Architectural Building Materials per CSI

DIVISION 02 - EXISTING CONDITIONS

02 41 00 - Demolition

Selective demolition of building elements for alteration purposes

 Refer to demolition drawings; Remove selected building elements as indicated on the drawings -Remove site features and utilities as indicated on drawings - Remove other items indicated, for salvage, relocation, and recycling.

DIVISION 03 - CONCRETE

03 54 00 - Cast Underlayment

Used for repair and leveling at infill of areas where mud set tile is removed at existing restrooms and for patching of existing holes through floors.

 Liquid applied, self-leveling, cementitious base, installed over interior subfloors – Basis of Design: ARDEX Engineered Cements; ARDEX K 15 with ARDEX MC ULTRA

DIVISION 04 - MASONRY

04 05 11 - Mortar and Masonry Grout

Mortar for all masonry work

- Mortar Mix Designs: ASTM C270, Property Specification; Mineral pigments added as required to produce approved color sample
 - Interior, Loadbearing Masonry: Type N
 - Interior, Non-loadbearing Masonry: Type O

04 20 00 - Unit Masonry

For infill at existing masonry walls

- Standard concrete masonry units (CMU) with nominal face dimensions of 16 by 8 inches and nominal depth(s) of 4 & 8 inches or as indicated on the drawings for specific locations; Provide non-standard blocks configured for corners, lintels, headers, control joint edges, and other detailed conditions; Hollow block, normal weight
 - Bond: Running bond
 - Mortar Joints: Concave
 - Pre-Faced (Glazed) Units; where exposed infill is needed at the north wing corridor: Hollow block, with smooth resinous facing
- Mortar for all masonry work; refer to Section 04 05 11
 - Reinforcement for masonry work
 - Single Wythe Joint Reinforcement: Truss or ladder type
 - Multiple Wythe Joint Reinforcement: Truss type; fabricated with moisture drip

DIVISION 05 - METALS

05 50 00 - Metal Fabrications

- Shop fabricated steel items
 - Lintels: Prime paint finish at interior locations, hot-dipped galvanized finish at exterior locations
 - Steel Angle Supports: Prime paint finish at interior locations, hot-dipped galvanized finish at exterior locations
 - Miscellaneous clips, anchors supports

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 10 00 - Rough Carpentry

- Miscellaneous framing and sheathing including:
 - Concealed wood blocking, nailers, and supports for mounting of miscellaneous accessories, casework and equipment
 - Rough opening framing for doors, windows, and roof openings

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 92 00 - Joint Sealants

Nonsag gunnable sealants, backers, accessories

- General Purpose Interior Sealant; Acrylic Emulsion Latex: Water-based Basis of Design: Pecora Corporation; AC-20 + Silicone Acrylic Latex Caulking Compound
 - Joints between door and window frames and wall surfaces
 - Other interior joints for which no other type of sealant is indicated
- Tile and Sanitary; Mildew-Resistant Silicone Sealant Basis of Design: Pecora Corporation; 898NST Sanitary Silicone Sealant - Class 50
 - Joints between plumbing fixtures and floor and wall surfaces
 - Joints at inside corners in ceramic wall tile applications
- Acoustic Sealant at Exposed and Semi-Concealed Locations; Use General Purpose Interior Sealant
 - Joints and penetrations at non-rated assemblies
 - Joints between interior wall and floor or ceiling
 - Joints between interior walls of differing materials
 - Seal around all penetrations by conduit, pipe, ducts, and rough-in boxes, except where firestopping is required
- Acoustic Spray Sealant at Concealed Locations; Acrylic latex emulsion sealant Basis of Design: Tremco Global Sealants; TREMstop Smoke and Sound Spray
 - Spray sealant used at joint between top of wall and structure
- Accessories:
 - Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible
 with specific sealant used, and recommended by backing and sealant manufacturers for specific
 application
 - Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application
 - Primers: Type recommended by sealant manufacturer to suit application; non-staining

DIVISION 08 - OPENINGS

08 12 13 - Hollow Metal Frames

Interior door and borrowed lite frames, non-fire-rated

- Full profile/continuously welded type; SDI-100 Level 2 Heavy-duty; 16 gage, 0.053 inch, minimum thickness
 - Knock-down type where existing door frames are being removed and replaced in existing openings
 - Frame Finish: Factory primed with rust-inhibiting primer and field finished
 - Frames Wider than 48 Inch: Reinforce with steel channel fitted tightly into head of frame, flush with top
 - Apply bituminous coating and grout frames at masonry walls

08 14 16 - Flush Wood Doors

Flush wood doors and flush glazed; non-rated

- Refer to drawings for types: Flush (F), Full-Glazed (FG), Half-Glazed (HG), and Narrow-Glazed (NG)
- Premium Grade with A grade veneer, Extra Heavy Duty performance; 5-ply or 7-ply; 1-3/4 inches
 thick; flush construction; Stiles/Edge banding of solid lumber outer for superior impact resistance, to
 match face veneer; bonded to core, 3/8" minimum thickness (Edge Type D)
- Fire Rated Doors: Tested to ratings indicated on drawings in accordance with UL 10C or UBC Standard 7-2-97 ("positive pressure"); Category A doors, UL labeled without any visible seals when door is open
- Wood veneer facing with factory transparent finish: Red oak, veneer grade in accordance with quality standard indicated, plain sliced (flat cut), with book match between leaves of veneer, balance match of spliced veneer leaves assembled on door or panel face

08 71 00 - Door Hardware

Mortise Locks: Best Locking Systems

08 80 00 - Glazing

Monolithic and insulating glass units; fire-rated and non fire-rated; Clear

- Insulated aluminum infill panels (INS-1): Exterior spandrel glazing unless otherwise indicated; Smooth textured prefinished aluminum panel at interior and exterior face; Rigid insulating isocyanurate core material; 3 inch overall panel thickness, rabbited to fit 1 inch aluminum frame glazing channel; Provide matching stops for insertion in existing door frame Basis of Design: Mapes Industries, Inc.; Mapes-R+ (8-Ply) panels
- Monolithic Interior Vision Glazing (FG): Interior glazing unless otherwise indicated; 1/4 inch thick, nominal; Heat-strengthened float glass
- Monolithic Interior Vision Safety Glazing (TG): Interior glazing where safety glazing is required by code and as indicated on drawings; 1/4 inch thick, nominal; Fully tempered safety glass

DIVISION 09 - FINISHES

09 05 61 - Common Work Results for Flooring Preparation

- Removal of existing floor coverings
- Preparation of existing concrete floor slabs for installation of floor coverings

09 21 16 - Gypsum Board Assemblies

- Non-Loadbearing Framing System Components: Galvanized sheet steel; G60/Z180 coating
 - Studs: "C" shaped with flat or formed webs with knurled faces; Sizes as indicated on drawings or 3-5/8 and/or 6 inches; 20 gauge, unless noted otherwise; 16 inches on center spacing, unless noted otherwise
 - Runners: U shaped, sized to match studs
 - L-Angle: 20 gauge, unless noted otherwise; Sizes as indicated on drawings
 - Z-Furring Channels: 20 gauge, unless noted otherwise; Sizes as indicated on drawings; 24 inches on center spacing, unless noted otherwise
 - Furring: Hat-shaped sections, minimum depth of 7/8 inch; 24 inches on center spacing, unless noted otherwise
 - Resilient Furring Channels: 1/2 inch depth, for attachment to substrate through one leg only; 24 inches on center spacing, unless noted otherwise
- Ceiling Suspension System: For gypsum board ceilings Basis of Design: Armstrong World Industries, Inc; Drywall Grid System
- Wall and Ceiling Board:
 - At Assemblies Indicated with Fire-Rating: Use type required by indicated assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
 - Gypsum Wallboard: Typical, unless noted otherwise; Paper-faced gypsum panels; 5/8 inch thick or as indicated on drawings; Tapered edges - Basis of Design: USG Corporation; Sheetrock Brand Gypsum Panels.
- Mineral Fiber Acoustic Batt Insulation (SAFB on drawings): Flexible preformed batt or blanket; friction fit; unfaced; Thickness: 3-1/2 inch, unless noted otherwise Basis of Design: Thermafiber, Inc; SAFB
- Corner Beads: Galvanized steel; Install at external corners, using longest practical lengths Basis of Design: Clarkwestern Dietrich Building Systems LLC; 103 Delux Corner Bead (CBU) Metal Corner Bead
- Plastic Trim: PVC molding designed to be taped and filled with joint compound with tear-away tab; white color; Install at locations where gypsum board abuts dissimilar materials; Maintain a gap of 3/16 inches with straight, parallel line and fill gap with sealant - Basis of Design: Trim-Tex Drywall Products; Tear Away L Bead
- Control/Expansion Joints: Place control joints consistent with lines of building spaces and where indicated on drawings; Rigid PVC, to allow 3/8 inch wall movement - Basis of Design: Trim-Tex Drywall Products; Hideaway Expansion
 - Locate control joints at corners of heads of doors and where indicated by Architect
 - Run vertical control joints continuously to top of partition or furred area, as applicable
 - Not more than 30 feet apart on walls and ceilings over 50 feet long
 - At exterior soffits, not more than 30 feet apart in both directions
- Finish gypsum board in accordance with levels defined in ASTM C840, as follows:

- Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated
- Level 1: Wall areas above finished ceilings, whether or not accessible in the completed construction
- Level 0: Temporary partitions

09 51 00 - Acoustical Ceilings

Acoustical ceiling panels, suspension grid, and accessories

- Acoustical Tile Type ACT-1: Plastic faced mineral fiber, ASTM E 1264 Type IV, Form 2, Pattern E;
 White; 24 x 24 inches; Exposed grid Type 1 Basis of Design: Armstrong World Industries, Inc;
 ULTIMA Tegular
- Exposed Suspension System Type 1: Formed steel, commercial quality cold rolled; heavy-duty; White; 9/16 inch wide face - Basis of Design: Armstrong World Industries, Inc; SUPRAFINE XL High Recycled Content (HRC)
- Perimeter Moldings: Material and finish to match exposed grid; Provide L-shaped molding for mounting at same elevation as face of grid
- Transition Moldings at Exposed Ceiling Edges: Provide extruded aluminum trim; Finish to match exposed grid; Provide custom color to match painted finish on drywall ceiling edges; Sizes/Profiles as indicated on drawings; Provide factory mitered inside and outside corner pieces - Basis of Design: Armstrong World Industries, Inc; AXIOM Transitions

09 65 00 - Resilient Flooring

- Vinyl Composition Tile (Type "V" on Finish Plans): Homogeneous, with color extending throughout thickness; Size: 12 by 12 inch; Color: Multiple colors as selected from manufacturer's full range -Basis of Design: Armstrong World Industries, Inc.; Standard Excelon - Imperial Texture, Imperial Texture Rave, and Multi Color Lines
- Resilient Base (Type "R" on Finish Plans): Type TV, vinyl, thermoplastic; top set Style B, Cove; 1/8 inch thick; 4 inch high; Color to be selected by Architect from manufacturer's full range; Provide premolded external corners and internal corners Basis of Design: Roppe Corp; Vinyl Wall Base
- Moldings, Transition and Edge Strips: For conditions as indicated on drawings and/or as listed below
 Basis of Design: Roppe Corp
 - Adapter for VCT to concrete

09 91 23 - Interior Painting

- Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete, concrete masonry units, and wood; Two top coats and one coat primer Top Coat Basis of Design: Sherwin-Williams; ProMar 200 Zero VOC Interior Latex
 - Flat: MPI gloss level 1; use this sheen for ceilings and other overhead surfaces
 - Eggshell: MPI gloss level 3; use this sheen at all locations, except where noted otherwise
 - Semi-Gloss: MPI gloss level 5; use this sheen at locations indicated
- Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including metals;
 Two top coats and one coat primer Top Coat Basis of Design: Sherwin-Williams Pro Industrial Acrylic Coating, Semi-Gloss
 - Medium duty applications include doors, door frames, railings, handrails, guardrails, balustrades, and intumescent surfaces

• Primers:

- Interior Institutional Low Odor/VOC Primer Sealer; All substrates, except where noted otherwise -Basis of Design: Sherwin-Williams ProMar 200 Zero VOC Interior Latex Primer
- Interior/Exterior Latex Block Filler; Substrate; Concrete Masonry Surfaces Basis of Design: Sherwin-Williams Loxon Block Surfacer
- Alkali Resistant Water Based Primer; Substrate: Concrete Surfaces Basis of Design: Sherwin-Williams Loxon Concrete & Masonry Primer/Sealer
- Interior Rust-Inhibitive Water Based Primer; Substrate: Preprimed and Unprimed Steel Basis of Design: Sherwin-Williams Pro Industrial Pro-Cryl Universal Primer
- Latex Primer for Interior Wood Basis of Design: Sherwin-Williams Multi-Purpose Latex Primer/Sealer

DIVISION 10 - SPECIALTIES

10 11 01 - Visual Display Boards

- Markerboards: Porcelain enamel on steel, laminated to core; Height: 48 inches; Length: As indicated on drawings; Frame: Extruded aluminum, with concealed fasteners; Writing Surface/Color: Claridge LCS II low gloss No. 75 for projection; Frame Finish: Anodized, natural; Accessories: Provide marker tray, chalk tray, map rail, and flag holder Basis of Design: Claridge Products and Equipment, Inc; LCS II Series 4
- Tackboards: Composition cork; Composed of 1/4 inch thick self-healing, burlap backed cork laminated to a 1/4 inch hardboard backing; Color: As selected from manufacturer's full range; Height: 48 inches; Length: As indicated on drawings; Frame: Extruded aluminum, with concealed fasteners; Frame Finish: Anodized, natural - Basis of Design: Claridge Products and Equipment, Inc; Claridge Cork with Series 4 frame
- Combination Units and Units Made of More Than One Panel: Factory-assembled markerboards and tackboards in a single frame, of materials specified above; Join panels of similar construction with butt joints, aligned and secured with steel spline concealed in edge of core; Join panels of different construction with H-shaped extruded aluminum molding finished to match frame

10 14 00 - Signage

- Room and Door Signs: Flat signs with applied character on back painted panel media; Signage media without frame; Edges: Square; Corners: Square; Face Plate Thickness: 1/4 inch; Provide "tactile" signage, with letters raised minimum 1/32 inch and Grade II braille; Character Font: Arial; Provide opaque backing for signs mounted on glass surfaces; Provide preprinted die cut paper inserts for window type signs Basis of Design: ASI Sign Systems, Inc.; Product: Inform Series (Nucryl Material) Subsurface applied paint
 - Room Name Signs (RN): 8 signs needed

10 28 13.11 - Under-Lavatory Pipe and Supply Covers

 Under-lavatory pipe and supply covers: Insulate exposed drainage piping including hot, cold, and tempered water supplies under lavatories or sinks - Basis of Design: Truebro, Inc; Lav Guard 2 Undersink Piping Covers

10 56 17 - Wall Mounted Standards and Shelving

- Extra Heavy Duty Shelf Standards: Single-slotted channel standards for brackets adjustable in 1 inch
 increments along entire length of standard, drilled and countersunk for screws; 14-gauge 304-grade
 stainless steel construction Basis of Design: Knape & Vogt Manufacturing Company; K&V 87
 standard with 187 series bracket
- Chemical-Resistant Laminate Faced Shelves: Particleboard or medium density fiberboard covered
 with high pressure decorative laminate on both sides; Laminate: NEMA LD 3 Type HGL; Edge
 Finish: Matching laminate, all four edges; Provide lip extending 1/4 inch above top surface at
 Chemistry Lab, Chemistry Prep, and Chemistry Storage; Flat Surface Thickness: 1 inch, nominal;
 Length: As indicated on drawings; Laminate Color and Pattern: To be selected by Architect from
 manufacturer's full line; Shelf Quantity: Provide one shelf for each 12 inches of length of standard,
 per pair of standards, unless otherwise indicated Basis of Design: Formica Corporation; Chemtop2

DIVISION 11 – EQUIPMENT

11 52 13 - Projection Screens

• Type PS-1: 96 inch by 96 inch; Extra Drops: Black; 18 inch wide - Basis of Design: Draper, Inc (Manual, Exposed Mounting); Luma Series

11 53 13 - Laboratory Fume Hoods

Fume Hood: Basis of Design: Hamilton Laboratory Solutions; SafeAire II

DIVISION 12 – FURNISHINGS

12 24 00 - Window Shades

- Manually Operated Roller Shades; Fascias: Size as required to conceal shade mounting Basis of Design: Draper, Inc; Clutch Operated FlexShade
 - Shade Fabric: Sheer shades Basis of Design Fabric: SheerWeave Infinity2 by Phifer; 5% open

12 35 53.19 - Wood Laboratory Casework

- Wood Laboratory Casework: Unless otherwise indicated provide products of quality specified by AWI//AWMAC/WI Architectural Woodwork Standards (AWS) for Premium Grade; Style: Flush overlay. Ease doors and drawer fronts slightly at edges; Species: Plain-Sliced; Red Oak - Basis of Design: Hamilton Laboratory Solutions; Gold Line
 - Framed Doors For Wall Cabinets: Float glass, with gaskets and removable stops; minimize rattling and vibration
 - Butt Hinges for Inset Doors: five-knuckle, projecting barrel, minimum 2-1/2 inches long. Stainless steel with No. 4 finish
 - Pulls: Stainless steel wire pulls, 4 inches wide
 - Locks: Provide locks on casework drawers and doors; Lock with 5 pin cylinder and 2 keys per lock
 - Adjustable Shelf Supports: Standard side-mounted system using multiple holes for pin supports and coordinated self rests, BHMA Grade 1 double-pin clear plastic finish, for nominal 1 inch spacing adjustments
 - Drawer Slides: Steel, full extension arms, ball bearings; self-closing; capacity as recommended by manufacturer for drawer height and width
- Epoxy Resin Countertops: Filled epoxy resin molded into homogenous, non-porous sheets; no surface coating and color and pattern consistent throughout thickness; with integral or adhesively seamed components; Fabricate in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), Section 11 - Countertops, Premium Grade
 - Flat Surface Thickness: 1 inch, nominal; Provide lip extending 1/4 inch above top surface at Chemistry Lab, Chemistry Prep, and Chemistry Storage
 - Color: Black
 - Exposed Edge Shape: 1/8 inch bevel chamfer
 - Drip Edge: Drip groove 1/8 inch wide and deep, located 1/2 inch back from edge on underside of each exposed edge
 - Back and End Splashes: Same material, same thickness; separate for field attachment
- Laboratory sinks; Material: Epoxy; Mounting: Undermount