



Division 01 General Requirements

01 10 00 Summary

01 10 10 Introduction

These Guidelines provide requirements and establish parameters related to the design and construction of facilities on the campus of the University of Wisconsin–Madison (UW-Madison). The requirements of these Guidelines pertain to all campus projects, whether administered/managed by the State’s Division of Facilities Development (DFD) or administered/managed by UW-Madison.

The DFD *Policy and Procedure Manual for Architects/Engineers and Consultants* establishes the general framework for architectural and engineering work on State of Wisconsin facilities and is also intended to provide the model for architecture/engineering (A/E) work on UW Managed Projects when DFD is not involved.

DFD has additional technical guidelines and provides model specifications which address various building elements or trades. It is the intent that all projects on the UW-Madison campus incorporate those guidelines and specifications when applicable.

UW-Madison’s Facilities Planning & Management (FP&M) provides these *Guidelines for Planning and Design of UW Madison Facilities* to provide additional guidance with regard to particular requirements, standards, or preferences established by UW-Madison for facilities on campus. Where the requirements of these UW Guidelines differ from the DFD guidelines and specifications, the UW Guidelines will take precedence, however, the A/E shall discuss each of these discrepancies or differences with the UW Project Manager & the DFD Project Manager.

The latest version of the DFD guidelines and specifications should always be used. The most recent versions are available from the DFD website. Likewise, A/Es should regularly check FP&M’s Capital Planning & Development’s (CP&D) website at <https://cpd.fpm.wisc.edu/> to obtain the latest version of these Guidelines. The A/E shall include the requirements established in these Guidelines in the construction documents that are advertised for bid.

The goals and guiding principles of the UW-Madison Campus Master Plan (latest edition) shall be considered and referenced as part of the planning, design, detailing, and material section for every project.

01 12 00 Code Requirements

01 12 20 Building Codes

The design and construction of UW-Madison facilities are subject to the provisions of Chapters SPS 361 to 366 of the Wisconsin Administrative Code, which constitute the Wisconsin Commercial Building Code. SPS 361.05 incorporates by reference the 2015 editions of the International Building Code (IBC), the International Energy Conservation Code (IECC), the International Mechanical Code (IMC), the International Fuel Gas Code (IFGC), and the International Existing Building Code (IEBC), as amended by SPS 361 to 366. SPS 361.03 (14) requires compliance with design and construction related provisions of certain sections and chapters of the 2015 International Fire Code (IFC).



Plumbing in UW-Madison facilities is regulated by Chapters SPS 381 to 387 of the Wisconsin Administrative Code and Electrical work is regulated by SPS 316, which adopts by reference the 2011 edition of the National Fire Protection Association's NFPA 70 National Electrical Code (NEC).

Chapter SPS 314 of the Wisconsin Administrative Code regulates the use, operation, and maintenance of UW-Madison facilities related to fire prevention. SPS 314.001 requires compliance with the City of Madison's model fire code, which is the 2018 IFC. The Madison Fire Department also uses Madison Municipal Code Chapters 34 and 40.

01 13 00 Documentation Requirements

01 13 20 CAD/BIM

The University of Wisconsin-Madison requires that the A/E firm for each project provide the construction drawing set in either Computer Aided Design (CAD) format or Building Information Modeling (BIM) format in addition to the PDF and hardcopy drawing sets required by the State of Wisconsin Division of Facilities Development (DFD). All sitework related construction drawings shall be provided in CAD format. CAD files shall be in AutoCAD format per DFD's standards for record drawing submittal. BIM files shall be in Revit format per the UW-Madison FP&M's Architecture & Engineering Group's guidance documents, *BIM for Architects & Engineers*, *BIM for Contractors*, and *BIM Naming Standards*, which are found in the Division 1 Appendix. These drawings, in all three formats listed above, shall be submitted to the UW-Madison project manager shortly after a project enters into the construction phase. These drawings offer an opportunity for campus offices to plan and prepare for ownership and maintenance of the facilities within the project. This process often begins before construction takes place and well before the project is completed and record drawings are submitted. Bid drawing set submissions shall be designated as such, recognizing that changes are probable and will be superseded by record drawings.

01 13 40 Record Documents

Record documents are typically submitted to FP&M by the contractor and serve as the permanent record of construction for the facilities and landscapes built. The University of Wisconsin-Madison requires that we receive final record documents in AutoCAD or Revit formats in addition to PDF format. The submittals in both formats shall include the UW-Madison building number, the UWSA Number, and the DFDM Project Number (when applicable) for reference as well as:

- Drawings which document what was built inclusive of all construction bulletins, field orders, known field changes, etc.
- Specifications inclusive of all construction bulletins, field orders, known field changes, etc.
- All test data, reports, air balance schedules, etc
- All sitework related construction drawings shall be provided in CAD format.

01 13 50 Facility Information Requirements

UW-Madison's requirements related to floor level numbering, vertical passage numbering, door numbering, and workstation numbering; and associated design and drawing requirements can be found in the Space Management Office's *Facility Information Requirements* establishes criteria for facility naming and room numbering for campus. This document can be found in the Division 1 Appendix .



01 13 60 O&M Manuals

Operations and Maintenance (O&M) manuals must be organized to include a Table of Contents and be inclusive of all submittals, confirmed materials selected including finishes, list of contact numbers for all used materials, and dated warranty information. The format of O&M manuals can be electronic in searchable PDF format.

01 13 80 Drawing Checklist

A Drawing Checklist has been provided at the end of this division to assist A/Es and reviewers with checking requirements for the 35% and 100% drawing review packages.

This list is not comprehensive and does not include all the requirements of a given project, nor are all elements in the checklist pertinent to all projects. The list represents some elements that reviewers may want to look at as is appropriate for the given project. Confer with the UW-Madison Project Manager if items are deemed not pertinent to a specific submittal.

Consult other divisions of these Guidelines for additional drawing requirements for project reviews. Incomplete drawings will require resubmittal if deemed inadequate by FP&M.

01 14 00 Work Restrictions

01 14 11 Access Keys

The Lead Contractor shall fill out an Access Key form and return it to the UW-Madison Lock Shop to obtain keys needed to perform required work. The UW-Madison Lock Shop is located at 30 N. Mills St. All keys, under control of the lead contractor, shall be kept secure and shall not be duplicated or shared with other persons. Any lost keys shall be reported to the UW-Madison Lock Shop immediately.

The *Single Key Request Form*, *Multiple Keys Request Form* and *Utility Key Request Form* are provided in the Division 1 Appendix.

01 14 12 Security Procedures

All workers shall at all times wear a visible identification badge with photo ID that contains their name and the name of their employer.

01 14 13 Site Access Restrictions

There may be restricted access to the site during resident move-in/move-out. Contractors may work normal hours, but construction access in or out of the site may be restricted and prohibited at times due to heavy pedestrian and vehicular traffic on all four move-in/out days. The specific days have yet to be determined, but will occur during the following approximate time periods (A/E shall insert appropriate dates in the format shown below):

- Fall Move-In: August XX through Sept. XX, 20XX.
- Spring Move-Out: May X-XX, 20XX.
- Fall Move-In: August XX through Sept. XX, 20XX.
- Spring Move-Out: May 20XX.
- Football Games – Fall of 20XX and 20XX
- Other Sporting Events

01 14 14 Work Hours

Contractor work hours shall comply with the City of Madison construction noise ordinance and the following:

City of Madison Noise Restrictions:



All contractor work hours shall be limited per Madison General Ordinance 24.08. In general, this ordinance does NOT allow the use of any equipment used in construction between the hours of 7:00 P.M. and 7:00 A.M. (Monday through Saturday) in such a manner as to unreasonably interfere with the peace, comfort and quality of life of the neighboring persons of ordinary sensibilities. On Sunday, no person shall operate or permit the operation of any equipment used in construction work before 10:00 A.M. and after 7:00 P.M. The intent here is to not allow the use of equipment, i.e. hammers, power saws, compressors, pneumatic tools, etc. during the hours when construction noise is regulated. Work outside of these times shall require prior approval from the DFD Construction Representative and University as well as appropriate approvals by the Contractor from the City. Refer directly to the City's ordinances for the official language.

Noise Restrictions During Final Exams – the contractor may have noise restrictions imposed during various periods throughout the academic year. These times may include but are not limited to (A/E shall insert appropriate dates in the format shown below):

- Final Exams and Study – Dec XX, thru XX, 20XX
- Final Exams and Study – May X thru 8, 20XX
- Final Exams and Study – Dec XX thru XX, 20XX

01 14 15 Shutdowns

The A/E shall include the following procedure regarding shutdowns:

1. Design Phase

- a. The UW-Madison Project Manager, Building Manager and Users are to be informed by the A/E of potential shutdowns.
- b. The A/E is to incorporate a list of potential major shutdowns in the front end of the Construction Documents.
- c. Environmental Health and Safety (EH&S) is to be informed of anticipated shutdowns during design reviews.
- d. A/E shall instruct the GC to follow EH&S Fire & Life Safety's Life Safety Impairment procedures and Hot Work procedures in their documentation.

2. Construction Phase

- a. The GC shall provide a list of anticipated shutdowns at each construction progress meeting.
- b. The GC shall incorporate the shutdowns in the project schedule.
- c. The GC shall formally notify campus of upcoming shutdowns no less than 10 working days prior to the shutdown.
 - GC shall fill out the UW's "Project Impairment/Shutdown Form" and email that form to campus stakeholders shown on the form as well as the UW's Project Manager and UW's Construction Rep. UW's Project Manager will then request a Work Order from Physical Plant for assistance if needed.
- d. The appropriate Campus Shops supervisor coordinates the shutdown with the GC and UW Madison Project Manager
- e. The GC shall set up pre-installation meetings.
- f. Environmental Health & Safety shall be informed of all anticipated shutdowns throughout all phases of construction.
- g. The Contractor is responsible to know and follow the UW Madison policies and procedures for Fire Protection Impairments and Hot Work Permits including submitting the appropriate submittal forms and notices. See the following websites for pertinent information.



FIRE PROTECTION IMPAIRMENTS

Fire Protection UW Impairment Form - Website

<https://ehs.wisc.edu/fire-life-safety/fire-protection-uw-impairment-form/>

FIRE PROTECTION IMPAIRMENT PROGRAM - document

<https://ehs.wisc.edu/wp-content/uploads/sites/1408/2020/09/EHS-FLS-GUI-003.pdf>

Fire Protection UW Impairment Fire Watch Form

<https://ehs.wisc.edu/fire-life-safety/fire-protection-uw-impairment-fire-watch-form/>

Fire Protection Impairment FAQ's

<https://ehs.wisc.edu/wp-content/uploads/sites/1408/2020/09/Fire-Protection-Impairment-FAQ-update-10->

HOT WORK PROGRAM

Hot Work Permit Program

<https://ehs.wisc.edu/wp-content/uploads/sites/1408/2020/08/HotWorkProgram.pdf>

Hot Work Permit Scheduling Form

<https://ehs.wisc.edu/hot-work-permit-scheduling-form/>

Hot Work Fire Watch Form

<https://ehs.wisc.edu/fire-life-safety/hot-work-fire-watch-form/>

01 14 16 Work by Owner

1. Access Control System
 - a. Card readers are provided by the Owner and installed by the Prime Contractor (wiring and installation of units and the equipment)
2. Security cameras
3. DoIT switches and network gear
4. Door hardware lock cylinders
5. Fire extinguishers
6. Any operational accessories
7. UW-Madison Shops involvement
 - a. Obtain quote / estimate for the anticipated work
 - b. Labor
 - c. Meetings
 - d. Design
 - e. CA (inspection, reviews, commissioning, submittals)
 - f. Shutdowns
 - g. Equipment
 - h. Schedule coordination
8. UW-Madison Digital Controls Group (DCG) of the Electrical Shop
 - a. Specifications for Direct Digital Controls (DDC) shall be based upon the DFD Master Specifications sections for automated control systems.
 - b. Any deviations from the DFD Master Specifications must be approved by the UW-Madison Project Manager.
 - c. In preliminary design, engage the UW-Madison DCG group to determine if they have the capacity to perform the programming of the project.
 - d. If the DCG group has the capacity to perform the programming of the digital controls for the project, a general scope should be explained and if there are



- stringent controls required, the DCG group should be engaged early in the process
- e. If the DCG group doesn't have the capacity, then Johnson Controls International (JCI) will need to perform the programming for the project. A Class 1 notice will need to be issued for this work.
 - f. In either scenario above, the DCG group should be involved in the review and commissioning of the project.
 - g. UW-Madison DCG group and JCI should only be providing the tie-in panel and the programming of the controls via specification. Controls should be furnished and installed by the mechanical sub-contractor.
 - h. All DDC equipment shall be compatible with Johnson Controls and comply with DFDM standard specifications.
 - i. DCG group / JCI will not be providing the DDC equipment, however, their review of these specifications is crucial.
 - j. DDC Group / JCI should be aware and attend periodic construction meetings throughout construction.

01 50 00 Temporary Facilities and Controls

01 51 00 Temporary Construction Measures

01 51 16 Temporary Fire Protection

Bagging of smoke detectors is not allowed in UW-Madison Facilities.

01 56 16 Temporary Dust Barriers

Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise and to prevent damage to existing materials and equipment. Partitions shall be constructed of fire resistant poly sheeting.

01 55 00 Vehicular Access and Parking

01 55 05 Operations Confinement

Confine all operations, equipment, apparatus and storage of materials to the immediate area of work to the greatest possible extent and within the assigned project limits. Contractor shall ascertain, observe and comply with all rules and regulations in effect on the project site, including but not limited to parking and traffic regulations, use of walks, security restrictions and hours of allowable ingress and egress. Any special traffic control during construction involving lane closures shall be in accordance with the federal standard, Manual of Uniform Traffic Control Devices (MUTCD). Fire lanes, fire access roads, Fire Department Connections (FDC) and hydrants shall remain unobstructed and accessible.

01 55 19 Construction Parking

All contractors and others involved with the project shall comply with the parking policies of UW-Madison Transportation Services. See www.transportation.wisc.edu/rates-and-policies/.

In general, construction staging areas shall be used only for equipment and vehicles involved directly in the construction project. Personal vehicles used for commuting to the worksite are not permitted in staging areas. Parking permits in campus parking lots may be purchased from any UW-Madison Transportation Services customer service office, subject to availability and compliance with stated policies.



See www.transportation.wisc.edu.

All personal vehicles used for commuting to campus (including the construction project site) must display a valid UW-Madison Transportation Services parking permit and park in a designated lot/ramp.

1. A personal vehicle is defined as any vehicle not owned by a licensed construction company.
2. Personal vehicles displaying a temporary company sign or logo do not qualify as a construction vehicle.
3. Personal vehicles used for commuting may not park at the construction site or inside the staging area.
4. Temporary permits for workers commuting to a project site are available for sale in various locations across campus based on available space.
5. All vehicles must follow UW - Madison Transportation Services parking policies.

01 55 26 Traffic Control Plan

The A/E consultants shall provide a complete traffic control and mitigation plan for the construction period that includes motor vehicles, bicycles, and pedestrians as part of the 35% review documents. The University experiences unusually large numbers and concentrations of both pedestrians and bicyclists nearly every day when classes are in session and these must be accommodated. Questions about this plan should be directed to the campus transportation planner, and the plan should include the following:

1. Construction Detours:
 - 1.1. Two-way traffic for motor vehicles shall be maintained unless otherwise approved after consultation with the University transportation planner.
 - 1.2. Accommodations shall be made for bicyclists and pedestrians just as they are for motor vehicles, including bike parking and safe, well-marked detours when needed if sidewalks, bicycle lanes, or bicycle paths must be temporarily blocked. Any blockages of sidewalks, bicycle lanes, or multi-use paths should be minimized in extent and in time.
 - 1.3. Pedestrian accommodations shall comply with Americans with Disabilities Act Accessibility Guidelines (ADAAG) and ANSI 117.1 standards.
 - 1.4. Temporary paths for bicyclists, pedestrians, and wheelchair users shall be paved smoothly and designed to accommodate bicycle and wheelchair tires.
2. Construction Traffic Signs/Visibility:
 - 2.1. Existing signs, posts, meters, bike racks, and any other transportation equipment belonging to the University that must be removed shall be returned to Transportation Services via the campus transportation planner or stored carefully by arrangement to be re-installed. The contractor assumes responsibility for any lost or damaged devices and equipment.
 - 2.2. Provide plans indicating a complete system of the correct transportation related signs, in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), shall be identified and provided equally for motor vehicles, bicyclists, and pedestrians.



- 2.3. Signs shall be placed so as to not block pedestrian and bicycle routes unless the intention is to take the route out of service.
- 2.4. Warnings shall be placed a sufficient distance from a blockage or problem to allow a motorist, bicyclist, or pedestrian time to react safely. If a bicycle lane or path must be blocked temporarily or narrowed, signs indicating “End Bike Lane,” “Share the Road/Sidewalk,” or “Sidewalk Closed – Use Other Side,” etc., must be provided.
- 2.5. Sufficient lighting shall be provided along detours and roadways, bicycle paths, and sidewalks near construction sites to allow for the safe travel of all persons during night-time hours.
- 2.6. Signing shall otherwise follow the guidance of Wisconsin Department of Transportation (WisDOT), American Association of State Highway and Transportation Officials (AASHTO), and City of Madison standards. When guidance of the proper response to a specific condition during the construction period is not clear, the University transportation planner should be consulted.
3. Accessible Route Signage around Construction Areas Policy:
 - 3.1. Ensure that proper notification is given relating to any disruptions and/or routing/access revisions or closures especially around construction sites. If routing/access for people with disabilities in and through the construction area is closed, provide a temporary new fully accessible route with appropriate directional signage to available accessible routes.
 - 3.2. New construction area signs addressing construction and parking, traffic revisions, road closures, pedestrian detours, and accessible route detours must be made in accordance with ADAAG, ANSI, and UW-Madison signage standards and in adequate quantity to address the obvious need. The sign for accessible routing shall be 12 inches wide by 18 inches high, made of metal, with white international disability symbol. The symbol shall have a minimum dimension of 8 inches wide by 8 inches high, on blue background. One acceptable example is Tapco sign model DA-13. The sign may also have wording such as “Accessible Route” or other short relevant messages (Note: message might be location specific and should be verified by FP&M Facilities Access Specialist). The sign shall have appropriate directional arrow (8 inches long by 1 inch wide) to indicate the direction of the route. All new construction-type signage shall be installed in logical, safe and strategic locations, in accordance with existing directives and signage manuals. For More Information: contact the FP&M Facilities Access Specialist.

01 55 29 Staging Areas

The A/E consultants shall provide a complete site plan identifying the construction limits and staging area boundaries proposed for construction as part of the 35% review documents for all projects, including those where the proposed work is all interior. Any parking proposed to be lost during construction shall be approved by UW-Madison Transportation Services. Also noted in the construction documents shall be phasing or specific sequencing of construction that will be required as well as a site restoration plan (if site will be disturbed). Staging areas may not be used for parking personal vehicles used for commuting to the worksite. Equipment or vehicles which will be exhausting fumes in the staging area shall not be positioned near intakes or other building openings.



01 55 30 Snow Removal

The contractor shall remove snow as needed in a timely fashion within and around any staging area or as needed to allow for access to University properties, including parking lots, loading docks, egress routes, and entrances to other facilities. Snow removal must also include the outside perimeter of staging area fences where UW-Madison Grounds equipment might otherwise be able to clear snow. Contractors should consult with UW-Madison Grounds about snow removal to ensure good coordination of removal activities around project sites and their staging areas.

01 55 70 Fire Safety Safeguards

Safeguards shall be taken by the GC to ensure all aspects of a project (construction, alteration, or demolition) conform to standards outlined for Fire Safety During Construction and Demolition within NFPA 241 and the International Fire Code. For example, the use of non-flame retardant tarpaulins shall not be allowed within a UW-Madison facility.

01 56 00 Temporary Barriers

01 56 26 Temporary Fencing

1. Contractors shall employ 8 foot high chain link fencing for construction perimeters. All openings shall be gated so that they can be secured after hours. During demolition, dust control fabric may be added to the interior of the fencing to reduce the spread of dust and to assist with safety and security.
2. The construction fences shall provide enough setback between the fence and surrounding sidewalks to allow the maneuvering of snow removal equipment.
3. When emergency egress paths from any adjacent buildings extend through the construction limits, additional fencing shall be provided to direct and safeguard occupants exiting in an emergency.
4. GC to install sign on fencing noting location of the fire department connection (FDC) if the FDC is located within the construction fencing or work area.

01 56 39 Temporary Tree and Plant Protection

1. See Division 1 Appendix for standard tree protection detail.
2. Contractors shall take steps to prevent damage to existing tree root systems, trunks, and branches prior to entering the site. Existing trees to be preserved may need to be pruned, watered, and fertilized by a licensed arborist prior to any construction. All such work shall be coordinated with UW-Madison Grounds.
3. Trees, shrubs and other plants to be protected during construction shall be fenced with chain link fence sections. No trenching or digging shall be done within the critical root radius of the vegetation to be saved. All protection material shall be specified on the plans. Wood snow-fence may be used when approved by the UW-Madison Project Manager. Plastic fencing is not acceptable.
4. The area to be fenced around existing trees shall be determined by the Critical Root Zone (CRZ) or the tree canopy drip line, whichever is greater. CRZ is calculated at 1.5 feet x DBH (Trunk Diameter at Breast Height of 4.5 feet) of the tree. Example: a tree that has a 2 inch DBH, $2 \times 1.5 \text{ feet} = 3 \text{ feet}$, this tree will be fenced 3 feet out in all directions from the base of the tree trunk, unless the drip line is a greater distance.



5. No vehicles, heavy equipment, construction material, tools or equipment shall be parked, stored, or used within the CRZ or tree protection area at any time.
6. All trees shall obtain adequate water during the construction process. The construction company shall allow UW-Madison Grounds access into the site to water trees either by hose or by water truck.
7. Tree protection shall be required whenever there will be activity that could result in compaction within the critical root radius and drip line of a tree to be saved or whenever there is potential for damage to branches/limbs of plants to be saved and protected during construction.
8. If existing trees on site must be worked around or under, precautions shall be taken to prevent root, trunk and branch damage as well as soil degradation within the CRZ and drip line. All such work shall be coordinated with UW-Madison Grounds.
9. If heavy equipment must be driven within the CRZ or drip line of the tree, wooden bridging, or 12 inches of shredded hardwood mulch shall be placed under trees with the CRZ to prevent compaction and root damage. All such work shall be coordinated with UW-Madison Grounds and approved by UW-Madison Campus Planning & Landscape Architecture
10. Soil compaction or chemical contamination of soil is not acceptable.
11. All roots over ½ inch in diameter that need to be removed shall be cut with a sharp, clean hand pruner or pruning saw. Roots torn by construction equipment shall not be left without a clean cut.
12. If utilities are to go under tree root systems, an auger shall be used to bore under the roots rather than trenching through the root system. See standard detail in Division 1 Appendix
13. Silt fence shall not be trenched within the CRZ and drip line of any tree. Use silt socks as an alternative.
14. Contractors shall be responsible for setting up tree maintenance programs to maintain trees within construction boundaries. This includes watering, preconstruction pruning, and clearance pruning during construction. Coordinate work with UW-Madison Grounds.
15. 8' Chain link fence shall be used for tree and vegetation protection. Establish criteria for protection of branches versus removal of limbs for vegetation with high potential for damage during work. All such work shall be coordinated with UW-Madison Grounds.
16. Trees damaged during construction shall be attended to and/or pruned. Contact the UW-Madison Project Manager when damage occurs and coordinate remediation work with UW-Madison Grounds.



01 57 00 Temporary Controls

01 57 23 Temporary Storm Water Pollution Controls

1. Riprap stone at stormwater outflow points is required wherever concentrated flow is leaving the site.
2. Existing stormwater drainage paths shall be diverted around the work site.
3. The water from these diverted paths, as well as water from the disturbed work site, will result in increased water volume in some drainage ways, or may mandate creation of new drainage ways; this has such effects as increased flow velocity and larger flow area subject to erosion—these effects shall be mitigated with check dams, straw bales, etc.
4. Filter sediments from drainage water before it reaches the sewer system or the lake. This can be done with silt fence, inlet protection, and other best management practices used by City of Madison, WI DNR, and/or approved by UW-Madison Project Manager.

01 70 00 Execution and Closeout Requirements

01 74 00 Cleaning and Waste Management

01 74 19 Construction Waste Management and Disposal

This Section specifies requirements for salvaging, recycling and disposing of construction waste.

1. Preconstruction and Pre-bid Meetings: The Pre-bid and Preconstruction Meetings will include discussion of construction waste management requirements. Prior to the commencement of the work, the Lead Contractor should schedule and conduct a meeting with the A/E, DFD, and the UW-Madison Project Manager to discuss the proposed Construction Waste Management Plan to develop a mutual understanding regarding details of construction waste management implementation.
2. Specifications for waste management should be based upon the DFD Master Specification Section 01 74 19 Construction Waste Management
3. Waste Management Goals: The diversion goal to be achieved at Substantial Completion of the Project shall be at least 75 percent by weight. Include materials destined for alternative daily cover (ADC) in the calculations as waste (not diversion). Any materials sent to a commingled recycling facility for processing must take the facility average recycling rate and must include any ADC as waste (not diversion). Hazardous waste and land clearing debris are not included.
4. The Contractor shall provide monthly progress reports of the waste generated, including disposal and diversion rates of the project. The monthly progress reports should use disposal records such as tickets and manifests that indicate the following: material type, amount/quantity, and processing type (landfilled, recycled, reused/salvaged, etc.).
5. The Contractor shall provide a final waste management report detailing all waste generated, including disposal and diversion rates for the project.



01 80 00 Performance Requirements

01 80 00 Facility Performance Requirements

01 81 13 Sustainable Design Requirements

1. The UW-Madison Office of Sustainability is developing its Green Building Standards & Guidelines for use in designing sustainable facilities. Consult the Office of Sustainability for their Standards & Guidelines..
2. Use non-toxic, renewable, durable, locally sourced, and sustainable finishes to the greatest extent possible.

01 81 22 Crime Prevention

1. Crime Prevention Through Environmental Design (CPTED) is a multi-disciplinary approach for reducing crime through urban and environmental design and the management and use of built environments. UW-Madison promotes and encourages CPTED principles to create safer communities and environments. The International CPTED website can be found at <http://www.cpted.net/>.



BIM for Architects & Engineers

See following attachment



UNIVERSITY OF WISCONSIN - MADISON BUILDING INFORMATION MODELING FOR ARCHITECTS & ENGINEERS

Division 01. General Requirements

01 0 00. Administrative Requirements

In addition to the Division of Facility Development (DFD) Building Information Modeling (BIM) Standards, the University of Wisconsin-Madison (UW-Madison) requests that the Architects and Engineers (AE) Firm for each project provide a Building Information Model.

00 54 36. Building Information Model

1. BIM Requirement

The primary objective is an implemented process focused on the development, use and transfer of the digital information model of a building project in order to improve the design, construction and operation of a project or facility.

- 1.1. The Design Team shall use parametric BIM Authoring software for UW-Madison projects. Architects, Structural, Mechanical, Electrical, Plumbing Engineers, and Consultants are requested to use the following design authoring software:
 - Autodesk® Revit® Architecture
 - Autodesk® Revit® MEP
 - Autodesk® Revit® Structure
 - Autodesk® AutoCAD
 - Autodesk® Civil 3D
- 1.2. Projects will remain on the same software release at the beginning and throughout the life of the project, unless all team members of the project agreed to a different software release. AE shall follow the guidelines and requirements detailed in the DFD BIM Standards and in applicable portions of this document for BIM related services.
- 1.3. Where DFD Standards and UW-Madison Standards are not provided, AE's in-house BIM Standards are acceptable methods in producing models, construction drawings, and final submissions.

2. Level of Development

BIM Level of Development (LOD) describes the level of completeness to which a BIM is developed and their minimum requirements. The Level of Development is accumulative and should progress from the design phase through the construction phase.

- 2.1. BIMs shall be created and include geometry, physical characteristics, information and data necessary so to describe and facilitate the design, intended construction, and cost estimating of a project as necessary to meet the requirements, as described in



this document and the AE's BIM Execution Plan, for each Design Phase of a project. In addition, drawings, simulations, and services required for analysis and review shall be extractions from the BIMs

- 2.2. Required Building Elements need not illustrate, depict individual parts that are required for the assembly and/or the manufacture of the Modeled Building Element. The intent and requirements for a Modeled Building Element is different for each phase and LOD. It is to provide overall size, shape, clearances, information, data, and the orientation of a Modeled Building Element for its installation and coordination with other required work, as well as for the population of required Schedules.

3. Shared Parameter

Shared Parameter is a definition of a container for information that can be used in multiple families or projects.

- 3.1 Upon request, UW-Madison will provide the AE with the UW Revit Families, Shared Parameter, and Templates. The UW-Madison shared parameters shall include but not limited to:

- UW Building No.
- UW Asset I.D.
- UW Asset Type
- UW Equipment Name
- UW Manufacturer
- UW Serial Number
- UW Installation Date

4. Architect and Engineer Discipline Model Requirement

4.1. Architectural

In addition to the DFD minimum requirements, the model should include the following architectural elements to a level that defines the design intent and accurately represents the design solution:

- Architectural Site
- Existing conditions
- Demolition items
- New interior and exterior walls including but not limited to:
 - Doors, windows, openings
 - Interior and exterior soffits, overhangs, sun control elements
 - Parapets, screening elements
 - Architectural precast
- Floor, ceiling and roof systems including but not limited to:
 - Appropriate structural items listed below if not provided by the structural engineer and integrated into the architectural model for coordination and document generation.
 - Insulation, ceiling systems, and floor are to be included.
 - Roof, floor and ceiling slopes, if needed, shall be modeled.
 - Soffits, openings, and accessories will also be modeled.
- Elevators, stairs, and ramps



- Casework, shelving, and other interior architectural elements
- Furnishings, fixtures, and equipment
 - Furniture Systems
 - Specialty equipment (food service, medical, etc)
 - Model mechanical, electrical and plumbing items that require architectural space (toilets/sinks/etc), require color/finish selection
 - (louvers, diffusers, etc.) or affect 3D visualization (lighting fixtures) unless provided by engineers.
- Clearance zones for access, door swings, service space requirements, gauge reading, and other operational clearance must be modeled as part of all equipment and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.

4.2. Structural

In addition to the DFD minimum requirements, the model should include the following structural elements to a level that defines the design intent and accurately represents the design solution:

- Foundations
- Framing
 - Columns and beams
 - Floor Joists
 - Open Web Joist
 - Precast Concrete
 - Floors, including overall extents and openings
 - Fireproofing, clearance zones
- Housekeeping pads
- Wall Types
 - Load Bearing Walls
 - Structural Foundation Walls

4.3. Mechanical HVAC Systems

In addition to the DFD minimum requirements, the model should include the following mechanical elements to a level that defines the design intent and accurately represents the design solution:

- Equipment
 - Fans, VAV's, compressors, chillers, cooling towers, air handlers etc.
- Distribution
 - Supply, return, exhaust, relief and outside air ductwork modeled to outside face dimension or duct insulation (whichever is greater)
 - Duct Fittings
 - Diffusers, grilles, louvers, hoods, radiant panels, perimeter units, wall units
- Pipes larger than 2" diameter, include any insulation
- Stacked/bundled pipes 2" or greater in diameter
- Clearance zones for access, door swings, service space requirements, gauge reading, equipment removal zones, and other operational clearance must be modeled as part of the HVAC equipment and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.



4.4. Plumbing and Fire Protection Systems

In addition to the DFD minimum requirements, the model should include the following plumbing and fire protection elements to a level that defines the design intent and accurately represents the design solution:

- Waste and Vent Piping sized at and over 2" diameter, include any insulation
 - Roof and floor drains, leaders, sumps, grease interceptors, tanks, water treatments and other major items.
- Supply Piping larger than 2" diameter, include any insulation
 - Domestic Booster Pumps
- Lab and Med Gas Piping at and over 1" diameter, include any insulation
- Fixtures: sinks, toilet fixtures, water tanks, floor sinks
- Fire protection
 - Sprinkler lines larger than 2" diameter
 - Sprinkler heads, Fire Protection Pumps
 - Stand pipes, wall hydrants, fire department connections, risers, including valve clearances
- Clearance zones for access, service space requirements, gauge reading, equipment removal zones, valve clearances and other operational clearance must be modeled as part of the plumbing and fire protections system and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.

4.5. Electrical Systems

In addition to the DFD minimum requirements, the model should include the following electrical elements to a level that defines the design intent and accurately represents the design solution:

- Power and Telecommunications
 - Interior and exterior transformers, emergency generators, cable tray and other equipment
 - Main and distribution panels and switchgear including access clearances
 - Main IDF's
 - Feeders and conduit larger than 2" diameter
 - Outlets, switches, junction boxes
- Lighting
 - Permanently mounted lighting fixtures
 - Lighting Controls
 - Switches
 - Junction Boxes
- Fire Alarm and Security Systems
 - Input devices
 - Notification devices
 - Associated equipment and access clearances
 - Permanently mounted fixtures
 - Building Controls
- Clearance zones for access, door swings, service space requirements, equipment removal zones, and other operational clearance must be modeled as part of the electrical equipment for collision checking. These clearance zones should be modeled as invisible solids within the object.



4.6. Specialty Equipment

In addition to the DFD minimum requirements, the model should include the following specialty equipment elements to a level that defines the design intent and accurately represents the design solution:

- Equipment
- Rough-in connections points
- Clearance zones for access, door swings, service space requirements, equipment removal zones, and other operational clearance must be modeled as part of the specialty equipment for collision checking. These clearance zones should be modeled as invisible solids within the object.

4.7. Civil Engineering

In addition to the DFD minimum requirements, the model should include the following civil engineering elements to a level that defines the design intent and accurately represents the design solution:

- Topography
- Landscaping
- Stormwater

5. Coordination Meeting

- 5.1. BIM Coordination Meeting shall occur regularly and in accordance to what is defined in the AE's Design Team - BIM Implementation Plan Outline, by necessity of the project and the coordination team using a collaboration software. Attendance is mandatory by all team members to maintain the coordination and construction schedules. Throughout the modeling process, any design conflicts, clashes, interferences, discrepancies in drawing details and design documentation, lack of information and coordination issues will be identified, documented, reviewed, and/or resolved by the coordination team.
- 5.2. AE BIM Manager will be responsible for BIM coordination meeting management.
- 5.3. Attendees shall include but not limited to:
 - Project Manager
 - Construction Manager
 - MEP Contractor
 - Design Team
 - Owner's BIM Facilitator

6. BIM Deliverables

BIMs are submitted to DFD by the AE and serve as the permanent record of construction for the facilities and landscape. Upon substantial completion, the AE shall submit:

- 6.1. BIM - The model shall have information in the component parameters. Files and models shall be cleaned of extraneous layers, sheets, revision clouds, worksets, section cuts, reference lines, reference planes, and other miscellaneous content typically produced during BIM design.





BIM for Contractors

See following attachment



UNIVERSITY OF WISCONSIN - MADISON BUILDING INFORMATION MODELING FOR CONTRACTORS

Division 01. General Requirements

01 0 00. Administrative Requirements

In addition to the Division of Facility Development (DFD) Building Information Modeling (BIM) Standards, the University of Wisconsin-Madison (UW-Madison) requests that the Contractor for each project provide a Building Information Model.

00 54 36. Building Information Model

1. BIM Requirement

The primary objective is an implemented process focused on the development, use and transfer of the digital information model of a building project in order to improve the design, construction and operation of a project or facility.

- 1.1. The Construction Team shall use parametric BIM Authoring software for UW-Madison projects.
- 1.2. Projects will remain on the same software release at the beginning and throughout the life of the project, unless all team members of the project agreed to a different software release. Contractor shall follow the guidelines and requirements detailed in the DFD BIM Standards and in applicable portions of this document for BIM related services.
- 1.3. Where DFD Standards and UW-Madison Standards are not provided, Contractor's in-house BIM Standards are acceptable methods in producing models, construction drawings, and final submissions.

2. Level of Development

BIM Level of Development (LOD) describes the level of completeness to which a BIM is developed and their minimum requirements. The Level of Development is accumulative and should progress from the design phase through the construction phase.

- 2.1. BIMs shall be created and include geometry, physical characteristics, information and data necessary so to describe and coordinate the construction, and cost estimating of a project as necessary to meet the requirements, as described in this document and the Contractor's BIM Execution Plan. In addition, drawings, simulations, and services required for analysis and review shall be extractions from the BIMs
- 2.2. Required Building Elements need not illustrate, depict individual parts that are required for the assembly and/or the manufacture of the Modeled Building Element. It is to provide overall size, shape, clearances, information, data, and the orientation of a Modeled Building Element for its installation and coordination with other required work, as well as for the population of required Schedules.



3. Shared Parameter

Shared Parameter is a definition of a container for information that can be used in multiple families or projects.

3.1 Upon request, UW-Madison will provide the Contractor with the UW Revit Families, Shared Parameter, and Templates. The UW-Madison shared parameters shall include but not limited to:

- UW Building No.
- UW Asset I.D.
- UW Asset Type
- UW Equipment Name
- UW Manufacturer
- UW Serial Number
- UW Installation Date

4. Construction Model Requirement

4.1. Architectural

In addition to the DFD minimum requirements, the model should include the following architectural elements to a level that accurately represents installation and constructability:

- Architectural Site
- Existing conditions
- New interior and exterior walls including but not limited to:
 - Doors, windows, openings
 - Interior and exterior soffits, overhangs, sun control elements
 - Parapets, screening elements
 - Architectural precast
- Floor, ceiling and roof systems including but not limited to:
 - Appropriate structural items listed below if not provided by the structural engineer and integrated into the architectural model for coordination and document generation.
 - Insulation, ceiling systems, and floor are to be included.
 - Roof, floor and ceiling slopes, if needed, shall be modeled.
 - Soffits, openings, and accessories will also be modeled.
- Elevators, stairs, and ramps
- Casework, shelving, and other interior architectural elements
- Furnishings, fixtures, and equipment
 - Furniture Systems
 - Specialty equipment (food service, medical, etc)
 - Model mechanical, electrical and plumbing items that require architectural space (toilets/sinks/etc), require color/finish selection (louvers, diffusers, etc.) or affect 3D visualization (lighting fixtures) unless provided by engineers.
- Clearance zones for access, door swings, service space requirements, gauge reading, and other operational clearance must be modeled as part of all equipment and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.



4.2. Structural

In addition to the DFD minimum requirements, the model should include the following architectural elements to a level that accurately represents installation and constructability:

- Foundations
- Framing
 - Columns and beams
 - Floor Joists
 - Open Web Joist
 - Precast Concrete
 - Floors, including overall extents and openings
 - Fireproofing, clearance zones
- Housekeeping pads
- Wall Types
 - Load Bearing Walls
 - Structural Foundation Walls

4.3. Mechanical HVAC Systems

In addition to the DFD minimum requirements, the model should include the following mechanical elements to a level that accurately represents installation and constructability:

- Equipment
 - Fans, VAV's, compressors, chillers, cooling towers, air handlers etc.
- Distribution
 - Supply, return, exhaust, relief and outside air ductwork modeled to outside face dimension or duct insulation (whichever is greater)
 - Duct Fittings
 - Diffusers, grilles, louvers, hoods, radiant panels, perimeter units, wall units
- All pipes, include any insulation
- Clearance zones for access, door swings, service space requirements, gauge reading, equipment removal zones, and other operational clearance must be modeled as part of the HVAC equipment and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.

4.4. Plumbing and Fire Protection Systems

In addition to the DFD minimum requirements, the model should include the following plumbing and fire protection elements to a level that accurately represents installation and constructability:

- All Waste and Vent Piping, include any insulation
 - Roof and floor drains, leaders, sumps, grease interceptors, tanks, water treatments and other major items.
- All Supply Piping include any insulation
 - Domestic Booster Pumps
- Lab and Med Gas Piping, include any insulation
- Fixtures: sinks, toilet fixtures, water tanks, floor sinks
- Fire protection
 - Sprinkler lines



- Sprinkler heads, Fire Protection Pumps
 - Stand pipes, wall hydrants, fire department connections, risers, including valve clearances
- Clearance zones for access, service space requirements, gauge reading, equipment removal zones, valve clearances and other operational clearance must be modeled as part of the plumbing and fire protections system and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.

4.5. Electrical Systems

In addition to the DFD minimum requirements, the model should include the following electrical elements to a level that accurately represents installation and constructability:

- Power and Telecommunications
 - Interior and exterior transformers, emergency generators, cable tray and other equipment
 - Main and distribution panels and switchgear including access clearances
 - Main IDF's
 - All Feeders and conduits
 - Outlets, switches, junction boxes
- Lighting
 - Permanently mounted lighting fixtures
 - Lighting Controls
 - Switches
 - Junction Boxes
- Fire Alarm and Security Systems
 - Input devices
 - Notification devices
 - Associated equipment and access clearances
 - Permanently mounted fixtures
 - Building Controls
- Clearance zones for access, door swings, service space requirements, equipment removal zones, and other operational clearance must be modeled as part of the electrical equipment for collision checking. These clearance zones should be modeled as invisible solids within the object.

4.6. Specialty Equipment

In addition to the DFD minimum requirements, the model should include the following specialty equipment elements to a level that accurately represents installation and constructability:

- Equipment
- Rough-in connections points
- Clearance zones for access, door swings, service space requirements, equipment removal zones, and other operational clearance must be modeled as part of the specialty equipment for collision checking. These clearance zones should be modeled as invisible solids within the object.



4.7. Civil Engineering

In addition to the DFD minimum requirements, the model should include the following civil engineering elements to a level that accurately represents installation and constructability:

- Topography
- Landscaping
- Stormwater

5. Coordination Meeting

- 5.1. BIM Coordination Meeting shall occur regularly and in accordance to what is defined in the Construction Team - BIM Implementation Plan Outline, by necessity of the project and the coordination team using a collaboration software. Attendance is mandatory by all team members to maintain the coordination and construction schedules. Throughout the construction process, any construction conflicts, clashes, interferences, discrepancies in drawing details and construction documentation, lack of information and coordination issues will be identified, documented, reviewed, and/or resolved by the coordination team.
- 5.2. Construction BIM Manager will be responsible for BIM coordination meeting management.
- 5.3. Attendees shall include but not limited to:
 - Project Manager
 - Construction Manager
 - MEP Contractor
 - Design Team
 - Owner's BIM Facilitator

6. BIM Deliverables

BIMs are submitted to DFD by the Contractor and serve as the permanent record of construction for the facilities and landscape. Upon substantial completion, the Contractor shall submit:

- 6.1. The model shall have information in the component parameters. Files and models shall be cleaned of extraneous layers, sheets, revision clouds, worksets, section cuts, reference lines, reference planes, and other miscellaneous content typically produced during BIM design.
- 6.2. If the BIM Authoring software is not Revit, UW-Madison requests a separate 2018 or older version Revit (RVT) file for each discipline.



BIM Floor Naming Standards

Naming convention for Floor Levels in the Architectural model

XXXX = Project Phase Number

XXXX BASEMENT DEMOLITION PLAN
XXXX BASEMENT REMODEL PLAN

XXXX - 1ST FLOOR DEMOLITION PLAN
XXXX - 1ST FLOOR REMODEL PLAN

XXXX - 1ST FLOOR CEILING DEMOLITION PLAN
XXXX - 1ST FLOOR CEILING REMODEL PLAN

... 2nd FLOOR
3RD FLOOR ...
Roof

Naming convention for Floor Plan Views in the MEP models

XXXX = Project Phase Number

XXXX - BASEMENT ELECTRICAL DEMOLITION PLAN
XXXX - BASEMENT ELECTRICAL REMODEL PLAN

XXXX - 1ST FLOOR ELECTRICAL DEMOLITION PLAN
XXXX - 1ST FLOOR ELECTRICAL REMODEL PLAN

XXXX - 1ST FLOOR ELECTRICAL CEILING DEMOLITION PLAN
XXXX - 1ST FLOOR ELECTRICAL CEILING REMODEL PLAN

XXXX - 2nd FLOOR ELECTRICAL CEILING DEMOLITION PLAN
XXXX - 2ST FLOOR ELECTRICAL CEILING REMODEL PLAN

...



Naming convention for Arch, MEP Sheet Views in the CD model

Architectural plan title doesn't need the word "Architectural".

BASEMENT DEMOLITION PLAN
BASEMENT REMODEL PLAN

FIRST FLOOR DEMOLITION PLAN
FIRST FLOOR REMODEL PLAN

Mechanical, Electrical, Plumbing & Fire Protection title will need to spelled out.

BASEMENT ELECTRICAL DEMOLITION PLAN
BASEMENT ELECTRICAL REMODEL PLAN
FIRST FLOOR ELECTRICAL DEMOLITION PLAN
FIRST FLOOR ELECTRICAL REMODEL PLAN

FIRST FLOOR ELECTRICAL CEILING DEMOLITION PLAN
FIRST FLOOR ELECTRICAL CEILING REMODEL PLAN

SECOND FLOOR ELECTRICAL DEMOLITION PLAN
SECOND FLOOR ELECTRICAL REMODEL PLAN

...



Drawings Checklist

This list is not comprehensive and does not include all the requirements of a given project, nor are all elements in the checklist pertinent to all projects. The list represents some elements that reviewers may want to look at as is appropriate for the given project. Confer with the UW-Madison Project Manager if items are deemed not pertinent to a specific submittal. Consult other divisions of these Guidelines for additional drawing requirements for project reviews.

All numbers to the right of each checklist item indicate the latest drawing review stage at which the item should be coordinated.

35% = Design Development Review

100% = Construction Document Review

Project Title _____

Reviewer's Name _____

Coordinated?
YES NO N/A %

CIVIL				
AE has read and is following the UW-Madison Technical Guidelines				35
AE has verified that that all drawings contain the required elements as stated in the UW Technical Guidelines Div. 32 05 20 "Drawing Requirements for Exterior Improvements.				35
AE demonstrates that new underground utilities (power, telephone, water, sewer, gas, storm drainage, fuel lines, grease traps, fuel tanks) have no interferences with other utilities or structures.				35
AE shows the limits of construction, clearing, grading, sodding, grass or mulch are shown and are consistent in other disciplines.				35
AE has verified that fire hydrants and street light poles do not conflict with other utilities or other above ground items.				35
AE coordinated the proposed grading plan with the proposed ground floor/ first floor elevations of all other disciplines.				35
AE verified locations of gas meters, water meters, electrical transformers, substations are acceptable with owner, utility, and designer.				35
AE verified that all pertinent existing and proposed grades are shown.				35
AE verified that site runoff does not adversely affect areas off site.				35
LIFE SAFETY PLANS				
Verify location of perimeter fire lane and 150' fire department access requirement.				35
Review construction classification and allowable area.				35
Review sprinkler and fire lane floor area increase worksheet.				35
Locate Fire proofing & Fire Rated Walls.				35
Knox Box Location				35
Knox Box Specification				100
Review NFPA 13 vs. 13R requirements (if applicable – 13R will be rare on campus).				35
Review fire apparatus worksheet.				35
Review Pre-design Report (if any).				35
SITE PLAN				
AE has read and is following the UW Technical Guidelines				35
AE has verified that that all drawings contain the required elements as stated in the UW Technical Guidelines Div. 32 05 20 "Drawing Requirements for Exterior Improvements.				35
AE has verified that limits of construction, clearing, grading, sodding, grass or mulch are shown and consistent with other disciplines.				35
AE has verified that the locations of flag poles, dumpster pads, and landscaping have been coordinated with other discipline site plans.				35
Specialty paving/surfaces, and curbs & gutters are identified.				35



Dumpster locations / enclosures are shown in correct locations.				35
Site signage locations are shown and AE coordinated them with Transportation.				35
Property line dimensions on survey or civil site plans match architectural.				35
Building is located behind setback lines and outside easements.				35
Limits of construction are shown and AE verified that they are consistent with other disciplines.				35
Distinction shown between asphalt and concrete paved areas.				35
All site detail meet UW Technical Guidelines				35
Existing and new work is clearly identified.				35
ARCHITECTURAL - GENERAL				
Property line dimensions on survey or civil site plans match architectural.				35
Building is located behind set-back lines.				35
Locations of columns and bearing walls, and overall building dimensions match structural.				35
Existing and new work is clearly identified on site plans.				35
Building elevations match floor plans. In particular, check roof lines, window and door openings, louver openings, exterior light fixtures, and expansion joints.				35
Building sections match elevations and plans.				35
Wall sections match architectural and structural building sections.				35
Size of openings for windows and doors matches structural. Verify window glass types with specifications.				35
Expansion joints are continuous throughout the building.				100
Large scale partial floor plans match small scale floor plans.				100
Reflected ceiling plans match architectural floor plans to ensure no variance with wall locations. Location of electrical fixtures and mechanical registers/diffusers on electrical and mechanical plans does not conflict with location on reflected ceiling plans.				100
Room finish schedule information matches plan and elevation information; including room numbers, names of rooms, finishes, and ceiling heights. look for omissions and inconsistencies.				100
Door schedule information matches plan, and elevation information; including sizes, types, labels, etc. Look for omissions and inconsistencies.				100
The location of fire rated walls matches the location of fire and/or smoke dampers on mechanical plans.				100
Cabinets will fit in available space and electrical outlets on cabinet walls are at the correct height.				100
Flashing material, gauges and construction methods match drawings and specifications.				100
Verify edge condition at wall/roof is adequate to contain tapered insulation thickness.				100
The locations of flag poles, dumpster pads, and landscaping have been coordinated with other discipline site plans.				100
Walls required to extend to deck above do not interfere with joists above.				35
FLOOR PLAN(S)				
Structural grid and column locations, with typical bay dimensions indicated.				35
Exterior wall articulation with window openings, doors, overhead doors, and important design elements.				35
Building elevations match floor plans (roof lines, window and door openings, louvers, exterior light fixtures, and expansion joints).				35
Door and window opening sizes match structural.				35
Enlarged unit plans match overall floor plans.				35
Millwork indicated.				35
Door schedule information matches plan and elevation information; including sizes, types, labels, etc.				35
Reflected ceiling plans match floor plans.				35
Door and window opening sizes match structural.				35



All plans have generic wall type or poche' wall for Revit projects.				35
Enlarged unit plans match overall floor plans.				35
Interior partitions with doors, borrowed lights, and important design elements.				
Rated enclosures and fireproofing indicated.				35
Stairs, elevators, and access ladders accurately depicted.				35
Toilet rooms indicated.				35
Electrical and Mechanical rooms and chases, data and telecom closets indicated.				35
Millwork indicated.				35
Specialty construction or design elements and explanatory notes.				35
Indicate special ceiling elements on Reflected Ceiling Plan.				35
Indicate special finishes on Room Finishes Schedule.				35
Building section mark.				35
Room finish schedule information matches plan and elevation information; including room numbers, room names, finishes, and ceiling heights.				35
Door schedule information matches plan and elevation information; including sizes, types, labels, etc.				35
Cabinets will fit in available space and electrical outlets on cabinet walls are at the correct height.				35
Flashing material, gauges and construction methods match drawings and specifications.				35
Verify edge condition at wall/roof is adequate to contain tapered insulation thickness.				35
Walls required to extend to deck above do not interfere with joists above.				35
Owner-supplied equipment (vending, appliances, etc.).				35
ROOF PLAN(S)				
Building Footprint with major roof materials indicated.				35
Intended roof pitch and drainage systems (located gutters and downspouts).				35
Skylights located.				35
Mechanical screens indicated.				35
Mechanical RTU locations.				35
EXTERIOR ELEVATIONS				
Minimum all principal elevations depicted.				35
Exterior wall materials indicated.				35
Windows and doors indicated.				35
Floor elevations indicated.				35
Building response to site contours.				35
Column grids indicated.				35
Special design elements and explanatory notes.				35
Building-mounted lighting and signage.				35
Mechanical screening.				35
BUILDING SECTIONS				
Indicate major materials and systems.				35
Column grid indicated.				35
Floor elevations indicated.				35
Roof pitch.				35
Fire proofing (if required).				35
Special design elements and explanatory notes.				35
STRUCTURAL				
Column grid lines on structural and architectural match.				35
Column locations are the same on structural and architectural.				35
Perimeter slab on structural matches architectural.				35
Depressed or raised slabs are indicated and match architectural.				35
Slab elevations match architectural.				35



Foundation <i>piers</i> are identified and sized on a schedule or plan.				100
Foundation <i>beams</i> are identified and sized on a schedule or plan.				100
Locations of roof framing plan column lines and columns match foundation plan column lines and columns.				35
Structural perimeter roof line matches architectural roof plan.				35
Columns, floor beams, and roof beams are listed in column and beam schedules.				100
Verify columns drawn match column profile as scheduled- (i.e. if a W 15x24 is scheduled, a W 15x24 should be shown)				35
Sections are properly labeled.				100
Expansion joint locations match other disciplines.				35
Dimensions match architectural.				35
Drawing notes do not conflict with specifications.				100
Roof drain locations and roof slopes match architectural roof plan and plumbing plan.				35
PLUMBING AND MECHANICAL				
Plumbing / Mechanical floor plans match architectural floor plans.				35
New gas, water, sewer, etc. lines connect to existing or new utilities on civil drawings.				35
Plumbing fixtures match plumbing schedules and architectural locations.				35
Roof drain locations and roof slopes match architectural roof plan.				35
Pipes and drains are connected and do not interfere with foundations.				35
Wall chases are provided on architectural to conceal vertical piping.				35
Sanitary drain system pipes are sized and all fixtures are connected.				100
HVAC floor plans match architectural.				35
Sprinkler heads are in appropriate rooms and do not interfere with other ceiling items.				35
Mechanical/plumbing ducts and pipes do not conflict with architectural features or structural members.				35
Adequate ceiling height exists at worst case duct intersection or largest beam.				100
Structural supports required for mechanical equipment are indicated on structural drawings.				100
Dampers are indicated at smoke and fire walls.				100
Diffuser locations match architectural reflected ceiling plans.				100
Openings for roof penetrations (ducts, fans, etc.) are indicated on structural roof plans.				100
Ductwork and piping does not interfere with walls required to extend to structure above.				100
Notes are referenced.				100
Air conditioning units, heaters, and exhaust fans match architectural roof plan locations.				100
Mechanical equipment will fit in spaces allocated and that there is room for maintenance such as removing filters or tubes.				100
Horsepower ratings, phases, and voltages of major items of equipment on mechanical and electrical drawings and specifications match.				100
Thermostat locations have been coordinated with architectural drawings.				35
Waste and supply line diagrams with sizes.				35
Air handling unit location, size, and type indicated.				35
Chiller location, size, and type indicated.				35
Boiler, heat exchanger and pumps location, and size indicated.				35
Other gas and fluids location, size, and type indicated.				35
Distribution Systems (HVAC ductwork, Plumbing, Fire Protection, etc.) line diagrams with sizing and flow requirements.				35
ELECTRICAL				
Electrical floor plans match architectural and mechanical. Check that the location of floor mounted equipment is consistent between disciplines.				35
The location of light fixtures matches architectural reflected ceiling plan and that light fixtures do not conflict with the structure or mechanical HVAC system.				100
Major pieces of equipment have electrical connections and that horsepower ratings, Phases, and voltages are consistent with other discipline schedules.				100



Guidelines for Planning and Design of UW-Madison Facilities
Division 01 Appendix – Drawings Checklist
University of Wisconsin – Madison

10/17/2022

Locations of panel boards are consistent with architectural, mechanical, and plumbing floor plans and that the panel boards are indicated on the electrical riser diagram.				35
Notes are referenced.				100
There is sufficient space for electrical panels to fit.				35
Electrical panels are not recessed in fire rated walls.				35
Exterior electrical equipment locations are coordinated with site paving, grading, and landscaping.				100
Locations of electrical conduit runs, floor trenches, and openings are coordinated with structural plans.				35
Equipment Plan indicating switch gear, transformers, and generators location and size indicated.				35
One line power distribution plan.				100
Lighting Plan with fixture cut sheets or quality/performance requirements.				35
Light fixture locations match architectural reflected ceiling plan.				35
Typical power plan with special requirements.				35
Typical communications plan with special requirements and equipment locations.				35
FOOD SERVICE – verify that:				
The equipment layout matches other discipline floor plans and that there are no conflicts with columns.				35
Equipment is connected to utility systems.				35
SPECIFICATIONS				
Check that bid items explicitly state what is intended.				35
Check specifications for phasing of construction.				100
Compare architectural finish schedule to specification index.				35
Check major items of equipment and verify that they are coordinated with contract drawings.				100
Verify that the items specified “as indicated” or “where Indicated” in the specifications are in fact indicated on contract drawings.				100
Verify that all specification sections are in the index and that cross referenced specifications sections exist.				100
Verify that thickness of materials or quantities of materials ARE NOT in specifications.				100



Facility Information Requirements

Design and Drawing Requirements

Project Start (Planning & Design)

1. **Facility number** assigned by Space Management for accounting.
2. **Facility number** included in FP&M project tracking.
3. **Facility name** provided to Space Management. A working name is sometimes used until an official moniker has been approved.
4. **Facility address** assigned by the designated main entry. This can also take some time and negotiations. Mail drops are limited on campus and may play a role in addressing.
5. **INSITE facility data** will now be included as “Planning” status.

Pre Design Development (UW Managed) or Preliminary (DFD) Review

1. **Floor level assignments** need to be established in conjunction with Space Management per UW guidelines. See *Typical Floor Level Numbering* below.
2. **Vertical passages numbering** will be done by Space Management per UW guidelines. See *Typical Vertical Passage Numbering* below.
3. **Exterior door numbering** will be done by Space Management per UW guidelines. See *Exterior Door Numbering* below.
4. **Room number assignments** will be done by Space Management on the UW’s behalf.
 - a. The request should be made early enough to be included in the 35% review.
 - b. Numbering rooms can take about 4 weeks to establish the best schema for the particular building. Projects within existing facilities often have unique restrictions and negotiations.
 - c. Preferably, Project Staff and/or Occupants meet with Space Management to establish building flow, function, and downstream wayfinding/signage at this time.
5. **Room number guidelines** are established by Space Management to provide transparency. See *Typical Room Numbering* below.
6. **Workstation/lab bench numbering** is done by Space Management.
7. **Review** of assigned room numbers by Space Management will be done as part of the standard 35%, 90% and bid review process.
 - a. Space Management will provide a graphic representation of the room number review with both changing and approving each number.
 - b. A listing of these room changes may also be requested.



Design Revisions (Post Design Development or Preliminary Design Review)

1. **Room numbering updates** may be needed when design is altered. It will be the responsibility of the UW Project Manager to contact Space Management with any design changes effecting room numbering.
 - a. Any appropriate A/E staff may work directly with Space Management staff.
 - b. Turn-around time required will depend on the scale of changes.

Final Review on UW Managed or DFD Projects

1. **Official Facility Name** should already be assigned.
2. **Address(es)** should already be negotiated with city.
3. **Final room number review** - hopefully just a proof of room numbers already assigned.
 - a. If there are any reported room number changes are still required to be implemented in the project, due to new redesign or oversight of implementing previous changes.

Bid Set Plans

1. Digital design documents (Revit AutoCAD dwg) be delivered to FP&M when bid paper and PDF plans are distributed. These rvt/dwg files should include plans of the site plan and floor plans, including room numbers and workstation/lab bench designations when appropriate.
 - a. Revit and/or AutoCAD documents provided will enable Space Management to easily transition these plans into FP&M dwg standards.
 - b. These will be used to create Evacuation Posters as well as by several campus units to get the facility on-line.
 - c. If AutoCAD documents are submitted, a room schedule is also required.
2. **Changes** during construction that effect walls/windows/doors/numbers should be communicated to FP&M and Space Management staff.

Record Drawings

1. **Delivery requests** of record drawings from FP&M Project Managers should include getting both hardcopy and Revit .rvt (or AutoCAD .dwg) files on disk to both FP&M & DFDM as standard protocol. Complete record plan sets, including mechanicals and details, are currently required by contract.
 - a. These digital files will be formatted as per UW guidelines in the bid documents above.
2. **Long term:** Work with DFD to collapse delivery time on as-built/record hardcopy and AutoCAD dwg files. Length of time should be measured from when the building is turned over to UW-Madison. Exceptions may need to be negotiated when substantial completion is delayed from occupancy.



Typical Floor Level Numbering

1. First floor is the main facility entry level. It is denoted as 2-digit floor numbers (i.e. 01) in campus data sets.
 - a. This is also the level that has the primary door used for the facility address.
2. Ascending floors above the first floor are numbered sequentially (second, third, . . . tenth, etc.) They are denoted as 2-digit floor numbers (i.e. 02, 03, . . . 10, etc.) in data sets.
3. The first basement level below the first floor is the first basement. It is denoted as B1 in data sets.
4. The next lower basement is the second basement. It is denoted as B1 in data sets.
5. The basement numbers increase as the depth of the floor level increase (B3, B4, etc. as needed)
 - a. For public floor levels below the entry level “Lower Level” may be used similar to the Basement level numbering (L1 down to L2, etc.)
 - b. For parking ramps under the entry floor level, “Parking Level” may be used similar to the Basement level numbering (P1 down to P2 down to P3, etc.)
6. A mezzanine floor level is a partial floor and numbered with the full floor below, so the first floor mezzanine is above the first floor. The floor level is denoted with a “M” suffix in data sets (01M, 10M, B2M, etc.)
 - a. A mezzanine level that is a very public area may be numbered as a standard floor even though is technically for code purposes. This would eliminate the “M” suffix in room numbers and make wayfinding more convenient. (floor 01M becomes 02, then 02 becomes 03, and up as needed).
 - b. Mechanical mezzanines are typically considered a mezzanine level independent of the floor below.
 - c. Penthouses are often a standard floor level, even though the floor area may be much smaller than the floor below.
7. UW-Madison does NOT use “Ground” as an acceptable level. It has no data set reference.
8. Special attention is needed for floors with different elevation levels.
 - a. All rooms starting with “1” are technically on the first level, even though the floor may have a split level component.
 - b. If possible, floors that do not connect without elevators, should be assigned a floor level that does not have a corresponding level in the facility footprint.



Typical Vertical Passage Numbering

Vertical passages such as elevators and stairwells have both a Vertical identification for the entire vertical shaft as well as a room number for every floor level for space assignment.

Elevators

1. Elevator cars have a unique number across the entire facility (ELEV 1, ELEV 2, etc.)
 - a. These are used for elevator emergency and mechanical purposes.
 - b. These numbers may be used for wayfinding and directions within facilities.
2. Elevators have sequential numbers within a facility.
 - a. In new facilities, these will increase with the increase of the room numbering schema (i.e. ELEV 1 will be closest to room number 1001, then up through room number 1999).

Stairs

1. Stairwells have a unique number across the entire facility (STAIR 1, STAIR 2, etc.)
 - a. These numbers may be used for wayfinding and directions within facilities.
2. Stairwells with the most floors for public access are numbered first, starting with STAIR 1 closest to the lowest room numbers and sequentially increasing with the room numbering.
 - a. Special consideration may be given to facility layout if the stair numbers may be used for wayfinding.
3. Stairs with less floors are numbered as they are encountered from the lowest floor up.
 - a. Stairs starting on upper floors, especially to mechanical areas are given the highest stair number identifiers.
 - b. Special consideration may be given to single flight stairs in very public areas if it will be used for wayfinding.

Exterior Door Numbering

Four Faces of Each Building

1. Every building is divided into 4 sections dictated by North, South, East or West.
 - a. If the building has many wall sections, the building is divided into the primary 4 sections.
 - b. Site location and landscape may play a practical role in the common sense of these divisions.
 - c. These 4 faces are marked with an “Exterior Cut” line on the FPM Base Floor plans and are consistent vertically up the building.
2. Then a 3 part label will be used to identify all exterior doors.



Three Part Label

Part One:

Identifies on what side of the building (orientation) the doorway is located.

1. N - North.
2. E – East.
3. S – South.
4. W – West.

Part Two:

Identifies a specific doorway on a given face of a building with 2 digits.

1. Starting at the left most corner on a given side number the doorways progressively, from left to right (counter clockwise).

Part Three:

Identifies the floor of a door is located.

1. The first floor doors have no floor level identifier.
2. Other floors have doors numbered for that floor with a dash (-) and the 2 digit floor level (Ie N01-08) E – East.

Interior Courtyards

When exterior doors enter onto an interior courtyard, the identifiers:

1. Start with “C”.
2. Then the courtyard alpha assignment from Space Management.
3. A dash “-“.
4. Ending with the floor level.
5. Example: CA1-B1

Exterior Door Sign Standards

Individual signs are to be installed in the center of the doorframe above each door. Double-sided tape will be used to attach the signs and will be provided with the signs. . The signs are 1”x 3 1/2” and made of an exterior grade plastic. The type size is 1/ 2” Helvetica single line. The UW Sign Shop will produce the signs (contact for the UW Sign Shop).

Typical Room Numbering

Here are some ‘typical’ numbering schema:

1. The first digit (#) is the floor level (ideally corresponds with the elevator buttons as well).
 - a. The first floor is the floor with entry at the primary address to the building.



-
- b. In smaller buildings, it is the first of 3 digits.
 - c. In larger buildings, it is the first of 4 digits and then the second digit is a zone of the floor.
 - d. Of course, facilities with floors 10 and above add an additional digit to the room numbers.
 2. Basements are numbered with the preface “B” and the basement level, similar to the floor level numbering so for B1## numbers are on the first basement level.
 - a. Lower Levels use the preface “L” and floor level to match the floor level, so L1## are on the first Lower level.
 - b. Parking levels use the preface “P” and floor level to match the floor level, so P1## are on the first parking level underground.
 3. Mezzanines use the preface “M” and floor level to match the floor level, so M1## are on the mezzanine above the first floor.
 - a. As described in the floor numbering, public mezzanines may be given standard floor levels to avoid using this “M” preface. In these cases all floor references (including elevator buttons) will use the sequential floor numbering, even though code reference may need to refer to a “mezzanine.”
 4. Circulation spaces are #00alpha, like 100A, 1400F, etc.
 - a. Stairs are typically #00A-#00D.
 - b. Elevators are typically #00H, #00I, #00Z, #00Y, #00X.
 - c. Main lobbies are #00L or #00M, followed by corridors #00N, #00P, etc.
 - d. #00E, #00F, and #00G are used for stairs, vestibules, or corridors as needed.
 - e. Alphabet “O” are not used if possible, since they look like 0 (unfortunately history has used “I” for elevators even though it looks like 1)
 5. Room numbering is in order of access walking through the corridors
 - a. Even numbers on one side, Odd on the other, increasing along the path of travel.
 - b. It is often desirable to allow for a number ever 10’ or so, skipping number at large spaces (this allows for inserted rooms over time).
 - c. If the building has a circular path, it is desirable for the highest number to end up back at the lowest number and continue the circle.
 - d. Suites (rooms accessed through another room of the corridor) are sub-numbered with an alpha (101A is inside 101) If there is a second sub-room, it is given the next alpha, and then continue from the main room again (101A is entered from 101, then 101B is entered from 101A, and 101C is again entered from the main room 101, etc.) The secondary sub-room is 101B, not 101AA.



- i. The suite numbering pattern is matched to the specific layout and function, increasing alphabets in the most understandable way possible while walking inside the space.
- ii. Alpha numbers may be skipped if there is a large probability that more sub-rooms may be added in the future.
- e. Existing room numbers are maintained as much as possible during internal remodels.
- i. That said, there are times that areas outside the project must be renumbered. Any related costs for this will need to be part of the project budget
- f. Mechanical rooms, and especially telecom and electrical rooms sometimes remain existing numbers, even though they do not follow the life safety pattern. Please give this VERY serious consideration, as there will never be a better time to make adjustments. However, sometimes there are significant downstream issues created by changing these particular numbers.

Workstation Numbering

Workstation (and Lab Bench) numbering is becoming more common as Schools and Colleges start using the floor plans and room data to assign occupants to these locations. It also helps them find available space for staff changes.

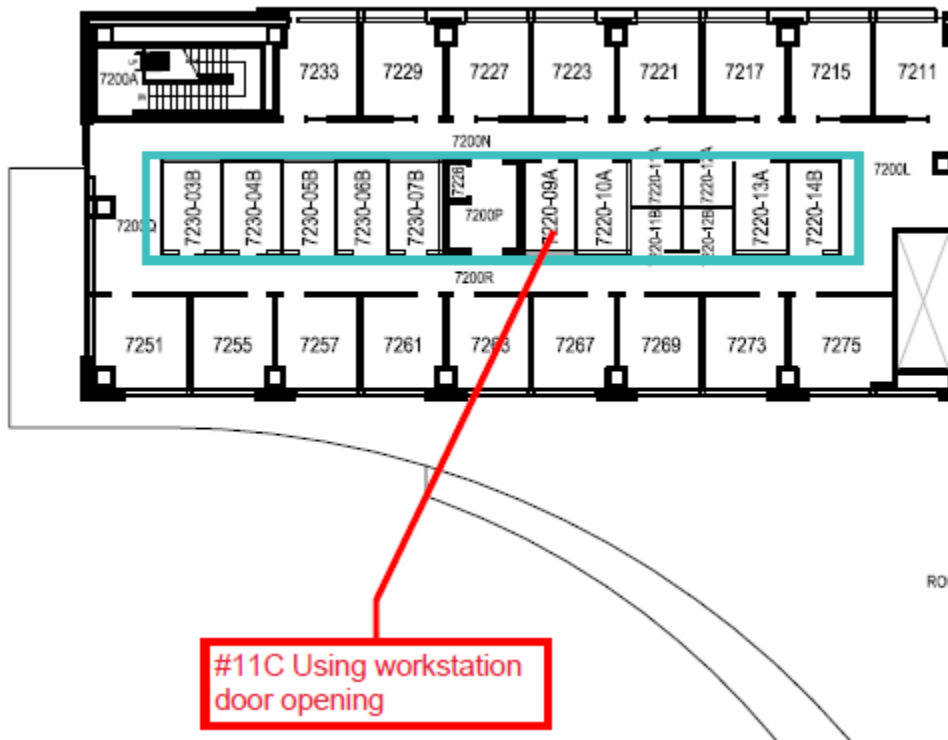
Workstation numbering may not be desirable if there is no interest in maintaining the data at this minute level. Without occupant data, it only adds more rooms and clutter to the data base with no gain in usefulness.

Workstation Numbering (20 or more)

1. A grid system will be established to identify workstation numbers within open office areas (these can be from 4'x4' to 10'x10' depending on the configuration design and long range vision of the facility).
 - a. The columns of the grid will be identified by two digit numbers, beginning with 01 and extending as needed.
 - b. The rows of the grid will be identified by alphabets (capitalized), omitting "I" and "O" to minimized confusion with 1 & 0.
 - i. In large areas, double alphabets will be used, starting with AA-AZ, then BA-BZ, CA-CZ, etc.
2. The general format is 4275-05E; where 4275 is the open office room number, 05 is the grid column, and E is the grid row.
 - a. Large grid format would be 4275-05AE.
3. The numeric component will be the first workstation identifier. This is to minimize confusion with the alpha system already in place on campus to identify permanent rooms that are entered through another room (i.e. currently rooms 101A and 101B are entered through room 101 from the public corridor).
4. The grid will typically start in the northwest corner of the workstation area--a working "north" will be established when the building is not oriented N-S-E-W (in this sample working North is up on the plan).



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5. Corridors will be skip grid sections to accommodate any future reconfigurations.
 6. Half stations (more than one seat in a grid section) will not be identified uniquely--it would be like assigning two people or data jacks in a single office.
 7. When multiple open areas do not include barriers, the grid will extend over the combined areas (as in 4275 & 4170 in this bldg.) with the appropriate room number assignment followed by the grid workstation assignment.
 8. The grid will be left in the plans for reference of future changes.
 9. When workstations are included in a suite with a mixture of offices/anterooms, judgment will be used as to identifying them as workstations vs. rooms, 101-01B vs. 101L respectively, on a case by case basis.
 10. Lone workstations in a corridor may be assigned a standard room number (101), especially if it is a public contact desk (see 4214 in attached PDF).
 11. In instances where a workstation lies in two grid areas, use the best option below:
 - a. Establish the primary flow of workstations within the grid and work out to the edges with the best possible fit (on the 4th floor, row E is the best fit for most workstations below; rows # C&D were assigned from that baseline).
 - b. Use the grid section containing the desk units (see open office 6131).
 - c. Use the grid section with the door opening (see open offices 7220 & 7230).



Workstation Numbering (less than 20)

1. The general format is 4275-05; where 4275 is the open office room number, 05 is the workstation number.
2. The numeric component will be the workstation identifier. This is to minimize confusion with the alpha system already in place on campus to identify permanent rooms that are entered through another room (i.e. currently rooms 101A and 101B are entered through room 101 from the public corridor).
3. The workstation numbering pattern will follow a pattern that starts near the main entry of the open office and follow a logical pattern around the room.
4. Workstation numbers may be skipped, where logical, to accommodate any future reconfigurations.
5. Half stations (more than one seat in a grid section) will not be identified uniquely--it would be like assigning two people or data jacks in a single office.
6. If perceived helpful, the workstation pattern can be left in the plans for reference of future changes.
7. When workstations are included in a suite with a mixture of offices/anterooms, judgment will be used as to identifying them as workstations vs. rooms, 101-01 vs. 101L respectively, on a case-by-case basis.
8. Lone workstations in a corridor may be assigned a standard room number (101), especially if it is a public contact desk (see 4214 in attached PDF) Both machine room-less (MRL) and traditional traction elevators as well as hydraulic elevators are acceptable for use in UW-Madison campus buildings.



Key Request Forms

See the following attachments:

Single Key Request Form

Multiple Keys Request Form

Contractor Utility Key Request



Facilities Planning
& Management
UNIVERSITY OF WISCONSIN-MADISON

UW MADISON LOCK SHOP

REQUEST FORM FOR SINGLE KEY ACCESS TO ROOMS - SUPPLIED BY UW LOCK SHOP


1	DATE	
2	NAME (PLEASE PRINT) - INDIVIDUAL RECEIVING KEY	
3	SIGNATURE	
4	CONTACT INFORMATION / PHONE NUMBER	
5	DEPARTMENT OR COMPANY NAME FOR NON-FP&M PERSONAL	
6	SUPERVISOR'S NAME (PLEASE PRINT)	
7	SUPERVISOR'S SIGNATURE	
8	PURPOSE FOR ISSUING KEY PROJECT NAME / NUMBER	/
9	BUILDING NAME / NUMBER	/
10	BUILDING ROOM OR AREA OF ACCESS	
11	NOTES :	
12	SCHEDULE OF DATES THAT KEY IS NEEDED,	FROM - TO -
13	ATTENTION- Any keys issued by this document are for the sole purpose of completing assigned work. These keys will be kept secure and shall NOT BE DUPLICATED OR SHARED with other persons. Any loss of keys will be reported to the UW Key Shop immediately.	
14	FP&M - AUTHORIZING SUPERVISOR	
15	SIGNATURE	
16	DATE	
17	COMMENTS:	
18	ESCORT REQUIRED	YES - NO -
19	APPROVAL	YES - NO -
20	KEY CODE -	MFG- NUMBER-
21	LOCK SHOP EMPLOYEE PROCESSING REQUEST	
22	DATE RETURNED	



UW MADISON LOCK SHOP

REQUEST FORM FOR MULTIPLE KEYS ACCESS TO ROOMS - SUPPLIED BY UW LOCK SHOP

1	DATE	
2	NAME (PLEASE PRINT) - INDIVIDUAL RECEIVING KEY	
3	SIGNATURE	
4	CONTACT INFORMATION / PHONE NUMBER	
5	DEPARTMENT OR COMPANY NAME FOR NON-FP&M PERSONAL	
6	SUPERVISOR'S NAME (PLEASE PRINT)	
7	SUPERVISOR'S SIGNATURE	
8	PURPOSE FOR ISSUING KEYS PROJECT NAME / NUMBER	/
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14	FP&M - AUTHORIZING SUPERVISOR	
15	SIGNATURE	
16	DATE	
17	KEY CODE -	MFG- NUMBER-
18	KEY CODE -	MFG- NUMBER-
19	KEY CODE -	MFG- NUMBER-
20	KEY CODE -	MFG- NUMBER-
21	KEY CODE -	MFG- NUMBER-
22	KEY CODE -	MFG- NUMBER-
23	KEY CODE -	MFG- NUMBER-
24	LOCK SHOP EMPLOYEE PROCESSING REQUEST	
25	DATE RETURNED	

		Physical Plant - Occupational Safety Program Contractor Utility key request	
Program Segment: Facility Project Access Request		Release Date:	Return Date:
Company Requesting Access	Utility Released By	Utility Returned date:	

Dear key requestor:

Thank you for your recent project order requesting Utility Keys. **All utility keys provided are required to be returned within 2 weeks of project completion.** The access approval team will need the following information in order to complete your request:

Company Name Contact Info:

Name of person being issued the key(s) Contact Info:

FP&M Responsible Person: Contact Information:

Facility Name: Project number:

Detailed explanation for access:

FP&M Responsible Person* Validation

As the Project Manager and by my signature below, The Contractor requesting the keys is under contract with the University and will abide by the rules, standards & policies set forth in the contract and by UW-Madison.

(Project Manager Shall Check Off)

- ☐ Contractor has an understanding of the hazards present while accessing requested locations.
- ☐ Contractor has the ability to recognize those hazards and properly perform corrective action in eliminating and or controlling the hazards in order to perform assigned activities safely.

FP&M Responsible Person

Date

Key issued to Validation

By my signature below, I acknowledge I have the ability to recognize any hazards that apply to entering the locations that I am requesting access to and will abide by the rules, standards & policies set forth in the contract and by UW-Madison. **All utility keys provided are required to be returned within 2 weeks of project completion.**

Key issued to Signature

Date

Please return this completed form to the Lock Shop, FPM/Physical Plant attention to the Supervisor indicated below. The University Project Manager responsible will evaluate your request based upon the information provided. If additional information is required, the assigned Project Manager will contact you accordingly. If access is granted, keys for the spaces where access is approved will be issued. Costs associated with any unique keying will be the requestor's responsibility. The intent of this procedure is to ensure a safe environment for all who access FPM/Physical Plant utility spaces.

Thank you,
Tim Croy
Building & Grounds Superintendent
UW-Madison Lock shop
tim.croy@wisc.edu
608-263-3333

Approved Access Tier/ Keys issued: _____

Electric Shop approval: _____
(If needed)

*FPM Responsible Person: Project Manager, Facilities Specialist, Shop Supervisor, Work Coordinator, Contract Representative