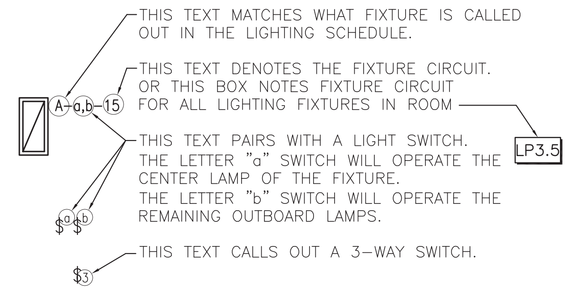
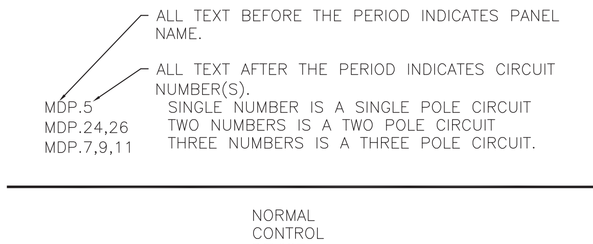
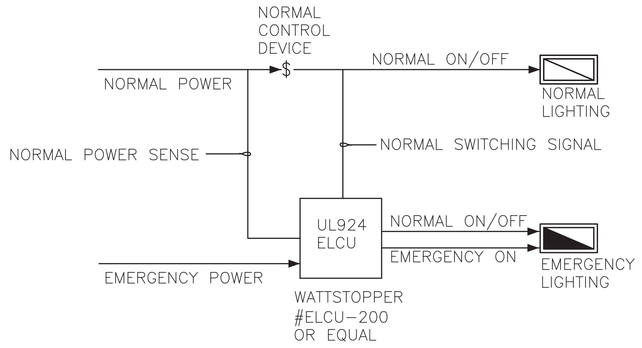
CIRCUITING / SWITCHING







LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	REFERENCE CATALOG #	LAMPS	VOLTS
A	2X4 LED RECESSED VOLUMETRIC LIGHT FIXTURE, 4500 LMS MINIMUM, 50 WATT DRIVER, 4000K COLOR. DRIVER MUST BE ACCESSABLE FROM BELOW; 0-10V DIMMING CONTROL	COOPER COLUMBIA	2AC-42-UNV-LP840-CD LEPC24-4044G-LL-EDU	LED	MVOLT
B	2X2 LED RECESSED VOLUMETRIC LIGHT FIXTURE, 3400 LMS MINIMUM, 43 WATT DRIVER, 4000K COLOR. DRIVER MUST BE ACCESSABLE FROM BELOW; 0-10V DIMMING CONTROL	COOPER COLUMBIA	2AC-23-UNV-L840-CD LEPC22-4033G-LL-EDU	LED	MVOLT
D	6" LED DOWNLIGHT 35K LAMP, CLEAR LENS	LITHONIA OR APPROVED EQUAL	DOM6 LED 900L 35K 120 DL61	LED	120
⊠	EXIT LIGHT, CAST ALUMINUM, AC ONLY POWERED WITH LED LAMPS, (SINGLE FACE). MATCH EXISTING BUILDING FIXTURES. FOR USE WITH GENERATOR.	SURE-LITES LITHONIA APPROVED EQUAL	CX61RW LES-W-1-R-120/277	LED	DUAL
⊠	EXIT LIGHT, CAST ALUMINUM, A/C ONLY POWERED WITH LED LAMPS, (DOUBLE FACE). MATCH EXISTING BUILDING FIXTURES. FOR USE WITH GENERATOR.	SURE-LITES LITHONIA APPROVED EQUAL	CX62RW LES-W-2-R-120/277	LED	DUAL
F	4' LENSED LED STRIPLIGHT, CHAIN HUNG, 4000K, 4600 LUMENS	LITHONIA OR APPROVED EQUAL	ZL2 L48 4600L D75 LP840	LED	MVOLT
G	2' LENSED LED STRIPLIGHT, WALL MOUNT, 4000K, 2600 LUMENS	LITHONIA OR APPROVED EQUAL	ZL2 L48 4600L LP840	LED	MVOLT
J	4' WALL MOUNTED DIRECT-INDIRECT FLUORESCENT FIXTURE 4000K LED	CORELITE	L1W-WM-2-L40-1C-UNV-SU-WA	LED	UNV
J8	SAME AS FIXTURE "J" EXCEPT 8' IN LENGTH	CORELITE	L1W-WM-2-L40-1C-UNV-SU-WA	LED	UNV
K	4' LED WALL MOUNT. 1 UP / 2 DOWN MODULE CONFIGURATION 4000K, NON-DIMMING, CLEAR POLYCARBONATE	FAIL-SAFE OR APPROVED EQUAL	FMB-D-4-1250-1250-7-40-UNV-80/84-ED	LED	MVOLT
L	48" UNDERCABINET FIXTURE; SOLID FRONT, 4000K LED, ON/OFF CONTROLLED BY WALL SWITCH, 0-10V DIMMING	FAIL-SAFE OR APPROVED EQUAL	UCL-4-LD2-40-A12125-ED-UNV	LED	UNV
L2	SAME AS "L" EXCEPT 24" FIXTURE	FAIL-SAFE OR APPROVED EQUAL	UCL-2-LD2-40-A12125-ED-UNV	LED	UNV

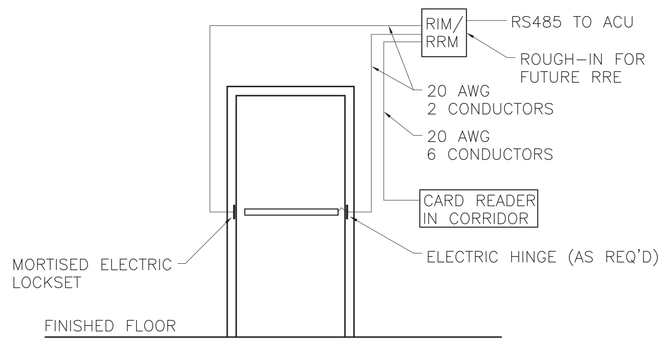
GENERAL NOTES:
1. DUE TO THE LIMITED SPACE ABOVE THE DROP CEILING, FIXTURE HEIGHT IS CRITICAL. 2x2 & 2x4 FIXTURES LISTED ABOVE SHOULD BE CONSIDERED AT OR VERY NEAR MAXIMUM HEIGHT.
2. PROVIDE MASTER/SATELLITE CONFIGURATION WHERE APPLICABLE.
3. PROVIDE SINGLE OR DUAL BALLASTED FIXTURES PER LAYOUT. MULTI-TAP BALLASTS ACCEPTABLE.
4. ALL 4' T8 LAMPS SHALL BE A FOCUS ON ENERGY QUALIFIED HIGH PERFORMANCE T8 LAMP.
5. ALL BALLAST FOR 4' T8 LAMPS SHALL BE A FOCUS ON ENERGY QUALIFIED HIGH PERFORMANCE T8 BALLAST.
6. ALL FIXTURES WITH THE LETTER "E" AFTER THEIR TYPE WILL BE SUPPLIED WITH BATTERY BACKUP RATED AT 90 MINUTES OF OPERATING TIME.
7. ON/OFF SWITCH LOCATED ON THE YOKE. ELECTRICAL CONTRACTOR SHALL PROVIDE UNISTRUT SUPPORT CHANNEL FRAMING MOUNTED TO BUILDING STRUCTURE FOR SUPPORT OF FIXTURE. FIXTURE SHALL BE SUPPORTED COMPLETELY INDEPENDENTLY FROM ACOUSTICAL TILE CEILING.

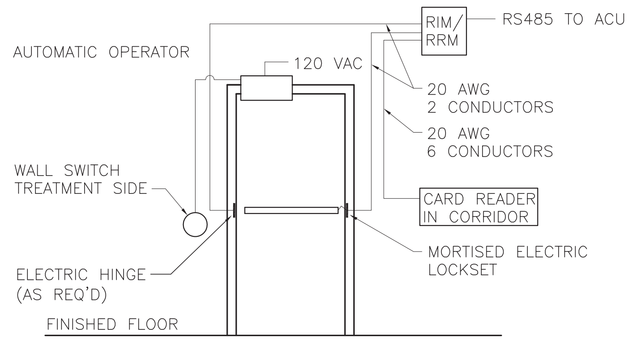
SYMBOL LINEWEIGHT LEGEND

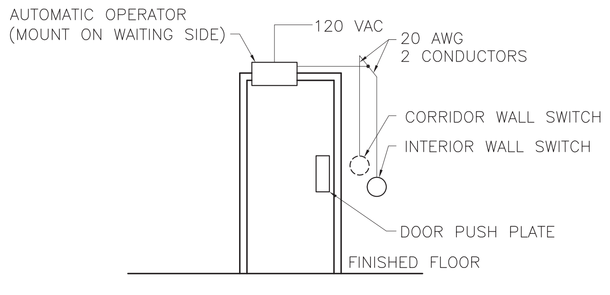
LIGHT SOLID LINES	= EXISTING DEVICE(S) TO REMAIN
HEAVY, DASHED LINES	= EXISTING DEVICE(S) TO BE REMOVED
HEAVY, SOLID LINES	= NEW DEVICE(S) TO BE INSTALLED

ELECTRICAL SHEET INDEX

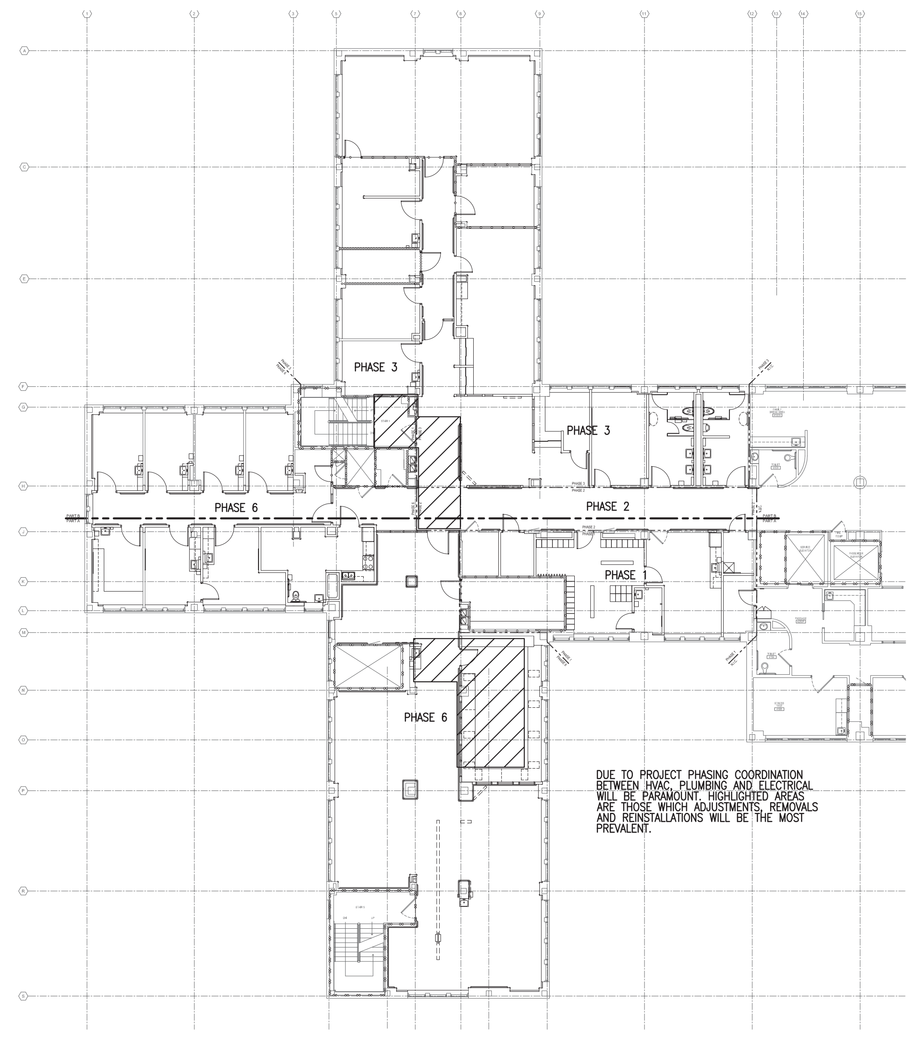
E001	ELECTRICAL SCHEDULES AND NOTES
E002	ELECTRICAL SCHEDULES AND NOTES
ED100	ELECTRICAL DEMOLITION PLAN 4TH FLOOR OVERALL
ED101	ELECTRICAL DEMOLITION PLAN 4TH FLOOR PART A
ED102	ELECTRICAL DEMOLITION PLAN 4TH FLOOR PART B
EL100	ELECTRICAL LIGHTING PLAN 4TH FLOOR OVERALL
EL101	ELECTRICAL LIGHTING PLAN 4TH FLOOR PART A
EL102	ELECTRICAL LIGHTING PLAN 4TH FLOOR PART B
EL103	ELECTRICAL COORDINATION PLAN 3RD AND 5TH FLOORS
EP100	ELECTRICAL POWER & SYSTEMS PLAN 4TH FLOOR OVERALL
EP101	ELECTRICAL POWER & SYSTEMS PLAN 4TH FLOOR PART A
EP102	ELECTRICAL POWER & SYSTEMS PLAN 4TH FLOOR PART B
EY101	ELECTRICAL PANELBOARDS
EY102	ELECTRICAL PANELBOARDS
FA100	ELECTRICAL FIRE ALARM PLAN OVERALL
FA101	ELECTRICAL FIRE ALARM PLAN 4TH FLOOR PART A
FA102	ELECTRICAL FIRE ALARM PLAN 4TH FLOOR PART B







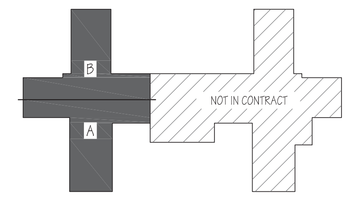
1 TYPICAL POWERED DOOR OPERATIONS
NO SCALE



2 PHASING DRAWING
1/16" = 1'-0"

NORTH

THE DEMOLITION PLANS HAVE BEEN PREPARED TO ASSIST THE CONTRACTOR IN DETERMINING THE SCOPE OF DEMOLITION WORK TO BE INCLUDED IN THIS PROJECT. DUE TO CONDITIONS BEYOND OUR CONTROL (LOCKED ROOMS, STAFF OCCUPIED ROOMS AND OBSTRUCTIONS THAT CANNOT BE MOVED ie CUBICLE WALLS, EQUIPMENT, FURNITURE) THIS DRAWING IS NOT INTENDED TO BE A COMPLETE INDICATION OF ALL DEMOLITION WORK REQUIRED TO COMPLETE THE PROJECT. THE CONTRACTOR SHOULD REVIEW ALL DRAWINGS AND SPECIFICATIONS, INCLUDING DEMOLITION SHOWN FOR OTHER TRADES, AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS, IN ORDER TO DETERMINE THE SCOPE OF DEMOLITION WORK.



KEY PLAN - FOURTH FLOOR
NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL SCHEDULES AND NOTES
Approved: Project Director
Project Title: Renovate Four West
Location: IRON MOUNTAIN, MICHIGAN
Date: 01/22/2014
Checked: ASR
Drawn: LA
Project Number: 585-12-132
Building Number: 1
Drawing Number: E001
Dwg. 84 of 100

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

OCCUPANCY SENSOR SCHEDULE

(DT)	MULTI-TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR WITH PHOTOCELL CONTROL AND RELAY: WATTSTOPPER: #LS-101 PROVIDE WITH LOW VOLATAGE POWER PACK. HUBBELL: #OMNIDT2000RP PROVIDE WITH MP120A POWER PACK, TIE RELAY AND PHOTOCELL AHEAD OF ROOM SWITCHING.
(OS)	MULTI-TECHNOLOGY, CEILING MOUNTED OCCUPANCY SENSOR (LINE VOLTAGE) WATTSTOPPER: DT-355-3 HUBBELL: #OMNIDT2000
$ ob oc	MULTI-TECHNOLOGY WALL SWITCH SENSOR PIR & ULTRASONIC DUAL SWITCHING, DUAL RELAY, LIGHT LEVEL SENSING. FITS IN SINGLE GANG BOX, SINGLE TRIM RING: WATTSTOPPER: #DW-200 HUBBELL: #LHMTD2
$ Mo	PIR SINGLE SWITCH SENSOR WITH LIGHT LEVEL SENSOR, FITS IN SINGLE GANG BOX, SINGLE TRIM RING: WATTSTOPPER: #PW-100 HUBBELL: #LHIRSI
$ ob Mo	PIR WALL SWITCH SENSOR WITH DUAL SWITCHING, DUAL RELAY AND LIGHT LEVEL SENSOR. FITS IN SINGLE GANG BOX, SINGLE TRIM RING: WATT STOPPER: #PW-200 HUBBELL: #LHIRD2

GENERAL NOTES:

E.C. SHALL CONTACT ARCHITECT FOR COLOR SELECTION PRIOR TO ORDER OF ANY SENSOR.

ELECTRICAL ABBREVIATIONS

AC	ABOVE COUNTERTOP	MG	MED GAS PANEL
AFF	ABOVE FINISH FLOOR	MTD	MOUNTED
AFG	ABOVE FINISH GRADE	OCC	OCCUPANCY
ANNC	ANNUNICIATOR	PC	PLUMBING CONTRACTOR
CC	CONTROLS CONTRACTOR	PNL	PANEL
DPST	DOUBLE POLE SINGLE THROW	SPST	SINGLE POLE SINGLE THROW
EC	ELECTRICAL CONTRACTOR	TC	TIME CLOCK
EM	EMERGENCY	TR	TAMPER RESISTANT
EX	EXISTING	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
EXR	EXISTING RELOCATED	UNO	UNLESS NOTED OTHERWISE
GC	GENERAL CONTRACTOR	VFD	VARIABLE FREQUENCY DRIVE
GFI	GROUND FAULT INTERRUPT	WP	WEATHER PROOF
HP	HORSEPOWER	20A	20 AMP
LV	LOW VOLTAGE	ø	PHASE
LMS	LUMENS	3W	3 WIRE
MC	MECHANICAL CONTRACTOR	20/1	20 AMP SINGLE PHASE
MCA	MINIMUM CIRCUIT AMPS		
MDP	MAIN DISTRIBUTION PANEL		

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE IN CONFORMANCE WITH NATIONAL, STATE, AND LOCAL CODES AND/OR ORDINANCES.
2. SEE ARCHITECTURAL, MECHANICAL, & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS.
3. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO GIVE APPROXIMATE LOCATIONS AND OVERALL DESIGN INTENT. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCTS, MATERIALS, AND ELECTRICAL METHODS WHICH HAVE NOT BEEN SHOWN OR INDICATED BUT ARE REQUIRED FOR A COMPLETE SYSTEM TO THE STANDARDS OF THE INDUSTRY.
4. INSTALL LIGHTING FIXTURES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE SUPPORTING DEVICES FOR ADEQUATE SUPPORT OF FIXTURES FROM STRUCTURE.
5. UPON COMPLETION OF THE ELECTRICAL WORK, THE INSTALLATION SHALL BE TESTED FOR CONTINUITY, GROUNDS, AND SHORT CIRCUITS. THE ELECTRICAL CONTRACTOR SHALL DEMONSTRATE PROPER PERFORMANCE OF ALL SYSTEMS. ALL DEFECTIVE WORK OR MATERIALS SHALL BE REPLACED OR REPAIRED AS NECESSARY AND RETESTED.
6. ELECTRICAL RACEWAYS THAT PENETRATE FIRE RATED ASSEMBLIES SHALL BE SLEEVED AND SEALED AS PER THE LOCAL BUILDING CODE.
7. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A TEMPORARY ELECTRICAL SYSTEM FOR THE PROJECT. AT LEAST ONE 120 VOLT SINGLE PHASE RECEPTACLE SHALL BE PROVIDED FOR EACH 500 SQUARE FEET OF FLOOR SPACE. SUFFICIENT TEMPORARY LIGHTING SHALL BE PROVIDED TO ALLOW ALL CONTRACTORS TO COMPLETE THEIR WORK. TEMPORARY ELECTRICAL CIRCUITS SHALL BE EQUIPPED WITH COMBINATION GROUND FAULT INTERRUPTER AND CIRCUIT BREAKER PER NEC. TEMPORARY ELECTRICAL SYSTEM SHALL BE INCLUDED IN THIS BID.
8. ELECTRICAL DEVICES/EQUIPMENT SHOWN AS DASHED AND BOLD ARE EXISTING TO BE REMOVED, ELECTRICAL DEVICES/EQUIPMENT SHOWN AS LIGHT AND SOLID ARE EXISTING TO REMAIN, AND ELECTRICAL DEVICES/EQUIPMENT SHOWN AS BOLD AND SOLID SHALL BE NEW.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH-IN, ALL WIRING & JACKS FOR COMMUNICATIONS DEVICES, INCLUDING 4" SQUARE, MINIMUM 2-1/8" DEEP BACKBOX WITH SINGLE GANG MUD RING AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING WITH 90 DEGREE BEND INTO THE ROOM AND PLASTIC BUSHING.
10. PROTECT TELEMETRY AND OTHER LOW VOLTAGE CABLE FROM DEMOLITION OPERATIONS. DO NOT DISRUPT WITHOUT WRITTEN OWNER APPROVAL UPON 5 DAY MINIMUM NOTICE.
12. ALL RECEPTACLES TO HAVE I.D. TAG ON COVERPLATE STATING THE PANEL AND CIRCUIT NUMBER THAT FEEDS THAT RECEPTACLE.
13. ALL CRITICAL & CRITICAL UPS CIRCUITED RECEPTACLES ARE TO HAVE RED OUTLETS AND STAINLESS STEEL COVERPLATES.
14. ALL LIFE SAFETY RECEPTACLES ARE TO HAVE RED OUTLETS AND STAINLESS STEEL COVERPLATES.
15. CABLE TRAY SHALL BE WIRE BASKET TYPE CABLE TRAY 12" WIDE BY 4" DEEP. FITTINGS SHALL HAVE 12" RADIUS MINIMUM. ALL TRAY SHALL BE GROUNDED AND BONDED PER NEC REQUIREMENTS. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND ROUTING OF CABLE TRAY WITH OTHER TRADES. CABLE TRAY SHALL BE AS MANUFACTURED BY CABLOFIL, B-LINE, MONO-SYSTEMS, HUBBELL, OR OTHER EQUIVALENT PRODUCTS.

GENERAL ELECTRICAL NOTES

NURSE CALL:
THE EXISTING ACCESS CONTROL SYSTEM IS A SIMPLEX GRINNELL EZ CARE NURSE CALL SYSTEM. ALL DEVICES MODIFIED OR ADDED FOR THIS PROJECT SHALL BE FULLY COMPATITIBLE WITH THE EXISTING SYSTEM. CONTRACTOR SHALL INCLUDE ADDITIONAL EQUIPMENT REQUIRED FOR A FULLY OPERATIONAL SYSTEM. NEW EQUIUPMENT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: NEW DUTY STATIONS, SOFTWARE LICENSES, LCD MONITOR, ALL TYPES OF CALL STATIONS, COLD BLUE STATIONS, GATEWAY ELECTRONICS, STAR WIRING HUB, CABLING AND CONNECTORS, ETC. ELECTRICAL CONTRACTOR SHALL CONTACT SCOTT NIELSON AT THE SIMPLEX GRINNELL GREEN BAY, WI OFFICE (920-883-9309) TO COORDINATE ALL ACCESS CONTROL SYSTEM WORK. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL OF THE FIRE ALARM WORK COSTS IN THEIR PROPOSAL AND CONTRACT. SIMPLEX GRINNELL SHALL BE THE SUB-CONTRACTOR FOR THIS SYSTEM.

CARD READER - ACCESS CONTROL:
THE EXISTING ACCESS CONTROL SYSTEM IS A SIMPLEX GRINNELL SYSTEM. ALL DEVICES MODIFIED OR ADDED FOR THIS PROJECT SHALL BE FULLY COMPATITIBLE WITH THE EXISTING SYSTEM. ELECTRICAL CONTRACTOR SHALL CONTACT SCOTT NIELSON AT THE SIMPLEX GRINNELL GREEN BAY, WI OFFICE (920-883-9309) TO COORDINATE ALL ACCESS CONTROL SYSTEM WORK. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL OF THE ACCESS CONTROL SYSTEM WORK COSTS IN THEIR PROPOSAL AND CONTRACT. SIMPLEX GRINNELL SHALL BE THE SUB-CONTRACTOR FOR THIS SYSTEM.

FIRE ALARM SYSTEM:
THE THE EXISTING FIRE ALARM SYSTEM IS A SIMPLEX GRINNELL ADDRESSABLE SYSTEM WITH VOICE ANNUNCIATION. ALL DEVICES MODIFIED OR ADDED FOR THIS PROJECT SHALL BE FULLY COMPATITIBLE WITH THE EXISTING SYSTEM. ELECTRICAL CONTRACTOR SHALL CONTACT SCOTT NIELSEN AT THE SIMPLEX GRINNELL GREEN BAY, WI OFFICE (920-883-9309) TO COORDINATE ALL FIRE ALARM SYSTEM WORK. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL OF THE FIRE ALARM WORK COSTS IN THEIR PROPOSAL AND CONTRACT. SIMPLEX GRINNELL SHALL BE THE SUB-CONTRACTOR FOR THIS SYSTEM.

ELECTRICAL SYMBOLS LEGEND

LIGHTING

- TROFFER STYLE FIXTURE, 2x4
- TROFFER SYLE FIXTURE ON EMERGENCY POWER
- STRIP LIGHT
- SURFACE MTD FIXTURE, 2x4
- TROFFER STYLE FIXTURE, 2x2
- TROFFER SYLE FIXTURE 2x2 ON EMERGENCY POWER
- LIGHT FIXTURE - CEILING MOUNTED
- LIGHT FIXTURE - WALL MOUNTED
- WALL MTD LINEAR FIXTURE
- UNDERCABINET LIGHT

SWITCHING

$ SWITCH:
BLANK = SINGLE POLE
D = DIMMER
LV = LOW VOLTAGE
LM = LOW VOLTAGE MASTER
PB = PUSH BUTTON STATION
X = EXPLOSION PROOF
2 = DOUBLE POLE
3 = THREE-WAY
4 = FOUR-WAY
K = KEY OPERATED
L = LOCK
P = WITH PILOT LIGHT
RC = REMOTE CONTROL
WP = WEATHER PROOF
Mo = OCCUPANCY SENSOR
MS = MANUAL SWITCH

(OS) CEILING MTD OCC. SENSOR

ELECTRICAL SYMBOLS LEGEND

FIRE ALARM

- (P) MANUAL PULL STATION 46" A.F.F. CENTER
- SPEAKER/STROBE 82" A.F.F. TO CENTER
- SPEAKER, HORN OR SIREN
- SPEAKER/STROBE - CEILING MOUNTED
- STROBE ONLY 82" A.F.F. TO CENTER
- SMOKE DETECTOR
- (H) DETECTOR:
  C = FIRE/SMOKE DAMPER (120V)
  H = HEAT SMOKE
  PH = PHOTOELECTRIC AND HEAT SMOKE
  P = PHOTOELECTRIC SMOKE
- DUCT DETECTOR
- (FSD) ALARM, TAMPER SWITCH
- (FSD) DETECTOR, FLOW SWITCH
- (MH) MAGNETIC DOOR HOLD
- (FACP) ALARM, FIRE, COMMUNICATOR

ELECTRICAL SYMBOLS LEGEND

COMMUNICATIONS

- TELEPHONE
- TELEPHONE/DATA
- (W) WALL MOUNTED TELEPHONE (1) CAT5e CABLE
- DATA/VOICE RECEPTACLE
- DATA/VOICE RECEPTACLE 6" ABOVE COUNTER OR AT HEIGHT SHOWN
- (V) DATA/VOICE RECEPTACLE - CEILING MOUNTED
- (XX) OUTLET
  TV = TELEVISION
  C = CAMERA
  M = MONITOR
  PM = PATIENT MONITOR; (4) CAT6 CABLES TO PATIENT MONITOR SYSTEM
- (SP) SPEAKER
- (SP)F SPEAKER, FIRE ALARM
- (SP) WALL MOUNTED SPEAKER
- (SP)F SPEAKER, FIRE ALARM WALL MOUNTED
- (B) DOOR BELL/BUZZER

NURSE CALL

- (N)X NURSECALL STATION
  2 = DUPLICATE FACILITIES FOR TWO BEDS
  D = DUTY STATION
  E = 6'0" SHOWER; 4'6" TUB; 3'0" TOILET
  P = PSYCH CORRIDOR WITH KEY SWITCH
  M = MASTER STATION
  S = AUDIO VISUAL MALL STATION
  U = UTILITY CALL STATION
  L = LOCATOR
  CB = CODE BLUE
  SA = STAFF ASSIST
  SM = SUB MASTER STATION
  TV = PATIENT TV CONTROL
  IR = INFRARED SENSOR LOCATION DEVICE
  2B = STAFF ASSIST, CODE BLUE,
  B = PATIENT BEDSIDE STATION
- (N)X NURSECALL STATION
  2 = DOME LIGHT ABOVE DOOR
  D = CORRIDOR DOME LIGHT
  I = AUXILIARY INTERSECTIONAL DOME LIGHT

SECURITY

- (CR) CLOSED CIRCUIT CAMERA (CCC)
- (CR) CARD READER
- (DP) DOOR POSITION SWITCH
- (RTE) REQUEST TO EXIT SENSOR
- (ES) ELECTRIC STRIKE w/DOOR POSITION SENSOR
- (ML) MAGNETIC LOCK
- (DS) DOOR STRIKE
- (DC) DOOR CONTACT
- (PB) DURESS CALL PANIC BUTTON

ELECTRICAL SYMBOLS LEGEND

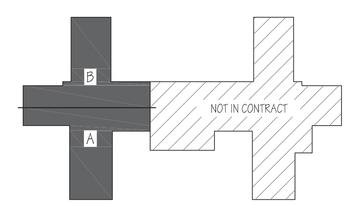
RECEPTACLES

- 20A, 120V, 2P, 3W GROUNDING DUPLEX RECEPTACLE
- 20A, 120V, 2P, 3W GROUNDING DUPLEX RECEPTACLE, CEILING MOUNTED
- TAMPER RESISTANT DUPLEX RECEPTACLE
- QUADPLEX RECEPTACLE
- QUADPLEX RECEPTACLE 6" ABOVE COUNTER OR AT HEIGHT SHOWN
- (A) RECEPTACLE: SPECIAL PURPOSE
  A = 120V, 20A, 1ø, 2P, 3W, NEMA 5-20R
  B = 208V, 20A, 1ø, 2P, 3W, NEMA 6-20R
  C = 120V, 30A, 1ø, 2P, 3W, NEMA 5-30R
  D = 208V, 30A, 1ø, 2P, 3W, NEMA 6-30R
  E = 208V, 60A, 1ø, 3P, 4W, NEMA 14-60R
  F = 208V, 30A, 3ø, 3P, 4W, NEMA 15-30R
  G = 208V, 50A, 3ø, 3P, 4W, NEMA 15-50R
  H = 208V, 60A, 3ø, 3P, 4W, NEMA 15-60R
- GFCI DUPLEX RECEPTACLE
- GFCI DUPLEX RECEPTACLE 6" ABOVE COUNTER OR AT HEIGHT SHOWN
- DUPLEX RECEPTACLE 6" ABOVE COUNTER OR AT HEIGHT SHOWN
- ELECTRICAL CONNECTION

POWER

PROVIDE SEPERATE NEUTRALS FOR ALL 277V & 120V CIRCUITS

- PANEL BOARD
- PUSH BUTTON STATION AS NOTED
- J-BOX
- (GB) GROUND BAR
- (C) CONTACTOR



KEY PLAN - FOURTH FLOOR
NOT TO SCALE
NORTH

Revisions:	Date
100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2730 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

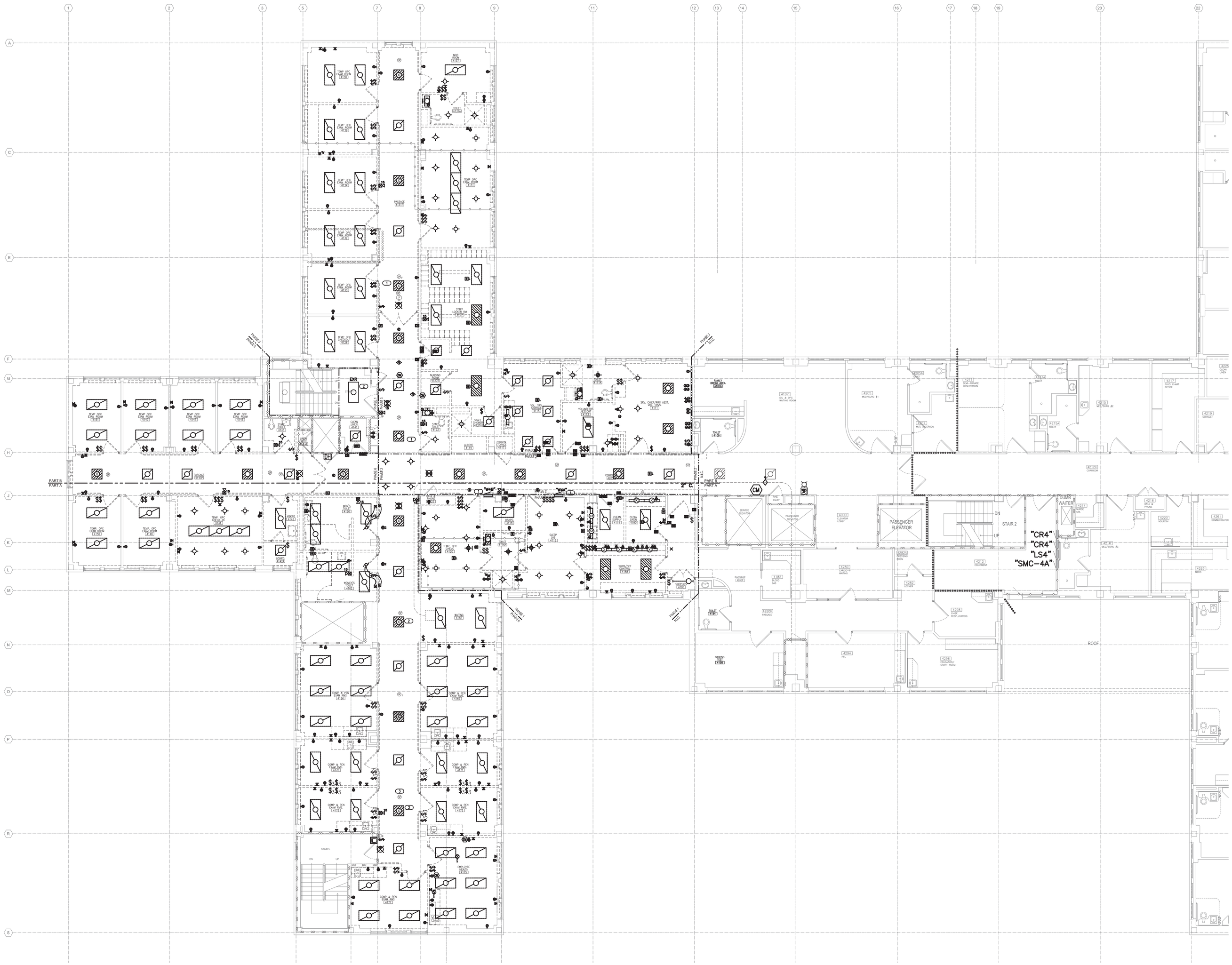
ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL SCHEDULES AND NOTES
Approved: Project Director
Project Title: Renovate Four West
Location: IRON MOUNTAIN, MICHIGAN
Date: 01/22/2014 | Checked: ASR | Drawn: LA
Project Number: 585-12-132
Building Number: 1
Drawing Number: E002
Dwg. 85 of 100

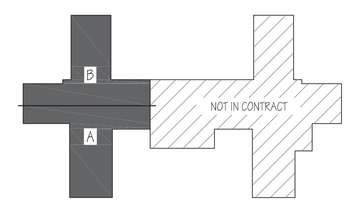
Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



1 PARTIAL FOURTH FLOOR - ELECTRICAL DEMOLITION PLAN - OVERALL

1/8" = 1'-0"



NORTH

KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL DEMOLITION PLAN 4TH FLOOR OVERALL

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

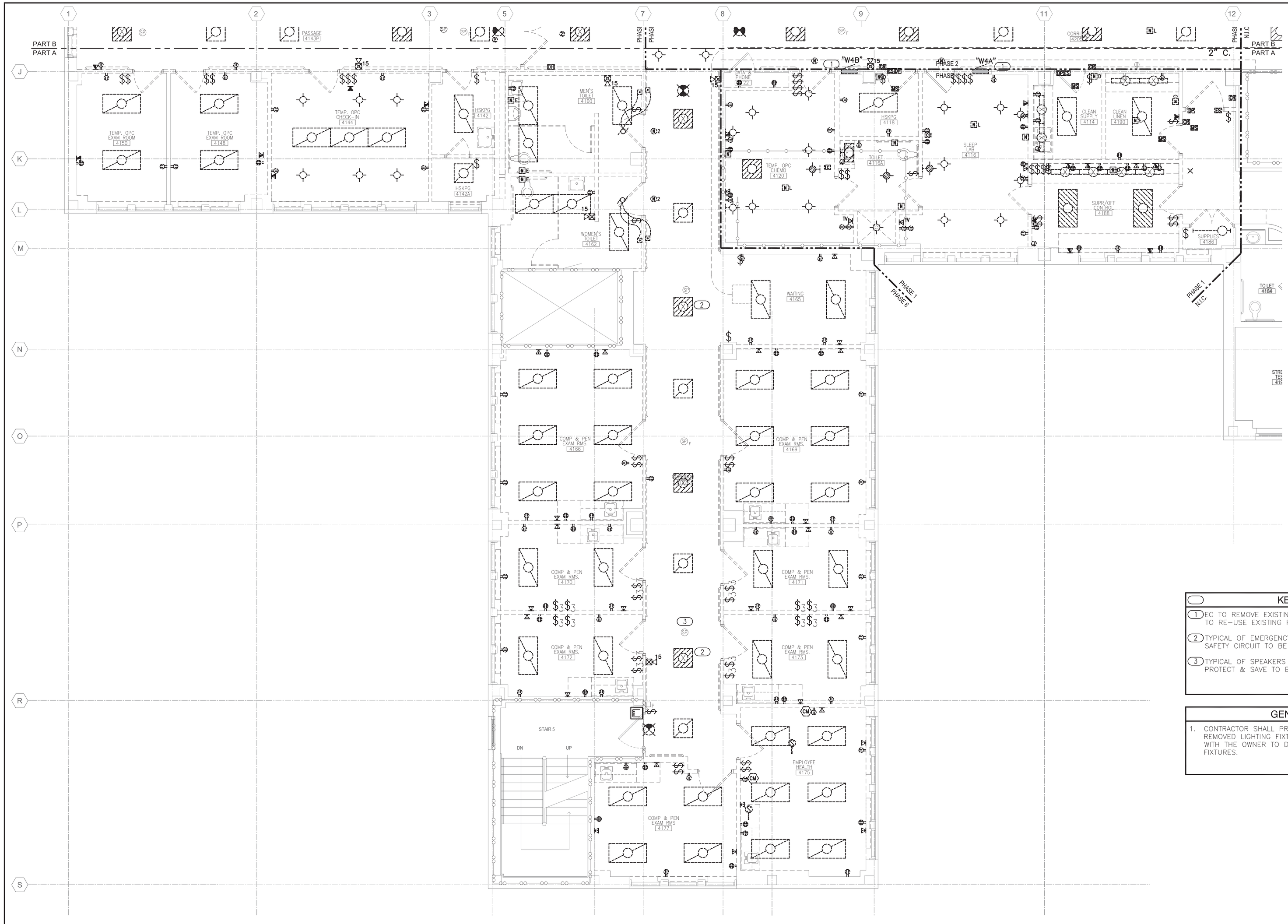
Drawing Number: ED100

Dwg. 86 of 100

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



KEYED NOTES

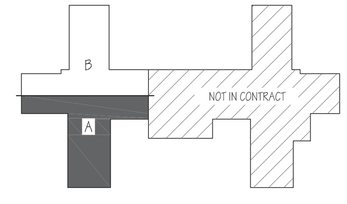
(1) EC TO REMOVE EXISTING PANEL AND SALVAGE FEEDER. EC TO RE-USE EXISTING FEEDER TO FEED NEW PANEL.

(2) TYPICAL OF EMERGENCY FIXTURES: SALVAGE EXISTING LIFE SAFETY CIRCUIT TO BE RE-USED.

(3) TYPICAL OF SPEAKERS AND FIRE ALARM SPEAKERS: SALVAGE, PROTECT & SAVE TO BE REINSTALLED.

GENERAL NOTES

1. CONTRACTOR SHALL PROTECT, SALVAGE & PALLETIZE REMOVED LIGHTING FIXTURES. CONTRACTOR TO CONSULT WITH THE OWNER TO DETERMINE IF THEY WANT TO RETAIN FIXTURES.



1 PARTIAL FOURTH FLOOR - ELECTRICAL DEMOLITION PLAN - PART A

1/4" = 1'-0"

NORTH

KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL DEMOLITION PLAN 4TH FLOOR PART A	Project Title: Renovate Four West	Project Number: 585-12-132	Office of Construction and Facilities Management
Approved: Project Director	Location: IRON MOUNTAIN, MICHIGAN	Building Number: 1	
	Date: 01/22/2014 / Checked: ASR / Drawn: LA	Drawing Number: ED101 Dwg. 87 of 100	Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

KEYED NOTES

1. TYPICAL OF EMERGENCY FIXTURES: SALVAGE EXISTING LIFE SAFETY CIRCUIT TO BE RE-USED.
2. EC TO SALVAGE FIXTURE AND CIRCUIT TO BE RE-USED AT SAME LOCATION.
3. TYPICAL OF SPEAKERS AND FIRE ALARM SPEAKERS: SALVAGE, PROTECT & SAVE TO BE REINSTALLED.

GENERAL NOTES

1. CONTRACTOR SHALL PROTECT, SALVAGE & PATTETIZE REMOVED LIGHTING FIXTURES. CONTRACTOR TO CONSULT WITH THE OWNER TO DETERMINE IF THEY WANT TO RETAIN FIXTURES.
2. EXISTING SPEAKERS TO BE SALVAGED DURING DEMOLITION. CLEANED, STORED, AND REINSTALLED.

1 PARTIAL FOURTH FLOOR - ELECTRICAL DEMOLITION PLAN - PART B

1/4" = 1'-0"

NORTH

KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

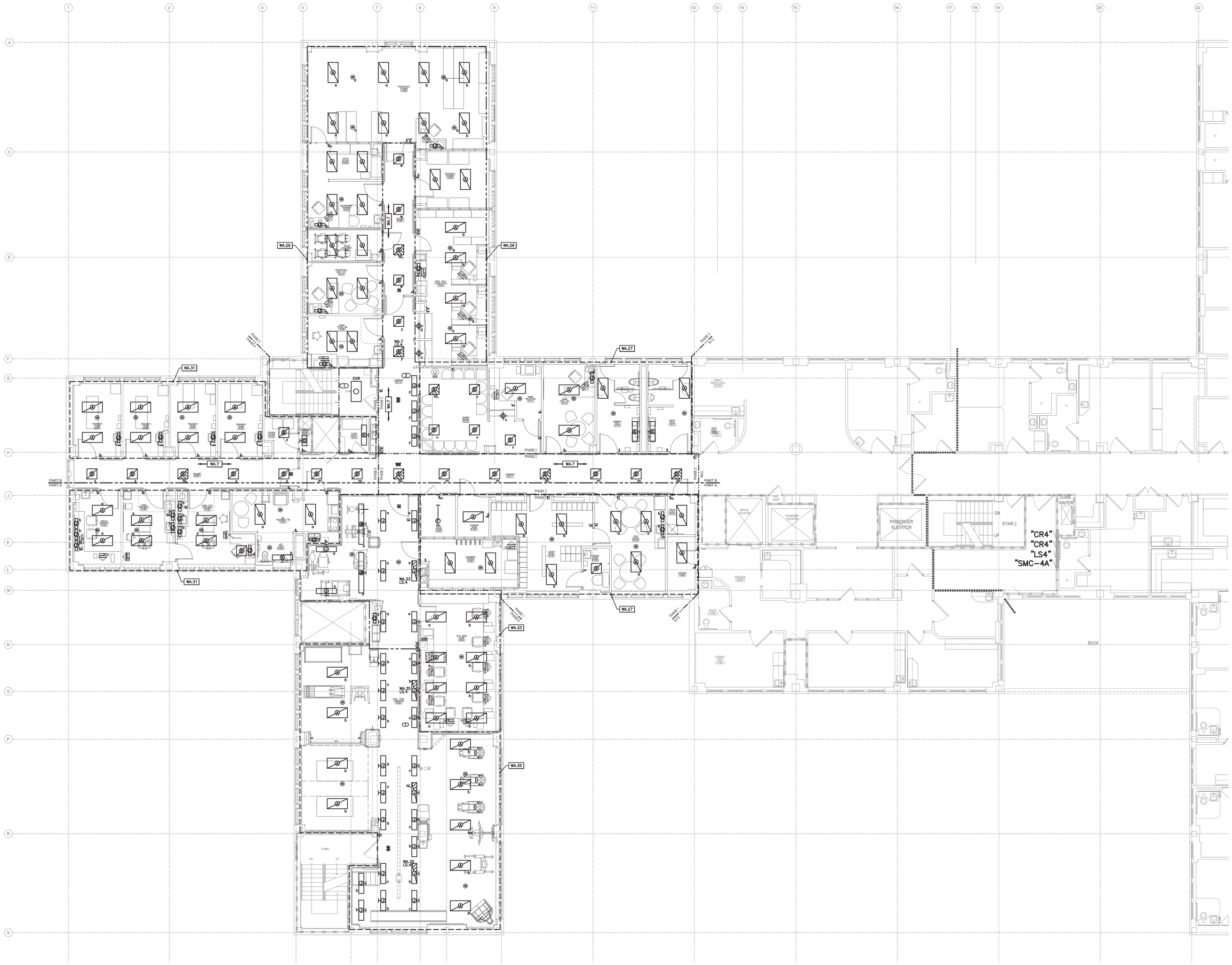
ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title	ELECTRICAL DEMOLITION PLAN 4TH FLOOR PART B
Approved: Project Director	
Project Title	Renovate Four West
Location	IRON MOUNTAIN, MICHIGAN
Date	01/22/2014
Checked	ASR
Drawn	LA
Project Number	585-12-132
Building Number	1
Drawing Number	ED102
Dwg.	88 of 100

Office of Construction and Facilities Management
Department of Veterans Affairs

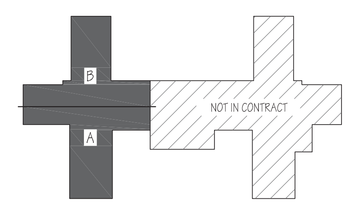
VA FORM 08-6231, OCT 1978



1 PARTIAL FOURTH FLOOR - ELECTRICAL LIGHTING PLAN - OVERALL

1/8" = 1'-0"

NORTH



KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL LIGHTING PLAN 4TH FLOOR OVERALL

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

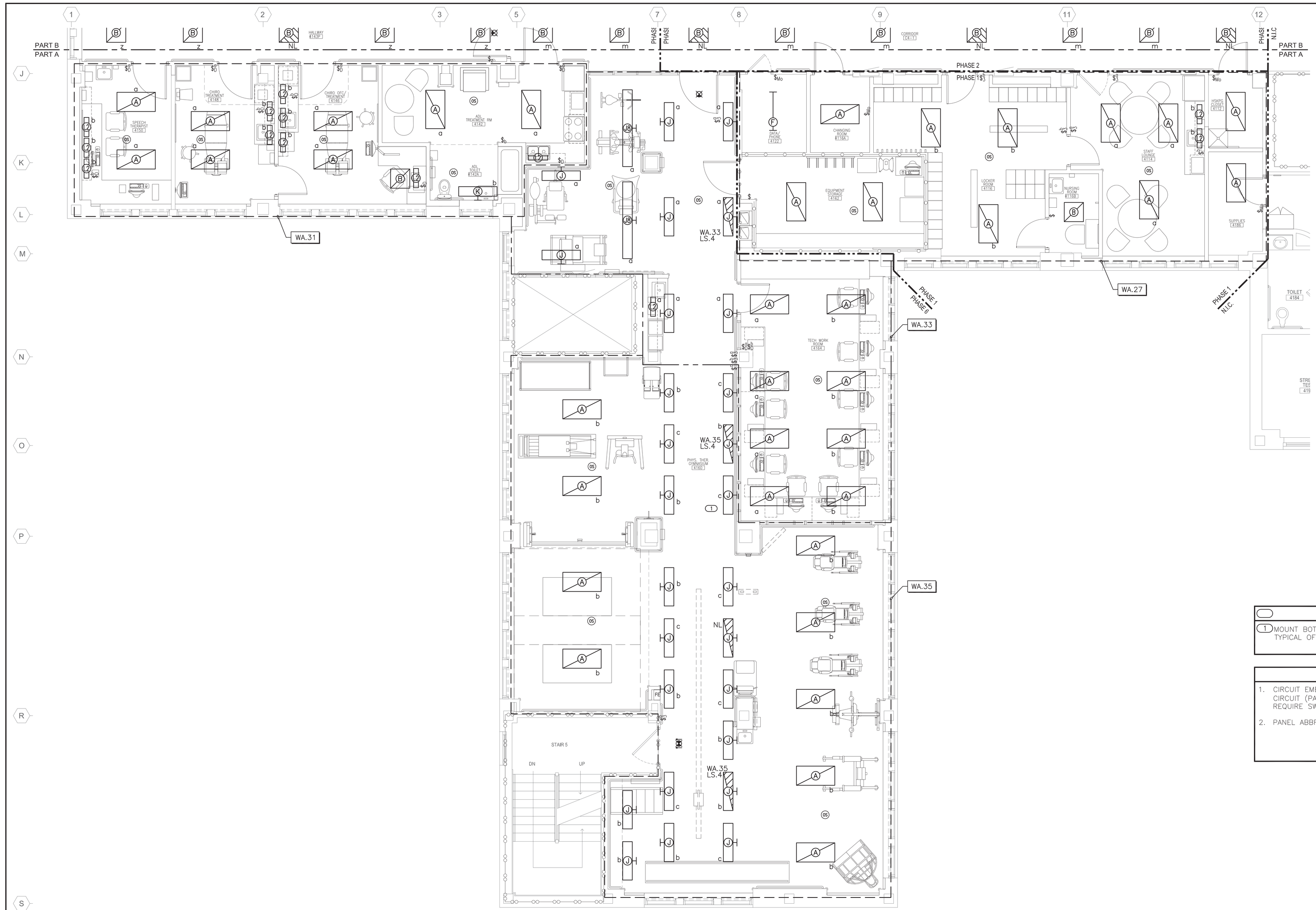
Drawing Number: EL100

Dwg. 89 of 100

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

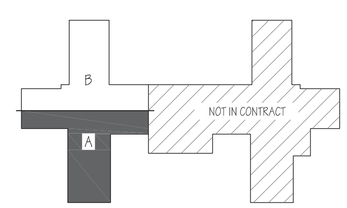


KEYED NOTES

(1) MOUNT BOTTOM OF "J" FIXTURE 1" ABOVE SOFFIT EDGE. TYPICAL OF PHYSICAL THERAPY CORRIDROR.

GENERAL NOTES

1. CIRCUIT EMERGENCY FIXTURES TO EXISTING LIFE SAFETY CIRCUIT (PANEL LS-4, CKT #4). FOR FIXTURES THAT REQUIRE SWITCHING; SEE SWITCHING DETAIL ON SHEET E001.
2. PANEL ABBREVIATIONS: WA = PANEL W4A; WB = PANEL W4B; CR = PANEL CR-4; LS = PANEL LS-4



1 PARTIAL FOURTH FLOOR - LIGHTING PLAN - PART A

1/4" = 1'-0"

NORTH

KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL LIGHTING PLAN 4TH FLOOR PART A

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

Drawing Number: EL101

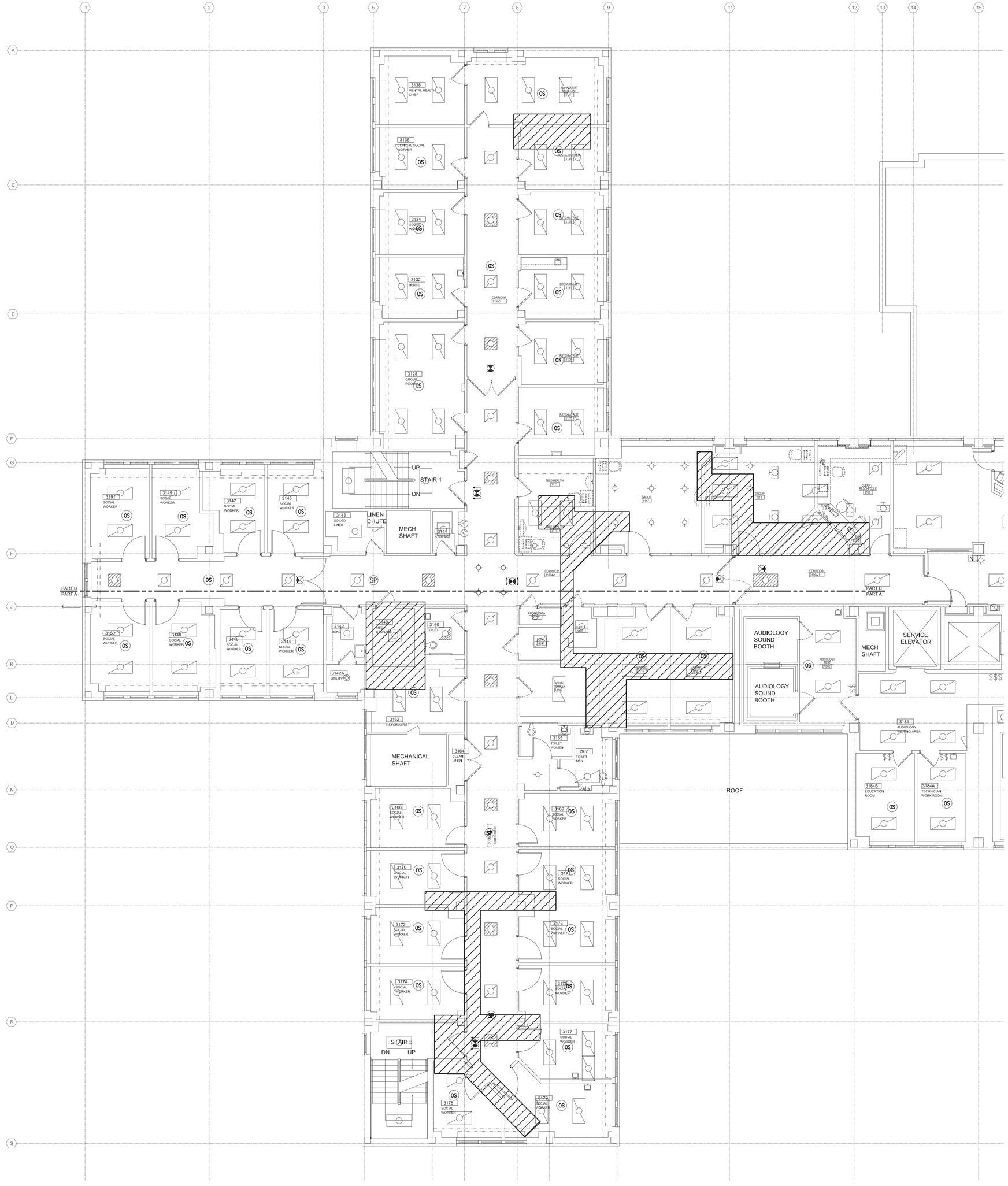
Dwg. 90 of 100

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

PROSTHETICS STORAGE 4136
SUPPLY ALCOVE 4134
RECEIVING/ ASSEMBLY 4135
RESPIRATORY THERAPIST 4134
HALLWAY 4129P
SOILED HOLDINGS 4133
PROSTHETICS CHIEF OFC 4130
EXAM/ FITTING RM 4128
PROS. REC/ CLERK/ TECH 4131
WA.29
WA.29
WA.7
WA.7
WA.7



1 PARTIAL THIRD FLOOR - ELECTRICAL COORDINATION PLAN

1/8" = 1'-0"

NORTH

2 PARTIAL FIFTH FLOOR - ELECTRICAL COORDINATION PLAN

1/8" = 1'-0"

NORTH

GENERAL NOTES

1. HATCHED AREAS HIGHLIGHT AREAS FOR PLUMBING AND OR HVAC ACCESS. EC TO DISCONNECT/REMOVE FIXTURES AS REQUIRED TO ASSIST TRADES. EC SHALL CLEAN ALL REMOVED FIXTURES AND REPLACE LAMPS AS REQUIRED. EC TO RE-INSTALL FIXTURES ONCE OTHER TRADE WORK HAS BEEN COMPLETED. REFER TO PLUMBING AND OR HVAC DRAWINGS FOR MORE DETAIL.

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL COORDINATION PLAN 3RD AND 5TH FLOORS

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

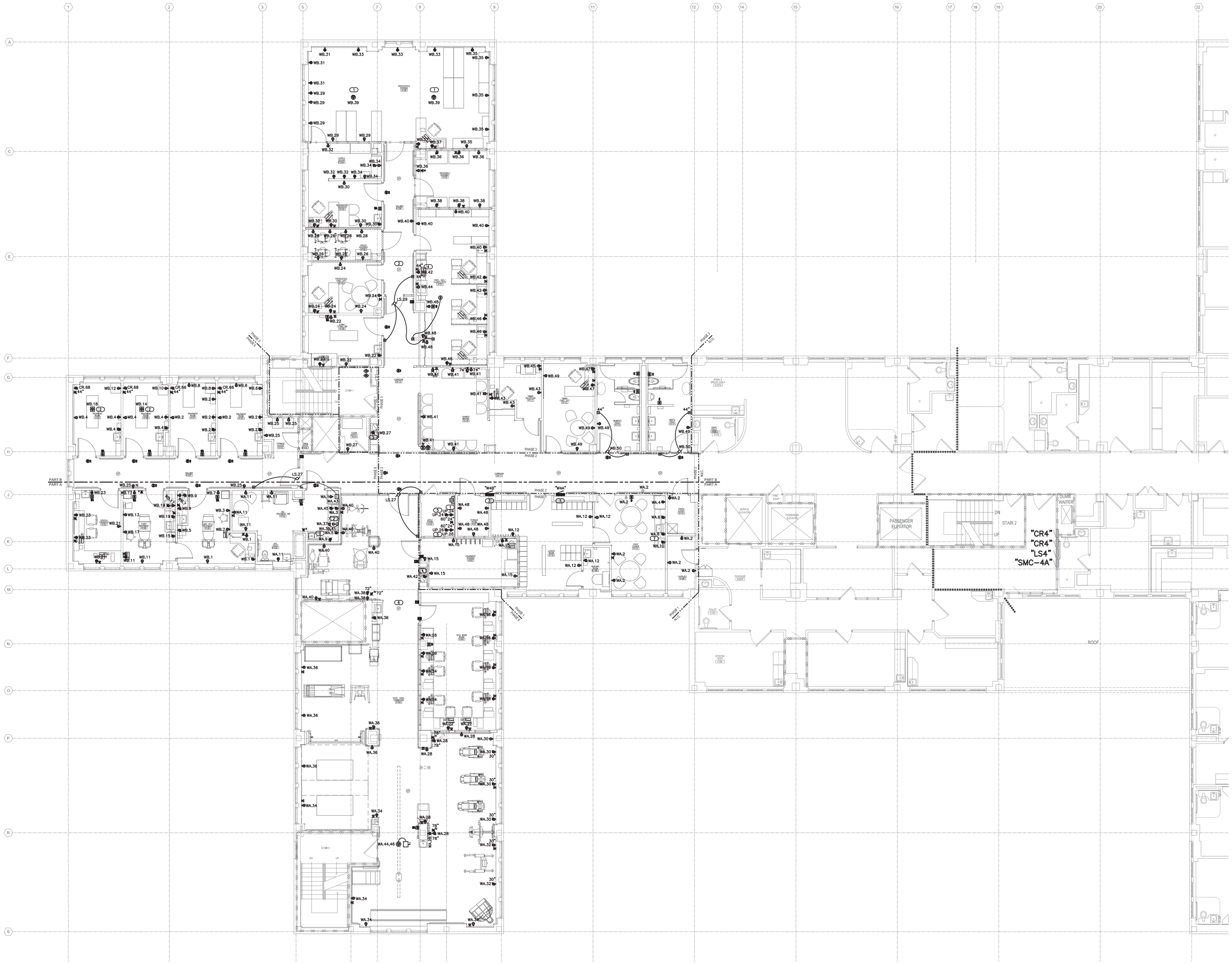
Drawing Number: EL103

Dwg. 92 of 100

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



1 PARTIAL FOURTH FLOOR - ELECTRICAL POWER AND SYSTEMS PLAN - OVERALL

1/8" = 1'-0"

NORTH

KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC

engineers | consultants | commissioning

MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS

420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL POWER AND SYTEMS PLAN 4TH FLOOR OVERALL

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

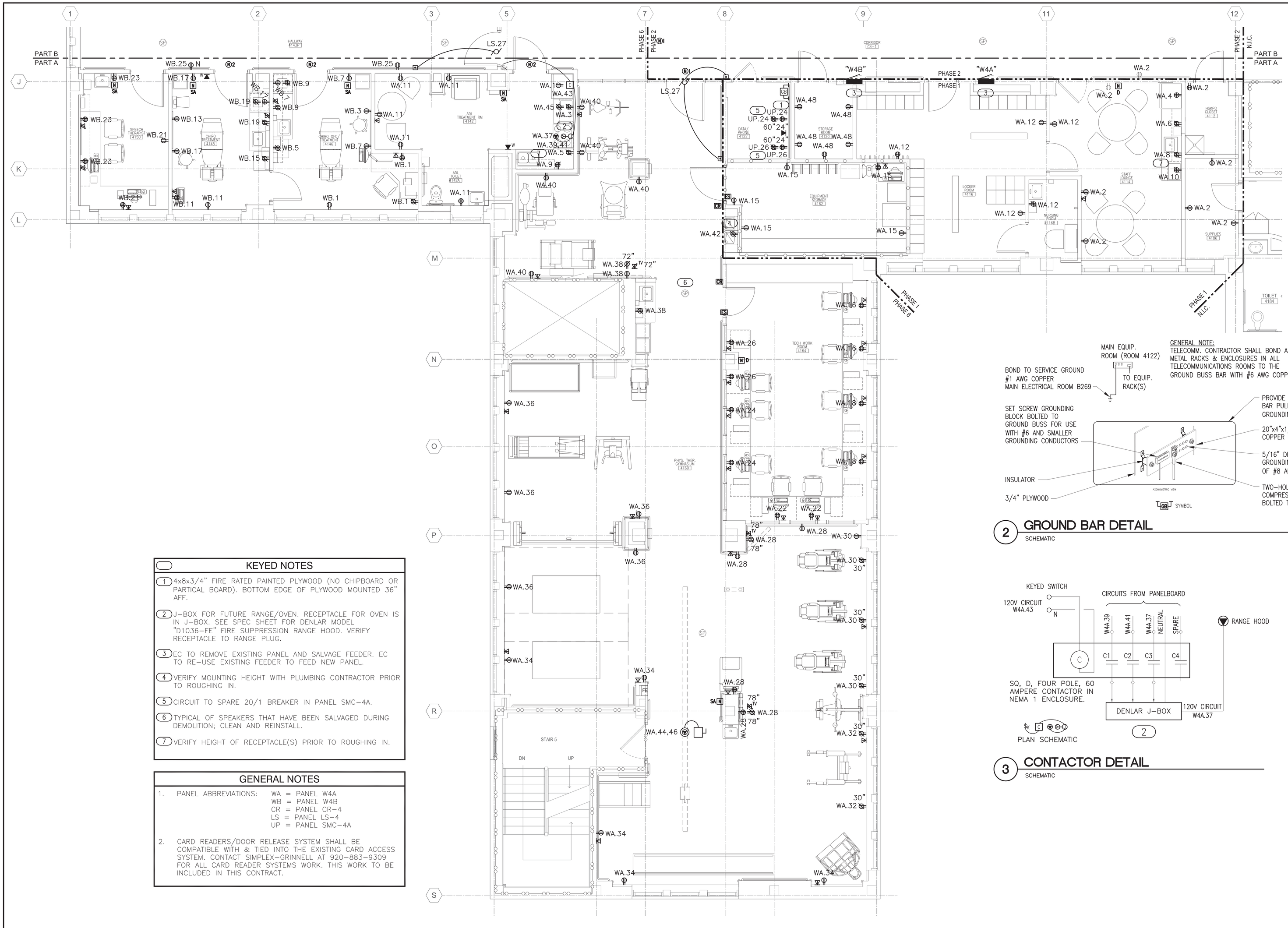
Drawing Number: EP100

Dwg. 93 of 100

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



KEYED NOTES

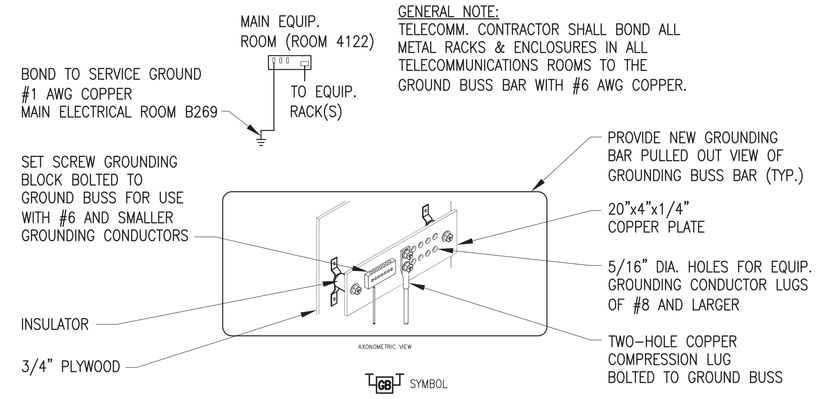
1. 4x8x3/4" FIRE RATED PAINTED PLYWOOD (NO CHIPBOARD OR PARTICAL BOARD). BOTTOM EDGE OF PLYWOOD MOUNTED 36" AFF.
2. J–BOX FOR FUTURE RANGE/OVEN. RECEPTACLE FOR OVEN IS IN J–BOX. SEE SPEC SHEET FOR DENLAR MODEL "D1036–FE" FIRE SUPPRESSION RANGE HOOD. VERIFY RECEPTACLE TO RANGE PLUG.
3. EC TO REMOVE EXISTING PANEL AND SALVAGE FEEDER. EC TO RE–USE EXISTING FEEDER TO FEED NEW PANEL.
4. VERIFY MOUNTING HEIGHT WITH PLUMBING CONTRACTOR PRIOR TO ROUGHING IN.
5. CIRCUIT TO SPARE 20/1 BREAKER IN PANEL SMC–4A.
6. TYPICAL OF SPEAKERS THAT HAVE BEEN SALVAGED DURING DEMOLITION; CLEAN AND REINSTALL.
7. VERIFY HEIGHT OF RECEPTACLE(S) PRIOR TO ROUGHING IN.

GENERAL NOTES

1. PANEL ABBREVIATIONS:
   - WA = PANEL W4A
   - WB = PANEL W4B
   - CR = PANEL CR–4
   - LS = PANEL LS–4
   - UP = PANEL SMC–4A
2. CARD READERS/DOOR RELEASE SYSTEM SHALL BE COMPATIBLE WITH & TIED INTO THE EXISTING CARD ACCESS SYSTEM. CONTACT SIMPLEX–GRINNELL AT 920–883–9309 FOR ALL CARD READER SYSTEMS WORK. THIS WORK TO BE INCLUDED IN THIS CONTRACT.

1 PARTIAL FOURTH FLOOR – POWER AND SYSTEMS PLAN – PART A

1/4" = 1'–0"



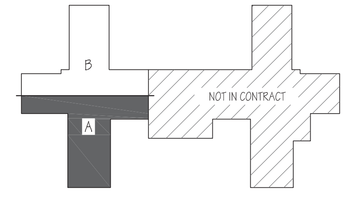
GENERAL NOTE:
TELECOMM. CONTRACTOR SHALL BOND ALL METAL RACKS & ENCLOSURES IN ALL TELECOMMUNICATIONS ROOMS TO THE GROUND BUSS BAR WITH #6 AWG COPPER.

2 GROUND BAR DETAIL

SCHEMATIC

3 CONTACTOR DETAIL

SCHEMATIC



NORTH

KEY PLAN – FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS – REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.3680 | Fax: 715.832.3668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906–475–6616
FAX: 906–475–6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL POWER AND SYSTEMS PLAN 4TH FLOOR PART A

Approved: Project Director

Project Title: Renovate Four West

Project Number: 585-12-132

Building Number: 1

Location: IRON MOUNTAIN, MICHIGAN

Drawing Number: EP101

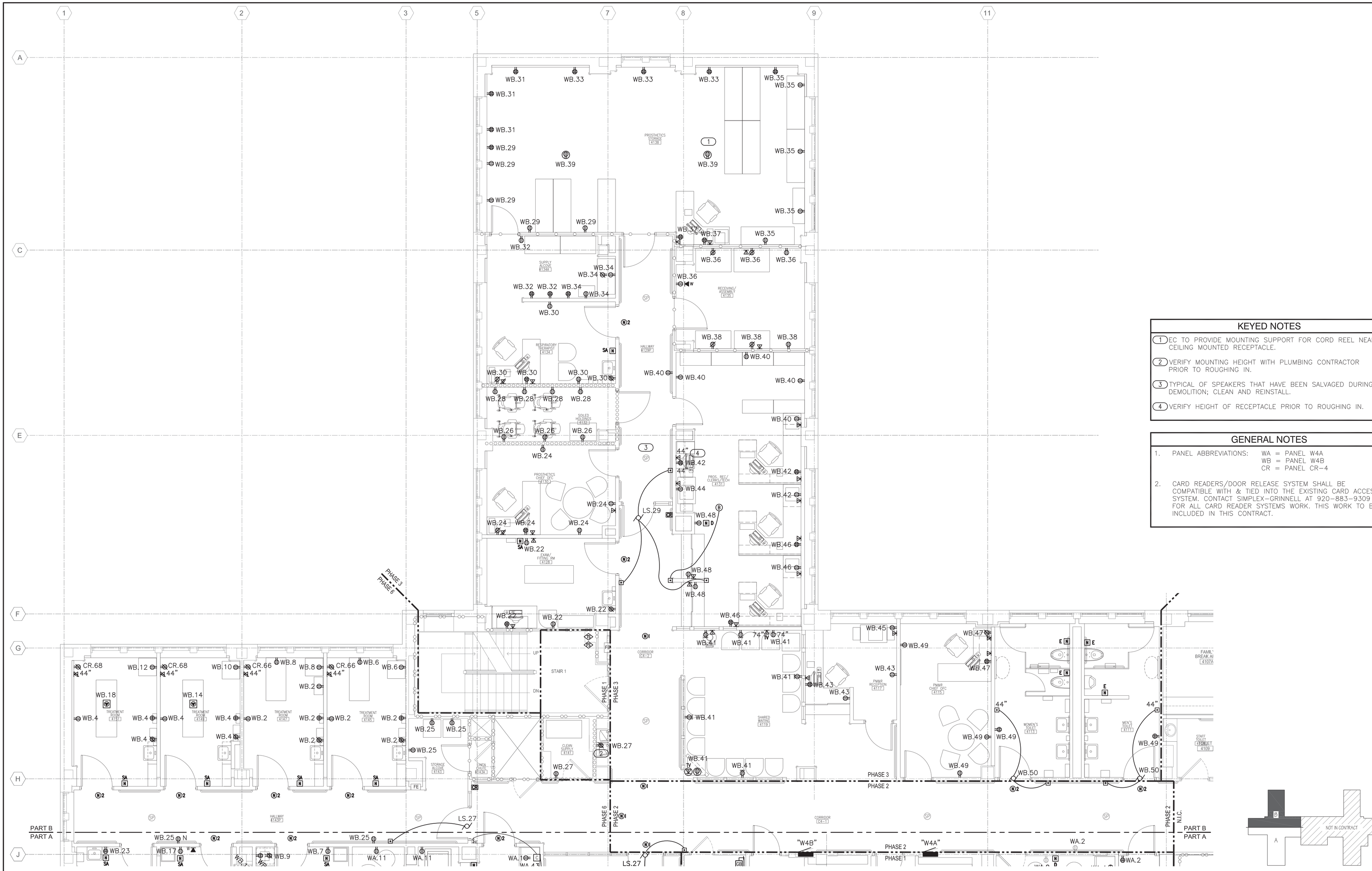
Dwg. 94 of 100

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



KEYED NOTES

1. EC TO PROVIDE MOUNTING SUPPORT FOR CORD REEL NEAR CEILING MOUNTED RECEPTACLE.
2. VERIFY MOUNTING HEIGHT WITH PLUMBING CONTRACTOR PRIOR TO ROUGHING IN.
3. TYPICAL OF SPEAKERS THAT HAVE BEEN SALVAGED DURING DEMOLITION; CLEAN AND REINSTALL.
4. VERIFY HEIGHT OF RECEPTACLE PRIOR TO ROUGHING IN.

GENERAL NOTES

1. PANEL ABBREVIATIONS: WA = PANEL W4A
   WB = PANEL W4B
   CR = PANEL CR-4
2. CARD READERS/DOOR RELEASE SYSTEM SHALL BE COMPATIBLE WITH & TIED INTO THE EXISTING CARD ACCESS SYSTEM. CONTACT SIMPLEX-GRINNELL AT 920-883-9309 FOR ALL CARD READER SYSTEMS WORK. THIS WORK TO BE INCLUDED IN THIS CONTRACT.

1 PARTIAL FOURTH FLOOR - POWER AND SYSTEMS PLAN - PART B

1/4" = 1'-0"

NORTH

KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title	ELECTRICAL POWER AND SYTEMS PLAN 4TH FLOOR PART B
Approved: Project Director	
Project Title	Renovate Four West
Location	IRON MOUNTAIN, MICHIGAN
Date	01/22/2014
Checked	ASR
Drawn	LA
Project Number	585-12-132
Building Number	1
Drawing Number	EP102
Dwg. 95 of 100	

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

| EXISTING Panel: W4A Corridor 4199C | | |

Existing Panel: CR-4 Left Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Left PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
1	Lights 3165,3168,3170,3171,3171A, 3176,3176A	20A	1P
3	Lights 3149,3149A, 3160, 3167, 3167A, 3144, 3144A, 3145,3145A,3148, 3148A	20A	1P
5	Lights 3155, 3123, 3128	20A	1P
7	Nurse Station Light	20A	1P
9	Receptacle 4120	20A	1P
11	~~Receptacle 4116~~	20A	1P
13	Receptacle 4182, Receptacle 4198	20A	1P
15	Receptacle Under sink 4220, Receptacle 4271A	20A	1P
17	Receptacle 4263	20A	1P
19	Medicine Refrigerator 4263	20A	1P
21	~~Receptacle 4199~~	20A	1P
23	Hillrom bed receptacle 4277	20A	1P
25	Hillrom bed receptacle 4277	20A	1P
27	Receptacle 4267	20A	1P
29	Receptacle 4275	20A	1P
31	Receptacle 3118, 4263, Medgas Master Alarm 6299A	20A	1P
33	Unknown	20A	1P
35	Hillrom bed Receptacle 4265	20A	1P
37	Hillrom bed receptacle 4265	20A	1P
39	Receptacle 4261	20A	1P
41	Receptacle 4264	20A	1P

Existing Panel: CR-4 Left Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Left PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
2	Lights 4109, ~~3111~~	20A	1P
4	Lights 4223, 4207, 4205A, 4205,4217,4211,4211A, 4215, 4215A	20A	1P
6	Lights 4237A, 4237, 4236A, 4236, 4234, 4234A, 4233, 4233A, 4229, 4230A, 4230	20A	1P
8	Lights 4245, 4250, 4250A, 4251, 4251A, 4245A, 4262, 4262A, 4246, 4246A	20A	1P
10	Lights 4270A, 4270, 4268, 4268A	20A	1P
12	Lights 4277, 4273, 4269	20A	1P
14	Lights 4261, 4216, 4263, 4265	20A	1P
16	Lights ~~4148A, 4146, 4120, 4188,~~ 4184	20A	1P
18	Security	20A	1P
20	Hillrom bed Receptacle 4269	20A	1P
22	Rm 4265 ICU Headwall West	20A	1P
24	Hillrom 4270	20A	1P
26	Hillrom bed Receptacle 4270	20A	1P
28	Hillrom bed Receptacle 4268	20A	1P
30	Hillrom bed Receptacle 4268, Receptacle undersink 4268	20A	1P
32	Hillrom bed Receptacle 4262	20A	1P
34	Hillrom Receptacle 4262	20A	1P
36	Hillrom bed Receptacle 4216	20A	1P
38	Hillrom Receptacle 4216	20A	1P
40	Unknown	20A	1P
42	Receptacle 4214	20A	1P

Existing Panel: CR-4 Right Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Right PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
43	Hillrom bed Receptacle 4246	20A	1P
45	Hillrom bed Receptacle 4246	20A	1P
47	Hillrom bed Receptacle 4250	20A	1P
49	Hillrom bed Receptacle 4250	20A	1P
51	Hillrom bed Receptacle 4251	20A	1P
53	Hillrom bed Receptacle 4251	20A	1P
55	4245 Hillrom Receptacle	20A	1P
57	4245 Hillrom Receptacle	20A	1P
59	Hillrom bed Receptacle 4230	20A	1P
61	Hillrom bed Receptacle 4230	20A	1P
63	4234 Hillrom Receptacle	20A	1P
65	4234 Hillrom Receptacle	20A	1P
67	4236 Hillrom Receptacle	20A	1P
69	4236 Hillrom Receptacle	20A	1P
71	4237 Hillrom Receptacle	20A	1P
73	Receptacle 4237, Hillrom Receptacle 4237	20A	1P
75	Hillrom Receptacle 4233	20A	1P
77	Hillrom Receptacle 4233	20A	1P
79	Receptacle 4207	20A	1P
81	Hillrom Receptacle 4205	20A	1P
83	Hillrom Receptacle 4205	20A	1P

Existing Panel: CR-4 Right Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Right PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
44	Receptacle 4252	20A	1P
46	Receptacle 4228, Undersink Receptacle 4243	20A	1P
48	Receptacle 4238	20A	1P
50	Receptacle 4217	20A	1P
52	Receptacle 4225	20A	1P
54	Hillrom Bed Receptacle 4215	20A	1P
56	Hillrom Bed Receptacle 4215	20A	1P
58	4211 Hillrom Receptacle	20A	1P
60	4211 Hillrom Receptacle	20A	1P
62	4211 Hillrom Receptacle	20A	1P
64	Receptacle 4211 Hillrom Receptacle	20A	1P
66	~~Receptacle 4111~~	20A	1P
68	~~Receptacle 4111~~	20A	1P
70	~~Receptacle 4111~~	20A	1P
72	~~Receptacle 4111, Sink Solenoid 4111~~	20A	1P
74	Unknown	20A	1P
76	Unknown	20A	1P
78	Hillrom Receptacle 4273	20A	1P
80	Hillrom Receptacle 4273	20A	1P
82	Hillrom Bed Receptacle 4269	20A	1P
84	Hillrom Bed Receptacle 4269	20A	1P

Existing Panel EQ-4 Room 2180			
UPDATED: May 4, 2009			
PANEL: CR-3 PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 200 WIRE: 4 POLE: 42			
CKT#	DESCRIPTION	CB	POLE
1	AHU-1 (20 hp)	20A	1P
3	AHU-1 (20 hp)	20A	1P
5	AHU-1 (20 hp)	20A	1P
7	CHWP-9 (1/2 hp)	20A	1P
9	CHWP-9 (1/2 hp)	20A	1P
11	CHWP-9 (1/2 hp)	20A	1P
13	EF-45, EF-46, EF-47 (2-1/8 hp & 1-1/2 hp)	20A	1P
15	EF-45, EF-46, EF-47 (2-1/8 hp & 1-1/2 hp)	20A	1P
17	EF-45, EF-46, EF-47 (2-1/8 hp & 1-1/2 hp)	20A	1P
19	15A-3PH - Spare Breaker	20A	1P
21	15A-3PH - Spare Breaker	20A	1P
23	15A-3PH - Spare Breaker	20A	1P
25	AHU-03 (7.5 hp) (50A breaker)	20A	1P
27	AHU-03 (7.5 hp) (50A breaker)	20A	1P
29	AHU-03 (7.5 hp) (50A breaker)	20A	1P
31	RF-03 & OAF-03 (3/4 hp) (20A breaker)	20A	1P
33	RF-03 & OAF-03 (3/4 hp) (20A breaker)	20A	1P
35	RF-03 & OAF-03 (3/4 hp) (20A breaker)	20A	1P
37			
39			
41			

Existing Panel EQ-4 Room 2180			
UPDATED: May 4, 2009			
PANEL: CR-3 PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 200 WIRE: 4 POLE: 42			
CKT#	DESCRIPTION	CB	POLE
2	EF-40, EF-42 (2-1/4 hp)	20A	1P
4	EF-40, EF-42 (2-1/4 hp)	20A	1P
6	EF-40, EF-42 (2-1/4 hp)	20A	1P
8	EF-44, EF-48 (1-1/4 hp & 1-1/2 hp)	20A	1P
10	EF-44, EF-48 (1-1/4 hp & 1-1/2 hp)	20A	1P
12	EF-44, EF-48 (1-1/4 hp & 1-1/2 hp)	20A	1P
14	EF-41, EF-43 (2-1/4 hp)	20A	1P
16	EF-41, EF-43 (2-1/4 hp)	20A	1P
18	EF-41, EF-43 (2-1/4 hp)	20A	1P
20	Spare	20A	1P
22	AHU-1 Lights & Receptacles	20A	1P
24	Spare	20A	1P
26	RF-04 (1 hp) & OAF-04 (3/4 hp)(20A breaker)	20A	1P
28	RF-04 (1 hp) & OAF-04 (3/4 hp)(20A breaker)	20A	1P
30	RF-04 (1 hp) & OAF-04 (3/4 hp)(20A breaker)	20A	1P
32			
34			
36			
38			
40			
42			

1 EXISTING PANELS

REVISED: CR-4 Left Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Left PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
1	Lights 3165,3168,3170,3171,3171A, 3176,3176A	20A	1P
3	Lights 3149,3149A, 3160, 3167, 3167A, 3144, 3144A, 3145,3145A,3148, 3148A	20A	1P
5	Lights 3155, 3123, 3128	20A	1P
7	Nurse Station Light	20A	1P
9	Receptacle 4120	20A	1P
11	**SPARE**	20A	1P
13	Receptacle 4182, Receptacle 4198	20A	1P
15	Receptacle Under sink 4220, Receptacle 4271A	20A	1P
17	Receptacle 4263	20A	1P
19	Medicine Refrigerator 4263	20A	1P
21	**SPARE**	20A	1P
23	Hillrom bed receptacle 4277	20A	1P
25	Hillrom bed receptacle 4277	20A	1P
27	Receptacle 4267	20A	1P
29	Receptacle 4275	20A	1P
31	Receptacle 3118, 4263, Medgas Master Alarm 6299A	20A	1P
33	Unknown	20A	1P
35	Hillrom bed Receptacle 4265	20A	1P
37	Hillrom bed receptacle 4265	20A	1P
39	Receptacle 4261	20A	1P
41	Receptacle 4264	20A	1P

REVISED: CR-4 Left Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Left PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
2	Lights 4109, **4184**	20A	1P
4	Lights 4223, 4207, 4205A, 4205,4217,4211,4211A, 4215, 4215A	20A	1P
6	Lights 4237A, 4237, 4236A, 4236, 4234, 4234A, 4233, 4233A, 4229, 4230A, 4230	20A	1P
8	Lights 4245, 4250, 4250A, 4251, 4251A, 4245A, 4262, 4262A, 4246, 4246A	20A	1P
10	Lights 4270A, 4270, 4268, 4268A	20A	1P
12	Lights 4277, 4273, 4269	20A	1P
14	Lights 4261, 4216, 4263, 4265	20A	1P
16	**SPARE**	20A	1P
18	Security	20A	1P
20	Hillrom bed Receptacle 4269	20A	1P
22	Rm 4265 ICU Headwall West	20A	1P
24	Hillrom 4270	20A	1P
26	Hillrom bed Receptacle 4270	20A	1P
28	Hillrom bed Receptacle 4268	20A	1P
30	Hillrom bed Receptacle 4268, Receptacle undersink 4268	20A	1P
32	Hillrom bed Receptacle 4262	20A	1P
34	Hillrom Receptacle 4262	20A	1P
36	Hillrom bed Receptacle 4216	20A	1P
38	Hillrom Receptacle 4216	20A	1P
40	Unknown	20A	1P
42	Receptacle 4214	20A	1P

REVISED: CR-4 Right Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Right PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
43	Hillrom bed Receptacle 4246	20A	1P
45	Hillrom bed Receptacle 4246	20A	1P
47	Hillrom bed Receptacle 4250	20A	1P
49	Hillrom bed Receptacle 4250	20A	1P
51	Hillrom bed Receptacle 4251	20A	1P
53	Hillrom bed Receptacle 4251	20A	1P
55	4245 Hillrom Receptacle	20A	1P
57	4245 Hillrom Receptacle	20A	1P
59	Hillrom bed Receptacle 4230	20A	1P
61	Hillrom bed Receptacle 4230	20A	1P
63	4234 Hillrom Receptacle	20A	1P
65	4234 Hillrom Receptacle	20A	1P
67	4236 Hillrom Receptacle	20A	1P
69	4236 Hillrom Receptacle	20A	1P
71	4237 Hillrom Receptacle	20A	1P
73	Receptacle 4237, Hillrom Receptacle 4237	20A	1P
75	Hillrom Receptacle 4233	20A	1P
77	Hillrom Receptacle 4233	20A	1P
79	Receptacle 4207	20A	1P
81	Hillrom Receptacle 4205	20A	1P
83	Hillrom Receptacle 4205	20A	1P

REVISED: CR-4 Right Room 4212			
UPDATED: December 28th, 2007			
PANEL: Emer CR-4 Right PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 225A WIRE: 4 POLE: 84			
CKT#	DESCRIPTION	CB	POLE
44	Receptacle 4252	20A	1P
46	Receptacle 4228, Undersink Receptacle 4243	20A	1P
48	Receptacle 4238	20A	1P
50	Receptacle 4217	20A	1P
52	Receptacle 4225	20A	1P
54	Hillrom Bed Receptacle 4215	20A	1P
56	Hillrom Bed Receptacle 4215	20A	1P
58	4211 Hillrom Receptacle	20A	1P
60	4211 Hillrom Receptacle	20A	1P
62	4211 Hillrom Receptacle	20A	1P
64	Receptacle 4211 Hillrom Receptacle	20A	1P
66	**Receptacle 4145, 4147**	20A	1P
68	**Receptacle 4149, 4151**	20A	1P
70	**SPARE**	20A	1P
72	**SPARE**	20A	1P
74	Unknown	20A	1P
76	Unknown	20A	1P
78	Hillrom Receptacle 4273	20A	1P
80	Hillrom Receptacle 4273	20A	1P
82	Hillrom Bed Receptacle 4269	20A	1P
84	Hillrom Bed Receptacle 4269	20A	1P

REVISED Panel: LS-4 Room 4212			
UPDATED: December 28th, 2007			
PANEL: LS-4 PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 100 WIRE: 4 POLE: 42			
CKT#	DESCRIPTION	CB	POLE
1	Smoke Dampers 3W	20A	1P
3	Smoke Dampers 3W	20A	1P
5	Smoke Dampers 4E North	20A	1P
7	Spare	20A	1P
9	Spare	20A	1P
11	Smoke Dampers 4E South	20A	1P
13	Smoke Dampers 4207, 4269	20A	1P
15	FIRE ALARM	20A	1P
17	Power Assist Floor 5	20A	1P
19	Power Assist Floor 5	20A	1P
21	Power Assist Floor 3	20A	1P
23	Corridor Lighting Floor 5	20A	1P
25	Corridor Lighting Floor 5	20A	1P
27	**Power Assist Floor 4**	**20A**	**1P**
29	**Power Assist Floor 4**	**20A**	**1P**
31			
33			
35			
37			
39			
41			

REVISED Panel: LS-4 Room 4212			
UPDATED: December 28th, 2007			
PANEL: LS-4 PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 100 WIRE: 4 POLE: 42			
CKT#	DESCRIPTION	CB	POLE
2	Corridor Lighting 3rd Floor West	20A	1P
4	Corridor Lighting 4th Floor West	20A	1P
6	Corridor Lighting 4th Floor East	20A	1P
8	Corridor Lighting 4th Floor Center	20A	1P
10	Medical Gas Master Alarm	20A	1P
12	Medical Gas Alarm 4214	20A	1P
14	Medical Gas Communicators 4261	20A	1P
16	Receptacle Above Nurse Call Panels 4212	20A	1P
18	Medical Gas Alarm 4188	20A	1P
20	Panel LS-7	60A	3P
22	X	X	X
24	X	X	X
26			
28			
30			
32			
34			
36			
38			
40			
42			

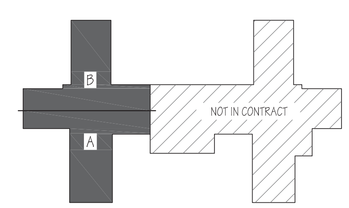
Revised Panel EQ-4 Room 2180			
UPDATED: May 4, 2009			
PANEL: CR-3 PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 200 WIRE: 4 POLE: 42			
CKT#	DESCRIPTION	CB	POLE
1	AHU-1 (20 hp)	20A	1P
3	AHU-1 (20 hp)	20A	1P
5	AHU-1 (20 hp)	20A	1P
7	CHWP-9 (1/2 hp)	20A	1P
9	CHWP-9 (1/2 hp)	20A	1P
11	CHWP-9 (1/2 hp)	20A	1P
13	EF-45, EF-46, EF-47 (2-1/8 hp & 1-1/2 hp)	20A	1P
15	EF-45, EF-46, EF-47 (2-1/8 hp & 1-1/2 hp)	20A	1P
17	EF-45, EF-46, EF-47 (2-1/8 hp & 1-1/2 hp)	20A	1P
19	15A-3PH - Spare Breaker	20A	1P
21	15A-3PH - Spare Breaker	20A	1P
23	15A-3PH - Spare Breaker	20A	1P
25	AHU-03 (7.5 hp) (50A breaker)	20A	1P
27	AHU-03 (7.5 hp) (50A breaker)	20A	1P
29	AHU-03 (7.5 hp) (50A breaker)	20A	1P
31	RF-03 & OAF-03 (3/4 hp) (20A breaker)	20A	1P
33	RF-03 & OAF-03 (3/4 hp) (20A breaker)	20A	1P
35	RF-03 & OAF-03 (3/4 hp) (20A breaker)	20A	1P
37			
39			
41			

Revised Panel EQ-4 Room 2180			
UPDATED: May 4, 2009			
PANEL: CR-3 PANEL TYPE: Square D			
Voltage: 120/208 Phase: 3 AMPS: 200 WIRE: 4 POLE: 42			
CKT#	DESCRIPTION	CB	POLE
2	EF-40, EF-42 (2-1/4 hp)	20A	1P
4	EF-40, EF-42 (2-1/4 hp)	20A	1P
6	EF-40, EF-42 (2-1/4 hp)	20A	1P
8	EF-44, EF-48 (1-1/4 hp & 1-1/2 hp)	20A	1P
10	EF-44, EF-48 (1-1/4 hp & 1-1/2 hp)	20A	1P
12	EF-44, EF-48 (1-1/4 hp & 1-1/2 hp)	20A	1P
14	EF-41, EF-43 (2-1/4 hp)	20A	1P
16	EF-41, EF-43 (2-1/4 hp)	20A	1P
18	EF-41, EF-43 (2-1/4 hp)	20A	1P
20	**FIRE/SMOKE DETECTORS (4TH FLOOR)**	20A	1P
22	AHU-1 Lights & Receptacles	20A	1P
24	**FIRE/SMOKE DETECTORS (4TH FLOOR)**	20A	1P
26	RF-04 (1 hp) & OAF-04 (3/4 hp)(20A breaker)	20A	1P
28	RF-04 (1 hp) & OAF-04 (3/4 hp)(20A breaker)	20A	1P
30	RF-04 (1 hp) & OAF-04 (3/4 hp)(20A breaker)	20A	1P
32			
34			
36			
38			
40			
42			

2 REVISED PANELS

KEYED NOTES

1. MOVE LIGHTING LOAD ROOM 4184 FROM CIRCUIT #16 TO CIRCUIT #2.



KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: NOB.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL PANELBOARDS 4TH FLOOR

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

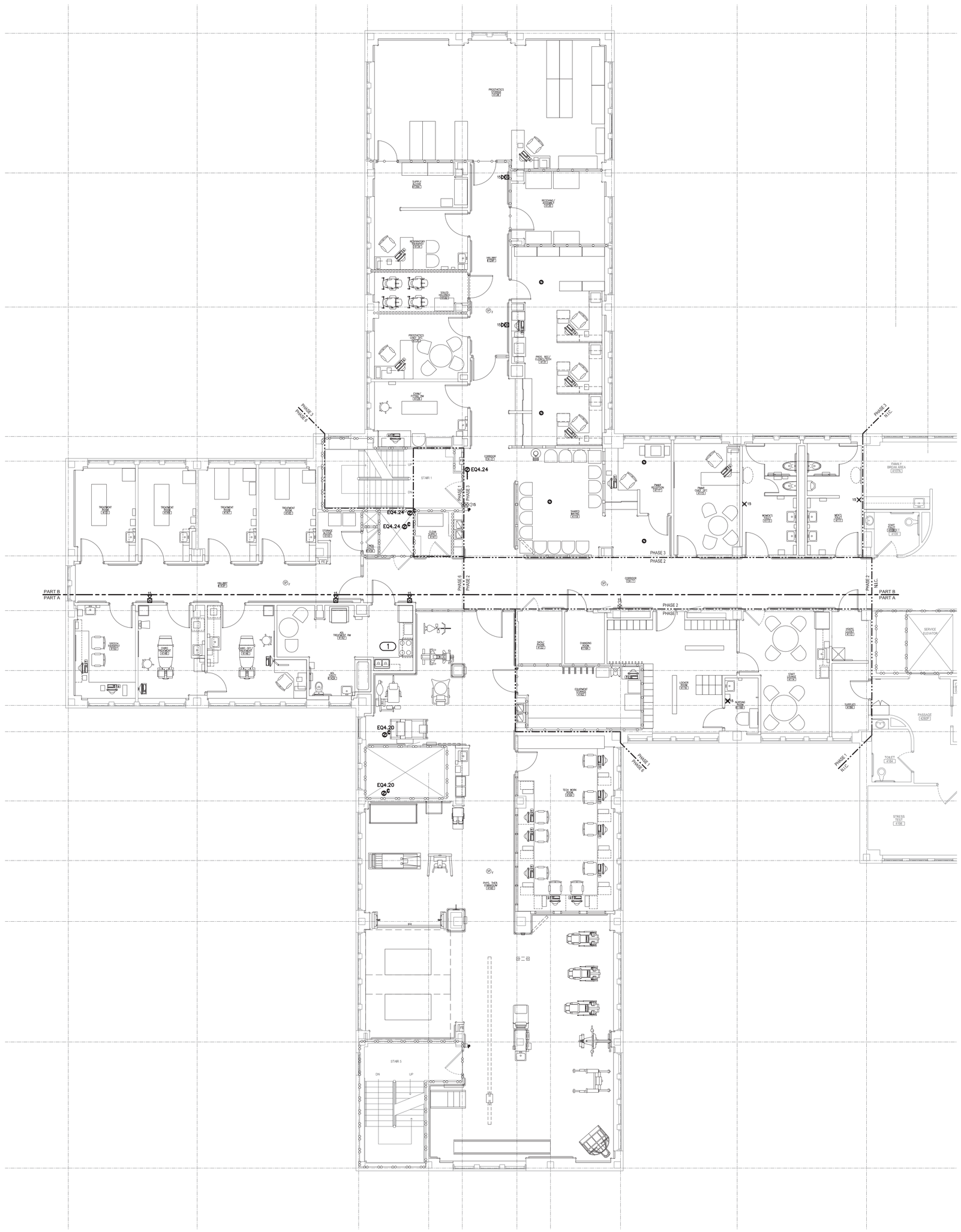
Drawing Number: EY102

Dwg. 97 of 100

Office of Construction and Facilities Management

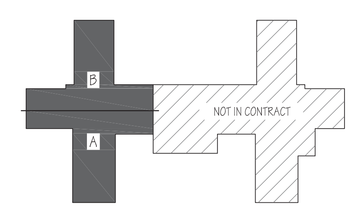
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



1 PARTIAL FOURTH FLOOR - ELECTRICAL FIRE ALARM PLAN - OVERALL
1/8" = 1'-0"

NORTH



KEY PLAN - FOURTH FLOOR
NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: NDB-13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title
ELECTRICAL FIRE ALARM PLAN
4TH FLOOR OVERALL

Approved: Project Director

Project Title
Renovate Four West

Location
IRON MOUNTAIN, MICHIGAN

Date
01/22/2014

Checked
ASR

Drawn
LA

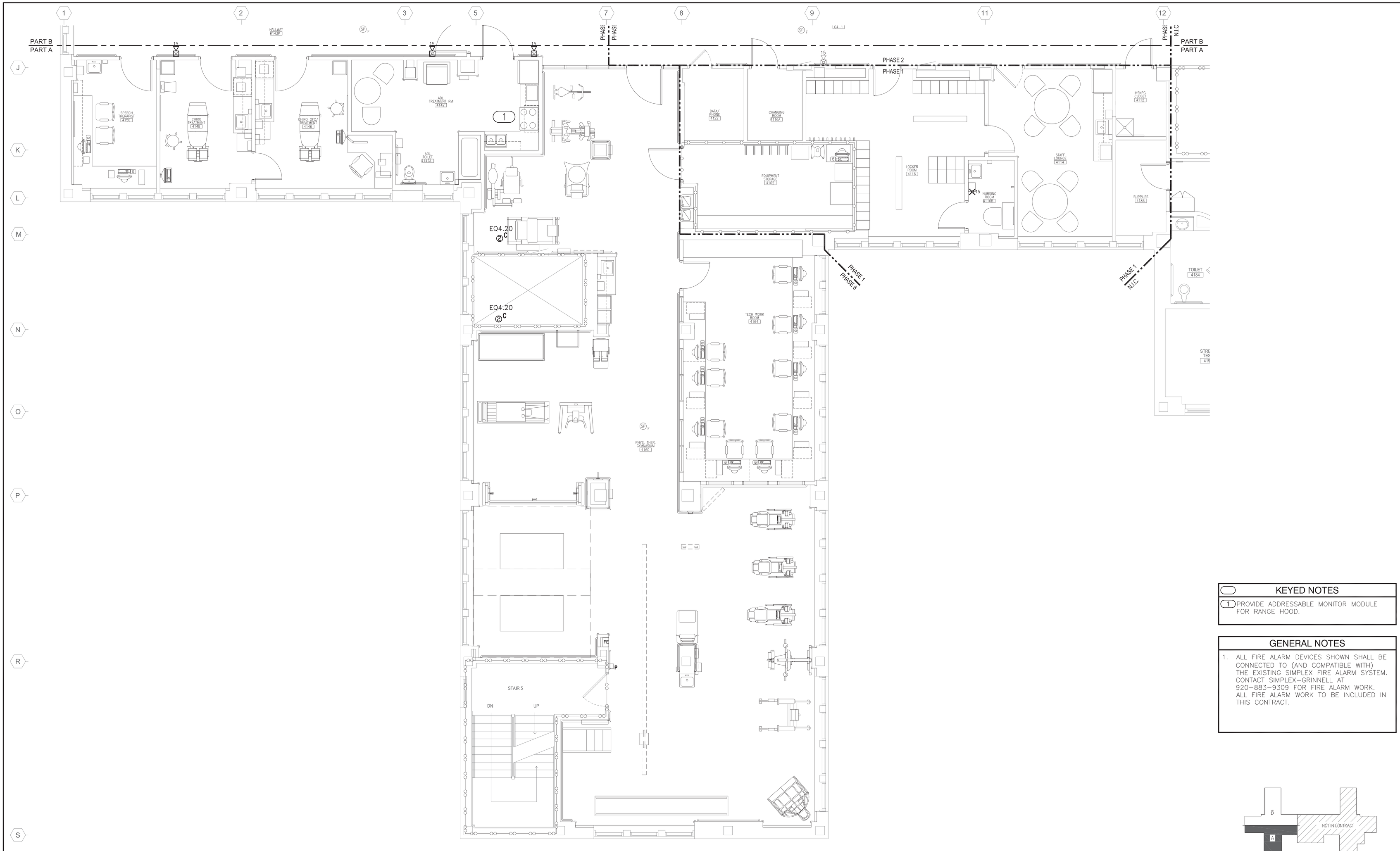
Project Number
585-12-132

Building Number
1

Drawing Number
FA100
Dwg. 98 of 100

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

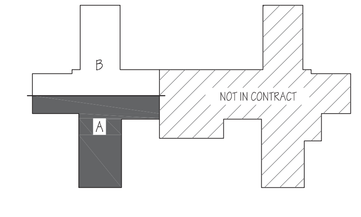


KEYED NOTES

1. PROVIDE ADDRESSABLE MONITOR MODULE FOR RANGE HOOD.

GENERAL NOTES

1. ALL FIRE ALARM DEVICES SHOWN SHALL BE CONNECTED TO (AND COMPATIBLE WITH) THE EXISTING SIMPLEX FIRE ALARM SYSTEM. CONTACT SIMPLEX-GRINNELL AT 920-883-9309 FOR FIRE ALARM WORK. ALL FIRE ALARM WORK TO BE INCLUDED IN THIS CONTRACT.



1 PARTIAL FOURTH FLOOR - FIRE ALARM PLAN - PART A

1/4" = 1'-0"

NORTH

KEY PLAN - FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.3680 | Fax: 715.832.3668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL FIRE ALARM PLAN 4TH FLOOR PART A

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

Drawing Number: FA101

Dwg. 99 of 100

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

GENERAL NOTES

1. ALL FIRE ALARM DEVICES SHOWN SHALL BE CONNECTED TO (AND COMPATIBLE WITH) THE EXISTING SIMPLEX FIRE ALARM SYSTEM. CONTACT SIMPLEX–GRINNELL AT 920–883–9309 FOR FIRE ALARM WORK. ALL FIRE ALARM WORK TO BE INCLUDED IN THIS CONTRACT.

1 PARTIAL FOURTH FLOOR – FIRE ALARM PLAN – PART B

1/4" = 1'-0"

NORTH

KEY PLAN – FOURTH FLOOR

NOT TO SCALE

NORTH

100% CONSTRUCTION DOCUMENTS - REVISED	01/22/2014
Revisions:	Date

CONSULTANTS:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
MEP Associates, LLC | 2720 Arbor Court | Eau Claire, WI 54701
Phone: 715.832.5680 | Fax: 715.832.5668 | www.mepassociates.com
MEP PROJECT NO.: N08.13.01

ARCHITECT/ENGINEERS:

NORTHERN DESIGN WORKS
420 RAIL STREET
NEGAUNEE, MI 49866
PHONE: 906-475-6616
FAX: 906-475-6954
NDW PROJECT NUMBER: 1214

Drawing Title: ELECTRICAL FIRE ALARM PLAN 4TH FLOOR PART B

Approved: Project Director

Project Title: Renovate Four West

Location: IRON MOUNTAIN, MICHIGAN

Date: 01/22/2014 | Checked: ASR | Drawn: LA

Project Number: 585-12-132

Building Number: 1

Drawing Number: FA102

Dwg. 100 of 100

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978