

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER

Bicsi

Timothy W. Howell

REG. NO. 18209SR

EXPIRES 12/31/18

[Signature]

RCDD

06-27-2017

**Office of
Construction
and Facilities
Management**

VA FORM 08-6231

three inches = one foot
one and one-half inches = one foot
one inch = one foot
three-quarters inch = one foot
one-half inch = one foot
three-eighths inch = one foot
one-quarter inch = one foot
one-eighth inch = one foot

KEYED NOTES

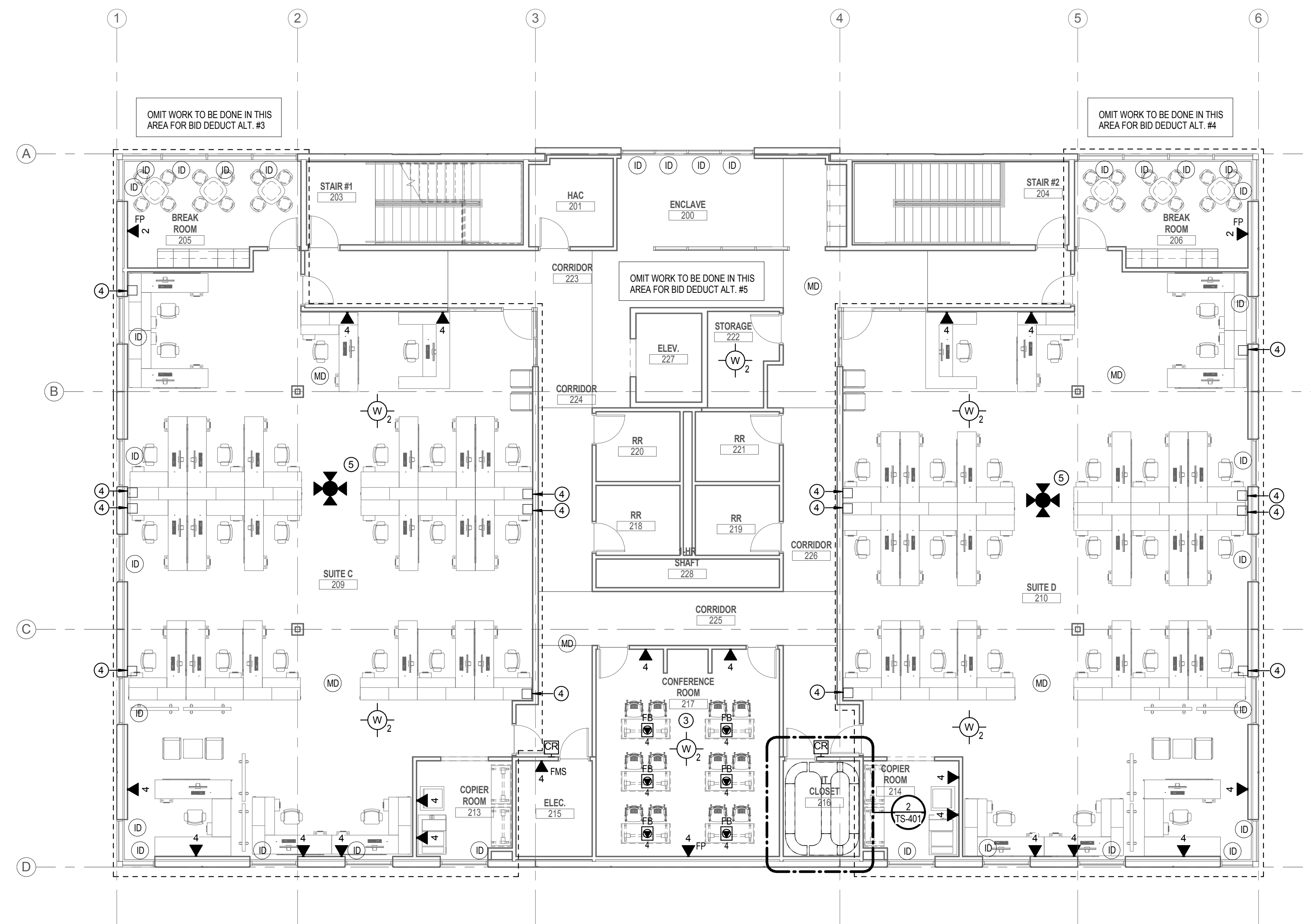
- 1. MOUNT CAMERAS 12' ABOVE GROUND TILTED DOWNWARD FOR VIEWING BUILDING INGRESS AND EGRESS.
- 2. VA PHYSICAL SECURITY DESIGN MANUAL (2015), APPENDIX B DOOR TYPE C. INCLUDE INTERCOM.
- 3. AV FLOOR BOX OUTLETS.
- 4. INDICATES THE LOCATION OF AN 18-PORT, 12" X 12" X 8" MULTI-USER TELECOMMUNICATIONS OUTLET ASSEMBLY (MUTOA) INTENDED TO SERVE LOCAL WORK AREA. MUTOA TO BE INSTALLED IN WALL.
- 5. CEILING MOUNTED MULTI-IMAGER DOME CAMERA.

GENERAL NOTES

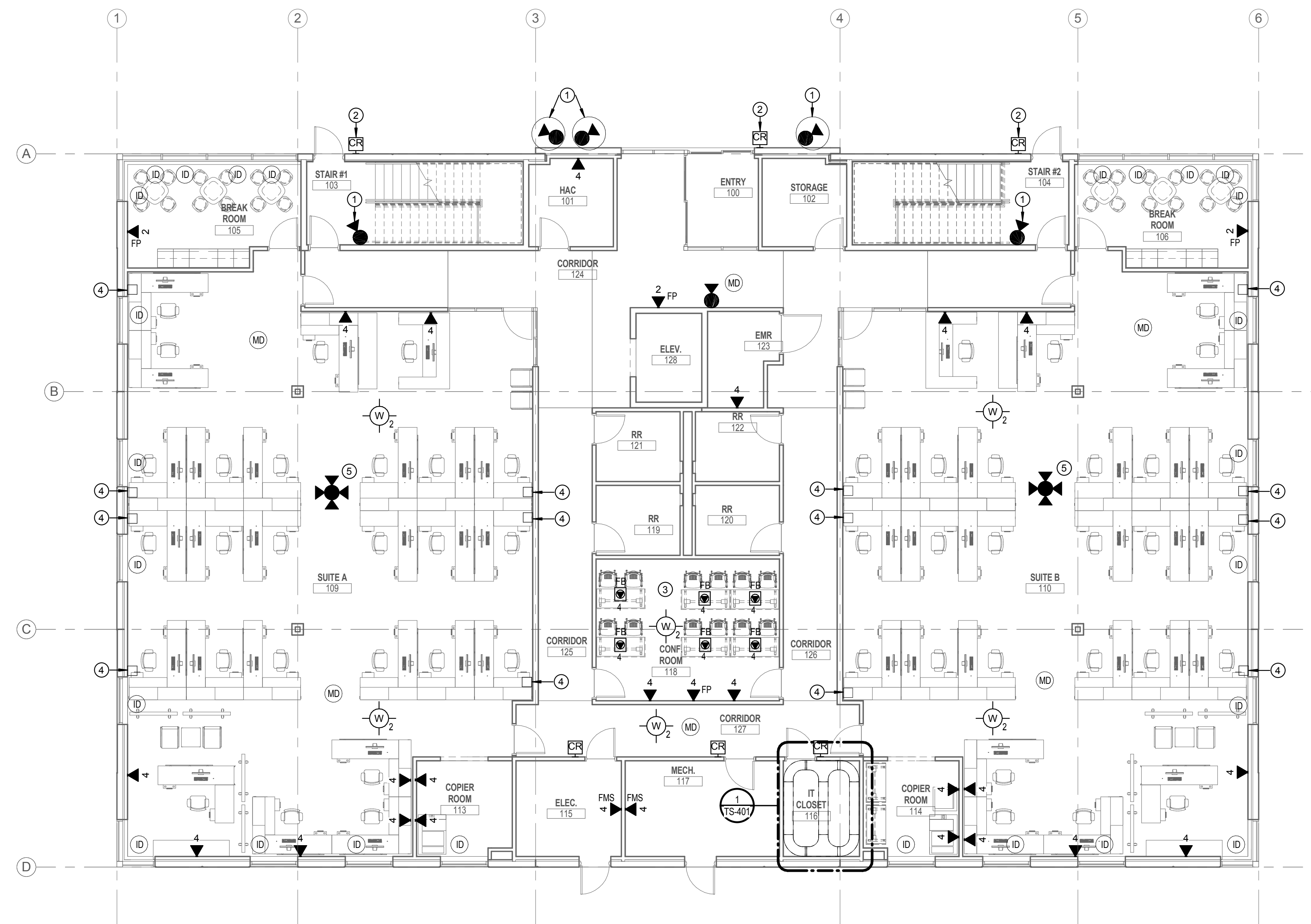
- 1. INTRUSION DETECTION SENSORS SHALL BE MOUNTED NEAR THE TOP OF THE GLASS FOR TAMPER RESISTANCE.
- 2. MOTION DETECTION LOCATIONS AND QUANTITIES ARE APPROXIMATE. FIELD COORDINATE FINAL LOCATIONS.

BID DEDUCT ALTERNATE NOTES

- 1. **BID DEDUCT ALT. #3:** OMIT WORK SHOWN IN SUITE 209 C, COPIER ROOM 213 AND BREAK ROOM 205. REFER TO SHEET AS-103 AND AS-201 FOR FLOOR PLANS.
- 2. **BID DEDUCT ALT. #4:** OMIT WORK SHOWN IN SUITE 210 D, COPIER ROOM 214 AND BREAK ROOM 206. REFER TO SHEET AS-103 AND AS-201 FOR FLOOR PLANS.
- 3. **BID DEDUCT ALT. #5:** OMIT WORK SHOWN IN SUITE 209 C AND SUITE 210 D, COPIER ROOM 213 AND 214, BREAK ROOM 205 AND 206, CONFERENCE ROOM 217, IT CLOSET 216 AND ELECTRICAL ROOM 215. REFER TO SHEET AS-103 AND AS-201 FOR FLOOR PLANS.



2 TELECOM - LEVEL 02
SCALE: 1/8" = 1'-0"



1 TELECOM - LEVEL 01
SCALE: 1/8" = 1'-0"

CONSULTANTS		ARCHITECT		APPROVED: DIRECTOR		SHEET TITLE TELECOM FLOOR PLANS		PROJECT TITLE NEW ADMINISTRATION BUILDING		VA PROJECT NUMBER	
STRUCTURAL / CIVIL ENGINEER H2B, INC. 1225 N. LOOP WEST, SUITE 900 HOUSTON, TX 77008 (713) 864-2900		M.E.P. ENGINEER SPUR DESIGN 1511 WESTPORT ROAD KANSAS CITY, MO 64111 (405) 842-6100		FIRE PROTECTION / TELECOM ENGINEER PAGE 400 W. CESAR CHAVEZ STREET, SUITE 500 AUSTIN, TX 78701 (512) 472-6721		APPROVED: ASSOCIATE DIRECTOR		PROJECT LOCATION 2002 HOLCOMBE BOULEVARD, HOUSTON, TX 77030		BUILDING NUMBER	
Revision #		Date		320 NW 59th St, SUITE A Oklahoma City, OK 73103 spur-design.com		APPROVED: ASSISTANT DIRECTOR		DATE 06-27-2017		DRAWING NUMBER TS-101	
				1511 Westport Road Kansas City, MO 64111 spur-design.com		APPROVED: CHIEF ENGINEER		CHECKED TH		Dwgs.	
						APPROVED: CHIEF ENGINEER		DRAWN BA		Dwg.	

BICSi
Timothy W. Howell
Reg. No. 18209580
06-27-2017

BID DOCUMENTS

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

A

B

C

D

E

F

G

A

B

C

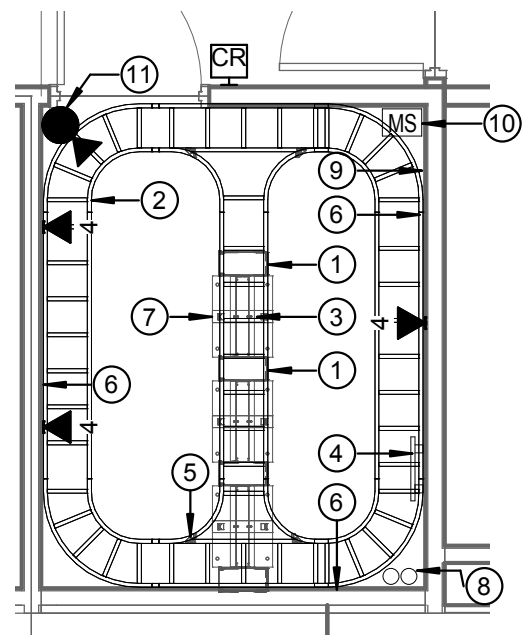
D

E

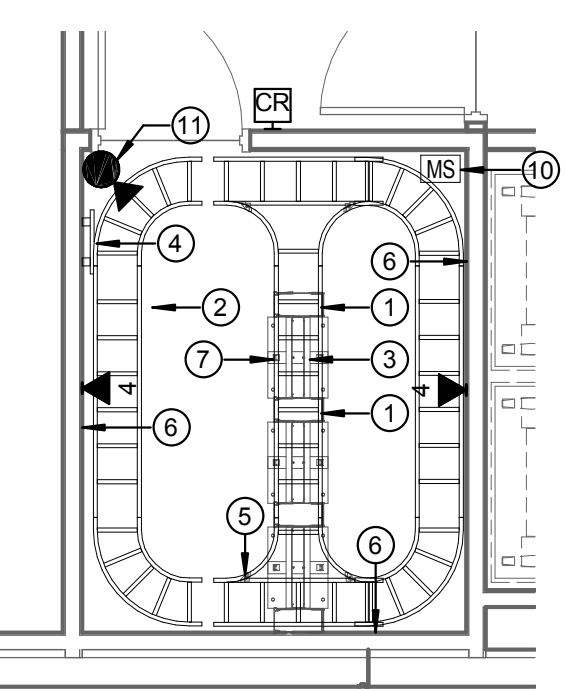
F

G

0
6
three inches = one foot
0
6
one and one-half inches = one foot
2
0
6
one inch = one foot
2
0
6
three-quarters inch = one foot
4
0
6
one-half inch = one foot
4
0
6
three-eighths inch = one foot
8
0
4
one-quarter inch = one foot
16
0
4
one-eighth inch = one foot




1 **ENLARGED PLAN - IT CLOSET 116**
SCALE: 1/4" = 1'-0"



2 **ENLARGED PLAN - IT CLOSET 216**
SCALE: 1/4" = 1'-0" (BID DEDUCT ALT. #5)

KEYED NOTES

- ① INDICATES THE LOCATION OF A NEW 7' FRONT/BACK VERTICAL CABLE MANAGER. CONTRACTOR TO PROVIDE AND INSTALL CABLE MANAGER AND ALL REQUIRED MOUNTING HARDWARE. TYPICAL FOR ALL SHOWN.
- ② INDICATES THE LOCATION OF A 12" LADDER TRAY TO BE INSTALLED. CONTRACTOR TO PROVIDE AND INSTALL LADDER TRAY AND ALL REQUIRED MOUNTING HARDWARE. TYPICAL FOR ALL SHOWN.
- ③ INDICATES THE LOCATION OF A RACK-TO-RUNWAY MOUNTING PLATE TO BE INSTALLED. CONTRACTOR TO PROVIDE AND INSTALL MOUNTING PLATE AND ALL REQUIRED MOUNTING HARDWARE. TYPICAL FOR ALL SHOWN.
- ④ INDICATES THE LOCATION OF A NEW WALL MOUNTED GROUND BUS BAR. CONTRACTOR TO PROVIDE BUS BAR AND ALL REQUIRED MATERIAL TO MOUNT AT THE LOCATION SHOWN, 18" A.F.F.
- ⑤ INDICATES THE LOCATION OF A 90 DEGREE JUNCTION SPLICE KIT. CONTRACTOR TO PROVIDE AND INSTALL AT EACH 90 DEGREE LADDER TRAY JUNCTION POINT. TYPICAL FOR ALL SHOWN.
- ⑥ INDICATES THE LOCATION OF A 3/4" FIRE RATED PLYWOOD. CONTRACTOR TO PROVIDE AND INSTALL PLYWOOD AND ALL REQUIRED MOUNTING HARDWARE. PLYWOOD SHALL BE PAINTED WHITE WITH FIRE RATED PAINT. TYPICAL FOR ALL SHOWN.
- ⑦ INDICATES THE LOCATION OF A NEW TELECOM RACK. CONTRACTOR TO PROVIDE AND INSTALL RACK AND ALL REQUIRED MOUNTING HARDWARE. TYPICAL FOR ALL SHOWN.
- ⑧ INDICATES THE STUB/UP LOCATIONS FOR (2) 4" CONDUITS RESERVED FOR INCOMING TELECOM SERVICES. 96-STRAND SINGLE MODE FIBER OPTIC (OM2) CABLE BY OTHERS. TERMINATE ON FIBER OPTIC SHELF IN TELECOM SPACE.
- ⑨ SECURITY PANEL TO BE MOUNTED AT THIS LOCATION.
- ⑩ FRESNEL LENS MOTION DETECTION SENSOR, MOUNT AT 7' 0" A.F.F. (MINIMUM).
- ⑪ IP CAMERA. USE CAT 6A JUMPER CABLE TO PATCH PANEL. MOUNT AT 7' 0" A.F.F. (MINIMUM).

CONSULTANTS		ARCHITECT		APPROVED: DIRECTOR	SHEET TITLE TELECOM ENLARGED PLANS	PROJECT TITLE NEW ADMINISTRATION BUILDING	VA PROJECT NUMBER	Office of Construction and Facilities Management U.S. Department of Veterans Affairs
STRUCTURAL / CIVIL ENGINEER H2B, INC. 1225 N. LOOP WEST, SUITE 900 HOUSTON, TX 77008 (713) 864-2900		M.E.P. ENGINEER SPUR DESIGN 1511 WESTPORT ROAD KANSAS CITY, MO 64111 (405) 842-6100	FIRE PROTECTION / TELECOM ENGINEER PAGE 400 W. CESAR CHAVEZ STREET, SUITE 500 AUSTIN, TX 78701 (512) 472-6721	APPROVED: ASSOCIATE DIRECTOR		PROJECT LOCATION 2002 HOLCOMBE BOULEVARD, HOUSTON, TX 77030	BUILDING NUMBER	
				APPROVED: ASSISTANT DIRECTOR		APPROVED: CHIEF ENGINEER	DRAWING NUMBER TS-401	
Revision # Date				APPROVED: CHIEF ENGINEER		DATE 06-27-2017	CHECKED TH	



BID DOCUMENTS

A
three inches = one foot

B
one and one-half inches = one foot

C
one inch = one foot

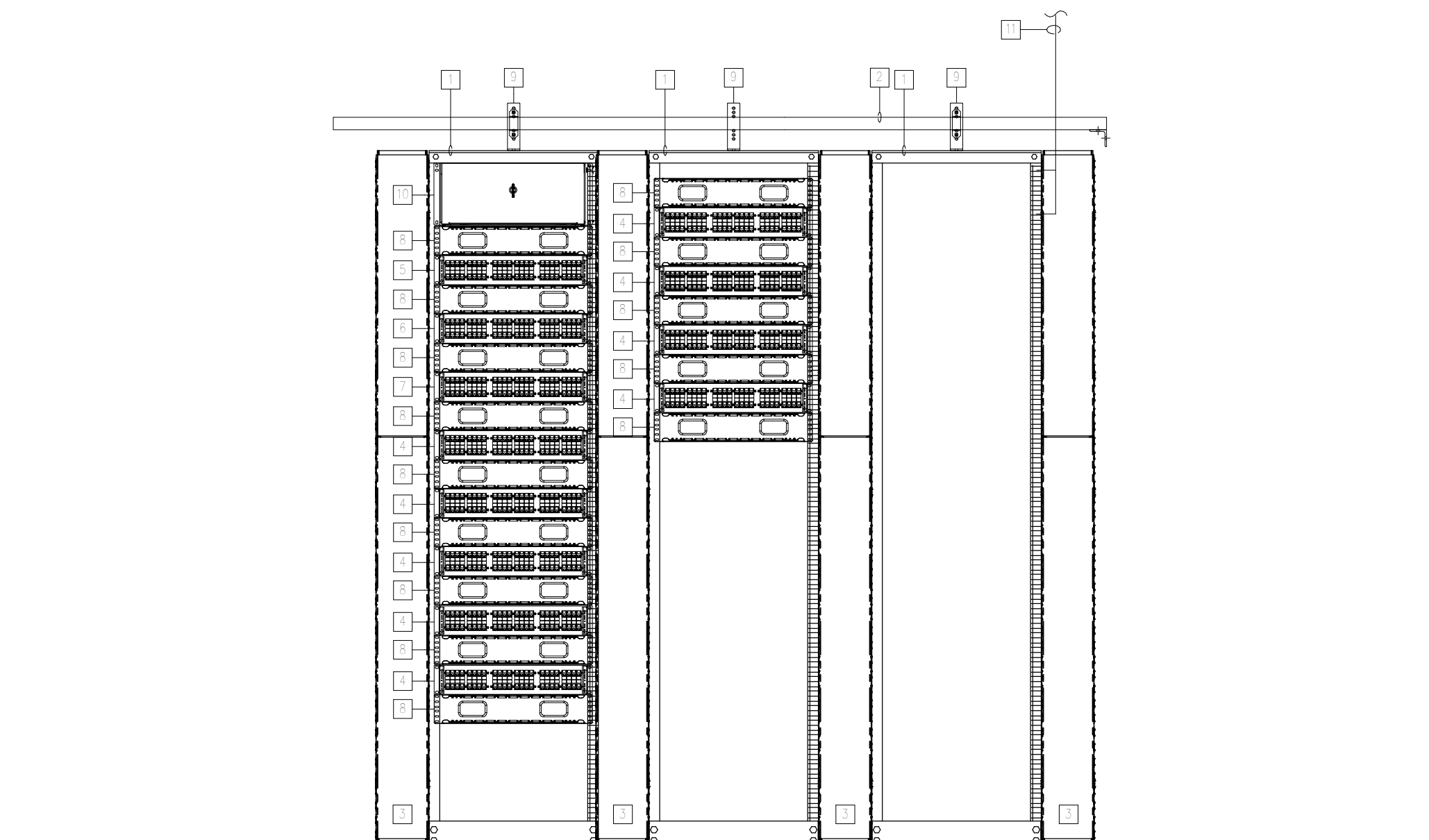
D
three-quarters inch = one foot

E
one-half inch = one foot

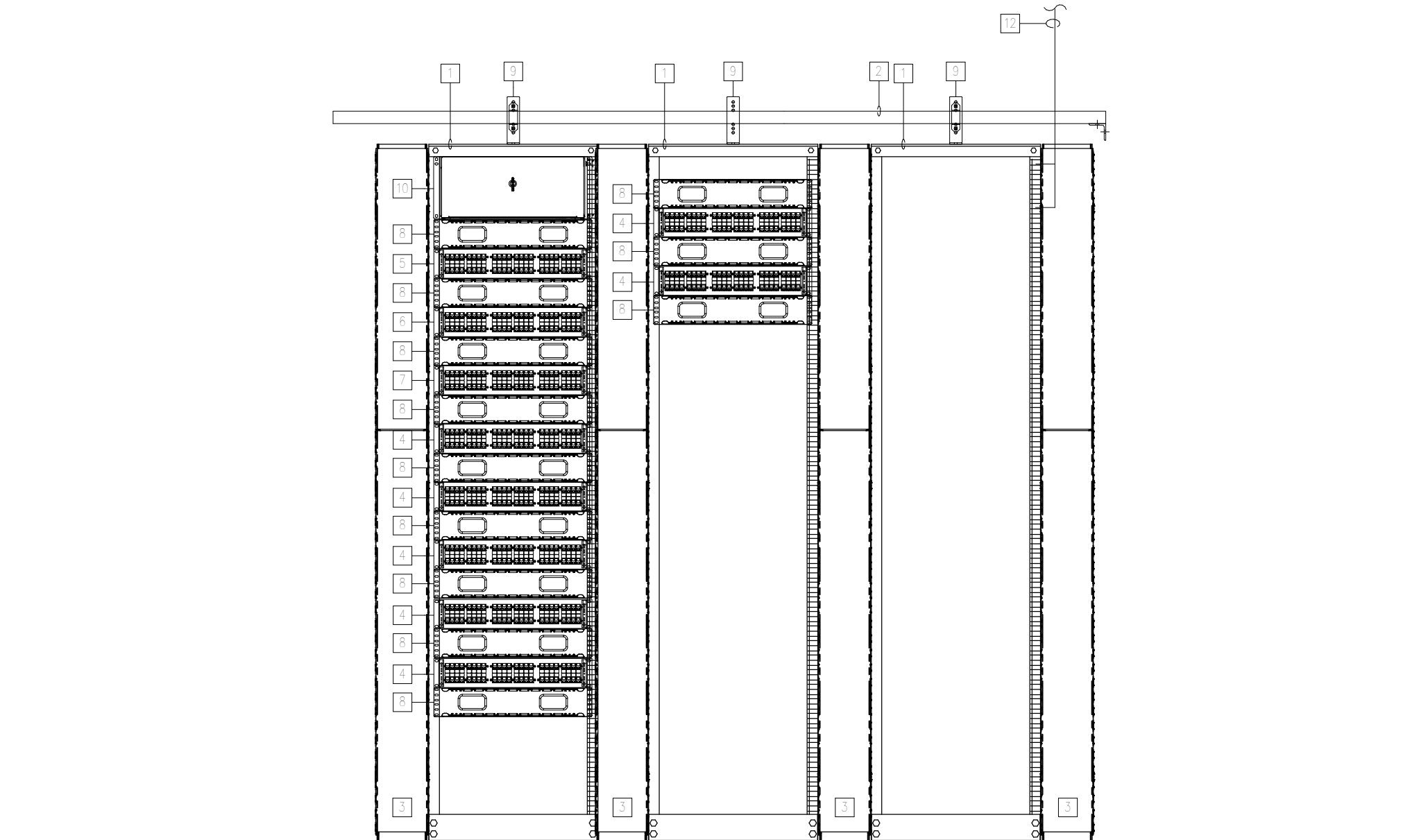
F
three-eighths inch = one foot

G
one-quarter inch = one foot

H
one-eighth inch = one foot



IT CLOSET 116



IT CLOSET 216

KEYED NOTES:

- 1 RACK AT THIS LOCATION IS TO BE RESERVED FOR TELECOM EQUIPMENT. RACK TO BE PROVIDED AND INSTALLED BY CABLING CONTRACTOR.
- 2 CABLING CONTRACTOR TO PROVIDE AND INSTALL A 12" LADDER TRAY WITH ALL REQUIRED MOUNTING HARDWARE.
- 3 CABLING CONTRACTOR TO PROVIDE AND INSTALL A 7" VERTICAL CABLE MANAGER AND ALL REQUIRED MOUNTING HARDWARE.
- 4 CABLING CONTRACTOR TO PROVIDE AND INSTALL A 48-PORT PATCH PANEL WITH ALL REQUIRED MOUNTING HARDWARE AND TERMINATION COMPONENTS. FOR THE TERMINATION OF ALL DATA CABLES IN THIS COMMUNICATIONS CLOSET. PANELS SHOWN ARE AN ESTIMATE. CONTRACTOR TO PROVIDE THE REQUIRED AMOUNT TO TERMINATE 110% OF THE TOTAL NUMBER OF CABLES TERMINATING IN EACH CLOSET.
- 5 CABLING CONTRACTOR TO PROVIDE AND INSTALL A 48-PORT PATCH PANEL WITH ALL REQUIRED MOUNTING HARDWARE AND TERMINATION COMPONENTS. FOR THE TERMINATION OF ALL ACCESS POINT DATA CABLES IN THIS COMMUNICATIONS CLOSET. PANELS SHOWN ARE AN ESTIMATE. CONTRACTOR TO PROVIDE THE REQUIRED AMOUNT TO TERMINATE 110% OF THE TOTAL NUMBER OF CABLES TERMINATING IN EACH CLOSET.
- 6 CABLING CONTRACTOR TO PROVIDE AND INSTALL A 48-PORT PATCH PANEL WITH ALL REQUIRED MOUNTING HARDWARE AND TERMINATION COMPONENTS. FOR THE TERMINATION OF ALL SECURITY CABLES IN THIS COMMUNICATIONS CLOSET. PANELS SHOWN ARE AN ESTIMATE. CONTRACTOR TO PROVIDE THE REQUIRED AMOUNT TO TERMINATE 110% OF THE TOTAL NUMBER OF CABLES TERMINATING IN EACH CLOSET.
- 7 CABLING CONTRACTOR TO PROVIDE AND INSTALL A 48-PORT PATCH PANEL WITH ALL REQUIRED MOUNTING HARDWARE AND TERMINATION COMPONENTS. FOR THE TERMINATION OF ALL CONFERENCE ROOM/AUDIO VIDEO CABLES IN THIS COMMUNICATIONS CLOSET. PANELS SHOWN ARE AN ESTIMATE. CONTRACTOR TO PROVIDE THE REQUIRED AMOUNT TO TERMINATE 110% OF THE TOTAL NUMBER OF CABLES TERMINATING IN EACH CLOSET.
- 8 CABLING CONTRACTOR TO PROVIDE AND INSTALL A 2RU, HORIZONTAL CABLE MANAGER AT THIS LOCATION. CONTRACTOR TO PROVIDE OWNER WITH AN ADDITIONAL HORIZONTAL CABLE MANAGER PER PATCH PANEL INSTALLED, OWNER TO INSTALL AS NEEDED FOR NETWORK SWITCHES.
- 9 CABLING CONTRACTOR TO PROVIDE AND INSTALL LADDER TRAY ELEVATION KIT AND ALL REQUIRED MATERIALS TO MOUNT TO RACK.
- 10 CABLING CONTRACTOR TO PROVIDE AND INSTALL A RACK MOUNTED, 4RU FIBER OPTIC ENCLOSURE. ALL FIBER OPTIC TO THIS RACK/CABINET ARE TO BE TERMINATED IN THIS ENCLOSURE. PROVIDE AND INSTALL THE FIBER OPTIC ADAPTER PLATES REQUIRED TO ACCOMMODATE 110% OF THE INSTALLED FIBER OPTICS.
- 11 INDICATES A LOCATION TO BE DESIGNATED FOR THE INCOMING SERVICE FIBER BY OTHERS.
- 12 CABLING CONTRACTOR TO ROUTE FIBER OPTIC CABLING FROM FIRST FLOOR IT CLOSET TO SECOND FLOOR IT CLOSET AND TERMINATE ON FIBER OPTIC ENCLOSURE.

<div>Revision #</div> <div>Date</div>		CONSULTANTS		ARCHITECT		APPROVED: DIRECTOR		SHEET TITLE TELECOM RACK RISER DIAGRAMS		PROJECT TITLE NEW ADMINISTRATION BUILDING		VA PROJECT NUMBER		<div>Office of Construction and Facilities Management</div> <div>U.S. Department of Veterans Affairs</div>			
		STRUCTURAL / CIVIL ENGINEER H2B, INC. 1225 N. LOOP WEST, SUITE 900 HOUSTON, TX 77008 (713) 864-2900		M.E.P. ENGINEER SPUR DESIGN 1511 WESTPORT ROAD KANSAS CITY, MO 64111 (405) 642-6100		FIRE PROTECTION / TELECOM ENGINEER PAGE 400 W. CESAR CHAVEZ STREET, SUITE 500 AUSTIN, TX 78701 (512) 472-6721				PROJECT LOCATION 2002 HOLCOMBE BOULEVARD, HOUSTON, TX 77030		BUILDING NUMBER					
				<div>SPUR DESIGN</div> <div>320 NW 10th St, SUITE A Oklahoma City, OK 73103 spur-design.com</div> <div>1511 Westport Road Kansas City, MO 64111 spur-design.com</div>				APPROVED: CHIEF ENGINEER		DATE 06-27-2017		CHECKED TH				DRAWN BA	
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BID DOCUMENTS