CODE REVIEW SUMMARY:

Project: Olsson North Little Rock Office TI
Tenant Finish - Office Space

Address: 1 Riverfront Drive
North Little Rock, AR 72114

General Summary:
Interior tenant improvements to approximately 7,690 SF of the fourth floor of an existing, eight-story building. The existing building is framed with structural steel protected by spray fireproofing and contains non-combustible construction. The building is partially sprinklered. This suite will be sprinklered.

Scope of Work:

Use / Occupancy Classification:	B (Business)
Overall Building Use / Occupancy Classification:	B - Business
Intended Use:	Office
Construction Type:	Existing building may be equivalent to Type IIA.
Parking:	No Change in use type
IEBC Alteration:	Level 2 - Not all of building is in scope (Area of work does not exceed 50% of overall building SF)

Governing Codes:
2021 International Fire Code, as amended by the State of Arkansas
2021 International Building Code (IBC), as amended by the State of Arkansas
2009 International Energy Code / ASHRAE 90.1-2007 as amended by the State of Arkansas
2018 International Plumbing Code as amended by the State of Arkansas
2021 International Mechanical Code not amended
2018 International Fuel Gas Code as amended by the State of Arkansas
2020 National Electrical Code (NFPA 70) as amended by the State of Arkansas
2010 ADA Standards for Accessible Design not amended
2017 ICC/ANSI A117.1 not amended

USE AND OCCUPANCY CLASSIFICATION

OCCUPANCY CLASSIFICATION

Office	**B**
Break and Conference	**A**

REQUIREMENTS BASED ON USE AND OCCUPANCY

SPECIAL OCCUPANCY REQUIREMENTS

N/A

REQUIREMENTS BASED ON TYPES OF CONSTRUCTION

FIRE RESISTIVE REQUIREMENTS (Table 601)

STRUCTURAL FRAME	1 HR
EXTERIOR BEARING WALLS	1 HR
INTERIOR BEARING WALLS	1 HR
EXTERIOR NON-BEARING WALLS	1 HR
INTERIOR NON-BEARING WALLS	0 HR
FLOOR CONSTRUCTION	1 HR
ROOF CONSTRUCTION	1 HR

FIRE RESISTANCE EXTERIOR WALLS (Table 602)

FIRE SEPARATION IS GREATER THAN 30 FT	0 HR

FIRE PROTECTION SYSTEMS

Building is partially sprinklered.
This suite will be sprinklered.

REQUIREMENTS BASED ON MEANS OF EGRESS

OCCUPANT LOADS (Section 1004)

ACTIVITY USES	AREA (SF)	SF/PERSON	OCCUPANT TOTAL
Assembly (Unconcentrated)	1350	15	93
Business	6010	150	44
Utility (Accessory)	103	300	1
Total Occupants			138

MINIMUM REQUIRED EGRESS WIDTH (Section 1005)

Horizontal Egress Required*:	.20 inches / occupant	27.6 inches
Horizontal Egress Provided:	(2) 36" doors to stair towers	64 inches clear
Vertical Egress Required*	.30 inches / occupant	41.4 inches
Vertical Egress Provided:	(2) 48" stairs	96"

*Not including occupants from other suite on this level

LIFE SAFETY SYMBOL LEGEND

NAME / AREA / OCC | NO. — DESCRIPTION OF AREA; SQ. FT. OF SPACE OR ROOM; NUMBER OF CALCULATED OCCUPANTS; OCCUPANT LOAD FACTOR (SQ.FT./PERSON)

EXIT / XXX / XXX / X.X — TOTAL NUMBER OF OCCUPANTS EXITING; CAPACITY OF EXIT ELEMENT; EXIT WIDTH IN FEET

XX — NUMBER OF OCCUPANTS EXITING THROUGH ELEMENT

FEC — FIRE EXTINGUISHER CABINET

FE — FIRE EXTINGUISHER - PORTABLE & WALL MOUNTED

|1|1 — 1 HOUR RATED WALL OR SHAFT

||2||2 — 2 HOUR RATED WALL OR SHAFT

LIFE SAFETY PLAN
1/8" = 1'-0"

Master Keynote List

DRAWING KEYNOTE SYSTEM DESCRIPTION:

A KEYNOTING SYSTEM IS USED ON THE DRAWINGS FOR MATERIAL REFERENCING AND NOTATION. REFER TO THE KEYNOTE LEGEND ON EACH SHEET FOR ADDITIONAL DESCRIPTIVE INFORMATION ASSOCIATED TO THE PARTICULAR KEYNOTE IDENTIFICATION USED IN THE DETAILS LOCATED ON THAT PARTICULAR SHEET.

EACH KEYNOTE IDENTIFIER CONSISTS OF A 6-DIGIT NUMBER FOLLOWED BY A PERIOD AND AN ALPHANUMERIC SUFFIX. THE 6-DIGIT NUMBER CORRESPONDS TO A SPECIFIC SPECIFICATION SECTION IN THE PROJECT MANUAL WHERE ADDITIONAL INFORMATION REGARDING THE PRODUCT REQUIREMENTS CAN BE FOUND. THE ALPHANUMERIC SUFFIX ADDED TO THE 6-DIGIT NUMBER HELPS TO PROVIDE ADDITIONAL, UNIQUE IDENTIFICATION FOR PRODUCTS NOTED IN THE DRAWING BUT DOES NOT SPECIFICALLY CORRESPOND TO ANY REFERENCE LETTER USED WITHIN THE ASSOCIATED SPECIFICATIONS

THE ORGANIZATION OF THE KEYNOTING SYSTEM ON THE DRAWINGS, ALONG WITH THE KEYNOTE REFERENCE NUMBERS ASSOCIATED TO THE SPECIFICATION SECTION NUMBERING SYSTEM, SHALL NOT CONTROL THE CONTRACTOR IN THEIR DIVISION OF WORK SCOPES AMONG THE VARIOUS SUB-CONTRACTORS, OR IN ESTABLISHING THE EXTENT OF WORK TO BE PERFORMED BY ANY SPECIFIC TRADE

KEYNOTE MASTER LEGEND

061000.F01	WOOD BLOCKING
064116.A13	(PLAM-1) - PLASTIC-LAMINATE-CLAD BASE CABINET - 24" DEEP - PROVIDE ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.A21	(PLAM-2) - PLASTIC-LAMINATE-CLAD BASE CABINET - 24" DEEP - PROVIDE ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.A22	(PLAM-2) - PLASTIC-LAMINATE-CLAD BASE CABINET - 36" DEEP - PROVIDE ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.B13	(PLAM-1) - PLASTIC-LAMINATE-CLAD DRAWER BASE CABINET - 24" DEEP
064116.B23	(PLAM-2) - PLASTIC-LAMINATE-CLAD DRAWER BASE CABINET - 24" DEEP
064116.B43	(PLAM-2) PLASTIC-LAMINATE-CLAD, PARTIALLY OPEN, DRAWER. ALL EXPOSED SURFACES TO BE PLAM-2. 24" DEEP
064116.B44	(PLAM-2) PLASTIC-LAMINATE-CLAD, PARTIALLY OPEN, DRAWER. ALL EXPOSED SURFACES TO BE PLAM-2. 36" DEEP
064116.C23	(PLAM-2) - PLASTIC-LAMINATE-CLAD WASTE RECEPTACLE BASE CABINET - 24" DEEP - CABINET TO FUNCTION AS A SINGLE PULL-OUT DRAWER TO CONTAIN REMOVABLE TRASH / RECYCLING CONTAINER
064116.C81	(PLAM-1) - PLASTIC-LAMINATE-CLAD WASTE RECEPTACLE BASE CABINET - 24" DEEP - CABINET TO FUNCTION AS A SINGLE PULL-OUT DRAWER TO CONTAIN REMOVABLE TRASH / RECYCLING CONTAINER. CABINET FACE IS TO HAVE A 4"X14" OPENING WITH MATCHING EDGEBANDING - SEE INTERIOR ELEVATIONS.
064116.C82	(PLAM-2) - PLASTIC-LAMINATE-CLAD WASTE RECEPTACLE BASE CABINET - 36" DEEP - CABINET TO FUNCTION AS A SINGLE PULL-OUT DRAWER TO CONTAIN REMOVABLE TRASH / RECYCLING CONTAINER. CABINET FACE IS TO HAVE A 4"X14" OPENING WITH MATCHING EDGEBANDING - SEE INTERIOR ELEVATIONS.
064116.D15	(PLAM-1) - PLASTIC-LAMINATE-CLAD OPEN FACE BASE CABINET - 36" DEEP WITH ADJUSTABLE SHELVING
064116.G13	(PLAM-1) - PLASTIC-LAMINATE-CLAD SINK BASE CABINET - 24" DEEP
064116.H11	(PLAM-1) - PLASTIC-LAMINATE-CLAD UPPER CABINET - 12" DEEP WITH ADJUSTABLE SHELVING WHERE GRAPHICALLLY INDICATED
064116.H21	(PLAM-2) - PLASTIC-LAMINATE-CLAD UPPER CABINET - 12" DEEP WITH ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.J11	(PLAM-1) - PLASTIC-LAMINATE-CLAD OPEN FACE UPPER CABINET - 12" DEEP WITH ADJUSTABLE SHELVING
064116.L01	(PLAM-2) - PLASTIC-LAMINATE-CLAD MICROWAVE CABINET - 12" DEEP CABINET BOX WITH 18" DEEP SHELF - FINISH OF CABINET INTERIOR TO MATCH CABINET EXTERIOR
064116.M10	PLASTIC-LAMINATE-CLAD FILLER PANEL - FINISH TO MATCH ADJACENT CABINET
064116.N01	(PLAM-1) - PLASTIC-LAMINATE-CLAD SHELF - 12" DEEP x 2" THICK - PROVIDE FLOATING SHELF BRACKET WITH MINIMUM OF (3) 1/2" DIAMETER x 6" LONG RODS - RECESS BACKPLATE IN SHELF
064216.A01	(WPW-1.1) - 3/4" THICK ACOUSTIC WOOD WALL PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.A02	(WPW-1.2) - 2" THICK ACOUSTIC WOOD WALL PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.A03	(WPW-1.3) - WOOD PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.B01	(WPW-2) - WOOD PANEL WALL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.C01	ALUMINUM Z-CLIP HARDWARE - FIELD INSTALLED
064216.D01	(WD-2)
072100.C01	UNFACED GLASS-FIBER BATT INSULATION - FILL VOID
078413.A01	FIRESTOPPING SEALANT
078413.B01	FIRESTOPPING ASSEMBLY - PROVIDE AT ALL PENETRATIONS THROUGH FIRE-RATED WALL ASSEMBLIES
079219.A01	ACOUSTICAL JOINT SEALANT WITH BACKER ROD FOR EXPOSED AND CONCEALED JOINTS
083113.A01	FLUSH ACCESS DOOR WITH EXPOSED FLANGE (16x16)
083113.L01	FIRE-RATED SECURITY ACCESS DOOR WITH EXPOSED FLANGE (24x24)
084113.B01	NON-THERMAL INTERIOR ALUMINUM STOREFRONT ASSEMBLY - BASIS-OF-DESIGN: RACO - CLASSIC, CENTER GLAZED
084126.23.H01	1/2-INCH CLEAR FLOAT GLASS - PROVIDE FULLY TEMPERED WHERE REQUIRED BY CODE
084126.23.K02	CLEAR SILICONE JOINT SEALANT AT ALL PANEL TO PANEL JOINTS AND ALL PANEL TO WALL JOINTS
088000.A03	(MG-3) 1/2-INCH CLEAR FLOAT GLASS - PROVIDE FULLY TEMPERED AT LOCATIONS IDENTIFIED AND WHERE REQUIRED BY CODE
088000.E01	EXTRUDED CLEAR SILICONE GASKET
088113.C01	OWNER PROVIDED DECORATIVE FILM OVERLAY APPLIED TO SPECIFIED GLAZING PANELS - APPLY TO 'PRIVATE' SIDE OF GLAZING PANEL
092216.B01	1-5/8 INCH METAL FRAMING AT THICKNESS AND SPACING REQUIRED TO MEET SPECIFIED DEFLECTION
092216.D01	3-5/8 INCH METAL FRAMING AT THICKNESS AND SPACING REQUIRED TO MEET SPECIFIED DEFLECTION
092216.G01	SLIP-TYPE HEAD TRACK TO ALLOW FOR VERTICAL DEFLECTION
092216.H01	FLAT STRAP BACKING PLATE FOR BLOCKING AND BRACING
092900.A01	5/8-INCH TYPE 'X' INTERIOR GYPSUM BOARD - REFER TO SPECIFICATIONS, PART 3 ARTICLE 'APPLYING INTERIOR GYPSUM BOARD' FOR INSTALLATION LOCATIONS OF THE VARIOUS TYPES OF WALLBOARD APPLICABLE TO THE PROJECT
092900.C01	5/8-INCH TYPE 'X' INTERIOR GYPSUM BOARD
093013.B01	(CT-1) - 1 x 6 WALL TILE - VERTICAL STACKED BOND
095113.A01	(APC-2) - ACOUSTICAL PANEL CEILING ASSEMBLY - 24" x 24"
095113.B01	(APC-1) - ACOUSTICAL PANEL CEILING ASSEMBLY - 48" x 48"
095113.F03	6"H AXIOM CLASSIC TRIM ALL SIDES (COLOR: WHITE)
096513.C01	(RWB-1) - THERMOPLASTIC RUBBER WALL BASE - SCULPTED - REFER TO MATERIAL LIST FOR PROFILE
096513.C02	(RWB-2) - THERMOPLASTIC RUBBER WALL BASE - SCULPTED - REFER TO MATERIAL LIST FOR PROFILE
096813.A04	(CPT-4) CARPET TILE
097200.A01	(WCV-1) - ACOUSTIC WALL COVERING, SEE INTERIOR ELEVATIONS FOR SEAM LOCATION
097200.A02	(WCV-2) - ACOUSTIC WALL COVERING, SEE INTERIOR ELEVATIONS FOR SEAM LOCATION
097200.A03	(WCV-3) - ACOUSTIC WALL COVERING, SEE INTERIOR ELEVATIONS FOR SEAM LOCATION
098436.A01	(ABC-1) - SUSPENDED ACOUSTICAL FELT BAFFLE
099123.C01	PAINT EXPOSED STRUCTURE, FIREPROOFING, PIPING, CONDUIT AND MECHANICAL SYSTEMS - PNT-1
101100.A01	(GB-1) - GLASS MARKER BOARD
101100.B01	(WCV-4) - TACKABLE WALL COVERING. PROVIDE ALUMINUM TRIM AT ALL EXPOSED EDGES
102800.J02	FRAMED MIRROR - 24x48
102800.K20	(HDWR-3) - SURFACE MOUNTED COAT HOOK
104413.A10	RECESSED FIRE EXTINGUISHER CABINET
113100.A01	REFRIGERATOR - PROVIDED AND INSTALLED BY OWNER
113100.A50	UNDERCOUNTER REFRIGERATOR - PROVIDED AND INSTALLED BY OWNER
113100.B01	MICROWAVE - PROVIDED AND INSTALLED BY OWNER
113100.B02	MICROWAVE - UNDERCABINET MOUNT - PROVIDED BY OWNER, INSTALLED BY CONTRACTOR
113100.C01	COFFEE MAKER - PROVIDED AND INSTALLED BY OWNER
113100.D01	DISHWASHER - PROVIDED BY OWNER, INSTALLED BY CONTRACTOR - PROVIDE WATER CONNECTIONS REQUIRED
114000.A50	ICE AND WATER DISPENSER - COUNTERTOP MODEL
114000.B01	COFFEE BREWING MACHINE - PROVIDED BY OWNER, INSTALLED BY CONTRACTOR - PROVIDE WATER AND DRAIN CONNECTIONS AS REQUIRED
122413.B01	(RS-1): SINGLE ROLLER, MANUAL SHADE ASSEMBLY (1% OPEN) WITH PRE-FINISHED ALUMINUM FASCIA TO MATCH STOREFRONT ASSEMBLY. PROVIDE AT ALL EXTERIOR WINDOWS.
123661.19.B10	(QTZ-1): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITHOUT BACKSPLASH - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.B11	(QTZ-1): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITHOUT BACKSPLASH - PROVIDE MATCHING 1 3/16" (3CM) THICK QUARTZ APRON AT EDGE OF COUNTERTOP - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.B20	(QTZ-2): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITHOUT BACKSPLASH - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.C10	(QTZ-1): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITH 4" TALL BACKSPLASH AND SIDESPLASH - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.G01	(QTZ-1): 13/16" (2CM) THICK QUARTZ PANEL - ADHERE TO FRAMED WALL ASSEMBLY
123661.19.H02	CONCEALED COUNTER SUPPORT BRACKETS: BASIS OF DESIGN: A&M HARDWARE CFLAT24(2.0) BLACK - SPACED 32" O.C.
123661.19.J01	2" GROMMET - PROVIDE APPROPRIATE HOLE IN COUNTER ALONG WITH COLOR-MATCHED GROMMET TO COUNTER FINISH - CONFIRM FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION
265113.A01	INTERIOR LIGHT FIXTURE - REFER TO ELECTRICAL
265113.B01	UNDER-CABINET LIGHTING - REFER TO ELECTRICAL

REVISION SCHEDULE

#	Date	Revision Description

Index of Drawings

GENERAL
AG100 Drawing Standards and Wall Types
AG200 Architectural Specifications
AG201 Architectural Specifications
AG202 Architectural Specifications
AG203 Architectural Specifications

ARCHITECTURAL
A100 Fourth Level Floor Plan
A110 Finish Schedule, Door Schedule, Frame Types, and Door Types
A600 Interior Elevations
A700 Fourth Level Reflected Ceiling Plan

MECHANICAL
GM001 General Mechanical Information
MD101 Mechanical Demo Plans
FP101 Fire Protection Plan
P101 Plumbing Plan
M101 HVAC Plan
M201 Mechanical Piping Plan
M501 Mechanical Details
M601 Mechanical Schedules
M701 Mechanical Specifications

ELECTRICAL
GE001 General Electrical Information
GE002 General Electrical Information
E101 Lighting Plan
E201 Power Plan
E202 Power Mechanical Equipment Plan
E301 Special Systems Plan
E302 Special Systems Cable Tray Plan
E401 Electrical & Systems Enlarged Plans
E402 Conference Room TV Wall Elevations
E501 Electrical Details
E502 Systems Details
E503 Systems Details
E504 Systems Diagrams
E601 Electrical Schedules
E701 Electrical Specifications
E702 Electrical Specifications
E703 Electrical Specifications

Olsson North Little Rock Office TI

Olsson

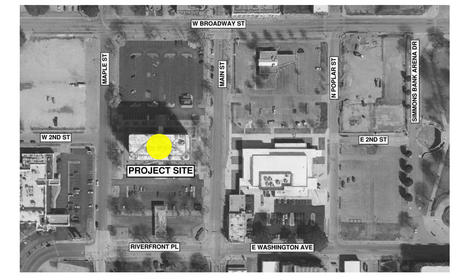
1 Riverfront Drive
North Little Rock, AR 72114

Contract Drawings

August 20, 2026

Sinclair Hille Architects **Project No. 25073**
700 Q St. Lincoln, NE 68508 T: 402 476 7331 W: *sinclairhille.com*

Vicinity Map



Professional Seal

COORDINATING PROFESSIONAL

REGISTERED ARCHITECT — DAVID E. QUADE — No. 10201 — 08/20/2026 — STATE OF ARKANSAS

I, David E. Quade,
am the Coordinating Professional
on the Olsson North Little Rock Project.

Project Consultants

SINCLAIR HILLE ARCHITECTS

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

olsson

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

SINCLAIR HILLE ARCHITECTS

© Copyright SINCLAIR HILLE ARCHITECTS

L1 ABBREVATIONS

NO SCALE | TYPICAL ARCHITECTURAL ABBREVIATIONS

ABBREVIATIONS

@	AT
A/E	ARCHITECT / ENGINEER
ABV	ABOVE
AD	AREA DRAIN
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
ADJC	ADJACENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AL	ALUMINUM
ALT	ALTERNATE
AMT	AMOUNT
ANOD	ANODIZED
AP	ACCESS PANEL
APC	ACOUSTICAL PANEL CEILING
ARCH	ARCHITECT (URAL)
ASC	ABOVE SUSPENDED CEILING
ASPH	ASPHALT
AV	AUDIO VISUAL
AWC	ACOUSTICAL WALL COVERING
AWP	ACOUSTICAL WALL PANEL
B&B	BALLED AND BURLAPPED
BAL	BALANCE
BB	BULLETIN BOARD
BC	BOTTOM OF CURB
BD	BOARD
BF	BOTH FACES
BFF	BELOW FINISHED FLOOR
BJT	BED JOINT
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLKHD	BULKHEAD
BM	BEAM
BO	BOTTOM OF
BOC	BACK OF CURB
BOW	BOTTOM OF WALL
BP	BASE PLATE
BRG	BEARING
BRK	BRICK
BRK	BRICK LEDGE

ABBREVIATIONS

BRKT	BRACKET
BS	BOTH SIDES
BSMT	BASEMENT
BTM	BOTTOM
BUR	BUILT UP ROOF
BW	BOTH WAYS
CACMU	COLOR ADDED CMU
CAPT	CAPITAL
CJ	CONTROL OR CONTRACTION JOINT
CL	CLOSET
CLG	CEILING
CMT	CERAMIC MOSAIC TILE
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
COND	CONDITION
CONT	CONTINUOUS
CPT	CARPET
CRNR	CORNER
CSK	COUNTERSINK
CT	CERAMIC TILE
CW	CURTAIN WALL
DBL	DOUBLE
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DISP	DISPOSAL
DPR	DISPENSER
DRF	DECORATIVE RESINOUS FLOORING
DRWRS	DRAWERS
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
ELEV	ELEVATOR
EQ	EQUAL
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXP STR	EXPOSED STRUCTURE
EXTG	EXISTING
F.V.	FIELD VERIFY
FD	FLOOR DRAIN

ABBREVIATIONS

FIN	FINISHED
FLR	FLOOR
FND	FOUNDATION
FT	FULLY TEMPERED GLASS
FT-AE	FT ACID ETCHED GLASS
FT-TINT	FT TINTED GLASS
GCMU	GLAZED CONCRETE MASONRY UNIT
GMU	GLAZED MASONRY UNIT
GWB	GYPSUM WALLBOARD OR GYPSUM BOARD
H	HEIGHT
HC	HOLLOW CORE
HDBD	HARDBOARD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
IG	INSULATING GLASS
IG-LE	INSULATING GLASS - LOW 'E'
INSUL	INSULATION
JAN	JANITOR
JNT	JOINT
L	LENGTH
LAV	LAVATORY
LSF	LINOLEUM SHEET FLOORING
M.O.	MASONRY OPENING
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OHD	OVERHEAD DOOR
OPNG	OPENING
OPP	OPPOSITE HAND
ORD	OVERFLOW ROOF DRAIN
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PNT	PAINT
QT	QUARRY TILE
R	RADIUS
R.O.	ROUGH OPENING

ABBREVIATIONS

RAF	RESILIENT ATHLETIC FLOORING
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REQ'D	REQUIRED
REST	RESTROOM
RM	ROOM
RSF	RUBBER SHEET FLOORING
SC	SEALED CONCRETE
SECT	SECTION
SF	STOREFRONT
SHLV	SHELVING
SHT	SHEET
SIM	SIMILAR
SJ	SOFT JOINT
SLC	SOLID CORE
SRD	SECONDARY ROOF DRAIN
STL	STEEL
STN	STAIN
STOR	STORAGE
STRUCT	STRUCTURE
SV	SHEET VINYL
T.B.L.	TOP OF BRICK LEDGE
T.O.	TOP OF
T.O.W.	TOP OF WALL
THK	THICK
TP	TOILET PARTITIONS
TPRWB	THERMOPLASTIC RUBBER WALL BASE
TSRWB	THERMOSET VULCANIZED RUBBER WALL BASE
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VSF	VINYL SHEET FLOORING
VT	VINYL TILE
VWB	VINYL WALL BASE
VWC	VINYL WALL COVERING
W	WIDTH
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WWF	WELDED WIRE FABRIC

G1 PATTERNS

NO SCALE | TYPICAL ARCHITECTURAL HATCH PATTERNS

DIVISION 03 - CONCRETE

- CAST-IN-PLACE CONCRETE
- PRECAST CONCRETE
- GRANULAR SUBBASE

DIVISION 04 - MASONRY

- BRICK
- CONCRETE MASONRY UNITS
- GROUT / GROUT FILL
- CAVITY DRAINAGE MATERIAL

DIVISION 05 - METALS

- STEEL
- ALUMINUM

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

- FINISH WOOD - CUT
- FINISH WOOD - ELEVATION
- PLYWOOD
- GYPSUM SHEATHING
- PARTICLEBOARD
- HARDBOARD
- CONTINUOUS WOOD
- INTERMITTENT WOOD

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

- THERMAL BATT INSULATION
- SPRAY FOAM INSULATION
- PERIMETER INSULATION
- RIGID INSULATION
- SPRAY FOAM INSULATION
- MINERAL WOOL INSULATION
- SPRAYED FIRE-RESISTIVE MATERIAL

DIVISION 08 - OPENINGS

- GLASS

DIVISION 09 - FINISHES

- SOUND INSULATION
- GYPSUM WALLBOARD
- TERRAZZO

DIVISION 23 - MECHANICAL

- DUCT LINER

DIVISION 31 - EARTHWORK

- EARTH - EXISTING SOIL
- EARTH - COMPACTED BACKFILL
- EARTH - CLAY TOPPING
- GRANULAR FILL

A1 STANDARD ARCHITECTURAL SYMBOLS

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

- NORTH ARROW
- DETAIL — A1 / A4.00 — DETAIL IDENTIFICATION NUMBER; SHEET NUMBER WHERE DETAIL IS DRAWN
- WALL SECTION — A1 / A3.00 — DETAIL IDENTIFICATION NUMBER; SHEET NUMBER WHERE DETAIL IS DRAWN
- BUILDING SECTION — A1 / A2.00 — DETAIL IDENTIFICATION NUMBER; SHEET NUMBER WHERE DETAIL IS DRAWN
- INTERIOR ELEVATION — A6.00 / A1 — SHEET NUMBER WHERE DETAIL IS DRAWN; DETAIL IDENTIFICATION NUMBER
- BUILDING ELEVATION — A2.00 / A1 — SHEET NUMBER WHERE DETAIL IS DRAWN; DETAIL IDENTIFICATION NUMBER
- REVISION NUMBER
- DETAIL REFERENCE BLOCK — A1 — DETAIL NUMBER; DETAIL SCALE; SCALE: 1/2" = 1'-0"
- STRUCTURE — STRUCTURAL SLOPE
- SLAB AND OR ROOF SLOPE DIRECTION
- 3D IMAGE CALLOUT — DIRECTION OF VIEW; DETAIL AND SHEET WHERE IMAGE IS DRAWN
- ROOM IDENTIFICATION — OFFICE 100 — ROOM NAME; ROOM NUMBER
- NEW GRIDLINE REFERENCE
- EXISTING GRIDLINE REFERENCE
- WALL TYPE
- WINDOW TYPE
- NOTE 1 — SHEET SPECIFIC NOTE
- D 001 — DEMOLITION NOTE
- CLG-1 — CEILING ASSEMBLY TAG
- LIFE SAFETY LOAD FACTOR — CONFERENCE — DESCRIPTION OF AREA; 274 SF — SQUARE FOOT OF SPACE OR ROOM; 15 / 18 — NUMBER OF CALCULATED OCCUPANTS; OCCUPANT LOAD FACTOR (SQ.FT./PERSON)
- LIFE SAFETY EGRESS CAPACITY — EXIT — 101 — TOTAL NUMBER OF OCCUPANTS EXITING; 240 — CAPACITY OF EXIT ELEMENT; 36" — EXIT WIDTH IN INCHES
- DOOR NUMBER
- 033000.A — KEYNOTE NUMBER
- 100'-0" — CONTROL POINT
- ROUGH OPENING EL. = 102'-4" — VERTICAL CONTROL DIMENSION
- CENTERLINE
- GWB CONTROL JOINT
- 1143.08' — SLAB ELEVATION
- EL. 1172.04' — SPOT ELEVATION
- TC 1172.04' — TOP OF CURB
- TP 1172.04' — TOP OF PAVEMENT
- WALL OR SHAFT RATINGS — 1 HOUR RATED WALL OR SHAFT; 2 HOUR RATED WALL OR SHAFT

L7 DEVICE ALIGNMENT DETAILS

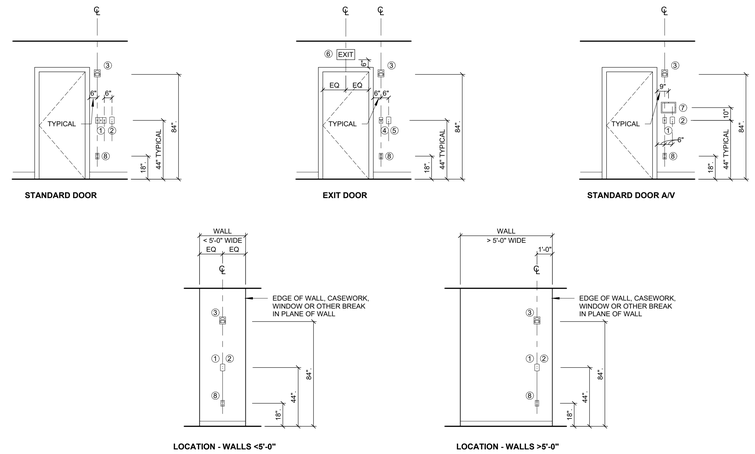
SCALE: 1/4" = 1'-0"

GENERAL NOTES RELATING TO PLACEMENT OF POWERED AND LOW-VOLTAGE DEVICES

1. ALIGN DEVICES VERTICALLY AND HORIZONTALLY WHEREVER POSSIBLE. NOT ALL DEVICES OR CONFIGURATIONS ARE DEPICTED ON THIS DETAIL. FOR ANY CONFIGURATIONS WITH FOUR OR MORE DEVICES, COORDINATE ARRANGEMENT WITH ARCHITECT PRIOR TO ROUGH-IN. REFER TO FLOOR PLANS FOR INDIVIDUAL DOOR REQUIREMENTS.
2. WHERE MULTIPLE SWITCHES OR WALL BOX DIMMERS ARE GANGED TOGETHER, ALIGN FIRST GANG WITH DEVICES ABOVE AND ADD DEVICES TO THE RIGHT AS REQUIRED.
3. DIMENSIONS ARE TO BE MEASURED FROM OUTSIDE EDGE OF DOOR FRAME OR TRIM. WHERE SIDELIGHT WINDOWS ARE PROVIDED, DIMENSIONS SHOULD BE MEASURED FROM OUTSIDE EDGE OF SIDELIGHT WINDOW FRAME OR TRIM.
4. ALL DEVICES SHALL BE LOCATED TO MAINTAIN ALL A.D.A. MOUNTING HEIGHT REQUIREMENTS AND SUCH THAT CENTER OF ADJACENT DEVICES ARE AT SAME ELEVATION (TYPICALLY 44" A.F.F. TO CENTER OF DEVICE). NOTIFY ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.

DEVICE LEGEND

1. WALL SWITCH, WALL OCCUPANCY SENSOR SWITCH, WALL BOX DIMMER SWITCH OR ENTRY STATION
2. THERMOSTAT, TEMPERATURE SENSOR OR CARBON DIOXIDE SENSOR ROUGH-IN
3. FIRE ALARM AUDIO / VISUAL INDICATING DEVICE. MEASUREMENT IS TO CETNER OF STROBE LENS. COORDINATE ROUGH-IN HEIGHT WITH SPECIFIC MODEL OF INDICATING DEVICE
4. FIRE ALARM PULL STATION. MEASUREMENT IS TO CENTER OF PULL MECHANISM. COORDINATE ROUGH-IN HEIGHT WITH SPECIFIC MODEL OF DEVICE
5. ACCESS CONTROL CARD READER
6. EXIT SIGN
7. A/V TOUCHSCREEN
8. POWER RECEPTACLE, DATA PORT

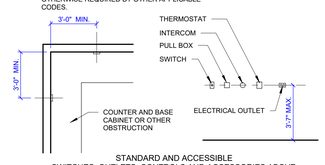


STANDARD DOOR | EXIT DOOR | STANDARD DOOR A/V | LOCATION - WALLS <5'-0" | LOCATION - WALLS >5'-0"

J7 Switches, Outlets, and Controls Above Countertop

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

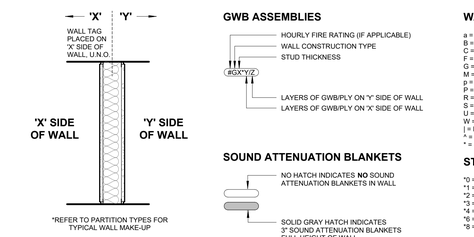
ELECTRICAL SWITCHES, OUTLETS, CONTROLS AND ACCESSORIES ON WALLS OVER OBSTRUCTIONS MUST BE A MINIMUM OF 36" FROM CORNER, UNLESS OTHERWISE REQUIRED BY OTHER APPLICABLE CODES.



STANDARD AND ACCESSIBLE SWITCHES, OUTLETS, CONTROLS AND ACCESSORIES ABOVE COUNTERTOPS AND OTHER OBSTRUCTIONS LESS THAN 25" IN DEPTH

J11 WALL TYPE LEGEND

SCALE: 1" = 1'-0"



GWB ASSEMBLIES

SOUND ATTENUATION BLANKETS

WALL CONSTRUCTION

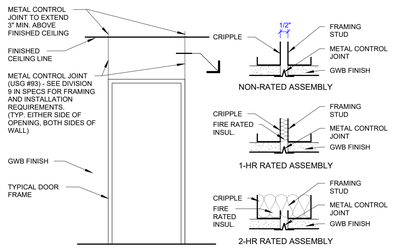
a = ACOUSTICAL INSULATION INCLUDED
B = BATTERED WALL
C = CONCRETE WALL
F = FOAMED INSULATION CORE METAL WALL PANEL
G = GYPSUM WALLBOARD 6" MINIMUM ABOVE CEILING
M = METAL STUD WALL
p = PLYWOOD INCLUDED IN WALL ASSEMBLY
P = PRECAST WALL
R = RESILIENT WALL
S = SHAFT WALL
U = UNIT MASONRY
W = WOOD STUD WALL
| = DIVIDER
* = TAKE GWB TO MIN. 6" ABOVE FINISH CEILING
* = STAGGERED STUD ASSEMBLY

STUD THICKNESS

*0 = 7/8" HAT CHANNEL
*1 = 1 5/8" METAL STUD
*2 = 2 1/2" METAL STUD OR 2 1/2" C-H STUD
*3 = 3 5/8" METAL STUD
*4 = 4" METAL STUD OR 4" C-H STUD
*6 = 6" METAL STUD OR 6" C-H STUD
*8 = 8" METAL STUD

F7 GWB CONTROL JOINT DETAILS

SCALE: 3" = 1'-0"



TYPICAL GWB CONTROL JOINT DETAIL AT HEAD OF DOOR OPENING

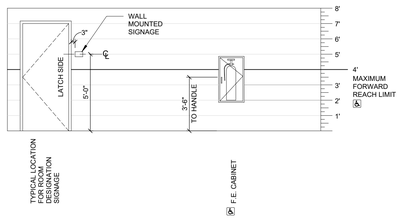
F11 TYPICAL FIXTURE HEIGHTS

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

NOTE:

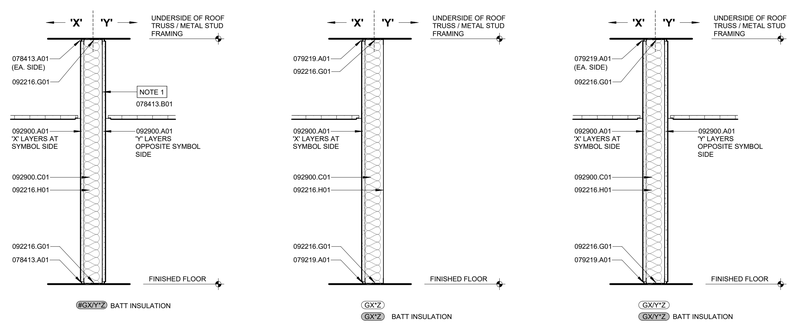
MOUNTING OF ALL ACCESSORIES INDICATED SHALL BE 48" MAX TO THE HIGHEST OPERABLE DEVICE OF MECHANISM, INCLUDING COIN SLOTS.

PROVIDE WOOD BLOCKING AS NECESSARY FOR FIXTURE MOUNTING AND STABILITY.



A7 WALL TYPES

SCALE: 1" = 1'-0"



G — METAL STUD - FIRE RATED | G — METAL STUD | G — METAL STUD

KEYNOTE LEGEND

078413.A01	FIRESTOPPING SEALANT
078413.B01	FIRESTOPPING ASSEMBLY - PROVIDE AT ALL PENETRATIONS THROUGH FIRE-RATED WALL ASSEMBLIES
079219.A01	ACOUSTICAL JOINT SEALANT WITH BACKER ROD FOR EXPOSED AND CONCEALED JOINTS
092216.G01	SLIP-TYPE HEAD TRACK TO ALLOW FOR VERTICAL DEFLECTION
092216.H01	FLAT STRAP BACKING PLATE FOR BLOCKING AND BRACING
092900.A01	5/8-INCH TYPE 'X' INTERIOR GYPSUM BOARD - REFER TO SPECIFICATIONS, PART 3 ARTICLE 'APPLYING INTERIOR GYPSUM BOARD' FOR INSTALLATION LOCATIONS OF THE VARIOUS TYPES OF WALLBOARD APPLICABLE TO THE PROJECT
092900.C01	5/8-INCH TYPE 'X' INTERIOR GYPSUM BOARD

SHEET G100 SHEET SPECIFIC NOTES

GENERAL NOTES

1. NOTES APPLY TO ALL TRADES AND DRAWINGS.
2. ALL DIMENSIONS ARE REFERENCED FROM FACE OF FRAMING STUD, FACE OF MASONRY, FACE OF CAST-IN-PLACE CONCRETE OR FACE OF PRECAST UNLESS NOTED OTHERWISE.
3. WHERE REMOVAL OF ITEMS LEAVES A HOLE OR DAMAGED SURFACE THAT WILL BE EXPOSED IN FINISHED WORK, PATCH AND REPAIR DAMAGE TO MATCH ADJACENT FINISHED SURFACE.
4. COORDINATE WORK OF ALL OTHER TRADES WITH YOUR TRADE PRIOR TO STARTING ANY CONSTRUCTION.
5. FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF ANY NEW CONSTRUCTION. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
6. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE WORK OF ALL TRADES.
7. CONSULT ARCHITECT / STRUCTURAL ENGINEER FOR ANY AND ALL LOCATIONS WHERE UNFORESEEN OR UNUSUAL STRUCTURAL CONDITIONS EXIST.
8. DO NOT SCALE DIMENSIONS FROM THESE DRAWINGS. VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.
9. PROVIDE BLOCKING IN WALLS FOR ALL BASE AND WALL CABINETS, TELEVISIONS, WALL HUNG EQUIPMENT, BATH ACCESSORIES AND WALL APPLIED DOOR HARDWARE.
10. PLUMBING / ELECTRICAL TRADES SHALL COORDINATE THEIR WORK WITH FOUNDATIONS AS REQUIRED IN MECHANICAL / ELECTRICAL SPECIFICATIONS AND NOTES. PENETRATIONS / SLEEVES SHALL BE COORDINATED WITH ARCHITECT AND STRUCTURAL ENGINEER.
11. WHETHER SPECIFICALLY INDICATED OR NOT, CONTRACTOR SHALL PROVIDE A STRUCTURAL STOOP AT ALL EXTERIOR DOOR LOCATIONS.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W sinclairhille.com

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W olsson.com

Seal:

REGISTERED ARCHITECT — DAVID E. QUADE — No. 10201 — 02/17/2026 — STATE OF ARKANSAS

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Construction Documents
Date:	August 20, 2026
Drawn by:	PD & KT
Checked by:	DEQ
Designer:	KT
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission.
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

Drawing Standards and Wall Types

Sheet Number:

AG100

Autodesk Docs://25073_Olsson North Little Rock 1/ 25073_Architectural_WS_2025.rvt
8/21/2026 4:12:06 PM

SUPPLEMENTARY CONDITIONS TO THE CONTRACT:

Correlation and Intent of the Contract Documents:

In the event of conflicting provisions, the more specific provision will take precedence over the less specific; the more stringent will take precedence over the less stringent; the more expensive item will take precedence over the less expensive. On all drawings, figures take precedence over scaled dimensions. Scaling of dimensions, if done, is done at the Contractor `s own risk.

Ownership and Use of Drawings, Specifications and Other Instruments of Service

The Architect and the Architect`s consultants shall be deemed the authors and owners of their respective Instruments of Service, Including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-Subcontractor, and Suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of Architect or Architect `s consultants` reserved rights.

The Contractor, Subcontractors, Sub-subcontractors, and Suppliers may not use the Instrument of Services on other projects or for additions to the Project outside the scope of the Work without specific written consent of the Owner, Architect, and the Architect `s consultants.

Review of Contract Documents and Field Conditions by Contractor:

The Contractor may submit requests for information to the Architect to help facilitate the Contractor `s performance of the Contract. Prior to submitting each request for information, the Contractor shall first carefully study and compare the Contract Documents, field conditions, other Owner provided information, Contractor prepared Coordination Drawings, and prior Project correspondence and documentation to determine that the information to be requested is not reasonably obtained from such sources

Each request for information shall be submitted to the Architect, in writing, on such form as the Architect may require and with such accompanying information as the Architect may require for such purpose. Each request for information shall identify the specific sources, which were reviewed by the Contractor in its efforts to determine the information requested, and a statement to the effect that the information being requested could not be determined from such sources.

Accuracy of Contract Documents:

Reasonable effort has been made to confirm and verify existing conditions which will affect the quantity, nature and performance of the work. The existing information on the drawings and schedules is as exact as could be secured insofar as existing conditions are concerned. Extreme accuracy is not guaranteed. The drawings, schedules, and specifications are intended for the assistance of the contractors in achieving the end result. Exact locations, levels, measurements, distances, etc. will be governed by conditions at the job site. Contractors shall field verify all existing conditions which affect work to be performed as part of this project prior to execution of any related work.

These documents are intended to include all labor, materials, equipment and services required to complete all work described herein. It is the responsibility of the Contractor to bring to the attention of the Architect any conditions which will not permit construction according to the intentions of these documents. It is the responsibility of the Architect to provide details and/or directions regarding design intent where it is altered by existing conditions or where unclear in the documents.

Work indicated or reasonably inferable in any one of the documents shall be supplied as though fully covered in all. Any discrepancy between the different parts shall be reported to the Architect immediately. If notification is not made and work is continued, responsibility for any future problems created will be borne by the contractor or subcontractor.

Digital Data Use and Reliance

Digital Data is defined as information, communications, CAD drawings, building information model (BIM) or designs created or stored for the project in digital form.

The use of Digital Data is intended solely as a convenience and for information purposes only for the sole purpose of preparing Contractor `s shop drawings pursuant to this Contract.

Digital Data are not Construction Documents . Differences may exist between the Digital Data and corresponding signed and sealed hard-copy Construction Documents. The Architect and their agents and employees make no representation regarding the accuracy or completeness of the Digital Data. In the event a conflict arises, the signed and sealed hard-copy Construction Documents shall govern. The using or relying party is responsible for determining if any conflicts exists and to field verify critical areas of their work.

Any use of, or reliance on, all or a portion of the Digital Data information without agreement to protocols governing the use of, and reliance on, the Digital Data information shall be at the using or relying party `s sole risk and without liability to the other party and it `s contractors or consultants, the authors of, or contributors to, the Digital Data information and each of their agents and employees.

Code Compliance:

All Work shall comply with all state and local codes and ordinances, and shall be performed to the highest standards of craftmanship by journeyman of the appropriate trades.

The building inspector shall be notified by the Contractor when there is need of inspection as required by the International Building Code (IBC) or by any local code or ordinance.

Building Permit:

The Contractor will secure and pay for all necessary building permits and fees. The Coordinating Design Professional will be responsible for providing stamped drawing set to the General Contractor for the purpose of obtaining a building permit. The General Contractor shall be responsible for obtaining all final inspections, including Health Department (when applicable), and shall deliver to the Owner the Certificate of Occupancy.

Not Employees of Owner:

Neither the Contractor nor any of his subcontractors, nor any agent or employee of either, shall be considered to be an employee of the Owner or by virtue of the contract of any term or portion thereof.

Indemnification:

To the fullest extent permitted by law, the Contractor will indemnify and hold harmless the Owner and the Architect and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Work, provided that any such claims, damage, loss or expense is attributed to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and caused in whole or in part by; negligent or willful act or omission of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

In any and all claims against the Owner and the Architect, or any of their agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation 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 Contractor or any Subcontractor under workmen's compensation acts, disability benefits acts or other employee benefit acts.

The obligation of the Contractor under this paragraph shall not extend to the liability of the Architect, his agents, of Drawings, opinions, reports, surveys, Change Orders, designs or Specifications.

Coordination and Protection:

The General Contractor and all subcontractors shall coordinate installation of all utilities and trade work with the Owner and any Owner-furnished items and services, and afford reasonable access and cooperation with Owner. The General Contractor will assume responsibility of items requiring coordination and resolution during the bidding process. Contractor shall verify and coordinate all openings through floors, ceilings and walls with architectural, structural, mechanical, plumbing and electrical drawings.

Schedule construction operations in sequence required to obtain the best results. Where installation of one part of the Work depends on installation of other components, before or after its own installation.

Coordinate installation of different components to ensure maximum performance and accessibility for require maintenance, service and repair.

Make adequate provisions to accommodate items scheduled for later installation.

Contractor shall provide protection to existing interior and exterior finishes adjacent to these project premises and repair to original condition any damage incurred.

Site Examination:

All Bidders shall inform themselves fully of the existing conditions at the job site, as they relate to the construction of the project. Bidders shall carefully examine the Contract Documents. Failure to obtain first-hand knowledge of existing conditions and requirements of the Contract Document will not relieve a successful bidder of his/her obligations to furnish all materials and labor necessary to carry out the provisions of the Contract. Contactors will not be given extra payments for conditions which can be determined by examining the existing site conditions and Contract Documents.

Existing Utilities:

It shall be the Contractor`s responsibility to inform himself of the existing utilities in the vicinity of the proposed work, and to notify the respective utility companies prior to commencing work. Notifications of intent to begin construction shall be given sufficiently in advance of actual construction to allow the utility companies sufficient time to locate or relocate their utilities. The Owner and Architect assumes no responsibility for location of utilities and any reference to utilities on the Plans is approximate, The Contractor shall avoid damaging main and service lines from and utility. Any damage to such lines will be the responsibility of the Contractor to repair. No additional compensation will be allowed for protecting utilities or for repair of any damage caused to the utility.

Guarantee:

Unless noted otherwise in the documents the Contractor and Sub-Contractors shall guarantee all materials and equipment furnished and Work performed for a period of one (1) year from the date of Substantial Completion. The Contractor warrants and guarantees for a period of one (1) year from this date that the completed systems are free from all defects due to faulty materials or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of systems resulting
from such defects. The Owner will give notice of observed defects with reasonable promptness. In the event the Contractor should fail to make such repairs, adjustments, or other work that may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred.

011000 SUMMARY

PROJECT INFORMATION:
Project: **Olsson - Little Rock – Tenant Improvement**
Project Location: **1 Riverfront Drive, North Little Rock, AR 72114**
Architect: Sinclair Hille & Associates

The Work consists of **an interior tenant finish of approximately 7,690 GSF. Alterations involve partial demolition of existing metal stud walls, lay-in acoustical ceilings systems, hard-lid ceilings, mechanical, electrical, and lighting systems. New walls, ceilings, flooring, millwork, mechanical, plumbing and electrical also included.**

The successful bidder will be charged with coordinating the work performed by the Owner and the work of others. The Bid is based upon labor, materials, products, systems, equipment and other items required to complete the Work. The successful bidder shall also include in their bid all cost(s) of obtaining and paying of all fees (including impact fees) and charges associated with all permits or licenses required to complete the Project.

WORK RESTRICTIONS:
1. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
2. Limits: Confine construction operations to areas of the building identified in the contract drawings necessary to carry out the work indicated on the drawings. Protect access to neighboring tenant suite - keep common spaces clean and free for public use.
3. On-Site Work Hours: Work in the existing building during the hours of 7:00am to 5:00pm, Monday through Friday, except as otherwise indicated.
4. Weekend Hours: 8:00am to 5:00pm
5. Any loud construction (i.e., core drilling, or installing track with a ram set) is to be performed after 6PM or on the weekends.
6. Hours for Utility Shutdowns: Coordinate with Owner for specific situations. Notify Owner not less than 72 hours in advance of proposed utility interruptions and obtain Owner`s written permission.
7. Driveways, Walkways, and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
8. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet (8 m) of entrances, operable windows, or outdoor-air intakes.
9. Condition of Existing Building: Maintain portions of existing building affected by construction operations in the weathertight condition throughout construction period. Repair damage caused by construction operations.
10. Employee Identification: Owner will provide identification tags for Contractor personnel working the Project site. Identification tags shall be worn at all times.
11. Card access can be acquired so teams can access build at off-hours. Service elevator can be blocked off for construction use as needed.
12. Dumpsters are to be set on the south side of building, coordinate exact location with building owner.

012600 CONTRACT MODIFICATION PROCEDURES

Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

Owner-Initiated Proposal Requests : Architect will issue a detailed description of proposed changes in the Work. Proposal Requests are not instructions either to stop work in progress or to execute the proposed change. After receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time.

Contractor-Initiated Proposals : If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.

On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor, for all changes to the Contract Sum or the Contract Time.

Architect may issue a Construction Change Directive. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

Each request for approval of additional work which is to require additional payment from the Owner, or in instances where credit is to be allowed to the Owner for omission of certain work or materials, shall be accompanied by a price quotation, including a complete cost breakdown of materials, labor, overhead and profit. The maximum allowance for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedule: 1) Ten percent (10%) overhead and profit on Subcontractor's own work and five percent (5%) overhead and profit on sub-subcontractor's work. 2) Ten percent (10%) overhead and profit on General Contractor's own work and five percent (5%) overhead and profit on Subcontractor's work.

PAYMENT PROCEDURES:

Submit a Schedule of Values with the initial Application for Payment. Break down the Contract Sum into at least one line item for each Specification Section in the Project Manual table of contents. Coordinate the schedule of values with Contractor's construction schedule.
Round amounts to nearest whole dollar; total shall equal the Contract Sum.
Provide separate line items in the schedule of values for initial cost of materials and for total installed value of that part of the Work.

Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.

Submit 3 copies of each application for payment per the schedule established in Owner/Contractor Agreement.

With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.

Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien. Include insurance certificates, proof that taxes, fees, and similar obligations were paid, and evidence that claims have been settled. Include consent of surety to final payment on AIA Document G707.

013300 SUBMITTALS

SHOP SUBMITTALS
Shop submittals shall be initially reviewed and marked up by the General Contractor prior to submitting to the Design Team for review. Submittals shall include project name, date, name of contractor, names of subcontractor, manufacturer and supplier and shall be submitted with unique submittal numbers including a revision identifier that is coordinated with the specification section they are associated with.

Submittals shall be made electronically as individual PDF files specific to each product requesting review. The file shall be named using a project identifier and section number followed by a hyphen and a sequential number. (e.g., Olsson - North Little Rock TI-25073-01). Resubmittals shall include the suffix "hyphen.R" followed by a sequential number (e.g., Olsson - North Little Rock TI-25073-01-R1).

REQUESTED SUBMITTALS
The Design Team will review the following submittals as related to this project. No other submittals will be required or reviewed as part of this contract by the Design Team:

Section	Description
064116	Plastic-Laminate-Clad Architectural Cabinet Shop Drawings & Samples
064216	Wood Veneer Wall Paneling, Shop Drawings & Samples
081113	Hollow Metal Doors and Frames Shop Drawings
081216	Aluminum Frames, Product Data & Shop Drawings
081416	Flush Wood Door Samples
083113	Access Doors & Frames Product Data
087100	Door Hardware Product Data, Schedule & Shop Drawing
087100	Keying Schedule
088300	Mirrors, Product Data
093013	Ceramic Tiling, Product Data & Samples
095113	Acoustical Panel Ceilings Product Data
096513	Resilient Base Product Data & Samples
096813	Tile Carpeting Product Data
097200	Wall Covering Product Data & Samples
098436	Felt Baffle Ceilings
099123	Interior Painting Product Data & Draw Downs
101100	Visual Display Surfaces, Product Data
104413	Fire Protection Cabinet Product Data
104416	Fire Extinguishers Product Data
122413	Roller Window Shades
123623.13	Plastic-Laminate Countertop Shop Drawings & Samples
123661.19	Quartz, Shop Drawings & Samples
211000	Water-Based Fire-Suppression Systems
220700	Plumbing Insulation
221116	Domestic Water Piping
221123	Domestic Water Pumps
221316	Sanitary Waste And Vent Piping
223300	Electric Domestic Water Heaters
224000	Plumbing Fixtures
230700	HVAC Insulation
233113	Metal Ducts
233300	Air Duct Accessories
233600	Air Terminal Units
233713	Diffusers, Registers and Grilles
235413	Electric-Resistance Furnaces
238126	Split-System Air-Conditioners
238239	Unit Heaters
260923	Lighting Control Devices
263323	Central Battery Equipment
262726	Wiring Devices
262816	Enclosed Switches and Circuit Breakers
265119	LED Interior Lighting
284621.11	Addressable Fire Alarm System
270500	Common Work Results for Communication
270526	Grounding and Bonding for Communication Systems
271000	Structured Cabling

016000 PRODUCT REQUIREMENTS

General Requirements:
The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

Comparable Product Requests:
Submit request for consideration of each comparable product. Do not submit unapproved products on Shop Drawings or other submittals. Identify product to be replaced and show compliance with requirements for comparable product requests. Include a detailed comparison of significant qualities of proposed substitution with those of the Work specified. Architect will review the proposed product and notify Contractor of its acceptance or rejection.

Basis-of-Design Product Specification Submittal:
Show compliance with requirements.

Compatibility of Options:
If Contractor is given option of selecting between two or more products, select product compatible with products previously selected.

Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

Deliver products to Project site in manufacturer's original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

Store materials in a manner that will not endanger project structure. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

Product Selection Procedures:

Provide products that comply with the Contract Documents, are undamaged, and are new at the time of installation. Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.

Where Specifications name a single manufacturer and product, provide the named product that complies with requirements.

Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.

Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements.
Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.

Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements for "comparable product requests" for consideration of an unnamed product.
Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.

Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements.

Where Specifications name a single product, or refer to a product indicated on Drawings, as the "basis-of-design," provide the named product. Comply with provisions for "comparable product requests" for consideration of an unnamed product by another manufacturer.

Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

Unless otherwise indicated, Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium options.

017300 EXECUTION

Examination and Preparation:
Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Verify compatibility with and suitability of substrates. Examine roughing-in for mechanical and electrical systems. Examine walls, floors, and roofs for suitable conditions.

Proceed with installation only after unsatisfactory conditions have been corrected.

Take field measurements as required to fit the Work properly. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication.

Verify space requirements and dimensions of items shown diagrammatically on Drawings.

Installation:
Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated. Make vertical work plumb and make horizontal work level. Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections to form hairline joints. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.

Comply with manufacturer's written instructions and recommendations.

Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

Use products, cleaners, and installation materials that are not considered hazardous.

Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place. Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed.

Cutting and Patching:
Provide temporary support of work to be cut. Do not cut structural members without prior written approval of Architect.

Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.

Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction in a manner that will minimize evidence of patching and refinishing.

Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.

Cleaning:
Clean Project site and work areas daily, including common areas. Dispose of materials lawfully.
Remove liquid spills promptly. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate. Remove debris from concealed spaces before enclosing the space.

Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:

Remove labels that are not permanent.
Clean transparent materials, including mirrors.
Remove excess glazing compounds.
Replace chipped or broken glass.
Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Sweep concrete floors broom clean.
Vacuum carpeted surfaces and wax resilient flooring.
Wipe surfaces of mechanical and electrical equipment.
Remove excess lubrication.
Clean plumbing fixtures.
Clean light fixtures, lamps, globes, and reflectors.
Clean Project site, yard, and grounds, in areas disturbed by construction activities.
Sweep paved areas; remove stains, spills, and foreign deposits.
Rake grounds to a smooth, even-textured surface.

017700 CLOSEOUT PROCEDURES

Closeout Submittals:

Record Drawings: Maintain a set of prints of the Contract Drawings as record Drawings. Mark to show actual installation where installation varies from that shown originally.

Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

Operation and Maintenance Data:
Submit one copy of manual. Organize data into three-ring binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:

Manufacturer's operation and maintenance documentation.
Maintenance and service schedules.
Maintenance service contracts.
Emergency instructions.
Spare parts list.
Wiring diagrams.
Copies of warranties.

Closeout Procedures:

Substantial Completion:
Before requesting Substantial Completion inspection, prepare a list of items to be completed and corrected (punch list). Include the value of items on the list, and reasons why the Work is not complete.

Advise Owner of pending insurance changeover requirements. Submit specific warranties, maintenance service agreements, and similar documents.

Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.

Submit record Drawings, operation and maintenance manuals, and similar final record information.

Deliver tools, spare parts, extra materials, and similar items. Make final changeover of permanent locks and deliver keys to Owner.

Complete startup testing of systems. Remove temporary facilities and controls. Submit changeover information related to Owner's occupancy, use, operation, and maintenance. Complete final cleaning requirements, including touchup painting. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will proceed with inspection or advise Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued. Architect will NOT review project for substantial completion until the written punch list has been submitted by the Contractor. The Design Teams supplementary information related to the Contractor `s punch list should not be exhaustive in nature but is intended to identify items that may have been inadvertently overlooked by the Contractor.

Final Completion:
The Architect shall review the project for final completion once all of the items listed on the final punch list have been completed or otherwise resolved for acceptance and all required closeout submittals have been processed. The Contractor shall submit a written request for final inspection. Upon completion of inspection and assuming all unfulfilled requirements have been met, the Architect will accept a final Certificate for Payment.

017900 DEMONSTRATION AND TRAINING

Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system. Include instruction for basis of system design and operational requirements, review of documentation, emergency procedures, operations, adjustments, troubleshooting, maintenance, and repairs.

024119 SELECTIVE DEMOLITION

Definitions:
Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.

Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner.

Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.

Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

Ownership:
Unless otherwise indicated, demolition waste becomes property of Contractor.

Items of interest or value to Owner that may be encountered during selective demolition remain Owner's property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to Owner.

Field Conditions:
Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical. Before selective demolition, Owner will remove furniture and equipment in construction areas currently occupied. Coordination with Owner throughout phases of work is critical.

Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

It is not expected that hazardous materials will be encountered. If encountered, do not disturb and immediately notify Architect and Owner.

Examination:
Verify that utilities have been disconnected and capped before starting selective demolition.

When unanticipated mechanical, electrical or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

Utility Service and Mechanical/Electrical Systems:
Maintain existing services/systems indicated to remain and protect against damage.

Locate, identify, disconnect and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished. Coordinate required shut offs with utility companies and Owner. If services/systems are required to be removed, relocated or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

Disconnect, demolish and remove fire-suppression systems, plumbing and HVAC systems, equipment and components indicated to be removed. Where piping is to be removed, remaining piping should be capped or plugged with same or compatible piping material. Where piping is to be abandoned in place, piping should be drained and capped or plugged with same or compatible piping material.

Selective Demolition, General:
Maintain services/systems indicated to remain and protect them against damage during selective demolition operations. Before proceeding with demolition, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of the building.

Protect walls, ceilings, floors, and other existing finish work that are to remain. Erect and maintain dustproof partitions. Cover and protect furniture, furnishings, and equipment that have not been removed.

Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.

Promptly remove demolition waste materials from Project site and legally dispose of them. Do not burn demolished materials.

Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition existing before demolition operations began.

064116 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS

General:
Provide submittals for shop drawings and samples for verification.

Work to comply with quality standards of the Architectural Woodwork Institute's "Architectural Woodwork Quality Standards."

Do not deliver cabinets until painting and similar operations that could damage cabinets have been completed in installation areas. Do not deliver or install cabinets until building is enclosed, wet work is complete and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

Where cabinets are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on Shop Drawings. Locate concealed framing, blocking and reinforcements that support cabinets by field measurements before being enclosed.

Materials:
Medium-Density Fiberboard: ANSI A208.2, Grade MD

Particleboard: ANSI A208.1, Grade M-2

Softwood Plywood: DOC PS 1, Medium Density Overlay

Veneer-Faced Panel Products (Hardwood Plywood): HPVA HP-1

Thermoset Decorative Panels: Particleboard or medium-density fiberboard finished with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD 3, Grade VGL for test methods 3.3, 3.4, 3.6, 3.8 and 3.10.

Melamine-Faced Particleboard: Comply with ANSI A208.1, Grade M-2 finished on both faces with thermally fused, melamine-impregnated decorative paper and complying with NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10. Color: White.

Cabinet Hardware and Accessory Materials:
Frameless Concealed Hinges (European Type): BHMA A156.9, B01602, 135 degrees of opening, self-closing (soft-close).

Door and Drawer Pulls: See Material List

Shelf Rests: BHMA A156.9, B04013; metal.

Drawer Slides: BHMA A156.9, B05091, Standard Duty (Grade 1, Grade 2 and Grade 3): Side mounted and extending under bottom edge of drawer; full-extension type; zinc-plated steel with polymer rollers. Box Drawer Slide to be Grade 1 for drawers not more than 6 inches high and 24 inches wide. Provide slides with soft-close motion.

Door Locks: ANSI / BHMA A156.11, E07121.

Exposed hardware finishes to comply with BHMA A156.18 for BHMA code number indicated: Finish to be Satin Stainless Steel, BHMA 630. For concealed hardware, provide manufacturer's standard finish that complies with product class requirements in BHMA A156.9.

Closet Rod and End Brackets: Basis of Design – Hardware Resources 1-5/16" round closer rod w/ knock-in opening mounting brackets for 1-5/16 " round closet rods. Chrome Finish.

Interior Woodwork:
Unless noted otherwise, provide Custom-grade interior woodwork complying with referenced quality standard.

Plastic-Laminate Cabinets: Provide AWI flush overlay construction. Laminate cladding at exposed surfaces to be high-pressure decorative laminate; Grade HGS at horizontal surfaces other than tops, vertical surfaces and edges. Surfaces other than drawer bodies are to be thermoset decorative panels. Drawer sides and backs to be solid-hardwood lumber. Drawer bottoms to be hardwood plywood. Provide dust panels of 1/4 inch plywood or tempered hardboard above compartments and drawers unless located directly under a top.

Drawer Construction:
Fabricate with exposed fronts fastened to subfront with mounting screws from interior of body. Join subfronts, backs and sides with glued rabbeted joints supplemented by mechanical fasteners or glued dovetail joints.

Provide the following colors, patterns and finishes for plastic laminate cabinets:

PLAM-1:
See Material List

Shelving:
Shelving to be 3/4-inch thick melamine-faced particleboard with applied PVC front edge.

Installation:
Prior to installation, condition cabinets to average prevailing humidity conditions in the installation areas.

Install cabinets level, plumb, true and straight. Shim as required with concealed shims. Install level and plumb (including tops) to a tolerance of 1/8 inch in 96 inches. Scribe and cut cabinets to fit adjoining work, refinish cut surfaces and repair damaged finish at cuts.

Anchor cabinets to anchors or blocking built in or directly attached to substrates. Fasten with countersunk concealed fasteners and blind nailing.

Install cabinets so doors and drawers are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation.

Anchor countertops securely to base units. Seal space between backsplash and wall.

Cut shelf cleats at ends of shelves about ½ inch less than width of shelves and sand exposed ends smooth.

Install shelf cleats by fastening to framing or backing with finish nails or trim screws, set below face and filled. Space fasteners not more than 16 " on center. Apply a bead of multipurpose construction adhesive to back of shelf cleats before installing. Remove adhesive that is squeezed out after fastening shelf cleats in place.

Install shelf brackets according to manufacturer `s written instructions, spaced not more than 36 " on center. Fasten to framing members, blocking, or metal backing, or use toggle bolts or hollow wall anchors.

Installation of Shelving:
Cut shelf cleats at ends of shelves about 1/2-inch less than width of shelves and sand exposed ends smooth. Install cleats by fastening to framing or backing with finish nails or trim screws, set below face and filled.

Install shelf brackets according to manufacturer `s written instructions spaced not more than 36 inches o.c. Fasten to framing members or blocking.

Install standards for adjustable shelf supports according to manufacturer `s written instruction. Fasten to framing members or blocking with fasteners not more than 12 inches o.c.

Cut shelves to neatly fit openings with only enough gap to allow shelves to be removed and reinstalled. Fasten shelves to brackets to comply with bracket manufacturer `s written instructions.

SECTION 064216 - FLUSH WOOD PANELING

ACTION SUBMITTALS

Product Data: For each type of product.
Shop Drawings: For flush wood paneling.
1. Include plans, elevations, sections, and attachment details.
2. Show details full size.
3. Show locations and sizes of furring and blocking, including concealed blocking specified in other Sections.
4. For paneling produced from premanufactured sets, show finished panel sizes, set numbers, sequence numbers within sets, and method of cutting
5. For paneling veneered in fabrication shop, show veneer leaves with dimensions, grain direction, exposed face, and identification numbers
6. Apply **AWI Quality Certification** Program label to Shop Drawings.

Samples for Verification: For the following:
1. Lumber for Transparent Finish
2. Veneer Leaves: Representative of and selected from flitches to be used for transparent-finished paneling.
3. Veneer-Faced Panel Products for Transparent Finish: Include at least one face-veneer seam and finish as specified.

QUALITY ASSURANCE

Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.

DELIVERY, STORAGE, AND HANDLING

Do not deliver paneling until painting and similar operations that might damage paneling have been completed in installation areas. Store paneling in installation areas or in areas where environmental conditions comply with requirements specified in "Field Conditions" Article.

FIELD CONDITIONS

Environmental Limitations without Humidity Control: Do not deliver or install paneling until building is enclosed, wet-work is complete, and HVAC system is operating and will maintain temperature and relative humidity at levels planned for building occupants during the remainder of the construction period.

Field Measurements:
1. Where paneling is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
2. Locate concealed framing, blocking, and reinforcements that support paneling by field measurements before being enclosed/concealed by construction and indicate measurements on Shop Drawings.

Established Dimensions: Where paneling is indicated to fit to other construction, establish dimensions for areas where woodwork is to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

FLUSH WOOD PANELING (WOOD-VENEER WALL SURFACING)

Grade: **Premium**

Wood Species and Cut: **White oak, rift sliced**.

Veneer Matching Method:
1. Adjacent Veneer Leaves: **Slip** match.
2. Within Panel Face: **Running** match.
3. Adjacent Veneer Leaves and within Panel Face: Slip match.

Panel-Matching Method:
1. No matching is required between adjacent panels. Select and arrange panels for similarity of grain pattern and color between adjacent panels.

Panel Core Construction: **Hardwood veneer-core plywood.**
1. Thickness: **As indicated on Drawings**.

Exposed Panel Edges: **Inset solid-wood or wood-veneer matching faces**.

Panel Reveals: **Matte black plastic laminate**

Fire-Retardant-Treated Paneling: Panels are to consist of wood-veneer and fire-retardant particleboard or fire-retardant, medium-density fiberboard (MDF). Panels are to have a flame-spread index of [**25**] [**75**] or less and a smoke-developed index of 450 or less per ASTM E84, and be listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction.

Assemble panels by gluing and concealed fastening.

MATERIALS

Materials, General: Provide materials that comply with requirements of referenced quality standard for each quality grade specified unless otherwise indicated.

INSTALLATION MATERIALS

Furring, Blocking, Shims, and Hanging Strips: **Softwood or hardwood**, kiln-dried to less than 15 percent moisture content.

Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide metal expansion sleeves or expansion bolts for post-installed anchors. Use nonferrous-metal or hot-dip galvanized anchors and inserts at inside face of exterior walls.

Installation Adhesive: Product recommended by panel fabricator for each substrate for secure anchorage.

SHOP FINISHING

General: Finish paneling at fabrication shop as specified in this Section. Defer only final touchup, cleaning, and polishing until after installation.

Shop Priming: Shop apply the prime coat including backpriming, if any, for **transparent-finished** paneling specified to be field finished. See Section 099300 "Staining and Transparent Finishing" for material and application requirements.

Preparation for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing paneling, as applicable to each unit of work.
1. Backpriming: Apply two coats of sealer or primer, compatible with finish coats, to concealed surfaces of paneling.

Transparent Finish:
1. Grade: **Premium.**
2. Finish: WDMA TR-6 catalyzed polyurethane.
3.

079200 JOINT SEALANTS

General:
Compatibility: Provide joint sealants, backings and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

Colors of exposed sealants will generally be selected to match the color of the masonry veneers, storefronts and other finish materials used on the project. Architect will work to utilize standard colors when possible however, if an acceptable color cannot be obtained using standard colors, Contractor shall provide opportunity for custom colors at no additional cost to the Owner.

Sealants identified as "nonstaining" shall not stain substrates when tested according to ASTM C1248.

Joint Sealant Products:

MILDEW-RESISTANT JOINT SEALANTS:

(JS-S1): Silicone, Mildew Resistant, Acid Curing, S, NS, 25, NT

Acceptable Products:
GE Construction Sealants; SCS1700 Sanitary
Pecora Corporation; Pecora 860
The Dow Chemical Company; Dow Corning 786 Silicone Sealant
Tremco Incorporate; Tremsil 200

(JS-STPE1): STPE, Mildew Resistant, S, NS, 50, NT

Acceptable Products:
BASF Corporation; MasterSeal NP 150 (Pre-2014); Sonolastic 150VLM)

LATEX JOINT SEALANTS:

(JS-L1): Acrylic Latex, Type OP, Grade NF – paintable

Acceptable Products:
Pecora Corporation; AC-20
Sherwin-Williams Company; 850Z Siliconized Acrylic Latex Caulk
Tremco Incorporated; Tremflex 834

Joint Sealant Backing:
Backing material to be nonstaining and compatible with joint substrates, sealants, primers and other joint fillers, and approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

Cylindrical sealant backings to comply with ASTM C1330, Type B and shall be of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

Bond breaker tape to be polyethylene or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces on back of joint.

Miscellaneous Materials:
Provide primer as recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated and as determined from preconstruction joint-sealant-substrate tests and field tests.

Joint Sealant Applications:
Interior Joints in Vertical Surfaces and Horizontal Nontraffic Surfaces not Subject to Significant Movement:

(JS-L1): Acrylic Latex, Type OP, Grade NF – paintable

Mildew-Resistant Interior Joints in Vertical Surfaces and Horizontal Nontraffic Surfaces:

(JS-S3): Silicone, Mildew Resistant, Acid Curing, S, NS, 25, NT
(JS-STPE-2): STPE; Mildew Resistant, S, NS, 50, NT

Installation:
Comply with ASTM C 1193.
Install sealant backings to support sealants during application and to produce cross-sectional shapes and depths of installed sealants that allow optimum sealant movement capability.
Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

079219 ACOUSTICAL JOINT SEALANTS

General:
Provide acoustical joint-sealant products that effectively reduce airborne sound transmission through perimeter joints and openings in building construction, as demonstrated by testing representative assemblies according to ASTM E90.

Colors of exposed sealants to be selected by Architect from manufacturer 's full range of colors.

Joint Sealant Products:

ACOUSTICAL JOINT SEALANT:

(JS-A1)

Acceptable Products:
Accumetric LLC; BOSS 826 Acoustical Sound Sealant
GE Construction Sealants; RCS20 Acoustical
Hilti, Inc; CP 506 Smoke and Acoustical Sealant
Pecora Corporation; AC-20 FTR
Tremco Incorporated; Tremco Acoustical Sealant
USG Corporation; Sheetrock Acoustical Sealant

Miscellaneous Materials:
Primer as recommended by acoustical-joint-sealant manufacturer where required for adhesion of sealant to joint substrates.

Installation:
Prime substrates where recommended by manufacturer.

STC-Rated Assemblies: Seal construction at perimeters, behind control joints, and at openings and penetrations with a continuous bead of acoustical joint sealant. Install acoustical joint sealants at both faces of partitions, at perimeters, and through penetrations. Comply with ASTM C919, ASTM C1193, and manufacturer's written recommendations for closing off sound-flanking paths around or through assemblies, including sealing partitions to underside of floor slabs above acoustical ceilings.

081113 HOLLOW METAL DOORS AND FRAMES

Quality Assurance:
Fire-Rated Door Assemblies shall comply with NFPA 80 and be listed and labeled by a qualified testing agency for the ratings indicated based on testing at positive pressure according to NFPA 252.

Standard Hollow Metal Frames:
All frames shall be fabricated with mitered or coped corners and shall be fabricated as full profile welded frames. Steel sheet thickness shall be 0.053 inch for all frames. Fabricate interior frames from cold-rolled steel sheet and exterior frames from metallic-coated steel sheet complying with requirements identified for standard hollow metal doors.

Provide frames with four anchors per jamb for lengths between 60 and 90 inches spaced a maximum of 32 inches o.c. and no more than 18 inches from the top and bottom of frame. On doors not scheduled to receive weatherstripping, drill stops to receive three door silencers in strike jamb and two on heads of double-door frames.

SECTION 081216 - ALUMINUM FRAMES:

GENERAL

ACTION SUBMITTALS

Product Data Submittals: For each product.

Construction details, material descriptions, dimensions of individual components and profiles, and finishes.

Operating characteristics, electrical characteristics, and furnished accessories.

Shop Drawings:

Plans, elevations, sections, full-size details, and attachments to other work.

Point-to-point wiring diagrams showing the following:

Power requirements for each electrically operated door hardware.

Location and types of switches, signal device, conduit sizes, and number and size of wires.

Entrance Door Hardware Schedule: Prepared by or under supervision of supplier, detailing fabrication and assembly of entrance door hardware, as well as procedures and diagrams. Coordinate final entrance door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of entrance door hardware.

Delegated Design Submittals: For aluminum-framed entrances and storefront systems, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

CLOSEOUT SUBMITTALS

Operation and Maintenance Data: For aluminum-framed entrance and storefront systems.

QUALITY ASSURANCE

Installer Qualifications:

Entity that employs installers and supervisors who are trained and approved by manufacturer.

Delegated Design Engineer Qualifications: A professional engineer who is legally qualified to practice in Nebraska where Project is located and who is experienced in providing engineering services of the type indicated.

Product Options: Information on Drawings and in Specifications establishes requirements for aesthetic effects and performance characteristics of assemblies. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction.

Do not change intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If changes are proposed, submit comprehensive explanatory data to Architect for review.

WARRANTY

Special Warranty: Manufacturer agrees to repair or replace components of aluminum-framed entrance and storefront systems that fail in materials or workmanship within specified warranty period.

Failures include, but are not limited to, the following:

Structural failures, including.

Deterioration of metals, metal finishes, and other materials beyond normal weathering.

Warranty Period: Five years from date of Substantial Completion.

Special Finish Warranty, Anodized Finishes: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of anodized finishes within specified warranty period.

Deterioration includes, but is not limited to, the following:

Color fading more than 5 Delta E units when tested in accordance with ASTM D 2244.

Chalking in excess of a No. 8 rating when tested in accordance with ASTM D 4214.

Cracking, peeling, or chipping.

Warranty Period: 20 years from date of Substantial Completion.

PRODUCT SOURCE LIMITATIONS

Obtain all components of aluminum-framed entrance and storefront system, including framing and accessories, from single manufacturer.

PERFORMANCE REQUIREMENTS

Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design aluminum-framed entrance and storefront systems.

General Performance: Comply with performance requirements specified, as determined by testing of aluminum-framed entrance and storefront systems representing those indicated for this Project without failure due to defective manufacture, fabrication, installation, or other defects in construction.

Aluminum-framed entrance and storefront systems to withstand movements of supporting structure, including, but not limited to, twist, column shortening, long-term creep, and deflection from uniformly distributed and concentrated live loads.

Failure also includes the following:

Thermal stresses transferring to building structure.

Glass breakage.

Noise or vibration created by wind and thermal and structural movements.

Loosening or weakening of fasteners, attachments, and other components.

Failure of operating units.

Deflection of Framing Members Supporting Glass: At design wind load, as follows:

Deflection Normal to Wall Plane: Limited to 1/175 of clear span for spans of up to 13 feet 6 inches (4.1 m) and to 1/240 of clear span plus 1/4 inch (6.35 mm) for spans greater than 13 feet 6 inches (4.1 m).

Deflection Parallel to Glazing Plane: Limited to amount not exceeding that which reduces glazing bite to less than 75 percent of design dimension and that which reduces edge clearance between framing members and glazing or other fixed components to less than 1/8 inch (3.2 mm).

Operable Units: Provide a minimum 1/16-inch (1.6-mm) clearance between framing members and operable units.

ALUMINUM-FRAMED ENTRANCE AND STOREFRONT SYSTEMS

Basis-of-Design Products: Requests for manufacturer substitutions prior to bidding will be reviewed and responded to in conformance with Division 1 requirements. Subject to compliance with requirements, provide the Basis-of-Design Product indicated or a comparable product pre-approved during bidding by a manufacturer listed below:

Pre-approved manufacturers:

EFCO Corporation.
Kawneer North America
Manko Window Systems, Inc.
Tubelite
U.S. Aluminum; a brand of C.R. Laurence.
YKK AP America Inc.
RAKO Interiors

Basis-of-Design Products:

(SF-1) - Non-Thermal Storefront:

Manufacturer; RAKO Interiors

Product; Classic

Framing Members: Manufacturer's extruded- or formed-aluminum framing members of thickness required and reinforced as required to support imposed loads.

Interior Vestibule Framing Construction: Nonthermal.

Glazing System: Retained mechanically with gaskets on four sides.

Glazing Plane: Front.

Finish: Clear anodic finish.

Fabrication Method: Field-fabricated stick system.

Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

Steel Reinforcement: As required by manufacturer.

Backer Plates: Manufacturer's standard, continuous backer plates for framing members, if not integral, where framing abuts adjacent construction.

Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.

Entrance Doors: Manufacturer's standard glazed entrance doors for manual-swing or automatic operation.

Door Construction:
1-3/4-inch (44.5-mm) overall thickness, with minimum 0.125-inch- (3.2-mm-) thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and filled welded or that incorporate concealed tie rods.

Glazing Stops and Gaskets: Square, snap-on, extruded-aluminum stops and preformed gaskets.

Provide nonremovable glazing stops on outside of door.

Finish: See Material List

ENTRANCE DOOR HARDWARE

Entrance Door Hardware: Hardware not specified in this Section is specified in Section 087100 "Door Hardware."

Weather Stripping: Manufacturer's standard replaceable components.

Sliding Type: AAMA 701/702, made of wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing.

Weather Sweeps: Manufacturer's standard exterior-door bottom sweep with concealed fasteners on mounting strip.

GLAZING

Glazing: Comply with Section 088000 "Glazing."

Glazing Gaskets: Manufacturer's standard sealed-corner pressure-glazing system of black, resilient elastomeric glazing gaskets, setting blocks, and shims or spacers.

Glazing Sealants: Comply with Section 088000 "Glazing."

MATERIALS

Sheet and Plate: ASTM B209 (ASTM B209M).

Extruded Bars, Rods, Profiles, and Tubes: ASTM B221 (ASTM B221M).

Structural Profiles: ASTM B308/B308M.

Steel Reinforcement:

Structural Shapes, Plates, and Bars: ASTM A36/A36M.

Cold-Rolled Sheet and Strip: ASTM A1008/A1008M.

Hot-Rolled Sheet and Strip: ASTM A1011/A1011M.

Steel Reinforcement Primer: Manufacturer's standard zinc-rich, corrosion-resistant primer complying with SSPC-PS Guide No. 12.00; applied immediately after surface preparation and pretreatment. Select surface preparation methods in accordance with recommendations in SSPC-SP COM, and prepare surfaces in accordance with applicable SSPC standard.

ACCESSORIES

Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.

Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.

Reinforce members as required to receive fastener threads.

Use concealed fasteners when possible. When not possible, exposed fasteners shall be countersunk Phillips screw heads, finished to match framing system.

Anchors: Three-way adjustable anchors with minimum adjustment of 1 inch (25.4 mm) that accommodate fabrication and installation tolerances in material and finish compatible with adjoining materials and recommended by manufacturer.

FABRICATION

Form or extrude aluminum shapes before finishing.

Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.

Fabricate components that, when assembled, have the following characteristics:

Profiles that are sharp, straight, and free of defects or deformations.

Accurately fitted joints with ends coped or mitered.

Physical and thermal isolation of glazing from framing members.

Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.

Provisions for field replacement of glazing from exterior.

Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.

Mechanically Glazed Framing Members: Fabricate for flush glazing without projecting stops.

Entrance Door Frames: Reinforce as required to support loads imposed by door operation and for installing entrance door hardware.

At interior and exterior doors, provide compression weather stripping at fixed stops.

Entrance Doors: Reinforce doors as required for installing entrance door hardware.

At pairs of exterior doors, provide sliding-type weather stripping retained in adjustable strip and mortised into door edge.

At exterior doors, provide weather sweeps applied to door bottoms.

Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.

After fabrication, clearly mark components to identify their locations in Project in accordance with Shop Drawings.

ALUMINUM FINISHES

Black Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

087100 DOOR HARDWARE

PART 1 GENERAL
1.01 SECTION INCLUDES
A. Hardware for Swinging Doors
B. Electrically operated and controlled hardware.
C. Gasketing.
1.02 RELATED REQUIREMENTS
A. Section 081113 - Hollow Metal Doors and Frames.
B. Section 081416 - Flush Wood Doors.
C. Section 084313 - Aluminum-Framed Storefronts.
D. Section 281000 (if provided)- Access Control: Electronic access control devices.
1.03 REFERENCE STANDARDS
A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.
B. ANSI/BHMA Certified product standards - Various.
C. DHI WHD - Specifications Format for the Hardware Schedule 2015.
D. ICC A117.1 - Accessible and Usable Buildings and Facilities 2017.
E. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
1.04 ADMINISTRATIVE REQUIREMENTS
A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
B. Sequence installation to ensure facility services connections are achieved in an orderly and expeditious manner.
C. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
1. Prior to installation of door hardware, conduct project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review system operational parameters for each electrically controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures.
D. Keying Requirements Meeting:
1. Agenda:
a. Establish keying requirements.
b. Verify locksets and locking hardware are functionally correct for project requirements.
c. Verify that keying and programming complies with project requirements.
d. Establish keying submittal schedule and update requirements.
2. Incorporate "Keying Requirements Meeting" decisions into keying submittal upon review of door hardware keying system.
3. Deliver established keying requirements to manufacturers.
1.01 SUBMITTALS
A. See Section 013000 - Administrative Requirements for submittal procedures.
B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
C. Shop Drawings - Door Hardware Schedule: A detailed listing that includes each item of hardware to be installed on each door.
1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
2. Comply with DHI (H&S) using door numbering scheme and hardware set numbers as indicated in Contract Documents.
a. submit in vertical format.
3. Include complete description for each door listed.
D. Shop Drawings - Electrified Door Hardware: Include diagrams for power, signal, and control wiring for electrified door hardware that include details of interface with building safety and security systems. Provide elevations and diagrams for each electrified door opening as follows:
1. Prepared by or under supervision of Architectural Hardware Consultant (AHC) unless provided by Access Control System provider.
2. Electrical Schedule: Include elevations of each door opening showing electrified devices with connections installed and an operations narrative describing how opening operates from either side at any given time.
3. Diagrams: Include manufacturer point-to-point wiring diagrams that show each device in door opening system with related control wire connections to each device.
E. Samples for Verification (if requested):
1. Submit minimum size of 2 by 4 inch (51 by 102 mm) for sheet samples, and minimum length of 4 inch (102 mm) for other products.
F. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
G. Installer's qualification statement. Company specializing in performing work of the type specified for commercial door hardware with at least three years of documented experience.
H. Supplier's qualification statement. Company certified Architectural Hardware Consultant (AHC) to assist in work of this section.
I. Maintenance Data: Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.
J. Keying Schedule:
1. Submit one (1) electronic copy of Keying Schedule in compliance with requirements established during Keying Requirements Meeting for distribution to project team members, unless otherwise indicated.
K. Warranty: Submit manufacturer's warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
L. Project Record Documents: Record actual locations of concealed equipment, services, and conduit.
M. Maintenance Materials and Tools: Furnish the following for Owner's use in maintenance of project.
1. See Section 016000 - Product Requirements, for additional provisions.
1.02 QUALITY ASSURANCE
A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
B. Sequence installation to ensure facility services connections are achieved in an orderly and expeditious manner.
C. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
1.03 DELIVERY, STORAGE, AND HANDLING
A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
B. Deliver each item or package separately with identification related to the final Door Hardware Schedule and include basic installation instructions with each item or package.
C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".
1.04 WARRANTY
A. See Section 017800 - Closeout Submittals for additional warranty requirements.
B. Manufacturer Warranty: Provide manufacturer warranty against defects in material and workmanship for period indicated, from Date of Substantial Completion. Complete forms in Owner's name and register with manufacturer.
1. Closers: 25 years, minimum.
2. Exit Devices: Three years, minimum.
3. Locksets and Cylinders: Three years, minimum.

PART 2 PRODUCTS
2.01 SCHEDULED DOOR HARDWARE
A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
C. Products furnished, but not installed, under this Section include the following: Coordinating, purchasing, delivering, and scheduling remain requirements of this Section.
1. Permanent cylinders, cores, and keys to be installed by Owner.
D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.
2.02 HINGES
A. Manufacturers: Conventional butt hinges.
1. Ives
B. Properties:
1. Butt Hinges: As applicable to each item specified.
a. Standard Weight Hinges: Minimum of two (2) permanently lubricated non-detachable bearings.
b. Heavy Weight Hinges: Minimum of four (4) permanently lubricated bearings on heavy weight hinges.
c. Template screw hole locations.
d. Bearing assembly installed after plating.
e. Bearings: Exposed fully hardened bearings.
f. Bearing Shells: Shapes consistent with barrels.
g. Pins: Easily seated, non-rising pins.
1. Fully plate hinge pins.
2. Non-Removable Pins: Slotted stainless steel screws.
3. UL 10C listed for fire-resistance-rated doors.
1. Sizes: See Door Hardware Schedule.
a. Hinge Widths: As required to clear surrounding trim.
b. Sufficient size to allow 180 degree swing of door.
2. Finishes: See Door Hardware Schedule.
a. Fully polish hinges, front, back, and barrel.
3. Grades:
a. Butt Hinges: Comply with BHMA A156.1 and BHMA A156.7 for templated hinges.
4. Material: Base metal as indicated for each item by BHMA material and finish designation.
5. Types:
a. Butt Hinges: Include full mortise hinges.
6. Options: As applicable to each item specified.
7. Quantities:
a. Butt Hinges: Three (3) hinges per leaves up to 90 inches (2286 mm) in height. Add one (1) for each additional 30 inches (762 mm) in height or fraction thereof.
1. Hinge weight and size unless otherwise indicated in hardware sets:
1. For doors up to 36 inches (914 mm) wide and up to 1-3/4 inches (44.5 mm) thick provide hinges with a minimum thickness of 0.134 inch (3.4 mm) and a minimum of 4-1/2 inches (114 mm) in height.
2. For doors from 36 inches (914 mm) wide up to 48 inches (1219 mm) wide and up to 1-3/4 inches (44.5 mm) thick provide hinges with a minimum thickness of 0.180 inch (4.6 mm) and a minimum of 5 inches (127 mm) in height.
3. For doors greater than 1-3/4 inches (44.5 mm) thick provide hinges with a minimum thickness of 0.180 inch (4.6 mm) and a minimum of 5 inches (127 mm) in height.
2.03 POWER TRANSFER DEVICES
1. Electrified Quick Connect Power Transfers:
2. Manufacturers:
a. Von Duprin
1. Provide electrified full mortise power transfers (CON) with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets with a 1-year warranty. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.
2.04 MORTISE LOCKS
1. Manufacturers:
a. Schlage – L9000 Series
2. Properties:
a. Mechanical Locks: Manufacturer's standard.
1. Fitting modified ANSI A115.1 door preparation.
2. Door Thickness Coordination Fitting 1-3/4 inch (44 mm) to 2-1/4 inch (57 mm) thick doors.
3. Latch: Solid, one-piece, anti-friction, self-lubricating stainless steel.
1. Latchbolt Throw: 3/4 inch (19 mm), minimum.
4. Auxiliary Deadlatch: One piece stainless steel, permanently lubricated.
5. Backset: 2-3/4 inch (70 mm).
6. Lever Trim:
1. Functionality: Allow the lever handle to move up to 45 degrees from horizontal position prior to engaging the latchbolt assembly.
2. Strength: Locksets outside locked lever designed to withstand minimum 1,400 inch-lbs (158.2 Nm) of torque. In excess of that, a replaceable part will shear. Key from outside and/or inside lever will still operate lockset.
3. Spindle: Designed to prevent forced entry from attacking of lever.
4. Suspended Spindle: Designed for each lever.
a. Torn to be self-aligning and throw-bolted.
5. Handles: Made of forged or cast brass, bronze, or stainless steel construction. Levers that contain a hollow cavity are not acceptable.
6. Levers to operate a roller bearing spindle hub mechanism.
3. Finishes: See Door Hardware Schedule.
a. Core Faces: Match finish of lockset.
4. Grades: Grade 1
5. Options: Electrified Functions
2.05 TUBULAR PANIC DEVICES
1. Tubular Panic Devices: ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Device to be ADA compliant requiring less than 5 lbs. of force to activate. Post mounting with optional mechanical dogging. Provide proper fasteners as required by manufacturer to meet application requirements. Provide exit devices on both leaves of pairs of doors.
a. Devices to meet California Building Code (2013) Sec.11B.309.4.
b. Style: Exposed vertical rod. 1-1/4" grip diameter with interior operating panic handle in combination with exterior fixed pull handle. Panic mechanism shall be concealed within brass or stainless steel tubing. Optional entrance from exterior by a keyed cylinder.
c. Configurations (provide as specified):
1. Full Height Straight Pull X 72"
d. Push/pull operation when dogged from the inside.
e. Latching: Top latching: Reversed, flat, Pullman style. Roller-type latching not acceptable.
f. Engraved "PUSH" signage with optional paint infill and boundary grooves.
g. Manufacturers:
1. Rockwood (RO) - ROJ8500 Series.
2. Blumcraft, a division of C.R. Laurence (BL) - PA Series.
2.06 LOCK CYLINDERS
1. Manufacturers:
a. Schlage (Keyed to Facility System)
2. Properties:
a. Lock Cylinders: Provide key access on outside of each lock, unless otherwise indicated.
1. Provide cylinders from same manufacturer as locking device.
2. Provide cams and/or tailpieces as required for locking devices.
3. Provide cylinders with appropriate format interchangeable cores where indicated.
3. Grades:
a. Standard Security Cylinders: Comply with BHMA A156.5.
4. Types: As applicable to each item specified.
2.07 KEYS
1. Manufacturers:
a. Schlage (keyed to system)
2. Properties: Complying with guidelines of BHMA A156.28.
a. Provide keys and cores as required for use with locks and devices indicated in hardware sets.
2.08 DOOR LATCHES
A. Manufacturers:
a. IVES
b. ROCKWOOD
B. Door Pulls and Push Plates: Comply with BHMA A156.6.
2.09 CLOSERS
A. Manufacturers:
1. LCN – 4000 Series
B. Properties:
1. Surface Mounted Closers: Manufacturer's standard.
a. Construction: Cast Iron
b. Maximum Projection from Face of Door: 2-7/16 inches (62 mm).
c. Mechanism: Separate tamper-resistant adjusting valves for closing and latching speeds.
1. Include advanced backcheck feature
2. Include delayed action feature (where specified).
d. Hydraulic Fluid: All-weather type.
2. Arm Assembly: Standard for product specified.
a. Include integral stop feature, as specified in Door Hardware Schedule.
3. Covers:
1. Type: Standard for product selected.
a. Full
2. Material: Metal
3. Finish: Painted.
1. Grades:
a. Closers: Comply with BHMA A156.4, Grade 1.
2. Types:
a. Rack-and-pinion, surface-mounted. 1-1/2 inches (38 mm) minimum bore.
3. Installation:
a. Mounting: Includes surface mounted installations.
b. Mount closers on non-public side of door and stair side of stair doors unless otherwise noted in hardware sets.
c. Provide adapter plates, shim spacers, and blade stop spacers as required by frame and door conditions.
2.10 PROTECTION PLATES
1. Manufacturers:
a. Ives
2. Properties:
a. Plates:
1. Kick Plates: Provide along bottom edge of push side of every wood door with closer, except aluminum storefront and glass entry doors, unless otherwise indicated:
1. Size: 10 inches (254 mm) high by 2 inch (51 mm) less door width (LDW) on push side of door except as noters otherwise in the hardware set.
2. Edges: Beveled, on four (4) unless otherwise indicated.
3. Grades: Comply with BHMA A156.6.
4. Material: As indicated for each item by BHMA material and finish designation.
a. Metal Properties: Stainless steel.
1. Metal, Standard Duty: Thickness 0.050 inch (1.27 mm), minimum.
5. Installation:
a. Fasteners: Countersunk screw fasteners
2.11 STOPS AND HOLDERS
1. Manufacturers:
a. Ives
b. Soss
2. General: Provide overhead stop/holder when wall or floor stop is not feasible.
3. Grades:
a. Door Holders, Wall Bumpers, and Floor Stops: Comply with BHMA A156.16 and Resilient Material Retention Test as described in this standard.
4. Material: Base metal as indicated for each item by BHMA material and finish designation.
5. Installation:
a. Non-Masonry Walls: Confirm adequate wall reinforcement has been installed to allow lasting installation of wall bumpers.
2.12 WEATHERSTRIPPING AND GASKETING
A. Manufacturers:
1. Zero
B. Properties:
1. Weatherstripping Air Leakage: Resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.
2. Adhesive-Backed Perimeter Gasketing: Silicone gasket material applied to frame with self- adhesive.
C. Grades: Comply with BHMA A156.22.
2.13 MISCELLANEOUS ITEMS
A. Manufacturers: Various
B. Properties:
1. Silencers: Provide at all openings where adhesive gasketing on the stop is not specified and at equal locations on door frame to mute sound of door's impact upon closing.
a. Single Door: Provide three on strike jamb of frame.
b. Pair of Doors: Provide two on head of frame, one for each door at latch side.
c. Material: Rubber, gray color.
2. Silencers are not specified in hardware sets. To be supplied with HM frame supplier.
2.14 POWER SUPPLIES
A. Manufacturers:
1. Von Duprin (verify if centralized)
B. Properties:
1. Power Supply Units: Manufacturer's standard.
a. Enclosures: Lockable NEMA Type 1, with hinged cover and knockouts.
b. Power: 24 VAC, 10 Amp; field-selectable.
c. Power Distribution Module: Designed to release devices upon activation of fire alarm system.
d. Auxiliary contacts for remote signaling.
e. User-selectable time delay from 0 to 4 minutes.
f. Fire Alarm System Interface: Standard.
1. Fire alarm terminal with green LED indicating power is available.
1. Output Distribution Board with indicator LEDs.
2. On/Off LED power indicator.
2.15 CARD READER AND ACCESSORIES
A. Manufacturers:
1. Provided by Facility Access Control System Supplier
B. System Components to be included:
1. System Software (as required)
2. Encoder Stations (as required)
3. Server Licenses (as required)
4. Messenger Hubs (as required)
5. System Credentials (as required)
2.16 FINISHES
1. Finishes: Identified in Hardware Sets.

PART 3 EXECUTION
3.01 EXAMINATION
1. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.
2. Correct all defects prior to proceeding with installation.
3. Verify that electric power is available to power operated devices and of correct characteristics.
3.02 **INSTALLATION**
1. Install hardware in accordance with manufacturer's instructions and applicable codes.
2. All scheduled door hardware is to be provided by the contractor and installed by qualified installers trained by the manufacturer of the products provided.
3. Install hardware using the manufacturer's fasteners provided with the hardware. Do not use self-tapping sheet metal or metallic materials. Do not use#8x-%x8" or similar products.
4. Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.
5. Install smoke seals on fire-rated doors and frames in accordance with NFPA 105.
6. Use templates provided by hardware item manufacturer.
7. Do not install surface mounted items until application of finishes to substrate are fully completed.
8. Wash down masonry walls and complete painting or staining of doors and frames.
9. Complete finish flooring prior to installation of thresholds.
10. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item. As indicated in following list, unless noted otherwise in Door Hardware Schedule or on drawings.
a. Mounting heights in compliance with ADA Standards:
1. Locksets: 40-5/16 inch (1024 mm).
2. Push Plates/Pull Bars: 42 inch (1067 mm).
3. Exit Devices: 40-5/16 inch (1024 mm).
11. Set exterior threshold with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal, anchor thresholds with stainless steel countersunk screws.
12. Include in installation for existing doors and frames any necessary field modification and field preparation of doors and frames for new hardware. Provide necessary fillers, reinforcements, and fasteners for mounting new hardware and to cover existing door and frame preparations.
3.03 CLEANING
1. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
2. Clean adjacent surfaces soiled by door hardware installation.
3. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.
3.04 PROTECTION
1. Protect finished Work under provisions of Section 017000 - Execution and Closeout Requirements.
2. Do not permit adjacent work to damage hardware or finish.
3.05 **DEMONSTRATION**
1. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.
3.06 DOOR HARDWARE SETS
1. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be furnished with the appropriate additional hardware required for proper application and functionality.
a. Quantities listed are for each pair of doors, or for each single door.
b. The supplier is responsible for handing and sizing all products.
c. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.

MANUFACTURER LIST

Code	Name
OTH	BY OTHERS
IVE	IVES
LCN	LCN CLOSERS
SOS	SOSS HARDWARE
SCH	SCHLAGE
ROC	ROCKWOOD
ZER	ZERO

OPTION LIST

Code	Description
B-CS	4 BEVELED EDGES -COUNTERSUNK HOLES (STD)
L283-722	VACANT/OCCUPIED INDICATOR (OUTSIDE OF DR)
RX	REQUEST TO EXIT
J	FULL SIZE INTERCHANGEABLE CORE
EU	ELECTRIC UNLOCK

HARDWARE SETS

Set #1.0
Doors: 101.1

4	Hinge	5BB1HW 4.5" x 4.5"	622	IVE
1	Push Bar Panic Device	PDJ8500-3 x O1	BSP	ROC
1	Electric Strike	MSK-SGL	BSP	ROC
1	Mortise Cylinder	20-062	622	SCH
1	Closer (parallel, stop arm)	4111 SCUSH	693	LCN
1	CUSH support	4111-30	693	LCN
1	Wire Harness (frame)	CON-192		SCH
1	Position Switch	679-05WD		LOC
1	Request to Exit Sensor	SCAN-1G		SCE
1	Power Supply	By Facility Security Integrator		OTH
1	Video/Remote Release	By Facility Security Integrator		OTH
1	Card Reader	By Facility Security Integrator		OTH

NOTE:
* Door is normally closed, monitored and secured to prevent access. Door is monitored for propped door and unauthorized use. Request to exit sensor will shunt door position switch upon approach of door for egress. Presentation of an authorized credential to card reader or remote release after intercom use will release electrified strike and shunt door position switch to momentarily allow access. In the event of a loss of power door will remain secured to prevent access. Key override is available for emergency access. Free egress is always available from inside.

Set #1.1
Doors: 102.2

4	Hinge	5BB1HW 4.5" x 4.5"	622	IVE
1	Push Bar Panic Device	PDJ8500-3 x O1	BSP	ROC
1	Electric Strike	MSK-SGL BSP		ROC
1	Mortise Cylinder	20-062	622	SCH
1	Closer (parallel, stop arm)	4111 SCUSH	693	LC

093013 CERAMIC TILING

General:
Provide tile that complies with ANSI A137.1 for types, compositions and other characteristics indicated.

Obtain tile of each type and color or finish from same production run for each contiguous area. For tile exhibiting color variations within ranges, blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved samples.

Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages. Store tile and cementitious materials on elevated platforms, under cover and in a dry location.

Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.

Products:

(CT-1):
See Materials List

Setting and Grout Materials:
Modified Dry-Set Mortar (Thinset): ANSI A118.4

High-Performance Tile Grout: ANSI A118.7
Basis-of-Design; TEC Power Grout

Miscellaneous Materials:
Trowelable Underlayment and Patching Compounds : Latex-modified, Portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.

Metal Edge Strips : Angle or L-shaped, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring application: Clear anodized aluminum exposed-edge material.

Basis-of-Design; Schluter Systems L.P.
(TS-1): JOLLY, Used at top of tile wall base, edge of tile at kitchen.
(TS-2): DILEX-AHK, Used as a coved transition in showers between wall and floor tile.
(TS-3): SCHIENE, Used at transitions between tile and carpet flooring and or wood flooring

Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.

Installation:
Comply with TCNA's "Handbook for Ceramic Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of ANSI A108 Series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.

For installations indicated below, follow procedures in ANSI's "Specifications for the Installation of Ceramic Tile" for providing 95 percent mortar coverage.

Tile floors in wet areas
Tile floors composed of tiles 8 by 8 inches (200 by 200 mm) or larger.
Tile floors composed of rib-backed tiles.

Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

Lay tile in grid pattern unless otherwise indicated. Align joints where adjoining tiles on floor, base, walls, and trim are the same size.

Install and treat joints according to ANSI A108.11. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot (1:50) toward drains. Install waterproofing to comply with ANSI A108.13. Do not install tile over waterproofing until waterproofing has cured and been tested to determine that it is watertight.

Interior Wall Tile Installation Method(s):

Over Metal Studs or Furring: TCNA W243 (thin-set mortar on gypsum board)
Over Metal Studs or Furring: TCNA W244 (thin-set mortar on glass-mat backer board)

092900 GYPSUM BOARD

General:
Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.

Do not install panels that are wet, moisture damaged, and mold damaged.

For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.

For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by an independent testing agency.

Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

Interior Gypsum Board:
Basis-of-Design products have been listed. Products from any of the following manufacturers that meet the same performance standards of the basis-of-design products are acceptable.

American Gypsum
CertainTeed Corporation
Georgia-Pacific Gypsum LLC
National Gypsum Company
USG Corporation

Gypsum Board, Type X: ASTM C 1396/C (Standard Gypsum Board)
Basis-of-Design; National Gypsum Company, Gold Bond Fire-Shield
Thickness: 5/8 inch
Long Edges: Tapered
Location: At all locations unless indicated otherwise.

Trim Accessories:
Provide galvanized or aluminum-coated steel sheet or rolled zinc. Provide cornerbeads, LC-Beads (J-shaped, exposed long flange to receive joint compound), and expansion (control) joints.

Install control joints at locations indicated on drawings and according to ASTM C840 and in specific locations approved by the Architect for visual effect. Cornerbead shall be installed at all outside corners and LC-Bead shall be installed at exposed panel edges.

Joint Treatment Materials:
Joint tape to be paper unless recommended otherwise by panel manufacturer.

Joint compound to utilize formulation that is compatible with other compounds applied on previous or for successive coats.

Auxiliary Materials:
Use steel drill screws compliant with ASTM C1002 for typical applications and with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.

Sound-Attenuation Blankets to be Type I, produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool or rock wool per ASTM C665.

Installation:
Install gypsum board to comply with ASTM C 840.

Provide 5/8" Type 'X' gypsum board with long edges tapered. Utilize paper joint tape at all joints. At open joints and damaged areas of gypsum board, use a setting-type taping compound. For all other subsequent steps to finishing, use drying-type, all-purpose compound.

Panels are to be installed with face side out. Butt panels together with no more than 1/16 inch of open space between panels. Locate edge and end joints over supports. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. DO NOT place joints other than control joints at corners of framed openings. Fit gypsum panels around ducts, pipes and conduits and where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members. Allow 1/4 to 3/8-inch wide joints to install sealant.

Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4 to 1/2-inch wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

At STC-rated assemblies, seal construction at perimeters, behind control joints and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer 's written recommendations for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

At wall installations, install gypsum panels vertically unless indicated otherwise by fire-resistance-rated assembly, and minimize end joints. Stagger abutting end joints not less than one framing member in alternate courses of panels. Utilize steel drill screws. For multilayer applications, apply face layers so joints are offset at least one stud from base layer. Base and face layers should be fastened separately.

At ceiling installations, apply gypsum panels before wall/partition board applications and at right angles to framing. Install panels across framing to minimize the number or abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

Provide gypsum board finish levels as follows:
Level 1: Ceiling plenum areas, concealed areas and where indicated.
Level 4: At all data rooms, mechanical rooms and storage areas.
Level 5: At all locations unless noted otherwise.

095113 ACOUSTICAL PANEL CEILINGS

Acoustical Panels General:

Work includes acoustical panels ceilings with exposed suspension grid, as shown and scheduled on the Drawings and as specified herein.

Obtain each type of panel and suspension system through one source from a single manufacturer.

Permit panels to reach room temperature and a stabilized moisture content prior to installation.

Coordinate layout and installation of panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

Layout of ceiling grids to be centered within each room in both directions. Unless indicated otherwise.

Fire-Resistance-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

Acoustical Panels:

General: Comply with ASTM E1264, Class A.

Basis-of-Design Product:
(APC-1):
See Materials List.

Metal Suspension System:

General: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable requirements in ASTM C 635.

Attachment devices to be sized for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated.

Provide wire hangers, braces and ties complying with ASTM A 641/A641M, Class 1 zinc coating, soft temper. Wire diameter to be sized so its stress at 3 times the hanger design load will be less than yield stress of wire, but provide not less than 0.106-inch diameter wire.

Suspension system to be formed steel, commercial quality cold rolled with painted finish; intermediate-duty. Profile to be a tee, 15/16 inch wide face, painted finish to match existing. Perimeter moldings to be of the same material and finish as the grid. Where grid is exposed; provide L-shaped molding for mounting at the same elevation as the face of grid.

Installation:

Install acoustical panel ceilings to comply with ASTM C 636. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.

Coordinate hanger locations with other work. Suspension system to be independent of walls, columns, ducts, pipes and conduit. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Do not attach hangers to steel deck tabs.

Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.

Install edge moldings and trim at perimeter of ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends. Miter corners accurately and connect securely. Do not use exposed fasteners, including pop rivets, on moldings and trim.

Install acoustical units in accordance with manufacturer's instructions. Install after above-ceiling work is complete. Where cutting is required, make field cut edges of the same profile as the factory edge. Where round obstructions occur, provide preformed closures to match perimeter molding.

Extra Materials:

Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents. Furnish quantity of full-size acoustical panels equal to ten (10) percent of amount installed.

096513 RESILIENT BASE AND ACCESSORIES

Resilient Base:
Obtain from single source from single manufacturer. Product to comply with ASTM F 1861.

Provide Type TP (rubber, thermoplastic), Group I (solid, homogeneous), Style Cove (base with toe).

Minimum Thickness shall be 0.125 inch with Height of 4 inches.

Provide product in coils of manufacturer's standard length. Outside and inside corners shall be job formed. Finish to be satin.

Rubber Wall Base:

(RWB-1):
See Materials List.

Rubber Transition Strip:

(TS-X): Basis-of-Design Product:
See Materials List

092900 GYPSUM BOARD

General:
Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.

Do not install panels that are wet, moisture damaged, and mold damaged.

For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.

For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by an independent testing agency.

Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

Interior Gypsum Board:
Basis-of-Design products have been listed. Products from any of the following manufacturers that meet the same performance standards of the basis-of-design products are acceptable.

American Gypsum
CertainTeed Corporation
Georgia-Pacific Gypsum LLC
National Gypsum Company
USG Corporation

Gypsum Board, Type X: ASTM C 1396/C (Standard Gypsum Board)
Basis-of-Design; National Gypsum Company, Gold Bond Fire-Shield
Thickness: 5/8 inch
Long Edges: Tapered
Location: At all locations unless indicated otherwise.

Trim Accessories:
Provide galvanized or aluminum-coated steel sheet or rolled zinc. Provide cornerbeads, LC-Beads (J-shaped, exposed long flange to receive joint compound), and expansion (control) joints.

Install control joints at locations indicated on drawings and according to ASTM C840 and in specific locations approved by the Architect for visual effect. Cornerbead shall be installed at all outside corners and LC-Bead shall be installed at exposed panel edges.

Joint Treatment Materials:
Joint tape to be paper unless recommended otherwise by panel manufacturer.

Joint compound to utilize formulation that is compatible with other compounds applied on previous or for successive coats.

Auxiliary Materials:
Use steel drill screws compliant with ASTM C1002 for typical applications and with ASTM C954 for fastening panels to steel members from 0.033 to 0.112 inch thick.

Sound-Attenuation Blankets to be Type I, produced by combining thermosetting resins with mineral fibers manufactured from glass, slag wool or rock wool per ASTM C665.

Installation:
Install gypsum board to comply with ASTM C 840.

Provide 5/8" Type 'X' gypsum board with long edges tapered. Utilize paper joint tape at all joints. At open joints and damaged areas of gypsum board, use a setting-type taping compound. For all other subsequent steps to finishing, use drying-type, all-purpose compound.

Panels are to be installed with face side out. Butt panels together with no more than 1/16 inch of open space between panels. Locate edge and end joints over supports. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. DO NOT place joints other than control joints at corners of framed openings. Fit gypsum panels around ducts, pipes and conduits and where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members. Allow 1/4 to 3/8-inch wide joints to install sealant.

Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4 to 1/2-inch wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

At STC-rated assemblies, seal construction at perimeters, behind control joints and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer 's written recommendations for locating edge trim and closing off sound-flanking paths around or through assemblies, including sealing partitions above acoustical ceilings.

At wall installations, install gypsum panels vertically unless indicated otherwise by fire-resistance-rated assembly, and minimize end joints. Stagger abutting end joints not less than one framing member in alternate courses of panels. Utilize steel drill screws. For multilayer applications, apply face layers so joints are offset at least one stud from base layer. Base and face layers should be fastened separately.

At ceiling installations, apply gypsum panels before wall/partition board applications and at right angles to framing. Install panels across framing to minimize the number or abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

Provide gypsum board finish levels as follows:
Level 1: Ceiling plenum areas, concealed areas and where indicated.
Level 4: At all data rooms, mechanical rooms and storage areas.
Level 5: At all locations unless noted otherwise.

095113 ACOUSTICAL PANEL CEILINGS

Acoustical Panels General:

Work includes acoustical panels ceilings with exposed suspension grid, as shown and scheduled on the Drawings and as specified herein.

Obtain each type of panel and suspension system through one source from a single manufacturer.

Permit panels to reach room temperature and a stabilized moisture content prior to installation.

Coordinate layout and installation of panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

Layout of ceiling grids to be centered within each room in both directions. Unless indicated otherwise.

Fire-Resistance-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

Acoustical Panels:

General: Comply with ASTM E1264, Class A.

Basis-of-Design Product:
(APC-1):
See Materials List.

Metal Suspension System:

General: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable requirements in ASTM C 635.

Attachment devices to be sized for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated.

Provide wire hangers, braces and ties complying with ASTM A 641/A641M, Class 1 zinc coating, soft temper. Wire diameter to be sized so its stress at 3 times the hanger design load will be less than yield stress of wire, but provide not less than 0.106-inch diameter wire.

Suspension system to be formed steel, commercial quality cold rolled with painted finish; intermediate-duty. Profile to be a tee, 15/16 inch wide face, painted finish to match existing. Perimeter moldings to be of the same material and finish as the grid. Where grid is exposed, provide L-shaped molding for mounting at the same elevation as the face of grid.

Installation:

Install acoustical panel ceilings to comply with ASTM C 636. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.

Coordinate hanger locations with other work. Suspension system to be independent of walls, columns, ducts, pipes and conduit. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Do not attach hangers to steel deck tabs.

Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.

Install edge moldings and trim at perimeter of ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends. Miter corners accurately and connect securely. Do not use exposed fasteners, including pop rivets, on moldings and trim.

Install acoustical units in accordance with manufacturer's instructions. Install after above-ceiling work is complete. Where cutting is required, make field cut edges of the same profile as the factory edge. Where round obstructions occur, provide preformed closures to match perimeter molding.

Extra Materials:

Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents. Furnish quantity of full-size acoustical panels equal to ten (10) percent of amount installed.

096513 RESILIENT BASE AND ACCESSORIES

Resilient Base:
Obtain from single source from single manufacturer. Product to comply with ASTM F 1861.

Provide Type TP (rubber, thermoplastic), Group I (solid, homogeneous), Style Cove (base with toe).

Minimum Thickness shall be 0.125 inch with Height of 4 inches.

Provide product in coils of manufacturer's standard length. Outside and inside corners shall be job formed. Finish to be satin.

Rubber Wall Base:

(RWB-1):
See Materials List.

Rubber Transition Strip:

(TS-X): Basis-of-Design Product:
See Materials List

Resilient Molding Accessory:
Obtain from single source from single manufacturer.

Provide reducer and transition strips as required between various flooring finishes. Product to be rubber with profile, colors and patterns as selected by Architect from the full range of industry colors.

Miscellaneous Materials:
Provide latex-modified, portland cement based or blended hydraulic--cement-based trowelable leveling and patching compounds as necessary.

Provide water-resistant type adhesives recommended by manufacturer to suit resilient products and substrate conditions on the job. Use adhesives that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):

- Cove Base Adhesives: Not more than 50 g/L
- Rubber Floor Adhesives: Not more than 60 g/L.

Extra Materials:

Furnish extra materials described below that match products installed, are packaged with protective covering for storage, and are identified with labels describing contents. Furnish not less than ten (10 linear feet in roll form for each (500) linear feet or fraction thereof.

Preparation:
Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.

Fill cracks, holes and depressions in substrates with toweitable leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.

Do not install resilient products until they are the same temperature as the space where they are to be installed. Products should be stored into spaces they will be installed at least 48 hours in advance of installation.

Installation:
Comply with manufacturer's written instructions.

Apply to walls, columns, pilasters, casework and cabinets in toe spaces and other permanent fixtures in rooms and areas where base is required. Install in lengths as long as practicable without gaps at seams and with tops of adjacent pieces aligned. Do not stretch product during installation.

Use straight pieces of maximum lengths possible formed without producing discoloration (whitening) at bends for all job-formed corners.

Butt resilient molding accessories to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of carpet, resilient floor covering and tile that would otherwise be exposed.

After installation of product, remove adhesive and other blemishes from exposed surfaces and damp-mop surfaces to remove marks and soil.

096519 RESILIENT TILE FLOORING

General Delivery, Storage, Handling, and Installation:
Store floor tile and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F. Store floor tiles on flat surfaces. Maintain ambient temperatures within range recommended by manufacturer prior to installation of product, during installation and until substantial completion. Do not install product until other finishing operations, including painting, have been completed.

(LVT-X) - Basis-of-Design Product **:**
See Material List

Miscellaneous Materials:
Provide latex-modified, portland cement based or blended hydraulic--cement-based trowelable leveling and patching compounds as necessary.

Provide water-resistant type adhesives recommended by manufacturer to suit resilient products and substrate conditions on the job. Use adhesives that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):

- Cove Base Adhesives: Not more than 50 g/L
- Rubber Floor Adhesives: Not more than 60 g/L.

Preparation:
Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products. Verify that substrates comply with manufacturer's requirements for installation prior to installing products.

Do not install tiles until they are the same temperature as the space where they are to be installed. Products should be stored into spaces they will be installed at least 48 hours in advance of installation.

Installation:
Comply with manufacturer's written instructions.

Lay out tiles from center marks established with principal walls so tiles at opposite edges of room are of equal width. Lay tiles square with room axis with grain direction alternating in adjacent tiles (basket-weave pattern). Tiles should be matched for color and pattern by selecting from cartons in the same sequence as manufactured and packaged, if so numbered.

Scribe, cut and fit tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets and door frames. Tile to extend into toe spaces, door reveals, closets and similar openings. Tile to extend to center of door openings. Adhere tiles to substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks and other surface imperfections.

Remove soil, visible adhesive and surface blemishes from floor tile surfaces prior to applying liquid floor polish. Follow manufacturer's guidelines for polishing.

096813 TILE CARPETING

Carpet Tile:
Comply with CRI 104 for delivery, storage, handing, installation and limitations for temperature, humidity and ventilation. Do not install tiles over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet tile manufacturer.

Extend Tile Carpet into toe spaces, door reveals, closets, open-bottomed obstuctions, removeable flanges, alcoves, open-knee spaces below countertops, and other similar conditions.

(CPT-X) - See Material List

Flooring contractor to contact katie.allen@interface.com and dave.carl@interface.com for olsson material costs.

Install with glue down, releasable, pressure-sensitive adhesive that is water-resistant, mildew-resistant and nonstaining. Adhesives shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

Extra Materials:

Furnish full-size units equal to five (5) percent of amount installed for each type indicated, but not less than 10 sq.yds.

097200 WALL COVERINGS

General:
Do not deliver or install wall coverings until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above ceilings is complete and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction project.

Provide rolls of each type of wall covering from same print run or dye lot.

Acoustic Covering:

Wall Covering Durability Standard: Provide strippable wall coverings that comply with ASTM F 793 for Category V, Type II, Commercial Serviceability products.

Wallcovering to comply with ASTM E84; Class A.

(WC-X) - See Material List

Extra Materials:

For each type, color, texture, and finish, furnish wall-covering materials in full-width by length to equal to five (5) percent of amount installed.

Installation:
Clean substrates of substances that could impair wall covering's bond, including mold, mildew, oil, grease, incompatible primers and dirt. Prepare substrates to achieve a smooth, dry, clean surface free of flaking, unsound coatings, cracks and defects.

Gypsum board surfaces should be primed. Verify that any painted surfaces will not be subject to pigment bleeding. Areas that are susceptible should be treated. Gloss, semigloss and eggshell finishes should be sanded with afine sandpaper.

Install seams vertical and plumb with no horizontal seams. Pattern match to occur at 72 inches above finished floor.

Remove excess adhesive at finished seams, perimeter edges and adjacent surfaces using cleaning methods recommended by wall covering manufacturer. Replace strips that cannot be cleaned.

098436 FELT BAFFLE CEILINGS

Felt Baffles General:

Obtain baffles and suspension system through one source from a single manufacturer.

Permit baffles to reach room temperature and a stabilized moisture content prior to installation.

Coordinate layout and installation of panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system and partition assemblies.

Layout to be centered within each room in both directions unless otherwise noted.

Fire-Resistance-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

Basis of Design: See Material List

Installation:

Coordinate hanger locations with other work. Suspension system to be independent of walls, columns, ducts, pipes and conduit. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Do not attach hangers to steel deck tabs.

Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.

Install acoustical units in accordance with manufacturer's instructions. Install after above-ceiling work is complete. Where cutting is required, make field cut edges of the same profile as the factory edge.

Extra Materials:

Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents. Furnish (2) full-size panels.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

REGISTERED ARCHITECT
DAVID E. QUADE
No. 10201
08/12/26
STATE OF ARKANSAS

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Construction Documents
Date:	August 20, 2026
Drawn by:	PD & KT
Checked by:	DEQ
Designer:	KT
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission.
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

Architectural Specifications

Sheet Number:

AG202

Autodesk Docs://25073_Olsson North Little Rock 1/ 25073_Architectural_V25_2025.rvt
8/21/2026 4:12:07 PM

Autodesk Docs://25073_Olsson North Little Rock 1/ 25073_Architectural_WS_2025.rvt

099123 INTERIOR PAINTING

Storage and Field Conditions:
Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg. F. Remove rags and waste from storage areas daily.

Apply paints only when temperatures of surfaces to be painted and ambient air temperatures are between 50 and 95 deg. F. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

Materials:
Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

Colors:
(PNT-1):
Basis-of-Design; Sherwin Williams "Pure White" – SW 7005
Location: Typical Walls and Ceiling unless noted otherwise.
Finish / Sheen: Eg-Shel at Walls, Flat at Ceilings and Underside of Bulkheads

(PNT-2):
Basis-of-Design; Sherwin Williams "Tricorn Black" – SW 6258
Finish / Sheen: Eg-Shel at Walls, Flat at Ceilings and Underside of Bulkheads

Preparation:
Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated for both preparation and application.

Remove hardware, lighting fixtures and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.

Clean and prepare surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

Application:
Paint exposed surfaces, new and existing unless otherwise indicated. Do not paint prefinished items, items with an integral finish, operating parts, and labels unless otherwise indicated.

Apply paints according to manufacturer's written instructions. Use brushes only where the use of other applicators is not practical. Use rollers for finish coat on all interior walls and ceilings.

Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color and appearance.

Interior Paint Application Schedule:
All systems are scheduled using products by **The Sherwin Williams Company as the Basis-of-Design**. Comparable systems by Diamond Vogel Paints, ICI Paints and PPG Architectural Finishes, Inc. are also acceptable.

Gypsum Board Substrates:

Typical Walls: (Acrylic Latex)

Finished Sheen: Low Lustre
Prime Coat: ProMar 200 Zero VOC Interior Latex Primer (B28W02600)
Intermediate Coat: Cashmere Interior Acrylic Latex (D17W00151)
Topcoat: Cashmere Interior Acrylic Latex (D17W00151)

Typical Ceilings: (Acrylic Latex)

Finished Sheen: Low Lustre
Prime Coat: ProMar 200 Zero VOC Interior Latex Primer (B28W02600)
Intermediate Coat: Cashmere Interior Acrylic Latex (D17W00151)
Topcoat: Cashmere Interior Acrylic Latex (D17W00151)

Steel Substrates:

Acrylic Interior System
Prime Coat: Pro Industrial Pro-Cryl® Universal Primer (B66W310)
Intermediate Coat: Pro Industrial 0 VOC Acrylic Semi-Gloss (B66W651)
Topcoat: Pro Industrial 0 VOC Acrylic Semi-Gloss (B66W651)

099300 STAINING AND TRANSPARENT FINISHING

Storage and Field Conditions:
Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg. F. Remove rags and waste from storage areas daily.

Apply finishes only when temperatures of surfaces to be finished and ambient air temperatures are between 50 and 95 deg. F. Do not apply finishes when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces. Do not apply exterior finishes in snow, rain, fog or mist.

Materials:
Provide materials for use within each coating system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.

Preparation:
Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates indicated for both preparation and application.

Remove hardware, covers, plates and similar items already in place that are removable. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and finishing. After completing finishing operation, use workers skilled in the trades involved to reinstall items that were removed.

Clean and prepare surfaces to be finished according to manufacturer 's written instructions for each substrate condition and as specified. Remove dust, dirt, oil and grease by washing with a detergent solution; rinse thoroughly with clean water and allow to dry. Remove grade stamps and pencil marks by sanding lightly. Remove loose wood fibers by brushing. Remove mildew by scrubbing with commercial wash formulated for mildew removal and as recommended by stain manufacturer.
At interior wood substrates, scrape and clean knots and apply coat of knot sealer before applying primer. Apply wood filler paste to open-grain woods as defined in "MPI Architectural Painting Specification Manual " to produce smooth, glasslike finish. Sand surfaces exposed to view and dust off. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dry.

Application:
Apply finishes according to manufacturer's written instructions.

Apply finishes to produce surface films without cloudiness, holidays, lap marks, brush marks, runs, ropiness, or other surface imperfections.

Wood Finish System Schedule:
All systems are scheduled using products by **The Sherwin Williams Company as the Basis-of-Design**.

Wood Substrates: Interior Architectural millwork, trim and doors

Water-Based Polyurethane over Stain System:

Stain Coat: Basis-of-Design ; Sher-Wood BAC Stain
First Intermediate Coat: Water-based varnish matching topcoat.
Second Intermediate Coat: Water-based varnish matching topcoat.
Topcoat: Clear Waterbase Polyurethane (A68F90), (Satin finish).
Color: Match PNT-2

101400 SIGNAGE

General:
Provide all signage as applicable to the project in order to obtain final occupancy.

Signs shall be required at any restroom, stair, fire sprinkler room, elevator equipment room, exterior vertical shaft-way and primary building entrance.

Any permits required for obtaining signs shall be the responsibility of the Contractor and shall be included in the cost of the construction.

Room identification signs shall be constructed with smooth, uniform surfaces with message and characters having uniform faces, sharp corners and precisely formed lines and profiles. Sign face shall be an engineered PVC/Acrylic allow with integral background colors and high impact resistance. Provide tactile copy and grade 2 braille raised 1/32 inch minimum from plaque surface using manufacturer 's standard process. Lettering and graphics shall be precisely formed, uniformly opaque and in compliance with relevant ADA regulations and requirements indicated for size, style, spacing, content, position and colors.
Background colors shall be high contrast semi-matte integral colors for graphics with all integral colors utilizing U.V. stabilized resins with industrial grade pigments. Edges shall be cut smooth, square and utilize rounded corners. Mount signs with manufacturer 's standard two-face tape. Font style shall be Arial. Schedule of Room Identification Signs is as follows:

- Restrooms: Size – 6" wide x 8" high. Text/message shall be "MEN" at men's restrooms, "WOMEN" at women's restrooms and "FAMILY" at family restrooms. Provide an integrated graphic representational of the appropriate use with text. Signs shall be mounted on door (for in-swinging doors) or on wall, outside of the swing of the door (for out-swinging doors).

Building identification signs shall be constructed with field-applied, vinyl characters die cut from 3 to 3.5 mil thick, weather-resistant vinyl film with release liner on back and carrier film on front for on-site alignment and application. Schedule of Building Identification Signs is as follows:

- Entry Door: Provide 8 " high field-applied vinyl character mounted to glass at top of entry door panel. Text/message shall be the buildings numerical address as defined by the AHJ.
- Final placement of building identification signs shall be confirmed by the contractor with the AHJ prior to installation.

Departmental Signage: Refer to Drawings.

101100 VISUAL DISPLAY SURFACES

General:
Obtain each product from single source from single manufacturer.

Do not deliver or install until spaces are enclosed and weathertight, wet work is complete and dry work above ceilings is complete with temporary HVAC system operating and maintaining an ambient temperature and humidity condition comparable to occupancy conditions.

Store vertically, with packaging materials between each unit.

Markerboards:
Provide porcelain-enamel markerboard assembly that is a balanced, high-pressure, factory-laminated markerboard assembly of three-ply construction consisting of backing sheet, 1/2 inch thick fiberboard core and 0.021-inch thick porcelain-enamel face sheet with high-gloss finish with the following accessories:

- Continuous display rail integral with map rail fabricated from cork approximately 1 to 2 inches wide.
- End stops located at each end of map rail.
- Two map hooks with flexible metal clips for every 48 inches of map rail or fraction thereof.
- One flag holder for each room.
- Solid type chalktray.

Units are to be factory assembled with clear anodic aluminum frames and trim, 0.010 mm or thicker. Corners shall be square and mitered to a neat hairline closure. Units are to be mounted with a rail support system at a mounting height of 36 inches above finished floor to the top of the chalktray.

Tackboards:
Provide plastic-impregnated cork sheet: Seamless, homogeneous, self-sealing sheet consisting of granulated cork, linseed oil, resin binders, and dry pigments that are mixed and calendared onto fabric backing; with washable vinyl finish and integral color throughout.

122413 ROLLER WINDOW SHADES

General:
Product Standard: Unless noted otherwise, fabricate roller shades to comply with WCMA A 100.1.

Coordinate blocking requirements with other trades.

Field verify all dimensions prior to fabrication.

Fabrication:
Fabricate units in sizes to fill window and other openings as follows;

Between (Inside) Jamb Installations: Width equal to jamb-to-jamb dimension of opening in which shade is installed less 1/4 inch per side or 1/2-inch total, plus or minus 1/8-inch. Length equal to head-to-sill dimension of opening in which shade is installed less 1/4-inch, plus or minus 1/8-inch.

Outside of Jamb Installations: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separation between openings.

Fabricate shadebands without battens or seams to extent possible.

Manually Operated Shades with Single Rollers:
Basis-of-Design; SWF Contract, True Performance Manual Solar Shades

(RS-X):
See Material List

Installation:
Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions. For opaque shadebands, located so shadeband is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.

Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

123623.13 PLASTIC-LAMINATE COUNTERTOPS

General:
Field verify all dimensions of countertops after base cabinets are installed but before countertop fabrication is complete.

Do not deliver or install countertops until building is enclosed, wet-work is 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.

Quality Standard:
Unless otherwise indicated, comply with the "Architectural Woodwork Standards " for grades of plastic-laminate-clad countertops indicated for construction, finishes, installation and other requirements.

Material:

PLAM-X: Basis-of-Design:
See Materials List.

Plywood to be exterior softwood plywood complying with DOC PS 1, Grade C-C Plugged, touch sanded.

Grade: Custom

Edge Treatment: 3.0-mm PVC edging.

Core Material: Particleboard

Core Thickness: 3/4 inch with countertop thickness built up to 1-1/2 inches at front, back and at ends with additional layers of core material laminated to top.

Fabrication:
Fabricate to dimensions, profiles and details indicated. Provide front and end overhang of 1 inch over base cabinets.

When possible, fabricate countertops without joints. Where unable to fabricate without joints, fabricate in sections for joining in field. Joint locations should not be within 18 inches of a sink or cooktop and not where a countertop section less than 36 inches long would result.

Seal edges of cutouts by saturating with varnish.

Installation:
Install countertops level to a tolerance of 1/8 inch in 8 feet, 1/4 inch maximum. Do not exceed 1/64-inch difference between planes of adjacent units.

Install backsplashes and end splashes by adhering to wall and countertops with adhesive. Mask areas of countertops and splashes adjacent to joints to prevent adhesive smears.

Seal joints between countertop and backsplash, if any, and joints where countertop and backsplash abut walls with mildew-resistant silicone sealant or another permanently elastic sealing compound recommended by countertop material manufacturer.

123661.19 QUARTZ AGGLOMERATE COUNTERTOPS

General:
Field verify all dimensions of countertops after base cabinets are installed but before countertop fabrication is complete.

Materials:
Solid sheets consisting of quartz aggregates bound together with a matrix of filled plastic resin and complying with ICPA SS-1, except for composition.

(QTZ-X): Basis-of-Design;
See Materials List.

Plywood to be exterior softwood plywood complying with DOC PS 1, Grade C-C Plugged, touch sanded.

Fabrication:
Fabricate according to quartz agglomerate manufacturer 's written instructions and the AWI "Architectural Woodwork Standards "

Grade: Premium

Configuration: Front to be straight, slightly eased at top. Back and End Splashes to be slightly eased at corner.

Countertops to be 3CM with Backsplashes (where indicated) to be 2CM

Fabricate tops with shop-applied edges unless otherwise indicated. Fabricate with loose backsplashes for field assembly.

When possible, fabricate countertops without joints. Where unable to fabricate without joints, fabricate in sections for joining in field. Joint locations should not be within 18 inches of a sink or cooktop and not where a countertop section less than 36 inches long would result.

Cutouts and Holes: Make cutouts for fixtures in shop using template or pattern furnished by fixture manufacturer. Form cutouts to smooth, even curves. Provide vertical edges, slightly eased at juncture of cutout edges with top and bottom surfaces of countertop and projecting 3/16 inch into fixture opening.

Installation:
Install countertops level to a tolerance of 1/8 inch in 8 feet, 1/4 inch maximum. Do not exceed 1/64-inch difference between planes of adjacent units.

Fasten subtops to cabinets by screwing through subtops into cornerblocks or base cabinets. Shim as needed to align subtops in a level plane.

Secure countertops to subtops with adhesive according to material manufacturer 's written instructions. Align adjacent surfaces and using adhesive in color to match countertop, form seams to comply with manufacturer 's written instructions. Carefully dress joints smooth, remove surface scratches and clean entire surface.

Bond joints with adhesive and draw tight as countertops are set. Mask ares of countertops adjacent to joints to prevent adhesive smears.

Install backsplashes and end splashes by adhering to wall and countertops with adhesive. Mask areas of countertops and splashes adjacent to joints to prevent adhesive smears.

Apply sealant to gaps at walls; comply with Section 079200 "Joint Sealants".

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

REGISTERED ARCHITECT
DAVID E. QUADE
No. 10201
08/21/2026
STATE OF ARKANSAS

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Construction Documents
Date:	August 20, 2026
Drawn by:	PD & KT
Checked by:	DEQ
Designer:	KT
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

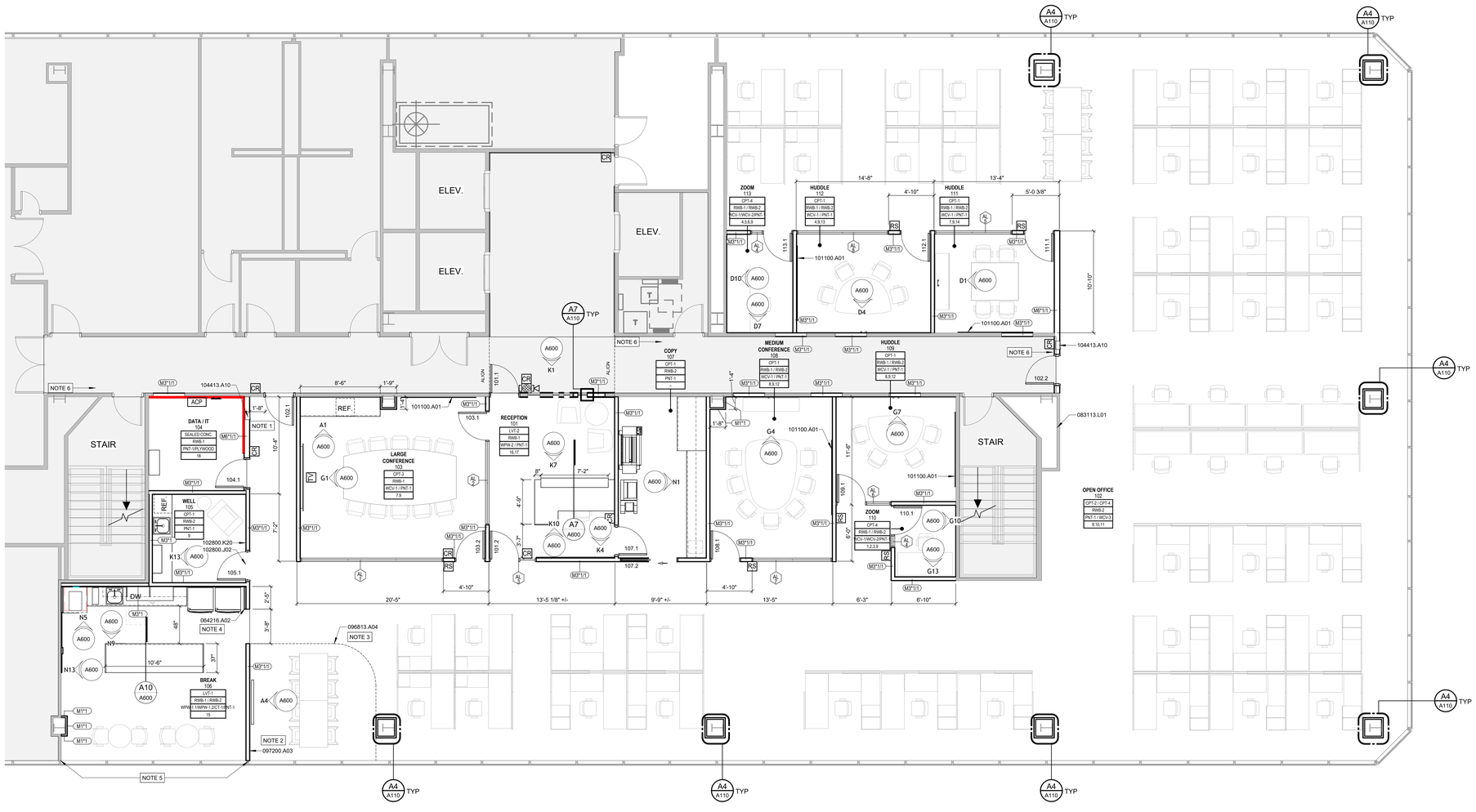
Sheet Title:

Architectural Specifications

Sheet Number:

AG203

8/21/2026 4:12:07 PM
Autodesk Docs



A1 FLOOR PLAN

SCALE: 3/16" = 1'-0"

FOURTH LEVEL

KEYNOTE LEGEND

064216.A02	(WPW-1.2) - 2" THICK ACOUSTIC WOOD WALL PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
083113.L01	FIRE-RATED SECURITY ACCESS DOOR WITH EXPOSED FLANGE (24x24)
096813.A04	(CPT-4) CARPET TILE
097200.A03	(WCV-3) - ACOUSTIC WALL COVERING, SEE INTERIOR ELEVATIONS FOR SEAM LOCATION
101100.A01	(GB-1) - GLASS MARKER BOARD
102800.J02	FRAMED MIRROR - 24x48
102800.K20	(HDWR-3) - SURFACE MOUNTED COAT HOOK
104413.A10	RECESSED FIRE EXTINGUISHER CABINET

SHEET A100 SHEET SPECIFIC NOTES

NOTE 1 1'-6" CLEAR MIN. FOR ADA - ALERT ARCHITECT IF MINIMUM IS NOT MET

NOTE 2 RWB-1 TO BE INSTALLED BELOW WCV-3

NOTE 3 CPT-4 IS TO BE INSTALLED IN AREA INDICATED BY DASHED LINE. CPT-4 IS TO ALIGN WITH OPENING TO BREAK 106 AND THE COLUMN GWB TO THE SOUTH

NOTE 4 WPW-1.2 TO BE MOUNTED 4 1/2" A.F.F. AND ALIGN WITH TOP OF ADJACENT WOOD PANELS, APPROXIMATELY 9'-3 1/2" HIGH. PANEL DEPTH IS TO BE WIDTH OF WALL, APPROXIMATELY 2'-5" WIDE.

NOTE 5 EXTRUDED END CAP. BASIS OF DESIGN MULLION MATE END CAP AS MANUFACTURED BY GORDON INC. FACTORY FINISH TO MATCH ALUMINUM WINDOW FRAME FINISH. COORDINATE SIZE WITH WALL CONSTRUCTION.

NOTE 6 PAINT TO MATCH EXISTING CORRIDOR TO THE EXTENTS SHOWN.

FINISH PLAN NOTES

1 WCV-1 LOCATED ON EAST WALL. SEE INTERIOR ELEVATIONS FOR SEAM LOCATION.
2 WCV-2 LOCATED ON SOUTH WALL. SEE INTERIOR ELEVATIONS FOR SEAM LOCATION.
3 RWB-1 IS TO BE INSTALLED ON EAST AND SOUTH WALLS. RWB-2 IS TO BE INSTALLED ON NORTH AND WEST WALLS.
4 WCV-1 LOCATED ON SOUTH WALL. SEE INTERIOR ELEVATIONS FOR SEAM LOCATION.
5 WCV-2 LOCATED ON WEST WALL. SEE INTERIOR ELEVATIONS FOR SEAM LOCATION.
6 RWB-1 IS TO BE INSTALLED ON SOUTH AND WEST WALLS. RWB-2 IS TO BE INSTALLED ON NORTH AND EAST WALLS.
7 WCV-1 LOCATED ON WEST WALL. SEE INTERIOR ELEVATIONS FOR SEAM LOCATION.
8 WCV-1 LOCATED ON NORTH WALL. SEE INTERIOR ELEVATIONS FOR SEAM LOCATION.
9 CARPET TILE IS TO RUN EAST-WEST
10 CPT-4 IS TO BE INSTALLED IN COLLABORATION ZONE INDICATED ON PLAN
11 WCV-3 IS TO BE INSTALLED ON ON WEST WALL OF COLLABORATION ZONE. SEE INTERIOR ELEVATION FOR SIZE.
12 RWB-1 IS TO BE INSTALLED ON NORTH WALL. RWB-2 IS TO BE INSTALLED ON ALL OTHER WALLS.
13 RWB-1 IS TO BE INSTALLED ON SOUTH WALL. RWB-2 IS TO BE INSTALLED ON ALL OTHER WALLS.
14 RWB-1 IS TO BE INSTALLED ON WEST WALL. RWB-2 IS TO BE INSTALLED ON ALL OTHER WALLS.
15 RWB-1 IS TO BE INSTALLED ON NORTH CASEWORK AND BREAK ISLAND CASEWORK. RWB-2 IS TO BE INSTALLED ON ALL OTHER WALLS.
16 WPW-2 TO BE INSTALLED ON NORTH AND SOUTH WALLS. SEE INTERIOR ELEVATIONS FOR DIMENSIONS.
17 LVT-2 IS TO RUN NORTH-SOUTH
18 FIRE RATED PLYWOOD BACKERBOARD, PAINTED PNT-1, ON NORTH AND EAST WALLS TO 8'-0" A.F.F.

ROOM FINISH TAG

ROOM NAME

ROOM #

FLOOR FINISH
BASE FINISH
PRIMARY WALL FINISH

INTERIOR FINISH MATERIALS: REFER TO MATERIALS LIST FOR MATERIAL INDEX CODES

FINISH TAG NOTES

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

REGISTERED ARCHITECT
DAVID E. QUADE
No. 10201
08/21/2026
STATE OF ARKANSAS

REVISION SCHEDULE

#	Date	Revision Description

Issue: Construction Documents
Date: August 20, 2026
Drawn by: PD & KT
Checked by: DEQ
Designer: KT
Project Architect: DEQ

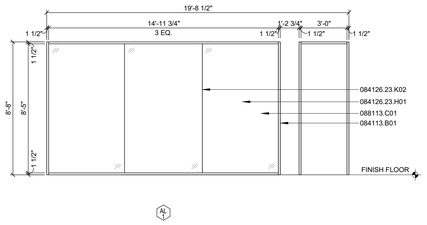
These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

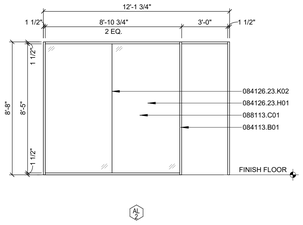
Sheet Title:

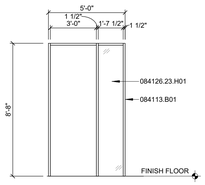
Fourth Level Floor Plan

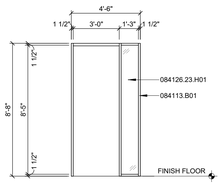
Sheet Number:

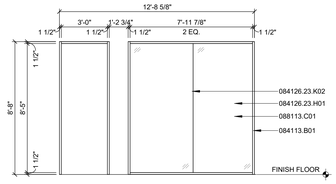
A100

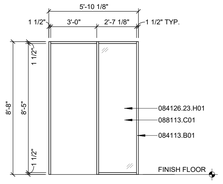


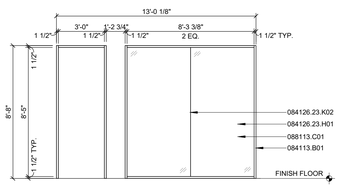


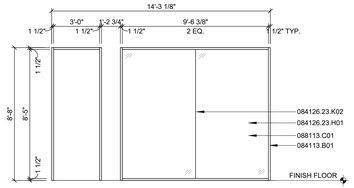










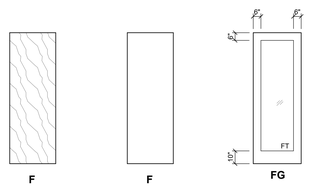


E1 FRAME TYPES

MATERIAL LIST

MARK	DESCRIPTION	SECTION	MANUFACTURER	MATERIAL/ COLOR	FINISH/ INSTALL	SIZE	LOCATION, U.N.O.	NOTES
DIVISION 06: WOODS, PLASTICS AND COMPOSITES								
HDWR-1	HARDWARE - CABINET TAB PULL	06 41 16	MOCKETT	DP3C - TAB DRAWER PULL	MATTE BLACK	1-1/2" X 6" L	TYP U.N.O.	--
HDWR-2	HARDWARE - GROMMET LINER	06 41 16	MOCKETT	EDP3 - FLIP TOP GROMMET SET WITH CAP AND LINER	BLACK	2-1/2" DIAMETER	RECEPTION 101	--
HDWR-3	HARDWARE - COAT HOOK	06 41 16	SIGNATURE HARDWARE	ELTER MODERN BRASS DOUBLE HOOK	MATTE BLACK	5"H	WELLNESS 105	--
PLAM-1	PLASTIC LAMINATE	06 41 16	WILSONART	7938 NEW AGE OAK	SOFT GRAIN FINISH	--	--	VERTICAL ORIENTATION
PLAM-2	PLASTIC LAMINATE	06 41 16	FORMICA	8552-NG BLACK BIRCHPLY	NATURAL GRAIN FINISH	--	LARGE CONFERENCE 103 & BREAK 106	--
WD-1	WOOD - NATURAL	06 42 16	--	RIFT CUT WHITE OAK	CLEAR MATTE, ICA URETHANE (2 COATS)	--	--	--
WD-2	WOOD - EBONY	06 42 16	--	RIFT CUT WHITE OAK	TINTED TO MATCH PNT-2, MATTE FINISH	--	--	PNT-2 TINTED CONVERSION VARNISH. (2) WET COATS CHEMCRAFT 421-6300 CHEMLIFE 24 CONVERSION VARNISH SEALER; (1) TOP COAT CHEMCRAFT 421-6320 CHEM LIFE 24 CONVERSION VARNISH CLEAR TC (LOW GLOSS). GRAIN SHOULD SHOW THROUGH VARNISH. PROVIDE ARCH SAMPLE
WPW-1.1	WOOD PANEL WALL - ACOUSTICAL	06 42 16	SOUNDPLY	LATUS WP-LRM19 - 3/4" THICK ACOUSTIC WOOD WALL PANEL	WHITE OAK RIFT CUT, FINISH TO MATCH WD-1	SIZE VARIES, SEE DRAWINGS	BREAK 106	INSTALL DIRECT MOUNT WITH Z CLIPS. ALL PANELS TO BE EDGEBANDED TO MATCH PANEL FACE BY MANUFACTURER
WPW-1.2	WOOD PANEL WALL - ACOUSTICAL	06 42 16	SOUNDPLY	LATUS WP-LRM51 - 2" THICK ACOUSTIC WOOD WALL PANEL	WHITE OAK RIFT CUT, FINISH TO MATCH WD-1	SIZE VARIES, SEE DRAWINGS	BREAK 106	INSTALL DIRECT MOUNT WITH Z CLIPS. ALL PANELS TO BE EDGEBANDED TO MATCH PANEL FACE BY MANUFACTURER
WPW-1.3	WOOD WALL PANEL	06 42 16	SOUNDPLY	3/4" PLYWOOD VENEER PANEL	WHITE OAK RIFT CUT, FINISH TO MATCH WD-1	SIZE VARIES, SEE DRAWINGS	BREAK 106	INSTALL DIRECT MOUNT WITH Z-CLIPS; VENEER PANEL TO MATCH AND BE SEQUENTIAL WITH WPW-1.1 AND WPW-1.2. ALL PANELS TO BE EDGEBANDED TO MATCH PANEL FACE BY MANUFACTURER
WPW-2	WOOD PANEL WALL - EBONY	06 42 16	--	3/4" PLYWOOD VENEER PANEL	WHITE OAK RIFT CUT, FINISH TO MATCH WD-2	SIZE VARIES, SEE DRAWINGS	RECEPTION 101	INSTALL DIRECT MOUNT WITH Z-CLIPS. PNT-2 TINTED CONVERSION VARNISH TO MATCH WD-2
DIVISION 09: FINISHES								
CT-1	CERAMIC TILE	09 30 13	ANN SACKS	CONTEXT - 1X6 STACKED MOSAIC, BLACK / METALLIC	VERTICAL STACKED	12" X 12" SHEET	BREAK 106	GROUT: MAPEI ULTRACOLOR PLUS FA, BLACK 5010
APC-1	ACOUSTIC CEILING PANEL	09 51 13	ARMSTRONG	3256 OPTIMA SQUARE TEGULAR 9/16"	WHITE	48" X 48" X 1" THICK	TYPICAL U.N.O.	GRID: SUPRAFINE XL 9/16" EXPOSED TEE; AT SUSPENDED CLOUD LOCATIONS, PROVIDE 6"H AXIOM CLASSIC TRIM ALL SIDES (COLOR: WHITE)
APC-2	ACOUSTIC CEILING PANEL	09 51 13	ARMSTRONG	3251 OPTIMA SQUARE TEGULAR 9/16"	WHITE	24" X 24" X 1" THICK	105, 107, 109, 110, 111, 113	GRID: SUPRAFINE XL 9/16" EXPOSED TEE
RWB-1	RUBBER WALL BASE	09 65 13	TARKETT	MW 40 H MANDALAY 4 1/2" 40 BLACK	--	4.5" H	TYPICAL U.N.O.	--
RWB-2	RUBBER WALL BASE	09 65 13	TARKETT	MW 06 H MANDALAY 4 1/2" 08 ICICLE	--	4.5" H	WHERE NOTED ON FINISH NOTES	--
LVT-1	LUXURY VINYL TILE	09 65 19	INTERFACE	LEVEL SET COLLECTION, TEXTURED STONES 4.5MM, LIGHT CONCRETE A00308	MONOLITHIC	50CM X 50CM X 4.5MM THICK	BREAK 106	--
LVT-2	LUXURY VINYL TILE	09 65 19	INTERFACE	NORTHERN GRAIN 4.5 MM PLANKS, A02611 OAK SATIN	ASHLAR	25CM X 1M PLANK	RECEPTION 101	--
CPT-1	CARPET TILE	09 68 13	INTERFACE	WORLD WOVEN WW870, 105345 CHARCOAL WEFT	ASHLAR	25CM X 1M PLANK	105, 107, 108, 109, 111, 112	--
CPT-2	CARPET TILE	09 68 13	INTERFACE	WORLD WOVEN WW870, 105344 FLANNEL WEFT	ASHLAR	25CM X 1M PLANK	OPEN OFFICE	--
CPT-3	CARPET TILE	09 68 13	INTERFACE	WORLD WOVEN WW896, 103216 PLATEAU WEAVE	ASHLAR	25CM X 1M PLANK	LARGE CONFERENCE 103	--
CPT-4	CARPET TILE	09 68 13	INTERFACE	WORLD WOVEN WW870, CUSTOM COLOR TO MATCH ARCHITECTS SAMPLE #275184-003	ASHLAR	25CM X 1M PLANK	ZOOM ROOMS AND COLLAB SPACE	--
TS-1	TRANSITION STRIP	09 68 13	SCHLUTER	SCHIENE, STAINLESS STEEL	STAINLESS STEEL	COORDINATE WITH FLOORING THICKNESS	CONCRETE FLOORING TO CARPET FLOORING	--
TS-2	TRANSITION STRIP	09 68 13	SCHLUTER	VINPRO-S, STAINLESS STEEL	STAINLESS STEEL	COORDINATE WITH FLOORING THICKNESS	LVT FLOORING TO CARPET FLOORING	--
WCV-1	WALLCOVERING - ACOUSTIC	09 72 00	MOMENTUM	NUFELT WALLCOVERING, PTNF-06 WISHFUL THINKING	--	63" W ROLL	ZOOM / MEETING ROOMS	PROVIDE LEVEL 5 FINISH AT WALL SUBSTRATE; DIRECT INSTALL WCV WITH FULL SPREAD ADHESIVE; SEE INT ELEVATIONS FOR SEAM LOCATIONS
WCV-2	WALLCOVERING - ACOUSTIC	09 72 00	MOMENTUM	NUFELT WALLCOVERING, PTNF-04 ADVENTURE	--	63" W ROLL	ZOOM ROOMS / MEETING ROOMS	PROVIDE LEVEL 5 FINISH AT WALL SUBSTRATE; DIRECT INSTALL WCV WITH FULL SPREAD ADHESIVE; SEE INT ELEVATIONS FOR SEAM LOCATIONS
WCV-3	WALLCOVERING - ACOUSTIC	09 72 00	FILZFELT	435 SMARAGD	--	70 3/4" W ROLL	COLLAB SPACE	PROVIDE LEVEL 5 FINISH AT WALL SUBSTRATE; DIRECT INSTALL WCV WITH FULL SPREAD ADHESIVE; SEE INT ELEVATIONS FOR SEAM LOCATIONS
ABC-1	ACOUSTIC BAFFLE CEILING	09 84 36	ACOUFELT	TRUSS CEILING BAFFLES - PREMIER COLLECTION, METAL M033	--	12"H X 93"L X 2" THICK BLADE; 4-1/2" O.C. SPACING	BREAK 106	INSTALL WITH CABLE DECK MOUNT EMBEDDED BAFFLE HANGING KIT
PNT-1	WALL / CEILING PAINT	09 91 23	SHERWIN WILLIAMS	PURE WHITE SW 7005	--	--	TYP U.N.O.	--
PNT-2	ACCENT PAINT (BLACK)	09 91 23	SHERWIN WILLIAMS	TRICORN BLACK SW 6258	--	--	--	--
DIVISION 10: SPECIALTIES								
GB-1	GLASS MARKER BOARD	10 11 00	CLARUS	FLOAT MAGNETIC	SMOOTH WHITE / GLOSS FINISH	5'-0" x 8'-0"	CONFERENCE AND HUDDLE ROOMS	INSTALL HORIZONTAL ON CONCEALED FLOAT MOUNT; PROVIDE (1) JET BLACK MAGNETIC BOX TRAY PER BOARD
WCV-4	WALLCOVERING - TACKABLE	10 11 00	KOROSEAL	WALLTALKERS TAC-WALL, HARBOR	INSTALL ROLL HORIZONTAL TO AVOID SEAMS	48"W ROLL	--	PROVIDE ALUMINUM TRIM AT ALL EXPOSED EDGES
DIVISION 12: FURNISHINGS								
RS-1	MANUAL ROLLER SHADES	12 24 13	MECHOSHADE	EUROTWILL	6211 GRAPHITE - 1% OPEN	--	--	PROVIDE AT ALL EXTERIOR WINDOWS; EDGE OF SHADES TO ALIGN WITH CENTER OF MULLIONS, U.N.O.
QZ-1	QUARTZ	12 36 61	CAMBRIA	WHITE CLIFF - POLISHED	--	2 CM	--	--
QZ-2	QUARTZ	12 36 61	CAMBRIA	BLACKPOOL - MATTE	--	2 CM	--	--

J7 MATERIAL LIST



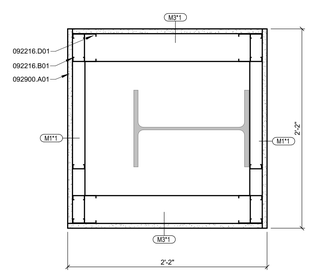
SCALE: 1/4" = 1'-0"

E7 DOOR TYPES

DOOR SCHEDULE

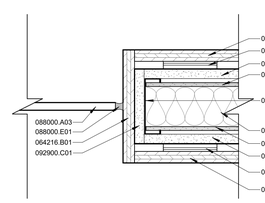
Door No.	Door Size	F.R.	DOOR Elev.	DOOR Mat'l	DOOR Fin.	FRAME Type	FRAME Mat'l	FRAME Fin.	Hdwr. Set	NOTES	Door No.
101.1	3'-0" x 8'-6 1/2"		FG	WD	STN	AL-#	AL	BLACK	#1	CR	101.1
101.2	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#3	CR	101.2
102.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	BLACK	BLACK	#4	CR	102.1
102.2	3'-0" x 7'-0"		F	WD	STN	HM-#	HM	PNT	#3	CR	102.2
103.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#5	Passage	103.1
103.2	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#3	CR	103.2
104.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	BLACK	BLACK	#4	CR	104.1
105.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	BLACK	BLACK	#6	Privacy	105.1
107.1	3'-0" x 7'-0"		F	WD	PNT-1	HM-#	HM	PNT-1	#2	CR	107.1
107.2	3'-0" x 8'-6 1/2"		F	WD	STN	HM-#	HM	PNT	#7	Pocket, Passage	107.2
108.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#5	Passage	108.1
109.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#5	Passage	109.1
110.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#5	Passage	110.1
111.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#5	Passage	111.1
112.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#5	Passage	112.1
113.1	3'-0" x 8'-6 1/2"		F	WD	STN	AL-#	AL	BLACK	#5	Passage	113.1

E11 DOOR SCHEDULE



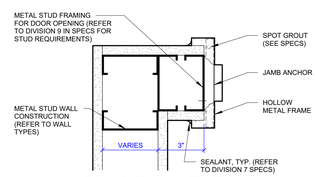
A4 PLAN DETAIL

SCALE: 1 1/2" = 1'-0" INTERIOR COLUMN WRAP PLAN DETAIL - TYPICAL



A7 PLAN DETAIL

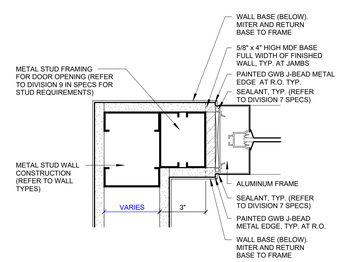
SCALE: 3" = 1'-0" PD_Reception Window @ Wood Panel



TYPICAL DOOR JAMB IN METAL STUD FRAMING

A10 TYP. HM DOOR JAMB DETAIL

SCALE: 3" = 1'-0"



TYPICAL ALUMINUM FRAME JAMB IN METAL STUD FRAMING

A13 TYPICAL ALUM. JAMB DETAIL

SCALE: 3" = 1'-0"

KEYNOTE LEGEND

061000.F01	WOOD BLOCKING
064216.B01	(WPW-2) - WOOD PANEL WALL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.C01	ALUMINUM Z-CLIP HARDWARE - FIELD INSTALLED
072100.C01	UNFACED GLASS-FIBER BATT INSULATION - FILL VOID
084113.B01	NON-THERMAL INTERIOR ALUMINUM STOREFRONT ASSEMBLY - BASIS-OF-DESIGN; RACO - CLASSIC, CENTER GLAZED
084126.23.H01	1/2-INCH CLEAR FLOAT GLASS - PROVIDE FULLY TEMPERED WHERE REQUIRED BY CODE
084126.23.K02	CLEAR SILICONE JOINT SEALANT AT ALL PANEL TO PANEL JOINTS AND ALL PANEL TO WALL JOINTS
088000.A03	(MG-3) 1/2-INCH CLEAR FLOAT GLASS - PROVIDE FULLY TEMPERED AT LOCATIONS IDENTIFIED AND WHERE REQUIRED BY CODE
088000.E01	EXTRUDED CLEAR SILICONE GASKET
088113.C01	OWNER PROVIDED DECORATIVE FILM OVERLAY APPLIED TO SPECIFIED GLAZING PANELS - APPLY TO 'PRIVATE' SIDE OF GLAZING PANEL
092216.B01	1-5/8 INCH METAL FRAMING AT THICKNESS AND SPACING REQUIRED TO MEET SPECIFIED DEFLECTION
092216.D01	3-5/8 INCH METAL FRAMING AT THICKNESS AND SPACING REQUIRED TO MEET SPECIFIED DEFLECTION
092900.A01	5/8-INCH TYPE 'X' INTERIOR GYPSUM BOARD - REFER TO SPECIFICATIONS, PART 3 ARTICLE 'APPLYING INTERIOR GYPSUM BOARD' FOR INSTALLATION LOCATIONS OF THE VARIOUS TYPES OF WALLBOARD APPLICABLE TO THE PROJECT
092900.C01	5/8-INCH TYPE 'X' INTERIOR GYPSUM BOARD

SHEET A110 SHEET SPECIFIC NOTES

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

REGISTERED ARCHITECT
DAVID E. QUADE
No. 10201
08/21/2026
STATE OF ARKANSAS

REVISION SCHEDULE

#	Date	Revision Description

Issue: Construction Documents
Date: August 20, 2026
Drawn by: PD & KT
Checked by: DEQ
Designer: KT
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

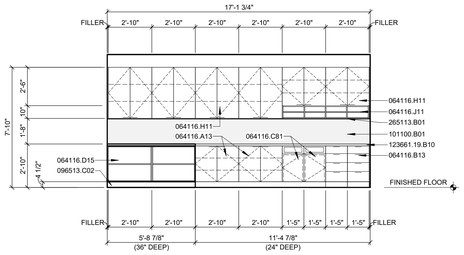
Sheet Title:

Finish Schedule, Door Schedule, Frame Types, and Door Types

Sheet Number:

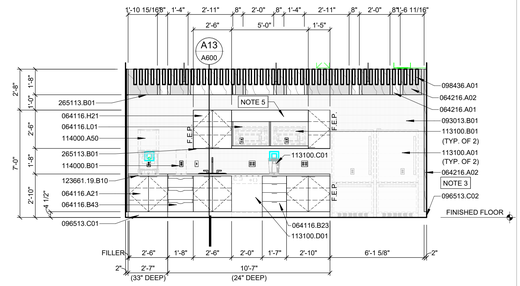
A110

Autodesk Docs://25073_Olsson North Little Rock 1/ 25073_Architectural_WS_2025.rvt
8/21/2026 4:12:38 PM



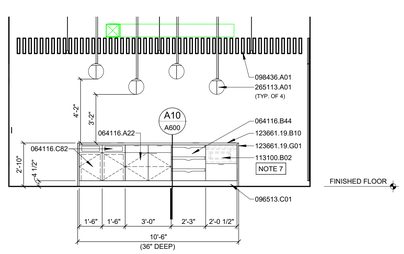
N1 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" COPY 107, EAST



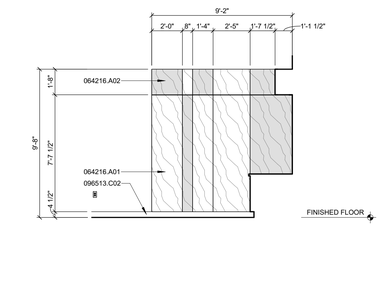
N5 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" BREAK 106, NORTH



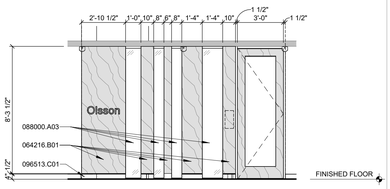
N9 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" BREAK 106, SOUTH



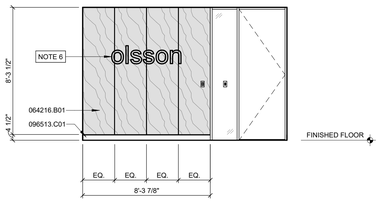
N13 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" BREAK 106, WEST



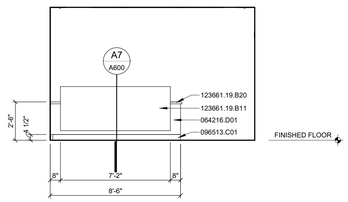
K1 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" RECEPTION 101, SOUTH



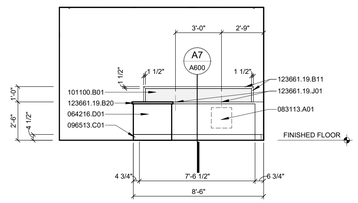
K4 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" RECEPTION 101, SOUTH



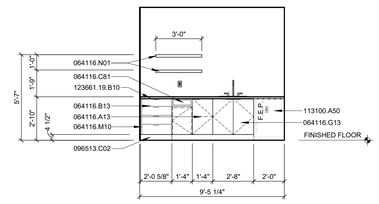
K7 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" RECEPTION 101, SOUTH



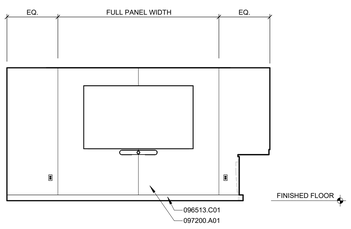
K10 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" RECEPTION 101, NORTH



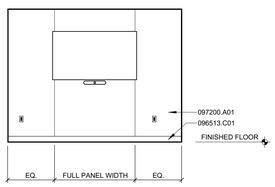
K13 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" WELLNESS ROOM, WEST



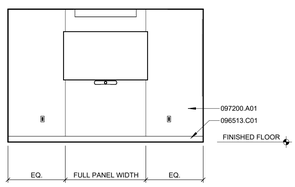
G1 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" LARGE CONFERENCE 103, WEST



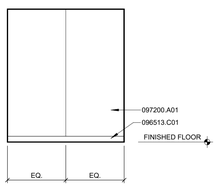
G4 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" CONFERENCE 108, NORTH



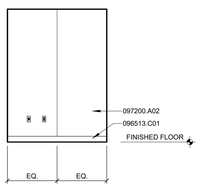
G7 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" HUDDLE 109, NORTH



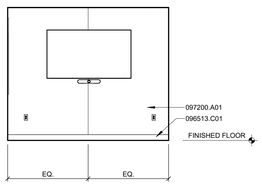
G10 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" ZOOM 110, EAST



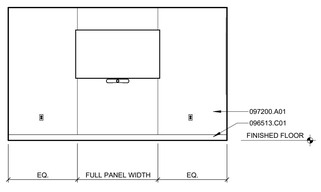
G13 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" ZOOM 110, SOUTH



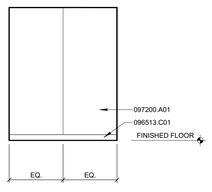
D1 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" HUDDLE 111, WEST



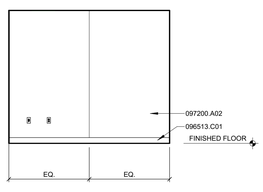
D4 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" HUDDLE 112, SOUTH



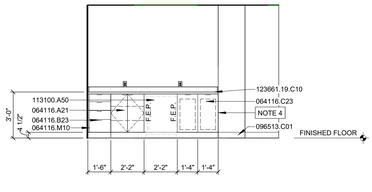
D7 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" ZOOM 113, SOUTH



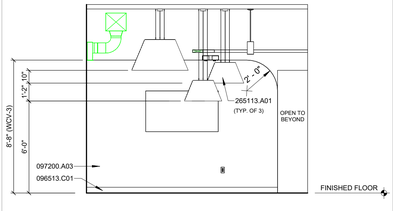
D10 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" ZOOM 113, WEST



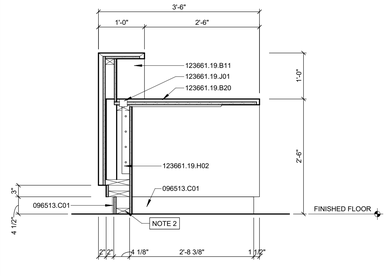
A1 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" LARGE CONFERENCE 103, NORTH



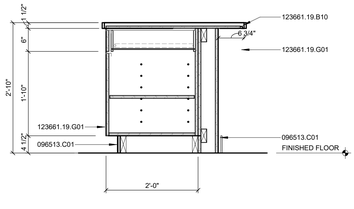
A4 INTERIOR ELEVATION

SCALE: 1/4" = 1'-0" COLLABORATION SPACE, WEST



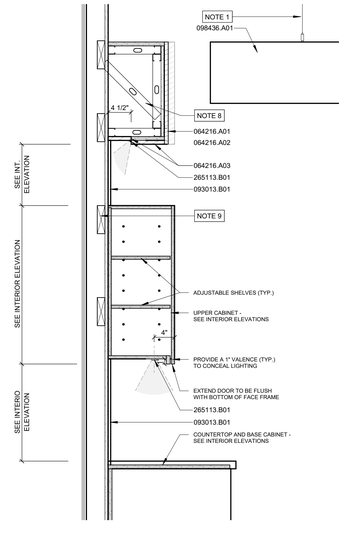
A7 SECTION DETAIL

SCALE: 3/4" = 1'-0" RECEPTION 101, RECEPTION DESK



A10 SECTION DETAIL

SCALE: 3/4" = 1'-0" BREAK 106, ISLAND CASEWORK



A13 SECTION DETAIL

SCALE: 1" = 1'-0" BREAK 103, CASEWORK

KEYNOTE LEGEND

064116.A13	(PLAM-1) - PLASTIC-LAMINATE-CLAD BASE CABINET - 24" DEEP - PROVIDE ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.A21	(PLAM-2) - PLASTIC-LAMINATE-CLAD BASE CABINET - 24" DEEP - PROVIDE ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.A22	(PLAM-2) - PLASTIC-LAMINATE-CLAD BASE CABINET - 36" DEEP - PROVIDE ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.B13	(PLAM-1) - PLASTIC-LAMINATE-CLAD DRAWER BASE CABINET - 24" DEEP
064116.B23	(PLAM-2) - PLASTIC-LAMINATE-CLAD DRAWER BASE CABINET - 24" DEEP
064116.B43	(PLAM-2) PLASTIC-LAMINATE-CLAD, PARTIALLY OPEN, DRAWER. ALL EXPOSED SURFACES TO BE PLAM-2. 24" DEEP
064116.B44	(PLAM-2) PLASTIC-LAMINATE-CLAD, PARTIALLY OPEN, DRAWER. ALL EXPOSED SURFACES TO BE PLAM-2. 36" DEEP
064116.C23	(PLAM-2) - PLASTIC-LAMINATE-CLAD WASTE RECEPTACLE BASE CABINET - 24" DEEP - CABINET TO FUNCTION AS A SINGLE PULL-OUT DRAWER TO CONTAIN REMOVABLE TRASH / RECYCLING CONTAINER
064116.C81	(PLAM-1) - PLASTIC-LAMINATE-CLAD WASTE RECEPTACLE BASE CABINET - 24" DEEP - CABINET TO FUNCTION AS A SINGLE PULL-OUT DRAWER TO CONTAIN REMOVABLE TRASH / RECYCLING CONTAINER. CABINET FACE IS TO HAVE A 4"X14" OPENING WITH MATCHING EDGEBANDING - SEE INTERIOR ELEVATIONS.
064116.C82	(PLAM-2) - PLASTIC-LAMINATE-CLAD WASTE RECEPTACLE BASE CABINET - 36" DEEP - CABINET TO FUNCTION AS A SINGLE PULL-OUT DRAWER TO CONTAIN REMOVABLE TRASH / RECYCLING CONTAINER. CABINET FACE IS TO HAVE A 4"X14" OPENING WITH MATCHING EDGEBANDING - SEE INTERIOR ELEVATIONS.
064116.D15	(PLAM-1) - PLASTIC-LAMINATE-CLAD OPEN FACE BASE CABINET - 36" DEEP WITH ADJUSTABLE SHELVING
064116.G13	(PLAM-1) - PLASTIC-LAMINATE-CLAD SINK BASE CABINET - 24" DEEP
064116.H11	(PLAM-1) - PLASTIC-LAMINATE-CLAD UPPER CABINET - 12" DEEP WITH ADJUSTABLE SHELVING WHERE GRAPHICALLY INDICATED
064116.H21	(PLAM-2) - PLASTIC-LAMINATE-CLAD UPPER CABINET - 12" DEEP WITH ADJUSTABLE SHELVING WHERE GRAPHICALLLY INDICATED
064116.J11	(PLAM-1) - PLASTIC-LAMINATE-CLAD OPEN FACE UPPER CABINET - 12" DEEP WITH ADJUSTABLE SHELVING
064116.L01	(PLAM-2) - PLASTIC-LAMINATE-CLAD MICROWAVE CABINET - 12" DEEP CABINET BOX WITH 18" DEEP SHELF - FINISH OF CABINET INTERIOR TO MATCH CABINET EXTERIOR
064116.M10	PLASTIC-LAMINATE-CLAD FILLER PANEL - FINISH TO MATCH ADJACENT CABINET
064116.N01	(PLAM-1) - PLASTIC-LAMINATE-CLAD SHELF - 12" DEEP X 2" THICK - PROVIDE FLOATING SHELF BRACKET WITH MINIMUM OF (3) 1/2" DIAMETER x 6" LONG RODS - RECESS BACKPLATE IN SHELF
064216.A01	(WPW-1.1) - 3/4" THICK ACOUSTIC WOOD WALL PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.A02	(WPW-1.2) - 2" THICK ACOUSTIC WOOD WALL PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.A03	(WPW-1.3) - WOOD PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.B01	(WPW-2) - WOOD PANEL WALL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
064216.D01	(WD-2)
083113.A01	FLUSH ACCESS DOOR WITH EXPOSED FLANGE (16x16)
088000.A03	(MG-3) 1/2-INCH CLEAR FLOAT GLASS - PROVIDE FULLY TEMPERED AT LOCATIONS IDENTIFIED AND WHERE REQUIRED BY CODE
093013.B01	(CT-1) - 1 x 6 WALL TILE - VERTICAL STACKED BOND
096513.C01	(RWB-1) - THERMOPLASTIC RUBBER WALL BASE - SCULPTED - REFER TO MATERIAL LIST FOR PROFILE
096513.C02	(RWB-2) - THERMOPLASTIC RUBBER WALL BASE - SCULPTED - REFER TO MATERIAL LIST FOR PROFILE
097200.A01	(WCV-1) - ACOUSTIC WALL COVERING, SEE INTERIOR ELEVATIONS FOR SEAM LOCATION
097200.A02	(WCV-2) - ACOUSTIC WALL COVERING, SEE INTERIOR ELEVATIONS FOR SEAM LOCATION
097200.A03	(WCV-3) - ACOUSTIC WALL COVERING, SEE INTERIOR ELEVATIONS FOR SEAM LOCATION
098436.A01	(ABC-1) - SUSPENDED ACOUSTICAL FELT BAFFLE
101100.B01	(WCV-4) - TACKABLE WALL COVERING. PROVIDE ALUMINUM TRIM AT ALL EXPOSED EDGES
113100.A01	REFRIGERATOR - PROVIDED AND INSTALLED BY OWNER
113100.A50	UNDERCOUNTER REFRIGERATOR - PROVIDED AND INSTALLED BY OWNER
113100.B01	MICROWAVE - PROVIDED AND INSTALLED BY OWNER
113100.B02	MICROWAVE - UNDERCABINET MOUNT - PROVIDED BY OWNER, INSTALLED BY CONTRACTOR
113100.C01	COFFEE MAKER - PROVIDED AND INSTALLED BY OWNER
113100.D01	DISHWASHER - PROVIDED BY OWNER, INSTALLED BY CONTRACTOR - PROVIDE WATER CONNECTIONS REQUIRED
114000.A50	ICE AND WATER DISPENSER - COUNTERTOP MODEL
114000.B01	COFFEE BREWING MACHINE - PROVIDED BY OWNER, INSTALLED BY CONTRACTOR - PROVIDE WATER AND DRAIN CONNECTIONS AS REQUIRED
123661.19.B10	(QTZ-1): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITHOUT BACKSPLASH - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.B11	(QTZ-1): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITHOUT BACKSPLASH - PROVIDE MATCHING 1 3/16" (3CM) THICK QUARTZ APRON AT EDGE OF COUNTERTOP - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.B20	(QTZ-2): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITHOUT BACKSPLASH - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.C10	(QTZ-1): 1 3/16" (3CM) THICK QUARTZ COUNTERTOP WITH 4" TALL BACKSPLASH AND SIDESPLASH - EASE EXPOSED EDGES 1/8" TYPICAL
123661.19.G01	(QTZ-1): 13/16" (2CM) THICK QUARTZ PANEL - ADHERE TO FRAMED WALL ASSEMBLY
123661.19.H02	CONCEALED COUNTER SUPPORT BRACKETS: BASIS OF DESIGN: A&M HARDWARE CFLAT24(2.0) BLACK - SPACED 32" O.C.
123661.19.J01	2" GROMMET - PROVIDE APPROPRIATE HOLE IN COUNTER ALONG WITH COLOR-MATCHED GROMMET TO COUNTER FINISH - CONFIRM FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION
265113.A01	INTERIOR LIGHT FIXTURE - REFER TO ELECTRICAL
265113.B01	UNDER-CABINET LIGHTING - REFER TO ELECTRICAL

SHEET A600 SHEET SPECIFIC NOTES

NOTE 1	ABC-1 IS TO BE MOUNTED V/A AIRCRAFT CABLE TO DECK V/A MANUFACTURERS RECOMMENDATIONS
NOTE 2	SECURE DESK TO FLOOR & SIDE WALL
NOTE 3	WPW-1.2 TO BE MOUNTED 4 1/2" A.F.F. AND ALIGN WITH TOP OF ADJACENT WOOD PANELS, APPROXIMATELY 9'-3 1/2" HIGH. PANEL DEPTH IS TO BE WIDTH OF WALL, APPROXIMATELY 2'-5" WIDE.
NOTE 4	FINISHED END PANEL TO BE INSTALLED ON PORTION OF CASEWORK THAT PROTRUDES GWB
NOTE 5	9" H, PLAM-2 TRIM PEICE TO ALIGN WITH TOP OF CABINETS
NOTE 6	PROVIDE BLOCKING FOR OWNER PROVIDED SIGN
NOTE 7	EQUIPMENT TO SIT FLUSH WITH EDGE OF COUNTERTOP ABOVE AND FACE OF DRAWER BELOW, COORDINATE WITH MANUDACTURER INSTALLATION REQUIREMENTS
NOTE 8	3 5/8" X 20GA METAL STUD BRACING AT 32" O.C.
NOTE 9	BLOCKING AS REQUIRED

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

REGISTERED ARCHITECT DAVID E. QUADE No. 10201 STATE OF ARKANSAS 08/21/2026

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Construction Documents
Date:	August 20, 2026
Drawn by:	PD & KT
Checked by:	DEQ
Designer:	KT
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

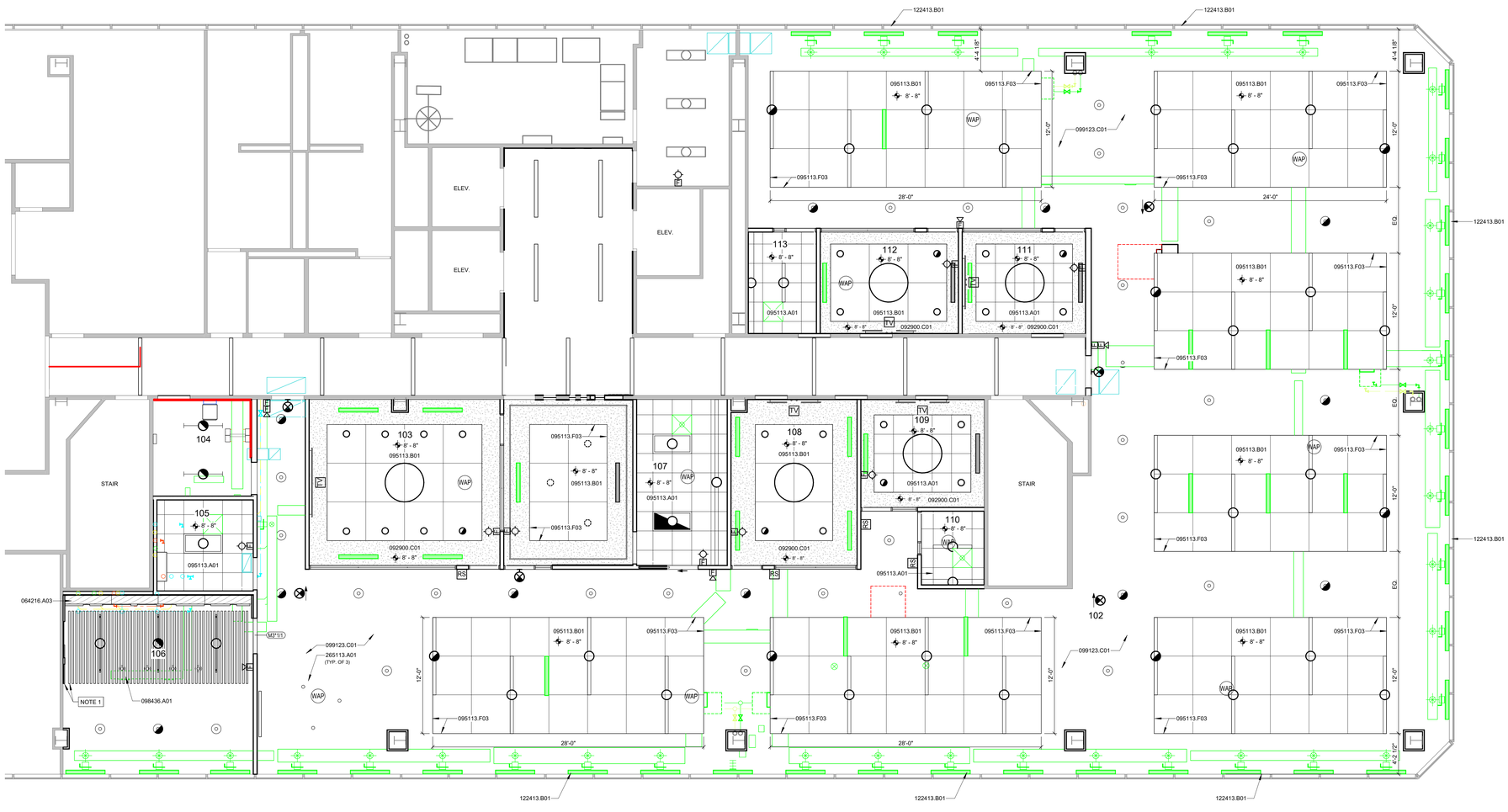
Sheet Title:

Interior Elevations

Sheet Number:

A600

Autodesk Docs://25073_Olsson North Little Rock 1/ 25073_Architectural_WS_2025.rvt
8/21/2026 4:12:14 PM



KEYNOTE LEGEND

064216.A03	(WPW-1,3) - WOOD PANEL - SEE MATERIAL LIST AND INTERIOR ELEVATIONS FOR INSTALLATION INFORMATION
092900.C01	5/8-INCH TYPE 'X' INTERIOR GYPSUM BOARD
095113.A01	(APC-2) - ACOUSTICAL PANEL CEILING ASSEMBLY - 24" x 24"
095113.B01	(APC-1) - ACOUSTICAL PANEL CEILING ASSEMBLY - 48" x 48"
095113.F03	6"H AXIOM CLASSIC TRIM ALL SIDES (COLOR: WHITE)
098436.A01	(ABC-1) - SUSPENDED ACOUSTICAL FELT BAFFLE
099123.C01	PAINT EXPOSED STRUCTURE, FIREPROOFING, PIPING, CONDUIT AND MECHANICAL SYSTEMS - PNT-1
122413.B01	(RS-1): SINGLE ROLLER, MANUAL SHADE ASSEMBLY (1% OPEN) WITH PRE-FINISHED ALUMINUM FASCIA TO MATCH STOREFRONT ASSEMBLY. PROVIDE AT ALL EXTERIOR WINDOWS.
265113.A01	INTERIOR LIGHT FIXTURE - REFER TO ELECTRICAL

SHEET A700 SHEET SPECIFIC NOTES

NOTE 1 ALIGN FACE OF ABC-1 WITH WOOD PANELS

REFLECTED CEILING PLAN LEGEND

- GYPSUM WALLBOARD CEILING/SOFFIT/BULKHEAD - PAINT FINISH
- APC CEILING
- APC CEILING
- METAL SOFFIT PANEL
- WOOD PANEL CEILING
- ACOUSTICAL PLASTER CEILING ASSEMBLY
- METAL CONTROL JOINT
- CAN LIGHT OR PENDANT LIGHT - REFER TO ELECTRICAL
- 2X4 LIGHT - REFER TO ELECTRICAL
- 1X4 LIGHT - REFER TO ELECTRICAL
- SUPPLY DIFFUSER - REFER TO MECHANICAL
- LINEAR SUPPLY DIFFUSER - REFER TO MECHANICAL
- RETURN DIFFUSER - REFER TO MECHANICAL
- EXHAUST GRILLE - REFER TO MECHANICAL
- EXIT LIGHT - REFER TO ELECTRICAL
- SPEAKER - REFER TO ELECTRICAL
- OCCUPANCY SENSOR - REFER TO ELECTRICAL
- DETECTOR - REFER TO ELECTRICAL
- SPRINKLER HEAD - REFER TO MECHANICAL FOR COMPLETE LAYOUT. LOCATIONS ONLY SHOWN IN CEILINGS THAT REQUIRE AESTHETIC CONSIDERATION.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

REGISTERED ARCHITECT
DAVID E. QUADE
No. 10201
STATE OF ARKANSAS

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Construction Documents
Date:	August 20, 2026
Drawn by:	PD & KT
Checked by:	DEQ
Designer:	KT
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission.
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

Fourth Level Reflected Ceiling Plan

Sheet Number:

A700

A1 FOURTH LEVEL REFLECTED CEILING PLAN

SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock T1/25073_Architectural_W5_2025.rvt
8/21/2026 4:12:18 PM

MECHANICAL SYMBOL LEGEND

NOT ALL SYMBOLS SHOWN ARE USED IN THIS PROJECT

GENERAL

EXISTING	
DEMOLITION	
NEW	
TAG	NEW SCHEDULED EQUIPMENT
TAG	EXISTING EQUIPMENT
	NEW TO EXISTING
#	SHEET KEYNOTE
3	REVISION DELTA
	PIPE UP
	PIPE DOWN
	PIPE ELBOW
	PIPE CAP
	HORIZONTAL PIPE TEE
	PIPE TEE DOWN
	PIPE TEE UP
	PIPE ANCHOR
	PIPE GUIDE
	PIPE ROLLER SUPPORT
	FLOW DIRECTION ARROW
	PIPE EXPANSION JOINT
	FLEXIBLE CONNECTOR
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	CONTINUATION (REFER TO OTHER DISCIPLINE)
	CONTINUATION (REFER TO OTHER SHEET/VIEW)

PLUMBING

SANITARY DRAIN (ABOVE GRADE)	ACID WASTE (ABOVE GRADE)
SANITARY DRAIN (BELOW GRADE)	ACID WASTE (BELOW GRADE)
COLD WATER (CW)	GREASE WASTE (ABOVE GRADE)
HOT WATER (HW)	GREASE WASTE (BELOW GRADE)
HOT WATER RETURN (HWR)	CONDENSATE DRAIN PIPING
140 HW — 140°F DOMESTIC HOT WATER	ROOF DRAIN (ABOVE GRADE)
140 HWR — 140°F DOMESTIC HOT WATER RETURN	ROOF DRAIN (BELOW GRADE)
T — TEMPERED WATER	OVERFLOW DRAIN (ABOVE GRADE)
TC — TEMPERED WATER CIRCULATING	OVERFLOW DRAIN (BELOW GRADE)
VENT	SOFT COLD WATER
VENT (BELOW GRADE)	SOFT HOT WATER
AV — ACID VENT	SOFT HOT WATER RETURN
AV — ACID VENT (BELOW GRADE)	DRAIN TILE (SUB-SOIL DRAIN)
GV — GREASE VENT	FORCE MAIN (PUMP DISCHARGE)
GV — GREASE VENT (BELOW GRADE)	

FIXTURES

M — METER (GAS, WATER, ETC)	CO — HORIZ. CLEAN OUT
VTR — VENT THRU ROOF	FD-# / FS-# — FLOOR DRAIN OR SINK
RD-# — ROOF DRAIN	HB-# — HOSE BIBB
OD-# — OVERFLOW DRAIN	WH-# — WALL HYDRANT
ECO — EXTERIOR CLEAN OUT	YH-# — YARD HYDRANT
FCO — FLOOR CLEAN OUT	DS-# — DOWNSPOUT NOZZLE
WCO — WALL CLEAN OUT	

HYDRONIC

CHWR — CHILLED WATER RETURN	CTR — COOLING TOWER RETURN
CHWS — CHILLED WATER SUPPLY	CTS — COOLING TOWER SUPPLY
HHWR — HEATING WATER RETURN	CR — CONDENSER WATER RETURN
HHWS — HEATING WATER SUPPLY	CS — CONDENSER WATER SUPPLY
HCWR — HEATING/CHILLED WATER RETURN	ERR — ENERGY RECOVERY RETURN
HCWS — HEATING/CHILLED WATER SUPPLY	ERS — ENERGY RECOVERY SUPPLY
HPR — HEAT PUMP RETURN	NPW — NON-POTABLE WATER
HPS — HEAT PUMP SUPPLY	MU — MAKE-UP WATER

STEAM

STEAM TRAP	MPC — MEDIUM PRESSURE CONDENSATE (> 15 < 99 PSIG)
BBD — BOILER BLOW DOWN	MPS — MEDIUM PRESSURE STEAM (> 15 < 99 PSIG)
PC — PUMPED CONDENSATE	LPC — LOW PRESSURE CONDENSATE (≤ 15 PSIG)
HPC — HIGH PRESSURE CONDENSATE (≥ 100 PSIG)	LPS — LOW PRESSURE STEAM (≤ 15 PSIG)
HPS — HIGH PRESSURE STEAM (≥ 100 PSIG)	

SITE

W — WATER SERVICE	WIRE FENCE
CURB STOP VALVE	ER — ELECTRICAL RISER
SAN — SANITARY SEWER (SITE)	SB — SWITCH BOX
POST INDICATOR VALVE	PRP — PROPERTY CORNER
POST INDICATOR VALVE W/ TAMPER SWITCH	THRUST BLOCK
FM — BUILDING SPRINKLER FIRE MAIN	LS — LAWN SPRINKLER
SS — STORM SEWER (SITE)	W — WELL
SD — STORM DRAIN (SITE)	YHT — YARD HYDRANT
	TREE

HVAC

SD-# 9"x9" 250 — CEILING DIFFUSER (HATCH INDICATES BLANK-OFF PANEL)	TYPE, NECK SIZE, CFM
LD-# 48" 300 — LINEAR DIFFUSER	TYPE, DIFFUSER LENGTH, CFM
SR-# 10x6 250 — SUPPLY REGISTER	TYPE, NECK SIZE, CFM
RG-# 12x12 250 — RETURN AIR GRILLE	TYPE, NECK SIZE, CFM (OPTIONAL)
EG-# 12x6 250 — RETURN AIR GRILLE	TYPE, NECK SIZE, CFM (OPTIONAL)
XG-# 10x6 300 — EXHAUST AIR GRILLE	TYPE, NECK SIZE, CFM
LouvR 24x12 — LOUVER W/ FLOW DIRECTION	TYPE, SIZE
THERMOSTAT	
SENSOR	
H — HUMIDISTAT	
CO2 — CARBON DIOXIDE SENSOR	
NO2 — NITROGEN DIOXIDE SENSOR	
12x8 — RECTANGULAR DUCT (WxH)	
12"ø — ROUND DUCT (DIA.)	
12/8 — OVAL DUCT (W/H)	
	SUPPLY AIR/OUTSIDE AIR UP AND DOWN
	RETURN AIR UP AND DOWN
	EXHAUST OR RELIEF AIR UP AND DOWN
	MANUAL VOLUME DAMPER
	MOTORIZED DAMPER
	BACKDRAFT DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION FIRE AND SMOKE DAMPER
	TURNING VANES
	VOLUME EXTRACTOR

VALVES & ACCESSORIES

T&P RELIEF VALVE	PRESSURE REDUCING & REGULATING VALVE
ISOLATION VALVE	PRESSURE REGULATING VALVE
ISOLATION VALVE IN VERTICAL POSITION	DIAPHRAGM VALVE
CHECK VALVE	ANGLE VALVE
BALANCING VALVE	STRAINER
MOTORIZED 2-WAY VALVE	STRAINER W/ BLOWDOWN
MOTORIZED 3-WAY VALVE	UNION
VACUUM BREAKER	AUTOMATIC AIR VENT
PRESSURE GAUGE	MANUAL AIR VENT
THERMOMETER	

FIRE

F — FIRE PROTECTION PIPING	SPRINKLER HEAD, PENDANT
FIRE DEPARTMENT CONNECTION	SPRINKLER HEAD, SIDE WALL
DUCT — DUCT SMOKE DETECTOR AND RELAY	ALARM VALVE, WET
TS — TAMPER SWITCH	ALARM VALVE, DRY
FS — FLOW SWITCH	FIRE PROTECTION RISER

SPECIALTY SYSTEMS

RO — REVERSE OSMOSIS	RL — PAIR REFRIGERANT LINES (SUCTION, LIQUID)
RD — REFRIGERANT DISCHARGE	P — PROPANE
FOR — FUEL OIL RETURN	AIR OUTLET
FOS — FUEL OIL SUCTION	VAC — VACUUM (AIR)
FOV — FUEL OIL VENT	DI — DISTILLED WATER
G — NATURAL GAS	LOX — LIQUID OXYGEN
LPG — LIQUID PETROLEUM GAS	DE — DEIONIZED WATER
LR — LIQUID REFRIGERANT	A — COMPRESSED AIR
SR — SUCTION REFRIGERANT	

MEDICAL GAS

MA — MEDICAL COMPRESSED AIR	N2O — NITROUS OXIDE
CO2 — CARBON DIOXIDE	OX — OXYGEN
H — HELIUM	MV — MEDICAL VACUUM
N — NITROGEN	WAGD — WASTE ANESTHETIC GAS DISPOSAL
LA — LABORATORY COMPRESSED AIR	LV — LABORATORY VACUUM
MA — MEDICAL AIR OUTLET	OX — OXYGEN OUTLET
CO2 — CARBON DIOXIDE OUTLET	V — VACUUM OUTLET
H — HELIUM OUTLET	VS — VACUUM SLIDE OUTLET
N — NITROGEN OUTLET	WAGD — WAGD OUTLET
N2O — NITROUS OXIDE OUTLET	ZONE VALVE BOX, ARROW INDICATES VALVE ACCESS

ABBREVIATIONS

GENERAL

&	AND
A	AMPERES
AD	ACCESS DOOR
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AP	ACCESS PANEL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AUTO	AUTOMATIC
BFR	BELOW FLOOR
BHP	BRAKE HORSEPOWER
CAP	CAPACITY
CONT	CONTINUOUS
DEG	DEGREE
DIA	DIAMETER
DN	DOWN
DTL	DETAIL
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EFF	EFFICIENCY
ELEC	ELECTRIC(AL)
EQUIP	EQUIPMENT
EXIST	EXISTING
FF	FINISHED FLOOR
FS	FLOW SWITCH
FT	FEET (FOOT)
GYP	GYPSUM
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HT	HEIGHT
IN	INCHES
KA	KILOAMPERE
KW	KILOWATT
LBS	POUNDS
LF	LINEAR FOOT (FEET)
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OFC	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
PEMB	PRE-ENGINEERED METAL BUILDING
PH	PHASE
PLBG	PLUMBING
RCP	REFLECTED CEILING PLAN
REF	REFERENCE
REV	REVISION(S)
RPM	REVOLUTIONS PER MINUTE
SCCR	SHORT CIRCUIT CURRENT RATING
SHT	SHEET
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
STR	STRUCTURAL (STRUCTURE)
TC	TIME CLOCK
TCP	TEMPERATURE CONTROL PANEL
TEMP	TEMPERATURE
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLTAGE (VOLTS)
VFC	VARIABLE FREQUENCY CONTROLLER
VFD	VARIABLE FREQUENCY DRIVE
W	WATT
°F	DEGREES FAHRENHEIT
Ø	DIAMETER
Φ	PHASE

MECHANICAL

A/C	AIR CONDITIONING
AHRI	AIR CONDITIONING, HEATING, AND REFRIGERATION INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
BAS	BUILDING AUTOMATION SYSTEM
BFF	BELOW FINISHED FLOOR
BFP	BACK FLOW PREVENTER
BFV	BUTTERFLY VALVE
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTUH	BRITISH THERMAL UNIT PER HOUR
BV	BALL VALVE
CFM	CUBIC FEET PER MINUTE
CO	CLEAN OUT
DB	DRY BULB
DBA	DECIBEL A-SOUND LEVELS
DDC	DIRECT DIGITAL CONTROLS
DG	DOOR GRILLE
DPS	DIFFERENTIAL PRESSURE SWITCH
DTR	DUCT THROUGH ROOF
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
FLEX	FLEXIBLE
FME	FLOW MEASURING EQUIPMENT
FPI	FINS PER INCH
FPM	FEET PER MINUTE
G/E	GREASE EXHAUST AIR
GAL	GALLON
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GV	GATE VALVE
HVAC	HEATING VENTILATING AND AIR CONDITIONING
IE	INVERT ELEVATION
IN WC	INCHES OF WATER COLUMN
L/E	LABORATORY EXHAUST AIR
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
M/A	MIXED AIR
MAV	MANUAL AIR VENT
MBH	THOUSAND BTU PER HOUR
NC	NOISE CRITERIA
NSF	NATIONAL SANITATION FOUNDATION
OS&Y	OUTSIDE SCREW AND YOKE
P/T	PRESSURE/TEMPERATURE TEST PORT
PD	PRESSURE DROP
PDI	PLUMBING AND DRAINAGE INSTITUTE
PG	PRESSURE GAUGE
PSI	POUNDS PER SQUARE INCH
RH	RELATIVE HUMIDITY
SD	SMOKE DETECTOR
SEER	SEASONAL ENERGY EFFICIENCY RATING
SENS	SENSIBLE
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SP	STATIC PRESSURE
T/A	TRANSFER AIR
TC	TEMPERATURE CONTROL
TDH	TOTAL DYNAMIC HEAD
TS	TEMPERATURE SENSOR
TSP	TOTAL STATIC PRESSURE
VAV	VARIABLE AIR VOLUME
VENT	VENTILATION
VTR	VENT THROUGH ROOF
VTW	VENT THROUGH WALL
WB	WET BULB
WFMD	WATER FLOW MEASURING DEVICE

MECHANICAL SHEET LIST

SHEET NO.	SHEET NAME
GM001	GENERAL MECHANICAL INFORMATION
MD101	MECHANICAL DEMO PLAN
FP101	FIRE PROTECTION PLAN
P101	PLUMBING PLANS
M101	HVAC PLAN
M201	MECHANICAL PIPING PLAN
M501	MECHANICAL DETAILS
M601	MECHANICAL SCHEDULES
M701	MECHANICAL SPECIFICATIONS

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 22505
2/26/2026
BRAD R. MOSTICK

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	RAF
Checked by:	BRM
Designer:	JMM
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

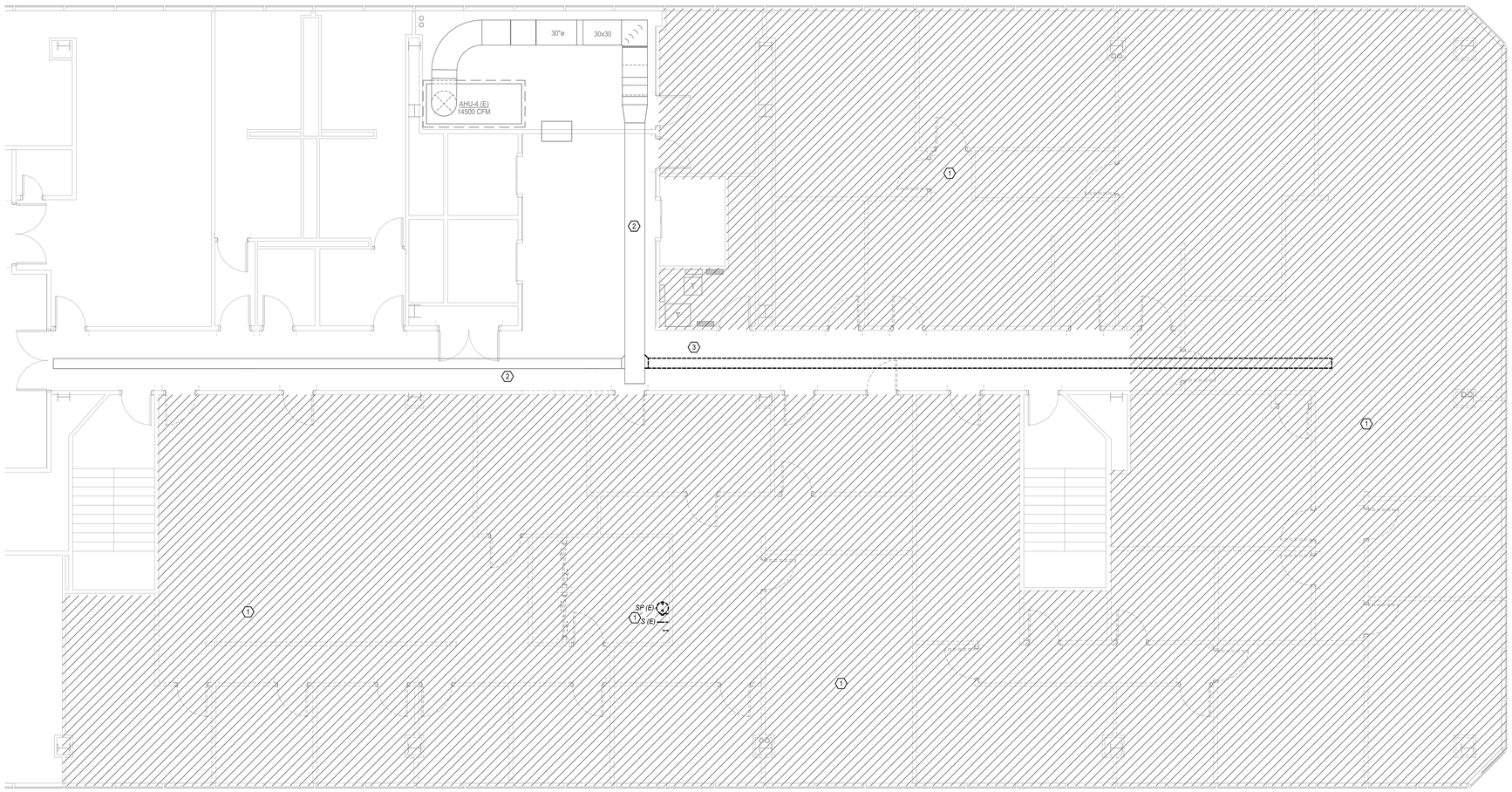
Sheet Title:

GENERAL MECHANICAL INFORMATION

Sheet Number:

GM001

Autodesk Docs://25073_Olsson North Little Rock TI-ME_Little Rock AK Area Office_Central_016012_R23.rvt
8/20/2026 10:14:11 AM



GENERAL SHEET NOTES

A. EXISTING FLOOR, CABINETRY, EQUIPMENT AND FURNITURE MAY REMAIN. CONTRACTOR TO PROTECT ITEMS FROM ANY DUST ACCUMULATION AND/OR CONSTRUCTION DAMAGE. COORDINATE ITEMS REMAINING WITH ARCHITECTURAL SHEETS. IF MATERIALS OR FINISHES SCHEDULED TO REMAIN ARE DAMAGED, THEY SHALL BE REPAIRED OR REPLACED TO MATCH EXISTING AT NO ADDITIONAL COST TO THE OWNER.

B. SUPPORT EXISTING ELECTRICAL, DATA, PHONE, AND TV WIRING WHERE REQUIRED WHEN PIPING, DUCTWORK, CEILING, ETC. ARE REMOVED. PROTECT WIRING FROM BEING DAMAGED DURING DEMO AND CONSTRUCTION. ANY DAMAGED CABLING, WIRING, OR RACEWAY SHALL BE REPLACED IN ITS ENTIRETY.

C. ALL EXISTING PIPING, DUCTWORK, EQUIPMENT AND ACCESSORIES ARE NOT NECESSARILY SHOWN ON THIS DRAWING. EXISTING SYSTEMS SHOWN ARE AS DEEMED NECESSARY TO PROVIDE INTENT OF DEMOLITION WORK INVOLVED IN THIS PROJECT. CONTRACTOR SHALL FIELD VERIFY ITEMS PRIOR TO BID.

D. ALL DASHED AND/OR HATCHED PIPING, DUCTWORK, EQUIPMENT, ETC. IS DESIGNATED FOR REMOVAL UNLESS SPECIFICALLY NOTED OTHERWISE. ALL PIPING TO BE CAPPED OR PLUGGED BEHIND WALLS AND BELOW FLOORS.

E. COORDINATE ITEMS TO BE SALVAGED WITH OWNER.

F. BUILDING TO REMAIN OCCUPIED. COORDINATE TIMEFRAME OF ACTIVITIES RESULTING IN LOUD NOISES OR VIBRATIONS WITH OWNER PRIOR TO STARTING.

G. GENERAL CONTRACTOR SHALL PATCH ALL HOLES LEFT FROM REMOVING PIPES, DUCT, EQUIPMENT, AND CONTROLS. COORDINATE FINISH REQUIREMENTS WITH ARCHITECTURAL PLANS.

H. COORDINATE THE SCHEDULING, AND SHUT-DOWN, ISOLATION, DRAINING AND VENTING OF EXISTING SYSTEMS WITH OWNER. FOLLOW SITE PROCEDURES FOR LOCK OUT / TAG OUT REQUIREMENTS.

XX SHEET KEYNOTES

1. LANDLORD TO DEMO ALL ITEMS IN EXISTING TENANT SPACE. HYDRONIC PIPING RISERS AND THE FIRE STANDPIPE ARE TO REMAIN.
2. EXISTING DUCT MAINS ARE TO REMAIN.
3. DEMO DUCTWORK BACK TO MAIN. PREPARE MAIN FOR CONNECTION TO NEW DUCTWORK.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 22205 8-20-2026 BRAD R. MOSTECK

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	RAF
Checked by:	BRM
Designer:	JMM
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

MECHANICAL DEMO PLAN

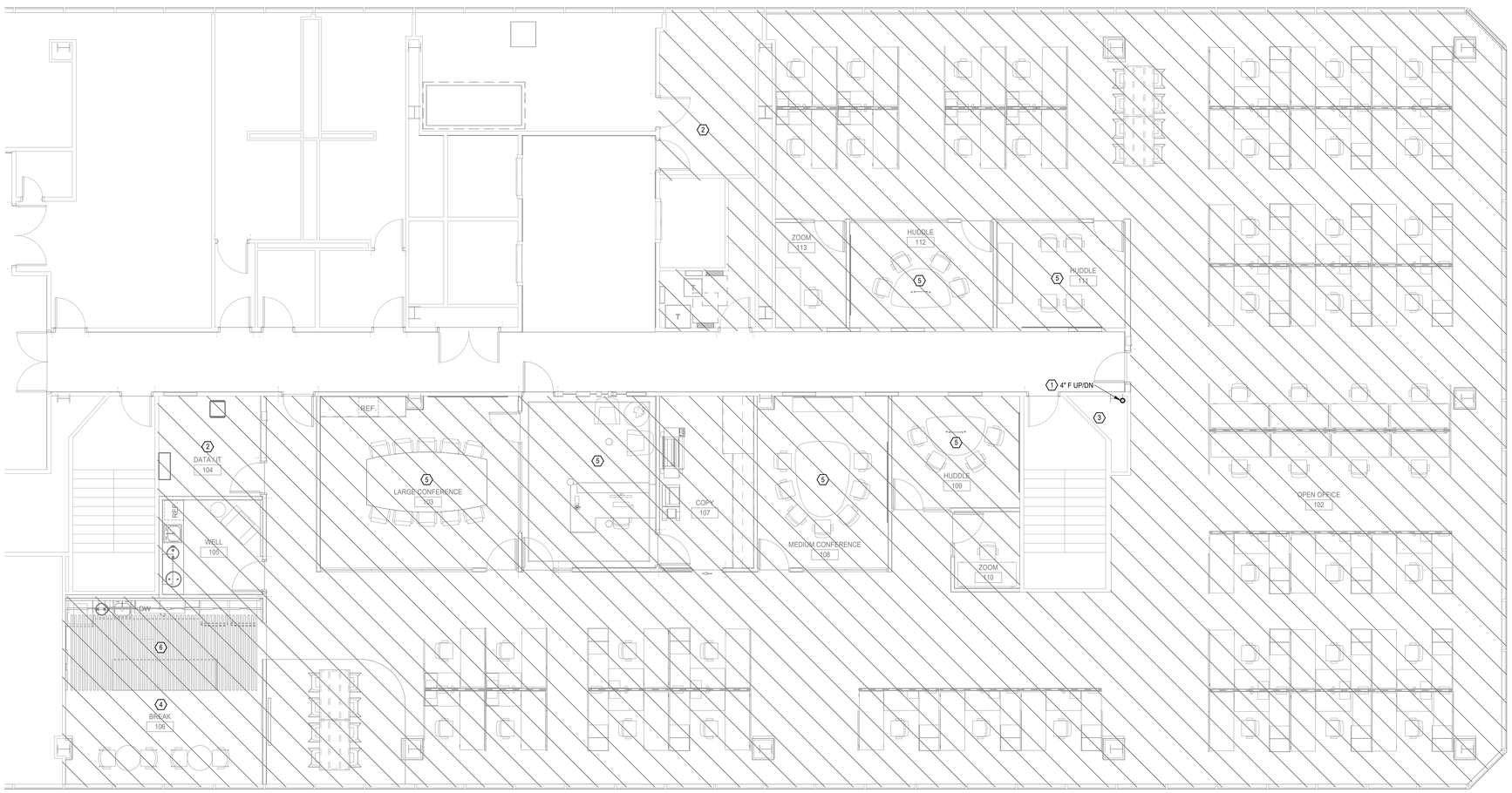
Sheet Number:

MD101

A1 MECHANICAL DEMO PLAN

SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock TI-ME_Little Rock AK New Office_Central_016017_R23.rvt
8/20/2026 10:54:41 AM



GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. UNLESS NOTED/SHOWN OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL, PLUMBING, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. HVAC CONTRACTOR'S DUCT AND EQUIPMENT LOCATIONS SHALL TAKE PRIORITY OVER FIRE SPRINKLER PIPING. VALVES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

C. FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

D. ALL PIPING IN AREAS WITH CEILINGS TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.

E. SPRINKLER HEAD LOCATIONS SHALL BE COORDINATED WITH LIGHTS, DIFFUSERS, SOUND SYSTEM COMPONENTS AND OTHER ITEMS INSTALLED IN CEILING. LOCATION OF THESE DEVICES TAKES PRIORITY OVER SPRINKLER HEAD LOCATIONS. SHOW CLEARLY, THE RELATIONSHIP OF ALL CEILING MOUNTED DEVICES WITH THE SPRINKLER HEAD LOCATIONS WHEN SPRINKLER SHOP DRAWINGS ARE SUBMITTED FOR APPROVAL.

F. SPRINKLER HEADS SHALL BE LOCATED IN CENTER OF LAY-IN CEILING GRIDS, ASSUMING 2x2 GRID FORMAT. SPRINKLER HEADS IN EXPOSED OR HARD CEILINGS SHALL BE LAID OUT IN A UNIFORM AND SYMMETRICAL PATTERN ACCEPTABLE WITH ARCHITECT AND/OR ENGINEER. SEE ARCHITECTURAL PLANS FOR TYPE OF CEILING INSTALLED.

G. SPRINKLER DRAIN PIPING SHALL BE ROUTED IN CONCEALED SPACES TO OUTSIDE OR TO MOP SINKS ONLY. 2" TEST LINES MUST BE PIPED TO OUTSIDE. EXTERIOR DRAIN OUTLETS SHALL BE CHROME WITH MATCHING ESCUTCHEON AND THREADED HOSE FITTING, AND SHALL DISCHARGE ON SPLASH BLOCK AT 45-DEGREE ANGLE.

H. FIRE PROTECTION PLANS, SPRINKLER DRAWINGS, & SPRINKLER CALCULATIONS MUST BE SIGNED BY A LICENSED REGISTERED FIRE PROTECTION CONTRACTOR ALLOWED TO WORK IN AREA OF JURISDICTION AND FOLLOW ALL LOCAL AND STATE CODES.

I. REFER TO 'M' SHEETS FOR LEGEND, DETAILS, AND SCHEDULES.

(XX) SHEET KEYNOTES

1. PROVIDE CONNECTION TO EXISTING FIRE PROTECTION STANDPIPE LOCATED IN CHASE NEAR STAIR. PROVIDE NEW FIRE PROTECTION PIPING, SPRINKLERS AND EQUIPMENT TO ALL AREAS OF SPACE OCCUPIED BY TENANT.
2. SERVE ROOM WITH SIDEWALL HEAD(S). IF ROOM IS TOO LARGE, ONLY BRANCH LINE/ARM-OVER PIPING SERVING SPRINKLERS WITHIN ROOM SHALL BE RUN OVER THIS ROOM (TYPICAL FOR ALL DATA AND ELECTRICAL ROOMS).
3. PROVIDE 24" x 24", 1-1/2 HR FIRE RATED ACCESS DOOR TO SERVICE FIRE SPRINKLER RISER.
4. PROVIDE SPRINKLER HEAD ABOVE AND BELOW BAFFLE CEILING. CONCEALED SPRINKLER HEAD COVERS ARE TO BE A CUSTOM COLOR. COORDINATE COLOR WITH ARCHITECT.
5. ALIGN RECESSED SPRINKLER HEADS WITH CAN LIGHTING FIXTURES WITHIN THIS ROOM.
6. PROVIDE SPRINKLER HEADS ABOVE AND BELOW BAFFLES. CONCEALED SPRINKLER HEAD COVERS ARE TO BE A CUSTOM COLOR. COORDINATE COLOR WITH ARCHITECT.

FIRE PROTECTION LEGEND

ZONE 1
WET-PIPE SYSTEM
8,112 SF

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 22505
8/20/2026
BRAD R. MOSTICK

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	RAF
Checked by:	BRM
Designer:	JMM
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

FIRE PROTECTION PLAN

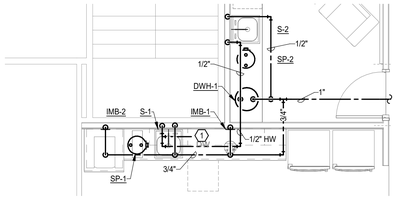
Sheet Number:

FP101

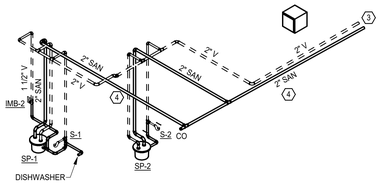
A1 FIRE PROTECTION PLAN

SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock T1-ME_Little Rock AK New Office_Central_016012_R23.rvt
8/20/2026 10:14:25 AM



N1	PLUMBING PLAN-ENLARGED
SCALE: 1/4" = 1'-0"	



N5	SANITARY AND VENT RISER
SCALE: N.T.S.	

GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR A COMPLETE SYSTEM.

C. UNLESS NOTED/SHOWN OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

D. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

E. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

F. ALL VALVES TO BE INSTALLED IN ACCESSIBLE LOCATIONS.

G. SANITARY DRAIN PIPING 3" OR LARGER SHALL SLOPE AT A MINIMUM 1/8" PER FOOT. SANITARY DRAIN PIPING 2-1/2" AND SMALLER SHALL SLOPE AT A MINIMUM OF 1/4" PER FOOT.

H. ALL PIPING IN AREAS WITH CEILINGS TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.

I. REFER TO SANITARY AND VENT RISER DIAGRAMS AND PLUMBING FIXTURE SCHEDULES FOR PIPING AND SIZES NOT SHOWN.

J. PROVIDE WATER HAMMER ARRESTORS ON EACH BRANCH PIPE SERVING A PLUMBING FIXTURE, OR FIXTURE GROUP, ACCORDING TO PDI-WH 201.

K. PROVIDE ADDITIONAL CLEANOUTS AS REQUIRED BY LOCAL CODE.

L. REFER TO 'M' SHEETS FOR DETAILS, LEGEND, AND SCHEDULES.

(XX) SHEET KEYNOTES

1. PROVIDE 1/2" HOT WATER CONNECTION WITH ISOLATION VALVE FROM SINK S-1 HOT WATER SUPPLY TO DISHWASHER. ROUTE DISHWASHER WASTE PIPING UP ABOVE BOTTOM OF COUNTERTOP BEFORE CONNECTING TO SINK WASTE PIPING ABOVE P-TRAP OR TO GARBAGE DISPOSAL CONNECTION.
2. ROUTE PIPING TO NEAREST ACCESSIBLE COLD WATER PIPE SERVING RESTROOM. PROVIDE NEW TEE TO SERVE TENANT SPACE.
3. ROUTE SANITARY AND VENT PIPING TO NEAREST VIABLE LOCATION IN RESTROOM.
4. SLOPE SANITARY PIPING AT A MINIMUM 1/4" PER FOOT.

A1	PLUMBING PLAN
SCALE: 3/16" = 1'-0"	

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 22565 04-24-2026 BRAD R. MOSITER

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	RAF
Checked by:	BRM
Designer:	JMM
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

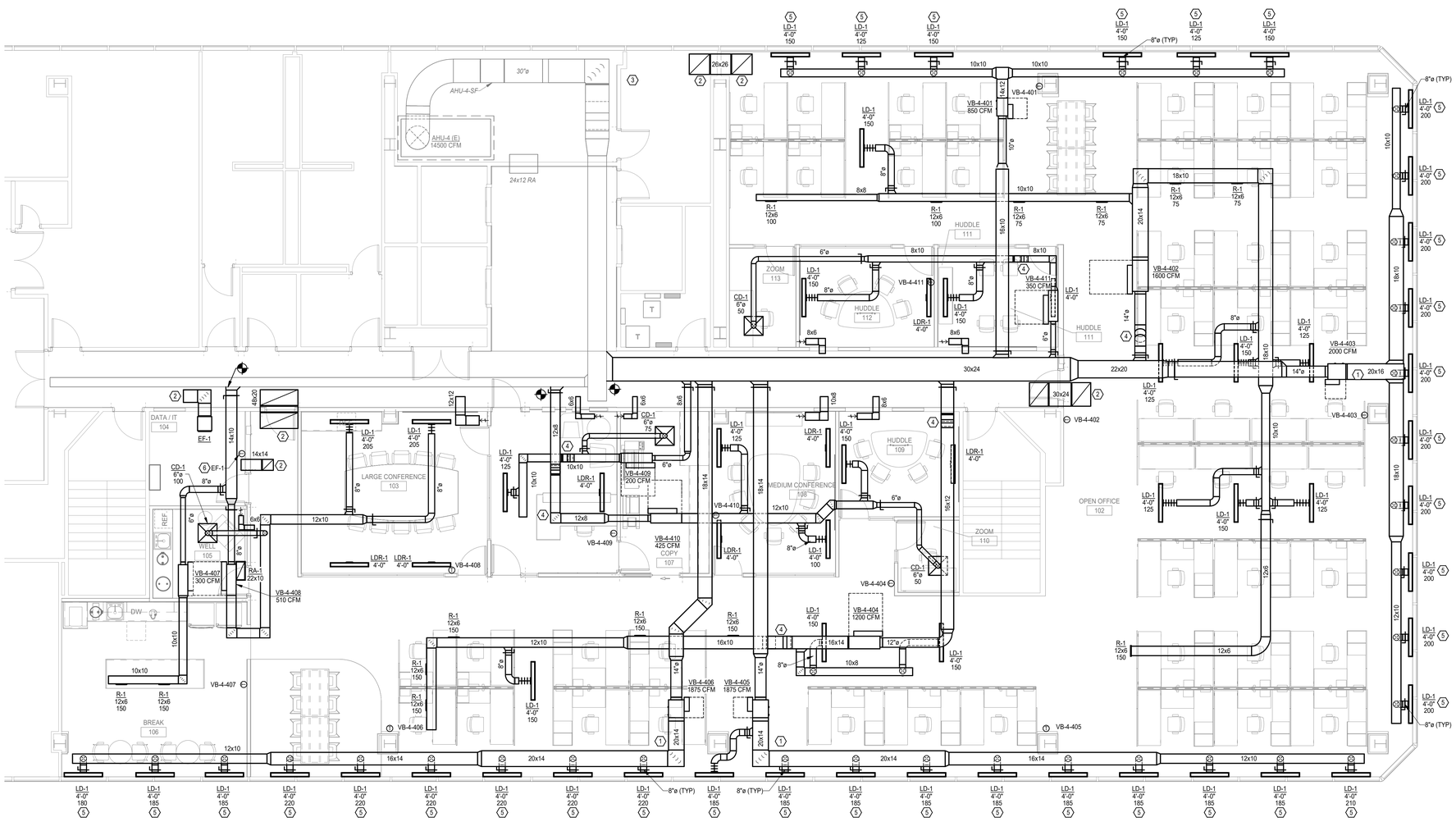
Sheet Title:

PLUMBING PLANS

Sheet Number:

P101

Autodesk Docs://25073_Olsson North Little Rock T1-MEP_Little Rock AK New Office_Central_016017_R23.rvt
8/20/2026 10:10:44 AM



GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR A COMPLETE SYSTEM.

C. UNLESS NOTED/SHOWN OTHERWISE, ALL DUCTWORK SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN DUCTS UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE PROTECTION, AND PLUMBING CONTRACTORS PRIOR TO INSTALLATION. DAMPERS AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

D. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

E. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

F. DASHED LINES AROUND EQUIPMENT INDICATE MINIMUM REQUIRED SERVICE CLEARANCES. DO NOT INSTALL HVAC, PIPING, AND ELECTRICAL ITEMS IN THESE AREAS.

G. ALL DUCT FITTINGS WHERE TURN IS GREATER THAN 30-DEGREES SHALL BE PROVIDED WITH TURNING VANES EXCEPT TRANSFER AIR DUCTS, UNLESS NOTED OTHERWISE.

H. ALL VAV BOXES SHALL HAVE A MINIMUM OF 36" STRAIGHT DUCT (NO TURNS OR DAMPERS) AT INLET TO VAV FOR ACCURATE AIRFLOW READINGS. THE SIZE OF THIS DUCT IS TO MATCH THE INLET BOX SIZE FOR LENGTH SHOWN ON THE PLAN. IF BOX SIZE IS DIFFERENT THAN SCHEDULED, ADJUST DUCT SIZE TO MATCH.

I. BALANCE MANUAL DAMPERS DIRECTLY BEFORE VAV BOXES SO THAT VAV DAMPER IS 80% OPEN AT FULL AIRFLOW TO ALLOW BETTER BOX CONTROL. DO NOT ADJUST MANUAL DAMPERS IF VAV DAMPER HAS A RANGE >80% BEFORE ADJUSTMENT.

J. ALL SUPPLY AIR DEVICES SHALL BE INSTALLED WITH MANUAL BALANCING DAMPERS. DAMPER SHALL BE FITTED WITH QUADRANT CONTROL WITH STANDOFF TO EXTEND THRU INSULATION. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.

K. NEW THERMOSTATS AND SENSORS SHALL BE LOCATED ON WALL NEAR LOCATION SHOWN. LOCATE ON WALL WITH CENTER AT 3'-8" ABOVE FINISH FLOOR, MATCHING LIGHT FIXTURE SWITCH HEIGHT, UNLESS NOTED OTHERWISE.

L. ALL CEILING MOUNTED DIFFUSERS SHALL HAVE A MINIMUM 2'-0" LENGTH OF FLEXIBLE DUCT FOR SOUND DAMPENING. DO NOT USE FLEX DUCT TO CHANGE DIRECTION.

M. KEEP ALL DUCT OPENINGS AND AIR DEVICES COVERED AIR-TIGHT UNTIL ALL DUST CREATING ACTIVITY HAS BEEN FINISHED AND EQUIPMENT IS READY FOR START-UP.

N. DUCTWORK TO DIFFUSER SHALL MATCH DIFFUSER NECK SIZE UNLESS NOTED OTHERWISE.

SHEET KEYNOTES

1. EXISTING STRUCTURAL PENETRATION IN THIS AREA. ROUTE DUCTWORK THROUGH EXISTING PENETRATION. FIELD COORDINATE EXACT LOCATIONS AND HEIGHTS.
2. COVER DUCT OPENINGS WITH WIRE MESH.
3. TRANSFER AIR TO USE EXISTING TRANSFER PATHWAY THROUGH ROOM TO MECHANICAL ROOM.
4. COORDINATE DUCT OFFSETS WITH ALL OTHER TRADES. TRANSITION DUCTWORK AS REQUIRED TO MAXIMIZE CEILING HEIGHTS. UTILIZE 45° OFFSETS WHERE POSSIBLE.
5. SUPPORT LINEAR DIFFUSERS FROM STRUCTURE. BOTTOM OF LINEAR TO ALIGN WITH THE TOP OF WINDOW MULLION AT 8'-8" AFF.
6. THERMOSTAT TO BE SET AT 80° F.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 22505 BRAD R. MOSTER 8/20/2026

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	RAF
Checked by:	BRM
Designer:	JMM
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

HVAC PLAN

Sheet Number:

M101

A1 HVAC PLAN

SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock 01-MEL Little Rock AK New Office_Central_016012_R23.rvt
8/20/2026 10:14:45 AM

GENERAL SHEET NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL OFFSETS REQUIRED FOR A COMPLETE SYSTEM.

C. UNLESS NOTED/SHOWN OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

D. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

E. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS. COORDINATE WITH ARCHITECTURAL PLANS FOR RATED SEPARATION LOCATIONS.

F. DASHED LINES AROUND EQUIPMENT INDICATE CLEARANCE FOR HYDRONIC PIPING, CONDENSATE DRAIN, ELECTRICAL CONNECTIONS, FILTER PULL, AND MINIMUM REQUIRED SERVICE CLEARANCES. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO INSTALLATION IF SPACE ALLOCATED FOR THE RESPECTIVE WORK CANNOT BE INSTALLED AS INDICATED.

G. ALL VALVES AND ACTUATORS TO BE INSTALLED IN ACCESSIBLE LOCATIONS. PROVIDE ACCESS DOORS AS REQUIRED.

H. ALL PIPING IN AREAS WITH CEILINGS TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED OTHERWISE.

I. PROVIDE PVC JACKET ON ALL EXPOSED INSULATED PIPE IN PUBLIC AREAS BELOW 10'-0" ABOVE FINISHED FLOOR.

J. MINIMUM HYDRONIC PIPE SIZE SHALL BE 3/4".

(XX) SHEET KEYNOTES

1. VERIFY SIZE OF EXISTING HYDRONIC PIPING AT LOCATION.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 22605 BRAD R. MOSS, SR.

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	RAF
Checked by:	BRM
Designer:	JMM
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

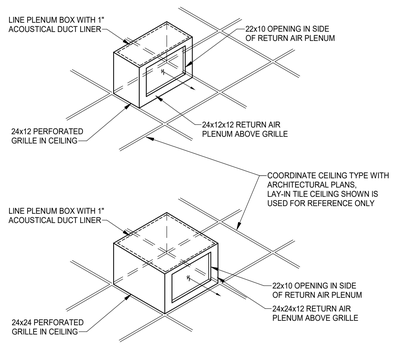
MECHANICAL PIPING PLAN

Sheet Number:

M201

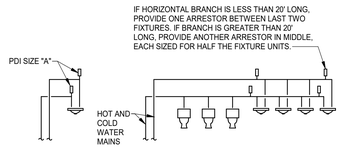
A1 MECHANICAL PIPING PLAN
SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock 1 1 MEC_Little Rock AK New Office_Central_016017_R25.rvt
8/20/2026 10:10:46 AM



L1 RETURN AIR BOOT

SCALE: N.T.S.



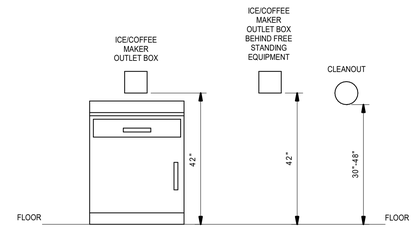
PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32
C	1"	33-60
D	1-1/4"	61-113
E	1-1/2"	114-154
F	2"	155-330

FIXTURE UNIT VALUES		
FIXTURE	COLD	HOT
URINAL	4.0	-
WATER CLOSET	8.0	-
LAVATORY	1.5	1.5
SINK	3.0	3.0
SHOWER/TUB	2.0	3.0
WASHING MACHINE	3.0	3.0

NOTES:
1. PROVIDE WATER HAMMER ARRESTORS.
2. INSTALL IN HORIZONTAL OR VERTICAL POSITION.
3. SIZE THE UNITS AS SHOWN ON THE DRAWING AND/OR THE TABLES SHOWN ABOVE.
4. INSTALL PER PDI STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

L5 WATER HAMMER ARRESTOR DETAIL

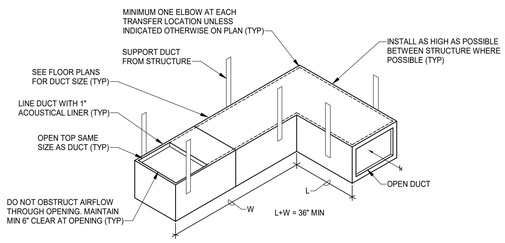
SCALE: N.T.S.



NOTES:
1. COORDINATE ELEVATION OF DEVICES WITH ALL ADJACENT DEVICES INCLUDING THOSE WITH OTHER TRADES. ALL DEVICES WHICH HAVE ADA AND NON-ADA HEIGHTS LISTED SHALL BE MOUNTED TO COMPLY WITH ADA EXCEPT WHERE NOTED ON THE PLANS AS NON-ADA.
2. GROUP DEVICES IN AN ORGANIZED AND UNIFORM MANNER.
3. REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL REQUIREMENTS. WHERE THESE REQUIREMENTS DIFFER FROM THE ARCHITECTURAL PLANS, THE ARCHITECTURAL PLANS SHALL TAKE PRECEDENCE. WHERE DEVICES OR EQUIPMENT ARE SHOWN ON WALLS WHERE THE ARCHITECTURAL ELEVATION INDICATES A SURFACE OTHER THAN THE BASE PAINT FOR THE PROJECT, REQUEST CLARIFICATION ON THE MOUNTING LOCATION OF THE DEVICE OR EQUIPMENT. DEVICES AND EQUIPMENT SHALL NOT BE MOUNTED TO FEATURE WALLS AND WALLS CONSTRUCTED OF MATERIALS OTHER THAN DRYWALL WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
4. REFER TO ARCHITECTURAL ELEVATIONS FOR ALL PLUMBING FIXTURES.
5. ALL DEVICES SHALL BE COORDINATED SO AS NOT TO INTERRUPT A BACK SPLASH OR MATERIAL TRANSITIONS. REFER TO ARCHITECTURAL ELEVATION TO CONFIRM DEVICE IS NOT LOCATED WITHIN TRANSITION AREA.
6. PROVIDE BACKING IN WALLS WHERE WALL MOUNTED DEVICES OR EQUIPMENT ARE INSTALLED. REFER TO ARCHITECTURAL SPECIFICATIONS.

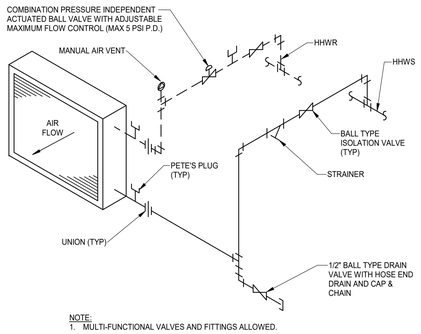
L9 PLUMBING EQUIPMENT MOUNTING HEIGHTS

SCALE: N.T.S.



G1 TRANSFER DUCT DETAIL

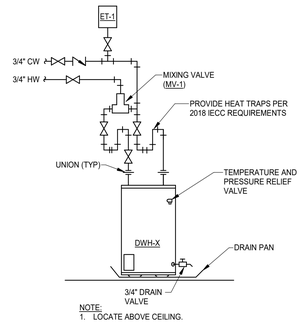
SCALE: N.T.S.



NOTE:
1. MULTI-FUNCTIONAL VALVES AND FITTINGS ALLOWED.

G5 HYDRONIC VAV CONNECTION

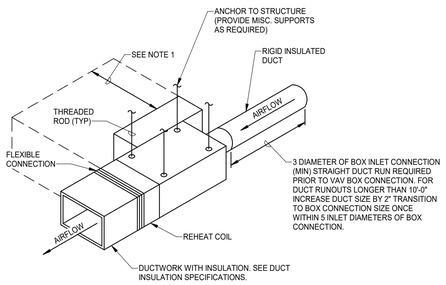
SCALE: N.T.S.



NOTE:
1. LOCATE ABOVE CEILING.

G9 ELECTRIC WATER HEATER DETAIL

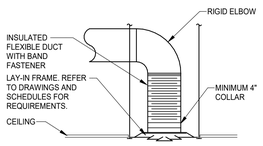
SCALE: N.T.S.



NOTE:
1. PROVIDE 3'-0" MINIMUM CLEARANCE FROM CONTROL BOX AND REHEAT TERMINAL ON VAV BOXES.

C1 TERMINAL UNIT DUCT CONNECTION

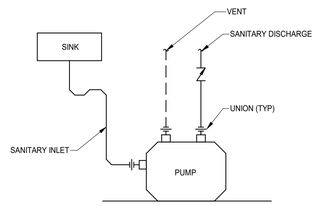
SCALE: N.T.S.



NOTES:
1. REFER TO PLANS FOR DUCT SIZES.
2. FLEX DUCT MAY BE ALTERNATIVELY POSITIONED BEFORE THE RIGID ELBOW.

C5 DIFFUSER CONNECTION DETAIL

SCALE: N.T.S.



NOTE:
1. LOCATE UNDER COUNTER BELOW SINK.

C9 SANITARY PUMP CONNECTION DETAIL

SCALE: N.T.S.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 22505 BRAD R. MOSTICK

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	RAF
Checked by:	BRM
Designer:	JMM
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

MECHANICAL DETAILS

Sheet Number:

M501

Autodesk Docs://25073_Olsson North Little Rock TI-MEP_Little Rock AK New Office_Central_016012_R23.rvt
8/20/2026 10:15:47 AM

VARIABLE AIR VOLUME SUPPLY BOXES WITH HOT WATER REHEAT

MARK	SERVES	SIZE (IN)		TOTAL APD (IN WC)	RADI. SOUND (NC)	DISCH. SOUND (NC)	AIRFLOW RATE (CFM)			HOT WATER HEATING COIL									BRANCH PIPE SIZE (IN)	MANUFACTURER	MODEL	NOTES
		INLET	OUTLET				CONNECTED	MIN	HTG MAX	CAPACITY (MBH)	EAT (°F)	LAT (°F)	FLOW (GPM)	EWT (°F)	LWT (°F)	WPD (FT)	ROWS	FPI				
VB-4-401	AHU-4 (E)	10	14x12.5	0.36	20	25	850	255	800	34.2	55.0	94.4	3.8	140.0	121.7	0.62	3	10	1"	TITUS	DESV	1-9
VB-4-403	AHU-4 (E)	14	20x17.5	0.49	21	20	2,000	600	825	39.0	55.0	98.5	2.3	140.0	104.8	0.23	3	10	3/4"	TITUS	DESV	1-9
VB-4-405	AHU-4 (E)	14	20x17.5	0.29	21	20	1,875	570	700	28.7	55.0	92.8	2.8	140.0	118.8	0.38	2	10	3/4"	TITUS	DESV	1-9
VB-4-406	AHU-4 (E)	14	20x17.5	0.29	21	20	1,875	570	700	28.7	55.0	92.8	2.8	140.0	118.8	0.38	2	10	3/4"	TITUS	DESV	1-9

NOTES:
1. SIZED AT AN ELEVATION OF 1,200 FT.
2. RADIANT SOUND LEVELS DETERMINED USING AHRI 885-2008 APPENDIX E.
3. 1/2" GLASS FIBER OR FIBER FREE LINER.
4. INCLUDE AEROCROSS MULTI-POINT CENTER AVERAGING VELOCITY SENSOR, DAMPER ACTUATOR, AND CONTROL ENCLOSURE.
5. PROVIDE LABEL INDICATING PLAN NUMBER, CFM RANGE, AND CFM FACTORY SETTING.
6. TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE MODULATING PIC VALVES FOR ALL REHEAT COILS.
7. BOTTOM ACCESS DOOR.
8. SEE FLOOR PLANS FOR VAV BOX CONFIGURATION. PROVIDE RIGHT HAND OR LEFT HAND CONFIGURATION AS REQUIRED. ADJUST CONFIGURATION AS REQUIRED TO AVOID CONFLICTS WITH ALL OTHER TRADES AND TO MAINTAIN REQUIRED CLEARANCES.
9. PROVIDE WITH 24 VOLT CONTROL TRANSFORMER.

VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT

MARK	SERVES	SIZE (IN)		TOTAL APD (IN WC)	RADI. SOUND (NC)	DISCH. SOUND (NC)	AIRFLOW RATE (CFM)			ELECTRIC HEATING COIL									MANUFACTURER	MODEL	NOTES
		INLET	OUTLET				CONNECTED	MIN	HTG MAX	CAPACITY (KW)	EAT (°F)	LAT (°F)	VOLTS	PH	STAGES	MCA (A)	MOCP (A)	SCCR (KA)			
VB-4-402	AHU-4 (E)	14	20x17.5	0.10	18	18	1600	670	670	7	55.0	88.0	277	1	SCR	31.6	35	5.0	TITUS	DESV	1-9
VB-4-404	AHU-4 (E)	12	16x15	0.10	20	23	1200	495	495	5	55.0	86.9	277	1	SCR	22.6	25	5.0	TITUS	DESV	1-9
VB-4-407	AHU-4 (E)	6	12x8	0.07	16	18	300	90	90	1	55.0	90.1	277	1	SCR	4.5	15	5.0	TITUS	DESV	1-9
VB-4-408	AHU-4 (E)	8	12x10	0.02	19	24	510	200	200	2	55.0	86.6	277	1	SCR	9.0	15	5.0	TITUS	DESV	1-9
VB-4-409	AHU-4 (E)	6	12x8	0.02	10	15	200	90	90	1	55.0	90.1	277	1	SCR	4.5	15	5.0	TITUS	DESV	1-9
VB-4-410	AHU-4 (E)	8	12x10	0.02	17	23	425	185	185	2	55.0	89.2	277	1	SCR	9.0	15	5.0	TITUS	DESV	1-9
VB-4-411	AHU-4 (E)	6	12x8	0.10	20	20	350	150	150	1.5	55.0	86.6	277	1	SCR	6.8	15	5.0	TITUS	DESV	1-9

NOTES:
1. SIZED AT AN ELEVATION OF 400 FT.
2. RADIANT SOUND LEVELS DETERMINED USING AHRI 885-2008 APPENDIX E.
3. 1/2" GLASS FIBER OR FIBER FREE LINER.
4. INCLUDE AEROCROSS MULTI-POINT CENTER AVERAGING VELOCITY SENSOR, DAMPER ACTUATOR, AND CONTROL ENCLOSURE.
5. PROVIDE LABEL INDICATING PLAN NUMBER, CFM RANGE, AND CFM FACTORY SETTING.
6. TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE MODULATING PIC VALVES FOR ALL REHEAT COILS.
7. BOTTOM ACCESS DOOR.
8. SEE FLOOR PLANS FOR VAV BOX CONFIGURATION. PROVIDE RIGHT HAND OR LEFT HAND CONFIGURATION AS REQUIRED. ADJUST CONFIGURATION AS REQUIRED TO AVOID CONFLICTS WITH ALL OTHER TRADES AND TO MAINTAIN REQUIRED CLEARANCES.
9. PROVIDE WITH 24 VOLT CONTROL TRANSFORMER.

PLUMBING FIXTURE SCHEDULE

MARK	TYPE	MANUFACTURER	MODEL	DESCRIPTION	ACCESSORIES	CONNECTIONS			
						WASTE	VENT	CW	HW
S-1	SINK UNDER MOUNTED SINGLE COMPARTMENT	ELKAY	"CROSSTOWN" ECTRU21179T	UNDERMOUNTED; 18-GAUGE STAINLESS STEEL WITH POLISHED SATIN FINISH; 22-1/2" x 18-1/2" x 9" DEEP, SINGLE COMPARTMENT SINK WITH 3-1/2" DRAIN OPENING.	PROVIDE 1-1/2" CHROME-PLATED CAST-BRASS TRAP WITH CLEANOUT AND WALL ESCUTCHEON. 1/2" CHROME-PLATED SUPPLIES WITH STOPS AND WALL ESCUTCHEONS. FAUCET: ELKAY LKAV3032 SINGLE HANDLE, 1.8 GPM, ADA COMPLIANT, PULLDOWN TYPE,LUSTROUS STEEL, CERAMIC DISK VALVE, FAUCET WITH 7" HI-ARC SWINGING SPOUT AND REMOVABLE CARTRIDGE. PROVIDE BOTTOM GRID AND A 3/4 HP GARBAGE DISPOSER.	2" UP TO 1-1/2" TRAP ARM	1-1/2"	1/2"	1/2"
S-2	SINK UNDER MOUNTED SINGLE COMPARTMENT	ELKAY	"LUSTERTONE" ELUH211512	UNDERMOUNTED; 18-GAUGE STAINLESS STEEL WITH LUSTROUS SATIN FINISH, 23-1/2" x 18-1/4" x 12" DEEP, SINGLE COMPARTMENT SINK WITH 3-1/2" DRAIN OPENING.	PROVIDE 1-1/2" CHROME-PLATED CAST-BRASS TRAP WITH CLEANOUT AND WALL ESCUTCHEON. 1/2" CHROME-PLATED SUPPLIES WITH STOPS AND WALL ESCUTCHEONS. FAUCET: ELKAY LKAV3032 SINGLE HANDLE, 1.8 GPM, ADA COMPLIANT, PULLDOWN TYPE, LUSTROUS STEEL, CERAMIC DISK VALVE, FAUCET WITH 7" HI-ARC SWINGING SPOUT AND REMOVABLE CARTRIDGE. PROVIDE BOTTOM GRID AND A CRUMB CUP FOR SINK DRAIN OPENING.	2" UP TO 1-1/2" TRAP ARM	1-1/2"	1/2"	1/2"
IMB-1	ICE MAKER OUTLET BOX	OATEY	I2K	RECESSED, ICE MAKER BOX, CENTER DRAIN OPENING, QUARTER TURN BRASS SUPPLY BALL VALVE WITH WATER HAMMER ARRESTOR, HIGH IMPACT POLYSTYRENE, INCLUDE SUPPORT BRACKETS.	-	-	-	1/2"	-
IMB-2	ICE MAKER OUTLET BOX WITH DRAIN	OATEY	ELIMINATOR	RECESSED, ICE MAKER BOX, CENTER DRAIN OPENING, QUARTER TURN BRASS SUPPLY BALL VALVE WITH WATER HAMMER ARRESTOR, HIGH IMPACT POLYSTYRENE, INCLUDE SUPPORT BRACKETS.	-	2"	1-1/2"	1/2"	-

NOTES:
1. VERIFY ALL CONNECTIONS & MOUNTING HEIGHTS WITH CODES, MANUFACTURERS, AND PLANS.
2. SIZES LISTED INDICATE MIN. SIZE ONLY. SEE PLUMBING RISERS AND FLOOR PLANS FOR LARGER SIZES.
3. ACCEPTABLE ALTERNATIVE MANUFACTURERS INCLUDE AMERICAN STANDARD, KOHLER, GUY GRAY, OR APPROVED EQUAL.

EXHAUST FANS

MARK	SERVES	AIRFLOW (CFM)	MOTOR SPEED (RPM)	ESP (IN. WC)	SOUND (SONES)	ELECTRICAL DATA				OPERATED BY	OPER. WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
						HP	VOLTS	PH	SCCR (KA)					
EF-1	104 - DATA / IT	600	1138	0.30	4.9	1/20	120	1	5	THERMOSTAT	44.00	GREENHECK	SQ-9-M1-VG	1,2,3

NOTES:
1. ELECTRICAL DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS
2. EXHAUST FAN CONTROLLED BY 120V THERMOSTAT ON WALL. IF TEMPERATURE IS HIGHER THAN 80 DEG THEN FAN IS TO RUN. FAN TO TURN OFF IF TEMPERATURE IS BELOW 77 DEG.
3. MOUNT FAN HIGH IN ROOM AND SUPPORT FAN AND DUCTWORK FROM STRUCTURE.

AIR DISTRIBUTION DEVICES

MARK	SYSTEM	COLOR	DAMPER	THROW PATTERN	MAX NC	MAX APD (IN WC)	MANUFACTURER	MODEL	NOTES
CD-1	SUPPLY	WHITE	-	360°	25	0.1	TITUS	OMNI (24x24 FACE)	1,2,3
RA-1	RETURN	WHITE	-	PERFORATED	25	0.1	TITUS	PAR (24x12 FACE)	1,2,3,6,7,8
LD-1	SUPPLY	WHITE	-	180°	25	0.1	TITUS	FL-10 (2) 1" SLOTS	1,2,4,8
LDR-1	SUPPLY	WHITE	-	180°	25	0.1	TITUS	FL-10 (2) 1" SLOTS	1,2,4,8
R-1	SUPPLY	WHITE	OBD	DOUBLE DEFL.	25	0.1	TITUS	300 RS	1,2,3,5,7

NOTES:
1. VERIFY BORDER TYPE REQUIRED.
2. NECK SIZE INDICATED ON PLANS.
3. STEEL CONSTRUCTION.
4. ALUMINUM CONSTRUCTION.
5. 3/4" BLADE SPACING.
6. PERFORATED FACE TO BE FLUSH WITH CEILING.
7. FLAT BLACK PAINT SHALL BE PROVIDED BEHIND DEVICES THAT SHOW DUCTWORK, ELEC. CONDUITS, PIPING, STRUCTURAL, ECT.
8. 2-SLOT (1" SLOT SIZE) LINEAR DIFFUSER WITH ADJUSTABLE PATTERN CONTROLLER AND TITUS INSULATED PLENUM. PLENUM INLET SIZE SHALL BE THE SAME OR LARGER THAN THE DUCTWORK SERVING DIFFUSER.

DOMESTIC WATER HEATERS (ELECTRIC)

MARK	STORAGE (GAL)	RECOVERY (GPH)	TEMP RISE (°F)	TEMP SETTING (°F)	ELECTRICAL DATA			NO. OF ELEMENTS	MANUFACTURER	MODEL	NOTES
					VOLTS	PH	TOTAL INPUT (KW)				
DWH-1	10.0	24	100	140	208	1	6	1	AO SMITH	DEL-10	1-5

NOTES:
1. PROVIDE WITH DRAIN VALVE AND T&P RELIEF VALVE.
2. INSULATED TANK WITH 150 PSI MAX WORKING PRESSURE.
3. PROVIDE WITH EXPANSION TANK ET-1, AMTROL MODEL ST-5, 0.9 GALLON ACCEPTANCE.
4. PROVIDE WITH CEILING MOUNTED INSTALLATION KIT.
5. PROVIDE WITH THERMOSTATIC MIXING VALVE (MV-1), POWERS MODEL LFLM490. MAX DISTRIBUTION TEMPERATURE TO BE 110°F.

SANITARY PUMPS

MARK	GPM	HEAD (FT)	HP	VOLTS	RECEIVER			MANUFACTURER	MODEL	NOTES
					VOLUME (GAL)	DIA. (IN)	HEIGHT (IN)			
SP-1	5	20.0	1/3	120	4.3	13.75	11	LIBERTY PUMPS	404L	1,2,3
SP-2	5	20.0	1/3	120	4.3	13.75	11	LIBERTY PUMPS	404L	1,2,3

NOTES:
1. LOW PROFILE HEIGHT LESS THAN 11".
2. 2" DISCHARGE, INLET, AND VENT CONNECTIONS.
3. INTEGRAL FLOAT SWITCH.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 22505 BRAD R. MONTER

x	REVISION SCHEDULE	
#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: RAF
Checked by: BRM
Designer: JMM
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

MECHANICAL SCHEDULES

Sheet Number:

M601

Autodesk Docs://25073_Olsson North Little Rock T1 MEP_Little Rock AK New Office_Central_0100172_R23.rvt
8/20/2026 10:10:47 AM

DIVISION 21/22/23 - MECHANICAL SPECIFICATIONS

SECTION 210000/220000/230000 - GENERAL PROVISIONS

THE DRAWINGS, GENERAL NOTES, GENERAL CONDITIONS, AND DIVISION 1 GENERAL REQUIREMENTS SHALL BE CONSIDERED AS PART OF THIS SPECIFICATION.

ALL NEW WORK SHALL MEET LANDLORD REQUIREMENTS. BIDDING CONTRACTORS SHALL OBTAIN TENANT CRITERIA FROM LANDLORD PRIOR TO BIDDING. COORDINATE SPECIFIC REQUIREMENTS WITH LANDLORD.

ALL MATERIALS AND EQUIPMENT SHALL BE NEW, INSTALLED IN FULL COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS, INSTALLED IN ACCORDANCE WITH ACCEPTED GOOD PRACTICE OF THE INDUSTRY, AND ALL APPLICABLE ITEMS SHALL CARRY A UL LABEL.

ALL NEW WORKS SHALL MEET BUILDING STANDARDS. COORDINATE WITH LANDLORD.

THE WORD 'PROVIDE' AS USED HEREIN MEANS TO FURNISH AND INSTALL COMPLETE, INCLUDING ALL ITEMS NECESSARY FOR A FULLY-FUNCTIONAL SYSTEM.

FAMILIARIZE ONESELF WITH ALL REQUIREMENTS AS TO PERMITS, LICENSES, FEES, CODES, AND ORDINANCES AND ARRANGE TO COMPLY WITH THEM. ALL PERMITS, LICENSES, FEES, AND INSPECTIONS REQUIRED FOR THE WORK UNDER THIS CONTRACT SHALL BE OBTAINED AND PAID FOR UNLESS OTHERWISE SPECIFIED.

ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE NFPA, NEC, ANSI, UL, SMACNA, AND ASHRAE CODES AND STANDARDS UNLESS SUPERCEDED BY STATE AND LOCAL REGULATION. CONFORM TO DOCUMENTS WHEN CODES ARE EXCEEDED.

EXAMINE SITE BEFORE BIDDING. ADVISE ENGINEER PRIOR TO BID IF SITE CONDITIONS DICTATE MODIFICATION TO THE BASE DESIGN.

COORDINATE ALL WORK WITH OTHER TRADES AND VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD. CUT AND PATCH ONLY AS REQUIRED. COORDINATE ALL CHANGES TO BUILDING STRUCTURE WITH ARCHITECT/ENGINEER AND THEIR REQUIREMENTS PRIOR TO EXECUTION.

SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO GENERAL CONTRACTOR OR CONSTRUCTION MANAGER FOR FORWARDING TO ARCHITECT/ENGINEER FOR APPROVAL. SUBMITTALS SHALL BE IN ACCORDANCE WITH GENERAL CONDITIONS AND SHALL BEAR A STAMP OF THE MECHANICAL CONTRACTOR SHOWING THAT THEY REVIEWED AND APPROVED THEM. LACK OF SUCH CONTRACTOR APPROVAL WILL BE CAUSE FOR REJECTION WITHOUT REVIEW BY THE ARCHITECT/ENGINEER.

SUBSTITUTION OF EQUIPMENT MAY BE PERMITTED WITH PRIOR APPROVAL OF ENGINEER. THE ENGINEER SHALL BE THE SOLE AND FINAL JUDGE AS TO THE SUITABILITY OF ITEMS SUBSTITUTED FOR THOSE SPECIFIED. THE ENTIRE COST OF ALL CHANGES DUE TO SUBSTITUTION SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

PAINTING, IF REQUIRED, SHALL BE COORDINATED WITH AND COMPLETED BY THE GENERAL CONTRACTOR. COORDINATE ALL PAINTING REQUIREMENTS WITH ARCHITECT, GENERAL CONTRACTOR, AND OWNER'S CONSTRUCTION MANAGER.

PROVIDE ACCESS DOORS FOR ALL DEVICES REQUIRING INSPECTION OR MAINTENANCE. MINIMUM SIZE SHALL BE 12" x 12".

MECHANICAL CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN THEIR WORK AS THE JOB PROGRESSES, AND UPON COMPLETION, SHALL TURNOVER TO THE ARCHITECT/ENGINEER A 'RECORD' SET OF PRINTS SHOWING THESE CHANGES.

THE CONTRACTOR SHALL GUARANTEE THAT ALL MECHANICAL SYSTEMS SHALL BE FREE FROM DEFECTS IN WORKMANSHIP, MATERIALS, AND PERFORMANCE TO SPECIFIED CAPACITIES AND THAT IF SUCH DEFECTS SHALL APPEAR DURING A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE, THEY WILL REMEDY SUCH DEFECTS TO THE SATISFACTION OF THE ARCHITECT/ENGINEER AT NO EXTRA COST TO THE OWNER, WITHIN A REASONABLE TIME.

FURNISH AN ELECTRONIC OPERATING AND MAINTENANCE MANUAL TO THE ARCHITECT/ENGINEER AFTER ALL TESTS AND ADJUSTMENTS HAVE BEEN MADE. FINAL PAYMENT WILL NOT BE MADE UNTIL THIS MANUAL HAS BEEN APPROVED AND DELIVERED TO THE OWNER. THE MANUAL SHALL INCLUDE, BUT NOT BE LIMITED TO:

1. CONTRACTOR ADDRESS AND PHONE NUMBER.
2. MANUFACTURER AND LOCAL REPRESENTATIVE ADDRESSES AND PHONE NUMBERS.
3. MANUFACTURERS' MANUAL AND PARTS LIST.
4. FILTER AND V-BELT LIST.
5. TEST AND BALANCE REPORT.
6. STATE OR CITY TESTS, APPROVAL, OR ACCEPTANCE OF SYSTEMS (THIS SHALL INCLUDE WATER STERILIZATION AND EQUIPMENT INSTALLATION START-UPS.)

SECTION 211000 - SPRINKLER SYSTEM

PROVIDE AUTOMATIC FIRE EXTINGUISHING DISTRIBUTION SYSTEM THROUGHOUT THE PROJECT BOUNDARY.

COMPLY WITH ALL REQUIREMENTS OF THE GOVERNMENTAL AGENCIES AND AUTHORITIES HAVING JURISDICTION OVER THE PREMISES. DESIGN AND INSTALLATION SHALL COMPLY WITH NFPA #13 AND ALL APPLICABLE STATE AND LOCAL LAWS AND ORDINANCES. SUBCONTRACT THE WORK TO A LICENSED CONTRACTOR.

SUBMIT SHOP DRAWINGS TO INDICATE DESIGN, LAYOUT, MATERIALS, AND INSTALLATION. SUBMIT TO THE ARCHITECT/ENGINEER, AND TO AUTHORITIES HAVING JURISDICTION, AND OBTAIN THEIR APPROVAL PRIOR TO EXECUTION OF THE WORK OF THIS SECTION. SHOP DRAWINGS SHALL SHOW PIPING AND SPRINKLER HEADS, CEILING CONSTRUCTION AND HEIGHTS, LIGHTS, MECHANICAL DIFFUSERS, SOFFITS, AND OTHER CEILING DROPS.

ALL WET-PIPE SPRINKLER PIPING 2" AND SMALLER SHALL BE EITHER SCHEDULE 40, BLACK-STEEL PIPE WITH THREADED ENDS, UNCOATED GRAY-IRON THREADED FITTINGS, AND THREADED JOINTS; OR SCHEDULE 10 BLACK STEEL PIPE WITH ROLL-GROOVED ENDS, UNCOATED GROOVED END FITTINGS, GROOVED-END PIPE COUPLINGS, AND GROOVED JOINTS. WET PIPING 2-1/2" AND LARGER SHALL BE SCHEDULE 10 BLACK STEEL PIPE WITH ROLL-GROOVED ENDS, UNCOATED GROOVED END FITTINGS, GROOVED-END PIPE COUPLINGS, AND GROOVED JOINTS.

SPRINKLER HEADS IN CEILINGS SHALL BE FULLY CONCEALED TYPE WITH FACTORY-PAINTED CUSTOM COLOR (BY ARCHITECT) COVER PLATE. HEADS IN AREAS WITH NO CEILING SHALL BE EXPOSED, UPRIGHT SPRINKLERS. UPRIGHT SPRINKLERS IN FINISHED AREAS SHALL BE CHROME-PLATED. SIDEWALL SPRINKLERS SHALL BE CHROME-PLATED AND INSTALLED WHERE NOTED ON THE PLANS.

COORDINATE SPRINKLER SYSTEM WORK WITH OTHER TRADES TO CLEAR PIPING, LIGHTING, DUCTWORK, AND STRUCTURAL MEMBERS.

NOTIFY LANDLORD/OWNER PRIOR TO DRAINING AND/OR REFILLING SPRINKLER SYSTEM. PERFORM THE WORK, TEST, AND RECONNECT TO THE MAIN SYSTEM.

IN ALL AREAS WITH CEILINGS, INSTALL PIPING ABOVE CEILING UNLESS OTHERWISE DIRECTED. LOCATE SPRINKLER HEADS CENTERED IN SQUARE CEILING PANELS. LOCATE DRAIN LINES TO PREVENT WATER DAMAGE IN BUILDING.

FLEXIBLE HOSES TO HEADS SHALL ONLY BE USED IN CONCEALED LOCATIONS WITH LANDLORD APPROVAL.

SECTION 220500/230500 - COMMON WORK RESULTS

PIPE SLEEVES AND FIRE STOPPING:
THIS CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, SETTING, AND PROPER LOCATION OF ALL SLEEVES REQUIRED FOR PLUMBING WORK. ALL SLEEVES SHALL BE OF SUFFICIENT SIZE TO PERMIT PIPE MOVEMENT DUE TO EXPANSION AND CONTRACTION, AND TO ACCOMMODATE PIPE INSULATION.

HOLES FOR PIPING THROUGH CONCRETE FLOORS AND WALLS SHALL BE SCHEDULE 40 STEEL PIPE, SECURED TO WALL. SLEEVES ARE NOT REQUIRED FOR CORE-DRILLED OPENINGS.

PIPES SHALL NOT BE INSTALLED THROUGH FOOTINGS, BEAMS, OR COLUMNS EXCEPT AS APPROVED BY STRUCTURAL ENGINEER.

FIRESTOPPING IS DEFINED HEREIN AS THE PROCESS OF FURNISHING AND INSTALLING MATERIAL, OR COMBINATION OF MATERIALS, IN VARIOUS CONSTRUCTION TO MAINTAIN AN EFFECTIVE BARRIER AGAINST THE SPREAD OF FLAME, SMOKE, AND GASES AND TO RETAIN THE INTEGRITY OF TIME-RATED CONSTRUCTION. INSTALL FIRESTOP FOR ALL PIPING AND DUCT PENETRATIONS THROUGH FLOOR SLAB, THROUGH FIRE-RATED PARTITIONS, OR FIRE WALLS.

SECTION 220529/230529 - HANGERS AND SUPPORT

ALL FERROUS PIPING SHALL BE HUNG WITH ADJUSTABLE SWIVEL RING AND HANGERS. ALL COPPER PIPING SHALL BE HUNG WITH ADJUSTABLE SWIVEL RING, COPPER PLATED HANGERS FOR NOMINAL TUBING AS REQUIRED. PROVIDE VINYL-COATED HANGERS FOR PEX PIPING.

PROVIDE HANGER RODS OF THE PROPER LENGTH AND SIZE FOR ALL HANGERS.

UTILIZE WALL BRACKETS, BEAMS, OR OTHER CONSTRUCTION TO SUPPORT HANGER RODS WITH APPROPRIATE BEAM CLAMPS OR OTHER STRUCTURAL ATTACHMENTS. SHOT-IN ANCHORS WILL NOT BE ACCEPTED.

CONTRACTOR SHALL FURNISH AND INSTALL MISCELLANEOUS STEEL MEMBERS FOR SUPPORT OF PIPING WHERE REQUIRED. STANDARD CONNECTIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SHALL BE UTILIZED. WELDING TO BUILDING STEEL IS NOT ALLOWED.

ALL PIPES SHALL BE SUPPORTED AT EACH FLOOR LEVEL AND ELSEWHERE AS REQUIRED TO ELIMINATE VIBRATION WITH RISER CLAMPS.

HANGERS FOR STEEL AND COPPER PIPING SHALL BE SPACED NOT OVER 10'-0" ON CENTERS, AND CLOSER WHERE REQUIRED TO ACCOMMODATE CONCENTRATED LOADS AND TO LIMIT DEFLECTION TO 1/4". HANGERS SHALL BE INSTALLED AT ALL CHANGES IN DIRECTION OF PIPING.

HANGERS FOR PEX PIPING SHALL BE SPACED NOT OVER 4'-0" ON CENTERS, AND CLOSER WHERE REQUIRED TO LIMIT DEFLECTION TO 1/4". HANGERS SHALL BE INSTALLED AT ALL CHANGES IN DIRECTION OF PIPING.

HANGERS FOR PVC PIPING SHALL COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, OR LOCAL CODES, WHICHEVER IS MORE STRINGENT.

FIXTURES, FIXTURE SUPPORTS, FIXTURE TRIMMINGS, ETC., SHALL BE SECURED WITH 1/2" BRASS THROUGH BOLTS, EXPANSION BOLTS OR TOGGLE BOLTS IN ACCORDANCE WITH WALL MATERIAL AND AS REQUIRED TO SECURELY ANCHOR FIXTURE TO WALL. EXPOSED HEADS AND CAP NUTS SHALL BE CHROMIUM PLATED.

HANGERS FOR PIPE SHALL BE SIZED TO ACCOMMODATE INSULATION AND SHALL BE INSTALLED WITH SHEET METAL SHIELDS.

SECTION 220548/230548 - VIBRATION ISOLATORS

CONTRACTOR SHALL PROVIDE ISOLATION SYSTEMS SO THAT OBJECTIONABLE NOISES OR VIBRATIONS WILL NOT BE TRANSMITTED THROUGH FOUNDATIONS, FLOORS, WALLS, COLUMNS, PIPING AND DUCTS, ETC. ALL ISOLATION SYSTEMS PROPOSED SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER.

EVERY ROTATING AND RECIPROCATING ITEM OF EQUIPMENT, THEIR COMPONENTS, AND MATERIALS USED FOR CONVEYANCE, SHALL BE PROVIDED WITH THE PROPER ISOLATION EQUIPMENT. FACTORY PACKAGED EQUIPMENT SHALL BE FURNISHED COMPLETE WITH INTEGRAL ISOLATORS.

SECTION 220700/230700 - PIPE INSULATION

AS MANUFACTURED BY JOHNS MANVILLE, KNAUF, OR OWENS CORNING. ALL INSULATION SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS, AS TESTED BY PROCEDURE ASTM E-84, NFPA 255, & UL 723, NOT EXCEEDING A FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPED RATING OF 50. INSULATION SHALL BE CONTINUOUS THROUGH WALLS, INCLUDING WHERE INSTALLED INSIDE OF WALL CAVITIES.

PRE-FORMED, FIBERGLASS PIPE INSULATION WITH ALL-SERVICE JACKET, INCLUDING SELF-SEALING LAPS, AND VAPOR BARRIER SHALL BE PROVIDED FOR THE FOLLOWING SYSTEMS:
- HEATING HOT WATER AND CHILLED WATER PIPING: 1-1/2" THICK.
- DOMESTIC COLD WATER AND HOT WATER: 1" THICK.

ALL VALVES AND FITTINGS SHALL BE INSULATED WITH ZESTON PRE-MOLDED PVC COVERS WITH GLASS FIBER INSERT TO SAME THICKNESS AS PIPE INSULATION. TAPE JUNCTION OF COVERS AND PIPE INSULATION. SEAL THROAT OF COVERS WITH MASTIC FOR ALL COLD WATER PIPING IN BUILDING.

SECTION 221000/231000 - PIPING MATERIALS

ALL PIPE AND FITTINGS SHALL BE SMOOTH INSIDE, STRAIGHT, FREE FROM WELD OR SOLDER FLAWS, BLISTERS, OR OTHER DEFECTS. EACH LENGTH OF PIPE AND EACH FITTING SHALL HAVE CAST, STAMPED, OR INDELIBLY MARKED ON IT, THE MAKER'S MARK OR NAME AND THE WEIGHT AND QUALITY OF THE PRODUCT WHERE SUCH MARKING IS REQUIRED BY THE APPROVED STANDARD THAT APPLIES. ALL SIZES SHOWN ON PLANS ARE I.D. REFERENCES TO ANSI AND OTHER STANDARDS SHALL BE LATEST EDITIONS.

PIPING:
ALL SANITARY WASTE PIPING IN BUILDING ABOVE GROUND AND VENTS ABOVE GROUND SHALL BE PVC PLASTIC PIPE OR CAST IRON PIPE (BELL & SPIGOT OR HUBLESS WITH 304 STAINLESS STEEL HEAVY-DUTY COUPLING). PLASTIC PIPE AND FITTINGS SHALL NOT BE INSTALLED IN CEILING SPACES USED FOR AIR PLENUMS UNLESS COVERED WITH A MINIMUM OF 1" FIBERGLASS INSULATION AS SPECIFIED IN SECTION 220700.

HORIZONTAL SOIL, WASTE, AND DRAIN PIPE SHALL BE SLOPED AT 1/4" PER FOOT EXCEPT WHEN THE PIPE IS 3" OR LARGER WHICH MAY BE INSTALLED WITH A SLOPE OF NOT LESS THAN 1/8" PER FOOT UNLESS OTHERWISE NOTED.

ALL ABOVE GROUND DOMESTIC COLD AND DOMESTIC HOT WATER PIPING INSIDE BUILDING SHALL BE TYPE 'L' HARD TEMPER COPPER TUBING CONFORMING TO ASTM B88 WITH SOLDERED JOINTS.

ALL HEATING WATER PIPING INSIDE BUILDING SHALL BE TYPE 'L' HARD TEMPER COPPER TUBING CONFORMING TO ASTM B88 WITH SOLDERED JOINTS, OR SCHEDULE 40 THREADED STEEL PIPE CONFORMING TO ASTM A53.

FITTINGS:
FITTINGS FOR CAST IRON SOIL PIPE, BELL AND SPIGOT, SHALL BE CAST IRON CONFORMING TO ASTM A74. JOINTS SHALL BE MADE WITH VULCANIZED RUBBER OR NEOPRENE CONFORMING TO ASTM C-564.

FITTINGS FOR CAST IRON SOIL PIPE (HUBLESS) SHALL BE MADE WITH 304 STAINLESS STEEL COUPLINGS. GASKETS TO CONFORM TO CISPI 301.

PVC FITTINGS FOR PVC PIPING.

FITTINGS FOR RIGID COPPER TUBING SHALL BE WROUGHT COPPER SOLDER FITTINGS CONFORMING TO ANSI B16.22.

JOINTS:
SCREWED PIPE JOINTS SHALL HAVE FULL CLEAN CUT THREADS CONFORMING TO ANSI B2.1, WITH ENDS OF PIPE REAMED, FILED AND ALL BURRS REMOVED. JOINTS SHALL BE MADE WITH GRAPHITE BASE PIPE JOINT COMPOUND OR APPROVED EQUAL COMPOUND. FITTINGS AND PIPE SHALL BE FREE FROM OIL AND GREASE.

SOLDERED COPPER PIPE JOINTS SHALL USE 95% TIN AND 5% ANTIMONY SOLDER USING A NON-CORROSIVE FLUX.

PVC PIPE JOINTS SHALL BE SOLVENT WELD WITH SOLVENT CEMENT CONFORMING TO ASTM D2855 AND D2564.

INSTALL INSULATING TYPE DIELECTRIC UNIONS FOR CONNECTING DISSIMILAR PIPE.

PIPE LABELS:
ATTACHED SELF-ADHESIVE, PRINTED PLASTIC, PIPE LABELS TO ALL NEW DOMESTIC AND HYDRONIC PIPING IN CONCEALED AREAS. SPACING SHALL BE EVERY 20' AND NEXT TO EACH WALL PENETRATION, ACCESS DOOR, OR MAJOR EQUIPMENT. LABEL SHALL INCLUDE A MINIMUM OF 1/2" HIGH LETTERS AND FLOW ARROWS.

VALVES:
VALVES SHALL BE OF ONE MANUFACTURER THROUGHOUT INSTALLATION. VALVES SHALL BE RATED 200 PSI FOR COLD WATER SERVICE. SOLDER JOINT VALVES SHALL BE RATED 150 PSI FOR WATER SERVICE AT 200°F. UNLESS OTHERWISE SPECIFIED OR INDICATED. ALL VALVES SHALL BE FULL-PORT BALL VALVES. WHERE VALVES AND PIPING SHALL BE INSULATED, EXTENDED STEMS SHALL BE PROVIDED ON VALVES.

SOLDER JOINT VALVES FOR COPPER TUBING:
- BALL VALVES - BRONZE/BRASS BALL, SCREWED TFE SEAT.
- CHECK VALVES - BRONZE SWING CHECK.

TESTING AND FLUSHING:
ALL WATER PIPING SHALL BE HYDROSTATICALLY TESTED, AT 1-1/2 TIMES OPERATING PRESSURE (MIN. 125 PSI), LEAKS REPAIRED AND SYSTEM RETESTED UNTIL PROVED RIGHT BEFORE BACKFILLING, OR CONCEALING OF INSULATED PIPE. WASTE PIPE SHALL BE TESTED AT A MINIMUM OF 10' OF WATER.

ALL POTABLE WATER SYSTEM PIPING AND COMPONENTS SHALL BE FLUSHED AND STERILIZED AFTER CLEANING. STERILIZE AND CHLORINATE IN ACCORDANCE WITH STATE AND LOCAL HEALTH DEPARTMENT STANDARDS, SUBMIT SAMPLES TO BE TESTED AND PROVIDE REPORT TO ARCHITECT/ENGINEER.

SECTION 224000 - PLUMBING FIXTURES

PLUMBING FIXTURES SHALL BE FURNISHED AND INSTALLED IN A WORKMANLIKE MANNER WITH PROPER CONNECTIONS TO SUPPLY AND DRAINAGE PIPING. ALL FIXTURES SHALL BE FREE OF DEFECTS AND FLAWS AND SHALL OPERATE PERFECTLY WHEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

TRAPS:
EACH FIXTURE AND EACH PIECE OF EQUIPMENT REQUIRING CONNECTION TO THE SANITARY DRAINAGE SYSTEM SHALL BE EQUIPPED WITH WATER-SEALED TRAP. EACH TRAP SHALL BE PLACED AS NEAR THE FIXTURE AS POSSIBLE. TRAPS EXPOSED TO VIEW IN FINISHED SPACES SHALL BE CHROME-PLATED CAST BRASS WITH CLEANOUT. TRAPS INSTALLED ON THREADED PIPE SHALL BE RECESS DRAINAGE PATTERN.

VENT PIPING:
MINIMUM SIZES OF FIXTURE VENTS SHALL BE INSTALLED AS SHOWN IN RISER DIAGRAM ON THE DRAWINGS. CONNECTING VENTS SHALL BE SIZED AND RUN TO MAIN VENT SHOWN ON PLANS. VENTS MUST BE CONNECTED INTO STACK VENTS ABOVE HIGHEST FIXTURE.

SEE PLUMBING FIXTURE SCHEDULE ON MECHANICAL SCHEDULE SHEET.

SECTION 230593 - TESTING AND BALANCING

AFTER THE HEATING AND COOLING SYSTEMS ARE OPERABLE, ENGAGE A NEBB-CERTIFIED TAB SPECIALIST TO OPERATE THE SYSTEMS AND MAKE ADJUSTMENTS IN THE CONTROLS AND EQUIPMENT AS REQUIRED TO BALANCE THE SYSTEMS TO DELIVER THE REQUIRED DESIGN AIR QUANTITIES AND TEMPERATURES. PROVIDE TYPEWRITTEN TEST AND BALANCE REPORT, INDICATING ACTUAL READINGS AT ALL INLETS AND OUTLETS IN THE SUPPLY, RETURN AND EXHAUST SYSTEMS. DELIVER TO ARCHITECT/ENGINEER. USE NEBB REPORTING FORMS FOR REPORT.

SECTION 230700 - HVAC INSULATION

DUCT INSULATION SHALL BE AS MANUFACTURED BY CERTAINTEED, JOHNS MANVILLE, KNAUF, OR OWENS CORNING. ALL INSULATION SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS, AS TESTED BY PROCEDURE ASTM E-84, NFPA 255, & UL 723, NOT EXCEEDING FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPED RATING OF 50.

INTERIOR DUCTWORK (DUCTWORK IN MECHANICAL ROOMS SHALL BE CONSIDERED AS CONCEALED):
- ROUND SUPPLY DUCT IN EXPOSED AREAS SHALL BE DOUBLE-WALL SPIRAL DUCTWORK WITH 1" INTERSTITIAL INSULATION, PERFORATED INNER LINER, AND PAINT GRIP FINISH, OR SHALL BE COVERED WITH 1-1/2" THICK 3/4 LB. DENSITY FIBERGLASS BLANKET DUCT WRAP WITH FACTORY-APPLIED FRK FACING, AND VAPOR BARRIER.
- RECTANGULAR SUPPLY DUCT IN EXPOSED AREAS SHALL BE LINED WITH 1" THICK, 2 LB. DENSITY GLASS TEXTILE FIBER LINER.
- ROUND AND RECTANGULAR SUPPLY DUCT IN CONCEALED AREAS SHALL BE COVERED WITH 1-1/2" THICK 3/4 LB. DENSITY FIBERGLASS BLANKET DUCT WRAP WITH FACTORY-APPLIED FRK FACING, AND VAPOR BARRIER.
- RECTANGULAR TRANSFER DUCT SHALL BE LINED WITH 1" THICK, 2 LB. DENSITY GLASS TEXTILE FIBER LINER.

LINER SHALL MEET THE STANDARDS OF NFPA 90A.

SECTION 230900 - CONTROLS

PROVIDE ALL TEMPERATURE CONTROLS IN ACCORDANCE WITH RECOMMENDATIONS OF THE EQUIPMENT MANUFACTURER.

CONTROLS SHALL TIE INTO EXISTING BUILDING MANAGEMENT SYSTEM.

1. FURNISH COMPLETE CONTROL DIAGRAMS SHOWING ALL ASPECTS OF THE OPERATION.
2. PROVIDE ALL WIRING, TUBING, ETC. REQUIRED FOR COMPLETE AND OPERATING SYSTEM.
3. ALL CONTROLS AND SAFETY DEVICES SHALL BE THOROUGHLY CHECKED TO ASSURE PROPER OPERATION AND PROTECTION.
4. SEE FLOOR PLANS FOR ZONE TEMPERATURE SENSOR LOCATIONS. COORDINATE FINAL PLACEMENT OF ZONE SENSORS WITH FURNITURE LAYOUT, EQUIPMENT LAYOUT, LANDLORD, OWNER'S CONSTRUCTION MANAGER, AND ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION.
5. ZONE TEMPERATURE SENSOR ROUGH-INS BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS.
6. ALL NEW VAV BOXES SHALL BE CONTROLLED BY THE EXISTING CONTROL SEQUENCE CONTROLLING OTHER VAV BOXES IN THE BUILDING.
7. THERMOSTATS SHALL MATCH EXISTING.
8. EXHAUST FAN SHALL OPERATE BASED ON TEMPERATURE IN DATA ROOM. REFER TO SCHEDULE NOTE.

SECTION 233000 - DUCTWORK AND ACCESSORIES

SHEET METAL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH LATEST EDITION OF LOCAL CODES, ASHRAE, AND SMACNA STANDARDS FOR LOW PRESSURE DUCT SYSTEMS. SEISMIC BRACING SHALL BE PROVIDED PER CODE AND PER SMACNA STANDARDS.

ALL EXPOSED ROUND DUCT AND MEDIUM PRESSURE ROUND DUCT SHALL BE SPIRAL CONSTRUCTION. ALL CONCEALED LOW PRESSURE ROUND DUCT SHALL BE SPIRAL CONSTRUCTION OR CONSTRUCTED WITH A LONGITUDINAL SEAM AND SCREWED OR POP RIVETED TOGETHER.

DUCTS AND CASINGS SHALL BE MECHANICALLY TIGHT AND SUBSTANTIALLY AIRTIGHT. ALL SEAMS SHALL BE SEALED OR GLUED PER MANUFACTURER'S RECOMMENDATIONS.

SIZES SHOWN ON THE PLAN INDICATE THE FREE AREA OF THE DUCT UNLESS OTHERWISE NOTED. GALVANIZED SHEET STEEL SHALL COMPLY WITH ASTM A653 AND HAVE GALVANIZED COATING DESIGNATION G60 WITH MILL PHOSPHATIZED FINISH. TIE RODS SHALL BE GALVANIZED STEEL, 1/4" MINIMUM DIAMETER FOR LENGTHS 36" OR LESS; 3/8" MINIMUM DIAMETER FOR LENGTHS LONGER THAN 36".

CLEAN DUCTWORK BY REMOVING ALL VISIBLE CONTAMINANTS. FAILURE TO PROTECT DUCTWORK OPENINGS FROM CONSTRUCTION DUST MAY RESULT IN A MORE STRINGENT CLEANING METHODOLOGY REQUIREMENT.

DUCT CONSTRUCTION PRESSURE CLASSES:
- SUPPLY DUCTS CONNECTED TO AHU'S: POSITIVE 4" W.G.
- RETURN DUCTS: POSITIVE OR NEGATIVE 2" W.G.

SEALANTS AND GASKETS SHALL HAVE A MAXIMUM FLAME-SPREAD INDEX OF 25 AND A MAXIMUM SMOKE-DEVELOPED INDEX OF 50 WHEN TESTED ACCORDING TO UL 723.

APPLY WATER BASED JOINT AND SEAM SEALANTS. PRODUCTS SHALL BE RATED FOR INDOOR/OUTDOOR USE, WATER RESISTANT, MOLD AND MILDEW RESISTANT, WITH A SERVICE TEMPERATURE OF -20 TO 200 DEGREES.

FLANGED JOINT SEALANTS SHALL COMPLY WITH ASTM C920. FLANGED JOINT GASKETS SHALL BE BUTYL RUBBER, NEOPRENE, OR EPDM POLYMER WITH POLYISOBUTYLENE PLASTICIZER.

PROTECT DUCTS EXPOSED IN FINISHED SPACES FROM BEING DENTED, SCRATCHED, OR DAMAGED. TRIM DUCT SEALANTS FLUSH WITH METAL. CREATE A SMOOTH AND UNIFORM EXPOSED BEAD. DO NOT USE TWO-PART TAPE SEALING SYSTEM. MAINTAIN CONSISTENCY, SYMMETRY, AND UNIFORMITY IN THE ARRANGEMENT AND FABRICATION OF FITTINGS, HANGER AND SUPPORTS, DUCT ACCESSORIES, AND AIR OUTLETS. REMOVE ALL LABELS AND MARKINGS FOR A CLEAN AND UNIFORM GALVANIZED EXPOSED FINISH.

SEAL DUCTS TO THE FOLLOWING SEAL CLASSES ACCORDING TO SMACNA'S 'HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE':

1. CONDITIONED SPACE, SUPPLY-AIR DUCTS <= 4" W.G.: SEAL CLASS B.
2. CONDITIONED SPACE, RETURN-AIR DUCTS: SEAL CLASS B.

SECTION 233300 - AIR DUCT ACCESSORIES

INSTALL DUCT ACCESSORIES ACCORDING TO APPLICABLE DETAILS IN 2020 SMACNA 'HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE'.

TURNING VANES SHALL BE INSTALLED IN EACH BEND OR TURN IN ALL SUPPLY, EXHAUST AND RETURN AIR DUCTS. INSTALL SPLITTER DAMPERS, MANUAL DAMPERS, ETC., WHERE NOTED ON THE PLANS OR WHERE REQUIRED.

ACCESS DOORS 18"x18", OR AS LARGE AS DUCT WILL ALLOW, SHALL BE INSTALLED WHERE REQUIRED TO PROVIDE ACCESS TO WORKING PARTS, FIRE DAMPERS, FUSIBLE LINKS, FILTERS, COILS, ETC.

WHEREVER SHEET METAL DUCTWORK IS INSTALLED, ALL DUCT CONNECTIONS TO EQUIPMENT WITH BLOWERS SHALL BE MADE WITH FLEXIBLE DUCT CONNECTION A MINIMUM OF 3" WIDE OF FIRE RESISTANT MATERIAL THAT IS ABSOLUTELY WATERTIGHT AND AIRTIGHT. FABRIC SHALL WITHSTAND TEMPERATURE OF 200°F CONTINUOUSLY. CONNECTION OF FLEXIBLE DUCT TO SHEET METAL SHALL BE MADE AIRTIGHT WITH RIVETS OR SCREWS AS REQUIRED. VENTGLAS BY VENTFABRICS, OR NEOPRENE FABRIDUCT BY ELGEN. COMPLY WITH NFPA 90A.

FLEXIBLE DUCT SHALL BE A MAXIMUM OF 5'-0" LONG AT DIFFUSERS CONNECTIONS.

SQUARE OR RECTANGULAR BALANCING DAMPERS SHALL BE STANDARD-LEAKAGE DAMPERS WITH OPPOSED 3V BLADE TYPE. GREENHECK MBD-15 OR EQUAL. ROUND BALANCING DAMPERS SHALL BE GREENHECK MBDR-50 OR EQUAL. FURNISH EACH DAMPER WITH 1-1/2" STANDOFF BRACKET AND POSITIVE LOCKING QUADRANT FOR MANUAL DAMPERS TO HOLD DAMPER BLADES SECURELY IN THE DESIRED POSITION AND SHALL INDICATE THE RELATIVE POSITION OF THE DAMPER BLADES. QUADRANTS SHALL BE MOUNTED IN ACCESSIBLE LOCATIONS.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 22505 8-20-2026 BRAD R. MOSTICK

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: RAF
Checked by: BRM
Designer: JMM
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

MECHANICAL SPECIFICATIONS

Sheet Number:

M701

Autodesk Docs://25073_Olsson North Little Rock 1 Riverfront Office_Central_016017.2_R23.rvt
8/20/2026 10:14:47 AM

ELECTRICAL SYMBOL LEGEND

NOT ALL SYMBOLS SHOWN ARE USED IN THIS PROJECT

POWER DEVICES

- DUPLEX RECEPTACLE; MOUNT AT 18" TO CENTER OF DEVICE AFF UNLESS OTHERWISE NOTED
- SIMPLEX RECEPTACLE; MOUNT AT 18" TO CENTER OF DEVICE AFF UNLESS OTHERWISE NOTED
- FOUR PLEX RECEPTACLE; MOUNT AT 18" TO CENTER OF DEVICE AFF UNLESS OTHERWISE NOTED
- ABOVE COUNTER, DUPLEX RECEPTACLE
- ABOVE COUNTER, FOUR PLEX RECEPTACLE
- DUPLEX RECEPTACLE, MOUNTED HORIZONTALLY
- ABOVE COUNTER, DUPLEX RECEPTACLE, MOUNTED HORIZONTALLY
- GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE
- ABOVE COUNTER, GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE
- FOUR PLEX GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE
- ABOVE COUNTER, FOUR PLEX GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE
- GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE, MOUNTED HORIZONTALLY
- ABOVE COUNTER, GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE, MOUNTED HORIZONTALLY
- DEAD FRONT, GROUND FAULT INTERRUPTER DEVICE
- ABOVE COUNTER, DEAD FRONT, GROUND FAULT INTERRUPTER DEVICE
- DUPLEX RECEPTACLE, ON EMERGENCY CIRCUIT
- ABOVE COUNTER, DUPLEX RECEPTACLE, ON EMERGENCY CIRCUIT
- DUPLEX RECEPTACLE, ON EMERGENCY CIRCUIT, MOUNTED HORIZONTALLY
- ABOVE COUNTER, DUPLEX RECEPTACLE, ON EMERGENCY CIRCUIT, MOUNTED HORIZONTALLY
- FOUR PLEX RECEPTACLE, ON EMERGENCY CIRCUIT
- ABOVE COUNTER, FOUR PLEX RECEPTACLE, ON EMERGENCY CIRCUIT
- CONTROLLED RECEPTACLE
- SPECIAL USE RECEPTACLE
- DUPLEX USB RECEPTACLE
- ABOVE COUNTER, DUPLEX USB RECEPTACLE
- FOUR PLEX USB RECEPTACLE
- ABOVE COUNTER, FOUR PLEX USB RECEPTACLE
- DUPLEX USB RECEPTACLE, MOUNTED HORIZONTALLY
- ABOVE COUNTER, DUPLEX USB RECEPTACLE, MOUNTED HORIZONTALLY
- SPECIAL-PURPOSE OUTLET, LETTER DESIGNATES TYPE, SEE SPECIAL CONNECTION SCHEDULE FOR REQUIREMENTS
- SURFACE RACEWAY WITH OUTLETS AS INDICATED ON PLANS, MOUNTED AT 18" TO CENTER OF DEVICE AFF UNLESS OTHERWISE NOTED
- WALL MOUNTED JUNCTION BOX
- CEILING MOUNTED JUNCTION BOX
- FLOOR MOUNTED JUNCTION BOX
- FLOOR MOUNTED DUPLEX RECEPTACLE
- FLOOR MOUNTED FOUR PLEX RECEPTACLE
- FLOOR MOUNTED, FOUR PLEX GROUND FAULT INTERRUPTER RECEPTACLE
- FLOOR MOUNTED, FOUR PLEX GROUND FAULT INTERRUPTER RECEPTACLE, ON EMERGENCY CIRCUIT
- CEILING MOUNTED DUPLEX RECEPTACLE
- CEILING MOUNTED FOUR PLEX RECEPTACLE
- ELECTRICAL DISTRIBUTION PANEL
- RECESSED MOUNTED ELECTRICAL PANEL
- SURFACE MOUNTED ELECTRICAL PANEL
- ELECTRICAL POWER TRANSFORMER
- FUSED DISCONNECT SWITCH
- NON-FUSED DISCONNECT SWITCH
- COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH
- STARTER/MOTOR CONTROLLER
- ELECTRICAL MOTOR - SINGLE PHASE
- ELECTRICAL MOTOR - THREE PHASE
- RELAY
- BATTERY PACK
- HP — HARDWIRED PLUMBING FIXTURE
- MOTORIZED DAMPER

LIGHTING

- CEILING-MOUNTED OR RECESSED LIGHT FIXTURE; LABEL INDICATES FIXTURE TYPE
- PENDANT MOUNTED LIGHT FIXTURE; LABEL INDICATES FIXTURE TYPE
- WALL-MOUNTED LIGHT FIXTURE; LABEL INDICATES FIXTURE TYPE
- 2'x4' LIGHT FIXTURE; LABEL INDICATES FIXTURE TYPE
- 2'x2' FIXTURE; LABEL INDICATES FIXTURE TYPE
- 1'x4' TYPICAL CEILING MOUNTED FIXTURE; LABEL INDICATES FIXTURE TYPE
- 1'x4' TYPICAL PENDANT MOUNTED FIXTURE; LABEL INDICATES FIXTURE TYPE
- 1'x4' TYPICAL WALL MOUNTED FIXTURE; LABEL INDICATES FIXTURE TYPE
- 1'x2' TYPICAL WALL MOUNTED FIXTURE; LABEL INDICATES FIXTURE TYPE
- INDUSTRIAL STRIP LIGHT FIXTURE; LABEL INDICATES FIXTURE TYPE
- STRIP LIGHT FIXTURE; LABEL INDICATES FIXTURE TYPE
- UNDER CABINET FIXTURE; LABEL INDICATES FIXTURE TYPE
- TYPICAL FIXTURE - ON EMERGENCY CIRCUIT
- TYPICAL FIXTURE - ON EMERGENCY CIRCUIT
- BRANCH CIRCUIT WIRING CONCEALED IN WALLS OR CEILING
- BRANCH CIRCUIT WIRING EXPOSED
- BRANCH CIRCUIT WIRING (PARTIAL)
- OS — CEILING OR WALL-MOUNTED OCCUPANCY SENSOR
- PC — CEILING OR WALL-MOUNTED PHOTO CELL
- DS — CEILING OR WALL-MOUNTED DAYLIGHT SENSOR
- XXX — LIGHTING CONTROL TAG, REFER TO LIGHTING CONTROL SCHEDULE
- DOUBLE-FACED CEILING OR WALL-MOUNTED, EXIT SIGN WITH EMERGENCY POWER BACK UP.
- SINGLE-FACED CEILING OR WALL MOUNTED, EXIT SIGN WITH EMERGENCY POWER BACK UP.
- COMBINATION EXIT AND EMERGENCY LIGHT
- DIRECTION ARROW FOR EMERGENCY LIGHT
- CEILING OR WALL MOUNTED, SELF-CONTAINED EMERGENCY LIGHT UNIT; FIXTURE SHALL MONITOR LIGHTING CIRCUIT IN AREA.
- $ — SINGLE-POLE SWITCH
- $2 — DOUBLE-POLE SWITCH
- $3 — 3-WAY SWITCH
- $4 — 4-WAY SWITCH
- $P — SINGLE-POLE SWITCH AND PILOT LIGHT
- $TE — SINGLE-POLE MANUAL MOTOR STARTER WITH THERMAL ELEMENT
- $D — SINGLE-POLE DIMMER SWITCH
- $K — SINGLE-POLE KEYED SWITCH
- $L — LOW VOLTAGE SWITCH
- $F — FAN SWITCH
- $M — MOMENTARY CONTACT SWITCH
- PUSHBUTTON SWITCH
- COMBINATION PUSHBUTTON SWITCH
- MUSHROOM EMERGENCY SHUT-OFF SWITCH.
- LC — LIGHTING CONTACTOR
- TC — TIME CLOCK, AS INDICATED ON PLANS
- PC — PHOTOCELL, AS INDICATED ON PLANS

SPECIAL SYSTEMS

- DATA/TELEPHONE OUTLET, FLOOR MOUNTED
- COMBINATION DATA/TELEPHONE OUTLET
- TELEPHONE
- DATA OUTLET; NUMBER INDICATES QUANTITY, BLANK INDICATES SINGLE OUTLET. MOUNTED AT 18" TO CENTER OF DEVICE AFF UNLESS OTHERWISE NOTED.
- DATA, CEILING MOUNTED
- DATA, FLOOR MOUNTED
- TV — TELEVISION OUTLET, CEILING MOUNTED
- TV — TELEVISION CABLE OUTLET; MOUNT AT 18" TO CENTER OF DEVICE AFF UNLESS OTHERWISE NOTED
- AP — WIRELESS ACCESS POINT, CEILING MOUNTED
- FB — MULTI-OUTLET FLOOR BOX, SEE FLOOR BOX SCHEDULE FOR REQUIREMENTS.
- S — SPEAKER, WALL MOUNTED
- S — SPEAKER, CEILING MOUNTED
- E — ELECTRIC VALVE
- I — INSTRUMENT DEVICE
- S — INTERIOR SIREN ALARM
- C — CLOCK, WALL MOUNTED
- C — CLOCK, CEILING MOUNTED
- CABLE TRAY
- GROUND BAR
- DOWN CONDUCTOR CONNECTION TO GROUND ROD
- BONDING CONNECTION
- GROUND ROD

FIRE ALARM

- M — MAGNETIC DOOR HOLD DEVICE
- FS — SPRINKLER FLOW SWITCH
- TS — SPRINKLER TAMPER SWITCH
- EXTERIOR REMOTE FLASHING STROBE LIGHT
- F — MANUAL PULL STATION; MOUNT ACCORDING TO MOUNTING HEIGHT DETAIL AT 46" TO CENTER OF DEVICE AFF. ADA COMPLIANT
- F — HORN & STROBE; MOUNT SO BOTTOM OF DEVICE IS AT 80" AFF UNLESS OTHERWISE NOTED. ADA COMPLIANT
- F — STROBE; MOUNT SO BOTTOM OF DEVICE IS AT 80" AFF UNLESS OTHERWISE NOTED. ADA COMPLIANT
- F — SPEAKER & STROBE; MOUNT SO BOTTOM OF DEVICE IS AT 80" AFF UNLESS OTHERWISE NOTED. ADA COMPLIANT
- FIRE ALARM VOICE WALL MOUNT SPEAKER
- FIRE ALARM VOICE CEILING MOUNT SPEAKER
- SMOKE DETECTOR
- D — DUCT MOUNTED SMOKE DETECTOR
- H — THERMAL HEAT DETECTOR
- H — HORN STROBE, CEILING MOUNTED
- S — SPEAKER STROBE, CEILING MOUNTED
- F — STROBE, CEILING MOUNTED
- PIV — POST INDICATOR VALVE
- B — BELL
- R — SHUTDOWN RELAY WITH REMOTE TEST SWITCH
- RT — SHUTDOWN RELAY AND TEST SWITCH
- FACP — FIRE ALARM CONTROL PANEL
- RAP — REMOTE ANNUNCIATOR PANEL
- SMOKE DAMPER
- FIRE DAMPER
- COMBINATION FIRE AND SMOKE DAMPER

SECURITY DEVICES

- DCM — DOOR CONTROL MODULE
- ACP — ACCESS CONTROL PANEL
- ES — ELECTRIC DOOR STRIKER
- VIDEO CAMERA, WITH MOUNTING HARDWARE
- VM — VIDEO MONITOR
- VR — VIDEO RECORDER
- ML — ELECTRIC MAGNETIC LOCK
- CL — ELECTRIC CYLINDER LOCK
- CR — CARD READER
- REX — REQUEST TO EXIT
- DOOR CONTACT - RECESSED
- DOOR CONTACT - SURFACE MOUNT
- M — MOTION DETECTOR, CEILING MOUNTED
- M — MOTION DETECTOR, WALL MOUNTED
- EMERGENCY DOOR RELEASE BUTTON
- PANIC BUTTON
- SECURITY BUZZER HORN
- INTERCOM SUBSTATION
- INTERCOM SUBSTATION WITH CAMERA
- M — INTERCOM MASTER STATION
- GLASS BREAK SENSOR
- POWER TRANSFER HINGE

ABBREVIATIONS

GENERAL

&	AND
A	AMPERES
AD	ACCESS DOOR
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AP	ACCESS PANEL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AUTO	AUTOMATIC
BFR	BELOW FLOOR
BHP	BRAKE HORSE POWER
CAP	CAPACITY
CONT	CONTINUOUS
DEG	DEGREE
DIA	DIAMETER
DN	DOWN
DTL	DETAIL
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EFF	EFFICIENCY
ELEC	ELECTRIC(AL)
EQUIP	EQUIPMENT
EXIST	EXISTING
FF	FINISHED FLOOR
FS	FLOW SWITCH
FT	FEET (FOOT)
GYP	GYPSUM
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HT	HEIGHT
IN	INCHES
KA	KILOAMPERE
KW	KILOWATT
LBS	POUNDS
LF	LINEAR FOOT (FEET)
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OFC	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
PEMB	PRE-ENGINEERED METAL BUILDING
PH	PHASE
PLBG	PLUMBING
RCP	REFLECTED CEILING PLAN
REF	REFERENCE
REV	REVISION(S)
RPM	REVOLUTIONS PER MINUTE
SCCR	SHORT CIRCUIT CURRENT RATING
SHT	SHEET
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
STR	STRUCTURAL (STRUCTURE)
TC	TIME CLOCK
TCP	TEMPERATURE CONTROL PANEL
TEMP	TEMPERATURE
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLTAGE (VOLTS)
VFC	VARIABLE FREQUENCY CONTROLLER
VFD	VARIABLE FREQUENCY DRIVE
W	WATT
°F	DEGREES FAHRENHEIT
Ø	DIAMETER
Φ	PHASE

ELECTRICAL

AC	ALTERNATING CURRENT
AD	AUTOMATIC DAMPER
AFCI	ARC FAULT CIRCUIT INTERRUPTER
ATS	AUTOMATIC TRANSFER SWITCH
C	CONDUIT
CB	CIRCUIT BREAKER
CCT	CORRELATED COLOR TEMPERATURE
CIR	CIRCUIT
CRI	COLOR RENDERING INDEX
DC	DIRECT CURRENT
E	EXISTING DEVICES TO REMAIN
EMT	ELECTRIC METALLIC TUBING
ER	NEW LOCATION OF EXISTING RELOCATED
FA	FIRE ALARM
FB	FLOOR BOX
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METALLIC TUBING
GFI	GROUND FAULT INTERRUPTER
HD	HAND DRYER
HZ	HERTZ
IG	ISOLATED GROUND
KVA	KILOVOLT-AMPERE
LRA	LOCKED ROTOR AMPS
MD	MOTORIZED DAMPER
NF	NON-FUSED
NL	NIGHT LIGHT
NR	NEW TO REPLACE EXISTING
P	POLE
PB	PUSH BUTTON
PE	PRIMARY ELECTRIC SERVICE
PTD	ELECTRIC PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE CONDUIT
R	RELAY
RE	REMOVE EXISTING
REF	ROOF EXHAUST FAN
RL	RELOCATE EXISTING
RLA	RATED LOAD AMPS
RMC	RIGID METALLIC CONDUIT
RR	REMOVE AND REPLACE ON NEW SURFACE
S&P	SPACE AND PROVISION
SD	SMOKE DAMPER
SE	SECONDARY ELECTRIC SERVICE
T	TELEPHONE SERVICE
TP	TAMPER PROOF
TV	TELEVISION
UGE	UNDERGROUND ELECTRICAL
VA	VOLT-AMPERE
W	WIRE
WG	WIRE GUARD
WP	WEATHERPROOF
WR	WEATHER RESISTANT
XFMR	TRANSFORMER

EXISTING, DEMO & NEW LEGEND

- HALFTONE LINES INDICATE EXISTING DEVICES TO REMAIN
- BOLD DASHED LINES INDICATE DEVICES TO BE REMOVED.
- NEW DEVICES
- X — SHEET NOTE TAG, LABEL INDICATES NOTE NUMBER
- XX — FEEDER TAG

LIGHTING CONTROL DEVICE LEGEND

SYMBOL	DESCRIPTION
	ON/OFF
O	1-POLE, ON/OFF, INTEGRAL SENSOR
OD	1-POLE, ON/OFF, DIM MIN TO MAX, INTEGRAL SENSOR
D	1-POLE, ON/OFF, DIM MIN TO MAX
2	2-SCENE
2D	2-POLE, ON/OFF, DIM MIN TO MAX
4	4-SCENE
4D	4-POLE, ON/OFF, DIM MIN TO MAX
4S	4-SCENE, ON/OFF, DIM MIN TO MAX
TS	SMALL SINGLE-GANG TOUCH SCREEN
TL	LARGE 7" TOUCH SCREEN

GENERAL LEGEND NOTES:

A. FINISH SHALL BE BLACK ON DARK FINISHED SURFACES, WHITE ON LIGHT FINISHED SURFACES, AND GREY ON GREY FINISHED SURFACES. CONFIRM FINISHES WITH ARCHITECT PRIOR TO ORDERING.

B. COORDINATE SCENES WITH OWNER DURING PROGRAMMING.

ELECTRICAL SHEET LIST

SHEET NO.	SHEET NAME
GE001	GENERAL ELECTRICAL INFORMATION
GE002	GENERAL ELECTRICAL INFORMATION
E101	LIGHTING PLAN
E201	POWER PLAN
E202	POWER MECHANICAL EQUIPMENT PLAN
E301	SPECIAL SYSTEMS PLAN
E302	SPECIAL SYSTEMS CABLE TRAY PLAN
E401	ELECTRICAL & SYSTEMS ENLARGED PLANS
E402	CONFERENCE ROOM TV WALL ELEVATIONS
E501	ELECTRICAL DETAILS
E502	SYSTEMS DETAILS
E503	SYSTEMS DETAILS
E504	SYSTEMS DIAGRAMS
E601	ELECTRICAL SCHEDULES
E701	ELECTRICAL SPECIFICATIONS
E702	ELECTRICAL SPECIFICATIONS
E703	ELECTRICAL SPECIFICATIONS

COMMUNICATIONS CABLING LEGEND

DEVICE	CABLE TYPE	CABLE QTY (NOTE 1)	JACK COLOR (NOTE 2, 3)	DESCRIPTION	COMMENTS
#	CAT-6A	2	BLUE	DATA RECEPTACLE - WALL	
	CAT-6A	2	BLUE	DATA RECEPTACLE - ABOVE CEILING	PROVIDE A BISCUIT JACK ABOVE THE ACCESSIBLE CEILING SPACE
	CAT-6A	1	BLUE	DATA RECEPTACLE - WALL PHONE	
	CAT-6A	2	BLUE	DATA RECEPTACLE - ABOVE COUNTER	
WAP	CAT-6A	2	ORANGE	WIRELESS ACCESS POINT	PROVIDE A BISCUIT JACK ABOVE THE ACCESSIBLE CEILING SPACE. PROVIDE A 10' SERVICE LOOP AT WAP LOCATION. WIRELESS ACCESS POINT SHALL BE FURNISHED BY OWNER AND INSTALLED BY DIV. 27 CONTRACTOR. CONFIRM FINAL LOCATIONS OF WAP's WITH OWNER PRIOR TO INSTALLATION. WIRELESS ACCESS POINTS SHALL BE TERMINATED TO A DEDICATED PATCH PANEL WITH BOTH CABLES FOR THE SAME WAP TERMINATED TO ADJACENT PORTS.
TV	CAT-6A	4	GRAY	TV OR AUDIOVISUAL FLAT PANEL DISPLAY.	COORDINATE FINAL ROUGH-IN REQUIREMENTS WITH A/V CONTRACTOR.
RS	CAT-6A	1	GRAY	ROOM SCHEDULER SYSTEM TOUCH PANEL.	NEAT PAD ROOM SCHEDULER. COORDINATE FINAL BACK BOX SIZE WITH AUDIOVISUAL CONTRACTOR.
	CAT-6A	1	YELLOW	VIDEO INTERCOM SYSTEM	COORDINATE FINAL ROUGH-IN REQUIREMENTS WITH SURVEILLANCE CONTRACTOR.
	CAT-6A	1	YELLOW	WALL MOUNTED SURVEILLANCE CAMERA (I.P., POE)	COORDINATE FINAL ROUGH-IN REQUIREMENTS AND LOCATION WITH SURVEILLANCE CONTRACTOR. FINAL CAMERA LOCATION MAY VARY BY +/- 15'. PROVIDE A 3-METER MODULAR PLUG TERMINATED LINK (MPTL) CONNECTOR.
	CAT-6A	1	YELLOW	CEILING MOUNTED SURVEILLANCE CAMERA (I.P., POE)	COORDINATE FINAL ROUGH-IN REQUIREMENTS AND LOCATION WITH SURVEILLANCE CONTRACTOR. FINAL CAMERA LOCATION MAY VARY BY +/- 15'. PROVIDE A 3-METER MODULAR PLUG TERMINATED LINK (MPTL) CONNECTOR.
ACP	CAT-6A	1	YELLOW	ACCESS CONTROL PANEL.	COORDINATE FINAL ROUGH-IN REQUIREMENTS WITH SECURITY CONTRACTOR.
FB1	CAT-6A	2 PER WORK STATION	BLUE	SYSTEMS FURNITURE FLOOR BOX.	REFER TO FLOOR BOX SCHEDULE ON E601
FB2	CAT-6A	2	BLUE	MULTI-OUTLET FLOOR BOX.	REFER TO FLOOR BOX SCHEDULE ON E601
AC	COMPOSITE	1	WHITE	ACCESSED CONTROLLED DOOR. SYMBOL REPRESENTS 6X6X6 JUNCTION BOX TO BE LOCATED 24" ABOVE THE DOOR OR ABOVE THE ACCESSIBLE CEILING SPACE. REFER TO FLOOR PLANS FOR CARD READER LOCATIONS. REFER TO DOOR ROUGH-IN DETAILS FOR PATHWAY REQUIREMENTS TO INDIVIDUAL DOOR SECURITY DEVICES.	COORDINATE FINAL ROUGH-IN REQUIREMENTS WITH SECURITY CONTRACTOR. PROVIDE WINDY CITY WIRE PN: SWH-UL-OSDP-WHT. CABLING PROVIDED BY DIVISION 27 CONTRACTOR.

COMMICATIONS CABLING LEGEND NOTES:

1. PROVIDE QUANTITY OF CABLES AS SHOWN IN SCHEDULE UNLESS OTHERWISE NOTED IN PLANS BY A NUMBER MODIFIER ADJACENT TO THE SYMBOL.
2. PROVIDE JACK COLOR AT THE HORIZONTAL CROSS CONNECT (TR) END AS SHOWN IN THE SCHEDULE.
3. JACK COLOR AT THE WORK AREA OR DEVICE/EQUIPMENT END OF THE CABLE SHALL MATCH THE COLOR OF THE FACEPLATE. PROVIDE WHITE JACKS FOR WHITE FACEPLATES, GREY JACKS FOR STAINLESS STEEL FACEPLATES AND BLACK JACKS FOR BLACK FACEPLATES.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS — LICENSED PROFESSIONAL ENGINEER — No. 12584 — TIMOTHY W. DAVIS

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

GENERAL ELECTRICAL INFORMATION

Sheet Number:

GE001

Autodesk Docs://25073_Olsson North Little Rock TI ME_Little Rock AK New Office_Central_016017_R23.rvt
8/20/2026 9:45:18 AM

GENERAL SYSTEMS NOTES

A. ALL DEVICES SHOWN SHALL BE MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.

B. NO BOXES SHALL BE MOUNTED BACK TO BACK.

C. ALL CONDUITS FOR VOICE OR DATA RECEPTACLES SHALL BE STUBBED TO AN ACCESSIBLE CEILING SPACE.

D. ALL CONDUIT PROVIDED FOR VOICE OR DATA ROUGH-IN SHALL BE A MINIMUM OF 1-1/4" EMT.

E. ALL RACEWAYS ROUTED THROUGH WALLS SHALL BE SEALED AS REQUIRED BY NEC PARAGRAPHS 230.8, 300.5(G) AND 300.7(A).

F. RACEWAY, JUNCTION BOX, PULL BOX, AND OTHER OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE-RESISTANT RATED WALLS, PARTITIONS, FLOORS OR CEILINGS SHALL BE FIRE STOPPED USING U.L. LISTED FIRE AND OR SMOKE STOPPING ASSEMBLIES TO MAINTAIN THE FIRE-RESISTANCE RATING OF THE WALL.

G. ALL NEW FIRE ALARM DEVICES SHALL MATCH EXISTING AND SHALL BE CONNECTED TO THE EXISTING FIRE ALARM CONTROL PANEL.

H. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL WIRING DEVICES WITH CABINET AND ROOM LAYOUTS PRIOR TO ROUGH-IN. SEE ARCHITECTURAL PLANS AND ELEVATIONS.

I. PROVIDE ALL CONDUIT SLEEVES AND FIRE RATED SLEEVES AS REQUIRED FOR ROUTING OF COMMUNICATIONS AND SECURITY CABLING. SLEEVE LOCATIONS AND SIZES ARE APPROXIMATE. COORDINATE FINAL SLEEVE PLACEMENT AND SIZES WITH THE DIV. 27 CABLING CONTRACTOR BASED ON FINAL CABLE ROUTING.

J. FIRE ALARM CABLING AND EQUIPMENT CONTROL WIRING ASSOCIATED WITH FIRE ALARM SYSTEM SHALL BE INSTALLED IN A DEDICATED RACEWAY SYSTEM. THIS SYSTEM SHALL NOT BE USED FOR ANY OTHER WIRE OR CABLE.

K. COORDINATE ROUTING OF CONDUIT ALONG THE EXTERIOR WALLS WITH LINEAR DIFFUSER LOCATIONS.

L. ALL CONDUITS IN OPEN OFFICE AREAS SHALL BE PAINTED TO MATCH CEILING SURFACE.

M. FIRE ALARM CONTRACTOR IS TO COORDINATE WITH DOOR HARDWARE SUPPLIER FOR DOOR LOCATIONS REQUIRING DELAYED EGRESS FIRE ALARM RELAYS.

N. SMOKE OR FIRE/SMOKE DAMPERS; PROVIDE CONNECTION TO FIRE ALARM SYSTEM. PROVIDE A FA RELAY AND DUCT DETECTOR WITH REMOTE INDICATOR LAMP AND TEST SWITCH FOR ACTUATION OF EACH DAMPER SHOWN ON MECHANICAL DRAWINGS. COORDINATE DETECTION MAY BE UTILIZED IN LIEU OF DUCT DETECTOR IF APPLICABLE. DETECTION AND ACTUATION SHALL BE COMPLIANT WITH IBC 2018 FOR EACH DAMPER SHOWN ON MECHANICAL DRAWINGS.

O. PROVIDE RELAY(S) FOR FAN SHUTDOWN OF MECHANICAL EQUIPMENT WITHIN 3FT OF EACH MECHANICAL UNIT FOR ALL DUCT DETECTORS (REFER TO MECHANICAL PLANS FOR EQUIPMENT LOCATIONS). COORDINATE EFFORT WITH DIVISION 23.

P. VELCRO STRAPS SHALL BE UTILIZED FOR CABLE BUNDLING. CABLE TIES OR ZIP TIES SHALL NOT BE USED.

Q. LOW VOLTAGE CABLING SHALL NOT BE PAINTED. CABLING THAT HAS BEEN PAINTED WILL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

R. THE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF NFPA 70 (NEC), ALL APPLICABLE LOCALLY ADOPTED BUILDING, AND ENERGY CODES.

S. CONDUIT CONNECTORS AND COUPLINGS SHALL BE COMPRESSION TYPE. SET SCREW TYPE CONDUIT FITTINGS SHALL NOT BE ALLOWED. THIS APPLIES TO BOTH POWER AND LIGHTING.

GENERAL POWER NOTES

A. VERIFY EXACT LOCATION AND MOUNTING HEIGHTS OF ALL WIRING DEVICES WITH CABINET AND ROOM LAYOUTS PRIOR TO ROUGH-IN, SEE ARCHITECTURAL PLANS AND INTERIOR ELEVATIONS.

B. ALL CONDUIT THAT IS LEFT EMPTY SHALL INCLUDE A PULL STRING THROUGHOUT LENGTH AND 12" ADDITIONAL AT EACH END.

C. CONCEAL ALL CONDUCTORS IN WALLS AND ABOVE CEILING.

D. PROVIDE DEDICATED NEUTRAL AND GROUNDING CONDUCTORS FOR EACH CIRCUIT.

E. THE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF NFPA 70 (NEC), ALL APPLICABLE LOCALLY ADOPTED BUILDING, AND ENERGY CODES.

F. COORDINATE THE CONNECTIONS OF ALL EQUIPMENT PROVIDED BY OTHERS WITH THE CONTRACTOR PROVIDING THE EQUIPMENT PRIOR TO ROUGH-IN. THIS INCLUDES, BUT NOT LIMITED TO, MECHANICAL EQUIPMENT, FIRE ALARM EQUIPMENT, ETC. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE APPROPRIATE DISCONNECTING MEANS FOR THE EQUIPMENT AND SHALL MAKE THE FINAL CONNECTION TO THE EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AN APPROPRIATE CORD AND PLUG FOR ANY EQUIPMENT THAT REQUIRES AN INTEGRAL CORD AND PLUG IF NOT PROVIDED WITH THE EQUIPMENT.

G. PRESERVE THE FIRE RATING OF ANY FIRE-RATED WALL, CEILING OR FLOOR BY PROVIDING A UL LISTED FIRE-RATED ASSEMBLY. COORDINATE FIRE-RATED WALL, CEILING, OR FLOOR ASSEMBLY LOCATIONS WITH THE ARCHITECTURAL DRAWINGS.

H. ALL EQUIPMENT, DEVICES, AND LUMINAIRES SHALL BE SUITABLE FOR THE ENVIRONMENT IN WHICH THEY ARE INSTALLED. EQUIPMENT MOUNTED OUTDOORS SHALL BE NEMA 3R. DEVICES MOUNTED IN DAMP OR WET LOCATIONS SHALL BE WEATHERPROOF. 120V RECEPTACLES RATED 15 OR 20 AMPS SHALL BE GFCI PROTECTED AND EQUIPPED WITH A "WHILE-IN-USE" COVER WHERE THEY ARE LOCATED IN DAMP OR WET LOCATIONS.

I. MINIMUM BRANCH CONDUCTOR SIZE SHALL BE #12 AWG AND MINIMUM CONDUIT SIZE SHALL BE 3/4 INCH. PROVIDE A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR IN WITH ALL CIRCUITS, SIZED IN ACCORDANCE WITH THE NEC; #12 AWG MINIMUM.

J. ALL MOUNTING HEIGHTS ARE MEASURED TO CENTER OF DEVICE, COORDINATE WITH ARCHITECTURAL PLANS AND ELECTRICAL LEGENDS.

K. COVERPLATES OF JUNCTION BOXES SHALL BE LABELED TO INDICATE THE CIRCUIT(S) ENCLOSED WITHIN THE JUNCTION BOX.

L. CONDUIT CONNECTORS AND COUPLINGS SHALL BE COMPRESSION TYPE. SET SCREW TYPE CONDUIT FITTINGS SHALL NOT BE ALLOWED. THIS APPLIES TO BOTH POWER AND LIGHTING.

M. COORDINATE ROUTING OF CONDUIT ALONG THE EXTERIOR WALLS WITH LINEAR DIFFUSER LOCATIONS.

N. ALL CONDUITS IN OPEN OFFICE AREAS WITH EXPOSED CEILINGS SHALL BE PAINTED TO MATCH CEILING SURFACE.

O. NO BOXES SHALL BE MOUNTED BACK TO BACK.

P. SEE MECHANICAL EQUIPMENT SCHEDULE, SHEET E601 FOR ELECTRICAL CONNECTION REQUIREMENTS FOR EACH PIECE OF MECHANICAL EQUIPMENT TAGGED ON POWER MECHANICAL EQUIPMENT PLAN, SHEET E202.

Q. #12 AWG SHALL BE USED AS A STANDARD 120V CIRCUIT. WHERE A CIRCUIT EXCEEDS 75', #10 AWG SHALL BE USED. WHERE A CIRCUIT EXCEEDS 125', #8 AWG SHALL BE USED FOR FIRST 75' MINIMUM.

R. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL SYSTEMS FURNITURE LOCATIONS WITH POWER AND SYSTEMS PLAN PRIOR TO ROUGH-IN TO AVOID POTENTIAL CONFLICTS WITH FURNITURE AND WALL MOUNTED FURNITURE SUPPORTS, AND TO IDENTIFY ANY UNIQUE SYSTEMS FURNITURE POWER, LIGHTING AND DATA REQUIREMENTS.

S. CEILING MOUNTED DEVICES SHALL BE CENTERED IN CEILING TILE WHERE INSTALLED IN ACOUSTICAL TILE CEILING.

T. THE DIRECTORY IN EACH PANEL SHALL BE TYPED AND FILLED OUT AS PANEL SCHEDULE DICTATES WITH EXACTLY WHAT EACH CIRCUIT IS SERVING.

U. SEE BRANCH POWER SCHEDULE FOR FEEDER SIZES REQUIRED FOR CORRESPONDING BREAKER SIZE INDICATED IN PANEL SCHEDULES AND DRAWINGS.

V. ALL RACEWAYS ROUTED THROUGH WALL SHALL BE SEALED AS REQUIRED BY NEC PARAGRAPHS 230.8, 300.5(G) AND 300.7(A).

W. ALL DEVICES SHOWN SHALL BE MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.

X. FURNISH AND INSTALL OUTLETS AND SWITCHES WHERE SHOWN OR REQUIRED. MINOR CHANGES RELATIVE TO THE LOCATION OF ELECTRICAL EQUIPMENT MAY BE MADE BY THIS CONTRACTOR TO COMPLY WITH STRUCTURAL AND BUILDING REQUIREMENTS AS DETERMINED IN THE COURSE OF CONSTRUCTION. ALL OUTLETS AND SWITCHES MUST BE OF THE SAME MANUFACTURER AND NOT MIXED ON THE PROJECT. DEVICE AND COVER PLATE COLOR IS TO BE STANDARD WHITE IN ALL LOCATION WITH THE EXCEPTION OF THE FOLLOWING AREAS. DEVICES LOCATED ON DARK GREEN FELT WALLS ARE TO BE BLACK. DEVICES LOCATED ON LIGHT GREY AND CHARCOAL FELT WALLS ARE TO BE GREY. DEVICES LOCATED ON EBONY PANELS ARE TO BE BLACK. DEVICES LOCATED IN MECHANICAL SPACES ARE TO BE GREY. COORDINATE SPECIFIC WIRING DEVICE COLOR WITH ARCHITECTURAL FINISH SCHEDULE.

Y. UNLESS OTHERWISE NOTED, ELECTRICAL DEVICES ARE TO BE FLUSH MOUNTED AND ALL WIRE AND CONDUITS ARE TO BE ROUTED CONCEALED. COORDINATE INSTALLATION WITH EXISTING CONDITIONS, INCLUDE PATCHING AND REFINISHING OF EXISTING SURFACES TO ACCOMMODATE THIS REQUIREMENT.

Z. WHERE A MECHANICAL RETURN AIR PLENUM SYSTEM IS PRESENT, ALL EQUIPMENT AND MATERIALS PROVIDED WITHIN THE PLENUM CEILING RETURN MUST MEET THE FLAME SPREAD AND SMOKE DEVELOPED RATINGS OF 25/50 AND BE APPROVED FOR USE IN PLENUM RETURN CEILINGS. UNLESS OTHERWISE NOTED, METAL HOUSINGS ON LUMINAIRES ARE ACCEPTABLE WITHIN THE PLENUM AND SHALL NOT REQUIRE ENHANCED PLENUM RATINGS.

AA. WHERE FLEXABLE METALLIC CONDUIT (FMC) IS ALLOWED BY THESE CONTRACT DOCUMENTS AND LOCAL BUILDING CODES, LENGTH SHALL NOT EXCEED 6FT.

BB. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY SLEEVES THROUGH WALLS AND FLOORS TO ALLOW FOR THE ROUTING OF TELECOMMUNICATIONS AND LOW VOLTAGE SYSTEMS CABLING. REVIEW ROUTING WITH LOW VOLTAGE CONTRACTOR FOR SLEEVE LOCATIONS AND REQUIREMENTS.

CC. MECHANICAL CONTROLS SHALL BE INSTALLED BY THE MECHANICAL CONTROLS CONTRACTOR. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL RACEWAYS AND BOXES ASSOCIATED WITH MECHANICAL CONTROLS. FOR EACH THERMOSTAT PROVIDE JUNCTION BOX WITH ONE (1) 3/4" CONDUIT STUBBED TO ABOVE NEAREST ACCESSIBLE CEILING. PROVIDE ADDITIONAL 3/4" CONDUIT FROM EACH TEMPERATURE CONTROL CABINET TO NEAREST CORRIDOR CABLE TRAY WHERE APPLICABLE, OR TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING. REFER TO MECHANICAL FLOOR PLANS FOR ALL WALL CONTROL LOCATIONS AND QUANTITIES.

DD. FULLY COORDINATE THE INSTALLATION OF ALL ELECTRICAL DEVICES WITH THE WORK OF OTHER TRADES. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR DEVICE MOUNTING HEIGHT AND LOCATION WHERE DEVICE IS TO BE INSTALLED IN CASEWORK. BACK-TO-BACK MOUNTING OF DEVICES IS NOT ACCEPTABLE IN A STANDARD 3-5/8" STUD WALL.

EE. ALL 120V THROUGH 250V RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPRERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY 3-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERPES OR LESS, INSTALLED IN THE FOLLOWING LOCATIONS SHALL HAVE GROUND FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL:
   a. BATHROOMS AND RESTROOMS
   b. KITCHENS
   c. ROOFTOPS
   d. OUTDOORS
   e. RECEPTACLES WITHIN 6FT OF A SINK
   f. INDOOR DAMP AND WET LOCATIONS
   g. OTHER LOCATIONS AS REQUIRED BY NEC.210.8

GG. PROVIDE 120V POWER TO ALL SMOKE AND FIRE/SMOKE DAMPERS. SOURCE POWER FROM DEDICATED 120V 20A BRANCH CIRCUIT(S) IN NEAREST 208V PANELBOARD SERVING AREA. REFER TO RECEPTACLE BRANCH CIRCUITING IN AREA FOR APPROPRIATE PANELBOARD SOURCE. DAMPERS MAY SHARE COMMON BRANCH CIRCUIT WHERE LOCATED IN COMMON AIR HANDLING UNIT ZONE. EACH BRANCH CIRCUIT SHALL SERVE A MAXIMUM OF 20 DAMPERS. REFER TO MECHANICAL PLANS FOR AIR HANDLING UNIT ZONES AND DAMPER LOCATIONS. CONTROL EACH DAMPER WITH DEDICATED ADDRESSABLE CONTROL MODULE FROM FIRE ALARM SYSTEM. PROVIDE A SYSTEM DUCT SMOKE DETECTOR WITHIN 5FT OF EACH DAMPER, LOCATE IN ACCESSIBLE LOCATION WITH A REMOTE STATUS INDICATOR AND TEST STATION IN CEILING AT DETECTOR LOCATION. COORDINATE EXACT LOCATION OF TEST STATION WITH OWNER PRIOR TO INSTALLATION.

GENERAL LIGHTING NOTES

A. COORDINATE LIGHT FIXTURE LAYOUT WITH HVAC DUCTWORK/DIFFUSERS AND REFLECTED CEILING PLAN.

B. CONCEAL ALL CONDUCTORS IN WALLS AND ABOVE CEILING WHERE POSSIBLE.

C. COVERPLATES OF JUNCTION BOXES SHALL BE LABELED TO INDICATE THE CIRCUIT(S) ENCLOSED WITHIN THE JUNCTION BOX.

D. TIME DELAY ON ALL SENSORS SHALL BE SET TO 20 MINUTES UNLESS OTHERWISE NOTED.

E. LOCATE OCCUPANCY SENSORS A MINIMUM OF 4'-0" FROM MECHANICAL DIFFUSERS. COORDINATE LOCATION WITH OCCUPANCY SENSOR MANUFACTURER TO PROVIDE ADEQUATE COVERAGE.

F. REFER TO DETAILS ON SHEET E501 FOR LOW VOLTAGE SWITCH, SENSOR TYPES AND WIRING DIAGRAMS.

G. PROVIDE CAT 5E CABLING (PRETERMINATED WHERE POSSIBLE) CREATING A NETWORK BETWEEN POWERPACKS, LOW VOLTAGE SWITCHES, OCCUPANCY SENSORS, AND BRIDGES. PROVIDE ALL COMPONENTS FOR A COMPLETE AND OPERATIONAL LIGHTING CONTROL SYSTEM. ALL POWERPACKS SHALL BE DIMMING, POWERPACKS SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS AND LABELED WITH THE AREA IT SERVES.

H. VELCRO STRAPS SHALL BE UTILIZED FOR CABLE BUNDLING. CABLE TIES OR ZIP TIES SHALL NOT BE USED.

I. LOW VOLTAGE CABLING SHALL NOT BE PAINTED. CABLING THAT HAS BEEN PAINTED WILL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

J. CIRCUITS SERVING EMERGENCY LIGHTING EQUIPMENT SUCH AS EMERGENCY BATTERIES SHALL NOT SHARE A NEUTRAL (SHALL NOT BE PART OF A MULTIWIRE BRANCH CIRCUIT) WITH ANY OTHER CIRCUIT. PROVIDE A SEPARATE NEUTRAL FOR EVERY CIRCUIT THAT SERVES EMERGENCY LIGHTING EQUIPMENT.

K. CONDUIT CONNECTIONS AND COUPLINGS SHALL BE COMPRESSION.

L. OCCUPANCY SENSORS INSTALLED IN EXPOSED STRUCTURE AREAS SHALL BE MOUNTED TO A 4" SQUARE BOX WITH DOUBLE MUD RING MOUNTED BELOW DUCTWORK. PROVIDE UNISTRUT OR CONDUIT PENDANT AS REQUIRED. SHOW EXAMPLE MOCK-UP TO ENGINEER FOR APPROVAL.

M. ALL CONDUITS IN OPEN OFFICE AREAS WITH EXPOSED CEILINGS SHALL BE PAINTED TO MATCH CEILING SURFACE.

N. EXIT SIGNS SHALL BE ILLUMINATED 24 HOURS. SERVE FROM UNSWITCHED CIRCUIT FROM CENTRAL BATTERY INVERTER SYSTEM. LIGHT FIXTURES DESIGNATED AS "EM" SHALL BE CONTROLLED WITH NORMAL SOURCE LIGHT FIXTURES WITHIN COMMON SPACE. PROVIDE UL 924 EMERGENCY LIGHTING CONTROL RELAYS FOR EACH SPACE FOR EMERGENCY LIGHTING OVERRIDE. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR INSTALLATION INSTRUCTIONS.

O. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, ELEVATIONS, AND SECTIONS FOR ADDITIONAL INFORMATION.

P. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS AND DIMENSIONS OF ALL CEILING MOUNTED DEVICES. COORDINATE INSTALLATION WITH ALL OTHER TRADES.

Q. SUPPORT ALL RECESSED AND PENDANT MOUNTED FIXTURES FROM STRUCTURE IN ACCORDANCE WITH APPLICABLE BUILDING CODE REQUIREMENTS. SUSPENDED CEILING MOUNTING SYSTEMS SHALL NOT BE USED TO SUPPORT FIXTURES OR RACEWAYS.

R. PROVIDE ENCLOSURES AROUND RECESSED LIGHTING FIXTURES AS REQUIRED SO THAT ALL CODE REQUIRED CLEARANCES BETWEEN COMBUSTIBLE MATERIALS, THERMAL INSULATION, ETC. AND LIGHTING FIXTURES ARE MAINTAINED. FULLY COORDINATE ALL REQUIREMENTS WITH THE GENERAL CONTRACTOR.

S. EXIT SIGNS SHALL BE CEILING-MOUNTED UNLESS INDICATED OTHERWISE. WHERE WALL-MOUNTED EXIT SIGNS ARE INDICATED ABOVE A DOOR OR TO THE SIDE OF A CORRIDOR, THE EXIT SIGN SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGN 6 INCHES ABOVE THE TOP OF THE DOOR FRAME.

T. IN ALL ELECTRICAL, COMMUNICATIONS, AND MECHANICAL UTILITY ROOMS COORDINATE LOCATION OF LIGHT FIXTURES WITH EQUIPMENT PRIOR TO INSTALLATION.

U. CEILING MOUNTED DEVICES SHALL BE CENTERED IN CEILING TILE WHERE INSTALLED IN ACOUSTICAL TILE CEILING.

V. ALL RACEWAYS ROUTED THROUGH WALL SHALL BE SEALED AS REQUIRED BY NEC PARAGRAPHS 230.8, 300.5(G) AND 300.7(A).

W. THE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF NFPA 70 (NEC), ALL APPLICABLE LOCALLY ADOPTED BUILDING, AND ENERGY CODES

LIGHTING CONTROL SYSTEM BASIS OF DESIGN

A. BASIS OF DESIGN FOR THE OVERALL LIGHTING CONTROL SYSTEM SHALL BE THE NLIGHT WIRED NETWORKED LIGHTING CONTROLS PLATFORM WITH LIGHTING CONTROL CONFORMING TO 2018 IECC.

B. PROVIDE NLIGHT BUILDING CONTROLS SOFTWARE, MANUFACTURER STARTUP, AND TRAINING FOR OWNER.

C. SEE SPECIFICATIONS, SCHEDULES, DETAILS FOR ADDITIONAL INFORMATION.

D. LIGHTING CONTROL DEVICES (LINE VOLTAGE AND LOW VOLTAGE) ARE INDICATED WITHOUT CONNECTION TO FIXTURE(S) BEING CONTROLLED. UNLESS OTHERWISE INDICATED, CONNECT CONTROL DEVICE TO SERVE LIGHT FIXTURE(S) LOCATED WITHIN SAME SPACE AS CONTROL DEVICE. WHERE LIGHT FIXTURES ARE INDICATED WITH A SUBSCRIPT ('a', 'b', 'c', etc.) LETTER INDICATING LIGHTING CONTROL ZONES, CONTROL DEVICE SERVING SPACE WITH MATCHING SUBSCRIPT SHALL CONTROL CORRESPONDING LIGHT FIXTURES.

E. CONNECT ALL NETWORK CONTROL DEVICES PER MANUFACTURER'S INSTRUCTIONS. CONNECT FIXTURES SERVED BY DIMMING POWER PACKS VIA 0-10V CONTROL WIRING IN 3/4" CONDUIT SEPARATE FROM LINE VOLTAGE WIRING. IT IS ACCEPTABLE FOR 0-10V WIRING TO SHARE THE SAME CONDUIT AS LINE VOLTAGE SO LONG THAT IT IS PROVIDED WITH CLASS 1 (600V) TYPE INSULATION.

F. PROVIDE ALL SWITCHES, SENSORS, LOAD CONTROLLERS, SYSTEM INTERFACES, AND ACCESSORIES NECESSARY FOR A COMPLETE INSTALLATION.

G. PROVIDE COMMISSIONING OF LIGHTING CONTROL SYSTEM IN ACCORDANCE WITH LOCALLY ADOPTED ENERGY CODE AND AHJ REQUIREMENTS. PROVIDE FUNCTIONAL PERFORMANCE TESTING OF LIGHTING CONTROL SYSTEM TO ENSURE ALL COMPONENTS, BOTH HARDWARE AND SOFTWARE, ARE CALIBRATED, ADJUSTED, PROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THESE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS.

H. A REGISTERED DESIGN PROFESSIONAL PROVIDED BY THE ELECTRICAL CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEM HAS BEEN TESTED TO MEET ALL REQUIREMENTS OF 2018 IECC SECTION C408.3 FUNCTIONAL TESTING OF LIGHTING CONTROLS.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 12584
TIMOTHY W. DRINNON

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

GENERAL ELECTRICAL INFORMATION

Sheet Number:

GE002

Autodesk Docs://25073_Olsson North Little Rock TI-ME_Little Rock AK New Office_Central_25073_R23.rvt
8/20/2026 6:40:19 AM

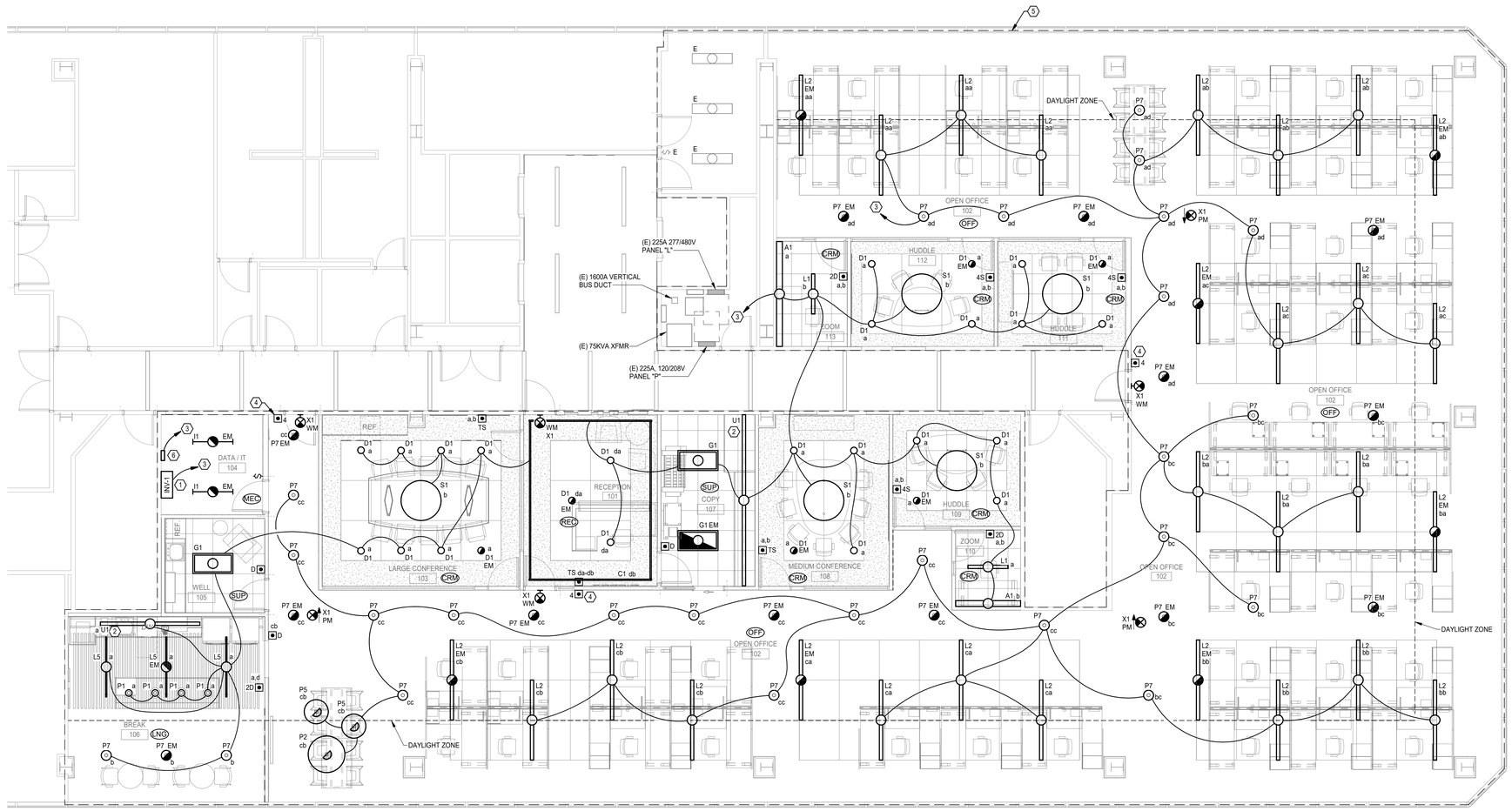
GENERAL SHEET NOTES

A. SEE GE SERIES SHEETS FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

B. LIGHT FIXTURES DESIGNATED AS "EM" SHALL BE SERVED FROM CENTRAL BATTERY INVERTER CIRCUIT AS NOTED. REFER TO GENERAL LIGHTING NOTE "N" ON SHEET GE002 FOR ADDITIONAL INFORMATION.

(XX) SHEET KEYNOTES

1. EMERGENCY LIGHTING INVERTER. SEE EMERGENCY LIGHTING INVERTER SCHEDULE. SHEET E601 FOR MORE INFORMATION. COORDINATE FINAL MOUNTING LOCATION WITH LOW VOLTAGE INSTALLERS PRIOR TO ROUGH-IN SO AS NOT TO INTERFERE WITH DATA RACK INSTALLATION IN SAME ROOM.
2. RECESS MOUNT TAPE LIGHT AND CHANNEL UNDER CABINET. REFER TO ARCHITECTURAL DETAILS FOR ADDITIONAL INFORMATION.
3. CIRCUIT TO SPARE 20A, 1P CIRCUIT BREAKER IN EXISTING 277/480V PANEL "L" LOCATED IN 4TH FLOOR ELECTRICAL ROOM AS SHOWN.
4. PROVIDE THE FOLLOWING ZONE GROUPINGS AND ENGRAVINGS FOR LIGHTING CONTROL PUSHBUTTON CHANNELS.
   - CHANNEL #1: ZONES aa-cc "ALL ON/OFF"
   - CHANNEL #2: ZONES aa-ag "NORTH"
   - CHANNEL #3: ZONES ba-bc "SOUTH EAST"
   - CHANNEL #4: ZONES ca-cc "SOUTH"
5. LIMIT AREA OF CONSTRUCTION. ANY WORK OUTSIDE THIS AREA IS TO BE COORDINATED WITH OWNER PRIOR TO COMMENCING WORK.
6. PROVIDE NETWORKED LIGHTING CONTROL SYSTEM CONTROLLER LCP-1 IN NEMA 1 ENCLOSURE WITH TOUCHSCREEN INTERFACE.



SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DAVISON 8/20/26

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	KRT
Checked by:	TWD
Designer:	RRI
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

LIGHTING PLAN

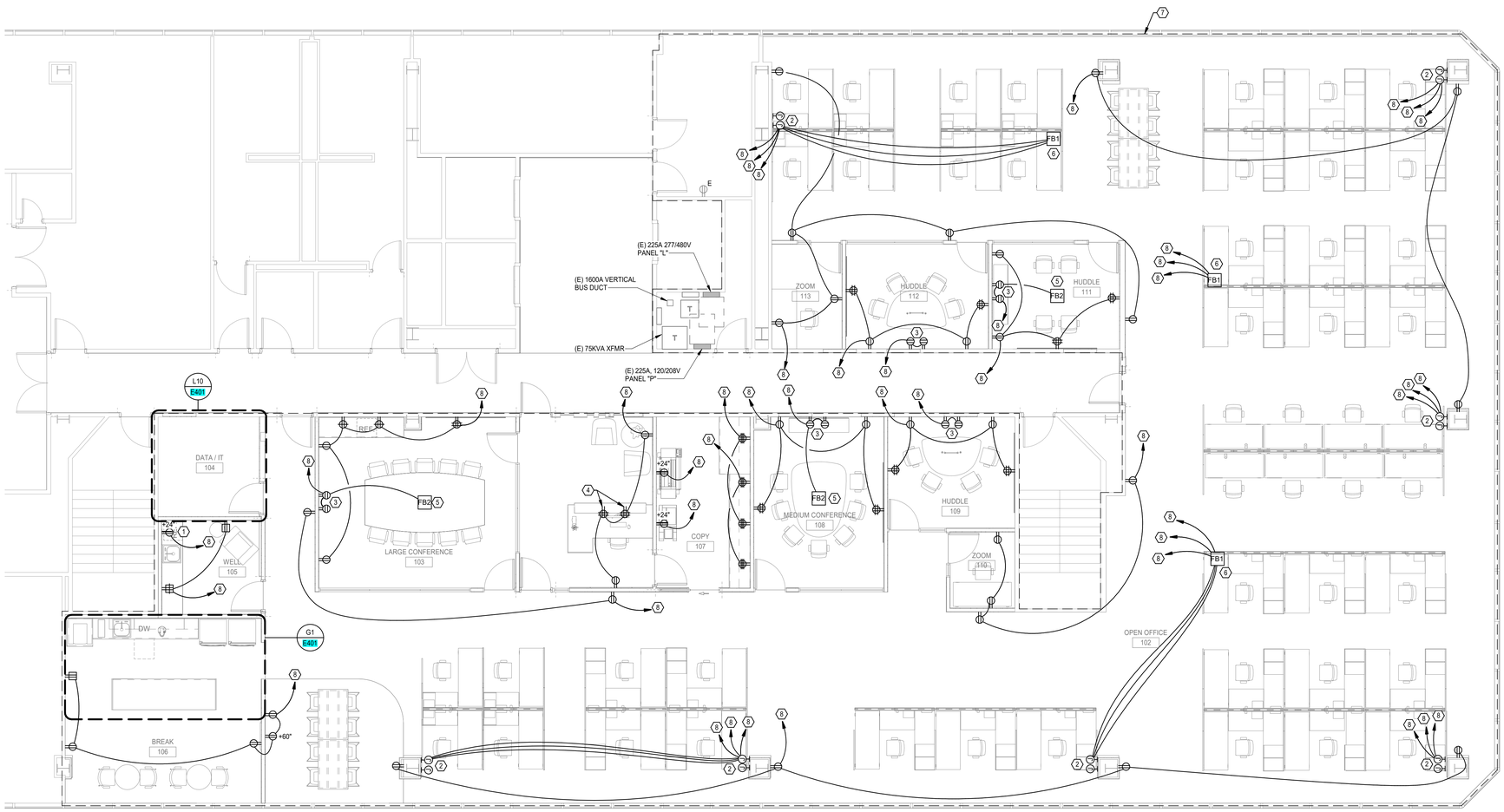
Sheet Number:

E101

A1 LIGHTING PLAN

SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock TI-ME_Little Rock AK New Office_Central_016012_R23.rvt
8/20/2026 9:40:29 AM



GENERAL SHEET NOTES

A. SEE GE SERIES SHEETS FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

(XX) SHEET KEYNOTES

1. THIS RECEPTACLE SHALL BE PROTECTED BY GFCI BREAKER. PROVIDE A NEW 20A, 1P GFCI PROTECTED CIRCUIT BREAKER IN EXISTING 120/208V PANEL "P" LOCATED IN 4TH FLOOR ELECTRICAL ROOM.
2. POWER CONNECTION TO OFFICE FURNITURE VIA RECESSED WALL JUNCTION BOX. MAKE FINAL ELECTRICAL CONNECTIONS TO FURNITURE, PROVIDING WHIPS AS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION. EACH GROUP OF 3-120V CIRCUITS SERVING FURNITURE FEEDS SHALL BE PROVIDED WITH HANDLE IN PANEL BOARD LINKING CIRCUITS TOGETHER TO ALLOW ALL CIRCUITS TO BE SWITCHED ON/OFF AT SAME TIME.
3. PROVIDE TWO HORIZONTAL DUPLEX RECEPTACLES MOUNTED IN TOP EDGE OF TV BACK BOX AT EACH TV MONITOR LOCATION. SEE ASSOCIATED CONFERENCE ROOM ELEVATION AND BACK BOX DETAILS ON SHEET E501 FOR EXACT MOUNTING LOCATION AND ANY ADDITIONAL INFORMATION.
4. RECEPTACLES SHOWN AT RECEPTION DESK ARE TO BE MOUNTED BELOW THE COUNTER. COORDINATE INSTALLATION WITH CUSTOM CASEWORK INSTALLERS PRIOR TO ROUGH-IN. SEE ARCHITECTURAL DETAILS FOR MORE INFORMATION.
5. PROVIDE A COMBINATION POWER/DATA/AV POKE THROUGH FLOOR BOX ASSEMBLY WITH COVER PLATE, POWER FEED THRU, DATA ACTIVATIONS, AND AV CABLING FEED THROUGH. PROVIDE ONE (1) 3/4" CONDUIT FOR POWER AND ONE (1) 1" CONDUIT FOR DATA AND ONE (1) 1" FOR AV. CONDUIT SHALL BE ROUTED UNDERFLOOR AS SHOWN AND ROUTED TO ACCESSIBLE CEILING OR CABLE TRAY WITHIN SAME ROOM. REFER TO SYSTEMS PLANS FOR ADDITIONAL INFORMATION ON DATA CONDUIT ROUTING REQUIREMENTS. SEE FLOOR BOX SCHEDULE, SHEET E601 FOR ADDITIONAL INFORMATION.
6. PROVIDE A COMBINATION POWER/DATA POKE THROUGH FURNITURE FEED FLOOR BOX ASSEMBLY WITH COVER PLATE, POWER FEED THRU, DATA FEED THROUGH. PROVIDE ONE (1) 3/4" CONDUIT FOR POWER AND ONE (1) 1" CONDUIT FOR DATA. CONDUIT SHALL BE ROUTED UNDERFLOOR AS SHOWN AND ROUTED TO ACCESSIBLE CEILING OR CABLE TRAY. REFER TO SYSTEMS PLANS FOR ADDITIONAL INFORMATION ON DATA CONDUIT ROUTING REQUIREMENTS. SEE FLOOR BOX SCHEDULE, SHEET E601 FOR ADDITIONAL INFORMATION. EACH GROUP OF 3-120V CIRCUITS SERVING FURNITURE FEEDS SHALL BE PROVIDED WITH HANDLE IN PANEL BOARD LINKING CIRCUITS TOGETHER TO ALLOW ALL CIRCUITS TO BE SWITCHED ON/OFF AT SAME TIME..
7. LIMIT AREA OF CONSTRUCTION. ANY WORK OUTSIDE THIS AREA IS TO BE COORDINATED WITH OWNER PRIOR TO COMMENCING WORK.
8. CIRCUIT TO SPARE 20A, 1P CIRCUIT BREAKER IN EXISTING 120/208V, 225 AMP PANEL "P" LOCATED IN 4TH FLOOR ELECTRICAL ROOM.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DANIEL

REVISION SCHEDULE		
#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	KRT
Checked by:	TWD
Designer:	RRI
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

POWER PLAN

Sheet Number:

E201

A1 POWER PLAN

SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock 01-MEL_Little Rock AK New Office_Central_016017_R23.rvt
8/20/2026 9:40:21 AM

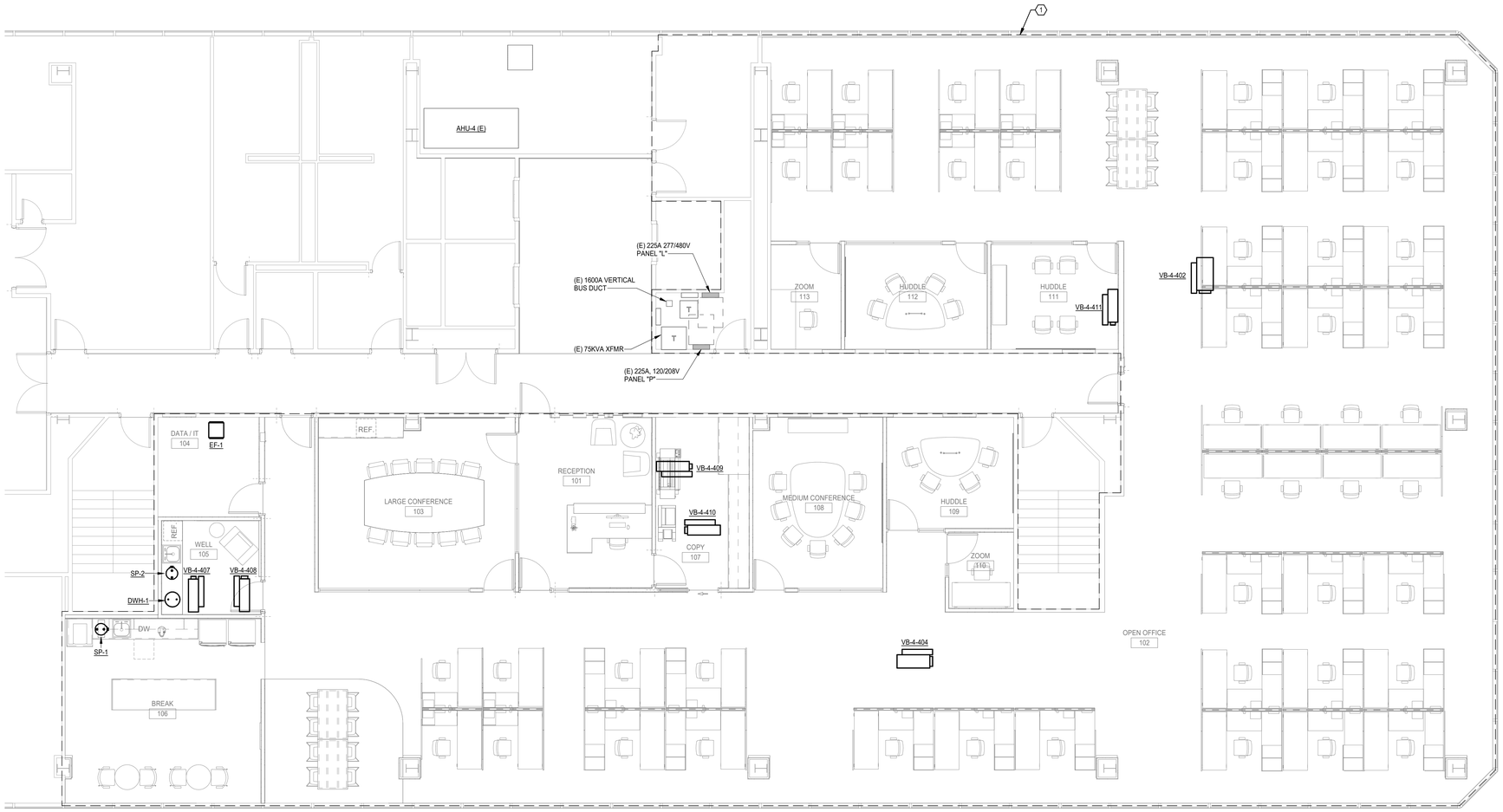
GENERAL SHEET NOTES

A. SEE GE SERIES SHEETS FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

B. SEE MECHANICAL EQUIPMENT SCHEDULE, SHEET E601 FOR ELECTRICAL CONNECTION REQUIREMENTS FOR EACH PIECE OF MECHANICAL EQUIPMENT TAGGED ON POWER PLANS.

(XX) SHEET KEYNOTES

1. LIMIT AREA OF CONSTRUCTION. ANY WORK OUTSIDE THIS AREA IS TO BE COORDINATED WITH OWNER PRIOR TO COMMENCING WORK.



A1 POWER MECHANICAL EQUIPMENT PLAN

SCALE: 3/16" = 1'-0"

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 8/20/26 TIMOTHY W. DANIEL

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

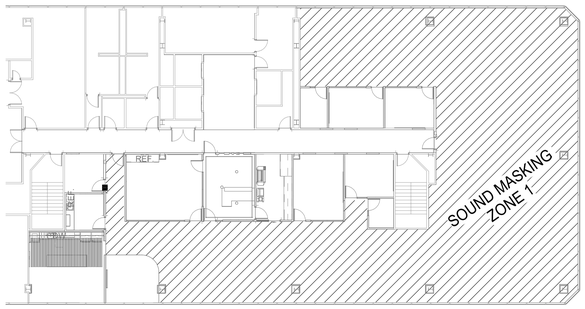
Sheet Title:

POWER MECHANICAL EQUIPMENT PLAN

Sheet Number:

E202

Autodesk Docs://25073_Olsson North Little Rock T1 ME_Little Rock AK New Office_Central_016017_R23.rvt
8/20/2026 9:45:21 AM



M1 SOUND MASKING ZONE PLAN

SCALE: 1/16" = 1'-0"

A1 SPECIAL SYSTEMS PLAN

SCALE: 3/16" = 1'-0"

GENERAL SHEET NOTES

A. SEE GE SERIES SHEETS FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

(XX) SHEET KEYNOTES

1. LIMIT AREA OF CONSTRUCTION. ANY WORK OUTSIDE THIS AREA IS TO BE COORDINATED WITH OWNER PRIOR TO COMMENCING WORK.
2. DATA/TELEPHONE CONNECTION TO OFFICE FURNITURE SYSTEM VIA WALL MOUNTED JUNCTION BOXES. DATA JUNCTION BOX SHALL BE 4"X4"X2-1/2" DEEP JUNCTION BOX WITH 2-GANG MUD RING. PROVIDE 1-1/2" C. FOR COMMUNICATION CABLING, STUBBED ABOVE ACCESSIBLE CEILING TO STRUCTURE.
3. ROOM SCHEDULER. PROVIDE 4"X4"X2-1/2" DEEP JUNCTION BOX WITH HORIZONTAL MOUNTED 1-GANG MUD RING AT 54" AFF WITH 3/4" C. ROUTED TO ABOVE ACCESSIBLE CEILING. PROVIDE A SINGLE CAT-6A CABLE TO NEAREST TELECOMMUNICATIONS CLOSET. COORDINATE FINAL ROUGH-IN LOCATION AND HEIGHT WITH OWNER'S AV CONTRACTOR.
4. COMBINATION DATA AND POWER FLOOR BOX LOCATION. REFER TO FLOOR BOX SCHEDULE IN ELECTRICAL PLANS FOR DETAILS.
5. OFCI WIRELESS ACCESS POINT TO BE MOUNTED WITHIN DROP CEILING. REFER TO SYSTEMS DETAILS FOR ROUGH-IN REQUIREMENTS.
6. OFCI WIRELESS ACCESS POINT TO BE MOUNTED TO SOLID CEILING, REFER TO SYSTEMS DETAILS FOR MORE INFORMATION.
7. PROVIDE ONE (1) 1 1/4" CONDUIT FROM FLOOR BOX TO TV WALL BOX. ROUTE (1) 1 1/4" CONDUIT FROM TV WALL BOX TO ABOVE ACCESSIBLE CEILING. REFER TO FLOOR BOX SCHEDULE ON E601 FOR ADDITIONAL INFORMATION.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DANIEL

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	KRT
Checked by:	TWD
Designer:	RRI
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission.
© Copyright SINCLAIR HILLE ARCHITECTS

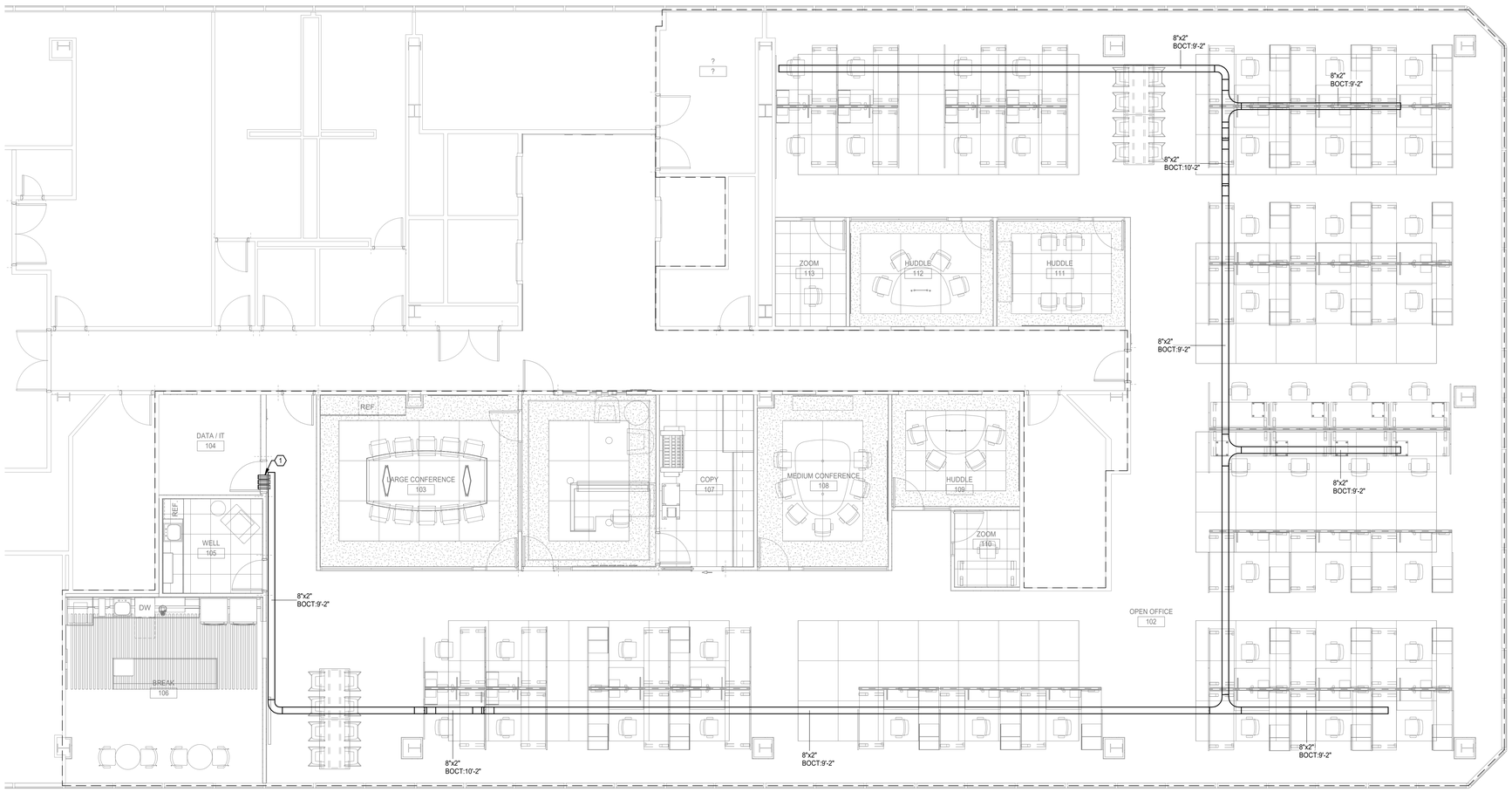
Sheet Title:

SPECIAL SYSTEMS PLAN

Sheet Number:

E301

Autodesk Docs://25073_Olsson North Little Rock TI-ME_Little Rock AK New Office_Central_016017.2_R23.rvt
8/20/2026 9:42:22 AM



GENERAL SHEET NOTES

A. SEE GE SERIES SHEETS FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

XX SHEET KEYNOTES

1. PROVIDE CONDUIT SLEEVES AS REQUIRED TO MAINTAIN A 40% FILL RATE BASED ON CABLING QUANTITIES ON THE PLANS.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DANIEL

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

SPECIAL SYSTEMS CABLE TRAY PLAN

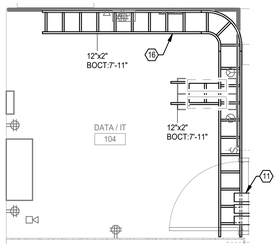
Sheet Number:

E302

A1 LIGHTING PLAN Copy 1

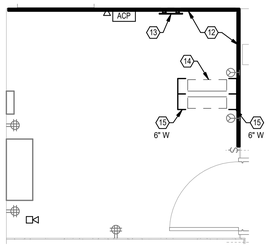
SCALE: 3/16" = 1'-0"

Autodesk Docs://25073_Olsson North Little Rock T1-MEP_Little Rock AK New Office_Central_016017_R23.rvt
8/20/2026 9:40:23 AM



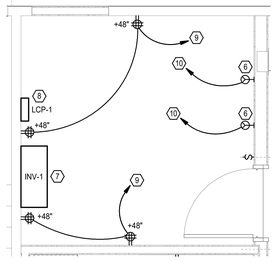
L1	ENLARGED CABLE TRAY PLAN - DATA 104

SCALE: 3/8" = 1'-0"



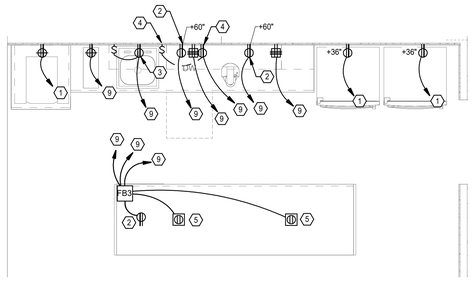
L5	ENLARGED SYSTEM PLAN - DATA 104

SCALE: 3/8" = 1'-0"



L10	ENLARGED POWER PLAN - DATA 104

SCALE: 3/8" = 1'-0"



G1	ENLARGED POWER PLAN - BREAK 106

SCALE: 3/8" = 1'-0"

GENERAL SHEET NOTES

A. SEE GE SERIES SHEETS FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.

XX SHEET KEYNOTES

1. PROVIDE A NEW 20A, 1P GFCI PROTECTED CIRCUIT BREAKER IN EXISTING 120/208V PANEL "P" LOCATED IN 4TH FLOOR ELECTRICAL ROOM.
2. RECEPTACLE TO BE PROVIDED FOR MICROWAVE MOUNTED IN CABINET. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT RECEPTACLE LOCATION PRIOR TO ROUGH-IN. THIS RECEPTACLE PROTECTED BY GFCI BREAKER.
3. RECEPTACLE TO BE PROVIDED FOR DISPOSAL IS TO BE MOUNTED UNDER THE SINK. SWITCH ASSOCIATED WITH DISPOSAL IS TO BE LOCATED ABOVE COUNTER. LABEL SWITCH "DISPOSAL". REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT RECEPTACLE LOCATION PRIOR TO ROUGH-IN.
4. LOCATE SWITCH FOR DISHWASHER UNDER SINK, LABEL "DISHWASHER DISCONNECT". REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT RECEPTACLE LOCATION PRIOR TO ROUGH-IN. THIS RECEPTACLE SHALL BE PROTECTED BY GFCI BREAKER.
5. PROVIDE A HEAVY DUTY COMMERCIAL GRADE, WHITE, 20A, FLIP-UP GFCI DUPLEX RECEPTACLE IN COUNTERTOP. PROVIDE LEW ELECTRIC, MODEL #PUFP-CT-WT-PB OR APPROVED EQUAL. COORDINATE ALL INSTALLATION REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGH-IN.
6. PROVIDE DEDICATED NEMA L6-30R RECEPTACLES FOR DATA / AV RACK CONNECTIONS. COORDINATE WITH DATA RACK INSTALLERS FOR EXACT RECEPTACLE LOCATIONS PRIOR TO ROUGH-IN.
7. EMERGENCY LIGHTING INVERTER. SEE EMERGENCY LIGHTING INVERTER SCHEDULE. SHEET E601 FOR MORE INFORMATION. COORDINATE FINAL MOUNTING LOCATION WITH LOW VOLTAGE INSTALLERS PRIOR TO ROUGH-IN SO AS NOT TO INTERFERE WITH DATA RACK INSTALLATION IN SAME ROOM.
8. PROVIDE NETWORKED LIGHTING CONTROL SYSTEM CONTROLLER LCP-1 IN NEMA 1 ENCLOSURE WITH TOUCHSCREEN INTERFACE.
9. CIRCUIT TO SPARE 20A, 1P CIRCUIT BREAKER IN EXISTING 120/208V, 225 AMP PANEL "P" LOCATED IN 4TH FLOOR ELECTRICAL ROOM.
10. CIRCUIT TO NEW 30A, 1P CIRCUIT BREAKER IN EXISTING 120/208V, 225 AMP PANEL "P" LOCATED IN 4TH FLOOR ELECTRICAL ROOM.
11. PROVIDE CONDUIT SLEEVES AS REQUIRED TO MAINTAIN A 40% FILL RATE BASED ON CABLING QUANTITIES ON THE PLANS.
12. PROVIDE 4' X 8' X 3/4" PLYWOOD TELECOMMUNICATIONS EQUIPMENT BACK BOARD(S) ON WALLS INDICATED. BACKBOARD SHALL BE FIRE RETARDANT PLYWOOD PAINTED WITH TWO COATS OF WHITE PAINT. FIRE RATING LABEL ON PLYWOOD SHALL NOT BE PAINTED AND SHALL BE VISIBLE FOR INSPECTION.
13. PROVIDE 4"X20" PRIMARY BONDING BUS. REFER TO DETAIL E6/E502 FOR TGB REQUIREMENTS. REFER TO DETAIL E11/E502 FOR TELECOM ROOM GROUNDING DIAGRAM.
14. PROVIDE BLACK 45RU, 2 POST EQUIPMENT RACK.
15. PROVIDE BLACK DUAL -SIDED, VERTICAL CABLE MANAGER WITH SIZE AS INDICATED ON PLANS.
16. PROVIDE BLACK LADDER TYPE CABLE RUNWAY WITH SIZES AS INDICATED. PROVIDE ALL ACCESSORIES AND SUPPORTS AS NEEDED FOR A COMPLETE SYSTEM. PROVIDE RADIUS CABLE DROP OUT KITS FOR TRANSITIONING CAT-6 CABLE TO EQUIPMENT RACKS.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 12584
8/20/26
TIMOTHY W. DANIEL

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	KRT
Checked by:	TWD
Designer:	RRI
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

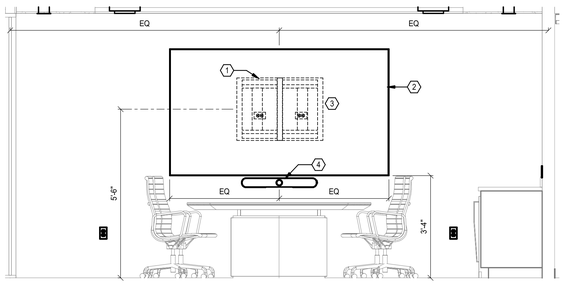
Sheet Title:

ELECTRICAL & SYSTEMS ENLARGED PLANS

Sheet Number:

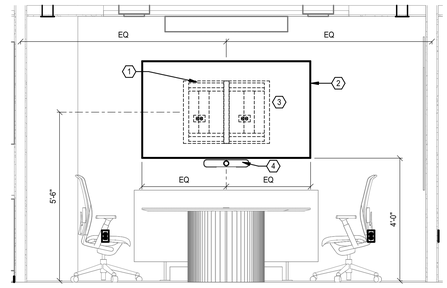
E401

Autodesk Docs://25073_Olsson North Little Rock T1 MEP_Little Rock AK New Office_Central_0100172_R23.rvt
8/20/2026 9:46:23 AM



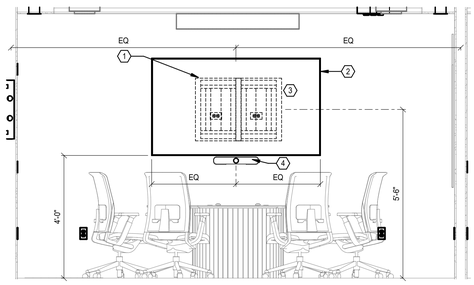
L1 LARGE CONFERENCE 103 AV ELEVATION

SCALE: 1/2" = 1'-0"



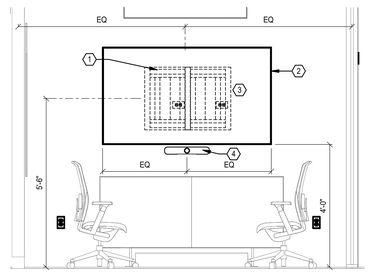
L7 MEDIUM CONFERENCE ROOM 108 AV ELEVATION

SCALE: 1/2" = 1'-0"



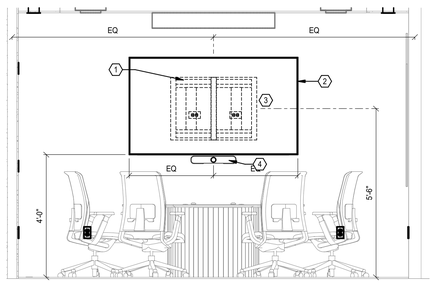
G1 HUDDLE ROOM 112 AV ELEVATION

SCALE: 1/2" = 1'-0"



G7 HUDDLE ROOM 111 AV ELEVATIONS

SCALE: 1/2" = 1'-0"



C1 HUDDLE ROOM 109 AV ELEVATION

SCALE: 1/2" = 1'-0"

SHEET KEYNOTES

1. DISPLAY BACK BOX ROUGH-IN KITS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR. DISPLAY MOUNT KITS SHALL BE PROVIDED BY AUDIO/VISUAL CONTRACTOR. REFERENCE DISPLAY SCHEDULE FOR BASIS OF DESIGN MODEL NUMBER. AUDIO/VISUAL CONTRACTOR AND ELECTRICAL CONTRACTOR ARE REQUIRED TO COORDINATE COMPATIBILITY OF PART NUMBER PRIOR TO PURCHASE AND/OR INSTALLATION.
2. FLAT PANEL DISPLAY AS SCHEDULED. PROVIDE 3/4" PLYWOOD BACKING FOR EACH DISPLAY.
3. DATA AND POWER OUTLETS SHALL BE PROVIDED WITHIN PROVIDED KNOCKOUT IN DISPLAY BACK BOX.
4. COMBINATION SOUNDBAR/CAMERA CONFERENCING DEVICE. REFERENCE ONE-LINE DIAGRAM FOR BASIS OF DESIGN PART NUMBER.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DEVINE

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

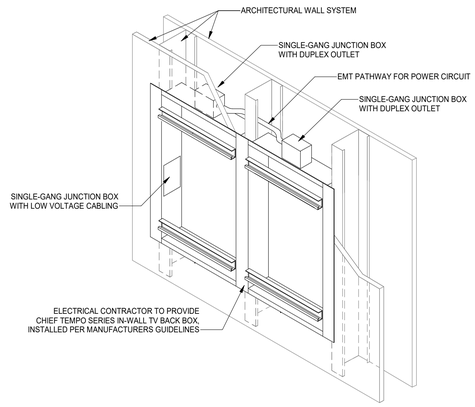
Sheet Title:

CONFERENCE ROOM TV WALL ELEVATIONS

Sheet Number:

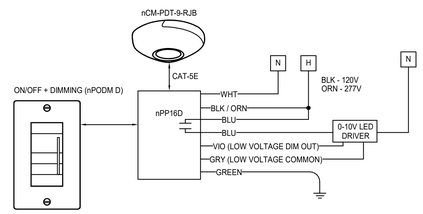
E402

Autodesk Docs://25073_Olsson North Little Rock TI-ME_Little Rock AK New Office_Central_016017_R23.rvt
8/20/2026 9:40:24 AM



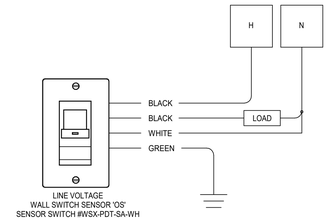
L1 DUAL TV BACKBOX - TOGETHER

SCALE: N.T.S.



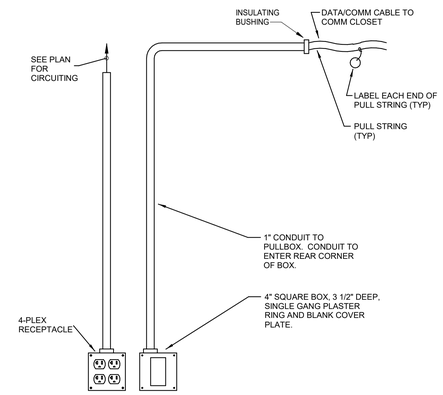
L5 LOW VOLTAGE SWITCH WIRING DIAGRAM

SCALE: N.T.S.



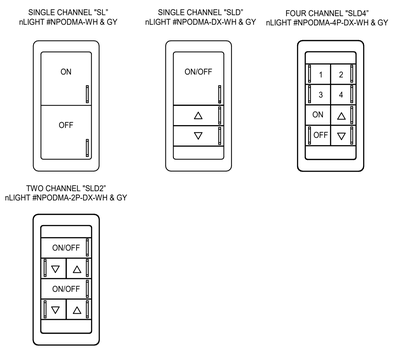
L10 LINE VOLTAGE LIGHTING WIRING DIAGRAM

SCALE: N.T.S.



L14 MULTI-OUTLET ROUGH-IN DETAIL

SCALE: N.T.S.



GENERAL NOTES:

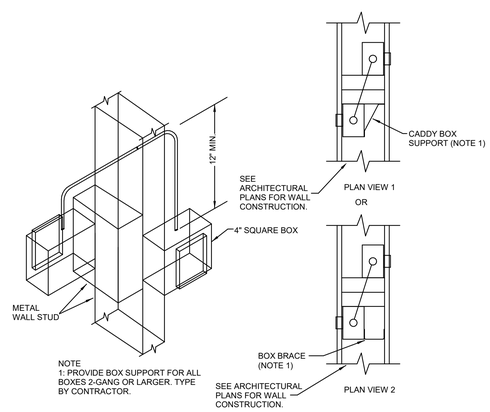
A. SWITCHES TOGGLE EACH CHANNEL ON/OFF. DIMMER SWITCHES ALSO HAVE RAISE/LOWER.

B. ENGRAVING TO BE DETERMINED DURING SUBMITTAL REVIEW.

C. ALL DEVICES IN THE OFFICE AREA SHALL BE WHITE DECORATOR STYLE WITH WHITE THERMOPLASTIC COVERPLATES. ALL DEVICES IN THE FOPS ON GRAY WALLS SHALL BE GRAY WITH GRAY THERMOPLASTICS COVERPLATES.

F1 LOW VOLTAGE SWITCHES

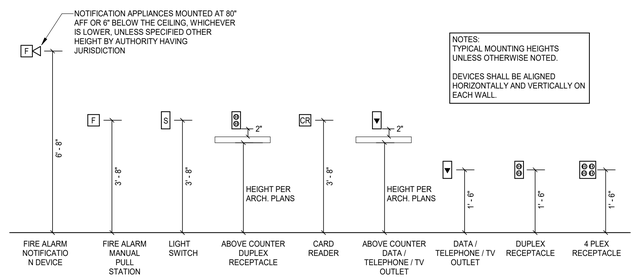
SCALE: N.T.S.



NOTE
1: PROVIDE BOX SUPPORT FOR ALL BOXES 2-GANG OR LARGER. TYPE BY CONTRACTOR.

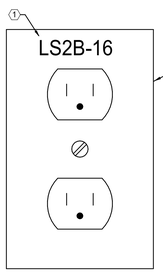
F5 ELECTRIC OUTLETS IN COMMON WALL

SCALE: N.T.S.



F10 TYPICAL DEVICE MOUNTING HEIGHTS

SCALE: N.T.S.



TYPICAL WIRING DEVICE PLATE
(SINGLE SHOWN. VERIFY DOUBLE DUPLEX LOCATIONS)

GENERAL NOTE FOR DEVICE LABELING:

1. TYPICAL NUMBER (EXAMPLE) FOR DEVICE CIRCUIT LABELING AND NUMBERING. LETTERS SHALL BE 3/15" HIGH BLACK ON CLEAR LABEL. LETTERS PRINTED WITH NUMBERS OF CIRCUIT AS SHOWN ON PLAN.

A1 DEVICE LABELING DETAIL

SCALE: N.T.S.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 ROBERT W. DRAKE

REVISION SCHEDULE		
#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	KRT
Checked by:	TWD
Designer:	RRI
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

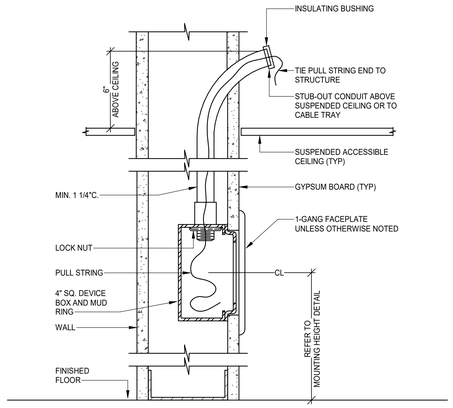
Sheet Title:

ELECTRICAL DETAILS

Sheet Number:

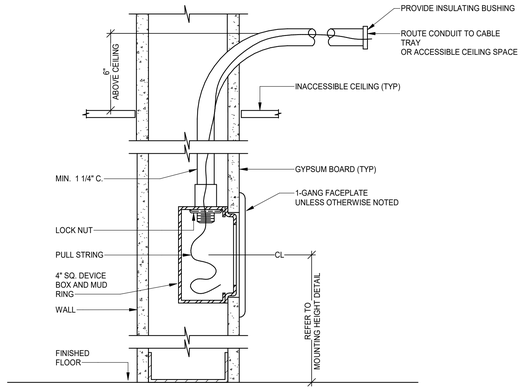
E501

Autodesk Docs://25073_Olsson North Little Rock 01 ME_Little Rock AK New Office_Central_0160172_R23.rvt
8/20/2026 9:46:26 AM



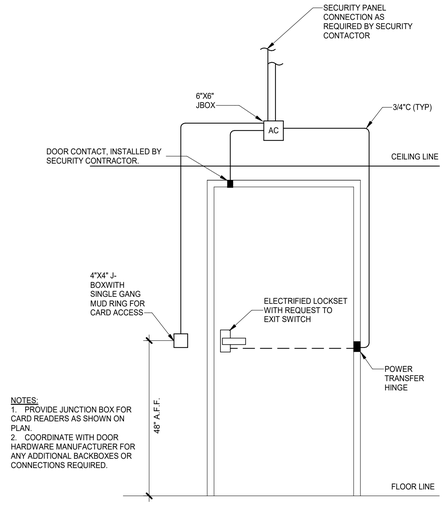
L1 LOW VOLTAGE SYSTEM OUTLET - ACCESSIBLE CEILING

SCALE: N.T.S.



L6 LOW VOLTAGE SYSTEM OUTLET - DRYWALL CEILING

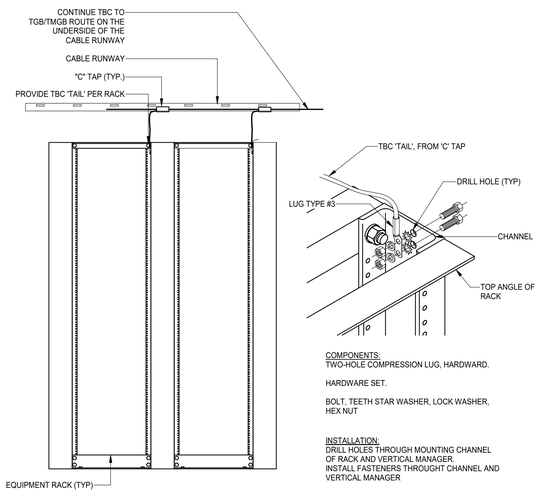
SCALE: N.T.S.



NOTES:
1. PROVIDE JUNCTION BOX FOR CARD READERS AS SHOWN ON PLAN.
2. COORDINATE WITH DOOR HARDWARE MANUFACTURER FOR ANY ADDITIONAL BACKBOXES OR CONNECTIONS REQUIRED.

L11 TYPICAL ACCESS ROUGH-IN DETAIL

SCALE: 12" = 1'-0"



NOTE: DO NOT BOND EQUIPMENT RACK IN SERIES

COMPONENTS:
TWO-HOLE COMPRESSION LUG, HARDWARD.

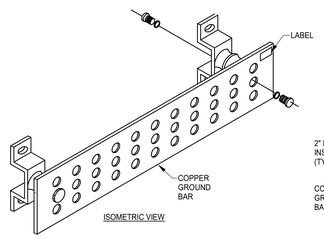
HARDWARE SET.

BOLT, TEETH STAR WASHER, LOCK WASHER, HEX NUT

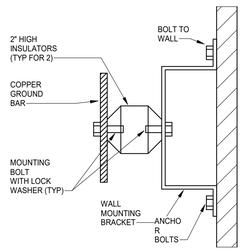
INSTALLATION:
DRILL HOLES THROUGH MOUNTING CHANNEL OF RACK AND VERTICAL MANAGER.
INSTALL FASTENERS THROUGHT CHANNEL AND VERTICAL MANAGER

E1 EQUIPMENT RACK BONDING DETAIL

SCALE: N.T.S.



ISOMETRIC VIEW

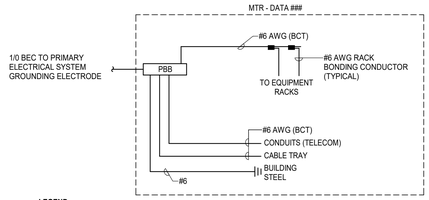


SECTION

GROUND BAR SCHEDULE		
MARK	NOMINAL SIZE	ERITECH CAT #
MGB	1/4" x 4" x 12"	EGBA14412CCT
TGB	1/4" x 4" x 12"	TMGB-A12L27PT

E6 GROUND BAR

SCALE: N.T.S.



LEGEND:
MTR = MAIN TELECOMMUNICATIONS ROOM
ACEG = ALTERNATING CURRENT EQUIPMENT GROUND
BEC = BONDING ELECTRODE CONDUCTOR
BCT = BONDING CONDUCTOR FOR TELECOMMUNICATIONS
EF = ENTRANCE FACILITY
ER = EQUIPMENT ROOM
GE = GROUNDING EQUALIZER
GEC = GROUNDING ELECTRODE CONDUCTOR
TBB = TELECOMMUNICATIONS BONDING BACKBONE
PBB = PRIMARY BONDING BUSBAR
SBB = SECONDARY BONDING BUSBAR
TR = TELECOMMUNICATIONS ROOM

GENERAL NOTES:
A. PROVIDE BONDING BUSHING FOR ALL TELECOMMUNICATIONS CONDUITS ENTERING ROOM AND BOND TO PBB OR SBB
B. PROVIDE ALL BONDING BUSBARS, CONDUCTORS, AND FINAL CONNECTIONS AS SHOWN ON THIS DETAIL TO INCLUDE FINAL BONDING CONNECTIONS TO PATHWAYS AND EQUIPMENT ROOM FITTINGS.

E11 IT/SERVER ROOM GROUNDING DIAGRAM

SCALE: N.T.S.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010

OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DANNER

REVISION SCHEDULE

#	Date	Revision Description

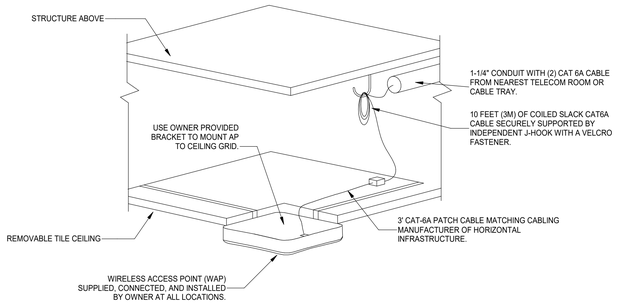
Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:
SYSTEMS DETAILS

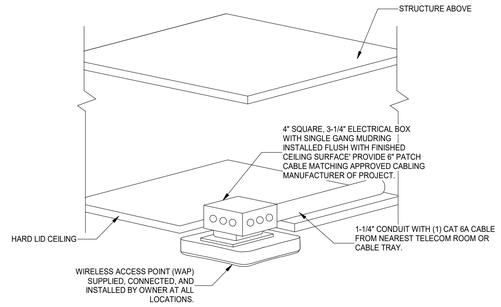
Sheet Number:
E502

Autodesk Docs://25073_Olsson North Little Rock 1 1 ME_Little Rock AK New Office_Central_0160172_R23.rvt
8/20/2026 9:40:26 AM



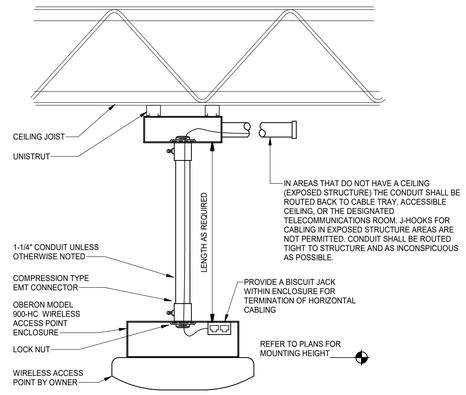
L1 DROP CEILING MOUNTED WAP

SCALE: N.T.S.



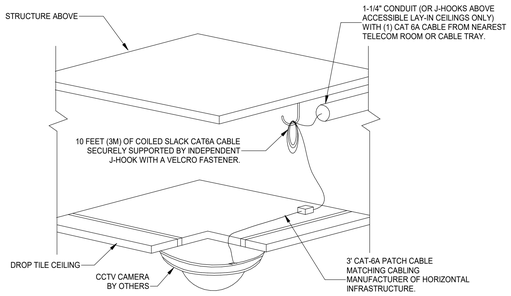
L7 HARD-LID CEILING MOUNTED WAP

SCALE: N.T.S.



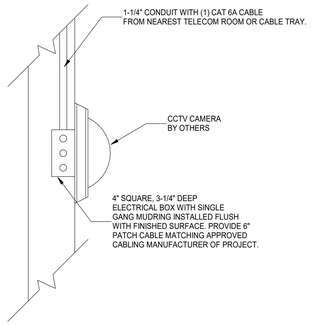
L12 WIRELESS ACCESS POINT MOUNTING (EXPOSED CEILING)

SCALE: N.T.S.



G1 DROP CEILING MOUNTED CAMERA

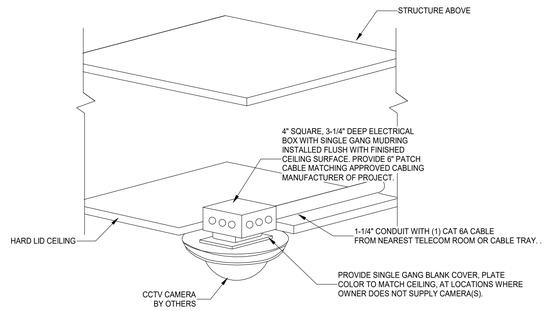
SCALE: N.T.S.



CAMERA SCHEDULE		
TYPE MARK	CAMERA TYPE	MOUNT TYPE
C1	FIXED	DROP CEILING-SURFACE
C2	FIXED	WALL-SURFACE

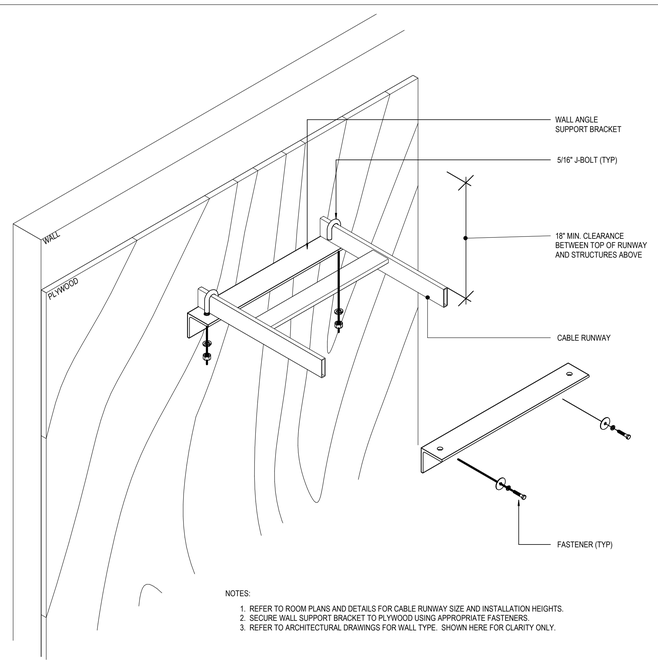
G7 INTERIOR WALL MOUNTED CAMERA

SCALE: N.T.S.



G12 HARD LID CEILING MOUNTED CAMERA

SCALE: N.T.S.



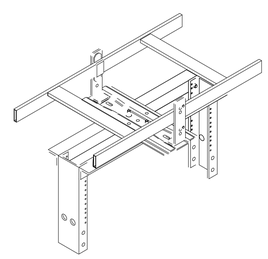
NOTES:

1. REFER TO ROOM PLANS AND DETAILS FOR CABLE RUNWAY SIZE AND INSTALLATION HEIGHTS.
2. SECURE WALL SUPPORT BRACKET TO PLYWOOD USING APPROPRIATE FASTENERS.
3. REFER TO ARCHITECTURAL DRAWINGS FOR WALL TYPE. SHOWN HERE FOR CLARITY ONLY.

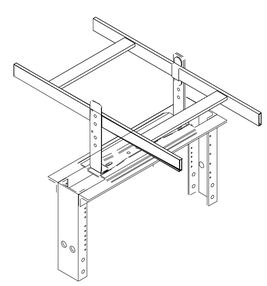
A1 TYPICAL CABLE RUNWAY TO WALL BRACING DETAIL

SCALE: N.T.S.

Parallel Mounting



Perpendicular Mounting



A7 TYPICAL RACK TO RUNWAY MOUNTING

SCALE: N.T.S.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073

Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD

Consultant Project #: 25073

Certificate of Authorization #: COA-01289

SINCLAIR HILLE ARCHITECTS

700 Q Street

Lincoln, NE 68508

P 402.476.7331

W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING

Consultant Project #: 016-0172

Certificate of Authorization #: 1010

OLSSON

601 P Street

Lincoln, NE 68508

P 402.474.6311

W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DRINNON

REVISION SCHEDULE

#	Date	Revision Description

Issue:	Contract Documents
Date:	August 20, 2026
Drawn by:	KRT
Checked by:	TWD
Designer:	RRI
Project Architect:	DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission.

© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

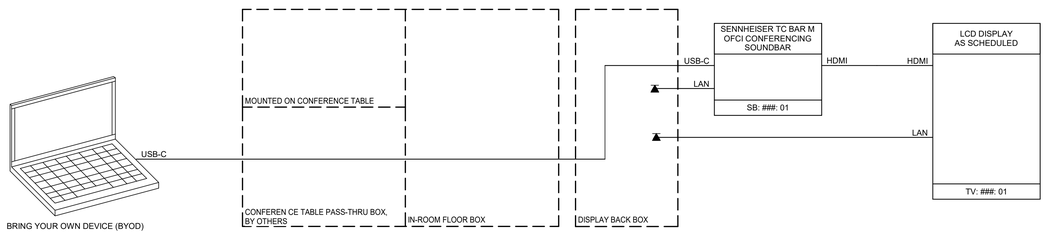
SYSTEMS DETAILS

Sheet Number:

E503

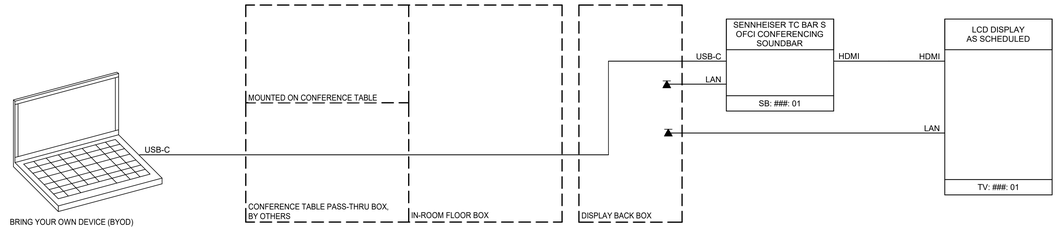
Autodesk Docs://25073_Olsson North Little Rock TI-ME_Little Rock AK New Office_Central_016012_R23.rvt

8/20/2026 6:36:39 AM



D1 MEDIUM & LARGE CONF ROOM - AV ONE-LINE DIAGRAM

SCALE: NONE



A1 SMALL CONFERENCE ROOM - AV ONE-LINE DIAGRAM

SCALE: NONE

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive, North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 12584 TIMOTHY W. DERINGER

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission.
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

SYSTEMS DIAGRAMS

Sheet Number:

E504

Autodesk Docs://25073_Olsson North Little Rock T1-MEP_Little Rock AK New Office_Central_016012_R23.rvt
8/20/2026 6:36:39 AM

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

ITEM	DESCRIPTION	FLA	MCA	MOCP	AMPS	KW	HP	VOLTS	PHASE	DISC. BY	DISC. SIZE	NEMA	DISC. TYPE	PANEL	CONDUCTORS PHASE	CONDUCTORS NEUTRAL	CONDUCTORS GROUND	CONDUIT SIZE	COMMENTS
DWH-1	DOMESTIC WATER HEATER (ELECTRIC)	29 A	36 A	40 A	28.8	6	--	208 V	1	ELEC	60A	--	NON FUSED	PANEL P	#8	--	#10	3/4"	A,B,C,D
EF-1	EXHAUST FAN	3 A	4 A	15 A	2.8		1/20	120 V	1	ELEC	--	--	THERMAL ELEMENT SWITCH	PANEL P	#12	#12	#12	3/4"	A,B,C,D
SP-1	SEWAGE PUMP	8 A	9 A	20 A	7.2	.9	1/3	120 V	1	ELEC	--	--	THERMAL ELEMENT SWITCH	PANEL P	#12	#12	#12	3/4"	A,B,C,D
SP-2	SEWAGE PUMP	8 A	9 A	20 A	7.2	.9	1/3	120 V	1	ELEC	--	--	THERMAL ELEMENT SWITCH	PANEL P	#12	#12	#12	3/4"	A,B,C,D
VB-4-402	VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT	25 A	32 A	35 A	25.3	7	--	277 V	1	ELEC	30A	--	NON FUSED	PANEL L	#8	#8	#10	3/4"	A,B,C,D
VB-4-404	VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT	18 A	23 A	25 A	18.1	5	--	277 V	1	ELEC	30A	--	NON FUSED	PANEL L	#10	#10	#10	3/4"	A,B,C,D
VB-4-407	VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT	4 A	5 A	15 A	3.6	1	--	277 V	1	ELEC	30A	--	NON FUSED	PANEL L	#12	#12	#12	3/4"	A,B,C,D
VB-4-408	VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT	7 A	9 A	15 A	7.2	2	--	277 V	1	ELEC	30A	--	NON FUSED	PANEL L	#12	#12	#12	3/4"	A,B,C,D
VB-4-409	VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT	4 A	5 A	15 A	3.6	1	--	277 V	1	ELEC	30A	--	NON FUSED	PANEL L	#12	#12	#12	3/4"	A,B,C,D
VB-4-410	VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT	7 A	9 A	15 A	7.2	2	--	277 V	1	ELEC	30A	--	NON FUSED	PANEL L	#12	#12	#12	3/4"	A,B,C,D
VB-4-411	VARIABLE AIR VOLUME BOXES WITH ELECTRIC REHEAT	5 A	7 A	15 A	5.4	1.5	--	277 V	1	ELEC	30A	--	NON FUSED	PANEL L	#12	#12	#12	3/4"	A,B,C,D

MECHANICAL EQUIPMENT CONNECTION SCHEDULE GENERAL NOTES:
A. PROVIDE ALL DISCONNECTS SHOWN IN SCHEDULE ABOVE AND MAKE ALL CONNECTIONS REQUIRED TO MECHANICAL EQUIPMENT. PROVIDE STARTERS AS REQUIRED.
B. COORDINATE CHANGES WITH MECHANICAL EQUIPMENT PROVIDED PRIOR TO INSTALLATION.
C. MOUNT DISCONNECTS VERTICALLY WITH "ON" AT TOP OF UNIT. MOUNT DISCONNECTS WITHIN 6 FEET OF UNIT SERVED UNLESS SHOWN OR OTHERWISE NOTED.
D. CIRCUIT TO NEW OR SPARE CIRCUIT BREAKER AS NOTED WITHIN MOCP & PANEL COLUMN IN THE ABOVE SCHEDULE.

FLOOR BOX SCHEDULE

TYPE	STYLE	APPLICATION	COVER TYPE	COVER FINISH	COVER FLOORING	POSITION / DEVICES 1	2	3	4	5	6	7	8	NOTES
FB-1	G	POKE-THRU	FF	AA	CP	B	P	P	DB	DB	--	--	--	A
FB-2	G	POKE-THRU	FL	AA	CP	PB	B	DB	AVB	PB	--	--	--	
FB-3	F	POKE-THRU	FF	AA	TL	P	B	B	--	--	--	--	--	A

1. LOCATIONS:
   A. ON GRADE (-OG)
   B. ABOVE-GRADE
   C. WOOD FLOOR
2. DEPTH: 3-7/16", 2-5/8" (SS)
3. POSITIONS:
   A. 1-PB
   B. 2-PB, DB, AVB
   C. 3-PB
   D. 4-PB, DB, AVB
4. COVER: FL, F, FF

1. LOCATIONS:
   A. ON GRADE (-CI)
   B. ABOVE GRADE
2. DEPTH: 3-7/16", 2-7/16" (SS)
3. POSITIONS:
   A. 1-PB
   B. 2-PB, DB, AVB
   C. 3-PB
   D. 4-PB, DB, AVB
4. COVER: FL, F, FF

1. LOCATIONS:
   A. ONGRADE
   B. ABOVE GRADE
   C. RAISED FLOOR
   D. WOOD FLOOR
2. DEPTH: 4-1/16"
3. POSITIONS:
   A. ALL - P, PS, D, AV
4. COVER: FL, F

1. LOCATIONS:
   A. ONGRADE
   B. ABOVE GRADE
   C. RAISED FLOOR
   D. WOOD FLOOR
2. DEPTH: 6"
3. POSITIONS:
   A. ALL - P, PS, D, AV
4. 1-GANG, 2-GANG AND 4-GANG MOUNTING BRACKETS
5. COVER: FL, F

1. LOCATIONS:
   A. ONGRADE (-OG)
   B. ABOVE GRADE
   C. RAISED FLOOR
   D. WOOD FLOOR
2. DEPTH: 5-7/8"
3. POSITIONS:
   A. ALL - P, PS, D, AV
4. COVER: FL, F

1. LOCATIONS:
   A. ABOVE GRADE
2. DEPTH: 16-1/4"
3. POSITIONS:
   A. 1 - PB
   B. 2 - PB
   C. 3 - DB, (2) AVB
4. COVER: FL, F, FF

1. LOCATIONS:
   A. ABOVE GRADE
2. DEPTH: 16-1/4"
3. POSITIONS:
   A. 1 - PB
   B. 2 - PB
   C. 3 - PB, DB, (2) AVB
   D. 4 - PB, DB, (2) AVB
   E. 5 - PB, DB, (2) AVB
4. COVER: FL, F, FF

1. LOCATIONS:
   A. ON GRADE
2. DEPTH: 3-1/2"
3. POSITIONS:
   A. 1 - PB, PS, DB, AVB

1. LOCATIONS:
   A. ON GRADE
2. DEPTH: 6"
3. POSITIONS:
   A. 1 MODEL - FF
4. COVER: FL

FLOORBOX DEVICE LEGEND:
P - DUPLEX RECEPTACLE WITH STANDARD FACEPLATE.
PB - DUPLEX RECEPTACLE (OR GFCI) MOUNTED IN SPECIAL MOUNTING BRACKET.
PS - SPECIAL RECEPTACLE MOUNTED IN SPECIAL MOUNTING BRACKET.
D - COMMUNICATIONS OUTLET WITH STANDARD FACEPLATE.
DB - COMMUNICATIONS OUTLET MOUNTED IN SPECIAL MOUNTING BRACKET.
AV - AUDIO VIDEO OUTLET IN STANDARD FACEPLATE.
AVB - AUDIO VIDEO OUTLET IN EXTRON AAP OR EXTRON MAAP MOUNTING BRACKET.
T - THREADED OPENING.
B - BLANK COVER
(SS) - SHALLOW VERSION DEPTH.
(-OG) - ON GRADE VERSION.
(-CI) - CAST IRON ON GRADE VERSION.

NOTES:
A. COORDINATE FINAL CONNECTIONS WITH OWNER PROVIDED FURNITURE SYSTEMS.

COVER FINISH:
BK - BLACK
GY - GRAY
NK - NICKEL
BS - BRASS
BZ - BRONZE
AA - BRUSHED ALUMINUM
SB - SATIN BRASS
SN - SATIN NICKEL

COVER TYPES:
FL - FLANGE
F - FLUSH
FF - FURNITURE FEED

COVER FLOOR:
CP - CARPET
TL - TILE

BRANCH CIRCUIT COPPER CONDUCTOR AND CONDUIT SIZE :.:

PROTECTION DEVICE RATING (AMPS)	REQUIRED CONDUCTOR SIZE	EQUIPMENT GROUNDING CONDUCTOR SIZE	SINGLE PHASE 2-WIRE + GND. CONDUIT SIZE	SINGLE PHASE 3-WIRE + GND. CONDUIT SIZE	SINGLE PHASE 4-WIRE + GND. CONDUIT SIZE
15	12 AWG	12 AWG	3/4"	3/4"	3/4"
20	12 AWG	12 AWG	3/4"	3/4"	3/4"
25	10 AWG	10 AWG	3/4"	3/4"	3/4"
30	10 AWG	10 AWG	3/4"	3/4"	3/4"
35	8 AWG	10 AWG	3/4"	3/4"	3/4"
40	8 AWG	10 AWG	3/4"	3/4"	3/4"
45	6 AWG	10 AWG	3/4"	3/4"	1"
50	6 AWG	10 AWG	3/4"	3/4"	1"
60	4 AWG	10 AWG	1"	1"	1-1/4"
70	4 AWG	10 AWG	1"	1"	1-1/4"
80	3 AWG	8 AWG	1"	1-1/4"	1-1/4"
90	2 AWG	8 AWG	1"	1-1/4"	1-1/4"
100	1 AWG	8 AWG	1-1/4"	1-1/2"	1-1/2"

* = UNLESS OTHERWISE NOTED ON THE DRAWINGS.

** = ALL CONDUCTORS SHOWN IN THIS TABLE ARE BASED ON THREE CURRENT CARRYING CONDUCTORS IN A RACEWAY OR CABLE. CONDUCTORS SHALL BE DERATED IN ACCORDANCE WITH THE NEC IF 4 OR MORE CONDUCTORS ARE PLACED IN A RACEWAY OR CABLE.

*** = THE CONDUCTORS SHOWN IN THIS TABLE ARE BASED ON AN AMBIENT TEMPERATURE OF 86°F. FOR TEMPERATURES ABOVE 86°F THE CONDUCTOR AMPACITY SHALL BE DERATED IN ACCORDANCE WITH THE NEC.

DISPLAY SCHEDULE

LOCATION RM. NUMBER	LOCATION RM. NAME	MANUFACTURER	MODEL	NOMINAL SCREEN SIZE	MOUNT MANUFACTURER	MOUNT MODEL	BRIGHTNESS	RESOLUTION	ORIENTATION	COMMENTS
103	LARGE CONFERENCE	SONY	98BZ30L	98-INCH	CHIEF	FPIWMKIT2	500 NITS	3840X2160	LANDSCAPE	
108	MEDIUM CONFERENCE	SONY	75BZ40P	75-INCH	CHIEF	FPIWMKIT2	500 NITS	3840X2160	LANDSCAPE	
109	HUDDLE	SONY	75BZ40P	75-INCH	CHIEF	FPIWMKIT2	500 NITS	3840X2160	LANDSCAPE	
111	HUDDLE	SONY	75BZ40P	75-INCH	CHIEF	FPIWMKIT2	500 NITS	3840X2160	LANDSCAPE	
112	HUDDLE	SONY	75BZ40P	75-INCH	CHIEF	FPIWMKIT2	500 NITS	3840X2160	LANDSCAPE	

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	DESCRIPTION	MANUFACTURER	MODEL	TOTAL INPUT WATTS	WATTS PER LINEAR FOOT	LAMP TYPE	LAMP LUMENS	LAMP CCT	LAMP CRI	VOLTAGE	MOUNTING	APPROVED MANUFACTURER	KEYED NOTES
A1	RECESSED LINEAR - ASYMMETRIC	FOCAL POINT	FSM4PR-ALH-AF1-625LF-935K-1C-UNV-L11-G-WH-##FT-##IN		5	625LM/FT LED	2850	3500 K	90	277	CEILING RECESSED IN GRID	LUMENWERX	
C1	12'x16' RECESSED LINEAR SQUARE	BASO LIGHTING	BASO 1.5-RTL-WH-OP-35K-C90-UNV-010V-0400LF-RS-144X192IN	48	4	400LM/FT LED	8556	3500 K	90	277	CEILING RECESSED IN GYP	QTL	3,4
D1	4" ROUND RECESSED DOWNLIGHT - WIDE DIST.	FOCAL POINT	FLC3D-RO-SW-1900-UNV-L11-LC3-RDO-SW-1900L-935K-DSS-SWFL-WH	22		2000LM LED	4800	3500 K	90	277	CEILING RECESSED IN GRID	PORTFOLIO	
G1	2X4 RECESSED SWITCHABLE FLAT PANEL	LITHONIA	CPX-2X4-ALO8-80CRI-SWWY-SWL-MVOLT	40		4900LM LED	8913	3500 K	80	277	CEILING RECESSED IN GRID	METALUX	5
I1	4' INDUSTRIAL STRIP LED	LITHONIA	CLX-L48-5000LM-SEF-RDL-MVOLT-GZ10-40K-80CRI-WH-ZACVH M100	35		5000LM LED	5600	4000 K	80	277	CEILING SUSPENDED	METALUX	7
L1	4"X4' RECESSED LINEAR	FOCAL POINT	FSM4L-BW-1250LF-935K-1C-UNV-L11-T1-**-4FT	46		3700LM LED	1380	3500 K	90	277	CEILING RECESSED IN GRID	LUMENWERX	
L2	4"X8' RECESSED LINEAR	FOCAL POINT	FSM4L-BW-1000LF-935K-1C-UNV-L11-T1-**-8FT	74		7400LM LED	4450	3500 K	90	277	CEILING RECESSED IN GRID	LUMENWERX	
L5	1" SUSPENDED LINEAR	MARK ARCHITECTURAL	S1PD-LLP-6FT-MSL6-90CRI-35K-600LMF-DBW-SCT-MIN1-FLL-MVOLT-BLKT-ZT #-2/72A-RDCY-BLKCY-BCRD	79		625LM/FT LED	11400	3500 K	90	277	CEILING SUSPENDED	LUMENWERX	6
P1	12" GLOBE PENDANT	PABLO	BOLA SPH 12-GUN	20		1625LM LED	1380	2700 K	90	277	CEILING SUSPENDED		3,4,11
P2	LARGE ACOUSTIC LED PENDANT	BUZZI SPACE	BUZZISHADE L - LED SOLO-277V-3500K-12 FA-LightGrey 1000**	19		1500LM LED	1380	3500 K	80	277	CEILING SUSPENDED		4,10
P5	MED LED ACOUSTIC PENDANT	BUZZI SPACE	BUZZISHADE M - LED SOLO-277V-3500K-12 FA-Grass 59**	19		1500LM LED	1380	3500 K	80	277	CEILING SUSPENDED		4,10
P7	5" SUSPENDED ROUND CYLINDER PENDANT - LOW OUTPUT	FOCAL POINT	FLCY4-RD-WHG-2000L-935K-1C-UNV-DSCL-L11-C72-DSS-SWFL-CD-***	24		1500LM LED	1380	3500 K	90	277	CEILING SUSPENDED		9
S1	4' LED SURFACE DRUM	FOCAL POINT	FSDEP-4-FL-7000DN-SG-935K-1C-UNV-L11-SM-BK	62		7000LM LED	2400	3500 K	90	277	CEILING SURFACE	PRUDENTIAL	
U1	RECESSED LED UNDERCABINET LINEAR	PURE EDGE	LCMW 6-5W-XX-D-35K-**		4	400LM LED	2850	3500 K	90	277	RECESSED MILLWORK	QTL	3
X1	EXIT SIGN - SINGLE FACE	LITHONIA	EDGR-1-RMR	2		LED	0	4000 K		277	WALL, SUSPENDED, CEILING	SURE-LITES	1,2

GENERAL SCHEDULE NOTES:
A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF SUSPENDED AND WALL MOUNTED LIGHT FIXTURES WITH OWNER/ARCHITECT PRIOR TO ORDERING AND INSTALLATION.
B. FOR LED REPLACEMENT LAMPS, PROVIDE PRODUCT DATA SUBMITTAL FOR REVIEW BY THE OWNER/ARCHITECT/ENGINEER.
C. FOR EXIT SIGNS, PROVIDE DIRECTIONAL ARROWS AS REQUIRED FOR MAXIMUM CLARITY OF THE PATH OF EGRESS OR TO MATERIAL PROCUREMENT.
D. FIXTURE FINISH - WHERE CATALOG NUMBER LISTED INDICATES **** IN LIEU OF MANUFACTURER'S FINISH OPTION, COORDINATE WITH ARCHITECT FOR EXACT FINISH PRIOR TO ORDERING.

SCHEDULE KEYNOTES:
1. PROVIDE WITH PENDANT MOUNT (PM) OPTION WHEN PENDANT MOUNT (PM) DESIGNATION IS INDICATED ON THE LIGHTING PLANS.
2. PROVIDE WITH RECESSED WALL MOUNT (WM) OPTION WHEN WALL MOUNT (WM) DESIGNATION IS INDICATED ON THE LIGHTING PLANS.
3. PROVIDE ALL COMPONENTS (POWER SUPPLIES, POWER SUPPLY ACCESSORIES, ACCESSORIES, ETC.) FOR MOUNTING AND INSTALLATION OF A COMPLETE SYSTEM.
4. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS.
5. SWITCHABLE CCT AND LUMEN OUTPUT. FIELD VERIFY WITH OWNER ON THE FINAL CCT AND LUMEN OUTPUT SELECTIONS.
6. COORDINATE OVERALL FIXTURE LENGTH AND MOUNTING POINTS WITH BULKHEAD AND SUSPENDED ARCHITECTURAL CEILING COMPONENTS.
7. SUSPEND SO THAT BOTTOM OF FIXTURE IS 9'-0" AFF.
8. SUSPEND SO THAT BOTTOM OF FIXTURE IS 10'-6" AFF.
9. SUSPEND SO THAT BOTTOM OF FIXTURE IS 10'-0" AFF.
10. PREFERRED VENDOR: ENCOMPASS, CONTACT AMY WRIGHT (AMY@ENCOMPASS.COM; 816.285.6482). LIGHTING FIXTURE SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
11. PROVIDE FIXTURE WITH BUG PROOF CUSTOM CAP AT THE TOP. COORDINATE WITH MANUFACTURER FOR EXACT PART NUMBER.

LIGHTING CONTROL SCHEDULE

TAG	ROOM TYPE	DEVICES OCC	DEVICES DAY LT	DEVICES AUX	DEVICES NETWK	SEQUENCE OF OPERATION
CRM	CONFERENCE/ MTG ROOM	DT	N	N	Y	MANUAL ON: LIGHTS TO 100% WALL DEVICE: PROVIDE ON/OFF CONTROL AND DIM FROM MIN/MAX OCC DELAY: 20 MINUTE DELAY, LIGHTS TO 0%
LNG	LOUNGE W/ DAYLIGHT HARVESTING	DT	Y	N	Y	AUTO ON: UPON OCCUPANCY DETECTION, LIGHTS TO 50% WALL DEVICE: PROVIDE ON/OFF CONTROL AND DIM FROM MIN/MAX OCC DELAY: 20 MINUTE DELAY, LIGHTS TO 0% DAYLIGHT ZONE(S): UTILIZE PHOTOCELL TO MAINTAIN A MAX LEVEL OF 40FC
MEC	MECHANICAL/ ELECTRICAL	N	N	N	N	NO AUTOMATIC CONTROLS WITHIN THIS SPACE
OFF	OPEN OFFICE W/ DAYLIGHT HARVESTING	DT	Y	N	Y	AUTO ON (DURING AFTER HOURS): UPON OCCUPANCY DETECTION, LIGHTS TO 50% MANUAL ON: DURING NORMAL BUSINESS HOURS WALL DEVICE: PROVIDE ON/OFF CONTROL AND DIM FROM MIN/MAX REFER TO GENERAL NOTE J
REC	RECEPTION	DT	N	N	Y	AUTO ON (DURING AFTER HOURS): UPON OCCUPANCY DETECTION, LIGHTS TO 100% WALL DEVICE: PROVIDE ON/OFF CONTROL AND DIM FROM MIN/MAX SCHEDULE ON: 6:00 A.M. LIGHTS TO 100% UPON OCCUPANCY DETECTION, REMAIN 100% UNTIL AFTER HOURS SCHEDULE [AFTER HOURS: 6:30 P.M. OCC DELAY: 20 MINUTE DELAY, LIGHTS TO 10%]
SUP	SUPPORT SPACES	DT	N	N	Y	AUTO ON: UPON OCCUPANCY DETECTION, LIGHTS TO 50% OCC DELAY: 10 MINUTE DELAY, LIGHTS TO 0%

GENERAL SCHEDULE NOTES:
A. PROVIDE MANUFACTURER INTERCONNECTION DIAGRAMS INDICATING DEVICE QUANTITIES, LOCATIONS, AND ASSOCIATED CONTROLS CABLING.
B. SEE LIGHTING PLAN FOR WALL DEVICE TYPES AND LOCATIONS.
C. DEVICE QUANTITIES NOT INDICATED. PROVIDE TYPE AND QUANTITY OF DEVICES AS REQUIRED TO PROVIDE COMPLETE COVERAGE OF SPACE AND INTENDED SYSTEM OPERATION.
D. WHERE BI-LEVEL SWITCHING AND AUTO ON TO 50% ARE USED IN THE SAME SPACE, THE ZONE THAT IS AUTOMATICALLY TURNED ON SHALL BE CONTROLLED BY THE BOTTOM BUTTON OF WALL DEVICES.
E. WHERE DAYLIGHT HARVESTING IS BEING UTILIZED, PROVIDE ADDITIONAL COMPONENTS AS NEEDED TO CONTROL LIGHTING WITHIN DAYLIGHT ZONES 2018 IECC INDEPENDENT OF GENERAL AREA LIGHTING WITHIN SPACE. PROVIDE MINIMUM OF (1) PHOTOCELL DEVICE PER DAYLIGHT ZONE.
F. WHERE PHOTOCELLS ARE BEING UTILIZED, PROVIDE ADDITIONAL COMPONENTS AS NEEDED TO CONTROL LIGHTING WITHIN DAYLIGHT ZONES 2018 IECC INDEPENDENT OF GENERAL AREA LIGHTING WITHIN SPACE. PROVIDE MINIMUM OF (1) PHOTOCELL DEVICE PER DAYLIGHT ZONE.
G. UNLESS NOTED OTHERWISE, LIGHTING SHALL UTILIZE CONTINUOUS DIMMING.
H. UNDERCABINET LIGHTING SHALL BE SWITCHED SEPARATELY FROM MAIN ROOM LIGHTING. UNDERCABINET LIGHTING SHALL STILL BE CONTROLLED BY THE AUTO OFF FUNCTION OF OCCUPANCY SENSORS.
I. WHERE PHOTOCELLS ARE UTILIZED FOR DAYLIGHT HARVESTING, TARGET ILLUMINANCE LEVELS SHALL BE MEASURED AT WORK PLANE OF PRIMARY TASK IN SPACE.
J. OPEN OFFICE LIGHTING CONTROLS SHALL BE CONFIGURED PER 2018 IECC SECTION C405.2.1.3.

DEVICES:
1. "OCC" - PROVIDE OCCUPANCY SENSOR. CEILING MOUNT UNLESS NOTED OTHERWISE.
   - "IR" = PASSIVE INFRARED
   - "US" = ULTRASONIC/MICROPHONIC
   - "DT" = DUAL TECHNOLOGY
   - "N" = NO OCCUPANCY SENSOR
2. "DAYLIGHT" - DAYLIGHT CONTROLS. CEILING MOUNT UNLESS NOTED OTHERWISE.
   - "Y" = PROVIDE DAYLIGHT PHOTOCELL. PHOTOCELLS MAY NOT BE COMBINED WITH OCCUPANCY SENSORS UNLESS NOTED OTHERWISE.
   - "N" = NO DAYLIGHT PHOTOCELL.
3. "AUX" - AUXILIARY CONTACT.
   - "Y" = PROVIDE AUXILIARY CONTACT/RELAY TO INDICATE OCCUPANCY FOR USE BY OTHER SYSTEMS. MAY BE INTEGRATED WITH OCCUPANCY SENSOR.
   - "N" = NO AUXILIARY CONTACT.
4. "NETWK" - NETWORKED LIGHTING CONTROL COMMUNICATIONS.
   - "Y" = NETWORK ROOM DEVICES TO BUILDING-WIDE LIGHTING CONTROLS NETWORK COMMUNICATIONS.
   - "N" = BUILDING-WIDE LIGHTING CONTROLS NETWORK COMMUNICATIONS NOT REQUIRED TO THIS ROOM.

LIGHTING INVERTER SCHEDULE

ITEM	MANUFACTURER	MODEL	VA RATING	MOUNTING	LABEL
INV-1	EVENLITE	LM-2200-1P-LC-IB-OB-C1	2200 VA	FLOOR	EMERGENCY LIGHTING INVERTER

GENERAL SCHEDULE NOTES:
1. COORDINATE EXACT MOUNTING LOCATION AND LABEL TEXT WITH OWNER PRIOR TO INSTALLATION.
2. ALTERNATE MANUFACTURERS: MYERS, ISOLITE, OR APPROVED EQUAL.

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 12584
TIMOTHY W. DAVIS

REVISION SCHEDULE #	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

ELECTRICAL SCHEDULES

Sheet Number:

E601

DIVISION 26 - ELECTRICAL SPECIFICATIONS

SECTION 260100 - GENERAL PROVISIONS

GENERAL REQUIREMENTS

ALL REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. EACH CONTRACTOR SHALL BE RESPONSIBLE TO BECOME THOROUGHLY FAMILIAR WITH ALL ITS CONTENTS AS TO REQUIREMENTS WHICH AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES ALL MATERIAL, EQUIPMENT, APPLIANCES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS, OR REASONABLY INFERRED TO BE NECESSARY TO FACILITATE EACH SYSTEMS FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT SPECIFIED.

INSPECTION OF SITE

THE CONTRACTOR SHALL PERSONALLY INSPECT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.

MATERIAL AND WORKMANSHIP

ALL MATERIAL AND APPARATUS SHALL BE NEW AND IN FIRST CLASS CONDITION. ALL MATERIAL AND APPARATUS SHALL HAVE MARKINGS OR A NAMEPLATE IDENTIFYING THE MANUFACTURER AND PROVIDING SUFFICIENT REFERENCE TO ESTABLISH QUALITY, SIZE AND CAPACITY. ALL WORKMANSHIP SHALL BE OF THE FINEST POSSIBLE BY EXPERIENCED MECHANICS OF THE PROPER TRADE. IN GENERAL, ALL MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTABLE. ALL HOISTS, SCAFFOLDS, STAGING, RUNWAYS, TOOLS, MACHINERY AND EQUIPMENT REQUIRED FOR THE PERFORMANCE OF THE ELECTRICAL WORK SHALL BE FURNISHED BY THIS CONTRACTOR. MATERIAL AND EQUIPMENT SHALL BE STORED AND MAINTAINED IN CLEAN CONDITION, AND PROTECTED FROM WEATHER, MOISTURE, AND PHYSICAL DAMAGE. ALL ELECTRICAL MATERIALS USED IN THIS WORK SHALL BE APPROVED BY THE UNDERWRITER'S LABORATORIES AND SHALL BEAR THEIR LABEL OF APPROVAL.

COORDINATION

THE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS AND SUBCONTRACTORS SO THAT VARIOUS COMPONENTS OF THE ELECTRICAL SYSTEMS WILL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE AND WILL ALLOW PROPER SERVICE ACCESS TO ALL EQUIPMENT. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND TO RELEVANT EQUIPMENT DRAWINGS TO DETERMINE THE EXTENT OF CLEAR SPACES. THE CONTRACTOR SHALL MAKE ALL OFFSETS REQUIRED TO CLEAR EQUIPMENT, BEAMS AND OTHER STRUCTURAL MEMBERS; AND TO FACILITATE CONCEALING CONDUIT IN THE MANNER ANTICIPATED IN THE DESIGN. THE CONTRACTOR SHALL PROVIDE MATERIALS WITH TRIM WHICH WILL FIT PROPERLY THE TYPES OF CEILING, WALL, OR FLOOR FINISHES ACTUALLY INSTALLED.

SUBMITTALS

SUBMIT ONE ELECTRONIC COLOR, HIGH QUALITY ZOOMABLE VERSION OF SHOP DRAWINGS AND PRODUCT DATA ON ALL ELECTRICAL EQUIPMENT TO BE PROVIDED BY THE CONTRACTOR.

TITLE EACH DRAWING WITH PROJECT NAME AND NUMBER; IDENTIFY EACH ELEMENT OF DRAWINGS BY REFERENCE TO SHEET NUMBER AND DETAIL, SCHEDULE OR ROOM NUMBER OF CONTRACT DOCUMENTS.

SEQUENTIALLY NUMBER SUBMITTALS ACCORDING THEIR SPECIFICATION SECTION NUMBER. REVISED SUBMITTALS SHOULD INCLUDE ORIGINAL NUMBER AND A SEQUENTIAL ALPHABETIC SUFFIX.

CONTRACTOR AND SUPPLIER SHALL REVIEW AND STAMP AND SIGN SUBMITTALS PRIOR TO TRANSMITTAL; DETERMINE AND VERIFY FIELD MEASUREMENTS, FIELD CONSTRUCTION CRITERIA, MANUFACTURERS CATALOG NUMBERS AND CONFORMANCE OF SUBMITTAL WITH REQUIREMENTS OF CONTRACT DOCUMENTS. IDENTIFY IN WRITING AT TIME OF SUBMITTAL OF ANY DEVIATIONS FROM REQUIREMENTS OF CONTRACT DOCUMENTS.

MARK DIMENSIONS AND VALUES IN UNITS TO MATCH THOSE SPECIFIED.

MARK ANY FEATURES/OPTIONS BEING PROVIDED. DELETE OR PUT A LINE THROUGH FEATURES/OPTIONS THAT ARE NOT BEING PROVIDED.

DO NOT FABRICATE OR ORDER PRODUCTS OR BEGIN WORK THAT REQUIRES SUBMITTALS UNTIL APPROVAL OF SUBMITTAL.

APPROVAL OF EQUIPMENT DOES NOT CONSTRUE APPROVAL OF EQUIPMENT, COMPONENTS, ETC. THAT NO INFORMATION IS FURNISHED TO SHOW COMPLIANCE WITH CONTRACT DOCUMENTS.

CONTRACTOR SHALL PAY A SHOP DRAWING REVIEW FEE OF $100.00, TO THE ENGINEER, FOR EACH SHOP DRAWING REVIEW AFTER TWO REVIEWS THAT ARE MARKED "RETURNED FOR CORRECTIONS" BY THE ENGINEER.

SUBSTITUTIONS

THE ENGINEER SHALL BE THE SOLE AND FINAL JUDGE AS TO THE SUITABILITY OF ITEMS SUBSTITUTED FOR THOSE SPECIFIED. REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED NO LATER THAN TEN (10) DAYS PRIOR TO THE DAY OF BID OPENING. IF PRIOR APPROVAL IS NOT GRANTED, EQUIPMENT SHALL BE FURNISHED AS SPECIFIED OR AS SHOWN ON THE PLANS.

THE ENTIRE COST OF ALL CHANGES OF ANY TYPE DUE TO SUBSTITUTIONS FOR MATERIALS SPECIFIED SHALL BE BORNE BY THE CONTRACTOR AT NO EXTRA COST TO THE OWNER AND SHALL REIMBURSE OTHER TRADES OF ADDITIONAL COST DUE TO SUBSTITUTION.

DOCUMENT EACH REQUEST WITH COMPLETE DATA SUBSTANTIATING COMPLIANCE OF PROPOSED SUBSTITUTION WITH CONTRACT DOCUMENTS.

REQUEST CONSTITUTES A REPRESENTATION THAT CONTRACTOR:
1. HAS INVESTIGATED PROPOSED PRODUCT AND DETERMINED THAT IT MEETS OR EXCEEDS, IN ALL RESPECTS, SPECIFIED PRODUCT.
2. WILL PROVIDE THE SAME WARRANTY FOR SUBSTITUTION AS FOR SPECIFIED PRODUCT.
3. WILL COORDINATE INSTALLATION AND MAKE OTHER CHANGES THAT MAY BE REQUIRED FOR WORK TO BE COMPLETE IN ALL RESPECTS.
4. WAIVES CLAIMS FOR ADDITIONAL COSTS OR TIME EXTENSION THAT MAY SUBSEQUENTLY BECOME APPARENT.
5. WILL REIMBURSE OWNER FOR REVIEW OR REDESIGN SERVICES ASSOCIATED WITH RE-APPROVAL BY AUTHORITIES.

SUBSTITUTIONS WILL NOT BE CONSIDERED WHEN THEY ARE INDICATED OR IMPLIED ON SHOP DRAWING OR PRODUCT DATA SUBMITTALS WITHOUT SEPARATE WRITTEN REQUEST, OR WHEN ACCEPTANCE WILL REQUIRE SUBSTANTIAL REVISION OF CONTRACT DOCUMENTS.

DIMENSIONS AND LAYOUTS

THE DRAWINGS ARE SCHEMATIC IN NATURE, BUT SHOW THE VARIOUS COMPONENTS OF THE SYSTEMS APPROXIMATELY TO SCALE AND ATTEMPT TO INDICATE HOW THEY ARE TO BE INTEGRATED WITH OTHER PARTS OF THE BUILDING. FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE DIMENSIONS. DETERMINE EXACT LOCATIONS BY JOB MEASUREMENTS, BY CHECKING THE REQUIREMENTS OF OTHER TRADES, AND BY REVIEWING ALL CONTRACT DOCUMENTS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS WHICH COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.

ORDINANCES AND CODES

CONTRACTOR'S PERFORMANCE, WORKMANSHIP AND MATERIALS SHALL COMPLY WITH NATIONAL FIRE PROTECTION ASSOCIATION CODES, STATE AND LOCAL BUILDING CODES, AND/OR ALL OTHER APPLICABLE CODES AND ORDINANCES. CONTRACTOR SHALL COMPLY WITH RULES AND REGULATIONS OF PUBLIC UTILITIES AND MUNICIPAL DEPARTMENTS AFFECTED BY CONNECTION OF SERVICES. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES, FEES AND INSPECTIONS REQUIRED FOR THE WORK UNDER THIS CONTRACT UNLESS OTHERWISE SPECIFIED. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY VIOLATION OF THE LAW. CONTRACTOR SHALL MAINTAIN ALL NECESSARY SIGNAL LIGHTS AND GUARDS FOR THE SAFETY OF THE PUBLIC.

ADJUSTING, ALIGNING AND TESTING

ALL ELECTRICAL EQUIPMENT ON THIS PROJECT FURNISHED UNDER THIS DIVISION AND ALL ELECTRICAL EQUIPMENT FURNISHED BY OTHERS SHALL BE ADJUSTED, ALIGNED AND TESTED FOR PROPER OPERATION BY THE ELECTRICAL CONTRACTOR. COMPLETE WIRING SYSTEMS SHALL BE FREE FROM SHORT CIRCUITS. ALL MOTORS SHALL BE VERIFIED FOR PROPER ROTATION.

THE CONTRACTOR SHALL MAINTAIN ON THE PROJECT PREMISES THE FOLLOWING AT ALL TIMES: A TRUE RMS READING VOLTMETER, A TRUE RMS READING AMMETER, AND A MEGGER INSULATION RESISTANCE TESTER. THE CONTRACTOR SHALL PROVIDE TEST DATA RATINGS AS REQUESTED OR AS REQUIRED.

CUTTING AND PATCHING

THIS CONTRACTOR SHALL DO ALL CUTTING OF WALLS, FLOORS, CEILINGS, ETC. AS REQUIRED TO INSTALL WORK UNDER THIS SECTION. CONTRACTOR SHALL OBTAIN PERMISSION OF THE ARCHITECT BEFORE DOING ANY CUTTING. ALL HOLES SHALL BE CUT AS SMALL AS POSSIBLE. CONTRACTOR SHALL PATCH WALLS, FLOORS, ETC. AS REQUIRED BY WORK UNDER THIS SECTION. ALL PATCHING SHALL BE THOROUGHLY FIRST CLASS AND SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION.

COORDINATE WITHOUT DELAY ALL ROUGHING-IN WITH GENERAL CONSTRUCTION. ALL CONDUIT ROUGH-IN SHALL BE CONCEALED EXCEPT IN UNFINISHED AREAS AND WHERE OTHERWISE SHOWN.

GUARANTEE

GUARANTEE AGAINST DEFECTIVE WORKMANSHIP AND MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF WRITTEN FINAL ACCEPTANCE. GUARANTEE SHALL INCLUDE MATERIAL TO BE REPLACED AND ALL LABOR REQUIRED.

FIRESTOPPING OF FLOOR AND WALL PENETRATIONS

THIS CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH FIRE RATED FLOOR AND WALL ASSEMBLIES IN ACCORDANCE WITH NFPA CODES AND UL WALL CONSTRUCTION TYPES. THE SEALING SYSTEM MUST BE CAPABLE OF PASSING A THREE HOUR TEST, PER ASTM E-814 (UL 1479). PENETRATION SEALING SYSTEM SHALL BE, AT A MINIMUM, 3M BRAND 7904 (CP-25 CAULK, OR 303 PUTTY), OR APPROVED EQUAL, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

SECTION 260519 - WIRE

ALL WIRE SHALL HAVE COPPER CONDUCTORS, WITH U.L. LABEL, AND 600 VOLT INSULATION. ALL WIRE SHALL BE RUN IN CONDUIT. SERVICE ENTRANCE CABLE SHALL BE TYPE USE, THWN -2 OR XHHW -2, 90 DEGREES RATED, WITH STRANDED CONDUCTORS. ALL FEEDER AND BRANCH CIRCUIT WIRE #8 AWG AND LARGER SHALL BE TYPE THWN OR XHHW, BOTH WITH STRANDED CONDUCTORS. ALL WIRE #10 AWG AND SMALLER SHALL BE TYPE THWN (WET OR DAMP LOCATIONS, OR IN CONDUIT BELOW GRADE OR SLAB) OR THHN (DRY LOCATIONS ONLY AND ABOVE GRADE), BOTH WITH SOLID CONDUCTORS. WIRE WITHIN FIXTURE CHANNELS SHALL BE TYPE THHN. ALL BRANCH CIRCUIT WIRING SHALL BE NOT SMALLER THAN # 12 AWG WIRE. IF NO WIRE SIZE IS INDICATED ON THE PLANS FOR A BRANCH CIRCUIT, PROVIDE #12AWG WIRE AND A 20A CIRCUIT BREAKER. CONTROL WIRING SHALL HAVE 600V INSULATION AND BE OF THE PROPER TYPE, SIZE AND NUMBER AS REQUIRED TO ACCOMPLISHED SPECIFIED FUNCTION. NO MORE THAN 6 RECEPTACLES OR 16 AMPS OF LOAD PER CIRCUIT.

WIRING INSTALLATION

ALL WIRING SHALL BE INSTALLED IN APPROVED RACEWAY AND ENCLOSURES.

SUPPORT ALL WIRE AND CABLES IN VERTICAL INSTALLATIONS AS REQUIRED BY CODE BY INSTALLING CABLE SUPPORTERS OR PLUG-TYPE CONDUIT RISER SUPPORTS.

ALL WIRE AND CABLE IN CONDUIT SHALL BE CONTINUOUS WITHOUT TAPS OR SPLICES. ALL SPLICES OR TAPS SHALL OCCUR IN APPROVED BOXES AND ENCLOSURES AND SHALL BE KEPT TO THE MINIMUM REQUIRED, AND SHALL BE MADE UP WITH APPROVED SOLDERLESS CONNECTORS. ALL SPLICES, TAPS, AND JOINTS SHALL BE INSULATED AS REQUIRED BY CODE.

ALL MATERIALS USED TO TERMINATE, SPLICE OR TAP CONDUCTORS SHALL BE DESIGNED FOR, PROPERLY SIZED FOR, AND U.L. LISTED FOR THE SPECIFIC APPLICATION AND CONDUCTORS INVOLVED, AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, USING THE MANUFACTURER'S RECOMMENDED TOOLS.

WHERE WIRE IS INDICATED TO BE INSTALLED, BUT THE CONNECTION IS INDICATED "FUTURE" OR "BY OTHERS", CONTRACTOR SHALL LEAVE A MINIMUM OF 3 FEET OF "PIGTAIL" AT THE BOX, TAPE THE ENDS OF THE CONDUCTORS, AND COVER THE BOX.

CONDUCTORS SHALL HAVE INSULATION OF THE PROPER COLOR TO MATCH NEC COLOR CODE SYSTEM AND IN THE TABLE BELOW. IN LARGER WIRE SIZES WHERE PROPERLY COLORED INSULATION IS NOT AVAILABLE, THE CONTRACTOR SHALL USE VINYL PLASTIC ELECTRICAL TAPE OF THE APPROPRIATE COLOR AROUND EACH CABLE AT ALL TERMINATION POINTS, JUNCTION AND PULL BOXES.

SYSTEM VOLTAGE, CONDUCTOR TYPE, COLOR:

208V/120		480/277Y
BLACK	PHASE A	BROWN
RED	PHASE B	ORANGE
BLUE	PHASE C	YELLOW
WHITE	NEUTRAL	GRAY
GREEN	EQUIPMENT GROUND	GREEN
GREEN W/ YELLOW STRIP	ISOLATED GROUND	

ALL TERMINAL BLOCKS AND WIRE TERMINALS FOR CONTROL WIRING SHALL BE PROPERLY NUMBERED FOR IDENTIFICATION WITH VINYL STICK-ON MARKERS OR EQUIVALENT.

ALL RECEPTACLE AND NON-LIGHTING EQUIPMENT BRANCH CIRCUITS SHALL HAVE AN EQUIPMENT GROUND CONDUCTOR INSTALLED IN THE BRANCH CIRCUIT RACEWAY, SIZED IN ACCORDANCE WITH NEC TABLE 250.122.

VOLTAGE DROP IN BRANCH CIRCUITS SHALL NOT EXCEED 2%.

SECTION 260526 - GROUNDING

THE ELECTRICAL SERVICE, ALL TRANSFORMERS, CONDUCTORS, CONDUITS, MOTOR FRAMES, AND SIMILAR CONDUCTING SURFACES IN THIS CONTRACT WHICH REQUIRE GROUNDING SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED BY THIS CONTRACTOR IN A THOROUGH AND EFFICIENT MANNER IN CONFORMANCE TO THE NATIONAL ELECTRICAL CODE. ALL CIRCUITS SHALL HAVE SEPARATE GREEN GROUND CONDUCTOR ROUTED WITH PHASE CONDUCTORS.

SECTION 260533 - RACEWAYS

GENERAL REQUIREMENTS

ALL CONDUIT SHALL BE RUN CONCEALED EXCEPT WHERE OTHERWISE NOTED. ALL CONDUIT MAY BE THIN-WALL EMT WHERE APPROVED BY LOCAL CODE.

FINAL CONNECTION TO EACH MOTOR AND TRANSFORMER, AND TO ANY DEVICE WHICH WOULD OTHERWISE TRANSMIT MOTION, VIBRATION OR NOISE, SHALL BE IN FLEXIBLE METAL CONDUIT. WHERE FLEXIBLE METAL CONDUIT IS EXPOSED TO LIQUIDS, VAPORS OR SUNLIGHT, LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED. ALL FLEXIBLE METAL CONDUIT SHALL BE PROVIDED WITH AN INSULATED GROUND WIRE.

CONDUIT INSTALLATION

ALL WIRING SHALL BE RUN IN CONDUIT. ALL CONDUIT RUNS SHOWN ARE DIAGRAMMATIC, EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD.

CONDUIT SHALL BE INSTALLED CONCEALED ABOVE SUSPENDED CEILINGS OR CONCEALED IN WALL OR IN OR BENEATH FLOORS WHEREVER POSSIBLE. RUN PARALLEL TO BUILDING

CONDUIT SHALL BE INSTALLED TO REQUIREMENTS OF STRUCTURE AND TO REQUIREMENTS OF ALL OTHER WORK ON THE PROJECT. CONDUIT SHALL BE INSTALLED TO CLEAR ALL OPENINGS, DEPRESSIONS, PIPES, DUCTS, REINFORCING STEEL, AND SIMILAR ITEMS. CONDUIT SET IN FORMS FOR CONCRETE STRUCTURE SHALL BE INSTALLED IN SUCH A MANNER THAT INSTALLATION WILL NOT AFFECT THE STRENGTH OF THE STRUCTURE, EXCEPT WHERE APPROVED IN WRITING BY THE ARCHITECT, NO CONDUIT SHALL BE RUN IN A SLAB ON GRADE. CONDUIT SHALL BE LOCATED IN GRANULAR FILL BELOW SLABS-ON GRADE.

CONDUITS SHALL BE INSTALLED CONTINUOUS BETWEEN CONNECTIONS TO OUTLETS, BOXES AND CABINETS WITH A MINIMUM POSSIBLE NUMBER OF BENDS AND NOT MORE THAN THE EQUIVALENT OF FOUR 90 BENDS BETWEEN CONNECTIONS. BENDS SHALL BE SMOOTH AND EVEN AND SHALL BE MADE WITHOUT FLATTENING CONDUIT OR FLAKING ENAMEL. RADIUS OF BENDS SHALL BE AS LONG AS POSSIBLE AND NEVER SHORTER THAN THE CORRESPONDING TRADE ELBOW. LONG RADIUS ELBOWS SHALL BE USED WHERE NECESSARY.

CONDUITS SHALL BE SECURELY FASTENED IN PLACE WITH APPROVED STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. SINGLE CONDUITS FOR FEEDERS SHALL BE HUNG WITH MALLEABLE SPLIT RING HANGERS WITH ROD AND TURNBUCKLE SUSPENSION FROM INSERTS SPACED NOT OVER 10 FEET APART IN CONSTRUCTION ABOVE. GROUPS OF HORIZONTAL FEEDER CONDUITS SHALL BE CLAMPED TO UNISTRUT STEEL CHANNELS AND SUSPENDED FROM INSERTS SPACED NOT OVER 10 FEET APART IN CONSTRUCTION ABOVE. VERTICAL FEEDER CONDUITS SHALL BE SECURELY CLAMPED TO STRUCTURAL STEEL MEMBERS ATTACHED TO STRUCTURE. CABLE CLAMPS SHALL BE INSTALLED FOR SUPPORT OF VERTICAL FEEDERS WHERE REQUIRED. CONDUIT SUPPORTS SHALL BE ADDED WITHIN 12" AT ONE END OF ALL BENDS. CONDUIT SHALL NOT BE SUPPORTED FROM SUSPENDED CEILING COMPONENTS.

CONDUIT ENDS SHALL BE REAMED BEFORE INSTALLATION AND ALL CONDUIT SHALL BE THOROUGHLY CLEANED BEFORE INSTALLATION AND KEPT CLEAN AFTER INSTALLATION. OPENINGS AND BOXES SHALL BE PLUGGED OR COVERED AS REQUIRED TO KEEP CONDUIT CLEAN DURING CONSTRUCTION AND ALL CONDUIT SHALL BE FISHED CLEAR OF OBSTRUCTIONS BEFORE THE PULLING OF WIRES. ALL CONDUIT SHALL BE OF AMPLE SIZE FOR PULLING OF WIRE AND SHALL NOT BE SMALLER THAN CODE REQUIREMENTS AND NOT LESS THAN 3/4" IN SIZE. CONDUIT CONNECTIONS AND COUPLINGS SHALL BE COMPRESSION TYPE.

ALL ELECTRICAL WORK SHALL BE PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. ANY WORK DAMAGED OR MOVED OUT OF LINE AFTER ROUGHING-IN SHALL BE REPAIRED TO MET ENGINEER'S APPROVAL WITHOUT ADDITIONAL COST TO THE OWNER.

CONDUIT TERMINATIONS AT PANELBOARDS, SWITCHBOARDS, MOTOR CONTROL EQUIPMENT AND JUNCTION BOXES SHALL BE ALIGNED AND INSTALLED TRUE AND PLUMB.

INSTALL APPROVED EXPANSION FITTINGS WHERE CONDUIT OR EMT PASSES THROUGH EXPANSION JOINTS.

INSTALL A PULL WIRE IN EACH EMPTY CONDUIT WHICH IS LEFT BY THE CONTRACTOR FOR INSTALLATION OF WIRES OR CABLES BY OTHERS.

MAKE ALL JOINTS AND CONNECTIONS IN A MANNER WHICH WILL ENSURE MECHANICAL STRENGTH AND ELECTRICAL CONTINUITY.

THRU-WIRING OF LIGHT FIXTURES IS NOT PERMITTED.

BUSHINGS AND LOCKNUTS

WHERE CONDUITS ENTER BOXES, THEY SHALL BE RIGIDLY CLAMPED TO THE BOX BY A BUSHING ON THE INSIDE AND A LOCKNUT ON THE OUTSIDE, AND CONDUIT SHALL ENTER THE BOX SQUARELY. BUSHINGS AND LOCKNUTS SHALL BE MADE OF GALVANIZED MALLEABLE IRON AND SHALL HAVE SHARP, CLEAN-CUT THREADS. WHERE THIN-WALL CONDUIT ENTERS BOX, PROVIDE APPROVED E.M.T. CONNECTORS. USE INSULATED GROUNDING BUSHINGS WHEREVER CONNECTION IS SUBJECT TO VIBRATION OR MOISTURE.

SECTION 260553 - EQUIPMENT IDENTIFICATION

THIS CONTRACTOR SHALL FURNISH AND INSTALL EQUIPMENT IDENTIFICATION NAMEPLATES ON ALL PANELBOARDS, SWITCHES, STARTERS, ETC., INCLUDING SWITCHES IN DISTRIBUTION PANELS. NAMEPLATES SHALL BE ENGRAVED PHENOLIC PLASTIC AND SHALL BE FIRMLY ATTACHED TO THE EQUIPMENT WITH SELF-TAPPING, STAINLESS STEEL SCREWS OR STAINLESS STEEL MACHINE SCREWS WITH NUTS AND FLAT AND LOCK WASHERS. NAMEPLATES SHALL CLEARLY IDENTIFY EACH ITEM AND WHAT IT CONTROLS.

SECTION 262726 - WIRING DEVICES

FURNISH AND INSTALL THE FOLLOWING OUTLETS AND SWITCHES WHERE SHOWN OR REQUIRED. MINOR CHANGES RELATIVE TO THE LOCATION OF ELECTRICAL EQUIPMENT MAY BE MADE BY THIS CONTRACTOR TO COMPLY WITH STRUCTURAL AND BUILDING REQUIREMENTS AS DETERMINED IN THE COURSE OF CONSTRUCTION. ALL OUTLETS AND SWITCHES MUST BE OF THE SAME MANUFACTURER AND NOT MIXED ON THE PROJECT.

STANDARD-GRADE RECEPTACLES
DUPLEX CONVENIENCE RECEPTACLES: 125V, 20 A; COMPLY WITH NEMA WD 1, NEMA WD 6 CONFIGURATION 5-20R, UL 498, AND FS W-C-596, FOR USE IN FOPS LAB 143.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
   A. COOPER; 5352.
   B. HUBBELL; HBL5342, HBL5352.
   C. LEVITON; 5342, 5362.
   D. PASS & SEYMOUR; 5362.

DECORATOR-STYLE DEVICES, 20 A

DECORATOR DUPLEX RECEPTACLES, 125 V, 20 A. USE IN ALL OFFICE, CONFERENCE ROOMS, BREAKROOMS AND COMMON SPACES.

1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
   A. EATON (ARROW HART).
   B. HUBBELL INCORPORATED; WIRING DEVICE-KELLEMS.
   C. LEVITON MANUFACTURING CO., INC.
   D. PASS & SEYMOUR/LEGRAND (PASS & SEYMOUR).

2. DESCRIPTION: TWO POLE, THREE WIRE, AND SELF-GROUNDING. SQUARE FACE.

3. CONFIGURATION: NEMA WD 6, CONFIGURATION 5-20R.
4. STANDARDS: COMPLY WITH UL 498.

EQUIVALENT HUBBELL, LEVITON AND BRYANT, WILL BE ACCEPTABLE. OTHER DEVICES SHOWN ON THE PLANS BUT NOT CALLED OUT ABOVE SHALL BE OF THE SAME CONSTRUCTION QUALITY AS DEFINED BY THE MODEL NUMBERS SHOWN.

SWITCH AND OUTLET COVER PLATES

GROUPS OF SWITCHES SHALL BE UNDER ONE GANG-PLATE, USUALLY MOUNTED HORIZONTALLY; WHERE REQUIRED BY DETAILS, VERTICAL MOUNTING SHALL BE USED INSTEAD. PLATES SHALL BE SET PLUMB, PARALLEL, AND SHALL FINISH FLUSH WITH THE WALL. WEATHERPROOF COVER PLATES SHALL BE CAST ALUMINUM LISTED AND LABELED EXTRA DUTY WITH PVC GASKETING AND RATED FOR "WHILE-IN-USE".

WALL PLATES

SINGLE AND COMBINATION TYPES SHALL MATCH CORRESPONDING WIRING DEVICES.

1. PLATE-SECURING SCREWS: METAL WITH HEAD COLOR TO MATCH PLATE FINISH.
2. MATERIAL FOR FINISHED SPACES IN OFFICE, CONFERENCE ROOMS, BREAKROOMS AND COMMON SPACES: SMOOTH, HIGH IMPACT THERMOPLASTIC 0.035-INCH- (1-MM-) THICK.
3. MATERIAL FOR UNFINISHED SPACE: GALVANIZED STEEL.
4. MATERIAL FOR DAMP LOCATIONS: CAST ALUMINUM WITH SPRING-LOADED LIFT COVER, AND LISTED AND LABELED FOR USE IN WET AND DAMP LOCATIONS.

FINISHES

DEVICE COLOR:

1. DEVICE AND COVER PLATE COLOR IS TO BE STANDARD WHITE IN ALL LOCATION WITH THE EXCEPTION OF THE FOLLOWING AREAS. DEVICES LOCATED ON DARK GREEN FELT WALLS ARE TO BE BLACK. DEVICES LOCATED ON LIGHT GREY AND CHARCOAL FELT WALLS ARE TO BE GREY. DEVICES LOCATED ON EBONY PANELS ARE TO BE BLACK. DEVICES LOCATED IN MECHANICAL SPACES ARE TO BE GREY. COORDINATE SPECIFIC WIRING DEVICE COLOR WITH ARCHITECTURAL FINISH SCHEDULE.

LOCATIONS OF OUTLETS, SWITCHES AND OTHER WIRING DEVICES

OUTLETS MUST BE CENTERED WITH REGARD TO PANELING, FURRING, AND TRIM. ANY OUTLET WHICH IS IMPROPERLY LOCATED MUST BE CORRECTED AT THE CONTRACTOR'S EXPENSE. OUTLETS MUST BE SET PLUMB OR HORIZONTAL AND SHALL EXTEND TO THE FINISHED SURFACE OF THE WALL, CEILING OR FLOOR AS THE CASE MAY BE WITHOUT PROJECTING BEYOND SAME. RECEPTACLES, SWITCHES, AND OTHER WIRING DEVICES SHOWN ON WOOD TRIM, CASES OR OTHER FIXTURES SHALL BE INSTALLED SYMMETRICALLY ON SUCH TRIM OR FIXTURE AND WHERE NECESSARY, SHALL BE SET WITH THE LONG DIMENSION OF THE PLATE HORIZONTAL, OR SHALL BE GANGED IN TANDEM.

MOUNTING HEIGHTS TO CENTER OF BOX ABOVE FINISHED FLOOR SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.

GENERAL FLUSH SWITCHES, MANUAL STATIONS	44"
GENERAL CONVENIENCE RECEPTACLES	18"
PANELBOARDS, TO TOP	72"
TELEPHONE PANELS, TO TOP	72"
SAFETY SWITCHES	54"
MOTOR CONTROLLERS	54"

SECTION 262816 - DISCONNECT SWITCHES

CONTRACTOR SHALL FURNISH AND INSTALL SQUARE D, SIEMENS, GENERAL ELECTRIC OR CUTLER HAMMER FUSED OR NON-FUSED (AS NOTED OR REQUIRED) NEMA HEAVY DUTY EXTERNALLY OPERATED SAFETY SWITCHES WHERE NOT FURNISHED WITH THE STARTING EQUIPMENT, AND AT ALL OTHER POINTS REQUIRED BY CODE. FUSE HOLDERS SHALL HAVE CLASS R REJECTION FEATURE. CONSTRUCTION SHALL BE OF A NEMA DESIGN SUITABLE FOR THE ENVIRONMENT INSTALLED IN.

SECTION 265100 - LIGHT FIXTURES

LIGHT FIXTURE LOCATIONS

LIGHT FIXTURES SHOWN ON THE ELECTRICAL DRAWINGS REPRESENT GENERAL ARRANGEMENTS ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR MORE EXACT LOCATIONS. COORDINATE LOCATION WITH ALL OTHER TRADES BEFORE INSTALLATION TO AVOID CONFLICTS. LIGHT FIXTURES LOCATIONS IN MECHANICAL ROOMS SHALL BE COORDINATED WITH FINAL INSTALLED PIPING AND DUCTWORK LAYOUTS.

LIGHT FIXTURES

PROVIDE LIGHT FIXTURES AS SCHEDULED ON DRAWINGS. THIS SHALL INCLUDE ALL MATERIAL AND LABOR TO SECURELY HANG FIXTURES, CLEAN THEM AND MAKE THEM COMPLETELY READY FOR USE. ALL LIGHT FIXTURES SHALL INCLUDE ALL NECESSARY ACCESSORIES REQUIRED. LIGHT FIXTURE MODELS SCHEDULED ON THE DRAWINGS ARE TO SHOW THE MANUFACTURER, GRADE AND STYLE OF FIXTURES REQUIRED ONLY. PROVIDE ALL HANGERS, SUPPORTS, AND MISCELLANEOUS HARDWARE REQUIRED TO INSTALL LIGHT FIXTURES. PROVIDE PROPER TRIM TO FIT EACH CEILING CONDITION ACTUALLY ENCOUNTERED. PROVIDE ADDITIONAL TIE WIRES CONNECTED TO STRUCTURE TO CONFORM TO UB 47-18 SEISMIC REQUIREMENTS WHERE REQUIRED.

THROUGH WIRING OF FIXTURES IS NOT PERMITTED. EACH FIXTURE MUST BE CONNECTED BY A WHIP TO A JUNCTION BOX. THE WHIP SHALL BE MIN. #14 CU IN 1/2"C. AND OF SUFFICIENT LENGTH TO ALLOW THE FIXTURE TO BE RELOCATED WITHIN A 6' RADIUS WHEN INSTALLED IN A LAY-IN CEILING.

LED LIGHTING

UL COMPLIANCE: COMPLY WITH UL 1598. CRI OF MINIMUM 80. CCT OF 3500K OR 4000K. L70 LAMP LIFE OF 50,000 HOURS.

INTERNAL DRIVER: 10kV SURGE SUPPRESSION PROTECTION IN ACCORDANCE WITH IEEE/ANSI C62.41.2.

NOMINAL OPERATING VOLTAGE: 277 VAC.

EXTRA MATERIALS

FURNISH EXTRA MATERIALS THAT MATCH PRODUCTS INSTALLED AND THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.

DRIVERS: TWO FOR EACH TYPE

SECTION 260923 LIGHTING CONTROL SYSTEM

MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY THE FOLLOWING: nLIGHT, ACUITY. DESIGN IS BASED ON A DIGITAL NETWORKED SYSTEM.

INDOOR OCCUPANCY SENSORS
ALL CEILING SENSORS SHALL BE nLIGHT DUAL TECH WITH 360 DEGREE SMALL MOTION COVERAGE, #nCM-PDT-9-RJB OR APPROVED EQUAL.

LOW VOLTAGE SWITCHES SHALL BE AS SPECIFIED ON SHEET E501.

PROVIDE ALL DIMMING POWER PACKS AND CABLING AS REQUIRED FOR A COMPLETE AND OPERATIONAL NETWORKED LIGHTING CONTROL SYSTEM.

A REGISTERED DESIGN PROFESSIONAL PROVIDED BY THE ELECTRICAL CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SY

SECTION 270000 –TELECOMMUNICATIONS CABLE PLANT

PART 1 -GENERAL

RELATED DOCUMENTS

GENERAL SUMMARY OF WORK TO BE PERFORMED ON THE PROJECT.

DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION01 SPECIFICATION SECTIONS,APPLY TO THIS SECTION.

DIVISION 260533 "RACEWAYS" SECTIONS APPLY TO WORK SPECIFIED IN THIS SECTION.

DESCRIPTION OF WORK

THIS DOCUMENT DESCRIBES THE PRODUCTS AND EXECUTION REQUIREMENTS OF THE INSTALLATION, LABELING, AND TESTING OF A STRUCTURED CABLING SYSTEM.

QUANTITIES, TYPES OF CABLING, TELECOMMUNICATIONS OUTLETS, OUTLET LOCATIONS AND ROUTING OF CABLING ARE PROVIDED WITHIN THE CONSTRUCTION DOCUMENTS OF THE TELECOMMUNICATIONS DRAWINGS PACKAGE.

ROUTE HORIZONTAL CABLING THROUGH FURNISHED PATHWAYS BY OTHERS AND CONTRACTOR PROVIDED CABLE SUPPORTS.

FURNISH CABLING, FACEPLATES, MOUNTING BRACKETS, TELECOMMUNICATIONS OUTLET/CONNECTORS AS INDICATED ON SYSTEM LAYOUT DRAWINGS AND THIS SPECIFICATION.

ADMINISTRATIVE REQUIREMENTS

COORDINATE LAYOUT AND INSTALLATION OF TELECOMMUNICATIONS CABLING WITH OWNER'S TELECOMMUNICATIONS AND LAN EQUIPMENT AND SERVICE SUPPLIERS.

COORDINATE TELECOMMUNICATIONS OUTLET/CONNECTOR LOCATIONS WITH LOCATION OF POWER RECEPTACLES AT EACH WORK AREA.

ACTION SUBMITTALS

CONTRACTOR SHALL SUBMIT MANUFACTURERS CUT SHEETS FOR ALL PRODUCTS, HARDWARE AND CABLING SPECIFIED WITHIN THIS DOCUMENT.

INFORMATIONAL SUBMITTALS

QUALIFICATION DATA: CONTRACTOR SHALL SUBMIT COPIES OF THE CERTIFICATION OF THE COMPANY AND STAFF MEMBERS THAT WILL BE PERFORMING THE INSTALLATION, TERMINATIONS AND TESTING OF THE SYSTEM TO PROVIDE COMPLIANCE OF THIS AND RELATED SPECIFICATIONS.

CLOSEOUT SUBMITTALS

MAINTENANCE DATA: FOR SPLICES AND CONNECTORS TO INCLUDE IN MAINTENANCE MANUALS.

FIELD TESTING REPORTS FOR HORIZONTAL UTP CABLING AND OPTICAL FIBER CABLING.

QUALITY ASSURANCE

INSTALLER QUALIFICATIONS:

1. CABLING INSTALLER MUST HAVE PERSONNEL CERTIFIED BY BICSI ON STAFF AND THOSE PERSONNEL SHALL BE PRESENT WHEN WORK IS BEING PERFORMED.
2. INSTALLER QUALIFICATIONS: MINIMUM OF 2 YEARS'EXPERIENCE INSTALLING PRODUCTS SPECIFIED WITHIN THIS SECTION
3. ALL WORK SHALL BE PERFORMED AND SUPERVISED BY MANAGERS AND TECHNICIANS QUALIFIED AND CERTIFIED TO INSTALL AND TEST THE SPECIFIED SYSTEM.
4. INSTALLATION SUPERVISION: INSTALLATION SHALL BE UNDER THE DIRECT SUPERVISION OF REGISTERED TECHNICIAN OR LEVEL 2 INSTALLER, WHO SHALL BE PRESENT AT ALL TIMES WHEN WORK OF THIS SECTION IS PERFORMED AT PROJECT SITE.

ALL CABLE AND EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER.

ALL METHODS OF CONSTRUCTION THAT ARE NOT SPECIFICALLY DESCRIBED OR INDICATED IN THE CONTRACT DOCUMENTS SHALL BE SUBJECT TO THE CONTROL AND APPROVAL OF THE OWNER AND OWNER'S REPRESENTATIVES.

EQUIPMENT AND MATERIALS SHALL BE OF THE QUALITY AND MANUFACTURE INDICATED. THE EQUIPMENT SPECIFIED IS BASED UPON THE ACCEPTABLE MANUFACTURERS LISTED.

INSTALLER SHALL CONFORM IN EVERY WAY TO THE RULES AND REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, THE LOCAL ELECTRICAL CODE AND WITH DETAILED MANUFACTURER'S INSTRUCTION SHEETS, APPLICABLE CODES AND STANDARDS.

THIS DOCUMENT DOES NOT REPLACE ANY CODE, EITHER PARTIALLY OR WHOLLY. THE CONTRACTOR MUST BE AWARE OF ALL CODES THAT IMPACT THIS PROJECT. MATERIAL AND WORK SPECIFIED HEREIN SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF:

1. NFPA 70: NATIONAL ELECTRICAL CODE
2. NEC 250: GROUNDING AND BONDING
3. NEC 300: WIRING METHODS
4. NEC 725: REMOTE-CONTROL, SIGNALING AND POWER LIMITED CIRCUITS
5. NEC 770: OPTICAL FIBER CABLES AND RACEWAYS
6. NEC 800: COMMUNICATIONS CIRCUITS
7. ANSI–J-STD-607A, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
8. ANSI/TIA/EIA – 569-B COMMERCIAL BUILDING STANDARD FOR TELECOMMUNICATIONS PATHWAY AND SPACES
9. ANSI/TIA/EIA – 568-B.1, COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARD, PART 1: GENERAL REQUIREMENTS, 2001
10. ANSI/TIA/EIA – 568-B.2, COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARD (AND ALL PUBLISHED ADDENDA), PART 2: BALANCED TWISTED PAIR CABLING COMPONENTS, 2001
11. ANSI/TIA/EIA – 568-B.21, COMMERCIAL BUILDING TELECOMMUNICATIONS CABLING STANDARD, PART 2: BALANCED TWISTED PAIR CABLING COMPONENTS, ADDENDUM 1: TRANSMISSION PERFORMANCE SPECIFICATIONS FOR 4-PAIR 100 OHM CATEGORY 6 CABLING, 2002
12. ANSI/TIA/EIA – 568-B.3, OPTICAL FIBER CABLING COMPONENTS STANDARD, 2000
13. ANSI/TIA/EIA – 606-A, ADMINISTRATION STANDARD OF COMMERCIAL TELECOMMUNICATIONS INFRASTRUCTURE, 2002
14. FEDERAL COMMUNICATIONS COMMISSION (FCC), CODE OF FEDERAL REGULATIONS, PART 68: CONNECTION OF TERMINAL EQUIPMENT TO THE TELEPHONE NETWORK, 1998
15. U.S. PUBLIC LAW 336, 101ST CONGRESS, ADA: AMERICANS WITH DISABILITIES ACT OF 1992
16. BICSI TELECOMMUNICATIONS DISTRIBUTION METHODS MANUAL
17. BICSI INFORMATION TRANSPORT SYSTEMS INSTALLATION MANUAL

MANUFACTURERS

PRODUCTS FROM THE FOLLOWING MANUFACTURERS ARE APPROVED FOR USE ON THIS PROJECT:
1. COMMSCOPE SYSTEMAX
2. PANDUIT
3. CHATSWORTH

WARRANTY

THE VOICE AND DATA CABLING CONTRACTOR SHALL PROVIDE A TWENTY-YEAR MANUFACTURER'S WARRANTY BE A CERTIFIED PARTNER OR DEALER OF THE MANUFACTURER.

THE SYSTEMS PRODUCTS SHALL BE WARRANTED FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP.

THIS SYSTEM SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S PERFORMANCE WARRANTY STATUS AT COMPLETION OF THE PROJECT AND RECEIVE VERIFICATION OF THE WARRANTY IN WRITING FROM THE MANUFACTURER. THIS SHALL BE INCLUDED IN THE O&M MANUALS FOR THE OWNERS RECORDS.

PART 2 -PRODUCTS

EQUIPMENT RACKS

CUBE-IT WALL CABINET : PROVIDE 36"H x 24"W(19"EIA) x18" D RACK, BLACK, 19RU, #12-24 TAPPED MOUNTING RAILS, UL LISTED FOR 1,000 LBS., WITH PRINTED RACK SPACING IDENTIFICATION ON
ALL EQUIPMENT RAILS.

1. CHATSWORTH PRODUCTS
2. 11996-X36 MODEL

VERTICAL CABLING SECTION FOR CUBE-IT WALL- MOUNT CABINET MANAGERS WITH DOOR. FINISH SHALL MATCH THE EQUIPMENT RACK. PROVIDE THE FOLLOWING PRODUCTS OR AN APPROVED EQUIVALENT:

1. 40970-707 MODEL 7U, 12.3"H x 0.5"D (311 mm x 13 mm)

CATEGORY 6 PATCH PANELS

PROVIDE THE FOLLOWING PRODUCTS OR AN APPROVED EQUIVALENT:

1. PANDUIT 24-PORT CAT-6 PATCH PANEL: CPP24FMWBLY
2. PANDUIT 48-PORT CAT-6 PATCH PANEL: CPP48FMWBLY
3. COMMSCOPE 24-PORT CAT-6 PATCH PANEL: UNP-6-DM-1U-24
4. COMMSCOPE 48-PORT CAT-6 PATCH PANEL: UNP-6-DM-2U-48
5. PROVIDE REAR CABLE MANAGEMENT BAR FOR EACH PATCH PANEL.

CATEGORY 6 CHANNEL COMPLIANT JACKS – UTP

PROVIDE THE FOLLOWING PRODUCTS OR AN APPROVED EQUIVALENT:

1. COMMSCOPE BLUE CAT-6 JACK: UNJ600-BU
2. PANDUIT BLUE CAT-6 JACK: CJ688TGBU

CABLE

UTP CABLE: CABLE SHALL BE CATEGORY 6

1. COMMSCOPE BLUE CAT-6 CABLE: CS34P BLU
2. PANDUIT BLUE CAT-6 CABLE: PUP6C04BU

ACCESS CONTROL COMPOSITE CABLING

PROVIDE THE FOLLOWING PRODUCTS FOR ACCESS CONTROL COMPOSITE CABLING.

1.BELDEN 558AFS - RISER
2.BELDEN 658GMS - PLENUM
3. OR APPROVED EQUAL

FACEPLATES

FACEPLATES SHALL BE IN ACORDANCE WITH ELECTRICAL AND ARCHITECTUAL DRAWINGS WITH A MINIMUM OF TWO PORTS.

FACEPLATES SHALL BE COMPATIBLE WITH THE RJ-45 JACK PROVIDED.

GROUNDING

COMPLY WITH J-STD-607-A.

IDENTIFICATION PRODUCTS

COMPLY WITH TIAEIA-606-A AND UL969 FOR LABELING MATERIALS, INCLUDING LABEL STOCKS, LAMINATING ADHESIVES, AND INKS USED BY LABEL PRINTERS.

PART 3 -EXECUTION

ENTRANCE FACILITIES

COORDINATE BACKBONE CABLING WITH THE PROTECTORS AND DEMARCATION POINT PROVIDED BY COMMUNICATIONS SERVICE PROVIDER.

EQUIPMENT WALL CABINET.

WALL CABINET SHALL BE ASSEMBLED SUCH THAT MOUNTING RAILS ARE EXACTLY PERPENDICULAR TO THE BASE.

WALL CABINET SHALL BE SECURED TO THE WALL USING APPROPRIATE ANCHORS.

WALL CABINET SHALL BE GROUNDED TO THE TMGB OR TGB OR APPROPRIATE BUILDING GROUND USING A MINIMUM #6 STRANDED, INSULATED GROUNDING WIRE.

WALL CABINET SHALL BE INSTALLED PER THE REQUIREMENTS SPECIFIED BY THE MANUFACTURER'S INSTALLATION GUIDELINES.

PATCH PANELS – UTP

PANELS SHALL BE INSTALLED TO PROVIDE MINIMAL SIGNAL IMPAIRMENT BY PRESERVING WIRE PAIR TWISTS AS CLOSELY AS POSSIBLE TO THE POINT OF MECHANICAL TERMINATION. THE AMOUNT OF UNTWISTING IN A PAIR AS A RESULT OF TERMINATION TO THEPATCH PANEL SHALL BE NO GREATER THAN 0.5 INCHES (13 MM)

PANELS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND PROPERLY MOUNTED TO A CABINET, BRACKET OR OTHER APPROPRIATE MOUNTING DEVICE.

PANELS SHALL BE INSTALLED SUCH THAT CABLES TERMINATED TO THE PANEL CAN MAINTAIN MINIMUM BEND RADIUS OF AT LEAST 4 TIMES THE CABLE DIAMETER INTO THE IDC CONTACTS.

CABLES SHALL BE TERMINATED ON THE PANELS SUCH THAT THERE IS NO TENSION ON THE CONDUCTORS IN THE TERMINATION CONTACTS.

PANELS SHALL BE PROPERLY LABELED ON FRONT AND BACK WITH THE CABLE NUMBER AND PORT CONNECTIONS FOR EACH PORT.

CATEGORY 6 AND CATEGORY 6A CHANNEL COMPLIANT JACKS

JACKS SHALL BE INSTALLED TO PROVIDE MINIMAL SIGNAL IMPAIRMENT BYPRESERVING WIRE PAIR TWISTS AS CLOSELY AS POSSIBLE TO THE POINT OF MECHANICAL TERMINATION. THE AMOUNT OF UNTWISTING IN A PAIR AS A RESULT OF TERMINATION TO THEJACK SHALL BE NO GREATER THAN 0.5 INCHES (13 MM). COMPLY WITH TIA/EIA-568-B.2.

JACKS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND PROPERLY MOUNTED IN PLATES, FRAMES, HOUSINGS OR OTHER APPROPRIATE MOUNTING DEVICE.

JACKS SHALL BE INSTALLED SUCH THAT CABLES TERMINATED TO THE JACKS MAINTAIN MINIMUM BEND RADIUS OF AT LEAST 4 TIMES THE CABLE DIAMETER INTO THE IDC CONTACTS. CABLES SHALL BE TERMINATED ON JACKS SUCH THAT THERE IS NO TENSION ON THE CONDUCTORS IN THE TERMINATION CONTACTS.

CABLE

ALL CABLES ARE TO BE SUPPORTED BY MEANS SECURED TO THE BUILDING STRUCTURE, EITHER BY CONDUIT, J-HOOKS. IN SOME INSTANCES. CABLES CAN BE SECURED DIRECTLY TO THE BUILDING STRUCTURE BY A PRE-APPROVED MEANS. CABLES ARE TO BE ROUTED AND RUN AS HIGH AS POSSIBLE; NO CABLES ARE TO BE RUN ON TOP OF LAY IN CEILINGS. ALL CABLES ROUTED BELOW ACCESSIBLE FLOOR SYSTEM SHALL BE NEATLY TRAINED USING APPROPRIATE SUPPORTS.

DO NOT EXCEED THE MANUFACTURER'S RECOMMENDED PULLING TENSION OR MINIMUM BEND RADIUS.

AVOID WALKING, STEPPING ON OR COMPRESSING CABLES IN ANY WAY. INSTALLED CABLE JACKS SHALL HAVE NO ABRASIONS WITH EXPOSED CONDUCTOR INSULATION OR BARE COPPER. THE INSTALLER IS RESPONSIBLE TO REPLACE DAMAGED CABLES AT NO COST TO THE OWNER.

DO NOT OVER-TIGHTEN CABLE TIES. DO NOT USE STAPLES, CLAMPS OR ZIP TIES TO ANCHOR CABLES.

USE D-RINGS, J-HOOKS, VELCRO STRAPS, CONDUIT, CABLE MANAGEMENT. WITH THE USE OF D-RINGS, J-HOOKS OR VELCRO, CABLE RUNS SHALL BE SUPPORTED EVERY 4 TO 5 FEET. THE MANUFACTURER'S SPECOFICATIONS FOR CABLE LOADING SHALL BE FOLLOWED. FOR VELCRO, ENSURE THE MINIMUM OVERLAP ON THE STRAP MEETS THE MANUFACTURER REQUIREMENT, 2"MINIMUM UNLESS MANUFACTURER IS GREATER. IF VELCRO STRAPS ARE UTILIZED IN A PLENUM AIR SPACE, THE VELCRO STRAP SHALL BE RATED AS SUCH. THE PREFERRED VELCRO STRAP IS OF HOOK & LOOP TYPE.

DO NOT ROUTE CABLES NEAR HEAT SOURCES AND MAINTAIN A MINIMUM SPACING BETWEEN CABLES AND SOURCES OF EMI: POWER CABLES SHALL BE A MINIMUM OF 6", FLORESCENT LIGHTS SHALL MAINTAIN A MINIMUM OF 12" AND TRANSFORMERS OR ELECTRICAL ENCLOSURES SHALL BE A MINIMUM OF 36".

CONCEAL CONDUCTORS AND CABLES IN ACCESSIBLE CEILINGS, WALLS, AND FLOORS WHERE POSSIBLE.

COMPLY WITH NECA1.

COMPLY WITH TIA/EIA-568-B.1.

COMPLY WITH BICSIITSIM, CH.6, "CABLE TERMINATION PRACTICES."

INSTALL 110-STYLE IDC TERMINATION HARDWARE UNLESS OTHERWISE INDICATED.

MUTOA SHALL NOT BE USED.

CONSOLIDATION POINTS SHALL NOT BE USED.

CABLES MAY NOT BE SPLICED. SECURE AND SUPPORT CABLES AT INTERVALS NOT EXCEEDING 30 INCHES AND NOT MORE THAN 6 INCHES FROM CABINETS, BOXES, FITTINGS, OUTLETS, RACKS, FRAMES, AND TERMINALS.

INSTALL LACING BARS TO RESTRAIN CABLES, TO PREVENT STRAINING CONNECTIONS, AND TO PREVENT BENDING CABLES TO SMALLER RADII THAN MINIMUMS RECOMMENDED BY MANUFACTURER.

BUNDLE, LACE, AND TRAIN CONDUCTORS TO TERMINAL POINTS WITHOUT EXCEEDING MANUFACTURER'S LIMITATIONS ON BENDING RADII. BUT NOT LESS THAN RADII SPECIFIED IN BICSI ITSIM, "CABLING TERMINATION PRACTICES" CHAPTER. INSTALL LACING BARS AND DISTRIBUTION SPOOLS.

DO NOT INSTALL BRUISED, KINKED, SCORED, DEFORMED, OR ABRADED CABLE. DO NOT SPLICE CABLE BETWEEN TERMINATION, TAP, OR JUNCTION POINTS. REMOVE AND DISCARD CABLE IF DAMAGED DURING INSTALLATION AND REPLACE IT WITH NEW CABLE.

COLD-WEATHER INSTALLATION: BRING CABLE TO ROOM TEMPERATURE BEFORE DEREELING. HEAT LAMPS SHALL NOT BE USED FOR HEATING.

IN THE COMMUNICATIONS EQUIPMENT ROOM, INSTALL A 10-FOOT-LONG SERVICE LOOP ON EACHEND OF CABLE.

OPEN-CABLE INSTALLATION:

1. INSTALL CABLING WITH HORIZONTAL AND VERTICAL CABLE GUIDES IN TELECOMMUNICATIONS SPACES WITH TERMINATING HARDWARE AND INTERCONNECTION EQUIPMENT.
2. SUSPEND UTP CABLE NOT IN A WIREWAY OR PATHWAY A MINIMUM OF 8 INCHES ABOVE CEILINGS BY CABLE SUPPORTS NOT MORE THAN 60 INCHES APART.
3. CABLE SHALL NOT BE RUN THROUGH STRUCTURAL MEMBERS OR IN CONTACT WITH PIPES, DUCTS, OR OTHER POTENTIALLY DAMAGING ITEMS.

GROUP CONNECTING HARDWARE FOR CABLES INTO SEPARATE LOGICAL FIELDS.

FIRESTOPPING

COMPLY WITH TIA-569-B, ANNEXA, "FIRESTOPPING."

COMPLY WITH BICSITDMM, "FIRESTOPPING SYSTEMS" ARTICLE.

ALL PENETRATIONS THROUGH FIRE-RATED BUILDING STRUCTURES (WALLS AND FLOORS) SHALL BE SEALED WITH AN APPROPRIATE FIRESTOP SYSTEM. THIS REQUIREMENT APPLIES TO THROUGH PENETRATIONS (COMPLETE PENETRATION) AND MEMBRANE PENETRATIONS (THROUGH ONE SIDE OF A HOLLOW FIRE RATED STRUCTURE). ANY PENETRATION ITEM I.E., RISER SLOTS AND SLEEVES, CABLES, CONDUIT, CABLE TRAY, AND RACEWAYS, ETC. SHALL BE PROPERLY FIRE STOPPED.

FIRESTOP SYSTEMS SHALL BE UL CLASSIFIED TO ASTM E814 (UL 1479) AND SHALL BE APPROVEDBY THE AHJ IN THE STATE WHERE THE WORK IS TO BE PERFORMED.

GROUNDING

INSTALL GROUNDING ACCORDING TO BICSI TDMM, "GROUNDING, BONDING, AND ELECTRICAL PROTECTION" CHAPTER.

COMPLY WITH J-STD-607-A.

THE FACILITY SHALL BE EQUIPPED WITH A TELECOMMUNICATIONS BONDING BACKBONE (TBB). THIS BACKBONE SHALL BE USED TO GROUND ALL TELECOMMUNICATIONS CABLE SHIELDS, EQUIPMENT RACKS, AND OTHER ASSOCIATED HARDWARE THAT HAS POTENTIAL TO ACT AS A CURRENT CARRYING CONDUCTOR. THE TBB SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE ANSI/TIA/EIA-607 TELECOMMUNICATIONS BONDING AND GROUNDING STANDARD. COORDINATE ALL WORK WITH THE ELECTRICAL CONTRACTOR TO ENSURE THE GROUNDING AND BONDING IS INSTALLED IN ACCORDANCE.

THE MAIN ENTRANCE FACILITY/EQUIPMENT ROOM IN THE BUILDING SHALL BE EQUIPPED WITH A TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (TMGB). EACH TELECOMMUNICATIONS ROOM SHALL BE PROVIDED WITH A TELECOMMUNICATIONS GROUND BUS BAR (TGB). THE TMGB SHALL BE CONNECTED TO THE BUILDING ELECTRICAL ENTRANCE GROUNDING FACILITY. THE INTENT OF THIS SYSTEM IS TO PROVIDE A GROUNDING SYSTEM THAT IS EQUAL IN POTENTIAL TO THE GROUNDING STANDARD. GROUND SYSTEM. THEREFORE, GROUND LOOP CURRENT POTENTIAL IS MINIMIZED BETWEEN TELECOMMUNICATIONS EQUIPMENT AND THE ELECTRICAL SYSTEM TO WHICH IT IS ATTACHED. COORDINATE ALL WORK WITH THE ELECTRICAL CONTRACTOR TO ENSURE THE GROUNDING AND BONDING IS INSTALLED IN ACCORDANCE.

ALL RACKS, METALLIC BACKBOARDS, CABLE SHEATHS, SPLICE CASES, CABLE TRAYS, ETC. ENTERING OR RESIDING IN THE TR OR ER SHALL BE GROUNDED TO THE RESPECTIVE TGB OR TMGB USING A MINIMUM #6 AWG STRANDED COPPER BONDING CONDUCTOR AND COMPRESSION CONNECTORS. COORDINATE ALL WORK WITH THE ELECTRICAL CONTRACTOR TO ENSURE THE GROUNDING AND BONDING IS INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS.

COORDINATE LOCATIONS OF ALL GROUNDING BUS BARS WITH ALL OTHER TRADES AND THE OWNER.

LOCATE GROUNDING BUS BAR TO MINIMIZE THE LENGTH OF BONDING CONDUCTORS. FASTEN TO WALL ALLOWING AT LEAST 2-INCH CLEARANCE BEHIND THE GROUNDING BUS BAR. CONNECT GROUNDING BUS BAR WITH A MINIMUM NO.4 AWG GROUNDING ELECTRODE CONDUCTOR FROM GROUNDING BUS BAR TO SUITABLE ELECTRICAL BUILDING GROUND.

BOND METALLIC EQUIPMENT TO THE GROUNDING BUS BAR, USING NOT SMALLER THAN NO. 6 AWG EQUIPMENT GROUNDING CONDUCTOR.

LABELING

THE CONTRACTOR WILL ONLY USE ADHESIVE COMPUTER-GENERATED LABELS FOR LABELING CABLES, STATION PANELS, WALL PLATES, 110 BLOCKS, AND FIBER OPTIC ENCLOSURES.

WALL PLATE LABELING WILL IDENTIFY THE TC OR MC WIRING CLOSET AND THE TYPE OF CABLE (VOICE OR DATA) AND A UNIQUE THREE-DIGIT IDENTIFIER. ALL CABLES THAT ARE VOICE WILL BE LABELED WITH THE LETTER (V1) AND ALL CABLES THAT ARE DATA WILL BE LABELED WITH A (D1) IF THERE ARE MORE THAN ONE VOICE OR DATA CABLES THE SECOND CABLE WILL BE LABEL WITH (D2) OR (V2) OR (D3) FOR THE THIRD DATA CABLE. THE WALL PLATE WILL LOOK LIKE V1-02-001 FOR THE 1ST VOICE CABLE IN THE WALL PLATE WIRED FROM CLOSET NUMBER 02 WITH A UNIQUE IDENTIFIER OR 001.

THIS LABELING SCHEME SHALL BE DISCUSSED WITH THE OWNER TO ENSURE ACCEPTABILITY PRIOR TO ANY WORK BEING COMPLETED.

THIS LABEL WILL APPEAR ON THE WALL PLATE, PATCH PANEL, 110 BLOCKS, THE CABLE ON BOTH ENDS 5 TO 10 INCHES FROM ITS TERMINATION POINT, TEST RESULT, AND ON THE CAD DRAWING ALL LABELS WILL BE EASY TO READ SO YOU CAN EASILY LOCATE CABLES,CROSS CONNECT EQUIPMENT AND MOVE WALL PLATE LOCATIONS IN THE FUTURE.

ALL FIBER AND BACKBONE CABLE WILL BE LABELED IN THE SAME MANNER,SO YOU CAN LOCATE EACH WIRING CLOSET FROM THE LABEL ON THE PANEL OR BLOCK.

WHEN JOB IS COMPLETE, ALL TEST RESULTS WILL BE CHECKED BACK TO THE CAD DRAWINGS TO MAKE SURE ALL LABELS ARE CORRECT.

TESTING

GENERAL TESTING REQUIREMENTS:

DOCUMENT DATA FOR EACH MEASUREMENT. DATA FOR SUBMITTALS SHALL BE PRINTED IN A SUMMARY REPORT THAT IS FORMATTED SIMILAR TO TABLE 10.1 IN BICSI TDMM, OR TRANSFERRED FROM THE INSTRUMENT TO THE COMPUTER, SAVED AS TEXT FILES, AND PRINTED AND SUBMITTED. END-TO-END CABLING WILL BE CONSIDERED DEFECTIVE IF IT DOES NOT PASS TESTS AND INSPECTIONS. INSTALLER SHALL USE A FLUKE DSX8000 CABLE ANALYZER FOR ALL TESTING.

UTP CABLING PERFORMANCE TESTS

UTP PATCH PANELS, 110 CONNECTING BLOCKS, AND UTP JACKS SHALL BE TESTED AFTER HORIZONTAL OR BACKBONE CABLING HAS BEEN INSTALLED AND TERMINATEDAT BOTH ENDS. TEST EACH OUTLET, JACK, AND CABLE. PERFORM THE FOLLOWING TESTS ACCORDING TO TIA/EIA-568-B.1 AND TIA/EIA-568-B.2:

WIRE MAP.
LENGTH (PHYSICAL VS. ELECTRICAL, AND LENGTH REQUIREMENTS).
INSERTION LOSS.
NEAR-END CROSSTALK (NEXT) LOSS.
POWER SUM NEAR-END CROSSTALK (PSNEXT) LOSS.
EQUAL-LEVEL FAR-END CROSSTALK (ELFEXT).
POWER SUM EQUAL-LEVEL FAR-END CROSSTALK (PSELFEXT).
RETURN LOSS.
PROPAGATION DELAY.
DELAY SKEW.
A "PASS" INDICATION SHALL BE OBTAINED FOR ALL LINK OR CHANNEL TESTS.

END OF SECTION 270000

SECTION 275119 – SOUND MASKING SYSTEMS

PART 1 - GENERAL

DESCRIPTION OF WORK

THIS SPECIFICATION INCLUDES ALL COMPONENTS REQUIRED FOR A DELEGATED DESIGN OF A FULLY FUNCTIONAL SOUND MASKING SYSTEM FOR THE PURPOSE OF INCREASED SPEECH PRIVACY, FREEDOM FROM DISTRACTION, AND/OR SLEEP DISTURBANCE-REDUCTION IN THE TREATED AREAS.

REFERENCES

A. ASTM E1130-16 – STANDARD TEST METHOD FOR OBJECTIVE MEASUREMENT OF SPEECH PRIVACY IN OPEN OFFICES USING ARTICULATION INDEX (UPDATED).
B. ASTM E1374-18E1 – STANDARD GUIDE FOR OPEN OFFICE ACOUSTICS AND APPLICABLE ASTM STANDARDS (UPDATED).
C. ASTM E2638-10 – STANDARD TEST METHOD FOR OBJECTIVE MEASUREMENT OF THE SPEECH PRIVACY PROVIDED BY A CLOSED ROOM.
D. ASTM E1573-22 – STANDARD TEST METHOD FOR EVALUATING MASKING SOUND IN OPEN OFFICES USING "A"-WEIGHTED AND ONE-THIRD OCTAVE BAND SOUND PRESSURE LEVELS (UPDATED).
E. ANSI S1.6 – PREFERRED FREQUENCIES, FREQUENCY LEVELS, AND BAND NUMBERS FOR ACOUSTICAL MEASUREMENTS.
F. ANSI S1.4 – SPECIFICATION FOR SOUND LEVEL METERS. CALIBRATED TYPE 1 OR TYPE 2.
G. ANSI S1.11 – SPECIFICATION FOR OCTAVE BAND AND FRACTIONAL OCTAVE BAND ANALOG AND DIGITAL FILTERS.
H. UL 2043 – STANDARD FOR FIRE TEST FOR HEAT AND VISIBLE SMOKE RELEASE FOR DISCRETE PRODUCTS AND THEIR ACCESSORIES INSTALLED IN AIR HANDLING SPACES.
I. ISO - INTERNATIONAL STANDARDS ORGANIZATION
J. NEC - NATIONAL ELECTRICAL CODE

FUNCTIONAL REQUIREMENTS OF SYSTEMS

THE CONTRACTOR SHALL: DISTRIBUTE SOUND MASKING TO ALL COMMON AND PUBLIC OFFICE AREAS, LOCATE ALL ACTIVE ELECTRONIC COMPONENTS TO BE CONVENIENTLY ACCESSIBLE FOR SERVICE AND SUPPLY ALL SOUND MASKING SYSTEM COMPONENTS FROM A SINGLE MANUFACTURER.

SYSTEM DESIGN, COMMISSIONING AND EQUIPMENT SUPPLY

THE SOUND MASKING SYSTEM DESIGNER SHALL BE AN AUTHORIZED DEALER TRAINED AND CERTIFIED BY THE MANUFACTURER.

SOUND MASKING SYSTEM COMMISSIONING SHALL BE PERFORMED BY AN AUTHORIZED DEALER'S ENGINEER TRAINED AND CERTIFIED BY THE MANUFACTURER.

EQUIPMENT AND ACCESSORIES NOT SUPPLIED BY THE MASKING SYSTEM MANUFACTURER THAT ARE REQUIRED FOR A FUNCTIONAL MASKING SYSTEM, INCLUDING CABLING AND HARDWARE WHERE APPLICABLE, SHALL BE SUPPLIED BY A DEALER AUTHORIZED BY THE EQUIPMENT MANUFACTURER.

INSTALLING CONTRACTOR QUALIFICATIONS

THE SOUND MASKING SYSTEM SHALL BE INSTALLED BY A QUALIFIED CONTRACTOR.

TO BE CONSIDERED QUALIFIED FOR THIS WORK, THE CONTRACTOR SHALL BE EXPERIENCED IN THE PROVISION OF LOW-VOLTAGE ELECTRONIC SYSTEMS SIMILAR IN COMPLEXITY TO THOSE REQUIRED FOR THIS PROJECT, AND SHALL MEET THE FOLLOWING CRITERIA:

A. THE CONTRACTOR IS AN AUTHORIZED DEALER FOR THE MAJOR PRODUCT COMPONENTS AND IS CERTIFIED BY THE MANUFACTURER TO PERFORM INSTALLATION, SETUP, MAINTENANCE AND WARRANTY.
B. THE CONTRACTOR HAS A VERIFIABLE HISTORY OF SUCCESSFUL INSTALLATIONS OF AT LEAST THREE PROJECTS OF SIMILAR SCOPE AND SIZE.
C. THE CONTRACTOR HAS ALL APPLICABLE BUSINESS AND REGULATORY LICENSES AND CERTIFICATIONS.
D. DURING THE WARRANTY PERIOD, THE CONTRACTOR SHALL MAINTAIN TWO OR MORE TECHNICIANS WHO ARE CERTIFIED FOR THE PRODUCT(S) UNDER WARRANTY AS STATED IN SECTION 1.13.

SUBMITTALS

EXAMINATIONS: THE CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS AND, WHEN POSSIBLE, VISIT THE CONSTRUCTION SITE TO OBTAIN FIRST-HAND KNOWLEDGE OF EXISTING CONDITIONS. CONTRACTORS WILL NOT BE GIVEN EXTRA PAYMENTS FOR CONDITIONS THAT CAN BE DETERMINED BY EXAMINING DOCUMENTS OR BY MAKING ONSITE EXAMINATIONS, AND WILL NOT BE RELIEVED OF ANY OBLIGATIONS WITH RESPECT TO BID.

BASIS OF CONSIDERATION: SHALL CONSIST OF THE FOLLOWING ITEMS:

A. SOUND MASKING SYSTEM PERFORMANCE.
B. SOUND MASKING SYSTEM FUNCTIONAL CAPABILITIES.
C. CONTRACTOR'S QUALIFICATIONS
D. SOUND MASKING SYSTEM EASE OF USE / SOFTWARE INTERFACE
E. SOUND MASKING SYSTEM COST.

SUBMITTAL DOCUMENTS

UNLESS OTHERWISE DIRECTED BY CONTRACT, THE CONTRACTOR SHALL NOT ORDER EQUIPMENT UNTIL THE SUBMITTALS HAVE BEEN REVIEWED AND APPROVED BY THE SPECIFYING CONSULTANT.

ALL CAD DRAWINGS SHALL BE GENERATED IN DWG FORMAT AND ALSO IN PORTABLE DOCUMENT FORMAT (PDF). ALL OTHER SUBMISSIONS UNLESS OTHERWISE STATED SHALL BE PROVIDED AS PDFS.

THE CONTRACTOR SHALL PROVIDE MANUFACTURER'S DETAILED TECHNICAL DATA SHEETS FOR ALL MAJOR COMPONENTS IN PORTABLE DOCUMENT FORMAT (PDF).

THE CONTRACTOR SHALL PROVIDE COMPLETE FLOOR PLAN AND/OR REFLECTED CEILING PLAN DRAWING(S) DENOTING, AT MINIMUM, DEVICE LOCATIONS WHICH HAVE BEEN PREPARED BY THE SOUND MASKING SYSTEM DESIGNER BASED ON THE SOUND MASKING SYSTEM MANUFACTURER GUIDELINES.

WARRANTY

THE CONTRACTOR SHALL WARRANT ALL EQUIPMENT TO BE FREE OF FAULTY WORKMANSHIP AND DEFECTS FOR A MINIMUM PERIOD OF FIVE YEARS FROM DATE OF FINAL ACCEPTANCE.

WARRANT THE INSTALLATION OF ALL EQUIPMENT, CABLING, AND LABOR FOR AN INITIAL PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE UNLESS A LONGER TERM IS SPECIFIED ELSEWHERE.

PROVIDE OWNER REQUESTED SERVICES, INCLUDING TELEPHONE SUPPORT, AT NO CHARGE DURING THE DURATION OF THE INITIAL ONE-YEAR WARRANTY PERIOD.

INCLUDE TWO POST-COMMISSIONING VISITS TO THE SITE FOR ADJUSTMENTS AND MAINTENANCE OF ALL SPECIFIED AND INSTALLED SYSTEMS.

TRAINING

PROVIDE SUFFICIENT TRAINING TO PERSONNEL SELECTED BY THE OWNER ON OPERATION AND BASIC MAINTENANCE OF ALL SYSTEMS, SOFTWARE, AND EQU

SECTION 28 31 11
DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

PART 1 - GENERAL

RELATED DOCUMENTS

DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

SYSTEM DESCRIPTION

NONCODED, UL-CERTIFIED ADDRESSABLE SYSTEM, WITH MULTIPLEXED SIGNAL TRANSMISSION, DEDICATED TO FIRE-ALARM SERVICE ONLY.

SUBMITTALS

GENERAL SUBMITTAL REQUIREMENTS:

SUBMITTALS SHALL BE APPROVED BY AUTHORITIES HAVING JURISDICTION PRIOR TO SUBMITTING THEM TO ARCHITECT.

SHOP DRAWINGS SHALL BE PREPARED BY PERSONS WITH THE FOLLOWING QUALIFICATIONS:

1. TRAINED AND CERTIFIED BY MANUFACTURER IN FIRE-ALARM SYSTEM DESIGN.
2. NICET-CERTIFIED FIRE-ALARM TECHNICIAN, LEVEL III MINIMUM.
3. LICENSED OR CERTIFIED BY AUTHORITIES HAVING JURISDICTION.

DELEGATED-DESIGN SUBMITTAL: FOR NOTIFICATION APPLIANCES AND SMOKE AND HEAT DETECTORS, IN ADDITION TO SUBMITTALS LISTED ABOVE, INDICATE COMPLIANCE WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1. DRAWINGS SHOWING THE LOCATION OF EACH NOTIFICATION APPLIANCE AND SMOKE AND HEAT DETECTOR, RATINGS OF EACH, AND INSTALLATION DETAILS AS NEEDED TO COMPLY WITH LISTING CONDITIONS OF THE DEVICE.
2. DESIGN CALCULATIONS: CALCULATE REQUIREMENTS FOR SELECTING THE SPACING AND SENSITIVITY OF DETECTION, COMPLYING WITH NFPA 72. CALCULATE SPACING AND INTENSITIES FOR STROBE SIGNALS AND SOUND-PRESSURE LEVELS FOR AUDIBLE APPLIANCES.
3. INDICATE AUDIBLE APPLIANCES REQUIRED TO PRODUCE SQUARE WAVE SIGNAL PER NFPA 72.

PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.

SHOP DRAWINGS: FOR FIRE-ALARM SYSTEM. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

1. COMPLY WITH RECOMMENDATIONS IN THE "DOCUMENTATION" SECTION OF THE "FUNDAMENTALS OF FIRE ALARM SYSTEMS" CHAPTER IN NFPA 72.
2. INCLUDE VOLTAGE DROP CALCULATIONS FOR NOTIFICATION APPLIANCE CIRCUITS.
3. INCLUDE BATTERY-SIZE CALCULATIONS.
4. INCLUDE PERFORMANCE PARAMETERS AND INSTALLATION DETAILS FOR EACH DETECTOR, VERIFYING THAT EACH DETECTOR IS LISTED FOR COMPLETE RANGE OF AIR VELOCITY, TEMPERATURE, AND HUMIDITY POSSIBLE WHEN AIR-HANDLING SYSTEM IS OPERATING.
5. INCLUDE PLANS, SECTIONS, AND ELEVATIONS OF HEATING, VENTILATING, AND AIR-CONDITIONING DUCTS, DRAWN TO SCALE AND COORDINATING INSTALLATION OF DUCT SMOKE DETECTORS AND ACCESS TO THEM. SHOW CRITICAL DIMENSIONS THAT RELATE TO PLACEMENT AND SUPPORT OF SAMPLING TUBES, DETECTOR HOUSING, AND REMOTE STATUS AND ALARM INDICATORS. LOCATE DETECTORS ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS.
6. INCLUDE FLOOR PLANS TO INDICATE FINAL OUTLET LOCATIONS SHOWING ADDRESS OF EACH ADDRESSABLE DEVICE. SHOW SIZE AND ROUTE OF CABLE AND CONDUITS.

QUALIFICATION DATA: FOR QUALIFIED INSTALLER.

OPERATION AND MAINTENANCE DATA: FOR FIRE-ALARM SYSTEMS AND COMPONENTS TO INCLUDE IN EMERGENCY, OPERATION, AND MAINTENANCE MANUALS. IN ADDITION TO ITEMS SPECIFIED IN DIVISION 01 SECTION "OPERATION AND MAINTENANCE DATA," INCLUDE THE FOLLOWING:

1. COMPLY WITH THE "RECORDS" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER IN NFPA 72.
2. PROVIDE "RECORD OF COMPLETION DOCUMENTS" ACCORDING TO NFPA 72 ARTICLE "PERMANENT RECORDS" IN THE "RECORDS" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER.
3. PROVIDE "MAINTENANCE, INSPECTION AND TESTING RECORDS" ACCORDING TO NFPA 72 ARTICLE OF THE SAME NAME AND INCLUDE THE FOLLOWING:

   A. FREQUENCY OF TESTING OF INSTALLED COMPONENTS.
   B. FREQUENCY OF INSPECTION OF INSTALLED COMPONENTS.
   C. REQUIREMENTS AND RECOMMENDATIONS RELATED TO RESULTS OF MAINTENANCE.
   D. MANUFACTURER'S USER TRAINING MANUALS.

4. MANUFACTURER'S REQUIRED MAINTENANCE RELATED TO SYSTEM WARRANTY REQUIREMENTS.
5. ABBREVIATED OPERATING INSTRUCTIONS FOR MOUNTING AT FIRE-ALARM CONTROL UNIT.

QUALITY ASSURANCE

INSTALLER QUALIFICATIONS: PERSONNEL SHALL BE TRAINED AND CERTIFIED BY MANUFACTURER FOR INSTALLATION OF UNITS REQUIRED FOR THIS PROJECT.

INSTALLER QUALIFICATIONS: INSTALLATION SHALL BE BY PERSONNEL CERTIFIED BY NICET AS FIRE-ALARM LEVEL II TECHNICIAN.

SOURCE LIMITATIONS FOR FIRE-ALARM SYSTEM AND COMPONENTS: OBTAIN FIRE-ALARM SYSTEM FROM SINGLE SOURCE FROM SINGLE MANUFACTURER.

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.

NFPA CERTIFICATION: OBTAIN CERTIFICATION ACCORDING TO NFPA 72 BY A UL-LISTED ALARM COMPANY.

PART 2 - PRODUCTS

MANUFACTURERS

MANUFACTURERS: THE FIRE ALARM VOICE COMMUNICATION CONTROL PANEL IS EXISTING TO REMAIN. ALL NEW FIRE ALARM DEVICES SHALL BE OF THE SAME MANUFACTURER (SIEMENS) OF THE EXISTING SYSTEM AND SHALL BE FULLY COMPATIBLE WITH THE EXISTING SYSTEM. ALL NEW AUDIBLE SPEAKER AND VISUAL NOTIFICATION APPLIANCES SHALL MATCH THE TYPE ALREADY IN USE AT THE FACILITY.

SYSTEMS OPERATIONAL DESCRIPTION

FIRE-ALARM SIGNAL INITIATION SHALL BE BY ONE OR MORE OF THE FOLLOWING DEVICES AND SYSTEMS:

1. MANUAL STATIONS.
2. HEAT DETECTORS.
3. SMOKE DETECTORS.
4. VERIFIED AUTOMATIC ALARM OPERATION OF SMOKE DETECTORS.
5. AUTOMATIC SPRINKLER SYSTEM WATER FLOW.
6. HEAT DETECTORS IN ELEVATOR SHAFT AND PIT.
7. FIRE-EXTINGUISHING SYSTEM OPERATION.
8. FIRE STANDPIPE SYSTEM.

SECTION 28 31 11 (CONTINUED)

FIRE-ALARM SIGNAL SHALL INITIATE THE FOLLOWING ACTIONS:

1. CONTINUOUSLY OPERATE ALARM NOTIFICATION APPLIANCES.
2. IDENTIFY ALARM AT FIRE-ALARM CONTROL UNIT AND REMOTE ANNUNCIATORS.
3. TRANSMIT AN ALARM SIGNAL TO THE REMOTE ALARM RECEIVING STATION.
4. UNLOCK ELECTRIC DOOR LOCKS IN DESIGNATED EGRESS PATHS.
5. RELEASE FIRE AND SMOKE DOORS HELD OPEN BY MAGNETIC DOOR HOLDERS.
6. ACTIVATE ALARM COMMUNICATION SYSTEM.
7. CLOSE SMOKE DAMPERS IN AIR DUCTS OF DESIGNATED AIR-CONDITIONING DUCT SYSTEMS.
8. RECALL ELEVATORS TO PRIMARY OR ALTERNATE RECALL FLOORS.
9. RECORD EVENTS IN THE SYSTEM MEMORY.

FIRE-ALARM CONTROL UNIT

THE FIRE-ALARM VOICE COMMUNICATION CONTROL UNIT IS EXISTING TO REMAIN.

CIRCUITS: INITIATING DEVICE, NOTIFICATION APPLIANCE, AND SIGNALING LINE CIRCUITS: NFPA 72, CLASS A.

1. INSTALL NO MORE THAN 50 ADDRESSABLE DEVICES ON EACH SIGNALING LINE CIRCUIT.

SMOKE-ALARM VERIFICATION:

1. INITIATE AUDIBLE AND VISIBLE INDICATION OF AN "ALARM-VERIFICATION" SIGNAL AT FIRE-ALARM CONTROL UNIT.
2. ACTIVATE AN NRTL-LISTED AND -APPROVED "ALARM-VERIFICATION" SEQUENCE AT FIRE-ALARM CONTROL UNIT AND DETECTOR.
3. SOUND GENERAL ALARM IF THE ALARM IS VERIFIED.
4. CANCEL FIRE-ALARM CONTROL UNIT INDICATION AND SYSTEM RESET IF THE ALARM IS NOT VERIFIED.

ELEVATOR RECALL: EXISTING BUILDING ELEVATOR RECALL FUNCTIONALITY IS EXISTING TO REMAIN.

DOOR CONTROLS: DOOR HOLD-OPEN DEVICES THAT ARE CONTROLLED BY SMOKE DETECTORS AT DOORS IN SMOKE BARRIER WALLS SHALL BE CONNECTED TO FIRE-ALARM SYSTEM.

NOTIFICATION APPLIANCES

GENERAL REQUIREMENTS FOR NOTIFICATION APPLIANCES: CONNECTED TO NOTIFICATION APPLIANCE SIGNAL CIRCUITS, ZONED AS INDICATED, EQUIPPED FOR MOUNTING AS INDICATED AND WITH SCREW TERMINALS FOR SYSTEM CONNECTIONS.

1. COMBINATION DEVICES: FACTORY-INTEGRATED AUDIBLE SPEAKER AND VISIBLE DEVICES IN A SINGLE-MOUNTING ASSEMBLY, EQUIPPED FOR MOUNTING AS INDICATED AND WITH SCREW TERMINALS FOR SYSTEM CONNECTIONS.

A. FIRE ALARM VOICE/TONE NOTIFICATION APPLIANCES:

1. DESCRIPTION: NOTIFICATION APPLIANCES CAPABLE OF OUTPUTTING VOICE EVACUATION MESSAGES.
2. PERFORMANCE CRITERIA.

   a. REGULATORY REQUIREMENTS:

      1. NFPA 72.
      2. UL 1480.

   b. GENERAL CHARACTERISTICS:

      1. SPEAKERS FOR VOICE NOTIFICATION: LOCATE SPEAKERS FOR VOICE NOTIFICATION TO PROVIDE INTELLIGIBILITY REQUIREMENTS OF "NOTIFICATION APPLIANCES" AND "EMERGENCY COMMUNICATIONS SYSTEMS" CHAPTERS IN NFPA 72.
      2. HIGH-RANGE UNITS: RATED 2 TO 15 W.
      3. LOW-RANGE UNITS: RATED 1 TO 2 W.
      4. MOUNTING: SURFACE MOUNTED AND BIDIRECTIONAL.
      5. MATCHING TRANSFORMERS: TAP RANGE MATCHED TO ACOUSTICAL ENVIRONMENT OF SPEAKER LOCATION.
      6. COMBINATION DEVICES: FACTORY-INTEGRATED AUDIBLE AND INVISIBLE DEVICES IN SINGLE-MOUNTING ASSEMBLY, EQUIPPED FOR MOUNTING AS INDICATED, AND WITH SCREW TERMINALS FOR SYSTEM CONNECTIONS.

VISIBLE NOTIFICATION APPLIANCES: XENON STROBE LIGHTS COMPLY WITH UL 1971, WITH CLEAR OR NOMINAL WHITE POLYCARBONATE LENS MOUNTED ON AN ALUMINUM FACEPLATE. THE WORD "FIRE" IS ENGRAVED IN MINIMUM 1-INCH-(25-MM-) HIGH LETTERS ON THE LENS.

1. RATED LIGHT OUTPUT: 15/30/75/110 CD, SELECTABLE IN THE FIELD.
2. MOUNTING: WALL MOUNTED UNLESS OTHERWISE INDICATED.
3. FOR UNITS WITH GUARDS TO PREVENT PHYSICAL DAMAGE, LIGHT OUTPUT RATINGS SHALL BE DETERMINED WITH GUARDS IN PLACE.
4. FLASHING SHALL BE IN A TEMPORAL PATTERN, SYNCHRONIZED WITH OTHER UNITS.
5. STROBE LEADS: FACTORY CONNECTED TO SCREW TERMINALS.
6. MOUNTING FACEPLATE: FACTORY FINISHED, WHITE.
7. FINISH: WHITE.

PART 3 - EXECUTION

EQUIPMENT INSTALLATION

COMPLY WITH NFPA 72 FOR INSTALLATION OF FIRE-ALARM EQUIPMENT.

EQUIPMENT MOUNTING:

AUDIBLE ALARM-INDICATING DEVICES: INSTALL NOT BE LESS THAN 6 INCHES (150 MM) BELOW THE CEILING. INSTALL BELLS AND HORNS ON FLUSH-MOUNTED BACK BOXES WITH THE DEVICE-OPERATING MECHANISM CONCEALED BEHIND A GRILLE.

VISIBLE ALARM-INDICATING DEVICES: INSTALL ADJACENT TO EACH ALARM BELL OR ALARM HORN AND AT LEAST 6 INCHES (150 MM) BELOW THE CEILING.

DEVICE LOCATION-INDICATING LIGHTS: LOCATE IN PUBLIC SPACE NEAR THE DEVICE THEY MONITOR.

FIRESTOPPING

APPLY FIRESTOPPING TO PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES TO RESTORE ORIGINAL FIRE-RESISTANCE RATING OF ASSEMBLY.

IDENTIFICATION

IDENTIFY SYSTEM COMPONENTS, WIRING, CABLING, AND TERMINALS.

PROVIDE A LIST OF DEVICE DESCRIPTION FOR EACH ADDRESSABLE DEVICE TO THE OWNER PRIOR TO PROGRAMMING THE SYSTEM. THE OWNER SHALL APPROVE THE DEVICE LIST PRIOR TO PROGRAMMING.

FIELD QUALITY CONTROL

FIELD TESTS SHALL BE WITNESSED BY AUTHORITIES HAVING JURISDICTION.

PERFORM TESTS AND INSPECTIONS.

1. MANUFACTURER'S FIELD SERVICE: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT COMPONENTS, ASSEMBLIES, AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS, AND TO ASSIST IN TESTING.

SECTION 28 31 11 (CONTINUED)

TESTS AND INSPECTIONS:

VISUAL INSPECTION: CONDUCT VISUAL INSPECTION PRIOR TO TESTING.

1. INSPECTION SHALL BE BASED ON COMPLETED RECORD DRAWINGS AND SYSTEM DOCUMENTATION THAT IS REQUIRED BY NFPA 72 IN ITS "COMPLETION DOCUMENTS, PREPARATION" TABLE IN THE "DOCUMENTATION" SECTION OF THE "FUNDAMENTALS OF FIRE ALARM SYSTEMS" CHAPTER.
2. COMPLY WITH "VISUAL INSPECTION FREQUENCIES" TABLE IN THE "INSPECTION" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER IN NFPA 72; RETAIN THE "INITIAL/REACCEPTANCE" COLUMN AND LIST ONLY THE INSTALLED COMPONENTS.

SYSTEM TESTING: COMPLY WITH "TEST METHODS" TABLE IN THE "TESTING" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER IN NFPA 72.

TEST VISIBLE APPLIANCES FOR THE PUBLIC OPERATING MODE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

FACTORY-AUTHORIZED SERVICE REPRESENTATIVE SHALL PREPARE THE "FIRE ALARM SYSTEM RECORD OF COMPLETION" IN THE "DOCUMENTATION" SECTION OF THE "FUNDAMENTALS OF FIRE ALARM SYSTEMS" CHAPTER IN NFPA 72 AND THE "INSPECTION AND TESTING FORM" IN THE "RECORDS" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER IN NFPA 72.

REACCEPTANCE TESTING: PERFORM REACCEPTANCE TESTING TO VERIFY THE PROPER OPERATION OF ADDED OR REPLACED DEVICES AND APPLIANCES.

FIRE-ALARM SYSTEM WILL BE CONSIDERED DEFECTIVE IF IT DOES NOT PASS TESTS AND INSPECTIONS.

PREPARE TEST AND INSPECTION REPORTS.

END OF SECTION

SINCLAIR HILLE ARCHITECTS

Project Name:

Olsson

North Little Rock Office

SHA Project Number: 25073
Project Address: 1 Riverfront Drive
North Little Rock, AR 72114

Design Team:

ARCHITECT OF RECORD
Consultant Project #: 25073
Certificate of Authorization #: COA-01289
SINCLAIR HILLE ARCHITECTS
700 Q Street
Lincoln, NE 68508
P 402.476.7331
W *sinclairhille.com*

MECHANICAL / ELECTRICAL ENGINEERING
Consultant Project #: 016-0172
Certificate of Authorization #: 1010
OLSSON
601 P Street
Lincoln, NE 68508
P 402.474.6311
W *olsson.com*

Seal:

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 12584
TIMOTHY W. DRAKE

REVISION SCHEDULE

#	Date	Revision Description

Issue: Contract Documents
Date: August 20, 2026
Drawn by: KRT
Checked by: TWD
Designer: RRI
Project Architect: DEQ

These drawings & the designs are the sole property of Sinclair Hille Architects & may not be reproduced in whole or in part without express written permission.
© Copyright SINCLAIR HILLE ARCHITECTS

Sheet Title:

ELECTRICAL SPECIFICATIONS

Sheet Number:

E703

Autodesk Docs://25073_Olsson North Little Rock TI AIE_Little Rock AK New Office_Central_016017Z_R23.rvt
8/20/2026 8:42:27 AM