Intended Use

The Non-Conformance Report (NCR) process can be initiated by any party and is used to identify, document, track and resolve instances where materials, workmanship, processes, and/or any other contractual requirements are not in conformance with the Contract.

The use of the construction change management process and its associated form templates requires collaboration, communication and judgement within the project team to determine the process most suitable for each circumstance, which can vary between projects.

Examples of where a NCR would typically be used:

- Details of an installed pile driving frame are not in accordance with specified requirements.
- A weldment has a defect identified that requires further investigation and potential repair.
- Evaporation reducer is used as a finishing aid during bridge deck concrete finishing operations.
- Grout is used to patch tie holes instead of a concrete patching material from the Department's Products List.
- The surface of wingwall concrete does not meet flatness tolerance requirements.
- Fabrication of a girder proceeds past a specified Hold Point without all required signatures on the ITP.

Instructions for Use

A process workflow map is provided to illustrate the typical sequence of steps in the NCR process, including identification of the party responsible for each step, and should be referenced as necessary throughout the process.

The NCR form shall be completed comprehensively to support timely and accurate communication, evaluation and documentation of the non-conformance. Contract document references, photographs, sketches, technical data sheets, inspection reports, and other supporting information shall be included, as applicable. If additional space for responses or supporting information is required than can be accommodated by the form, they can be included as attachments.

If revisions are required during completion of the NCR process, a new version of the form should be issued along with sequential revision numbering to track its development.

Signature fields not required are to be crossed out or marked N/A.

The NCR process occurs in two parts:

Part 1: Identification and Proposed Corrective Action

- A party identifies and documents an aspect of the work that does not conform with the Contract.
- The Contractor develops proposed corrective actions to both resolve the non-conformance and prevent reoccurrence.
    - Non-conformances related to Contractor delegated design components (e.g. bearings, overhead sign structures, MSE walls) require the engineering professional responsible for the component to review and provide input into the Contractor's disposition.

- The Consultant and Department review the proposed corrective actions and provide dispositions regarding acceptability, including adding any additional conditions for acceptance.

The Department may request that the Consultant complete a risk assessment, using the Department's risk assessment tool/form as part of the NCR analysis, to support the engineering evaluation of non-conformance impacts. If the Department does not request a risk assessment, the Consultant may still, at their discretion, choose to complete a risk assessment. More detailed guidance on the risk assessment process is provided within the 'Instructions for Use' section of the Contract Variance Request (CVR) form.

The Department's Project Administrator or Project Sponsor may engage the applicable Technical Standards Branch area of expertise to review and provide comment on the NCR process to support the development of the Department's disposition and/or acceptance of corrective action. For non-conformances classified as low/medium risk, the project administration team will typically not engage the Technical Standards Branch. For non-conformances classified as high risk, the Technical Standards Branch will typically be engaged to contribute to the evaluation and risk assessment. The 'Department Technical Standards Branch' signature line is only required when they have been engaged in process evaluation.

Payment adjustment amounts included as part of proposed corrective actions are to be determined based on an engineering assessment of aesthetic, durability, safety and operational impacts over the design service life of the structure, expressed as net present value. Payment adjustments may also include consideration of risks transferred to the Department associated with the non-conforming work. They may also include additional engineering consulting fees, as determined by the Department, required to evaluate, assess and make recommendations related to the non-conformance. When accepted by the Department, payment adjustments are considered a form of remedy to non-conforming work as noted in Subsection 1.2.31.3 of the General Specifications and Specification Amendments for Highway and Bridge Construction.

For "Use As Is" corrective actions, the Consultant/Department may proceed directly to completing Part 2, Corrective Action Verification, but should first ensure that the Contractor's proposed corrective action to prevent reoccurrence has been accepted and is being implemented, if applicable.

Part 2: Corrective Action Verification

- The Contractor completes the reviewed and accepted corrective action, including conditional requirements outlined in the Consultant and Department's disposition.
- The Contractor provides documentation of the completed corrective action to the Consultant for review.
- The Consultant reviews and verifies that the corrective action has been acceptably completed.
- The Department reviews that the corrective action has been acceptably completed, through review of the Consultant's verification and/or direct verification.

Process Timelines

NCR process timelines can vary significantly based on the complexity, level of engineering review required, and risks identified.

Timelines for determination and acceptance of proposed corrective actions, implementation, and verification should attempt to align with the Contractor's work schedule to minimize project impacts whenever possible. In all cases, completion of the NCR process shall be a priority for all parties, with each step completed within reasonable timelines in order to minimize the impact of non-conformances on project cost, quality and schedule.

For non-conformances which require corrective action and verification prior to being able to proceed with subsequent work, these timeline conditions will be outlined in the Consultant and/or Department's disposition. The

identification of timeline/milestone conditions by the Consultant and/or Department shall not relieve the Contractor of their contractual obligations.

For example:

- Cast-in-place concrete piles for a concrete abutment placed by tremie method are determined to have non-conforming cross hole sonic log test results, indicating a defective pile. The timeline for NCR resolution, including verification of completed corrective actions, would be prior to proceeding with mud slab construction, abutment formwork and/or reinforcing steel installation activities.

Lines of communication and expectations for the submission, review and processing of Construction Change Management forms should be discussed during the preconstruction meeting. If items are identified during the project which require expedited resolution to avoid safety, cost, schedule, or other time sensitive impacts, they shall be brought to the attention of all parties as soon as possible. The project team shall then work collaboratively to determine a path forward, establishing expedited timelines to minimize the associated impact(s).

Result of Use

The use of the NCR process will result in one of the following outcomes:

- The non-conforming work is accepted as-is, with or without a payment adjustment.
- The non-conforming work is repaired in a manner acceptable to the Consultant and the Department (including associated conditions), with or without a payment adjustment.
- The non-conforming work is replaced with work that conforms to the Contract.

Contact

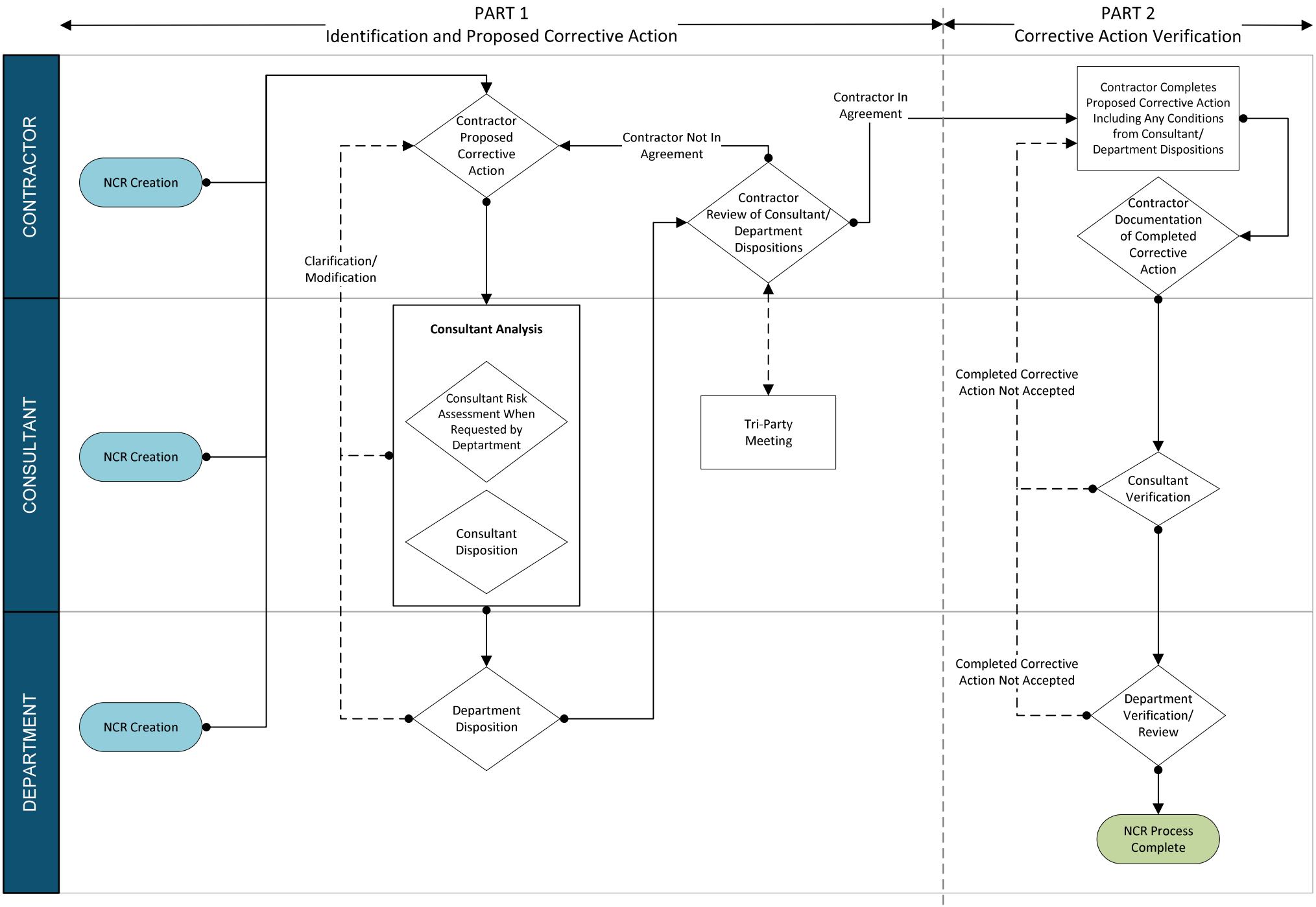
For more information or feedback on bridge construction administration change management processes please contact the project management office at:

tec.cm-pmo@gov.ab.ca

The change management process reference material provided above is not required to be included with the following process form as part of project transmittals/submissions.

Non-Conformance Report (NCR) Process Workflow

Alberta Transportation & Economic Corridors – Bridge Construction Administration Change Management



Non-Conformance Report (NCR)

Alberta Transportation & Economic Corridors Bridge Construction Administration Change Management

Project Details

Contract Number	Bridge File	Bridge Name/Project Description
CON0000000	BF00000-0	Highway ## over ABCDE River, ## km NW of Town FGH

Contractor

Consultant

NCR Information

Subject

NCR Number	Revision Number	Creation Date	Date of Occurrence	High Priority	Requested Response Date
NCR000	0	YYYY-MM-DD	YYYY-MM-DD	☐ Yes	YYYY-MM-DD

Contract Reference Documents (if applicable)

Standard Specification Section Number(s)

Drawing Number(s)

Special Provision Section Number(s)

Part 1 – Identification and Proposed Corrective Action

Description of Non-Conformance (attach supporting documents as required)

Attached Document(s):
(Document Name - Description)

Initiator (Print Name)

Signature & Date

Contractor Proposed Corrective Action – To Prevent Reoccurrence of Non-Conformance (attach supporting documents as required)

Contractor Proposed Corrective Action – To Resolve Non-Conformance (attach supporting documents as required)

☐USE AS-IS ☐REPAIR ☐REPLACE

Attached Document(s):
(Document Name/File Name - Document Description – Page Count)

Contractor Representative (Print Name)

Signature & Date

Consultant Risk Assessment Summary
(attach completed risk assessment form, and supporting documents as required)

☐RISK ASSESSMENT COMPLETED ☐RISK ASSESSMENT NOT REQUIRED

Attached Document(s):
(Document Name - Description)

Consultant Representative (Print Name)

Signature & Date

Consultant Disposition (attach supporting documents as required)

Disposition	Payment Adjustment	Adjustment Amount
☐USE AS-IS ☐REPAIR ☐REPLACE	☐Yes ☐No	$

Attached Document(s):
(Document Name - Description)

Consultant Disposition – Milestone Activity Impacts

Consultant Disposition – Conditions and Timelines for Acceptance

Consultant Representative (Print Name)

Signature & Date

Department Disposition (attach supporting documents as required)

Disposition	Payment Adjustment	Adjustment Amount
☐ USE AS-IS ☐ REPAIR ☐ REPLACE	☐ Yes ☐ No	$

Attached Document(s):
(Document Name - Description)

Department Technical Standards Branch (Print Name) — Signature & Date

Department Project Administrator (Print Name) — Signature & Date

Department Sponsor (Print Name) — Signature & Date

Part 2 – Corrective Action Verification

Contractor Documentation of Completed Corrective Action
(attach supporting documents as required)

Attached Document(s):
(Document Name - Description)

Contractor Representative (Print Name)

Signature & Date

Consultant Verification (attach supporting documents as required)

Attached Document(s):
(Document Name - Description)

Consultant Representative (Print Name)

Signature & Date

Department Verification/Review (attach supporting documents as required)

Attached Document(s):
(Document Name - Description)

Department Project Administrator (Print Name)

Signature & Date