

LOAD SERVED	KVA / Phase			CKT BRKR NO	NEUTRAL A, B, C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED
	A	B	C					A	B	C	
EXISTING LOAD	1.00	---	---	1P-20	1	2	1P-20	1.00	---	---	EXISTING LOAD
EXISTING LOAD	---	1.00	---	1P-20	3	4	1P-20	---	1.00	---	EXISTING LOAD
EXISTING LOAD	---	---	1.00	1P-20	5	6	1P-30	---	---	2.00	EXISTING LOAD
EXISTING LOAD	2.00	---	---	1P-25	7	8	1P-20	1.00	---	---	EXISTING LOAD
EXISTING LOAD	---	1.00	---	1P-15	9	10	1P-30	---	2.00	---	EXISTING LOAD
EXISTING LOAD	---	---	0.00	1P-20	11	12	1P-20	---	---	1.00	EXISTING LOAD
EXISTING LOAD	1.00	---	---	1P-20	13	14	1P-20	1.00	---	---	EXISTING LOAD
SPARE	---	0.00	---	1P-20	15	16	1P-20	---	0.00	---	SPARE
SPARE	---	0.00	0.00	1P-20	17	18	1P-20	---	---	0.00	SPARE
SPARE	0.00	---	---	1P-20	19	20	1P-20	0.00	---	---	SPARE
SPARE	---	0.00	---	1P-20	21	22	1P-20	---	0.00	---	SPARE
SPARE	---	0.00	0.00	1P-20	23	24	1P-20	---	---	0.00	SPARE
SPARE	0.00	---	---	1P-20	25	26	1P-30	2.00	---	---	EXISTING LOAD
SPARE	---	0.00	---	1P-20	27	28	1P-20	---	1.00	---	EXISTING LOAD
SPARE	---	0.00	0.00	1P-20	29	30	1P-20	---	---	1.00	EXISTING LOAD
SPARE	0.00	---	---	1P-25	31	32	1P-25	1.60	---	---	EXISTING LOAD
SPARE	---	0.00	---	1P-20	33	34	1P-20	---	1.60	---	EXISTING LOAD
SPARE	---	0.00	0.00	2P-20	35	36	1P-20	---	---	1.00	EXISTING LOAD (GF)
SPARE	0.00	---	---	1P-20	37	38	1P-20	0.00	---	---	SPARE
EXISTING LOAD	---	2.50	---	2P-30	39	40	1P-20	---	0.00	---	SPARE
SPARE	---	---	2.50	---	41	42	1P-20	1.00	---	0.00	EXISTING LOAD
SUB TOTAL	4.00	4.50	3.50				7.60	5.60	5.00	SUB TOTAL	
							11.60	10.10	8.50	TOTAL	

LOAD TYPE	CONNECTED KVA			NEC DEM FACTOR	DEMAND KVA		
	A	B	C		A	B	C
GENERAL LIGHTING	0.00	0.00	0.00	125%	0.00	0.00	0.00
RECEPT	10.60	10.10	8.50	<=10KVA@100% >10KVA@50%	3.33	3.33	3.33
MOTORS AND EQUIPMENT	0.00	0.00	0.00	125%	0.00	0.00	0.00
WATER HEATERS	0.00	0.00	0.00	100%	0.00	0.00	0.00
FIX ELEC. SPACE HEAT	0.00	0.00	0.00	100%	0.00	0.00	0.00
DEDICATED RECEPT	0.00	0.00	0.00	100%	0.00	0.00	0.00
SIGN	0.00	0.00	0.00	125%	0.00	0.00	0.00
TOTAL KVA PER PHASE	10.60	10.10	8.50		6.97	6.72	5.92
TOTAL DEMAND AMPERES PER PHASE					58	56	49
PANEL / FEEDER (TOTAL KVA)					19.60		
(TOTAL KVA) X 1000 = TOTAL AMPS							
VOLTS X 1.732					54		

LOAD SERVED	KVA / Phase			CKT BRKR NO	NEUTRAL A, B, C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED
	A	B	C					A	B	C	
EXISTING LOAD	1.00	---	---	1P-20	1	2	1P-20	1.00	---	---	EXISTING LOAD
EXISTING LOAD	---	1.00	---	1P-20	3	4	1P-20	---	1.00	---	EXISTING LOAD
EXISTING LOAD	---	---	1.00	1P-20	5	6	1P-20	---	---	1.00	EXISTING LOAD
EXISTING LOAD	1.00	---	---	1P-20	7	8	1P-20	2.00	---	---	EXISTING LOAD
EXISTING LOAD	---	1.00	---	1P-20	9	10	1P-30	---	2.00	---	EXISTING LOAD
EXISTING LOAD	---	---	1.00	1P-20	11	12	1P-30	---	---	2.00	EXISTING LOAD
EXISTING LOAD	2.50	---	---	2P-30	13	14	1P	---	---	---	SPACE
EXISTING LOAD	---	2.50	---	2P-30	15	16	2P-30	---	2.50	---	EXISTING LOAD
EXISTING LOAD	2.50	---	---	---	19	20	1P	---	---	---	SPACE
SPACE	---	---	---	1P	21	22	1P	---	---	---	SPACE
SPACE	---	---	---	1P	23	24	1P	---	---	---	SPACE
SPACE	---	---	---	1	25	26	1P	---	---	---	SPACE
SPACE	---	---	---	1P	27	28	1P	---	---	---	SPACE
SPACE	---	---	---	1P	29	30	1P	---	---	---	SPACE
SPACE	---	---	---	1P	31	32	1P	---	---	---	SPACE
SPACE	---	---	---	1P	33	34	1P	---	---	---	SPACE
SPACE	---	---	---	1P	35	36	1P	---	---	---	SPACE
SPACE	---	---	---	1P	37	38	1P	---	---	---	SPACE
SPACE	---	---	---	1P	39	40	1P	---	---	---	SPACE
SPACE	---	---	---	1P	41	42	1P	---	---	---	SPACE
SUB TOTAL	7.00	4.50	4.50				3.00	5.50	5.50	SUB TOTAL	
							10.00	10.00	10.00	TOTAL	

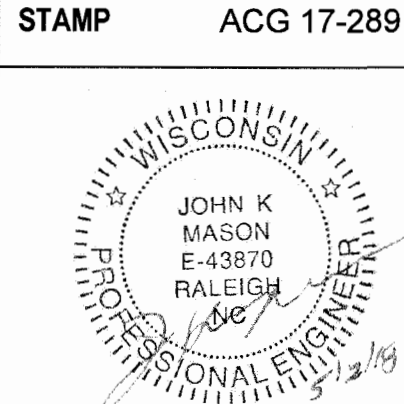
LOAD TYPE	CONNECTED KVA			NEC DEM FACTOR	DEMAND KVA		
	A	B	C		A	B	C
GENERAL LIGHTING	0.00	0.00	0.00	125%	0.00	0.00	0.00
RECEPT	10.00	10.00	10.00	>=10KVA@100% >10KVA@50%	3.33	3.33	3.33
MOTORS AND EQUIPMENT	0.00	0.00	0.00	125%	0.00	0.00	0.00
WATER HEATERS	0.00	0.00	0.00	100%	0.00	0.00	0.00
FIX ELEC. SPACE HEAT	0.00	0.00	0.00	100%	0.00	0.00	0.00
DEDICATED RECEPT	0.00	0.00	0.00	100%	0.00	0.00	0.00
SIGN	0.00	0.00	0.00	125%	0.00	0.00	0.00
TOTAL KVA PER PHASE	10.00	10.00	10.00		6.67	6.67	6.67
TOTAL DEMAND AMPERES PER PHASE					56	56	56
PANEL / FEEDER (TOTAL KVA)					20.00		
(TOTAL KVA) X 1000 = TOTAL AMPS							
VOLTS X 1.732					59		

LOAD SERVED	KVA / Phase			CKT BRKR NO	NEUTRAL A, B, C	CKT NO	CKT BRKR	KVA / Phase			LOAD SERVED
	A	B	C					A	B	C	
EXISTING LOAD	1.60	---	---	1P-25	1	2	1P-25	1.60	---	---	EXISTING LOAD
EXISTING LOAD	---	1.00	---	1P-20	3	4	1P-25	---	1.60	---	EXISTING LOAD
EXISTING LOAD	---	---	1.60	1P-25	5	6	2P-30	---	---	2.50	EXISTING LOAD
EXISTING LOAD	1.60	---	---	1P-25	7	8	---	2.50	---	---	EXISTING LOAD
EXISTING LOAD	---	1.00	---	1P-15	9	10	1P-25	---	1.60	---	EXISTING LOAD
EXISTING LOAD	---	---	1.00	1P-20	11	12	1P-15	---	---	1.00	EXISTING LOAD
EXISTING LOAD	2.00	---	---	1P-30	13	14	1P-15	1.00	---	---	EXISTING LOAD
EXISTING LOAD	---	1.60	---	1P-25	15	16	1P-25	---	1.60	---	EXISTING LOAD
EXISTING LOAD	---	---	2.00	1P-30	17	18	1P-20	---	---	---	SPARE
SPARE	---	---	---	1P-20	19	20	1P-20	---	---	---	SPACE
SPACE	---	---	---	1P	21	22	1P	---	---	---	SPACE
SPACE	---	---	---	1P	23	24	1P	---	---	---	SPACE
SPACE	---	---	---	1P	25	26	1P	---	---	---	SPACE
SPACE	---	---	---	1P	27	28	1P	---	---	---	SPACE
SPACE	---	---	---	1P	29	30	1P	---	---	---	SPACE
SPACE	---	---	---	1P	31	32	1P	---	---	---	SPACE
SPACE	---	---	---	1P	33	34	1P	---	---	---	SPACE
SPACE	---	---	---	1P	35	36	1P	---	---	---	SPACE
SPACE	---	---	---	1P	37	38	1P	---	---	---	SPACE
SPACE	---	---	---	1P	39	40	1P	---	---	---	SPACE
SPACE	---	---	---	1P	41	42	1P	---	---	---	SPACE
SUB TOTAL	5.20	3.60	4.60				5.10	4.80	3.50	SUB TOTAL	
							10.30	8.40	8.10	TOTAL	

LOAD TYPE	CONNECTED KVA			NEC DEM FACTOR	DEMAND KVA		
	A	B	C		A	B	C
GENERAL LIGHTING	0.00	0.00	0.00	125%	0.00	0.00	0.00
RECEPT	10.30	8.40	8.10	>=10KVA@100% >10KVA@50%	3.33	3.33	3.33
MOTORS AND EQUIPMENT	0.00	0.00	0.00	125%	0.00	0.00	0.00
WATER HEATERS	0.00	0.00	0.00	100%	0.00	0.00	0.00
FIX ELEC. SPACE HEAT	0.00	0.00	0.00	100%	0.00	0.00	0.00
DEDICATED RECEPT	0.00	0.00	0.00	100%	0.00	0.00	0.00
SIGN	0.00	0.00	0.00	125%	0.00	0.00	0.00
TOTAL KVA PER PHASE	10.30	8.40	8.10		6.82	5.87	5.72
TOTAL DEMAND AMPERES PER PHASE					57	49	48
PANEL / FEEDER (TOTAL KVA)					18.40		
(TOTAL KVA) X 1000 = TOTAL AMPS							
VOLTS X 1.732					51		

1 ELECTRICAL PANEL SCHEDULES
SCALE: NTS

FULLY SPRINKLERED

Revisions: Date:	CONSULTANT APOGEE Consulting Group Engineers Architects www.apogee.com 919-858-7420		ARCHITECT/ENGINEER OF RECORD Raleigh, NC Indianapolis, IN Pittsburgh, PA Virginia Beach, VA Atlanta, GA Fort Collins, CO		STAMP ACG 17-289 	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title ELECTRICAL PANEL SCHEDULES	Phase CONSTRUCTION DOCUMENTS	Project Title Whole Health Clinic Alteration		Project Number 676-18-201
	Location Tomah, WI									Building Number B407	EP604
						Issue Date 5/2/2018	Checked MAH	Drawn AT			

FIRE ALARM GENERAL NOTES

- FIRE ALARM SYSTEM AND COMPONENTS SHALL MEET THE FOLLOWING CODES:
 - NFPA 13- STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEM.
 - NFPA 14- STANDARD FOR THE INSTALLATION OF STANDPIPE SYSTEM.
 - NFPA 20- STANDARD FOR THE INSTALLATION OF FIRE PUMP.
 - NFPA 70 NATIONAL ELECTRIC CODES.
 - NFPA 12 NATIONAL FIRE ALARM CODE.
 - NFPA 90A STANDARD FOR THE INSTALLATION OF AIR CONDITIONING.
 - NFPA 101 LIFE SAFETY CODE.
 - VA STANDARDS.
 - ANSI S2.41 AUDIBLE EMERGENCY EVACUATION.
 - NFPA 88A STANDARD FOR PARKING STRUCTURE.
- FIRE ALARM SYSTEM SHALL COMPLY WITH FACTORY MUTUAL RESEARCH CORPORATION (FM).
- ALL FIRE ALARM CABLING SHALL BE IN CONDUIT. CONDUIT SHALL BE FACTORY PAINTED RED.
- THE CONTRACTOR IS RESPONSIBLE FOR TESTING THE EXISTING FIRE ALARM SYSTEM IN THE AREA OF WORK AND ADJACENT AREA FULLY, PRIOR TO THE START OF WORK, AND DEFICIENCIES OR NON-OPERATIONAL COMPONENTS OF THE FIRE ALARM SYSTEM SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE ENGINEER AT THAT TIME. UPON COMPLETION OF THE WORK, THE AFFECTED AREA OF THE WORK AND ADJACENT AREA SHALL BE FULLY TEST AGAIN AT 100%. ANY PORTION OF THE FIRE ALARM SYSTEM WHICH IS NON-FUNCTIONAL OR NON-COMPLIANT WITHIN THE AREA OF WORK OR ADJACENT SPACES AT THAT TIME, SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER/PROJECT.
- THE EXISTING FIRE ALARM SYSTEM/VENDOR/CONTRACTOR (SILENT KNIGHT) SHALL TERMINATE, TEST AND PROGRAM ALL NEW FIRE ALARM DEVICES. COORDINATE WITH COR.
- CONNECT ALL SPRINKLER DEVICES TO THE FIRE ALARM SYSTEM. COORDINATE LOCATION WITH THE SPRINKLER CONTRACTOR.
- CONNECT ALL ELECTROMAGNETIC DOOR HOLD OPEN DEVICES TO THE FIRE ALARM SYSTEM. COORDINATE WITH THE DOOR HARDWARE CONTRACTOR.
- PROVIDE RELAY CONTROL MODULES FOR PACS. COORDINATE WITH PACS CONTRACTOR & COR.

FIRE ALARM SYMBOL LEGEND

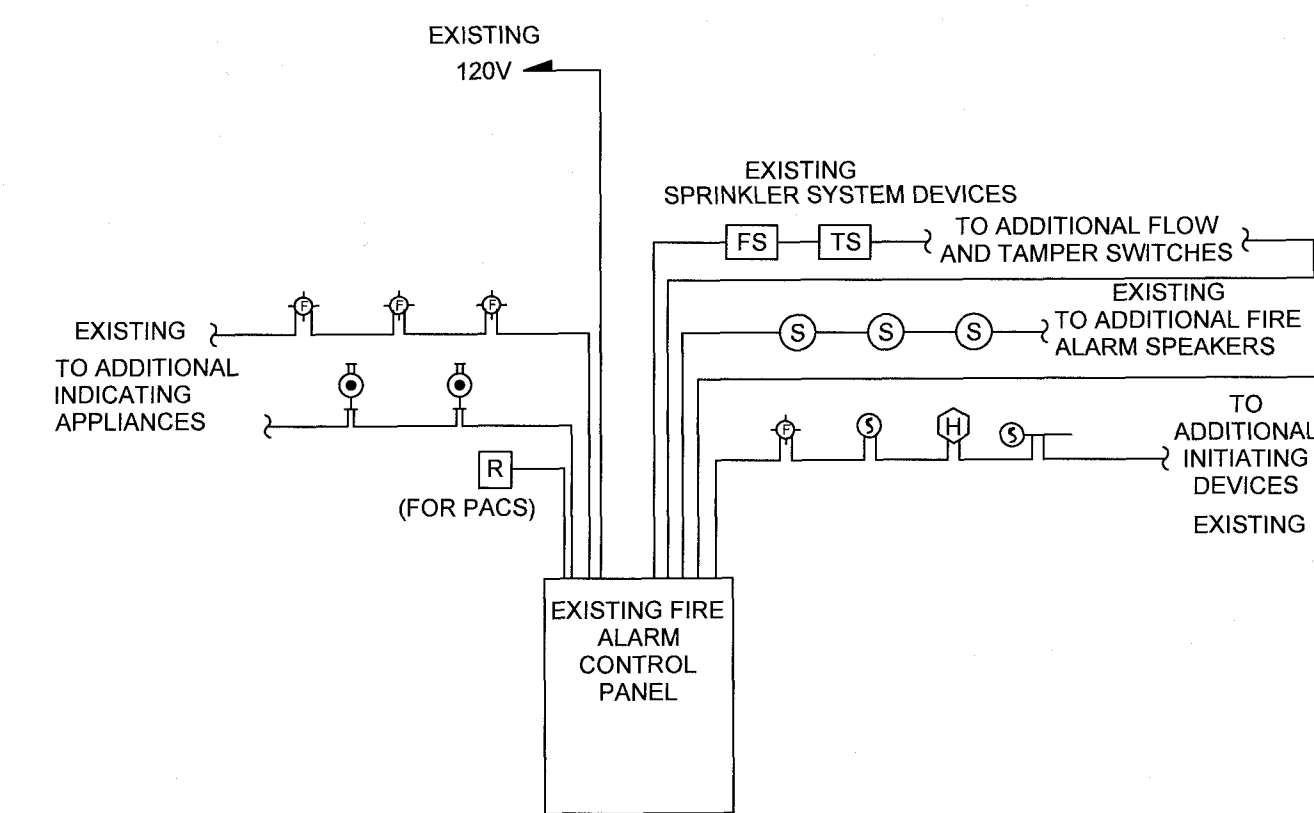
SYMBOL	HEIGHT	DESCRIPTION
	48"	FIRE ALARM PULL STATION
	90"	FIRE ALARM SPEAKER/STROBE (CLG MTD) XX - CANDELA
	90"	CENTRAL ALARM SPEAKER/STROBE (CLG MTD)
		FIRE ALARM DOOR OPEN HOLDER
		FIRE ALARM SMOKE DETECTOR
		FIRE ALARM CEILING MOUNTED SPEAKER
		FIRE ALARM DUCT SMOKE DETECTOR
		FIRE ALARM HEAT DETECTOR
		FIRE ALARM CONTROL PANEL
		FIRE ALARM NAC PANEL
		FIRE ALARM ANNUNCIATOR PANEL
		FLOW SWITCH
		TAMPER SWITCH
		POST INDICATOR VALVE
		REMOTE LIGHT/TEST SWITCH FOR DUCT DETECTORS
	90"	FIRE ALARM BELL
		CONTROL RELAY

ALL HEIGHTS ARE TO CENTER OF DEVICE UNLESS NOTED OTHERWISE.
TOP HEIGHT TO TOP OF DEVICE
ANY HEIGHTS INDICATED IN PLANS SHALL SUPERCEDE THOSE LISTED HERE.

FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX

INPUT DEVICE	OUTPUT						
	1. SOUND GENERAL BUILDING ALARM FOR OTHER HIGHRISE	2. NOTIFY FIRE DEPARTMENT	3. NOTIFY SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT RESPONSE	4. CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	5. CLOSE DAMPERS ON FAN PROXIMATE TO DETECTOR	6. SHUT DOWN AIR HANDLER SERVED BY THE DETECTOR	7. RECALL ELEVATOR
DUCT SMOKE DETECTOR	X	X					
AREA SMOKE DETECTOR *	X	X					
DOOR RELEASE SMOKE DETECTOR *	X	X		X	X		
ELEVATOR SMOKE DETECTOR *	X	X					X
MANUAL PULL STATION	X	X		X			
SPRINKLER WATERFLOW/PRESSURE SWITCH	X	X		X			
WATER CONTROL VALVE TAMPER			X				
Fire pump (Any Alarm condition required by NFPA 20)							
High/Low Pressure Dry Pipe Sprinkler System							
Kitchen Hood Suppression System							
Gas Extinction Systems							

* SMOKE DETECTORS, OTHER THAN DUCT SMOKE DETECTORS, SHALL NOTIFY BUILDING OCCUPANTS.
** THOSE DOORS THAT ARE REQUIRED TO BE TIED TO THE FIRE ALARM SYSTEM SUCH AS DELAYED EGRESS AND ACCESS CONTROLLED DOORS.
DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS.



- NOTES:
- ALL FIRE ALARM WIRING SHALL BE IN EMT CONDUIT FACTORY PAINTED RED.
 - ALL WIRING SHALL BE AS RECOMMENDED BY MANUFACTURER.
 - PROVIDE NEW DEVICES TO MATCH EXISTING (AS REQUIRED). SEE FA-102.
 - PROVIDE ZONE ADAPTER MODULES TO CONNECT NON ADDRESSABLE DEVICES SUCH AS FLOW AND TAMPER SWITCHES, DOOR HOLD-OPEN DEVICES, AND CONTROL SIGNALS.
 - PROVIDE POWER SUPPLY OR NAC (NOTIFICATION APPLIANCE CIRCUIT) PANEL AS REQUIRED FOR ADDITIONAL DEVICES.
 - PROVIDE ADDITIONAL POWER AMPLIFIERS FOR SPEAKERS AS REQUIRED.
 - EXISTING SILENT KNIGHT FIRE ALARM PANEL TO REMAIN.
 - VERIFY LOCATION OF SPRINKLER SYSTEM DEVICES WITH THE SPRINKLER CONTRACTOR.
 - PROVIDE ADDITIONAL POWER SUPPLIES AS REQUIRED FOR DOOR HOLD OPEN DEVICES.

1 FIRE ALARM RISER TYPICAL
SCALE: NTS

FULLY SPRINKLERED

Revisions: Date:	CONSULTANT Raleigh, NC Indianapolis, IN Pittsburgh, PA Virginia Beach, VA Atlanta, GA Fort Collins, CO	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 Nagel Architects Project Number: 17058	STAMP ACG 17-289 	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title FIRE ALARM NOTES, SYMBOLS, AND ABBREVIATIONS	Phase CONSTRUCTION DOCUMENTS	Project Title Whole Health Clinic Alteration	Project Number 676-18-201
					Approved:	Location Tomah, WI	Building Number B407	Drawing Number FA001
					Issue Date 5/2/2018	Checked MAH	Drawn AT	

SHEET NOTES:

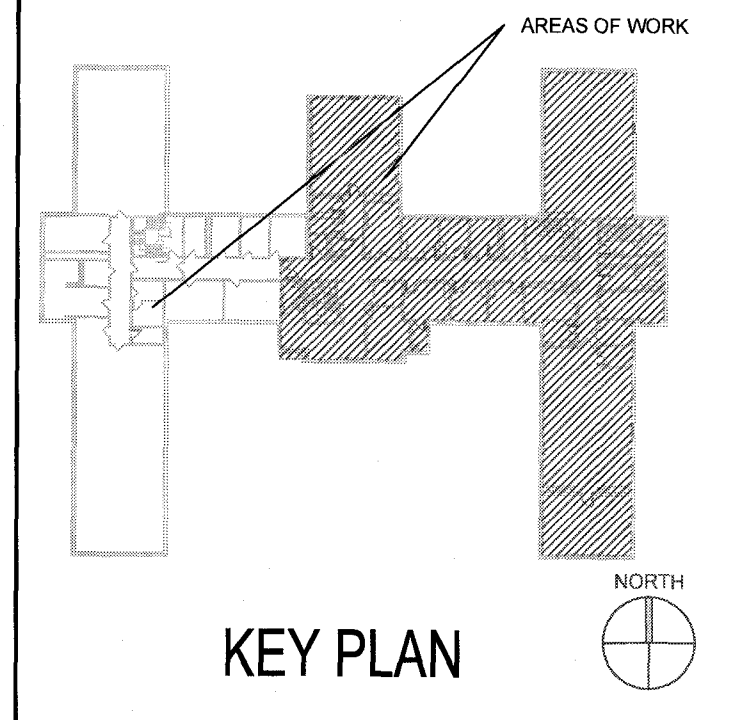
- A. PROTECT EXISTING FIRE ALARM DEVICES DURING CONSTRUCTION
- B. FIRE ALARM SYSTEM SHALL BE ACTIVE DURING CONSTRUCTION PER NFPA.
- C. FIRE ALARM SHALL MEET NFPA AND VA FIRE PROTECTION DESIGN MANUAL REQUIREMENTS.

SHEET KEY NOTES:

- 1. EXISTING SURFACE MOUNTED FIRE ALARM DEVICES AND SMOKE DETECTORS. RETAIN AND REUSE IN EXISTING LOCATIONS.
- 2. RELOCATE EXISTING DEVICES TO NEW CEILING, COORDINATE WITH ARCHITECTURAL CEILING PLAN (AC-101).
- 3. RELOCATE CORRIDOR FIRE ALARM DEVICES TO NEW CEILING, COORDINATE WITH REFLECTED CEILING PLAN (AC-101).
- 4. RELOCATED FIRE ALARM DEVICES, SEE DEMOLITION PLAN (ED-102).
- 5. NEW MAGNETIC HOLD OPENS FOR CORRIDOR DOORS. TIE TO LOCAL FA CONTROL PANEL. MATCH EXISTING SILENT KNIGHT FIRE ALARM EQUIPMENT.
- 6. NEW FIRE ALARM DEVICE (RATING AS NOTED). COORDINATE WITH EXISTING FA SYSTEM.



1 PARTIAL PLAN 2ND FLOOR FIRE ALARM
SCALE: 1/8" = 1'-0"



KEY PLAN

FULLY SPRINKLERED

Revisions:	Date:

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STAMP ACG 17-289

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PROFESSIONAL ENGINEER

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title
PARTIAL PLAN SECOND FLOOR FIRE ALARM

Approved:

Phase
CONSTRUCTION DOCUMENTS

Project Title
Whole Health Clinic Alteration

Location
Tomah, WI

Issue Date
5/2/2018

Checked
MAH

Drawn
AT

Project Number
676-18-201

Building Number
B407

Drawing Number
FA102

TECHNOLOGY GENERAL NOTES

- ALL COMMUNICATIONS DEVICES AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDED PROCEDURES, ALL APPLICABLE LOCAL AND STATE CODES, AMERICANS WITH DISABILITIES ACT AND WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, IBCS STANDARDS AND APPLICABLE VA STANDARDS.
- PROVIDE ADDITIONAL SUPPORT FOR DEVICES, AND EQUIPMENT WHERE THE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING.
- FIRESTOP, DRAFTSTOP, SMOKESTOP AND/OR PROTECT THE ANNULAR SPACE AROUND ALL PENETRATIONS THROUGH WALLS, PARTITIONS, FLOORS, CEILINGS, AND ROOF IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, UL LISTING REQUIREMENT AND THE APPLICABLE BUILDING CODES.
- ALL CABLING SHALL COMPLY WITH THE LATEST EDITION OF TELECOMMUNICATIONS DISTRIBUTION METHOD MANUAL AND ANSITIA/EIA PUBLICATIONS.
- COMPLY WITH ANSITIA/EIA 758 AND 607B OR 607A - GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS IN COMMERCIAL BUILDING.
- COMPLY WITH ANSITIA/EIA 568B - COMMERCIAL BUILDING TELECOMMUNICATIONS WIRING STANDARD.
- COMPLY WITH ANSITIA/EIA 569B - COMMERCIAL BUILDING STANDARD FOR TELECOMMUNICATIONS PATHWAYS AND SPACES.
- COMPLY WITH NFPA 70 NATIONAL ELECTRICAL CODE.
- COMPLY WITH NFPA 99 HEALTHCARE FACILITIES CODE.
- COMPLY WITH NFPA 101 LIFE SAFETY CODE.
- COORDINATE ANY AND ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION SO AS TO AVOID CONFLICT DURING CONSTRUCTION.
- MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES, TO INDICATE A QUALITY STANDARD, AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED. ALL PRODUCTS MUST COMPLY WITH "BUY AMERICAN ACT".
- MOUNTING HEIGHTS INDICATED ARE TO CENTER OF DEVICE, BOXES, OUTLET, OR EQUIPMENT UNLESS NOTED OTHERWISE.
- ALL CONDUITS SHALL BE RGS OR EMT UNLESS OTHERWISE NOTED.
- ALL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
- ANY DISCREPANCY BETWEEN PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE VA COR. FOR CLARIFICATION. THE MORE STRINGENT OF THE THEM SHALL TAKE PRECEDENCE.
- ANY LOCATION (CORRIDOR, ROOM OR ADJACENT SPACE) WITH TWO OR MORE VISIBLE FIRE ALARM NOTIFICATION APPLIANCES WITHIN THE FIELD OF VIEW SHALL HAVE VISIBLE APPLIANCES PROGRAMMED TO FLASH IN SYNCHRONIZATION.
- ALL COPPER OUTLETS/CONNECTORS SHALL BE TIAEIA CAT 6.
- ALL WORK AREA OUTLETS SHALL BE 6 PIN, CAT 6 KEYSTONE JACK WIRED PER T598B AS DIRECTED BY THE VA COR.
- LABELING SHALL BE ACCORDING TO LATEST ANSITIA 606A OR 606B EDITION AS WELL AS THE STANDARDS SET FORTH BY THE VA HOSPITAL OIT.
- PROVIDE A MINIMUM OF 12" CLEARANCE ABOVE THE CABLE TRAY PER TIAEIA 569B PARAGRAPH 4.5.6.2.
- ALL CABLING INSTALLED ABOVE THE CEILING SHALL BE PLENUM-RATED.
- THE VA WILL CONDUCT A WAP SURVEY AND PROVIDE THE SURVEY TO THE CONTRACTOR. CONTRACTOR SHALL INSTALL CABLING AND EQUIPMENT PER THE SURVEY. COORDINATE WITH CORIT.

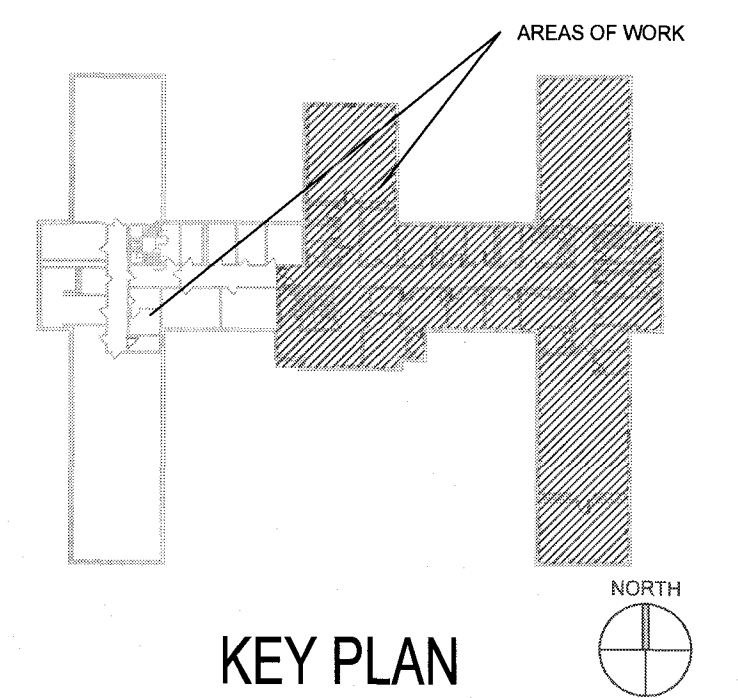
TECHNOLOGY ABBREVIATIONS LIST

ADO	AUTOMATIC DOOR OPERATOR	OC	ON CENTER
AF	ABOVE FINISH FLOOR	OIT	OFFICE OF INFORMATION AND TECHNOLOGY
AFR	AREA OF REFUGE	PACS	PHYSICAL ACCESS CONTROL SYSTEM
CCTV	CLOSED CIRCUIT TELEVISION	PAN	PUBLIC ADDRESS AND MASS NOTIFICATION SYSTEM
COAX	COAXIAL CABLE	PB	PUSH BUTTON
COMM	COMMUNICATION	PDU	RACK POWER DISTRIBUTION UNITS
DC	DOOR CONTACT SWITCH	POE	POWER OVER ETHERNET
DN	DOWN	PTZ	PAN/TILT/ZOOM
DO	DOOR OPERATOR	PR	PAIR
DVR	DIGITAL VIDEO RECORDER	Rx	REQUEST TO EXIT
EEB	EMERGENCY EXIT BUTTON	SEP	SERVICE ENTRANCE PROTECTION
EL	ELECTRICAL STRIKE	SM	SINGLE MODE FIBER
FA	FIRE ALARM	TEL	TELEPHONE
FAP	FIRE ALARM PANEL	TGB	TELECOMM GROUND BUS BAR
FAAP	FIRE ALARM ANNUNCIATOR PANEL	TMGB	TELECOMM MAIN GROUND BUS BAR
FO	FIBER OPTIC	TP	TWISTED PAIR
IT	INTERCOMMUNICATION ROOM	TR	TELECOMM ROOM
MATV	MASTER ANTENNA TELEVISION	TTB	TELEPHONE TERMINAL BOARD
MM	MULTI MODE FIBER	TV	TELEVISION
NAC	NETWORK APPLIANCES CONTROL PANEL	WAP	WIRELESS ACCESS POINT
NTS	NOT TO SCALE	WM	WIRE MANAGEMENT
NVR	NETWORK VIDEO RECORDER	UL	UNDERWRITERS LABORATORY
		UPS	UNINTERRUPTIBLE POWER SUPPLY
		UTP	UNSHIELDED TWISTED PAIR

TECHNOLOGY SYMBOL LEGEND

SYMBOL	HEIGHT	DESCRIPTION
▼2	18"	DATA OUTLET - 2-4 PR UTP
▼4	18"	DATA OUTLET - 4-4 PR UTP
▼6	18"	DATA OUTLET - 6-4 PR UTP
▼1	18"	DATA OUTLET - 1-4 PR UTP
▼1	48"	TELCO OUTLET - 1-4 PR UTP
W	48"	WALL PHONE - 1-4 PR UTP
◇	CEILING	WIRELESS ACCESS POINT - 2-4 PR UTP
TV	AS NOTED	TV OUTLET WALL MOUNTED
PACS	6' TO TOP	PHYSICAL ACCESS CONTROL SYSTEM
K	48"	CARD READER (K - KEYPAD)
ED	DOOR	ELECTRONIC LOCKING MECHANISM
ED	DOOR	ELECTRONIC PANIC HARDWARE
ED	DOOR	DOOR CONTACT
ED	ABOVE DOOR	REQUEST FOR EXIT SENSOR
ED	DOOR	DOOR OPERATOR
H	48"	HANDWAVE
H	48"	EMERGENCY EXIT BUTTON TO RELEASE DOOR (EEB)
M	88"	MOTION DETECTOR
M	54"	INTERCOM WITH CAMERA
M	DESK	INTERCOM MASTER WITH PUSH TO RELEASE DOOR
NAC	6' TO TOP	NURSE CALL EQUIPMENT CABINET
NC	ABOVE DOOR	NURSE CALL DOME LIGHT
NC	48" TO TOP	NURSE CALL SWITCH (PULL CORD)
CCD		CCTV DOME CAMERA FIXED
CCD		CCTV DOME CAMERA PAN/TILT/ZOOM
R	FLOOR	FOUR POST OIT EQUIPMENT RACK
R	FLOOR	TWO POST OIT EQUIPMENT RACK
R	FLOOR	OIT EQUIPMENT CABINET
MATV	6' TO TOP	MATV EQUIPMENT CABINET
CCV	FLOOR	CCTV EQUIPMENT CABINET
L	ABOVE CEILING	LADDER CABLE TRAY
G	18"	GROUND BUS
F	8"	4x8x3/4" FIRE RATED TTB
F	FLOOR	FLOOR BOX FOR DATA
K	48"	PATIENT ROAM ALERT ACCESS CONTROL KEYPAD
A	CEILING	PATIENT ROAM ALERT ANTENNA
S	CEILING	CEILING MOUNTED SPEAKERS
S	96"	WALL MOUNTED SPEAKERS
		ELECTRICAL STRIP MOLD (OUTLETS 48" OC) MTD 48" AFF UON. DUAL CHANNEL, POWER AND LOW VOLTAGE.

ALL HEIGHTS ARE TO CENTER OF DEVICE UNLESS NOTED OTHERWISE.
ANY HEIGHTS INDICATED IN PLANS SHALL SUPERCEDE THOSE LISTED HERE.
SEE DRAWINGS FOR MORE INFORMATION.
NOTE: NOT ALL SYMBOLS ARE USED



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Revisions:	Date:

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Drawing Title
**TECHNOLOGY NOTES, SYMBOLS,
AND ABBREVIATIONS**

Approved:

Phase
**CONSTRUCTION
DOCUMENTS**

Project Title
**Whole Health Clinic
Alteration**

Location
Tomah, WI

Issue Date
5/2/2018

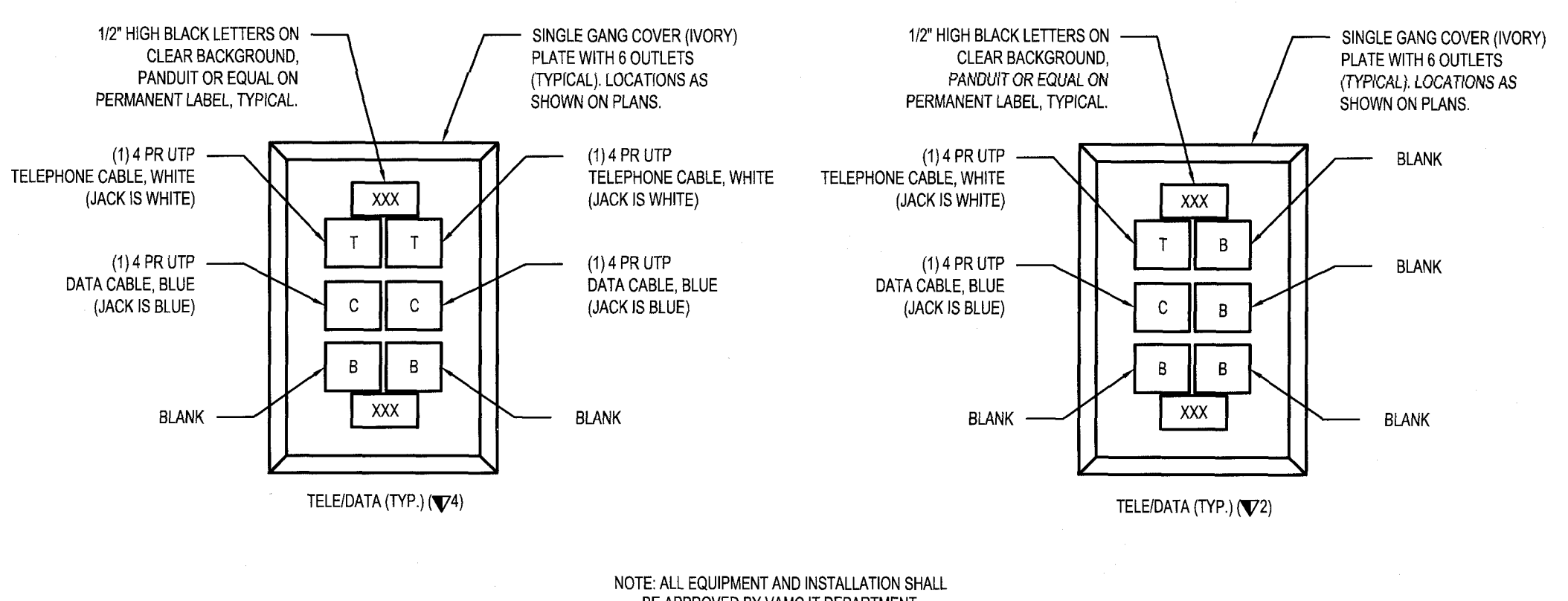
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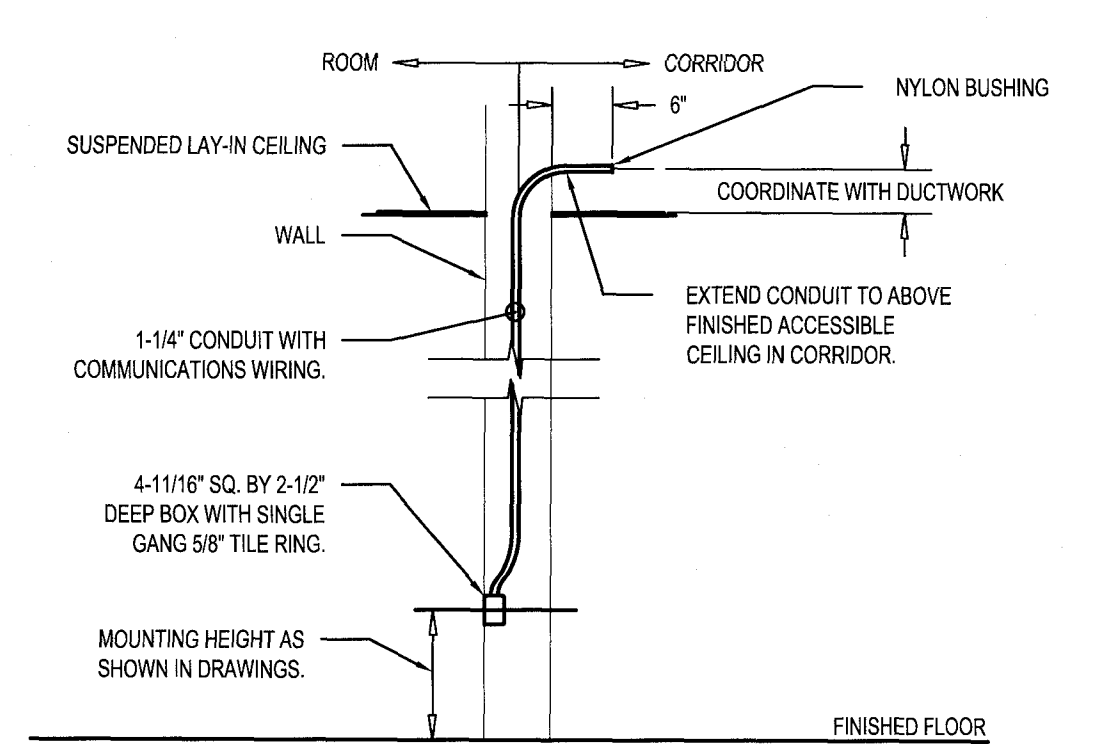
Project Number
676-18-201

Building Number
B407

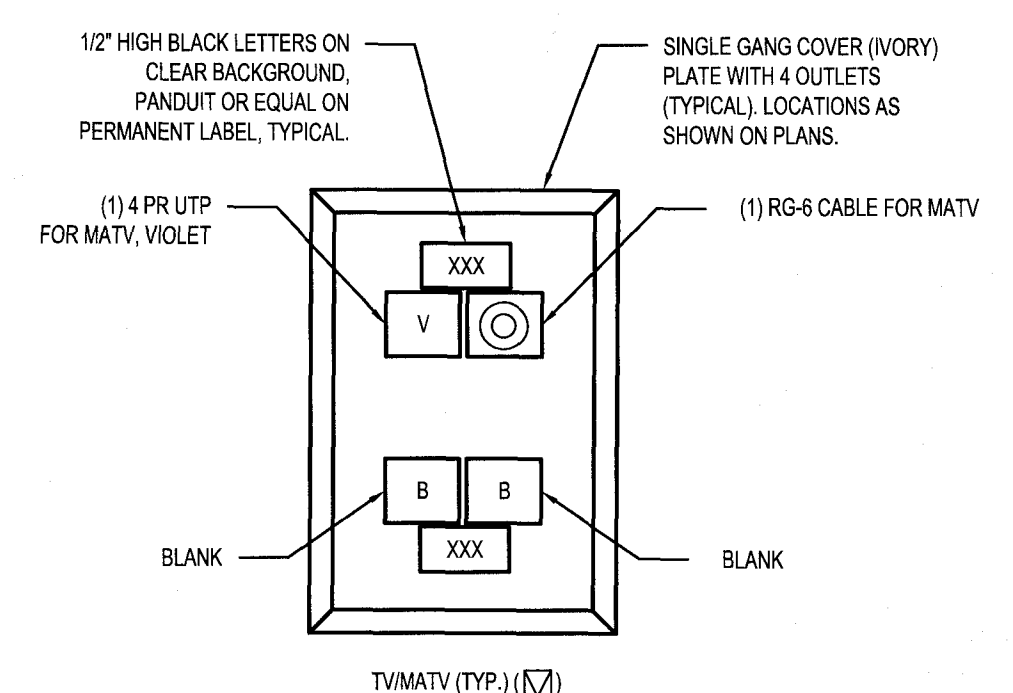
Drawing Number
TK001



1 TELECOMMUNICATIONS FACEPLATE DETAIL
SCALE: NTS

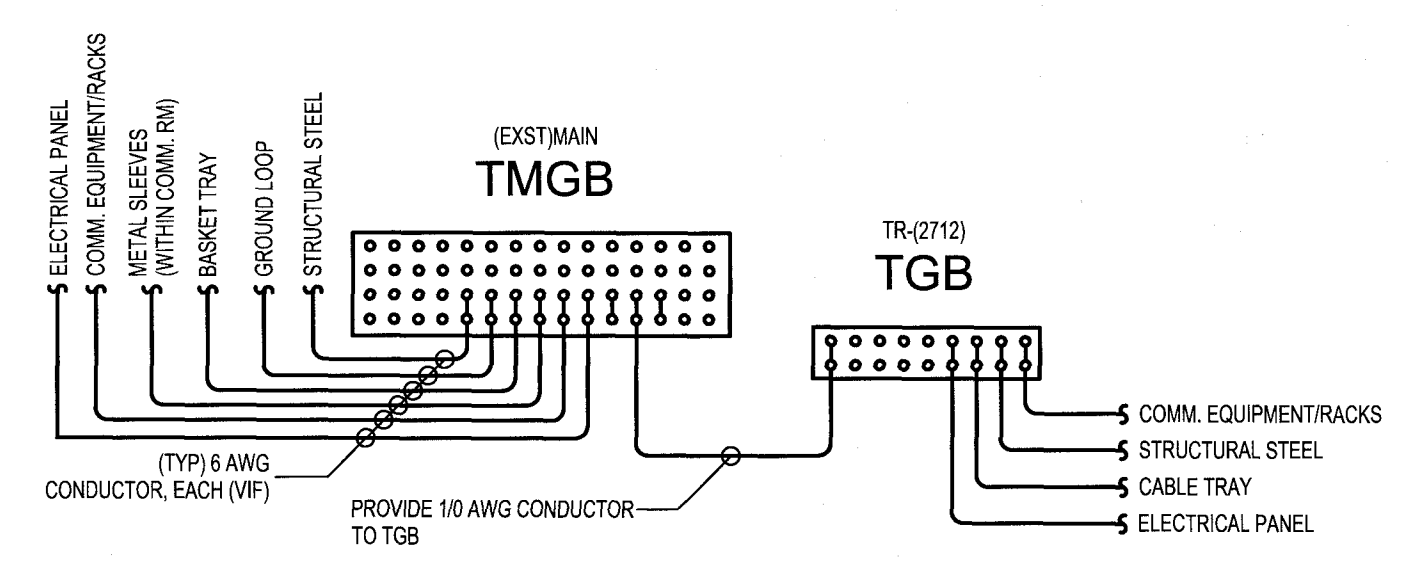


2 TELE/ DATA OUTLET INSTALLATION DETAIL
SCALE: NTS

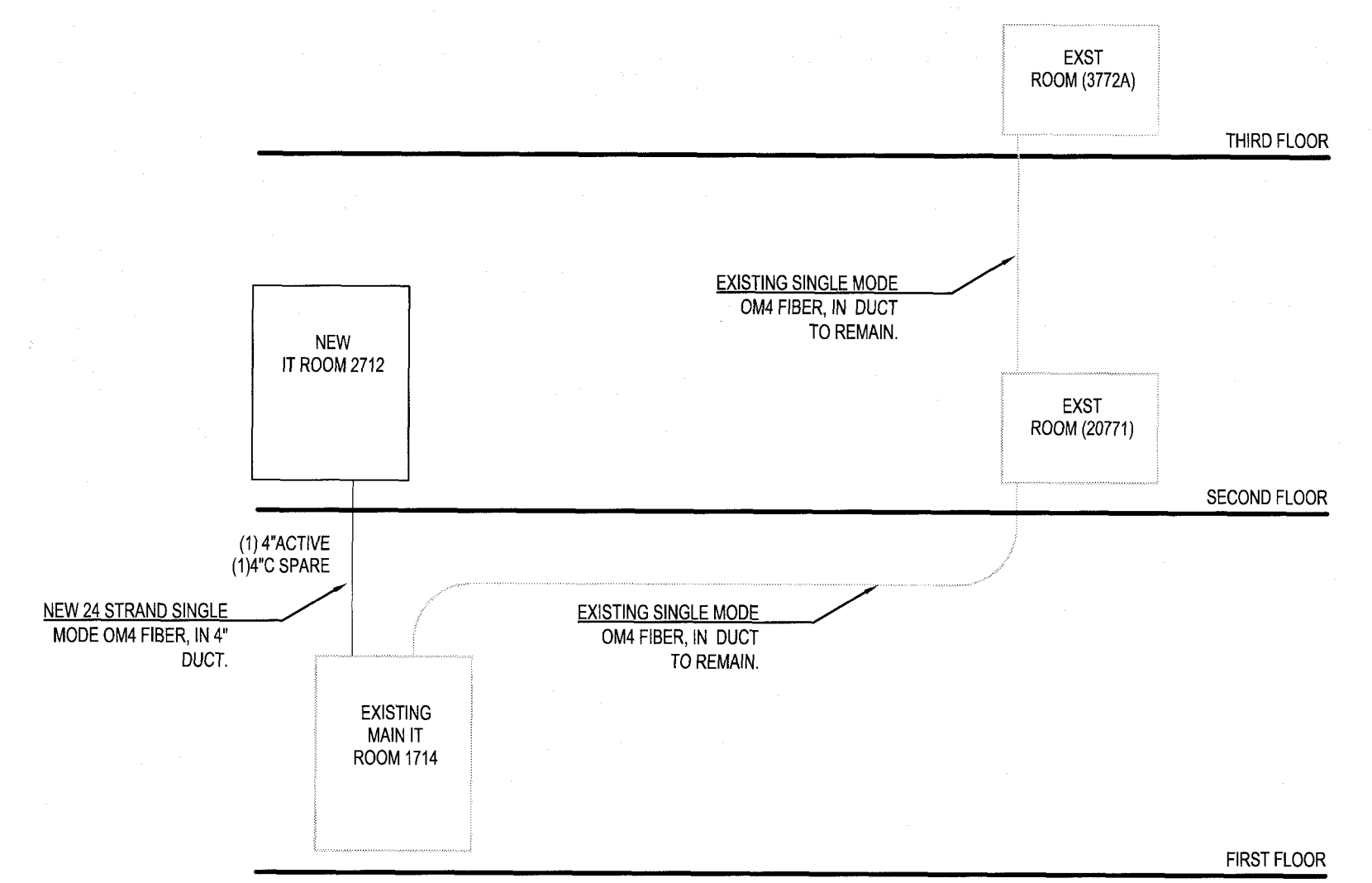


3 TV OUTLET FACEPLATE DETAIL
SCALE: NTS

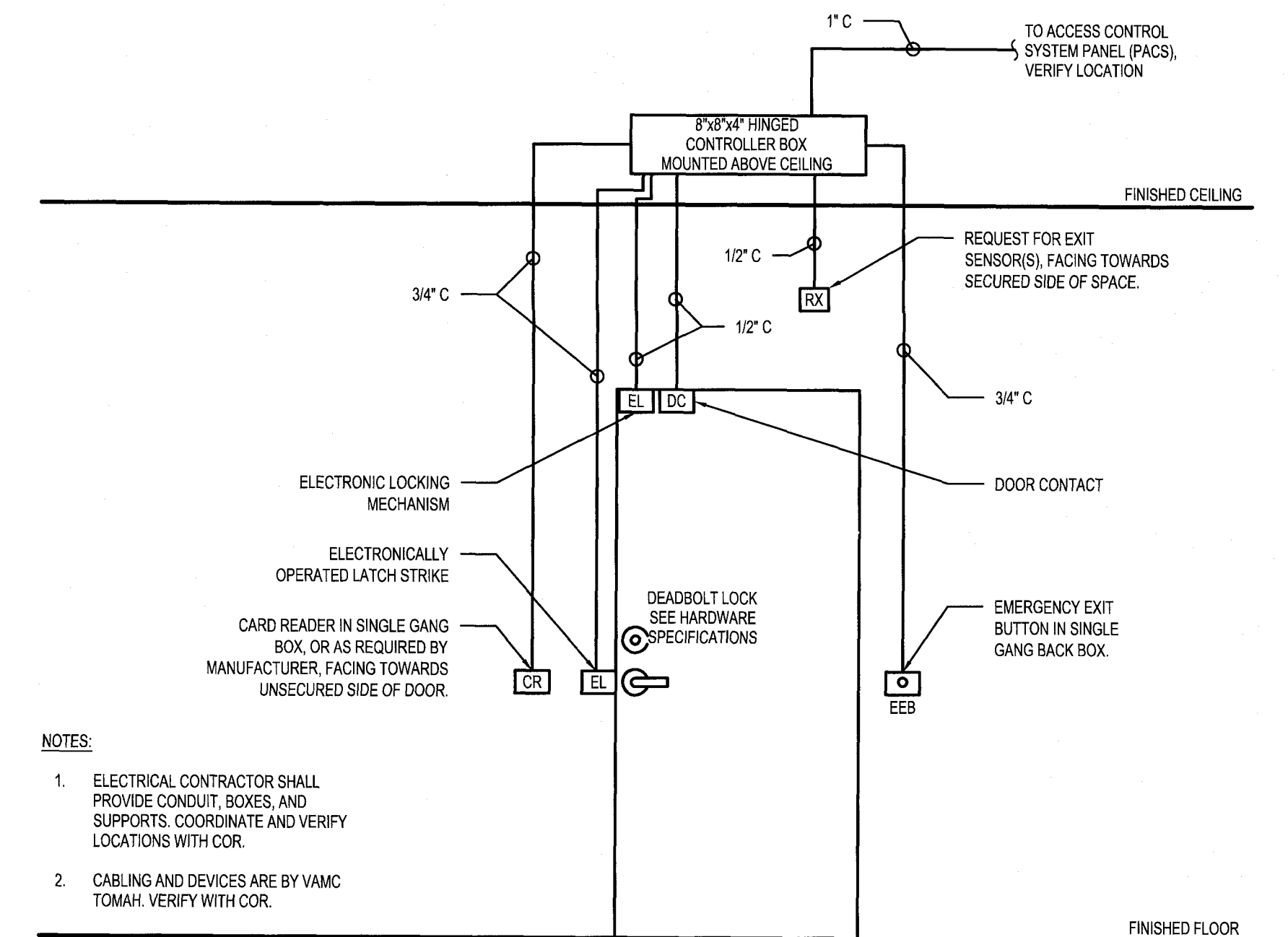
- NOTES:**
1. ALL CONNECTIONS TO THE TMGB AND TGB SHALL BE MADE WITH COMPRESSION STYLE LONG BARREL CONNECTORS ON THE CONDUCTOR AND 2-LUG BOLTED CONNECTIONS TO THE GROUNDING BARS. CONNECTIONS TO STEEL SHALL BE WITH SILICON BRONZE HARDWARE. CONNECTION TO SLEEVES OR CONDUITS SHALL BE BY AN APPROVED GROUNDING BUSHING.
 2. LOCATE TGB ON THE LEFT OF THE TTB AND 18" AFF.
 3. ALL CONDUCTORS USED FOR GROUNDING SHALL BE MARKED AT CONNECTION POINT AND EVERY TEN FEET (10') THEREAFTER WITH A LABEL, IDENTIFYING IT AS THE TELECOMMUNICATIONS GROUNDING SHEDDING (TGB). USE PANDUIT #LTYK OR APPROVED EQUIVALENT.
 4. NOT USED.
 5. PROVIDE 2" x 2 1/4" x 1/4" W TGB.
 6. CONTRACTOR SHALL CLEAN THE BUS BAR AND APPLY ANTI-OXIDANT PRIOR TO FASTENING THE CONNECTORS TO THE BUS BAR.
 7. ALL COPPER BACKBONE CABLING SHALL MEET THE REQUIREMENTS OF TIA/EIA 568-C FOR RISER CABLE.



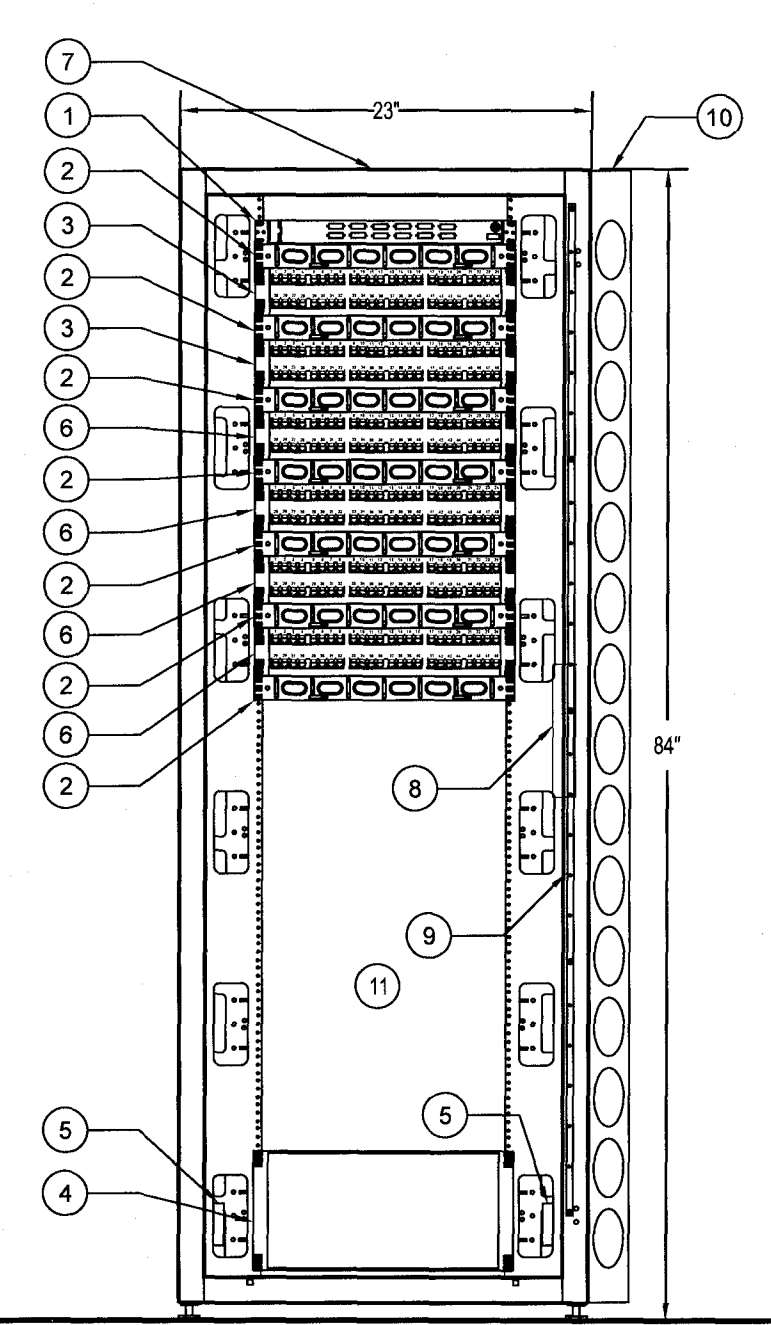
4 TELECOMMUNICATIONS GROUNDING DETAIL
SCALE: NTS



5 SYSTEM RISER DIAGRAM
SCALE: NTS



6 SINGLE DOOR CARD ACCESS DETAIL - INTERIOR
SCALE: NTS



- TYPICAL DATA RACK DETAIL NOTES:**
1. 48 PORT FIBER OPTIC PATCH PANEL WITH COUPLERS.
 2. HORIZONTAL WIRE MANAGEMENT.
 3. 48 PORT COPPER PATCH PANEL, VOICE.
 4. UNINTERRUPTIBLE POWER SUPPLY.
 5. DUPLEX RECEPTACLE. SEE ELECTRICAL DRAWINGS.
 6. 48 PORT COPPER PATCH PANEL, DATA.
 7. 2-POST EQUIPMENT RACK WITH POWER STRIP, GROUND BUS, AND VERTICAL & HORIZONTAL WIRE MANAGEMENT.
 8. VERTICAL POWER STRIP.
 9. VERTICAL GROUND BUS.
 10. VERTICAL WIRE MANAGEMENT.
 11. SPACE FOR VA EQUIPMENT.
- RACK, RACK ACCESSORIES, AND PATCH PANELS ARE BY THE CONTRACTOR. POE SWITCHES ARE BY THE VA. COORDINATE WITH COR AND OIT REPRESENTATIVE.

7 DATA RACK DETAIL
SCALE: NTS

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Drawing Title
TECHNOLOGY DETAILS

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Whole Health Clinic Alteration

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Tomah, WI

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676-18-201

Building Number
B407

Drawing Number
TK501

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MAH

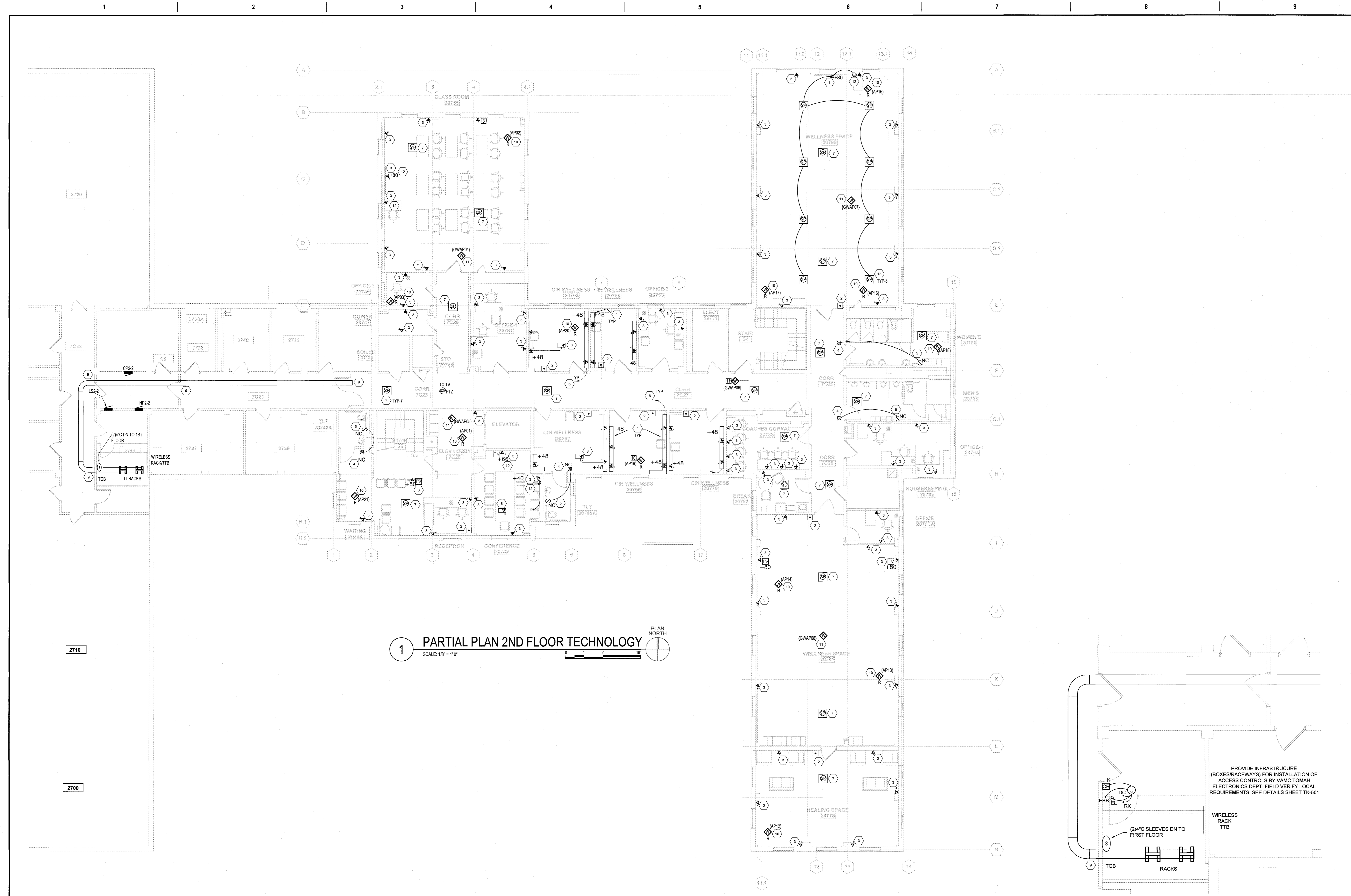
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SHEET NOTES:

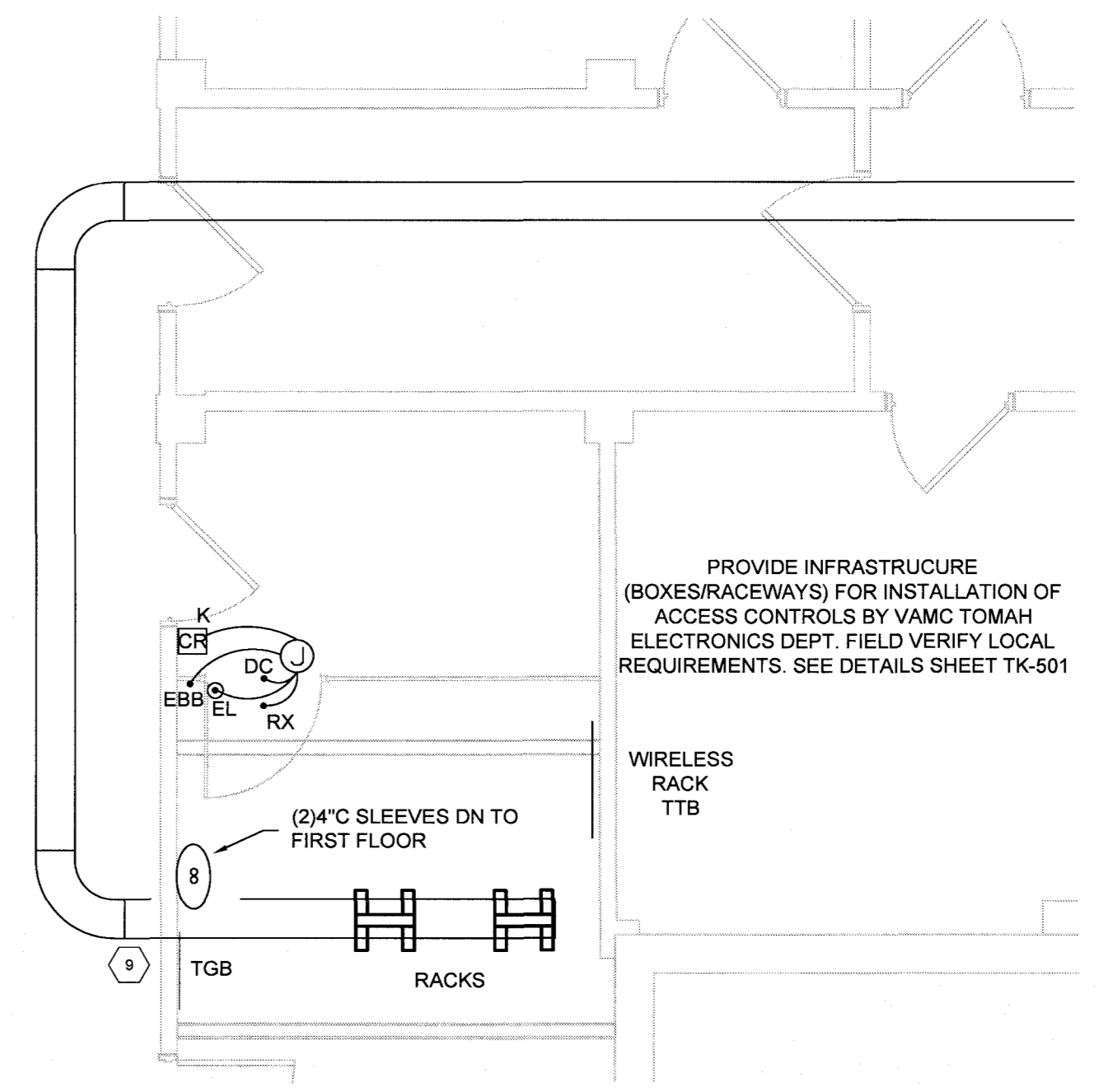
- COORDINATE DATA/TELECOMMUNICATIONS DEVICE LOCATIONS AND CABLING WITH TOMAH VAMC O&T STANDARDS.
- DATA/TELECOMMUNICATIONS CABLING WITHIN THE WHOLE HEALTH RENOVATIONS AREA SHALL BE ROUTED ABOVE THE CEILING IN D-RINGS OR J-HOOKS. COORDINATE WITH FIELD CONDITIONS. PROVIDE REQUIRED SLEEVES AT FIRE RATED WALLS/PENETRATIONS TO ROUTE CABLING DEVICE LOCATIONS.

SHEET KEY NOTES:

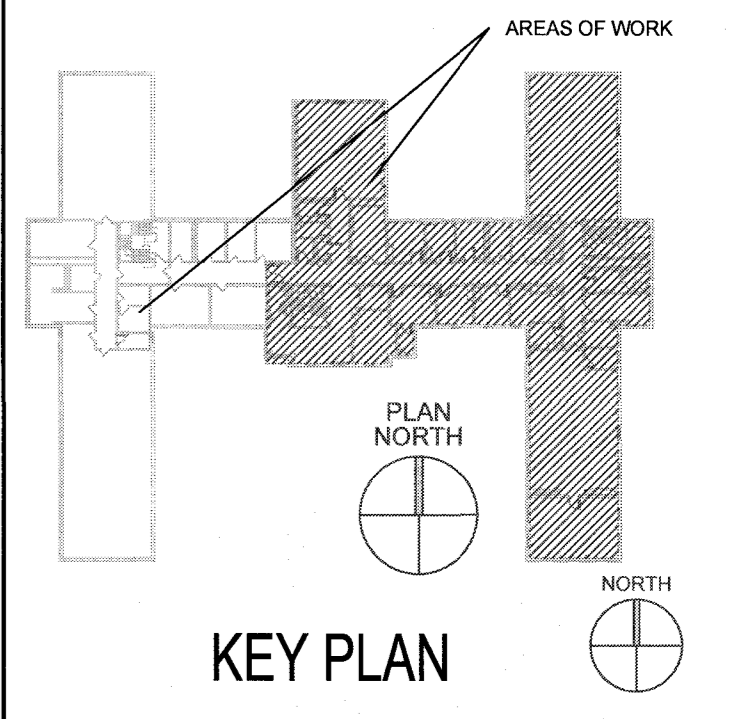
- TYPICAL (SURFACE METAL RACEWAY) AT 48" AFF WITH DEVICES AS NOTED. TWO CHANNEL (POWER/ DATA-COM). DEVICES 48" O.C.
- PANIC BUTTON MOUNTED AT 48" AFF (BY VAMC). PROVIDE #22AWGTP BACK TO TELEPHONE CABINET AT (2071). COORDINATE WITH VAMC TOMAH ELECTRONICS DEPARTMENT.
- NEW DEVICES WITH SURFACE MODULAR RACEWAY.
- NEW DOME LIGHT (120V) FOR NURSE CALL AT ADJACENT TR. EDWARDS CFA SERIES (7641-1NS) OR EQUAL
- NEW NURSE CALL SWITCH AT 48" AFF. EDWARDS CFA SERIES (6537) OR EQUAL
- (TYPICAL) 1-1/4" TO ACCESSIBLE CEILING SPACE FOR CONDUCTOR ACCESS/ROUTING TO IT (2712)
- CEILING MOUNTED CENTRAL PA SPEAKER. BOGEN CSD2X2 OR APPROVED EQUAL. PROVIDE SPEAKER, BACKBOX, AND WIRING FOR CONNECTION TO EXISTING CENTRAL PA SYSTEM. CORRIDOR (7C23).
- RECESSED FLOOR BOX (POKE THRU), WIREMOLD RC4 SERIES OR EQUAL. COORDINATE WITH GENERAL TRADES AND STRUCTURE. FIELD VERIFY LOCATION WITH OWNER PRIOR TO CONSTRUCTION. PROVIDE FOR 4" CORE THROUGH FLOOR. TWO GANG DEVICE (2) DUPLEX RECEPTACLE AND (4) DATA PORTS. SEE EP-102.
- CABLE TRAY (BASKET TYPE), 12"W X 6" DEEP. COORDINATE WITH EXISTING CONDITIONS AT CORRIDOR. PROVIDE 2" C (FIRE/SMOKE RATED SLEEVES) WHEN CROSSING RATE RATED ASSEMBLIES.
- WIRELESS (HUB) RELOCATED TO NEW LAYING CEILING AT LOCATIONS SHOWN. FIELD VERIFY LOCATIONS WITH TOMAH VAMC O&T. PROVIDE (1) CAT 6 CABLE (BLUE) TO EACH LOCATION FROM NEW TECHNOLOGY CLOSET (2712).
- GUEST WIRELESS (HUB) FIELD VERIFY LOCATIONS WITH TOMAH VAMC O&T. PROVIDE (1) CAT 6 CABLE (PURPLE) TO EACH LOCATION FROM NEW TECHNOLOGY CLOSET (2712)
- PROVIDE 2" C FOR HDMI & CAT 6 CABLE ROUTING BETWEEN WORKSTATION AND PROJECTOR/TV LOCATION. HDMI CABLE AND CONNECTORS ARE BY OWNER.
- CEILING MOUNTED SELF POWERED SPEAKER. BOGEN ACC2X2 OR APPROVED EQUAL. PROVIDE SPEAKER, BACKBOX, AND WIRING FOR CONNECTION TO OWNERS SOUND SYSTEM AT WELLNESS (20796).



1 PARTIAL PLAN 2ND FLOOR TECHNOLOGY
SCALE: 1/8" = 1'-0"



2 ENLARGED PLAN TECHNOLOGY (IT 2712)
SCALE: 1/4" = 1'-0"



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