

1 GENERAL

- 1.1 At time of proposal submission submit a brief description of intended commissioning activities to demonstrate Design-Builders capacity to respond to the following commissioning requirements.
- 1.2 Verification of the performance of the building systems will be done by means of a commissioning process. Submit completed Commissioning Plan for approval by Owner prior to implementation. Fully coordinate commissioning activities with the Owner and their representatives.
- 1.3 The Commissioning Agent (CA) will be appointed by the Project Manager.
- 1.4 The Commissioning Objectives are:
 - 1.4.1 To bring the mechanical and electrical systems and other systems and components from a state of static completion to a state of dynamic operation.
 - 1.4.2 To verify conformance to contract requirements.
 - 1.4.3 To confirm the installations meet the design intent of the Specifications and function in accordance with defined operational requirements.
 - 1.4.4 To ensure the completed facility meets user stated requirements.
 - 1.4.5 To provide all testing documents, certification and records.
 - 1.4.6 To fully train and equip Owner personnel to operate, maintain and trouble shoot all operational building systems.
- 1.5 The Commissioning Plan shall consist of.
 - 1.5.1 Details regarding the roles and responsibilities of the design/construction team during all phases of commissioning.
 - 1.5.2 Documentation defining design assumptions and performance standards of proposed systems.
 - 1.5.3 Description of systems, intended operation and performance details.
 - 1.5.4 Static testing and verification procedures.
 - 1.5.5 Functional performance testing procedures.
 - 1.5.6 Documentation requirements for test results.
 - 1.5.7 Seasonal or deferred commissioning.
 - 1.5.8 Training plan for building operators.
 - 1.5.9 Preparation of the Interim and Final Commissioning Reports.

2 CONTENTS

- 2.1 Part One: describe the commissioning activities directed by the CA and carried out by the Design-Builder.
- 2.2 Part Two: the descriptions of building mechanical and electrical systems as they appear in the O & M manual specified in Section 01730 - Operation and Maintenance Manual.
- 2.3 Part Three: the testing procedures and documentation of test results prepared by the Design Builder.
- 2.4 Part Four: test procedures and documentation of seasonal commissioning.

3 ROLES AND RESPONSIBILITIES

- 3.1 The CA will lead and be responsible to ensure that the commissioning activities are carried out in accordance with the Commissioning Plan. The CA is responsible for:
 - 3.1.1 Assembling the commissioning team and ensuring the co-ordination of activities with the team in carrying out the Commissioning Plan.
 - 3.1.2 Chairing and arranging commissioning meetings.
 - 3.1.3 Witnessing/Verifying testing and balancing measurements and procedures.
 - 3.1.4 Witnessing all tests and initialling all test documents at the time of test.
 - 3.1.5 Co-signing off all systems verification and test forms.
 - 3.1.6 Co-ordinating the building operators training.
 - 3.1.7 Arranging for the provision of additional training where required.
 - 3.1.8 Receipt from the Design-Builder and turnover of the completed Interim and Final Commissioning Reports.
- 3.2 The Design-Builder shall co-operate fully with the CA in the execution of the Commissioning Plan. At the completion of commissioning, provide a written statement affirming that the building systems are operating properly in accordance with the design intent of the Specification and the construction drawings and specifications. The Design-Builder shall ensure that necessary labour and materials are arranged in order to implement commissioning.
 - 3.3 The Design-Builder is responsible for preparation of:
 - 3.3.1 The Commissioning Plan and Commissioning Schedule.
 - 3.3.2 All testing procedures and data recording forms. Examples of acceptable documents will be provided by Owner.
 - 3.3.3 Schematics and flow diagrams necessary for commissioning.

- 3.3.4 The Interim Commissioning Report which contains all required commissioning information except for work remaining to be done as seasonal or deferred commissioning work.
 - 3.3.5 Seasonal commissioning requirements.
 - 3.3.6 The Final Commissioning Report. Provide six (6) copies to the CA.
- 3.4 Rectify all work and deficiencies identified during the commissioning process to the satisfaction of the CA and the Owner.