

DOCUMENT 00 90 00
ADDENDUM

ADDENDUM No.: 2

DATE: October 22, 2024

RE: WESTERN TECHNICAL COLLEGE
HEALTH SCIENCE CENTER DENTAL RENOVATION
1300 BADGER ST
LA CROSSE, WISCONSIN 54601
PROJECT NO. 24030

FROM: HSR Associates, Inc
100 Milwaukee Street
La Crosse, WI 54603
(608) 784-1830

TO: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated October 2024. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of: 2 pages, 1 document, 2 sections, and 3 drawings.

DOCUMENTS

1. Document PRE-BID MEETING SIGN IN SHEET

CHANGES TO SPECIFICATIONS:

2. Section 06 41 00 Architectural Wood Casework
 - a. See the revised section included in this addendum. Disregard the previous version.
 - b. Revised paragraph 2.07 F to require lever operated lock on shelf slides and to specify specific model Accuride 3608.
3. Section 09 51 00 Acoustical Ceilings
 - a. See the revised section included in this addendum. Disregard the previous version.
 - b. Listed USG brand products following a substitution request. See changes in 2.01 A.2, 2.01 B.2, and 2.02 B.4.

CHANGES TO DRAWINGS

4. Sheet P000 GENERAL NOTES 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Added General Plumbing Notes item #33, which states, "Final Connections to Plumbing Fixtures and Equipment to be done by Plumbing Contractor."

5. Sheet E200 ELECTRICAL POWER PLAN 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Provide a twenty amp, 2-pole branch circuit for equipment #20 located in Dental Assistant Lab #0002. Refer to bubbled change
 - c. General Note 'D' has modified to include the Electrical Contractor is responsible to make 'Final Connections' to Patterson/Aidec provided equipment. Refer to bubbled change.
6. Sheet E201 OVERALL BASEMENT POWER & LOW VOLTAGE PLAN 30"x42"
 - a. See the revised sheet included in this addendum. Disregard the previous version.
 - b. Change Panelboard 'A' from 54 spaces to 72 spaces. Refer to bubbled change.
 - c. Provide a 20/2 circuit breaker for equipment #20 in panelboard 'A'. Refer to bubbled change.

RESPONSES TO BIDDER QUESTIONS

7. Bidder Question:
 - a. Question: Are non-prequalified plumbing, mechanical, and electrical contractors allowed to bid on this work?
 - b. Response: Refer to Section 00 22 13 item 4.1.9. "Prime contractor bidders are required to pre-qualify to bid using the Owner's pre-qualification process prior to submitting bid." There is not a requirement for lower tier subcontractors and suppliers to pre-qualify using the Owner's process.
8. Bidder Question:
 - a. Question: X-Ray 1017 (Base Bid): Only work taking place in this area is the installation of CBCT imaging unit in wall, correct?
 - b. Response: Yes, that is correct.
9. Bidder Question:
 - a. Question: Alternate 2 Sterilizing Room: Is this new casework provided and installed by Patterson Dental as well? Or just base bid?
 - b. Response: The base bid includes sterilizing room casework and associated fixtures via the Owner's separate contract with Patterson Dental. Alternate 2 includes casework and associated fixtures by the Contractor.

END OF DOCUMENT 00 90 00

Pre-Bid Meeting Sign-In Sheet

October 15, 2024

PROJECT: WESTERN TECHNICAL COLLEGE
HEALTH SCIENCE CENTER
DENTAL RENOVATION
1300 BADGER ST
LA CROSSE, WI 54601
HSR PROJECT NO. 24030

BID OPENING: 2:00 PM, October 15, 2024

Name	Company
1. Alyssa Frank	HSR Associates
2. Gene McLeod	WTC
3. MATT LANGE	Knutson
4. Evan Jaedt	Knutson
5. Ross Donovan	BFB
6. GRANT SCHULTZ	S+S MECH.
7. Kyle Thesing	Kisl Elect.
8. MIKE ALLEN	Fowler & Hammer
9. Steve Eisen	Poellinger Electric
10. Tyler Rickling	Fowler & Hammer
11. Caleb Carpenter	Borton
12. Hunter Gross	Wieser Brothers
13. Bill Huff	M:J
14. ERIK SWENSON	HUNT elec
15. Kai Rodges	AHERN krodges@jfhern.com
16.	
17.	
18.	
19.	

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SECTION 06 41 00
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Specially fabricated cabinet units.
- B. Hardware.
- C. Preparation for installing utilities.

1.02 RELATED REQUIREMENTS

- A. Applicable provisions of Division 1 govern the work of this section.
- B. Section 06 10 00 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- C. Section 07 92 00 - Joint Sealants.
- D. Section 12 36 00 - Countertops.
- E. Division 22 - Required plumbing fixtures and connections.
- F. Division 26 - Required electrical fixtures and connections.

1.03 REFERENCE STANDARDS

- A. ANSI A208.1 - American National Standard for Particleboard; 2022.
- B. ANSI A208.2 - Medium Density Fiberboard (MDF) for Interior Applications; 2022.
- C. ANSI A208.1 - American National Standard for Particleboard; 2022.
- D. ANSI A208.2 - Medium Density Fiberboard (MDF) for Interior Applications; 2022.
- E. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).
- F. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.
- G. BHMA A156.9 - Cabinet Hardware; 2020.
- H. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for procedures.
- B. Review Submittals - Preparatory:
 - 1. Provide submittal packages that contain all the information identified in the submittal groups identified below. Follow any instructions regarding coordinating submittal timing between submittals of different sections.
 - 2. Submitter may combine submittals from this section and Section 12 36 00.
 - 3. Shop Drawings: Indicate materials, component profiles and elevations of casework layout, assembly methods, joint details, fastening methods, accessory listings, rough-in locations, hardware location and schedule of finishes. Show details of countertop construction including backsplash, end splash and edge details, and type of substrate core material.
 - a. Scale of Drawings: 1-1/2 inch to 1 foot, minimum.
 - b. Provide information as required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).
 - 4. Product Data: Provide data for hardware accessories.
- C. Review Submittals - Samples:
 - 1. Samples: Plastic laminate surfacing in manufacturer's standard colors.
 - 2. Samples: PVC edge banding representative of color/pattern, material and shape.
 - 3. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.
- D. Information Submittals - Preparatory:
 - 1. Certificate: Submit labels and certificates required by quality assurance and quality control programs.

- E. Maintenance Materials:
 - 1. Document delivery of required maintenance materials to Owner.

1.05 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.
 - 1. Company with at least one project in the past 5 years with value of woodwork within 20 percent of cost of woodwork for this Project.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect units from moisture damage.

1.07 FIELD CONDITIONS

- A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

1.08 WARRANTY REQUIREMENTS

- A. See Section 01 78 00 - Closeout Submittals for additional information regarding documenting warranties.
- B. Manufacturer's standard form in which manufacturer agrees to repair or replace components of manufactured wood casework that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Delamination of components or other failures of glue bond.
 - b. Warping of components.
 - c. Failure of operating hardware.
 - d. Deterioration of finishes.
- C. Correct defective Work within a one year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 CABINETS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.

2.02 PANEL CORE MATERIALS

- A. Particleboard: Composite panel composed of cellulosic particles, additives, and bonding system; comply with ANSI A208.1.
 - 1. Use: Countertops and Backsplash.
 - 2. Classification: Medium density Industrial.
 - 3. Grade: M-2; moisture resistance: MR10.
 - 4. Panel Thickness: As Indicated.
- B. Medium Density Fiberboard (MDF): Composite panel composed of cellulosic fibers, additives, and bonding system; cured under heat and pressure; comply with ANSI A208.2.
 - 1. Use for components not indicated as another material and as backing for plastic laminate unless otherwise indicated.
 - 2. Grade: 115; moisture resistance: MR10.
 - 3. Panel Thickness: As Required.
 - 4. Surface: Sanded.

2.03 LUMBER MATERIALS

- A. Cabinet Rib Materials, Base Frames and Kicks: Kiln dried hardwood or softwood with a moisture content of 5-10% or 3/4" APA B-B G-2 Exp 1 exterior plywood. Construction lumber (s-dry) not allowed.

2.04 LAMINATE MATERIALS

- A. Manufacturers: Refer to Master Color Schedule on ID Drawings for basis of design.
 - 1. Formica Corporation: www.formica.com.

2. Panolam Industries International, Inc: Including brands Panolam, Nevemar and Pionite; www.panolam.com.
 3. Wilsonart LLC: www.wilsonart.com.
 4. Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.
- B. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.
- C. Provide specific types as indicated.
1. Horizontal Surfaces: HGS, 0.048 inch nominal thickness, through color, color as selected, finish as indicated.
 2. Vertical Surfaces: VGS, 0.028 inch nominal thickness, through color, color as selected, finish as indicated.
 3. Post-Formed Horizontal Surfaces: HGP, 0.039 inch nominal thickness, through color, color as selected, finish as indicated.
 4. Post-Formed Vertical Surfaces: VGP, 0.028 inch nominal thickness, through color, color as selected, finish as indicated.
 5. Cabinet Liner: CLS, 0.020 inch nominal thickness (melamine), color as selected, finish as selected.
 6. Laminate Backer: BKL, 0.020 inch nominal thickness (melamine), undecorated; for application to concealed backside of panels faced with high pressure decorative laminate.

2.05 COUNTERTOPS

- A. Countertops: See Section 12 36 00 - Countertops.

2.06 ACCESSORIES

- A. Plastic edge banding:
1. Plastic edge banding at door, drawer, all face frames and other locations not otherwise indicated:
 - a. Extruded 0.018 inch PVC, flat shaped; smooth finish; of width to match component thickness.
 - b. Pattern/Color: As selected by Architect from manufacturer's full range.
- B. Fasteners: Size and type to suit application.
- C. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel or chrome-plated finish in exposed locations.
- D. Concealed Joint Fasteners: Threaded steel.

2.07 HARDWARE

- A. Hardware: BHMA A156.9, types as indicated for quality grade specified.
- B. Configuration: Pedestal supported with wood bench top and backrest.
- C. Drawer and Door Pulls: U-shaped 4" centers.
1. Material: Stainless Steel.
 2. Finish: Brushed Chrome Finish.
 3. Products:
 - a. Hafele: Handle, Stainless Steel 304; www.hafele.com.
 - b. Rockwood: 853; www.assaabloydooraccessories.us.
 - c. Sugatsune: SWP-696/S Stainless Steel Wire Pull; www.sugatsune.com.
- D. Cabinet Locks: Surface mount deadbolt or cam lock with keyed cylinder 5 pin tumbler, two keys per lock, master keyed, steel with chrome finish steel with satin finish. Coordinate any required grouping with owner and adjust master key quantities as required.
1. Products:
 - a. CompX National 8050 Series Disc Tumbler. www.compX.com.
 - b. Olympus. www.olympus-lock.com.
 - c. Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.

- E. Latches and Catches:
 - 1. Type: Magnetic Catch:
 - a. Non-Tabbed Magnetic Catch:
 - 1) Install one at base and wall cabinets, two (top and bottom) at each door of tall storage units.
 - 2) Products:
 - (a) Ives; 326 Magnetic Catch, dual double pole; us.allegion.com.
 - (b) Rockwood Pull; Rockwood 900 Heavy Duty Magnetic Catch: www.rockwoodpull.com.
 - (c) Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.
 - 2. Elbow Latches:
 - a. Install at double doors with locks.
 - b. Products:
 - 1) Ives; Ives #2 Elbow Latch; www.iveshinges.com.
 - 2) EPCO: Heavy Duty Elbow Latch; www.epcohardware.com.
 - 3) Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.
- F. Drawer Slides:
 - 1. Type: Combination metal and roller bearing, three-quarter extension.
 - 2. Drawers: Combination metal and roller bearing, full extension with over travel, 150 lb. Accuride 4034 Series or comparable.
 - 3. Shelf Slides: Combination metal and roller bearing, full extension with over travel, lever operated lock open and closed, 275 lb. Accuride 3608 or comparable by prior approval.
 - 4. Mounting: Side mounted.
 - 5. Stops: Integral type.
 - 6. Features: Provide stay close type.
 - 7. Manufacturers:
 - a. Accuride International, Inc: www accuride.com.
 - b. Blum; www.blum.com.
 - c. Fulterer; www.fultererusa.com.
 - d. Knap & Vogt Manufacturing Company: www.knapeandvogt.com.
 - e. Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.
- G. Hinges: 5 knuckle type, institutional style, hospital tipped, stainless steel with satin finish.
 - 1. Manufacturers:
 - a. Blum, Inc: www.blum.com.
 - b. Rockford Process Control (RPC): www.rockfordprocess.com.
 - c. Hardware Resources: www.hardwareresources.com.
 - d. Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.

2.08 SUPPORTS AND BRACKETS

- A. In-Cabinet Adjustable Shelf Supports: Standard side-mounted system using multiple holes for pin supports and coordinated self rests, satin chrome finish, for nominal 1 inch spacing adjustments.
 - 1. Products: #55 Double Pin manufactured by Allenfield Manufacturing and Development.
 - a. #55 Double Pin manufactured by Allenfield Manufacturing and Development.
 - b. Shelf Support Clip #3220CL from Bainbridge Manufacturing Inc.
 - c. Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.
- B. Formed/Bent Plate Countertop and Workstation Brackets: Fixed, formed plate, face-of-wall mounting.
 - 1. Materials:
 - a. Formed steel shapes:
 - 1) Finish: Manufacturer's standard, factory-applied, powder coat.
 - 2) Color: selected by A/E from manufacturer's standard options.

2. Dimensions:
 - a. Support Length:
 - 1) Select the largest support from the manufacturer's standard options that doesn't exceed the width of the supported panel and doesn't interfere with edge detailing of the supported panel.
 - b. Height: Manufacturer's standard height corresponding to support length.
 - c. Width: Manufacturer's standard width corresponding to support length.
3. Configuration:
 - a. Provide bracket with gap at upper corner for cable routing.
4. Products:
 - a. A&M Hardware, Inc; Standard Brackets: www.aandmhardware.com.
 - b. Gambas Workstation Brackets: Standard Brackets: www.gambasbrackets.com.
 - c. Rockler: Heavy-Duty Steel Shelf Brackets: www.rockler.com.
 - d. Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.

2.09 FABRICATION

- A. Cabinet Style: Flush overlay.
- B. Base Cabinets:
 1. Construct in accordance with AWI/AWMAC Architectural Woodwork Quality Standards Illustrated, Custom quality.
- C. Wall Cabinets:
 1. Underside of wall cabinets shall be Type "C" flush with finish applied after assembly.
 2. Provide manufacturer's standard construction to reinforce cabinets for wall attachment, minimum two, full width 3/4 inch thick x 3 inch, glued and mechanically fastened at cabinet back.
- D. Drawers:
 1. Joinery: dovetail or doweled.
 2. Bottoms and Sides: 1/2 inch Veneer core panel product, "B" face hardwood veneer or 1/2 inch medium density fiberboard with thermoset decorative overlay. PVC edge banding at exposed edges.
 3. Bottoms shall be dadoed into sides, front and back. Staple and glue.
 4. Reinforcement; 1/2 inch thick under-bottom stiffeners, one at 24 inch drawers, two at 36 inch drawers and four at 48 inch drawers.
 5. File drawers shall be sized to accommodate a follower mechanism or use of hanging folders. Selection to be confirmed by A/E.
- E. Tall Storage Units:
 1. Center shelf shall be fixed to allow for installation of lock where applicable.
- F. HDPL Veneer Shelves:
 1. Provide 3/4 inch thick shelves unless noted otherwise on drawings or to satisfy span limits described below.
 2. Shelf spans for 3/4 inch thick shelf panels:
 - a. Particle Board 1-M-2: Maximum span 36 inches.
 - b. Medium Density Fiberboard: Maximum span 36 inches.
 3. Shelf spans for 1 inch thick shelf panels:
 - a. Particle Board 1-M-2: Maximum span 44 inches.
 - b. Medium Density Fiberboard: Maximum span 44 inches.
 4. Shelf Veneer Material: HDPL at top and bottom of panels unless noted otherwise.
 5. Shelf Edge Material: PVC banding that is pattern/color matched to the veneer unless noted otherwise.
 6. Enclosed Shelves: Finish to match inside faces of cabinet. Fabricate all shelves to the full depth of the cabinet. Finish edges with banding at surfaces exposed when the doors are open.
 7. Non-enclosed Shelves - Finish all edges with banding if not otherwise indicated.

- G. HDPL Veneer Shelf Slides:
 - 1. Provide 1/2 inch thick HDPL cap panel.
 - 2. Provide 1 inch minimum supporting panel.
 - 3. Provide stiffening ribs.
 - 4. See A400 for additional requirements.
- H. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.
- I. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
- J. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
- K. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners.
 - 1. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.
 - 2. Cap exposed plastic laminate finish edges with material of same finish and pattern.
- L. Mechanically fasten back splash to countertops with steel brackets at 16 inches on center.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify location and sizes of utility rough-in associated with work of this section.

3.02 INSTALLATION

- A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.
- B. Use fixture attachments in concealed locations for wall mounted components.
- C. Use concealed joint fasteners to align and secure adjoining cabinet units.
- D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.
- E. Secure cabinets to floor using appropriate angles and anchorages.
- F. Coordinate placement of fixtures and items required in other divisions.
- G. Where casework meets wall surfaces, set with uniform space not to exceed 1/8 inch. Seal all joints to a slightly concave joint. Use backer rod where required. Refer to Section 07 92 00 for sealant type.

3.03 ADJUSTING

- A. Adjust installed work.
- B. Adjust moving or operating parts to function smoothly and correctly.

3.04 CLEANING

- A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION

SECTION 09 51 00
ACOUSTICAL CEILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Acoustical units.

1.02 RELATED REQUIREMENTS

- A. Applicable provisions of Division 1 govern the work of this section.
- B. Mechanical Supply and Return Devices Division 26.
- C. Electrical Light Fixtures Division 26.

1.03 REFERENCE STANDARDS

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- B. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2022.
- C. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2023.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for procedures.
- B. Review Submittals - Preparatory:
 - 1. Product Data: Provide data on suspension system components and acoustical units.
- C. Review Submittals - Samples:
 - 1. Samples: Submit two samples 12 by 12 inch in size illustrating material and finish of acoustical units.
- D. Maintenance Materials:
 - 1. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - a. See Section 01 60 00 - Product Requirements, for additional provisions.
 - b. Extra Acoustical Units: Quantity equal to 5 percent of total installed.

1.05 QUALITY ASSURANCE

- A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.06 FIELD CONDITIONS

- A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acoustic Tiles/Panels:
 - 1. Armstrong World Industries, Inc: www.armstrongceilings.com.
 - 2. USG Corporation: www.usg.com/ceilings.
- B. Steel Suspension Systems:
 - 1. Armstrong World Industries, Inc: www.armstrongceilings.com.
 - 2. USG Corporation: www.usg.com/ceilings.
 - 3. Substitutions: See Section 01 25 00 - Substitution Procedures for requirements.

2.02 ACOUSTICAL UNITS

- A. Acoustical Units - General: ASTM E1264, Class A.

- B. BOARD TYPE ACT-2: 2'x2' Tegular, Min NRC.70:
 - 1. Angled Tegular 15/16.
 - 2. NRC.:70.
 - 3. CAC: 35.
 - 4. Texture: Fine Fissured (including USG Radar pattern)

2.03 SUSPENSION SYSTEM(S)

- A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with stabilizer bars, clips, splices, and perimeter moldings as required.
 - 1. Materials:
 - a. Steel Grid: ASTM A653/A653M, G30 coating, unless otherwise indicated.
 - 2. Configuration: Exposed T-shaped grid.
 - 3. Width: 15/16".

2.04 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application and ceiling system flatness requirement specified.
- B. Hanger Wire: 12 gauge, 0.08 inch galvanized steel wire.
- C. Perimeter Moldings: Same metal and finish as grid.
 - 1. Angle Molding: L-shaped, for mounting at same elevation as face of grid.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that layout of hangers will not interfere with other work.

3.02 INSTALLATION - SUSPENSION SYSTEM

- A. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
- B. Locate system on room axis according to reflected plan.
- C. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
 - 1. Use longest practical lengths.
 - 2. Miter corners.
- D. Suspension System, Non-Seismic: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- E. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- F. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- G. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.
- H. Do not eccentrically load system or induce rotation of runners.

3.03 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Fit border trim neatly against abutting surfaces.
- D. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.

- E. Cutting Acoustical Units:
 - 1. Cut to fit irregular grid and perimeter edge trim.
 - 2. Make field cut edges of same profile as factory edges.
- F. Where round obstructions occur, provide preformed closures to match perimeter molding.
- G. Provide tegular edge at walls and other abutting vertical surfaces. Field paint cut edges to surface color and sheen.

END OF SECTION

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WESTERN TECHNICAL COLLEGE
HSC DENTAL RENOVATION
ELECTRICAL POWER PLANS

Project Title:
Project Location: 1300 BADGER ST
LA CROSSE, WI
Sheet Title:

HSR Project Number: 24030

Project Date: OCTOBER 2024

Drawn By: PLP

Key Plan:

Revisions:

No. Description Date

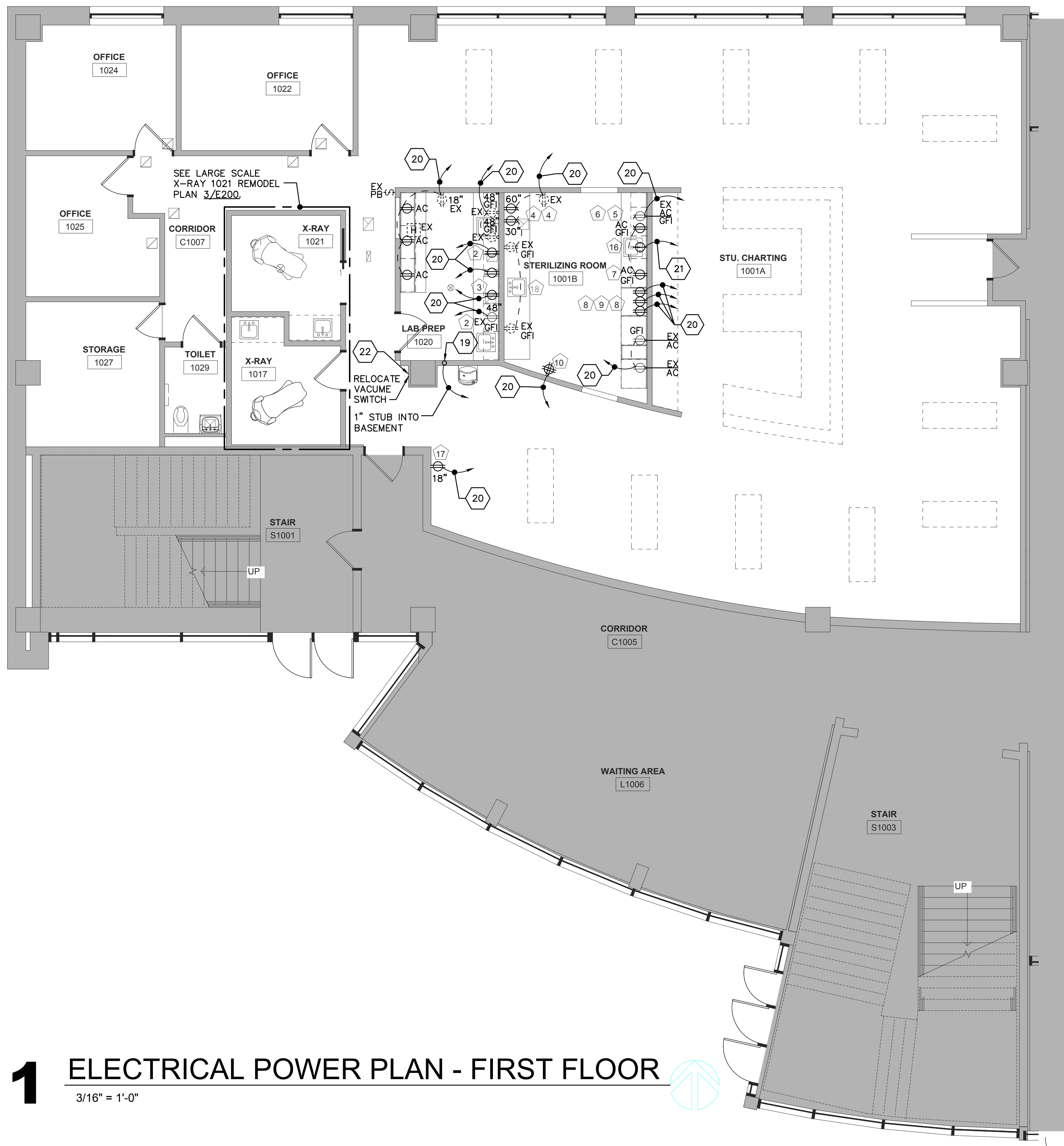
ADDENDUM # 2 10-22-24

Graphic Scale: VARIES

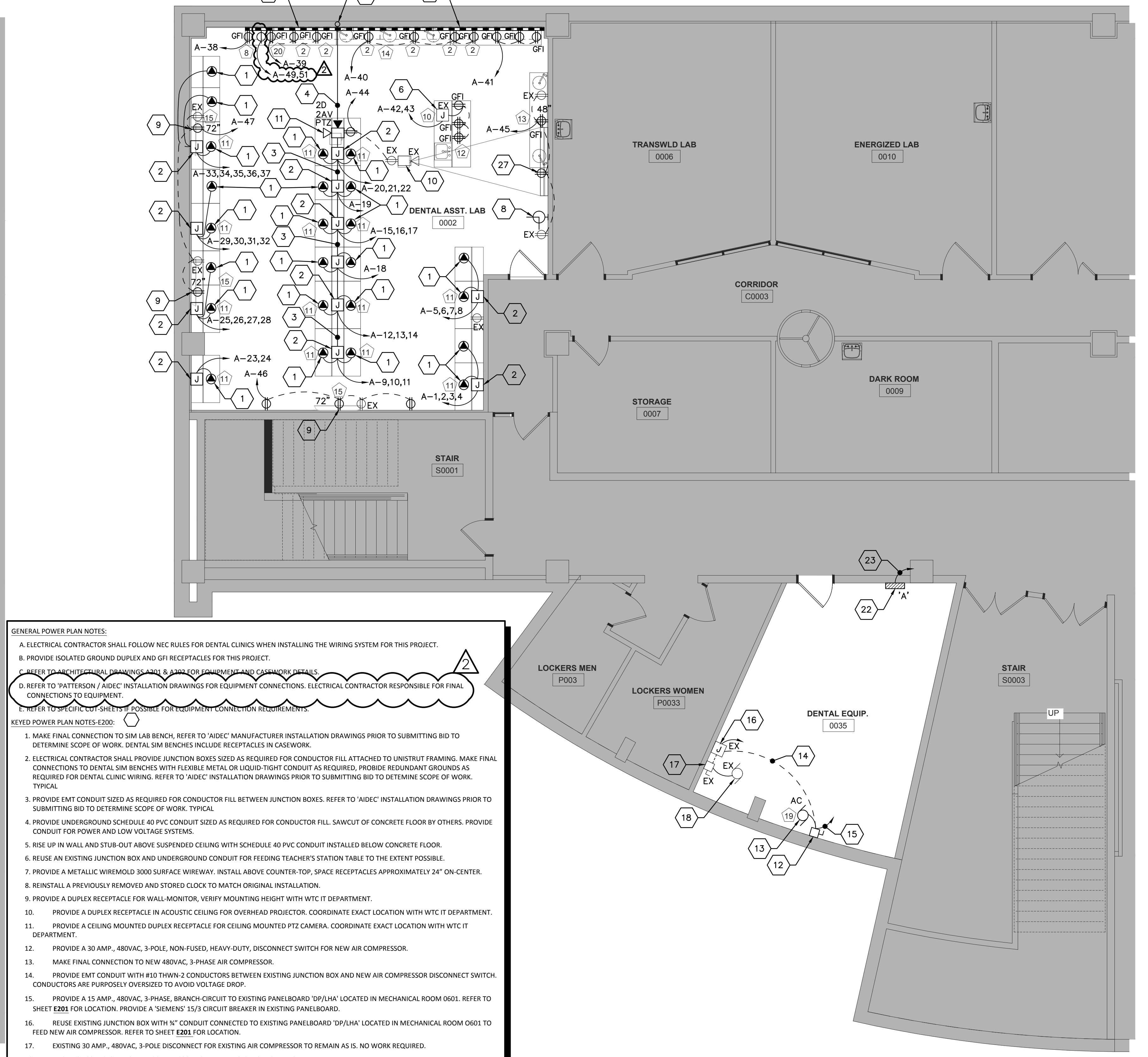
Last Update: 10/1/2024

BID DOCUMENTS

E200

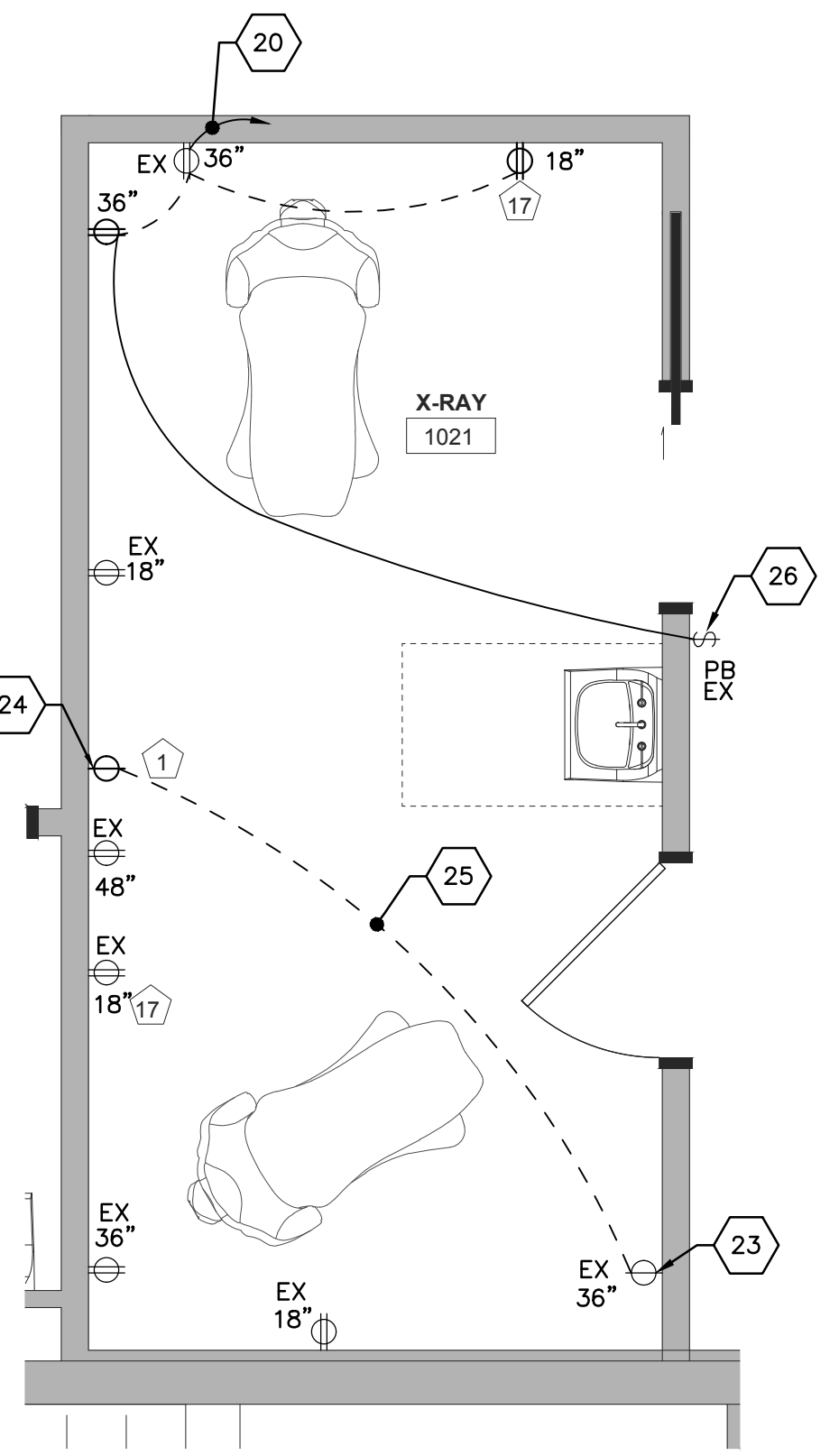


1 ELECTRICAL POWER PLAN - FIRST FLOOR
3/16" = 1'-0"

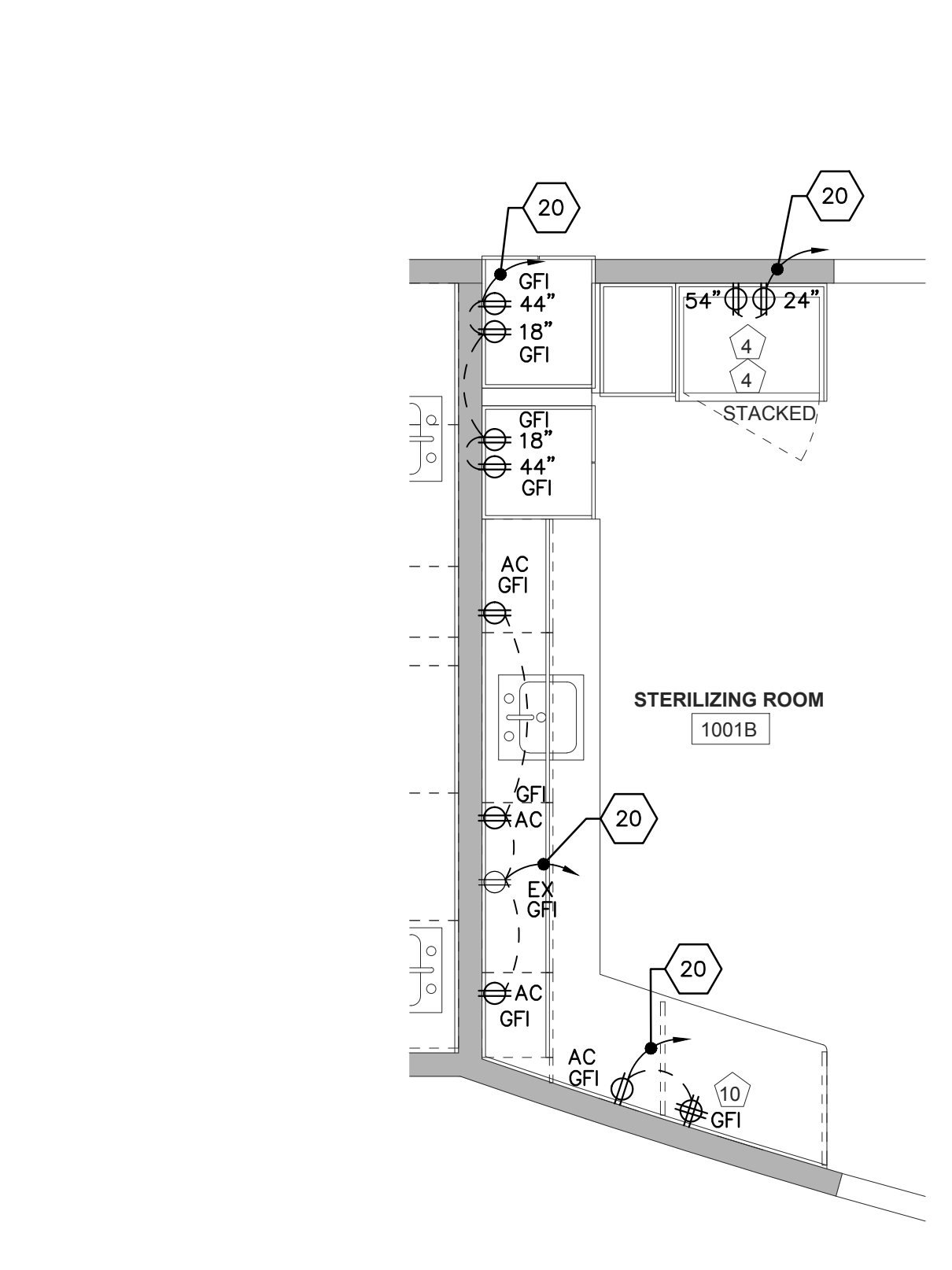


- GENERAL POWER PLAN NOTES:**
- ELECTRICAL CONTRACTOR SHALL FOLLOW NEC RULES FOR DENTAL CLINICS WHEN INSTALLING THE WIRING SYSTEM FOR THIS PROJECT.
 - PROVIDE ISOLATED GROUND DUPLEX AND GFI RECEPTACLES FOR THIS PROJECT.
 - REFER TO ARCHITECTURAL DRAWINGS AND AIA FOR EQUIPMENT AND CASEWORK DETAILS.
 - REFER TO PATTERSON / AIDEC INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS. ELECTRICAL CONTRACTOR RESPONSIBLE FOR FINAL CONNECTIONS TO EQUIPMENT.
- KEYED POWER PLAN NOTES E200:**
- MAKE FINAL CONNECTION TO SIM LAB BENCH. REFER TO AIDEC MANUFACTURER INSTALLATION DRAWINGS PRIOR TO SUBMITTING BID TO DETERMINE SCOPE OF WORK. DENTAL SIM BENCHES INCLUDE RECEPTACLES IN CASEWORK.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE JUNCTION BOXES SIZED AS REQUIRED FOR CONDUCTOR FILL ATTACHED TO UNISTRUT FRAMING. MAKE FINAL CONNECTIONS TO DENTAL SIM BENCHES WITH FLEXIBLE METAL OR LIQUID-TIGHT CONDUIT AS REQUIRED. PROVIDE REDUNDANT GROUNDS AS REQUIRED FOR DENTAL CLINIC WIRING. REFER TO AIDEC INSTALLATION DRAWINGS PRIOR TO SUBMITTING BID TO DETERMINE SCOPE OF WORK. TYPICAL.
 - PROVIDE EMT CONDUIT SIZED AS REQUIRED FOR CONDUCTOR FILL BETWEEN JUNCTION BOXES. REFER TO AIDEC INSTALLATION DRAWINGS PRIOR TO SUBMITTING BID TO DETERMINE SCOPE OF WORK. TYPICAL.
 - PROVIDE UNDERGROUND SCHEDULE 40 PVC CONDUIT SIZED AS REQUIRED FOR CONDUCTOR FILL. SAWCUT OF CONCRETE FLOOR BY OTHERS. PROVIDE CONDUIT FOR POWER AND LOW VOLTAGE SYSTEMS.
 - RISE UP IN WALL AND STUB-OUT ABOVE SUSPENDED CEILING WITH SCHEDULE 40 PVC CONDUIT INSTALLED BELOW CONCRETE FLOOR.
 - REUSE AN EXISTING JUNCTION BOX AND UNDERGROUND CONDUIT FOR FEEDING TEACHER'S STATION TABLE TO THE EXTENT POSSIBLE.
 - PROVIDE A METALLIC WIREMOLD 3000 SURFACE WIREWAY. INSTALL ABOVE COUNTER-TOP. SPACE RECEPTACLES APPROXIMATELY 24" ON-CENTER.
 - REINSTALL A PREVIOUSLY REMOVED AND STORED CLOCK TO MATCH ORIGINAL INSTALLATION.
 - PROVIDE A DUPLEX RECEPTACLE FOR WALL MONITOR. VERIFY MOUNTING HEIGHT WITH WTC IT DEPARTMENT.
 - PROVIDE A DUPLEX RECEPTACLE IN ACOUSTIC CEILING FOR OVERHEAD PROJECTOR. COORDINATE EXACT LOCATION WITH WTC IT DEPARTMENT.
 - PROVIDE A CEILING MOUNTED DUPLEX RECEPTACLE FOR CEILING MOUNTED PTZ CAMERA. COORDINATE EXACT LOCATION WITH WTC IT DEPARTMENT.
 - PROVIDE A 30 AMP, 480VAC, 3-POLE, NON-FUSED, HEAVY-DUTY, DISCONNECT SWITCH FOR NEW AIR COMPRESSOR.
 - MAKE FINAL CONNECTION TO NEW 480VAC, 3-PHASE AIR COMPRESSOR.
 - PROVIDE EMT CONDUIT WITH #10 THWN-2 CONDUCTORS BETWEEN EXISTING JUNCTION BOX AND NEW AIR COMPRESSOR DISCONNECT SWITCH. CONDUCTORS ARE PURPOSELY OVERSIZED TO AVOID VOLTAGE DROP.
 - PROVIDE A 15 AMP, 480VAC, 3-PHASE, BRANCH CIRCUIT TO EXISTING PANELBOARD 'DPL/HA' LOCATED IN MECHANICAL ROOM 0601. REFER TO SHEET E201 FOR LOCATION. PROVIDE A SIEMENS 15/3 CIRCUIT BREAKER IN EXISTING PANELBOARD.
 - REUSE EXISTING JUNCTION BOX WITH 1/2" CONDUIT CONNECTED TO EXISTING PANELBOARD 'DPL/HA' LOCATED IN MECHANICAL ROOM 0601 TO FEED NEW AIR COMPRESSOR. REFER TO SHEET E201 FOR LOCATION.
 - EXISTING 30 AMP, 480VAC, 3-POLE DISCONNECT FOR EXISTING AIR COMPRESSOR TO REMAIN AS IS. NO WORK REQUIRED.
 - EXISTING 480VAC, 3-PHASE, AIR COMPRESSOR TO REMAIN AS IS. NO WORK REQUIRED.
 - PROVIDE A 1" EMT EMPTY CONDUIT AND STUB TO CEILING BELOW IN BASEMENT. THIS CONDUIT WILL BE USED TO RECONNECT A VACUUM SWITCH BY OTHERS.
 - PROVIDE A 20 AMP, 120VAC, BRANCH CIRCUIT TO EXISTING PANELBOARD 'G/C' LOCATED IN ELECTRICAL ROOM #1102. REFER TO SHEET E202 FOR LOCATION. PROVIDE A SIEMENS 20/1 CIRCUIT BREAKER IN EXISTING PANELBOARD.
 - PROVIDE A 20 AMP, 208VAC, SINGLE-PHASE, BRANCH CIRCUIT FOR EQUIPMENT #6 TO EXISTING PANELBOARD 'G/C' LOCATED IN ELECTRICAL ROOM #1102. REFER TO SHEET E202 FOR LOCATION. PROVIDE A SIEMENS 20/2 CIRCUIT BREAKER IN EXISTING PANELBOARD.
 - REINSTALL EXISTING VACUUM SWITCH PREVIOUSLY REMOVED BY WTC PHYSICAL PLANT DEPARTMENT IN THIS APPROXIMATE LOCATION.
 - DISCONNECT, REMOVE AND DISPOSE OF EXISTING 20 AMP, 208VAC, SINGLE-PHASE RECEPTACLE AND PROVIDE A BLANK STAINLESS STEEL COVER PLATE.
 - PROVIDE A 20 AMP, 208VAC, SINGLE-PHASE, SINGLE RECEPTACLE TO MATCH CORO AND PLUG ON EQUIPMENT #1.
 - EXTEND EXISTING 20 AMP, 208VAC, SINGLE-PHASE, BRANCH CIRCUIT AS REQUIRED TO ENERGIZED EQUIPMENT #1.
 - REWIRE EXISTING X-RAY CONTROL SWITCH TO MATCH ORIGINAL INSTALLATION.
 - PROVIDE A DUPLEX RECEPTACLE ABOVE PROJECTION SCREEN FOR SOUND BAR. COORDINATE WITH WTC IT DEPARTMENT.

2 ELECTRICAL POWER PLAN - BASEMENT
3/16" = 1'-0"



3 X-RAY 1021 - POWER ALTERNATE BID #1
3/8" = 1'-0"



4 STERILIZING ROOM 1001B - POWER ALTERNATE BID #2
3/8" = 1'-0"

MARK	DESCRIPTION	MFG.	MODEL	ROOM # LOCATION	UTILITY CONNECT.	FURNISHED		INSTALLED		REMARKS
						OWNER	CONTRACT.	OWNER	CONTRACT.	
1	PANORAMIC X-RAY	KAVO	GF 30	1017	ELECT./DATA	Yes	No	No	No	OWNER SUPPLIED - CONTRACTOR INSTALLED
2	MODEL TRIMMER	RAY FOSTER/WHIP MX	NT12	0902 1020	ELECT./WATER	Yes	No	Yes	No	4 UNITS ARE RELOCATED EXISTING EQUIPMENT (3 RAY FOSTER AND 1 WHIP MX). 4 ADDITIONAL NEW UNITS (MFG. AND MODEL TBD BY OWNER). OWNER SUPPLIED - OWNER INSTALLED
3	LATHE	BALDOR	B2758 JG	1020	ELECT.	Yes	No	Yes	No	RELOCATED EXISTING EQUIPMENT. OWNER SUPPLIED - OWNER INSTALLED
4	3D PRINTER	SIRONA	PRIME PRINT	1001B	ELECT./DATA	Yes	No	Yes	No	PRINTER AND WASH/CURE STATION STACKED. OWNER SUPPLIED - OWNER INSTALLED
5	ULTRASONIC CLEANER	COLTENE	BIRSONIC UC300	1001B	ELECT.	Yes	No	Yes	No	COUNTERTOP UNIT. OWNER SUPPLIED - OWNER INSTALLED
6	HYDRIM	SCICAN	CS1 34	1001B	ELECT./WATER/DRAIN	Yes	No	Yes	No	UNDER COUNTER UNIT. OWNER SUPPLIED - OWNER INSTALLED
7	HANDPIECE MAINTENANCE SYSTEM	KAVO	QUATTROCARRE PLUS 2124A	1001B	ELECT./AIR	Yes	No	Yes	No	COUNTERTOP UNIT. OWNER SUPPLIED - OWNER INSTALLED
8	AUTOCLAVE	MIDMARK	M11	0902/1001B	ELECT.	Yes	No	Yes	No	AUTOCLAVES AND STAMIM STACKED IN TOWER ROOM 1001B. LOCATED ON COUNTERTOP IN ROOM 0002. OWNER SUPPLIED - OWNER INSTALLED
9	STAMIM	SCICAN	G4 2000	1001B	ELECT.	Yes	No	Yes	No	AUTOCLAVES AND STAMIM STACKED IN TOWER. OWNER SUPPLIED - OWNER INSTALLED
10	COMPUTER WORKSTATION	TBD	TBD	0902/1001B	ELECT./DATA	Yes	No	Yes	No	OWNER SUPPLIED - OWNER INSTALLED
11	SIM LAB BENCH	ADEC	S98 SIM LAB BENCH	0902	ELECT./AIR	Yes	No	Yes	No	OWNER SUPPLIED - OWNER INSTALLED
12	TEACHING STATION	ADEC	S93 ACCESSORY CONSOLE	0902	ELECT./DATA/WATER/DRAIN	Yes	No	Yes	No	TEACHING STATION TO HAVE DATA CONNECTIONS TO MONITORS AND OVERHEAD PROJECTOR. OWNER SUPPLIED - OWNER INSTALLED
13	HAND WASH STATION	ADEC	S93 ACCESSORY CONSOLE	0902	WATER/DRAIN/AIR	Yes	No	Yes	No	OWNER REP SUPPLIED - OWNER REP INSTALLED
14	WORK STATION	ADEC	S93 ACCESSORY CONSOLE	0902	WATER/DRAIN/AIR	Yes	No	Yes	No	OWNER REP SUPPLIED - OWNER REP INSTALLED
15	WALL MOUNTED MONITOR	TBD	TBD	0902	ELECT./DATA	No	Yes	No	Yes	TEACHING STATION TO HAVE DATA CONNECTIONS TO MONITORS AND OVERHEAD PROJECTOR. CONTRACTOR SUPPLIED - CONTRACTOR INSTALLED
16	STERILIZATION CENTER	ADEC	S94 STERILIZATION CENTER	1001B	WATER/DRAIN/AIR	Yes	No	Yes	No	OWNER REP SUPPLIED - OWNER REP INSTALLED
17	ERGOTRON WORKSTATION	TBD	TBD	1017	ELECT./DATA	Yes	No	No	Yes	RELOCATED EXISTING EQUIPMENT. OWNER SUPPLIED - CONTRACTOR INSTALLED
18	STERILIZATION WEST CABINETRY	ADEC	S94 STERILIZATION WEST	1001B	WATER/DRAIN	Yes	No	Yes	No	OWNER REP SUPPLIED - OWNER REP INSTALLED
19	AIR COMPRESSOR	TBD	TBD	0903	ELECT.	No	Yes	No	Yes	CONTRACTOR SUPPLIED - CONTRACTOR INSTALLED
20	HANDPIECE MAINTENANCE SYSTEM	SCICAN	STATMATIC 31	0902	ELECT./AIR	Yes	No	Yes	No	COUNTERTOP UNIT. OWNER SUPPLIED - OWNER INSTALLED
21	PRINTER	-	-	0902	ELECT./DATA	Yes	No	Yes	No	PRINTER. OWNER SUPPLIED-OWNER INSTALLED
22	CAMERA	-	-	0902	ELECT./DATA	Yes	No	Yes	No	CAMERA. OWNER SUPPLIED-OWNER INSTALLED
23	PROJECTOR	-	-	0902	ELECT./DATA	Yes	No	Yes	No	PROJECTOR. OWNER SUPPLIED-OWNER INSTALLED
24	PROJECTOR SCREEN	-	-	0902	ELECT./DATA	Yes	No	Yes	No	PROJECTOR SCREEN. OWNER SUPPLIED-OWNER INSTALLED
25	SOUND BAR	-	-	0902	ELECT./DATA	Yes	No	Yes	No	SOUND BAR. OWNER SUPPLIED-OWNER INSTALLED



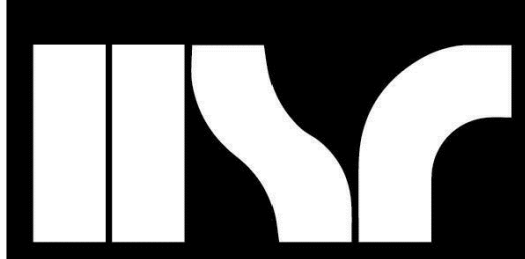
1 OVERALL BASEMENT POWER & LOW VOLTAGE PLAN
 1/8" = 1'-0"

- KEYED POWER AND LOW VOLTAGE PLAN NOTES-E201:**
- USE EXISTING JUNCTION BOX TO FEED NEW 480VAC, 3-PHASE, AIR COMPRESSOR.
 - USE EXISTING 1/2" CONDUIT CONNECTED BETWEEN JUNCTION BOX AND PANELBOARD 'DP/LHA' FOR FEEDING NEW 480VAC, 3-PHASE, AIR COMPRESSOR.
 - LOCATION OF EXISTING 'SIEMENS', 480VAC, 3-PHASE, PANELBOARD 'DP/LHA'. PROVIDE A 15/3 CIRCUIT BREAKER FOR NEW AIR COMPRESSOR.
 - PROVIDE EMT CONDUIT #10 THWN-2 CONDUCTORS BETWEEN EXISTING JUNCTION BOX AND NEW AIR COMPRESSOR DISCONNECT.
 - PROVIDE A 30 AMP, 3-POLE, NON-FUSED, HEAVY DUTY, 480VAC, DISCONNECT SWITCH FOR NEW AIR COMPRESSOR.
 - MAKE FINAL CONNECTION TO NEW 480VAC, 3-PHASE, AIR COMPRESSOR.
 - PROVIDE A NEW 225 AMP, 120/208VAC, 3-PHASE, 4-WIRE, 54 SPACE PANELBOARD 'A' WITH ISOLATED GROUNDING BAR TO FEED BRANCH CIRCUITS IN REMODELED DENTAL ASSIST. LAB 0002. PLEASE LABEL AS DIRECTED BY UWL ELECTRICAL DEPARTMENT.
 - PROVIDE A 225 AMP, 120/208VAC, 3-PHASE, 4-WIRE FEEDER BETWEEN NEW PANELBOARD 'A' AND EXISTING DISTRIBUTION PANELBOARD 'DP/LA' LOCATED IN ELECTRICAL ROOM 0104. PROVIDE 4 #4/0 THWN-2 AND 1 #4 THWN-2 (GRO) IN 2-1/2" EMT CONDUIT.
 - LOCATION OF EXISTING 800 AMP, 120/208VAC, 3-PHASE, 4-WIRE DISTRIBUTION PANELBOARD 'DP/LA'. PROVIDE A 'SIEMENS' 225/3 CIRCUIT BREAKER.
 - LOCATION OF EXISTING 250 AMP, 120/208VAC, 3-PHASE, 4-WIRE, 'SIEMENS' PANELBOARD 'LA'. PLEASE NOTE SEVERAL EXISTING BRANCH CIRCUITS FEEDING DENTAL ASSIST. LAB WILL NEED TO BE REMOVED FROM THIS PANELBOARD.
 - LOCATION OF EXISTING 480/277 VAC, 3-PHASE, LIGHTING CONTROL PANEL 'RC/LA' FEEDING DENTAL ASSIST. LAB.
 - LOCATION OF EXISTING IT EQUIPMENT RACK FEEDING DATA JACKS IN DENTAL ASSIST. LAB. PROVIDE NEW CAT6A PATCH PANELS IN THIS EXISTING RACK AS REQUIRED TO FEED NEW DATA JACKS, ETC. IN REMODEL PROJECT. COORDINATE THOROUGHLY WITH WTC IT DEPARTMENT.

Panel 'A', NEW SIEMENS, 225 AMP., 120/208VAC, M.L.O. 22K

Space No.	Serves	C/B Size/Type	Load (KVA)	Load (KVA)	C/B Size/Type	Serves	Space No.
1	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	2
3	EQUIPMENT #11	20/1	1.00	1.00	20/1	EQUIPMENT #11	4
5	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	6
7	EQUIPMENT #11	20/1	1.00	1.00	20/1	EQUIPMENT #11	8
9	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	10
11	EQUIPMENT #11	20/1	1.00	0.96	20/1	EQUIPMENT #11	12
13	EQUIPMENT #11	20/1	0.62	1.00	20/1	EQUIPMENT #11	14
15	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	16
17	EQUIPMENT #11	20/1	1.00	0.62	20/1	EQUIPMENT #11	18
19	EQUIPMENT #11	20/1	0.62	0.96	20/1	EQUIPMENT #11	20
21	EQUIPMENT #11	20/1	0.62	1.00	20/1	EQUIPMENT #11	22
23	EQUIPMENT #11	20/1	0.31	1.00	20/1	EQUIPMENT #11	24
25	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	26
27	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	28
29	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	30
31	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	32
33	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	34
35	EQUIPMENT #11	20/1	0.96	0.62	20/1	EQUIPMENT #11	36
37	EQUIPMENT #11	20/1	1.00	1.50	20/1	EQUIPMENT #8	38
39	RECEPTACLE	20/1	1.92	0.72	20/1	RECEPTACLE	40
41	RECEPTACLE	20/1	0.54	0.36	20/1	RECEPTACLE	42
43	RECEPTACLE	20/1	0.72	0.50	20/1	RECEPTACLE	44
45	RECEPTACLE	20/1	0.90	0.72	20/1	RECEPTACLE	46
47	RECEPTACLE	20/1	0.72		20/1	SPARE	48
49	EQUIPMENT #20	20/2	0.10		20/1	SPARE	50
51	"	20/2	0.10		20/1	SPARE	52
53	SPARE	20/1			20/1	SPARE	54
55	SPARE	20/1			20/1	SPARE	56
57	SPARE	20/1			20/1	SPARE	58
59	SPARE	20/1			20/1	SPARE	60
61	SPARE	20/1			20/1	SPARE	62
63	SPARE	20/1			20/1	SPARE	64
65	SPARE	20/1			20/1	SPARE	66
67	SPARE	20/1			20/1	SPARE	68
69	SPARE	20/1			20/1	SPARE	70
71	SPARE	20/1			20/1	SPARE	72
LIGHTING (KVA)							
RECEPTACLES (KVA)			39.11				
MOTOR/EQUIPMENT (KVA)							
TOTAL (KVA)			39.11		TOTAL AMP. :		108.6

Notes:
 1 Provide a 72 space panelboard.



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**WESTERN TECHNICAL COLLEGE
 HSC DENTAL RENOVATION**

Project Title:
 Project Location: 1300 BADGER ST
 LA CROSSE, WI
 HSR Project Number: 24030
 Project Date: OCTOBER 2024
 Drawn By: PLP
 Key Plan:

OVERALL BASEMENT POWER & LOW VOLTAGE PLAN

BID DOCUMENTS

Revisions:

No.	Description	Date
1	ADDENDUM # 2	10-22-24

Graphic Scale: VARIES

Last Update: 10/1/2024

E201