#### **Inspect Minnesota & Midwest Soil Testing**

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

Inspection Address: 8839 Scandia Trl, Forest Lake, MN 55025

#### **REPORT SUMMARY**

I have performed an "MPCA Compliance Inspection" on this system and have reviewed the original design/permit records, along with a previous compliance inspection from 2015, which were on file at Washington County. This system consists of two pre-cast septic tanks, a pre-cast lift tank, and a mound.

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

Inspect Minnesota and Midwest Soil Testing 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. Inspect Minnesota and Midwest Soil Testing 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): 4/22/2019			
·	pliant – Notice of Noncompliance ade Requirements on page 3)		
Reason(s) for noncompliance (check all applicable)  Impact on Public Health (Compliance Component #1) – Imminent threat to public health and safety  Other Compliance Conditions (Compliance Component #3) – Imminent threat to public health and safety  Tank Integrity (Compliance Component #2) – Failing to protect groundwater  Other Compliance Conditions (Compliance Component #3) – Failing to protect groundwater  Soil Separation (Compliance Component #4) – Failing to protect groundwater  Operating permit/monitoring plan requirements (Compliance Component #5) – Noncompliant			
Property Information Parcel ID# or Sec/Twp/Range	e:		
Property address: 8839 Scandia Trl, Forest Lake, MN 55025 Reason for	r inspection: Property Transfer		
Property owner: Scott & Carol Madsen Owner's pl	hone:		
Owner's representative: Pat Kinney - Keller Williams Represent	ative phone: 651-379-1593		
Local regulatory authority: Washington County Regulatory	authority phone: 651-430-6655		
Brief system description: _ Two pre-cast septic tanks, a pre-cast lift tank, and a mound	•		
Comments or recommendations:			
Certification			
I hereby certify that all the necessary information has been gathered to determine the compliance status of this system. No determination of future system performance has been nor can be made due to unknown conditions during system construction, possible abuse of the system, inadequate maintenance, or future water usage.			
Inspector name: Brian Humpal/Christopher Uebe Certification	on number: <u>C5342/C9852</u>		
Business name: Inspect Minnesota, Midwest Soil Testing Licens	se number: L2896		
Inspector signature: Brian Thumpal for the Phon	ne number: 651-492-7550		
Necessary or Locally Required Attachments			
Soil boring logs	ocal ordinance		
☐ Other information (list): Report Summary, Property Information, Disclaimer, Lice			

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Property address: 8839 Scandia Trl, Forest Lake, MN 55025

Inspector initials/Date: 4/22/2019 8# ( )

Impact on Public Health – Compliance component #1 of 5 Compliance criteria: Verification method(s): Searched for surface outlet ☐ Yes ☐ No System discharge sewage to the Searched for seeping in yard/backup in home ground surface. System discharge sewage to drain tile ☐ Yes ☐ No ☐ Homeowner testimony (See Comments/Explanation) or surface waters. ☐ "Black soil" above soil dispersal system ☐ Yes ☐ No System cause sewage backup into ☐ System requires "emergency" pumping dwelling or establishment. ☐ Performed dye test Any "yes" answer above indicates the system is Unable to verify (See Comments/Explanation) an Imminent Threat to Public Health and Safety. Other methods not listed (See Comments/Explanation) Comments/Explanation: None of the above found. 2. Tank Integrity – Compliance component #2 of 5 Verification method(s): Compliance criteria: □ Probed tank(s) bottom System consists of a seepage pit, ☐ Yes ☐ No cesspool, drywell, or leaching pit. Seepage pits meeting 7080.2550 may be ☐ Examined Tank Integrity Form (Attach) compliant if allowed in local ordinance. ☐ Observed liquid level below operating depth ☐ Yes ☒ No Sewage tank(s) leak below their ☐ Examined empty (pumped) tanks(s) designed operating depth. ☐ Probed outside tank(s) for "black soil" If yes, which sewage tank(s) leaks: ☐ Unable to verify (See Comments/Explanation) Any "ves" answer above indicates the ☐ Other methods not listed (See Comments/Explanation) system is Failing to Protect Groundwater. Comments/Explanation: Lowered underwater camera into tanks - baffles and tank walls OK. Lift pump and alarm were operational at the time of the inspection. 3. Other Compliance Conditions – Compliance component #3 of 5 Maintenance hole covers are damaged, cracked, unsecured, or appear to structurally unsound. ☐ Yes\* ⊠ No ☐ Unknown a. Other issues (electrical hazards, etc.) to immediately and adversely impact public health or safety. 

Yes\* No ☐ Unknown \*System is an imminent threat to public health and safety Explain: System is non-protective of ground water for other conditions as determined by inspector ☑ No \*System is failing to protect groundwater Explain:

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Inspector initials/Date: 4/22/2019 84(1) Property address: 8839 Scandia Trl, Forest Lake, MN 55025 **Soil Separation** – Compliance component #4 of 5 Date of installation: 2009 Unknown Verification method(s): Shoreland/Wellhead protection/Food Beverage ☐ Yes ☐ No Soil observation does not expire. Previous soil Lodging? observations by two independent parties are sufficient, unless site conditions have been altered or local Compliance criteria: requirements differ. For systems built prior to April 1, 1996, and ☐ Yes ☐ No not located in Shoreland or Wellhead ☐ Conducted soil observation(s) (Attach boring logs) Protection Area or not serving a food. ☐ Two previous verifications (Attach boring logs) beverage or lodging establishment: ☐ Not applicable (Holding tank(s), no drainfield) Drainfield has at least a two-foot vertical ☐ Unable to verify (See Comments/Explanation) separation distance from periodically ○ Other (See Comments/Explanation) saturated soil or bedrock. ⊠ Yes □ No Non-performance systems built April 1, Comments/Explanation: 1996, or later or for non-performance Reviewed previous compliance inspection from 2015. systems located in Shoreland or Wellhead Protection Areas or serving a food, Reviewed design and permit records. beverage, or lodging establishment: Drainfield has a three-foot vertical separation distance from periodically saturated soil or bedrock.\* "Experimental", "Other", or "Performance" ☐ Yes ☐ No Indicate depths of elevations systems built under pre-2008 Rules; Type IV See Attached or V systems built under 2008 Rules (7080. Boring Log(s) A. Bottom of distribution media 2350 or 7080.2400 (Advanced Inspector License required) B. Periodically saturated soil/bedrock Drainfield meets the designed vertical separation distance from periodically C. System separation saturated soil or bedrock. D. Required compliance separation\* Any "no" answer above indicates the system is \*May be reduced up to 15 percent if allowed by Local Failing to Protect Groundwater. Ordinance. 5. Operating Permit and Nitrogen BMP\* – Compliance component #5 of 5 Not applicable ☐ Yes ☐ No If "yes", A below is required Is the system operated under an Operating Permit? Is the system required to employ a Nitrogen BMP? ☐ Yes ☐ No If "yes", B below is required 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 completed.

Any "no" answer indicates Noncompliance.

Have the Operating Permit requirements been met?

b. Is the required nitrogen BMP in place and properly functioning?

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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Compliance criteria

a. Operating Permit number:

☐ Yes ☐ No

☐ Yes ☐ No

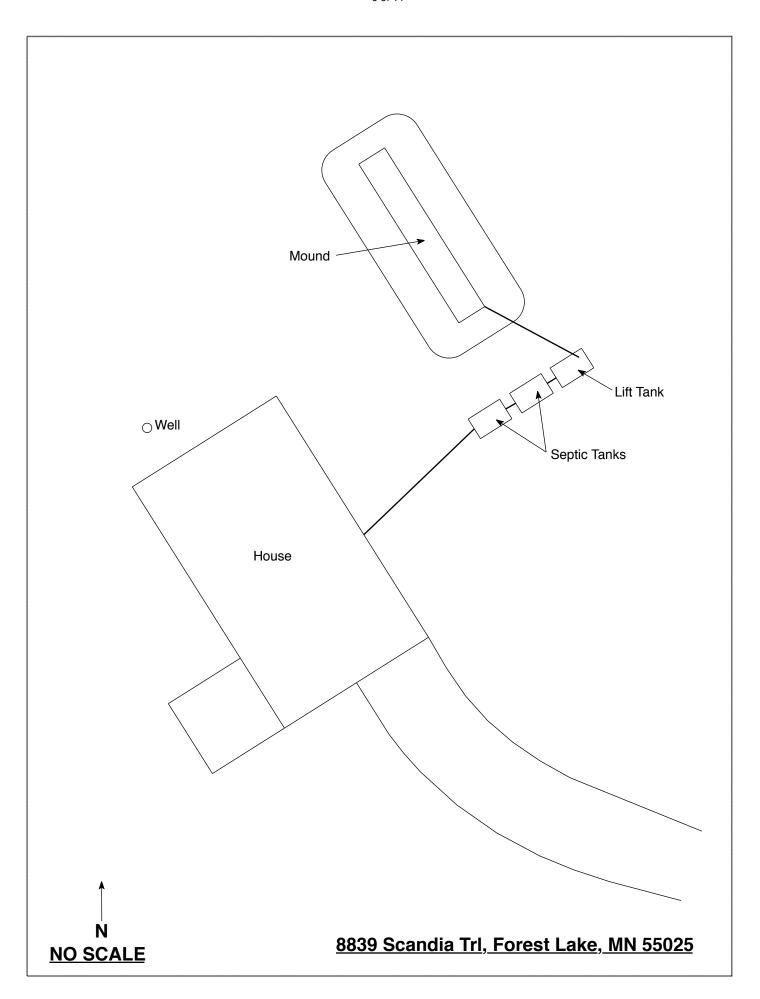
# Inspect Minnesota & Midwest Soil Testing Subsurface Sewage Treatment System Owner/Property Information

This information will be used for the purpose of conducting an MPCA Compliance Inspection.

Date of Inspection: April 22, 2019	Time: 11:30 AM		
Property Address: 8839 Scandia Trl, Forest Lake, MN	Zip: 55025		
Property Owner: Scott & Carol Madsen	Phone:		
Tank(s)       Tank(s)Material       Soil Treatment Sys         Septic 2       Fiberglass       Rock trench         Aerobic       Plastic       Gravelless trench         Lift       Metal       Chamber trench         Holding       Concrete       Seepage bed         Other:       Block       Mound         Other       At-grade	Alternative system h		
Are the tank maintenance covers accessible? ⊠ Yes □ No	*If no, proper maintenance must be		
performed through the maintenance holes. Maintenance hole	e covers should be made accessible to		
the ground surface to facilitate access and proper maintenance	ee of the system.		
Year house built: 1962 Year septic installed: 2009	Tank size (gals.): 2-1000		
	of residents in home?		
Number of bedrooms? 4 Are all floors drained			
Garbage disposal? Whirlpool			
More than one system (laundry, etc.)?			
Does this property have any footing drain tiles connected to	the septic 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 oth	er buildings?		
Location of septic system on lot? Northeast Side			
Location of water well on lot? North Side  Is the well a deep well? Y			
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? 2018 Name of	f pumper: Olson's Sewer Service		
How often pumped in previous years? Is s	ystem on a monitoring plan?		
Have you received notices from any government agency concerning this system?			
Is your property located in a shoreland management area? N			
Do you have any additional information that should be given to the 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			

Owner/Occupant: Date:

by Inspect Minnesota and Midwest Soil Testing.



#### **Logs of Soil Borings**

Location of Project:

8839 Scandia Trail, Forest Lake, MN 55025

Borings Made by Ben Zierke

Date:

6/11/2015

Hand bucket auger used for borings; USDA - SCS Soil Classification used.

Depth, in Inches 0	Boring Number 1	Depth, in Inches	Boring Number 2
0-10"	10 YR 3/3 Sandy loam	0-10"	10 YR 3/3 Topsoil/mixed fill
10-18"	10 YR 4/4 Sandy Ioam	10-36"	10 YR 4/4 Loamy sand
18-30"	10 YR 4/4 Loamy sand	36-48"	10 YR 5/4 Loamy sand, 0-5% coarse fragments
30-36"	10 YR 6/4 Clay loam, redox starting at 32"	48-52"	10 YR 5/4 Sandy loam
		52-58"	10 YR 6/4 Clay loam, redox at 54"
End of boring at Standing water tab Present at Standing water not p Mottled Soil: Observed at Mottled soil not pres Comments:	feet of depth Hours after boring oresent in hole 2.7 feet of depth	End of boring at Standing water tab Present at Standing water not p Mottled Soil: Observed at Mottled soil not pres Comments:	feet of depth Hours after boring oresent in hole  4.5 feet of depth
Depth, in Inches O	Boring Number 3	Depth, in Inches O	Boring Number 4
End of boring at  Standing water tab  Present at  Standing water not p  Mottled Soil:  Observed at  Mottled soil not pres  Comments:	feet of depth Hours after boring  feet of depth feet of depth	End of boring at Standing water tab Present at Standing water not p Mottled Soil: Observed at Mottled soil not pres Comments:	feet of depth Hours after boring bresent in hole feet of depth

#### 17140 NOTRE DAME STREET FOREST LAKE, MINNESOTA 55025 (851) 494-1985

#### Lose of Seal Borings

Location or Project 8839 Scandia Trail				
Borless whe by Levin Danaway mee 9/11/09				
	cation System: AASHD; USDA			
Auger w	Auger used (theck too): Hand N. or Power _: Plight or Suchet N: other			
Depth,	northe mader R-1	Bapch <sub>a</sub>		
feat	Surface elevation BM - 100	ir Seet	Sorface elevation 100	
0	Sondy Loan 104k 3/1	0	Souly Lover 164K 511	
7"	medium - fine youd	8"- 1		
	occasional pebble	.,,	104x 4/4	
271	104K 466 move vock.	24"	our old Cains	
332	10 4 + 16	3 —	10 46 310	
4	10 th 5/6	4	29" = 1040 6/4 1040 5/6 distruction	
5		5		
6		6 —		
7		3		
8		8		
	oring at 2.6 feet.	£	porting at 2.5 feet.	
-	resent at feet of depth. Present at feet of depth,			
	ent in boring hole.	Set present in busing hole		
	soft: at 2.6 foot of dopth.	Pottled mili: 2 for of depth.		

#### **LOGS OF SOIL BORINGS**

Location of Project George Asadourian, 2 acres, Korf Ests., Sec. 23, City of Forest Lake, Washington Co. Borings Made by Chris Zierke Date: 8/11/09

Hand bucket auger used for borings; USDA - SCS Soil Classification used.

Depth, In Feet	Boring Number 1
0-6"	Dark-brown loamy sand(10YR-3/3)
6-28"	Dark yellowish-brown loamy sand(10Y R-4/4)
28-36"	Yellowish-brown clay loam(10YR-5/4), iron-stains, light-gray mottles, pebbles

End of boring at 3 feet.

Standing water table:

Present at feet of depth, hours after boring.

Standing water not present in hole .

Mottled Soil:

Observed at 28" feet of depth.

Mottled soil not present in bore hole .

Comments:

Depth, In Feet	Boring Number 3	
0-4"	Dark-brown loamy sand(3/3)	
4-26"	Dark y-brown loamy sand(4/4), pebbles	
	obstruction	

End of boring at 26" feet.

Standing water table:

Present at feet of depth, hours after boring.

Standing water not present in hole .

Mottled Soil:

Observed at feet of depth.

Mottled soil not present in bore hole .

Comments:

Depth, In Feet	Boring Number 2
0-4"	Dark-brown loamy fine sand(3/3)
4-32"	Dark y-brown loamy sand(4/4), iron-st. & light-gray mottles below 24"
32-36"	Yellowish-brown clay loam(5/4), iron- st., light-gray mottles

End of boring at 3 feet.

Standing water table:

Present at feet of depth, hours after boring.

Standing water not present in hole ⊠.

Mottled Soil:

Observed at 2 feet of depth.

Mottled soil not present in bore hole □.

Comments:

Depth, In Feet	Boring Number 4	
0-6"	Dark-brown loamy sand(3/3)	
6-24"	Dark y-brown loamy sand(4/4), pebbles	
	obstruction	

End of boring at 2 feet.

Standing water table:

Present at feet of depth, hours after boring.

Standing water not present in hole .

Mottled Soil:

Observed at feet of depth.

Mottled soil not present in bore hole .

Comments:

#### **DISCLAIMER**

# Brian L. Humpal, Inc. dba. 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 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

# Inspect Minnesota, Midwest Soil Testing

License # L2896

License Expires: 12/22/2019

Issued: 11/20/2018

### Specialty Area(s):

Installer
Maintainer
Service Provider
Advanced Designer
Advanced Inspector

## **Designated Certified Individual(s):**

Cert #	Name	Certification Expires:
C9633	Anthony P Scully	3/5/2020
	Installer, Designer (Apprentice)	, v .
C5342	Brian L Humpal	10/15/2023
	Installer, Maintainer, Serv Prov, Adv	Designer, Adv Inspector
C9852	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