

## **STEM CAREER EXPLORATION OPPORTUNITY**

### Water Infrastructure

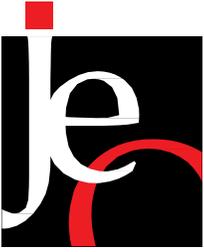
In years past, water and wastewater departments had the responsibility of what appeared to be simply putting pipes underground while trying not to hit anything. Today, we prefer to call water and wastewater management, Water Infrastructure. When an organization envisions a water infrastructure project, it expects more than just burying pipe in the ground. The massive environmental considerations we face today require specialized skills, powerful technology, and extensive resources.

### Water Resources

Our mission statement in the Water Resources Department is “Be a full-service water resources provider to NRD’s as well as municipalities, and local, state, and federal agencies through working hard, having fun, and developing close personal relationships.” We believe that this makes our work worth doing. Keeping water safe from people and people safe from water is where it begins.

### Transportation

It is very important to us that the transportation solution we create for our clients is a long-term, durable one. What makes JEO unique is that we’ve been around long enough to see how our work stands the test of time. There will always be new players coming and going in this industry but what makes JEO different is our understanding of meeting budgets and deadlines. What we do best... regardless of budgets and deadlines, is that we never lose sight of how the quality of our work will look and perform many years down the road.



## Environmental Sciences

The constant changes and complexities of environmental sciences can be a treacherous swamp for first timers. On a daily basis, we deal with environmental impact issues and governmental regulations that clients may only face on a rare occasion. Rest assured, our experienced team can guide clients through this muddy process from start to finish.

## Land Survey

Surveying has been one of the key services offered by JEO for over 70 years. Our staff of Registered Land Surveyors is committed to providing a superior product at a competitive price. We employ multiple survey crews, located throughout our area of operations, to work with clients throughout the Midwest. Our survey department consists of the highest quality personnel, trained and up to date on the latest equipment and survey techniques. As a member of an on-staff interdisciplinary team, or as a stand-alone service, we stand ready to provide our capabilities to the project's needs.

## Student Commitment

This will be during the summer and the expectation will be three days per week for approximately eight hours per day for three weeks. The start date is flexible (preferably sometime between the end of May and beginning of June). The days of the week are somewhat flexible as well.

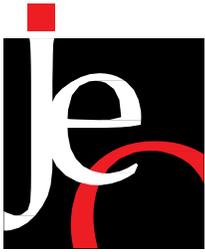
## Possible Learning Experiences

Explanation of a Proposal Process – The proposal is a document that explains the approach schedule and fee for a project such as building a road, bridge or other infrastructure for a community.

Client Project Kick Off – Meeting with our client to initiate work on an accepted proposal and discuss details of a project and timeline.

Project Design – Exposure to computer aided drafting to create design plans.

Client Project Progress Meetings – Discuss progress of current project and next steps.



Contractor Bid Negotiations – Bid meeting to determine the contract for project based contractor cost and quality.

Construction Inspection – Exposure to a project in process of being built to ensure contractor is building to plan specifications.

Surveying- Exposure to construction staking, topographic surveying and Geographic Information Systems (GIS).

Attend a City Council Meeting – Exposure to working with municipalities and understand community needs.

## Scholarship

Upon successful completion of the STEM Career Exploration Opportunity the student is eligible to receive a one-time \$500 college scholarship.