ADDENDUM NO. 2
ISSUE DATE: September 19, 2023

RE: CHEMISTRY 2nd and 4th FLOOR LAB RENOVATION
UNIVERSITY OF WISCONSIN - MADISON
MADISON, WISCONSIN

UW-Madison Project No. **0047 2301** /UWSA Project No. **A-22-015**

BID SUBMISSION DUE by 1:30 PM, September 28, 2023
BID SUBMISSION DUE by 1:30 PM, October 12, 2023

FROM: Strang, Inc.
811 East Washington Avenue, Suite 200
Madison, WI 53703

TO: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Contract Documents dated September 19, 2023, as noted below. Acknowledge receipt of this Addendum by inserting the number and issue date of this addendum in the blank space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of 3 pages and the attached documents:

DRAWINGS

- T001 – TITLE SHEET
- S104.1 – PLAN – 4TH FLOOR
- AD102.3-d – DEMOLITION PLAN – 2ND FLOOR – DANIELS (NORTH)
- A038 – DOOR SCHEDULE, TYPES, & DETAILS
- A304 – REFLECTED CEILING PLAN – 4TH FLOOR
- A715 – INTERIOR ELEVATIONS
- E102-5-d - ELECTRICAL POWER PLAN - 2ND FLOOR DANIELS (NORTH)
- E104-1 - ELECTRICAL POWER PLAN 4TH (WEST)
- E104-2 - ELECTRICAL POWER PLAN 4TH (EAST)
- E204 - ELECTRICAL LIGHTING PLAN - 4TH FLOOR.
- E904 - LIGHTING SCHEDULE
- E920 - ELECTRICAL PANEL SCHEDULE
- E921 - ELECTRICAL PANEL SCHEDULE
- E922 - ELECTRICAL PANEL SCHEDULE
- E923-d - ELECTRICAL PANEL SCHEDULE - DANIELS

CHANGES TO BIDDING REQUIREMENTS:

1. None

CHANGES TO CONDITIONS OF THE CONTRACT:

2. None

CHANGES TO SPECIFICATIONS (DIVISIONS 2 THRU 33):

3. Table of Contents
    a. Removed Section 08 41 13 Aluminum-Framed Entrances and Storefront from the Project.

4. Section 08 44 35 Protective Framed Glazing Assemblies
    a. Added a manufacturer.

5. Section 09 67 23 Resinous Flooring
    a. Revised floor system descriptions.

CHANGES TO DRAWINGS:

1. DRAWING SHEET T001 – Replace sheet with revised sheet attached to the addendum.
    a. Added information to identify the number of stories existing building consists of.

2. DRAWING SHEET S104.1 – Replace sheet with revised sheet attached to the addendum.
    a. Removed details and elevations reference marks.

3. DRAWING SHEET AD102.3-d – Replace sheet with revised sheet attached to the addendum.
    a. Removed keyed notes D05.7, D05-8 and D03.25.
    b. Revised keyed note D08.4.

4. DRAWING SHEET A038 – Replace sheet with revised sheet attached to this addendum.
    a. 45 Minute fire rating designation added to door schedule at doors 4429A and 4429B.
    b. Drawing reference added to 5/A038 for clarification.

5. DRAWING SHEET A304: Replace sheet with revised sheet attached to this addendum.
    c. Dimensional clarification of pendant light location in corridor 4400M

6. DRAWING SHEET A715: Replace sheet with revised sheet attached to this addendum.
    d. Detail 7: Dimensional clarification of device locations on west wall of Room 4421.
    e. Detail 8: Drawing reference added for clarification.

7. DRAWING SHEET E102.5-d – Replace Sheet with revised Sheet attached to this addendum.
    a. Revised circuiting so numbers are numerically in order and organized.

8. DRAWING SHEET E104.1 – Replace Sheet with revised Sheet attached to this addendum.
    a. Revised circuiting so numbers are numerically in order and organized.

9. DRAWING SHEET E104.2 – Replace Sheet with revised Sheet attached to this addendum.
    a. Revised circuiting so numbers are numerically in order and organized.

10. DRAWING SHEET E204 – Replace Sheet with revised Sheet attached to this addendum.
    a. Conference Room 4421: Relocate type L32 luminaires to match Architectural RCP.
    b. Conference Room 4444: Relocate type L3 luminaires to match Architectural RCP

11. DRAWING SHEET E904 – Replace Sheet with revised Sheet attached to this addendum.
    a. Revise luminaire type L1, L3, L9, L12B, L12D and L31 to remove Axis lighting.
    b. Type L32 Add Aculux.

12. DRAWING SHEET E920 – Replace Sheet with revised Sheet attached to this addendum.
    a. Revised circuiting information in panelboards.

13. DRAWING SHEET E921 – Replace Sheet with revised Sheet attached to this addendum.
    a. Revised circuiting information in panelboards.

14. DRAWING SHEET E922 – Replace Sheet with revised Sheet attached to this addendum.
    a. Revised circuiting information in panelboards.

15. DRAWING SHEET E923-d – Replace Sheet with revised Sheet attached to this addendum.
    a. Revised circuiting information in panelboards.

ADDITIONAL INFORMATION:

Pre-bid Meeting Attendees:
Provided for information only.

END OF ADDENDUM

Strang, Inc.
811 East Washington Avenue, Suite 200
Madison, WI 53703

Capital Planning and Budget
UW Systems Administration
Madison Wisconsin 53706

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SECTION 08 44 35
PROTECTIVE FRAMED GLAZING ASSEMBLIES

PART 1 GENERAL

SECTION INCLUDES
Interior protective framed glazing assembly.

SUBMITTALS
Product Data: Provide evidence of compliance with fire performance criteria and manufacturer's published product data on framing components, glazing, anchorage and fasteners, and doors, if any.
Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint location and details, and field welding required.
Samples: Submit 3-inch by 3-inch color samples for approval.

DELIVERY, STORAGE, AND HANDLING
Handle products of this section in accordance with AAMA CW-10.
Protect finished surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to substrate when exposed to sunlight or weather.

FIELD CONDITIONS
Do not install sealants when ambient temperature is less than 40 degrees F, and maintain above this minimum temperature during and for 48 hours after installation.

PART 2 PRODUCTS

INTERIOR PROTECTIVE FRAMED GLAZING ASSEMBLIES
Basis-of-Design Product: Subject to compliance with requirements, provide McGrory Glass, Inc. 'Forster Fuego Light" glass and framing system, or comparable product by one of the following:

SAFTIFIRST, a division of O'Keeffe's Inc; GPX Architectural Series with fire resistive walls/windows: www.safti.com/#sle.

Vetrotech VDS 60 framing system, with Contraflam 60 glazing.

Provide factory fabricated, factory finished framing members with glazing and related flashings, anchorage and attachment devices.
Fire Performance: Provide hourly fire-resistance-rating as indicated; tested as an assembly including glazing in compliance with ASTM E119 or UL 263 and requirements of local authorities having jurisdiction.
Acceptable evidence of compliance includes listing by UL (DIR), ITS (DIR), or testing agency acceptable to authorities having jurisdiction.

COMPONENTS
Framing Members: Formed steel structural members with aluminum cladding and non-combustible thermally-resistive material as required for fire rating.
Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors; fasteners and attachments concealed from view; reinforced as required for imposed loads.

Glazing Stops: Flush.

MATERIALS
Extruded Aluminum: ASTM B221 (ASTM B221M).
Glazing Gaskets: Type to suit application to achieve fire-rating, weather, moisture, and air infiltration requirements.

GLAZING

Fire Rated Glazing, compatible with framing system, as specified in Section 08 80 00.

FINISHES

Finishing: Apply factory finish to surfaces that will be exposed in completed assemblies.
Touch-up surfaces cut during fabrication so that no natural metal surfaces are visible in completed assemblies, including joint edges.

Finish: Polyester powder coated to AAMA 2604 standards. RAL color to match P-4.

PART 3 EXECUTION

INSTALLATION

Install wall system in accordance with limitations of fire rating and with manufacturer's instructions.
Install framed glazing assemblies in accordance with NFPA 80 and requirements of local authorities having jurisdiction.
Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
Provide alignment attachments and shims to permanently fasten system to building structure.
Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

TOLERANCES

Maximum Variation from Plumb: 1/16 inch every 3 feet non-cumulative or 1/2 inch per 100 ft, whichever is less.
Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.
Sealant Space Between Mullions and Adjacent Construction: Maximum of 3/4 inch and minimum of 1/4 inch.

CLEANING

Remove protective material from pre-finished surfaces.
Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

END OF SECTION

SECTION 09 67 23 - RESINOUS FLOORING

PART 1 - GENERAL

RELATED DOCUMENTS
Applicable provisions of Division 1 shall govern work under this Section.

SUMMARY
Section includes resinous flooring systems.

PREINSTALLATION MEETINGS
Preinstallation Conference: Conduct conference at Project site.

ACTION SUBMITTALS
Product Data: For each type of product. Include manufacturer's technical data, application instructions, and recommendations for each resinous flooring component required.

Samples for Initial Selection: For each type of exposed finish required.

Samples for Verification: For each resinous flooring system required, 12 inches square, applied to a rigid backing by Installer for this Project.

INFORMATIONAL SUBMITTALS
Installer Certificates: Signed by manufacturer certifying that installers comply with specified requirements.

Material Certificates: For each resinous flooring component, from manufacturer.

Material Test Reports: For each resinous flooring system, by a qualified testing agency.

CLOSEOUT SUBMITTALS
Maintenance Data: For resinous flooring to include in maintenance manuals.

QUALITY ASSURANCE
Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

Engage an installer who is certified in writing by resinous flooring manufacturer as qualified to apply resinous flooring systems indicated.

Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.

Build mockups for resinous flooring, including accessories.

Size: Minimum 100 sq. ft. of typical flooring condition for each color and pattern in locations directed by Architect.

Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

DELIVERY, STORAGE, AND HANDLING
Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storage and mixing with other components.

FIELD CONDITIONS

Environmental Limitations: Comply with resinous flooring manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and other conditions affecting resinous flooring application.

Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring application.

Close spaces to traffic during resinous flooring application and for 24 hours after application unless manufacturer recommends a longer period.

PART 2 - PRODUCTS

PERORMANCE REQUIREMENTS

VOC Content of Liquid-Applied Flooring Components: Not more than 100 g/L when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

Flammability: Self-extinguishing according to ASTM D 635.

MANUFACTURERS

Source Limitations: Obtain primary resinous flooring materials, including primers, resins, hardening agents, grouting coats, and topcoats, from single source from single manufacturer for each flooring type. Obtain secondary materials, including patching and fill material, joint sealant, and repair materials, of type and from manufacturer recommended in writing by manufacturer of primary materials.

Basis-of-Design Product: Subject to compliance with requirements, provide products indicated on Interior Finish Schedule or comparable product by one of the following:

BASF Construction Chemicals, Inc.; BASF Building Systems.
Crossfield Products Corp.; Dex-O-Tex.
DUDICK Inc.
Dur-A-Flex, Inc.
Key Resin Company.
ITW Polymers Sealants North America (formerly Pacific Polymers, Inc.).
Sika Corporation U.S.
Stonhard, Inc.
Tnemec Company, Inc.

RESINOUS FLOORING (RF-3)

Resinous Flooring System: Lab floors.

Basis of Design Product: Stonchem 802~~Stongard EFX~~.

System Characteristics:

Color and Pattern: Choose from Mfg. Standards
Wearing Surface: Standard smooth.
Overall System Thickness: 3/16 to 1/4 inch.80 mils
~~Moisture Tolerance: Can be applied to concrete up to 90 percent Rh.~~

System Components.

Waterproofing:

Material Design Basis: Stonproof ME7.

Resin: Urethane.
Formulation Description: High solids, elastomeric
Substrate Priming: Two-coat application per product directions.
Application Method: Notched squeegee.
Thickness of Coat: 30-40 mils.
Number of Coats: one.

Bonding Layer:

Material Design Basis: Stonhard Standard Primer.
Resin: Epoxy.
Formulation Description: 100 percent solids.
Application Method: Squeegee and back roll.
Broadcast: Texture #3 (#46 Grit silica) to rejection
Number of Coats: one.

Primer:

Material Design Basis: Stonchem 800 Primer.
Resin: Vinyl ester.
Formulation Description: high solids.
Application Method: Squeegee and back roll.
Number of Coats: one.

Mortar Grout:

Material Design Basis: Stonchem 802 Series Mortar.
Resin: Vinyl ester.
Formulation Description: consisting of vinyl ester resin, curing agent and finely divided mineral composite aggregate.
Application Method: Notched squeegee.
Thickness: 15 mils.
Number of Coats: one.
Aggregates: Mineral composite aggregate.

Top Coat:

Material Design Basis: Stonchem 802 Series Topcoat.
Resin: Vinyl Ester.
Formulation Description: Highly impermeable, mineral composite, vinyl ester.
Type: Pigmented gray only.
Thickness: 10 mils.
Number of Coats: one.

RESINOUS FLOORING (RF-4)

Resinous Flooring System: Common area system.

Basis of Design Product: ~~Stongard~~ Stoncrete EFX.

System Characteristics:

Color and Pattern: Choose from Mfg. Standards
Wearing Surface: Standard smooth.
Overall System Thickness: 3/16 to 1/4 inch.
~~Moisture Tolerance: Can be applied to concrete up to 90 percent Rh.~~

System Components.

Waterproofing:

Material Design Basis: Stonproof ME7.
Resin: Urethane.
Formulation Description: High solids, elastomeric
Substrate Priming: Two-coat application per product directions.
Application Method: Notched squeegee.
Thickness of Coat: 30-40 mils.
Number of Coats: one.

Primer Coat:

Material Design Basis: Stonhard Groutcoat.
Resin: Epoxy.
Formulation Description: two-component, 100 percent solids.
Application Method: squeegee and back roll.
Number of Coats: one.

Mortar Base:

Material Design Basis: Stonclad EFX.
Resin: Urethane.
Formulation Description: four-component, 100 percent solids.
Application Method: Metal Trowel.
Thickness: Nominal 3/16 to 1/4 inch, single lift.
Aggregates: Pigmented and natural blended aggregates.
After curing, grind to manufacturer's standards.

Grout Coat:

Material Design Basis: Stoncrete EFX Groutcoat.
Resin: Epoxy.
Formulation Description: Two-component, 100 percent solids.
Type: Clear.
Application Method: Squeegee and roller.
Finish: Standard.
Number of Coats: one.

Seal Coat:

Material Design Basis: Stonkote CE4.
Resin: Epoxy.
Formulation Description: Two-component, 100 percent solids.
Type: Clear.
Finish: Standard.
Number of Coats: one.

Top Coat:

Material Design Basis: Stonseal SK6-SF.
Resin: Aliphatic Urethane.
Formulation Description: 100 percent solids.
Type: Clear.

Finish: Satin.
Number of Coats: one.

RESINOUS FLOORING (RF-5)

Resinous Flooring System: Maintenance/Janitorial system.

Basis of Design Product: Stongard MR.

System Characteristics:

Color and Pattern: Choose from Mfg. Standards
Wearing Surface: Standard topcoat.
Integral Cove Base: Height, 6-inches.
Overall System Thickness: 40 mils.
~~Moisture Tolerance: Can be applied to concrete up to 90 percent Rh.~~

System Components.

Primer Coat One:

Material Design Basis: Stonhard Standard Primer.
Resin: epoxy.
Formulation Description: 100 percent solids.
Application Method: squeegee and back roll.
Number of Coats: one.

Primer Coat Two:

Material Design Basis: Stonhard SL Primer.
Resin: Urethane.
Formulation Description: 100 percent solids.
Application Method squeegee and back-roll application over wet Standard Primer coat.
Number of Coats: one.

Base Coat:

Material Design Basis: Stonproof ME7.
Resin: Urethane.
Formulation Description: 100 percent solids.
Application Method: Notched squeegee.
Thickness of Coat: 30-mils.
Number of Coats: one.

Top Coat:

Material Design Basis: Stonkote GS4.
Resin: Epoxy.
Formulation Description: 100 percent solids.
Type: Pigmented.
Finish: Lightly textured.
Number of Coats: one.

RESINOUS FLOORING (RF-6)

Resinous Flooring System: Waterproofing layer for use under ~~other flooring~~carpet.

Basis of Design Product: Stongard MR.

System Characteristics:

Color and Pattern: Choose from Mfg. Standards
Wearing Surface: Standard topcoat.
Integral Cove Base: Height, 6-inches.
Overall System Thickness: 40 mils.

System Components.

Primer Coat One:

Material Design Basis: Stonhard Standard Primer.
Resin: epoxy.
Formulation Description: 100 percent solids.
Application Method: squeegee and back roll.
Number of Coats: one.

Primer Coat Two:

Material Design Basis: Stonhard SL Primer.
Resin: Urethane.
Formulation Description: 100 percent solids.
Application Method squeegee and back-roll application over wet Standard Primer coat.
Number of Coats: one.

Base Coat:

Material Design Basis: Stonproof ME7.
Resin: Urethane.
Formulation Description: 100 percent solids.
Application Method: Notched squeegee.
Thickness of Coat: 30-mils.
Number of Coats: one.

Top Coat:

Material Design Basis: Stonkote GS4.
Resin: Epoxy.
Formulation Description: 100 percent solids.
Type: Pigmented.
Finish: Lightly textured.
Number of Coats: one.

ACCESORIES

Patching and Fill Material: Resinous product of or approved by resinous flooring manufacturer and recommended by manufacturer for application indicated.

Joints Filler/Crack Isolation: Elastomeric material with 10 oz, engineered, fiberglass fabric.
Patching Mortar: Two-component 100 percent solids epoxy patching mortar.

Pitching & Leveling: Type recommended or produced by resinous flooring manufacturer for type of service and joint condition indicated.

Basis of Design; Stonset TG5: a three-component quick-setting epoxy grout.
Basis of Design; Stonclad GS: four-component epoxy mortar.

Joint Sealant: Type recommended or produced by resinous flooring manufacturer for type of service and joint condition indicated.

Stonflex MP7 with Stonflex CR9: a two-component elastomeric urethane sealant with flouro-elastomeric sealer applied within Chemical Resistant Lining area.
Stonflex MP7: A two-component elastomeric urethane sealant.

PART 3 - EXECUTION

PREPARATION

Prepare and clean substrates according to resinous flooring manufacturer's written instructions for substrate indicated. Provide clean, dry substrate for resinous flooring application.

Concrete Substrates: Provide sound concrete surfaces free of laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil, and other contaminants incompatible with resinous flooring.

Roughen concrete substrates as follows:

Shot-blast surfaces with an apparatus that abrades the concrete surface, contains the dispensed shot within the apparatus, and recirculates the shot by vacuum pickup.
Comply with ASTM C 811 requirements unless manufacturer's written instructions are more stringent.

Repair damaged and deteriorated concrete according to resinous flooring manufacturer's written instructions.
Verify that concrete substrates are dry and moisture-vapor emissions are within acceptable levels according to manufacturer's written instructions.

Relative Humidity Test: Use in situ probes, ASTM F 2170. Proceed with installation only after substrates have a relative humidity level measurement that does not exceed coating manufacturer’s limits.
Provide one test for every 200 sq. ft. of flooring, or fraction there of.

Alkalinity and Adhesion Testing: Verify that concrete substrates have pH within acceptable range. Perform tests recommended by manufacturer. Proceed with application only after substrates pass testing.

Patching and Filling: Use patching and fill material to fill holes and depressions in substrates according to manufacturer's written instructions.

Joint Treatment: Treat joints and other nonmoving substrate cracks to prevent cracks from reflecting through resinous flooring according to manufacturer's written instructions.

Resinous Materials: Mix components and prepare materials according to resinous flooring manufacturer's written instructions.

APPLICATION

Refer to drawings and Finish Schedule for locations of each type of resinous flooring.

Apply components of resinous flooring system according to manufacturer's written instructions to produce a uniform, monolithic wearing surface of thickness indicated.

Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate, and optimum intercoat adhesion.

Cure resinous flooring components according to manufacturer's written instructions. Prevent contamination during application and curing processes.

Expansion and Isolation Joint Treatment: At substrate expansion and isolation joints, comply with resinous flooring manufacturer's written instructions.

Primer: Apply primer over prepared substrate at manufacturer's recommended spreading rate.

Topcoats: Apply topcoats in number indicated for flooring system and at spreading rates recommended in writing by manufacturer and to produce wearing surface indicated.

PROTECTION

Protect resinous flooring from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by resinous flooring manufacturer.

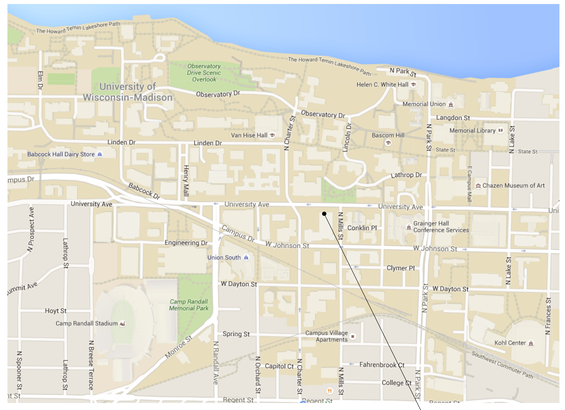
END OF SECTION 09 67 23

CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION

1101 UNIVERSITY AVENUE
MADISON, WI 53706-1322

UWSA CONTRACT #: A-22-015
UW PROJECT #: 0047-2301
STRANG PROJECT #: 2022104

SITE LOCATION MAP



STAMPS

ARCHITECTURAL

MECHANICAL

STRUCTURAL

PLUMBING

ELECTRICAL

DESIGN TEAM

ARCHITECT OF RECORD
STRANG, INC

ARCHITECTURAL CONSULTANT
ARO EBERLE ARCHITECTS

STRUCTURAL ENGINEERING
GRAEF ENGINEERING

MECHANICAL ENGINEERING
AFFILIATED ENGINEERS, INC

ELECTRICAL ENGINEERING
AFFILIATED ENGINEERS, INC

COMMUNICATIONS & AUDIO VISUAL
AFFILIATED ENGINEERS, INC

PLUMBING ENGINEERING
THUNDERBIRD ENGINEERING, INC

FIRE PROTECTION
THUNDERBIRD ENGINEERING, INC

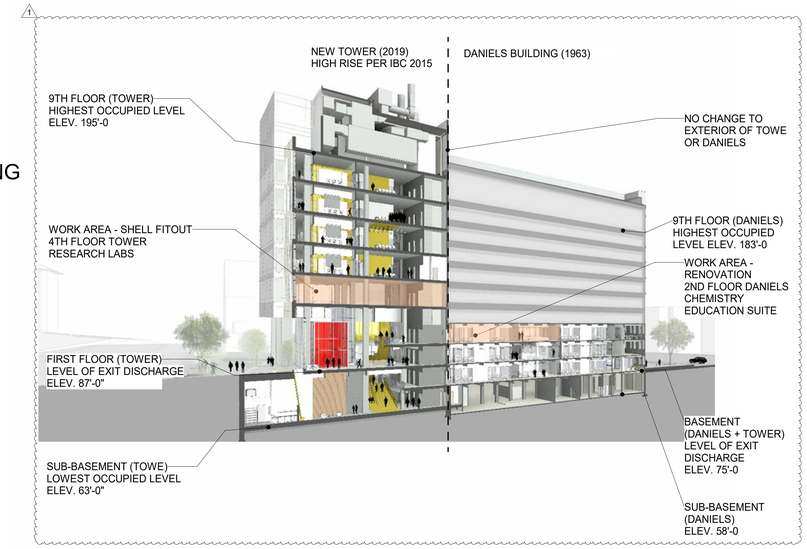
ARCHITECTURAL DESIGN
BALLINGER

LABORATORY PLANNING AND DESIGN
BALLINGER

COST ESTIMATING
MIDDLETON CONSTRUCTION CONSULTING

HAZARDOUS MATERIALS ABATEMENT
INDOOR AIR QUALITY DIAGNOSTICS

CHEMISTRY BUILDING - PARTIAL SECTION



SHEET INDEX

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The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
MADISON, WI 53706-1322

Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
TITLE SHEET

Revisions

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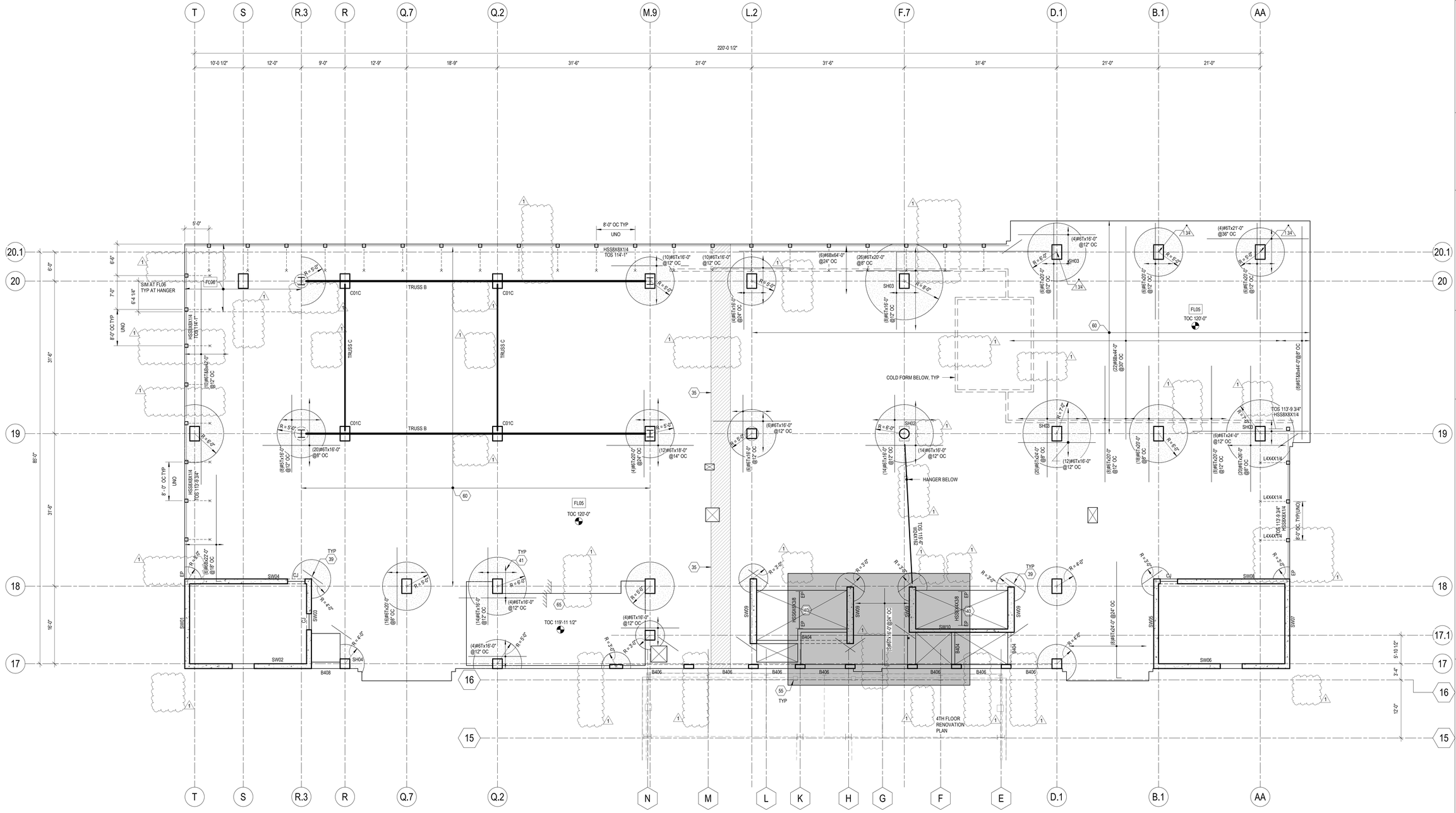
1	9/19/2023	ADDENDUM NO.2

Graphic Scale	N/A
UWSA#	A-22-015
Set Type	BD
Date Issued	08/24/2023
Sheet Number	T001



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1 4TH FLOOR - TOWER

1/8" = 1'-0"

FOR ADDITIONAL DIMENSIONS SEE ARCHITECTURAL CONTROL PLAN SHEET CP104

ELEVATOR DIVIDER BEAM TOS SCHEDULE	
HSS6X6X3/8	62'-3 1/2"
HSS6X4X3/8	62'-3 1/2"
HSS6X6X3/8	74'-3 1/2"
HSS6X4X3/8	74'-3 1/2"
HSS6X6X3/8	86'-3 1/2"
HSS6X4X3/8	86'-3 1/2"
HSS6X6X3/8	98'-3 1/2"
HSS6X4X3/8	98'-3 1/2"
HSS6X6X3/8	108'-9 1/2"
HSS6X4X3/8	108'-9 1/2"
HSS6X6X3/8	119'-3 1/2"
HSS6X4X3/8	119'-3 1/2"
HSS6X6X3/8	126'-9 1/2"
HSS6X4X3/8	126'-9 1/2"
HSS6X6X3/8	134'-3 1/2"
HSS6X4X3/8	134'-3 1/2"

ELEVATOR DIVIDER BEAM TOS SCHEDULE	
HSS6X6X3/8	141'-9 1/2"
HSS6X4X3/8	141'-9 1/2"
HSS6X6X3/8	149'-3 1/2"
HSS6X4X3/8	149'-3 1/2"
HSS6X6X3/8	156'-9 1/2"
HSS6X4X3/8	156'-9 1/2"
HSS6X6X3/8	164'-3 1/2"
HSS6X4X3/8	164'-3 1/2"
HSS6X6X3/8	171'-9 1/2"
HSS6X4X3/8	171'-9 1/2"
HSS6X6X3/8	179'-3 1/2"
HSS6X4X3/8	179'-3 1/2"
HSS6X6X3/8	191'-1 1/2"
HSS6X4X3/8	191'-1 1/2"

GENERAL SHEET NOTES

- TYPICAL FLOOR/ROOF = SEE PLAN AND FLOOR/ROOF SCHEDULE FOR FLOOR/ROOF TYPE. TOP OF CONCRETE SLAB ELEVATIONS TO BE NOTED ON PLAN.
- TOP OF STEEL ELEVATIONS NOTED ON PLAN THUS TOS XXX'-X".
- SEE "SCHEDULES" SHEETS FOR CONCRETE BEAM, SHEARHEAD SCHEDULES, SHEARWALL SCHEDULES, EMBED PLATE SCHEDULE, MASONRY WALL SCHEDULE, MISCELLANEOUS LINTEL SCHEDULE AND STEEL COLUMN BASE PLATE SCHEDULE.
- MAINTAIN SPECIFIED SLAB THICKNESS THROUGHOUT FLAT SLAB UNLESS NOTED OTHERWISE.
- SEE ELECTRICAL, PLUMBING, FIRE PROTECTION, HVAC AND ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATIONS OF SLAB OPENINGS AND PIPE SLEEVES. PROVIDE SLEEVES WITH DIAMETER 1" LARGER THAN CONDUIT. ALL SLEEVES TO BE SCHEDULE 40 STEEL PIPE.
- NO RECESSED AREAS IN SLAB ARE ALLOWED WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER.
- FOR MASONRY WALLS SEE "GENERAL DETAILS" SHEET AND "MASONRY WALL SCHEDULE" ON MISCELLANEOUS SCHEDULES SHEET, REFERENCE ARCHITECTURAL FOR LOCATION OF ALL CMU WALLS..
- SLAB REINFORCEMENT PLACING ORDER (UNLESS NOTED OTHERWISE):
  - N/S BOTTOM (3/4" CLR)
  - E/W BOTTOM
  - E/W TOP
  - N/S TOP (3/4" CLR)
- SEE "GENERAL DETAILS" SHEET(S) FOR THE FOLLOWING DETAILS:
  - TWO-WAY SLAB SECTION AT COLUMN STRIP
  - TWO-WAY SLAB CAMBER DIAGRAM
  - TWO-WAY SLAB OPENINGS NOT SHOWN ON PLAN
  - TWO-WAY SLAB OPENING REINFORCEMENT
  - TYP NON LOAD BEARING WALL AT SLAB EDGE
  - TYP NON LOAD BEARING WALL AT SLAB
- SEE ARCHITECTURAL DRAWINGS FOR MISCELANOUS STEEL EMBEDS TO BE PLACED IN STRUCTURAL CONCRETE.

SHEET KEYNOTES

35 4'-0" POUR STRIP.

39 (1) #5 x 5'-0" TOP AND BOTTOM TYPICAL AT ALL INVERT CORNERS, ALL LOCATIONS NOT SHOWN ON PLAN.

40 SEE SCHEDULE FOR ALL TOP OF STEEL ELEVATIONS FOR ELEVATOR DIVIDER BEAMS, SEE DETAIL "DIVIDER BEAM AT CMU WALL" ON MISCELLANEOUS DETAILS SHEET WHERE CMU WALL SUPPORTS BEAM.

41 NO VOID IN SLAB ZONE, TYPICAL AT COLUMNS AND SHEAR WALL LOCATIONS.

55 SLAB TO BE INFILLED AT 3RD, 4TH, 5TH AND 6TH FLOORS. REFER TO ARCHITECTURAL DEMOLITION PLANS.

60 PROVIDE LEVELING TOPPING IN BETWEEN GRID LINES / SLAB EDGE IN THE AREA INDICATED ON PLAN AFTER ALL CONCRETE FLOORS POURED AND HARDENED. AVERAGE LEVELING TOPPING THICKNESS APPROXIMATELY 1".

65 SLAB DEPRESSION IN THIS AREA, SEE ARCHITECTURAL FOR LOCATION.

FLOOR / ROOF SCHEDULE

MARK	DESCRIPTION	REMARKS
SG01	5" CONCRETE SLAB ON GRADE REINFORCED WITH #4@8" OC EACH WAY.	
FL01	4 1/2" NORMAL WEIGHT CONCRETE OVER 2" x 18 GAGE COMPOSITE METAL DECK (6 1/2" TOTAL THICKNESS) REINFORCED WITH #4@16" OC EACH WAY.	
FL02	4 1/2" NORMAL WEIGHT CONCRETE OVER 3" x 18 GAGE COMPOSITE METAL DECK (7 1/2" TOTAL THICKNESS) REINFORCED WITH #3@12" OC EACH WAY.	
FL03	6" MAX NORMAL WEIGHT CONCRETE REINFORCED WITH 5 LBS/CU YARD OF SYNTHETIC MACRO FIBERS	FINISHED FLOOR OVER STRUCTURAL SLAB (SHOWN AS HATCH ON PLAN)
FL04	4" NORMAL WEIGHT CONCRETE REINFORCED WITH 5 LBS/CU YARD OF SYNTHETIC MACRO FIBERS	FINISHED FLOOR OVER RIGID INSULATION AND STRUCTURAL SLAB (SHOWN AS HATCH ON PLAN)
FL05	16" CONCRETE VOIDED SLAB. REINFORCE WITH #6 CONTINUOUS AT 12" OC EACH WAY TOP AND #6 AT 12" OC EACH WAY BOTTOM. ADDITIONAL REINFORCEMENT NOTED ON PLAN.	
FL06	20" CONCRETE SOLID SLAB. REINFORCE WITH #6 CONTINUOUS AT 6" OC (N/S) AND 4" OC (E/W) TOP AND #6 AT 4" OC (E/W) AND 6" OC (N/S) BOTTOM. ADDITIONAL REINFORCEMENT NOTED ON PLAN.	
FL07	16" SOLID CONCRETE SLAB. REINFORCE WITH #6 EPOXY COATED CONTINUOUS AT 12" OC EACH WAY TOP AND #6 AT 12" OC EACH WAY BOTTOM. ADDITIONAL REINFORCEMENT NOTED ON PLAN.	GEOFOAM FILL ABOVE, SEE CIVIL
FL08	16" SOLID CONCRETE SLAB. REINFORCE WITH #6 EPOXY COATED CONTINUOUS AT 12" OC EACH WAY TOP, #6 AT 12" OC (E/W) BOTTOM AND #8 AT 12" OC (N/S) BOTTOM. ADDITIONAL REINFORCEMENT NOTED ON PLAN.	GEOFOAM FILL ABOVE, SEE CIVIL
FL09	12" SOLID CONCRETE SLAB. REINFORCE WITH #5 EPOXY COATED AT 12" OC EACH WAY TOP AND #6 AT 8" OC EACH WAY BOTTOM. ADDITIONAL REINFORCEMENT NOTED ON PLAN.	GEOFOAM FILL ABOVE, SEE CIVIL
FL10	13" CONCRETE VOIDED SLAB REINFORCE WITH #6 CONTINUOUS AT 12" OC EACH WAY TOP AND #6 AT 12" OC EACH WAY BOTTOM. ADDITIONAL REINFORCEMENT SHOWN ON PLAN. PROVIDE 3" OF NON STRUCTURAL CONCRETE TOPPING.	SAWCUT TOPPING 3/16" x 1 1/2" DEEP NO GREATER THAN 9'-0" OC
FL11	5 1/2" STRUCTURAL CONCRETE SLAB (MATCH EXISTING), REINFORCE WITH #5@9" OC TOP AND BOTTOM IN THE N/S DIRECTION AND #4@12" OC IN THE E/W DIRECTION. NEW STEEL BEAMS TOS TO MATCH EXISTING STEEL. ADDITIONAL REINFORCEMENT NOTED ON PLANS AND DETAILS.	
FL12	12" SOLID PRECAST CONCRETE PANEL LID WITH (4) LIFTING LUG INSERTS FOR FUTURE REMOVAL.	
FL13	4 1/4" LIGHTWEIGHT CONCRETE OVER 1 1/2" x 18 GAGE COMPOSITE METAL DECK (5 3/4" TOTAL THICKNESS) REINFORCED WITH 6x6-W2.1xW2.1 WWF.	
FL14	5" NORMAL WEIGHT CONCRETE OVER 3" x 18 GAGE COMPOSITE METAL DECK (8" TOTAL THICKNESS) REINFORCED WITH (3) #5 LONG AND #5@18" OC MAX SHORT	
FL15	5" NORMAL WEIGHT CONCRETE OVER 3" x 20 GAGE COMPOSITE METAL DECK (8" TOTAL THICKNESS) REINFORCED WITH #5@12" OC (2" FROM TOP)	
RF01	1 1/2" x 18 GAGE METAL ROOF DECK	
RF02	3" x 18 GAGE METAL ROOF DECK	

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The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
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Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency/ Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
PLAN - 4TH FLOOR

Revisions

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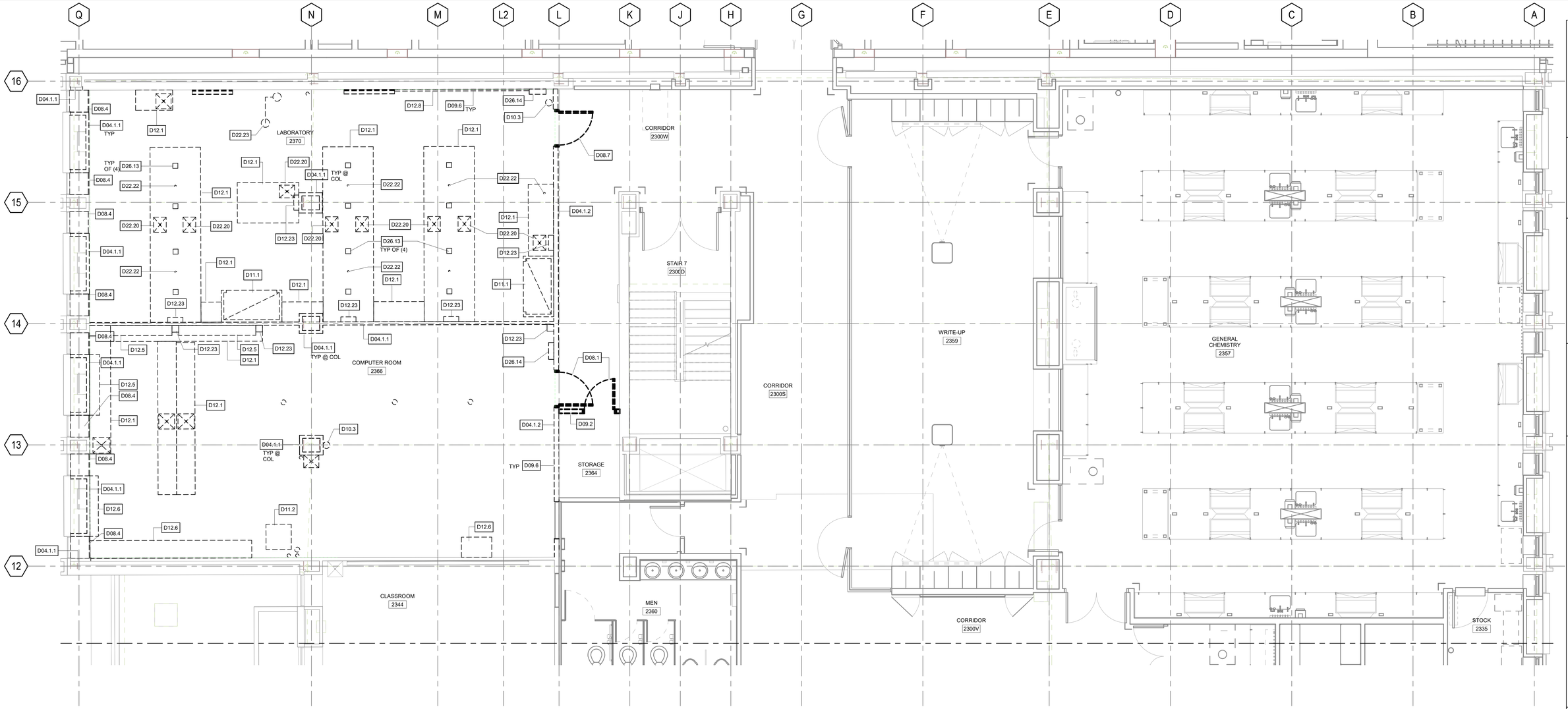

N

1 AD102.3-d

DEMOLITION PLAN - 2ND FLOOR - DANIELS (NORTH)

SCALE: 1/4" = 1'-0"

KEYNOTE LEGEND	
Key Note	Keynote Text
D04.1.1	DEMOLISH 4" CMU PARTITION IN ITS ENTIRETY
D04.1.2	DEMOLISH 6" CMU PARTITION IN ITS ENTIRETY
D08.1	DEMOLISH H.M. FRAME AND WOOD DOOR IN ITS ENTIRETY
D08.4	REMOVE ACCESS PANELS AND WOOD BLOCKING/FRAMING IN IT'S ENTIRETY
D08.7	DEMOLISH H.M. DOOR AND FRAME IN ITS ENTIRETY
D09.2	DEMOLISH GYPSUM OR PLASTER PARTITION / FURRING IN ITS ENTIRETY
D09.6	DEMOLISH RUBBER BASE IN ITS ENTIRETY
D10.3	DEMOLISH WALL HUNG FIRE EXTINGUISHER IN ITS ENTIRETY
D11.1	DEMOLISH FUME HOOD, BASE CABINETS AND WORK SURFACE IN ITS ENTIRETY
D11.2	OWNER TO RELOCATE OR DISPOSE OF ICE MAKER
D12.1	DEMOLISH LABORATORY BASE CABINETS IN ITS ENTIRETY
D12.5	DEMOLISH WALL SHELVING AND STANDARDS IN ITS ENTIRETY
D12.6	DEMOLISH TALL STORAGE SHELF / CABINET IN ITS ENTIRETY
D12.8	DEMOLISH COAT HOOKS IN THEIR ENTIRETY
D12.23	DEMOLISH WALL MOUNTED UMBILICAL ENCLOSURE
D22.20	PC TO DEMO THREE EXISTING FAUCETS AND PIPING AT SINK LOCATION, TRAPS TO BE REMOVED BY ASBESTOS ABATEMENT CONTRACTOR
D22.22	PC TO DEMO BENCH MOUNTED LAB UTILITIES - NATURAL GAS AND COMPRESSED AIR
D22.23	PC TO DEMOLISH EYEWASH AND SAFETY SHOWER IN ITS ENTIRETY
D26.13	EC TO DEMO PEDESTAL MOUNTED BENCHTOP ELECTRICAL OUTLET
D26.14	EC TO DEMOLISH ELECTRICAL PANEL

DEMOLITION GENERAL NOTES

1. VERIFY ALL DIMENSIONS AND CONDITIONS AT PROJECT SITE. PORTIONS OF EXISTING CONSTRUCTION NOTED ON PLANS MAY HAVE BEEN REMOVED BY OWNER.
2. VERIFY CONSTRUCTION OF ALL PARTITIONS TO BE REMOVED.
3. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION ITEMS AND NOTES. COORDINATE SPECIFIC WORK WITH EACH SUB-CONTRACTOR.
4. HAZARDOUS MATERIALS ABATEMENT IS BY OWNER'S SEPARATE CONTRACT.
5. TEMPORARY LIGHTING IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR FOR THE DURATION OF THE PROJECT.
6. CONTRACTORS ARE RESPONSIBLE FOR MAINTAINING CONTINUOUS UTILITY SERVICE TO ALL SPACES IN THE BUILDING NOT AFFECTED BY THIS WORK ANY DISRUPTION IN SERVICE REQUIRED TO PERFORM WORK OR TO MODIFY EXISTING DUCTWORK, PIPING, CONDUIT, CIRCUITS OR ANY ASSOCIATED EQUIPMENT, MUST BE COORDINATED IN ADVANCE WITH THE OWNER/USER.
7. ALL FURNITURE AND UNFIXED EQUIPMENT TO BE REMOVED BY OWNER PRIOR TO START OF CONSTRUCTION.
8. PROTECT IN PLACE DURING ENTIRE CONSTRUCTION PROCESS: ALL FLOORING, SURFACES AND ITEMS TO REMAIN.
9. EXISTING CONSTRUCTION TO REMAIN IS SHOWN SCREENED. CONSTRUCTION AND EQUIPMENT TO BE REMOVED IS SHOWN WITH DASHED LINES.
10. THE CONTRACTOR SHALL PATCH, PREPARE, REPAIR AND / OR RESTORE SURFACES SCHEDULED TO REMAIN INTACT THAT ARE DAMAGED AS A RESULT OF DEMOLITION WORK.
11. DEMOLITION PLANS ARE NOT NECESSARILY INCLUSIVE OF ALL ITEMS NEEDING REMOVAL. COORDINATE WITH ALL OTHER DRAWINGS AND FIELD VERIFY EXISTING CONDITIONS.
12. COORDINATE DEMOLITION DIMENSIONS ON THIS PLAN WITH NEW WORK PLANS AND EXISTING CONDITIONS.

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KEY PLAN

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
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CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
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Sheet Title:
DEMOLITION PLAN - 2ND FLOOR - DANIELS (NORTH)

Revisions

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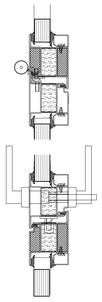
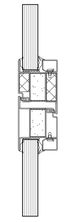
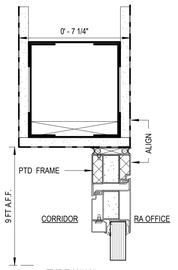


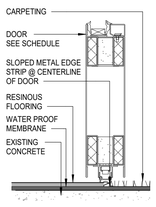
TYPE J5B
FIRE RATED GLAZING AND DOOR



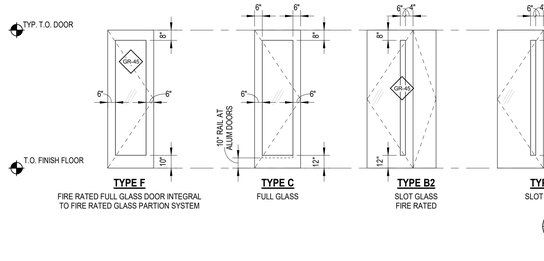
TYPE H5B
FIRE RATED DOOR WITH TRANSOM



TYPE H5/J5
FIRE RATED GLAZING AND DOOR



TYPE S6
FIRE RATED DOOR - RA OFFICES



TYPE F
FIRE RATED FULL GLASS DOOR INTEGRAL TO FIRE RATED GLASS PARTION SYSTEM

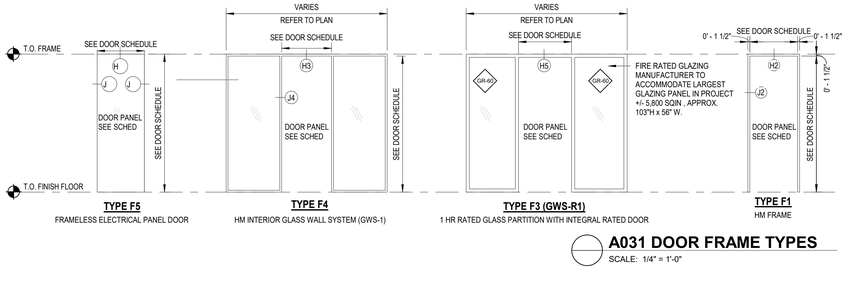
TYPE C
FULL GLASS

TYPE B2
SLOT GLASS FIRE RATED

TYPE B
SLOT GLASS

TYPE A2
SOLID DOOR

TYPE A
SOLID DOOR



TYPE F5
FRAMELESS ELECTRICAL PANEL DOOR

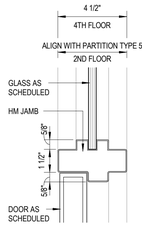
TYPE F4
HM INTERIOR GLASS WALL SYSTEM (GWS-1)

TYPE F3 (GWS-R1)
1 HR RATED GLASS PARTITION WITH INTEGRAL RATED DOOR

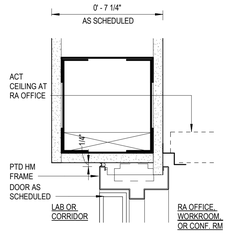
TYPE F1
HM FRAME

A031 DOOR PANEL TYPES
SCALE: 1/4" = 1'-0"

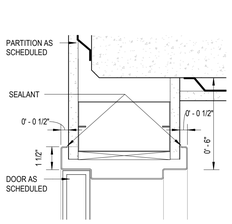
A031 DOOR FRAME TYPES
SCALE: 1/4" = 1'-0"



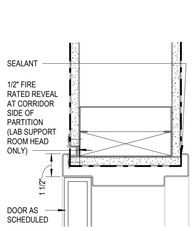
TYPE J4
HM DOOR TO INTERIOR GLASS WALL SYSTEM



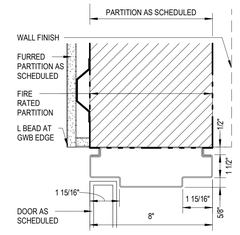
TYPE H3/J3
HM DOOR TO GWB



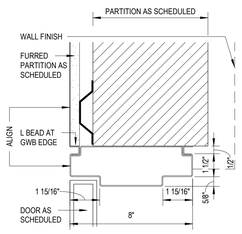
TYPE H2A/J2A
HM FRAME AT TOILET ROOM



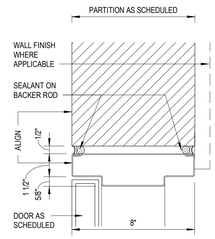
TYPE H2/J2
HM FRAME AT PARTITION
FIRE RATED AT LAB SUPPORT ROOMS



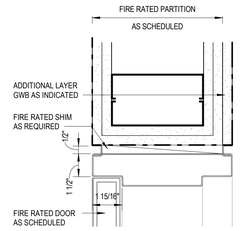
TYPE H1D/J1D
FIRE RATED HM FLUSH FRAME
AT FURRED CMU / CONCRETE WALL



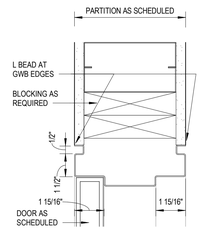
TYPE H1D/J1D
HM FLUSH FRAME
AT FURRED CMU / CONCRETE WALL



TYPE H1C/J1C
HM FLUSH FRAME
AT CMU / CONCRETE WALL

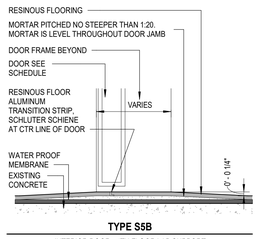


TYPE H1B/J1B
HM FIRE-RATED FLUSH FRAME

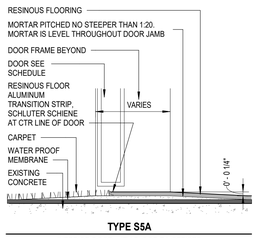


TYPE H1/J1
HM FLUSH FRAME

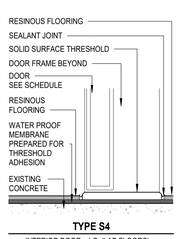
A031 DOOR FRAME DETAILS
SCALE: 3" = 1'-0"



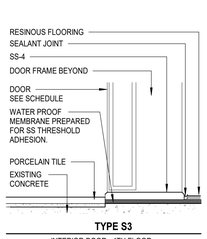
TYPE S5B
INTERIOR DOOR - 4TH FLOOR LAB SUPPORT AND LAB ENTRY FROM CORRIDOR



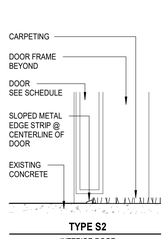
TYPE S5A
INTERIOR DOOR - 4TH FLOOR RA OFFICES (NO MORTAR PITCH AT SIM. CONDITIONS)



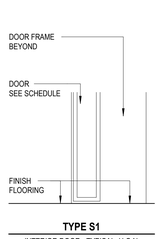
TYPE S4
INTERIOR DOOR - J.C. (LAB FLOORS)



TYPE S3
INTERIOR DOOR - 4TH FLOOR TOILET ROOMS



TYPE S2
INTERIOR DOOR



TYPE S1
INTERIOR DOOR - TYPICAL, U.O.N.

A031 THRESHOLD DETAILS
SCALE: 3" = 1'-0"

DOOR SCHEDULE - UW 4th & 2nd Floor

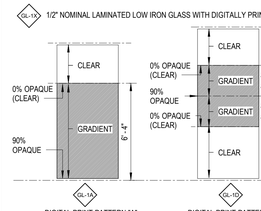
DOOR NUMBER	ROOM NAME	WIDTH	HEIGHT	DOOR TYPE	DOOR MATERIAL	FINISH	GLASS TYPE	FRAME TYPE	FRAME MATERIAL	Door Head	Door Jamb	FRAME FINISH	FIRE RATING	DOOR HARDWARE	REMARKS
2ND FLOOR-DANIELS															
2370	ENTRY	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1	F4	HM	H1	J4	PTD	-	109	
2370A	MEETING ROOM	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1A	F4	HM	H1	J1/J4	PTD	-	114	
2370B	WORK ROOM	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1	F4	HM	H1	J1/J4	PTD	-	114	
2370C	OFFICE	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1A	F4	HM	H1	J1/J4	PTD	-	114	
2370D	OFFICE	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1	F4	HM	H1	J4	PTD	-	106	
2370E	OFFICE	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1	F4	HM	H1	J4	PTD	-	106	
2370F	OFFICE	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1A	F4	HM	H1	J1/J4	PTD	-	114	
2370G	WORK ROOM	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1	F4	HM	H1	J1/J4	PTD	-	115	
2370H	MEETING ROOM	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1A	F4	HM	H1	J1/J4	PTD	-	114	
2370J	MEETING ROOM	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1A	F1	HM	H1	J1	PTD	-	115	
2370K	STORAGE	3' - 0"	7' - 10 1/2"	A	HM	PTD	-	F1	HM	H1	J1	PTD	-	117	
2370L	OFFICE	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1	F4	HM	H1	J4	PTD	-	106	
2370M	OFFICE	3' - 0"	7' - 10 1/2"	C	HM	PTD	GL-1	F4	HM	H1	J4	PTD	-	106	
4TH FLOOR-TOWER															
4400C	STAIR & LIFT	3' - 6"	7' - 0"	B	HM	PTD	GR-180	F1	HM	H1D	H1D	PTD	180 MIN	100	AUTOMATIC OPERATOR, CR
4400TA	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		120	
4400TB	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		118	
4400TC	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		119	
4400TD	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		120	
4400TE	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		120	
4400TF	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		118	
4400TG	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		119	
4400TH	CORRIDOR	4' - 3"	8' - 11 1/2"	A	WD	PTD	-	F5	-	SIM. 1/A038	SIM. 2/A038	-		120	
4403	LAB SUPPORT	4' - 6"	8' - 10"	B2	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	101	
4405A	OFFICE	3' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5	J5B	PTD	45 MIN	111	
4405B	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J3/J4	PTD	-	112	
4407	LAB SUPPORT	4' - 6"	8' - 10"	B2	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	101	
4409A	OFFICE	3' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5	J5B	PTD	45 MIN	111	
4409B	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J3/J4	PTD	-	112	
4410	R.O. WATER	4' - 6"	8' - 10"	A2	HM	PTD	-	F1	HM	H2	J2	PTD	-	102	
4415	LABORATORY	6' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5B	J5/J5B	PTD	45 MIN	99	
4417A	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1A	F4	HM	H3	J4	PTD	-	107	
4417B	WORK ROOM	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J4	PTD	-	106	
4419A	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1A	F4	HM	H3	J4	PTD	-	107	
4419B	WORK ROOM	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J4	PTD	-	106	
4421A	CONFERENCE ROOM	3' - 0"	8' - 10"	F	HM	PTD	GL-1D	F4	HM	H1	J4	PTD	-	108	
4421B	CONFERENCE ROOM	3' - 0"	8' - 10"	F	HM	PTD	GL-1D	F4	HM	H1	J4	PTD	-	108	
4423A	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1A	F4	HM	H3	J4	PTD	-	107	
4423B	WORK ROOM	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J4	PTD	-	106	
4424	STAIR & LIFT	4' - 0"	7' - 0"	A2	HM	PTD	-	F1	HM	H2A	J2	PTD	-	103	
4425A	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1A	F4	HM	H3	J4	PTD	-	107	
4425B	WORK ROOM	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J4	PTD	-	106	
4428	STORAGE	3' - 0"	7' - 0"	A	HM	PTD	-	F1	HM	H2A	J2	PTD	-	104	
4429	LABORATORY	6' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5B	J5/J5B	PTD	45 MIN	99	
4429A	LABORATORY	3' - 0"	8' - 10"	B	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	113	
4429B	LABORATORY	3' - 0"	8' - 10"	B	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	113	
4431A	OFFICE	3' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5	J5B	PTD	45 MIN	111	
4431B	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J3/J4	PTD	-	112	
4433	LAB SUPPORT	4' - 6"	8' - 10"	B2	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	101	
4435	LAB SUPPORT	4' - 6"	8' - 10"	B2	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	101	
4436	WOMEN	3' - 0"	8' - 10"	A	HM	PTD	-	F1	HM	H2A	J2A	PTD		116	10" SSTL KICK PLATE
4439A	OFFICE	3' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5	J5B	PTD	45 MIN	111	
4439B	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J4	PTD	-	112	
4440	MEN	3' - 0"	8' - 10"	A	HM	PTD	-	F1	HM	H2A	J2A	PTD	-	116	10" SSTL KICK PLATE
4443	LAB SUPPORT	4' - 6"	8' - 10"	B2	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	101	
4444A	CONFERENCE ROOM	3' - 0"	8' - 10"	F	HM	PTD	GL-1D	F4	HM	H3	J3/J4	PTD	-	110	
4444B	CONFERENCE ROOM	3' - 0"	8' - 10"	F	HM	PTD	GL-1D	F4	HM	H3	J3/J4	PTD	-	110	
4445A	OFFICE	3' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5	J5B	PTD	45 MIN	111	
4445B	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J4	PTD	-	112	
4448	JANITOR	3' - 6"	8' - 10"	A	HM	PTD	-	F1	HM	H2	J2	PTD	-	105	
4449A	OFFICE	3' - 0"	8' - 9"	F	HM	PTD	GR-45	GWS-R1	MFR.SYSTEM	H5	J5B	PTD	45 MIN	111	
4449B	OFFICE	3' - 0"	8' - 10"	C	HM	PTD	GL-1	F4	HM	H3	J4	PTD	-	112	
4451	LAB SUPPORT	4' - 6"	8' - 10"	B2	HM	PTD	GR-45	F1	HM	H2	J2	PTD	45 MIN	101	
E-4400A	STAIR 8	3' - 0"	8' - 10"	A-ETR	HM/ETR	PTD	-	EXISTING	HM/ETR	EXISTING	EXISTING	PTD	90 MIN	117/ ETR	EXISTING DOOR TO REMAIN. PAINT DOOR AND FRAME.
E-4400B	STAIR 9	3' - 0"	8' - 10"	A-ETR	HM/ETR	PTD	-	EXISTING	HM/ETR	EXISTING	EXISTING	PTD	90 MIN	117/ ETR	EXISTING DOOR TO REMAIN. PAINT DOOR AND FRAME.
E-4432	ELECTRICAL	3' - 0"	8' - 10 1/2"	A-ETR	HM/ETR	PTD	-	EXISTING	HM/ETR	EXISTING	EXISTING	PTD	90 MIN	117/ ETR	EXISTING DOOR TO REMAIN. PAINT DOOR AND FRAME.
E-4434	TELE-DATA	3' - 0"	8' - 10 1/2"	A-ETR	HM/ETR	PTD	-	EXISTING	HM/ETR	EXISTING	EXISTING	PTD	90 MIN	117/ ETR	EXISTING DOOR TO REMAIN. PAINT DOOR AND FRAME.

INTERIOR GLASS TYPES

- GL-1 — 1/2" NOMINAL LAMINATED GLASS WITH CLEAR INTERLAYER
- GR-45 — 45 MINUTE, CLEAR FIRE RATED GLASS
- GR-180 — 60 MINUTE, CLEAR FIRE-RATED GLASS
- GR-180 — 180 MINUTE, CLEAR FIRE-RATED GLASS
- AG-1 — 1/4" APPLIED GLASS BACK PAINTED
- AG-2 — 3/8" APPLIED GLASS BACKPAINTED ELEVATOR FRONTS
- AG-3 — 3/8" APPLIED GLASS, WRITEABLE AND MAGNETIC

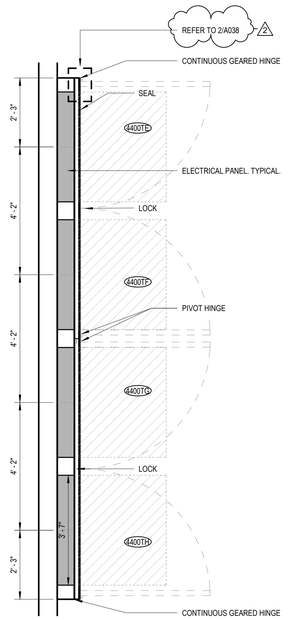
INTERIOR GLASS DIGITALLY PRINTED INTERLAYER

GL-1X — 1/2" NOMINAL LAMINATED LOW IRON GLASS WITH DIGITALLY PRINTED INTERLAYER

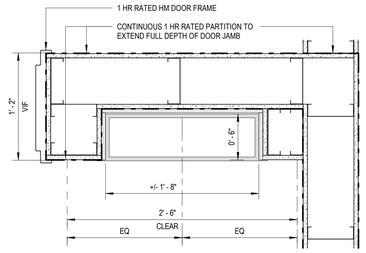


DOOR SCHEDULE GENERAL NOTES

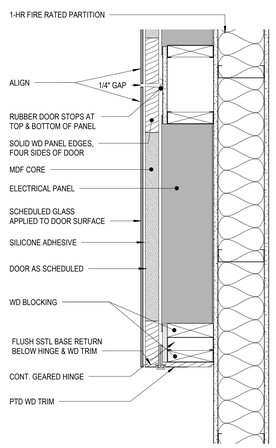
1. REFER TO DOOR SCHEDULE AND SPECIFICATION SECTION 08 71 00 FOR WIDTH, HEIGHT, FINISH AND ADDITIONAL INFORMATION.
2. COORDINATE ALL ROUGH-IN REQUIREMENTS FOR SECURITY AND ELECTRIFIED HARDWARE WITH DOOR AND FRAME MANUFACTURERS PRIOR TO CONSTRUCTION.
3. LOCATE SURFACE AND FRAME-MOUNTED CLOSERS ON NON-PUBLIC SIDE.
4. PROVIDE PAINTABLE SEALANT AT PERIMETER OF FRAMES.
5. HARDWARE NOT SHOWN. REFER TO SCHEDULE, HARDWARE SPECIFICATION 08 71 00 AND APPROVED MANUFACTURERS FOR ADDITIONAL INFORMATION.
6. PROVIDE CONCEALED REINFORCING AT ALL DOORS WITH CLOSERS AND/OR ELECTROMAGNETIC HOLD OPEN DEVICES. NO THRU-BOLT REINFORCING, CLOSERS OR DEVICES.
7. CONTRACTOR SHALL CONFIRM ALL PARTITION TYPES WITH PARTITION SCHEDULE AND FINISHES WITH FINISH SCHEDULE PRIOR TO FABRICATION IN COORDINATION WITH FULL FRAME/WALL ASSEMBLY DEPTHS, INCLUDING FINISHES.
8. NO EXPOSED FASTENERS OR KNOCK-DOWN FRAMES - ALL HOLLOW METAL FRAMES SHALL BE FULLY WELDED AND GROUND SMOOTH.
9. DOOR FRAMES TYPICALLY LOCATED 4" FROM MOST PROXIMATE ADJACENT PERPENDICULAR WALLS, U.O.N.
10. SEE A033 FOR INTERIOR GLASS WALL SYSTEMS.



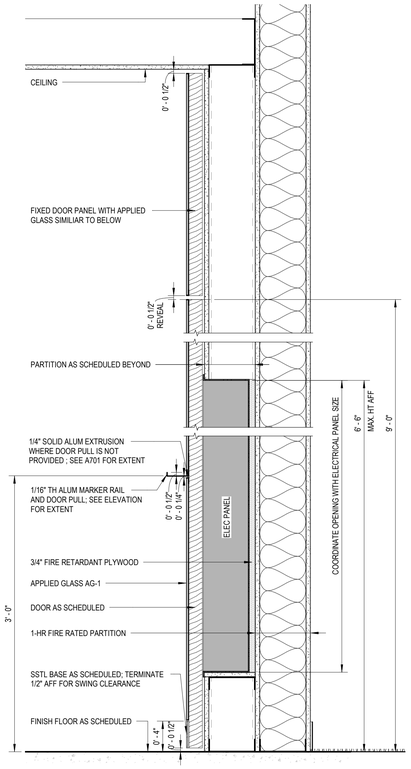
ELECTRICAL PANEL DOORS
5/A038 SCALE: 1/2" = 1'-0"



ELEC. PANEL AT CORRIDORS
3/A038 SCALE: 1 1/2" = 1'-0"



TYPICAL ELEC. PANEL DOOR
2/A038 SCALE: 1 1/2" = 1'-0"



ELEC. PANEL DOOR PULL & BASE
1/A038 SCALE: 1 1/2" = 1'-0"

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833 Chestnut Street / Suite 1400
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KEY PLAN

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
Project Address

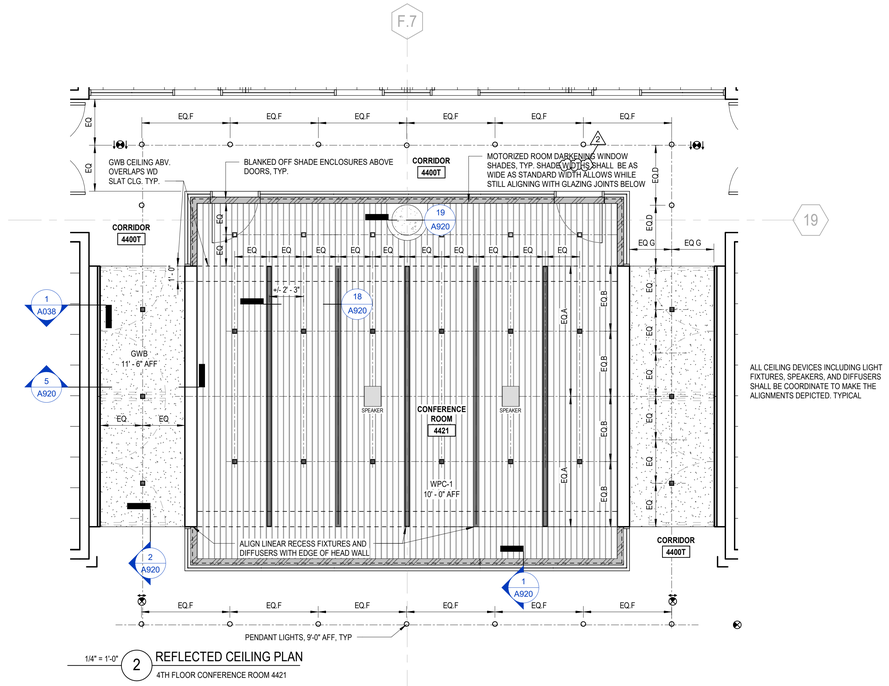
Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
DOOR SCHEDULE, TYPES, & DETAILS

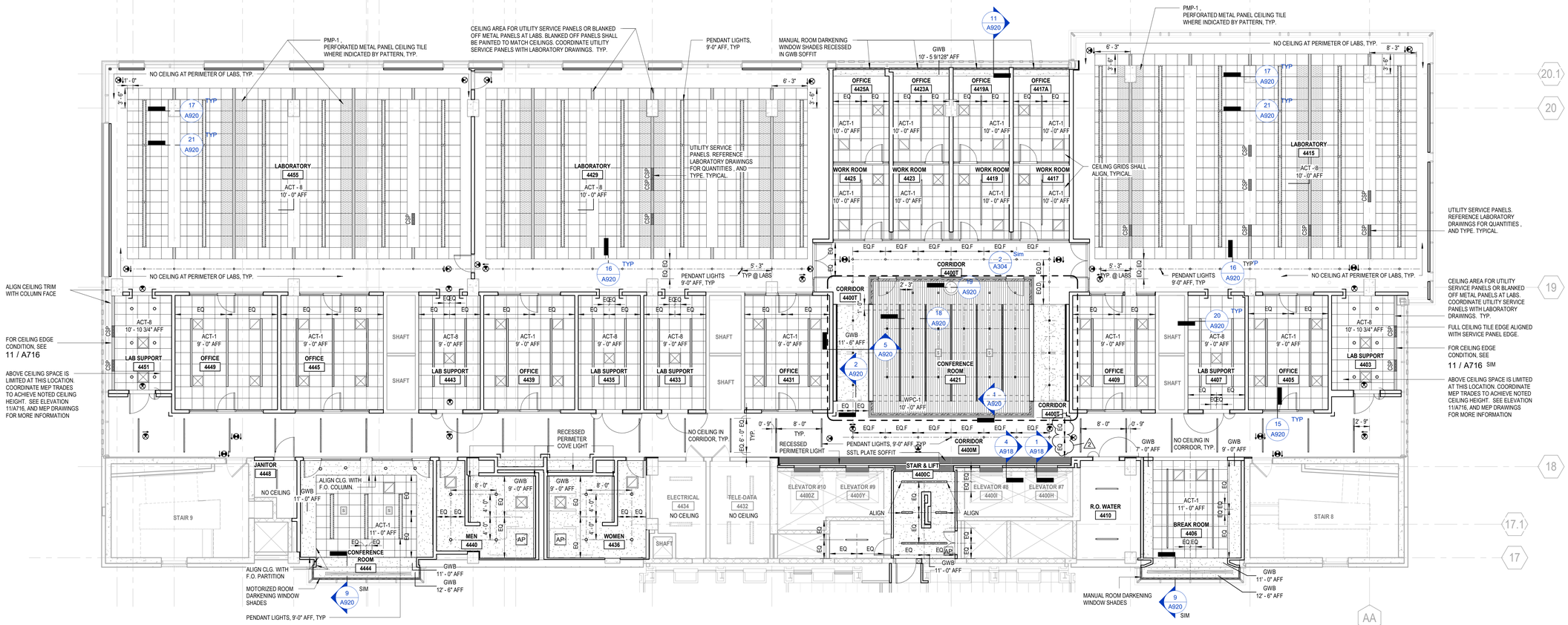
Revisions

No.	Date:	Description:
1	9/15/2023	ADDENDUM NO. 1
2	9/19/2023	ADDENDUM NO. 2

Graphic Scale	VARIES
UWS#	A-22-015
Set Type	BD
Date Issued	09/19/2023
Sheet Number	A038



1/4" = 1'-0" **2 REFLECTED CEILING PLAN**
4TH FLOOR CONFERENCE ROOM 4421



1/8" = 1'-0" **1 REFLECTED CEILING PLAN**
4TH FLOOR REFLECTED CEILING PLAN

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ballinger
833 Chestnut Street / Suite 1400
Philadelphia, PA 19107
215.448.3800 / |
215.448.3801 / f
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KEY PLAN

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address: Project Address

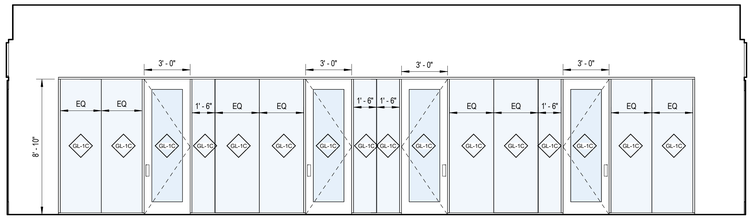
Project Title: CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution: UNIVERSITY OF WISCONSIN-MADISON

Sheet Title: REFLECTED CEILING PLAN - 4TH FLOOR

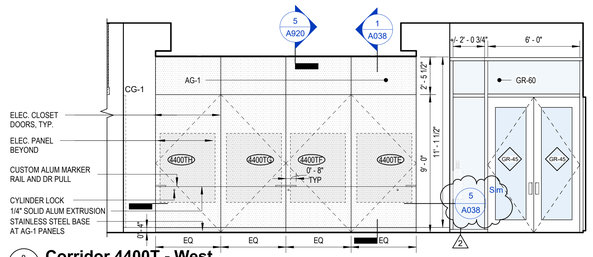
Revisions

No.	Date:	Description:
2	9/19/2023	ADDENDUM NO. 2

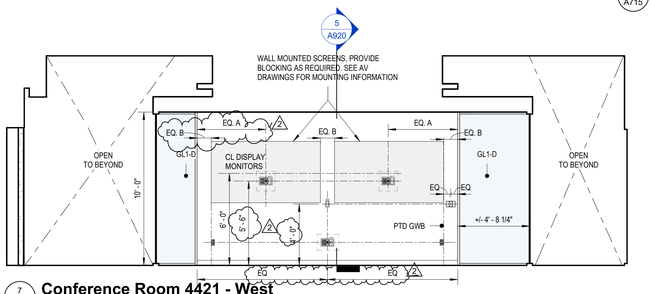
Graphic Scale	VARIES
UWSA#	A-22-015
Set Type	BD
Date Issued	09/19/2023
Sheet Number	A304



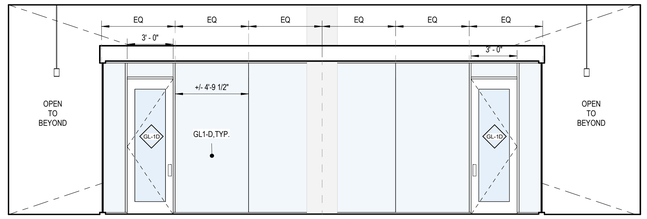
9 A715 **Corridor 4400T - North**
SCALE: 1/4" = 1'-0"



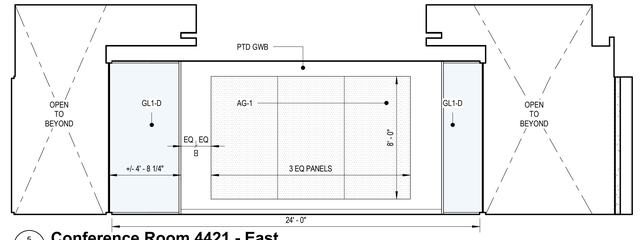
8 A715 **Corridor 4400T - West**
SCALE: 1/4" = 1'-0"



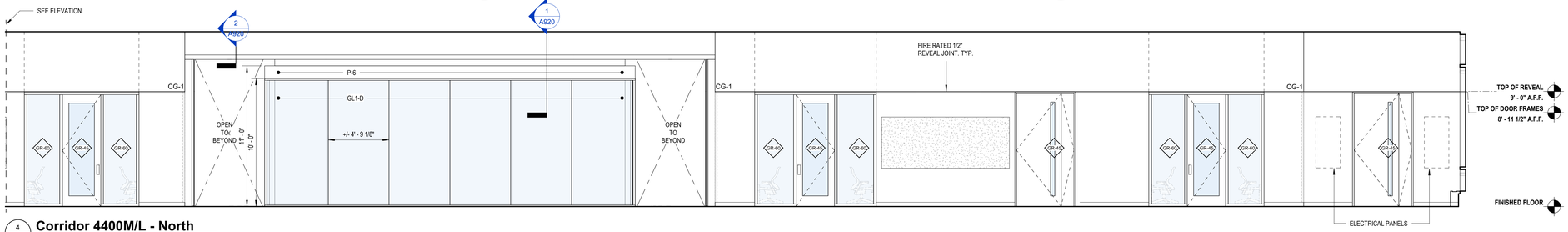
7 A715 **Conference Room 4421 - West**
SCALE: 1/4" = 1'-0"



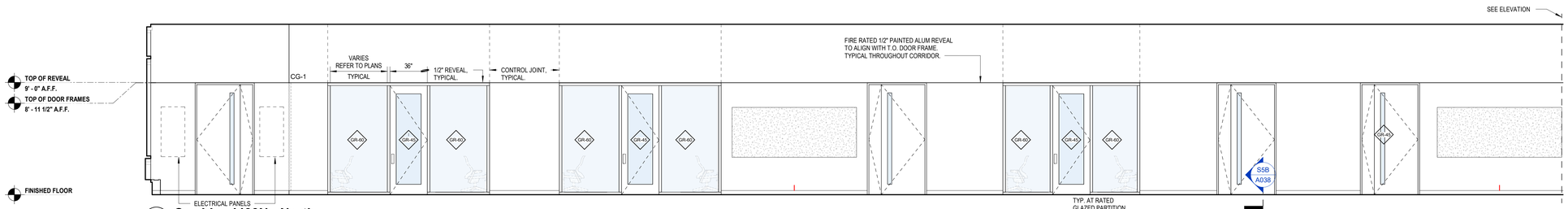
6 A715 **Conference Room 4421 - North**
SCALE: 1/4" = 1'-0"



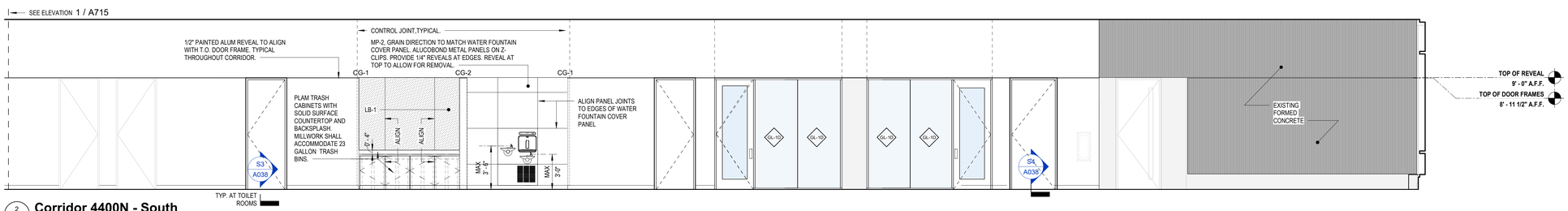
5 A715 **Conference Room 4421 - East**
SCALE: 1/4" = 1'-0"



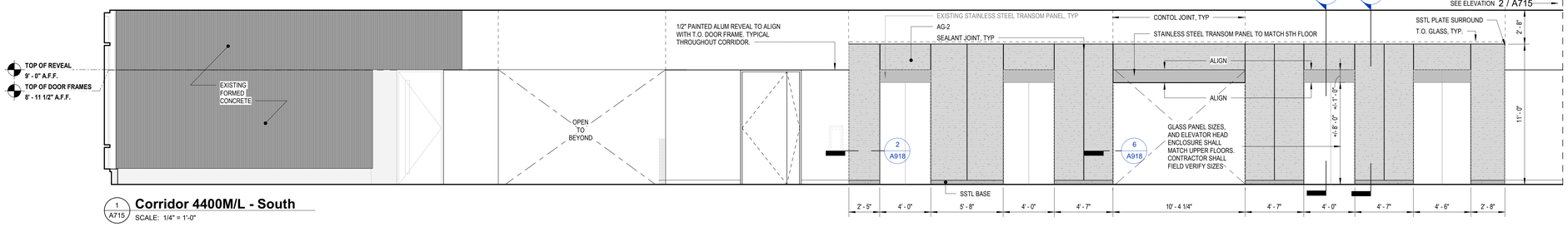
4 A715 **Corridor 4400M/L - North**
SCALE: 1/4" = 1'-0"



3 A715 **Corridor 4400N - North**
SCALE: 1/4" = 1'-0"



2 A715 **Corridor 4400N - South**
SCALE: 1/4" = 1'-0"



1 A715 **Corridor 4400M/L - South**
SCALE: 1/4" = 1'-0"

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KEY PLAN

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
Project Address

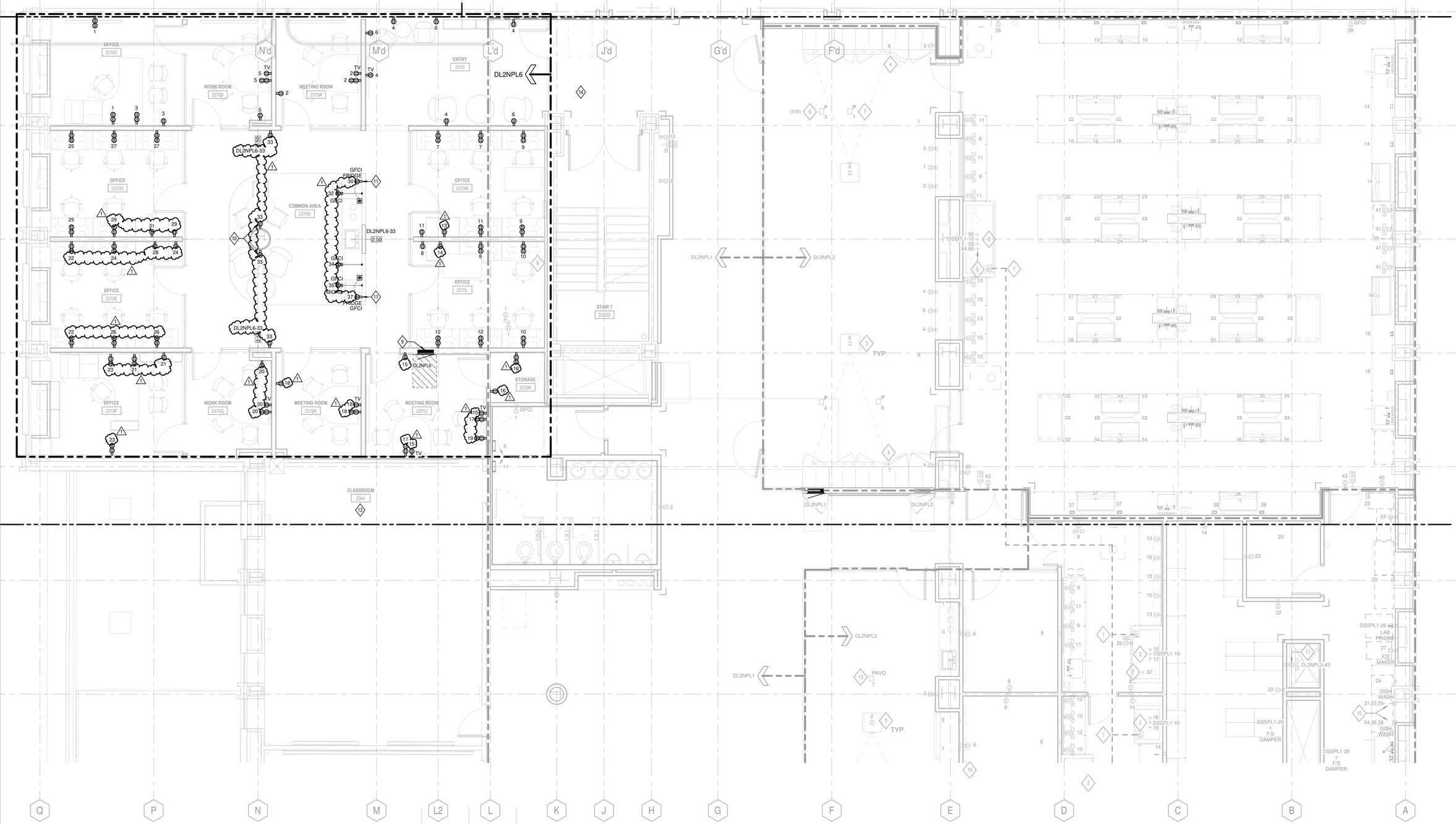
Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
INTERIOR ELEVATIONS

Revisions

No.	Date:	Description:
2	9/19/2023	ADDENDUM NO. 2

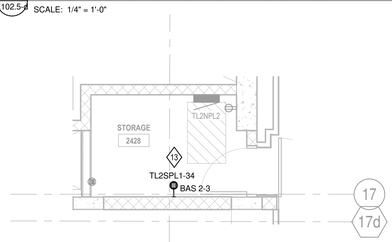
Graphic Scale	VARIES
UWSA#	A-22-015
Set Type	BD
Date Issued	09/19/2023
Sheet Number	A715



N 1 E102.5-d

ELECTRICAL POWER PLAN - 2ND FLOOR - DANIELS (NORTH)

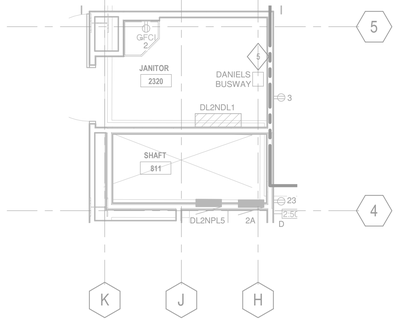
SCALE: 1/4" = 1'-0"



N 2 E102.5-d

ELECTRICAL POWER PLAN - 2ND FLOOR - TOWER

SCALE: 1/4" = 1'-0"



N 3 E102.5-d

ELECTRICAL POWER PLAN - 2ND FLOOR - DANIELS (SOUTH)

SCALE: 1/4" = 1'-0"

SHEET KEYNOTES

9. PROVIDE (6) SPARE 3/4" CONDUITS TO ACCESSIBLE LOCATION ABOVE CEILING FLOOR FOR EACH RECESSED PANELBOARD PER SPECIFICATION SECTION 26 24 16.
10. REFER TO ARCHITECTURAL DETAIL 1/A013 FOR ELECTRICAL DEVICE MOUNTED ON COLUMN.
11. PROVIDE A 120V, 20A FACELESS GFCI ON WALL. GFCI SHALL BE WIRED IN SERIES TO THE LINE SIDE OF THE DEDICATED APPLIANCE RECEPTACLE CIRCUIT. GFCI SHALL BE PROVIDED WITH LABEL OF FACEPLATE THAT READS "RESET". LABEL SHALL ALSO IDENTIFY APPLIANCE TYPE.
12. RECIRCUIT EXISTING PANEL 2B ELECTRICAL CIRCUITS IN THIS ROOM. PANEL 2B LIGHTING CIRCUITS 1, 2, 3, RECEPTACLE CIRCUITS 7,8 AND CEILING RECEPTACLE CIRCUIT 9 SHALL BE REFED FROM PANEL DL2NPL1. PROVIDE (6) 20/1 BREAKERS, CONDUIT, AND CONDUCTORS TO EXISTING DEVICES.
13. PROVIDE 120V, 20A FIXED EQUIPMENT LOCATION FOR TEMPERATURE CONTROL PANEL. COORDINATE EXACT LOCATION WITH TC VENDOR PRIOR TO ROUGH-IN. PANEL TL2SPL1 IS LOCATED IN ELECTRICAL ROOM 2430B ON THIS FLOOR.
14. RECIRCUIT EXISTING PANEL 2B ELECTRICAL CIRCUITS ON THIS FLOOR. PANEL 2B STAIRWELL PLUG CIRCUIT 17 AND HALLWAY RECEPTACLES CIRCUIT 23 SHALL BE REFED FROM PANEL DL2NPL1. PROVIDE (1) 20/2 AND (1) 20/1 BREAKERS, CONDUIT, AND CONDUCTORS TO EXISTING DEVICES.

(ETR)

1. TYPICAL: ALL FUME HOODS AND FLAMMABLE STORAGE CABINETS SHALL BE GROUNDED. THE INSULATED GROUNDING WIRE SHALL BE #6 AWG AND SHALL BE BONDED TO LAB GROUNDING LOOP(#2 AWG) WITH IRREVERSIBLE COMPRESSION FITTING. THE LAB GROUNDING LOOP SHALL BE BONDED TO THE GROUNDING BAR IN THE ELECTRICAL ROOM. MOUNT GROUND LOOP SO THAT IT IS OUT OF VIEW FROM FLOOR.
2. PROVIDE (2) NORMAL AND (1) STANDBY POWER CONNECTIONS TO FUME HOOD.
3. CEILING MOUNTED DUPLEX RECEPTACLES DEDICATED FOR PROJECTOR.
4. PROVIDE 120V, 20A CONNECTION AND SWITCH FOR AUTOMATIC PROJECTOR SCREEN.
5. PROVIDE 208V CIRCUIT FOR NEMA 6-15R ON EXISTING FUME HOOD. CONTRACTOR TO CONFIRM METHOD OF CONNECTING TO RECEPTACLE WITH EXISTING EQUIPMENT CONFIGURATION.
6. PROVIDE POWER ONLY POKE THROUGH WIREMOLD RC9A15TCAL OR EQUAL.
7. LOCATE POKE THROUGH TO AVOID DUCTWORK BELOW.
8. PROVIDE INFILL AND PATCHING OF DEMOLISHED CLASS BELL AND FIRE ALARM BOXES TO MATCH REQUIRED FIRE RATING OF WALL.

GENERAL NOTES

1. REFER TO DRAWING E001 FOR SYMBOLS AND ABBREVIATIONS.
2. ALL RECEPTACLES LOCATED WITHIN 6 FEET OF SINKS SHALL BE PROVIDED WITH INTERGRAL GROUND FAULT INTERRUPTER WHETHER SHOWN ON PLANS OR NOT.
3. REFER TO M-SERIES AND P-SERIES DRAWINGS FOR EXACT MOTOR LOCATIONS.
4. REFER TO ARCHITECTURAL PLANS, DETAILS AND ELEVATIONS FOR LOCATIONS, MOUNTING HEIGHTS, AND FINISHES OF ELECTRICAL DEVICES.

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KEY PLAN

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
MADISON, WI 53706-1322

Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
ELECTRICAL POWER PLAN - 2ND FLOOR DANIELS (NORTH)

Revisions

No.	Date:	Description:
1	9/19/2023	ADDENDUM #2

Graphic Scale	0 2 4
UWSA#	A-22-015
Set Type	BD
Date Issued	08/24/2023
Sheet Number	E102.5-d

GENERAL NOTES

1. REFER TO DRAWING E001 FOR SYMBOLS AND ABBREVIATIONS.
2. REFER TO M-SERIES AND P-SERIES DRAWINGS FOR EXACT MOTOR LOCATIONS.
3. REFER TO ARCHITECTURAL PLANS, DETAILS AND ELEVATIONS FOR LOCATIONS, MOUNTING HEIGHTS, AND FINISHES OF ELECTRICAL DEVICES.
4. REFER TO E708 ELECTRICAL GROUNDING RISER FOR INFORMATION ON GROUNDING CONNECTIONS. ELECTRICAL GROUNDING SHALL NOT BE CONNECTED TO AV/TELECOM GROUND BAR.
5. EXPOSED CONDUITS IN PUBLIC AND USER SPACES SHALL BE MINIMUM 12'-0" ABOVE FINISHED FLOOR.

SHEET KEYNOTES

1. PROVIDE PLUG-IN CIRCUIT BREAKER TO FEED FUTURE NORMAL POWER EQUIPMENT.
2. ELECTRICAL ROOMS IN SHELL FLOORS ARE FITOUT WITH EQUIPMENT DURING CORE PROJECT PHASE. REFER TO E601 ENLARGED ELECTRICAL ROOM FLOOR PLAN FOR MORE INFORMATION.
3. CONDUIT AND BACKBOXED MOUNTED IN STAIR SHALL BE RECESSED. PROVIDE 1" CONDUIT TO FACILITATE INSTALLATION OF FUTURE SERVICES. SURFACE MOUNTED BACKBOXED AND CONDUIT NOT PERMITTED.
4. NOT USED.
5. PROVIDE POWER TO FIRE ALARM POWER SUPPLIES FROM PANEL TL5EPL1, CIRCUIT 15. COORDINATE EXACT LOCATION WITH FIRE ALARM CONTRACTOR.
6. TYPICAL: ALL FUME HOODS AND FLAMMABLE STORAGE CABINETS SHALL BE GROUNDED. THE INSULATED GROUNDING WIRE SHALL BE #6 AWG AND SHALL BE BONDED TO LAB GROUNDING LOOP (#2 AWG) WITH IRREVERSIBLE COMPRESSION FITTING. THE LAB GROUNDING LOOP SHALL BE BONDED TO THE GROUNDING BAR IN THE ELECTRICAL ROOM. MOUNT GROUND LOOP SO THAT IT IS OUT OF VIEW FROM FLOOR. REVIEW AND MATCH EXISTING LABS ON UPPER FLOORS OF TOWER.
7. REFER TO DETAIL 1 ON SHEET L602A FOR ADDITIONAL FUME HOOD INFORMATION.
8. FLOOR MOUNTED FUME HOODS:
   - (1) STANDBY FIXED EQUIPMENT CONNECTION SHALL SERVE THE LOW FLOW ALARM.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE HOOD LIGHTS AND LEFT SIDE RECEPTACLE.
   - (3) NORMAL FIXED EQUIPMENT CONNECTIONS SHALL SERVE DEDICATED CIRCUIT PREWIRED HOOD CONVENIENCE RECEPTACLES. RECEPTACLES SHALL BE FURNISHED WITH PREWIRED MC CABLE WHIPS BY CASEWORK SUPPLIER. EC SHALL INSTALL MC CABLE WHIPS TO TOP OF FUME HOOD AND CONNECT TO JUNCTION BOX AT TOP OF FUME HOOD.
9. PROVIDE 120V, 20A FIXED EQUIPMENT CONNECTION FOR LIGHTING CONTROLS.
10. PROVIDE 120V, 20A FIXED EQUIPMENT CONNECTION FOR FIRE ALARM EQUIPMENT.
11. PROVIDE 120V, 20A SIMPLEX RECEPTACLE TO WATER COOLER. CIRCUIT SHALL BE PROTECTED BY GFI BREAKER AT PANEL.
12. PROVIDE POWER TO EXISTING RECEPTACLES AT EACH TELECOM EQUIPMENT RACK. REFER TO DETAIL 3/401 FOR TYPICAL INSTALLATION DETAIL.
13. PROVIDE 120V, 20A STANDBY POWER SECURITY CONTROL PANELS.
14. STANDARD FUME HOODS:
   - (1) STANDBY FIXED EQUIPMENT CONNECTION SHALL SERVE THE LOW FLOW ALARM.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE HOOD LIGHTS AND LEFT SIDE HOOD RECEPTACLE.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE RIGHT SIDE HOOD RECEPTACLE.
   - (4) NORMAL FIXED EQUIPMENT CONNECTIONS SHALL SERVE DEDICATED DUPLEX CONVENIENCE RECEPTACLES ON CASEWORK.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE VACUUM PUMP RECEPTACLE.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE SECOND VACUUM PUMP RECEPTACLE WHERE INDICATED.

   CASEWORK AND VACUUM PUMP RECEPTACLES SHALL BE FURNISHED WITH PREWIRED MC CABLE WHIPS BY CASEWORK SUPPLIER. EC SHALL INSTALL MC CABLE WHIPS TO TOP OF FUME HOOD AND CONNECT TO JUNCTION BOX AT TOP OF FUME HOOD.
15. PROVIDE (6) SPARE 3/4" CONDUITS TO ACCESSIBLE LOCATION ABOVE CEILING OR BELOW FLOOR FOR EACH RECESSED PANELBOARD PER SPECIFICATION SECTION 26 24 16.
16. PROVIDE 120V, 20A POWER CONNECTION TO MOTORIZED WINDOW SHADES. INSTALL SHADE CONTROLS PER MANUFACTURERS REQUIREMENTS.
17. ROUTE POWER FOR SURFACE MOUNTED RACEWAY DOWN FROM CEILING AT THIS LOCATION. PROVIDE 2-CHANNEL RACEWAY VERTICALLY FROM TOP OF FUME HOOD INTO HORIZONTAL 2-CHANNEL RACEWAY.
18. PROVIDE 2-CHANNEL SURFACE MOUNTED RACEWAY MOUNTED ON BACK OF FUME HOODS AS SHOWN. SMR CONDUIT AND WIRING IS TO BE ROUTED FROM CEILING. MOUNT ABOVE SURFACE MOUNTED PLUMBING CHANNEL SYSTEM.
19. PROVIDE 2-CHANNEL SURFACE MOUNTED RACEWAY MOUNTED TO SIDE OF FUME HOOD.
20. REPLACE EXISTING PANEL NAMEPLATE WITH NEW NAMEPLATE TO REVISE PANEL NAME FROM TL4NPL1 TO TL4NPL9. REPLACE JUNCTION BOX AND WIRING DEVICE IDENTIFICATION TAG WITH UPDATED PANEL NAME.
21. PROVIDE POKE THROUGH WIREMOLD EVOLUTION 10ATCPAA OR EQUAL FOR POWER, DATA AND AV WITH (2) 120V, 20A DUPLEX RECEPTACLES IN FLOOR BOX, WITH POWER, DATA AND AV. ELECTRICAL CONTRACTOR TO REMOVE J-BOX FROM BASE AND EXTEND CONDUIT STUB THROUGH FLOOR.
22. ROUTE POWER CONDUIT AND WIRING FROM CEILING INTO UMBILICAL. PROVIDE 2-CHANNEL SURFACE MOUNTED RACEWAY MOUNTED TO VERTICAL POSTS BELOW BOTTOM SHELF OF CASEWORK.
23. MOUNT CONDUIT THROUGH THIS ROOM TIGHT TO STRUCTURE TO COORDINATE WITH MECHANICAL DUCTWORK.
24. PROVIDE 120V, 20A CONNECTION TO SWITCHED DEDICATED RECEPTACLE INSTALLED INSIDE CABINET FOR VACUUM PUMP. SWITCH IS INTEGRAL TO FUME HOOD CABINET. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH FUME HOOD VENDOR PRIOR TO ROUGH-IN.
25. ADA FUME HOODS:
   - (1) STANDBY FIXED EQUIPMENT CONNECTION SHALL SERVE THE LOW FLOW ALARM.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE HOOD LIGHTS AND LEFT SIDE HOOD RECEPTACLE.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE RIGHT SIDE HOOD RECEPTACLE.
   - (2) NORMAL FIXED EQUIPMENT CONNECTIONS SHALL SERVE DEDICATED DUPLEX CONVENIENCE RECEPTACLES ON CASEWORK.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE VACUUM PUMP RECEPTACLE.

   CASEWORK AND VACUUM PUMP RECEPTACLES SHALL BE FURNISHED WITH PREWIRED MC CABLE WHIPS BY CASEWORK SUPPLIER. EC SHALL INSTALL MC CABLE WHIPS TO TOP OF FUME HOOD AND CONNECT TO JUNCTION BOX AT TOP OF FUME HOOD.
26. PROVIDE NEMA L14-20R IN CEILING SERVICE PANEL.
27. PROVIDE 120V, 20A STANDBY FIXED CONNECTION TO GAS METER AT CEILING LEVEL HEIGHT. EC SHALL ROUTE CABLES BETWEEN GAS METERING DEVICES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING CONTRACTOR.
28. TRANSITION CONDUITS TO SINGLE ROW DEEP TO COORDINATE WITH MECHANICAL DUCTWORK.
29. MOUNT DEVICE FACEPLATE FLUSH WITH EXISTING PLYWOOD WALL COVERING.

ELECTRICAL POWER PLAN - 4TH (WEST)

SCALE: 1/4" = 1'-0"

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KEY PLAN

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
MADISON, WI 53706-1322

Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
ELECTRICAL POWER PLAN 4TH (WEST)

Revisions

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1	9/19/2023	ADDENDUM #2

Graphic Scale	0 2 4
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Set Type	BD
Date Issued	08/24/2023
Sheet Number	E104.1

GENERAL NOTES

1. REFER TO DRAWING E001 FOR SYMBOLS AND ABBREVIATIONS.
2. REFER TO M-SERIES AND P-SERIES DRAWINGS FOR EXACT MOTOR LOCATIONS.
3. REFER TO ARCHITECTURAL PLANS, DETAILS AND ELEVATIONS FOR LOCATIONS, MOUNTING HEIGHTS, AND FINISHES OF ELECTRICAL DEVICES.
4. REFER TO E708 ELECTRICAL GROUNDING RISER FOR INFORMATION ON GROUNDING CONNECTIONS. ELECTRICAL GROUNDING SHALL NOT BE CONNECTED TO AV/TELECOM GROUND BAR.
5. EXPOSED CONDUITS IN PUBLIC AND USER SPACES SHALL BE MINIMUM 12'-0" ABOVE FINISHED FLOOR.

SHEET KEYNOTES

1. CONDUIT AND BACKBOXES MOUNTED IN STAIR SHALL BE RECESSED. PROVIDE 1" CONDUIT TO FACILITATE INSTALLATION OF FUTURE SERVICES. SURFACE MOUNTED BACKBOXES AND CONDUIT NOT PERMITTED.
2. PROVIDE (2) 120V, 20A DUPLEX RECEPTACLE IN FLOOR BOX WITH POWER, DATA AND AV CONDUIT STUB UP TO AREA OF FUTURE EAST AND WEST WALL OF CONFERENCE ROOM. REFER TO CONTROL PLANS FOR EXACT LOCATION OF FLOOR BOX AND DIMENSIONS FOR CONDUIT STUB UPS IN FUTURE WALL. COORDINATE INSTALLATION DEPTH OF FLOOR BOX PRIOR TO POUR AND PROVIDE ANY NECESSARY BOX EXTENSIONS.
3. PROVIDE (1) 120V, 20A DUPLEX RECEPTACLE IN FLOOR BOX, WITH POWER, DATA AND AV CONDUIT STUB UP TO AREA OF FUTURE EAST WALL OF CONFERENCE ROOM AND AV CONDUIT BETWEEN FLOOR BOXES IN THE ROOM. REFER TO CONTROL PLANS FOR EXACT LOCATION OF FLOOR BOX AND DIMENSIONS FOR CONDUIT STUB UPS IN FUTURE WALL. COORDINATE INSTALLATION DEPTH OF FLOOR BOX PRIOR TO POUR AND PROVIDE ANY NECESSARY BOX EXTENSIONS.
4. PROVIDE (1) 120V, 20A DUPLEX RECEPTACLE IN FLOOR BOX, WITH POWER, DATA AND AV CONDUIT STUB UP TO AREA OF FUTURE WEST WALL OF CONFERENCE ROOM AND AV CONDUIT BETWEEN FLOOR BOXES IN THE ROOM. REFER TO CONTROL PLANS FOR EXACT LOCATION OF FLOOR BOX AND DIMENSIONS FOR CONDUIT STUB UPS IN FUTURE WALL. COORDINATE INSTALLATION DEPTH OF FLOOR BOX PRIOR TO POUR AND PROVIDE ANY NECESSARY BOX EXTENSIONS.
5. PROVIDE CIRCUIT TO EXISTING RECEPTACLE(S) IN EXISTING FLOOR BOX. FEED FROM CONDUIT STUB UP AT EAST WALL. CAP AND ABANDON STUB UP AT WEST WALL.
6. TYPICAL: ALL FUME HOODS AND FLAMMABLE STORAGE CABINETS SHALL BE GROUNDED. THE INSULATED GROUNDING WIRE SHALL BE #6 AWG AND SHALL BE BONDED TO LAB GROUNDING LOOP (#2 AWG) WITH IRREVERSIBLE COMPRESSION FITTING. THE LAB GROUNDING LOOP SHALL BE BONDED TO THE GROUNDING BAR IN THE ELECTRICAL ROOM. MOUNT GROUND LOOP SO THAT IT IS OUT OF VIEW FROM FLOOR. REVIEW AND MATCH EXISTING LABS ON UPPER FLOORS OF TOWER.
7. REFER TO DETAIL 1 ON SHEET L602A FOR ADDITIONAL FUME HOOD INFORMATION.
8. ADA FUME HOODS:
   - (1) STANDBY FIXED EQUIPMENT CONNECTION SHALL SERVE THE LOW FLOW ALARM.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE HOOD LIGHTS AND LEFT SIDE RECEPTACLE.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE RIGHT SIDE HOOD RECEPTACLE.
   - (2) NORMAL FIXED EQUIPMENT CONNECTIONS SHALL SERVE DEDICATED DUPLEX CONVENIENCE RECEPTACLES ON CASEWORK.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE VACUUM PUMP RECEPTACLE.

   CASEWORK AND VACUUM PUMP RECEPTACLES SHALL BE FURNISHED WITH PREWIRED MC CABLE WHIPS BY CASEWORK SUPPLIER. EC SHALL INSTALL MC CABLE WHIPS TO TOP OF FUME HOOD AND CONNECT TO JUNCTION BOX AT TOP OF FUME HOOD.
9. STANDARD FUME HOODS:
   - (1) STANDBY FIXED EQUIPMENT CONNECTION SHALL SERVE THE LOW FLOW ALARM.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE HOOD LIGHTS AND LEFT SIDE RECEPTACLE.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE RIGHT SIDE HOOD RECEPTACLE.
   - (4) NORMAL FIXED EQUIPMENT CONNECTIONS SHALL SERVE DEDICATED DUPLEX CONVENIENCE RECEPTACLES ON CASEWORK.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE VACUUM PUMP RECEPTACLE.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE SECOND VACUUM PUMP RECEPTACLE WHERE INDICATED.

   CASEWORK AND VACUUM PUMP RECEPTACLES SHALL BE FURNISHED WITH PREWIRED MC CABLE WHIPS BY CASEWORK SUPPLIER. EC SHALL INSTALL MC CABLE WHIPS TO TOP OF FUME HOOD AND CONNECT TO JUNCTION BOX AT TOP OF FUME HOOD.
10. PROVIDE 2-CHANNEL SURFACE MOUNTED RACEWAY MOUNTED TO SIDE OF FUME HOOD.
11. PROVIDE 2-CHANNEL SURFACE MOUNTED RACEWAY MOUNTED ON BACK OF FUME HOODS AS SHOWN. SMR CONDUIT AND WIRING IS TO BE ROUTED FROM CEILING. MOUNT ABOVE SURFACE MOUNTED PLUMBING CHANNEL.
12. ROUTE POWER FOR SURFACE MOUNTED RACEWAY DOWN FROM CEILING AT THIS LOCATION. PROVIDE 2-CHANNEL RACEWAY VERTICALLY FROM TOP OF FUME HOOD INTO HORIZONTAL 2-CHANNEL RACEWAY.
13. FLOOR MOUNTED FUME HOODS:
   - (1) STANDBY FIXED EQUIPMENT CONNECTION SHALL SERVE THE LOW FLOW ALARM.
   - (1) NORMAL FIXED EQUIPMENT CONNECTION SHALL SERVE HOOD LIGHTS AND LEFT SIDE RECEPTACLE.
   - (3) NORMAL FIXED EQUIPMENT CONNECTIONS SHALL SERVE DEDICATED CIRCUIT PREWIRED HOOD CONVENIENCE RECEPTACLES.

   RECEPTACLES SHALL BE FURNISHED WITH PREWIRED MC CABLE WHIPS BY CASEWORK SUPPLIER. EC SHALL INSTALL MC CABLE WHIPS TO TOP OF FUME HOOD AND CONNECT TO JUNCTION BOX AT TOP OF FUME HOOD.
14. PROVIDE 120V, 20A STANDBY FIXED CONNECTION TO GAS METER AT CEILING LEVEL HEIGHT. EC SHALL ROUTE CABLES BETWEEN GAS METERING DEVICES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING CONTRACTOR.
15. PROVIDE 120V, 20A CONNECTION TO SWITCHED DEDICATED RECEPTACLE INSTALLED INSIDE CABINET FOR VACUUM PUMP. SWITCH IS INTEGRAL TO FUME HOOD CABINET. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH FUME HOOD VENDOR PRIOR TO ROUGH-IN.
16. PROVIDE (6) SPARE 3/4" CONDUITS TO ACCESSIBLE LOCATION ABOVE CEILING OR BELOW FLOOR FOR EACH RECESSED PANELBOARD PER SPECIFICATION SECTION 26 24 16.
17. ROUTE POWER CONDUIT AND WIRING FROM CEILING INTO UMBILICAL. PROVIDE 2-CHANNEL SURFACE MOUNTED RACEWAY MOUNTED TO VERTICAL POSTS BELOW BOTTOM SHELF OF CASEWORK.
18. PROVIDE 120V, 20A FIXED EQUIPMENT CONNECTION AND FUSED DISCONNECT SWITCH FOR WHEELCHAIR LIFT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH WHEELCHAIR LIFT VENDOR PRIOR TO ROUGH-IN.
19. PROVIDE 120V, 20A FIXED EQUIPMENT CONNECTION FOR FIRE ALARM EQUIPMENT. COORDINATE EXACT LOCATION WITH FIRE ALARM VENDOR PRIOR TO ROUGH-IN.
20. PROVIDE PROVISIONS FOR EXPANSION JOINT AT THIS LOCATION.
21. MOUNT CONDUIT THROUGH THIS ROOM TIGHT TO STRUCTURE TO COORDINATE WITH MECHANICAL DUCTWORK.
22. MOUNT RECEPTACLE HORIZONTALLY 1" BELOW TOP OF FIN TUBE COVER IN THE GAP BETWEEN FIN TUBE HEATING ELEMENTS. RECEPTACLE TO BE MOUNTED INDEPENDENT OF FIN TUBE ENCLOSURE SUCH THAT ENCLOSURE COVER CAN BE REMOVED. COORDINATE EXACT DIMENSIONS WITH MECHANICAL CONTRACTOR AND GENERAL CONTRACTOR.
23. TRANSITION CONDUITS TO SINGLE ROW DEEP TO COORDINATE WITH MECHANICAL DUCTWORK.
24. PROVIDE NEMA L14-20R IN CEILING SERVICE PANEL.
25. PROVIDE 120V, 20A FIXED EQUIPMENT CONNECTIONS FOR BAS EQUIPMENT. COORDINATE EXACT LOCATION WITH BAS VENDOR PRIOR TO ROUGH-IN.
26. MOUNT RECEPTACLE INSIDE AV BOX.
27. CONTROL SWITCHES FOR NORTH AND SOUTH MOTORIZED SHADES. CONFIRM EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
28. PROVIDE 120V, 20A CONNECTION TO MOTORIZED SHADE. CONFIRM EXACT LOCATION AND QUANTITY OF CONNECTIONS WITH SHADE SUPPLIER.
29. PROVIDE 120V, 20A OPTIONAL STANDBY CONNECTION TO POWERED DOOR OPERATOR. PROVIDE BACKBOX, CONDUIT, AND INTERCONNECTION FROM PUSH PLATES TO CONTROLLER AS REQUIRED. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
30. PROVIDE 120V, 20A OPTIONAL STANDBY CONNECTION TO REMOTE POWER SUPPLY FOR QEL EXIT DEVICE. COORDINATE EXACT LOCATION WITH DOOR SECURITY PROVIDER.

N

1 E104.2 **ELECTRICAL POWER PLAN - 4TH (EAST)**

SCALE: 1/4" = 1'-0"

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KEY PLAN

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
MADISON, WI 53706-1322

Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
ELECTRICAL POWER PLAN 4TH (EAST)

Revisions

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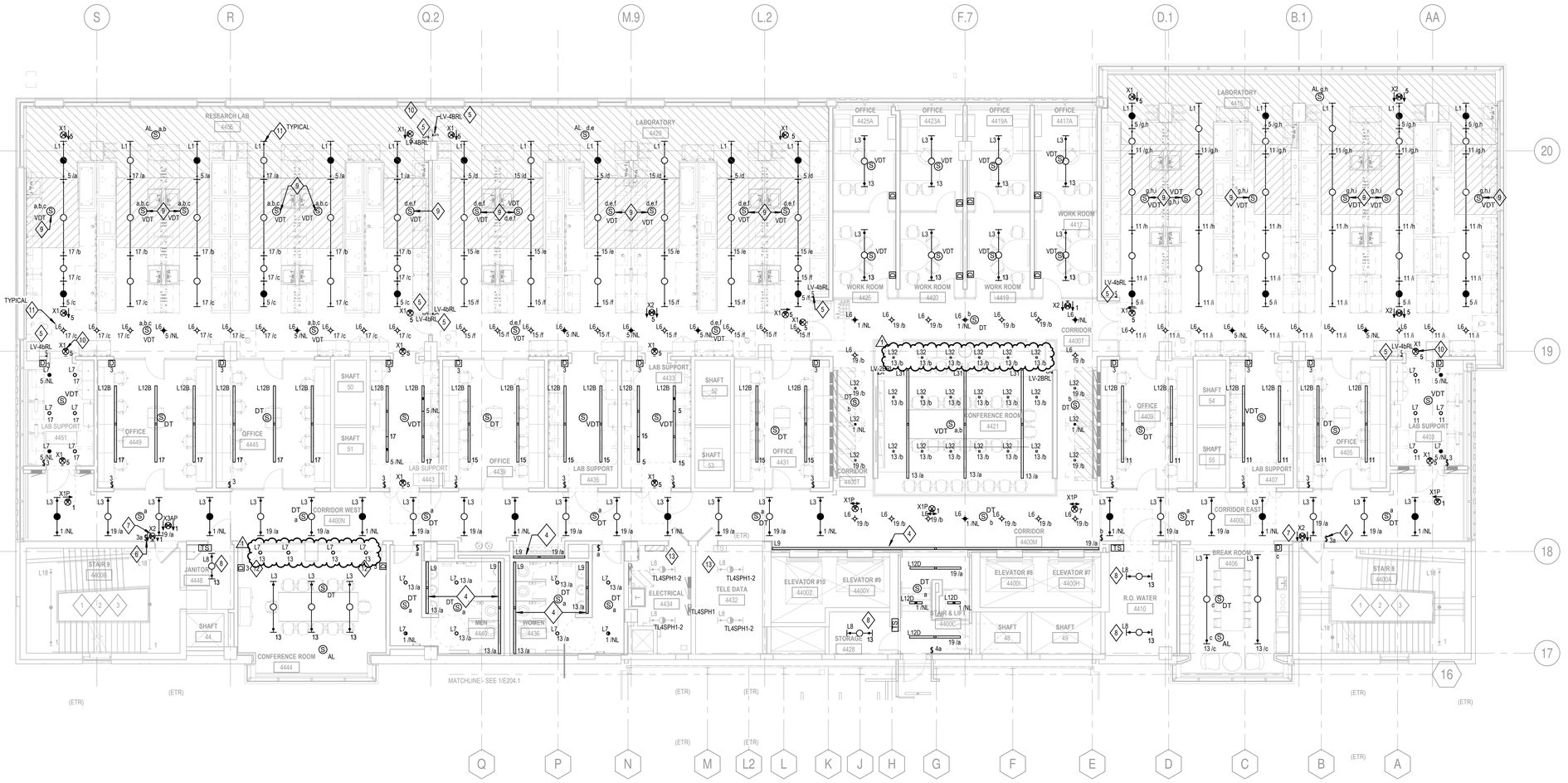


GENERAL NOTES

1. REFER TO DRAWING E001 FOR SYMBOLS AND ABBREVIATIONS.
2. REFER TO SHEET E904 FOR LUMINAIRE SCHEDULE.
3. FIRE-RATE ALL PENETRATIONS AS REQUIRED BY CODE, REFER TO ARCHITECTURAL DOCUMENTS FOR LOCATION OF FIRE-RATE WALLS, WALL TYPES, INTERIOR ELEVATIONS AND CEILING TYPES.
4. REFER TO ARCHITECTURAL ELEVATIONS AND FLOOR PLANS FOR EXACT DEVICE LOCATIONS AND ORIENTATION. ELECTRICAL DRAWINGS INDICATE DEVICE QUANTITES AND RELATIVE LOCATION BUT EXACT LOCATION AND ELEVATION SHELL BE PER ARCHITECTURAL DRAWINGS. IN THE AVSENCE OF AN ARCHITECTURAL ELEVATION, ELECTRICAL DRAWINGS SHALL TAKE PRECEDENCE.
5. OCCUPANCY SENSORS SHALL CONTROL ALL LUMINAIRES, WITH SWITCH LEG, IN ROOM IN WHICH THEY ARE INSTALLED. PROVIDE QUANTITY OF SENSORS AS REQUIRED FOR FULL COVERAGE OF ROOM. IN ROOMS WITH MORE THAN ONE SENSOR ALL SENSORS SHALL BE TIED TOGETHER.
6. ALL ROOMS WITH OCCUPANCY SENSORS SHALL HAVE AUXILARY CONTACTS FOR HVAC CONTROL EXCEPT CORRIDORS.
7. INDUSTRIAL TYPE LUMINAIRES IN UNFINISHED AREAS, WHICH ARE NEAR OBSTRUCTIONS SUCH AS DUCTS AND PIPES, SHALL BE:
   a. SUSPENDED SO THAT BOTTOM OF LUMINAIRE IS NO HIGHER THAN BOTTOM OF OBSTRUCTION.
   b. LOCATED AT HEIGHT OF LOWEST LUMINAIRE.
   c. MINIMUM HEIGHT: 8'-0"
   d. SHALL NOT BE LOCATED UNTIL LOCATIONS OF OBSTRUCTIONS ARE DETERMINED.
8. EXPOSED CONDUITS IN PUBLIC AND USER SPACES SHALL BE MINIMUM 12'-0" ABOVE FINISHED FLOOR.
9. EMERGENCY LIGHTING SHALL BE FED FROM PANEL TL5EPH1 ULNLESS OTHERWISE NOTED.
10. OPTIONAL STANDBY LIGHTING SHALL BE FED FROM PANEL TL4SPH1 UNLESS OTHERWISE NOTED.
11. NORMAL LIGHTING SHALL BE FED FROM PANEL TL5NPH1 UNLESS OTHERWISE NOTED.
12. PROVIDE UL-924 LISTED EMERGENCY TRANSFER DEVICE FOR LIGHTING WITH SWITCH TAG ON EMERGENCY POWER, WATT STOPPER ECLU-200, OR APPROVED EQUAL, FOR EACH SWITCHED CIRCUIT. PROVIDE UNSWITCHED EMERGENCY POWER AND UNSWITCHED NORMAL POWER TO TRANSFER DEVICE.
13. PROVIDE THE COST FOR THREE ADDITIONAL EXIT SIGNS FOR THIS WORK AREA. COST TO INCLUDE MATERIAL, LABOR, OVERHEAD AND PROFIT. LOCATE SIGNS AS REQUIRED BY INSPECTOR.

ELECTRICAL LIGHTING PLAN - 4TH FLOOR

SCALE: 1/8" = 1'-0"

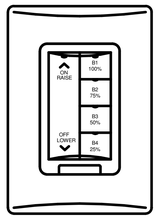
LIGHTING CONTROL MATRIX (UW CHEMISTRY 4TH FLOOR FIT OUT AND 2ND FLOOR RENOVATION)

	NORMAL HOURS OF OPERATION								AFTER HOURS OPERATION		
Space Description	Manual On	Sensor On	Wall Switch Override	Sensor Off	Local Control	Daylight Zones	HVAC Aux Contact	Seq Notes	Manual On	Sensor On	Sensor Off
Collaboration Spaces		100%	X	15 min	Low Voltage		X			100%	20 min
Common Area/Entry (2nd floor only)		100%	X	15 min	Low Voltage					100%	
Public Corridor (4th floor only)		100%		15 min	Low Voltage					100%	
Fac Office/Work, Interview, Office (2nd floor only)	X	50%	X	15 min	Dimmer		X		X	50%	15 min
RA Office (4th floor only)	X	50%	X	15 min	Dimmer		X		X	50%	15 min
FAC Office, Fac Work (4th floor only)	X		X	15 min	Dimmer		X		X		15 min
Conference Room (4th floor only)	X	50%	X	15 min	Dimmer		X		X	50%	15 min
Labs (4th floor only)	X		X	15 min	Dimmer	50lc	X				15 min
Lab Support (4th floor only)	X		X	15 min	Dimmer		X		X		15 min
Public Toilets (4th floor only)	X	100%	X	15 min	Switch		X		X	100%	15 min
Equipment Room (4th floor only)	X				Switch				X		
Electrical Room (4th floor only)	X								X		
Storage, R.O. Water, J.C.	X			5 min	Switch				X		5 min

SEQUENCE OF OPERATION NOTES

LAB LOW VOLTAGE CONTROL SCHEDULE (UW Chemistry 4TH FLOOR FIT OUT)

Desig No.	Location	Zone(s) Controlled	Buttons	Blink Warn	Time Sched	Button	Description	Notes
LV-4bRL	LABS	a,b,c	4+R/L	Y		B1 = 100%	On 100%	1,2
						B2 = 75%	On 75%	1,2
						B3 = 50%	On 50%	1,2
						B4 = 25%	On 25%	1,2
						(ON)Raise/(OFF)Lower	Dimming for buttons 1-4	
LV-4bRL	LAB 4429	d,e,f	4+R/L	Y		B1 = 100%	On 100%	1,3
						B2 = 75%	On 75%	1,3
						B3 = 50%	On 50%	1,3
						B4 = 25%	On 25%	1,3
						(ON)Raise/(OFF)Lower	Dimming for buttons 1-4	
LV-4bRL	LAB 4415	g,h,i	4+R/L	Y		B1 = 100%	On 100%	1,4
						B2 = 75%	On 75%	1,4
						B3 = 50%	On 50%	1,4
						B4 = 25%	On 25%	1,4
						(ON)Raise/(OFF)Lower	ON/OFF/Dimming for buttons 1-4	

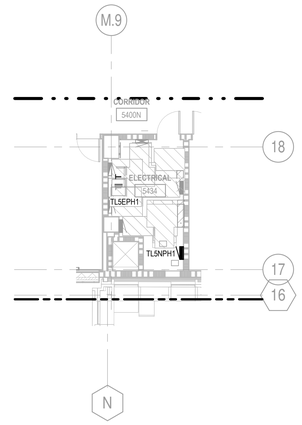


LAB LOW VOLTAGE SWITCH NOTES:
TAP TOP OF ON/RAISE BUTTON TO TURN ALL LIGHTS ON TO 100%
TAP BOTTOM OFF/LOWER BUTTON TO TURN ALL LIGHTS OFF

PRESS AND HOLD TOP OF ON/RAISE BUTTON TO RAISE THE LIGHT LEVEL OF SELECTED SCENE BUTTON
PRESS AND HOLD TOP OF OFF/LOWER BUTTON TO LOWER THE LIGHT LEVEL OF SELECTED SCENE BUTTON

LAB LOW VOLTAGE CONTROL NOTES:
1. Occupancy sensor are set for manual on(vacancy).
2. Ambient light sensor to dim lights to 20% if daylight provides levels above 50lc for switch "a,b" only.
3. Ambient light sensor to dim lights to 20% if daylight provides levels above 50lc for switch "d,e" only.
4. Ambient light sensor to dim lights to 20% if daylight provides levels above 50lc for switch "g,h" only.

LOW VOLTAGE SWITCH NOMENCLATURE (LV)
4bRL = 4 Button with (ON)Raise/(OFF)Lower



ELECTRICAL ROOM 5434 - 5TH (WEST)

SCALE: 1/8" = 1'-0"

SHEET KEYNOTES

(ETR)
1. STAIRWELLS SHALL BE REDUCED TO 50% WHEN UNOCCUPIED.
2. OCCUPANCY SENSOR SHALL BE INTEGRAL TO FIXTURES IN STAIRWALLS.
3. CONDUIT AND BACKBOXES MOUNTED IN STAIR SHALL BE RECESSED. PROVIDE 1" CONDUIT TO FACILITATE INSTALLATION OF FIXTURE SERVICES. SURFACE MOUNTED BACKBOXES AND CONDUIT NOT PERMITTED.
4. LUMINAIRE SHALL RUN CONTINOUS FROM WALL TO WALL AND ILLUMINATE THE ENTIRE LENGTH.
5. EACH SWITCH WITHIN LAB SHALL HAVE THE SAME FUNCTIONALITY. REFER TO SCHEDULE THIS SHEET.
6. EXISTING SWITCH LOCATION SHALL BE REWORKED TO SWITCH CORRIDOR LIGHTING.
7. NEW EXIT SIGN SHALL REPLACE EXISTING SINGLE SIDED EXIT SIGN.
8. REUSE EXISTING TYPE L8 LUMINAIRE FROM SHELL SPACE DEMOLITION.
9. OCCUPANCY SENSOR SHALL BE MOUNTED SO THAT BOTTOM FACE OF SENSOR IS FLUSH WITH BOTTOM OF LUMINAIRE.
10. ELECTRICAL CONTRACTOR TO RELOCATE EXISTING EXIT SIGN TO THIS LOCATION.
11. PROVIDE ADDITIONAL LUMINAIRE SUPPORTS AND OR OTHER SUPPORTING METHODS TO MOUNT LUMINAIRES. COORDINATE WITH OTHER TRADES TO PROVIDE COMPLETE INSTALLATION.
12. DIMMING SHALL BE PROVIDED AT BOTH LOCATIONS IN ROOM.
13. DISCONNECT EXISTING LUMINAIRES IN THIS ROOM FROM PANEL TL6SPH1, CIRCUIT 2 AND REFEED FROM PANEL TL4SPH1.

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UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
ELECTRICAL LIGHTING PLAN - 4TH FLOOR

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LUMINAIRE SCHEDULE - UW CHEMISTRY (2nd and 4th Floor)

Type	Description	Manufacturer	Catalog Number	Lamp Lumens/ Color Temp (K)	Total Watts	Ballast	Volts	Mounting Type	Remarks
L1	8" WIDE LINEAR LED PENDANT DIRECT/INDIRECT 80% DOWN AND 20% UP	LUMENWERX PEERLESS FINELITE	REVPICL-PMO-LED-80-600/200-35K-*LENGTH-UNV-ELD1-VERIFY-53WAC*-W- BRM9L LLP QST *FT MSL4 80CRI 35K ID800LMF 20/80 DARK ZT 277 SCT F1/18F C210 SERIES 16 LED DIRECT/INDIRECT	800 per ft 3500K	7.8 per ft	Integral Driver ELDO 0-10V DIMMING MIN 1% Dim	UNV	PENDANT	* LENGTH PER PLANS. VERIFY LENGTHS PRIOR TO ORDERING. ** VERIFY SWITCH LEGS REQUIRED. HOUSING COLOR (WHITE), MOUNTED 8'-6" AFF TO BOTTOM OF LIGHT. PROVIDE FOR ADDITIONAL MATERIAL TO MOUNT LIGHTS
L3	2" WIDE LINEAR DIRECT LED PENDANT	LUMENWERX CORONET MERCURY	VIA2P-D-LGO-FH-SW-80-750-35K-*LENGTH-UNV-ELD1-1C-AC*-W-* LS2 SERIES MLS2 SERIES	750 per ft 3500K	7.5 per ft	Integral Driver ELDO 0-10V DIMMING MIN 1% Dim	UNV	PENDANT	* LENGTH PER PLANS. VERIFY LENGTHS PRIOR TO ORDERING. HOUSING COLOR (WHITE)
L3A	NOT USED ON THIS FLOOR								
L3B	NOT USED ON THIS FLOOR								
L4	NOT USED ON THIS FLOOR								
L5	NOT USED ON THIS FLOOR								
L6	4.5" DIA DRUM WITH CLEAR ALZAK REFLECTOR	PATHWAY INDY LIGHTOLIER	C73PLB78V D 10 35K M D6 MW LC4 SERIES CALCULITE C4 SERIES	1000 3500K	11.4	Integral Driver ELDO 0-10V DIMMING MIN 10% Dim	UNV	SURFACE	HOUSING COLOR (WHITE), MOUNTED 8'-6" AFF TO BOTTOM OF LIGHT. PROVIDE UNISTRUT TO MOUNT LIGHT UNDER DUCT WORK AND PIPING.
L7	4" DIA RECESS LED DOWNLIGHT WITH CLEAR ALZAK SELF FLANGED REFLECTOR	GOTHAM PORTFOLIO LIGHTOLIER	EVO 35/10 4AR MWD LSS MVOLT EZ10 SF LD4B 10D010TR EU4B10208035 4LBM1H CALCULITE C4 SERIES	1000 3500K	11.8	Integral Driver ELDO 0-10V DIMMING MIN 5% Dim	UNV	RECESSED	
L9	LINEAR WALL SLOT	FINELITE LUMENWERX CORONET	HP WS 2D S 8 35 277 SC LG VIA3R-LGO-RG-SW-80-350-35K-*LENGTH-UNV-ELD1-1C-DMF-W JD3R SERIES	300 per ft 3500K	3 per ft	Integral Driver ELDO 0-10V DIMMING MIN 1% Dim	UNV	RECESSED	VERIFY LENGTHS WITH ARCHITECTURAL PLANS FOR FINAL DIMENSIONS. LUMINAIRE SHALL RUN WALL TO WALL.
L10	NOT USED ON THIS FLOOR								
L11	NOT USED ON THIS FLOOR								
L12	NOT USED ON THIS FLOOR								
L12A	NOT USED ON THIS FLOOR								
L12B	4" WIDE LINEAR RECESSED LED WITH ACRYLIC LENS	LUMENWERX FOCAL POINT FINELITE	VIA4R-D-LGO-800-35K-*LENGTH-UNV-ELD1-2EC-MOUNTING-W FSM4LWL FL 875LF 35K 1C UNV LD1 XFW WH XX HP4-R-D-XX-TL800-835-F-96LG-VOLT-SC-FC1%-VF-FE-SW	800 per ft 3500K	8 per ft	Integral Driver ELDO 0-10V DIMMING MIN 1% Dim	UNV	RECESSED	* LENGTH PER PLANS. VERIFY LENGTHS AND MOUNTING PRIOR TO ORDERING
L12D	4" WIDE LINEAR RECESSED LED WITH ACRYLIC LENS	LUMENWERX FOCAL POINT FINELITE	VIA4R-D-LGO-1000-35K-*LENGTH-UNV-ELD1-2EC-MOUNTING-W FSM4LWL FL 1000LF 35K 1C UNV LD1 XFW WH XX HP4-R-D-XX-TL1000-835-F-96LG-VOLT-SC-FC1%-VF-FE-SW	1000 per ft 3500K	4 per ft	Integral Driver ELDO 0-10V DIMMING MIN 1% Dim	UNV	RECESSED	* LENGTH PER PLANS. VERIFY LENGTHS AND MOUNTING PRIOR TO ORDERING
L13-30	NOT USED ON THIS FLOOR								
L31	4" WIDE LINEAR RECESSED LED WITH ACRYLIC LENS - BLACK HOUSING	LUMENWERX FOCAL POINT FINELITE	VIA4R-D-LGO-750-35K-*LENGTH-UNV-ELD1-2EC-*MOUNTING-B FSM4LWL FL SERIES HP4-R-D-XX-TL750-835-F-96LG-VOLT-SC-FC1%-SF-FE-FB	750 per ft 3500K	7.5 per ft	Integral Driver ELDO 0-10V DIMMING MIN 1% Dim	UNV	RECESSED	* LENGTH PER PLANS. VERIFY LENGTHS AND MOUNTING PRIOR TO ORDERING, HOUSING SHALL BE PAINTED BLACK, INSTALL IN WOOD CEILING.
L32	2" SQUARE RECESS LED DOWNLIGHT WITH MATTE BLACK SELF FLANGED REFLECTOR	CON-TECH LTG ACULUX	[illegible] AX2SQDR G2-12LM-35K-80CRI-30D-ZT-MVOLT-2SQ DB-FM	1100 3500K	10	Integral Driver ELDO 0-10V DIMMING MIN 5% Dim	UNV	RECESSED	INSTALL IN WOOD CEILING. CUT OUT SHALL BE 3-5/32" SQUARE.
X1	SINGLE FACE EDGE-LIT EXIT SIGNAGE	ISOLITE LITHONIA CHLORIDE	UEL-AC-R-URC LRP SERIES CE-10050 SERIES		2	EXIT SIGN SINGLE FACE	UNV	UNV	
X1P	SINGLE FACE EDGE-LIT EXIT SIGNAGE	ISOLITE LITHONIA CHLORIDE	ELT AC R 1M AG BA MP* PD UC LRP SERIES CE-10050 SERIES		2	EXIT SIGN SINGLE FACE	UNV	UNV	* PROVIDE PENDANT LENGTH TO MAKE EXIT SIGN VISABLE
X2	DOUBLE FACE EDGE-LIT EXIT SIGNAGE	SURE-LITES LITHONIA CHLORIDE	ES-6 LRP SERIES CE-10050 SERIES		2	EXIT SIGN FACE	UNV	UNV	
X3AP	AREA OF REFUGE SIGN	ISOLITE LITHONIA CHLORIDE	ELT AC R 2M AG BA MP* AU CW(AREA OF REFUGE) LRP SERIES CE-10050 SERIES		2	AREA OF REFUGE SIGN	UNV	UNV	

LUMINAIRE GENERAL NOTES:

1 LUMINAIRES SHALL BE PROVIDED COMPLETE WITH NECESSARY ACCESSORIES FOR PROPER INSTALLATION.
2 SPECIFICATIONS AND DRAWINGS CONVEY THE FEATURES, AND FUNCTIONS OF LUMINAIRES ONLY AND DO NOT SHOW EVERY ITEM OR DETAIL NECESSARY FOR THE WORK.
3 CONTRACTOR TO VERIFY AND COORDINATE FIXTURE INSTALLATION AND MOUNTING WITH ARCHITECTURAL DETAILS, HOUSING TYPE, FIELD CONDITIONS, AND CEILING SYSTEM DETAILS INCLUDING CEILING TYPE AND FLANGE REQUIREMENTS.
4 CONTRACTOR SHALL VERIFY MAXIMUM CEILING THICKNESS ALLOWED BY FIXTURE TRIM AND INFORM FACTORY IF CEILING IS THICKER THAN ALLOWED.
5 ALL LOW VOLTAGE SWITCHES SHALL MATCH COLOR OF STANDARD WALL SWITCHES. PROVIDE LABELING FOR ALL MULTIPLE SWITCH LOCATIONS.
6 ALL BALLASTS AND TRANSFORMERS SHALL HAVE A POWER FACTOR OF AT LEAST 0.90 UNLESS OTHERWISE NOTED.
7 BEAM SPREADS ARE FOR THE BEAM TO 10% OF CBCP, GIVEN IN VERTICAL DEGREES BY HORIZONTAL DEGREES.
8 ALL LUMINAIRES AND LUMINAIRE COMPONENTS SHALL BE UL LISTED FOR APPROPRIATE LOCATION.
9 CONTRACTOR SHALL PROVIDE ALL MOUNTING COMPONENTS NECESSARY FOR INSTALLATION OF FIXTURE AT NO ADDITIONAL COST, EVEN IF SUCH COMPONENTS ARE NOT SPECIFICALLY CALLED FOR IN THE CONTRACT DOCUMENTS.
10 ALL VISIBLE CONDUIT, JUNCTION BOXES, CANOPY PLATES, HARDWARE, BALLAST CONTAINERS, ETC. TO BE PAINTED TO MATCH ADJACENT SURFACES. VERIFY ALL COLORS WITH ARCHITECT.
11 WHEN REQUESTED, CONTRACTOR SHALL PROVIDE COORDINATED SHOP DRAWINGS SHOWING INTEGRATED WORK OF ALL TRADES.
12 ADJUSTABLE LUMINAIRES SHALL BE AIMED BY THE CONTRACTOR AFTER DARK IN PRESENCE OF LIGHTING CONSULTANT AND ARCHITECT.
13 ALL STEEL FABRICATED LUMINAIRES SHALL BE PAF (PAINTED AFTER FABRICATION) OR POST PAINTED.
14 LOCATE REMOTE TRANSFORMER, DRIVERS, AND/OR POWER SUPPLIES IN A SECURE, CONCEALED, ACCESSIBLE AND WELL VENTILATED LOCATION IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.
15 CONTRACTOR TO PROVIDE ALL NECESSARY LENGTHS, FEEDS, CONNECTORS, SUPPORTS, AND OTHER COMPONENTS FOR COMPLETE AND CODE COMPLIANT INSTALLATION.
16 PROVIDE DETAILED DRAWING OF RECESSED LUMINAIRES OVER 4'-0" IN LENGTH. INCLUDE DIMENSIONS, HOUSING LENGTHS, LENS LENGTHS, LAMP COMBINATIONS, DRIVER, AND/OR POWER SUPPLY LOCATIONS, LUMINAIRE JOINT LOCATIONS AND END PLATES WITH SHOP DRAWING REVIEW PRIOR TO FABRICATION.
17 PROVIDE DETAILED DRAWINGS OF LINEAR SUSPENDED LUMINAIRES INCLUDING DIMENSIONS, SUPPORT SPACING, SUSPENSION TYPE, POWER FEED TYPE AND LOCATIONS, LAMP COMBINATIONS, DRIVER, AND/OR POWER SUPPLY LOCATIONS, LUMINAIRE JOINT LOCATIONS AND END PLATES WITH SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION.
18 PROVIDE DETAILED DRAWINGS FOR EACH COVE AND LINEAR WALL SYSTEM CONFIGURATION INCLUDING DIMENSIONS, LENS/LOUVER LENGTHS, POWER FEED LOCATIONS, DRIVER, AND/OR POWER SUPPLY LOCATIONS, LUMINAIRE JOINT LOCATIONS, EXTENSION PLATES FOR END AND CORNER SECTIONS AND END PLATES.
19 CONTRACTOR TO FIELD VERIFY RUN LENGTHS PRIOR TO ORDERING FIXTURES.
20 EACH EMERGENCY SECTION INDICATED IN CONTINUOUS ROW LIGHTS SHALL HAVE A SEPARATE POWER FEED.
21 ARCHITECT TO VERIFY ALL VERTICAL MOUNTING HEIGHT AFF OF SUSPENDED OR WALL-MOUNTED LUMINAIRES
22 ARCHITECT TO VERIFY LUMINAIRE FINISHES.
23 IN CIRCULATION PATHS, LUMINAIRE SHALL BE ADA COMPLIANT, IE NOT TO EXCEED 4" FROM WALL.
24 EXTERIOR AREA LIGHTING: IES DISTRIBUTION PATTERN SHALL MATCH SPECIFIED OR PROVIDE POINT BY POINT CALCULATION TO SHOW LUMINAIRE MEETS THE DESIGN INTENT WITH AGI FILE TO ENGINEER.
25 UNLESS NOTED OTHERWISE, PENDANT LUMINAIRES SHALL BE MOUNTED AT 9'-0" AFF.
26 ALL WALL MOUNTED EXIT LIGHTS SHOWN ABOVE DOORS SHALL BE 1'-0" ABOVE DOOR FRAME TO BOTTOM OF EXIT LIGHT. ALL OTHER WALL MOUNTED EXITS SHALL MATCH THIS ELEVATION.
27 ALL WALL MOUNTED LUMINAIRES IN BATHROOMS SHALL BE MOUNTED 8" ABOVE MIRROR TO CENTER OF FIXTURE.
28 EMERGENCY WALL MOUNTED LUMINAIRES ARE TO BE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.
29 ALL LUMINAIRES IN STAIRWELL SHALL BE MOUNTED 9'-0" ABOVE FLOOR OR LANDING TO BOTTOM OF LUMINAIRE.
30 UNLESS NOTED OTHERWISE, INDUSTRIAL TYPE LIGHTING FIXTURES SHALL BE MOUNTED BELOW OBSTRUCTIONS SUCH AS PIPING, DUCTWORK, ETC. WHERE NO OBSTRUCTIONS EXIST, FIXTURES SHALL BE MOUNTED AT 12'-0" AFF. UNDER NO CIRCUMSTANCES SHALL A FIXTURE BE MOUNTED LESS THAT 8'-0" AFF TO THE BOTTOM.
31 LED LUMINAIRES SHALL BE ORDERED WITH NECESSARY POWER SUPPLIES, DRIVERS AND POWER FEEDS FOR INSTALLATION OF A COMPLETE SYSTEM.
32 LUMINAIRE SHALL MAINTAIN 70% LUMEN OUTPUT (L70) FOR A MINIMUM OF 50,000 HOURS.
33 LED DRIVER SHALL HAVE A RATED LIFE OF 50,000 HOURS, MINIMUM. SHALL HAVE A MINIMUM POWER FACTOR (PF) OF 0.9 AND A MAXIMUM CREST FACTOR (CF) OF 1.5 AT FULL INPUT POWER AND ACROSS SPECIFIED VOLTAGE RANGE
34 LED DRIVER SHALL BE COMPATIBLE WITH DIMMING CONTROLS WHERE DIMMING IS INDICATED ON THE PLANS. DIMMABLE DRIVERS SHALL USE DIMMING CONSTANT CURRENT (DCC) OR PULSE WIDTH MODULATION (PWM) OPERATION. DIMMER SHALL BE CAPABLE OF TURNING THE LUMINAIRE OFF
35 LED DRIVER SHALL BE REPLACABLE
36 LED Duv (THE DEVIATION ABOVE OR BELOW THE PLANCKIAN LOCUS) VALUE BETWEEN LUMINAIRES SHALL BE NO MORE THAN +/-0.003
37 ALL EMERGENCY LIGHTING TO BE CONTROLLED WITH NORMAL POWER LIGHTING UNLESS NOTED OTHERWISE. PROVIDE U.L. 924 BYPASS FOR ALL CONTROLLED EMERGENCY LIGHTING THAT DRIVES LUMINAIRE TO FULL OUTPUT UPON LOSS OF NORMAL POWER OR ACTIVATION OF FIRE ALARM SYSTEM.

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LIGHTING SCHEDULE

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TL4NPL1A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: FEED THROUGH LUGS

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
REC-4455		20 A	1	1	0.18			0.50			2	1	20 A		FH PWR-4455
REC-4455		20 A	1	3		0.72			1.00		4	1	20 A		FH PWR-4455
REC-4455		20 A	1	5			0.54			0.18	6	1	20 A		FH PWR-4455
REC-4455		20 A	1	7	0.46			0.18			8	1	20 A		FH PWR-4455
FH DDR-4455		20 A	1	9		0.18			0.54		10	1	20 A		REC-4455
FH DDR-4455		20 A	1	11			0.18			0.54	12	1	20 A		REC-4455
FH PWR-4455		20 A	1	13	1.00			0.18			14	1	20 A		REC-4455
FH PWR-4455		20 A	1	15		0.50			0.18		16	1	20 A		REC-4455
FH VP-4455		20 A	1	17			0.50			0.72	18	1	20 A		REC-4455
FH DDR-4455		20 A	1	19	0.18			0.72			20	1	20 A		REC-4455
FH DDR-4455		20 A	1	21		0.18			0.18		22	1	20 A		REC-4455
FH DDR-4455		20 A	1	23			0.18			0.18	24	1	20 A		REC-4455
FH DDR-4455		20 A	1	25	0.18			0.72			26	1	20 A		REC-4455
FH VP-4455		20 A	1	27		0.50			0.18		28	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	29			1.00			0.18	30	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	31	0.50			0.50			32	1	20 A		FH VP-4455
Spare		20 A	1	33		0.00			1.00		34	1	20 A		FH PWR-4455
Spare		20 A	1	35			0.00			0.50	36	1	20 A		FH PWR-4455
Spare		20 A	1	37	0.00			0.18			38	1	20 A		FH DDR-4455
Spare		20 A	1	39		0.00			0.18		40	1	20 A		FH DDR-4455
Spare		20 A	1	41			0.00			0.54	42	1	20 A		REC-4455

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	5.48 kVA	5.34 kVA	5.24 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	4.58 kVA	4.76 kVA	4.76 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	10.06 kVA	10.10 kVA	10.00 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	13.86 kVA	100%	13.86 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	16.20 kVA	100% FIRST 10KVA, 50% OTHER	13.10 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	30.16 kVA		27.06 kVA
TOTAL AMPS	84 A		75 A

TL4NPL1B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL1A
SCCR kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH VP-4455		20 A	1	43	0.50			0.18			44	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	45		0.18			0.18		46	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	47			0.18			0.50	48	1	20 A		FH VP-4455
FH DDR-4455		20 A	1	49	0.18			1.00			50	1	20 A		FH PWR-4455
FH DDR-4455		20 A	1	51		0.18			0.50		52	1	20 A		FH PWR-4455
FH PWR-4455		20 A	1	53			1.00			0.18	54	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	55	0.50			0.18			56	1	20 A		FH DDR-4455
FH VP-4455		20 A	1	57		0.50			0.18		58	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	59			0.18			0.18	60	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	61	0.18			0.50			62	1	20 A		FH VP-4455
FH PWR-4455		20 A	1	63		1.00			1.00		64	1	20 A		FH PWR-4455
FH PWR-4455		20 A	1	65			0.50			0.50	66	1	20 A		FH VP-4455
FH VP-4455		20 A	1	67	0.50			0.18			68	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	69		0.18			0.18		70	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	71			0.18			0.18	72	1	20 A		FH DDR-4455
Spare		20 A	1	73	0.00			0.18			74	1	20 A		FH DDR-4455
Spare		20 A	1	75		0.00			0.50		76	1	20 A		FH VP-4455
Spare		20 A	1	77			0.00			1.00	78	1	20 A		FH PWR-4455
Spare		20 A	1	79	0.00			0.50			80	1	20 A		FH VP-4455
Spare		20 A	1	81		0.00			0.18		82	1	20 A		FH DDR-4455
Spare		20 A	1	83			0.00			0.18	84	1	20 A		FH DDR-4455

	A	B	C
PHASE SUBTOTAL (kVA)	4.58 kVA	4.76 kVA	4.76 kVA
PHASE SUBTOTAL (AMPS)	38 A	40 A	40 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	7.50 kVA	100%	7.50 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	6.60 kVA	100% FIRST 10KVA, 50% OTHER	6.60 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	14.10 kVA		14.10 kVA
TOTAL AMPS	39 A		39 A

TL4NPL2A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: FEED THROUGH LUGS

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH DDR-4455		20 A	1	1	0.18			0.18			2	1	20 A		REC-4455
FH DDR-4455		20 A	1	3		0.18			0.18		4	1	20 A		REC-4455
FH PWR-4455		20 A	1	5			1.00			0.54	6	1	20 A		REC-4455
FH PWR-4455		20 A	1	7	0.50			0.72			8	1	20 A		REC-4455
FH VP-4455		20 A	1	9		0.50			0.72		10	1	20 A		REC-4455
FH DDR-4455		20 A	1	11			0.18			0.18	12	1	20 A		REC-4455
FH DDR-4455		20 A	1	13	0.18			0.18			14	1	20 A		REC-4455
FH DDR-4455		20 A	1	15		0.18			0.72		16	1	20 A		REC-4455
FH DDR-4455		20 A	1	17			0.18			0.18	18	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	19	1.00			0.18			20	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	21		0.50			0.50		22	1	20 A		FH VP-4455
FH VP-4455		20 A	1	23			0.50			1.00	24	1	20 A		FH PWR-4455
FH DDR-4455		20 A	1	25	0.18			0.50			26	1	20 A		FH PWR-4455
FH DDR-4455		20 A	1	27		0.18			0.18		28	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	29			0.18			0.18	30	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	31	0.18			0.18			32	1	20 A		FH DDR-4455
REC-4455		20 A	1	33		0.72			0.18		34	1	20 A		FH DDR-4455
REC-4455		20 A	1	35			0.72			0.54	36	1	20 A		REC-4455
Spare		20 A	1	37	0.00			0.46			38	1	20 A		REC-4455
Spare		20 A	1	39		0.00			0.00		40	1	20 A		Spare
Spare		20 A	1	41			0.00			0.00	42	1	20 A		Spare

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	4.62 kVA	4.74 kVA	5.38 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	5.58 kVA	5.94 kVA	4.26 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	10.20 kVA	10.68 kVA	9.64 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	14.04 kVA	100%	14.04 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	16.38 kVA	100% FIRST 10KVA, 50% OTHER	13.19 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	30.52 kVA		27.33 kVA
TOTAL AMPS	85 A		76 A

TL4NPL2B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL2A
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH PWR-4455		20 A	1	43	1.00			0.50			44	1	20 A		FH VP-4455
FH PWR-4455		20 A	1	45		0.50			1.00		46	1	20 A		FH PWR-4455
FH VP-4455		20 A	1	47			0.50			0.50	48	1	20 A		FH VP-4455
FH DDR-4455		20 A	1	49	0.18			0.18			50	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	51		0.18			0.18		52	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	53			0.18			0.50	54	1	20 A		FH VP-4455
FH DDR-4455		20 A	1	55	0.18			0.18			56	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	57		1.00			0.18		58	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	59			0.50			0.50	60	1	20 A		FH VP-4455
FH VP-4455		20 A	1	61	0.50			1.00			62	1	20 A		FH PWR-4455
FH DDR-4455		20 A	1	63		0.18			0.50		64	1	20 A		FH VP-4455
FH DDR-4455		20 A	1	65			0.18			0.18	66	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	67	0.50			0.18			68	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	69		0.18			0.18		70	1	20 A		FH DDR-4455
FH PWR-4455		20 A	1	71			0.18			0.18	72	1	20 A		FH DDR-4455
FH DDR-4455		20 A	1	73	0.18			0.50			74	1	20 A		FH VP-4455
REC-4455		20 A	1	75		0.36			1.00		76	1	20 A		FH PWR-4455
REC-4455		20 A	1	77			0.36			0.50	78	1	20 A		FH VP-4455
CSP-4455		20 A	2	79	0.50			--			80	1	--		Space
--	--	--	--	81		0.50			0.00		82	1	20 A		Spare
Spare		20 A	1	83			0.00			0.00	84	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	5.58 kVA	5.94 kVA	4.26 kVA
PHASE SUBTOTAL (AMPS)	48 A	51 A	36 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	9.54 kVA	100%	9.54 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	6.24 kVA	100% FIRST 10KVA, 50% OTHER	6.24 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	15.78 kVA		15.78 kVA
TOTAL AMPS	44 A		44 A

TL4NPL3A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: FEED THROUGH LUGS

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH PWR-4429		20 A	1	1	0.50			0.18			2	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	3		1.00			0.18		4	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	5			0.18			1.00	6	1	20 A		FH PWR-4429
FH PWR-4429		20 A	1	7	0.18			0.50			8	1	20 A		FH PWR-4429
REC-4429		20 A	1	9		0.54			0.50		10	1	20 A		FH VP-4429
REC-4429		20 A	1	11			0.54			0.18	12	1	20 A		FH DDR-4429
REC-4429		20 A	1	13	0.72			0.18			14	1	20 A		FH DDR-4429
REC-44429		20 A	1	15		0.72			0.50		16	1	20 A		FH VP-4429
REC-4429		20 A	1	17			0.72			0.18	18	1	20 A		FH DDR-4429
REC-4429		20 A	1	19	0.72			0.18			20	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	21		0.18			1.00		22	1	20 A		FH PWR-4429
FH DDR-4429		20 A	1	23			0.18			0.50	24	1	20 A		FH PWR-4429
FH VP-4429		20 A	1	25	0.50			0.50			26	1	20 A		FH VP-4429
FH PWR-4429		20 A	1	27		1.00			0.18		28	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	29			0.50			0.18	30	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	31	0.18			0.18			32	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	33		0.18			0.18		34	1	20 A		FH DDR-4429
Spare		20 A	1	35			0.00			0.00	36	1	20 A		Spare
Spare		20 A	1	37	0.00			0.00			38	1	20 A		Spare
Spare		20 A	1	39		0.00			0.00		40	1	20 A		Spare
Spare		20 A	1	41			0.00			0.00	42	1	20 A		Spare

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	4.52 kVA	6.16 kVA	4.16 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	5.30 kVA	5.08 kVA	5.66 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	9.82 kVA	11.24 kVA	9.82 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	13.86 kVA	100%	13.86 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	16.92 kVA	100% FIRST 10KVA, 50% OTHER	13.46 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	30.88 kVA		27.42 kVA
TOTAL AMPS	86 A		76 A

TL4NPL3B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL3A
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH DDR-4429		20 A	1	43	0.18			1.00			44	1	20 A		FH PWR-4429
FH DDR-4429		20 A	1	45		0.18			0.50		46	1	20 A		FH PWR-4429
FH VP-4429		20 A	1	47			0.50			0.50	48	1	20 A		FH VP-4429
FH PWR-4429		20 A	1	49	1.00			0.18			50	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	51		0.50			0.18		52	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	53			0.18			1.00	54	1	20 A		FH PWR-4429
FH DDR-4429		20 A	1	55	0.18			0.50			56	1	20 A		FH PWR-4429
FH DDR-4429		20 A	1	57		0.18			0.50		58	1	20 A		FH VP-4429
FH DDR-4429		20 A	1	59			0.18			0.18	60	1	20 A		FH DDR-4429
FH VP-4429		20 A	1	61	0.50			0.18			62	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	63		1.00			0.46		64	1	20 A		REC-4429
FH PWR-4429		20 A	1	65			0.50			0.54	66	1	20 A		REC-4429
FH DDR-4429		20 A	1	67	0.18			0.36			68	2	20 A		CSP-4429
FH DDR-4429		20 A	1	69		0.18			0.36		70	--	--	--	--
FH DDR-4429		20 A	1	71			0.18			0.36	72	2	20 A		CSP-4429
FH DDR-4429		20 A	1	73	0.18			0.36			74	--	--	--	--
FH VP-4429		20 A	1	75		0.50			0.36		76	2	20 A		CSP-4429
FH PWR-4429		20 A	1	77			1.00			0.36	78	--	--	--	--
FH PWR-4429		20 A	1	79	0.50			0.00			80	1	20 A		Spare
FH DDR-4429		20 A	1	81		0.18			0.00		82	1	20 A		Spare
FH DDR-4429		20 A	1	83			0.18			0.00	84	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	5.30 kVA	5.08 kVA	5.66 kVA
PHASE SUBTOTAL (AMPS)	44 A	42 A	47 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	7.50 kVA	100%	7.50 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	8.44 kVA	100% FIRST 10KVA, 50% OTHER	8.44 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	16.04 kVA		16.04 kVA
TOTAL AMPS	45 A		45 A

TL4NPL4A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: FEED THROUGH LUGS

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH DDR-4429		20 A	1	1	0.18			0.18			2	1	20 A		REC-4429
FH DDR-4429		20 A	1	3		0.18			0.18		4	1	20 A		REC-4429
FH PWR-4429		20 A	1	5			1.00			0.72	6	1	20 A		REC-4429
FH PWR-4429		20 A	1	7	0.50			0.72			8	1	20 A		REC-4429
FH VP-4429		20 A	1	9		0.50			0.18		10	1	20 A		REC-4429
FH DDR-4429		20 A	1	11			0.18			0.18	12	1	20 A		REC-4429
FH DDR-4429		20 A	1	13	0.18			0.72			14	1	20 A		REC-4429
FH DDR-4429		20 A	1	15		0.18			0.18		16	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	17			0.18			0.18	18	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	19	1.00			0.50			20	1	20 A		FH VP-4429
FH PWR-4429		20 A	1	21		0.50			1.00		22	1	20 A		FH PWR-4429
FH VP-4429		20 A	1	23			0.50			0.50	24	1	20 A		FH PWR-4429
FH DDR-4429		20 A	1	25	0.18			0.18			26	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	27		0.18			0.18		28	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	29			0.18			0.18	30	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	31	0.18			0.18			32	1	20 A		FH DDR-4429
CSP-4429		20 A	2	33		0.36			0.50		34	1	20 A		FH VP-4429
--	--	--	--	35			0.36			0.54	36	1	20 A		REC-4429
Spare		20 A	1	37	0.00			0.46			38	1	20 A		REC-4429
Spare		20 A	1	39		0.00			0.36		40	2	20 A		CSP-4429
Spare		20 A	1	41			0.00			0.36	42	--	--	--	--

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	5.16 kVA	4.48 kVA	5.06 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	7.26 kVA	6.08 kVA	5.12 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	12.42 kVA	10.56 kVA	10.18 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	16.50 kVA	100%	16.50 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	16.56 kVA	100% FIRST 10KVA, 50% OTHER	13.28 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	33.16 kVA		29.88 kVA
TOTAL AMPS	92 A		83 A

TL4NPL4B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL4A
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH PWR-4429		20 A	1	43	1.00			1.00			44	1	20 A		FH PWR-4429
FH PWR-4429		20 A	1	45		0.50			0.50		46	1	20 A		FH PWR-4429
FH VP-4429		20 A	1	47			0.50			0.18	48	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	49	0.18			0.18			50	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	51		0.18			0.50		52	1	20 A		FH VP-4429
FH DDR-4429		20 A	1	53			0.18			0.18	54	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	55	0.18			0.18			56	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	57		1.00			0.50		58	1	20 A		FH VP-4429
FH PWR-4429		20 A	1	59			0.50			1.00	60	1	20 A		FH PWR-4429
FH VP-4429		20 A	1	61	0.50			0.50			62	1	20 A		FH PWR-4429
FH DDR-4429		20 A	1	63		0.18			0.18		64	1	20 A		FH DDR-4429
FH DDR-4429		20 A	1	65			0.18			0.18	66	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	67	0.50			0.18			68	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	69		1.00			0.18		70	1	20 A		FH DDR-4429
FH PWR-4429		20 A	1	71			1.00			0.50	72	1	20 A		FH VP-4429
FH PWR-4429		20 A	1	73	1.00			1.00			74	1	20 A		FH PWR-4429
REC-4429		20 A	1	75		0.36			0.50		76	1	20 A		FH PWR-4429
REC-4429		20 A	1	77			0.36			0.36	78	2	20 A		CSP-4429
CSP-4429		20 A	2	79	0.50			0.36			80	--	--	--	--
--	--	--	--	81		0.50			0.00		82	1	20 A		Spare
Spare		20 A	1	83			0.00			0.00	84	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	7.26 kVA	6.08 kVA	5.12 kVA
PHASE SUBTOTAL (AMPS)	62 A	52 A	43 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	12.00 kVA	100%	12.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	6.46 kVA	100% FIRST 10KVA, 50% OTHER	6.46 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	18.46 kVA		18.46 kVA
TOTAL AMPS	51 A		51 A

TL4NPL5A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 PHASE 4 WIRE
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: FEED THROUGH LUGS

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
CSP-4451		20 A	2	1	0.50			0.72			2	1	20 A		REC-4449
--	--	--	--	3		0.50			0.72		4	1	20 A		REC-4449
CSP-4451		20 A	2	5			0.50			0.72	6	1	20 A		REC-4449
--	--	--	--	7	0.50			0.72			8	1	20 A		REC-4449
CSP-4451		20 A	2	9		0.50			1.00		10	1	20 A		PRINTERS-4449
--	--	--	--	11			0.50			0.72	12	1	20 A		REC-4439
REC-4451		20 A	1	13	0.18			0.72			14	1	20 A		REC-4439
REC-4445		20 A	1	15		0.72			0.72		16	1	20 A		REC-4439
REC-4445		20 A	1	17			0.72			0.72	18	1	20 A		REC-4439
REC-4445		20 A	1	19	0.72			0.68			20	1	20 A		PRINTERS-4439
REC-4445		20 A	1	21		0.72			0.72		22	1	20 A		REC-4435
PRINTERS-4445		20 A	1	23			1.00			0.72	24	1	20 A		REC-4435
REC-4443		20 A	1	25	0.72			0.72			26	1	20 A		REC-4431
REC-4443		20 A	1	27		0.72			0.72		28	1	20 A		REC-4431
REC-4433		20 A	1	29			0.72			0.54	30	1	20 A		REC-4444
REC-4433		20 A	1	31	0.72			0.36			32	1	20 A		REC-4444
REC-4433,4435,4443		20 A	1	33		0.54			1.00		34	1	20 A		PRINTERS-4431
Spare		20 A	1	35			0.00			0.46	36	1	20 A		REC-4444
Spare		20 A	1	37	0.00			0.50			38	1	20 A		WINDOW SHADES-4444
Spare		20 A	1	39		0.00			0.00		40	1	20 A		Spare
Spare		20 A	1	41			0.00			0.00	42	1	20 A		Spare

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	7.76 kVA	8.58 kVA	7.32 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	6.92 kVA	7.08 kVA	5.56 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	14.68 kVA	15.66 kVA	12.88 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	3.72 kVA	100%	3.72 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.50 kVA	125% LARGEST, 100% OTHER	0.63 kVA
RECEPTACLE	38.50 kVA	100% FIRST 10KVA, 50% OTHER	24.25 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	43.22 kVA		29.10 kVA
TOTAL AMPS	120 A		81 A

STRANG
ARCHITECTURE
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INTERIOR DESIGN

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5802 Research Park Boulevard
Madison, Wisconsin 53719
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The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
MADISON, WI 53706-1322

Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION

Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
ELECTRICAL PANEL SCHEDULE

Revisions

No.	Date:	Description:
1	9/19/2023	ADDENDUM #2

Graphic Scale	N/A
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Set Type	BD
Date Issued	08/24/2023
Sheet Number	E920

TL4NPL5B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL5A
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
REC-4431		20 A	1	43	0.72						44				
COFFEE-4406		20 A	1	45		1.20			0.36		46	1	20 A		LTG CONTROLS-4434
REC-4406		20 A	1	47			0.18			0.36	48	1	20 A		REC-4432
REC-4431		20 A	1	49	0.72			0.36			50	1	20 A		REC-4432
REC-4448, 4400N		20 A	1	51		0.82			0.36		52	1	20 A		REC-4410,4434
HAND DRYER-4440		20 A	1	53			0.72			1.20	54	1	20 A		MICRO-4406
REC-4436,4440		20 A	1	55	0.72			1.20			56	1	20 A		MICRO-4406
HAND DRYER-4436		20 A	1	57		0.72			1.20		58	1	20 A		FRIDGE-4406
REC-4400N		20 A	1	59			0.82			0.36	60	1	20 A		TV-4421
EWC-4400N	GFCI	20 A	1	61	0.36			0.82			62	1	20 A		REC-4421
REC-4432		20 A	1	63		0.36			0.50		64	1	20 A		REC-4421
DISHWASHER-4406		20 A	1	65			1.20			0.18	66	1	20 A		REC-4421
PRINTER-4406		20 A	1	67	1.30			0.18			68	1	20 A		REC-4421
PRINTER-4406		20 A	1	69		1.20					70				
REC-4406		20 A	1	71			0.54				72				
Spare		20 A	1	73	0.00			0.54			74	1	20 A		SHADES-4421
Spare		20 A	1	75		0.00			0.36		76	1	20 A		SHADES-4421
Spare		20 A	1	77			0.00			0.00	78	1	20 A		Spare
Spare		20 A	1	79	0.00			0.00			80	1	20 A		Spare
Spare		20 A	1	81		0.00			0.00		82	1	20 A		Spare
Spare		20 A	1	83			0.00			0.00	84	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	6.92 kVA	7.08 kVA	5.56 kVA
PHASE SUBTOTAL (AMPS)	59 A	61 A	46 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.54 kVA	100%	0.54 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	18.62 kVA	100% FIRST 10KVA, 50% OTHER	14.31 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	19.56 kVA		15.25 kVA
TOTAL AMPS	54 A		42 A

TL4NPL6A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: FEED THROUGH LUGS

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
REC-4409		20 A	1	1	0.72			0.72			2	1	20 A		REC-4407
REC-4409		20 A	1	3		0.72			0.72		4	1	20 A		REC-4407
REC-4409		20 A	1	5			0.72			0.36	6	1	20 A		REC-4403,4407
REC-4409		20 A	1	7	0.72						8				
REC-4405		20 A	1	9		0.72			1.00		10	1	20 A		PRINTERS-4409
REC-4405		20 A	1	11			0.72			0.72	12	1	20 A		REC-4425A
REC-4405		20 A	1	13	0.72			0.72			14	1	20 A		REC-4425
REC-4405		20 A	1	15		0.72			0.72		16	1	20 A		REC-4423
REC-4423A		20 A	1	17			0.72			0.72	18	1	20 A		REC-4419
REC-4419A		20 A	1	19	0.72						20				
REC-4417A		20 A	1	21		0.72			1.00		22	1	20 A		PRINTERS-4405
REC-4417		20 A	1	23			0.72			--	24	1	--		Space
Space		--	1	25	--			--			26	1	--		Space
Space		--	1	27		--			--		28	1	--		Space
Space		--	1	29			--			--	30	1	--		Space
Space		--	1	31	--			--			32	1	--		Space
Space		--	1	33		--			--		34	1	--		Space
Space		--	1	35			--			--	36	1	--		Space
Space		--	1	37	--			--			38	1	--		Space
Space		--	1	39		--			--		40	1	--		Space
Space		--	1	41			--			--	42	1	--		Space

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	4.32 kVA	6.32 kVA	4.68 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	4.24 kVA	3.74 kVA	4.10 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	8.56 kVA	10.06 kVA	8.78 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	2.00 kVA	100%	2.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	25.40 kVA	100% FIRST 10KVA, 50% OTHER	17.70 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	27.40 kVA		19.70 kVA
TOTAL AMPS	76 A		55 A

TL4NPL6B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL6A
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
CSP-4403		20 A	2	43	0.50			0.00			44	2	20 A		CSP-4403
--	--	--	--	45		0.50			0.00		46	--	--	--	--
CSP-4403		20 A	2	47			0.50			0.36	48	2	20 A		CSP-4415
--	--	--	--	49	0.50			0.36			50	--	--	--	--
CSP-4415		20 A	2	51		0.36			0.36		52	2	20 A		CSP-4415
--	--	--	--	53			0.36			0.36	54	--	--	--	--
CSP-4415		20 A	2	55	0.36			0.36			56	2	20 A		CSP-4415
--	--	--	--	57		0.36			0.36		58	--	--	--	--
CSP-4415		20 A	2	59			0.36			0.36	60	2	20 A		CSP-4415
--	--	--	--	61	0.36			0.36			62	--	--	--	--
CSP-4415		20 A	2	63		0.36			0.36		64	2	20 A		CSP-4415
--	--	--	--	65			0.36			0.36	66	--	--	--	--
CSP-4415		20 A	2	67	0.36			0.36			68	2	20 A		CSP-4415
--	--	--	--	69		0.36			0.36		70	--	--	--	--
CSP-4415		20 A	2	71			0.36			0.36	72	2	20 A		CSP-4415
--	--	--	--	73	0.36			0.36			74	--	--	--	--
CSP-4415		20 A	2	75		0.36			0.00		76	1	20 A		Spare
--	--	--	--	77			0.36			0.00	78	1	20 A		Spare
Spare		20 A	1	79	0.00			0.00			80	1	20 A		Spare
Spare		20 A	1	81		0.00			0.00		82	1	20 A		Spare
Spare		20 A	1	83			0.00			0.00	84	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	4.24 kVA	3.74 kVA	4.10 kVA
PHASE SUBTOTAL (AMPS)	36 A	31 A	35 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	2.00 kVA	100%	2.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	10.08 kVA	100% FIRST 10KVA, 50% OTHER	10.04 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	12.08 kVA		12.04 kVA
TOTAL AMPS	34 A		33 A

TL4NPL7A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: FEED THROUGH LUGS

△1

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH DDR-4415		20 A	1	1	0.18			0.72			2	1	20 A		REC-4415
FH DDR-4415		20 A	1	3		0.18			0.72		4	1	20 A		REC-4415
FH PWR-4415		20 A	1	5			1.00			0.72	6	1	20 A		REC-4415
FH PWR-4415		20 A	1	7	0.50			0.72			8	1	20 A		REC-4415
FH VP-4415		20 A	1	9		0.50			0.18		10	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	11			0.18			0.18	12	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	13	0.18			0.50			14	1	20 A		FH VP-4415
FH DDR-4415		20 A	1	15		0.18			1.00		16	1	20 A		FH PWR-4415
FH DDR-4415		20 A	1	17			0.18			0.50	18	1	20 A		FH PWR-4415
FH PWR-4415		20 A	1	19	1.00			0.18			20	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	21		0.50			0.18		22	1	20 A		FH DDR-4415
FH VP-4415		20 A	1	23			0.50			0.18	24	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	25	0.18			0.18			26	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	27		0.18			0.50		28	1	20 A		FH VP-4415
FH DDR-4415		20 A	1	29			0.18			1.00	30	1	20 A		FH PWR-4415
FH DDR-4415		20 A	1	31	0.18			0.50			32	1	20 A		FH PWR-4415
FH PWR-4415		20 A	1	33		1.00			0.82		34	1	20 A		REC-4415
Spare		20 A	1	35			0.00				36				
Spare		20 A	1	37	0.00			0.00			38	1	20 A		Spare
Spare		20 A	1	39		0.00			0.00		40	1	20 A		Spare
Spare		20 A	1	41			0.00			0.00	42	1	20 A		Spare

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	5.02 kVA	5.94 kVA	4.62 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	4.58 kVA	3.44 kVA	3.62 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	9.60 kVA	9.38 kVA	8.24 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	12.00 kVA	100%	12.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	15.12 kVA	100% FIRST 10KVA, 50% OTHER	12.56 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	27.22 kVA		24.66 kVA
TOTAL AMPS	76 A		68 A

TL4NPL7B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL7A
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

△1

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH PWR-4415		20 A	1	43	0.50			0.18			44	1	20 A		FH DDR-4415
FH VP-4415		20 A	1	45		0.50			0.18		46	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	47			0.18			0.50	48	1	20 A		FH VP-4415
FH DDR-4415		20 A	1	49	0.18			0.18			50	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	51		0.18			0.18		52	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	53			0.18			0.50	54	1	20 A		FH VP-4415
FH PWR-4415		20 A	1	55	1.00			1.00			56	1	20 A		FH PWR-4415
FH PWR-4415		20 A	1	57		0.00			0.50		58	1	20 A		FH PWR-4415
FH VP-4415		20 A	1	59			0.50			0.18	60	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	61	0.18			0.18			62	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	63		0.18			0.18		64	1	20 A		FH DDR-4415
REC-4415		20 A	1	65			0.36			0.18	66	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	67	0.50			0.50			68	1	20 A		FH VP-4415
FH PWR-4415		20 A	1	69		0.00			1.00		70	1	20 A		FH PWR-4415
FH PWR-4415		20 A	1	71			0.00			0.50	72	1	20 A		FH PWR-4415
FH PWR-4415		20 A	1	73	0.00			0.18			74	1	20 A		REC-4415
REC-4415		20 A	1	75		0.54			0.00		76	1	20 A		Spare
REC-4415		20 A	1	77			0.54			0.00	78	1	20 A		Spare
Spare		20 A	1	79	0.00			0.00			80	1	20 A		Spare
Spare		20 A	1	81		0.00			0.00		82	1	20 A		Spare
Spare		20 A	1	83			0.00			0.00	84	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	4.58 kVA	3.44 kVA	3.62 kVA
PHASE SUBTOTAL (AMPS)	38 A	29 A	30 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	5.00 kVA	100%	5.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	6.64 kVA	100% FIRST 10KVA, 50% OTHER	6.64 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	11.64 kVA		11.64 kVA
TOTAL AMPS	32 A		32 A

TL4NPL8A

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NDL1
SCCR kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

△1

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH DDR-4415		20 A	1	1	0.18			0.18			2	1	20 A		REC-4415
FH DDR-4415		20 A	1	3		0.18			0.18		4	1	20 A		REC-4415
FH PWR-4415		20 A	1	5			1.00			0.72	6	1	20 A		REC-4415
FH PWR-4415		20 A	1	7	0.50			0.72			8	1	20 A		REC-4415
FH VP-4415		20 A	1	9		0.50			0.18		10	1	20 A		REC-4415
FH DDR-4415		20 A	1	11			0.18			0.18	12	1	20 A		REC-4415
FH DDR-4415		20 A	1	13	0.18			0.72			14	1	20 A		REC-4415
FH DDR-4415		20 A	1	15		0.18			0.18		16	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	17			0.18			0.18	18	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	19	1.00			0.50			20	1	20 A		FH VP-4415
FH PWR-4415		20 A	1	21		0.50			1.00		22	1	20 A		FH PWR-4415
FH VP-4415		20 A	1	23			0.50			0.50	24	1	20 A		FH PWR-4415
FH DDR-4415		20 A	1	25	0.18			0.18			26	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	27		0.18			0.18		28	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	29			0.18			0.18	30	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	31	0.18			0.18			32	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	33		1.00			0.50		34	1	20 A		FH VP-4415
FH PWR-4415		20 A	1	35			0.50			1.00	36	1	20 A		FH PWR-4415
Spare		20 A	1	37	0.00			0.50			38	1	20 A		FH PWR-4415
Spare		20 A	1	39		0.00			0.00		40	1	20 A		Spare
Spare		20 A	1	41			0.00			0.00	42	1	20 A		Spare

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	5.20 kVA	4.76 kVA	5.30 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	4.84 kVA	4.94 kVA	4.48 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	10.04 kVA	9.70 kVA	9.78 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	12.50 kVA	100%	12.50 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	16.92 kVA	100% FIRST 10KVA, 50% OTHER	13.46 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	29.52 kVA		26.06 kVA
TOTAL AMPS	82 A		72 A

TL4NPL8B

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 225 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING RECESSED
ENCLOSURE TYPE 1
LOCATION 4TH FLOOR-TOWER,CORRIDO...
FED FROM TL4NPL8A
SCCR kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

△1

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
FH VP-4415		20 A	1	43	0.50			0.18			44	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	45		0.18			0.18		46	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	47			0.18			0.50	48	1	20 A		FH VP-4415
FH DDR-4415		20 A	1	49	0.18			0.18			50	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	51		0.18			0.18		52	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	53			1.00			0.50	54	1	20 A		FH VP-4415
FH PWR-4415		20 A	1	55	0.50			1.00			56	1	20 A		FH PWR-4415
FH VP-4415		20 A	1	57		0.50			0.50		58	1	20 A		FH PWR-4415
FH DDR-4415		20 A	1	59			0.18			0.18	60	1	20 A		FH DDR-4415
FH DDR-4415		20 A	1	61	0.18			0.18			62	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	63		0.50			0.18		64	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	65			0.00			0.18	66	1	20 A		FH DDR-4415
FH PWR-4415		20 A	1	67	0.00			0.50			68	1	20 A		FH VP-4415
FH PWR-4415		20 A	1	69		0.00			1.00		70	1	20 A		FH PWR-4415
REC-4415		20 A	1	71			0.36			0.50	72	1	20 A		FH PWR-4415
REC-4415		20 A	1	73	0.36			0.18			74	1	20 A		REC-4415
REC-4415		20 A	1	75		0.64			0.36		76	1	20 A		REC-4415
REC-4415		20 A	1	77			0.54			0.36	78	1	20 A		REC-4415
REC-4415		20 A	1	79	0.36			0.54			80	1	20 A		REC-4415
Spare		20 A	1	81		0.00			0.54		82	1	20 A		REC-4415
Spare		20 A	1	83			0.00			0.00	84	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	4.84 kVA	4.94 kVA	4.48 kVA
PHASE SUBTOTAL (AMPS)	41 A	42 A	37 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	5.00 kVA	100%	5.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	9.16 kVA	100% FIRST 10KVA, 50% OTHER	9.16 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	14.26 kVA		14.26 kVA
TOTAL AMPS	40 A		40 A

TL4NPL9

MAIN TYPE MCB
MAIN RATING 100 A
BUS RATING 100 A
VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING SURFACE
ENCLOSURE TYPE 1
LOCATION 4TH...
FED FROM DSNUL1
SCCR 65 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: PANEL IS EXISTING PANEL TL4NPL1 WITH NEW NAMEPLATE TL4NPL9 AS NOTED ON ONE-LINE AND FLOOR PLANS - ALL LOADS ARE EXISTING TO REMAIN UNLESS LINED OUT FOR DEMOLISHED.

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
REC MECH ELEC RMS		20 A	1	1	0.95			0.70			2	1	20 A		CUH-10
~~UH-28~~ Spare		20 A	1	3		~~0.60~~			~~0.60~~		4	1	20 A		~~UH-29~~ Spare
~~UH-30~~ Spare		20 A	1	5			~~0.60~~			0.54	6	1	20 A		REC-4400N
REC-4432, REC-4434		20 A	1	7	0.54			--			8	1	--		Space
Space		--	1	9		--			--		10	1	--		Space
Space		--	1	11			--			--	12	1	--		Space
Space		--	1	13	--			--			14	1	--		Space
Space		--	1	15		--			--		16	1	--		Space
Space		--	1	17			--			--	18	1	--		Space
Space		--	1	19	--			--			20	1	--		Space
Space		--	1	21		--			--		22	1	--		Space
Space		--	1	23			--			--	24	1	--		Space
Space		--	1	25	--			--			26	1	--		Space
Space		--	1	27		--			--		28	1	--		Space
Space		--	1	29			--			--	30	1	--		Space
Space		--	1	31	--			--			32	1	--		Space
Spare		20 A	1	33		0.00			0.00		34	1	20 A		Spare
Spare		20 A	1	35			0.00			0.00	36	1	20 A		Spare
Spare		20 A	1	37	0.00			0.00			38	1	20 A		Spare
Spare		20 A	1	39		0.00			0.00		40	1	20 A		Spare
Spare		20 A	1	41			0.00			0.00	42	1	20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	2.19 kVA	1.20 kVA	1.14 kVA
PHASE SUBTOTAL (AMPS)	18 A	10 A	10 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	1.80 kVA	100%	1.80 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	1.65 kVA	125% LARGEST, 100% OTHER	1.89 kVA
RECEPTACLE	1.08 kVA	100% FIRST 10KVA, 50% OTHER	1.08 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	4.53 kVA		4.77 kVA
TOTAL AMPS	13 A		13 A

TL4SPH1

MAIN TYPE MCB
MAIN RATING 400 A
BUS RATING 400 A
VOLTAGE 480/277 Wye
3 **PHASE** 4 **WIRE**
MOUNTING
ENCLOSURE Type 1
LOCATION 4TH...
FED FROM DSSSH1
SCCR 35 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

					LEFT SIDE, kVA			RIGHT SIDE, kVA							
DESCRIPTION	BRKR NOTES	BRKR AMP, POLES		CKT NO	A	B	C	A	B	C	CKT NO	BRKR AMP, POLES		BRKR NOTES	DESCRIPTION
LIGHTING - RESTROOMS		20 A	1	1	0.02			0.16			2	1	20 A		LIGHTING - RM 4432, 4434
Spare		20 A	1	3		0.00			0.00		4	1	20 A		Spare
Spare		20 A	1	5			0.00			0.00	6	1	20 A		Spare
Spare		20 A	1	7	0.00			0.00			8	1	20 A		Spare
Spare		20 A	1	9		0.00			0.00		10	1	20 A		Spare
Spare		20 A	1	11			0.00			0.00	12	1	20 A		Spare
Spare		20 A	1	13	0.00			0.00			14	1	20 A		Spare
Spare		20 A	1	15		0.00			0.00		16	1	20 A		Spare
Spare		20 A	1	17			0.00			0.00	18	1	20 A		Spare
Spare		20 A	1	19	0.00			0.00			20	1	20 A		Spare
Spare		20 A	1	21		0.00			0.00		22	1	20 A		Spare
Spare		20 A	1	23			0.00			0.00	24	1	20 A		Spare
Spare		20 A	1	25	0.00			0.00			26	1	20 A		Spare
Spare		20 A	1	27		0.00			0.00		28	1	20 A		Spare
Spare		20 A	1	29			0.00			0.00	30	1	20 A		Spare
Spare		20 A	1	31	0.00			0.00			32	1	20 A		Spare
Spare		20 A	1	33		0.00			0.00		34	1	20 A		Spare
Spare		20 A	1	35			0.00			0.00	36	1	20 A		Spare
Spare		20 A	1	37	0.00			21.30			38	3	20 A		TL4STH1
Spare		20 A	1	39		0.00			18.12		40	--	--	--	--
Spare		20 A	1	41			0.00			15.60	42	--	--	--	--

	A	B	C
PHASE SUBTOTAL (kVA)	21.48 kVA	18.12 kVA	15.60 kVA
PHASE SUBTOTAL (AMPS)	79 A	67 A	56 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	10.72 kVA	100%	10.72 kVA
LIGHTING	0.18 kVA	100%	0.18 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	44.30 kVA	100% FIRST 10KVA, 50% OTHER	27.15 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	55.20 kVA		38.05 kVA
TOTAL AMPS	66 A		46 A

STRANG
ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

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The Board of Regents of the
University of Wisconsin on behalf of
the University of Wisconsin - Madison

Project Address:
1101 UNIVERSITY AVENUE
MADISON, WI 53706-1322

Project Title:
CHEMISTRY 2ND AND 4TH FLOOR LAB
RENOVATION
Agency / Institution:
UNIVERSITY OF WISCONSIN-MADISON

Sheet Title:
ELECTRICAL PANEL SCHEDULE

Revisions

No.	Date:	Description:
1	9/19/2023	ADDENDUM #2

Graphic Scale	**N/A**
UWSA#	**A-22-015**
Set Type	**BD**
Date Issued	**08/24/2023**
Sheet Number	E921

TL4SPL1A

MAIN TYPE MCB | **VOLTAGE** 120/208 Wye | **LOCATION** 4TH...
MAIN RATING 250 A | 3 **PHASE** 4 **WIRE** | **FED FROM** TL4STH1
BUS RATING 250 A | **MOUNTING** SURFACE | **SCCR** 10 kA
ENCLOSURE TYPE 1 | **CALCULATED AVAILABLE FAULT...** kA

REMARKS: FEED THROUGH LUGS

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES	CKT NO	LEFT SIDE, kVA A	LEFT SIDE, kVA B	LEFT SIDE, kVA C	RIGHT SIDE, kVA A	RIGHT SIDE, kVA B	RIGHT SIDE, kVA C	CKT NO	BRKR AMP, POLES	BRKR NOTES	DESCRIPTION
RECEPTACLE-4455		20 A 1	1	0.54			0.90			2	1 20 A		FH FLO-4455
FH FLO-4455		20 A 1	3		0.72			0.72		4	1 20 A		FH FLO-4455
FH FLO-4455		20 A 1	5			0.90			0.54	6	1 20 A		RECEPTACLE-4429
OVEN-4455		20 A 1	7	1.20			1.20			8	1 20 A		OVEN-4455
OVEN-4455		20 A 1	9		1.20			1.20		10	1 20 A		OVEN-4455
FH FLO-4429		20 A 1	11			0.72			1.20	12	1 20 A		OVEN-4429
FH FLO-4429		20 A 1	13	0.90			1.20			14	1 20 A		OVEN-4429
OVEN-4429		20 A 1	15		1.20			0.90		16	1 20 A		FH FLO-4429
OVEN-4429		20 A 1	17			1.20			0.72	18	1 20 A		FH FLO-4415
FH FLO-4429		20 A 1	19	0.72			1.20			20	1 20 A		OVEN-4415
FH FLO-4415		20 A 1	21		0.90			1.20		22	1 20 A		OVEN-4415
OVEN-4415		20 A 1	23			1.20			0.54	24	1 20 A		GAS METERS-4443,4435,4433
OVEN-4415		20 A 1	25	1.20			0.18			26	1 20 A		GAS METER-4451
FH FLO-4415		20 A 1	27		0.72			1.20		28	1 20 A		FRIDGE-4451
FH FLO-4415		20 A 1	29			0.90			1.20	30	1 20 A		FREEZER-4451
FREEZER-4443		20 A 1	31	1.20			1.20			32	1 20 A		FRIDGE-4443
Spare		20 A 1	33		0.00			0.00		34	1 20 A		Spare
Spare		20 A 1	35			0.00			0.00	36	1 20 A		Spare
Spare		20 A 1	37	0.00			0.00			38	1 20 A		Spare
Spare		20 A 1	39		0.00			0.00		40	1 20 A		Spare
Spare		20 A 1	41			0.00			0.00	42	1 20 A		Spare

	A	B	C
1ST SECTION PHASE SUBTOTAL (kVA)	11.64 kVA	9.96 kVA	9.12 kVA
2ND SECTION PHASE SUBTOTAL (kVA)	9.66 kVA	8.16 kVA	6.48 kVA
ALL SECTIONS PHASE GRAND TOTAL (kVA)	21.30 kVA	18.12 kVA	15.60 kVA

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	10.72 kVA	100%	10.72 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	44.30 kVA	100% FIRST 10KVA, 50% OTHER	27.15 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	55.02 kVA		37.87 kVA
TOTAL AMPS	153 A		105 A

TL4SPL1B

MAIN TYPE MCB | **VOLTAGE** 120/208 Wye | **LOCATION** 4TH...
MAIN RATING 250 A | 3 **PHASE** 4 **WIRE** | **FED FROM** TL4SPL1A
BUS RATING 250 A | **MOUNTING** SURFACE | **SCCR** 10 kA
ENCLOSURE TYPE 1 | **CALCULATED AVAILABLE FAULT...** kA

REMARKS:

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES	CKT NO	LEFT SIDE, kVA A	LEFT SIDE, kVA B	LEFT SIDE, kVA C	RIGHT SIDE, kVA A	RIGHT SIDE, kVA B	RIGHT SIDE, kVA C	CKT NO	BRKR AMP, POLES	BRKR NOTES	DESCRIPTION
FRIDGE-4435		20 A 1	43	1.20			1.20			44	1 20 A		FREEZER-4435
FRIDGE-4407		20 A 1	45		1.20			1.20		46	1 20 A		FRIDGE-4433
FREEZER-4407		20 A 1	47			1.20			1.20	48	1 20 A		FREEZER-4433
FRIDGE-4403		20 A 1	49	1.20			1.20			50	1 20 A		FREEZER-4403
REC-4432		20 A 1	51		0.54			0.36		52	1 20 A		REC-4434
SECURITY PANEL-4432		20 A 1	53			0.36			0.36	54	1 20 A		REC-4432
REC-4432		20 A 1	55	0.36			0.50			56	2 20 A		POWER OUTLET-4432
WHEELCHAIR LIFT-4400C		20 A 1	57		0.36			0.50		58	-- --	--	--
BAS-4428		20 A 1	59			1.00			1.00	60	1 20 A		BAS-4428
BAS-4428		20 A 1	61	1.00			1.00			62	1 20 A		BAS-4428
BAS-4428		20 A 1	63		1.00			1.00		64	1 20 A		BAS-4428
BAS-4428		20 A 1	65			1.00			0.36	66	1 20 A		GAS METERS-4403,4407
BAS-4428		20 A 1	67	1.00			1.00			68	1 20 A		POWER DOOR-4400C
BAS-4428		20 A 1	69		1.00			1.00		70	1 20 A		REMOTE PWR DOOR SEC 4400C
Spare		20 A 1	71			0.00			0.00	72	1 20 A		Spare
Spare		20 A 1	73	0.00			0.00			74	1 20 A		Spare
Spare		20 A 1	75		0.00			0.00		76	1 20 A		Spare
Spare		20 A 1	77			0.00			0.00	78	1 20 A		Spare
Spare		20 A 1	79	0.00			0.00			80	1 20 A		Spare
Spare		20 A 1	81		0.00			0.00		82	1 20 A		Spare
Spare		20 A 1	83			0.00			0.00	84	1 20 A		Spare

	A	B	C
PHASE SUBTOTAL (kVA)	9.66 kVA	8.16 kVA	6.48 kVA
PHASE SUBTOTAL (AMPS)	83 A	70 A	54 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	1.00 kVA	100%	1.00 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	23.30 kVA	100% FIRST 10KVA, 50% OTHER	16.65 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	24.30 kVA		17.65 kVA
TOTAL AMPS	67 A		49 A

TL5EPH1

MAIN TYPE MCB | **VOLTAGE** 480/277 Wye | **LOCATION** 5TH FLOOR-TOWER,ELECTRIC...
MAIN RATING 100 A | 3 **PHASE** 4 **WIRE** | **FED FROM** DSEDH1
BUS RATING 100 A | **MOUNTING** SURFACE | **SCCR** 35 kA
ENCLOSURE TYPE 1 | **CALCULATED AVAILABLE FAULT...** kA

REMARKS: PANEL IS EXISTING TO REMAIN - NEW LOADS ARE SHOWN WITH BOLD ITALIC TEXT, ALL OTHERS ARE EXISTING TO REMAIN. NEW CIRCUIT BREAKERS ARE INDICATED IN BOLD ITALIC TEXT.

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES	CKT NO	LEFT SIDE, kVA A	LEFT SIDE, kVA B	LEFT SIDE, kVA C	RIGHT SIDE, kVA A	RIGHT SIDE, kVA B	RIGHT SIDE, kVA C	CKT NO	BRKR AMP, POLES	BRKR NOTES	DESCRIPTION
LTG - FOURTH FLOOR CORRIDORS		20 A 1	1	0.44				1.34		2	1 20 A		LTG - FIFTH FLOOR LABS
LTG - FIFTH FLOOR CORRIDORS		20 A 1	3		1.68				1.44	4	1 20 A		LTG - SIXTH FLOOR CORRIDORS
LTG - FOURTH FLOOR LABS		20 A 1	5			**1.14**				6	1 20 A		LTG - SIXTH FLOOR LABS
LTG - FOURTH FLOOR CORRIDORS		20 A 1	7	0.01			--			8	1 --		Space
Spare		20 A 1	9		0.00			--		10	1 --		Space
Spare		20 A 1	11			0.00			--	12	1 --		Space
Spare		20 A 1	13	0.00			--			14	1 --		Space
Spare		20 A 1	15		0.00			--		16	1 --		Space
Spare		20 A 1	17			0.00			--	18	1 --		Space
Spare		20 A 1	19	0.00			--			20	1 --		Space
Spare		20 A 1	21		0.00			--		22	1 --		Space
Spare		20 A 1	23			0.00			--	24	1 --		Space
Spare		20 A 1	25	0.00			--			26	1 --		Space
Spare		20 A 1	27		0.00			--		28	1 --		Space
Spare		20 A 1	29			0.00			--	30	1 --		Space
Spare		20 A 1	31	0.00			--			32	1 --		Space
Spare		20 A 1	33		0.00			--		34	1 --		Space
Spare		20 A 1	35			0.00			--	36	1 --		Space
Space		-- 1	37	--			--			38	1 --		Space
Space		-- 1	39		--			--		40	1 --		Space
Space		-- 1	41			--			--	42	1 --		Space

	A	B	C
PHASE SUBTOTAL (kVA)	1.78 kVA	3.12 kVA	2.69 kVA
PHASE SUBTOTAL (AMPS)	6 A	12 A	10 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	1.58 kVA	100%	1.58 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	7.59 kVA		7.59 kVA
TOTAL AMPS	9 A		9 A

TL5EPL1

MAIN TYPE MCB | **VOLTAGE** 120/208 Wye | **LOCATION** 5TH FLOOR-TOWER,ELECTRIC...
MAIN RATING 100 A | 3 **PHASE** 4 **WIRE** | **FED FROM** TL5ETH1
BUS RATING 100 A | **MOUNTING** SURFACE | **SCCR** 10 kA
ENCLOSURE TYPE 1 | **CALCULATED AVAILABLE FAULT...** kA

REMARKS: PANEL IS EXISTING TO REMAIN - NEW LOADS ARE SHOWN WITH BOLD ITALIC TEXT, ALL OTHERS ARE EXISTING TO REMAIN. NEW CIRCUIT BREAKERS ARE INDICATED IN BOLD ITALIC TEXT.

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES	CKT NO	LEFT SIDE, kVA A	LEFT SIDE, kVA B	LEFT SIDE, kVA C	RIGHT SIDE, kVA A	RIGHT SIDE, kVA B	RIGHT SIDE, kVA C	CKT NO	BRKR AMP, POLES	BRKR NOTES	DESCRIPTION
FA PNL 5434		20 A 1	1	1.00			1.00			2	***1 20 A***		***FIRE ALARM POWER SUPPLY 4434***
FA PNL 6434		20 A 1	3		1.00			0.36		4	***1 20 A***		***FIRE ALARM POWER SUPPLY 4434***
FA FAPS 4371B		20 A 1	5			1.00			0.36	6	***1 20 A***		***FIRE ALARM POWER SUPPLY 4424***
FA AMPS 4371B		20 A 1	7	1.00			--			8	1 --		Space
FA FAPS 5375A		20 A 1	9		1.00			--		10	1 --		Space
FA FAPS 6375		20 A 1	11			1.00			--	12	1 --		Space
FA AMPS 6375		20 A 1	13	1.00			--			14	1 --		Space
FA FAPS 4434		20 A 1	15		1.00			--		16	1 --		Space
LVL 5 FIRE DOOR		20 A 1	17			1.00			--	18	1 --		Space
LVL 6 FIRE DOOR		20 A 1	19	1.00			--			20	1 --		Space
Spare		20 A 1	21		0.00			--		22	1 --		Space
Spare		20 A 1	23			0.00			--	24	1 --		Space
Spare		20 A 1	25	0.00			--			26	1 --		Space
Spare		20 A 1	27		0.00			--		28	1 --		Space
Spare		20 A 1	29			0.00			--	30	1 --		Space
Spare		20 A 1	31	0.00			--			32	1 --		Space
Spare		20 A 1	33		0.00			--		34	1 --		Space
Spare		20 A 1	35			0.00			--	36	1 --		Space
Spare		20 A 1	37	0.00			--			38	1 --		Space
Spare		20 A 1	39		0.00			--		40	1 --		Space
Space		-- 1	41			--			--	42	1 --		Space

	A	B	C
PHASE SUBTOTAL (kVA)	5.00 kVA	3.36 kVA	3.36 kVA
PHASE SUBTOTAL (AMPS)	42 A	28 A	28 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	10.72 kVA	100%	10.72 kVA
LIGHTING	0.00 kVA	100%	0.00 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	1.00 kVA	100% FIRST 10KVA, 50% OTHER	1.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	11.72 kVA		11.72 kVA
TOTAL AMPS	33 A		33 A

TL5NPH1

MAIN TYPE MCB | **VOLTAGE** 480/277 Wye | **LOCATION** 5TH FLOOR-TOWER,ELECTRIC...
MAIN RATING 100 A | 3 **PHASE** 4 **WIRE** | **FED FROM** TSNDH1
BUS RATING 100 A | **MOUNTING** SURFACE | **SCCR** 18 kA
ENCLOSURE TYPE 1 | **CALCULATED AVAILABLE FAULT...** kA

REMARKS: PANEL IS EXISTING TO REMAIN - NEW LOADS ARE SHOWN WITH BOLD ITALIC TEXT, ALL OTHERS ARE EXISTING TO REMAIN. NEW CIRCUIT BREAKERS ARE INDICATED IN BOLD ITALIC TEXT.

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES	CKT NO	LEFT SIDE, kVA A	LEFT SIDE, kVA B	LEFT SIDE, kVA C	RIGHT SIDE, kVA A	RIGHT SIDE, kVA B	RIGHT SIDE, kVA C	CKT NO	BRKR AMP, POLES	BRKR NOTES	DESCRIPTION
LTG-5425 - 5455		20 A 1	1	1.56			0.68			2	1 20 A		LTG-4TH FLOOR
LTG-5400L - 5448		20 A 1	3		2.02			1.56		4	1 20 A		LTG-6425 - 6455
LTG-5400M - 5425A		20 A 1	5			1.35			2.07	6	1 20 A		LTG-6400K - 6446
LTG-5431-5449		20 A 1	7	1.72			1.72			8	1 20 A		LTG-6400R - 6449
LTG-5405-5415		20 A 1	9		1.92			1.29		10	1 20 A		LTG-6400M - 6425A
LTG-4403,4405,4407,4409,4415		20 A 1	11			2.40			1.84	12	1 20 A		LTG-6409 - 6415A
LTG-4406,10,17,19,21,23,25,28,36,40,44,48		20 A 1	13	1.64			--			14	1 --		Space
LTG-4431,4433,4435,4439		20 A 1	15		2.15			--		16	1 --		Space
LTG-4443,4445,4449,4451,4455		20 A 1	17			2.11			--	18	1 --		Space
LTG-4400C,L,M,N,T		20 A 1	19	0.94			--			20	1 --		Space
Spare		20 A 1	21		0.00			--		22	1 --		Space
Spare		20 A 1	23			0.00			--	24	1 --		Space
Spare		20 A 1	25	0.00			--			26	1 --		Space
Spare		20 A 1	27		0.00			--		28	1 --		Space
Spare		20 A 1	29			0.00			--	30	1 --		Space
Spare		20 A 1	31	0.00			--			32	1 --		Space
Spare		20 A 1	33		0.00			--		34	1 --		Space
Spare		20 A 1	35			0.00			--	36	1 --		Space
Spare		20 A 1	37	0.00			--			38	1 --		Space
Spare		20 A 1	39		0.00			--		40	1 --		Space
Spare		20 A 1	41			0.00			--	42	1 --		Space

	A	B	C
PHASE SUBTOTAL (kVA)	8.26 kVA	8.91 kVA	9.73 kVA
PHASE SUBTOTAL (AMPS)	30 A	33 A	35 A

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	26.88 kVA	100%	26.88 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	0.00 kVA	100% FIRST 10KVA, 50% OTHER	0.00 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	26.88 kVA		26.88 kVA
TOTAL AMPS	32 A		32 A

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5802 Research Park Boulevard
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Tel 608.238.2616 Fax 608.238.2614

The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address: 1101 UNIVERSITY AVENUE MADISON, WI 53706-1322

Project Title: CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution: UNIVERSITY OF WISCONSIN-MADISON

Sheet Title: ELECTRICAL PANEL SCHEDULE

Revisions

No.	Date:	Description:
1	9/19/2023	ADDENDUM #2

Graphic Scale	N/A
UWSA#	A-22-015
Set Type	BD
Date Issued	08/24/2023
Sheet Number	E922

DL2NPL6

MAIN TYPE MCB
MAIN RATING 100 A
BUS RATING 100 A

VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING Recessed
ENCLOSURE Type 1

LOCATION 2ND FLOOR-TOWER,MEETING...
FED FROM
SCCR 22 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS:

	DESCRIPTION	BRKR NOTES	BRKR AMP, POLES	CKT NO	LEFT SIDE, kVA A	LEFT SIDE, kVA B	LEFT SIDE, kVA C	RIGHT SIDE, kVA A	RIGHT SIDE, kVA B	RIGHT SIDE, kVA C	CKT NO	BRKR AMP, POLES	BRKR NOTES	DESCRIPTION
1	REC-2370C		20 A 1	1	0.72			0.72			2	20 A 1		REC-2370A
	REC-2370C		20 A 1	3		0.54			0.72		4	20 A 1		REC-2370
	REC-2370B		20 A 1	5			0.72			0.54	6	20 A 1		REC-2370
	REC-2370M		20 A 1	7	0.72			0.54			8	20 A 1		REC-2370L
	REC-2370M		20 A 1	9		0.72			0.72		10	20 A 1		REC-2370L
	REC-2370M		20 A 1	11			0.54			0.72	12	20 A 1		REC-2370L
	PRINTER-2370M		20 A 1	13	0.50			0.50			14	20 A 1		PRINTER-2370L
	REC-2370J		20 A 1	15		0.54			0.54		16	20 A 1		REC-2370K
	REC-2370J		20 A 1	17			0.72			0.72	18	20 A 1		REC-2370H
	REC-2370J		20 A 1	19	0.36			0.72			20	20 A 1		REC-2370G
	REC-2370F		20 A 1	21		0.54			0.72		22	20 A 1		REC-2370E
	REC-2370F		20 A 1	23			0.72			0.54	24	20 A 1		REC-2370E
	REC-2370D		20 A 1	25	0.72			0.72			26	20 A 1		REC-2370E
	REC-2370D		20 A 1	27		0.72			0.50		28	20 A 1		PRINTER-2370E
	REC-2370D		20 A 1	29			0.54			1.00	30	20 A 1		FRIDGE-2370N
	PRINTER-2370D		20 A 1	31	0.50			1.20			32	20 A 1		REC-2370N
	REC-2370N		20 A 1	33		1.02			0.60		34	20 A 1		REC-2370N
	MICRO-2370N		20 A 1	35			1.20			0.00	36	20 A 1		Spare
	FRIDGE-2370N		20 A 1	37	1.00			0.00			38	20 A 1		Spare
	Spare		20 A 1	39		0.00			0.00		40	20 A 1		Spare
	Spare		20 A 1	41			0.00			0.00	42	20 A 1		Spare
	Spare		20 A 1	43	0.00			0.00			44	20 A 1		Spare
	Spare		20 A 1	45		0.00			0.00		46	20 A 1		Spare
	Spare		20 A 1	47			0.00			0.00	48	20 A 1		Spare
	Spare		20 A 1	49	0.00			0.00			50	20 A 1		Spare
	Spare		20 A 1	51		0.00			0.00		52	20 A 1		Spare
	Spare		20 A 1	53			0.00			0.00	54	20 A 1		Spare
	Spare		20 A 1	55	0.00			0.00			56	20 A 1		Spare
	Spare		20 A 1	57		0.00			0.00		58	20 A 1		Spare
	Spare		20 A 1	59			0.00			0.00	60	20 A 1		Spare
	Spare		20 A 1	61	0.00			0.00			62	20 A 1		Spare
	LIGHTING-2370A,B,C,D,E,F,G,H		20 A 1	63		0.88			0.00		64	20 A 1		Spare
	LIGHTING-2370,2370J,K,L,M,N		20 A 1	65			0.88			0.00	66	20 A 1		Spare
					A	B	C	A	B	C				
	PHASE SUBTOTAL (kVA)				8.92 kVA	8.76 kVA	8.84 kVA							
	PHASE SUBTOTAL (AMPS)				74 A	73 A	74 A							

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	0.00 kVA	100%	0.00 kVA
LIGHTING	1.76 kVA	100%	1.76 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	24.46 kVA	100% FIRST 10KVA, 50% OTHER	17.23 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	26.52 kVA		19.29 kVA
TOTAL AMPS	74 A		54 A

DL2NPL1

MAIN TYPE MCB
MAIN RATING 150 A
BUS RATING 100 A

VOLTAGE 120/208 Wye
3 **PHASE** 4 **WIRE**
MOUNTING Recessed
ENCLOSURE Type 1

LOCATION 2ND FLOOR-TOWER,
FED FROM
SCCR 22 kA
CALCULATED AVAILABLE FAULT... kA

REMARKS: PANEL IS EXISTING TO REMAIN - NEW LOADS ARE SHOWN WITH BOLD ITALIC TEXT, ALL OTHERS ARE EXISTING TO REMAIN. NEW CIRCUIT BREAKERS ARE INDICATED IN BOLD ITALIC TEXT.

DESCRIPTION	BRKR NOTES	BRKR AMP, POLES	CKT NO	LEFT SIDE, kVA A	LEFT SIDE, kVA B	LEFT SIDE, kVA C	RIGHT SIDE, kVA A	RIGHT SIDE, kVA B	RIGHT SIDE, kVA C	CKT NO	BRKR AMP, POLES	BRKR NOTES	DESCRIPTION
REC-2354-2360		20 A 1	1	0.72			0.54			2	20 A 1		REC-2300S-2300V
REC-2300T		20 A 1	3		0.72			0.54		4	20 A 1		REC-2300T
LTG-2300S		20 A 1	5			0.56			0.60	6	20 A 1		LTG-2300T
LTG-2360-2364		20 A 1	7	0.15			0.54			8	20 A 1		REC-2300T
HAND DRYER-2360		20 A 1	9		1.00			0.00		10	20 A 1		Spare
HAND DRYER-2360		20 A 1	11			1.00			0.00	12	20 A 1		Spare
Spare		20 A 1	13	0.00			0.00			14	20 A 1		Spare
Spare		20 A 1	15		0.00			0.00		16	20 A 1		Spare
Spare		20 A 1	17			0.00			0.00	18	20 A 1		Spare
Spare		20 A 1	19	0.00			0.00			20	20 A 1		Spare
LTG-2344		***20 A*** 1	21		1.00			0.72		22	***20 A*** 1		***REC-2344***
LTG-2344		***20 A*** 1	23			1.00			0.72	24	***20 A*** 1		***REC-2344***
LTG-2344		***20 A*** 1	25	1.00			0.72			26	***20 A*** 1		***CLNG REC-2344***
STAIRWELL PLUG		***20 A*** 2	27		0.50			0.72		28	***20 A*** 1		***REC-HALLWAY***
--	--	-- --	29			0.50				30			
			31							32			
			33							34			
			35							36			
			37							38			
			39							40			
			41							42			
			43							44			
			45							46			
			47							48			
			49							50			
			51							52			
			53							54			
			55							56			
			57							58			
			59							60			
			61							62			
			63							64			
			65							66			
				A	B	C	A	B	C				
PHASE SUBTOTAL (kVA)				3.67 kVA	5.20 kVA	4.38 kVA							
PHASE SUBTOTAL (AMPS)				31 A	44 A	37 A							

LOAD CLASSIFICATION	CONNECTED (KVA)	DEMAND FACTOR	DEMAND (KVA)
POWER	3.00 kVA	100%	3.00 kVA
LIGHTING	4.31 kVA	100%	4.31 kVA
MOTOR	0.00 kVA	125% LARGEST, 100% OTHER	0.00 kVA
RECEPTACLE	5.94 kVA	100% FIRST 10KVA, 50% OTHER	5.94 kVA
HEATING	0.00 kVA	100%	0.00 kVA
TOTAL LOAD	13.25 kVA		13.25 kVA
TOTAL AMPS	37 A		37 A

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The Board of Regents of the University of Wisconsin on behalf of the University of Wisconsin - Madison

Project Address: 1101 UNIVERSITY AVENUE MADISON, WI 53706-1322

Project Title: CHEMISTRY 2ND AND 4TH FLOOR LAB RENOVATION
Agency / Institution: UNIVERSITY OF WISCONSIN-MADISON

Sheet Title: ELECTRICAL PANEL SCHEDULE - DANIELS

Revisions

No.	Date:	Description:
1	9/19/2023	ADDENDUM #2

Graphic Scale	N/A
UWSA#	A-22-015
Set Type	BD
Date Issued	08/24/2023
Sheet Number	E923-d