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Section 3.1 General Requirements

3.1.1 Dead and live loads for all structural systems shall be noted on the drawings.

3.1.2 If the AISC “Code of Standard Practice for Steel Buildings and Bridges” is used or referenced, the specifications shall modify that code by the deletion of the following sentence in paragraph 4.2.1: “This approval constitutes the owner’s acceptance of all responsibility for the design adequacy of any detail configuration of connections developed by the fabricator as a part of his preparation of these shop drawings.” The owner does not accept any responsibility for design adequacy.

3.1.3 New structural systems shall not be structurally connected to existing structures, except when the new structures are constructed above the existing structure. Additions to existing structures shall be separate from the existing structure with an expansion joint at the point of attachment. This is to prevent the problems created by settlement of new structures as compared to relative stability of the existing structure. It also takes into account the earthquake zone conditions outlined by the UBC for this area of Kansas.

Section 3.2 Cast in Place Concrete

3.2.1 General requirements

3.2.1.1 At expansion joint locations, the structure on each side of the expansion joint shall have full structural support.

3.2.1.2 Exposed concrete shall be free of imperfections caused by the forms.

3.2.2 Testing

3.2.2.1 The concrete shall be tested for strength, air entrainment, temperature, and slump. The specifications shall indicate allowable limits for each.

3.2.2.2 The university will retain the services of a testing firm. The contractor shall be responsible for scheduling the tests. The contractor shall be required to notify the owner’s representative a minimum of 48 hours prior to all placement of concrete.

3.2.2.3 Concrete shall be tested at the minimum rate of one test for the first 25 CY. placed each day, and one test for each additional 50 CY. placed. The concrete may be tested more often at the discretion of the owner’s representative.

3.2.2.4 The specifications shall make it clear to the contractor that quality control is the responsibility of the contractor. The above testing in no way relieves the contractor of the responsibility to comply with the specifications.

3.2.3 Calcium chloride shall not be permitted.

3.2.4 Slab flatness and levelness shall be within 1/8 in 10'. ASTM E1155 shall not be used to specify flatness and levelness unless the particular use requires a high level of accuracy. Areas that have floor drains shall not be required to meet the levelness tests, but shall have positive slope to the floor drain. The amount and direction of slope for floor drains shall be indicated on the drawings.
Section 3.3 Steel Structures

3.3.1 The specifications shall clearly state the responsibility for the design of steel connections. The responsibility may lie with the project designer or with the steel supplier. The responsible party must seal the connection designs.

3.3.2 Testing: The owner will retain the services of an independent testing agency to test all steel connections. Early in the design phase, the A/E shall estimate the cost of steel testing. The contractor shall be responsible for the cost of retesting any steel connections that fail any tests. The contractor shall be required to provide a minimum of 24 hours notice to the owner's representative prior to the time testing will be needed.

Section 3.4 Roof Structures

3.4.1 Gypsum decking shall not be used. The preferred decking material is steel or lightweight concrete.

3.4.2 All roof decks shall be designed with a minimum slope of 1/4" per foot. Positive slope for drainage shall be provided by the roof deck rather than tapered insulation.