

Procurement Services

REQUEST FOR PROPOSALS

UK-2563.30-20-25 CTC & AAC Modular Casework ADDENDUM #1 05/02/2025

ATTENTION: This is not an order. Read all the instructions, terms, and conditions carefully.

IMPORTANT: RFP AND ADDENDUM MUST BE RECEIVED BY: 05/09/2025 @ 3:00 P.M. LEXINGTON, KY TIME

Offeror should acknowledge receipt of this and any addendum as stated in the Request for Proposal.

ITEM #1: REVISIONS TO ORIGINAL BID DOCUMENTS and QUESTIONS & ANSWERS

• Please see enclosed, revised information and questions & answers, from the project team. Please refer to this information when preparing your proposal.

OFFICIAL APPROVAL UNIVERSITY OF KENTUCKY

05/02/2025

Ken Scott

Ken Scott, Purchasing Officer

Typed or Printed Name

SIGNATURE

University of Kentucky Procurement Services 322 Peterson Service Building Lexington, KY 40506-0005



Addendum #01 Cancer Center Modular Casework RFP

Client	University of Kentucky Healthcare	Date	5/2/2025
Project	UK Cancer Center + AAC Cancer Center Modular Casework ADD#1	UK Project #	2563.3
	UK-2563.30-20-25	Champlin Project #	514-6926

This addendum provides information to clarify or adjust construction items which may affect any or all trade contractors. The original documents for the referenced project are amended as noted in this addendum and made part of said documents and shall govern the work covered by the Form of Proposal. All work to be in strict accordance with the terms, stipulations and conditions of contract documents.

CLARIFICATION:

Drawings with revision clouds have changes as described below.

SUMMARY OF ATTACHMENTS

PART A – DRAWING

- A013 MATERIAL IDENTIFICATION CODES
 - 1. Added 123553.13 <CNTP-7> Epoxy Resin
- A014 MATERIAL IDENTIFICATION CODES
 - 1. Added 123570.10 <MCW-2a> Modular Metal Casework
 - 2. Added 123570.10 <MCW-2b> Plastic laminate Modular Casework
 - 3. Added 123553.13 < MCW-3> Lab Modular Metal Casework
 - 4. Added 099124 <PT-18>
 - 5. Added 099600 <PTE-18>
- A015 MATERIAL IDENTIFICATION CODES
 - 1. Added <SSF-10>
- A262.B FINISH PLANS LEVEL 02 AREA B
 - 1. Updated paint and wall mounted solid surface types in Clinical lab B206, Scope rooms B205C2-4, Wet specimen area B205C1.

A265.B - FINISH PLANS - LEVEL 05 - AREA B

1. Updated paint and wall mounted solid surface types in Acc/Processing B505A, Storage B505A1, Bio Repository B505B & Research lab B507K.

A615.4 - L1 - IMAGING - B103K & B103L ENLARGED PLAN & INTERIOR ELEVATIONS

1. Updated interior elevation details 22 & 24 with MAT ID identifiers <CNTP-1> & <MCW-1>.

A621– L2 – CLIN LAB – ENLARGED PLANS & INTERIOR ELEVATIONS

- 1. Updated floor plan details 1 & 2: Changed OFVI lab casework to CFCI <MCW-3> casework.
- 2. Updated interior elevation details 3-6: Changed OFVI lab casework to CFCI <MCW-3> casework with <CNTP-7> countertops. Updated SSF scope to <SSF-10>.

THINK CREATE REALIZE

A622– L2 – CLIN LAB – ENLARGED PLANS & INTERIOR ELEVATIONS

- 1. Updated interior elevation details 8, 10, 11, 12, 13, 15, 16: Changed OFVI lab casework to CFCI <MCW-3> casework with <CNTP-7> countertops. Updated SSF scope to <SSF-10>. Updated Paint color.
- A655-L5-PMC INTERIOR ELEVATIONS
 - 1. Updated interior elevation details 2 & 3: Changed OFVI lab casework to CFCI <MCW-3> casework with <CNTP-7> countertops. Updated SSF scope to <SSF-10>.
- A656– L5 STEM CELL ENLARGED PLAN & INTERIOR ELEVATIONS
 - 1. Updated floor plan detail 17: Changed OFVI lab casework to CFCI <MCW-3> casework.
 - 2. Updated interior elevation details 5-16: Changed OFVI lab casework to CFCI <MCW-3> casework with <CNTP-7> countertops. Updated SSF scope to <SSF-10>. Updated Paint color.

PART B - SPECIFICATIONS:

000010 – TABLE OF CONTENTS

- 1. Add new spec sections
- 123553.13 METAL LABORATORY CASEWORK 2. New spec section
- 123570.10 MODULAR METAL CASEWORK
 - 1. Add MCW-2a
- 123570.20 MODULAR PLASTIC LAMINATE CASEWORK 1. New spec section

PART C - RESPONSES TO BIDDER QUESTIONS:

See attached bidder questions and responses.

PART D – SUBSTITUTION REQUESTS

See attached substitution requests.

PART E – SKETCHES

Updated Modular Casework vs Millwork Diagram: Revised to correspond with design document changes and identify MCW-3.

PART F – Updated Exhibits

University of Kentucky General Conditions - Updated to correct version

End of Addendum

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Revision	Spec 102800	Code ACS	Description ADULT CHANGING STATION	Project Notes	Rep Contact/ Informatic
	102800	ACS-1	Wall-mounted Adult changing table, fold-out, motorized height adjustment	BOD: https://www.koalabear.com/product-catalog/kb3000-ahl/	
	095113	ACT-1	Certainteed Symphony m High CAC, Trim Panels in White, 24"x24"x7/8", 15/16" EZ Stab Classic Grid color: White. NRC 0.80, CAC 40	d, 2x2, high CAC ACT; Typical use all areas with prefab (L6 and L7), conference center, & tumor board rooms	
	095113	ACT-2 ACT-3	Certainteed, Symphony m High NRC, Trim panels in White, 24"x72"x7/8" with 6" infill panel every 10'-0", 15/16" EZ Stab Classic Grid, color: White. NRC 0.85 Certainteed, Symphony m High NRC, Trim panels in White, 24"x60"x7/8", 15/16" EZ Stab Classic	2x6; Used in public spaces where noted. 2x5; Used in public spaces where noted.	
	095113	ACT-4	Grid, color: White. NRC 0.85 Certainteed, Symphony m High NRC, Trim panels in White, 24"x48"x7/8", 15/16" EZ Stab Classic Grid. color: White. NRC 0.85	2x4, high NRC ACT; Used in public spaces where noted.	
	095113	ACT-5	Certainteed, Vinylrock, Trim panels in white, 24"x24"x1/2", 15/16" EZ Stab Classic gasketed grid in white	2x2 vinyl scrubbable, gasketed grid ACT; Used at labs, hot labs, pharmacy, kitchen, & stem cell spaces.,	
	095113	ACT-5a	Certainteed, Vinylrock, Trim panels in white, 24"x24"x1/2", 15/16" EZ Stab Classic grid in white	2x2 vinyl scrubbable, NON-gasketed grid ACT; Used at soiled rooms	
	095113	ACT-50 ACT-6	Certainteed, Vinyirock, Trim panels in White, 24 x24 x1/2", 15/16" EZ Stab All-Aluminum Cleanroom System Certainteed, Symphony m, Trim panels in White, 24"x24"x3/4", with non-ferrous grid and accessories	2x2 vinyi scrubbable, NON-gasketed grid AC I; Used at Steril Supply & CSP 2x2 nonferrous ACT; Used at MRI rooms	
	095113	ACT-7	(in white) Certainteed, Ecophon Focus A, Trim panels in Dark Diamond, 24"x24"x3/4", 15/16" EZ Stab Classic grid. color: Black	Black ACT; Used at radiologist work rooms, dosimetry and associated spaces as noted.	
	095113	ACT-8	Certainteed, Symphony m, Trim panels in White, 24"x24"x3/4", 15/16" EZ Stab Classic Grid, color: White	2x2 typical ACT; Used at staff break rooms (no high CAC requirement), private offices, admin, toilet, lactation/respite rooms, vestibules, and off-stage work areas where noted	
	095113	ACT-8a	Certainteed, Symphony m, Trim panels in White, 24"x48"x3/4", 15/16" EZ Stab Classic Grid, color: White	2x4 typical ACT; Used at off-stage work areas.	
	095113	ACT-9	Armstrong, Lyra PB, Square Lay-In, Toffee Chestnut WTC, 24"x24"x1", NRC .95, 9/16" Prelude grid t color match ceiling tile	o Wood-look ACT; Used in LINAC vaults, staff break rooms as noted.	
	095113 095113	ACTR ACTR-1	ACOUSTIC CEILING TRIM Certainteed Terminus, Acoustical up to Acoustical Transition, Height determined by difference in ceiling elevations are BCP color; white	ACT low to ACT high	
	095113	ACTR-2	Certainteed Terminus, Drywall up to Acoustical Transition, Height determined by difference in ceiling elevations - see RCP, color: white	GYP low to ACT high	
	095113	ACTR-3	Certainteed Terminus, Acoustical up to Drywall Transition, Height determined by difference in ceiling elevations - see RCP, color: white	ACT low to GYP high	
	095113	ACTR-4	Axiom Indirect Light Coves, ACT ceiling conditions at perimeter edges with closure - see RCP, color: white	ACT at perimeter edge light coves	
	84113	AFS	ALUMINUM-FRAMED ENTRANCES & STOREFRONTS		
	084113	AFS-1	Interior Storefront Framing, GL-1a UNO	Vestibule Interior Storefront Partition to match CW-1; PVDF resin coating in custom color as selected by Architect (Kawneer VersaGlaze 450 Framing System 2" Sightlines)	
	084126	AG	ALL-GLASS ENTRANCES & ASSEMBLIES		
	084126	AG-1	GL-1, with aluminum 6" shoe at floor conditions, 2" shoe at half wall conditions, 2" head for both	typical, clear	
	084126 084126	AG-2 AG-3	GL-20, with aluminum 6" shoe, 2" head GL-3, GL-4, GL-5, with WD-1 framing elements	typical, frosted, no pattern meditation	
	084126 084126	AG-4 AG-5	GL-4, with aluminum 6" shoe, 2" head GL-1, with aluminum recessed channels	meditation clerestory glass, infusion bays	
	084126 084126	AG-8 AG-9	GL-8, with aluminum 6" shoe at floor conditions; 2" shoe at other sills, 2" head typ. GL-9, with aluminum 6" show, 2" head	Vestibule Knee Wall Glass behind reg kiosks (gradient glass) ovarian screening blue glass	
	084126	AG-10 AG-11	GL-10, with aluminum 6" shoe, 2" head GL-11, with aluminum 6" shoe at floor conditions, 1" channel at counter conditions, 2" head for both	Level 00, trosted, patterned Level 01, frosted, patterned	
	084126 084126	AG-12 AG-13	GL-12, with aluminum 6" shoe, 2" head GL-13, with aluminum 6" shoe at floor conditions, 2" shoe at half wall conditions, 2" head for both	Level 02, frosted, patterned Level 03, frosted, patterned	
	084126	AG-14	GL-14, with aluminum 6" shoe, 2" head	Level 04, frosted, patterned	
	084126	AG-15 AG-16 AG-17	GL-15, with aluminum 6" shoe, 2" head GL-16, with aluminum 6" shoe, 2" head GL-17, with aluminum 6" shoe, 2" head	Level 05, frosted, patterned Level 06, frosted, patterned Level 07, frosted, patterned	
	084126	AG-18	GL-18, with aluminum 6" shoe at floor conditions, 2" shoe at half wall conditions, 2" head for both	01 imaging dividers in prep area	
	084126	AG-19	GL-19, with aluminum 6" shoe at floor conditions, 2" shoe at other sill conditions, 2" head typ.	Vestibule Decorative Entry Glass	
	083113	AP	ACCESS PANELS	AP Terminology: flush = on surface, recessed = flush with surrounding surface. Concealed flanges are mudded-in. All have concealed hinges,	
	083113	AP-1	Non-Fire-Rated Flush, Concealed flanges and hinges	(Milcor DW; JL Industries TMW; Karp KDW)	
	083113	Δ Ρ -2	Fire-Rated	(Milcor LER DW: IL Industries EDW: Karn KRP-350EW)	
	102233	AP-2 APTN	ACCORDION FOLDING PARTITIONS		
	102233	APTN-1	Accordion Door	AeroFlex Model(System S-126 Openstyle) by MobilFlex Inc.; Straight In-Line Pocket Stacking; Lead Post #2 with top/bottom shootbolts &	
	121114	ART	ART FURNISHINGS	cylinder lock in Clear Anodized Finish. L1 Cafe East/West entries.	
	121114	ART-1	Decorative backlit light fixture - see electrical drawings. Provide non-ferrous ceiling trim and accessories for MRI - safe application and 4" Certainteed Terminus trim around image area.	MRI - Lower Level	
		ART-2	Decorative backlit light fixture - see electrical drawings. Provide heavy duty T-bar grid and accessorie with 4" Certainteed Terminus trim around image area.	s CT Sim - Lower Level	
		ART-3	Decorative backlit light fixture - see electrical drawings. Provide non-ferrous ceiling trim and accessories for MRI - safe application and 4" Certainteed Terminus trim around image area.	MRI, SPEC/CT and PET/CT - Level 01	
		ART-4	Decorative backlit light fixture - see electrical drawings. Provide heavy duty T-bar grid and accessorie with 4" Certainteed Terminus trim around image area. Refer to electrical drawings for lighting.	s Ultrasound - Level 01	
		ART-5	Decorative backlit light fixture - see electrical drawings. Provide heavy duty T-bar grid and accessorie with 4" Certainteed Terminus trim.	s EMG - 2 x 6 - Level 03	
		ART-6	Decorative backlit light fixture - see electrical drawings. Provide heavy duty T-bar grid and accessorie with 4" Certainteed Terminus trim around image area.	s Ultrasound - Level 07	
		ARI-7	Decorative backlit light fixture - see electrical drawings. Provide heavy duty 1-bar grid and accessorie with 4" Certainteed Terminus trim around image area.	s SPEC/CT - Level 04	
	084229.23	ASLD 1	Automatic aluminum framed glass doors & sidelights	Elush full amarganov break away: Custom finish to match CW 1 at	
	004223.23			exterior, Custom 2-Coat PVDF finish at interior; (Stanley Dura-Glide Greenstar 3000 Series; Dormakaba ESA-300; Assa Abloy SL500 EcoDoor); GL-21T - Exterior Vestibule Doors	
	084229.23	ASLD-2	Automatic, aluminum-framed glass doors & sidelights	Flush full emergency break-away; Custom 2-Coat PVDF finish to match interior of CW-1; (Stanley Dura-Glide Greenstar 3000 Series; Dormakaba	
	097713	AST	ACOUSTIC TREATMENTS		
	097713	AST-1	1" Fabric Wrapped Acoustic Panels, Snaptex, Fabric: Carnegie, Xorel Meteor, color: 2024. Impact resistant core from floor to 36" AFF, acoustic core from 36" AFF to ceiling	Used at Radiologist work rooms, to match PT-17a SW Salty Dog	
	097713	AST-2	1" Fabric Wrapped Acoustic Panels, Snaptex, Fabric: Carnegie, Xorel Sahara Matte, color: 631. Impact resistant core from floor to 36" AFF, acoustic core from 36" AFF to ceiling	Used at Conference Center, Tumor Board rooms	
	102800	BA BA-1	BUILDING ACCESSORIES Mon/broom rack: [24" / 36"]	(B-223)	
		ВКТ	BRACKET		
	064116 105600	BKT-1 BKT-2	Counter support bracket, welded aluminum, RAKKS, various sizes Shelving support brackets with recessed standards. Mockett, SH15C Set With C-Style Tracks and Brackets, finish: Satin Aluminum	See CWKA-2 art display in elevator trash niche	
	083313	CCD	COILING COUNTER DOORS		
	083313	CCD-1	Coiling Counter Door	Overhead coiling fire-rated; steel interlocking slat curtain; Custom Powdercoat finish to match architect's sample - door panels and all trim; face-of-wall mounted; motor-operated (Cookson FDO-A10; Cornell	
				ERC-10; McKeon CFS Series) @LL loading dock desk	
	102123	CC CC-1	CUBICLE CURTAIN	Used at MRI Pren Rehab Onc & LINACe	
	, _ U		Tusk. Provide Cubicle Curtain tie back accessory in Beaded Nickel at all locations.	, ,	
	083323	CD CD-2	ColLING DOORS Coiling Door, Interior. Fire Rated	CD-2: Power-operated overhead coiling door. 90-minute fire ratios: steel	
	065525.10	CD-2		slat with powder-coat finish as selected by architect from manufacturer's standard range of colors. (Auto-Set System Model FSFD-M-G by McKeon Door Company or approved equivalent by Cookson Company or	
				Cornell Iron Works, Inc.) @LL Electrical room	
	035300	CEMF	CEMENTITIOUS FLOOR FINISHES (Exposed to View)		
	035300	UEMF-1	Seli-leveling topping	(Aruex N301 at exterior, K 500 at interior, not polished) with [sand aggregate / fiber-reinforcing]; [integral color / dye / stain / clear sealer]; [smooth / broom / non-slip grit] finish;	
	035300	CEMF-2	Sloping topping, feather edge	(Mapei Drytek 400) with [sand aggregate / fiber-reinforcing]; [bonded / unbonded over [vapor impermeable] separation sheet] / floating over [insulation / acoustic matil: slone to featheredge [smooth / broom /	
				non-slip grit] finish; [slope to feather edge]	
	102800	СН	соат ноок		
	102800 102800	CH-1 CH-2	Double Robe Hook Simple hook	typical; Bobrick B6727 Double Robe Hook Amerock, Single Prong Robe Hook BLACKROCK, Product # BH36000BBZ finish: Brushed Nickel descine result	
	102800	CH-3	Simple hook	Amerock, Single Prong Robe Hook BLACKROCK, Product # BH36000BBZ, finish: Golden Champagne: boutique consult	
	102800	CH-4	Coat hook rail with 5 hooks	Peter Pepper #2142XL	
	123101 123616	CNTP CNTP-1	COUNTERTOPS Stainless steel	Terminology for countertops other than WD, PLAM and SSF Level 5 - theranostic rooms [integral backsplash / basins] & Lower Level - RadioPharm even & toilet rooms	
7	123101 123616 123553.13	CNTP-1 CNTP-7	COUNTERTOPS Stainless steel Epoxy Resin	Terminology for countertops other than WD, PLAM and SSF Level 5 - theranostic rooms [integral backsplash / basins] & Lower Level -RadioPharm exam & toilet rooms At labs, chemical resistance with integral splash; black	

		Π	Vaterial Identification Codes				N	Naterial Identification Codes		
Revision	Spec	Code	Description	Project Notes	Rep Contact/Link Information	Revision Spec	Code	Description	Project Notes	Rep Contact/Link Information
	096813	CPT-4	Interface, Neck of the Woods Collection, Velvet Bark. Color: 106130 Walnut. Size: 25cm X 1m. Install: Ashlar	off-stage work area		79513.13 EXI	P JT-6	Interior; Ceiling-to-Ceiling	FCF Series by Construction Specialties or approved equal, w/fire barrier where indicated, 2" joint width	
	096813	CPT-5a	Interface, Woven Gradience, WG 100. Color: 108053 Ash. Size: 50cm X 50cm. Install: Monolithic	admin - field (no gradient)		79513.13 EXI	P JT-7	Interior; Floor-to-Wall	GFTW Series by Construction Specialties or approved equal, w/fire barrier where indicated, 2" joint width EWEC Series by Construction Specialties or approved equal w/fire	
	096813	CPT-6	Monolithic Interface, Lost Palms Collection, Keys View. Color: 108137 Natural. Size: 50cm X 1m. Install: Ashla	admin BOARDROOM		79513.13 EXI	P JT-9	Interior; Ceiling-to-Wall	barrier where indicated, 2" joint width FCFC Series by Construction Specialties or approved equal, w/fire	
	096813	CPT-7	Interface, Past Forward Collection, Archival. Color: 108183 Linen. Size: 50cm X 50cm. Install:	admin area rug (reception)					barrier where indicated, 2" joint width	
	030513	CST	CONCRETE SEALERS	for cured/existing floors & vertical surfaces, exposed to view		104413 FDI	кв КВ-1	FIRE DEPARIMENT KEY BOX Key storage box for fire department access	Knox-Vault 4400 Series by Knox Company; Recessed Installation	
	030513	CST-1	Sealer, clear acrylic, 15% solids, membrane-forming	shelled spaces - for flooring to be installed on top at future date						
	030513	CST-2	Sealer, clear acrylic, 18% solids, membrane-forming	for exposed - mech/utility rooms, elec rooms (those spaces could become Mohawk product sent by Jennifer on 12/4/23)		097200 FEI	LT LT-1	FELT Turf, Tubular 9mm, color: Holland Oats, pattern to run visually vertical, 24" wide x 120" high. Provide coordinating outside corner trim.	e Used at Conference Center, Tumor Board rooms as noted.	
	093013	СТА	CERAMIC TILE - ACCESSORIES			083513 FFI	DR	FOLDING FIRE DOORS		
	093013	CTA-1	Schluter JOLLY, Aluminum, finish: Brushed Antique Bronze Anodized Aluminum	Trim, Edge		083513 FFI	DR-1	Accordion-folding automatic fire door	(FireGuard by Won-Door, SafeScape by McKeon) with emergency egress opening @LL Monumental stair	
	093013	CTA-2	Schluter FINEC, Aluminum, finish: Brushed Antique Bronze Anodized Aluminum	Trim, Outside Corner		096813 FL 096813 FL	MAT MAT-1	ENTRANCE FLOOR MATS Tarkett, Abrasive Action II, color: Winter Grey, 24"x24" tile, install: ashlar	vestibules, staff entries, etc.	
	093013	CTA-3	Schluter QUADEC, Aluminum, finish: Brushed Antique Bronze Anodized Aluminum Erv Realet OC7 Outside Corner 1060, Einish: Buffed Brite Light Bronze	Trim, Edge of Stone. Used in elevator lobby at smoke curtain opening		104413 FEG	C	FIRE EXTINGUISHER CABINETS		
	093013					104413 FEC	C-1	Fire Extinguisher Cabinet, Fully Recessed/Flat Trim	Typical Cabinet; Fully Recessed/Flat Trim for use in 6" stud partition	
	093013 093013	CTW CTW-1	CERAMIC TILE - WALL Virginia Tile, VITL Collection - Accra, color: White, 12" x 24", install: horizontal stacked, 1/8" Grout Joints: CLISTOM Tile Installation Systems. #643 Warm Grav	toilet main	Cristin Hennessy	104413 FEC	C-2	Fire Extinguisher Cabinet, Semi-Recessed Trim	Semi-Recessed with 1 1/2 square edge trim, can use in 3 5/8" stud furring wall w/ 1 layer 5/8" gyp and 1/2" gap to masonry/concrete backup	
	093013	CTW-2	Tilebar, Kenridge Maple Ribbon, 24" x 48", install: horizontal stacked, 1/8" Grout Joints: TEC, #961	toilet accent	m	104413 FEC	C-3	Fire Extinguisher Cabinet, Trimless Recessed Aluminum	Basis of Design for High-Finish Areas; Fully Recessed, Trimless JL Embassy 5624S21 Aluminum; Windowless	
	093013	CTW-3	Sandstone Beige Stone Source, Mutina, Bas Relief, Patchwork Bianco, 7"x21", install: horizontal stacked, 1/8" Grout	clinic waiting accent @ planter	Stacy Fink	FEC	C-4	Fire Extinguisher & Fire Dept Valve Cabinet, Trimless Recessed	See Plumbing Drawings	
	093013	CTW-4	Virginia Tile, Wow USA, Alchemist, Pool, finish: Glossy, 2"x6" flat, install: horizontal stacked, 1/8" Grout Joints: Laticrete, #91 Slate Grey	staff break/lounges, lactation in lieu of Nemo Tile (cost saving)	Cristin Hennessy cristin.hennessy@virginiatile.co	FEC	C-5	Fire Extinguisher Cabinet, Surface Mounted		
	093013	CTW-5	Virginia Tile, VITL, Whitney, Blue Convex/Blue Triangle/Blue Crescent (produced at same time -	café	m Cristin Hennessy	FV0	C-#	Valve Cabinet	See Plumbing Drawings	CMTA is specifying these.
			SAME CALIBER TO ENSURE PROPER DIMENSIONS AND INSTALL PATTERN), finish: Matte, 8"x8", install: stacked - see drawings for pattern, 1/8" Grout Joints: TEC, #922 Sliver		cristin.hennessy@virginiatile.co m	078413 FS		FIRESTOPPING (Penetration)		
	093013	CTW-6	Virginia Tile, Wow USA, Gradient Indigo Crayon, finish: Glossy, 2"x10", install: horizontal stacked, 1/8" Grout Joints: CUSTOM Tile Installation Systems, #645 Steel Blue	café	Cristin Hennessy cristin.hennessy@virginiatile.co	078413 FS	I OP-1	See Firestopping Schedule in Specifications		
	093013	CTW-7	Virginia Tile, Wow USA, Texture Pattern Mix, color: Copper, 2.5" x 10", install: vertical stacked, 1/8" Grout Jointe: TEC #044 Lints Character	prefunction backsplash in lieu of DEC MET (cost saving)	m Cristin Hennessy cristin hennessy	078443 FR. 078443 FR.	JS JS-1	FIRESTOPPING (Joint) See Fire Resistive Joint System Schedule in Specifications	(Hilti; A/D Fire Protection Systems, Inc.; 3M Fire Protection Products	
	003040	CTW-0	Grour Joints: TEC, #944 Light Chocolate Tilebar. Tehama white nicket crackled ceramic tile. Beliebed 2%40% instally setting to the test of 6%	precision med anheresis influsion sink alcourse startured in the	m	007700	P		Systems, INC.)	
	093013	CTW-10	Grout Joints: CUSTOM Tile Installation Systems, #643 Warm Gray Wow USA, Tesserae collection, Play All Mar, Matt 11" x 11", install: stacked, 1/8" Grout Joints:	processor med, aprecess, influsion sink alcoves, also used in imaging sink alcoves	Cristin Hennessy	097700 FRI				
			Laticrete, #91 Slate Grey		cristin.hennessy@virginiatile.co m	097700 FRI	P-1	Marlite, Standard FRP, P 140 Ivory, Pebbled texture, Class A, Mounted 7'-2" AFF	kitchen panels	
	093013	CTW-13	Nate-Lo Tile & Stone, Oceani Solid Series. Color: Jeans. 2.5" x 10". Install: vertical stacked. Finish: Matte. 1/8" Grout Joints: Mapei, #5230 Armor Kate-Lo Tile & Stone. Oceani Solid Series. Color: White: 2.5" x 40". Install: vertical stacked. Finish:	level 04 long term influsion sink alcoves		ETT	RS	FLOOR TRANSITIONS		
	093013	CTW-14 CTW-17	Glossy. 1/8" Grout Joints: Mapei, #5077 Frost Wow USA, Rebels, color: Popcorn, 2" x 6", install: Vertical stacked, finish: Gloss, 1/8" Grout Joints:	03 prep/recovery bay; 07 gowned subwait	Cristin Hennessy	096623 FTF 096623 FTF	RS-1 RS-2	Terrazzo to CPT/RES/RFT/RSF: Profilitec, ZEROTEC ZR60, color: Titanium Terrazzo to Concrete: Profilitec, RAMPTEC ZRR, color: Silver		
			Mapei, #93 Warm Gray		cristin.hennessy@virginiatile.co m	096813/0965 FTF 19/096516	RS-3	CPT/RFT/RSF to Concrete: Profilitec, ZEROTEC ZLT, color: Titanium		
	093013 093013	CTM CTM-1	CERAMIC TILE - MOSAIC MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for	meditation		096516/0965 FTF 19	RS-5	RFT/RSF to RSF-6: Profilitec, TRIMTEC TR-KJ, color: Titanium	Used at toilet rooms with RSF-6 flooring.	
	093013	CTM-10	dimensions MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for dimensions	lower level elevator bank		096723 FTF	RS-6	RES to RFT/RSF: Profilitec, TRIMTEC TR-KJ, color: Titanium		
	093013	CTM-11	MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for dimensions	level 01 elevator bank		097200 FW	/C-1	FABRIC WALL COVERING Carnegie, Xorel Limestone, color: 2	Resource center, boutique, precision med, apheresis, infusion, conference center, gowned subwait, nurse/workstation accent	
	093013	CTM-12	MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for dimensions	level 02 elevator bank		097200 FW 097200 FW	/C-2 /C-3	Carnegie, Xorel Meteor, color: 703, X-Protect Wall Backing Carnegie, Xorel Meteor, color: 2031	staff elevators staff break	
	093013	CTM-13	MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for dimensions	level 03 elevator bank		097200 FW 097200 FW	'C-4 'C-5 'C-6	Carnegie, Xorel Nebula, color: 25 Carnegie, Xorel Meteor, color: 2014 Carnegie, Xorel Ion, color: 31	Resource center, boutique, conference center infusion feature wall	
	093013	CTM-14 CTM-15	MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for	level 05 elevator bank		097200 FW 097200 FW	/C-10 /C-11	Carnegie, Xorel Meteor, color: 735 Carnegie, Xorel Meteor, color: 2026	level 00 xorel accent (consult rooms) level 01 xorel accent (consult room)	
	093013	CTM-16	dimensions MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for	level 06 elevator bank		097200 FW 097200 FW	/C-12a /C-12b	Carnegie, Xorel Meteor, color: 2019 Carnegie, Xorel Meteor, color: 768	level 02 waiting accent (booth area & consult room) level 02 waiting accent (dark grey)	
	093013	CTM-17	MN Tile, Sicis, style: Artistic, pattern: custom mosaic, artwork to be determined, see drawings for dimensions	level 07 elevator bank		097200 FW 097200 FW 097200 FW	/C-13 /C-14a /C-14b	Carnegie, Xorel Meteor, color: 2002 Carnegie, Xorel Linen, color: 10 Carnegie, Xorel Sahara Matte. color: 631	level 03 xorel accent (consult room) level 04 admin boardroom level 04 staff break	
	064116	СШКА	CABINETWORK ACCESSORIES			097200 FW	/C-14c /C-15	Carnegie, Xorel Meteor, color: 2003 Carnegie, Xorel Meteor, color: 742	level04 xorel accent (consult rooms) level 05 xorel accent (precision med alcoves, consult room, infusion	
			Countertop Brackets			097200 FW	/C-16	Carnegie, Xorel Meteor, color: 718	lounge) level 06 xorel accent (consult rooms)	
	064116	CWKA-1	Exposed bracket	Hybrid bracket by A&M Hardware, white or painted to match wall finish	1	097200 FW	'C-17	Carnegie, Xorel Meteor, color: 2035 GRAB BARS	level 07 xorel accent (consult rooms)	
	064116	CWKA-2	Concealed bracket	Concealed Bracket ("C" model) by A&M Hardware, sized appropriate to counter depth. Provide Extended-leg Concealed Bracket ("EC" model) where wall framing space allows.	 <u>https://www.aandmhardw</u> <u>are.com/concealed-flat</u> 	102800 GB 102800 GB	-1 -2	See Drawings for configurations Angled grab bar, brushed or satin stainless steel. Basis of Design: Pickens Angled Grab Bar -	(B-6806)	
	064116	CWKA-2A	Concealed Flat bracket	Concealed Flat Bracket ("CFLAT" model) by A&M Hardware, sized appropriate to counter depth. Provide Extended-leg Concealed Flat Bracket ("ECELAT" model) where well framing space above countertors	_	088000 GI				
	064116			allows.	P	088005 GL	-1	Monolithic Glass Clear FT glass, 1/4" min		
	064116	CWKA-4	6" hidden shelf bracket (for shelves shorter than 9")	[steel] [pre-finished]	https://www.aandmhardware.co	088005 GL- 088113 GL-	-2 -3	Clear FT glass, 1/2" min Carvart, frosted, color: C060, Sample #: 02-C060-T1-21714, 1/4" thick	meditation (amber), frosted	Tiffany Theis, tiffany@bevondesignrg.com
	064116	CWKA-5	Floating Shelf Bracket, 1/2" diameter rod supports	Basis of Design: Sheppard Brackets, Floating Shelf Bracket, 1" backplate. 1/2" dia post, width of bracket and post length determined b	m/floating-hidden-shelf-brack https://www.sheppardbrackets. com/	088113 GL-	-4	Carvart, frosted, color: C112, Sample #: 02-C112-T1-21714, 1/4" thick	meditation (blue), frosted	Tiffany Theis,
				size of shelf, see drawings.		099112	5	Convert freeted color: 01 Duro Sample # 01 01 T2 21714 1/4" thick	meditation (no color) fronted	tiffany@beyondesignrg.com
			Wall Shelving			066113 GL-	-5	Carvart, frosted, color. Of Pure, Sample #. 01-01-12-21714, 1/4 unick	meditation (no color), nosted	tiffany@beyondesignrg.con
	105600	CWKA-11	Adjustable brackets & standards	[steel / stainless steel] [finish]		088113 GL-	-9	McGrory Glass, #HGAM-341	ovarian screening registration wall (blue)	Tiffany Theis, tiffany@beyondesignrg.com
			Misc Accessories					Monolithic Backpainted Specialty Glass		
	064116	CWKA-21	Cable grommet	Basis of Design: Mockett EDP3 - 2-1/2" Flip-Top® Grommet Set,		088113 GL- 088113 GL-	-6 -7	McGrory Glass, Back-Coated Etched Glass #HGAM-172 (matte finish) McGrory Glass, Back-Coated Glass #HGAM-391	"spandrel" at main lobby slats, matches PT-1 glass at theranostic room sinks	
	105600	CWKA-22	Clothes rod & brackets	Basis of Design Mockett HNGH Series, stainless steel		088113 GL	-8	Laminated Decorative Glass Skyline Design, Gradient, Bottom to Top, Ontion D, Film Interlayer on Stamphire (low-iron) Laminated	d behind rea kiosks - at vestibule wrap, bottom to top gradient	.lill Zitzer iill zitzer@amail o
	064116	CWKA-23	Soft Down Stay	105 degree opening angle, NSDX-20 [nickel finish]	69176-61824-instr.pdf (rockler.com)		0	Glass. Solid white from 2'-6" to 5'-6" AFF, gradation from 5'-6" to 6'-6", clear glass from 6'-6" to 9'-6"		
	064116	CWKA-24	Piano/Continuous Interior Door Hinge	RELIABILT 72-in H x Square Satin Nickel	RELIABILT 72-in H x Square Satin Nickel Piano/Continuou	GL-	-8a	Skyline Design, Gradient Middle, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass. Clear from floor to 2'-0" AFF, gradation between 2'-0" to 5'-6" AFF, clear glass from 5'-6" to head height.	dual gradient - for therapy gym entrance	
	057000	DEC MET	DECORATIVE METAL Fabrication Type			GL	-10	Skyline Design, Threads 2, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass	level 00, frosted, patterned	Jill Zitzer, jill.zitzer@gmail.c
	057500	DEC MET-1	Forms + Surfaces, Fused Nickel Bronze, finish: Seastone, treatment: Ceramiloc+, 0.8mm thickness	main lobby reg kiosks, cafe, conf prefunction backsplash, meditation signage panel		GL	-11	Skyline Design, Asian Grass, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass, Sample #: 544264-001	level 01, frosted, patterned	Jill Zitzer, jill.zitzer@gmail.c
	057500	DEC MET-2	Custom elevator hoistway frame & transom panel; RAL, #9017, Traffic Black (semi-matte finish); see door assembly types. Formed sheet metal column cover, field finished w/ concealed joints, field painted, Round.	e accent panel above staff elevators Basis of design Fry Reglet "FF" Column Cover - Round		GL	-12	Skyline Design, Intaglio, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass Skyline Design, Horizontal Small, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass	level 02, frosted, patterned	Jill Zitzer, jill.zitzer@gmail.c
	055813	DEC MET-4	Formed sheet metal column cover, field finished w/ concealed joints, field painted. Square.	Basis of design Fry Reglet "FF" Column Cover - Square		GL	-14	Skyline Design, Disperse, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass	level 04, frosted, patterned	Jill Zitzer, jill.zitzer@gmail.c
	055813	DEC MET-5	Formed sheet metal beam cover, field finished, field painted. Square.	Basis of design Fry Reglet "FF" Beam Cover - Square TBD		GL-	-15	Skyline Design, Triangles 2, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass, Sample #: 544264-002	level 05, frosted, patterned	Jill Zitzer, jill.zitzer@gmail.c
	057000	DEC MET-12	Metal Type Stainless Steel	polished plate, bar, or angle as detailed		GL-	-16	Skyline Design, Cascade, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass	level 06, frosted, patterned	Jill Zitzer, jill.zitzer@gmail.c
	057100	DEC STAIR	DECORATIVE STAIRS			GL	-17	Skyline Design, AR109, Option D, Film Interlayer on Starphire (low-iron) Laminated Glass	level 07, frosted, patterned	Jill Zitzer, jill.zitzer@gmail.o
	057100	DEC STAIR-1	Monumental stair assembly	Concealed steel structure. See TER-4, TERA-2, DEC RAIL-1, DEC RAIL-1A, DEC RAIL-2, DEC MET-12. DEC STAIR-1 is an umbrella tha encompasses these other items.	at	GL-	-10	Option D, Film Interlayer on Starphire (low-iron) Laminated Glass, Sample #: 544264-003	Level of imaging area - dividers in prep bays	Jin Zitzer, jin.zitzer@gmail.o
	057313	DEC RAIL	DECORATIVE RAILINGS			GL	-19	3form, Custom Digital Print, Film Interlayer on Low Iron Laminated Glass, Sample #: SO-571896.2	vestibule glass	
	057313	DEC RAIL-1	Handrail; 2"W x 1 1/4"D Rectangular Tube Handrail, polished, 1/4" eased edge to meet ADA perimeter and cross sectional limits, polished stainless steel; Long Arm Handrail Bracket for Wall or Glass Mount, polished stainless steel, flat handrail saddle adapter plate. Tube to receive DEC	BOD: CRL Item #HR2EGPS, Item #HR2EWPS, Item #HBFP1PS			-20	Laminated Glass Skyline Design, Obscure White, Film Interlayer on Starphire (low-iron) Laminated Safety Glass.	tvoical frosted laminated glass for doors, sidelites, etc - NO pattern	Jill Zitzer. jill.zitzer@amail.c
	057313	DEC RAIL-1A	RAIL-1A Illuminated handrail LED point source fixture, BOD: Wagner Lumenpod 16	Refer also to electrical drawings		088113 GL	-1a	Sample #: 534534-001, 1/4" (1/8"+1/8") Skyline Design, (low-iron) Laminated Safety Glass, 1/4" (1/8"+1/8")	Laminated Glass for Pamphlet Walls in Library and Meditation Rooms,	Jill Zitzer, jill.zitzer@gmail.c
	057313	DEC RAIL-2	Glass Guardrail; 1/2" Tempered Glass; 3 1/2" x 2 1/4" Guardrail Shoe, predrilled, stainless steel; 1" 1 5/16" Cap Rail, polished stainless steel;	BOD: CRL Brushed Stainless Shoe, Item #B5LDBSC; CRL Polished Stainless Cap, Item #GRL10PSC;				Fire-Protection-Rated Glazing		
	057313	DEC RAIL-3	stainless steel; 2"x2" Posts, matching finish, concealed mounting lug fixed to floor, see drawings.			088813 GL-	-62	Laminated ceramic glazing, clear, 5/16	Pilkington Firelite Plus	
	055213	DEC RAIL-4	Freestanding stainless steel handrail with posts: 1.9" diameter handrail with 1" x 2" rectangular posts; Polished stainless steel; 5" x 5" post baseplates & fasteners concealed by raised finish.	Pedway handrail BOD: FHC-USA.com 'The Glazing Supply Company', handrail assembly from parts. FHC PR12S Post Stanchion with 5" square base for 1" x 2" rectangular rail: FHC F336 'F3 series' post 1" x	и, х	088005 GL-	-72	Vision Control Glazing Integral operable blinds	Unicel Vision Control Mini	
				2" rectangular profile with fixed saddle.		088300 GL	-91	Mirrors Unframed mirror. clear. 1/4"	staff restrooms	
	062023	DEC WD	DECORATIVE WOOD			088300 GL 088300 GL	-92	Safety glass mirror, tempered glass, clear, 1/4" Safety glass mirror, laminated glass, clear, 1/4"		
	062023	DEC WD-1	Ikonni Inc., product: S13P26, color: Unfinished White Oak painted with PT-14d, Paperback (TNT) Panel. Apply blocking primer before Scuffmaster application.	admin fluted wood, painted (recept desk)		088005 GL	-94	Surveillance mirror, transparent, 1/4"	Mirropane T.M. Transparent Mirror by Pilkington	
	101210	DSPW DSPW-1	DISPLAY WALL SYSTEM Slat Wall Display, Aluminum channels, face: PLAM-5, adjustable sholving: WD 4	boutique and pharmacy		088113 GL	HW-1	1" high glazing sill, Anodized Aluminum	aluminum channel at head & sill, clear-anodized exposed surfaces	
	079300	EPJT	END-OF-PARTITION JOINTS	Used where partitions terminate at glass or curtainwall/storefront vertice	cal	088113 GL	HW-2 HW-3	Recessed Glazing Channel, Anodized Aluminum 6" high extruded aluminum base shoe, Anodized Aluminum 1/0" high clazing channel. Anodized Aluminum		
	092216	EPJT-1	Foam gasket	Used at non-rated conditions incompatible with EPJT-2, or directly to glass.		088113 GL 088113 GL 088113 GL	HW-5 HW-6	1/2 Ingin grazing grazin	CRL Stainless Steel Divider Bar, Item #: SS961 (Hot room Glass walls)	
	098453	EPJT-2	Prefabricated STC-rated closure	(Mull-It-Over)		088113 GL	HW-7	Stainless Steel Outside Corner	CRL Stainless Steel Outside Corner, Item #: SS962 (Hot room Glass	
	098453	EPJT-3	Prefabricated STC-rated closure, fire-rated	(Mull-It-Over)		088113 GL	HW-8	Stainless Steel J-Channel	CRL Stainless Steel 1/4" J-Channel w/Miter Cut at Corners, Item #: SS960 (Hot room Glass wall edge)	
	079513.16 / 077129	EXP JT	EXPANSION JOINT COVER ASSEMBLIES			088113 GL3	SF	GLASS SURFACE FILM		
	79513.13	EXP JT-4	Interior; Floor-to-Floor	GFT Series by Construction Specialties or approved equal, w/fire barrier where indicated, 2" joint width	er	088113 GL3 088113 GL3	SF-1 SF-2	NOT USED 3M, Scotchcal Blockout Film 3635-20B, color: Matte White, opacity: Opaque Advanced Contings Engineering (ACE) U.O. 200 During Clip. In the second s	blackout, precision med	
	79513.13	EXP JT-5	Interior; Wall-to-Wall	FWF Series by Construction Specialties or approved equal, w/fire barrie where indicated, 2" joint width		U88113 GLS	JIJ	איז איז דעעמוועס בווטוופטוווט (ACE) LLC, 200 Series, SL9 clear security laminate film	ose at Specially a Cherno Pharmacles	



Material Identification Codes

_	Revision	Spec	Code	Description	Project Notes	Rep Contact/Link Information
-		092900	GYP BD-1 GYP BD-2	5/8" fire-rated type X 5/8" fire-rated type X, mold-resistant & water-resistant	(ProRoc M2Tech by CertainTeed; ToughRock Mold-Guard by	
_		092900 092900	GYP BD-12 GYP BD-16	1/2" mold-resistant 1/4" regular type, flexible	Georgia-Pacific; Sheetrock Mold Tough Firecode by USG) LINAC sliding door chase interior finish Lobby curved walls (meditation)	
		092116.23	GYP BD-21	1" shaft liner	(CertainTeed Corp GlasRock Shaftliner Type X; G-P Gypsum Co. DensGlass Shaftliner; National Gypsum Company: eXP Shaftliner; USG SHEETROCK Brand Glass-Mat Liner Panels)	
		092900	GYP BD-25	5/8" fire-rated type X tile backer	(DensShield Fireguard Type X Tile Backer Board by G-P Gypsum Corporation; GlasRoc Diamondback Tile Backer Type X Board by CertainTeed Corporation; eXP Tile Backer Fire-Shield Type X by National Gypsum Company; Durock Glass-Mat Tile Backerboard Type X by USG)	
_		092900 092900	GYP BD-26 GYP BD-35	5/8" acoustic board 5/8" abuse-resistant	Sound break - Plan to use at meditation room and other acoustically sensitive spaces Lower Level Prison holding rooms	
		092900	GYP BD-36	5/8" impact-resistant	(CertainTeed Corp.: AirRenew Extreme Impact Resistant Gypsum Board; G-P Gypsum Corp.: Tough Rock brand Impact Resistant; National Gypsum Company: Gold Bond Brand Hi-Impact XP Gypsum Board; USG: Sheetrock brand Mold Tough Very High Impact)	
		092900	GYPA	GYPSUM BOARD ACCESSORIES		
		092900	GYPA-1 GYPA-2	Fry Reglet, DRM-25-25, 1/4" reveal molding Fry Reglet, Wallcovering Base trim, WCTBT125-217	terminates wallcovering at ends (soffit conditions)	
_		092900	GYPA-3 GYPA-4	Fry Reglet, Drywall Moulding End Closure, Anodized Aluminum, DMEC-4875 Fry Reglet, Acoustical Ceiling Trim, Extruded Aluminum FDA-625	end cap for drywall at infusion bays Molding transitions from ACT to Gyp at exterior soffits	
-		092900	GYPA-5	Fry Reglet, DRMC-IS-300 Curved Inside Corner	Curved Inside corner at Meditation Room	
_		092900	GYPA-6 GYPA-7	Fry Reglet, DRMC-OS-400 Curved Outside Corner Fry Reglet, DRMZ-625-375 Aluminum 3/8" 'Z' reveal	Curved outside corner at Infusion Feature Wall Used at Monumental stair	
		092900	GYPA-8	Fry Reglet, Millwork U Channel, MWU 7550 Aluminum Color: Anodized Buffed Brite Light Bronze	Used at L2 Slat Window base transition	
_		092900	GYPA-9 GYPA-10	Fry Reglet, Drywall F Reveal, DRMF-625-50 Aluminum Color: Anodized Buffed Brite Light Bronze Fry Reglet, Drywall Reveal Moulding, DRM-625-100 Aluminum 1" Color: Anodized Buffed Brite Stainlass Staal	Used at L2 Slat Wall base transition Meditation Room Baffle Wall Glass Reveals	
		092900	GYPA-11	Fry Reglet, Drywall F Reveal, DRMF-625-50 Aluminum Color: Anodized Buffed Brite Stainless Steel	Meditation Room Headwall	
-		092900	GYPA-12	Armstrong Transition Moulding, F Vertical Transition Moulding 7913	Typical ACT to Gyp Transition	
_		102800	HD-1	Xlerator, XLSB, Surface Mounted Automatic Hand Dryer	Public Toilets only. 120V. Refer to Plans for locations. https://www.exceldryer.com/product/xlerator-hand-dryer/	
		064116		CABINETWORK HARDWARE		
-		064116	HDWR-P1	Mockett, DP105C/4, Square Drawer Pull, finish: Satin Nickel	typical	
_		064116	HDWR-P3	CRL Satin Anodized Aluminum 3" pull with 7/16" lip for sliding glass and panel door (retail glass door): ITEM# D643A	art display niche @ public elevator lobby	
-		064116	HDWR-P4 HDWR-P5	Sliding glass door track. Ameriscan Designs, Epco Assembly #16, finish: Oil Rubbed Bronze Mockett, DP138, Elongated Frame Drawer Pull, 6 5/16" long x 1 31/32" wide, Satin Nickel finish	art display niche @ public elevator lobby dressing room drawers, meditation room bench (recessed)	
		064116	HDWR-P6	Mockett, DP224, Continuous Drawer Full. Refer to elevations for custom sizes. Satin Nickel finish.	admin recessed finger pull	
-		064116	HDWR-P7 HDWR-P9	Sliding glass door lock. EPCO, Sliding Door Lock - G03-C Hickory Hardware, Skylight Pull, 12" center to center, finish: Champagne Bronze, SKU:	art display niche @ public elevator lobby decorative pulls @ boutique displays	
_		099600	НРС	HIGH-PERFORMANCE COATING		
_		099600	HPC-8	Protective Coatings For Steel Zinc-rich urethane base, water-based epoxy build coat, polyurethane finish, match PT-5 Protective Coatings For Steel	stair railings (matches mushroom color)	
_		102123	НТ	Zinc-rich urethane base, water-based epoxy build coat, polyurethane finish, match PT-1 HOSPITAL TRACKS		
		102123 102123	HT-1 HT-2	Cubical curtain tracks, ball and chain hook style, color: White I.V. tracks		
_		081713 081713	IDOA-1	INTEGRATED OPENING ASSEMBLIES Fire-rated steel door & frame assembly, double door; Fire rating as scheduled	Rite Door, Total Door; L2 Parking Garage Firewall, L1 Stair A.	
-		081713	IDOA-2	Fire-rated steel door & frame assembly, single door; Fire rating as scheduled	Rite Door, Total Door, L2 Stair A	
		081713	IDOA-3	Fire-rated steel door & frame assembly, dual egress; Fire rating as scheduled	Rite Door, Total Door; L1 Lobby route to Pedestrian Bridge	
_		072100 072100	INSUL-40	INSULATION Unfaced fiberglass batt	(Certainteed: CertaPro AcoustaTherm Batts; Owens Corning; Sound Attenuation Batts; Johns Manville: Formaldehyde-Free and Unfaced Sound Control Batts)	
_		102800 102800	ICS-1	Stainless steel cabinet & HDPE liner, Horizontal Recessed	Recessed, Horizontal orientation, Surface Mtd	
		102800	ICS-2	Stainless steel cabinet & HDPE liner, Vertical Recessed	Recessed, Vertical orientation (required @ADAclearance issues in th rms) KB311-SSRE	
-		044313.16 044313.16	INT STN INT STN-1	INTERIOR STONE Tiled Stone; Russell Stone, Bloom Run Sandstone, finish: Honed. Running bond. 0.75" nominal thickness with 1/2" scratch coat mortar and 3/8" mortar on back face of stone. Stone to be 4" tall and 16" in length. Acceptable length range 12"-24" where needed. Provide continuous wrap corners from a single piece of stone with face length within acceptable length range and return of 4". Alternate return face with each course.	Interior stone - elevators, lobby, etc. Assembly: 5/8" Gyp Board, Cleavage Membrane(15lb felt), Metal Lath, 1/2" Mortar Scratch Coat, 1/2" Mortar Setting Bed	
-		044313.16	INT STN-2	Tiled Stone; Granite Veneer Panels; 0.75" nominal thickness; Acceptable length range 12"-24"	Coldspring USA; Color Mesabi Black; Textured finish	
		044313.16	INT STN-CRN	Running bond prefabricated corner condition to match INT STN-1.	Interior stone - elevators, lobby, etc. Assembly: 5/8" Gyp Board, Cleavage Membrane(15lb felt), Metal Lath, 1/2" Mortar Scratch Coat, 1/2" Mortar Setting Bed	
-		265100 265100	LGT-1	WINDOW LIGHT FIXTURE Window Light - Type 1	See Electrical Lighting Schedule: 12"H x 96"W; clear glass; 2" frame	
-		265100	LGT-2	Window Light - Type 2	See Electrical Lighting Schedule: 12"H x 72"W; clear glass; 2" frame width;wall recessed mounting; white finish; no additional options	
-		105000	LK	LOCKS		
		105000	LK-1	Digilock Axis Lock	https://www.digilock.com/products/electronic-locks/axis/	
-		105010	LKR-1	Prefinished steel	full height (L8-Staff only) refer to elevation for dimensions (24"w x 72"h x 24"d, UNO); on continuous Z-base / sloping top where noted]; prefinished to match PT; with padlock hasp hardware & accessories	
		105123	LKR-2	Plastic-laminate-clad wood lockers; Full-Height	LA1 by Hollman lockers or approved equal; refer to elevation for dimensions (18"W x 72"H x 18"D, UNO); 6" Base; CH:C Hooks; digilock; Provide accessible model where indicated: Exterior Finish: Phantom	
					Pearl SPhP, Interior Finish - White; Filler trim panel at head to meet gyp ceiling condition if applicable, manufacturer to provide finished end panels at exposed ends, and field cut filler panels to span to wall. Continuous rubber base applied across base condition, supplied by	
					others.	
		105123	LKR-3	Plastic-laminate-clad wood lockers; Z-Configuration	LZ1 by Hollman lockers or approved equal; refer to elevation for dimensions (15"W x 72"H x 18"D, UNO); 6" Base; CH:C Hooks; digilock; Provide accessible model where indicated; Exterior Finish Phantom Pearl SPhP; Interior Finish - White; Filler trim panel at head to meet gyp ceiling condition if applicable, manufacturer to provide finished end panels at exposed ends, and field cut filler panels to span to wall. Continuous rubber base applied across base condition, supplied by others.	
		105123	LKR-4	Plastic-laminate-clad wood lockers; Two-tier	LB1 by Hollman lockers or approved equal; refer to elevation for	
					dimensions (15"W x 72"H x 18"D, UNO); 6" Base; CH:C Hooks; digilock; Provide accessible model where indicated; Exterior Finish Phantom Pearl SPhP; Interior Finish - White; Filler trim panel at head to meet gyp ceiling condition if applicable, manufacturer to provide finished end panels at exposed ends, and field cut filler panels to span to wall. Continuous rubber base applied across base condition, supplied by others.	
-		105123	LKR-5	Plastic-laminate-clad wood lockers; Three-tier	LC1 by Hollman lockers or approved equal; refer to elevation for dimensions (15"W x 72"H x 18"D, UNO); 6" Base; CH:C Hooks; digilock; Provide accessible model where indicated. Future and the Dimensional Comparison of the second secon	
					Pearl SPhP; Interior Finish - White; Filler trim panel at head to meet gyp ceiling condition if applicable, manufacturer to provide finished end panels at exposed ends, and field cut filler panels to span to wall. Continuous rubber base applied across base condition, supplied by others.	
		105129	LKR-6	US Z-Style Locker with Open Cubby Traditional Phenolic	BOD: https://foremanlockers.com/lockers/traditional-phenolic-lockers/2-tier-ope n-cubby-z . 6" Base; CH:C Hooks; digilock; Exterior Finish Phantom Pearl SPhP; Interior Finish - White; Filler trim panel at head to meet gyp ceiling condition if applicable, manufacturer to provide finished end panels at exposed ends, and field cut filler panels to span to wall. Continuous rubber base applied across base condition, supplied by	

Material Identification Codes

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sion		Spec 105123	Code LKRB	Description LOCKER ROOM BENCH	Project Notes	Information
		105123 105123	LKRB-1 LKRB-2	Locker Room Bench Locker Room Bench	Hollman Hilo Standard Bench, Moondust SSF Top Hollman Hilo ADA Wall Mounted Bench, Moondust SSF Top	
		123570		MANUFACTURED CASEWORK	Thereportie rooms (1.5) Redienberm (Lower Lovel)	
8 8	\sim	123570	MCW-1 MCW-2a	MCW-2a: Synthesis Collection Modular Metal Casework by Midmark or equal		
8 8	ر ر	123553.13	MCW-2b	MCW-2b: Plastic laminate modular casework MCW-3: Lab Modular Metal Casework	Level 2 & Level 5 Lab	
		095133 095133	MET CLG MET CLG-1	METAL CEILINGS Arktura, Vapor Sky (Continuous Pattern), Backlit Torsion Spring panels on Armstrong Torsion Ceiling Grid, Powder-coated aluminum color: Steel Grey, 24"x48"x1-1/2"	Vestibule Ceilings	
		095133	MET CLG-2	Metal Panel Ceilings, To Match MP-1 Zinc on Armstrong Ceiling Grid.	Suspended Grid	
		092216	MET FURG-1	Hat channels		
		092216	MET FURG-2	Z-furring		
		092216	MET FURG-3	Channel bridging Resilient channel		
		092210	MET FURG-5	Interlocking Ceiling Panel Clips	Monarch metal MFCEIL-H interlocking clips for hanging of PLAM or	
		064116	MET GRL	METAL AIR VENT GRILLE	MOCKETT GTMSH 1/4x8 LIGHT GRAY - TO GO IN O.R. CASEWORK	
		055213 055213	MET RAIL MET RAIL-1	METAL RAILINGS Handrail, Interior	Mounting: bracket-mounted to wall/guardrail Hand Rail: steel pipe	
		055213	MET RAIL-2	Guardrail, Interior	Finish: HPC at stair assembly Mounting: welded to stair stringer/platform frame	
					Posts: steel tube Intermediates: steel bar vertical pickets w/ bottom bar rail	
		055213	MET RAIL-3	Barrier rail (cane detection)	Finish: HPC for under-stair locations; stainless steel tube; 1" square profile	
		057300	MET RAIL-6	Guardrail, Exterior, Stainless Steel with Cable Infill and Integral Light Fixtures	1.90° Schedule 40 Round stainless steel posts and top rail, 4'-0" o.c.; 1/4" cable diameter, 3" o.c.; Basis of design: Ultratek stainless steel railing system by Wagner (or approved equal by CR Lawrence or Julius Blum). Integrated Lumenood 28 top rail lighting - refer to electrical	
					drawings; Single-leaf swing gate with cable infill where noted - will require low-voltage security connection and egress hardware.	
		092216	MET STUD	METAL STUD FRAMING (Non-Structural)		
		092216	MET STUD-1	Steel stud; C-shaped, galvanized	EQ STUD (PRO STUD CLARK D)	
		092216.23 092216	MET STUD-2	Steel snaπ wall stud, C-I shaped, galvanized Cantilevered partial wall anchor system, Basis of design: Pony Wall Heavy by Clark Dietrich		
		062023	MET TRIM	METAL TRIM		
		062023 062023	MET TRIM-1 MET TRIM-2	Richelieu, Stickman Fry Reglet, Millwork 1/4" Post, Finish: Buffed Brite Light Bronze	typ outside corner at desks, millwork panels barstock - coordinates with PLCP-1 (main wood), PLCP-2 (dark wood), PLAM-6	
		062023 062023	MET TRIM-3 MET TRIM-4	Fry Reglet, Millwork U Channel, Finish: Buffed Brite Light Bronze Fry Reglet, Millwork Corner Key, Finish: Buffed Brite Light Bronze	coordinate with PLCP-1, PLCP-2 (admin) corner trim - coordinates with PLCP-1 (main wood), PLCP-2 (dark wood).	
		062023	MET TRIM-5	Fry Reglet, 1/4" Post Termination, Finish: Buffed Brite Light Bronze	PLAM-6, DEC MET signage in meditation ceiling condition - PLCP-1, PLCP-2, PLAM-6	
		062023 062023 062023	MET TRIM-7 MET TRIM-7 MET TRIM-7a	Fry Reglet, Millwork L Angle, Finish: Buffed Brite Light Bronze Eagle Aluminum L Angle, 2" horizontal leg, Custom Finish: Match MET TRIM-7	At DEC WD-1 toe kick condition At top of terrazzo base	
		062023 062023 062023	MET TRIM-7b MET TRIM-8 MET TRIM-9	Eagle Aluminum Flat Bar, 2-1/4" long, Custom Finish: Match MET TRIM-7 Fry Reglet, 1/8" Post Termination, Finish: Buffed Brite Light Bronze Bar Stock, 1/4" x 1-1/2" flat bar, finish to match MET TRIM-5	At top of terrazzo base meditation corner condition trim at public elevator niches	
		062023	MET TRIM-10	Bar Stock, 1/4" x 1" flat bar, finish to match MET TRIM-5	trim at level 01 bench niches	
		102800	MIR-1	Elegant Lighting, Evermore 18" x 60" Rectangular Metal Framed Mirror, MR801860BR, finish: Bronze	level 01 & level 07 dressing rooms, restrooms	
		102800	MIR-2 MIR-3	Joss & Main, Eaton Metal Flat Mirror full length mirror, 28"W x 68"H x 1.5"D Finish: Gold Welded steel angle-framed mirror; Bradley Standard Model 780 series or approved equal. Finish: stainless steel. Sized as indicated on architectural drawings.	Procedural Areas	
		101100 101100	MKBD MKBD-1	MARKER BOARD McGrory Glass, Back-Coated Magnetic Glass #HGAM-391, attachment system: Captive Hook	Conference, break room, infusion display case. See elevations for size.	
		101100	MKBD-3a	Claridge, Arise - Dry Erase, Magnetic Markerboard, with frame and tray	tech 3' W x 2' H	
		101100 101100 101100	MKBD-3c MKBD-3d	Claridge, Arise - Dry Erase, Magnetic Markerboard, with frame and tray Claridge, Arise - Dry Erase, Magnetic Markerboard, with frame and tray Claridge, Arise - Dry Erase, Magnetic Markerboard, with frame and tray	tech 4' W x 4' H tech 6' W x 4' H	
		101100 101100 101100	MKBD-3e MKBD-4a MKBD-4b	Claridge, Arise - Dry Erase, Magnetic Markerboard, with frame and tray Claridge, Dry Erase, with frame and tray, non-ferrous Claridge, Dry Erase, with frame and tray, non-ferrous	tech 8' W x 4' H MRI control room, 12' W x 4' H MRI control room, 8' W x 4' H	
		074213.23 095133	MP MP-5	METAL PANELS Arktura, Vapor Sky, Vertika Channel System(hook/channel hook plates), Powder-coated aluminum	Vestibule Portal Walls	
		097813	MP-6	color: Steel Grey, 24"x48", backlit Painted Finish Aluminum Faced Composite Panel(To match MP-3)	Interior Grade Metal Panel ; (Alcubond EasyFix Bottom-to-Top) Application: Lobby Vestibules & Portal	
		102239	OWS	OPERABLE WALL SYSTEMS		
		102239	OWS-1	Modernfold, Acousti-Seal Encore Automated #14, Continuously Hinged Electric; Automatic Operation; STC 56; Panel fabric: Carnegie Xorel Sahara Matte 631; Trim/Hinge finish: Dark Bronze; Includes integral exit door with integral exit sign	Conference center	
		102800	PTD PTD-1	PAPER TOWEL DISPENSER Surface mounted automatic roll WHITE 59447A	Georgia Pacific Enmotion enMotion® Impulse® 10" 1-Roll Automated	
		102000			Touchless Roll Paper Towel Dispenser in White, CFCI, typ all locations UNO	
		102800	PTD-2	Surface mounted, automatic roll BLACK 59488A	Georgia Pacific Enmotion, enMotion® Impulse® 10" 1-Roll Automated Touchless Roll Paper Towel Dispenser in Black, CFCI. on all dark wallcovering and dark wood walls	
		064116	PLAM PLAM-1	PLASTIC LAMINATES Formica ()6995-26 Cherry Walnut finish: Oiled Wood (26) Provide matching PVC edgebanding	(main wood-look) matches WD-1	
		064116	PLAM-2	where applicable. Pionite, Pralines & Cream WW160, finish: Timberline. Provide matching PVC edgebanding where applicable.	(dark wood look) matches WD-2	
		064116	PLAM-3	Wilsonart, Belair 8234K-05, finish: Timbergrain.	(white wood look) public elevator cabs, staff break, upper cabinets, admin - Conference/Cafe	
		064116	PLAM-4	Wilsonart, 15514 Feather Velvet, finish: 31 Traceless. Provide matching PVC edgebanding where applicable.	mushroom color, pharmacy, boutique, corresponds to PT-5	
		064116	PLAM-6	Nevamar, Graphite Blue S-3023, finish: Textured. Provide matching PVC edgebanding where applicable	desks conference center, staff break, prec med lounge, admin (slate color)	
		064116	PLAM-7	Wilsonart, Atlantis D25-60, finish: Matte. Provide matching PVC edgebanding where applicable.	staff elevator cabs, L7 gowned subwait (blue)	
		064116	PLAM-9	Formica, 8683, Glass Cloth, finish: Matte. Provide matching PVC edgebanding where applicable.	linac casework (mint/teal color)	
		098316 098316	PLAS PLAS-1	PLASTER Horizontal surface, Even Better acoustical plaster system by Fellert, Silk texture, match PT-1	meditation ceiling	
		098316	PLCP	PLASTIC-LAMINATE-FACED COMPOSITE PANELS	Li Gale Oppel walls - Gypsum plaster on GYP BD-24	
		064116	PLCP-1	3/4" panels wrapped in PLAM-1, in vertical orientations use Monarch Metals Z Clip MF375(1/4"); in horizontal orientations use Monarch Metals MFCEIL-H(1.390")	elevator niches, cafe niches, meditation, pharmacy wrap (main wood), Staff Break.	
		064116	PLCP-3	horizontal orientations use Monarch Metals MFCEIL-H(1.390") 3/4" panels wrapped in PLAM-3, , in vertical orientations use Monarch Metals Z Clip MF375(1/4"); in horizontal orientations use Monarch Metals MECEIL H(1.390")	L2 balcony banquette area (whitewashed wood)	
		064116	PLCP-6	3/4" FRT MDF panels wrapped in PLAM-6, , in vertical orientations use Monarch Metals Z Clip MF375(1/4"); in horizontal orientations use Monarch Metals MFCEIL-H(1.390")	admin (blue)	
		060660	PLGL PLGL-1	PLASTIC GLAZING 3form, Varia, color: Oat N23, 1" thick. finish: Sandstone F01 both sides eased edges	reg desk dividers	
		005400	PNLG	PANELING	nlank wall nanale (clinic writing living rooms)	Jaccico Schoonharra
		ບອວ426		custom reveal 1/4", Finish: WD-1. Align joints with adjacent WD CLG-1.	Prante wan parters (clinic walting living rooms)	jessica scribenberger, jessica.schoenberger@navyisl and.com
	_	062023	PNLG-2	3/4" veneer panels with solid hardwood edges, in vertical orientations use Monarch Metals Z Clip MF375(1/4"); in horizontal orientations use Monarch Metals MFCEIL-H(1.390"), Finish: WD-1	veneer panels on z-clips, lobby	Jessica Schoenberger, jessica.schoenberger@navyisl and.com
		099124	PT PT-1	PAINT (Colors) Sherwin Williams, SW 7012 Creamy	typical walls: Level 05 finish where noted	
		099124 099124 099124	PT-2 PT-3	Sherwin Williams, SW 7007 Ceiling Bright White Sherwin Williams, SW 9097 Soft Fawn	gyp ceilings door frames (matches light wood)	
		099124 099124 099124	PT-4 PT-5 PT-6	Sherwin Williams, SW 7525 Tree Branch Sherwin Williams, SW 7640 Fawn Brindle Sherwin Williams, SW 6251 Outerspace	door frames (matches dark wood) wayfinding (mushroom color), private offices (slate blue) level 01 conference center 04 admin_cafe	
		099124 099124	PT-7 PT-8	Sherwin Williams, SW 7076 Cyberspace Sherwin Williams, SW 6966 Blueblood	dark doors at garage, 04 admin therapy gym portal accent	
		099124 099124 099124	PT-10a PT-10b	Sherwin Williams, SW 7712 Townhouse Tan Sherwin Williams, SW 6374 Torchlight Sherwin Williams, SW 6219 Rain	level 00 (yellow) portals level 00 (medium blue) corridor accent	
		099124 099124	PT-10c PT-11a PT-11b	Sherwin Williams, SW 6218 Tradewind Sherwin Williams, SW 6516 Down Pour Sherwin Williams, SW 6507 Resolute Blue	level 00 (light blue) exam/treatment accent level 01 (blue) portals, food service level 01 (light blue) corridor accent	
		099124 099124 099124	PT-11c PT-11d	Sherwin Williams, SW 9056 French Moire Sherwin Williams, SW 6471 Hazel	level 01 (light blue) exam/treatment accent level 01 (light green) pharmacy, boutique, library	
		099600 099124 099124	PT-11e PT-12a PT-12b	Wolf Gordon, Scuffmaster, color: SM10243, finish: Solid Metal Sherwin Williams, SW 9052, Blithe Blue Sherwin Williams, SW 9058 Secret Cove	level 01 (zinc panel look) main lobby level 02 (aqua) portals level 02 (dark aqua) corridor accent	
		099124 099600	PT-12c PT-12d	Sherwin Williams, SW 6764 Swimming Wolf Gordon, Scuffmaster, Custom Envirometal Rolled, color: EMR241002, application: Rolled	level 02 (light aqua) exam/treatment accent level 02 balconv corridor accent	

Material Identification Codes

Revision Spec	Code	Description	Project Notes	Rep Contact/Link Information
099124 099124	PT-13a PT-13b	Sherwin Williams, SW 6521 Notable Hue Sherwin Williams, SW 6527 Blissful Blue	level 03 (blue) portals level 03 corridor accent	
099124	PT-13c PT-14a	Sherwin Williams, SW 6526 Icelandic Sherwin Williams, SW 6375 Honeycomb	level 03 exam/treatment accent level 04 (gold) portals	
099124	PT-140 PT-14c	Wolf Gordon, Scuffmaster, color: 8373, finish: Envirometal Rolled	level 04 accent (dark brown) conference center level 04 public corridor amber panels admin front deck finish	
099600	PT-14e PT-14f	Sherwin Williams, SW6366 Ambitious Amber Sherwin Williams, SW6372 Inviting Ivory	level 04 corridor accent	
099124	PT-15a PT-15b	Sherwin Williams, SW 6215 Rocky River Sherwin Williams, SW 6213 Halcyon Green	level 05 (dark green) portals, nurse stations level 05 (light green) corridor accent	
099600 099600	PT-15c PT-15d	Wolf Gordon, Scuffmaster, color: BR11333, finish: Burnished Metallic Wolf Gordon, Scuffmaster, color: ST11269, finish: Scrubtough	level 05 (light blue) infusion feature wall level 05 (purple-blue) infusion feature wall	
099600 099600	PT-15e PT-15f	Wolf Gordon, Scuffmaster, color: ST9248, finish: Scrubtough Wolf Gordon, Scuffmaster, color: BR097, finish: Burnished Metallic	level 05 (teal) infusion feature wall level 05 (green) infusion feature wall	
099124 099124 090124	PT-16a PT-16b	Sherwin Williams, SW 6495 Great Falls Sherwin Williams, SW 6486 Reflecting Pool	level 06 (deep teal) portals level 06 (teal) corridor accent level 06 (light teal) exem/treatment accent	
099124	PT-17a	Sherwin Williams, SW 9177 Salty Dog	level 07 (navy) portals, radiologist workrooms, level 03 therapy gym	
099124 099124	PT-17b PT-17c	Sherwin Williams, SW 6536 Searching Blue Sherwin Williams, SW 6537 Luxe Blue	level 07 (purple-ish blue) corridor accent level 07 (blue) exam/treatment accent	
8 099124	PT-18	Benjamin Moore, OC-65 Chantilly Lace	lab walls 8	
099600	PTE PTE-1	PAINT - EPOXY Epoxy Paint, matches PT-1 Epoxy Paint, matches PT-2	Epoxy-based paint, Color corresponding to PT-1	
099600 8 099600	PTE-12b PTE-18	Epoxy Paint, matches PT-12 Epoxy Paint, matches PT-12b Epoxy Paint, matches PT-18	level 2 lab	
099600	PTU	PAINT - URETHANE		
099600	PTU-1	2-Component urethane wall system, Dur-A-Flex, Dur-A-Wall HP, color: Melting Snow, Satin Finish	theranostic rooms and hot toilets (where there isn't glass walls)	
	10-2			
083450 /134900	RADP	RADIATION PROTECTION		
083450 083451	RADP-1 RADP-2	Neutron/Radiation Shielding Sliding Doors Neutron/Radiation Shielding Swing Doors	Nelco Guardian Single Slider w/ Oversized Panel 6'W x 7'-8"H Nelco Guardian Swing Door at HDR Vault	
134900 134900 134900	RADP-3 RADP-4 RADP-5	Neutron/Radiation Shielded HVAC Maze Neutron/Radiation Shielded Conduit Maze Neutron/Radiation Shielding High Density Modular Block 6" x 6" x 12" module size	Thickness and makeup per Physicist Report Thickness and makeup per Physicist Report Nelco Impervious Ultrashield Modular Block 6x6x12	
134900	RADP-6	Neutron/Radiation Shielding Cast-In Opening Protection	LINAC Vault door opening jamb & head additional shielding per Physicist Report	
134900	RADP-7	Lead glass view window	Lead Glass by Amerope Enterprises, Inc; Nuclear Associates Division	
134901.01	RB		cove at resilient straight at correct	
096513 096513	RB-1	Johnsonite, 6"H rubber wall base. color: 66 Either Ore	6" base, typical base, used at PLAM-2	
096513	RB-2 RB-3	Roppe, 6"H rubber wall base, color: #631 Sahara Johnsonite, 6"H rubber wall base, color: TG2 Shark Fin	6" base, matches PLAM-1 Back-of-House, elec room, idf, clean rooms	
096513 096513	RB-4 RB-5	Johnsonite, 6"H rubber wall base, color: Grey Haze Johnsonite, 6"H rubber wall base, color: #55 Silver Grey	6" base, matches PLAM-3 6" base, matches PT-5	
096513 096513	RB-6 RB-7	Johnsonite Millwork Base, Mandalay 6", color: 66 Either Ore Johnsonite, 6"H rubber wall base, color: #92 Blue Lagoon	meditation, infusion feature wall, stone walls 6" base, matches PLAM-6 / PT-6	
096513 096513	RB-9	Nora, Sanitary Base, color: #703b Clam Bake Nora, Sanitary Base, color: #2780 Phantom Mist Pappa 6"H nikhor wall base, color: #240 Nimera	level 2 corridor sanitary base	
096513 096513	RB-11 RB-12	Johnsonite, 6"H rubber wall base, color: #649 Milmosa Roppe, 6"H rubber wall base, color: #689 Sea Glass	6" base, matches PT-10a (lower level) 6" base, matches PT-11a (level 01) 6" base, matches PT-12a	
096513	RB-13 RB-14	Roppe, 6"H rubber wall base, color: #656 Bluebell Johnsonite, 6"H rubber wall base, color: #VM8 Mr. Sunshine	6" base, matches PT-13a 6" base, matches PT-14a	
096513 096513	RB-15 RB-16	VPI, 6"H rubber wall base, color: #89 Ivy Roppe, 6"H rubber wall base, color: #654 Lagoon	6" base, matches PT-15a 6" base, matches PT-16a	
096513 096513	RB-17 RB-18	Johnsonite, 6"H rubber wall base, color: #18 Navy Blue Johnsonite, 2.5"H rubber wall base, color: TG2 Shark Fin	6" base, matches PT-17a 2.5" cove base, pedestrian bridge, matches PT-1 at curtainwall	
096723	RES RES_1	RESINOUS FLOORING	lower level mechanical rooms that have numbing/chillers, penthouse	
096723	RES-2	color: Medium Grey, with 6" integral cove base Dur-A-Flex, Poly-crete SLB with TF Plus, 3/16" system, color: Charcoal, with 6" integral cove base	kitchen flooring	
096723	RES-3	Dur-A-Flex, Shop Floor MR with Pigmented Armor topcoat and Dur-A-Glaze MVP moisture barrier,	new color to define level 8 workspaces	
096723	RES-4	Color: Charcoal, with 6" Integral cove base Dur-A-Flex, Dur-A-Chip with Elast-O-Coat, Macro Chip blend: Pewter Dur A Flex, Dur A Chip with Flext O Cost, Clausters Pland color: Aver	Radioactive waste room	
096723	RES-0	Dur-A-Flex, Dur-A-Chip with Elast-O-Coat, Claystone Blend, color: Avon	Management in level 2 ASC sterile processing, decontam, instrument processing (L2)	
096723	RES-7	Dur-A-Flex, Poly-crete SLB with TF Plus, 3/16" system, color: Red, with 6" integral cove base	red line needed for surgery (refer to plan markups from DD#3)	
	DET			
096536	RFT-1	Flexco, Delane ESD control solid vinyl tile, color: Charcoal/Light Gray 66, size: 24" x 24". Monolithic installation.	MRI room accent + zone 3 static dissipative flooring - DARK	
096536	RFT-2	Flexco, Delane ESD control solid vinyl tile, color: Gray/Dark Gray 42, size: 24" x 24". Monolithic installation.	MRI room static dissipative flooring - LIGHT	
096536	RFT-3	Flexco, Delane ESD control solid vinyl tile, color: Golden Gate 311, size: 24" x 24". Monolithic installation.	MRI Zone 3 static dissipative flooring - WOOD TONE	
096519	RF1-4	Interface, Northern Grain, color: A02611 Oak Satin, size: 9.845 in x 39.38 in, thickness: 4.5 mm. Ashlar installation. Interface, Northern Grain, color: A02607 Dark Wash, size: 9.845 in x 39.38 in, thickness: 4.5 mm.	tield (medium wood look) LV l	
096519	RFT-6	Ashlar installation. Interface, Shantung, Silk Complex, color: A02704 Orchid, size: 9.845 in x 39.38 in, thickness: 4.5	light gray LVT accent	
096519	RFT-7	mm. Ashlar installation. Norament, Satura, color: 5107 Callisto, size: 39.53" x 39.53", thickness: 3.5mm. Provide	matches RST-1, egress stairs	
096519	RFT-8	Mohawk, Creative Terrain, color: 987 Graphite, 18" x 36", 3mm thickness. Product to be burnished per manufacturer's instructions upon installation. Monolithic installation.	Back-of-House corridors	
096519 096519	RFT-9 RFT-10	Interface, Native Fabric, color: A00801 Flax, 50cm x 50cm, 4.5mm thickness, Ashlar installation Interface, Shantung, color: A02708 Black Rose, 25cm x 1m, 4.5mm thickness, Ashlar installation	COORDINATES WITH RSF-2 Radiologist work rooms (really dark LVT)	
096516	RSF	RESILIENT SHEET FLOORING		
096516	RSF-1	Mannington, Realities III, color: Southern Oak Cotton, size: 6'-0" roll, thickness: 2.03 mm, color	field (medium wood look) sheet flooring to coordinate with field LVT,	
096516	RSF-2	Mannington, Entwined, Suber, color: Kamala, size: 6'-0" roll, thickness: 2.03 mm, color matching heat weld: 842407 Bedrock	dark sheet accent to coordinate with dark abstract lvt	
096516	RSF-3	Mannington, Entwined, Suber, color: Lead White, size: 6'-0" roll. thickness: 2.03 mm, color matching heat weld: 842472 Ash Gray	light sheet accent to coordinate with light gray LVT, Linac circle	
096516	RSF-4	Mannington, Biospec MD, color: New Mineral Gray, size: 6'-6" roll, thickness" 2.03 mm, color matching heat weld: 842524 Timberwolf	clean, soiled, EVS flooring	
096516	RSF-5	Mannington, Biospec MD, color: Cherry Tomato, size: 6'-6" roll, thickness" 2.03 mm, color matching heat weld: 842510 Scarlet	demarcation line (red) - chemo pharmacy	
096516	RSF-7	weld: WR553 Nora, Noraplan Unita, color: 7101 Here-N-There. size: 15 m x 1.22 m thickness: 2.0 mm color	clinic waiting to coordinate w/ light terrazzo	
096516	RSF-8	Matching heat weld: 7035 Nora, Noraplan Unita, color: 7106 Right-N-Left, size: 15 m x 1.22 m, thickness: 2.0 mm, color	clinic waiting to coordinate w/ medium terrazzo	
096516	RSF-9	Nora, Noraplan Unita, color: 7107 High-N-Low, size: 15 m x 1.22 m, thickness: 2.0 mm, color matching heat weld: 2931	clinic waiting to coordinate w/ dark terrazzo	
096516	RSF-10	Mannington, Realities III, Persian Walnut, color: Balsam, 6'-0" roll, thickness: 2.03 mm, color matching heat weld: 842486 Oak Nut	dark wood-look sheet, matches rft-5	
096516	RSF-11	Ecore, Balanced Motivate Class I, color: Catalina, 1.78m roll, thickness: 7mm, color matching heat weld	therapy gym (L3) - main athletic area	
096516	RSF-12	Ecore, Restorative Motivate Class I, color: Brighton, 1.78m roll, thickness: 7mm, color matching heat weld	therapy gym (L3) - desk & clean counter area	
096516	RSF-13	Nora, Noraplan Environcare, color: Clam Bake, size: 15 m x 1.22 m, thickness: 2.0 mm, color matching heat weld: 2382 Nora, Noraplan Environcare, color: Baseball Game, size: 15 m x 1.22 m, thickness: 2.0 mm, color	ORS (L2) - Tiela color (corridors)	
096516	RSF-15	matching heat weld: 6708 Nora, Noraplan Environcare, color: Pool Party, size: 15 m x 1.22 m, thickness: 2.0 mm, color	ORs (L2) - OR inner boundary (sterile)	
096516	RSF-16	matching heat weld: 7065 Nora, Noraplan Environcare, color: Apple Picking, size: 15 m x 1.22 m, thickness: 2.0 mm, color matching heat weld: 7073	red line needed for surgery	
000540	RST			
096513	RST-1	Norament Satura Stairtread, color: 5107 Callisto, equip with Nora Visually Impaired Strip in Safety	matches RFT-7, egress stairs	
		Yellow and photoluminescent nosing strip. Refer A501 for details.		
097216.16	RS VWC	RESILIENT SHEET VINYL WALLCOVERING		
097216.16	RS VWC-1	Altro, Whiterock, Linen-41, Tull neight, color coordinating heat weld seams Altro, Whiterock, Linen-41, Mounted 5'-6" AFE color coordinating heat weld seams	seamed panets - tab, chemo pharmacy, radioactive waste rooms, clinical labs, stem cell therapy.	
097216.16	RS VWC-3	Altro, Whiterock, Linen-41, Mounted 7'-2" AFF, color coordinating heat weld seams	LL med gas	
104413	SIGN-1	SIGNAGE Fire Extinguisher Cabinet Signage	Interior; Aluminum; White; FireSupplvDepot 4" x 12" 90 Degree Fire	
104413	SIGN-2	Annunciator Panel Signage	Extinguisher Arrow Sign Interior; Aluminum; White Sign Red Graphic; 9" x 7" Projection Mount	
			Red Fire Annunciator Sign; Viewable both sides	
102800	SHCR	SHOWER CURTAIN & ROD		
102800 102800	SHCR-1 SHCR-2	Shower Curtain & Rod	(B-6047) (B-204-2&1) (B-204-3&1) (B-6107) (B-204-2&1) (B-204-3&1)	
102800 102800	SHFS SHFS-1	SHOWER FREESTANDING SEAT	Gray, Aluminum, Reinforced Frame, 550 Lb. Capacity. #G2-102RX1	
		Medline Bariatric Shower Chair with Back		
	SHLVG	SHELVING		
	อпடขอ-1	freestanding electrified uprights in white finish (floor to ceiling attachment without back panels, wide: mix of White Matte laminate with Matte White Powercoat supports and backlit LED shelves -	bounde capie suerving	
		see elevation, Metal Cabinet with Three Wood Drawers, locking, finish: Matte White Powdercoat and Matte White Laminate face		
	SHLVG-2 SHLVG-3	Vertical Ledge, Pier Plinth No. 2, 20"x18"x28" tall, medium tabletop unit Vertical Ledge, Pier Plinth No. 1, 38"x18"x38" tall, large tabletop unit	boutique rreestanding, small square boutique freestanding, rectangle	
	SLD	MANUAL SLIDING DOORS		



Material Identification Codes

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097200VWC-12bMDC, Designer Gallery, Ancient Juniper, color: Opallevel 02 balcony waiting097200VWC-12cCustom printed Type II vinyl wallcovering (sepia-toned) with signage consultant. Provide Level 5 gyp finish.level 02 corridor graphic wayfinding097200VWC-13aCustom printed Type II vinyl wallcovering (gradient artwork), BOD: Designtex. Refer to forthcoming graphics package. Provide Level 5 gyp finish.level 03 gradient, waiting097200VWC-13aCustom printed Type II vinyl wallcovering (gradient artwork), BOD: Designtex. Refer to forthcoming graphics package. Provide Level 5 gyp finish.level 03 corridor wayfinding097200VWC-13bCustom printed Type II vinyl wallcovering (sepia-toned) with signage consultant. Provide Level 5 gyp finish.level 03 corridor wayfinding097200VWC-13cCustom printed Type II vinyl wallcovering (sepia-toned) with signage consultant. Provide Level 5 gyp finish.level 03 corridor wayfinding097200VWC-13cWolf Gordon, Macao, color: Rainlevel 03 dressing rooms & EOS room097200VWC-14cMDC, Esquire, Tidal, color: QuarryLevel 03 reg desk recess097200VWC-15aCustom printed Type II vinyl wallcovering (gradient artwork), BOD: Designtex. Refer to forthcoming graphics package. Provide Level 5 gyp finish.level 03 reg desk recess097200VWC-13cWolf Gordon, Macao, color: Smokelevel 03 reg desk recess097200VWC-15aCustom printed Type II vinyl wallcovering (gradient artwork), BOD: Designtex. Refer to forthcoming graphics package. Provide Level 5 gyp finish.level 05 gradient, waiting
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097200VWC-13aCustom printed Type II vinyl wallcovering (gradient artwork), BOD: Designtex. Refer to forthcoming graphics package. Provide Level 5 gyp finish.level 03 gradient, waiting097200VWC-13bCustom printed Type II vinyl wallcovering (sepia-toned) with signage panel. BOD: Designtex. Refer to forthcoming graphics package coordinated with signage consultant. Provide Level 5 gyp finish.level 03 corridor wayfinding097200VWC-13cWolf Gordon, Macao, color: Rainlevel 03 dressing rooms & EOS room097200VWC-13dWolf Gordon, Macao, color: Smokelevel 03 reg desk recess097200VWC-14cMDC, Esquire, Tidal, color: QuarryLevel 04 corridor accent - leading to admin097200VWC-15aCustom printed Type II vinyl wallcovering (gradient artwork), BOD: Designtex. Refer to forthcoming graphics package. Provide Level 5 gyp finish.level 05 gradient, waiting
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097200 VWC-17c AiNO, custom color: 0.52117-28-C Blur Fleck Ocean w/100% white ink at color, flecks to remain breast imaging gowned subweit
097200 VWC-17d AiNO, custom color: 052117-28-C. Blur Fleck Pastel w/100% white ink at color, flecks to remain breast imaging gowind subwait
standard, refer to custom sample 24-001-C-A
007200 VANC 17f MDC Water Street After midnight 250414/0
097200 VWC-17f MDC, Water Street, After midnight, 2504WS mammo rooms accent 102800 WP MARTER FOR CONSTANT
097200 VWC-17f MDC, Water Street, After midnight, 2504WS mammo rooms accent mammo rooms accent 102800 WR WASTE RECEPTACLE Image: Constraints of the street in the street
097200 VWC-17f MDC, Water Street, After midnight, 2504WS mammo rooms accent mammo rooms accent 102800 WR WASTE RECEPTACLE Image: Constraint of the street
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097200 VWC-17f MDC, Water Street, After midnight, 2504WS mammo rooms accent mammo rooms accent 1 102800 WR WASTE RECEPTACLE Image: Constraint of the street of the stre

Material Identification Codes

Revision	Spec	Code	Description Navy Island, veneer species: Walnut, veneer cut, select or better: plain sliced, color: NI-937, sheen:	Project Notes dark wood, matches PLAM-2	Rep Contact/Link Information
			10, sample #: D41558		jessica.schoenberger@na and.com
	061053 061053	WD BLKG WD BLKG-1	WOOD BLOCKING Wood Blocking, Fire-retardant Treated		
	095426 095426	WD CLG WD CLG-1	WOOD CEILINGS Linear Wood Planks: Soundply, Lino Acoustic 8" Planks, 1" thick, suspended grid (using plank clips),	clinic waiting; serving	Jessica Schoenberger,
	095426	WD CLG-2	Soundply Alta Acoustic Panels, 5'-0" x 10'-0" panels, 1" thick, torsion spring, CP-LRM25, custom	main lobby, pedestrian bridge, break rooms	and.com Jessica Schoenberger,
	095426	WD CLG-2a	reveal 1/4" black, Finish: WD-1 Soundply Alta Acoustic Panels, 5'-0" x 6'-10" panels, 1" thick, torsion spring, CP-LRM25, custom	conference center prefunction, corridor A509 on 5th floor	jessica.schoenberger@na and.com Jessica Schoenberger,
	095426	WD CLG-2b	reveal 1/4" black, Finish: WD-1 Soundply Alta Acoustic Panels, 3'-0" x 5'-0" panels and 5'-0" x 5'-0" panels to align with exterior	main lobby perimeter, cafe perimeter	jessica.schoenberger@na and.com Jessica Schoenberger,
	095426	WD CLG-3	mullions, 1" thick, torsion spring, CP-LRM25, custom reveal 1/4" black, Finish: WD-1 Soundply Alta Acoustic Panels, 5'-0" x 10'-0" panels, 1" thick, torsion spring, CP-LRM25, custom	admin 4th floor	jessica.schoenberger@na and.com Jessica Schoenberger,
	095426	WD CLG-3a	reveal 1/4" black, Finish: WD-2 Soundply Alta Acoustic Panels, 5'-0" x 6'-5" panels, 1" thick, torsion spring, CP-LRM25, custom	admin boardroom	jessica.schoenberger@na and.com Jessica Schoenberger,
	095426	WD CI G-3b	reveal 1/4" black, Finish: WD-2 Soundply Alta Acoustic Panels, 5'-0" x 5'-0" panels, 1" thick, torsion spring, CP-I RM25, custom	admin boardroom	jessica.schoenberger@na and.com
	095426	WD CI G-3c	reveal 1/4" black, Finish: WD-2 Soundbly Alta Acoustic Papels, See drawings for papel, dimensions, 1" thick, torsion spring	admin private offices	jessica.schoenberger@na and.com
	000420		CP-LRM25, custom reveal 1/4" black, Finish: WD-2		jessica.schoenberger@na and.com
	095426 095426	WD CLGTR WD CLGTR-1	WOOD CEILING TRIM Navy Island, Soundply Vertical Transition Trim. Height determined by difference in ceiling elevations - see RCP. Refer to drawings for grain direction. Finish: WD-1	coordinates with WD CLG-1, 2 (main wood)	Jessica Schoenberger, jessica.schoenberger@na
	095426	WD CLGTR-2	Navy Island, Soundply Vertical Transition Trim. Height determined by difference in ceiling elevations - see RCP. Refer to drawings for grain direction. Finish: WD-2	coordinates with WD CLG-3 (dark wood)	and.com Jessica Schoenberger, iessica.schoenberger@na
					and.com
	064000	WD FAB-1	Blik - Custom Wood Slat Wall on Film: 1-1/2" thick x 3-1/2" deep vertical slats spaced 10" on center,	Main & Link Lobby L2 Slat Wall	Sean Sliger,
	097773	WD FAB-2	(aluminum siats with printed wood finish to match PLAM-1); custom gradient Type II film with adhesive back, butt seams Blik - Custom Wood Slat Wall on Film: 1" thick x 2" deep vertical slats spaced 6" on center, custom	pedestrian bridge	Sean@wnatisblik.com
	062023	WD FAB-3	wood to match PLAM-1 (engineered wood); custom gradient Type II film with adhesive back, butt seams Custom Wood Screen Wall: 2" thick x 6" deep vertical slats spaced 6" on center, custom wood to	meditation room slat wall	sean@whatisblik.com
	097773	WD FAB-4	match PLAM-1, with GL-5 glazing between slats Blik - Custom Wood Slat Wall: 1" thick x 2" deep vertical slats spaced 6" on center, custom wood to	admin entry slats (dark wood)	Sean Sliger,
	062023	WD FAB-5	Multi-layered (5 layers) GYP panels with integrated LED edge lighting at each layer, applied with	infusion mountain feature - coord with arch	sean@whatisblik.com
	062023	WD FAB-6	PT-15c, d, e, f & FWC-5 Custom Wood Ribbed Wall: hardwood veneer planks with solid wood edges, Finish: WD-1, mounted	private registration, boutique entrance, cafe slat walls	
	062023	WD FAB-7	on PNLG-2. See A848.1 for typical plank width/pattern. Custom shadow box wall for art gallery. 3/4" solid wood boxes painted PT-1 of various sizes - refer to elevation drawings.	o admin gallery wall	
	102600	WGC	WALL GUARD - CORNER		
	102600	WGC-1	InPro, Aluminum Corner Guards, 3/4" wings, Light Bronze, Mounted Full Height, no exposed fasteners	bronze finish - tumor board	
	102600	WGC-2 WGC-3	InPro, Stainless Steel Surface Mount Corner Guard, 2" wings, Mounted Full Height, no exposed fasteners	parking garage, Back-of-House	
	102600	WGC-4	fasteners InPro, Aluminum Corner Guards, 3/4" wings, Clear Anodized Aluminum, Mounted Full Height, no exposed fasteners	public - on light colored surfaces (lower level yellow, white paint, etc)	
	102600 102600	WGR WGR-1	WALL GUARD - RAIL Acrovyn, ECR-32S Series stainless steel crash rail, mounted 3'-0" AFF to top of rail, 4" high rail	stainless steel bumper rail (needed for Back-of-House corridors, penthouse corridor, etc)	
	102600	WGR-2	Acrovyn, ECR-32S Series stainless steel crash rail, mounted 1'-0" AFF to top of rail, 4" high rail	stainless steel crash rail (needed for Back-of-House corridors, penthouse corridor, etc)	9
	102600 102600	WGS WGS-1a	WALL GUARD - SHEET Inpro, Palladium Rigid Sheet, .040" thickness, color: 0103 White Sand, texture: Velvet. 1/16" color matching caulk top cap and joints. Mounted Full Height. Provide overlap with base as recommended	hot labs	
	102600	WGS-1b	by manufacturer. Inpro, Palladium Rigid Sheet, .040" thickness, color: 0103 White Sand, texture: Velvet. 1/16" color matching caulk top cap and joints. Mounted to 4'-6" AFF (utilizing 4'-0" sheet and 6" base). Provide	typ throughout Back-of-House spaces	
	102600	WGS-1c	overlap with base as recommended by manufacturer. Inpro, Palladium Rigid Sheet, .040" thickness, color: 0103 White Sand, texture: Velvet. 1/16" color matching caulk top cap and joints. Mounted to 3'-6" AFF. (utilizing 3'-0" sheet and 6" base) Provide	typ in exam rooms	
	102600	WGS-1d	overlap with base as recommended by manufacturer. Inpro, Palladium Rigid Sheet, .040" thickness, color: 0103 White Sand, texture: Velvet. 1/16" color matching caulk top cap and joints. Mounted to 7'-2" AFF. Provide overlap with base as	L2 equipment rooms, request to have 7'-2"	
	102600	WGS-2a	recommended by manufacturer. Construction Specialties, Acrovyn, .040" thickness, 1609 White Papyrus, texture: Suede. Wood grain to run visually vertical. 1/16" color matching caulk top cap and joints. Mounted Full Height. Provide	(matches field wood) HNR-T, HEME/BMT, urgent care, draw bays,	
	102600	WCS 2b	coordinating outside corner trim and edge trims where shown. Provide overlap with base as recommended by manufacturer.	partial height look at rad med elevation	
	102000	WGS-2D	matching caulk top cap and joints. Mounted to 3'-6" AFF. Provide overlap with base as recommended by manufacturer.		
	102000	WG3-5	Microtexture, Wood grain to run visually vertical. 1/16" color matching caulk top cap and joints. Mounted Full Height. Provide coordinating outside corner trim and edge trims where shown. Provide overlap with base as recommended by manufacturer.		
	102600	WGS-4	InPro, Smooth Bronze, 5E027, .040" thickness, 1/16" color matching caulk joint at verticals. Mounted Full height. Provide overlap with base as recommended by manufacturer.	NEW Cafe backsplash	
	102600	WGS-10	Inpro, Palladium Rigid Sheet, .040" thickness, color: 0379 Porcelain Blue, texture: Velvet. 1/16" color matching caulk top cap and joints. Mounted to 3'-6" AFF. Provide overlap with base as	r level 00 AND level 06 exam/treatment accent wall protection, matches PT-10c & PT-16c	
	102600	WGS-11	recommended by manufacturer. Inpro, Palladium Rigid Sheet, .040" thickness, color: 0166 Serenity, texture: Velvet. 1/16" color matching caulk top cap and joints. Mounted to 3'-6" AFF. Provide overlap with base as	level 01 exam/treatment accent wall protection, matches PT-11c	
	102600	WGS-12	recommended by manufacturer. Construction Specialties, Acrovyn, .040" thickness, 1585 Morning Dew Blue, texture: Suede. 1/16" color matching caulk top cap and joints. Mounted to 3'-6" AFF. Provide overlap with base as	level 02 accent, matches PT-12c	
	102600	WGS-13	recommended by manufacturer. Construction Specialties, Acrovyn, .040" thickness, 309 Tranquil Blue, texture: Suede. 1/16" color matching caulk top cap and joints. Mounted to 3'-6" AFF. Provide overlap with base as	matches PT-13c	
		WGS-14	Construction Specialties, Acrovyn by Design, .040" thickness, Linen: Nantucket, texture: Suede. 1/16" color matching caulk top cap and joints. Mounted to 6'-3" AFF. Provide overlap with base as	Matches PT-14e	
		WGS-14a	Construction Specialties, Acrovyn by Design, .040" thickness, Linen: Nantucket, texture: Suede.	level 04 radiotheranostics, accent in long term infusion, aligns with tv	
	102600	WGS-17	1/16 color matching callk top cap and joints. Mounted to 6-3° AFF. Provide overlap with base as recommended by manufacturer.	MINWORK	
			matching caulk top cap and joints. Mounted to 3'-6" AFF. Provide overlap with base as recommended by manufacturer.		
	122000/ 122413	WT			
	122413	WT-1	MechoShade, EcoVeil Screens, 1550 Series (3% open), #1569 Silver Birch, motorized shades MechoShade, EcoVeil Screens, 1550 Series (3% open), #1569 Silver Birch, manual shades	motorized shades, public, 3% open	
	122413	- WT-4	MechoShade Dual Roller Shades, EcoVeil Screens, inside face: 1550 Series (3% open), #1569 Silver Birch, outside face: Chelsea Blackaut, 0270 Saries (white backing), #0290 Silver manual	infusion, precision med, apheresis patient bays and rooms	
	122200	WT-5	shades Manual Ripplefold drapery: Carnegie, Grasslands 4834, color: 1, Kirsch ripplefold draperv system.	admin boardroom	
	122413	WT-7	80% fullness, baton draw, single side stacking MechoShade Dual Roller Shades, EcoVeil Screens, inside face: 1550 Series (3% open), #1569 Silver Birch, outside face: Chelsea Blackout, 0270 Series (white backing), #0280 Silver, motorized shades	motorized dual shades, 3% and blackout - conference rooms, tumor board	
			END OF LIST		

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400004 40	Over the Annula make Original and an

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November 5, 2024 Revised: November 27, 2024 Revised: March 7, 2025 Revised April 15, 2025

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SECTION 123553.13 - METAL LABORATORY CASEWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Metal laboratory casework.
 - 2. Countertops.
 - 3. Laboratory casework systems.
 - 4. Laboratory accessories.
- B. Related Requirements:
 - 1. Section 061053 "Miscellaneous Rough Carpentry" for wood blocking for anchoring laboratory casework.
 - 2. Section 092216 "Non-Structural Metal Framing" for reinforcements in metal-framed partitions for anchoring laboratory casework.
 - 3. Section 096513 "Resilient Base and Accessories" for resilient base applied to laboratory casework.

1.2 WORK INCLUDED

- A. Furnishing of materials, products, accessories, tools, equipment, services, scaffolding, ladders, transportation, supervision, labor, product protection, and other items that may not be specifically mentioned, but are necessary for the fabrication and installation of laboratory casework.
- B. Furnish and install laboratory casework including, but not limited to, counter tops, reagent shelves, tables, standards, slotted studs, filler panels, scribes, knee space panels, accessories, utility space framing, utility space closure panels between base cabinets and at exposed ends of utility spaces, laboratory sinks, cup sinks, cup drains, strainers, overflows and sink outlets with integral or separate tail pieces and miscellaneous items of equipment as listed in these specifications and as shown on drawings, including delivery to the building, unpacking, installing, leveling and scribing to walls and floors as required.
- C. Furnish and deliver packed in boxes for receipt, handling and installation by others; electrical service fixtures, task lights including fluorescent bulbs, electrical receptacles and switches listed in these specifications and as shown on drawings as part of the laboratory casework. The above-defined items are to be supplied, not attached, and loose in boxes, properly marked for tailgate delivery.
- D. Furnish and set in place for installation by other trades; service fittings where part of the laboratory casework, listed in the specifications or shown on drawings. Tailpieces shall be furnished less couplings required to connect to the trap or drain piping system. Install service fittings "finger tight".

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
- B. Keying Conference: Conduct conference at Project site. Incorporate keying conference decisions into final keying requirements.

1.4 COORDINATION

- A. Coordinate layout and installation of framing and reinforcements for support of laboratory casework.
- B. Coordinate installation of laboratory casework with installation of laboratory equipment.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For laboratory casework.
 - 1. Include plans, elevations, sections, and attachments to other work including blocking and reinforcements required for installation.
 - 2. Indicate types and sizes of casework.
 - 3. Indicate manufacturer's catalog numbers for casework.
 - 4. Show fabrication details, including types and locations of hardware.
 - 5. Indicate locations and types of service fittings.
 - 6. Include details of utility spaces showing supports for conduits and piping.
 - 7. Include details of support framing system.
 - 8. Include details of exposed conduits, if required, for service fittings.
 - 9. Indicate locations of and clearances from adjacent walls, doors, windows, other building components, and laboratory equipment.
 - 10. Include coordinated dimensions for laboratory equipment specified in other Sections.
- C. Keying Schedule: Include schematic keying diagram, and index each key set to unique designations that are coordinated with the Contract Documents.
- D. Samples for Initial Selection: For casework finishes and materials requiring color selection.
- E. Samples for Verification: For each type of casework, exposed-hardware, and countertopmaterial finish, in manufacturer's standard sizes.
 - 1. Base Cabinet: One full-size wide, finished base cabinet complete with hardware, doors, and drawers but without countertop.
 - 2. Wall Cabinet: One full-size wide, finished wall cabinet complete with hardware, doors, and adjustable shelves.
 - 3. Full-Size Samples: Maintain at Project site during construction in an undisturbed condition as a standard for judging the completed Work. Unless otherwise indicated, approved sample units may become part of the completed Work if in undisturbed condition at time of Substantial Completion. Notify Architect of their locations.
 - 4. Adhesives and sealants.
 - 5. Countertop material (one of each specified): 12"x12"x1" thick, showing top, front edge and backsplash construction.

F. Delegated Design Submittals: For laboratory casework indicated to comply with seismic performance requirements, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
- B. Product Test Reports:
 - 1. Casework: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating compliance of laboratory casework with requirements of specified product standard and system structural performance specified in "Performance Requirements" Article.
 - 2. Countertop Surface Material: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating compliance of laboratory countertop surface material with requirements specified for chemical and physical resistance.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish complete touchup kit for each type and color of casework finish provided. Include fillers, primers, paints, and other materials necessary to perform permanent repairs to damaged laboratory casework finish.
- B. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Cabinet Mounting Clips and Related Hardware: Quantity equal to 5 percent of amount installed, but no fewer than 20 of each type.

1.8 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer that produces casework of types indicated for this Project that has been tested for compliance with SEFA 8 M.

1.9 TESTING

A. The laboratory casework manufacturer shall be required to include in their initial submittals, certified test reports indicating compliance of their laboratory casework finish and work top materials with requirements specified for chemical and physical resistance; and confirmation of load performance for movable tables. The material test reports shall be performed by an independent testing agency qualified for testing indicated, as documented according to ASTME548.

1.10 FIELD MEASUREMENTS

A. It is the laboratory casework manufacturer's responsibility to verify field measurements and that equipment will fit through entryways, corridors and door openings enabling a smooth flow of

equipment to its proper location in the building. Wall-to-wall counter tops are to be installed with a maximum 1/4-inch gap.

1.11 DELIVERY, STORAGE, AND HANDLING

- A. Deliver casework only after painting, utility rough-ins and similar operations that could damage, or deteriorate casework have been completed in installation areas. If casework must be stored in other than installation areas, store only in areas where environmental conditions meet requirements specified in "Project Conditions" Article of this specification section.
- B. Protect finished surfaces during handling and installation with protective covering of polyethylene film or other suitable material.

1.12 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install laboratory casework until building is enclosed, utility roughing-in and wet-work are complete, and HVAC system is operating and maintaining temperature and relative humidity at levels planned for building occupants during the remainder of the construction period.
- B. Established Dimensions: Where laboratory casework is indicated to fit to other construction, establish dimensions for areas where casework is to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.
- C. Field Measurements: Where laboratory casework is indicated to fit to existing construction, verify dimensions of existing construction by field measurements before fabrication and indicate measurements on Shop Drawings. Provide fillers and scribes to allow for trimming and fitting.
- D. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before enclosing them, and indicate measurements on Shop Drawings.

1.13 COORDINATION

- A. Coordinate layout of metal framing and reinforcements in wall assemblies for support of the casework.
- B. Coordinate installation of casework with installation of other laboratory equipment including rough-in locations and requirements.

1.14 MOCK-UP

- A. Laboratory casework manufacturer shall erect a laboratory casework mock-up at the location indicated on the Drawings. Once selected, the assembly shall be constructed and assembled in accordance with the construction documents. Modifications required to meet this specification shall be incorporated into the overall design of the project without change in contract sum.
- B. Once installed and approved, the mock-up shall be maintained at the project site during construction as a standard for judging the completed work.

1.15 WARRANTY

- A. Furnish a written warranty that work performed under this Section shall remain free from defects as to materials and workmanship for a period of one (1) year from date of Substantial Completion. Defects in materials and workmanship that may develop within this time are to be replaced without cost or expense to the Owner. Defects include, but are not limited to:
 - 1. Ruptured, cracked.
 - 2. Discoloration or lack of finish integrity.
 - 3. Cracking or peeling of finish.
 - 4. Slippage, shift, or failure of attachment to wall, floor, or ceiling.
 - 5. Weld or structural failure (visible weld marks).
 - 6. Warping or unloaded deflection of components.
 - 7. Failure of hardware.

1.16 EXCEPTIONS TO DRAWINGS AND SPECIFICATION

A. All exceptions shall be subject to written approval prior to receipt of bid. If no written communication is received prior to receipt of bid and approval indicated in an addendum, it is assumed that bidder will be in total compliance with specifications and will be held responsible for default or delay, regardless of any statement to the contrary in their written proposal.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain laboratory casework from single source from single manufacturer unless otherwise indicated.
- B. Product Designations: Drawings indicate sizes and configurations of laboratory casework by referencing designated manufacturer's catalog numbers. Other manufacturers' laboratory casework of similar sizes and similar door and drawer configurations and complying with Specifications may be considered. See Section 016000 "Product Requirements."
- C. Laboratory furniture systems and systems components must be UL 962 submitted, approved and listed. Products must bear the UL Mark and shall be identified to those products that were evaluated by UL and found to comply with UL's requirements. The testing standard shall include Dielectric, Grounding Impedance, Stability, Strain Relief and Strength tests.

2.2 PERFORMANCE REQUIREMENTS

- A. System Structural Performance: Laboratory casework and support framing system are to withstand the effects of the following gravity loads and stresses without permanent deformation, excessive deflection, or binding of drawers and doors:
 - 1. Support Framing System: 600 lb/ft. (900 kg/m).
 - 2. Suspended Base Cabinets (Internal Load): 160 lb/ft. (240 kg/m).
 - 3. Work Surfaces (Including Tops of Suspended Base Cabinets): 160 lb/ft. (240 kg/m).
 - 4. Wall Cabinets (Upper Cabinets): 160 lb/ft. (240 kg/m).
 - 5. Shelves: 40 lb/sq. ft. (200 kg/sq. m).

- B. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design laboratory casework installation.
- C. Seismic Performance: Laboratory casework installation is to withstand the effects of earthquake motions determined in accordance with ASCE/SEI 7.
 - 1. Design earthquake spectral response acceleration, short period (Sds) for Project is indicated on Drawings.
 - 2. Component Importance Factor: As indicated on Drawings.
 - 3. Base Cabinet Load (Including Countertop and Load on Countertop): 320 lb/ft. (480 kg/m).
 - 4. Wall Cabinet (Upper Cabinet) Load: 160 lb/ft. (240 kg/m).

2.3 CASEWORK, GENERAL

- A. Casework Product Standard: Comply with SEFA 8 M, "Laboratory Grade Metal Casework."
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.4 METAL LABORATORY CASEWORK (MCW-3)

- A. Steel Sheet: Cold-rolled, commercial steel (CS) sheet, complying with ASTM A1008/A1008M; matte finish; suitable for exposed applications.
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Bedcolab.
 - 2. CIF Lab Solutions LP.
 - 3. Hamilton Laboratory Solutions, LLC.
 - 4. Kewaunee Scientific Corporation.
 - 5. Mott Manufacturing Ltd.
- C. Nominal Metal Thickness:
 - 1. Sides, Ends, Fixed Backs, Bottoms, Tops, Soffits, and Items Not Otherwise Indicated: 0.048 inch (1.21 mm). Except for flammable liquid storage cabinets, bottoms may be 0.036 inch (0.91 mm) if reinforced.
 - 2. Back Panels, Doors, Drawer Fronts and Bodies, and Shelves: 0.036 inch (0.91 mm) except 0.048 inch (1.21 mm) for back panels and doors of flammable liquid storage cabinets and for unreinforced shelves more than 36 inches (900 mm) long.
 - 3. Intermediate Horizontal Rails, Table Aprons and Cross Rails, Center Posts, and Top Gussets: 0.060 inch (1.52 mm).
 - 4. Drawer Runners, Sink Supports, and Hinge Reinforcements: 0.075 inch (1.90 mm).
 - 5. Leveling and Corner Gussets: 0.105 inch (2.66 mm).

2.5 CABINET HARDWARE

A. General: Provide laboratory casework manufacturer's standard, commercial-quality, heavy-duty hardware complying with requirements indicated for each type.

- B. Hinges: Stainless steel, five-knuckle hinges complying with BHMA A156.9, Grade 1, with antifriction bearings and rounded tips. Provide two for doors 48 inches (1200 mm) high or less and three for doors more than 48 inches (1200 mm) high.
- C. Hinged-Door and Drawer Pulls: Satin chrome plated finish, back-mounted pulls. Provide two pulls for drawers more than 24 inches (600 mm) wide.
 - 1. Design: Wire pulls.
 - 2. Overall Size: 1-1/4 by 4-1/2 inches (32 by 114 mm).
- D. Door Catches: Hafele hinges have integral door catch mechanism. Catches shall be provided on hinged doors and shall be spring-loaded nylon roller types with a steel strike plate. Double doors without locks shall have a catch on each door. Tall cases shall have latching devices located on the structurally fixed center shelf. The left-hand door shall have a positive catch and the right-hand door shall have a roller type catch. Where locks are used, catches and strikeplates shall be used on left hand doors of double door cases and shall be steel, cadmium plated.
- E. Drawer Slides: ANSI/BHMA A156.9.
 - 1. Drawer slides are so fabricated as to create full extension zinc plated, feature on drawers in which the entire drawer body is exposed and physically accessible. It shall be designed to allow easy removal of the drawer yet prevent inadvertent drawer removal. Provide progressive slides with 150 lb. dynamic load for file drawers, bin drawers and drawers that are wider than 36". In all other cases, cabinets to have epoxy coated assemblies shall be rated at 100 lbs. Dynamic load capacity. Drawer slides shall be manufactured by Precision Slide, Accuride or Waterloo.
 - 2. Drawer slides for file or bin drawers shall be nylon tired, ball bearing, full extension zinc plated assembly that will allow the drawer body to be completely exposed and physically accessible, complying with BHMA A156.9, Type B05091. Drawer slides shall have an integral stop mechanism to avoid inadvertent removal. Assembly shall be typically rated for 150 lb. at full extension, dynamic load. Slides shall be as manufactured by Precision, Accuride, Waterloo or equal.
- F. Locks: Locks to be furnished where noted on the Drawings. Drawer and door locks shall be brass, five-pin tumbler type, complying with BHMA A156.11, Type EO7281 having para-centric keys. The exposed face shall be chromium plated with satin finish. Locks shall be mounted in special housing so designed as to prevent removal when in locked position. The locks and lock housings shall be fully concealed within the drawer heads and doors. The lock tongues shall engage the rails or stiles when in locked position. Sliding door locks shall be push-type operating in sleeves and engaging both doors when in locked position and provided with positive door holding device. Locks shall be separately keyed except cabinets with multiple locks. Supply (5) master keys, (100) sub-master keys and (144) individual keys for all locks.
- G. Sliding-Door Hardware Sets: Laboratory casework manufacturer's standard, to suit type and size of sliding-door units.

2.6 COUNTERTOPS (CNTP-7)

- A. General: Provide laboratory tabletops and countertops with integral 4" backsplashs indicated on Drawings.
- B. Epoxy: Factory-molded, modified epoxy-resin formulation with smooth, nonspecular finish.

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Durcon; a Wilsonart Company; Durcon Epoxy Tops or comparable product by one of the following:
 - a. American Epoxy Scientific LLC.
 - b. Prime Industries, Inc.
- 2. Physical Properties:
 - a. Flexural Strength: Not less than 10,000 psi (70 MPa).
 - b. Modulus of Elasticity: Not less than 2,000,000 psi (1400 MPa).
 - c. Hardness (Rockwell M): Not less than 100.
 - d. Water Absorption (24 Hours): Not more than 0.02 percent.
 - e. Heat Distortion Point: Not less than 260 deg F (127 deg C).
- 3. Chemical Resistance: Minimum acceptable chemical-resistance performance is to result in no more than four Level 3 conditions when tested with indicated reagents in accordance with SEFA 3.
- 4. Color: As selected by Architect from epoxy manufacturer's full range.

2.7 METAL CABINET FABRICATION

- A. General: Assemble and finish units at point of manufacture. Use precision dies for interchangeability of like-size drawers, doors, and similar parts. Perform assembly on precision jigs to provide units that are square. Reinforce units with angles, gussets, and channels. Except where otherwise specified, integrally frame and weld cabinet bodies to form dirt- and vermin-resistant enclosures. Where applicable, reinforce base cabinets for sink support. Maintain uniform clearance around door and drawer fronts of 1/16 to 3/32 inch (1.5 to 2.4 mm).
- B. Flush Doors: Outer and inner pans that nest into box formation, with full-height channel reinforcements at center of door. Fill doors with noncombustible, sound-deadening material.
- C. Hinged Doors: Mortise for hinges and reinforce with angles welded inside inner pans at hinge edge.
- D. Drawers: Fronts made from outer and inner pans that nest into box formation, without raw metal edges at top. Sides, back, and bottom fabricated in one piece with rolled or formed top of sides for stiffening and comfortable grasp for drawer removal. Provide drawers with rubber bumpers, polymer roller slides, and positive stops to prevent metal-to-metal contact or accidental removal.
- E. Adjustable Shelves: Front, back, and ends formed down, with edges returned horizontally at front and back to form reinforcing channels.
 - 1. Adjustable shelves shall be 12" deep, unless otherwise noted on the drawings.
 - 2. Adjustable shelves shall be mounted to surface type steel standards (wall condition) or slotted studs. Adjustable shelves shall be supported by steel shelf brackets. Brackets shall be cold rolled steel with epoxy powder coated finish, complying with BHMA A156.9, Types B04102 and B04112. Shelves shall be fastened to brackets with two stainless steel screws per bracket.
 - 3. Adjustable shelves mounted on slotted studs shall be supplied with a continuous 2" high band to create a 1" high curb at rear of shelf. The curb along the back shall be of similar material as the shelf.

- F. Toe Space: Fully enclosed, 4 or 6 inches high by 3 inches deep, with no open gaps or pockets.
- G. Utilities: Provide space, cutouts, and holes for pipes, conduits, and fittings in cabinet bodies to accommodate utility services and their support-strut assemblies.
 - 1. Provide base cabinets with removable backs for access to utility space.
- H. Utility-Space Framing: Steel framing units consisting of two steel slotted channels complying with MFMA-4, not less than 1-5/8 inches (41 mm) square by 0.105-inch (2.66-mm) nominal thickness, that are connected at top and bottom by U-shaped brackets made from 1-1/4-by-1/4inch (32-by-6-mm) steel flat bars. Framing units may be made by welding channel material into rectangular frames instead of using U-shaped brackets.
- I. Filler and Closure Panels: Provide where indicated and as needed to close spaces between casework and walls, ceilings, and equipment. Fabricate from same material and with same finish as casework and with hemmed or flanged edges unless otherwise indicated.
 - 1. Provide knee-space panels (modesty panels) at spaces between base cabinets, where cabinets are not installed against a wall or where space is not otherwise closed. Fabricate from back-to-back panels or of hollow construction to eliminate exposed hemmed or flanged edges.
 - 2. Provide utility-space closure panels at spaces between base cabinets where utility space would otherwise be exposed, including spaces below countertops.
 - 3. Provide closure panels at ends of utility spaces where utility space would otherwise be exposed.

2.8 LABORATORY CASEWORK SYSTEMS

- A. Provide casework manufacturer's standard integrated system that includes support framing, suspended modular cabinets, filler and closure panels, undercabinet task-lighting fixtures, countertops, and fittings needed to assemble system. System includes hardware and fasteners for securing support framing to permanent construction.
 - 1. Cabinets can be removed and reinstalled without use of special tools for relocation within system.
 - 2. Base cabinets can be removed without providing temporary support for, or removing, countertops.
 - 3. Sinks are supported independent of base cabinets.
 - 4. Support framing has provision for fastening pipe supports at utility space in not more than 1-inch (25-mm) increments.
 - 5. System includes filler and closure panels to close spaces between support framing, cabinets, shelves, countertops, floors, and walls unless otherwise indicated. Fabricate panels from same material and with same finish as metal cabinets and with hemmed or flanged edges.
- B. Support Framing: Casework manufacturer's standard system consisting of vertical supports and connecting braces and rails as follows:
 - 1. Cabinets, shelves, and countertops are supported from vertical supports except where floor-supported base cabinets are indicated. Vertical positioning of supported cabinets, shelves, and countertops can be varied in 1-inch (25-mm) increments through full height of supports.

- 2. Vertical supports rest on adjustable leveling bases and are secured to floor with metal clips fastened to floor.
- 3. Vertical supports are installed with braces and rails, connecting them to each other and to permanent building walls to create a stable, rigid structure with framed utility spaces where indicated.
- C. Undercabinet Task-Light Luminaires:
 - 1. Lamp Type: LED with switch and heavy-duty cord and plug.
 - 2. Finish: Baked enamel.
 - 3. Diffusers: Virgin acrylic with high resistance to yellowing and other changes from aging, heat, and UV radiation.
- D. Countertops: Provide in modular lengths indicated, without seams.

2.9 METAL CABINET FINISH

- A. General: Prepare, treat, and finish welded assemblies after assembling. Prepare, treat, and finish components that are to be assembled with mechanical fasteners before assembling. Prepare, treat, and finish concealed surfaces same as exposed surfaces.
- B. Preparation: After assembly, clean surfaces of mill scale, rust, oil, and other contaminants. After cleaning, apply a conversion coating suited to organic coating to be applied over it.
- C. Chemical-Resistant Finish: Immediately after cleaning and pretreating, apply laboratory casework manufacturer's standard two-coat, chemical-resistant, baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for applying and baking to achieve a minimum dry film thickness of 2 mils (0.05 mm).
 - 1. Chemical and Physical Resistance of Finish System: Finish complies with acceptance levels of cabinet surface finish tests in SEFA 8 M. Acceptance level for chemical spot test is to be no more than for Level 3 conditions.
 - 2. Colors for Metal Laboratory Casework Finish: As selected by Architect from manufacturer's full range.

2.10 COUNTERTOP FABRICATION

- A. Countertops, General: Provide units with smooth surfaces in uniform plane, free of defects. Make exposed edges and corners straight and uniformly beveled. Provide front and end overhang of 1 inch (25 mm).
- B. Epoxy:
 - 1. Countertops: Fabricate with factory cutouts for sinks, holes for service fittings and accessories, and butt joints assembled with epoxy adhesive and concealed metal splines.
 - a. Flat Configuration: 1 inch (25 mm) thick with continuous drip groove on underside 1/2 inch (13 mm) from overhang edge.
 - 1) Edges and Corners: Beveled.
 - 2) Backsplash: Integral coved.

- b. Marine-Edge Configuration: 1-inch (25-mm) minimum thickness, with integral or applied raised edge. Provide front and end overhang of 1" with continuous drip groove on underside ½-inch from edge.
 - 1) Edges and Corners: Beveled.
 - 2) Backsplash: Integral coved.
- c. Construction: Uniform throughout full thickness.

2.11 LABORATORY ACCESSORIES

A. Plastic or Resin Pegboards: Polypropylene, epoxy, or phenolic-composite pegboards with removable polypropylene pegs and stainless steel drip troughs with drain outlet.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of reinforcements, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF CABINETS

- A. Comply with installation requirements in SEFA 2. Install level, plumb, and true in line; shim as required using concealed shims. Where laboratory casework abuts other finished work, apply filler strips and scribe for accurate fit, with fasteners concealed where practical. Do not exceed the following tolerances:
 - 1. Variation of Tops of Base Cabinets from Level: 1/16 inch in 10 feet (1.5 mm in 3 m).
 - 2. Variation of Bottoms of Upper Cabinets from Level: 1/8 inch in 10 feet (3 mm in 3 m).
 - 3. Variation of Faces of Casework from a True Plane: 1/8 inch in 10 feet (3 mm in 3 m).
 - 4. Variation of Adjacent Surfaces from a True Plane (Lippage): 1/32 inch (0.8 mm).
 - 5. Variation in Alignment of Adjacent Door and Drawer Edges: 1/16 inch (1.5 mm).
- B. Utility-Space Framing: Secure to floor with two fasteners at each frame. Fasten to partition framing, wood blocking, or metal reinforcements in partitions and to base cabinets.
- C. Base Cabinets: Fasten cabinets to utility-space framing, partition framing, wood blocking, or reinforcements in partitions, with fasteners spaced not more than 16 inches (400 mm) o.c. Bolt adjacent cabinets together with joints flush, tight, and uniform.
 - 1. Where base cabinets are installed away from walls, fasten to floor at toe space at not more than 24 inches (600 mm) o.c. and at sides of cabinets with not less than two fasteners per side.
- D. Wall Cabinets: Fasten to hanging strips, masonry, partition framing, blocking, or reinforcements in partitions. Fasten each cabinet through back, near top, at not less than 16 inches (400 mm) o.c.

- E. Install hardware uniformly and precisely.
- F. Adjust operating hardware so doors and drawers align and operate smoothly without warp or bind and contact points meet accurately. Lubricate operating hardware as recommended by manufacturer.

3.3 INSTALLATION OF COUNTERTOPS

- A. Comply with installation requirements in SEFA 2. Abut top and edge surfaces true in plane with flush hairline joints and with internal supports placed to prevent deflection. Locate joints where indicated on Shop Drawings.
- B. Field Jointing: Where possible, make in same manner as shop-made joints, using dowels, splines, fasteners, adhesives, and sealants recommended by manufacturer. Shop prepare edges for field-made joints.
- C. Fastening:
 - 1. Secure countertops, except for epoxy countertops, to cabinets with Z-type fasteners or equivalent, using two or more fasteners at each cabinet front, end, and back.
 - 2. Secure epoxy countertops to cabinets with epoxy cement, applied at each corner and along perimeter edges at not more than 48 inches (1200 mm) o.c.
 - 3. Where necessary to penetrate countertops with fasteners, countersink heads approximately 1/8 inch (3 mm) and plug hole flush with material equal to countertop in chemical resistance, hardness, and appearance.
- D. Provide holes and cutouts required for service fittings.
- E. Provide scribe moldings for closures at junctures of countertop, curb, and splash with walls as recommended by manufacturer for materials involved. Match materials and finish to adjacent laboratory casework. Use chemical-resistant, permanently elastic sealing compound where recommended by manufacturer.
- F. Dress joints smooth, remove surface scratches, and clean entire surface.

3.4 INSTALLATION OF LABORATORY ACCESSORIES

- A. Install accessories in accordance with Shop Drawings, installation requirements in SEFA 2, and manufacturer's written instructions.
- B. Securely fasten adjustable shelving supports, stainless steel shelves, and pegboards to partition framing, wood blocking, or reinforcements in partitions.
- C. Install shelf standards plumb and at heights to align shelf brackets for level shelves. Install shelving level and straight, closely fitted to other work where indicated.
- D. Securely fasten pegboards to partition framing, wood blocking, or reinforcements in partitions.

3.5 CLEANING AND PROTECTING

- A. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.
- B. Clean counter tops leaving tops free of grease and streaks. Use no wax or oils.
- C. Protect against soiling and deterioration during remainder of construction period.
- D. Protect counter tops and ledges for the remainder of the construction period with ¼" corrugated cardboard or equal completely covering the top and securely taped to edges. Mark cardboard in large lettering "No Standing".

END OF SECTION 123553.13

SECTION 123570.10 - MODULAR METAL CASEWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
 - 1. Modular metal casework including floor base units, wall units, tall units, overhead units, specialty units, and accessory items.
- B. Related Requirements:
 - 1. Section 061053 "Miscellaneous Rough Carpentry" for wood blocking for anchoring modular casework.

1.2 COORDINATION

A. Coordinate layout and installation of framing and reinforcements for support of modular casework.

1.3 SYSTEM DESCRIPTION

- A. Design Requirements: Casework shall be metal, modular, with each unit being an individual, interchangeable, integral part of assembly for making up desired casework unit. Each sectional unit shall be rigid and depend on no other component part of complete assembly for its rigidity. Internal components such as drawers, glides, shelves, and similar items shall be modular and interchangeable.
- B. Performance Requirements: Provide modular casework which has been manufactured, fabricated and installed to withstand the medical environment and maintain manufacturer's warranted performance without defects, damage, or failure.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's product data for each type of product.
- B. Shop Drawings: Submit shop drawings including the following:
 - 1. Complete list of products, sizes and manufacturer's descriptive and technical literature.
 - 2. Requirements for utility connections.
 - 3. Requirements for blocking and support.
 - 4. Keying Schedule: Include schematic keying diagram, and index each key set to unique designations that are coordinated with the Contract Documents.
 - 5. Indicate locations of and clearances from adjacent walls, doors, windows, and other building components and equipment.
 - 6. Include coordinated dimensions for equipment specified in other Sections.
 - 7. Show fabrication details, including types and locations of hardware.
- C. Samples for Verification: Submit representative sample of each type of finish and color.

- D. Installer Reports: Submit copy of installer's reports for the following:
 - 1. Certification that installer is acceptable to the manufacturer.
 - 2. Manufacturer's field service report.
 - 3. Pre-installation meeting report.
- E. Operations and Maintenance Data: Submit manufacturer's recommendations for cleaning and maintenance, including a list of spare parts and information for ordering.
- F. Warranty: Submit executed copy of manufacturer's standard limited warranty.

1.5 QUALITY ASSURANCE

- A. Manufacturer: Regularly engaged in manufacturing modular casework, ISO 13485 and ISO 9001 certified.
- B. Installer: Minimum 2 year documented history of installing similar casework and acceptable to the manufacturer. Installer shall accept responsibility for all field verifications.
- C. Pre-Installation Meeting: Convene a pre-installation meeting prior to installation to review existing conditions, schedule, sequence of installation, and proper placement of utilities.
- 1.6 MAINTENANCE MATERIAL SUBMITTALS
 - A. Furnish complete touch-up kit for each type and color of modular casework provided. Include fillers, primers, paints, and other materials necessary to perform permanent repairs to damaged casework finish.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store casework as recommended by manufacturer. Protect from the weather, humidity, temperature variation, dirt, dust, or other contaminants.
- B. Protect finished surfaces during handling and installation with protective covering of polyethylene film or other suitable material.

1.8 FIELD CONDITIONS

- A. Established Dimensions: Where casework is indicated to fit to other construction, establish dimensions for areas where casework is to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.
- B. Field Measurements: Where casework is indicated to fit to existing construction, verify dimensions of existing construction by field measurements before fabrication and indicate measurements on Shop Drawings. Provide fillers and scribes to allow for trimming and fitting.
- C. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before enclosing them, and indicate measurements on Shop Drawings.

1.9 WARRANTY

- A. Modular Casework Limited Warranty: Provide manufacturer's standard limited warranty for the items listed below, with additional exclusions as included in manufacturer's standard warranty. Furnish copies of warranties for components not manufactured by Midmark Corporation but incorporated into the casework as applicable.
 - 1. Cabinet, door and drawer fronts: 10-years.

PART 2 - PRODUCTS

- 2.1 SOURCE LIMITATIONS
 - A. Obtain from single source from single manufacturer.

2.2 MANUFACTURER

A. Basis-of-Design Manufacturer: Midmark Corporation or equal approved by Architect prior to bidding.

2.3 MODULAR METAL CASEWORK (MCW-2A)

- A. Modular Metal Casework: Synthesis Casework Collection by Midmark.
 - 1. Sizes and Configuration: As indicated on the Drawings.
 - 2. Metal Finish: Premium powder coat, baked-on epoxy.
 - 3. Colors and Styles: Wood grain to match PLAM-1.
- B. Casework Assembly:
 - 1. Design: Individual, interchangeable, integral, modular units.
 - 2. Cabinet: 18 gauge cold rolled steel; multi-piece shell and frame design; riveted and press joined (Tog-L-Loc).
 - 3. Filler and Trim: Manufacturer's standard coordinated components.
- C. Door Construction:
 - 1. Front/Back: 12 mil seamless polymer-covered front; melamine back.
 - 2. Core: 45 lb. MDF board, 3/4 inch thick. Composite wood material to meet CARB P2 emission std of CARB regulation 91320.2.
 - 3. Hinges: Manufacturer's standard Blum, concealed, self-closing, 110 degree opening, nickel-plated metal, clip-on mount, three adjustment points.
 - 4. Pulls: Recessed and integrated front panel design.
- D. Drawers:
 - 1. Deep Drawer Construction: One piece molded polystyrene drawer bodies with rounded corners.
- 2. File Drawer Construction: 18 gauge cold rolled steel frame; including suspended file system and file bars.
- 3. Front/Back: 12 mil seamless polymer-covered front; melamine back.
- 4. Core: 45 lb. MDF board, 3/4 inch thick. Composite wood material to meet CARB P2 emission std of CARB regulation 91320.2.
- 5. Slides: Manufacturer's standard Accuride Aero (100 lb. capacity) ball bearing slides; and heavy duty Accuride Model 3640 (200 lb capacity) slide for file drawers and heavy duty pull out shelves.
- 6. Pulls: Recessed and integrated front panel design.
- E. Adjustable Shelving:
 - 1. 18 gauge cold rolled steel, painted to match cabinet color; manufacturer's standard die cast zinc support clips.
- F. Locks (where indicated):
 - 1. Doors: Manufacturer's standard Timberline, individually mounted, cam style lock or deadbolt orientation with removable lock plug; locks keyed alike with two keys per lock.
 - 2. Drawers: Manufacturer's standard Timberline lock body with removable lock plug with 14 gauge cold rolled steel pivoting lock bar for central lock system; locks keyed alike with two keys per lock.
- G. Casters: Manufacturer's standard Shepherd Caster Corp, 60 mm nylon or 4 inch twin wheel design with elastomeric treads, stem mounting; locking wheel.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of reinforcements, and other conditions affecting performance of healthcare casework.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install casework level, plumb, and true in line; shim as required using concealed shims. Where modular casework abuts other finished work, apply filler strips and scribe for accurate fit, with fasteners concealed where practical. Do not exceed the following tolerances:
 - 1. Variation of Tops of Base Cabinets from Level: 1/16 inch in 10 feet (1.5 mm in 3 m).
 - 2. Variation of Bottoms of Upper Cabinets from Level: 1/8 inch in 10 feet (3 mm in 3 m).
 - 3. Variation of Faces of Casework from a True Plane: 1/8 inch in 10 feet (3 mm in 3 m).
 - 4. Variation of Adjacent Surfaces from a True Plane (Lippage): 1/32 inch (0.8 mm).
 - 5. Variation in Alignment of Adjacent Door and Drawer Edges: 1/16 inch (1.5 mm).
- B. Base Cabinets: Fasten cabinets to partition framing, wood blocking, or reinforcements in partitions with fasteners spaced not more than 16 inches (400 mm) o.c. Bolt adjacent cabinets together with joints flush, tight, and uniform.

- C. Wall Cabinets: Fasten to partition framing, blocking, or reinforcements in partitions. Fasten each cabinet through the back, near the top, at not less than 16 inches (400 mm) o.c.
- D. Install door and drawer hardware uniformly and precisely. Set hinges snug and flat in mortises.
- E. Adjust operating hardware so doors and drawers align and operate smoothly without warp or bind and so contact points meet accurately. Lubricate operating hardware as recommended by manufacturer.

3.3 CLEANING AND PROTECTION

- A. Clean exposed surfaces using methods acceptable to the manufacturer which will not damage finish.
- B. Protect casework against damage until accepted. Restore damaged components and finishes as necessary so no evidence remains of corrective work.

END OF SECTION 123570.10

SECTION 123570.20 – MODULAR PLASTIC LAMINATE CASEWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. This section specifies plastic laminate casework as detailed on the drawings, including related components and accessories required to form integral units. Plastic laminate casework items shown on the drawings but not specified below shall be included as part of the work under this section, and applicable portions of the specification shall apply to these items. Each like item of casework shall be of the same design and by one manufacturer.
 - 2. Furnish all labor, materials, tools, equipment, and services for all plastic laminate casework system components as indicated, in accordance with provisions of Contract Documents.
 - 3. Completely coordinate with work of all other trades.
 - 4. Although such work is not specifically indicated, furnish and install all supplementary or miscellaneous items, appurtenances, and devices incidental to or necessary for sound, secure, and complete installation.

1.3 RELATED SECTIONS

- A. Miscellaneous Rough Carpentry: Section 061053.
- B. Plumbing Fixtures and Trim: Division 22.
- C. Solid-Surfacing Countertops: Section 123661.16.

1.4 SYSTEM DESCRIPTION

- A. Base Cabinets.
- B. Overhead Cabinets.
- C. Towers
- D. Work Surfaces.
- E. Technology Support Solutions.
- F. Accessories

1.5 REFERENCES AND QUALITY ASSURANCE

- A. Design Criteria:
 - 1. The intent of this specification is to provide quality and functional storage components in environments that do not require a high degree of flexibility and where it is anticipated that there will be only minor changes. The products must have the inherent qualities of durability, aesthetic value, and safety while being most functional within the healthcare setting.
 - 2. The fixed casework system will allow the healthcare facility to be space efficient by making maximum use of vertical space and by providing a highly organized and versatile way of storing materials.
- B. Installer/Erector Qualifications:
 - 1. Furnish proof of familiarity with equipment to be installed.
 - 2. Furnish proof of financial and technical resources to assure prompt performance in delivery and installation and in-service training of healthcare personnel.
 - 3. Provide competent supervision and installation persons.

1.6 SUBMITTALS

- A. Shop Drawings:
 - 1. Provide complete shop and installation drawings, giving all dimensions, details of construction, and accessory items.
 - 2. Indicate wall reinforcement and appropriate fastening and method of installation.
 - 3. Provide Owner a listing of components not included in this specification but required.
- B. Product Data:
 - 1. Provide catalog and model numbers for all components.
 - 2. Provide addresses and telephone numbers of nearest stocking/service parts locations.
- C. Samples: Provide samples of all finishes and colors as requested by Architect.
- D. Project Close-Out Data:
 - 1. Provide technical and operational instructions and user's manuals for all components.
 - 2. Extra material: None required.
 - 3. Warranties: See Section 1.9.
 - 4. Minimum of two copies of manufacturer's complete catalogs and price lists.
 - 5. Location and telephone number of nearest service organization.

1.7 DELIVERY STORAGE AND HANDLING

- A. Deliver all components to site in manufacturer's clearly identified containers.
- B. Deliver, receive, and store in a secured space in a manner to prevent damage.
- C. Time delivery to assure components are available at site when required for installation.

1.8 JOB CONDITIONS

- A. Existing Conditions:
 - 1. Assure that walls scheduled to receive attachment of system components are adequately reinforced to accept installation of this work.
 - 2. Assure that wall, floor, and ceiling work is finished.
 - 3. Report deficiencies to Contractor for correction.
- B. Protection:
 - 1. Assure that adjoining work is not damaged by installation of this work.
 - 2. Provide temporary protection as required, and repair all damage to such work.
- C. Sequencing:
 - 1. Sequence this work to allow work by Division 23 and 26 Contractors to be performed without interference.
 - 2. Coordinate this work with other operations in same area to avoid conflicts.

1.9 WARRANTY

- A. All warranties run from date of substantial completion.
- B. Written warranty on entire system, signed jointly by installer, manufacturer, and contractor for period of five years.
- C. Written warranty on items incorporated into system, not manufactured by contractor or subcontractor for a period of one year.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Plastic Laminate Casework System (MCW-2B):
 - 1. Basis-of-Design Product: Mora System by Herman Miller, Inc. or equal approved by Architect prior to bidding.

2.2 COMPONENTS REQUIREMENTS

- A. Plastic Laminate Casework System components must be provided by one manufacturer.
 - 1. If products of several manufacturers are used to satisfy this section, then all items shall meet the requirements specified herein.
 - 2. Supplier of the system is responsible for performance of all components.

2.3 BASE CABINETS

- A. To-The Floor Drawer Cases:
 - 1. Shall be available in heights of 34" and 36"; in depths of 19", 24" and 30"; and in at least four widths of 18", 24", 30" and 36". Please see contract drawings for exact dimensions.
 - 2. Shall have four (4) adjustable glides with nylon feet.
 - 3. Shall have a plinth base with toe space to permit an easy reach to the entire work surface without causing unnecessary strain on the lower back.
 - 4. Shall be available in three drawer options and open shelf configuration.
 - 5. Shall have keyed lock options.
 - 6. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Drawers:
 - 1) Shall be available in three drawer options and open configuration.
 - 2) Shall use glued and dowel construction methods to ensure structural integrity.
 - 3) Shall be .510" thick, 45-pound density particle board core with melamine dowel construction including .5mm Polypropylene edging.
 - 4) The slides which allow the drawer to open close, shall be quick disconnect, telescoping fully extended with pull-out stop and roll-out prevention, finish is chromated steel plated, with precision ball bearing that provide smooth action and high lateral stability. The drawer can be unlatched from the slide, making the drawer easy to remove and re-install.
 - 5) Extension drawer slides shall provide for full extension for better access to the entire drawer.
 - 6) Extension drawer slides side adjustment cam shall allow up to 2 mm of sideto-side adjustment.
 - 7) Extension drawer slides shall hold the drawer in place when fully extended and shall have a built-in drawer stop which protects the drawer fronts from being damaged from closing.
 - c. Drawer Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.

- 3) Drawer fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).

B. To-The-Floor Door Cases:

- 1. Shall be available in heights of 34" and 36"; in depths of 19", 24" and 30"; and in at least four widths of 18", 24", 30" and 36". Please see contract drawings for exact dimensions.
- 2. Shall have four (4) adjustable glides with nylon feet.
- 3. Shall have a plinth base with toe space to permit an easy reach to the entire work surface without causing unnecessary strain on the lower back.
- 4. Shall be available in three door options, including double doors.
- 5. Shall have keyed lock options.
- 6. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
 - c. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - d. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.

- 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.
- C. Plinth Base, finished and unfinished:
 - 1. Shall be available in height of 4" & 6"; in depths of 19", 24" and 30"; and in widths of 15" to 72". Please see contract drawings for exact dimensions.
 - 2. Shall allow a toe space to permit an easy reach to the entire work surface without causing unnecessary strain on the lower back.
 - 3. Components:
 - a. Side, Front and Back:
 - 1) Shall be .760" thick 45-pound density particle board core with high-pressure laminate facing in a reinforced corner construction.
 - 2) Shall be available in 37 color options, including unfinished.
- D. ADA Sink Enclosure:
 - 1. Shall be composed of 3/4" particle board with a melamine finish, available in 29 lowpressure laminate colors and 31 high pressure laminate colors.
 - 2. Shall mount on an architectural wall and support at most a 5-1/2" deep sink and a work surface.
 - 3. Shall be available at a nominal depths of 19" and 24"; and a width of 24", 30", 36", 42" and 48". Please see equipment drawings for exact dimensions.
 - 4. Shall be constructed with a removable front panel to permit access to the plumbing.
 - 5. Shall be provided with all attaching hardware including a support rail constructed of 14 gauge steel which attaches to the work surface, architectural wall and other supporting hardware.
 - 6. Sink is not included.

2.4 OVERHEAD CABINETS

- A. Overhead Storage:
 - 1. Shall be available in heights of 19" and 31"; in depth of 11", 13" and 16"; and in at least five widths of 18", 24", 30", 36" and 48. Please see contract drawings for exact dimensions.
 - 2. Shall be available in four door options, including double doors.
 - 3. Shall have keyed lock options.
 - 4. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).

- b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
- c. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
- d. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.
 - 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.
- B. Open Shelving Overheads:
 - 1. Shall be available in heights of 19" and 31"; in depths of 11", 13" and 16"; and in at least three widths of 24", 30", 36" and 48. Please see contract drawings for exact dimensions.
 - 2. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
- C. Soffit:

- 1. Shall be available in heights of 23" and 35" and to the ceiling; in depth of 11", 13", 16", 19" and 24"; and in at least widths from 15" to 72". Please see contract drawings for exact dimensions.
- 2. Shall be available in four door options, including double doors.
- 3. Shall have keyed lock options.
- 4. Components:
 - a. Soffit: Side and Front Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Soffit shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
- D. Overhead Storage: Glove box/paper towel panel options.
 - 1. Shall be available in heights of 23" and 36"; in depths of 11", 13" and 16"; and in at least three widths of 18", 24", 30", 36" and 48. Please see contract drawings for exact dimensions and configuration of glove holders/quantities.
 - 2. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - c. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.

- 3) Shall be concealed 6-way adjustable hinges.
- 4) Shall have height adjustment through mounting plate.
- 5) Shall have an opening angle of not less than 165 degrees.
- 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.

2.5 TOWERS

- A. Tower:
 - 1. Shall be available in depths of 19", and 24"; and in at least widths from 15" to 75". Please see contract drawings for exact dimensions.
 - 2. Components:
 - a. Soffit Fascia Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Soffit shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
- B. Wall-Mounted Door Towers with Soffit Fascia panels : Storage tower with shelves, drawers, glove and trash access options. See contract drawings for exact dimensions and types.
 - 1. Shall be available in heights of 66" and 74"; in depth of 19"; and widths of 15" and 24". Please see contract drawings for exact dimensions.
 - 2. Shall be full height and width door.
 - 3. Shall have keyed lock options.
 - 4. Storage Options:
 - a. Glove access and 3 pull-out drawers.
 - b. Shelves and 3 pull-out drawers.
 - c. Shelves.
 - d. Side and front trash/glove access with interior shelving.
 - 5. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:

- 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
- c. Drawers:
 - 1) Shall use glued and dowel construction methods to ensure structural integrity.
 - 2) Shall be .510" thick, 45-pound density particle board core with melamine dowel construction including .5mm Polypropylene edging.
 - 3) The slides which allow the drawer to open close, shall be quick disconnect, telescoping fully extended with pull-out stop and roll-out prevention, finish is chromated steel plated, with precision ball bearing that provide smooth action and high lateral stability. The drawer can be unlatched from the slide, making the drawer easy to remove and re-install.
 - 4) Extension drawer slides shall provide for full extension for better access to the entire drawer.
 - 5) Extension drawer slides side adjustment cam shall allow up to 2 mm of sideto-side adjustment.
 - 6) Extension drawer slides shall hold the drawer in place when fully extended and shall have a built-in drawer stop which protects the drawer fronts from being damaged from closing.
- d. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
- e. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.
 - 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.
- C. To-The-Floor Door Towers, with Soffit Fascia Panels
 - 1. Shall be available in heights of 66" and 74"; in depths of 19" and 24"; and widths of 15" and 24". Please see contract drawings for exact dimensions.
 - 2. Shall be full height and width door.
 - 3. Shall have keyed lock options.
 - 4. Storage Options:

- a. Side/Front glove and front trash and access with interior shelving.
- b. Glove access and 4 pull-out drawers.
- c. Shelves and 4 pull-out drawers.
- d. Shelves.
- e. Front trash access with interior shelving.
- 5. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
 - c. Drawers:
 - 1) Shall use glued and dowel construction methods to ensure structural integrity.
 - 2) Shall be .510" thick, 45-pound density particle board core with melamine dowel construction including .5mm Polypropylene edging.
 - 3) The slides which allow the drawer to open close, shall be quick disconnect, telescoping fully extended with pull-out stop and roll-out prevention, finish is chromated steel plated, with precision ball bearing that provide smooth action and high lateral stability. The drawer can be unlatched from the slide, making the drawer easy to remove and re-install.
 - 4) Extension drawer slides shall provide for full extension for better access to the entire drawer.
 - 5) Extension drawer slides side adjustment cam shall allow up to 2 mm of sideto-side adjustment.
 - 6) Extension drawer slides shall hold the drawer in place when fully extended and shall have a built-in drawer stop which protects the drawer fronts from being damaged from closing.
 - d. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:

- a) Low-pressure laminate (28 colors).
- b) High-pressure laminate (33 colors).
- e. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.
 - 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.
- D. Wall-Mounted Shelf Towers:
 - 1. Shall be available in heights of 66" and 74"; in depth of 19"; and width of 15". Please see contract drawings for exact dimensions.
 - 2. Shall be full base height and width door.
 - 3. Storage Option: Open side shelves, trash access.
 - 4. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
 - c. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - d. Hinges:

- 1) Shall be constructed of nickel-plated steel.
- 2) Shall have snap-on mounting and integrated side adjustment.
- 3) Shall be concealed 6-way adjustable hinges.
- 4) Shall have height adjustment through mounting plate.
- 5) Shall have an opening angle of not less than 165 degrees.
- 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.
- E. Tower Accessories:
 - 1. 1" Shelf for Shelf Towers: Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case. 15" wide and 19" deep.
 - 2. Straight Filler: 4" wide filler panel in height to match cabinet.
 - a. Shall be .760" thick 45-pound density particle board core with melamine facing. Color to match case.
 - 3. Corner Filler: 7-3/8" wide filler panel in height to match cabinet.
 - a. Shall be .760" thick 45-pound density particle board core with melamine facing. Color to match case.
- F. Wall-Mounted Wardrobes with Soffit Fascia Panels: Wardrobe with shelves, drawers, clothing rod options.
 - 1. Shall be available in heights of 66" and 74"; in depth of 19"; and width of 24". Please see contract drawings for exact dimensions.
 - 2. Shall be full height and width door.
 - 3. Shall have keyed lock options.
 - 4. Storage Options:
 - a. Door, wardrobe hook with interior shelf.
 - b. Door, clothing bar with interior shelf.
 - c. Door and 1 drawer, clothing bar with interior shelf.
 - 5. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.

- c. Drawers:
 - 1) Shall use glued and dowel construction methods to ensure structural integrity.
 - 2) Shall be .510" thick, 45-pound density particle board core with melamine dowel construction including .5mm Polypropylene edging.
 - 3) The slides which allow the drawer to open close, shall be quick disconnect, telescoping fully extended with pull-out stop and roll-out prevention, finish is chromated steel plated, with precision ball bearing that provide smooth action and high lateral stability. The drawer can be unlatched from the slide, making the drawer easy to remove and re-install.
 - 4) Extension drawer slides shall provide for full extension for better access to the entire drawer.
 - 5) Extension drawer slides side adjustment cam shall allow up to 2 mm of sideto-side adjustment.
 - 6) Extension drawer slides shall hold the drawer in place when fully extended and shall have a built-in drawer stop which protects the drawer fronts from being damaged from closing.
- d. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
- e. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.
 - 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.
- G. To-The-Floor Wardrobes with Soffit Fascia panels : Wardrobe with shelves, drawers, clothing rod options.
 - 1. Shall be available in heights of 66" and 74"; in depths of 19" and 24"; and width of 24". Please see contract drawings for exact dimensions.
 - 2. Shall be full height and width door.
 - 3. Shall have keyed lock options.
 - 4. Storage Options:
 - a. Door, wardrobe hook with interior shelf.
 - b. Door, clothing bar with interior shelf.

- c. Door and 1 drawer, clothing bar with interior shelf.
- 5. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
 - c. Drawers:
 - 1) Shall use glued and dowel construction methods to ensure structural integrity.
 - 2) Shall be .510" thick, 45-pound density particle board core with melamine dowel construction including .5mm Polypropylene edging.
 - 3) The slides which allow the drawer to open close, shall be quick disconnect, telescoping fully extended with pull-out stop and roll-out prevention, finish is chromated steel plated, with precision ball bearing that provide smooth action and high lateral stability. The drawer can be unlatched from the slide, making the drawer easy to remove and re-install.
 - 4) Extension drawer slides shall provide for full extension for better access to the entire drawer.
 - 5) Extension drawer slides side adjustment cam shall allow up to 2 mm of sideto-side adjustment.
 - 6) Extension drawer slides shall hold the drawer in place when fully extended and shall have a built-in drawer stop which protects the drawer fronts from being damaged from closing.
 - d. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).

- e. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.
 - 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.
- H. To-The-Floor Double Door Wardrobes with Soffit Fascia Panel and without Sloped Tops: Double door wardrobe with shelf and clothing rod option.
 - 1. Shall be available in heights of 66" and 74"; in depths of 19" and 24"; and width of 36". Please see contract drawings for exact dimensions.
 - 2. Shall be full height and width door.
 - 3. Shall have keyed lock options.
 - 4. Storage Options:
 - a. Double Door, clothing bar with interior shelf.
 - 5. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Shelves:
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing including .5mm polypropylene edging. Color to match case.
 - c. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).

- d. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.
 - 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.

2.6 CARTS

- A. Carts General Performance Requirements:
 - 1. Shall have rounded, exposed surfaces free from sharp edges to prevent injury to patients, visitors, and staff.
 - 2. Shall operate smoothly and easily under maximum load and be readily movable by one person.
 - 3. Shall be designed specifically to function for specialized applications by adding or changing components offered.
 - 4. Shall have components manufactured in such a fashion to ensure consistent color throughout.
 - 5. Shall be of a design that allows free exchange of internal components such as drawers, shelves, trays, etc., without the need for tools to exchange the components.
 - 6. Shall be manufactured to be highly cleanable, both in their design and through choice of materials.
 - 7. Shall have the capability to accept a locking drawer to ensure the security of controlled substances.
 - 8. Shall be able to be locked to a wall using optional accessories offered.
- B. Cart Guide: Mounted to underside of cantilevered surface to guide supply cart, linen cart or trash cart into place.
- C. Supply Cart:
 - 1. Shall be available in heights of 34" and 36"; in depths of 19"; and widths of 18" and 21". Please see contract drawings for exact dimensions.
 - 2. Shall have 2" soft, black casters.
 - 3. Shall have keyed lock options.
 - 4. Storage Option: Individual drawer fronts, 1 large and 3 small.
 - 5. Components:
 - a. Case: Side, Back, and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) High-pressure laminate (39 colors).

- b. Tops: Impact resistant, white ABS thermoformed top or solid surfacing in 12 color options.
- c. Drawers:
 - 1) Shall use glued and dowel construction methods to ensure structural integrity.
 - 2) Shall be .510" thick, 45-pound density particle board core with melamine dowel construction including .5mm Polypropylene edging.
 - 3) The slides which allow the drawer to open close, shall be quick disconnect, telescoping fully extended with pull-out stop and roll-out prevention, finish is chromated steel plated, with precision ball bearing that provide smooth action and high lateral stability. The drawer can be unlatched from the slide, making the drawer easy to remove and re-install.
 - 4) Extension drawer slides shall provide for full extension for better access to the entire drawer.
 - 5) Extension drawer slides side adjustment cam shall allow up to 2 mm of sideto-side adjustment.
 - 6) Extension drawer slides shall hold the drawer in place when fully extended and shall have a built-in drawer stop which protects the drawer fronts from being damaged from closing.
- d. Drawer Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - 3) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
- D. Linen Cart:
 - 1. Shall be available in heights of 34" and 36"; in depths of 19"; and widths of 18" and 21". Please see contract drawings for exact dimensions.
 - 2. Shall have 2" soft, black casters.
 - 3. Storage Option: Lid and foot pedal.
 - 4. Components:
 - a. Case: Side, Back, and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Cases shall be available in a variety of finishes including:
 - a) High-pressure laminate (39 colors).
 - b. Top Ring: Accommodates a standard blue linen bag.

- E. Trash Cart: Designed to hold a trash bin.
 - 1. Shall be available in heights of 34" and 36"; in depths of 19"; and widths of 16" and 21". Please see contract drawings for exact dimensions.
 - 2. Shall have 2" soft, black casters.
 - 3. Components:
 - a. Case: Side, Back, and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Cases shall be available in a variety of finishes including:
 - a) High-pressure laminate (39 colors).
 - b. Front Grommet for front opening with 5 finish options.
 - c. Metallic silver pull.

2.7 SURFACES

- A. Surface Wall Attachment Support: Metal bracket attaches to wall to support a work surface with work end, a peninsula or seated height work surface.
- B. End Panel:
 - 1. Shall be available in depths of 19", 24" and 30" and heights of 34" and 36".
 - 2. Shall be fabricated with 1" 55-pound density particle board with a polypropylene edge banding (2 mm on front) and high pressure laminate each side. Overall thickness shall not be less than 1".
 - 3. Provide one 2" adjustable glide for leveling
- C. Cantilever:
 - 1. Shall be available in depths of 19" and 24".
 - 2. Shall be fabricated with 1" 55-pound density particle board with a polypropylene edge banding (2 mm on front) and high pressure or low pressure laminate each side. Overall thickness shall not be less than 1".
 - a. Low-pressure laminate (28 colors).
 - b. High-pressure laminate (33 colors).
- D. Intermediate Thin Cantilever: Painted steel in metallic silver finish.
 - 1. Shall be available in depths of 19" and 24".
- E. Floating Shelf:
 - 1. Shall be available in depth of 6" and width from of 24" and 72".
 - 2. Shall be fabricated with 1" 55-pound density particle board with a polypropylene edge banding (2 mm on front) and high pressure laminate each side. Overall thickness shall not be less than 1".
 - 3. Include attachment hardware.

2.8 TECHNOLOGY SUPPORT SOLUTIONS

- A. Printer Storage:
 - 1. Shall be available in height of 18"; in depth of 22" and widths of 24" and 48".
 - 2. Storage Options for 24" Unit: Double doors or open storage.
 - 3. Storage Options for 48" Unit:
 - a. Hinged door left.
 - b. Hinged door right, open left.
 - c. Open storage with center support.
 - 4. Components:
 - a. Case: Side, Back, Top and Bottom Panels.
 - 1) Shall be .760" thick 45-pound density particle board core with melamine facing in a mortise and tenon construction including .5mm polypropylene edging.
 - 2) Shall be predrilled from top to bottom on nominal 1-1/4" spacing to accommodate interior components.
 - 3) Cases shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - b. Door Fronts:
 - 1) Shall be composed of .780" thick 45-pound density particle board with high pressure laminate front and back and 2 mm polypropylene edges to permit rounder corners and prevent moisture from penetrating the wood underlining.
 - 2) Door fronts shall be available in a variety of finishes including:
 - a) Low-pressure laminate (28 colors).
 - b) High-pressure laminate (33 colors).
 - 3) Pulls: Bar Pull, standard finish unless noted otherwise.
 - a) Bar Pull Color: Metallic Silver.
 - c. Hinges:
 - 1) Shall be constructed of nickel-plated steel.
 - 2) Shall have snap-on mounting and integrated side adjustment.
 - 3) Shall be concealed 6-way adjustable hinges.
 - 4) Shall have height adjustment through mounting plate.
 - 5) Shall have an opening angle of not less than 165 degrees.
 - 6) Shall have a self-closing feature so that the door closes automatically the last 2" (51) of travel.

2.9 ACCESSORIES

A. Coat Hook: Single coat hook with brushed nickel finish.

- B. Accessory Rail:
 - 1. Shall be available in widths of 18", 24", 30", 36" 42" and 48".
 - 2. Shall be able to support 15 pounds per linear foot.
 - 3. Shall be able to support accessory devices such as universal rail clamp, soap and sanitizers, paper towel dispensers, wire baskets, sharps container holders, vacuum bottles, glove boxes, clip organizers, instrument mounting brackets, sphygmomanometer basket, mounting clamps, IV poles, chart holders, and utility hooks.
- 2.10 FINISH
 - A. Colors shall be selected from manufacturer's standard line.
 - B. Colors may be specified to identify areas for materials management.
 - C. Finishes to meet need for infection control.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Inspect areas in which work is to be performed for acceptability to receive work.
- B. Report all discrepancies to Contractor for correction.
- C. Proceeding with work constitutes acceptance of existing conditions.

3.2 INSTALLATION

- A. Assemble and install all items in strict accordance with manufacturer's printed instructions.
 - 1. Anchor all fixed components firmly, square, level, plumb.
- B. Horizontal support elements.
 - 1. Install at heights indicated with all tops, shelves, and writing surfaces level within 1/8" (3) across width.
- C. Vertical support elements.
 - 1. Install plumb, spaced as indicated on shop drawings.
 - 2. Align slots to assure hanging units are level.
- D. Sealing
 - 1. The backsplash and work surface joints; the backsplash and wall joints; and the joints between the work surfaces shall be sealed with a 100% acrylic rubber, UV resistant, clear color (goes on white, dries clear) which is paintable and stainable, mildew and weather resistant. This product will clean up using soap and water. This product shall be non-hazardous.

3.3 FIELD QUALITY CONTROL

- A. Adjust components to assure proper alignment and operation.
- B. Repair, if acceptable, or replace all damaged or improperly operating items.

3.4 CLEANING

- A. Immediately after installation and adjustment, clean all surfaces to remove all marks, soil, and foreign matter.
- B. Just prior to substantial completion, recheck all components and perform all required additional cleaning.

END OF SECTION 123570.20

Bid Package 08 - Fit Out - Group 1 BIM TRADES					
	(Reen	Question and Resp	oonse Log 25 @ 8:00 AM		
	Through RFI #	149	20 @ 0.00 AM		
#	Question	Responder	Response	Release	
1	Will combination hide be accentable for this project?	Walch	Yes, combination bids will be acceptable. With Final addendum, Bid forms will be provided for the combincation bids that have been deemed acceptable. Firms will be required to bid each component of the combination in addition to the combination bid. It is anticipated combination bids will include a combination of HVAC Wet and HVAC Due and a Combination of HVAC Wet	Palazzad With DD9 Group 1	
2	Is the Owner purchasing any of the HVAC equipment for this bid package?	Walsh	No, the owner is only purchasing equipment from the C&S packages already let.	Released With BP8 Group 1	
2	We have compiled our product equivalent information for the Microperforated Acoustic Wood Panels in the UKY Cancer Treatment Center & Ambulatory Center for Key's review Please review as a substitution request	Champlin	The substitution request is acceptable provided the system meets the basis of design levels for plank / panel sizes, reveal spacing, maintenance access, finish, NRC, etc. The proposed product indicates a NRC of 0.55, and the RWDI acoustic report notes that a 0.80 is required for public waiting areas and must be met. It appears this system requires additional measures to meet this requirement which must be included	Released With RP8 Group 1	
	Drawing M601.1, detail numbers 2 and 3. Are Y-Strainers required for piping				
5	hook-ups? Specification 201300, paragraphs M and N, in Bid Package # 7 C&S were changed per the Walsh Group, Architect and Engineer. A new material matrix was supplied and approved. This allowed the use of Steel Pipe with Victaulic fittings 2-1/2" and above and copper pipe with solder or Pro Press fittings 2" and down. Can BP-8 also be changed to match this for consistency numposes		yes y-strainers are required	Released With BP8 Group 1	
			The value is to be set at \$100,000 (one hundred thousand).		
6	On the Trade Category 23A.8-HVAC Dry Fitout, Bid Breakdown Form, the Unit Price and Total Price do not match for Allowance # 6.	Walsh	The Bid Breakdown form will be re-issued with corrections in a future addendum.	Released With BP8 Group 1	
7	Under Trade Category 23B.8 HVAC Wet Fit Out Scope Clarifications-Scope Specific: 20. This subcontractor shall furnish and install all Heating and Cooling Unit Covers and associated miscellaneous materials (complete) as shown on the Contract Documents and in accordance with project plan and specification. The specification for this is: SECTION 055819 - HEATING/COOLING UNIT COVERS This is an Architectural Misc. Metals item and is something the HVAC contractors do not furnish unless it is part of the equipment. We would have no expertise in furnishing these types of enclosures. This should not be part of the HVAC-Wet Side Package. We would recommend making this part of an Architectural Metals package.	Walsh	Specification 055819 refers to fin tube covers. Fin tube covers were previously bid with the TC08E7 Exterior Glazing trade category as part of the Core and Shell.	Released With BP8 Group 1	
8	Page MG108.A1 (Medical Gas Plans Level 08 – Area A) Tagged Notes - P68 & P69, Refers to Medical Vacuum Pump & Medical Air Compressor in previous bid package. Per Addendum #4 Bid Package 07 #78 – All Medical Gas System will be part of the Fit-Out Package	Walsh	The entire medical gas package is to be part of Fit Out trade category with no medical gas scope previously purchased.	Released With BP8 Group 1	
	The Electric Humidifiers for BP-8 are shown to be by TC 23A.8 Dry-Fit Out. This is typically an item the piping/Wet contractor would provide. We would recommend having TCA 23B.8 furnish humidifiers. set generators on		Recommendation accepted. Walsh will issue bid documents		
9	wall, run piping. Show TC23A.8 install of distribution grids in duct (labor only).	Walsh	that correct the scopes of work accordingly.	Released With BP8 Group 1	
10	Please see the attached substitution request forms for the CTC for Summit Lockers to be considered acceptable.	Champlin	The Summit Lockers Substitution request is acceptable and meets the specifications for the different types required. Laminate colors must match the color listed in the MAT-ID. Summit will be added to the list of approved manufacturers in each affected specification section. Note: This request was submitted under the Vault Radiation Shielding RFP for Phenolic (LKR-6) which is the only locker in Vault Radiation RFP. It closed 12/5/24. Given we have six different lockers and three different spec sections we will add Summit as an approved manufacturer to all locker specs. BPO8 Fitout is the biggest locker scope (Group 2). Summit's closest Laminate color is NOT acceptable to the design architect. That is why we added, Laminate colors must match the color listed in the MAT-ID in our review response.	Released With RP8 Group 1	

Bid Package 08 - Fit Out - Group 1 BIM TRADES						
	Question and Response Log Resonces As Of 1/9/5/6 #200 AM					
	Through RFI #	149				
	TC23B.8					
11	On drawing M200.B1, Room B2002B, there appears to be an untagged Fan Coil Unit.	СМТА	the un-tagged fan coil is a HFCU-24 serving "IDF-L-1 - CSB00B"	Released With BP8 Group 1		
	Can the use of mechanical joints be above cieling or does that fall under note #4:		Mechanical joints are acceptable above accessible ceilings.			
12	(4) Piping installed in concealed locations shall not have mechanical joints	СМТА	ceilings.	Released With BP8 Group 1		
13	The Bid Break Down Form shows this bid package 238.8 Wet Fit Out, providing Hot Water Reheat Colls. This should be clarified as to be furnished and piped only. Installation into the ductwork would be by Bid Package 23A.8. Dry Fit Out.	Walsh	Recommendation accepted. Walsh will issue bid documents that correct the scopes of work accordingly.	Released With BP8 Group 1		
14	Which Subproject will the Window Film bid for the CTC AAC project fall under? We are trying to make sure our window film is included in the correct subproject since there are so many for this big project. TC238.8	Walsh	Window film will be part of the Interior Glazing package which will be a 'Group 2' trade. Group 2 will be issued for bid in early 2025. Film as required on exterior glass will have been included with the previously let exterior glazing pacakge with Bid Package 07.	Released With BP8 Group 1		
	On Drawings M204.A1, M204.B1 Should tagged note HF229, read include in "Base Bid", not include in "Alternate					
15	#1 and Base Bid"?	CMTA	Walsh agrees this note should read to include in "Base Bid". Budgets will not be shared with the marketplace prior to	Released With BP8 Group 1		
16	Good morning, do you have a budget for TC-09A.8 and TC-09G.8?	Walsh	bidding.	Released With BP8 Group 1		
17	Please see the attached substitution request for the project referenced above. JM Corbond IV Closed-Cell SPF uses an HFO blowing agent and is GREENGUARD & GREENGUARD Gold certified. Feel free to reach out if you have any questions.	Champlin	Substitution Request approved.	Released With BP8 Group 1		
			If a subcontractor submits a combination bid, the submitting firm may submit a single bid bond for the greatest possible combination of values. Copies of the bid bond should be			
18	If combination bids are submitted, will each bid require a bid bond?	Walsh / UK	included with each individual bid. Modular exam room scope will provide drywall interior to	Released With BP8 Group 1		
19	What drywall scope is the modular exam room subcontractor providing?	Walsh	the exam room only. The 'exterior' wall of the pod facing the corridors is to be drywalled by the drywall subcontractor TC09A8.	Released With BP8 Group 1		
			Fit Out trades are to provide the following to the Modular Exam Room subcontractor: Electrical - Lights, Power packs, and low voltage wall switches to be provided to Modular sub. Casework subcontractor to provide casework. DEH subcontractor to norwide door frames			
20	Will modular exam room provide all of their own materials?	Walsh		Released With BP8 Group 1		
21	How will testing of plumbing of modular aram sooms occur?	Walsh	Modular exam room subcontractors will be responsible for testing their plumbing in factory prior to delivery to site. If the plumbing subcontractor requires the Ptrap on the exam room sinks to be left off for testing of the entire system, then modular sub will comply but plumber (TC22A8) shall include installation of the PTrap. If the Ptrap can be left in laces the will be installed by the modular sub	Palacted With BBS Group 1		
21	now win testing of planning of modular exam rooms occur:	Walsh	No, modular subcontractor is not provided by appropriate PPS			
22	Is modular subcontractor providing their own wall protection?	Walsh	subcontractor.	Released With BP8 Group 1		
23	What will subcontractor provide for low voltage systems?	Walsh	Modular sub will provide pathways, pullstring, and back boxes in wall and connected to a box at the corridor side for continuing to the cable tray. Modular sub will not pull or terminate teledata cabling.	Released With BP8 Group 1		
	Linac 2 appears to encroach on the required clearance of the cabinet adjacent.	Champlin/Walsh	If this is inquiring about the Modulator Cabinet in the SW corner, we have reached out to the vendor and received email confirmation that this equipment will not interfere when located as shown, and will not be an issue when pulled away from the plan south wall for maintenance as			
24	Please clarify if this is acceptable.	Consulting	this will be on a temporary basis. This was evaluated by the design team to coordinate	Released With BP8 Group 1		
25	Confirm wall partition thicknesses has been coordinated with in wall devices and equipment	Champlin	partition depth with wall boxes & other devices, pipes, conduits, etc. Coordination by each contractor both across and within the various trades is still required to avoid field conflicts.	Released With BP8 Group 1		
26	What firm is responsible for fire caulking joints between masonry and gypsum wall assemblies?	Walsh	Drywaller shall be responsible for fire caulk between gyp and masonry assemblies.	Released With BP8 Group 1		
27	Is intent that TC09A8 be responsible for all supply and delivery of all wall protection or install only?	Walsh	Intent is for TC09A8 to furnish and install the 102600 wall protection.	Released With BP8 Group 1		
27	is TC09A8 intended to be responsible for supply and install of all resilient sheet	Walsh	No, the RS VWC 097216.16 is not to be included in TC09A8.	Released With BPR Group 1		
20		.vuisii	his stope win be on in bid rackage 3 Group 2.			
29	is TC09A8 intended to be responsible for supply and install of all solid surface wall protection?	Walsh	No, solid surface counter tops, backsplashes, and wall protection will be completed by the Millworker and bid with group 2.	Released With BP8 Group 1		

Bid Package 08 - Fit Out - Group 1 BIM TRADES						
	Question and Response Log					
	Through RFI # 149					
30	The project has several wood, or wood look, materials on the project. Will the design team provide a prime wood sample that all wood trades are going to match against? Or will a priority be provided of which trade wood color / species is the prime for others to match?	Champlin / HGA	PLAM-1 & PLAM-2 on the Mat-ID sheet A014 are the primary finishes that other trades should match species, color, and grain.	Released With BP8 Group 1		
31	What is the primary species and color for the project wood grains?	Champlin / HGA	This information is listed on the Mat-ID sheet A015 for WD-1 & WD-2, which are intended to match PLAM-1 & PLAM-2 respectively. Veneer cut information is listed on Mat-ID description.	Released With BP8 Group 1		
32	WD FAB 1, 2, and 4 appear to have specific installation requirements and attachment details for that material. Are their details for the system and requirements for framing or backing of the system? 7/A814.1 shows the slats fastening into drywall without framing back up. 9/A848.1 implies plywood backing. 11/A848.2 shows a horizontal stud providing support for WD FAB-2. How frequently will this system require fastening along the vertical length?	Champlin / HGA	Detail 11/A812.2 identifies metal strapping at 24" o.c. as the typical backer requirement for WD-FAB-1, 2, & 4. Details 7/A814.1, 8/A848.1, & 11/A848.2 have been updated to remove the plywood in between the studs & note the typical strapping. General Note 16 added to sheet A800.	Released With BP8 Group 1		
33	11/A848.2 calls for wood blocking behind the terrazzo base, what is the finish on the top surface of the wood blocking as this will be exposed where the slats are not present.	Champlin / HGA	This detail has been updated to add MET TRIM-7b to hide the blocking. MET TRIM-7a has been added to other terrazzo base details 2/A847, & 8/A848.1. The Wood blocking and Met Trim 7a shown in 11/A848.2 is excluded from Group 1 trades.	Released With BP8 Group 1		
34	There are no specifications issued for the misc metal and steel work for the	Champlin	See revised specification: SECTION 092216 - NON-	Released With BP8 Group 1		
35	The list of OFCI items is extensive and the documentation of the items, their locations, and the quantities are in thousand plus page documents. Can a document be provided to supply quantities of OFCI and CFCI items for bidding purposes?	Walsh	A list of medical equipment types, quantities, and responsibility as planned by the medical equipment planner will be released via addendum.	Released With BP8 Group 1		
36	Would misc metal subs have the (CWKA-1 and CWKA-3) brackets for base	Walsh	Millworker will be responsible for furnish and install for these items. This will be bid with Group 2	Released With BP8 Group 1		
37	misc metal subs would not have any brackets shown on sheets A844 and A845, Millwork supplier would have these, correct?	Walsh	Millworker will be responsible for furnish and install for these items. This will be bid with Group 2.	Released With BP8 Group 1		
38	On sheet A013, Countertop brackets are called out as 064116 spec. section. Are misc metal subs to include any of these?	Walsh	Millworker will be responsible for furnish and install for these items. This will be bid with Group 2.	Released With BP8 Group 1		
39	Sheet A721, (7/A721) The stl tube header/post is not misc metal sub's to pick un correct?	Walsh	CH Response: Details 7 & 15/A721 have been revised to show metal stud box header via delegated design per metal stud framing spec section 092216	Released With BP8 Group 1		
		Walsh	S801 is the only structural drawings in BP-08 Fitout. All other structural drawings were issued as part of BP-07 Core			
41	Sheet A834, (2/A834) Patient Lift Support System is together with th IV Track/curtain? See attached sketch.	Walsh	Walsh's view is that the patient lift and the IV/Curtain Track are separate systems and this detail is explaining the spacing below ceiling required for function of the patient lifts. TC09A8 Carpentry to owe support of the IV/Curtain track and furnish install of those systems. TC05B8 would provide above ceiling supports for the patient lift systems.	Released With BP8 Group 1		
42	All the information on this sketch says to refer to manufacturers documents, we don't have anything on that?	Walsh	Architectural drawings and Medical Equipment drawings call out locations for various equipment. Medical equipment drawings reference specific equipment ID numbers. Addendum 1 issued a room by room document with each piece of medical equipment with key physical properties and links for the equipment cut sheets.	Released With BP8 Group 1		
43	Please provide clarification of the temporary filters for temporary conditioning requirements. How many months? Which equipment?	Walsh	Subcontractors are to provide filters as needed to maintain clean ductwork during the course of the project per spec and per LEED requirements. Failure to maintain dust free ductwork will require ductwork cleaning at subcontractors expense. Re: heating Coils. Per RFI #13 these will be furnished and	Released With BP8 Group 1		
44	Who provides the heating coils? TC 23A.8 Dry side or Wet side? Do they come	Walsh	piped by Wet side, installed by dry side. Air terminal units are called out as part of the Dry Side. Venturi air valves per schedule in documents to be furnish only by Constole subcontractor.	Palassad With RD9 Crown 1		
	Please clarify the duct construction of the lab exhaust duct. Spec section 231200 6. A.1. states duct with be PVC coated galvanized duct, but paragraph 7. C. (3)	CNATA	The intent is for lab exhaust to be PVC coated	Palasted With RDR Come 1		
46	Test & balance specification 203100 is included in the documents however, under the HVAC trade specific scopes final test & balance of mechanical systems will be by others. Is test and balance part of this bid? If not, will a separate TAB package bid at a later date?	CMTA	Yes, TAB to be included in the project win and/erener. Yes, TAB to be included in the mechanical fit out contracts. This will be corrected in the Scope of work Documents. TAB to be carried by the applicable Mechanical trades (air balancing with Drv and water balancing with Wet).	Released With BP8 Group 1		
47	A liquid nitrogen (LN2) subcontractor submitted the following questions regarding the liquid nitrogen system, which is part of Bid Package TC 22B.8-	CMTA		Polosod With PD9 Group 1		
48	Is there any plan for future expansion of the system? If not, it would be inefficient/costly to go with 3" piping. If there are plans for future expansion, should there be any capped bayonets? If so, where?	СМТА	there are no plans for future expansion.	Released With BP8 Group 1		
49	It appears that the LN2 system is to feed 10 Cryo-storage freezers on the 5th floor and 4 Controlled Rate Freezers. Where are the Controlled Rate Freezers located?	СМТА	controlled rate freezers are located in Processing room B505A; LN2 supplies will be shown in next addendum.	Released With BP8 Group 1		
50	What is the anticipated Bulk Tank pressure going to be ran at?	CMTA	35 psi	Released With BP8 Group 1		
51	I don't see anything about gas traps, gas vents, or other cryo components. Is it up to the LN2 subcontractor to determine if/where these items are required? Are the N2 vent lines to be varuum included as well? Or will those be included	СМТА	additional relief vents and connection details will be shown in final addendum.	Released With BP8 Group 1		
52	copper?	СМТА	yes the N2 vents are to be vacuum jacket	Released With BP8 Group 1		
53	none of the glazing systems appear to fall under spec 084418. Please confirm this is correct.	Champlin / HGA	CW-3 is not used in the project. This spec section should be omitted.	Released With BP8 Group 1		

Bid Package 08 - Fit Out - Group 1 BIM TRADES					
		Question and Resp	ponse Log		
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	riiougi ki i #	110			
54	None of the glazing systems appear to fall under spec 085100. Please confirm this is correct.	Champlin / HGA	SVW-1 can be found on L2 in room Sat Pharm B207F. Tag was added accordingly on the floor plan. This will be picked up by Interior Glazing sub bidding in group 2.	Released With BP8 Group 1	
55	Spec section 097216.16 calls out only a single acceptable manufacturer for the RS-WVC's. What are alternative manufacturers or products that can be bid for this spec section?	Champlin / HGA	This question does not apply to Group 1 trades. RS-WVCs are not in scope for any Group 1 trades.	Released With BP8 Group 1	
	Is the 'film' as noted in the WD FAB-1,2, 4 integral with the WD FAB or is this a wall covering separate from the alumnimum wood look slats? What Spec section covers the wall covering 'film'? Is there information on the custom		The custom film is to be provided by the manufacturer along		
56	gradient available?	Champlin / HGA	with the WD FAB items. WD-FAB to be bid with Group 2.	Released With BP8 Group 1	
57	Spec 097773 calls out only a single acceptable manfucturer for multiple of the WD FAB products. Can an alternative manufacturer be submitted?	Champlin / HGA	Submit an official substitution request and provide product data for comparison with the basis of design product.	Released With BP8 Group 1	
58	Spec 098316 calls out a single acceptable manufacturer for the acoustical plaster ceilings. Can any plaster ceiling that meets the acoustic performance criteria be substituted?	Champlin / HGA	Yes. Substituted product must meet all of the performance criteria, including but not limited to: acoustics, flame spread, light reflectance, and VOC / LEED	Released With BP8 Group 1	
	 Please clarify that the security subcontractor is to use the card reader that is integrated into the lockset that is being provided by the door hardware contractor, where applicable according to the 087100 hardware sets, and the security subcontractor is not to provide a card reader for these openings as 		If the 087100 hardware set includes integrated card reader, the security contrator will not provide a wall or mullion mounted reader but will provide all cabling needed to		
59	indicated on the ESS drawings.	CMTA	connect the lock set to the security controller.	Released With BP8 Group 1	
60	 Please confirm that the security contractor is to provide all conduit, pathway, and line voltage included in TC 28A.8. 	Walsh	Confirmed. Security is to provide their own conduit, pathways, and line voltage.	Released With BP8 Group 1	
61	3.Please clarify the type of panic buttons that are to be used by the security contractor. i.e. Desk or wall mounted?	СМТА	Panic Buttons should be under desk or counter unless symbol is shown on a wall.	Released With BP8 Group 1	
62	Can you please clarify what type of glazing should be provided for glazing type GL-63T?	Champlin / HGA	For all locations which call for GL-63 or GL-63T, provide glass type GL-62. GL-62 is 5/16" laminated fire rated glazing: Pilkington Firelite Plus.	Released With BP8 Group 1	
63	This glazing type is listed on the core and shell door schedule as being used in several door lites, but it is not defined in the glazing specs or in the material identification code pages of the architectural plans.	Champlin / HGA	As noted in the previous question, all GL-63 glass should be GL-62. The specs for GL-62 are as follows:(GL-62) Laminated Ceramic Glazing: Proprietary product in the form of two lites of clear ceramic glazing material laminated together to produce a laminated lite of 5/16-inch (8-mm) nominal thickness; polished on both surfaces; weighing 4 lb/sq. ft. (19.5 kg/sq. m); and as follows: 1. Fire-Protection Rating: As indicated for the assembly in which the glazing material is installed, and permanently labeled by a testing and inspecting agency acceptable to authorities having jurisdiction. 2. Polished on both surfaces, transparent. 3. Product: Subject to compliance with requirements, provide "FireLite Plus" manufactured by Nippon Electric Glass Co., Ltd. and distributed by Technical Glass Products. 4. Other Acceptable Manufacturer: Vetrotech Saint-Gobain.	Released With BP8 Group 1	
05	There are two other glazing types that are listed on the door schedule pages as	Champin / HGA		Released with Bro Group 1	
CA	being used for door lites that I do not see in the glazing specs or material identification code pages: GL-11 and GL-20T. Should these be provided as GL-1	Chamelia (1101	There also have should be Cit and C 20	Released With DDP Course 4	
	I'd like to submit a substitution request for the Structural Glass Railing for the UK Cancer treatment center project. RIW Ornamental Metal, Inc. would like to be listed as one of the approved manufacturers for section 057313- Glazed Decorative Metal Railings. The current basis of design is CR Laurence Co, we manufacture and install the same type of railing and are 100% MWBE for both fabrication and installation. Attached please find the filled out substitution request form, photos of our work, product specs, data, and test reports. Please let me know if you need any more information. Thank you for your help	unamplin / HGA	The substitution request has been reviewed and marked	reieasea with BP8 Group 1	
67	processing this request. For Bid Package 238.8 HVAC Wet Side, Specification 201300-11, Paragraph R, states Condensate Drain shall be: (1) Type "DWV" copper, wrought copper, lead free solder. DWV Copper fittings are not available in larger sizes, the fittings that are available are very costly.	Champlin / HGA	Approved as noted.	Released With BP8 Group 1	
68	Condensate Drain System.	СМТА	duty bands may be used in lieu of copper	Released With BP8 Group 1	
69	What trade category is to carry the sound cap?	Walsh	The EPJT's are to be carried by TC09A8.	Released With BP8 Group 1	
70	PNLG-1 appears to be the same product as the WD-CLG-1. What trade category is to pick this up?	Walsh	PNLG-1 is to be picked up by the TC09G8 Ceilings trade category.	Released With BP8 Group 1	

Bid Package 08 - Fit Out - Group 1 BIM TRADES						
	(Door	Question and Resp	ponse Log			
	Thranch RF1 # 149					
			C&S Mechanical and Plumbing subcontractor to furnish and install all Div 22/23 sleeves based on quantity provided during that Bid. Quantities in excess of the C&S bid will be resolved at a future date. Div 22 and 23 subs should not include any sleeves. Additional scope for hours associated with coring will be added in each Ex B.2 to account for owner driven sleeve changes. The electrical C&S trade included 40 poke throughs/floor boxes per floor. Of those: =80% are 6' boxes			
71	 In the Core & Shell bid package (BP07) there was an allowance to add a large quantity of sleeves in the plumbing/mechanical/electrical trade categories. Should we assume all floor sleeves are accounted for in BP07 and we do not need to include them in BP08? 	Walsh	•10% are 8" boxes •10% are 10" boxes quantities above this are the responsibility of the fit out electrical contractor.	Released With BP8 Group 1		
72	2. There are no schedules/specs for the Medical Air Compressor (MAC-1) or Vacuum Pump (VAC-1) in the medical gas documents. Are these pieces of equipment to be included in the Fit-Out package? Or will they be purchased separately by the owner? They were removed from the Core & Shell package by addendum, but they are still indicated on BP08 drawings to be with C&S. Also, the vacuum exhaust piping and air intake piping for these pieces of equipment are indicated on BP08 drawings as if they were included with C&S pricing, which they were not. Should MAC-1, VAC-1, and all associated piping be included in the Fit-Out pricing? If so, please provide equipment schedules	Walch	MAC-1 and VAC-1 with all associated piping are to be included with the BP8 Fit Out Medical Gas Subcontractor TC2288. Schedule for this equipment will be issued via addendum	Palastad With BBS Group 1		
73	3. On drawing MG280.1, key note MG10 indicates hose reels in a handful of locations. Are these owner furnished or to be furnished by the medical gas contractor? If by med gas contractor, please provide a basis of design/spec for what is required.	CMTA	To be provided by Med gas contractor; basis of design will be provided in next addendum.	Released With BP8 Group 1		
74	4. On drawing MG010.1, on the "Medical Gas Outlet/Valve Box Schedule" items labeled MG-23, MG-24, & MG-25 say "Outlets Provided With Headwall", however in the Remarks section below the schedule, note 2 says, "Provide and install outlets in headwall system." Please confirm that any owner furnished headwall systems will include associated med gas outlets. We assume final connection to headwall system will be at the top of the wall, connecting to headwall manifold.	СМТА	Yes, any owner supplied headwalls will include outlets and internal piping; connections will be made by the contractor to the medical gas piping at top of the headwalls. Some of the head walls have multiple connection points (ie 2 vacuum connection point, etc.) Refer to medical equipment drawings for more information.	Released With BP8 Group 1		
75	5. Per spec section 00 24 13.03 we are to include costs associated with the pre- apprentice program. The subcontractors list includes "Mechanical" and "Plumbing". Since mechanical and plumbing is broken up into four separate Trade Categories (HVAC Wet, HVAC Dry, Plumbing, Med Gas) which trade categories need to include these costs associated with the pre-apprentice program?	Walsh	HVAC Wet, HVAC Dry, and Plumbing should each carry cost for 1 Preapprentice.	Released With BP8 Group 1		
76	6. Can the hid date be extended one week to Thursday January 23 rd 2	Walsh	UK has several large projects bidding in subsequent weeks.	Released With BP8 Group 1		
77	 I.In addendum #2, RFI Log question #1 is about combination bids being acceptable. The response stated that it was anticipated combination bids of HVAC Wet and Dry and a combination of Plumbing and Medical-Gas would be acceptable. Eor greater efficiencies we would like the owner to allow a single combination bid for all these trades as UK has on their other projects. The paperwork and associated time constraints that are required for multiple bids of this magnitude would be very difficult and would suggest to have the due date for breakdowns to be on a 48 hour time frame after bids are submitted. 	Walsh	A complete combination bid will be allowed and forms provided. Bid Breakdown forms with unit rates and the labor rate sheet will be required at time of bid. In event of discrepency between the bid breakdown form and the Bid form written value will govern.	Released With BP8 Group 1		
78	please, confirm if healthcare MC cable is acceptable, where allowed by code? Are there locations such as the 12 occupancy that it couldn't be utilized?	AFI	Refer to Specification Section 26 0519 Low-Voltage Electrical Power Conductors and Cables, Addendum #2 for Healthcare MC specifications indicate type/usage/location allowed for HealthCare MC cable."	Released With BPS Group 1		
79	There are (2) Alternates on this project. The specifications and drawing notes, indicate that these alternates are additions to the Base Bid. The bid form and bid breakdown form appear to indicate these alternates as deductions. Please clarify.	Walsh	The specifications are correct. The two alternates are ADD alternates. These will be corrected on Bid forms and bid breakdown forms.	Released With BP8 Group 1		
80	Which Trade Category is responsible for concrete housekeeping pads for plumbing/med gas/mechanical equipment?	Walsh	Concrete housekeeping pads will be completed by the structural concrete subcontractor previously under contract.	Released With BP8 Group 1		
81	On drawing MG 102.A1, most of the Instrument Air (IA) piping in the CSP area is not sized and there are no notes where drops are shown at equipment. However, when looking at the plumbing drawings (P102.A1 & associated enlarged plans) the IA mains are grayed out, but the branches are dark line type, sized, and have associated notes. Being that 'Medical Gas' and 'Plumbing' are two separate Trade Categories, can you please clarify the scope of work related to Instrument Air (IA) between the two TC' c2	СМТА	IA part of Medical gas scope; refer to enlarged CSP plumbing plan issued with addendum 3 for equipment connection requirements	Released With BPS Group 1		
82	Is the Talk-a-Phone on sheet T-001A to be included in Division 27 or 28's scope, or is it provided by others? If it is to be included by Div 27 or 28, please provide the part number or specification for the Talk-a-Phone	Walsh/UK	Talk-a-phones are to be OFCI attached to the TC28A8 trade category.	Released With BP8 Group 1		

Bid Package 08 - Fit Out - Group 1 BIM TRADES				
	C Resp	uestion and Resp ones As Of: 1/9/2	oonse Log 25 @ 8:00 AM	
	Through RFI #	149		
92	General Note G. on Sheet T-001A calls out providing 6 strand single mode indoor/outdoor fiber and coordinate with light pole contractor. I cannot find any other reference to this fibers origin or destination. Can more detail about this fiber he provided?	CMTA	The intent was for this 6 strand fiber to be terminated in	Palassad With RD9 Crown 1
84	For \$96 conduit work, is this to be provided and installed by electrical?	Walsh	Electrical TC26A8 is responsible for the cable trays and pathways inclusive of note \$96.	Released With BP8 Group 1
	For S95 conduit and junction box, is this to be provided and installed by		Electrical TC26A8 is responsible for the cable trays and	
85	electrical?	Walsh	pathways and in wall boxes inclusive of note S95. Media Converters shall be used for exterior devices. Owner	Released With BP8 Group 1
86	For cable runs that are over 285', which media converter should be used? Can we use 2 strand fiber for the cable runs that are over length? If so, which	CMTA	shall provide this equipment. This will need to be coordinaed with owner. Fiber cable	Released With BP8 Group 1
87	catalog # should be used?	CMTA	typically do not have less than 6 strands.	Released With BP8 Group 1
88	Please clarify who is responsible for providing and installing the top level of cable tray in the IDF and EIDF rooms, the electrical contractor, or the Division 27 contractor?	Walsh	Cable tray that is shown on the T100 series plans is to be by the Electrical TC26A8 contract. Cable tray in the IDF and EIDF rooms that are not shown on the T100 Series but are shown or noted on the T200 series is to be by TC27A8. Electrical TC26A8 is exponsible for the cable tray inclusive	Released With BP8 Group 1
89	Please clarify who is responsible for grounding the cable trays.	Walsh	of grounding.	Released With BP8 Group 1
90	Sheet T-101C Tagged Note S88 Assuming this conduit is for backbone cabling, could you please provide a "T" series drawing for Level 01 Area F? We can't see the area F side.	СМТА	IDF locations are not snown in Area F. Contractor snail provide 1000' of fiber optic cable as called out in contract documents and any necessary equipment needed for a completed permanent link connection. Final location and coordination will need to be done with UKIT systems department.	Released With BP8 Group 1
91	Sheet T-200 Note S76: Who is responsible for providng and installing plywood in the IDF's?	Walsh	Plywood in the IDFs is the responsibility of the Core and Shell Framing contractor TC09A7.	Released With BP8 Group 1
02	Who is responsible for providing and installing the grounding busbars in the	Walsh	Grounding and Bonding systems are to be completed by TC26A8 Electrical including the grounding busbars in the	Polosod With PP9 Crows 1
92	Who is responsible for bonding conductors to building steel?	Walsh	Grounding and Bonding systems are to be completed by TC26A8 Electrical.	Released With BP8 Group 1
94	Please clarify who is responsible for providng and installing AV system devices?	Walsh	Pathways and back boxes by electrical subcontractor. Other scope including cabling, devices, and programming by owner.	Released With BP8 Group 1
95	Please clarify who is responsible for providing and install Nurse Call system devices?	Walsh	NURSE CALL is removed from scope for BP8 Fit Out Group 1 trades. This will be bid with rough in, cabling, and install at a future bid opportunity with additional information from the nurse call vendor and owner.	Released With BP8 Group 1
96	Please clarify who is responsible for providing and installing RTLS system devices?	Walsh	Pathways and boxes by electrical. Devices and programming furnished by owner. Cabling and install by TC27A8.	Released With BP8 Group 1
97	Are security camera data cables to be included in the Division 27 pricing, or the Division 28 pricing?	Walsh	All security scope including conduit and cable to be carried with TC28A8 Security as called out in the Scope of work Ex B.2 documents.	Released With BP8 Group 1
98	Please provide cabling diagrams and risers for the Nurse Call and RTLS systems.	Walsh	RTLS System riser and cabling diagram is not available at this time to provide to subcontractors.	Released With BP8 Group 1
99	Division 27 bid form has lines for several systems to be provided that are not on the drawings. Please clarify if these systems are to be provided, and if they are, please provide some details as to what exactly is to be included: Line 007 Paging System, line 008 Central Clock System, and line 009, Intercom.	Walsh	Where subcontractors have identified no scope they may enter \$0 on bid breakdown forms.	Released With BP8 Group 1
100	Can Aluratone products be counted as an acceptable subsitution for wood look ceilings?	Champlin	The substitution request is acceptable provided the system meets the basis of design levels for plank / panel sizes, reveal spacing, maintenance access, finish, NRC, etc. The proposed product indicates a NRC of 0.55, and the RWDI acoustic report notes that a 0.80 is required for public waiting areas and must be met. It appears this system requires additional measures to meet this requirement which must be included.	Released With BP8 Group 1
101	Sound masking is referenced on the documents. Who is responsible for what to provide this system?	Walsh/UK	The particulars of the sound masking system has not been designed fully. As such, the sound masking will be bid at a future date as a complete turn key system inclusive of raceways, cabling, devices, and head end systems.	Released With BP8 Group 1
102	RF Shielding - Page 314, number 12. Not seeing any design for magnetic shielding, should this be an allowance or excluded?	Walsh	Magnetic shielding is a component of the delegated design of the RF shield. Given that the magentic shield has not been defined by the magnet vendors an allowance is being established for 2,000 pounds of magenetic shielding material per magnet or 8,000 pounds for the project. This would equate to the back wall(wall opposite the control room) and a toe plate, all at a thickness of X" of M36 silicon steel. If the shielding designs deviate from this assumed value the cost of the magnetic shield will be adjusted pro rata. This allowance is to be included in the base bid.	Released With BP8 Group 1
103	RF Shielding - Page 314, number 12. Shield to be copper. Are RF shields required to be copper?	Walsh	Yes. Shields are required to be copper per spec.	Released With BP8 Group 1
104	RF Shielding - Page 313, number 13, control room window to be glass and not plexi glass	Walsh	Yes. RF windows are to be glass and not plexi.	Released With BP8 Group 1
105	PE Shielding - Page 214 number 16 what is the STC rating on the door?	Walsh	STC Pating on the door is noted on the G200 Acoustic Plans	Palassad With PDS Group 1

Bid Package 08 - Fit Out - Group 1 BIM TRADES				
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	1 ili ougli Kr1 #	149	Subcontractor to comply with the door bardware	
			specifications for the RF shield door. However, the door	
			hardware shall maintain the shielding effectiveness with the	
106	RF Shielding - Page 313, number 17, key pad is required? RF Shielding - Page 316, number 45, does the IV waveguide need to be in the	Walsh	door and locksets installed. Yes, IV Wayeguide is required to be in the door frames per	Released With BP8 Group 1
107	door jamb?	Walsh	Door schedules.	Released With BP8 Group 1
	As part of the C&S bid the Level 4 electrical branch panels were removed from			
108	the C&S electrical scope. Please confirm if these panels should be installed in base bid or the alternate	Walsh	As part of the Alternate scope the level 4 branch panels will be provided to the Fit Out Electrian for installation.	Released With BP8 Group 1
			BIM Coordination is ongoing for the project with C&S trades	
			for coordination. There is a potential of the C&S MEP	
			contractors completing the BIM modeling and coordination	
			of lower levels on behalf of the interior fit out trades to	
			unit cost is provided on bid form and language in the scope	
	Project schedule seems to show not enough time to do BIM coordination of the		of work exhibits to allow for adjustment on a floor by floor	
109	interior fit out before decks are poured. How is this process going to work. Confirm spec section 055813 Interior Column Covers are to be provided by the	Walsh	basis as needed.	Released With BP8 Group 1
110	09A.8 Contractor (DEC MET-3,4,5 on A013)	Walsh	Confirmed. Per Scope Item 63 in Ex B.2.	Released with BP8.1 Drywall Rebid
	Confirm spec section 057500 Decorative Formed Metal are NOT to be provided			
111	by the 09A.8 Contractor (DEC ME1-1,2 on A013)	Walsh	Confirmed. These items are not in scope for TC09A8.	Released with BP8.1 Drywall Rebid
			Hatching (like on A213A) denotes the modular scope and	
			the walls in these areas are by the Modular Exam Room Subcontractor. There are locations where partitions are by	
			TC09A8 that directly abut the prefab scope. Refer to the B2a	
			partitions in room A303 as an example. Parition Types P and	
			V are by the Modular exam room subcontractor. Interior to the modular exam rooms. TC09A8 does owe the 102600	
	Confirm that Exam Room walls within the crossed areas on floor plans are a part		Wall protection. 'Outside' or corridor wall drywall of the	
	of this scope of work. These walls consist of wall types P and V on the partitions		modular exam rooms are to be by TC09A8.	
112	page which reference STC design by Prefab supplier. Confirm 078123 Insumescent Fire Protection to be provided by TC 07D.7. No	Walsh		Released with BP8.1 Drywall Rebid
113	scope to fall within TC 09A.8.	Walsh	Confirmed. Intumescent is not to be provided by this trade.	Released with BP8.1 Drywall Rebid
	Joint Firestopping. Per project specifications a 3rd Party installation is only required for spec section 07 84 13 Penetration Firestopping. Please confirm if		Specification 078443 does not reference a 3rd Party	
114	this is required for 07 84 43 Joint Firestopping as well.	Walsh	requirement. Installers shall comply with 078443-1.6	Released with BP8.1 Drywall Rebid
115	Please confirm that Firestopping of MEP penetrations is by respective trades	Malak	Confirmed	Deleged with DD0 1. Derwell Dehid
115	Please confirm if 10 51 13 Metal Lockers, 10 51 23 Plastic-Laminate-Clad	waish	Confirmed.	Released with BP8.1 Drywall Rebid
	Lockers, and 10 51 29 Phenolic Lockers are to be furnished and Install by TC			
116	09A.8. Scope of work is unclear as the spec sections do not occur in our	Walsh	TC09A8 shall not furnish or install lockers for 105113,	Palazcad with PPS 1. Donwall Pabid
110	package but scope item #114 suggest otherwise.	waish		Released with broth Diywain Rebid
	Please confirm if 09A.8 is only responsible for installation of door frames.		Confirmed. 09A8 is to install door frames provided by others.	
117	doors/hardware to be by others	Walsh	Temporary protection of door frames is to be by others.	Released with BP8.1 Drywall Rebid
			OF/CLitems are by TC09A8.	
			OF/CI/VI items are primarily VI items that have MEPT	
			connections and are not the responsibility of TC09A8.	
			(MOTE-129) from the Medical equipment CECI list.	
			Modular Exam room subcontractors will install OFCI inside	
118	Please confirm if 09A.8 is to provide installation for all OF/CI and OF/CI/VI items	Walsh	the rooms.	Released with BP8.1 Drywall Rebid
	Please confirm Owner Furnished items can be delivered on an "as needed"		09A8 shall not be responsible for storage of Owner	
119	basis. No storage to be provided by the 09A.8 contractor for CI items.	Walsh	Furnished items.	Released with BP8.1 Drywall Rebid
120	With a large number of long quote lead time items, will a bid extension be	Walch	No. This bid package is tied to award and release of critical	Polograd with PDS 1. Dorwall Pobid
120		***	pour nellis.	neicased with bro.1 Drywall Rebid
	Reference Interior Elevation Detail 18/A693 as an example. There are many			
	objects that are greyscaled with out material identification tags (Typical Throughout) Are these objects intended to be OF/CLitems? These items do		Items listed in the 102800 specification to be provided by	
	not appear on the Equipment Responsibility Matrix. If any of these items are to		TC09A8. Items in greyscale not noted as OFCI or in this spec	
121	be furnished by 09A.8 can we ask to have a material identification tag included.	Walsh	are excluded.	Released with BP8.1 Drywall Rebid
122				
123				
125				
126				
127				
128		1		

Bid Package 08 - Fit Out - Group 1 BIM TRADES						
Question and Response Log						
	Respones As OI: 1/9/25 @ 8:00 AM					
	Through RF1#	149				
129						
130						
131	UK typically uses Midmark Synthesis cabinetry in support areas (Nourishment, Soiled, some Meds, Break, Labs, etc.), but those rooms are not included in the scope. Please confirm if modular cabinetry will be used in those areas.	Champlin	If not shown on plans, do not provide quote/bid. We acknowledge the previous relationship, but need to establish a base number for what is shown on drawings.			
132	Counters on previous UK projects have been pre-drilled to accommodate UK's standard faucet. Is the modular casework manufacturer expected to pre-drill the counters? Will specs be provided to confirm the hole placement?	Champlin/Walsh	Assume all counter tops in scope shall be predrilled. Coordination shall be required with contractor(s) prior to any pre-drilling. Coordinate dimensions with approved fixture cut sheets provided by contractor. Succesful firm will be responsible for providing the hole and is suggested to be predrilled. Plumbing drawings and specifications were provided with the RFP to coordinate with proposal.	NICK PLEASE REVIEW CH SUGGESTGED RESPONSE Nick updated. WJS modified		
133	Previous UK projects have used sloping tops rather than soffits. Please confirm that soffits are being used.	Champlin	Yes. Soffits will be used instead of sloped tops			
134	Previous UK projects have used integrated 4" backsplashes. The drawings show full-height backsplashes. Please confirm which backsplash is preferred.	Champlin	Provide full height backsplashes as shown			
135	Previous UK projects have used a door/drawer panel finish that doesn't require any hardware pulls. Please confirm whether hardware pulls are preferred.	Champlin	Hardware pulls are preferred in all instance to meet ADA and match design intent in other exam spaces.			
136	Previous UK projects have included locks on mobile supply carts. Please confirm whether locks should be included.	Champlin/Walsh	Owner does need ability to lock carts. Please provide technical information on options to avoid keys.	NICK PLEASE REVIEW CH SUGGESTGED RESPONSE Nick updated.		
137	Previous UK projects have included standard sink bases with locks. The drawings call for ADA wall-hung sink units. Please confirm that ADA wall- hung is preferred.	Champlin	Provide sink apron as shown on drawings. No storage allowed at sink base			
138	Please confirm if under cabinet lighting should be included in the modular cabinetry RFP or if under cabinet lighting will be provided by others.	Walsh	Lighting supply and install to be by electrical subcontractor. Modular caseworker responsible for any required grommets or holes in casework to allow this to be properly wired.			
139	Please confirm which rooms will be delivered/installed to the pre-fab facility in Indianapolis and which rooms will be delivered directly to the project location.	Walsh	Refer to overall Architectural Notation Plans for locations of modular exam rooms. 138 in total.			
140	An estimated percentage would be helpful if exact room counts aren't available	Walsh	see above			
141	How many phases of delivery/installation are expected? Are estimated dates available?	Walsh	Refer to project schedule included with the RFP documents.			
142	During the pre-bid meeting comments were made that bonds and insurance are not required for the RFP. Please confirm this is accurate.	Walsh	Project is utilizing an SDI program and so no cost for bonds should be included. Project is utilizing a CCIP program. Offerors insurance should be aligned with the CCIP program. Program guide is included in RFP documents.			
143	Please provide clarification on delays in section 7.1. Figures of \$2,850 and \$400 are both listed.	Walsh	Ś2850 is correct.			
144	Please confirm payment process. Exhibit N (Textura) and Section 6.30 (Payment Plus/Net30) have some conflicts.	Walsh	Contract for Modular Casework subcontractor will be through Walsh Construction and per Walsh's Subcontract procedures including use of the Textura system.			
145	Are there any costs associated with the pre-apprenticeship program? Is the modular cabinetry installer/manufacturer/dealer expected to provide 8 weeks of pay?	Walsh	No the modular caseworker is not expected to pay wages for 8 weeks. Modular subcontractor may be required to have a Pre-apprentice(s) shadow their crew while the program is active.			
146	 Does a valance need to be incorporated on ALL upper cabinets, or just ones with UC task lights? 	Walsh	Assume Valance is only required at casework where UC task lights are identifed.			
147	2. The sink is sloped for ADA, but at 36'H which is not ADA. Do we need to lower this to ADA height?	Walsh	Assume all counter top heights are ADA compliant as currently shown.			
148	3. What are the dimensions for the glove holes for the upper cabinets?	Walsh	Assume standard Glove box dimensions at this time. Final shall be confirmed with client's preferred glove boxes.			
149	4. What type of locks for cabinets where it is indicated – keys or keyless locks?	Walsh	Cabinet locks, where required, shall be keyless. Provide cut sheet of proposed keyless lock in proposal.			

SUBSTITUTION REQUEST



(During the Bid Period)

Project:	UK Healthcare - Cancer Treatment	Substitution Request Number:
	and Advanced Ambulatory Center	From: Derek Koester - Stevens Industries, Inc.
To:	Ken Scott - UK Health	Date: 04/25/2025
		A/E Project Number: HGC No. 3776-003-00
Re:	Casework Drawer Slides - Brand	Contract For: Trade Category 06A.8 - Interior Finish Carpentry
Specifica	ation Title: Plastic-Laminate-Clad Architectural Cabinets	Description: Basis of Design - Accuride Brand Model 3634EC
Section:	<u> 064116 Page:</u> <u>6 </u>	Article/Paragraph: 2.4 Cabinet Hardware / Paragraph F

 Proposed Substitution:
 Fulterer USA Brand Soft Close Drawer Slides - Model FR5001.ECD

 Manufacturer:
 Fulterer USA, Inc.
 Address:542 Townsend Avenue High Point, NC 27263-4552
 Phone: (336) 431-4646

 Trade Name:
 Fulterer
 Model No.: FR5001.ECD

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.

Submitted by:	Derek Koester - Director of Sales Casework and Millwork Division
Signed by:	Darek Kozestes
Firm:	Stevens Industries, Inc.
Address:	704 West Main Street
	Teutopolis, IL 62467
Telephone:	(217) 857-7138

A/E's REVIEW AND ACTION

Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures. Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures. Substitution rejected - Use specified materials. Substitution Request received too late - Use specified materials.						
Signed by: Bill Ryo	h				Date: 4/2	0/2025
Supporting Data Attached:	X Drawings	X Product Data	Samples	Tests	Reports	□

Paguast For Information	From:		
Request For mormation	DEL De serve sterre		
DEI #.	RFI Requester:	RFI Date:	
KF1 #:	Derek Koester	April 25, 2025	
Requested:	To:		
Drawer Slide Hardware			
Reference:	RFI Responder:	RFI Date Responded:	
Plastic-Laminate-Clad Architectural Cabinets			

Requested Information:

Project Specification Section Plastic-Laminate-Clad Architectural Cabinets - Section 064116, page 6, Item 2.4 Cabinet Hardware / Paragraph F, calls for "Full Extension, Zinc-plated ball bearing slides carrying a 100lb rating as manufactured by Accuride (Model 3634EC).."

Stevens Industries, Inc. would like to propose the use of the Stevens Advantage Full Extension Slide. This design, engineered by Fulterer USA, comes with a 100lb load rating, but are actually tested to 120lbs per ANSI/BIFMA X5.5 Section 7. The Fulterer USA Drawer Slides come with a lever disconnect for easy drawer removal, hold/close function, and Extended Warranty. The proposed Drawer Slide substitution will provide a significant cost savings to the project. Stevens Industries also utilizes a 200lb load rated Drawer Slide on all lateral file drawers.

Please find the attached Stevens Industries, Inc. - Drawer Slide Documentation for more information regarding Product Data. I have also attached Stevens industries' - Engineering File Box Details Documentation, showing the maximum weight that fully loaded file drawer box will weigh vs. the corresponding Drawer Slide capacity being utilized by Stevens Industries. According to the data, a Drawer Slide with a 100lb load capacity rating easily exceeds the 69.4lb and 86.4lb Letter and Legal File Box Requirements.

The 200lb load capacity rating for Lateral File Drawers also easily exceeds the 140.1lb Lateral File Box Requirement.

Project Profiles

Response:

FR 5001 ECD | Full Extension Ball Bearing Slide





Specifications

- side mount
- ↔ 12.8 mm / 0.50 in.
- Â dynamic up to 45 kg / 100 lbs.
- ball bearing cages
- \square steel, zinc plated
- +5 °C to +40 °C l +41 °F to +104 °F

Characteristics

- pitch 32 mm (1.26 in.) compatible hole locations
- · drawer profile with disconnect release trigger
- tolerance absorbing mounting tabs

Dimensions



build-in width 12.8 mm 0.50 in.

Length		Extension			Weight		Item No.
					per	set	zinc plated
mm	inch	mm	inch		kg	lbs.	
300	11.81	245	9.65		0.90	1.98	5061
355	13.98	350	13.78		1.05	2.32	5062
405	15.95	400	15.75		1.20	2.65	5063
450	17.72	450	17.72		1.36	3.00	5064
500	19.69	500	19.69		1.51	3.33	5065
550	21.65	550	21.65		1.61	3.55	5066
600	23.62	600	23.62		1.81	3.99	5067
650	25.59	650	25.59		1.97	4.34	5068
700	27.56	700	27.56		2.13	4.70	5069

Packing Unit - Sets per Box, all Lengths: 10







ECD SPRING FORCE: 16N ± 2N PER SLIDE

RECOMMENDED HARWARE:

CABINET- 3.5MM SPAX M4 BUTTON HEAD OR #8 TRUSS HEAD SCREW

DRAWER- 3.5MM SPAX M4 BUTTON HEAD OR #8 TRUSS HEAD SCREW

5001.300-GA.T001

Х



ger	neral toler	anc									
ISO 2768-m						missing dimensions see 3D = theor. intersection					
This drawing remains our property and may not be multiplied neither be disclosed to third parties (§§1,3 and 5 from the copyright Act (UrhG))											
covered according to DIN	ISO 16016	6 scale:		surface:		material, semi finished parts: A2					
<u>k)</u>			1:2			STEEL					
\mathcal{D}			date		name	(technical requirements Fulterer)					
ĥ			drawn 29-10-2	2018	HB	description:					
g			proven 00-00-0	0000	00	SIDE MOUNT FULL EXTENSION					
f)			C.1+			DRAWER SLIDE WITH SOFT-					
d)			FULL	ď	2	CLOSE & DRAWER DISCONNECT					
Ĉ			Fulterer AC	G & Co	KG	drawing number:					
b			A-6890 Lustenau / Austria		ustria	5001 300-GA T001					
a) 0	00-00-0000	0	Fulterer AG								
nd. changes	date	na.	CH-9430 St. Margrethen		ethen	replaces version date:					

Dienstag, 11. Oktober 2022 15:21:04 - markus.ropele
Accuride

MODEL 3634/3634EC

Heavy-Duty Over Travel Slides 3634EC includes Easy-Close 3634 Hold-in Detent Feature

APPLICATIONS: Wider drawers and trays used for storage in retail fixtures, restaurants, medical facilities and business offices, as well as residential kitchens, garages, and more.

Specified Drawer Slide 3634/3634EC

QUICK REFERENCE

Drawer size:	1 9/16" less than the
	cabinet opening
Lengths:	3634: 12"–28"
-	3634EC: 14"-28"
Height:	2.09"
Load Rating:	3634: 200 lbs.*
	3634EC: 175 lbs.*



Ball Bearings:

Features:

Carburized Steel

for quiet operation.

3634: Hold-in detent to prevent drawer

3634EC: Easy-Close brings drawer to

a smooth, gentle close; out stop silenced

rollout and bounce-back; In and out stops silenced for quiet operation.

Height: 2.09" [53.1 mm]

3634: Side mount: 200 lbs. [91 kg] per pair* Load Rating: Flat mount: 75 lbs. [34 kg] per pair* 3634EC: Side mount only: 175 lbs. [79 kg]** Travel: 1" [25.4mm] over travel Note: 3634-14" Full travel

Side Space: .78 +.000/-.02 [19.8 mm +0/-.5]

Recommended

Drawer Size: 1-9/16" [39.69 mm] less than the cabinet opening.

* Side mount testing based on 22" slides on a 42" wide drawer, cycled 50,000 times. ** Flat mount testing based on 22" slides on a 24" wide drawer, cycled 15,000 times.

P/N	Slide Length	Slide Travel	А	В	С	D	E	F	G
3634-12	12.00 [304.8]	13.00 [330.2]			9.60 [243.8]	8.82 [224.0]			
3634-14 3634EC-14	14.00 [355.6] 14.00 [355.6]	15.00 [381.0] 14.00 [355.6]	 5.58 [141.8]		11.60 [294.6] 9.74 [247.4]	8.82 [224.0] —			
3634-16 3634EC-16	16.00 [406.4] 16.00 [406.4]	17.00 [431.8] 17.00 [431.8]	 5.58 [141.8]		13.60 [345.4] 11.74 [298.2]	8.82 [224.0] —			
3634-18 3634EC-18	18.00 [457.2] 18.00 [457.2]	19.00 [482.6] 19.00 [482.6]	5.58 [141.8] 5.58 [141.8]	13.12 [333.2]	15.60 [396.2] 14.74 [349.0]	8.82 [224.0] 8.82 [224.0]	13.86 [352.0]		
3634-20 3634EC-20	20.00 [508.0] 20.00 [508.0]	21.00 [533.4] 21.00 [533.4]	5.58 [141.8] 5.58 [141.8]	13.12 [333.2] 13.12 [333.2]	17.60 [447.0] 15.74 [399.8]	8.82 [224.0] 8.82 [224.0]	13.86 [352.0]		
3634-22 3634EC-22	22.00 [558.8] 22.00 [558.8]	23.00 [584.2] 23.00 [584.2]	5.58 [141.8] 5.58 [141.8]	13.12 [333.2] —	19.60 [497.5] 17.74 [450.6]	8.82 [224.0] 8.82 [224.0]	13.86 [352.0] —	18.90 [480.0] —	
3634-24 3634EC-24	24.00 [609.6] 24.00 [609.6]	25.00 [635.0] 25.00 [635.0]	5.58 [141.8] 5.58 [141.8]	16.40 [416.6] 16.40 [416.6]	21.60 [548.6] 19.74 [501.4]	8.82 [224.0] 8.82 [224.0]	13.86 [352.0] 13.86 [352.0]	18.90 [480.0] —	
3634-26 3634EC-26	26.00 [660.4] 26.00 [660.4]	27.00 [685.8] 27.00 [685.8]	5.58 [141.8] 5.58 [141.8]	16.40 [416.6] 16.40 [416.6]	23.60 [599.4] 21.74 [552.2]	8.82 [224.0] 8.82 [224.0]	13.86 [352.0] 13.86 [352.0]		21.42 [544.0]
3634-28 3634EC-28	28.00 [711.2] 28.00 [711.2]	29.00 [736.6] 29.00 [736.6]	5.58 [141.8] 5.58 [141.8]	16.40 [416.6] 13.12 [333.2]	25.60 [650.2] 23.74 [603.0]	8.82 [224.0] 8.82 [224.0]	13.86 [352.0] 13.86 [352.0]	 18.90 [480.0]	21.42 [544.0]

Installation Instructions

IMPORTANT: Drawer Preparation: for optimal performance construct drawer 1-9/16" less than the cabinet opening.

Cabinet Member Installation – Side Mount

1. To separate slide members, extend slide to expose lever, actuate lever and remove drawer member.

Install cabinet (large) member first. For applications with an overlay drawer front, refer to Figure 1 for conventional mounting. For applications with an inset drawer front, set the slide back the thickness of the drawer front plus 1/8" [3.2 mm].





32 mm System

- Install cabinet members using 6 mm x 10 mm Euro screws. Be sure slides are parallel. Refer to Figure 1.1 for cabinet hole locations.
- **NOTE:** Due to the heavy load capability and limitations of screw retention in wood products, Accuride recommends the use of two #10 screws, 3/4" long, at the front of the cabinet member and at least one at the rear. The hole pattern on the cabinet member matches Models 3832/3834.





Install Drawer Member

- Mount inner member (smallest) to drawer using #8 slotted pan head screws. See Figure 1.2 and Figure 1.3. Leave all screws loose until final adjustment.
- Before installing the drawer member into the cabinet, be sure the ball retainers in the cabinet are fully forward. Install drawer into cabinet. Close the drawer and cycle.
- Adjust slide position until movement is smooth. Install additional set screws to secure and tighten to complete installation.





Under/Flat Mount Installation

- 1. Install cabinet members on cabinet floor, making sure slides are parallel. Secure in place. (Figure 2)
- 2. Position drawer members under drawer bottom 1/8" from the back of the drawer face (overlay drawer). Install screws through mounting holes into the bottom of the drawer.

Minimum Screw Length = Drawer Bottom Thickness - 1/16" (1/2" Drawer Bottom Thickness Minimum)

3. Before installing the drawer into the cabinet, be sure the ball retainer in the cabinet member is fully forward. Install drawer into cabinet. Close the drawer and cycle.

Figure 2. Under/Flat Mount Installation



Ordering Instructions

Complete your slide order for models 3634 and 3634EC specifying the following:

	<u>100 Pair</u>	<u> </u>	3634	-18	
Total Required Slides —					
Slide Finish					
Slide Model —					
Slide Length					
Easy-Close Feature —					
Optional Polybag Packagi	ng ———				

Packaging Options

Models 3634, 3634EC available in D-pack or bulk packaging.

Distributor (D) Pack: All lengths are packaged 5 pair per box. Polybag includes one pair of slides with mounting screws.

Bulk (P) Pack: All lengths are packaged 5 pair per box. Slides and screws are ordered and packaged separately.

Specifications

Slide members and ball retainers: Cold rolled steel Ball bearings: Carburized steel

RoHS compliant

NOTE: Specifications, materials, prices, terms, and delivery are subject to change without notice.

Accuride

ACCURIDE INTERNATIONAL INC. 12311 Shoemaker Avenue Santa Fe Springs, CA 90670 TEL (562) 903-0200 FAX (562) 903-0208

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LOWER LEVEL

MILLWORK FURNITURE LAB CASEWORK < MCW-3>

NOTES: If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.







LEVEL 01

MILLWORK FURNITURE MODULAR CASEWORK < MCW-2a> or < MCW-2b> LAB CASEWORK < MCW-3> STAINLESS STEEL MODULAR CASEWORK < MCW-1>

NOTES: If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.







LEVEL 02

MILLWORK FURNITURE LAB CASEWORK < MCW-3>

NOTES: If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.



MODULAR CASEWORK < MCW-2a> or < MCW-2b>

LEVEL 03

MILLWORK FURNITURE LAB CASEWORK < MCW-3>

NOTES: If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.









LEVEL 04

- MILLWORK
- FURNITURE
- MODULAR CASEWORK < MCW-2a> or < MCW-2b>
- LAB CASEWORK < MCW-3>
- STAINLESS STEEL MODULAR CASEWORK < MCW-1>

NOTES: If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.





MILLWORK FURNITURE MODULAR CASEWORK < MCW-2a> or < MCW-2b> LAB CASEWORK < MCW-3>

NOTES: If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.

STAINLESS STEEL MODULAR CASEWORK < MCW-1>



LEVEL 06



MILLWORK FURNITURE MODULAR CASEWORK < MCW-2a> or < MCW-2b> LAB CASEWORK < MCW-3> STAINLESS STEEL MODULAR CASEWORK < MCW-1>

NOTES:

If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.

Casework Scope



LEVEL 07

Casework Scope Delineation Diagrams

- MILLWORK
- FURNITURE
- MODULAR CASEWORK < MCW-2a> or < MCW-2b>
- LAB CASEWORK < MCW-3>

STAINLESS STEEL MODULAR CASEWORK < MCW-1>

NOTES:

If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.



LEVEL 08

Delineation Diagrams

MILLWORK FURNITURE

MODULAR CASEWORK < MCW-2a> or < MCW-2b> LAB CASEWORK < MCW-3> STAINLESS STEEL MODULAR CASEWORK < MCW-1>

NOTES:

If WCG is providing it, it will not appear in these diagrams. See MAT ID for locker product information; lockers are not categorized in these diagrams.

Casework Scope



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GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION BY A Subcontractor University of Kentucky & Walsh Construction II LLC Capital Construction Division

SUBCONTRACTOR

These General Conditions are binding upon the Subcontractor and all Sub-contractors as each are subject to the provisions contained herein.

ARTICLE 1 - DEFINITIONS

1.1 Wherever used in these General Conditions or in other Contract Documents, the following terms have the meaning indicated which are applicable to both the singular and plural thereof:

1.1.1 ARCHITECTS SUPPLEMENTAL INSTRUCTIONS (ASI) - The term "ASI" means a written order issued by the Consultant that clarifies or interprets the Contract Documents, that orders minor changes in the Work, that does not require an adjustment in either cost or time, and that does not require a Change Order

1.1.2 BUSINESS DAY – The term "Business Day" means a Calendar Day that is not a Saturday, Sunday or legal holiday in Fayette County, Kentucky.

1.1.3 CALENDAR DAY - The term "Calendar Day" means a day of twenty-four hours measured from midnight to the next midnight.

1.1.4 CHANGE ORDER - The term "Change Order" means a written order to the Subcontractor, signed by the Construction Manager and issued after the execution of the Contract, directing a change in the Work or an adjustment in the Contract Amount or the Contract Time. A Change Order may be an agreed change by the Subcontractor and the Construction Manager or it may be a unilateral change by the Construction Manager.

1.1.5 CONSULTANT - The term "Consultant" means the person and/or entity, whether singular or plural, either Architect, Engineer or other Consultant, who is or are identified as such in the Contract Documents.

1.1.6 CONSTRUCTION MANAGER or CONSTRUCTION MANAGER AT RISK (CM) - The term "Construction Manager" or "Construction Manager at Risk" (CM) means the person or entity who will or has entered into a contract with the Owner that assumes the risk for construction of the Project as the construction manager, and who will provide consultation and collaboration regarding the construction during and after design of the Project. The CM shall execute and hold all construction Trade Contracts and Purchase Orders for the Project.

1.1.7 CONTRACT - The term "Contract" means the Contract between Construction Manager and Subcontractor and consists of all Contract Documents as defined in Article 1.1.8 of these General Conditions.

1.1.8 CONTRACT AMOUNT - The term "Contract Amount" means the sum stated in the Agreement which represents the total amount payable by the Construction Manager to the Subcontractor for the performance of the Work under the Contract Documents, plus or minus adjustments as provided for in the Contract Documents or by approved Change Orders.

 1.1.9 CONTRACT DOCUMENTS - The "Contract Documents" include the Agreement of Contract between the Construction Manager and the Subcontractor (the "Agreement"); the
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General Conditions; the Special Conditions; the Subcontractor's Form of Proposal; the Subcontractor's Bonds; the Specifications, Drawings and Addenda for the construction of the Project; and any Change Orders issued after execution of this Contract. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Construction Manager and any Sub-contractor, or any person or entity other than the Subcontractor. Documents not included or expressly contemplated in this Article do not, and shall not, form any part of the Contract for Construction. Without limiting the generality of the foregoing, shop drawings and other submittals from the Subcontractor or its Subcontractors and suppliers do not constitute a part of the Contract Documents. Except as otherwise provided, where these Contract Documents obligate the Subcontractor to certain responsibilities or require the Subcontractor to perform certain actions, the Subcontractor may require these same responsibilities and/or actions of one or more Sub-contractors. However, assignment of such responsibilities or actions to one or more Sub-contractors shall not be construed to relieve the Subcontractor of its obligation to the University or Construction Manager under this contract.

1.1.10 CONTRACT TIME - The term "Contract Time", unless otherwise provided, means the specified number of consecutive Calendar Days following the stipulated commencement of the Work as stated in the Work Order, plus or minus adjustments as provided for by approved Change Orders, within which the Subcontractor shall complete the Work required by the Contract and shall achieve certification of substantial and final completion.

1.1.11 KRS REFERENCES - Reference to "KRS" means the "Kentucky Revised Statutes" adopted by the Commonwealth of Kentucky, including all laws that may have been revised, amended, supplemented or new laws enacted.

1.1.12 OWNER - The term "Owner" means the University of Kentucky, a statutory body corporate existing pursuant to Sections 164.100 et seq. of the Kentucky Revised Statutes.

1.1.13 PROJECT - The term "Project" means the total construction of the Work performed under the Contract Documents, which may be the whole or a part, and which may include construction by the Owner or by separate contracts.

1.1.14 PROJECT MANAGER - The term "Project Manager", when used alone, means the Owner's representative responsible for administration and management of the Project. The Owner's Project Manager during construction shall be the designated University of Kentucky Capital Projects Management Project Manager that is in charge of the Project. The term "Subcontractor's Project Manager" or "Sub Project Manager" means the individual employed by the Subcontractor who is assigned to the Project to provide overall management during both the design and construction phases of the Project, and who has total responsibility for the successful completion of the Project

1.1.15 PROVIDE - The term "Provide," as used throughout the specifications, shall mean furnish, install and pay for.

1.1.16 SHOP DRAWINGS - The term "Shop Drawings" means drawings, diagrams, schedules, and other data specially prepared for the Work by the Subcontractor or any Sub-contractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

1.1.17 SUBSTANTIAL COMPLETION - The term "Substantial Completion" is the point at which, as certified in writing by the Owner, a project is at the level of completion, in strict compliance with the contract, where (a) necessary approval by public regulatory authorities (and by other authorities having jurisdiction or as identified in Article 11.2, as necessary) has been given; (b) the Owner has Rev 11/2020 4 General Conditions Revised

received all required warranties and documentation, and (c) the Owner may enjoy beneficial use or occupancy and may use, operate, and maintain the project in all respects, for its intended purpose. Partial use or occupancy shall not necessarily result in the project being deemed substantially complete and shall not be evidence of Substantial Completion. In order for the Owner to enjoy beneficial use or occupancy and use, operate, and maintain the project in all respects, for its intended purpose, the stage or progress of the Work or a designated portion thereof shall be sufficiently complete, accessible, operable and usable, and all parts, systems and site Work shall be 100% complete, cleaned and available for the Owner's full use without interruption in accordance with the Contract Documents, including but not limited to the provisions of Article 28 of these General Conditions. The Work will not be considered acceptable for Substantial Completion review until all Project systems included in the Work are operational as designed and scheduled, all designated or required governmental inspections and certifications have been made and approvals provided to the Owner, designated instruction of the Owner's personnel in the operation of systems has been completed, and all final finishes within the Contract Documents are in place. In general, the only remaining Work shall be minor in nature so that the Owner and/or the Owner's tenants could occupy the Project on that date and the completion of the Work by the Subcontractor would not materially interfere or hamper the Owner's or the Owner's tenants' normal business operations. As a further condition of Substantial Completion acceptance, the Subcontractor shall certify in writing that all remaining Work, the same being solely of a "punch list" nature, will be completed within thirty (30) consecutive Calendar Days following the date of Substantial Completion.

1.1.17.1The parties agree that "substantial completion" as defined in Article No. 2 of the Agreement and Article 1 of the General Conditions, as extended by approved Change Order(s) pursuant to Article 18.1 of the General Conditions, shall be the "date of completion specified in the contract" for purposes of KRS. 45A.250(2).

1.1.18 SUB-CONTRACTOR - The term "Sub-contractor" means the person, company, corporation, joint venture or other legal entity with whom the Construction Manager has executed a Contract for a portion of the Work.

1.1.19 WORK - The term "Work" means the scope of construction and services required by the Contract Documents and all approved Change Orders, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Subcontractor to perform and complete the Subcontractor's obligations under the Contract in an expeditious, orderly and workmanlike manner. The Work may constitute the whole or a part of the Project.

1.1.20 WORK ORDER - The term "Work Order" means a written notice by the Construction Manager to the Subcontractor authorizing the Subcontractor to commence Work under the Contract and establishing the beginning date from which the time for Substantial and Final Completion shall be established.

1.1.21 UNIT PRICE - The term "Unit Price" means the amount per unit of measurement for materials or services as described in the bid documents.

ARTICLE 2 - CONSULTANT

2.1 The Consultant will be the Owner's representative during construction and until the Work is complete. The Consultant will advise and consult with the Owner. The Owner's instructions to the Construction Manager and Subcontractor may be forwarded through the Consultant.

2.2 The Consultant will regularly, but no less frequently that monthly, visit the site to become familiar with the progress of the Work, the quality of the Work being provided and to determine if the Work is proceeding in accordance with the Contract Documents. On the basis of these on-site inspections, the Consultant will inform the Owner of the progress of the Work, will advise the Owner of any defects and deficiencies observed in the Work and, when appropriate, will certify to the Owner that the Work in place equals or exceeds the amount requested by the Subcontractor on all applications for progress payments.

2.2.1 If applicable for the Work, the Consultant will verify to the Owner that the Subcontractor is performing erosion prevention and sediment control inspections as required by the Kentucky Division of Water Construction General Permit (KYR10) at least once every 7 days and shall include the findings in the site visit reports.

2.3 The Consultant will be the interpreter of the requirements of the drawings and specifications and any changes made to the drawings and specifications.

2.4 Claims, disputes, and other matters in question that arise relating to the execution or the progress of the Work shall be referred in writing to the Consultant by the Subcontractor. The Consultant will provide a response in accordance with and subject to the provisions of Article 38 of these General Conditions

2.5 The Consultant will have the authority to reject Work which does not conform to the Contract Documents or to the required level of quality and performance.

2.6 The Consultant will review and approve, or take other appropriate action upon receipt of the Subcontractor's submittals such as Shop Drawings, product data, and samples. The review of submittals will be for general conformance with the design concept of the work, and for compliance with the information provided by the Contract Documents. Such review will not relieve the Subcontractor of any responsibility for errors or omissions in submittals, and will in no way constitute a waiver of or change to the requirements of the Contract Documents.

2.6.1 The Consultant's review and response will be completed with reasonable promptness with a goal of ten (10) business days or less. The Consultant's review of a specific item shall not indicate approval of an assembly of which the item is a component.

2.7 The Consultant will prepare Change Orders for the Owner to direct changes in the Work. Minor changes in the Work, not involving modifications to the contract cost or completion times and that are consistent with the purpose of Work, may be directed by the Consultant through Architect's Supplemental Instructions (ASI).

2.9 When requested by the Subcontractor, the Consultant will conduct inspections to determine if the Project is at the level of completion required by and is in strict compliance with the Contract such that the Owner may enjoy beneficial use or occupancy and may use, operate, and maintain the project in all respects, for its intended purpose, as further defined in the Contract. If the level of completion warrants, the Consultant will confirm that all necessary approvals by public regulatory authorities or other authorities having jurisdiction have been given, will confirm that the Owner has received all required warranties and documentation, will recommend dates for certification of Substantial Completion and Final Completion by the Owner, and will complete and submit the Notice of Termination of coverage under the KPDES General Permit for Storm Water Discharges Associated with Construction Activity. 2.10 The Subcontractor will accept direction for the Work on the Project only from the Owner's Project Manager, the Construction Manager, or from the Consultant. Requests for information from the Subcontractor shall be directed to the Consultant through the Construction Manager.

ARTICLE 3 - CORRELATION AND INTENT OF CONTRACT DOCUMENTS

3.1 Execution of the Contract by the Subcontractor is a representation that the Subcontractor has or shall thoroughly and carefully examine the site of the of Work; shall timely investigate all conditions which can affect the Work or its cost, including but not limited to availability of labor, materials, supplies, water, electrical power, roads, access to the site, uncertainties of weather, water tables, the character of equipment and facilities needed to perform the Work, and local conditions under which the Work is to be performed; and further, that the Subcontractor shall insure that the documents issued for bidding by Sub-contractors reflect the results of this investigation and are adequate to complete the Work. It is the responsibility of the Subcontractor to be familiar with and comply with all Federal, State, and local laws, ordinances, and regulations which might affect those engaged in the Work, and to be familiar with the materials, equipment, or procedures to be used in the Work, or which in any other way could affect the completion of the Work. The Subcontractor shall carefully study and compare the Contract Documents with each other and with other information provided to the Subcontractor by the Consultant or the Construction Manager pursuant to the Contract Documents and shall notify the Construction Manager and the Consultant in writing of any errors, inconsistencies or omissions in the Contract Documents recognized by the Subcontractor. Any failure to properly familiarize itself with the proposed Work shall not relieve the Subcontractor from the responsibility for completing the Work in accordance with the Contract Documents.

3.2 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Subcontractor. All Labor or materials which are reasonably inferable from the Contract Documents and which are necessary to produce the desired result, even though not specifically mentioned in the Contract Documents, shall be included in the Work at no additional cost to the Construction Manager.

3.3 In the event a question arises regarding the meaning or intent of the Contract Documents, the Subcontractor shall report it by preparing an RFI in eCommunication[®] to the Consultant. The Consultant shall furnish, with reasonable promptness and with a goal of three (3) business days and by whatever means as may be appropriate, additional instructions necessary for the proper execution of the Work. All such drawings and instructions shall be consistent with the Contract Documents, true developments thereof, and reasonably inferable therefrom. The Work shall be executed in conformity therewith and the Subcontractor shall do no Work without proper drawings and instructions. Items indicated on drawings as "N.I.C." or "Not In Contract" are shown for explanation purposes only and are not to be included in this Contract.

3.4 The Contract Documents are complementary, and what is required by one shall be binding as if required by all. In case of conflicts between the various documents, the order of precedence will be as follows: (1) Addenda, (2) Special Conditions, (3) General Conditions, (4) Technical provisions of the Specifications and (5) Drawings.

3.5 Any notice to the Subcontractor from the Owner or Construction Manager regarding this Contract shall be in writing and delivery and service of such notice shall be considered complete when sent by certified mail to the Subcontractor at Subcontractor's last known address. Such notice may also, at the Owner or Construction Manager's election, be hand-delivered to the Subcontractor or the Subcontractor's authorized representative.

ARTICLE 4 - PRE-CONSTRUCTION CONFERENCE

Rev 11/2020 Walsh Revised 4.1 Following the execution of the Contract, a pre-construction conference will be held. Representatives of the Capital Project Management Division, Consultant, Construction Manager, Subcontractor, and all major Sub-contractors shall be present to discuss the time for construction, methods and plan of operation, authority of the Consultant, procedures for handling shop drawings, progress estimates and requests for payments, and other relevant issues. The time and location of this meeting will be the responsibility of the Construction Manager in consultation with the Consultant, Owner and other interested parties.

4.2 Environmental aspects of the project, including erosion prevention and sediment control (EPSC) and storm water management shall be discussed during this conference. The Group shall discuss the Storm Water Pollution Prevention Plan (SWPPP) to ensure that all parties understand the requirements. During this meeting the responsibility for reading the rain gage on a daily basis will be established. The Contractor will identify the initial measures to be installed prior to land disturbing activities beginning. Any modifications to the SWPPP due to constructability issues should be discussed at this conference.

ARTICLE 5 - SHOP DRAWINGS

5.1 Not Used.

5.2 The Subcontractor shall review product samples and shop drawings for compliance with the requirements of the Contract Documents, and shall submit them to the Consultant in accordance with submittal procedure and schedule established. The Subcontractor's review and submittal to the Consultant of any shop drawing or sample shall constitute a representation to the Construction Manager and Consultant that a) the Subcontractor has determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or assumes full responsibility for doing so, and that b) each Shop Drawing or sample has been reviewed or coordinated with the requirements of the Work and the Contract Documents. Shop Drawings and submittal requirements shall not be deemed satisfied until approvable documents are received by the Consultant. Incorrect or incomplete submittals will be returned to the Subcontractor without action. No claim for additional time or extension of the contract will be considered if such claim is the result of failure by the Subcontractor to provide correct, accurate, complete and approvable submittals.

5.3 The Consultant will review submittals with reasonable promptness, and take appropriate action or return submittals to the Subcontractor for corrections as may be required. The Subcontractor shall make any corrections required by the Consultant for compliance with the Contract and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until approved. The Subcontractor shall direct specific attention, in writing, or on resubmitted Shop Drawings, to revisions other than the corrections called for by the Consultant on previous submissions.

5.4 Where a Shop Drawing or sample submission is required by the specifications, no related Work shall be commenced until the submission has been accepted in writing by the Consultant. The review and acceptance shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The acceptance of a separate item will not indicate acceptance of the assembly in which the item functions. A copy of each accepted Shop Drawing and product sample shall be kept in good order by the Subcontractor at the site and shall be made available to the Consultant on request.

5.5The Consultant's acceptance of Shop Drawings or samples shall not relieve the Subcontractor
from the responsibility for any deviations from the requirements of the Contract Documents unless
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the Subcontractor has in writing called the Consultant's attention to such deviation at the time of submission and the Consultant has given written approval to the specific deviation. Any acceptance by the Consultant does not relieve the Subcontractor from responsibility for errors or omissions in the Shop Drawings.

ARTICLE 6 - LAYING OUT WORK

6.1 The Subcontractor will secure all data at the site of the building such as grades of lot, convenience of receiving and sorting material, location of public services, and other information which will have a bearing proposals or on the execution of the Work and shall address these issues in the preparation of scopes of work for the Subcontract bid packages. No allowance shall be made for failure of the Subcontractor to obtain such site information prior to submitting their proposal or to include such information in the Subcontract bid packages, and no adjustment to the Subcontractor's Contract amount or stipulated time for completion shall be allowed when due to failure by the Subcontractor to do so.

6.2 The Subcontractor shall be responsible for all lines, levels and measurements of all Work executed under the Contract. The Subcontractor shall verify all dimensions before laying out the Work and will be held responsible for any error resulting from failure to do so. Working from lines and levels established by the property survey or by other Contract Documents, and as shown in relation to the Work, the Subcontractor will establish and maintain bench marks and other dependable markers to set lines and levels for Work at each area of construction and elsewhere on the site as needed to properly locate each element of the entire Project. The Subcontractor shall calculate and measure from the bench marks and dependable markers required dimensions as shown (within recognized tolerances if not otherwise indicated), and shall not scale drawings to determine dimensions. The Subcontractor shall advise Sub-contractors and trades persons performing Work of marked lines and levels provided for their use in layout work. The Subcontractor shall verify layout information shown on drawings as required for the Work.

6.3 The Subcontractor shall be responsible for coordination of the installation of all elements of the Work, including preparation of coordination drawings if required by the Contract Documents or deemed necessary by the Subcontractor for performance of the Work.

6.4 If any encroachments are made by the Subcontractor or any Sub-contractor on any adjacent property, the Subcontractor shall, at the Subcontractor's expense, and within thirty (30) Calendar Days after written notice from the Construction Manager or the Consultant, correct any encroachments and obtain approval from the Construction Manager of such adjacent property for any encroachments that cannot be feasibly corrected. The Subcontractor shall not be entitled to any adjustment to the Contract Amount or the Contract Time as a result of any such encroachment or the correction thereof.

ARTICLE 7 - PLANS, DRAWINGS, SPECIFICATIONS AND RECORD DRAWINGS

7.1 Unless otherwise provided in the Contract Documents, the Owner will furnish the Construction Manager free of charge one electronic or reproducible copy of the Drawings and Specifications for execution of the Work. The Construction Manager shall pay for the cost of duplication of all sets required over and above this amount.

7.2 The cost of additional plans, specifications and official contract documents for use by Subcontractors for bidding and for construction shall be borne by the Subcontractor or by the Subcontractors. Arrangements for orders and payment for plans, specifications and other contract documents must be made with Lynn Imaging, Lexington, Kentucky (<u>http://www.ukplanroom.com</u>) or by phone at 1.800.888.0693 or 859.255.1021) before a set of documents will be issued.

7.3 The Subcontractor shall keep one copy of all Contract Documents, including Drawings, Specifications and Shop Drawings on the site, and in good order. A qualified representative of the Subcontractor shall record on these documents, from day to day as Work progresses, all changes and deviations from the Contract Documents. Prior to Substantial Completion, the Subcontractor shall complete and turn over to the Consultant the As-Built drawings, with a digital copy (in PDF format) submitted to the Construction Manager simultaneously. The As-Built drawings shall consist of a set of drawings which indicate all field changes that were made to adapt to field conditions, changes resulting from Change Orders and all concealed and buried installations of piping, conduit and utility services. All buried and concealed items, both inside and outside the facility, shall be accurately located on the As-Built drawings as to depth and in relationship to not less than two permanent features such as interior or exterior wall faces. The As-Built drawings shall be clean and all changes, corrections and dimensions shall be given in a neat and legible manner in a contrasting color. For any changes or corrections in the Work which are made subsequent to the Substantial Completion Inspection, revisions shall be made to the As-Built drawings and submitted to the Consultant prior to final payment. Approval of the final payment request shall be contingent upon compliance with these provisions.

7.4 All drawings, specifications and copies thereof, furnished by the Consultant to the Owner, are the property of the University of Kentucky. They shall not be used by the Consultant, Construction Manager, Subcontractor, or any Sub-contractor or Supplier on any other Project.

ARTICLE 8 - TEMPORARY UTILITIES

8.1 The Subcontractor shall provide and pay for, unless modified in the Special Conditions, all temporary conveniences including, but not limited to, wiring, lighting, power and electrical outlets, heat, water, and sanitary facilities required for construction. In the event the Owner elects to make available, at no cost to the Subcontractor, the electric power required for construction activities, the electric power supplied shall not be utilized as a means to provide temporary heat or for welding.

8.2 The Subcontractor is responsible for paying all utility costs, whether the costs are from an outside utility company or from the University, for utility services used in the course of completing the Work. The Subcontractor shall provide temporary heating, ventilation, telephones, water, electricity, portable gas, lighting for the Work, safety lighting, security lighting, and trash removal/dumpster service for both Subcontractor and Sub-contractor use during the Project. Work and safety lighting shall be provided continuously during working hours. Security lighting shall be provided at all hours of darkness.

ARTICLE 9 - MATERIALS, EQUIPMENT, APPLIANCES, AND EMPLOYEES

9.1 Unless otherwise provided in the Contract Documents, the Subcontractor shall provide and pay for all materials, labor and personnel, tools, equipment, construction equipment and machinery, utilities, supplies, appliances, transportation, taxes, temporary facilities, licenses, permits and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and the proper execution and completion of the Work safely, without damage to persons and property, and in compliance with all applicable law. The Subcontractor shall furnish, erect, maintain, and remove at the completion of the Contract, all temporary installations as may be required during the construction period.

9.2 Immediately following the execution of each of the Trade Contracts, the Subcontractor shall determine the source of supply for all materials required under that Trade Contract and the length of time required for their delivery, and shall assure that orders are placed for such materials in sufficient time to assure delivery to the site so that such materials are available to be incorporated into the Work when needed to comply with the schedule of Work.

9.3 The Subcontractor shall immediately notify the Construction Manager and Consultant in writing of any known problems with the procurement, fabrication or ordering of any materials. Unless changes are approved in writing by the Consultant, the Subcontractor will not be excused for delays in securing materials specified.

9.4 The Subcontractor or Sub-contractors shall not place purchase orders or issue contracts for materials, supplies, equipment and services necessary to complete this Project using the name of the University of Kentucky or Construction Manager. All orders placed by the Subcontractor that are related to this Project must use the name of the Subcontractor or Sub-contractor placing the order. The use of the University of Kentucky's name for ordering purposes is strictly prohibited. Payment for all goods and services required for the completion of the Work is the sole responsibility of the Subcontractor. Any invoices received at the University that are related to this Project will be immediately forwarded to the Subcontractor. Copies of these invoices will be made and placed in the Subcontractor's file and proof must be provided that these invoices have been paid in full prior to the processing of the next scheduled application for progress payment.

9.5 The route for delivery of all materials to the Project shall be coordinated with the Owner's and Construction Managers Project Manager.

9.6 The Subcontractor shall be responsible for the proper and adequate storage of materials and equipment. Unless otherwise provided in the Contract Documents, all materials shall be of good quality and new. Workmanship and materials supplied and incorporated into this Work shall be of first quality. The Subcontractor, if required, shall furnish satisfactory evidence as to the kind and quality of materials.

9.7 The Subcontractor shall at all times enforce strict discipline and good order among all employees and Sub-contractors. The conduct of all individuals performing Work or operations related to the Work is the responsibility of the Subcontractor. The consumption of alcohol or drugs on the job by any workers is strictly prohibited. Any individual apprehended under the influence of alcohol or drugs on the premises at any time shall be subject to automatic removal from the Project by the Subcontractor, the Consultant, the Owner or the Construction Manager. Improper conduct of any kind will not be permitted and may result in the offending individual, Sub-contractor or Subcontractor being barred from the Owner's premises. The Subcontractor shall not permit the employment on the Project of any person unfit or not skilled in the Work assigned.

ARTICLE 10 - ROYALTIES AND PATENTS

10.1 The Subcontractor shall pay all royalties and license fees. If a particular process, product or device is specified in the Contract Documents and it is known to be subject to patent rights or copyrights, the existence of such rights shall be disclosed in the Contract Documents and the Subcontractor is responsible for payment of all associated royalties. The Subcontractor hereby agrees to indemnify, defend and hold the Construction Manager, and any subsidiary, parent, or affiliates of the Construction Manager, or other persons or entities designated by the Construction Manager, and their respective directors, officers, agents, employees and designees (collectively, the "Indemnities") harmless from all losses, claims, liabilities, injuries, damages and expenses, including attorneys' fees

and legal expenses, that the Indemnities may incur as a result of the Subcontractor's failure to strictly comply with its obligations under this Paragraph 10.1.

ARTICLE 11 - SURVEYS, PERMITS, REGULATIONS, AND STANDARD CODES

11.1 The Construction Manager will furnish only such surveys that are specifically required by the Contract Documents. Approvals, assessments, and easements for permanent structures or permanent changes in existing structures shall be secured and paid for by the Construction Manager, unless otherwise specified. All required utility tap-on fees shall be secured and paid for by the Subcontractor, or included in a Trade Contract, including the Lexington-Fayette Urban County Government (LFUCG) sewer tap-on fee. All construction permits, where required by local ordinances, except excavation permit, shall be obtained by the Subcontractor, but no fee shall be charged to or paid by the Subcontractor as the Owner is exempt from such charges. A Contractor's license fee for doing business in the locale, if applicable, shall be paid for by the Subcontractor.

11.2 All branches of Work shown on the plans and specifications shall be executed in strict compliance with all state and federal regulations and codes, with all national codes, and with the requirements of both ADA and JCAHO when applicable.

11.3 The Contractor, on projects disturbing 1 acre or more, or projects less than 1 acre that are part of a large common development plan, including grading, clearing, excavation, material laydown or other earth moving activities, shall assure full compliance with the requirements of the KYR10 and shall:

11.3.1 File a Notice of Intent (KPDES FORM eNOI-SWCA) with the Kentucky Division of Water and copy the UKCPM Project Manager and Water Quality Manager prior to the start of any excavation, grading or site development work.

11.3.2 The permittee (contractor) shall develop a Stormwater Pollution Prevention Plan (SWPPP) based on the Erosion Prevention and Sediment Control Plan (EPSC) as a minimum design standard. Ensure all requirements of KYR10 are fully addressed in the SWPPP. Once the SWPPP is written, forward a copy to the Capital Projects Project Manager and to the Water Quality Manager for approval. <u>Work cannot begin until SWPPP is approved and permit coverage obtained.</u>

11.3.3 Install BMP's such as, basins, traps, drainage, and sediment barriers before beginning land disturbing activities, including the construction entrance/exit. Once prevention measures have been installed, grading can commence. In the event a new construction entrance is added to the site, this new entrance must be built according to the EPSC design details with a wheel wash, a water supply and a sediment catch basin for washed wheel sediment.

11.3.4 Maintain all measures in working condition. Perform maintenance activities identified during inspections prior to the next rain event. Remove sediment from BMPs when 1/3 the storage volume has been filled.

11.3.5 Stabilize disturbed areas within 14 days of inactivity or reaching final grade on any portion of the site according to permit requirements.

11.3.6 Inspect the site every 7 calendar days and after each rainfall of ¹/₂"or more. Document site conditions, rainfall, maintenance activities needed and performed, stabilization needed and performed, and where new measures are needed. Discuss deficiencies with UK Project Manager and Water Quality Manager and note on the SWPPP Inspection Sheets.

Per the KPDES Permit, Section 2.1.7. "Inspections – Permittee Conducted". "Inspections shall be performed by personnel knowledgeable and skilled in assessing conditions at the construction site that Rev 11/2020 12 General Conditions Revised Walsh Revised Subcontractor could impact storm water quality and assessing the effectiveness of erosion prevention measures, sediment control measures, and other site management practices chosen to control the quality of the storm water discharges. Inspectors shall have training in storm water construction management such as Kentucky Erosion Prevention & Sediment Control (KEPSC), Certified Professional in Stormwater Quality (CPSWQ), Certified Erosion, Sediment and Stormwater Inspector (CESSWI), or other similar training."

Inspections shall include a tour of the total site and verification that all BMPs are performing as constructed. Inspector shall certify that all observations are correct as stated and sign and date the inspection form.

11.3.7 Keep Permit, SWPPP, weekly/rain event inspections sheets in binder in construction trailer. Any BMP change/alteration from SWPPP and EPSC plan must be noted on the EPSC and SWPPP.

11.3.8 No soil and sediment shall leave the construction site. BMPs shall be repaired immediately if failure has occurred. No Mud shall be permitted on any street. All entrances/exits shall have a means by which to wash wheels. If an entrance/exit does not have a wheel wash, that exit shall not be used in muddy conditions. If for any reason mud is tracked offsite, the area must be cleaned in such a way as to prevent sediment from entering the storm sewer system. The use of tractor brooms solely will not be permitted.

11.3.9 When it is necessary to dewater an excavation, proper BMPs must be implemented. Dewatering filter bags must be sized and used according to manufacturer's requirements and Standard Operating Procedures for Dewatering Bags.

11.3.10 UK (the MS4) routinely inspects sites for compliance with the EPSC/SWPPP. Any deficiencies noted become record for the Kentucky Division of Water and shall be remedied/installed as soon as site conditions are favorable but no more than 7 days from the inspection date.

11.3.11 At the conclusion of the project and all bare areas, slopes and ditches are 70% vegetated with the permanent ground cover, the contactor shall notify the UK Project Manager and Water Quality Manager and request a final site inspection prior to filing a "Notice of Termination (NOT) with the state. This inspection verifies that Construction BMPs can be removed, and Post-Construction BMPs are in place and functioning.

11.3.12 Failure of the site contractor (permitee of the KPDES Permit) to timely comply with requirements of KPDES, the Construction Manager shall inform the site contractor that a third party contractor shall be retained to remediate all BMP deficiencies immediately, and all third party costs shall be passed to the permitee of the KPDES Permit. Any fines or other costs resulting from failure to comply, levied against the Construction Manager will be assessed against the SUBCONTRACTOR'S funds.

11.3.13 Refer to 334000S01 STORM DRAINAGE UTILITIES – Information for Consultants & Contractors.

11.3.14 Reference to standards, codes, specifications, and regulations refer to the latest edition of printing in effect at the date of issue shown in the Contract Documents unless another date is implied by the suffix number of the standard.

11.4 Reference to standards, codes, specifications, and regulations refer to the latest edition of printing in effect at the date of issue shown in the Contract Documents unless another date is implied by the suffix number of the standard.

11.5 The Construction Manager with assistance of Subcontractor shall furnish a final occupancy permit from the proper agency or agencies as required.

11.5 The Subcontractor shall, by provision within each applicable sub-contract or by inclusion in the lump sum fee proposed to the Construction Manager, insure the payment of all sales, consumer, use and similar taxes for materials, equipment and supplies incorporated into the Work, by unless otherwise specified in the bid documents.

ARTICLE 12 - PROTECTION OF WORK, PROPERTY, AND PUBLIC

12.1 The Subcontractor shall continuously maintain adequate protection of all Work from damage and shall protect the Owner's property from injury or loss arising in connection with this Contract. Except as otherwise covered by Builder's Risk insurance, the Subcontractor shall pay for any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by agents or employees of the Owner. The Subcontractor shall adequately protect adjacent property as provided by law and the Contract Documents.

12.2 In an emergency affecting the safety of life, or of the Work, or of adjoining property, the Subcontractor, without special instruction or authorization from the Consultant, Owner, or Construction Manager, is obligated to act to prevent such threatened damage, loss or injury.

12.3 The Subcontractor shall maintain fire protection as required by the Kentucky Building Code. Access to the Project site and surrounding buildings for local fire truck access during construction must be maintained. The Subcontractor shall maintain construction to allow access to new, existing or temporarily relocated standpipes, fire hydrant connections and fire alarm communication panels pursuant to Section 3018.8 of the Kentucky Building Code. If the Subcontractor utilizes the Owner's or Construction Manager's fire protection equipment, the Subcontractor shall replace any such materials lost, consumed or misplaced during the Contract period. The Subcontractor is responsible for any false alarms caused by dust created in the Work area or dust traveling to areas beyond the Work area due to inadequate dust protection barriers. Should there be a need for any existing or newly installed fire alarm system, or parts of a system that requires service, to be removed from service or disconnected, prior approval must be obtained from the Owner and Construction Manager and the Subcontractor shall immediately provide alternate protection such as a fire watch until such systems are returned to full normal operations. When work or service is completed on a disabled fire alarm system, the Owner and Construction Manager shall be immediately notified so the system can be placed in service.

12.4 The Subcontractor and Sub-contractors are responsible for the security of their own materials, tools and equipment at the Project site.

12.5 The Subcontractor shall provide to the Owner and Construction Manager's Project Manager a key to Subcontractor's field office or job trailer.

ARTICLE 13 - BLASTING

13.1 Blasting is not allowed unless permission is granted in the Special Conditions. Should blasting be allowed by the Special Conditions, it shall be completed in accordance with all laws, regulations, ordinances and instructions contained in the Special Conditions.

ARTICLE 14 - CONSTRUCTION AND SAFETY DEVICES

14.1 The Subcontractor shall provide safety controls for protection of the life and health of employees and visitors. The Subcontractor will utilize precautionary methods for the prevention of damage to property, materials, supplies, and equipment, and for avoidance of work interruptions in the performance of this Contract. In order to provide such safety control, the Subcontractor shall comply with all pertinent provisions of the Kentucky Fire Prevention Code, Kentucky Building Code, Kentucky Labor Cabinet's Division of Occupational Safety and Health Program Construction Standards and Federal Occupational Safety and Health (Construction) Standards that are in effect at the time the Contract is entered into and during the period in which the Contract is to be performed.

14.2 The Subcontractor shall provide a written safety program which includes all pertinent written specialty standards such as, but not limited to, Control of Hazardous Energy Sources (Lockout/Tagout), Hazard Communications Program, First Aid, Blood Borne Pathogen Program, Respirator Use Program and Hearing Conservation Program. The Subcontractor shall require all Subcontractors to have an effective written safety program or be required to follow the Subcontractor's written safety program.

14.3 The Subcontractor shall maintain an accurate record of and shall report to Kentucky Labor Cabinet's Division of Occupational Safety and Health in the manner and on the forms prescribed by that Division, exposure data and all accidents resulting in death, traumatic injury, occupational disease. The Subcontractor shall maintain an accurate record of and shall report to the Construction Manager's Project Manager and Construction Manager, any damage to property, materials, supplies, and equipment incident to Work under this Contract.

14.4 The Kentucky Labor Cabinet's Division of Occupational Safety and Health may notify the Subcontractor of any noncompliance with the foregoing provisions. The Subcontractor shall, upon receipt of such notice, immediately correct the cited conditions. Notice delivered to the Subcontractor or the Subcontractor's representative at the site of the Work shall be deemed sufficient for this purpose. If the Subcontractor fails or refuses to comply promptly, the Construction Manager may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. Failure or refusal to comply with the order will be grounds for reducing or stopping all payments due under the Contract to the Subcontractor. No part of the construction time lost due to any such stop order shall be cause for, or the subject of a claim for, extension of time or for additional costs or damages by the Subcontractor.

14.5 The Subcontractor or any Sub-contractor shall immediately contact the University of Kentucky's Department of Occupational Health and Safety through the Construction Manager's Project Manager should they be selected for an inspection by the Kentucky Occupational Safety and Health Compliance Division.

14.6 Compliance with the provisions of the foregoing sections by Sub-contractors shall be the responsibility of the Subcontractor.

14.7 Nothing in the provisions of this Article 14 shall prohibit the U.S. Department of Labor or the Kentucky Department of Labor Division of Occupational Safety and Health from enforcing pertinent occupational safety and health standards as authorized under Federal or State Occupational Safety and Health Standards.

14.8The Subcontractor shall take all necessary precautions for the safety of employees on the
Work, and shall comply with all applicable provisions of federal, state, and municipal safety laws and
building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where
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the Work is being performed. If the Subcontractor or any Sub-contractor has questions related to the health or safety required by their written safety program, they should contact the Kentucky Labor Cabinet Occupational Safety and Health Program Division of Education and Training. The Subcontractor shall designate a responsible member of the on-site work force as the safety officer and shall report to the Consultant and to the Construction Manager the name of the person selected. The duties of the safety officer include the enforcement of safety regulations.

ARTICLE 15 - HAZARDOUS MATERIALS

15.1 If the Subcontractor encounters material reasonably believed to be or suspected to be asbestos containing material, lead, polychlorinated biphenyls (PCBs), fluorescent light bulbs and ballasts, mercury or other hazardous material, the following procedures must be followed:

15.1.1 The Subcontractor shall immediately stop work in the affected area and notify the Construction Manager's Project Manager who will notify the Owner's Project Manager. The Owner's Project Manager will contact the Owner's Environmental Health and Safety unit to arrange for collection of samples, review of existing data, or other testing necessary to confirm the presence of hazardous materials. The Owner's Project Manager will notify the Construction Manager in writing of the results. Until that notification is received, the Work must not continue in the affected area.

15.1.2 If the material is confirmed to be asbestos, lead, polychlorinated biphenyls (PCBs), fluorescent light bulbs and ballasts, mercury or other hazardous material, the Owner will take appropriate action to remove the material before the Subcontractor can continue Work in the affected area.

15.1.3 The Subcontractor shall not be required to perform any Work related to asbestos, lead, polychlorinated biphenyls, or other hazardous material. The Subcontractor is advised that certain classes of building materials (thermal system insulation, sprayed or troweled surfacing materials, and resilient flooring) installed before 1981 are required by law to be treated as asbestos containing until proven otherwise. These presumed asbestos containing materials must not be disturbed without confirmation from the Owner that asbestos is not present.

15.2 The Owner, the Construction Manager, and Sub-contractors will be under the requirements of the OSHA Hazard Communication Standard (29) CFR 1910.1200. The Subcontractor and Sub-contractors must provide their own written Hazard Communication Program. The Hazard Communication Standard must include: (1) A list of the hazardous chemicals to which the Subcontractor's employees may be exposed; (2) Statement of the measures that Subcontractor's employees and Sub-contractors may take to lessen the possibility of exposure to the hazardous materials; (3) The location of and access to the Material Safety Data Sheets (MSDS's) related to the hazardous chemicals located in the Work area; (4) Procedures that the Subcontractor's employees and Sub-contractors are to follow if they are exposed to hazardous chemicals above the Permissible Exposure Limit (PEL). Material Safety Data Sheets may be reviewed upon request by the Subcontractor or any Sub-contractor as they pertain to the Work areas of the Project. Photocopies of the MSDS's may be made by Subcontractor at its expense.

15.3 The Subcontractor and Sub-contractors shall provide the Construction Manager with a list of any hazardous materials that will be used on the job site that may be exposed to the Owner or Construction Manager's employees. The Subcontractor and Sub-contractors shall provide the Construction Manager with copies of Material Data Sheets for all such materials to be used.

15.4It is the policy of the Owner that PCB containing equipment will be treated by theSubcontractor and the Construction Manager in a manner that conforms to the intent of all applicableRev 11/202016Walsh RevisedGeneral Conditions RevisedSubcontractor

laws and regulations (primarily 40 CFR Part 761). The following procedures shall be followed by the Subcontractor and Sub-contractors while present on the Owner's Project or other property: (1) Only authorized, trained personnel may inspect, repair, or maintain PCB transformers; and (2) No combustible materials may be stored within a PCB transformer room or within five meters of a PCB transformer. Such materials include, but are not limited to, paints, solvents, plastic, paper, and wood. The Subcontractor shall not use rooms containing PCB transformers for storage rooms, staging areas, job site offices or break rooms. Violation of this policy may be grounds for dismissal of the offending Subcontractor and/or Sub-contractor from the Project. All PCB transformers at the University of Kentucky are identified by a PCB label as defined in federal regulations. If the Subcontractor should have a question as to the location of a PCB transformer, it should contact the Construction Manager's Project Manager.

15.5 The Subcontractor shall ensure that NO asbestos-containing materials (including but not limited to: drywall, joint compound, roof mastic or floor tile adhesive) will be install on any University project without prior written approval of the University's Environmental Health and Safety Division. Additionally, the Subcontractor shall submit MSDS sheets and have prior approval before installing any materials that contains hazardous substances or could pose an environmental hazard. If any environmental hazardous materials are installed without written approval of the University, the Subcontractor will be responsible for all material replacement cost, all removal and all other associated damages. Any materials removed shall be taken out in accordance with all applicable federal, state and local regulations.

ARTICLE 16 - INSPECTION OF WORK

16.1 Inspections, tests, measurements or other acts of the Consultant are for the sole purpose of assisting the Consultant in determining if the Work, materials, rate of progress, and quantities comply with the Contract Documents. These acts or functions shall not relieve the Subcontractor from performing the Work in full compliance with the Contract Documents, nor relieve the Subcontractor from any of the responsibility for the Work assigned to it by the Contract Documents. No inspection by the Consultant shall constitute or imply acceptance. Approval of material is general and shall not constitute waiver of the Construction Manager's right to demand full compliance with Contract Documents.

16.2 All Work completed and all materials incorporated for the Project are subject to inspection by the Construction Manager, the Consultant or their representatives to determine conformance with the Contract Documents. The Owner, Construction Manager, and Consultant and their representatives shall at all times have access to the Work whenever it is in preparation or progress. The Subcontractor shall provide, at no additional cost to the Construction Manager, any facilities necessary for sufficient and safe access to the Work to complete any inspections required. The Consultant shall be given timely notification in order to arrange for the proper inspections to be performed on any Work outside of the normal working day or week. If the Consultant provides the Subcontractor with a list of construction milestones that require inspection, the Subcontractor shall provide the Consultant with at least five (5) Business Days written notice prior to the commencement of Work with respect to such milestone in order to permit the Consultant time to coordinate an inspection of the commencement of the applicable Work.

16.2.1 Normal Work hours are defined as a period between 7:00 a.m. and 5:00 p.m. Monday through Friday. The Subcontractor shall notify the Construction Manager's Project Manager at least one working day prior to performance of any Work for permission to do any Work during non-normal Work hours.

16.3 If the Specifications, the Consultant's instructions, laws, ordinances, or any public authority require any Work to be specially inspected, tested or approved, the Subcontractor shall give the Consultant timely notice of the readiness of the Work for inspection. The Consultant shall promptly make all required inspections. If any portion of the Work should be covered contrary to the request of the Consultant, or to the requirements specifically expressed in the Contract Documents, the Work must be uncovered for inspection and observation and shall be uncovered and replaced at the Subcontractor's expense.

16.4 If any other portion of the Work has been covered, which the Consultant has not specifically requested to observe prior to being covered, the Consultant, with the Construction Manager's approval, may request to see such Work and it shall be uncovered by the Subcontractor. If such Work is found to be in accordance with the Contract Documents, the cost of uncovering and replacement shall be charged to the Owner by appropriate Change Order. If such uncovered Work is not in accordance with the Contract Documents, the Subcontractor shall pay all costs for uncovering and replacement of such Work.

ARTICLE 17 - SUPERINTENDENT - SUPERVISION

17.1 The Subcontractor shall completely and thoroughly direct and superintend the Work in accordance with the highest standard of care for the Subcontractor's profession so as to ensure expeditious, workmanlike performance in accordance with requirements of the Contract Documents. Except as otherwise dictated by specific requirements of the Contract Documents, the Subcontractor shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures. The Subcontractor shall be responsible for the acts and omissions of all Sub-contractors and persons directly or indirectly employed by the Subcontractor in the completion of the Work. The Subcontractor shall be responsible for coordinating and scheduling all portions of the Work unless the Contract Documents give other specific instructions. The Subcontractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by the activities of the Consultant in the administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Subcontractor.

17.2 The Subcontractor shall have a competent superintendent, or foreman, herafter referred to solely as a superintendent, on the Project site at all times during the process of the Work. The superintendent shall have authority to act on the Subcontractor's behalf with regard to all aspects of performance of this Contract. The superintendent shall have such assistants with individual specialized competencies as may be necessary to fully understand and oversee all aspects of the Work. The Subcontractor shall also provide administrative, supervisory and coordinating personnel required to fully perform the Work and for interfacing the Work with other work of the Project. The superintendent and all assistants shall be physically fit for their work and capable of going to all locations where Work is being performed. A communication given to the superintendent shall be binding on the Subcontractor. Immediately after the award of Contract, the Subcontractor shall submit to the Consultant a list of Subcontractor's employees and consultants, including names, positions held, addresses, telephone numbers and emergency contact numbers.

17.3 The superintendent assigned shall not be changed except under the following circumstances: (1) Where the superintendent ceases to be employed by the Subcontractor, in which case the Subcontractor shall give timely written notice to the Owner or Construction Manager of the impending change of the superintendent and a reasonable explanation for the change; or (2) Where the Owner or Construction Manager or the Consultant have reasonable grounds for dissatisfaction with the performance of the superintendent and give written notice to the Subcontractor of the

grounds. In either case, the Subcontractor shall obtain prior written approval from the Owner or Construction Manager of the qualifications of the proposed replacement superintendent. Such prior approval will not be unreasonably withheld.

17.4 If the Owner or Construction Manager or Consultant determines that the superintendent is not performing, or is incompetent to perform the required Work, the Owner or Construction Manager may direct the Subcontractor to remove the superintendent from the Project and replace the superintendent with an employee who has the necessary expertise and skills to satisfactorily perform the Work.

ARTICLE 18 - CHANGES IN THE WORK

18.1 The Construction Manager, at any time after execution of the Contract, may make changes within the general scope of the Contract or issue additional instructions, require additional Work, or direct the deletion of Work. The Construction Manager's right to make changes shall not invalidate the Contract or relieve the Subcontractor of any obligations under the Contract Documents. All such changes to the Work shall be authorized in writing by Change Order and shall be executed under the conditions of the Contract Document. Any adjustment of the Contract Amount or Time of Completion, as may be appropriate, shall be made only at the time of ordering such change. Change order proposals based on a reservation of rights, whether for additional compensation to be determined at a later date or for an extension of time to be determined at a later date, will not be considered for approval and shall be returned to the Subcontractor without action.

18.2 The cost or credit resulting from a change in Work shall be determined in one or more of the following ways:

18.2.1 By unit prices named in the Contract or additional unit prices subsequently agreed upon;

18.2.2 By agreement on a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;

18.2.3 By an amount agreed upon by the Subcontractor and the Construction Manager as a mutually acceptable fixed or percentage fee.

18.3 All lump sum proposals shall include a detailed cost breakdown satisfactory to the Consultant and to the Owner for each component of Work indicating both labor and material costs. This cost breakdown shall be submitted to the Consultant promptly and with a goal of seven (7) Calendar Days or less after receipt of the proposal request.

18.3.1 In computing labor costs, the hourly labor rates shall not exceed a mutually agreeable combined hourly labor rate plus fringe benefits negotiated with the Owner based on a presentation of acceptable documentation by the CM. For the purposes of this Article, the term "fringe benefits" shall mean those funds transferred irrevocably to a third party for payment/distribution. In addition, there may be added by the Sub-contractor an amount agreed upon, but not to exceed ten percent (10%) of the actual cost, for overhead and profit.

18.3.2 The CM is entitled to a mark-up for bonds and insurance on all change orders. For change orders coded "End User Requested Changes" or "Other Owner Requested Changes" the CM may add overhead & profit in addition to the bonds and insurance referenced above. The mark-ups shall not exceed the combined percentage for overhead and profit, bonds, and insurance stated in the CM's "Financial Proposal Summary". These mark-ups will not be added to the individual change orders

but will be reconciled by amendment at the completion of the project and/or on an annual basis for those projects exceeding 12 months in duration.

18.4 If none of the above methods are mutually agreed upon or if the Subcontractor does not respond promptly, a change may be made by unilateral determination by the Construction Manager and/or the Consultant of reasonable costs or savings attributable to the change, including a reasonable allowance for overhead and profit. If this method is utilized, the Subcontractor shall promptly proceed with the Work involved in the change upon receipt of a written order signed by the Construction Manager. In such case, the Subcontractor shall keep and present an itemized accounting of labor, equipment, material and other costs, in such form as may be prescribed by the Consultant.

18.5 In all cases where Change Orders are determined by unit prices set forth in the Contract Documents, no amount is to be added for additional overhead and profit.

18.6 The Subcontractor shall keep and present in such form as the Consultant may direct, a correct account of all items comprising the net cost of such Work, together with vouchers. The determination of the Consultant and/or the Construction Manager shall be final upon all questions of the amount and cost of extra Work and changes in the Work, and it shall include in such cost, the cost to the Subcontractor of all materials used, the cost of all labor (including social security, old age and unemployment insurance, fringe benefits to which the employee is entitled, and Workers Compensation insurance), and the fair rental of all machinery used upon the extra Work, for the period of such use, which was upon the Work before or which shall be otherwise required by or used upon the Work before or after the extra Work is done. If the extra Work requires the use of machinery not already on the Project site, or to be otherwise used upon the Work, then the cost of transportation of such machinery to and from the Project site shall be added to the fair rental value. Transportation costs shall not be allowable for distances exceeding one hundred (100) miles.

18.7 The Subcontractor shall not include or allow to be included in the cost of change in the Work any cost or rental of small tools, or any portion of the time of the Subcontractor or the superintendent, or any allowance for the use of capital, or for the cost of insurance or bond premium or any actual or anticipated profit, or job or office overhead. These items are considered as being covered under the added amount for general overhead addressed in Article 18.3

18.8 The Construction Manager will not pay claims made for lost opportunities, claims made for lost production or production inefficiencies or claims made that are formula based.

18.9 Pending final determination of value, partial payments on account of changes in the Work may be made on recommendation of the Consultant. All Change Orders shall be in full payment and final settlement of all claims for direct, indirect and consequential costs, including all items covered and affected. Any such claim not presented by the Subcontractor for inclusion in the Change Order shall be waived.

18.10 The Consultant may authorize minor changes in the Work which do not involve additional cost or extension of the Contract Time, and which are not inconsistent with the intent of the Contract Documents. Such changes shall be made by an ASI issued by the Consultant and shall be binding on the Owner and the Subcontractor. The Subcontractor shall carry out such orders promptly. If the Subcontractor should claim that an ASI involves additional cost or delay to the completion of the Work, the Subcontractor shall give written notice thereof within ten (10) Calendar Days after receipt of the written ASI. If this notification does not occur, the Subcontractor shall be deemed to have waived any right to claim or adjustment to the contract sum or to the contract completion time.

18.10.1 If the Subcontractor claims that any instructions by the Consultant involve additional cost or time extension, the Subcontractor shall give the Consultant written notice thereof within ten (10) Calendar Days after the receipt of such instructions and before proceeding to execute the change in Work. The written notice shall state the date, circumstances, whether a time extension will be requested, and the source of the order that the Subcontractor regards as a Change Order. Unless the Subcontractor acts in accordance with this procedure, any oral order shall not be treated as a change and the Subcontractor hereby waives any claim for an increase of the Contract amount or extension of the contract time.

18.11 Requests for extension of time related to changes in the Work shall be submitted in accordance with the requirements of Article 21 of these General Conditions

18.12 Prior to final payment, the Construction Manager shall provide to the Owner a full accounting of executed change orders by and between the Construction Manager and the Trade Contracts. The Construction Manager shall also provide a reconciliation of that accounting against the executed change orders by and between the Owner and the Construction Manager.

ARTICLE 19 - RULES AND MEASUREMENTS FOR EXCAVATION

19.1 If applicable, the following Rules and Measurements shall apply to the use of Unit Prices for the excavation portion of the Work:

19.1.1 Except as provided in this Article 19 for arbitrary measurements, the quantity of excavation shall be its in-place volume before removal.

19.1.2 No allowance will be made for excavating additional material of any nature taken out for the convenience of the Subcontractor beyond the quantity computed under these "Rules and Measurements."

19.1.3 The quantities of excavation shall be computed from instrument readings taken by the Consultant's representative in vertical cross sections located at such intervals that will ensure accuracy.

19.1.4 "Trench Excavation" for pipes shall arbitrarily be assumed to be two feet (2') wider than the outside diameter of the pipe barrel and with sides vertical.

19.1.5 The quantities shall be computed from plan size, or if there are no drawings, from actual measurements of the Work in place.

19.1.6 Each unit price shall cover, among other things, engineering (surveying) costs and keeping excavating dry.

19.1.7 Earth excavation for structures will be measured between the vertical planes passing 18 inches beyond the outside of the footings and from the surface of the ground to the neat lines of the bottom of the structure.

19.1.8 Rock excavation for structures will be measured between the vertical planes passing 18 inches beyond the outside of the footings and from the surfaces of the rock to the neat lines of the bottoms of the structures or the actual elevation of the rock ledge.

19.1.9 Rock excavation for pipelines trenches, unless otherwise provided for in the Specifications, shall be measured as follows: An arbitrary width of 18 inches plus the nominal diameter of the pipe multiplied by the depth from the surface the rock to six (6) inches below the invert for pipe 24 inches in diameter or less and eight (8) inches below the invert for all pipe greater than 24 inches in diameter. No additional compensation will be allowed for excavation for bell holes, gates or other purposes. The measurement of rock excavation for manholes shall be in accordance with Section 19.1.8 above.

19.1.10 Unclassified excavation shall be measured in the same manner as earth excavation.

ARTICLE 20 - CONCEALED CONDITIONS

20.1 The Contract Drawings show the approximate location of the existing and new utility lines. These lines have been identified and located as accurately as possible using available information. The Subcontractor is responsible for verifying all actual locations. If utilities require relocation or rerouting that is not shown or indicated to be relocated or rerouted, the Subcontractor shall contact and cooperate with the Consultant to make the required adjustments. Any request for change in the Contract Amount by the Subcontractor shall be made pursuant to Article 18 of the General Conditions.

20.2 If any charted or uncharted utility service is interrupted by activities of the Subcontractor or the Subcontractor's Sub-contractor(s) for any reason, the Subcontractor shall work continuously to restore service to the satisfaction of the Construction Manager.

20.2.1 If any charted utility service, or any uncharted utility service the existence of which could have been discovered by careful examination and investigation of the site of the Work by the Subcontractor, is interrupted by activities of the Subcontractor or the Subcontractor's Subcontractor(s) for any reason, the entire cost to restore service to the satisfaction of the Construction Manager shall be paid by the Subcontractor. Should the Subcontractor fail to proceed with appropriate repairs in an expedient manner, the Construction Manager reserves the right to have the work/repairs completed and the cost of such work/repairs deducted from the monies due or to become due to the Subcontractor pursuant to Article 22 of the General Conditions.

20.3 The Subcontractor shall promptly, but in no case more than ten (10) Calendar Days from the time of discovery, and before the conditions are disturbed, notify Consultant in writing of:

20.3.1 Subsurface or latent physical conditions or any condition encountered at the site which differ materially from those indicated in the Contract Documents and which were not known by Subcontractor or could not have been discovered by careful examination and investigation of the site of the proposed Work;

20.3.2 Unknown and unexpected physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered in the locale or generally recognized as inherent in the Work provided for in this Contract or,

20.3.3 Concealed or unknown conditions in an existing structure which are at variance with the conditions indicated by the Contract Documents, which are of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work provided for in this Contract, and which were not known by the Subcontractor and could not have been discovered by careful examination and investigation of the site of the Work.

20.4 The Consultant shall promptly investigate the conditions discovered. If the Consultant finds that conditions, which are materially different from those ordinarily encountered and generally recognized as inherent in the Work provided for in this Contract, were not known by the Subcontractor, and could not have been discovered by careful examination and investigation of the site of the Work, have caused or would cause a material increase or decrease in the Subcontractor's cost of construction or the time required for performance of any part of the Work under this contract, the Consultant will recommend and the Construction Manager will make an equitable adjustment in the Subcontractor to provide written notice to the Construction Manager of such claims for additional compensation or time for performance within ten (10) Calendar Days of discovery of such conditions shall constitute a waiver by the Subcontractor of the right to make such claims. The Construction Manager will not pay claims made for lost opportunities, claims made for lost production or production inefficiencies or claims made that are formula based.

20.5 If the Consultant determines that changed conditions do not exist or are not materially different and no adjustment in the Contract Amount or time is warranted, the Subcontractor shall continue performance of the Contract as directed by the Consultant. No claim by the Subcontractor under this clause shall be allowed unless the required written notice is given and the Consultant is given adequate opportunity to investigate the conditions encountered prior to disturbance. The failure of the Subcontractor to give the Consultant proper notice of a differing site condition shall not affect the Construction Manager's right to an equitable adjustment of the contract price or time if there is a decrease in the Contract Amount or time required to perform the Work.

ARTICLE 21 - DELAYS AND EXTENSION OF TIME

21.1 It is agreed that time is of essence for each and every portion of this Contract and where additional time is allowed for the completion of the Work or any part of the Work under this Contract, the new time limit fixed by such time extension shall be of the essence of this Contract. An extension of time shall not be cause for extra compensation under this Contract, except as set forth in Article 21.10 below.

21.2 The Subcontractor will, subject to the provisions of Articles 21.7, 21.8 and 21.9 below, be granted an extension of time and/or relief from liquidated damages when the delay in completion of the Work is due to:

21.2.1 Any preference, priority, or allocation order duly issued by the government;

21.2.2 Unforeseeable causes beyond the control and without the fault or negligence of the Subcontractor including, but not limited to, acts of God, or of the public enemy, acts of the Owner or Construction Manager, acts of another contractor in the performance of a contract with the Owner or Construction Manager, floods, epidemics, quarantine restrictions, strikes, and freight embargoes.

21.2.2.1For such delays which stop all work on the Project for thirty (30) Calendar Days or more, the Subcontractor shall be authorized at its discretion to remove its people from the site and return when the normal progress of the work may continue.

21.2.3 Regardless of the cause of a delay, the Subcontractor shall expend all reasonable effort to mitigate the impact of any delay.

21.2.4 Requests for additional time due to delays in transportation or due to failures of suppliers shall not be considered for approval.

21.3 Requests for extensions of time and/or relief from liquidated damages, except for weather related claims, shall be made in writing not later than ten (10) Calendar Days after the beginning of the delay. Requests for extension of time or relief from liquidated damages shall be stated in numbers of whole Calendar Days.

21.4 Except as otherwise provided in the Contract Documents, extensions of the contractually required completion dates may be granted for unusually bad weather on the Project. Unusually bad weather as used herein means daily temperature or precipitation that exceeds the normal weather recorded and expected for the locality and/or the season or seasons of the year. For the purposes of this contract, it is mutually agreed that the following chart accurately defines the number of days in each month on which bad weather can reasonably be anticipated to impact weather dependent construction operations, and the Subcontractor shall anticipate this normal seasonal weather in the development of the Project baseline schedule.

Mean	Jan.	Feb	Mar	Ap	May	Jun	Jul.	Aug	Se	Oct	Nov.	Dec.
Number of				r.					p.			
Days When												
Max Temp												
32° or	9	6	1	0	0	0	0	0	0	0	1	5
Below												
Precip. Is												
0.10 Inch	7	6	9	7	8	8	8	6	5	5	7	7
or Greater												

For the purpose of this Contract, "unusually bad weather" shall be interpreted as either 1) those days in a given month on which rainfall was 0.10 inch or more that exceed the number of days shown in the row for "Precip" or 2) those days in a given month on which maximum temperature was 32 degrees F or below that exceed the number of days shown in the row for "Max Temp", whichever is greater.

21.4.1 Requests for extension of time due to unusually bad weather that could not reasonably have been anticipated at the time of execution of the Contract shall be made in writing not later than the tenth calendar day of the month following the month in which the delay occurred.

21.4.2 Requests for an extension of time due to unusually bad weather shall be considered for approval only if it is shown that a) the unusual weather event delayed work on a specific weather dependent activity or activities that had been planned to be underway on the date(s) on which the weather event occurred, as shown in the most recent update to the Project schedule that had been submitted to the Construction Manager prior to the date of the event, and b) only if the delay to that activity or activities is shown to be the proximate cause of a corresponding delay to the contractually required completion dates for the Project shown in the most recent update to the Project schedule. The actual dates on which the delay(s) occurred must be stated and the specific activities that were directly impacted must be identified. In the event of concurrent delays, only those activities actually impacting contractually required completion dates will be considered in evaluating the merit of a delay request. Time extensions will not be considered if such adjustments do not exceed the total or remaining "float" associated with the impacted activities at the time of delay as shown in the most recent update to the Project schedule, nor for concurrent delays not caused by the Construction Manager.
21.4.3 In anticipation of the possibility of delay due to unusually bad weather, the Subcontractor shall identify those activities in the baseline schedules, and those activities subsequently added to updated schedules, that might reasonably be expected to be delayed by such weather.

21.4.4 Delays caused by unusually bad weather shall be incorporated in the Project schedule when the schedule is next updated by showing actual dates and/or percent complete for those activities that were impacted by the unusually bad weather as well as the effects of any effort to mitigate such delays. When claims are submitted for time extensions resulting from more than one occurrence of unusually bad weather during a month, the Project schedule shall be updated to reflect such separate events sequentially so that the impact of each subsequent occurrence is shown on an adjusted Project schedule that includes all prior claims for additional time.

21.5 In addition to the requirements of Article 21.7 and Article 21.8 below, any request for an extension of time for strikes or lockouts shall be supported by a written statement of facts concerning the strike including, but not limited to, the dates, the craft(s) affected, the reason for the strike, efforts to resolve the dispute, and efforts to minimize the impact of the strike on the Project.

21.6 Approval of time extensions for changes in the Work will depend upon the extent, if any, to which the changes cause delay in the completion of the various elements of construction. The Change Order granting the time extension may provide that the Contract Time will be extended only for those specific elements so delayed and that other Work will not be altered.

21.7 The Contract Time will only be adjusted for causes specified above. Extensions of time will only be approved if the Subcontractor provides justification supported by the Project schedule or other acceptable data that 1) such changes are, in fact, on the critical path and extend the contractually required completion dates, and 2) the Subcontractor has expended all reasonable effort to minimize the impact of such changes on the construction schedule. No additional extension of time will be granted subsequently for claims having the basis in previously approved extensions of time.

21.8 In support of requests for an extension of time not caused by unusual inclement weather, and concurrently with the submittal of any such request, the Subcontractor shall submit to the Consultant and the Construction Manager a written impact analysis showing the influence of each such event on contractually required completion dates as shown in the updated Project schedule most recently submitted to the Construction Manager prior to the event. The analysis shall include a partial network diagram showing a sequence of new or revised activities and/or durations that are proposed to be added to the existing schedule including related logic (a "fragnet"). This impact analysis and the fragnet shall include the new activities and/or activity revisions proposed to be added to the existing schedule and shall demonstrate the claimed impact on the critical path and the contractually required completion dates. The Subcontractor will not be granted an extension of time and/or relief from liquidated damages when the delay to completion of the work is attributable to, within the control of, or due to the fault, negligence, acts, or omissions of the Subcontractor and/or the Subcontractor's contractors, subcontractors, suppliers, or their respective employees and agents. Time extensions will not be considered in the event such adjustments do not exceed the total or remaining "float" associated with the impacted activities at the time of delay, nor for concurrent delays not caused by the Construction Manager. In the event of concurrent delays, only that event actually impacting contractually required completion dates will be considered in adjusting the schedule and evaluating the merit of a delay claim. Requests for an extension of time which are not supported by this information shall not be considered for approval.

21.9 Approved extensions of time not caused by unusual inclement weather shall be incorporated in a revised schedule at the time of approval. No subsequent requests for time extension will be

considered unless all previous approved time extensions have been incorporated in the Project schedule on which the requests are based.

21.10 Except as provided for in Article 21.10.1 through 21.10.3 below, no payment or compensation shall be made to the Subcontractor and extensions of the time fixed for completion of the Contract shall be the Subcontractor's sole remedy for any and all delays, hindrances, obstructions or impacts in the orderly progress of the Work.

21.10.1 In addition to the provisions of Articles 18.3 and 18.3.1 above, and subject to the requirements of Article 21.8 and 21.8.1 above, if the Construction Manager orders changes to the scope of Work for the Project that extend the then current contractually required completion dates of the Project, the Subcontractor shall be entitled to reimbursement for job site, general conditions and staffing costs associated with such delay.

21.10.2 If delays, hindrances, impacts or obstructions of the Subcontractor's performance of the Contract are in whole or in part within the control of the Construction Manager and, subject to the requirements of Article 21.8 and 21.8.1, extend contractually required completion dates of the Project, the Subcontractor shall be entitled to reimbursement for job site, general conditions and staffing costs for that portion of the costs caused by acts or omissions of the Construction Manager.

21.10.3 Such reimbursements shall not include consequential or similar damages, exemplary damages, damages based on unjust enrichment theory, formula-based delay claims, or any element of home office overhead.

ARTICLE 22 - CORRECTION OF WORK BEFORE FINAL PAYMENT

22.1 The Subcontractor shall promptly remove from the site and replace any material and/or correct any Work found by the Consultant to be defective or that fails to conform to the requirements of the Contract, whether incorporated in the Work or not, and whether observed before or after Substantial or Final Completion. The Subcontractor shall bear all costs of removing, replacing or correcting such Work or material including the cost of additional professional services necessary, and the cost of repairing or replacing all Work of separate contractors damaged by such removal or replacement.

22.2 The Consultant will notify the Subcontractor and the Construction Manager immediately upon its knowledge that additional services will be necessary. The Construction Manager may consent to accept such nonconforming Work and materials with an appropriate adjustment in the Contract Amount. Otherwise, the Subcontractor shall promptly replace and re-execute the Work in accordance with the Contract Documents and without expense to the Construction Manager and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement. If the Subcontractor fails to commence and continue to correct non-conforming Work within a reasonable time as determined by the Consultant, the Construction Manager may without limitation of other rights available to the Construction Manager and without prejudice to other remedies, take any necessary action to make the necessary corrections. If the Construction Manager mill be issued reflecting an equitable deduction from the Contract Amount. This amount will be deducted from payments due to the Subcontractor or, if no additional payments are due, Subcontractor or the Subcontractor's surety shall be responsible for payment of this amount.

ARTICLE 23 - CORRECTION OF WORK AFTER FINAL PAYMENT

23.1 Neither the final certificate of payment nor any provisions in the Contract Documents shall relieve the Subcontractor of responsibility for materials and equipment incorporated into the Work that fail to meet specification requirements, or for use of faulty materials or poor-quality workmanship. If within one year after the date of Substantial Completion of the Work or designated portion thereof, any of the Work is found to be defective or not in accordance with the requirements of the Contract Documents, the Subcontractor shall correct it promptly after receipt of written notice from the Construction Manager to do so. The Subcontractor shall correct any defects due to these conditions and pay for any damage to other Work resulting from their use. Nothing contained in this clause shall be construed to establish a period of limitation with respect to any obligation of the Subcontractor under the Section shall be in addition to and not in limitation of any obligations imposed by special guarantees or warranty required by the Contract, given by the Subcontractor, or otherwise recognized or prescribed by law.

23.2 In addition to being responsible for correcting the Work and removing any non-conforming Work or materials from the job site, the Subcontractor shall bear all other costs of bringing the affected Work into compliance with the Contract requirements. This includes costs of any required additional testing and inspection services, Consultant's services and any resulting damages to other property or to work of other contractors or of the Owner or Construction Manager.

23.3 If the Subcontractor fails to correct nonconforming Work within a reasonable time as determined by the Consultant, the Construction Manager may take necessary actions to make the necessary corrections. If the Construction Manager makes required corrections for nonconforming Work or materials after Final Payment to the Subcontractor, the Construction Manager shall be entitled to recover all amounts for such corrections, including costs and attorney's fees, from Subcontractor or surety.

ARTICLE 24 - TERMINATION OF CONTRACT FOR CONVENIENCE OF CONSTRUCTION MANAGER

24.1 The Construction Manager, by written notice to the Subcontractor, may terminate this Contract in whole or in part when it is in the interest of the Construction Manager, at the sole discretion of the Construction Manager. In such case, the Subcontractor shall be paid for all Work in place and a reasonable allowance for profit and overhead on Work done, provided that such payments shall not exceed the total Contract price as reduced by the value of the Work as yet not completed. The Subcontractor shall not be entitled to profit and overhead on Work not performed.

ARTICLE 25- CONSTRUCTION MANAGER'S RIGHT TO STOP WORK

25.1 If the Subcontractor fails to correct defective Work as required, or persistently fails to carry out the Work in accordance with the Contract Documents, the Construction Manager by written notice may order the Subcontractor to stop the Work or any portion of the Work, until the cause for the order has been eliminated to the satisfaction of the Construction Manager. The Consultant may stop Work without written notice for 24 hours whenever in its professional opinion such action is necessary or advisable to insure conformity with the Contract Documents. The Subcontractor shall not be entitled to an adjustment in the Contract Time or Amount under this clause in the event such stoppages are determined to be the fault of the Subcontractor or its Sub-contractor(s). The right of the Construction Manager or Consultant to stop Work shall not give rise to a duty on the part of the Construction Manager or Consultant to exercise this right for the benefit of the Subcontractor or others.

ARTICLE 26 -TERMINATION OF CONTRACT FOR DEFAULT ACTION OF SUBCONTRACTOR

26.1 In addition to its rights under Articles 24 and 25, the Construction Manager may terminate the contract upon the occurrence of any one or more of the following events:

26.1.1 If the Subcontractor refuses or fails to prosecute the Work (or any separable part thereof) with such diligence as will insure its completion within the agreed upon time; or if the Subcontractor fails to complete the Work within such time;

26.1.2 If the Subcontractor is adjudged a bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the Subcontractor or a third party files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws concerning the Subcontractor, or if a trustee or receiver is appointed for the Subcontractor or for any of the Subcontractor's property on account of the Subcontractor's insolvency, and the Subcontractor or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract within 10 days of receipt of a request for assurance from the Construction Manager;

26.1.3 If the Subcontractor repeatedly fails to supply sufficient qualified supervision of the work, or repeatedly fails to ensure that Sub-contractors supply adequate supervision, suitable materials or equipment, or adequate numbers of skilled workmen and supervision to the Work;

26.1.4 If the Subcontractor repeatedly fails to make prompt payments to Sub-contractors or suppliers at any tier, or for labor, materials or equipment;

26.1.5 If the Subcontractor disregards laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction;

26.1.6 If the Subcontractor disregards the authority of the Consultant or the Construction Manager;

26.1.7 If the Subcontractor performs Work which deviates from the Contract Documents, and neglects or refuses to correct rejected Work; or

26.1.8 If the Subcontractor otherwise violates in any material way any provisions or requirements of the Contract Documents.

26.2 Once the Construction Manager determines that sufficient cause exists to justify the action, the Construction Manager may terminate the Contract without prejudice to any other right or remedy the Construction Manager may have, after giving the Subcontractor and its Surety three (3) Calendar Days notice by issuing a written Declaration of Default. The Construction Manager shall have the sole discretion to permit the Subcontractor to remedy the cause for the contemplated termination without waiving the Construction Manager's right to terminate the contract.

26.3 In the event that the Contract is terminated, the Construction Manager may demand that the Subcontractor's Surety take over and complete the Work on the Contract. The Construction Manager may require that in so doing, the Subcontractor's Surety not utilize the Subcontractor in performing the Work. Upon the failure or refusal of the Subcontractor's Surety to take over and begin completion of the Work within twenty (20) Calendar Days after the demand, the Construction Manager may take over the Work and prosecute it to completion as provided below.

26.3.1 In the event that the Contract is terminated and the Subcontractor's Surety fails or refuses to
complete the Work, the Construction Manager may take over the Work and prosecute it to completion
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Subcontractor

in accordance with the laws of the Commonwealth, by contract or otherwise, and may exclude the Subcontractor from the site. The Construction Manager may take possession of the Work and of all of the Subcontractor's tools, appliances, construction equipment, machinery, materials, and plant which may be on the site of the Work, and use the same to the full extent they could be used by the Subcontractor, without liability to the Subcontractor. At the Construction Manager's sole discretion, the Construction Manager has the right to take assignment of any or all portions of the contract work in order to prosecute the completion of the Work. In exercising the Construction Manager's right to prosecute the completion of the Work, the Construction Manager may also take possession of all materials and equipment stored at the site or for which the Construction Manager has paid the Subcontractor but which are stored elsewhere, and finish the Work as the Construction Manager until the Work is finished.

26.3.2 If the unpaid balance of the Contract Price exceeds the direct and indirect costs and expenses of completing the Work including compensation for additional professional and Consultant services, such excess shall be used to pay the Subcontractor for the cost of the Work it performed and a reasonable allowance for overhead and profit. If such costs exceed the unpaid balance, the Subcontractor or the Subcontractor's Surety shall pay the difference to the Construction Manager. In exercising the Construction Manager's right to prosecute the completion of the Work, the Construction Manager shall have the right to exercise its sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work and the Construction Manager shall not be required to obtain the lowest figure for Work performed in completing the Contract. In the event that the Manager takes bids for remedial Work or completion of the Project, the Subcontractor shall not be eligible for the award of such Contract.

26.3.3 The Subcontractor shall be liable for any damage to the Construction Manager resulting from the termination or the Subcontractor's refusal or failure to complete the Work, and for all costs necessary for repair and completion of the Project above the amount of the Contract. The Subcontractor shall be liable for all attorney's fees, costs and expenses incurred by the Construction Manager to enforce the provisions of the Contract.

26.3.4 If liquidated damages are provided in the Contract and the Manager terminates the Contract, the Subcontractor shall be liable for such liquidated damages, as provided for in Article 29.2 and 29.3 below, until Substantial Completion and Final Completion of the Work are achieved.

26.3.5 In the event the Contract is terminated, the termination shall not affect any rights of the Construction Manager against the Subcontractor. The rights and remedies of the Construction Manager under this Article are in addition to any other rights and remedies provided by law or under this Contract. Any retention or payment of monies to the Subcontractor by the Construction Manager will not release the Subcontractor from liability.

26.3.6 In the event the Contract is terminated under this Article, and it is determined for any reason that the Subcontractor was not in default under the provisions of this Article, the termination shall be deemed a Termination for Convenience of the Construction Manager pursuant to Article 24 and the rights and obligations of the parties shall be determined in accordance with Article 24.

ARTICLE 27 - SUSPENSION OF WORK

27.1 The Construction Manager or the Consultant may, at any time and without cause, order the Subcontractor in writing or cause the Subcontractor to suspend, delay or interrupt all or any part of the Work for such period of time as the Construction Manager may determine to be appropriate for its

convenience. Adjustment may be made for any increase in the Contract time necessarily caused by such suspension or delay, in accordance with Article 21.

ARTICLE 28 - TIME OF COMPLETION

28.1 The Subcontractor shall begin the Work on the date of commencement as specified in the Work Order. All time limits stated in the Contract Documents are of the essence of the Contract. The actual end of the Contract Time shall be the date specified on the approved certificate of Substantial Completion. The time for completion set forth in the Contract is a binding part of the Contract upon which the Owner may rely in planning the use of the facilities to be constructed and for all other purposes.

28.2 Substantial Completion is defined in Article 1.1.17 of these General Conditions. Only incidental corrective Work under punch lists and final cleaning (if required) for Owner's full use shall remain for Final Completion. The ability to occupy or utilize shall include regulatory authority approval unless regulatory approval is delayed due to actions of the Owner or the Consultant. When the Owner accepts and occupies a portion of the Project, the operation, maintenance, utilities, and insurance of that portion of the Project becomes the responsibility of the Owner.

28.3 The date of Substantial Completion shall be that date certified by the Owner, in accordance with the following procedures, that the Work is sufficiently complete to occupy or utilize as defined above.

28.3.1 When the Construction Manager considers the entire Work is substantially complete as defined in Article 1.1.17 of these General Conditions, and is ready for its intended use, the Construction Manager shall notify the Consultant in writing and request an inspection. The declaration and request shall be accompanied by a list prepared by the Subcontractor of those items of Work still to be completed or corrected. The failure of the Subcontractor or Consultant to include any item or items, which are not completed or which need correction, on such list shall not alter the responsibility of the Subcontractor to complete all Work in accordance with the Contract Documents.

28.3.2 The Consultant shall, within a reasonable time after receipt of notification from the Construction Manager of a declaration of Substantial Completion and request for inspection, make such inspection. Prior to the Substantial Completion Inspection and within sufficient time to allow the Consultant's review, the Subcontractor shall submit all As-Built drawings, Notice of Termination, catalog data, complete operating and maintenance instructions, manufacturer specifications, certificates, warranties, written guarantees and related documents required by the contract. The Consultant shall review said documents for accuracy and compliance with the Construction Manager.

28.3.3 If the Consultant considers the Work substantially complete, the Consultant shall recommend that the Owner prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion and the responsibilities between the Owner and Construction Manager for security, maintenance, heat, utilities and insurance, if not otherwise provided for in the Contract Documents, and a tentative list of items to be completed or corrected, and shall fix the time within which the Subcontractor shall complete the items listed therein. This time shall not exceed thirty (30) Calendar Days unless otherwise provided for in the Work Order. The Certificate of Substantial Completion shall be submitted to the Consultant, Construction Manager, and Subcontractor for their written acceptance of the responsibilities assigned to them in the certificate. The Project shall not be deemed substantially complete until the certificate is issued. If, after making the inspection, the

Consultant does not consider the Work substantially complete, the Consultant will notify the OwnerConstruction Manager, and the Subcontractor in writing, giving the reasons, therefore.

28.4 <u>Operation and Maintenance Manual Deliverables</u>. In anticipation and preparation of completion of the Work and the closing out of the Project, and to facilitate training of the Owner's personnel in the maintenance and operation of the new installations, the Contractor shall comply with the requirements of Article 8.7 of the Special Conditions. (For the purposes of this article, air test and balance reports may be submitted at a later date with the request for certification of substantial completion.) These manuals shall be submitted to the Consultant for approval and subsequently forwarded to the Owner's Project Manager by or before the time construction is 75% complete, as reflected by the Contractor's most recently submitted Application for Payment.

28.4.1 The provisions of Article 30.11 notwithstanding, if the Subcontractor meets the requirements of Article 28.4 above with respect to timely submittal of approvable Operation and Maintenance manuals and provided the project construction is 1) at least 75% complete and 2) is equal to or ahead of the approved progress schedule and 3) the Work completed is in compliance with the requirements of the contract documents, the Owner, at the sole discretion of the Director, Capital Projects Management Division may reduce the retainage to not less than three percent (3%) of the current Contract Amount.

28.4.2 In the event the Subcontractor fails to submit acceptable O&M manuals prior to reaching 75% completion, it is agreed that the Construction Manager at its sole discretion may deduct from the current and subsequent Applications for Payment an amount deemed by the Construction Manager to be sufficient to encourage prompt compliance with this contractual requirement, until such time as acceptable O&M manuals are received.

28.5 <u>Project Close Out.</u> When the Subcontractor considers that all Work required by the Contract is 100% complete, including correction of any remaining punch list work or deficiencies, the Subcontractor shall notify the Consultant in writing and request a final inspection. The Consultant, upon receipt of written notice from the Construction Manager that the Work is complete and is ready for final inspection and acceptance, will promptly make such inspection and when the Consultant finds the Work completed and acceptable under the Contract Documents and the Contract fully performed, the Consultant will so notify the Construction Manager in writing to submit, and will certify to the a final Certificate for Payment submitted in accordance with Articles 30.9 and 30.9.1 of these General Conditions. If the Subcontractor does not complete the punch items within the time designated, the Construction Manager retains the right to have these items corrected at the expense of the Subcontractor including all architectural, engineering and inspection costs and expenses incurred by the Consultant and the Owner or Construction Manager, and to deduct such costs and expenses from the funds being held in retainage. The Construction Manager shall not be required to release the retainage until such items have been completed.

ARTICLE 29 - LIQUIDATED DAMAGES

29.1 The Construction Manager and the Subcontractor recognize and agree that time is of the essence of this Contract and that the Construction Manager will suffer financial loss if the Work is not completed within the time specified in the Contract plus any extensions that may be allowed. The parties further recognize the delays, expense and difficulties involved in proving the actual loss suffered by the Construction Manager should the Work not be completed on time. The Construction Manager and the Subcontractor agree on the amounts stated as liquidated damages in the Agreement. The Construction Manager and Subcontractor agree that the amount stated as liquidated damages are not intended to be penalties.

29.2 Should the Subcontractor fail to satisfactorily complete the Work under Contract on or before the date stipulated for Substantial Completion, as adjusted by approved Change Orders, if any, the Subcontractor will be required to pay liquidated damages to the Construction Manager for each consecutive Calendar Day that the Owner is deprived of full use of the area beyond the date specified unless otherwise stipulated elsewhere by Owner. After the date for Substantial Completion has been certified by the Owner, the Subcontractor shall cease to owe liquidated damages until the date established for Final Completion.

29.3 If Final Completion is not achieved by the date established for Final Completion, as adjusted by approved Change Orders, if any, liquidated damages in the amount stipulated in the Agreement will become due and collectable. The Contract will be considered complete and Final Completion shall be deemed to have occurred when all Work has been completed in compliance with the Contract Documents and the Certificate of Final Completion has been issued by the Owner. No deduction or payment of liquidated damages will, in any degree, release the Subcontractor from further obligations and liabilities to complete the entire Contract. Permitting the Subcontractor to continue and finish the Work, or any part of it, after expiration of the Contract Time, shall in no way constitute a waiver on the part of the Construction Manager of any liquidated damages due under the Contract.

ARTICLE 30 - PAYMENT TO THE SUBCONTRACTOR

30.1 Payments on account of this Contract shall be made monthly as Work progresses. The Subcontractor shall submit to the Construction Manager, in the manner and form prescribed, an application for each payment, and, if required, receipts or other vouchers showing payments made for materials and labor, including payments to Sub-contractors. All payments shall be subject to any withholding or retainage provisions of this contract. All pay request documents, except the final payment, shall be submitted in whole dollar amounts. All payment applications from the Subcontractor shall include line items for overhead, profit and general condition costs.

30.2 The Consultant shall, within ten (10) Business Days after receipt of each application for payment, certify approval of payment in writing to the Owner and present the application to the Owner, or return the application to the Construction Manager indicating in writing its reasons for refusing to approve payment. The Owner, provided no exception is taken to the application for payment submitted by the Consultant, will issue payment on or within thirty (30) Business Days from the date received from the Consultant. A reasonable delay on the part of the Owner in making payment to the Construction Manager for any given payment shall not be grounds for breach of Contract. A reasonable delay on the part of the Construction Manager in making payment to the Subcontractor for any given payment shall not be grounds for breach of Contract. The Consultant may refuse to approve the whole or any part of any payment if it would be incorrect to make such presentation to the Owner.

30.3 If payment is requested on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored at an off jobsite location agreed to in writing by the Construction Manager that meets the manufacturer's requirements for the stored material and not-comingled with other material, the Subcontractor shall furnish the following:

30.3.1 A list of the materials consigned to the Project (which shall be clearly identified), giving the place of storage, together with copies of invoices.

30.3.2 Certification that all items have been tagged for delivery to the Project and that they will not be used for any other purpose.

30.3.3 A letter from the Surety indicating that the Surety agrees to the arrangements and that payment to the Subcontractor shall not relieve either the Subcontractor or its Surety of their responsibility to complete the Work.

30.3.4 Evidence of adequate insurance listing the Construction Manager as an additional insured covering the material in storage.

30.3.5 Evidence that representatives of the Consultant have visited the Subcontractor's place of storage and checked all items listed on the Subcontractor's certificate. They shall certify, insofar as possible, that the items are in agreement with the Specifications and approve their incorporation into the Project.

30.4 The Construction Manager will pay 80% of the invoiced value less retainage for materials stored off site providing the above conditions are met.

30.5 The Subcontractor's signature on each subsequent application for payment shall certify that all previous progress payments received on account of the Work have been applied to discharge in full all of the Subcontractor's obligations reflected in prior applications for payment.

30.6 Each payment made to the Subcontractor shall be on account of the total amount payable to the Subcontractor and the Subcontractor warrants and guarantees that the title to all materials, equipment and Work covered by the paid partial payment shall become the sole property of Construction Manager free and clear of all encumbrances. Nothing in this Article shall be construed as relieving Subcontractor from the sole responsibility for care and protection of materials, equipment and Work upon which payments have been made or restoration of any damaged Work or as a waiver of the right of Construction Manager to require fulfillment of all terms of the Contract Documents.

30.7 Prior to submitting the first application for payment, the Subcontractor shall submit to the Construction Manager for approval a detailed breakdown of the Contract Amount pursuant to CSI specification divisions, divided so as to facilitate payment and correlated to the schedule required by General Conditions Article 32 of the Contract Documents. The total value of all activities shall add up to the Contract Amount. When approved by the Construction Manager, this schedule shall be used as a basis for Subcontractor's applications for payment and may be used by the Construction Manager to determine costs or credits resulting from changes in the Work. Failure to obtain the approval of the Schedules of Values shall be a basis for withholding payment to the Subcontractor.

30.8 Retainage – The Owner will retain ten percent (10%) of the Subcontractor's progress payments, including amounts claimed for construction management fee, until fifty one percent (51%) of the construction project has been completed. Thereafter, if the Work is fully in compliance with the requirements of the Contract and except as provided for in Article 28.4.1 above, the Owner shall retain five percent (5%) of the total contract amount until Substantial Completion and acceptance of all Work covered by this Contract, as collateral security to insure successful completion of the Work. For the purposes of this Article, the term "in full compliance" shall mean 1) that the progress of the Work is equal to or ahead of that predicted by the Project Baseline schedule and 2) the Work completed is in compliance with the requirements of the contract documents. Subsequent to the issuance of the Substantial Completion Certificate and depending upon the cost involved for the completion and/or correction of punch list items, the Consultant may recommend to the Owner an adjustment to the amount being held as retainage and, if approved by Owner, the amount of retainage may then be reduced and a sufficient sum retained by Owner to assure completion of the remaining unfinished Work. Retainage reduction as provided for in this Article 30.8 is contingent upon the Subcontractor and/or Sub-contractors being on or ahead of the approved progress schedule and on

verification by the Consultant that the Work completed is in compliance with the requirements of the contract documents

30.8.1 In addition to the retainage set forth above, the Construction Manager may withhold from any monthly progress payments or nullify any progress payments in whole or in part as necessary to protect the Construction Manager from loss on account of:

30.8.1.1Defective Work which has not been remedied or completed Work which has been damaged requiring correction or replacement, or

30.8.1.2Action required by the Construction Manager to correct Defective Work or complete Work which the Subcontractor has failed or refused to correct or complete, or

30.8.1.3Failure of the Subcontractor to perform any of its obligations under the Contract, or

30.8.1.4Failure of the Subcontractor to make payment properly to Sub-contractors; suppliers of material, services or labor; or to reimburse the University for utilities or other services as provided for in the Contract;

30.8.1.5 Amounts to be withheld as liquidated damages for failure to complete the Project in the allotted Contract time.

30.8.2 When the Construction Manager is satisfied that the Subcontractor has remedied any such deficiency, payments shall be made of the amount being withheld on the next scheduled application for payment.

30.9 Final Payment – When all Work is completed and acceptable and the Contract is fully performed, the Subcontractor will be directed to submit a final payment application for certification and the entire balance shall be due and payable upon a certification of completion by the Consultant that the Work is in accordance with the Contract Documents. Final change order reconciliation as per Article 18.12 must be provided prior to final payment.

30.9.1 Upon issuance of the Certificate of Final Completion by the Owner and submittal by the Subcontractor of all required documents and releases, all retained amounts shall be paid to the Subcontractor as part of the Final Payment. By accepting such payment, the Subcontractor certifies that all amounts due or that may become due to any Sub-contractor, any Consultant of the Subcontractor, or any vendors or material suppliers, have been paid or will be paid from the proceeds of the final payment; and that, further, there are not liens, claims or disputes involving the Construction Manager or the Consultant that are outstanding or unresolved.

30.10 The Subcontractor shall promptly pay each Sub-contractor and material supplier upon receipt of payment from the Construction Manager the amount to which said Sub-contractor and supplier is entitled, reflecting the percentage actually retained from payments to the Subcontractor on account of such Sub-contractor's work. The Subcontractor shall, by an appropriate Agreement with each Sub-contractor and material supplier, require each Sub-contractor and supplier to make payments to their sub-contractors, vendors and suppliers in similar manner.

30.10.1 The Consultant may, on request, furnish to any Sub-contractor or material supplier information regarding the percentages of completion applied for by the Subcontractor and the action thereon by the Consultant.

30.10.2 Neither the Construction Manager nor the Consultant shall have any obligation to make payment to any Sub-contractor or material supplier except as may otherwise be required by law.

ARTICLE 31 - AUDITS

31.1 The Construction Manager's Trade Contractors', sub-contractors' and/or vendor's "records" shall upon reasonable notice be open to inspection and subject to audit and/or reproduction during normal business working hours as may be deemed necessary by the Construction Manager at its sole discretion. Such audits may be performed by an Construction Manager's representative or an outside representative engaged by the Construction Manager. The Construction Manager or its designee may conduct such audits or inspections throughout the term of this contract and for a period of three years after final payment, or longer if required by law. Construction Manager's representative may (without limitation) conduct verifications such as counting employees at the Construction Site, witnessing the distribution of payroll, verifying information and amounts through interviews and written confirmations with Subcontractor's employees, field and agency labor, Trade Contractors and vendors.

31.2 "Records" as referred to in this Contract shall include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, superintendents' reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in the Construction Manager's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Contract Document. Such records shall include hard copy, as well as computer readable data if it can be made available, written policies and procedures; time sheets; payroll registers; cancelled payroll checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, etc.); original estimates; estimating work sheets; correspondence; change order files (including documentation covering negotiated settlements); back charge logs and supporting documentation; invoices and related payment documentation; general ledger; records detailing cash and trade discounts earned; insurance rebates and dividends; and any other Subcontractor or contractor records which may have a bearing on matters of interest to the Construction Manager in connection with the Subcontractor's dealings with the Construction Manager (all foregoing hereinafter referred to as the "records") to the extent necessary to adequately permit evaluation and verification of any or all of the following:

Compliance with Contract requirements for deliverables; Compliance with approved plans and specifications; Compliance with Construction Manager's business ethics expectations; Compliance with Contract provisions regarding the pricing of change orders; Accuracy of Subcontractor representations regarding pricing of invoices; and Accuracy of Subcontractor representations related to claims submitted by the Subcontractor or its payees.

31.3 The Subcontractor shall require all payees (examples of payees include Trade Contractors, Sub-contractors, vendors, and/or material suppliers) to comply with the provisions of this Article by including the requirements hereof in a written contract agreement between the Subcontractor and payees. Such requirements to include flow-down right of audit provisions in contracts with payees will also apply to Subcontractors and Sub-subcontractors, material suppliers, etc. The Subcontractor will cooperate fully and will cause all related parties and all of the Subcontractor's Trade Contractors and/or subcontractors (including those entering into lump sum subcontracts) to cooperate fully in furnishing or in making available to Construction Manager from time to time whenever requested, in an expeditious manner, any and all such information, materials and data. 31.4 Construction Manager's authorized representative or designee shall have reasonable access to the Subcontractor's facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this contract and shall provide adequate and appropriate work space in order to conduct audits in compliance with this Article. The Subcontractor and its payees agree bear their costs and expenses relating to any inspections and audits.

31.5 If an audit inspection or examination in accordance with this Article discovers any fraud or misrepresentation, or discloses overpricing or overcharges (of any nature) by the Subcontractor to the Construction Manager, in addition to making adjustments for the overcharges, the reasonable actual cost of the Construction Manager's audit shall be reimbursed to the Construction Manager by the Subcontractor. Any adjustments and/or payments that must be made as a result of any such audit or inspection of the Subcontractor's invoices and/or records shall be made within Ninety (90) Calendar Days from presentation of the Construction Manager's findings to the Subcontractor.

31.6 The provisions of Articles 31.1, 31.2 and 31.5 notwithstanding, the Construction Manager shall have the right to conduct inspections and audits of any matter relating to the Contract Documents or the Work, which shall be for the Construction Manager's sole benefit and shall not relieve the Subcontractor, its sureties, contractors, subcontractors suppliers and their respective employees and agents of any obligations under the Contract Documents.

31.7 Any audits or inspections under Article 31 shall not constitute a waiver of any right the Construction Manager has to accounting or discovery of records in the possession, custody or control of the Subcontractor, its sureties, contractors, subcontractors, vendors and their respective employees and agents

ARTICLE 32- PROGRESS & SCHEDULING

32.1 If requested by the Owner during the Design Phase of the Project, and working in cooperation with the Owner and the Consultant(s), the Construction Manager shall prepare a Critical Path Method (CPM) type Design Phase schedule incorporating design phase and review activities through completion of the design and bidding of the Trade Contracts, shall include in this Design Phase schedule the broad categories of Work to be accomplished in the subsequent implementation of the design and construction of the Project, and shall modify and update this Design Phase schedule as necessary to reflect the actual status and then current plan for the Project.

32.2 The schedules submitted for this Project shall be prepared using Primavera P6 scheduling software. If approved by the University, and at the sole discretion of the University, schedules submitted using earlier versions of Primavera scheduling software (Primavera SureTrak or Primavera P3) may be converted to Primavera P6 format by the University for review purposes. However, the University will not be responsible for any inaccuracies that may result from such conversions.

32.2.1 Prior to bidding Trade Contracts, the Construction Manager shall prepare and submit to the Owner and the Consultant a preliminary CPM construction schedule for the Work that will be included in the Project bidding documents.

3.2.2.2 The schedules submitted for this Project shall coordinate Work in accordance with all schedules included in the Owner's approved Program. Construction work shall be scheduled and executed such that operations of the University are given first priority. This applies particularly to outages and restriction of access.

32.2.3 The schedules submitted for this Project shall not exceed time limits established for the Project. Schedules which reflect a duration less than the Contract Time are for the convenience of the Subcontractor and shall not be the basis of any claim for delay or extension of time.

32.2.4 Schedules shall be revised at appropriate intervals as required by the condition of the Work and the Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

32.2.5 The Subcontractor shall also submit a payment schedule indicating the percentage of the Contract Amount and the amount of the anticipated monthly payments that will be requested as the Project proceeds.

32.2.6 The Owner may withhold approval of all or a portion of progress payments until the progress payment schedule and construction schedule have been submitted by the Subcontractor.

32.3 The Subcontractor shall prepare and keep current, for the Consultant's approval, a separate schedule of submittals coordinated with the Construction Manager's CPM construction schedule that provides reasonable time for the Consultant to review the submittals.

32.4 The Subcontractor shall cause the work to be performed pursuant to the most recent schedules.

ARTICLE 33 - USE OF COMPLETED PORTIONS

33.1 Upon mutual Agreement between the Owner, Construction Manager, and Consultant, the Owner may use a completed portion of the Project after an inspection is made. Such possession and use shall not be deemed as acceptance of any Work not completed in accordance with the Contract Documents, nor shall such possession and use be considered to alter warranty obligations or cause any warranty period to commence prior to Substantial Completion.

ARTICLE 34 - INDEMNIFICATION

34.1 To the fullest extent permitted by law, the Subcontractor shall indemnify and hold harmless the Construction Manager, its consultants, and their respective employees and agents from and against all claims, damages, losses and expenses, including attorney's fees, provided that any such claim, loss, damage or expense: (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (b) is caused in whole or in part by any negligent act or omission of the Subcontractor, any Sub-contractor or material supplier, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable This basic obligation to indemnify shall not be construed to nullify or reduce other indemnification rights which the Construction Manager, its consultants, and their respective employees and agents would otherwise have.

34.2 The Subcontractor shall also indemnify and hold harmless the Construction Manager, its consultants, and their respective employees and agents from any claims relating to the Project brought against the Construction Manager, its consultants, and their respective employees and agents by any Sub-contractor unless such claims are due to the gross negligence or misconduct of the Construction Manager or Consultant.

34.3In any and all claims against the Construction Manager its consultants, and their respective
employees and agents, by any employee of the Subcontractor, any Sub-contractor, any one directly or
indirectly employed by any of them or anyone for whose acts any of them may be liable, the
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indemnification obligation under this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Subcontractor or any Subcontractor under Worker's Compensation acts, disability benefit acts or other employee benefit acts.

34.4 The obligations of the Subcontractor under this Article shall not extend to the liability of the Consultant, his agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Consultant, his agents or employees, provided such giving or failure to give is the primary cause of injury or damage.

ARTICLE 35 - INSURANCE

35.1 The Subcontractor shall furnish the Construction Manager the Certificates of Insurance or other acceptable evidence that insurance is effective, and guarantee the maintenance of such coverage during the term of the Contract. Each policy of insurance, except Workers Compensation, shall name the University of Kentucky and the directors, officers, trustees and employees of the University as additional insured on a primary and non-contributory basis as their interest appears. Waiver of subrogation in favor of the University of Kentucky shall apply to all policies. Any endorsements required to validate such waiver of subrogation shall be obtained by the Subcontractor at the Subcontractor's expense.

35.2 The Subcontractor shall not commence, nor allow any Sub-contractor to commence Work under this Contract, until the Construction Manager has reviewed the certificates and approved coverages and limits as satisfying the requirements of the bidding process.

35.3 Workers' Compensation and Employers' Liability Insurance. The Subcontractor shall acquire and maintain Workers' Compensation insurance with Kentucky's statutory limits and Employers' Liability insurance as defined in the Special Conditions for all employees who will be working at the Project site. In the event any Work is sublet, the Subcontractor shall require any Sub-contractor to provide proof of this insurance for the Sub-contractors' employees, unless such employees are covered by insurance provided by the Subcontractor.

35.4. The Subcontractor shall either require each Sub-contractor to procure and maintain insurance of the type and limits stated during the terms of the Contract, or insure the activities of such Sub-contractors under a blanket form as described below:

35.4.1 Commercial General Liability Insurance. The Subcontractor shall acquire and maintain a Broad Form Comprehensive General Liability (CGL) Insurance Policy including premises - operations, products/completed operations, blanket contractual, broad form property damage, real property fire legal liability and personal injury liability coverage. The Insurance Policy must be on an "occurrence" form only, unless approved by the Construction Manager. Contractual liability must be endorsed to include defense costs. Products and completed operations insurance must be carried for two years following completion of the Work. Policies which contain Absolute Pollution Exclusion endorsements are not acceptable. Coverage must include pollution from "hostile fires". Where required by the risks involved, Explosion, Collapse and Underground (XCU) coverages shall be added by endorsement. If the work involved requires the use of helicopters, a separate aviation liability policy as defined in the Special Conditions will be required. If cranes and rigging are involved, a separate inland marine policy with liability limits as defined in the Special Conditions will be required.

35.4.1.1 The limits of liability shall not be less than defined in the Special Conditions.

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35.4.2 Comprehensive Automobile Liability Insurance. The Subcontractor shall show proof and guarantee the maintenance of insurance to cover all owned, hired, leased or non-owned vehicles used on the Project. Coverage shall be for all vehicles including off the road tractors, cranes and rigging equipment and include pollution liability from vehicle upset or overturn. Policy limits shall not be less than defined in the Special Conditions.

35.4.3 Excess or Umbrella Liability Insurance. The Subcontractor shall acquire and maintain a policy of excess liability insurance in an umbrella form for excess coverages over the required primary policies of broad form commercial general liability insurance, business automobile liability insurance and employers' liability insurance. This policy shall have a minimum as defined in the Special Conditions for each occurrence in excess of the applicable limits in the primary policies. The excess liability policy shall not contain an absolute pollution exclusion and shall include coverages for pollution that may occur due to hostile fires and vehicle upset and overturn. The limits shall be increased as appropriate to cover any anticipated special exposures.

35.5 Builders Risk Insurance. The Subcontractor shall purchase and maintain an "all risk" Builder's Risk Insurance policy upon the Work at the site to the full insurable value thereof. Such insurance shall include interests of the Construction Manager, Subcontractor, and all Sub-contractors and of their subcontractors. It shall insure against perils of fire, extended coverage, vandalism and malicious mischief. Subcontractor's work performed, and materials to be incorporated into the project and stored on the jobsite, will be covered. Builder's Risk does not include temporary buildings, or Subcontractor or Subcontractor's tools, equipment, or trailers and contents.

35.6 Insurance Agent and Company Insurance as required in the bidding process of the Project shall be written according to applicable state law in Kentucky. The policies shall be written by an insurer duly authorized to do business in Kentucky in compliance with KRS: 304.1-100 and -.110.

ARTICLE 36 - PERFORMANCE AND PAYMENT BONDS - NOT USED

ARTICLE 37 - DAMAGED FACILITIES

37.1 The Subcontractor shall repair or replace, at no expense to the Construction Manager, any damaged section of existing buildings, paving, landscaping, streets, drives, utilities, watersheds, etc. caused by Work performed under the Contract or incidental thereto, whether by the Subcontractor's own forces, Sub-contractors or by material suppliers. Such repair or replacement shall be performed by craftsmen skilled and experienced in the trade or craft for the original Work.

37.2 Water damage to the interior of any building caused by Work performed under the Contract or incidental thereto, whether by the Subcontractor's own forces, Sub-contractors, or by material suppliers, and whether occurring in a new or existing building, shall be repaired by the Subcontractor at the Subcontractor's expense, and any materials damaged inside the building, including personal property, shall be repaired or replaced at the full replacement cost by the Subcontractor at the Subcontractor's expense.

37.3 For existing buildings, the Subcontractor, along with the Construction Manager, and Owner's Representative and Consultant, will tour the Project site to evaluate existing conditions and determine any existing damage before any Work on this Contract is done.

37.4Should the Subcontractor fail to proceed with appropriate repairs in an expedient manner, the
Construction Manager reserves the right to have the Work/repairs completed and deduct the cost of
such Work/repairs from amounts due or to become due to the Subcontractor. If the Construction
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Manager deems it not expedient to repair the damaged Work, or if repairs are not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

ARTICLE 38- CLAIMS & DISPUTE RESOLUTION

38.1 All Subcontractor's claims and disputes shall be referred to the Consultant for review and recommendation. All claims shall be made in writing to the Consultant and Construction Manager, not more than ten (10) days from the occurrence of the event which gives rise to the claim or dispute, or not more than ten (10) days from the date that the Subcontractor knew or should have known of the claim or dispute. Unless the claim is made in accordance with these requirements, it shall be waived. Any claim not submitted before Final Payment shall be waived. The Consultant shall render a written decision within fifteen (15) days following receipt of a written demand for the resolution of a claim or dispute.

38.1.1 The provisions of Article 43.2 notwithstanding, claims and disputes between the Subcontractor and any Sub-contractor or supplier shall not be referred to the Consultant except to request interpretation and/or clarification of the intent of the plans or specifications. Such claims and disputes between the Subcontractor and any Sub-contractor shall be resolved between those parties as required by Article 43.4 of these General Conditions.

38.2 The Consultant's decision shall be final and binding on the Subcontractor unless the Subcontractor submits to the Consultant and the Project Manager a written notice of appeal within fifteen (15) Calendar Days of the Consultant's decision. The Subcontractor must present within fifteen (15) Calendar Days of the notice to appeal a narrative claim in writing with complete supporting documentation. After receiving the written claim, the Project Manager will review the materials relating to the claim and may meet with the Consultant and/or the Subcontractor to discuss the merits of the claim. The Project Manager will render a decision within thirty (30) Calendar Days after receiving the written claim and supporting documentation. The decision of the Project Manager shall be final and binding pending further appeal as provided for in Article 39. If the Consultant or the Project Manager do not issue a written decision within thirty (30) calendar days after receiving the claim and supporting documentation, or within a longer period as may be established by the parties to the Contract in writing, then the Subcontractor may proceed as if an adverse decision had been received.

38.3 If the Project Manager does not agree with the Consultant's decision on a claim by the Subcontractor, the Project Manager shall notify the Subcontractor and the Consultant and direct the Subcontractor to perform the Work about which the claim was made and the Subcontractor shall proceed with such Work in accordance with the Project Manager's instruction. If the Subcontractor disagrees with a decision of the Project Manager concerning a Subcontractor's claim, the Subcontractor shall proceed with the Work as indicated by the Project Manager's decision.

38.4 The Subcontractor shall continue to diligently pursue Work under the Contract pending resolution of any dispute, and the Construction Manager shall continue to pay for undisputed work in place.

ARTICLE 39 - CLAIMS FOR DAMAGE

39.1 Should either party to the Contract suffer damage because of wrongful act or neglect of the other party, or of anyone employed by them, or others for whose act they are legally liable, or other controversy arising under the Contract, such claim or controversy shall be made in writing to the other party within thirty (30) days after the first occurrence of the event. Prior to the institution of any action in court, the claim or controversy (together with supporting data) shall be presented in

writing to the Director of the Capital Project Management Division at the University of Kentucky ("Director") or his designee for the University of Kentucky. The Director, or designee, is authorized, subject to any limitations or conditions imposed by regulations, to settle, comprise, pay, or otherwise adjust the claim or controversy with the Subcontractor. The Director, or designee, shall promptly issue a decision in writing. A copy of the decision shall be mailed or otherwise furnished to the Subcontractor. The decision rendered shall be final and conclusive unless the Subcontractor files suit pursuant to KRS 45A.245. If the Director, or designee, does not issue a written decision within one hundred and twenty (120) days after written request for a final decision, or within a longer period as may be established by the parties to the Contract in writing, then the Subcontractor may proceed as if an adverse decision had been received.

39.2 Any legal action on the Contract shall be brought in the Franklin Circuit Court and shall be tried by the Court sitting without a jury. All defenses in law or equity, except the defense of government immunity, shall be preserved to the Construction Manager. The Construction Manager shall recover from the Subcontractor all attorney's fees, costs and expenses incurred to the extent the Construction Manager prevails in defending or prosecuting each claim in litigation of disputes under the Contract. The Construction Manager is the prevailing party under this provision and is entitled to recover attorneys' fees, costs and expenses on a claim-by-claim basis to the extent the Construction Manager successfully defeats or prosecutes each claim. A recovery of a net judgment by the Subcontractor shall not be determinative of the Construction Manager's right to recover attorneys' fees, expenses and costs. Rather, such a determination shall be made based on the extent that the Construction Manager successfully defends or prosecutes each distinct claim in litigation under the Contract, even if the Construction Manager for all attorney's fees, costs and expenses incurred by the Contract, even if the Construction Manager for all attorney's fees, costs and expenses incurred by the Construction Manager for all attorney's fees, costs and expenses incurred by the Construction Manager for all attorney's fees, costs and expenses incurred by the Construction Manager to enforce the provisions of the Contract.

ARTICLE 40 - LIENS

40.1 The filing and perfection of liens for labor, materials, supplies, and rental equipment supplied on the Work are governed by KRS 376.195 et seq.

40.2 Statements of lien shall be filed with the Fayette County Clerk and any action to enforce the same must be instituted in the Fayette Circuit Court, pursuant to KRS 376.250 (2).

40.3 The lien shall attach only to any unpaid balance due the Subcontractor for the improvement from the time a copy of statement of lien, attested by the Fayette County Clerk, is delivered to the Construction Manager, pursuant to the provisions of KRS 376.240.

ARTICLE 41 - ASSIGNMENT

41.1 Neither party to the Contract shall assign the Contract, or any portion thereof without the prior written consent of the other, which consent may be granted or withheld in the granting party's sole and absolute discretion. The Subcontractor shall not assign any amount or part of the Contract or any of the funds to be received under the Contract unless the Subcontractor has the prior written approval of the Construction Manager (which approval may be granted or withheld in the Construction Manager's sole and absolute discretion) and the Surety on the Subcontractor's bond has given written consent to any such assignment.

ARTICLE 42 - SEPARATE CONTRACTS

42.1The Construction Manager reserves the right to enter into other Contracts in connection with
the Project or to perform any work with the Construction Manager's forces in the normal sequence of
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the work as depicted in the then current construction schedule. Except for work performed by University personnel, such contracts shall be assignable to the Subcontractor and shall contain the same terms and conditions as the contracts between the Subcontractor and the Sub-contractors. The Subcontractor will be entitled to a maximum of three percent (3%) overhead and profit on the value of such assigned contracts. The Subcontractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate its Work with theirs in such manner as the Consultant may direct.

42.2 Should the Subcontractor cause damage to any separate contractor on the Work, and the separate contractor sues the Construction Manager on account of any damage alleged to have been so sustained, the Subcontractor shall be responsible for all costs, attorney's fees and expenses incurred by the Construction Manager for defending such proceedings unless the Construction Manager prevails on behalf of the Subcontractor in which case fees and expenses will be the responsibility of the separate contractor and if any judgment against the Construction Manager arises therefrom, the Subcontractor shall pay or satisfy it and shall pay all costs, attorney's fees and expenses incurred by the Construction Manager.

42.3 If any part of the Subcontractor's Work depends upon the work of any other separate contractor, the Subcontractor shall promptly report to the Consultant any observed defects in such work that render it unsuitable for proper execution connection. The failure to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of the work, except as to defects which may develop in the other contractor's work after the execution of the work.

42.4 Whenever work being done by the Construction Manager's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various parties involved shall be established by the Construction Manager to secure the completion of the various portions of the Work in general harmony.

ARTICLE 43 - SUBCONTRACTOR/SUB-CONTRACTOR RELATIONSHIP

43.1 The Subcontractor is fully responsible to the Construction Manager for the acts and omissions of the Sub-contractors and of persons either directly or indirectly employed by them. The Subcontractor is responsible for the acts and omissions of persons employed directly by the Subcontractor and for the coordination of the Work, including placement and fittings of the various component parts. No claims for extra costs as a result of the failure to coordinate the Work, or by acts or omissions of the various Sub-contractors, will be paid by the Construction Manager.

43.2 Except as otherwise provided in these Contract Documents, the Subcontractor agrees to bind every Sub-contractor by the terms and conditions of the Contract Documents as far as applicable to their portion of the Work. Upon request, the Subcontractor shall provide copies of any subcontracts and purchase orders to the Construction Manager or Consultant.

43.3 The Subcontractor shall make no substitution or change in any Sub-contractor listed and accepted by the Consultant or Construction Manager except as approved in writing by the Construction Manager. The Subcontractor shall not employ any Sub-contractor or supplier against whom the Construction Manager or the Consultant has made reasonable and timely objection. The Construction Manager (CM) will not be allowed to self-perform work or bid on any of the proposed work categories unless a subcontractor fails to perform and upon prior approval by the Universities authorized representatives."

43.4Nothing contained in the Contract Documents shall create any contractual relationship
between the Construction Manager and any Sub-contractor, Trade Contractor or Supplier, nor shall
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the Subcontractor include any language in their contracts with any Sub-contractor, Trade Contractor and/or Supplier that might Imply such a relationship. The Subcontractor is hereby notified that it is the Subcontractor's contractual obligation to settle disputes between Sub-contractors, Trade Contractors, and/or Suppliers. Neither the Construction Manager nor the Consultant will settle disputes between the Subcontractor and any Sub-contractor, Trade Contractor, and/or Supplier or between Sub-contractors, Trade Contractors, Trade Contractors, and/or Supplier or between Sub-contractors, Trade Contractors, and/or Supplier or between Sub-contractors, Trade Contractors, and/or Supplier or between Sub-contractors, Trade Contractors, and/or Suppliers.

43.4.1 The Owner does not waive sovereign immunity under KRS 45A.245(1) for any claim or claims made by parties not having a written contract with the University of Kentucky.

43.4.2 Third party and/or flow-through type claims, from Sub-contractors and/or suppliers or any other entity not having a written contract directly with the University, are specifically prohibited by this Contract and no provision of the Subcontractor's contracts with such entities shall indicate otherwise.

43.4.3 The Subcontractor shall indemnify and hold harmless the Construction Manager and its agents and employees from any claims relating to the Project brought against the Construction Manager by any of the Subcontractor's Sub-contractors or suppliers, or between their sub-contractors or suppliers.

ARTICLE 44 - CASH ALLOWANCE

44.1 The Subcontractor is to provide or require the Sub-contractor(s) to include in the Contract Amount all costs necessary to complete the Work. Costs based on "allowances" shall be permitted only for objectively quantifiable material items and only with the prior written approval of the Construction Manager.

ARTICLE 45 - PROJECT SITE LIMITS

45.1 The Subcontractor shall confine the apparatus, the storage of materials, and the operations of Workmen to Project site limits indicated in the Contract Documents and as permitted by law, ordinances, and permits, and shall not unreasonably encumber the site with materials and equipment.

ARTICLE 46 - CLEAN UP

46.1 The Subcontractor shall at all times keep the premises free from accumulation of waste material or rubbish caused by the operations in connection with the Work. All corridors and exit doors must be kept clear at all times. All exit ways, walks, and drives must be kept free of debris, materials, tools and vehicles.

46.2 At the completion of the Work, and prior to final inspection and acceptance, the Subcontractor shall remove all remaining waste materials, rubbish, Subcontractor's construction equipment, tools, machinery, and surplus materials and shall leave the Work in a clean and usable condition, satisfactory to the Consultant and the Owner or Construction Manager. If the Subcontractor fails to clean up as provided in the Contract Documents, the Construction Manager may perform the cleaning tasks and charge the cost to the Subcontractor.

ARTICLE 47 - POINTS OF REFERENCE

47.1 The Subcontractor shall carefully preserve bench marks, reference points and stakes, and in case of willful or careless destruction, the Subcontractor shall be charged with the resulting expense of replacement and shall be responsible for any mistake that may be caused by their loss or disturbance.

ARTICLE 48 - SUBSTITUTION - MATERIALS AND EQUIPMENT

48.1 Reference to or the listing of items to be incorporated in the construction without referring to any specific article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number shall be interpreted as establishing the general intent of the Contract and the general standard of quality for that item.

48.2 Specific references in the Contract Documents to any article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number, with the words "or equal", shall be interpreted as establishing a minimum standard of quality, and shall not be construed as limiting competition.

48.2.1 Substitution of other equipment and materials as "or equal" to items named in the specifications will be allowed provided the proposed substitution is approved by the Consultant and will perform the functions called for by the general design, be similar and of equal quality to that specified and be suited to the same use and capable of performing the same function of that specified. The Contractor has the burden to prove equality of any substitution requested.

48.3 Specific references in the Contract Documents to any article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number, without the words "or equal", shall be interpreted as defining an item or source that has after careful consideration been determined by the University as necessary to be compliant with, and/or to function properly within, the University operational system. No substitutions will be allowed.

48.3.1 In the event the Contract Documents contain specific reference to two (2) or more items as described in Article 48.3, any of those listed will be acceptable.

48.4 Substitution of equipment and materials previously submitted by the Contractor and approved by the Consultant will be considered only for the following reasons:

48.4.1 Unavailability of the materials or equipment due to conditions beyond the control of the supplier.

48.4.2 Inability of the supplier to meet Contract Schedule.

48.4.3 Technical noncompliance to specifications.

48.5 In substituting materials or equipment, the Contractor assumes responsibility for any changes in systems or modifications required in adjacent or related work to accommodate such substitutions, despite consultant approval, and all costs associated with the substitution shall be the responsibility of the Contractor. The Consultant shall be reimbursed by the Contractor for any architectural or engineering revisions required as the result of such substitutions.

48.6 Inclusion of a certain make or type of materials or equipment in the Contractor's bid proposal shall not obligate the Construction Manager to accept such materials or equipment if they do not meet the requirements of the Contract Documents and any such substitutions in the preparation of the bid without written approval shall be at the sole risk of the Contractor.

ARTICLE 49 - TEST AND INSPECTION

49.1 Regulatory agencies of the government having jurisdiction may require any Work to be inspected, tested or approved. The Subcontractor shall assume full responsibility therefore, pay all costs in connection therewith, unless otherwise noted, and furnish the Consultant the required certificates of inspection, testing or approval.

49.2 The Subcontractor shall give the Consultant timely notice of readiness of the Work for all inspections, tests or approvals.

49.3 The technical specifications may indicate specific testing requirements to be performed by the Subcontractor. Unless otherwise provided in the Contract Documents, the cost of all such testing shall be the responsibility of the Subcontractor. Testing shall be completed using a testing facility or laboratory approved by the Construction Manager.

49.4 The costs of all inspection fees as may be required to construct and occupy the Work shall be the responsibility of the Subcontractor.

ARTICLE 50 - WARRANTY

50.1 The Subcontractor warrants to the Construction Manager, Owner, and the Consultant that all materials and equipment furnished under this Contract shall be new and in accordance with the requirements of the Contract Documents, and that all Work shall be of good quality, free from faults and defects and in conformance with the Contract Documents. If required by the Consultant or the Construction Manager, the Subcontractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If the Subcontractor requests approval of a substitution of material or equipment, the Subcontractor warrants that such installation, construction, material, or equipment will equally perform the function for which the original material or equipment was specified. The Subcontractor explicitly warrants the merchantability, the fitness for a particular purpose, and quality of all substituted items in addition to any to any warranty given by the manufacturer and/or supplier. Approval of any such substitution is understood to rely on such warrant of performance. Prior to the Substantial Completion inspection, the Subcontractor shall deliver to the Construction Manager all warranties and operating instructions required under the Contract or to which the Subcontractor is entitled from manufacturers, suppliers, and Sub-contractors. All warranties for products and materials incorporated into the Work shall begin on the date of Substantial Completion. The warranty provided in this Article 50 shall be in addition to and not a limitation of any other warranty or remedy required by law or by the Contract Documents, and such warranty shall be interpreted to require the Subcontractor to replace defective material and equipment and re-execute defective Work which is disclosed to the Subcontractor by or on behalf of the Construction Manager within a period of one (1) year after Substantial Completion of the entire Work in addition to other warranty obligations beyond one (1) year from Substantial Completion as provided for by law or by the Contract Documents.

50.2 Neither the final payment, any provision in the Contract Documents nor partial or entire use or occupancy of the premises by the Owner shall constitute an acceptance of Work not done in accordance with Contract Documents or relieve the Subcontractor or its Sureties of liability with respect to any warranties or responsibilities for faulty materials and workmanship. The Subcontractor or its sureties shall remedy any defects in Work and any resulting damage to Work at the Subcontractor's own expense. The Subcontractor shall be liable for correction of all damage resulting from defective Work. If the Subcontractor fails to remedy any defects or damage, the Construction Manager may correct Work or repair damages and the cost and expense incurred in such event shall be paid by or be recoverable from the Subcontractor or the surety. The Construction Manager will give notice of observed defects with reasonable promptness. 50.3 The Subcontractor shall guarantee that labor, material, and equipment will be free of defects for a period of one (1) year from the date shown on the Certificate of Substantial Completion unless special conditions or additional warranty periods are required by the contract pursuant to Article 23 in addition to warranty obligations which extend beyond one year from Substantial Completion. The Construction Manager will give notice of observed defects with reasonable promptness. Expendable items and wear from ordinary use are excluded from this warranty.

50.4 Should the Subcontractor be required to perform tests that must be delayed due to climate conditions, it is understood that such tests will be accomplished by the Subcontractor at the earliest possible date with provisions of the general warranty beginning upon satisfactory completion of said test. The responsibility of the Subcontractor under this Article will not be abrogated if the Construction Manager should elect to initiate final payment. If the Construction Manager initiates final payment, consent of Subcontractor's surety acknowledging that Work not yet tested is required. The Subcontractor shall warrant that the entire Project will conform to the Contract Documents.

50.5 In addition to the foregoing, the Subcontractor shall warrant for a period of one (1) year that all buildings and other improvements constructed as a part of the Work shall be watertight and leak proof at every point and in every area. The Subcontractor shall, immediately upon notification by or on behalf of the Construction Manager of water penetration, determine the source of water penetration and, at the Subcontractor's expense, (a) do any work to be necessary to make such buildings or improvements watertight and (b) repair and replace any other damaged material, fences and furnishings damaged as a result of such water penetration and return the buildings or other improvements to their original condition.

50.6 The Subcontractor shall address and resolve to the Construction Manager's satisfaction any warranty claims made by or on behalf of the Construction Manager during the above described warranty period and all repairs and replacements made by the Subcontractor pursuant to this Article 50 shall be warranted by the Subcontractor, on the terms set forth in this Article 50, for a period of time commencing upon the completion of such repairs and replacements and ending on the later of (a) the expiration of the one (1) year warranty period provided for above or (b) six (6) months after the date such repair or replacement is completed.

50.7 All costs, attorney's fees and expenses incurred by the Construction Manager as a result of the Subcontractor's failure to honor any warranty for the Work shall be paid by or recoverable from the Subcontractor.

ARTICLE 51 - PREVAILING WAGE LAW REQUIREMENTS (NO LONGER USED AS OF 1/9/2017)

ARTICLE 52 - APPRENTICES

52.1 Apprentices (for all classifications of work) shall be permitted to work only under an apprenticeship agreement approved by the Kentucky Supervisor of Apprenticeship and by the Kentucky Apprenticeship and Training, United States Department of Labor.

ARTICLE 53 - GOVERNING LAW

53.1 This Contract and all issues and disputes arising out of this Contract shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Kentucky without consideration of its conflicts of laws principles.

ARTICLE 54 - NONDISCRIMINATION IN EMPLOYMENT

54.1 During the performance of the Contract, the Subcontractor agrees as follows:

54.1.1 The Subcontractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, or disability in employment. The Subcontractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, or disability in employment. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Subcontractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

54.1.2 The Subcontractor will, in all solicitations or advertisements for employees placed by or on behalf of the Subcontractor; state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin or disability in employment.

54.1.3 The Subcontractor will send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representatives of the Subcontractor's commitments under this Article, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

54.2 Failure to comply with the above nondiscrimination clause constitutes a material breach of Contract.

ARTICLE 55 - AFFIRMATIVE ACTION; REPORTING REQUIREMENTS

55.1 The Subcontractor and any Sub-contractor is exempt from any affirmative action or reporting requirements, under the Kentucky Equal Employment Opportunity Act of 1978, KRS 45.550 to KRS 45.640 "The Act", if any of the following conditions are applicable:

55.1.1 The sub-contract awarded is in the amount of two hundred and fifty thousand dollars (\$250,000.00) or less, and the amount of the sub-contract is not a subterfuge to avoid compliance with the provisions of the Act;

55.1.2 The Subcontractor or Sub-contractor utilizes the services of fewer than eight (8) employees during the course of the Contract;

55.1.3 The Subcontractor or Sub-contractor employs only family members or relatives;

55.1.4 The Subcontractor or Sub-contractor employs only persons having a direct ownership interest in the business and such interest is not a subterfuge to avoid compliance with the provisions of The Act.

55.2 The Subcontractor and any Sub-contractor, not otherwise exempted, shall:

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55.2.1 For the length of the Contract, hire DBE's from within the drawing area to satisfy the agreed upon goals and timetables. Should the union with which the Subcontractor or Sub-contractor have collective bargaining agreements be unwilling to provide sufficient DBE's to satisfy the agreed upon goals and timetables, the Subcontractor and Sub-contractors shall hire DBE's from other sources within the drawing area.

Disadvantaged Business Enterprises (DBE) consist of minority, women, disabled, veteran and disabled veteran owned business firms that are at least fifty-one percent owned and operated by an individual(s) of the aforementioned categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled. MBE, WBE, Veterans, Disabled Veterans and Disabled make up Disadvantaged Business Enterprises (DBE)

55.2.2 The equal employment provisions of The Act may be met in part by the Subcontractor contracting to a Disadvantaged Business Enterprise (DBE) contractor or Sub-contractor. A DBE contractor, or Sub-contractor shall mean a business established under the definition of a DBE in Article 55.2.1

55.2.3 Each Subcontractor shall, for the length of the Contract, furnish such information as required by The Act and by such rules, regulations and orders issued pursuant thereto and will permit access by the contracting agency and the department to all books and records pertaining to its employment practices and Work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with The Act and such rules, regulations and orders issued pursuant thereto.

55.3 If the Subcontractor is found to have committed an unlawful practice against a provision of The Act during the course of performing under this Contract, a subcontract covered under The Act, the Construction Manager may cancel or terminate the Contract, conditioned upon a program for future compliance approved by the Construction Manager. The Construction Manager may also declare such Subcontractor ineligible to submit proposals on further contracts until such time as the Subcontractor complies in full with the requirements of The Act.

55.4 Any provisions of The Act notwithstanding, no Subcontractor shall be required to terminate an existing employee, upon proof that employee was employed prior to the date of the Contract, nor hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

End of Document