

UNH T2 PUBLIC WORKS INTERN TRAINING OUTLINE

DAY 1: INTRODUCTION TO PUBLIC WORKS AND MUNICIPAL PUBLIC SERVICE

Learning Objectives - Interns will understand how public works departments operate within a municipal structure and how to communicate, act, and make decisions appropriately as representatives of a public agency, including ethical responsibilities, public interaction, and handling of information.

Topic 1: How Public Works Departments Are Organized and Support Their Communities

Topic 2: Communicating Up, Within, and Out

Topic 3: Engaging with the Public

Topic 4: Ethics in Public Works

Topic 5: Cybersecurity in Municipal Operations

Topic 6: The Role of Public Information in Public Service (Freedom of Information, Public Records, PIO)

Employer Lunch – meet with intern mentor and/or HR for lunch and to receive policies, procedures, introduction to org chart, and any job specifics

End-of-Day Outcome - Interns should be able to:

- Describe how a public works department is structured and how it supports community
- Identify appropriate communication pathways (who to go to, when, and why) in municipal settings
- Interacting professionally with residents, including when to answer, defer, or escalate
- Recognize their role as a representative of the municipality while in the field or public setting
- Explain ethical responsibilities, including use of resources, professionalism, and accountability
- Understand proper handling of emails, notes, photos, and reports per public record laws
- Recognize basic cybersecurity risks (phishing, data handling, device use) and expectations.
- Understand the role of public information, including how and why information is shared with the public and who is responsible for doing so
- Apply sound judgment in common “gray area” situations, knowing when to pause and seek guidance rather than act independently

DAY 2: FIELD SAFETY & WORK ZONE OPERATIONS

Learning Objective - Interns will understand how to operate safely in roadway and public works environments.

Topic 1: Safety Culture and Hazard Awareness

Topic 2: Personal Protective Equipment (PPE)

Topic 3: Work Zone Safety Fundamentals

Topic 4: Flagger Awareness (Intro Level)

Topic 5: Working Around Heavy Equipment

Topic 6: Outdoor Work Conditions

Topic 7: Hazard Recognition

End-of-Day Outcome - Interns should be able to:

- Identify common job site hazards
- Position themselves safely in work zones
- Understand PPE requirements
- Recognize risks when working near traffic and equipment

DAY 3: PLAN READING 101 + FIELD APPLICATION

Learning Objective - Interns will understand how to read basic public works plans and connect them to field conditions.

Topic 1: Basic Plan Components

Topic 2: Common Infrastructure Symbols

Topic 3: Reading Layouts and Flow Direction

Topic 4: Intro to Profiles (Concept Only)

Topic 5: Field Application (Matching Plans to Real Structures)

End-of-Day Outcome - Interns should be able to:

- Interpret basic plan elements
- Identify infrastructure in the field
- Understand differences between plans and actual conditions

DAY 4: ASSET INVENTORY AND GIS

Learning Objective - Interns will understand how infrastructure data is collected, used, and managed responsibly.

Topic 1: Asset Inventory and GIS Basics

Topic 2: Understanding how communities are “broken out” – Parcel IDs, ROW, file structures, records

Topic 3: GPS Data Collection including the use of high-accuracy GPS/GNSS positioning (like Bad Elf, etc)

Topic 3: Data Quality and Accuracy

Topic 4: Asset Collection- Review and Practice within SADES as example

Topic 5: Data Use in Public Works Decision-Making

Topic 6: Driveway and Trench Permits, Online Permitting Systems (like SmartGov) Work Order Systems, Public Reporting/Ticket Systems (including what do we look for in permit compliance)

End-of-Day Outcome - Interns should be able to:

- Collect and record asset data accurately
- Understand how data supports decisions and compliance

DAY 5: WATER

STORMWATER & MS4

Learning Objective - Interns will understand stormwater responsibilities and how to communicate effectively in a municipal environment.

Topic 1: Stormwater Systems Overview

Topic 2: MS4 Program Basics- outreach and reporting/printing/sharing

Topic 3: Outfall Inspections and Sampling (collection and record keeping)

Topic 4: IDDE Fundamentals

Topic 5: Water Quality Sampling Overview and Quarterly Inspection Process

Field excursion: Observe stormwater and green infrastructures at UNH (ideally on a rainy day)

Water treatment plant visit (if possible)

WATER/WASTEWATER SYSTEMS & INTEGRATION

Learning Objective - Interns will understand how public works systems function together and how their work contributes to operations.

Topic 1: Wastewater Collection Systems

Topic 2: Treatment Process Overview

Topic 3: Lead/Service Line Basics

Topic 4: Water/Sewer Tie-in

Topic 5: Integrated Field Scenario Exercise

Topic 6: Inspection of water and sewer service installations. (What to look for)

End-of-Day Outcome - Interns should be able to:

- Describe basic municipal oversight of water and wastewater system & functions including MS4
- Connect field tasks to system operations
- Conduct basic stormwater infrastructure inspections, water/sewer inspections