

ES Internships Summer Cohort 2026



August 2026

Manuel Garcia

metro council.org

2026 Internship Cohort

2026 Cohort

- 15 traditional Interns
- 2 Met Scholars Interns
- 9 Interns approved for extensions

Software Specialist Internship

Environmental Services, Laboratory Services.



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Introduction



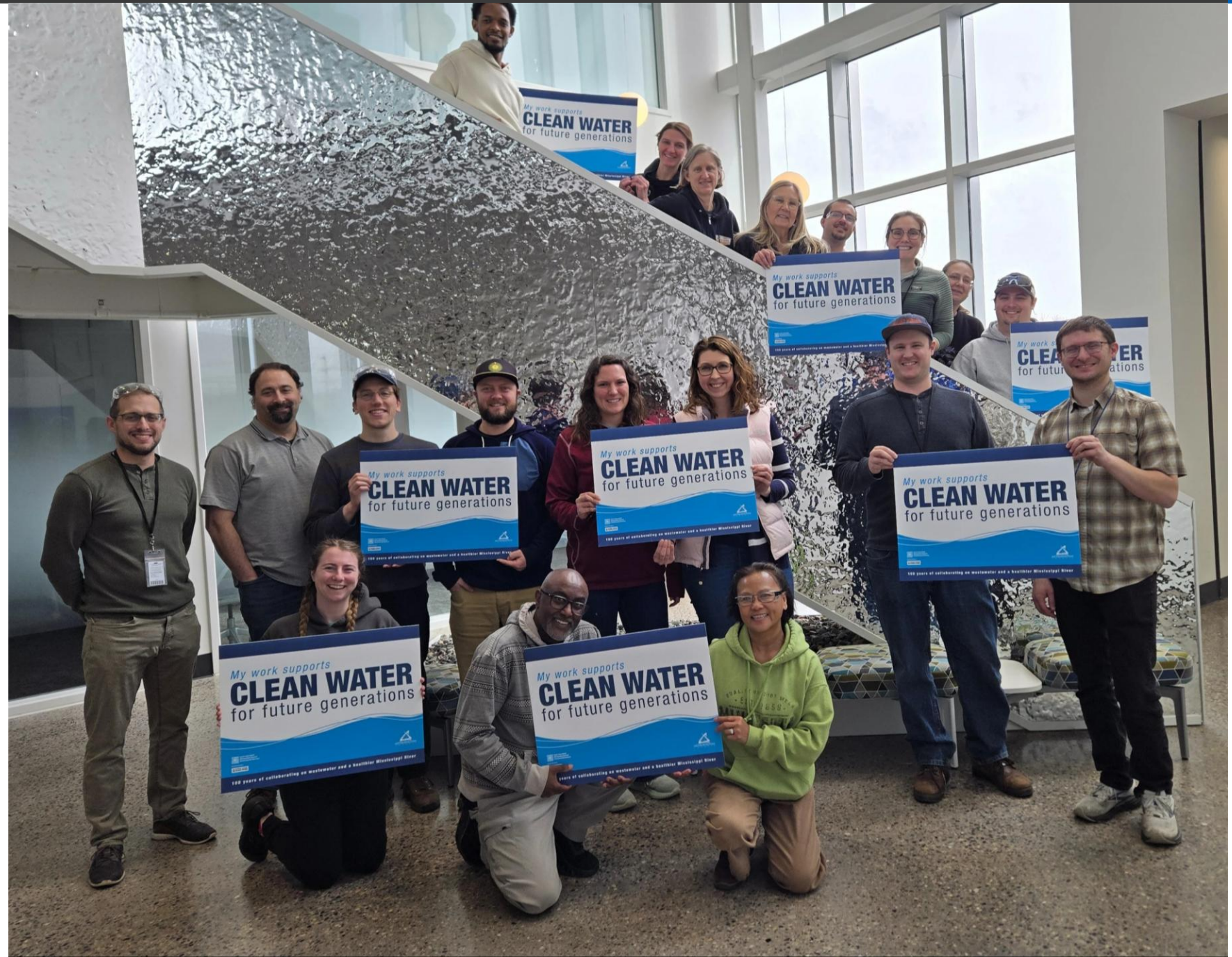
About me

- I'm from in Bogota, Colombia.
- Software Development Degree from Minneapolis College.
- Interested in music production, software, and roller skating!
- Currently working in new LIMS implementation project (Clinisys).

Introduction

About the laboratory.

- Laboratory Services provides timely and quality data to support the operations of our nine WRRFs (water resource recovery facilities) to help maintain the health of the Mississippi River, as well as other regional waterbodies.
- The lab requires a new LIMS system to operate as the current entered is deprecated.



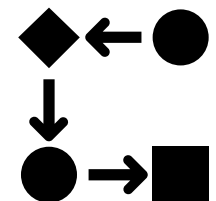
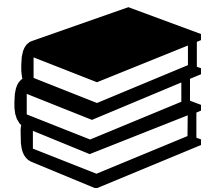
Projects & Responsibilities



Standard Operational Procedures (SOPs) generation over Clinisys (CLS).

Requirements gathering for laboratory procedures and reporting.

Test generation in CLS platform.



Standard Operational Procedures (SOPs) generation over Clinisys (CLS).

SOPs

- A step-by-step set of instructions to guide laboratory members navigate new LIMS software (CLS).
- Customized SOPs based on Roles. (Admin, Manager, General, etc.)

Requirements gathering for laboratory procedures and reporting.

DCWs and testing descriptions.

- DCWs are spreadsheets that describe lab tests in CLS terminology to create a digital implementation in the new LIMS system.
- Several meetings through the week within lab managers, SMEs, and me :) to describe requirements.

Test generation in CLS platform.

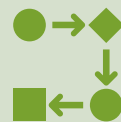
- CLS is in charge to generate most of tests in the new LIMS system, but lab LIMS administrator needs to know about test generation too.
- Out Of The Box (OOTB) tests need to be updated by lab LIMS administrators.
- User Acceptance Testing.

Takeaways

What I've learnt



How essential the laboratory is to keep our water clean.



How complex a new software implementation project can be!



It's ok to not know and ask when you need!



A lot of chemistry!



Questions?



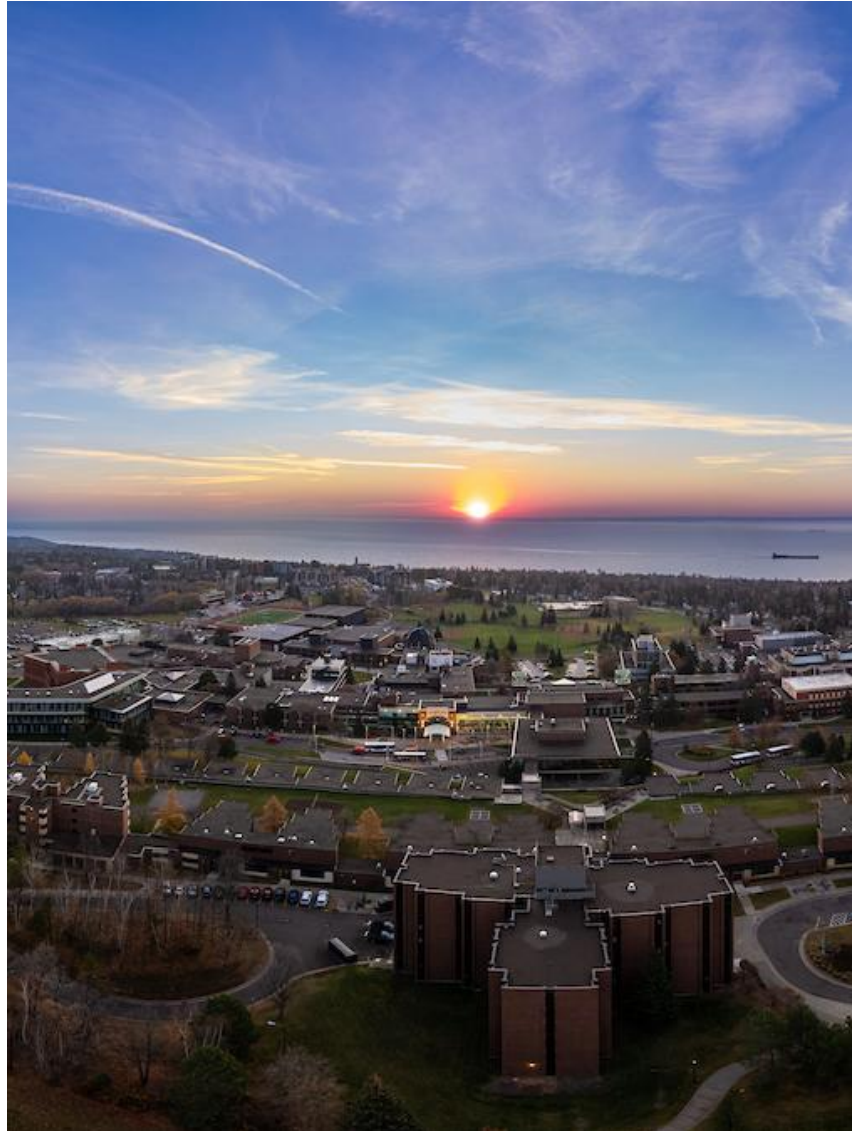
Facility Intern

Environmental Services Planning and Scheduling, East Business Unit

📍 **Empire Water Resource Recovery Facility**

July 2026 Shaylie Magdziarz metro council.org

Introduction



University of Minnesota Duluth
Mechanical and Industrial Engineering
Vice President, Women in Engineering and Science



Planning and Scheduling: Coordinates maintenance, inspections, and projects by scheduling work, managing resources, and help minimize equipment downtime.

Technical Writer Interns

Environmental Services, TPS

Lead: Thomas Weber

Manager: Roderic Southall



August 2026

Sabrina Thompson & Damien Blake

metcouncil.org

Introduction: Sabrina Thompson

Introduction

- University of St. Thomas, May 2026
 - English (technical writing), philosophy of law, public policy, journalism
- Technical writer intern (ES)
 - Using writing skills for a cause

Introduction: Damien Blake

Introduction

- Metro State University
 - Technical Communication & Professional Writing BA.
- Interested in professional writing, user experience, medical writing, product design/management, and research.
- Technical Writer Intern in the Training and Program Support department (TPS) of Workforce & Equity in E.S
- Use my skills to benefit the Twin Cities communities.
 - Audience awareness.

Background



What do Technical Writers do?

Technical writers break down **complex** tasks into **plain, readable** content for a wide variety of audiences,

- Especially considering **accessibility** and **inclusivity**.

We translate content between Subject Matter Experts (SMEs) and users to make the final product:

1. **Accurate** and informative
2. **Clear** to inexperienced users

Internship Goals

Goal #1:

Audit and Edit
Real SOPs

Goal #2:

Learn XML/DITA
Coding Language

Goal #3:

Practice Design &
Video Editing

Projects & Responsibilities

1. SOP Audit & Edit Project
2. SOP Writing Assignments
3. Video Editing & Other Creative Projects

SOP Audit/Edit Project

Standard Operating Procedures (SOPs)

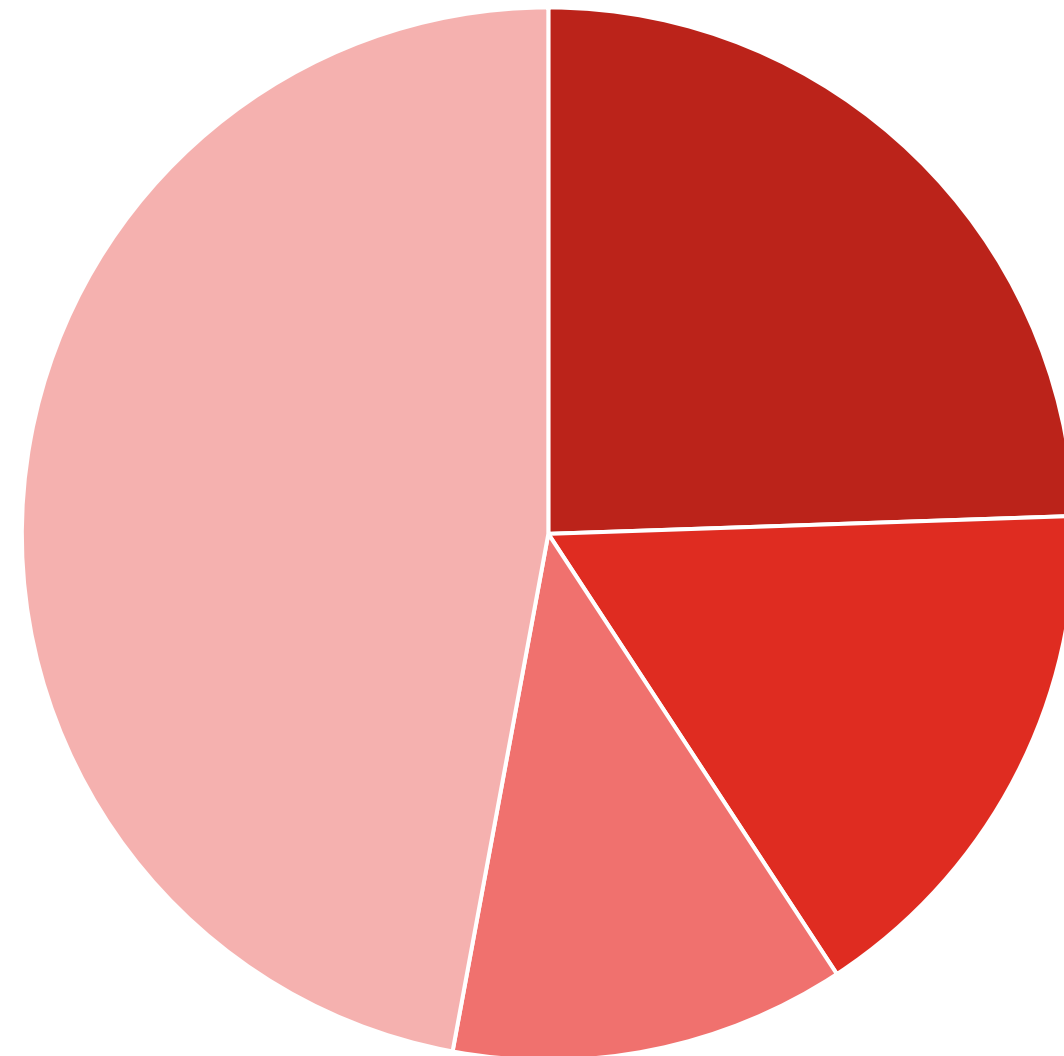
About

- Spreadsheets of ~800 SOPs for the ES locations
- Wastewater processes, emergency planning

Goals + Skills

- Find and track any edits that would improve SOP clarity

SOP Totals



■ # of Damaged SOPs ■ # of Caution SOPs ■ # of Missing SOPs ■ # of Good SOPs

SOP Audit/Edit Project

What we audit for:

- Broken images
- Broken links
- Empty note boxes
- Duplicate 'Important' or 'Caution' tags
- Empty or missing steps/stray bullet points
- Images too big (takes up more than half the page)
- Images too small (can't read text or see required parts)
- Contact Info that's out-of-date

SOP Writing Projects

Updating SOPs by collaborating with SMEs

About

- Make comprehensive edits to an SOP based on feedback from SME
- Camera Stabilizer SOP

Goals + Skills

- SOP creation
- Writing and editing step-by-step instructions in XML



GC example



SOP Writing Projects Cont.

Camera Stabilizer SOPs

Video Editing & Other Creative Projects

Creative Projects

About

- MN State Fair staff training video
- New program flyer

Video Editing & Other Creative Projects

Goals + Skills

- Recording and editing instructional video
- Creative design and communication

Learning and Development

Embracing our Role

- Technical writing and editing with in-use documentation.
- Faster auditing practices.

Biggest Challenge:

- Unfamiliar systems and coding language.
- Unfamiliar processes.

Collaboration

- SME communications.
- Workshopping our own SOPs.
- Team Lead demos.
- Learning from software specialists.
- Informational Interviews.
- LEARN library virtual training.

Software

- XML/DITA language in PTC arbor text.
- Video editing in Adobe Premiere Pro.
- Deeper understanding of content management systems (SharePoint, Titania, Windchill).

Damien's Takeaways

A Step in the Right Direction

- More passionate about serving the public.
 - People/community focused vs. Profit focused.
- Keep practicing with XML/DITA and Adobe Premiere Pro.
- Further my technical editing skills.
- XML is used in many technical writer roles.
- Professional skills from LOD trainings.
- Insights from informational interviews with other MCES employees
 - Thanks again for their time!

Sabrina's Takeaways

So Many Options!

- Writing and communications have endless opportunities
- Wide variety of audiences, purposes
- Human judgement is necessary in this role

Questions?

Sabrina Thompson

Technical Writer Intern, ES

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Damien Blake

Technical Writer Intern, ES

damien.blake@metc.state.mn.us



Empire WRRF

-  Empire/Farmington, Minnesota
- Built in 1979
- Treats 10-12 million gallons a day
 - Discharges 13 Miles Away to Mississippi River
- Communities Served:
 - Empire
 - Apple Valley
 - Farmington
 - Lakeville
 - Elko New Market

Internship Goals

Gain real-real world experiences and develop professional skills.

See how the concepts I've learned are applied to a real workplace setting.

Discover what a career in wastewater would look like day to day.



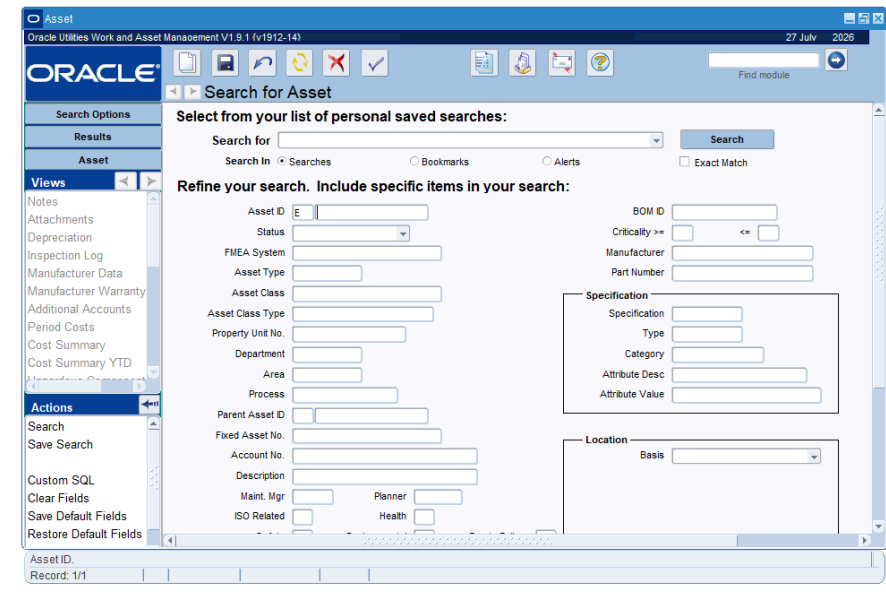
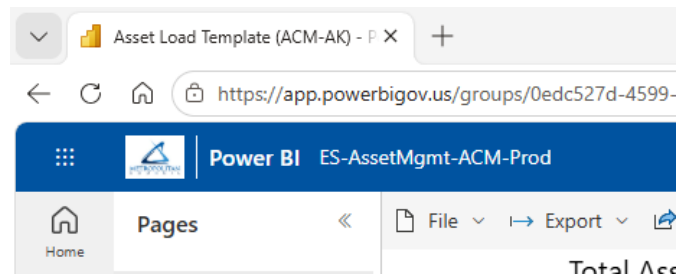
Projects & Responsibilities

Safety Equipment Asset and Components

Maintenance Operation Routes

Asset Labeling and Identification

General Process



Alternate ID → Look up on WAM → Create and place Label → Update WAM Information

Project/responsibility #1

Safety Equipment

Objective: Learn about industrial fall protection.

Role: Assist in tracking and labeling components.

Tools: WAM, Label Maker

Outcome: Better tracked and organized safety equipment.



Project/responsibility #2

Maintenance Routes

Objective: Learn about industrial lubrication programs.

Role: Provide feedback and edit how routes are categorized.

Tools: WAM, Excel

Outcome: Detailed operation procedure and easier stockroom ordering.



Project/responsibility #3

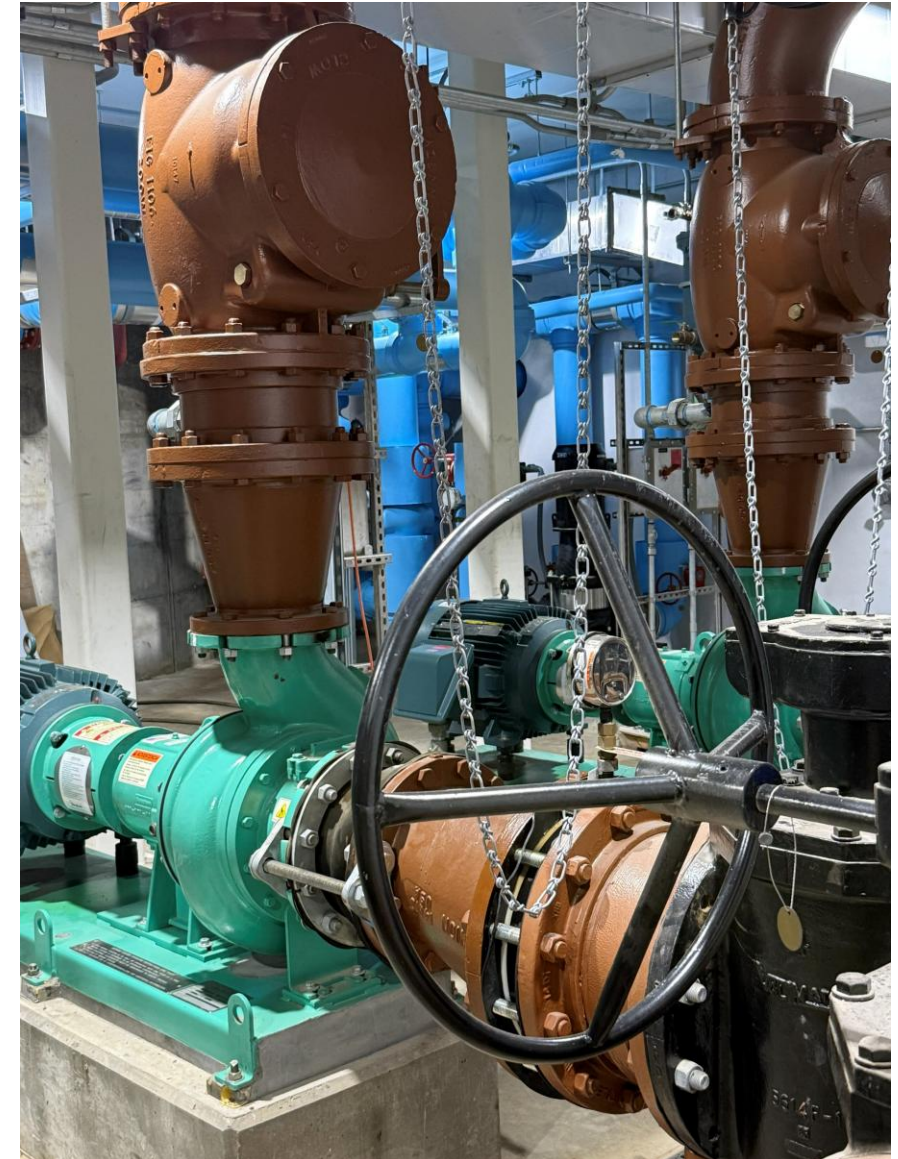
Asset Labeling and Identification

Objective: Learn about asset tracking.

Role: Assist in labeling and cataloging.

Tools: Power BI, WAM, Label Maker.

Outcome: Located and cataloged new plant construction.



Learning and Development

Skill learned #1

Gained Technical Skills:

- ES Specific Tools: WAM and Power BI
- Workplace Processes: Asset Management and Plant Systems
- Safety Procedures: Confined Space Entry and Fall Protection

Skill learned #2

Improved Professional Skills:

- Communication: Collaborated with coworkers and supervisors
- Adaptability: Learned to work around unexpected challenges while completing tasks.

Skill learned #3

Cross-Functional Awareness:

- Gained a better understanding of how different teams connect and impact each other to reach a bigger goal.

Takeaways

Career Interest:

- Better understanding of the work that motivates me.
 - “Clean Water For Future Generations”
- Interest in a future career within Wastewater.

Continued Learning:

- Improve my ability to spot inefficiencies and suggest practical improvements.

Going Forward:

- Bring stronger system-analysis skills into my mechanical and industrial engineering work.

Conclusion

Shaylie Magdziarz

Facility Intern
Planning and Scheduling

LinkedIn Profile:



Thank You!

Any Questions?