1.13 DEMOLITION AND NEW WORK

1.1 SUMMARY OF WORK

B. AS SOON AS POSSIBLE AFTER THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT FOR REVIEW SIX
A. ALL PIPING THROUGH EXTERIOR OR FOUNDATION WALLS SHALL PASS THROUGH SCHEDULE 40 GALVANIZED STEEL

DEMOLITION WORK. THIS SHALL INCLUDE ALL REMOVAL, RELOCATION AND REWORKING OF PIPING, ITEMS OF HVAC
BUILDING AS REQUIRED. THE CONTRACTOR SHALL INCLUDE ALL WORK WHICH MAY BE REQUIRED TO ALTERATIONS AND
NOTED, THE CONTRACTOR SHALL MAINTAIN SERVICES TO ALL EXISTING AREAS REQUIRING SUCH SERVICES. THE
POSSIBLE FOR USE DURING CONSTRUCTION IF TEMPORARY HEAT IS REQUIRED. AIR HANDLING EQUIPMENT SHALL NOT
EXECUTED IN ACCORDANCE WITH SAID LAWS, REGULATIONS, ORDINANCES, STATUES OR CODES, WITHOUT INCREASED
EXECUTE HIS WORK IN SUCH A MANNER AS NOT TO INTERFERE WITH OR DELAY THE WORK OF OTHER TRADES.

2. FOR OPENINGS IN WALLS, THE CAULKING SHALL BE APPLIED TO A MINIMUM OF 3 INCH TOTAL DEPTH. SEALANT
SEALANT, "DMYERIC" BY TREMCO OR EQUAL BY PERMATITE NO. 1113FR.

INCH ABOVE THE FLOOR.

CONTRACTOR SHALL REROUTE AS REQUIRED SUCH SERVICES WHERE ARE DISRUPTED DUE TO ARCHITECTURAL
CONNECTIONS OF SERVICES.

TO MEET SUCH CONDITIONS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL VERIFY ALL
OBSERVATIONS TO PROVIDE COMPLETE AND FUNCTIONING INSTALLATIONS IN ACCORDANCE WITH THE INTENT OF THE
SMACNA "B" CLASSIFICATION.

STEEL ANGLE ON THE BOTTOM OF THE DUCT SUPPORTED WITH STEEL RODS OF APPROPRIATE SIZE SECURELY FASTENED
OWENS CORNING UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL DUCT LINER IS TO COMPLY AND BE INSTALLED

VIBRATION FROM THE FAN UNIT TO THE DUCTWORK.

TO COMPLETION OF THE WORK. UNITS SHALL NOT BE RUN WITHOUT FILTERS IN PLACE.

TO THE BUILDING STRUCTURE. ALL SUPPORTS TO MEET SMACNA STANDARDS.

C. SPRINKLER HEADS SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE CENTERS OF CEILING TILES WITHOUT THE USE

AREA STYLES W/OUT CEILINGS: CENTRAL SPRINKLER MODEL "A", PENDANT AUTOMATIC SPRINKLER, ROUGH BRONZE

BACKFLOW PREVENTERS FOR FIRE PROTECTION SERVICE SHALL BE FEBCO OR EQUIVALENT BEECO, CONBRACO, OR

STEEL PIPE. INCLUDE ENDS MATCHING JOINING METHOD.

SUBMITTALS SHALL HAVE BEEN APPROVED BY AUTHORITIES HAVING JURISDICTION, INCLUDING HYDRAULIC
INCLUDING LOSSES THROUGH WATER-SERVICE PIPING, VALVES, AND BACKFLOW PREVENTERS.

AROUND THE DEVICE.

REVISIONS:

CHECKED BY:

drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this

Kansas City, MO 64153
1.14 INTERRUPTION OF SERVICES

2.5   WIRE AND CABLE

2.1   GENERAL REQUIREMENTS

C.  RECEPTACLES DESIGNATED WITH GROUND FAULT PROTECTION SHALL BE HUBBELL NO. GF-5362, OR APPROVED EQUAL,

G.  GENERAL CONTRACTOR SHALL PROVIDE ALL FIRE-RATED ENCLOSURES FOR LIGHT FIXTURES INSTALLED IN FIRE-RATED

I.   CONDUITS SHALL BE PROTECTED DURING CONSTRUCTION; PLUG AND KEEP CLEAN AND DRY. CONDUIT ENDS SHALL BE

A.  ELECTRICAL OUTLETS AND EQUIPMENT ARE SO LOCATED ON THE DRAWINGS TO SHOW INTENT OF DESIGN. MINOR

A.  ALL SERVICE ENTRANCE EQUIPMENT, DISCONNECT SWITCHES, PANELBOARDS, RELAYS, MOTOR STARTERS,

EQUIPMENT UNDER THIS CONTRACT, SHALL BE PROVIDED WITH PROPER IDENTIFICATION. IDENTIFICATION SHALL BE BY

ELBOWS AND EXTENSION. PVC CONDUIT/FITTINGS SHALL NOT BE PERMITTED TO BE EXPOSED ABOVE THE FLOOR.

USED. COLOR CODING SHALL BE AS FOLLOWS:

A. ALL CABINETS, SAFETY SWITCHES, AND OTHER APPARATUS USED FOR OPERATION AND CONTROL OF CIRCUITS,

1.10 BLANK FACEPLATES

B. ACCEPTABLE MODELS ARE AS FOLLOWS

A. PATCH PANELS SHALL BE BELDEN PART #AX103253 LOADED PATCH PANELS OR APPROVED EQUAL.

B. THE VENDOR SHALL REMOVE PROTECTION AT COMPLETION OF THE WORK.

F. CABLES SHALL HAVE NO PHYSICAL DEFECTS SUCH AS CUTS, TEARS OR BULGES IN THE OUTER JACKET.  CABLES WITH

D. DO NOT UNTWIST CATEGORY 6 OR 5E CABLE PAIRS MORE THAN 0.5 INCHES WHEN TERMINATING.

E. ALL FLOOR PENETRATIONS SHALL COMPLY WITH LOCAL AHJ TO MAINTAIN DESIGNED FIRE RATING OF FLOOR/CEILING.

F. ALL WALL PENETRATIONS SHALL COMPLY WITH LOCAL AHJ TO MAINTAIN DESIGNED FIRE RATING OF WALL.

I. J-HOOKS

G. INSTALL CABLE IN NEAT AND WORKMANLIKE MANNER.  NEATLY BUNDLE AND TIE ALL CABLE IN CLOSETS.  LEAVE

A. HORIZONTAL WIRE MANAGERS SHALL BE CHATSWORTH 35441-702 EVOLUTION HORIZONTAL CABLE MANAGERS.

H. THE VENDOR SHALL INSTALL AND COMPLETE THE SYSTEMS AS FOLLOWS:

K. THERMAL HEAT DETECTORS SHALL BE SIGA-HFS, 190 DEGREE F. FIXED TEMPERATURE TYPE. WHEN UNIT IS ACTIVATED,

F. ACTUATION OF ANY MANUAL OR AUTOMATIC INITIATING DEVICE SHALL CAUSE THE FOLLOWING:

I. MANUAL STATIONS SHALL BE GE-EST MODEL SIGA-278 NONCODED, SINGLE ACTION TYPE. THE STATION SHALL BE

E. THE SYSTEM SHALL BE ADDRESSABLE, ELECTRICALLY SUPERVISED AND UTILIZE 2-WIRE, CLASS B CIRCUITS FOR ALL

C. THE USE OF ADAPTING PLATES TO CHANGE FROM 2-GANG TO 1-GANG BOXES IS NOT PERMITTED.

C. THE USE OF ADAPTING PLATES TO CHANGE FROM 2-GANG TO 1-GANG BOXES IS NOT PERMITTED.

V. THE CONTROL CABINETS SHALL HAVE AN OUTDOOR AND FRAME ASSEMBLY WHICH SHALL BE

21 AX102007 FPDUAL-SS 43080-1S2

ALL SECTIONS OF CABLE TRAY MUST BE BUTTED TOGETHER PARALLEL AND SECURED BY USING A MECHECIAL

5.  ALL SECTIONS OF CABLE TRAY MUST BE BUTTED TOGETHER PARALLEL AND SECURED BY USING A MECHECIAL

2.7 VENTS

B. THE VENDOR WILL BE NEEDED TO INSTALL THE VENT IN THE EQUIPMENT ROOM AND TELECOMMUNICATIONS ROOM.

B. THE VENDOR WILL BE NEEDED TO INSTALL THE VENT IN THE EQUIPMENT ROOM AND TELECOMMUNICATIONS ROOM.

A.  SOLID COPPER, 23 AWG, 100 FEET OR MORE WILL BE REQUIRED FOR TEлетPHONE SERVICE.

B. BALANCED TWISTED-PAIR (UTP), CM, BLUE, CATEGORY 6 CABLES WITH FOUR TP PAIRS.

6.  WHERE MULTIPLE PIECES OF RACEWAY COVER ARE REQUIRED, FACTORY ENDS SHALL BE BUTTED WITHOUT ANY

7.  ALL TRAYS SHALL BE SUPPORTED BY TWO INDIVIDUAL HANGERS (TRAPEZE) OR WALL MOUNTED.  NO CABLE TRAY

4" EMT 90
2.7 TESTING

- SITE TESTING

- TELECOMMUNICATIONS TESTING

2.8 LABELING

- LABEL FACEPLATES AND PATCH PANELS: TR NUMBER, FOLLOWED BY PATCH PANEL LETTER, FOLLOWED BY PATCH PANEL NUMBER.

- INSTALL CABLES IN ONE CONTINUOUS PIECE. SPLICES SHALL NOT BE ALLOWED.

- INSTALL HORIZONTAL CABLING TO THE TELECOMMUNICATIONS ROOM (TR) AS SHOWN ON DRAWING.

- ARRANGE AND MOUNT EQUIPMENT AND MATERIAL AS DESCRIBED IN THIS DOCUMENT, AND IN A MANNER COMPLIANT WITH THE MANUFACTURER’S RECOMMENDATIONS/INSTALLATION GUIDES AND BEST INDUSTRY PRACTICES.


- CABLES SHALL BE DRESSED AND TERMINATED IN ACCORDANCE WITH STANDARDS-BASED RECOMMENDATIONS, THE MANUFACTURER’S RECOMMENDATIONS/INSTALLATION GUIDES AND BEST INDUSTRY PRACTICES.

- LABEL EACH FACEPLATE WITH SELF-ADHESIVE PERMANENT POLYESTER LABEL WITH MINIMUM, 3/16 IN. HIGH CHARACTERS.

- LABEL EACH HORIZONTAL CABLE WITH PERMANENT SELF-ADHESIVE LABEL WITH MINIMUM, 1/8 IN. HIGH CHARACTERS.

- THE VENDOR SHALL NOT CUT, REMOVE OR DAMAGE ANY HVAC CONTROL, FIRE ALARM, INTRUSION DETECTION, RF SYSTEM, OR ITEMS AS SPECIFIED IN THE BID SPECIFICATION, UPON REQUEST OF THE CONSTRUCTION MANAGER.


1200 SF Room A100
1430 SF Room A101
914 SF Room A103

ENGINEERS
phone  913.345.2127   fax  913.345.0617
25501 west valley parkway, suite 200    olathe, KS 66061
bouchersmith&

Please consider the environment before printing this.

Missouri State Certificate of Authority
Architecture # 0000161Structure # 2006031333
Hollis + Miller Architects

JOB NO:
S&B
KTM

Overall Floor Plan - Level 5 - Mechanical

SHEET KEYNOTE LEGEND

x DESCRIPTION

- DRAWN BY:
- DATE:
- REVISIONS:

- CHECKED BY:
- Smith & Boucher Engineers
- Mechanical, Electrical, & Plumbing Engineering
- State Certificate of Authority # EGC
- 000178
- 25501 West Valley Parkway
- Olathe, KS 66061
- 913.345.2127 phone
- 913.345.0617 fax

The Professional Architects seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this architect, and this architect expressly disclaims any and all responsibility for such plan, drawings, or documents not exhibiting this seal.

The Professional Engineers seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this architect, and this architect expressly disclaims any and all responsibility for such plan, drawings, or documents not exhibiting this seal.
1. PROVIDE (1) 1/2" CONDUIT FROM ALL THERMOSTAT/TEMPERATURE SENSORS TO ASSOCIATED HVAC EQUIPMENT.
2. EXTEND (1) 1" CONDUIT FROM EACH PHONE OR DATA OUTLET TO CEILING UNLESS NOTED OTHERWISE.
3. SPECIAL MOUNTING HEIGHTS NOTED ON PLANS ARE REFER TO ARCHITECTURAL FLOOR PLANS AND REFLECTED CEILING PLANS FOR EXACT MOUNTING LOCATIONS OF ALL 120V BRANCH CIRCUITING SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED.
4. GROUND CONDUCTOR AND RACEWAYS SHALL BE INCREASED AS REQUIRED.
5. PATCH AND REPAIR ALL OPENINGS CREATED THAT OPPOSITE SIDES OF A FIRE RATED WALL, AND ARE WITHIN 5' OF EACH OTHER, INSTALL AN INTUMESCENT MOLDABLE FIRE STOP PUTTY PAD AROUND EACH JUNCTION BOX.
6. TERMINATE ON EXISTING PATCH PANEL. COORDINATE EXACT LOCATION OF WALL MOUNT PROJECTOR.
7. PROJECTOR AND MOUNT PROVIDED BY OTHERS AND INSTALLED BY CONTRACTOR. PROVIDE (1) PLENUM-CMP, 2 AWG STRANDED COPPER CONDUCTORS WITH RIPCORD (BELDEN # 6300UE OR APPROVED EQUAL) BETWEEN SPEAKER AND ABOVE CEILING AMP. MAKE ALL CONNECTIONS FOR A COMPLETE AND WORKING SYSTEM.
8. RECEPTACLE/DATA FOR CEILING MOUNT PROJECTOR. THIS ROOM. HDMI CABLE TO CEILING MOUNT PROJECTOR THIS ROOM.
9. UNV VOLTAGE 2'X4' LED TROFFER. WILLIAMS SERIES 50, OR EQUAL.
10. LETTERING, INTEGRAL UL924 BATTERY PACK. WILLIAMS SERIES EXIT, OR EQUAL.

Please consider the environment before printing this.