

Committee: **The Environmental and Ecological Planning Advisory Committee**

Organization/Sector represented:

Name: **Issam Mohamed**

Occupation: **PhD Candidate/Western University**

Work experience: **My years of experience in Civil and Environmental Engineering has allowed me to gain an extensive experience in supervision, design using various engineering software including proficiency level in AutoCAD and MS Office Suite, construction, consultation and management.**

Education: **Pursuing a PhD at Western University where I also graduated with a MEng degree in Civil and Environmental Engineering. Master's thesis work was about developing a prediction model using machine learning computer software (e.g. Artificial Intelligence) to forecast water quality and quantity measures at Thames River using large historical collected data-set. During my studies, I have expanded my expertise in data collection, processing (data QA/QC) and analysis, as well as powerful data presentation skills. Strong various statistical techniques and methods knowledge and analytical skills were extra polished. Experience in computer modeling software, environmental assessment processes, water resources engineering, stormwater management, infrastructure design, watershed protection and floodplain mapping were also further developed. Moreover, Conservation Authorities' and Ontario's Legislations and Acts understanding was demonstrated and advanced through various course projects.**

Skills: *** Design and presentation skills * Knowledge of Conservation Authorities and Ontario's environmental regulations, legislations and acts * Advanced research skills * Computer skills (AutoCAD, ArcGIS, HEC-HMS, HEC-RAS, MS Office Suite) * Stormwater management, Infrastructure design & Water resources engineering * Data collection, processing and analysis skills * Excellent oral and written communication skills * Proven soft and interpersonal skills**

Interest reason: **Well, there are several reasons, as listed below: * Personal interest and responsibility to support the needs of Londoner's * Having skills that | believe would benefit the community * | believe that it will enhance my resume and career opportunities * | believe that it will give me an opportunity to interact more fully with the people in the community * | enjoy taking on new challenges and learning new things * To raise the concerns about the environment and getting involved in planning policies and green initiatives to conserve the environment and to address climate change issues and try to reduce our footprints. * To raise the public awareness in regarding with the various environmental challenges and how to make London a safe city for us and the next generations.**

Contributions: **I see that one of the mandates of the EEPAC is to to assist in maintaining an up-to-date information base on environmentally significant areas and to continuously monitor them. and throughout my studies at Western I have gained a lot of experience in regards with huge data collection, pre- processing, management and presentation. | have also had the chance to understand the Upper Thames River's Watershed (which contains the City of London and other municipalities) environmental conditions, especially when it comes to the sedimentation and erosion control practices, which requires a good understanding of the area that is being studied. Proficiency in using various engineering modeling software as well as drafting and presentation programs. Using Artificial Intelligence in modeling the most complicated non- linear relationship between various variables was also sharpened. Advanced knowledge of municipal class environmental assessment, conservation authorities act, flood management control, erosion control, ICID checklists and weight modeling. Utilizing best management practices (BMPs) approach to mimic the natural environmental system for local developments, to restore urbanized areas back to pre-development conditions.**

Past contributions: **Worked for an NGO at some point and my role was to critically analyze various civil engineering designs and to advise and give comments on their compliance with the engineering codes and with the city's master plan. Trained fresh graduate and senior undergrads on drafting software (i.e. AutoCAD). In addition to working adjacently with the various engineers and architects at the organization.**

Interpersonal: **Working for various engineering companies has allowed me to first learn from others' experiences and second to give my opinions supported by the engineering**

sense which were always well recognized. | am a good listener, hard worker, critical thinker and love challenges and team work to solve various engineering problems.

Interview interest: **Yes**