

QUALITY CONTROL

1.0 INSPECTION AND TESTING OF WORK

1.1 Laboratories/Agencies

- .1 Independent Inspection/Testing Agencies may be engaged by the Owner for the purpose of inspecting and/or testing portions of Work for the purposes of determining whether the work completed is satisfactory for Progress Payment.
- .2 Costs of the above services will be paid by the Owner.
- .3 All equipment required for carrying out the above inspection and testing will be provided by the respective Agencies.

1.2 Contractor Responsibility

- .1 It is the Contractor's responsibility to perform mix designs and carry out preliminary testing on aggregates to be incorporated into the work and whatever testing he feels is required to ensure that the work is in conformance with the Contract Documents.
- .2 The Contractor cannot rely on the testing that will be carried out by the Independent Testing Agency for Quality Control by the Engineer; the intention of this Testing is for determination by the Engineer of satisfactory completed work for Progress Payment.
- .3 All costs, beyond the testing by Independent Testing retained by the Owner, deemed required to ensure Quality Control shall be borne by the Contractor.

1.3 Access to Work and Plant

- .1 Allow the Inspection/Testing Agencies access to all portions of Work on site and manufacturing and fabrication plants, as may be necessary to carry out their work. Cooperate to provide reasonable facilities for such access.

1.4 Procedures for Tests

- .1 Notify the Engineer well in advance of the requirements for tests, in order that necessary arrangements can be made by the Engineer with the respective Agencies.
- .2 Submit necessary samples and/or materials required for testing, as specifically requested in the Specifications. Submit with reasonable promptness and in an orderly sequence, so as to cause no delay in Work.
- .3 Provide workers and facilities to obtain and handle samples and/or materials on-site. Provide sufficient space to facilitate the storage and curing of test samples.

QUALITY CONTROL

- .4 If defects are revealed during inspection and/or testing, the Engineer may request additional inspection and/or testing to ascertain full degree of defects.
- .5 The Contractor shall correct defects and irregularities and pay all costs for all additional testing.

1.5 Rejected Work

- .1 Defective work whether the result of poor workmanship, use of defective products, or damage through carelessness or other act of omission of the Contractor, and whether incorporated in the Work or not, which has been rejected by the Engineer as failing to conform to the Contract Documents shall be removed promptly from the Work and replaced or re-executed by the Contractor in accordance with the Contract Documents at the Contractor's expense.
- .2 Other work destroyed or damaged by such removals, replacements or re-execution shall be made good promptly at the Contractor's expense.

2.0 TESTS AND DESIGNS

- .1 Furnish to the Engineer test results and mix designs as specifically requested in the Specifications.
- .2 The cost of test results and mix design shall be borne by the Contractor.

3.0 REFERENCE STANDARDS

- .1 Within the text of the Specifications, reference may be made to the following standards:

ACI	- American Concrete Institute
AISC	- American Institute of Steel Construction
ANSI	- American National Standards Institute
ASTM	- American Society of Testing and Materials
AWWA-	American Water Works Association
CANI	- National Standard of Canada
CEC	- Canadian Electric Code (published by CSA)
CGA	- Canadian Gas Association
CGSB	- Canadian Government Specification Board
CISC	- Canadian Institute of Steel Construction
CMB	- Construction Materials Board
CSA	- Canadian Standards Association
EIB	- Electrical Inspection Branch
IEEE	- Institute of Electrical and Electronic Engineers
IPCEA	- Insulated Power Cable Engineers Association
NACE	- National Association of Corrosion Engineers
NBC	- National Building Code
NEMA	- National Electrical Manufacturers Association

QUALITY CONTROL

NFPA - National Fire Protection Association
ULC - Underwriters Laboratories of Canada

- .2 Conform to the latest version of such standards available at the time of tendering, in whole or in part, as specified.
- .3 If there are questions as to whether any product or system is in conformance with applicable standards, the Engineer reserves the right to have such products or systems tested to prove or disprove conformance with Contract Documents, or by the Contractor in the event of non-conformance.

END OF SECTION