #1 of 5			
	Com	pliance criteria:		Verification method(s):			
		m discharge sewage to the d surface.	☐ Yes ⊠ No	<ul><li>☒ Searched for surface outlet</li><li>☒ Searched for seeping in yard/backup in home</li></ul>			
		m discharge sewage to drain tile	☐ Yes ⊠ No				
	or sur	face waters.		<ul> <li>✓ Homeowner testimony (See Comments/Explanation)</li> <li>✓ "Black soil" above soil dispersal system</li> </ul>			
		m cause sewage backup into ng or establishment.	☐ Yes ⊠ No	☐ System requires "emergency" pumping			
	Any '	"yes" answer above indicates nminent Threat to Public Hea		<ul> <li>□ Performed dye test</li> <li>□ Unable to verify (See Comments/Explanation)</li> <li>□ Other methods not listed (See Comments/Explanation)</li> </ul>			
	Comn	nents/Explanation:					
	A soil	boring over the drainfield indicated	d no signs of ponding	or black/grey soils.			
2.	Tank	<b>Integrity</b> – Compliance con	nnonent #2 of 5				
<u></u>			mponent #2 or o	Marification mathematics			
		pliance criteria:	D Vac M Na	Verification method(s):  ☑ Probed tank(s) bottom			
		m consists of a seepage pit, ool, drywell, or leaching pit.	☐ Yes ⊠ No	<ul> <li>☑ Frobed talk(3) bottom</li> <li>☑ Examined construction records</li> </ul>			
	Seepa	ge pits meeting 7080.2550 may be ant if allowed in local ordinance.		☐ Examined Tank Integrity Form (Attach)			
		ge tank(s) leak below their	☐ Yes ⊠ No	Observed liquid level below operating depth			
		ned operating depth.		<ul><li>Examined empty (pumped) tanks(s)</li><li>Probed outside tank(s) for "black soil"</li></ul>			
		which sewage tank(s) leaks:		☐ Unable to verify (See Comments/Explanation)			
	-	"yes" answer above indica em is Failing to Protect Gr		☐ Other methods not listed (See Comments/Explanation)			
	Comn	nents/Explanation:					
	Lower	red underwater camera into tank -	baffles and tank walls	OK.			
3.	Othe	er Compliance Conditions	s – Compliance con	nponent #3 of 5			
	a. Ma	aintenance hole covers are damage	d, cracked, unsecured	, or appear to structurally unsound. ☐ Yes* ☒ No ☐ Unknown			
		her issues (electrical hazards, etc.) to i system is an imminent threat to pu		rsely impact public health or safety. ☐ Yes* ☒ No ☐ Unknown  **ty**			
	Ex	plain:					
	*S	rstem is non-protective of ground wa system is failing to protect ground splain:		s as determined by inspector ☐ Yes* ☒ No			

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Prop	perty address: _ 5080 Jamaca Ave N, Lake Elmo	o, MN 55042	Inspector initials/Date: _7/30/2020		
4.	Soil Separation – Compliance compor	nent #4 of 5			
	Date of installation: 1979  Shoreland/Wellhead protection/Food Beverage Lodging?  Compliance criteria:	☐ Unknown ☐ Yes  ☑ No	Verification method(s):  Soil observation does not expire. Previous soil observations by two independent parties are sufficient, unless site conditions have been altered or local		
	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	requirements differ.  Conducted soil observation(s) (Attach boring logs) Two previous verifications (Attach boring logs) Not applicable (Holding tank(s), no drainfield) Unable to verify (See Comments/Explanation) Other (See Comments/Explanation)		
	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:	☐ Yes ☐ No	Comments/Explanation:  Reviewed previous compliance inspection from 2017.  Reviewed design and permit records.		
	Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.*				
	"Experimental", "Other", or "Performance" systems built under pre-2008 Rules; Type IV or V systems built under 2008 Rules (7080. 2350 or 7080.2400 (Advanced Inspector License required)  Drainfield meets the designed vertical separation distance from periodically saturated soil or bedrock.	☐ Yes ☐ No	A. Bottom of distribution media  B. Periodically saturated soil/bedrock  C. System separation		
5.	Any "no" answer above indicates the Failing to Protect Groundwater.  Operating Permit and Nitrogen Ba	D. Required compliance separation*  *May be reduced up to 15 percent if allowed by Local Ordinance.  e component #5 of 5  Not applicable			
	Is the system operated under an Operating Periods the system required to employ a Nitrogen BM BMP=Best Management Practice(s) specific of the answer to both questions is "no", Compliance criteria	P?			
	Operating Permit number:     Have the Operating Permit requirements be		☐ Yes ☐ No		
	b. Is the required nitrogen BMP in place and	? Yes No			

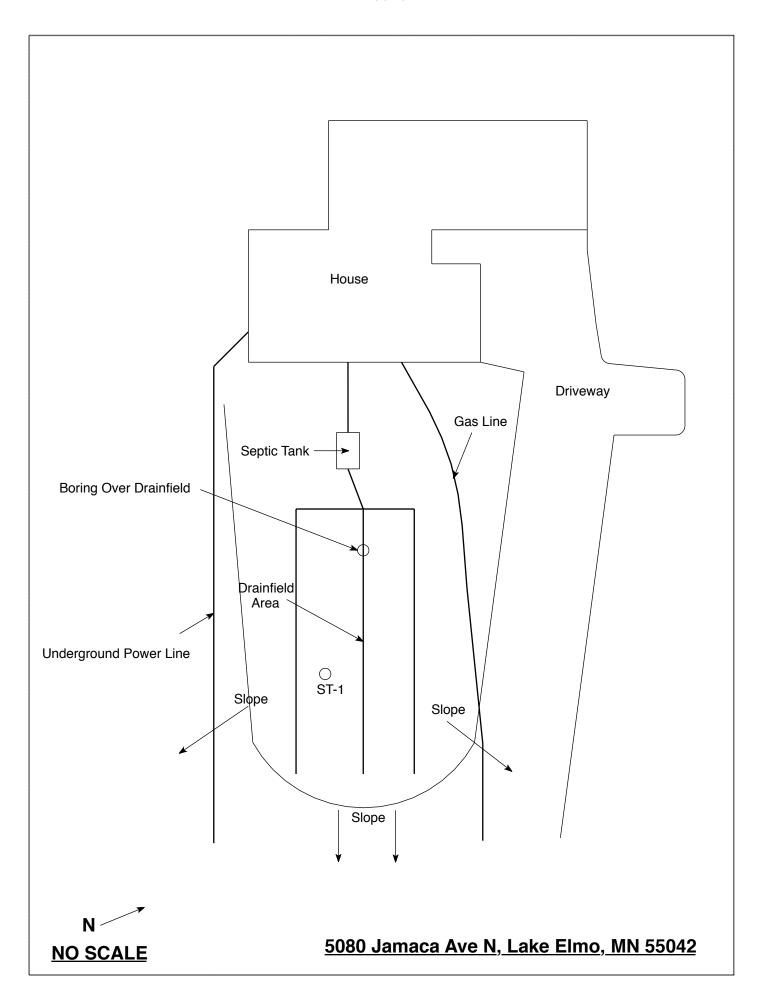
Any "no" answer indicates Noncompliance.

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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# Midwest Sewer Testing Subsurface Sewage Treatment System Owner/Property Information This information will be used for the purpose of conducting an MPCA Compliance Inspection.

This information will be used for the purpose of conducting an MFCA	Compitance inspection.				
Date of Inspection: July 30, 2020	Time: 1:15 PM				
Property Address: 5080 Jamaca Ave N, Lake Elmo, MN	Zip: 55042				
Property Owner: Bill & Beth Resemius	Phone: 651-308-9694				
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	no, proper maintenance must be				
performed through the maintenance holes. Maintenance hole cover	ers should be made accessible to				
the ground surface to facilitate access and proper maintenance of t	the system.				
Year house built: 1979 Year septic installed: 1979	Tank size (gals.): 1200				
	sidents in home? 2				
Number of bedrooms? 3 Are all floors drained by g	ravity? Lower Pumped				
Garbage disposal? N Whirlpool bath?					
More than one system (laundry, etc.)? N					
Does this property have any footing drain tiles connected to the se	ptic system? N				
Are any buildings on this property such as garages or out-building					
Are there any additional systems on this property serving other bu	ildings? N				
Location of septic system on lot? West Side					
Location of water well on lot?  Is the	e well a deep well? Y				
Have you ever experienced any problems with the system such as surfacing of sewage onto the ground, septic tank overflowing, etc. to the system? N If yes, explain:					
When was the system last pumped? 2019 Name of pum	per: Ron's Sewer Service				
How often pumped in previous years? Every 3					
Have you received notices from any government agency concerning this system? N					
Is your property located in a shoreland management area? N					
Do you have any additional information that should be given to the	e new owner? N				
I hereby certify that the above information is correct to the best of my knowledge considered "non-compliant/failing" per MPCA rules, that the inspector must by local government unit within 15 days of the date of inspection completion. I al this report, that I/we are ultimately responsible for payment of all fees for all wo by Inspect Minnesota and Midwest Soil Testing	law submit a copy of this report to the so agree that unless otherwise noted in				
Owner/Occupant:	Date:				



### **Soil Observations Log**

Observations Made By:   Midwest Sewer Services   Date:   7/30/2020	Location of Project: 5080 Jamaca Ave N, Lake Elmo, MN 55042						
Soil Observation: ST-1 Soil Observation:  Surface Elevation of Observation of Observation of Observation  Depth In Inches Rock % Soils Encountered 10YR 2/2 Loamy Sand 10YR 3/3 Silt Loam With Gravel 10YR 3/3 Silt Loam With Gravel Refusal At 56"  Soils Encountered 10YR 4/3 Loam With Gravel 10YR 3/3 Silt Loam With Gravel Refusal At 56"  Depth To End Of Soil Observation Or Redox Refusal Of Observation Or Redox Refusal At 56"  Depth To End Of Soil Observation Relative To System Elevation Of Observation Relative To System Off Separation  End Of Soil Observation At: S6" End Of Soil Observation At: Redox Present At: None Redox Present At: None					7/30/2020		
Surface Elevation of Observation    Same ground surface as last drainfield trench   Soils Encountered   Depth In Inches   Rock %   Soils Encountered   Depth Inches   Soils En	Classific	cation System:	USDA				
Same ground surface as last drainfield trench   Soils Encountered   Depth In Inches	So	I Observation:	ST-1		Soil O	bservation:	
Solis Encountered   Sol	Elevation of	1		Elevation of			
14-26 ≥35 10YR 3/3 Silt Loam 10YR 3/3 Silt Loam 10YR 3/3 Silt Loam 10YR 3/3 Hedium Coarse Sand With Gravel Refusal At 56"  56" Depth To End Of Soil Observation Or Redox Same Elevation Of Observation Relative To System -30" Depth To Bottom Of Distribution Media ≥26" Of Separation  End Of Soil Observation At: Redox Present At:  None Redox Present At:	. I KUCK %	Soils E	ncountered		Rock %	Soils	Encountered
SameElevation Of Observation Relative To SystemElevation Of Observation Relative To System-30"Depth To Bottom Of Distribution MediaDepth To Bottom Of Distribution Media≥26"Of SeparationOf SeparationEnd Of Soil Observation At:56"End Of Soil Observation At:Redox Present At:NoneRedox Present At:	14-26 ≥35 26-30	10YR 4/3 L 10YR 3 10YR 3/4 Me Wi	Loam With Gravel B/3 Silt Loam edium Coarse Sand th Gravel				
-30" Depth To Bottom Of Distribution Media  ≥26" Of Separation  End Of Soil Observation At:  Redox Present At:  None  Redox Present At:  None  Depth To Bottom Of Distribution Media  Of Separation  End Of Soil Observation At:  Redox Present At:  Redox Present At:	56" Depth	To End Of Soil O	bservation Or Redox		Depth T	o End Of Soil	Observation Or Redox
≥26" Of Separation Of Separation  End Of Soil Observation At: 56" End Of Soil Observation At:  Redox Present At: None Redox Present At:							tion Relative To System
End Of Soil Observation At: 56" End Of Soil Observation At: Redox Present At: None Redox Present At:			stribution Media				Distribution Media
Redox Present At: None Redox Present At:	≥26"  Of Sep	aration			Of Sepa	iration	
Redox Present At: None Redox Present At:	End Of Soil	Observation At:	56"	End Of	Soil Oh	servation At:	
	Standing Water Present At: None		Standi				

Bottom Of Distribution Medium At: 30 Inches				
Signature:	Offer the			

### **Log Of Soil Borings**

Loc	cation of Project:	5080 Jamaca Ave N,	Lake Elmo	, MN 55042	
Borings Made By: Inspect Minnesota				Date:	3/23/17
Auger Used: Hand/Bucket			Class	ification System:	USDA
	Boring Number:	1		Boring Number:	
Surface Elevation Boring	of Same grou	und surface as last ofield trench	Surface Elevation Boring		
Depth In Inches	Soils E	ncountered	Depth In Inches	Soils Er	ncountered
0-9 9-22 22-52 52-81	10YR 4/3 10YR 4/4 M Trace Of La 10YR 5/4 Fine T	2/2 Loam Medium Sand edium Sand With amellae Banding To Medium Sand With amellae Banding			
81"	Depth To End Of B	oring Or Redox		Depth To End Of Bo	oring Or Redox
Same	Elevation Of Boring	g Relative To System		Elevation Of Boring	Relative To System
-30" Depth To Bottom Of Distribution Media				of Distribution Media	
≥51" Of Separation			Of Separation		
	E. LOCB : ::	04"		E. LOCB :	
End Of Boring At: 81"			End Of Boring At:		
Redox Present At: None			Redox Present At:		
Standing Water Present At: None		Standing	Water Present At:		

Bottom Of Distribution Medium At: 30 Inches	

#### **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 only 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 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 1<sup>st</sup> through April 1<sup>st</sup>) 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.

# Subsurface Sewage Treatment Systems

Non-transferable

# Business License

### **Midwest Sewer Services**

License # L2896

License Expires: 12/22/2020

Issued: 11/26/2019

# Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

### Designated Certified Individual(s):

Cert # Na

Name

**Certification Expires:** 

C5342

Brian L Humpal

10/15/2023

Installer, Maintainer, Serv Prov, Adv Designer, Adv Inspector

C9852 4

Christopher R Uebe

3/4/2021

Designer, Inspector



520 Lafayette Road North St. Paul, Minnesota 55155-4194 Mich Haig

Nick Haig, Supervisor Certification and Training Unit