

## UNIVERSITY SUSTAINABLE DESIGN STANDARDS

*Sustainability is a continuous effort integrating environmental, social, and economic goals through design, planning, and operational organization to meet current needs without compromising the ability of future generations to meet their own needs. Sustainability requires the collective actions of the University of Minnesota (University) community and shall be guided by the balanced use of all resources, within budgetary constraints. The University is committed to incorporating sustainability into its teaching, research, and outreach and the operations that support them.*

Board of Regents Policy: Sustainability and Energy Efficiency, 2004

### 1. University Policy and Guidance

University Sustainable Design Standards implement University of Minnesota (UMN) Board of Regents Policy and University Systemwide Sustainability Goals, Measures, Outcomes, and Process:

1.1 Board of Regents Policy: Sustainability and Energy Efficiency (2004)

[https://regents.umn.edu/sites/regents.umn.edu/files/2019-09/policy\\_sustainability\\_and\\_energy\\_efficiency.pdf](https://regents.umn.edu/sites/regents.umn.edu/files/2019-09/policy_sustainability_and_energy_efficiency.pdf)

1.2 University Systemwide Sustainability Goals, Measures, Outcomes, and Process (2009)

[http://www.uservices.umn.edu/sites/uservices.umn.edu/files/um\\_systemwide\\_sustainability\\_final\\_report.pdf](http://www.uservices.umn.edu/sites/uservices.umn.edu/files/um_systemwide_sustainability_final_report.pdf)

### 2. Policy Implementation

University facilities significantly impact land, air, water, natural resources, and public health. The University is committed to the protection of these resources at all stages of acquisition, design, development, and operation of its campus facilities.

As a consultant contracted by the University, the Architect/Engineer (A/E) shall comply with and integrate these Sustainable Design Standards into all applicable University building projects. However, the A/E is not limited to these Standards. The University of Minnesota encourages innovations outside of these Standards that serve to enhance the sustainable nature of its campuses, buildings and operations.

2.1 Minnesota Buildings, Benchmarks, and Beyond (B3) Guidelines and Sustainable Building 2030 (SB 2030) Energy Standard: The [B3 Guidelines](#) apply to the design of new buildings or renovations to meet sustainability goals for site, water, energy, indoor environment, materials and waste. By using the B3 Guidelines, projects automatically enroll in the [SB 2030 Energy Standard](#).

All University building projects that meet the criteria shall comply with the most applicable version of B3 and SB 2030, and track projects within the B3 Tracking Tool, regardless of project funding source. Projects may file a Non-Applicable designation request, if deemed necessary by the team, by completing a [Non-Applicability Request Form](#). This request process is used to make a final determination as to whether the B3 Guidelines apply to a project. Consult with your project Capital Project Management (CPM) Design Project Manager or CPM B3 Oversight Manager prior to submitting a Request Form.

2.1.1 New Building Applicability Criteria: All new buildings funded in whole or part by Minnesota bond monies after January 1, 2004 *and non-State Funded University of Minnesota projects* must comply with B3 Guidelines.

Additions are considered New Buildings that require compliance with B3 Guidelines if they have both of the following characteristics:

- The addition has its own heating plant(s) (e.g., boiler, etc.) whether or not its source of energy (e.g., fuel) is from an adjacent building AND
- The addition has its own cooling plant(s) (e.g., chiller, rooftop unit, etc.) whether or not its source of energy (e.g., electricity) is from an adjacent building.

Exceptions to compliance with the B3 Guidelines are prohibited based on size of building, number of utility connections, or whether a building is heated, cooled, or electrically lit.

2.1.2 Building Renovation Applicability Criteria: All Major Renovation work funded in whole or part by Minnesota bond monies *and non-State Funded University of Minnesota projects* must comply with the B3 Guidelines.

Renovation work is considered under Major Renovations and requires compliance with the guidelines if it has both of the following characteristics:

- Renovated area includes 10,000 square feet or more AND
- Renovation encompasses at least the replacement of the mechanical, ventilation, or cooling system of the building, or a section of the building.

Exceptions to compliance with the B3 Guidelines as a whole are prohibited based on number of utility connections, or whether the renovated area is heated, cooled, or electrically lit. However, some individual guideline criteria are customized based on these or other project characteristics, including the scope of renovation work. If applicable, contact your CPM Design Project Manager or CPM B3 Oversight Manager to begin customizing your project Guidelines in collaboration with the Center for Sustainable Building Research (CSBR).

Additional information on B3 Applicability and Guidelines can be found on the Minnesota Sustainable Buildings website at: <https://www.b3mn.org/guidelines/>

2.2 Energy Rebate Programs: All University Projects shall consult [Xcel Energy's Design Assistance Program \(EDA\)](#) or approved and equal program to assist in efforts to meet University Energy Efficiency Policies and Goals.

These services can consist of modeling the projected energy use of proposed designs, suggesting strategies to reduce the projected energy use, and projecting energy savings associated with the suggested strategies. CPM Design Project Manager or CPM B3 Oversight Manager leads the Energy Program enrollment process with A/E team collaboration.

### 3. B3 Roles and Responsibilities

Information on Guideline Management Roles are available at <https://www.b3mn.org/guidelines/>. Use the UMN B3 Roles Matrix as a reference when assigning roles and actions within the B3 Tracking Tool. Final assignments are determined by CPM Design Project Manager or CPM B3 Oversight Manager and Guideline Leader.

UMN B3 Roles Matrix  
Revised September 2021

<b>UMN B3 Administrative Role</b>	<b>Recommended Contact</b>
B3 Oversight Manager	Dana Murdoch, murdoch@umn.edu
B3 Operations Manager	Shane Stennes, stennes@umn.edu
B3 Program Administrator (CSBR)	Patrick Smith, patsmith@umn.edu
<b>B3 Tracking Tool Role</b>	<b>Recommended Contact</b>
Acoustics Leader	A/E Consultant Acoustics Engineer
Agency Contact	CPM, Design Project Manager
Agency Operations Contact	FM, Director of Sustainability
Architectural Leader	A/E Project Architect
Civil Leader	A/E Consultant Civil Engineer
Design/Construction Commissioning Leader	FM, Commissioning Agent
Electrical Leader	A/E Consultant Electrical Engineer
Energy Leader	A/E Consultant
Facility Operations Manager	FM, Director of Sustainability
Guideline Leader	A/E Project Manager or Sustainability Leader
Guidelines Operations Leader	FM, Director of Sustainability
Interior Design Leader	A/E Interior Designer
Landscape Leader	A/E Consultant Landscape Architect
Mechanical Leader	A/E Consultant Mechanical Engineer
Operations Commissioning Leader	FM, Commissioning Agent
Owner	CPM, Design Project Manager or B3 Oversight Manager
Planner	PSRE, Campus Planner
Project Observer	CPM, Delivery Project Manager
SB 2030 Approver	CSBR
Structural Leader	A/E Consultant Structural Engineer

#### **4. Getting Started with B3 at UMN**

To start a B3 record at the University of Minnesota, please follow the steps below prior to 50% Feasibility/Pre-design:

- 4.1 Contact your CPM Design Project Manager or CPM B3 Oversight Manager to discuss project applicability.
- 4.2 CPM/CSBR to determine B3 applicability
- 4.3 CPM to contact CSBR with the primary project contacts
- 4.4 CSBR to establish B3 Tracking Tool
- 4.5 CPM to work with Guideline Leader to input team member contacts, assign roles and actions, and preliminary budget and schedule information. See below section to guide the assignment of roles and actions.
- 4.6 CPM and Guideline Leader to set-up B3 kick-off meeting with relevant University and Consultant participants.
- 4.7 Follow all B3 Guidelines at <https://www.b3mn.org/guidelines/>  
Determine any potential Variance Requests by 95% Pre-design. See below section for additional information.

#### **5. B3 Variance Requests**

UMN Variance Requests should follow criteria outlined by [B3 Guidelines](#) with the addition of several steps unique to University of Minnesota processes. Please see below for excerpts from B3 Guidelines and highlighted University of Minnesota Variance Request steps.

##### **5.1 Variance Types**

5.1.1 Full Variance: Full variances are intended for cases where guidelines are in conflict with the program (intended use) of the project, either by direct conflict or due to the limits of available approaches. Full variances should only be requested pursuant to the justifications listed below.

5.1.2 Provisional Variance: A provisional variance is requested when there is not enough information available at the current phase to determine if the guideline can be met. A provisional variance may not be requested during the last phase in which a guideline is required. It is recommended that provisional variances are pursued as long as possible before requesting full variances if the ability for a project to meet the guidelines is unknown at an early phase.

##### **5.2 UMN Variance Review Process**

The Variance Review Process defines the steps for reviewing a request to waive a portion of the guideline as written. This process is intended to be used sparingly, for issues such as non-

applicability to a building type, location, or scale. The Variance Review Process is led by CPM and consists of the following steps:

5.2.1 Project team identifies that one or more guidelines have programmatic or feasibility conflicts and have exhausted available alternative approaches they may request a variance from the Guideline.

5.2.2 A preliminary request for Variance is submitted through the project Design Project Manager and reviewed by the UMN B3 Variance Committee. If there is no Design PM for your project, submit all Variance requests through the B3 Oversight Manager.

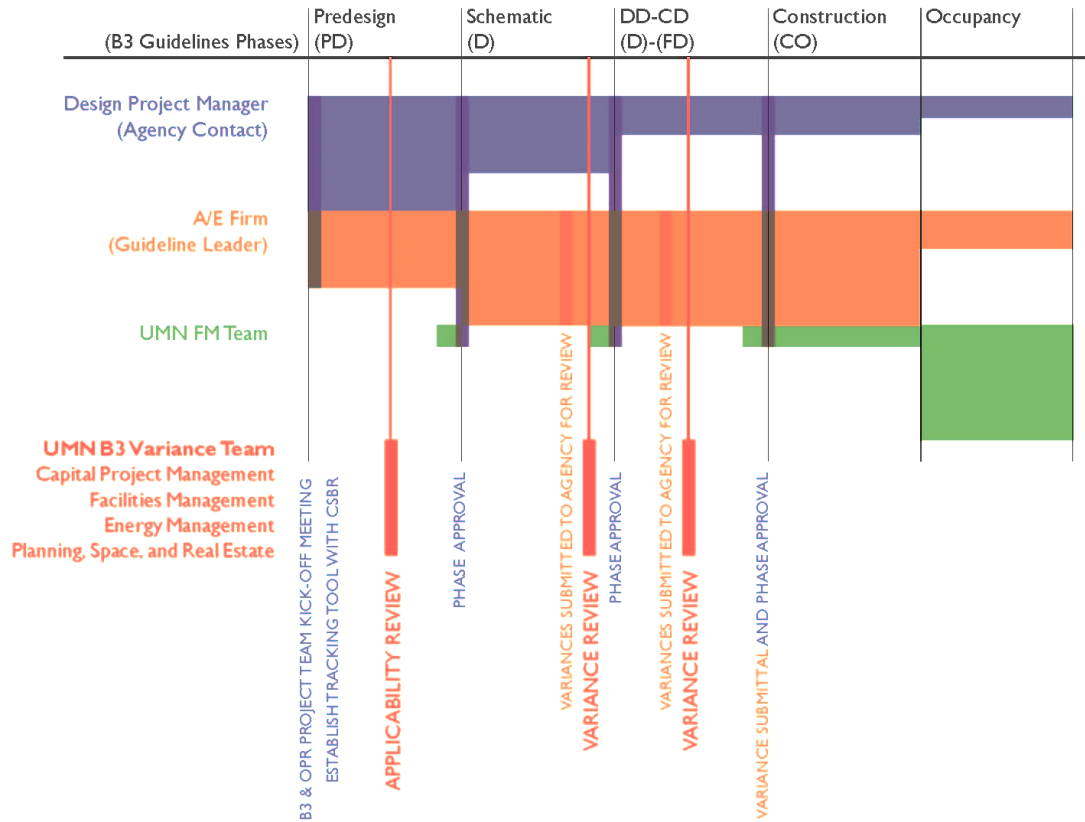
5.2.3 After review, the UMN B3 Variance Committee either accepts or rejects the preliminary request for variance, they may further specify a compromise equivalency or conditions for the variance.

5.2.4 If approved by the UMN B3 Variance Committee, the request for Variance must be submitted in the B3 Tracking Tool.

5.2.5 Once submitted in the B3 Tracking Tool, CSBR confirms that the variance request meets one of the available justifications (noted below).

5.2.6 The variance request and approval or rejection is documented and tracked using the B3 Guidelines Tracking Tool.

University Services B3 Matrix  
Revised April 2021



**5.3 Justifications for a Full Variance**

5.3.1 Programmatic conflicts: If a project’s building program (i.e., the necessary use of the building) and B3 Guidelines are in direct conflict, the building use takes precedence. If the building program cannot accommodate a particular guideline, a variance for that specific guideline may be requested.

5.3.2 Technologic limitations: In rare instances the available technology or methodology does not permit the project to meet the B3 Guidelines’ performance threshold. The design team is expected to pursue available methods to meet the intent of the guidelines to the extent feasible.

Additional information on B3 Variances and Guidelines can be found on the Minnesota Sustainable Buildings website at: <https://www.b3mn.org/guidelines/>

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