Grand River Conservation Authority

Complete Application Supplementary Checklist

Culvert/Bridge Works

This checklist is supplemental to the GRCA Complete Application Checklist (2025). It is provided to streamline the review process and assist applicants in providing a complete permit application. The level of detail required for the application will depend on the scope of proposed works, as well as the natural hazards present on site. The checklist should be submitted by the applicant with all the required information as part of submission of a formal permit application. Incomplete applications will not be reviewed.

The checklist applies to the proposal as submitted. For an application to be considered complete, all items identified below are to be submitted unless otherwise noted on the GRCA Complete Application Checklist.

Submission Details

Municipal Address: _____

Project Description: _____

Planning Act File Number: _____

Submitted	Submission Requirements
☐	Hydraulic Analysis[1]*
☐	Hydrologic Analysis (Not required if flows provided by Conservation Authority (CA) staff)[1]*
☐	Cover Letter or Comment-Response Matrix in spreadsheet format (resubmissions)
☐	Drawing Set[1]
☐	Digital Hydrologic Modelling Files (Not required if flows provided by CA staff)*
☐	Digital Hydraulic Modelling Files*
☐	Digital GIS Files (Not required if floodplain is not modified)* Note that GIS data must be in an Esri Geodatabase Feature Classes or GeoPackage Feature Classes. Spatial data must be used Projected CRS - NAD83 CSRS v8 Zone 17 (EPSG: 22717), and Vertical CRS - CGVD2013 (EPSG: 9245). For detailed GIS files submission requirements refer to GRCA Geospatial Data Standards.

[1]Signed and stamped by a qualified P.Eng.

*Not required if the proposed design is the same as existing, including no changes in road profile.

Submitted	Drawings Of Existing & Proposed Structure[1]
☐	Plan and Profile of Existing and Proposed Structures
☐	Hydraulic Structure Drawings
☐	Existing and Proposed Grading Plan**
☐	Erosion and Sediment Control Plan

[1]Signed and stamped by a qualified P.Eng.
**Pre-development grading plan should be based on the survey provided by OLS surveyor.

Submitted	Hydraulic & Hydrologic Analysis
Hydrological Analysis *(*Not required if flows provided by CA)**[1]***	
☐	Methods of computing flows, computational procedures, required input data, catchment area, and modeling parameters
☐	Flows computed and provided for all return periods and regulatory storm event
☐	Table providing summary of results including location and corresponding cross section number used in hydraulic modelling
Hydraulic Analysis[1]*	
☐	Hydraulic model revision tracking sheet
☐	Detailed background notes provided in the description section of the Hydraulic Model (name and date, plan description, vertical geodetic datum, purpose, changes, etc.)
☐	Ineffective flow areas shown on all applicable cross sections including section located upstream and downstream of structures
☐	Expansion and Contraction coefficients applied upstream and downstream of bridges and culverts, in accordance with relevant hydraulic modeling references.
☐	Proposed water surface elevations at all cross sections are equal to or lower than the existing water surface elevations. Where this is not the case, the design must, at a minimum, comply with GRCA's Policy 8.1.15 for public infrastructure. Comparison between existing and proposed water surface elevations provided, for all storm events up to the Regulatory Storm, at all locations where results are different
☐	Separate hydraulic modeling plans for the existing geometry and proposed geometry
Drawings and Details[1]	
☐	Hydraulic structure dimensions and relevant elevations (upstream and downstream inverts/obverts and top of the road elevations) match the model and analysis
☐	Road low and high point elevation shown on the road profile
☐	Staging and Sequencing Details/Plan if applicable

[1]Signed and stamped by a qualified P.Eng.
*Not required if the proposed design is the same as existing, given no changes in road profile.

Submitted	General Criteria
Construction Erosion and Sediment Control (ESC) Plan[1]	
☐	ESC Plan design completed (seethe Erosion and Sediment Control Guide for Urban Construction, TRCA, 2019**)**
☐	An implementation schedule for the erosion and sedimentation control measures, detailing measures and/or activities to be completed, modified, removed, and/or implemented at each stage of development
☐	Note on ESC Plan that all excavated materials will be immediately removed off-site or stored within a designated stockpile area
☐	All stockpiles and staging areas to be identified on plans and are to be located outside regulated features and hazards (e.g. floodplains, wetlands, erosion hazards), as well as outside any required setbacks, and are appropriately protected with ESC measures. Any potential deviation of these requirements to be discussed with CA staff.

☐	Detailed riprap information, including sizing calculations, design details, and references, if used
☐	Watercourse diversions, dewatering and cofferdam details, designed as per the above ESC Guideline (if applicable) Any potential deviation of these requirements to be discussed with CA staff
☐	Dewatering plans and details for excavations (groundwater dewatering) and surface water (if applicable)
☐	Contingency plan to secure the site in case of more significant flooding
☐	Detailed inspection, monitoring, and maintenance plan as per above ESC Guideline

[1]Signed and stamped by a qualified P.Eng.

ADDITIONAL STAFF COMMENTS

COMPLETE APPLICATION ACKNOWLEDGEMENT	
Applicant/Agent: Please submit the required information along with this form as part of a complete application. Please note that if the application is deemed incomplete, you will be notified, and it will not be reviewed by GRCA staff. An agent acting on behalf of a client must provide a copy of the completed checklist to the applicant and landowner.	
I sign and certify that the attached submission includes all the required documentation as noted in the above complete application checklist.	X _____ Signature of Applicant/Agency

General Note: It is the applicant's responsibility to obtain any required approvals under federal and provincial legislation. Consultation with the local municipality is recommended before proceeding with a GRCA permit application.