



NOTTAWASAGA VALLEY CONSERVATION AUTHORITY

JOB DESCRIPTION

Position: Engineering Technologist

Position Purpose:

Responsible for the review and commenting on development applications associated with the *Planning Act* and the Authority's Regulations with a focus on water resources engineering.

Act as a resource to the Engineering team by providing input to designs for internal projects using engineering practices and computer modelling. These include but not limited to, engineering studies and special projects.

Date of Last Revision: July 2017

Position Reports To: Senior Engineer

Position Mandate for: Engineering Technologist

Management/Leadership

- Monitors the performance of works being done by self and subordinates to ensure safety and the use of protective devices, in accordance with NVCA policy and the *Occupational Health and Safety Act*.

Technical

- Provision of technical plan review of applications under the *Planning Act*, Authority Regulations, and other applications including development and implementation of Authority Engineering Standards with good judgment, and apply consistent and effective decision making.
- Contribute to the preparation and delivery of expert opinion on behalf of NVCA, and its stakeholders at Ontario Municipal Board (OMB), NVCA Board and Ontario Mining and Lands hearings on matters of Authority interest. This could include acting as an expert witness.
- Development, maintenance and dissemination of watershed data in order to meeting legislative requirements, support NVCA strategies objectives and provide good services to clients and applicants.
- Apply sound science and engineering to effectively and efficiently assess situations, define alternatives, problem solve and generate solutions for a multi-stakeholder environment when reviewing planning and permit applications and watershed planning documents to ensure that the Authority's goals and objectives are achieved.
- Identification and tracking of best practices and advances in the CA and to position the Department on the leading edge or knowledge.
- Assist with the implementation of Water Resource projects according to established terms of reference and timetables; submission of progress and final reports to the Senior Engineer/Director covering project progress/completion.
- Input and implementation of quality assurance programs covering the delivery of services, monitoring of feedback, initiation of corrective action, and compliance with applicable federal and provincial regulations/legislation and against industry established procedures.
- Assist in the river system analysis using industry approved hydraulic models (ex. HEC-RAS).
- Assist in the development, review and maintenance of the watershed hydrologic models.
- Assist with other duties and special projects as assigned.

Communications/Representation

- Acts as spokesperson to municipalities, professionals, landowners, community groups, associations, developers and special interest groups.
- Provide communications to NVCA plan review staff and clients regarding technical review of project proposals with an emphasis on effective solution oriented communications.
- Development and maintenance of a professional contact network with counterparts in other Conservation Authorities and member municipalities.
- Liaison with regulatory officials/agencies at the federal, provincial and municipal levels.
- Participation in Committees and Task Forces assigned by the supervisor/Director.

Knowledge/Skills Requirements

Knowledge and Skills	Basic Competency	Int. Competency	Adv. Competency
1.0 Technical Knowledge and Skills			
1.1 Education: University degree or college diploma in civil or water resources engineering	✓		
1.2 Experience: 5 years related	✓		
1.3 Affiliation: must be a member of the Ontario Association of Certified Engineering Technologists and Technicians (OACETT) or be eligible for certification	✓		
1.4 TECHNICAL KNOWLEDGE IN SPECIFIC DISCIPLINES/AREAS INCLUDING:			
- Content details, Conservation Authority Watershed, Storm water and Natural Hazards Management Principles and Practices			✓
- Plan Review (Hydrology, hydraulics, floodplain management, flood proofing, natural hazards, riparian rights, legislation and regulations, storm water management, erosion and sediment control, hydrogeology) Conservation Authorities Act, related federal and provincial regulations/legislations and applicable by-laws of member municipalities			✓
- Content details, Flood Forecasting and Warning (forecasting, monitoring, modeling, communications, program development, emergency operations, data networks)	✓		
- Content details of procedures at hearings/tribunals and the Ontario Municipal Board re: evidence and testimony	✓		
Content details, quality assurance programs as applied to service delivery by program			✓
- Up-to-date techniques and practices, environmental preservation and protection			✓
- Content details, operating procedures, work methods and standards for Watershed Management program		✓	
1.5 Knowledge of sources of information for each of the above disciplines; ability to research information from appropriate sources			✓
1.6 Ability to develop and maintain technical/professional contacts with counterparts in Conservation Authorities and the municipal field as well as provincial and federal government representatives, community groups/associations, special interest groups and public/private sector sponsors			✓

Knowledge and Skills	Basic Competency	Int. Competency	Adv. Competency
2.0 Knowledge of Conservation Authority Operations and Administration			
2.1 Familiarization with the technical terms, functions, activities and key contacts for each of the Departments/Functions in the Conservation Authority:			
- Office of the CAO & Communications		✓	
- Land, Education & Stewardship Services		✓	
- Watershed Management (Planning, Monitoring and Engineering)			✓
- Corporate Services (Finance, Administration, Human Resources)		✓	
- Corporate Services (GIS/IT)		✓	
3.0 Public and Customer Contact Skills			
3.1 General knowledge of the services offered/provided to customers/clients and stakeholders by the various departments in the Authority		✓	
3.2 Familiarization, "key players" (e.g., representatives of community associations, special interest groups, etc.)			✓
3.3 Customer contact skills (e.g., telephone answering, public and private sponsors, "customer-centered" problem-solving, etc.)			✓
3.4 Full appreciation of "how the Conservation Authority works" (i.e., key functions/sub-functions, work process/flow within and between Depts., Board/Authority Staff interaction, important players and their roles, financial implications/sensitivities, public education and awareness efforts, etc.)		✓	
4.0 Management Skills			
4.1 Ability to evaluate specific work situations and to decide appropriate action based upon decision-making principles and sound judgment (i.e., distinguishing between facts and perceptions, anticipating consequences, maintaining overall corporate perspective, etc.)			✓
4.2 Task management skills (planning, organizing, controlling) as applied to own work, the work of subordinates and outsourced professionals/technicians			✓
4.3 People management skills (work direction and follow-up, coaching/counseling, performance appraisal, etc.)			✓
4.4 Coordinating skills, i.e., obtaining inputs/participation of other Depts. and counterparts in other municipalities while making effective use of their time and resources			✓

Knowledge and Skills	Basic Competency	Int. Competency	Adv. Competency
4.5 Project management capability, including knowledge of relevant techniques (e.g., Project Evaluation & Review Techniques, Critical Path Methodology, etc.)		✓	
4.6 Working knowledge of strategic planning processes and techniques including goal setting, work planning, integrated budgeting, monitoring performance against Strategic Plan, etc.		✓	
4.7 Leadership skills in motivating/directing the work of others (subordinates, co-workers, contractors/suppliers), e.g., leading by example and/or technical competence		✓	
4.8 Working knowledge of effective training techniques and the ability to apply them in training/developing subordinates, co-workers		✓	
4.9 Change management skills (e.g., understanding of the need for change, consideration of various change strategies/approaches, selection of the optimum change approach, anticipation of changes, effective response to changes, etc.)			✓
4.10 Motivated to learn or advance own expertise, demonstrating flexibility in continuous learning and identifying and acting on opportunities to increase the value of own role			✓
5.0 Support Skills			
5.1 Effective in written communications (concise, to the point, well organized, etc.):			
- correspondence, letters, memo, short reports			✓
- medium-size to major reports, based on thorough staff work			✓
5.2 Effective in oral communications (concise, articulate, persuasive, etc.):			
- one-on-one, small group settings			✓
- large group presentation settings		✓	
5.3 Ability to grasp problem essentials quickly and to identify cause-effect relationships; ability to anticipate/identify problems and propose solution alternatives			✓
5.4 Interpersonal skills and the ability to apply them in contacts with subordinates, co-workers, suppliers/contractors, and Full Authority:			
- Empathetic listening			✓
- Realization of impact of own behaviours or others			✓
- Objective rather than judgmental feedback		✓	

Knowledge and Skills	Basic Competency	Int. Competency	Adv. Competency
5.5 Ability to represent the Authority effectively in contacts with government officials, community associations, special interest groups, developers, suppliers, contractors, general public, the media, etc.			✓
5.6 Negotiating skills (i.e., ability to evaluate trade-offs and reach agreements reflecting a win-win situation for the Authority and the parties concerned; and, if applicable, ability to clearly identify pertinent contract terms and conditions)			✓
5.7 Conflict management/resolution skills (i.e., ability to arbitrate/mediate differences of opinion among senior managers, staff, various stakeholders, etc.)			✓
5.8 Ability to handle/cope with on-the-job stress (i.e., simultaneous handling of "hot files", ambiguities/"grey" areas, conflicting views among senior Authority Staff and/or Board Members, changing priorities, after-hours work, etc.)			✓
5.9 Ability to handle confidential information; familiarity with procedures to secure such information in the file/data system of the Conservation Authority		✓	
5.10 Computer literacy (i.e., working knowledge of PCs, internet, other office automation including hardware, software and networking)			✓

Factors in the Work Environment

Degree of interaction definitions: High = >70% of the time; Medium = >50% of the time; Fair = <50% of the time

- A FAIR degree of confidentiality and discretion is required.
- The position has a HIGH degree of impact of errors.
- The position reports to the Senior Engineer.
- The position has a MEDIUM amount of interaction with staff and FAIR amount of interaction with the public.
- Regular hours of employment are 8:30 a.m. to 4:30 p.m. Monday to Friday; however, work outside of these hours may be required.
- Position is based in the John Hix Administration Building.

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this job, the employee is regularly required to sit, talk and hear, and stand, walk and reach with hands and arms.
- The employee occasionally is required to use hands for manual dexterity.
- The employee is occasionally required to climb or balance and stoop, kneel and crouch.
- The employee must be able to occasionally lift and/or move up to 50 pounds.
- The employee is required to operate a non-motorized boat, and may be required to use light equipment and machinery.
- Specific vision abilities required by this job include: close vision & concentration, depth perception, and ability to adjust focus for most of the day.

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- The employee is frequently exposed to outside weather conditions.
- The noise level in the work environment is usually moderate.
- Daily travel within watershed is frequently required.