1.1 Introduction

The standards set out in this document are intended to serve as mandatory design requirements for the University of Calgary. They reflect the planning, design, construction and maintenance expertise of University personnel. The standards have been compiled and are continually updated by the Facilities Development department within the Facilities portfolio.

As standards for the University, the information contained herein is to be applied to all campus design relating to new construction, renovation, renewal, and maintenance projects in as much the existing structure, infrastructure and conditions allow.

The information contained herein reflects the procedures to be followed, materials to be used, performance standards to be met and design standards which the University has found to be appropriate to assure the quality desired now and in the future operation and maintenance of facilities.

Facilities personnel within the University, as well as outside architects, sub-consultants and contractors should become familiar with these standards.

Standards form the basis from which to create specifications. All of the concepts and procedures included herein are for the use of designers and consultants. The use and inclusion of these standards in bid documents does not relieve the consultant or architect of the responsibility and legal liability for any bid documents created from these standards.

These standards are a "living" document and as such are under constant review and revision. As changes, updates and new sections are incorporated the version number and issue date will be updated and the revised document posted to the Facilities web page. At the start of each project, prime consultants shall acknowledge the current version of the University design standards in use.

It is not the intent of these standards to limit or confine the development and application of creative and innovative solutions. Where such alternative solutions, systems or approaches are being considered, a written proposal outlining the benefits, limitations, and total cost of ownership of the proposed solution shall be submitted to Facilities Development for formal approval by the appropriate technical authority within the University.

In developing these standards, five guiding principles have been identified for all planning, design and construction projects at the University. These guiding principles are: Safety and Security; Accessibility; Sustainability and Environment; Flexibility and Adaptability; and Total Cost of Ownership. Further description/definition of these principles are as follows:

Safety and Security

- Ensure public health
- Ensure personal safety
- Ensure buildings can be made secure during non-operating hours
- Ensure buildings meet/exceed fire and life safety requirements
- Limit or reduce University risk and liability.
Accessibility

- Universal design (provide features to enhance accessibility for all)
- Site planning must accommodate persons with mobility and sight impairment without the need of assistance on primary routes;
- Allow access universally regardless of ability, from the moment of entry to the University campus, into and through its buildings and lands.

Sustainability and Environment

- Building design should enhance/encourage sustainable practices.
- Energy efficiency
- Water efficiency
- Materials use
- Indoor environmental quality
- Renovate, reuse, renew, and recycle materials, systems, products and/or spaces.

Flexibility and Adaptability

- Provide features which permit flexibility and change of spaces to new/other occupancies and/or functions at a minimum cost
- Provide controls to operate building systems permitting portions of the building to be used efficiently while other portions are unoccupied/closed

Total Cost of Ownership

- Optimize life cycle costs while ensuring long life for building components and elements
- Provide design features to assist access to systems/equipment for routine maintenance, periodic repairs and replacement
- Provide a building envelope with a service life consistent with the planned building life
- Provide durable, easy to maintain material/finishes
- Ensure building design is compatible with the University's utilities infrastructure
- Ensure building system operates in accordance with design intent

A requirement for clarification of, or variation from, any aspect of these design standards shall be requested through the Office of the University Architect.