

### ADDENDUM NO. 03, JANUARY 5, 2023

RE: DTA Operations Center Office Remodel

LHB Project No. 190559

To: All Planholders

From: LHB, Inc.

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated October 24, 2022 and Addendum No. 01, dated December 19, 2022, and Addendum No. 02, dated December 27, 2022. 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 02 pages and the following attachment (s):

General

None

Specifications Div 02 – 14: 09 5100 Div 21 – 23: 22 4000, 23 0100, 23 0713, 23 3300

Drawings Architectural: A701, A702

#### **Changes to Prior Addenda**

1. None

#### **Questions and Answers**

- Q1. Are you needing ACT3 for this project?
- A1. ACT3 was eliminated.
- Q2. Are you needing AX or AXCE ceiling grid?
- A2. Yes, with ACT2 near the Women's showers and in Vestibule (higher humidity) as noted on revised sheets A701 and A702 attached.
- Q3. Can you confirm the grid profile size needed for ACT2?
- A3. 15/16" DX and AX ceiling grids. See revised sheets A701 and A702 attached.

#### General

2. None

#### **Changes to Specifications**

- 3. Replace Section 09 5100 in its entirety.
- 4. Replace Section 22 4000 in its entirety.

- 5. Replace Section 23 0100 in its entirety.
- 6. Replace Section 23 0713 in its entirety.
- 7. Refer to Section 23 0719:
  - a. Paragraph 3.03 A. 1. a. 3): Delete.
  - b. Paragraph 3.03 A. 1. b.: Delete.
- 8. Replace Section 23 3300 in its entirety.

#### **Product Approvals**

No materials or equipment will be allowed to be used unless it either 1) meets specified criteria and/or manufacturer or 2) has received prior approval as documented in an addendum. This includes all equipment furnished by subcontractors.

SECTION / PARAGRAPH NO.	SPECIFIED PRODUCT	PROPOSED SUBSTITUTION / MODEL
None		

#### **Changes to Drawings**

- 9. Replace Sheet A701 in its entirety.
- 10. Replace Sheet A702 in its entirety.

#### **END OF ADDENDUM NO. 03**

#### **SECTION 09 5100**

#### ACOUSTICAL CEILINGS (REVISED ADDENDUM NO. 03)

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

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

#### 1.02 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; 2019a.
- B. ASTM B209/B209M Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021.
- C. ASTM C635/C635M Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2017.
- D. ASTM C636/C636M Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2013.
- E. ASTM E580/E580M Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2020.
- F. ASTM E1264 Standard Classification for Acoustical Ceiling Products; 2019.

#### 1.03 ADMINISTRATIVE REQUIREMENTS

- A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Do not install acoustical units until after interior wet work is dry.

#### 1.04 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on suspension system components and acoustical units.
- C. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

#### 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.
- B. Acoustical Unit 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/#sle.
  - 2. USG Corporation: www.usg.com/ceilings/#sle.
  - 3. Substitutions: See Section 01 6000 Product Requirements.
- B. Suspension Systems:
  - 1. Same as for acoustical units.

#### 2.02 ACOUSTICAL UNITS

- A. Acoustical Units General: ASTM E1264, Class A.
- B. Acoustical Panels, Type ACT1: Mineral fiber with membrane-faced overlay, with the following characteristics:
  - 1. Classification: ASTM E1264 Type IV.
  - 2. Size: 24 by 24 inches.
  - 3. Thickness: 3/4 inch.
  - 4. Light Reflectance: 0.90 percent, determined in accordance with ASTM E1264.
  - 5. NRC Range: 0.70 to 0.75, determined in accordance with ASTM E1264.
  - 6. Ceiling Attenuation Class (CAC): 35, determined in accordance with ASTM E1264.
  - 7. Panel Edge: Tegular.
  - 8. Color: White.
  - 9. Suspension System: Exposed grid.
  - 10. Products:
    - a. USG Corporation; Mars Acoustical Panels: www.usg.com/ceilings/#sle.
    - b. Substitutions: See Section 01 6000 Product Requirements.
- C. Acoustical Panels, Type ACT2: Mineral fiber with water-repellent membrane-faced overlay, with the following characteristics:
  - 1. Classification: ASTM E1264 Type IV.
    - a. Form: 1 and 2.
    - b. Pattern: "E" lightly textured.
  - 2. Size: 24 by 24 inches.
  - 3. Thickness: 3/4 inch.
  - 4. Light Reflectance: 0.90 percent, determined in accordance with ASTM E1264.
  - 5. NRC Range: 0.70 to 0.75, determined in accordance with ASTM E1264.
  - 6. Ceiling Attenuation Class (CAC): 35, determined in accordance with ASTM E1264.
  - 7. Scrubbability: Passed, when tested in accordance with ASTM D2486.
  - 8. Washability: Passed, when tested in accordance with ASTM D2486.
  - 9. Panel Edge: Beveled (SLT) 15/16" grid profile.
  - 10. Color: White.
  - 11. Suspension System: Exposed grid.
  - 12. Products:
    - a. USG Corporation; Mars Healthcare Acoustical Panels: www.usg.com/ceilings/#sle.
    - b. Substitutions: See Section 01 6000 Product Requirements.

#### 2.03 SUSPENSION SYSTEM(S)

- A. Metal Suspension Systems General: Complying with ASTM C635/C635M; die cut and interlocking components, with perimeter moldings, hold down clips, stabilizer bars, clips, and splices as required.
  - 1. Materials:
    - a. Steel Grid: ASTM A653/A653M, G30 coating, unless otherwise indicated.
    - b. Aluminum Grid: Aluminum sheet, ASTM B209/B209M.
- B. Exposed Suspension System: Aluminum grid and cap.
  - 1. Application(s): For use with acoustic panels type ACT2, in rooms with potentially high humidity conditions.
  - 2. Structural Classification: Intermediate-duty, when tested in accordance with ASTM C635/C635M.
  - 3. Profile: Tee; 15/16 inch face width.
  - 4. Finish: Baked enamel.
  - 5. Color: White.
  - 6. Products:

- a. USG Corporation; Donn Brand AX/AXCE 15/16 inch Acoustical Suspension System: www.usg.com/ceilings/#sle.
- b. Substitutions: See Section 01 6000 Product Requirements.
- C. Exposed Suspension System: Hot-dipped galvanized steel grid and cap.
  - 1. Application(s): For use with acoustic panels type ACT1.
  - 2. Structural Classification: Intermediate-duty, when tested in accordance with ASTM C635/C635M.
  - 3. Profile: Tee; 15/16 inch face width.
  - 4. Finish: Baked enamel.
  - 5. Color: White.
  - 6. Products:
    - a. USG Corporation; Donn Brand DX/DXL 15/16 inch Acoustical Suspension System: www.usg.com/ceilings/#sle.
    - b. Substitutions: See Section 01 6000 Product Requirements.

#### 2.04 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.
- B. Hanger Wire: 12-gage 0.08 inch galvanized steel wire.
- C. Hold-Down Clips: Manufacturer's standard clips to suit application.
- D. Perimeter Moldings: Same metal and finish as grid.
- E. Touch-up Paint: Type and color to match acoustical and grid units.

#### 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 PREPARATION

- A. Install after major above-ceiling work is complete.
- B. Coordinate the location of hangers with other work.

#### 3.03 INSTALLATION - SUSPENSION SYSTEM

- A. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions and as supplemented in this section.
- B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
- C. Locate system on room axis according to reflected plan.
- D. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
  - 1. Use longest practical lengths.
- E. 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.
- F. 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.
- G. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- H. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.

I. Do not eccentrically load system or induce rotation of runners.

#### 3.04 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.
  - 3. Double cut and field paint exposed reveal edges.

#### 3.05 TOLERANCES

- A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.
- B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

#### 3.06 SCHEDULE

A. Refer to drawings.

#### **SECTION 22 4000**

#### PLUMBING FIXTURES (REVISED ADDENDUM NO. 03)

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Water closets.
- B. Urinals.
- C. Lavatories.
- D. Sinks.
- E. Shower receptor and trim.
- F. Wash fountains.

#### 1.02 REFERENCE STANDARDS

- ASME A112.6.1M Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use; 1997 (Reaffirmed 2017).
- B. ASME A112.18.1 Plumbing Supply Fittings; 2018, with Errata.
- C. ASME A112.19.2 Ceramic Plumbing Fixtures; 2018, with Errata.
- D. NSF 61 Drinking Water System Components Health Effects; 2019.
- E. NSF 372 Drinking Water System Components Lead Content; 2016.

#### 1.03 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide catalog illustrations of fixtures, sizes, rough-in dimensions, utility sizes, trim, and finishes.

#### PART 2 PRODUCTS

#### 2.01 GENERAL

A. Potable Water Systems: Provide plumbing fittings and faucets that comply with NSF 61 and NSF 372 for maximum lead content; label pipe and fittings.

#### 2.02 HIGH EFFICIENCY FLUSH VALVE WATER CLOSETS

- A. Wall Hung: WC Elongated Siphon Jet
  - 1. ASME A112.19.2M; wall hung, siphon jet vitreous china closet bowl, with elongated rim, 1-1/2 inch top spud, china bolt caps. Designed for flush of 1.28 gpm or less.
  - 2. Seat:
    - a. Solid white plastic, open front, extended back, brass bolts, without cover.
  - 3. Flush Valves:
    - a. Exposed Flush Valve:
      - ASME A112.18.1; Manual flush, 1.28 gpm maximum, exposed chrome plated, diaphragm type with oscillating handle, escutcheon, seat bumper, integral screwdriver stop and vacuum breaker.
      - 2) Bid Option Flush Valve operation: Battery powered, sensor operated.
  - 4. Water Closet Carrier:
    - a. Manufacturers:
      - 1) JOSAM Company: www.josam.com.
      - 2) Sloan Valve Company: www.sloanvalve.com.
      - 3) Mifab Manufacturing, Inc: www.mifab.com.
      - 4) Wade Drains, Division of Tyler Pipe: www.wadedrains.com.
      - 5) Zurn Industries, Inc: www.zurn.com.
      - 6) Substitutions: See Section 01600 Product Requirements.

b. ASME A112.6.1M; adjustable cast iron frame, integral drain hub and vent, adjustable spud, lugs for floor and wall attachment, threaded fixture studs with nuts and washers. Minimum of three floor connection points.

#### 2.03 WALL HUNG URINALS

- A. Wall Hung Urinal Manufacturers:
  - 1. American Standard Inc; WASHBROOK Urinal: www.americanstandard.com.
  - 2. Kohler Company: www.kohler.com
  - 3. Zurn; www.zurn.com
  - 4. Substitutions: See Section 01 6000 Product Requirements.
- B. Urinals: Vitreous china, ASME A112.19.2, wall hung with side shields and concealed carrier.
  - 1. Flush Volume: 0.125 gallons, maximum.
  - 2. Flush Style: Washout.
  - 3. Flush Valve: Exposed (top spud).
  - 4. Flush Operation: Manual, oscillating handle.
  - 5. Bid Option Flush Operation: Battery powered sensor.
  - 6. Trap: Integral.
  - 7. Removable stainless steel strainer.
  - 8. Supply Size: 3/4 inch.
  - 9. Outlet Size: 2 inches.
- C. Carriers:
  - 1. Manufacturers:
    - a. JOSAM Company: www.josam.com.
    - b. Sloan Valve Company: www.sloanvalve.com.
    - c. Mifab Manufacturing, Inc: www.mifab.com.
    - d. Wade Drains, Division of Tyler Pipe: www.wadedrains.com.
    - e. Zurn Industries, Inc: www.zurn.com.
    - f. Substitutions: See Section 01600 Product Requirements.
  - 2. ASME A112.6.1M; cast iron and steel frame with tubular legs, lugs for floor and wall attachment, threaded fixture studs for fixture hanger, bearing studs.

#### 2.04 LAVATORIES

- A. Lavatory Manufacturers:
  - 1. American Standard Inc; Model Lucerne: www.americanstandard.com.
  - 2. Substitutions: See Section 01 6000 Product Requirements.
  - 3. Substitutions: Equivalent to listed in material and size.
- B. Vitreous China Wall Hung Basin: ASME A112.19.2; vitreous china wall hung lavatory, 20 by 20 inch minimum, with 4 inch high back, rectangular basin with splash lip, and front overflow.
  - 1. Supply Faucet Manufacturers:
    - a. Chicago Faucets; Model 2200-4CP: www.chicagofaucets.com.
  - 2. Supply Faucet: ASME A112.18.1; chrome plated supply fitting with open grid strainer, water economy aerator with maximum flow of 0.5 gallon per minute (low-flow), single lever handle.
  - 3. Bid Option Supply Faucet: Similar in style as base bid. ASME A112.18.1; chrome plated supply fitting with open grid strainer, water economy aerator with maximum flow of 0.5 gallon per minute (low-flow), battery powered, sensor operated.
  - 4. Accessories:
    - a. Chrome plated 17 gage brass P-trap with clean-out plug and arm with escutcheon.
    - b. Thermostatic mixing valve conforming to MN Plumbing Code.
    - c. Screwdriver stops.
    - d. Rigid supplies.
    - e. Carrier:

- 1) New Walls: ASME A112.6.1M; cast iron and steel frame with tubular legs, lugs for floor and wall attachment, threaded studs for fixture hanger, bearing plate and studs.
- 2) Existing Walls: Reuse existing lavatory hanger or provide wall mounted hanger.
- f. Under Sink Protection:
  - 1) ADA compliant under sink protection fully covering piping and traps. Molded vinyl with smooth cleanable surface. Removable and reinstallable.
    - (a) Manufacturer: IPS Corporation; Truebro HC500R.

#### 2.05 SINKS

- A. Double Compartment Bowl (SK-1):
  - 1. ASME A112.19.3M; 33 x 22 x 6.5 inch outside dimensions, 22 Gage thick, Type 304 stainless steel, self-rimming and undercoated, with ledge back drilled for trim.
    - a. Drains: 3-1/2 inch crumb cup with stopper and tailpiece.
    - b. Manufacturers:
      - 1) American Standard: www.americanstandard.com.
      - 2) Kohler Company; www.kohler.com
      - 3) Dayton Sinks; Model D3322: www.elkay.com.
      - 4) Elkay: www.elkay.com.
      - 5) Kindred: www.kindred-sinkware.com.
      - 6) Just Manufacturing: www.justmfg.com.
      - 7) Advance Tabco.
      - 8) Substitutions: See Section 01600 Product Requirements.
  - 2. Supply Faucet:
    - a. Brass body with polished chrome finish, single lever with ceramic disc valves, high arch (minimum of 8.5 inches above deck) spout, 2 function pull down sprayhead with stream and spray discharge, 1.8 gpm flow, braided hose, and magnetic spray head docking system.
    - b. Supply Faucet Manufacturers:
      - 1) Kohler Company: www.kohler.com
      - 2) Chicago Faucet Inc: www.chicagofaucet.com.
      - 3) Delta Commercial Faucet Company; Model 9113-DST: www.deltafaucet.com.
      - 4) Elkay: www.elkay.com.
      - 5) Zurn Industries, Inc: www.zurn.com.
      - 6) Substitutions: See Section 01600 Product Requirements.
  - 3. Accessories: Chrome plated 17 gage brass P-trap, extensions, and arm with escutcheon, wheel handle stop, flexible supplies.

#### 2.06 SHOWER RECEPTORS

- A. Shower Receptor: ADA compliant for 36 inch by 36 inch interior dimensioned single threshold transfer shower enclosure. Textured slip resistant floor and threshold with bevelled front. Built from one of the material choices listed for installation on existing level concrete floor.
  - 1. Solid plastic resin casting, self supporting.
  - 2. Acrylic/fiberglass composite requiring mortar bed support.
  - 3. Gelcoat/fiberglass composite requiring mortar bed support.
  - 4. Color and Pattern: As selected by Architect from manufacturer's full line.
  - 5. Manufacturers:
    - a. American Standard, Inc; A8009D-FCO: www.americanstandard-us.com.
    - b. Best Bath Systems; P3838B5B.V2: www.bestbath.com.
    - c. Inpro; BioPrism Standard ADA: www.inprocorp.com.
    - d. Substitutions: See Section 22 0100.
- B. Drain Trim: Removable chrome plated strainer and tail piece.

#### 2.07 SHOWERS

- A. Shower Trim:
  - 1. Dual shower unit with separate diverter valve, for wall shower and separate handshower.
    - a. Concealed in-wall single lever pressure balancing shower control valve. Solid brass fabricated body. Metal lever handle-ADA compliant, field adjustable to limit handle rotation into hot water zone. All parts shall be replaceable from the front of the valve Integral stops and checks. Polished chrome plated finish.
    - b. Cast Vandal Resistant Fixed Spray Showerhead, 30 ° spray angle, 2.0USgpm@80psi, concealed brass mounting plate.
    - c. 69" Long Chrome plated Brass Double Spiral Hose with Quick Disconnect, ASSE vacuum breaker, Wall elbow, 48" Slide/grab bar.
  - 2. Trim Manufacturers:
    - a. Chicago Faucet Inc: www.chicagofaucet.com.
    - b. Delta Faucet Company: www.deltafaucet.com.
    - c. Sloan Valve Company: www.sloanvalve.com.
    - d. Zurn Industries, Inc: www.zurn.com.
    - e. Substitutions: See Section 01600 Product Requirements.

#### 2.08 WASH FOUNTAINS

- A. Wash Fountain Manufacturers:
  - 1. Acorn Engineering Company: www.acorneng.com.
  - 2. Bradley Corporation; Model Sentry SN2004: www.bradleycorp.com.
  - 3. Intersan Manufacturing Company: www.intersanus.com.
- B. Bowl:
  - 1. Semi-circular, 54 inch diameter, shallow bowl stainless steel washfountain, floor mounted.
    - a. Infrared control with plug in transformer.
    - b. Standard height.
    - c. 4 users.
    - d. Offline vent with supplies from below.
    - e. Thermostatic mixing valve conforming to MN Plumbing Code.
    - f. Backsplash.
    - g. Combination stop, strainer, and check valves.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that walls and floor finishes are prepared and ready for installation of fixtures.
- B. Confirm that millwork is constructed with adequate provision for the installation of counter top lavatories and sinks.

#### 3.02 PREPARATION

A. Rough-in fixture piping connections in accordance with minimum sizes indicated for particular fixtures.

#### 3.03 INSTALLATION

- A. Install each fixture with trap, easily removable for servicing and cleaning.
- B. Provide chrome plated rigid or flexible supplies to fixtures with loose key stops, reducers, and escutcheons.
- C. Install components level and plumb.
- D. Install and secure fixtures in place with wall supports and bolts.
- E. Provide shower base support as required by manufacturer's installation instructions.
- F. Seal fixtures to wall and floor surfaces with sealant as specified in Section 07 9005, color to match fixture.

#### 3.04 INTERFACE WITH WORK OF OTHER SECTIONS

A. Review millwork shop drawings. Confirm location and size of fixtures and openings before rough-in and installation.

#### 3.05 ADJUSTING

A. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.

#### 3.06 CLEANING

A. Clean plumbing fixtures and equipment.

#### 3.07 PROTECTION

- A. Protect installed products from damage due to subsequent construction operations.
- B. Do not permit use of fixtures by construction personnel.
- C. Repair or replace damaged products before Date of Substantial Completion.

#### SECTION 23 0100

#### HVAC GENERAL PROVISIONS (REVISED ADDENDUM NO. 03)

#### PART 1 GENERAL

#### 1.01 CONDITIONS OF THE CONTRACT

A. The Conditions of the Construction Contract and applicable provisions of Division I - General Requirements, as well as these General Provisions, shall apply to all Sections of Division 23.

#### 1.02 SCOPE

- A. The work to be done under this Division of the Specifications shall include the furnishing of all labor, materials, equipment and services necessary for the proper completion of all of the HVAC work as shown on the drawings and herein specified.
- B. In general, this shall include the furnishing and installing of all heating, refrigeration, ventilation, and temperature control systems, complete with auxiliaries, as may be required to make a complete and properly operating installation.
- C. Only such items as are hereinafter specified or indicated on the drawings to be furnished by others, shall be considered to be furnished by others. All other items are to be considered as a part of this Contract, and shall be so bid.
- D. The omission of specific reference to any parts necessary to, or reasonably incidental to, a complete installation shall not be construed as releasing the Contractor from furnishing and installing same.
- E. Applicable provisions of the following sections shall apply to all sections for HVAC Work.

#### 1.03 RELATED WORK

A. This project includes commissioning of HVAC systems. Refer to Sections 01 9113 & 23 0800 for each division 23 section's responsibilities.

#### 1.04 DEFINITIONS

- A. Provide: Under this Contract, Contractor shall furnish and install item or items specified. Contractor shall perform all labor and furnish all materials and equipment necessary so that specified item or system will be complete and operational in every respect.
- B. Furnish: Under this Contract, Contractor shall deliver to the site item(s) specified, as well as additional specialized materials and/or accessories necessary for the use and operation of item or items specified.
- C. Install: Under this Contract, Contractor shall set in position, connect (including sub-assemblies furnished), and adjust for use. Contractor shall furnish miscellaneous specialty items such as hangers, valves, unions, piping, sheet metal, etc., as obviously necessary for a complete and operating installation.

#### 1.05 DRAWINGS

- A. In general, the drawings of the HVAC Systems and Equipment are to scale, however, to determine exact locations of walls and partitions, the Contractor shall consult the Architectural and/or Structural Drawings. Drawings shall not take precedence over field measurements. Plans of piping and ductwork, although shown on scale drawings, are diagrammatic only. They are intended to indicate the size and/or capacity where stipulated, approximate location and/or direction, and approximate general arrangement of one phase of work to another, but not the exact detail or exact arrangement of construction.
- B. If it is found before installation of any or all construction phases, that a more convenient, suitable or workable arrangement of any or all phases of the project would result by varying or altering the arrangement indicated on the drawings, the Architect may require any or all Contractors to change the location or arrangement of their work without additional cost to the Owner. Such rearrangement shall be in accordance with directions from the Architect.

- C. Where discrepancies are discovered after certain portions or phases of any Contract have been installed, the Architect reserves the right to have any or all Contractors make minor changes in pipe, duct, fixture or equipment locations or arrangements to avoid conflict with other work at no additional cost to the Owner.
- D. Because the drawings are to a relatively small scale to show as large a portion as is practical, the fact that only certain features of the system are indicated does not mean that other similar or different features or details will not be required. Contractor shall furnish all incidental labor, materials, or equipment for the systems under his control, so that each system is a complete and operating one unless otherwise specifically stipulated in the detailed body of the Specifications.
- E. The Contractor shall be responsible for determining all field measurements before commencing construction, giving due consideration to building design and other equipment to be installed. HVAC equipment not dimensioned on the drawings shall be field located, giving due consideration to the work of other trades. The Contractor shall verify all dimensions before proceeding with the work.
- F. Dimensions shall not be scaled from the drawings. If the Contractor discovers any discrepancy between actual measurements and those shown on the drawings which prevents good practice, good arrangement, or which is contrary to the intent of the drawings and specifications, he shall notify the Architect before proceeding with the work.

#### 1.06 SITE INSPECTION

A. Before submitting a proposal for the work contemplated in these specifications and accompanying drawings, each bidder shall examine the site and familiarize themselves with all the existing conditions and limitations, including the extent of demolition, cutting and patching to be done by the Contractor for HVAC Work. No extras will be allowed because of the Contractor's misunderstanding as to the amount of work involved, or his lack of knowledge of any condition in connection with the work.

#### 1.07 CODES AND STANDARDS

- A. The entire project shall comply with any and all OSHA, Federal, State and local codes, including, but not limited to State Building Code, National Electrical Code, NFPA 90A (Ventilation Systems), and the State/International Energy Code (insulation).
- B. Code requirements shall supersede details shown on the drawings or described in these specifications. Size of all pipe must conform to the requirements of all Codes except where larger sizes are shown on the drawings.

#### 1.08 PRODUCT/ASSEMBLY/SYSTEM SUBSTITUTIONS

- A. Refer to Division 1 for substitution product request procedure.
- B. The cost of any changes of other trades as a result of use of the substitution material or equipment must be borne by the Contractor submitting such material or equipment.
- C. Approval to submit substitutions prior to submission of Bids is not required. Unless otherwise specifically provided in this Contract, reference to any equipment, material, article, or patented process by trade name, make or catalog number, shall be regarded as establishing a standard of quality, performance, style, and configuration and shall not be construed as limiting competition. The Contractor may, at his option, substitute any equipment, material, article, or process, which in the judgment of the Architect (at the time of submittal for approval), is equal to that named. There will not be a listing of approved substitutions prior to the bid.

#### 1.09 EQUIPMENT

- A. All equipment shall be new and in first-class condition. Equipment shall not be used for purposes other than intended by the manufacturer.
- B. Manufacturer's nameplate, name or trademark shall be permanently affixed to all equipment and material furnished under this Specification. Nameplate of Subcontractor or distributor will

not be acceptable. Nameplate shall be masked prior to any painting. Remove masking after completion.

C. Equipment specified and furnished shall be of a type and manufacturer that has a local representative and a local replacement and service outlet to give complete coverage on parts and service at all times.

#### 1.10 WARRANTY

A. The Contractor shall be held responsible for any and all defects in equipment and workmanship which appear for one (1) full year after the date of Substantial Completion. All such defects must be repaired or defective equipment promptly replaced by the Contractor at no expense to the Owner.

#### 1.11 INSPECTIONS AND FEES

A. The Contractor shall obtain all permits and licenses required in connection with the work under Division 23. Cost for such shall be paid by the Contractor.

#### 1.12 SUBMITTALS

- A. Shop Drawings:
  - 1. See Division 1 for submittals procedures. This section supplements the requirements of Division 1. In case of differences, the greater requirement applies.
  - 2. Shop drawings shall be submitted for all major equipment under each Section of this Specification.
  - 3. Shop drawings must first be checked by the Contractor for capacities and space conformance, and so stamped prior to submittal to the Architect.
- B. Operating and Maintenance Manuals:
  - 1. See Division 1 for submittals procedures. This section supplements the requirements of Division 1. In case of differences, the greater requirement applies.
  - 2. Manuals shall be clean electronic PDF's provided by the manufacturer. Each PDF must be fully readable.
  - 3. Instructions shall include the following information:
    - a. Include full instructions on lubrication, servicing and maintenance scheduling.
    - b. Include operating instructions including start up, emergency shut down and start-up, seasonal servicing and start up, etc.
    - c. Include owner's manuals for each item of equipment.
    - d. Include final certified TAB report.
    - e. Include all equipment wiring diagrams.
    - f. Include all HVAC control diagrams.
    - g. Include all HVAC systems diagrams and operational diagrams.
    - h. Include full parts lists and exploded schematic diagrams.
    - i. Include full warranty information.
    - j. Include full names, addresses, phone numbers, suppliers, service companies, contract numbers and other points of contact/information relative to the job.
  - 4. Where indicated in the Specifications, the Contractor shall provide the services of a factory trained representative to instruct the Owner's authorized personnel in the operation, control and maintenance of equipment.
- C. Record Drawings:
  - 1. The Contractor shall keep a complete set of all HVAC drawings in the job site office for purposes of showing "As-Built" installation of HVAC systems and equipment.
  - 2. This set of drawings shall be used for no other purpose. Where any material, equipment or system components are installed different from that shown on the Drawings, such differences shall be clearly and neatly shown on this set of drawings using ink, or indelible pencil. The change notations shall be kept up-to-date on a daily basis. At the completion of the project, the set of drawings shall be turned over to the Architect for approval and delivery to the Owner.

#### 1.13 TEMPORARY UTILITIES

A. Contractor shall refer to Division 1 for temporary water, sewer and heating requirements during construction.

#### PART 2 - PRODUCTS - NOT USED.

#### **PART 3 - EXECUTION**

#### 3.01 WORKMANSHIP

A. Workmanship shall be first-class in every respect. Standard accepted practice in the various trades shall be considered as minimum. The Architect reserves the right to reject any workmanship not in accordance with the specifications, either before or after installation of equipment.

#### 3.02 COORDINATION

- A. The Contractor shall coordinate locations and arrangements of his equipment with other Contractors and subcontractors working on the project. Before starting work, the Contractor shall examine the Architectural, Structural and Electrical drawings and specifications, as well as shop and vendor drawings, for all divisions, to ascertain locations, levels, arrangements and dimensions of other work and shall confer and cooperate with all other Contractors or subcontractors to avoid all interferences. He shall also provide Contractors for other trades with information regarding locations, arrangements and dimensions of his equipment.
- B. In cases of interferences between various items of equipment or between equipment and building members, if simplified construction is made possible by the relocation of certain equipment, changes in arrangements may be made only if authorized by the Architect.
- C. Interferences between the work of different divisions which cannot be resolved by the parties involved shall be submitted to the Architect who shall decide upon final location and arrangement without respect to which work was installed first.

#### 3.03 DEMOLITION AND REMODELING

- A. Where cutting and patching is required, each Contractor shall be responsible for his own work.
- B. Relocation of existing equipment and piping systems, which of necessity must provide continuous uninterrupted service, shall be accomplished in the least possible time. Work shall be scheduled so as to minimize down time for the respective systems involved. This will require for existing services being revamped and/or relocated, that all interconnecting portions of these systems shall be installed as complete as practicable prior to actual shutdown for final connections.
- C. Locate existing piping and make connection where required and/or where shown on the drawings. Do not cut into existing services without first ascertaining that the pipe involved is the desired service. In any area where work performed under Division 23 is the only work involved, restore the area to its original condition upon completion of the work.
- D. All existing services and equipment shall be maintained unless otherwise indicated on the drawings.
- E. Work that interrupts any service (this includes cutting into existing lines for new connection), shall be performed at times (usually nights or weekends) to cause least interference to the normal operation of the building. Anticipate scheduling work at periods which will result in additional construction costs, such as nights or weekends, and include cost in the proposal.
- F. The Owner shall be fully informed in advance of any shut-off which will occur and which will be affected for a specific period of time. Only after the Owner is fully informed and has agreed to the schedule of cut-offs, can the work then proceed accordingly.
- G. Provide temporary bracing, shoring, underpinning and support during demolition, cutting, remodeling and related new construction as necessary for the execution of the Work and the protection of persons and property.

- H. Provide protective coverings and enclosures necessary to prevent damage to existing work to remain. Protect temporary openings in exterior walls and roofs so as to prevent damage from water and the elements and prevent excessive heat loss from the existing building.
- I. Demolish and remove existing construction to be removed. Where new work is to be installed in or adjacent to existing construction or existing work is to be replaced, remove or cut the existing construction to the extent necessary to install or join the new work to the existing construction as necessary to complete the Work of the Project.
- J. Refrigerant shall be recovered from all existing A/C systems prior to demolition. Recovered refrigerant shall be bottled in approved containers.
- K. Clean demolition areas and remove debris, waste and rubbish from the building at the conclusion of each day's work. Transport debris and rubbish in such a manner as to prevent the spread of dust. Remove debris, waste and rubbish promptly from the site. Do not burn debris, waste and rubbish on the site.
- L. Owner shall have first rights to salvage existing equipment not indicated to be reused. All existing materials not designated to be reused or to remain the property of the Owner, shall become the property of the Contractor and shall be removed from the site.
- M. Existing materials indicated on the drawings to be reused shall be stored on the site and protected until reuse.
- N. Patch existing construction to match. All painting shall comply with the specifications laid out in the General Contractor's portion of the specifications. Examine existing surfaces where existing surfaces are to be patched before proceeding with the work. Report all conditions where existing materials, colors, and finishes cannot be matched to the Architect, and do not proceed until the Architect has issued instructions. Existing construction that has been damaged as a result of the work shall be repaired to an extent and as required to match adjacent undamaged construction.
- O. Where existing piping, indicated to remain, penetrates new fire rated partitions, Contractor shall fire seal these penetrations same as for new piping.
- P. Where duct and/or piping is removed from existing partitions which are to remain, it is this Contractor's responsibility to patch voids to match existing construction.

#### **SECTION 23 0713**

#### **DUCT INSULATION (REVISED ADDENDUM NO. 03)**

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Duct insulation.

#### 1.02 REFERENCE STANDARDS

- A. ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; 2017.
- B. ASTM C553 Standard Specification for Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications; 2013 (Reapproved 2019).
- C. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2020.
- D. ASTM E96/E96M Standard Test Methods for Water Vapor Transmission of Materials; 2016.
- E. NFPA 255 Standard Method of Test of Surface Burning Characteristics of Building Materials; National Fire Protection Association; 2006.
- F. UL 723 Standard for Test for Surface Burning Characteristics of Building Materials; Current Edition, Including All Revisions.

#### 1.03 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide product description, thermal characteristics, list of materials and thickness for each service, and locations.
- C. Manufacturer's Instructions: Indicate installation procedures necessary to ensure acceptable workmanship and that installation standards will be achieved.

#### 1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section with not less than three years of documented experience.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Accept materials on site in original factory packaging, labelled with manufacturer's identification, including product density and thickness.
- B. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

#### **1.06 FIELD CONDITIONS**

- A. Maintain ambient temperatures and conditions required by manufacturers of adhesives, mastics, and insulation cements.
- B. Maintain temperature during and after installation for minimum period of 24 hours.

#### PART 2 PRODUCTS

#### 2.01 REGULATORY REQUIREMENTS

A. Surface Burning Characteristics: Flame spread index/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84 or UL 723.

#### 2.02 GLASS FIBER, FLEXIBLE

- A. Manufacturer:
  - 1. Knauf Insulation: www.knaufinsulation.com.
  - 2. Johns Manville: www.jm.com.
  - 3. Owens Corning Corporation: www.ocbuildingspec.com.
  - 4. Certain-teed.

- 5. Substitutions: See Section 01 6000 Product Requirements.
- B. Insulation: ASTM C553; flexible, noncombustible blanket.
  - 1. 'K' value: 0.25 at 75 degrees F, when tested in accordance with ASTM C518.
  - 2. Maximum Service Temperature: 150 degrees F.
  - 3. Maximum Water Vapor Absorption: 5.0 percent by weight.
- C. Vapor Barrier Jacket:
  - 1. Kraft paper with glass fiber yarn and bonded to aluminized film.
  - 2. Moisture Vapor Permeability: 0.029 ng/Pa s m (0.02 perm inch), when tested in accordance with ASTM E96/E96M.
  - 3. Secure with pressure sensitive tape.
- D. Vapor Barrier Tape:
  - 1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that ducts have been tested before applying insulation materials.
- B. Verify that surfaces are clean, foreign material removed, and dry.

#### 3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install in accordance with NAIMA National Insulation Standards.
- C. Insulated ducts conveying air below ambient temperature:
  - 1. Provide insulation with vapor barrier jackets.
  - 2. Finish with tape and vapor barrier jacket.
  - 3. Continue insulation through walls, sleeves, hangers, and other duct penetrations.
  - 4. Insulate entire system including fittings, joints, flanges, fire dampers, flexible connections, and expansion joints.

#### 3.03 SCHEDULES

- A. Minimum Code Compliance is required for installed insulation "R" values.
- B. Supply Ducts:
  - 1. Concealed: 2 inch flexible glass fiber.
- C. Return Ducts: None.

#### **SECTION 23 3300**

#### AIR DUCT ACCESSORIES (REVISED ADDENDUM NO. 03)

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Duct access doors.
- B. Volume control dampers.

#### 1.02 REFERENCE STANDARDS

- A. NFPA 90A Standard for the Installation of Air-Conditioning and Ventilating Systems; 2015.
- B. SMACNA (DCS) HVAC Duct Construction Standards Metal and Flexible; 2005.

#### 1.03 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Manufacturer's Installation Instructions: Provide instructions for fire dampers and combination fire and smoke dampers.

#### 1.04 PROJECT RECORD DOCUMENTS

A. Record actual locations of access doors and test holes.

#### 1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum three years of documented experience.

#### PART 2 PRODUCTS

#### 2.01 DUCT ACCESS DOORS

A. Fabrication: Rigid and close-fitting of galvanized steel with sealing gaskets and quick fastening locking devices. For insulated ducts, install minimum 1 inch thick insulation with sheet metal cover.

#### 2.02 VOLUME CONTROL DAMPERS

- A. Fabricate in accordance with SMACNA (DCS) and as indicated.
- B. Single Blade Dampers: Fabricate for duct sizes up to 6 by 30 inch.
  - 1. Blade: 24 gage, 0.0239 inch, minimum.
- C. Multi-Blade Damper: Fabricate of opposed blade pattern with maximum blade sizes 8 by 72 inch. Assemble center and edge crimped blades in prime coated or galvanized channel frame with suitable hardware.
  - 1. Blade: 18 gage, 0.0478 inch, minimum.
- D. End Bearings: Except in round ducts 12 inches and smaller, provide end bearings. On multiple blade dampers, provide oil-impregnated nylon, thermoplastic elastomer, or sintered bronze bearings.
- E. Quadrants:
  - 1. Provide locking, indicating quadrant regulators on single and multi-blade dampers.
  - 2. On insulated ducts mount quadrant regulators on stand-off mounting brackets, bases, or adapters.
  - 3. Where rod lengths exceed 30 inches provide regulator at both ends.

#### PART 3 EXECUTION

#### 3.01 INSTALLATION

- A. Install accessories in accordance with manufacturer's instructions, NFPA 90A, and follow SMACNA (DCS). Refer to Section 23 3100 for duct construction and pressure class.
- B. Provide duct access doors for inspection and cleaning before and after filters, coils, fans, automatic dampers, at fire dampers, combination fire and smoke dampers, and elsewhere as

indicated. Provide minimum 8 x 8 inch size for hand access, 18 x 18 inch size for shoulder access, and as indicated. Provide 4 x 4 inch for balancing dampers only. Review locations prior to fabrication.

- C. Provide duct access doors for inspection and cleaning before and after coils,
- D. Provide balancing dampers at points on supply, return, and exhaust systems where branches are taken from larger ducts as required for air balancing. Install minimum 2 duct widths from duct take-off.

# FINISH MATERIALS

## 06 4100 - ARCHITECTURAL WOOD CASEWORK

PL1	PLASTI	C LAMINATE 1
	150	DIONUTE (DAN)

FG:	PIONITE (PANOLAM)
INISH:	TEXTURED / SUEDE (SD)
TYLE:	HPL

COLOR:	AG415 OLD FRIEND
OC:	COUNTERTOP

PL2	PLASTIC LAMINATE 2	

NEVAMAR (PANOLAM) MFG: FINISH: TEXTURED (T) STYLE: HPL

COLOR: S2086T JUTE LOC: RADIATION COVERS

(TO MATCH EXIST)

06 6100 - SOLID POLYMER FABRICATIONS

SSF1 SOLID	SURFACE 1
MFG:	CORIAN
FINISH:	MATTE
STYLE:	CARBON AGGREGATE
LOC:	TRANSACTION SHELF
	(RECEPTION), KITCHENETTE
	(DRIVERS LOUNGE)

### 08 1416 - FLUSH WOOD DOORS

С

DR1 WOOD VE	NEER DOOR 1
MFG:	VT INDUSTRIES
FINISH:	FACTORY
STYLE:	MAPLE (CUT TO MATCH EXISTING)
COLOR:	SE18 SERENGETI
LOC:	INTERIOR

1

## <u>09 3000 - TILING</u>

ACT1

CT1 CERAMIC T MFG: TYPE: STYLE:	ILE 1 CAESAR CERAMICS L PORCELAIN TILE, REC STONEWAYS
SIZE:	12x24 INCH
THICK:	5/16 INCH (9mm)
COLOR:	VELVET
GROUT:	TBD
CT2 CERAMIC T	TILE 2
MFG:	CAESAR CERAMICS L
TYPE:	PORCELAIN TILE, REC
STYLE:	STONEWAYS
SIZE	3" v 2/1" BUILLNOSE

SIZE: 3" x 24" BULLNOSE THICK: 5/16 INCH (9mm) COLOR: VELVET GROUT: TBD

## 09 5100 - SUSPENDED ACOUSTICAL CEILINGS

ACOUSTIC	CEILING TILE 1
/IFG:	USG
STYLE:	MARS ACOUSTICAL PANEL #86785
DGE:	TEGULAR (SLT)
SIZE:	24" x 24"
COLOR:	WHITE
GRID:	DONN DX/DXL 15/16"

#### ACT2 ACOUSTIC CEILING TILE 3 MF

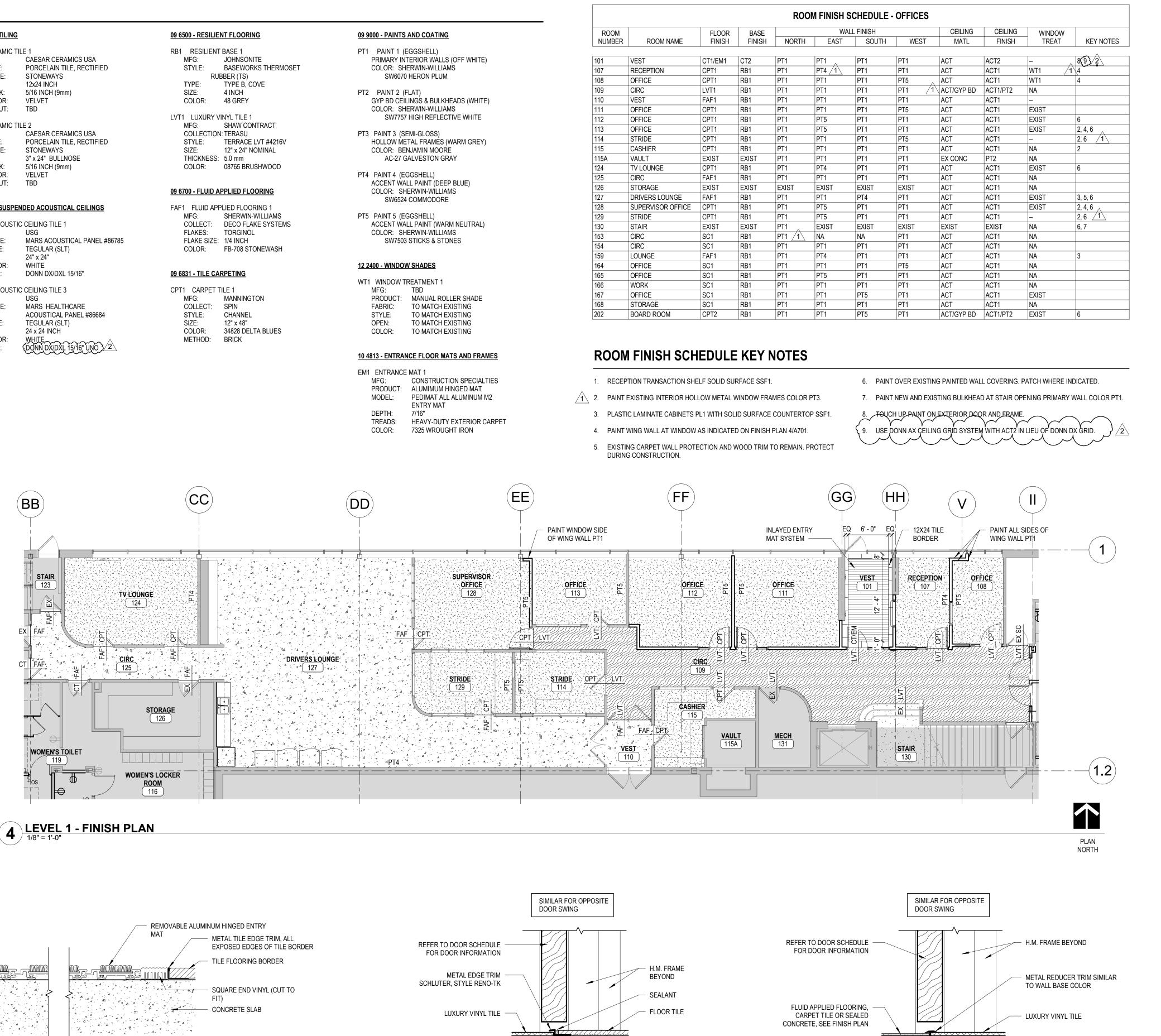
MFG:	USG
STYLE:	MARS HEALTHCARE
	ACOUSTICAL PANEL #86684
EDGE:	TEGULAR (SLT)
SIZE:	24 x 24 INCH
COLOR:	WHITE
GRID:	(DONN DX/DXL 15/16" UNO )/2

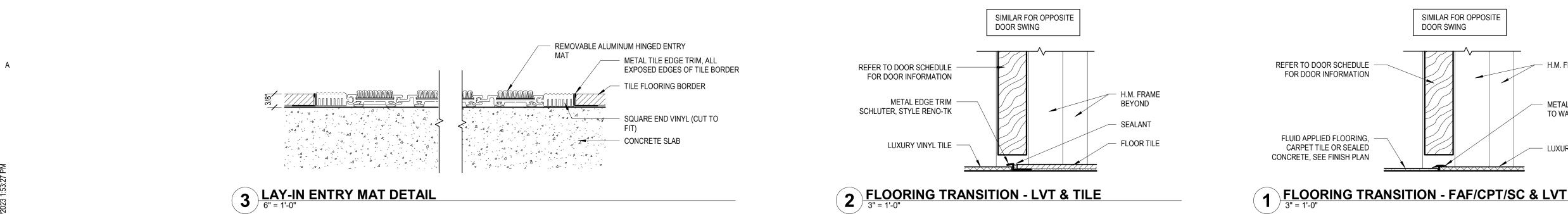
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B1	RESILIENT	BASE 1
	MFG:	JOHNSON
	STYLE:	BASEWOR
	RUB	BER (TS)
	TYPE:	TYPE B, C
	SIZE:	4 INCH
	COLOR:	48 GREY
/T1	1 LUXURY VI	NYL TILE 1
	MFG:	SHAW CO
	COLLECTION:	TERASU
	STYLE:	TERRACE
	SIZE:	12" x 24" N
	THICKNESS:	5.0 mm
	COLOR:	08765 BRI

AF1 FLUID	APPLIED FLOC
MFG:	SHERWIN
COLLEC	T: DECO FLA
FLAKES:	TORGINO
FLAKE S	IZE: 1/4 INCH
COLOR:	FB-708 ST

MFG:	MANNING
COLLECT:	SPIN
STYLE:	CHANNE
SIZE:	12" x 48"
COLOR:	34828 DE
METHOD:	BRICK





	CEILING	CEILING	WINDOW	
ST	MATL	FINISH	TREAT	KEY NOTES
	ACT	ACT2		8(9)/2
	ACT	ACT1	WT1 /1	4
	ACT	ACT1	WT1	4
<u>/</u> 1	ACT/GYP BD	ACT1/PT2	NA	
	ACT	ACT1		
	ACT	ACT1	EXIST	
	ACT	ACT1	EXIST	6
	ACT	ACT1	EXIST	2, 4, 6
	ACT	ACT1		2, 6 1
	ACT	ACT1	NA	2
	EX CONC	PT2	NA	
	ACT	ACT1	EXIST	6
	ACT	ACT1	NA	
	ACT	ACT1	NA	
	ACT	ACT1	EXIST	3, 5, 6
	ACT	ACT1	EXIST	2, 4, 6
	ACT	ACT1		2, 6 1
	EXIST	EXIST	NA	6, 7
	ACT	ACT1	NA	
	ACT	ACT1	NA	
	ACT	ACT1	NA	3
	ACT	ACT1	NA	
	ACT	ACT1	NA	
	ACT	ACT1	NA	
	ACT	ACT1	EXIST	
	ACT	ACT1	NA	
	ACT/GYP BD	ACT1/PT2	EXIST	6



21 W. Superior St., Ste 500 | Duluth, MN 55802 | 218.727.8446

CLIENT: **DULUTH TRANSIT** AUTHORITY (DTA) 2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

THIS SQUARE APPEARS 1/2"x1/2" ON FULL SIZE SHEETS 10/24/2022 100% DOCUMENTS DATE ISSUED FOR NO 01/05/2023 ADDENDUM 03 12/15/2022 ADDENDUM 01 DATE REVISION

I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Remains Signature:

Typed or Printed Name: BRANDEE NESS LIAN Date: 10/24/2022 Reg. No.: 42859

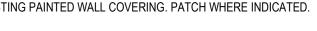
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PROJECT NAME: **OPS CENTER OFFICE** AND TOILET REMODEL 2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

DRAWING TITLE: **OFFICE ROOM FINISH** SCHEDULE, FINISH PLAN AND DETAILS

DRAWN BY: KJS CHECKED BY: BNL PROJ. NO: 190559 DRAWING NO:





# **FINISH MATERIALS**

## 06 6100 - SOLID POLYMER FABRICATIONS

SSF2	SOLID SURFA	CE 2
	MFG:	CORIAN
	FINISH:	MATTE
	STYLE:	GLACIER WHITE
	THICKNESS:	1/4 INCH
	LOC:	SHOWER WALL PANELS

# 08 1416 - FLUSH WOOD DOORS

R1	WOOD VENEEI	R DOOR 1
	MFG:	VT INDUSTRIES
	FINISH:	FACTORY
	STYLE:	MAPLE (CUT TO MATCH EXISTING)
	COLOR:	SE18 SERENGETI
	LOC:	INTERIOR

<u>09 3000</u>	) - TILING	
CT1	CERAMIC TILE MFG: TYPE: STYLE: SIZE: THICK: COLOR: GROUT: LOC:	1 CAESAR CERAMICS USA PORCELAIN TILE, RECTIFIED STONEWAYS 12x24 INCH 5/16 INCH (9mm) VELVET TBD TILE @ VEST & OFFICE TLTS (SEE A701)
CT2	CERAMIC TILE MFG: TYPE: STYLE: SIZE: THICK: COLOR: GROUT: LOC: 1	2 CAESAR CERAMICS USA PORCELAIN TILE COVE BASE STONEWAYS 3x24 INCH BULLNOSE 5/16 INCH (9mm) VELVET TBD WALL BASE TILE @ VEST (SEE A701)
СТ3	CERAMIC TILE MFG: TYPE: STYLE: SIZE: THICK: COLOR: GROUT: LOC:	3 LANDMARK CERAMICS PORCELAIN TILE, RECTIFIED ATTITUDE 12x24 INCH 5/16 INCH (9mm) WARM SAND TBD FLOOR TILE @ LOCKER RMS
CT4	CERAMIC TILE MFG: TYPE: STYLE: SIZE: THICK: COLOR: GROUT: LOC:	4 LANDMARK CERAMICS PORCELAIN TILE, RECTIFIED ATTITUDE COVE BASE 6 X 12 INCH 5/16 INCH (9mm) WARM SAND TBD COVE BASE TILE w/ CT3
CT5	CERAMIC TILE MFG: TYPE: STYLE: SIZE: THICK: COLOR: GROUT: LOC:	5 LANDMARK CERAMICS PORCELAIN TILE, RECTIFIED ATTITUDE 12x24 INCH 5/16 INCH (9mm) SIMPLY GREY TBD WALL TILE @ LOCKER RMS
CT6	CERAMIC TILE MFG: TYPE: STYLE: SIZE: THICK: COLOR: GROUT: LOC:	6 LANDMARK CERAMICS PORCELAIN TILE, RECTIFIED ATTITUDE 3 X 24 INCH BULLNOSE 5/16 INCH (9mm) WARM SAND TBD TRIM TILE @ LOCKER RMS

1

# 09 5100 - SUSPENDED ACOUSTICAL CEILINGS

ACT1	ACOUSTIC CEI	LING TILE 1
	MFG:	USG
	STYLE:	MARS ACOUSTICAL PANEL #86785
	EDGE:	TEGULAR (SLT)
	SIZE:	24 x 24 INCH
	COLOR:	WHITE
	GRID:	DONN DX/DXL 15/16"

#### ACT2 ACOUSTIC CEILING TILE 3 MFG:

MFG:	056
STYLE:	MARS HEALTHCARE
	ACOUSTICAL PANEL #86684
EDGE:	TEGULAR (SLT)
SIZE:	24 x 24 INCH
COLOR:	
GRID:	(DONN DX 15/16"UNO 2

#### 09 9000 - PAINTS AND COATINGS

PT1 PAINT 1 (EGGSHELL) PRIMARY INTERIOR WALLS (OFF WHITE) COLOR: SHERWIN-WILLIAMS SW6070 HERON PLUM

PT2 PAINT 2 (FLAT) GYP BD CEILINGS & BULKHEADS (WHITE) COLOR: SHERWIN-WILLIAMS SW7757 HIGH REFLECTIVE WHITE

PT3 PAINT 3 (SEMI-GLOSS) HOLLOW METAL FRAMES (WARM GREY) COLOR: BENJAMIN MOORE AC-27 GALVESTON GRAY

PT4 PAINT 4 (EGGSHELL) ACCENT WALL PAINT (DEEP BLUE) COLOR: SHERWIN-WILLIAMS SW6524 COMMODORE

PT5 PAINT 5 (EGGSHELL) ACCENT WALL PAINT (WARM NEUTRAL) COLOR: SHERWIN-WILLIAMS SW7503 STICKS & STONES

PT6 PAINT 6 (SEMI-GLOSS) TOILET ROOM WALL PAINT (OFF WHITE) COLOR: SHERWIN-WILLIAMS SW6070 HERON PLUM

### 09 9600 - HIGH PERFORMANCE COATINGS

PT7 PAINT 7 (HIGH PERFORMANCE) SHOWER CEILINGS (CEILING WHITE)

#### 10 2113.19 - PLASTIC TIOLET COMPARTMENTS

TP1 TOILET PARTITI	ONS 1
MFG:	SCRANTON PRODUCTS
PRODUCT:	HINY HIDERS HPDE PAR
COLOR:	NICKEL
FINISH:	HAMMERED (H)

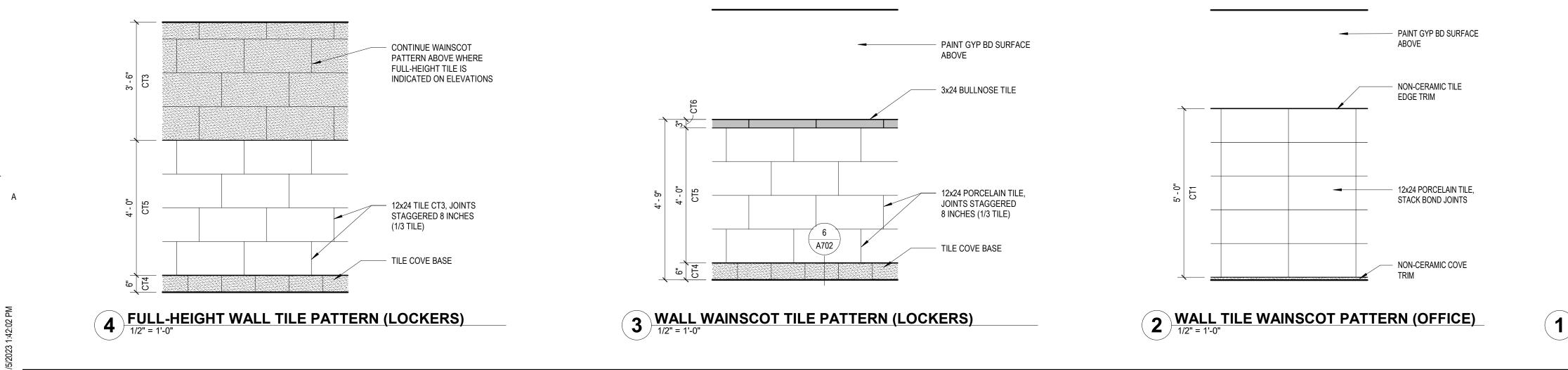
ARTITIONS HAMMERED (H)

> **REFER TO DOOR** SCHEDULE FOR DOOR INFORMATION

> > SEALANT

PORCELAIN TILE





161 WOMEN'S LOCKEF 161A SHOWER 162 LOCKERS JANITOR 163 WOMEN'S TOILET 213 MEN'S TOILET 216

ROOM

105

106

120

122

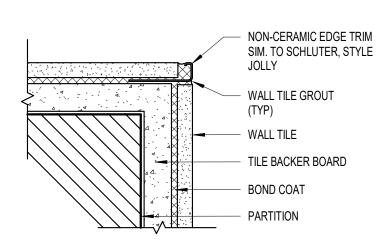
156

157

158

154A

NUMBER ROOM NAME







ROOM FINISH SCHEDULE - TOILETS AND LOCKERS									
				WALL			CEILING	CEILING	
ROOM NAME	FLOOR FINISH	BASE FINISH	NORTH	EAST	SOUTH	WEST	MATL	FINISH	COMMENTS
WOMEN'S TOILET	CT1	ALUM TRIM	CT1/PT6	CT1/PT6	CT1/PT6	CT1/PT6	ACT	ACT2	2, 5
MEN'S TOILET	CT1	ALUM TRIM	CT1/PT6 /1	CT1/PT6 /1	CT1	CT1/PT6	ACT	ACT2	2,5 1
WOMEN'S LOCKER ROOM	CT3	CT4	EX/PT6	EX/PT6	EX/PT6	EX/PT6	ACT	ACT1	2, 7
LACTATION	CT3	CT4	PT6 1	PT6	PT6	PT6	ACT	ACT1	2, 7
WOMEN'S SHOWER	CT3	CT4	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	GYP BD	PT7	2, 3, 6
WOMEN'S TOILET	CT3	CT4	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6	ACT	ACT2	2, 6, 7, 8 / 2
MEN'S TOILET	CT3	CT4	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	ACT	ACT2	2, 6
MEN'S LOCKER ROOM	CT3	CT4	PT6	PT6	PT6	PT6	ACT	ACT2	2,7/1
MEN'S SHOWER	CT3	CT4	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	GYP BD	PT7	2, 3, 6
HALL	SC1	RB1	EX	PT6	EX	PT6	ACT	_ ACT1	
MEN'S SHOWER	CT3	CT4	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	GYP BD	1 PT7	2, 3, 6
MEN'S TOILET	CT3	CT4	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	ACT	ACT2	2, 6
MEN'S LOCKERS	CT3	CT4	PT6	PT6	CT5/CT6/PT6	CT5/CT6/PT6	ACT	ACT2	2, 6, 7
WOMEN'S LOCKER ROOM	CT3	CT4	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	ACT	ACT2	2, 6 8 2 2
SHOWER	CT3	CT4 _	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	CT5/CT6/PT6	GYP BD	PT7	2, 3, 6
LOCKERS	CT3	CT4 1	PT6	PT6	PT6	PT6	ACT	ACT1	2, 7
JANITOR	EX	EX/RB	PT6/EX	EX	EX	EX	EXP	EX	1
WOMEN'S TOILET	CT1	ALUM TRIM	CT1/PT6	CT1/PT6	CT1/PT6	CT1/PT6	ACT	ACT2	2, 5
MEN'S TOILET	CT1	ALUM TRIM	CT1/PT6	CT1/PT6	CT1/PT6	CT1/PT6	ACT	ACT2	2, 5

∴1. NOT USED

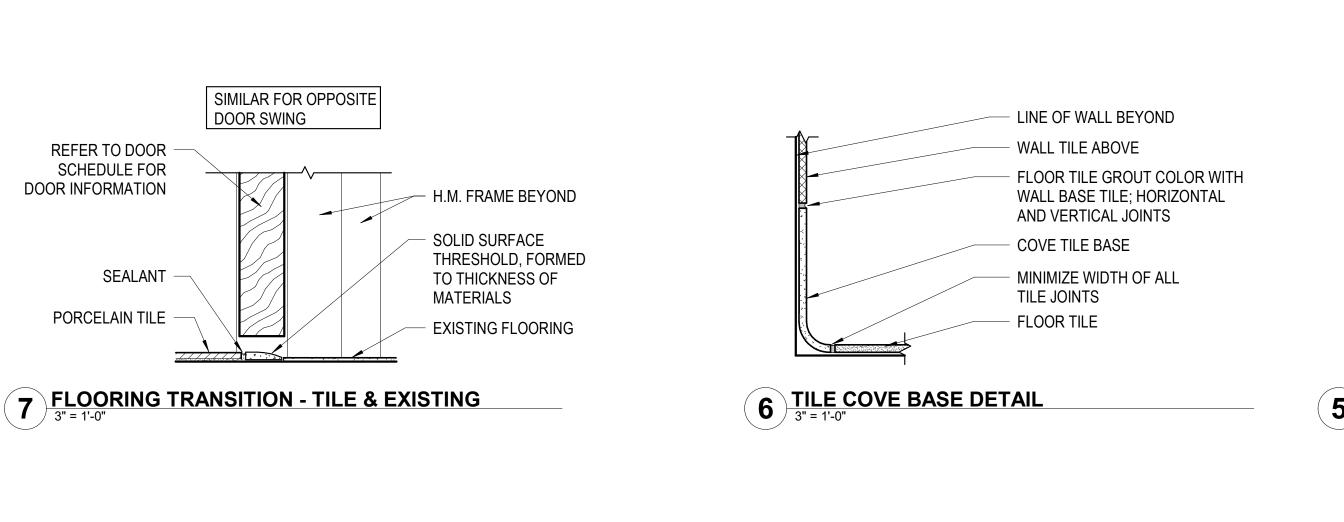
# **ROOM FINISH SCHEDULE KEY NOTES**

	5/A/02.
4.	SEE SHEET A701 FOR OTHER FINISH WORK.
5.	WALL TILE WAINSCOT PATTERN PER FINISH DETAIL 2/A702.
6.	WALL TILE WAINSCOT PATTERN PER FINISH DETAIL 3/A702, WHERE INDICATED; FULL HEIGHT TILE PER FINISH DETAIL 4/A702 BEHIND SINKS AS INDICATED ON ELEVATIONS.
7.	USE NON-CERAMIC TRIM AT EXPOSED TOP EDGE OF COVE BASE TILE CT4 ON WALLS WITHOUT TILE WAINSCOT.

2. FLOOR TILE PATTERN PER FINISH DETAIL 1/A702.

# E BASE TILE CT4 ON USE DONN AX CEILING GRID SYSTEM WITH ACT2 IN LIEU OF DONN DX GRID. /2\{ 8.

3. SOLID SURFACE SSF2 AS WALL PANELS IN SHOWER UNIT; SEE FINISH DETAIL



# **GENERAL FINISH NOTES**

A.	INSTRUCTIONS.
В.	SEE ADDITIONAL NOT
C.	ALL PAINTED STEEL S EXPOSED DUCTWORI INSTALLED, OR THE C
D.	PAINTING AND CONTR ACCEPTANCE OF WAR CORRECTION.
E.	CEILING AND SOFFIT
F.	ALL WALL PAINT IN TO FINISH, UNO.
G.	ALL INTERIOR HM DO
H.	ALL EXPOSED SURFA PAINTED COLOR PT7.
I.	TRANSITION ALL FLOO DETAIL 7 / A702, UNO.
J.	SIGN LOCATIONS PER
K.	ALL OUTSIDE CORNEI EXPOSED EDGES OF

PAN (PAN BY MECH).

A. SEE SPECIFICATIONS MANUAL FOR TECHNICAL SPECIFICATIONS AND INSTALLATION

DTES ON OTHER SHEETS.

- STRUCTURE ON WALLS, METAL GRILLS, LOUVERS, ETC., AND ALL RK, TO BE FINISHED TO MATCH THE SURFACE ON WHICH THEY ARE CEILING, UNO.
- RACTORS APPLICATION OF WALL AND FLOOR FINISH CONSTITUTES ALL CONDITIONS AND RESPONSIBILITY FOR IMPERFECTION
- FHEIGHTS SHOWN ON REFLECTED CEILING PLAN. TOILET, SHOWER AND LOCKER ROOM AREAS TO BE SEMI-GLOSS
- OORS AND DOOR FRAMES TO BE PAINTED COLOR PT3.  $\overline{1}$
- ACES OF GYP BD CEILINGS, SOFFITS AND BULKHEADS TO BE USE PT6 AT OPENINGS.
- OORING MATERIALS OR COLORS UNDER CENTER OF DOORS SIM.
- ER DETAIL XXX AND PER SECTION 10 1400.
- ERS OF WALL TILE TO HAVE METAL TRIM PER DETAIL 8 / A702. WALL TILE SIMILAR.
- SHOWER WALL TO BE FULL SHEET OF SOLID SURFACE MATERIAL SSF2 PER DETAIL 5 / A702. USE MILDEW-RESISTANT SEALANT IN ALL CORNER JOINTS AND EDGES OF PANELS. WATERPROOFING MEMBRANE BEHIND SSF PANELS AND UNDER SHOWER
- M. TILE COVE BASE PER DETAIL 6 / A702 WHERE INDICATED. 1

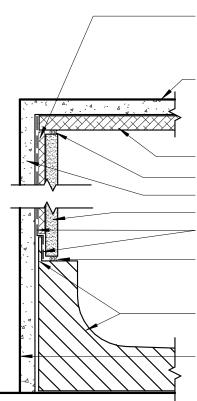


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CLIENT: **DULUTH TRANSIT** AUTHORITY (DTA) 2402 WEST MICHIGAN ST. DULUTH, MINNESOTA 55806

THIS SQUARE APPEARS 1/2"x1/2"

ON FULL SIZE SHEETS



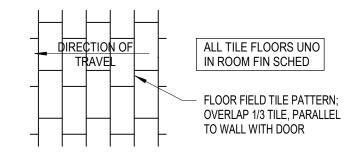
PROVIDE ADDITIONAL BACKING FOR WALL PANELS AS NEEDED TO PROPERLY OVERLAP FLANGE OF SHOWER PAN LINE OF CEILING FRAMING

HIGH-PERFORMANCE COATING SEALANT TILE BACKER BOARD 1/4" SOLID SURFACE PANEL WATERPROOFING MEMBRANE SEALANT

SHOWER PAN WITH FLANGE

LINE OF FRAMING, SEE PLAN FOR PARTITION TYPE

# 5 SHOWER DETAIL AT WALLS



**1 FLOOR TILE PATTERN** 

	10/24/2022	100% DOCUMENTS
NO	DATE	ISSUED FOR
	04/05/0000	
2	01/05/2023	ADDENDUM 03 ADDENDUM 01
NO	DATE	REVISION
	Printed Name: <u>BR/</u> 0/24/2022 F	ANDEE NESS LIAN
YRIGHT	2022 BY LHB, INC	. ALL RIGHTS RESERVED.
JECT N	AME:	
		R OFFICE
PS	CENTE	
PS ND	CENTE TOILET	REMODEL
PS ND	CENTE TOILET	<b>REMODEL</b> HIGAN ST.
PS ND 102 V	CENTE TOILET	REMODEL
PS ND 102 V ULU	CENTE TOILET VEST MIC TH, MINNE	<b>REMODEL</b> HIGAN ST.
PS ND 02 V JLU	CENTE TOILET VEST MIC TH, MINNE	<b>REMODEL</b> HIGAN ST.
PS ND 102 V JLU	CENTE TOILET VEST MIC TH, MINNE	REMODEL HIGAN ST. ESOTA 55806
PS ND 02 V JLU WING T OIL OO	CENTE TOILET VEST MIC TH, MINNE TH, MINNE ET AND	REMODEL HIGAN ST. ESOTA 55806
ND 102 V ULU AWING T OIL	CENTE TOILET VEST MIC TH, MINNE	REMODEL HIGAN ST. ESOTA 55806

DRAWN BY: KJS CHECKED BY: BNL PROJ. NO: 200066 DRAWING NO:

