VA MEDICAL CENTER
MARTINSBURG, WV

RENOVATE 2A WING FOR OEF/OIF CLINIC BUILDING 500

510 BUTLER AVENUE, MARTINSBURG, WEST VIRGINIA

ABBREVIATIONS

@	AT
ACT	ACOUSTIC CEILING TILE
ADD	ADDENDUM
ADH	ADHESIVE
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ARCH	ARCHITECT(URAL)
BARR	BARRIER
BD	BOARD
BHD	BULKHEAD
BLDG	BUILDING
BLK	BLOCK(ING)
BM	BEAM
BO	BOTTOM
B/O	BOTTOM OF
BTWN	BETWEEN
BU	BUILT-UP
CAB	CABINET
CG	CORNER GUARD
CJ	CONTROL JOINT
CL	
CL	CLOSET
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMB	COMBINATION
CO	COMPANY
C/O	CLEAN OUT
CONC	CONCRETE
CONF	CONFERENCE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CORR	CORRIDOR
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER
DBL	DOUBLE
DEMO	DEMOLITION
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DF	DRINKING FOUNTAIN
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DTL	DETAIL
DWR	DRAWER
DWG(S)	DRAWING(S)

EF	EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR
EMR	ELEVATOR MACHINE ROOM
EJ	EXPANSION JOINT
ENCL	ENCLOSE(URE)
EQ	EQUAL
EQUIP	EQUIPMENT
EX	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
FF	FINISHED FLOOR
FIN	FINISH(ED)
FLASH	FLASHING
FLR	FLOOR(ING)
FO	FLOOR OUTLET
FOS	FACE OF STUD
FR	FIRE RATED(ING)
FRT	FIRE RETARDED TREATED
FUR	FURR(ING)
FVC	FIRE VALVE CABINET
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GL	GLASS
GEN	GENERAL
GWP	GYPSUM WALL BOARD
H	HEIGHT OR HIGH
HB	HOSE BIB
HC	HOLLOW CORE
HCP	HANDICAPPED
HDR	HANDRAIL
HM	HOLLOW METAL
HORZ	HORIZONTAL
HP	HIGH POINT
HPL	HIGH PRESSURE LAMINATE
HR	HOUR(S)
H & V	HORIZONTAL & VERTICAL
ID	INSIDE DIAMETER
INCL	INCLUDE(D)(ING)
INSUL	INSULATE(D)(ION)
INT	INTERIOR
JB	JUNCTION BOX
JC	JANITOR'S CLOSET
JT	JOINT
KD	KNOCK DOWN
KIT	KITCHEN
KO	KNOCK OUT

LAM	LAMINATE
LAV	LAVATORY
LBL	LABEL LEFT
LH	LEFT HAND
LF	LINEAR FEET
LG	LENGTH
LOC	LOCATION
MACH	MACHINE
MANF	MANUFACTURER
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MIC	MICROWAVE
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MOV	MOVABLE
MUL	MULLION
MT	MARBLE TILE
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFS	OFFICE
OH	OVERHEAD
OPG	OPENING
OPP	OPPOSITE
PART'N	PARTITION
PBD	PARTICAL BOARD
PC	PRECAST CONCRETE
PERF	PERFORATED
PL, PLAM	PLASTIC LAMINATE
PLUMB	PLUMBING
PLAS	PLASTER
PNL	PANEL
PR	PAIR
PREFAB	PREFABRICATED
PREP	PREPARATION
PROJ	PROJECTED(ION)
PT	PRESSURE TREATED
PTD, P	PAINTED
PTN	PARTITION
PTS	PNEUMATIC TUBE STATION
PWD	PLYWOOD
QT	QUARRY TILE

R	RISER
RA	RETURN AIR
RAD, R	RADIUS
RCP	REFLECTED CEILING PLAN
REF	REFERENCE, REFRIGERATOR
REINF	REINFORCE(D)(ING)
REQ	REQUIRED
RES	RESILIENT
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RT	RUBBER TILE
SC	SOLID CORE
SCWD	SOLID CORE WOOD
SCHD	SCHEDULE
SCPLAM	SOLID CORE PLASTIC LAMINATE
SH SHT	SHEET
SIM	SIMILAR
SP	STANDPIPE
SPEC	SPECIFY(ED), SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR, ST	STORAGE
STRUC	STRUCTURAL
SUSP	SUSPENDED
SYS	SYSTEM
T	TREAD
TEL	TELEPHONE
TERR	TERRAZZO
T & G	TONGUE & GROOVE
THK	THICK(NESS)
THRES	THRESHOLD
TLT	TOILET
T/O	TOP OF
TYP	TYPICAL
TS	TOP OF SHELF
UC	UNDERCUT
UL	UNDERWRITER'S LABORATORY
UNF	UNFINISHED
UNO	UNLESS OTHERWISE NOTED
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VWC	VINYL WALLCOVERING
W	WIDTH
W/	WITH
W/O	WITHOUT
WC	WALLCOVERING
WD	WOOD

GENERAL

GS-000	COVER SHEET
GS-001	GENERAL NOTES
GI-101	LIFE SAFETY PLANS- SECOND FLOOR

ARCHITECTURAL

AD-101	DEMOLITION PLAN
AP-101	NEW WORK PLAN
AP-201	NEW WORK RCP
AP-301	NEW WORK FINISH FLOOR PLAN
AP-302	FINISH SCHEDULE
AP-303	EQUIPMENT PLAN & TABLE
AS-101	INTERIOR ELEVATIONS
AS-102	BATHROOM DETAILS
AS-201	PARTITION TYPES
AS-301	DETAILS
AS-302	DETAILS
AS-401	DOOR SCHEDULE & DETAILS

FIRE PROTECTION

FX-001	SPRINKLER SYSTEM NOTES AND SYMBOLS
FX-101	SPRINKLER SYSTEM- SECOND FLOOR- NEW WORK PLAN
FX-501	SPRINKLER SYSTEM DETAILS
FA-001	FIRE ALARM & DETECTION- NOTES AND SYMBOLS
FA-101	FIRE ALARM & DETECTION- SECOND FLOOR- NEW WORK PLAN

PLUMBING

PG-001	PLUMBING LEGEND, ABBREVIATIONS, SCHEDULE AND GENERAL NOTES
PD-101	BLDG 500 FIRST FLOOR INTERSTITIAL SPACE- PLUMBING- DEMOLITION
PD-102	BLDG 500 SECOND FLOOR- PLUMBING- DEMOLITION
PD-103	BLDG 500 SECOND FLOOR INTERSTITIAL SPACE- PLUMBING- DEMOLITION
PL-101	BLDG 500 FIRST FLOOR INTERSTITIAL SPACE- PLUMBING- NEW WORK
PL-102	BLDG 500 SECOND FLOOR- PLUMBING- NEW WORK
PL-103	BLDG 500 SECOND FLOOR INTERSTITIAL SPACE - PLUMBING-NEW WORK
PL-601	RISER DIAGRAMS AND DETAIL

MECHANICAL

MG-001	COVER SHEET- MECHANICAL
MD-101	BLDG 500 SECOND FLOOR- MECHANICAL- DEMOLITION
MD-102	BLDG 500 SECOND FLOOR- MECHANICAL PIPING- DEMOLITION
MH-101	BLDG 500 SECOND FLOOR- MECHANICAL - NEW WORK
MH-102	BLDG 500 SECOND FLOOR- MECHANICAL PIPING - NEW WORK
MH-501	MECHANICAL DETAILS
MH-701	MECHANICAL SCHEDULES

ELECTRICAL

EG-001	ELECTRICAL LEGEND, CONVENTIONS, AND ABBREVIATIONS
EG-002	ELECTRICAL GENERAL NOTES
ED-101	BLDG 500 SECOND FLOOR- ELECTRICAL- DEMOLITION
EL-101	BLDG 500 SECOND FLOOR- LIGHTING
EP-101	BLDG 500 SECOND FLOOR- POWER & SPECIALTY SYSTEMS
ES-501	ELECTRICAL DETAILS
ES-502	ELECTRICAL DETAILS
ES-601	ELECTRICAL ONE-LINE DIAGRAM AND SCHEDULES
ES-602	ELECTRICAL SCHEDULES
ES-603	ELECTRICAL SCHEDULES

TRANSPORTATION

QH-101	PNEUMATIC CONVEYOR SYSTEM ALTERATION

SYMBOLS

XXX / XXX — DRAWING NUMBER / DETAIL INDICATOR / DRAWING SHEET

— DOOR SCHEDULE OPENING NUMBER / DOOR INDICATOR

X — COLUMN NUMBER / COLUMN INDICATOR

X X — WALL TYPE MARKER / NOTES

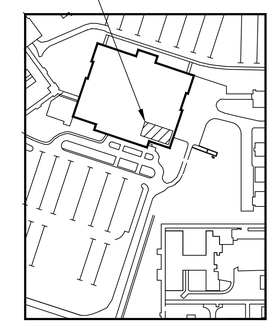
B — SCHEDULED ITEM MARKERS

HEIGHT, ELEVATION MARKERS

1 — GENERAL NOTE MARKER

PROJECT LOCATION NOT TO SCALE

BLDG. 500-2



ALTERNATES NOT TO SCALE

1- ALT. DEDUCT: RENOVATION AND FIT OUT OF SWING SPACE 2A-123.

2- ALT. DEDUCT: RENOVATION AND FIT OUT OF SWING SPACE 2A-123. REINSTALLATION PNEUMATIC TUBE SYSTEM. SYSTEM SHALL BE RETURNED TO VA COTR.

3- ALT. DEDUCT: RENOVATION AND FIT OUT OF SWING SPACE 2A-123. REINSTALLATION PNEUMATIC TUBE SYSTEM. SYSTEM SHALL BE RETURNED TO VA COTR.GLASS DOOR 2A-124B1 & SIDE LIGHT.

4- ALT. DEDUCT: RENOVATION AND FIT OUT OF SWING SPACE 2A-123. REINSTALLATION PNEUMATIC TUBE SYSTEM. SYSTEM SHALL BE RETURNED TO VA COTR.GLASS DOOR 2A-124B1 & SIDE LIGHT. PUSH PLATE & HANDICAP ACCESS CONTROLLER FOR DOOR 2A-124 SUITE ENTRY.

100% Submission

Revisions	Date

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Drawing Title: **Cover Sheet**	Project Title: **2A WING OEF / OIF CLINIC**	Project Number: 613 - 13 - 112	**Department of Veterans Affairs**
Approved: Project Director	Location	Building Number: 500	
	Date: SEPTEMBER 20, 2013 / Checked: CB & MS / Drawn: EBR	Drawing Number: GS-000	

GENERAL NOTES

1. PRIOR TO THE COMMENCEMENT OF WORK THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT, AND IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND REQUIREMENTS.
3. IF ANY HAZARDOUS MATERIALS IS FOUND AT THE SITE, CONTRACTOR IS TO CONFIRM EXISTENCE WITH THE COTR PRIOR TO COMMENCING ANY WORK. CONTRACTOR SHALL CONTACT COTR PRIOR TO COMMENCING ANY WORK TO DISCUSS AND COORDINATE SITE RELATED EXTIRPATIONS (SEE SPECIFICATIONS RELATED TO ASBESTOS ABATEMENT PROVIDED BY VA.)
4. REQUIRED DEMOLITION WORK SHALL NOT BE LIMITED TO THAT PORTION SHOWN ON PLANS ALONE, BUT SHALL INCLUDE ALL NECESSARY WORK AS ASSESSED BY THE CONTRACTOR AFTER VISITING THE SITE PRIOR TO BIDDING. THE CONTRACTOR SHALL GATHER ALL THE INFORMATION AND COORDINATE WITH THE NEW OR MODIFIED WORK AS INDICATED ON THE DRAWINGS. –SEE PHASING NOTE ON SHEET AD–101.
5. CONTRACTOR TO PROVIDE TEMPORARY BARRICADES, DIRECTIONAL SIGNS, DANGER SIGNS AND SIMILIAR DEVICES AS NECESSARY FOR ADEQUATE PROTECTION OF THE PUBLIC AND WORKERS AND PREVENT DUST AND DEBRIS FROM AFFECTING ADJACENT AREAS. PROVIDE SUCH PROTECTION BEFORE DEMOLITION OPERATIONS AND UNTIL COMPLETION OF WORK.
6. CONTRACTOR SHALL PROVIDE ALL REQUIRED DEMOLITION WORK INDICATED ON THESE DRAWINGS. THE SCHEDULING OF DEMOLITION WORK SHALL BE COORDINATED WITH THE COTR PRIOR TO PERFORMING THE WORK.
7. CONTRACTOR SHALL CLEAN THE PROJECT SITE AT THE END OF EACH WORKING DAY.
8. THE CONTRACTOR SHALL COMPLETE THE PROJECT IN ITS ENTIRETY, WHETHER OR NOT ITEMS OF WORK ARE INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL RESTORE, CORRECT AND REPAIR ALL INCIDENTAL DAMAGE DONE TO THE BUILDING OR ITS COMPONENTS DURING THE COURSE OF CONSTRUCTION. PROVIDE UNIT PRICING FOR INDIVIDUAL DAMAGED ITEMS.
10. THE CONTRACTOR SHALL CONFINE THE STORAGE OF ALL CONSTRUCTION MATERIALS, TOOLS AND EQUIPMENT, INCLUDING VEHICLES, TO AREAS DESIGNATED BY THE COTR.
11. GENERAL CONTRACTOR SHALL PROVIDE MATERIAL SAFETY DATA SHEETS FOR ALL CHEMICALS USED AT SITE FOR THE REVIEW OF THE COTR.
12. GENERAL CONTRACTOR SHALL MAINTAIN ACCESS TO THE LOADING AREA AT ALL TIMES DURING CONSTRUCTION.
13. WHERE EXISTING OPENINGS ARE REQUIRED TO BE FILLED, OPENINGS SHALL BE FILLED FLUSH ON EACH SIDE AND NEW FINISHES PROVIDED AND INSTALLED TO MATCH ADJACENT MATERIALS.
14. COORDINATE PENETRATIONS WITH LOCATION OF FRAMING MEMBERS IN FIELD PRIOR TO DRILLING OR SAW CUTTING.
15. THE FIRE RESISTIVE INTEGRITY OF THE ORIGINAL BUILDING, INCLUDING FIRE RATED SHAFTS, FLOOR AND CEILING ASSEMBLY, ETC. IS NOT TO BE COMPROMISED BY ANY ACTION OF THE CONTRACTOR. FIRE STOP AT ALL PENETRATIONS WHERE NEEDED.
16. ALL SURFACES ARE TO BE CLEANED AND NOT MARRED UPON DELIVERY OF THE FINISHED PROJECT TO THE SITE.
17. CONTRACTOR TO INFORM CONTRACTING OFFICER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF AFFECTED WORK.
18. CONTRACTOR TO CLEAN ALL EXISTING SURFACES UPON COMPLETION OF PROJECT.

BUILDING DESIGN DATA

PROPERTY OWNER: VAMC MARTINSBURG

CODE JURISDICTION: FEDERAL GOVERNMENT (VAMC MARTINSBURG)

BUILDING CODES: INTERNATIONAL BUILDING CODE (IBC), 2012 EDITION.
VA FIRE PROTECTION DESIGN MANUAL (VAFPDM) 6TH EDITION SEPTEMBER 2011.
NFPA 101, THE LIFE SAFETY CODE (LSC), 2012 EDITION.
NFPA 13, STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS, 2013 EDITION.
NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE, 2013 EDITION.

FEDERAL MANDATES: EXECUTIVE ORDERS, CODE OF FEDERAL REGULATIONS (CFR), U.S. CODES

GSA RECOMMENDED REGIONAL NON-ENFORCEABLE CODES:

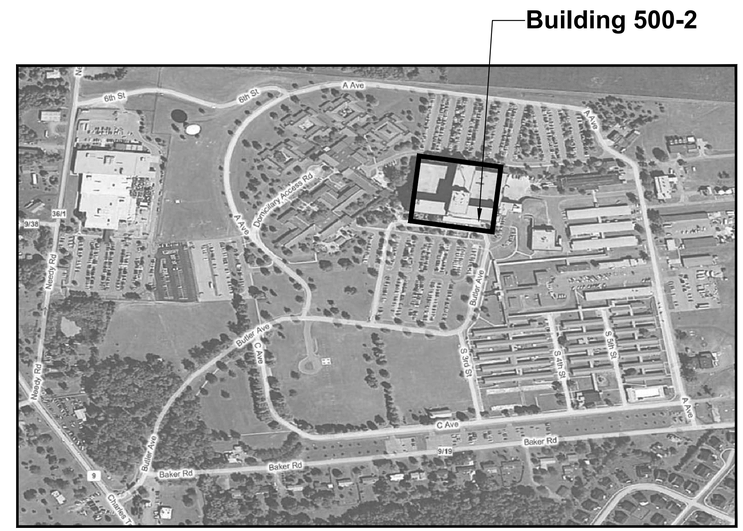
1. FEDERAL GOVERNMENT CODE 29-3-5B AND PROVISIONS
   - 1.1. NFPA 70, NATIONAL ELECTRIC CODE/2011
   - 1.2. THE 2009 INTERNATIONAL BUILDING CODE WITH EXCEPTIONS
   - 1.3. THE 2009 EDITION OF THE INTERNATIONAL PLUMBING CODE
   - 1.4. THE 2009 EDITION OF THE INTERNATIONAL MECHANICAL CODE
   - 1.5. THE 2009 EDITION OF THE INTERNATIONAL FUEL GAS CODE WITH EXCEPTION
   - 1.6. THE 2003 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE
   - 1.7. THE 2003 ICC/ANSI STANDARDS FOR ACCESSIBILITY AND USABLE BUILDINGS AND FACILITIES
   - 1.8. THE 2009 EDITION OF THE INTERNATIONAL EXISTING BUILDING CODE WITH EXCEPTION
2. THE STATE BUILDING CODE CITY OF MARTINSBURG INSERTS

USE GROUP: I-2 (INSTITUTIONAL)
B (BUSINESS)

CONSTRUCTION CLASSIFICATION: TYPE 1A - BLDG. 500-2

SPRINKLERED: FULLY SPRINKLERED

SCOPE OF WORK: RENOVATION



Aerial View Plan

100% Submission

Revisions | Date

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Drawing Title: General Notes

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: GS-001

Department of Veterans Affairs

1 LIFE SAFETY - SECOND FLOOR

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

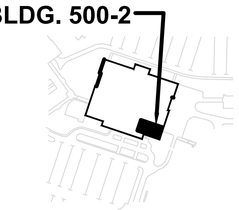
LIFE SAFETY LEGEND

- 2 HR FIRE BARRIER (1–1/2 HOUR DOORS)
- 1 HR FIRE BARRIER (3/4 HOUR DOORS)
- SMOKE BARRIER
- SMOKE RESISTIVE
- HAZARDOUS AREA
- NON–SLEEPING SUITE
- NOT INCLUDED IN SCOPE
- EXIT
- XX' MTD — MTD TO EXIT
- XX' MTD — MTD TO SMOKE BARRIER

OCCUPANT LOAD SUMMARY

	USE	AREA (sq ft)	OCCUPANT LOAD FACTOR (sq ft/person)	OCCUPANT LOAD (People)
Floor 2	Exam/Offices	2314	100	23
	Assembly (Waiting, Group Therapy)	450	15	30
	Storage	292	300	1
	TOTAL AREA	**3056**	**TOTAL OCCUPANT LOAD**	**54**

BLDG. 500-2



KEY PLAN

100% Submission

Revisions	Date

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STATE OF MARYLAND — JOSHUA WALTER HALLER — No. 30436 — PROFESSIONAL ENGINEER
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Drawing Title: **Life Safety Plans - Second Floor**

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

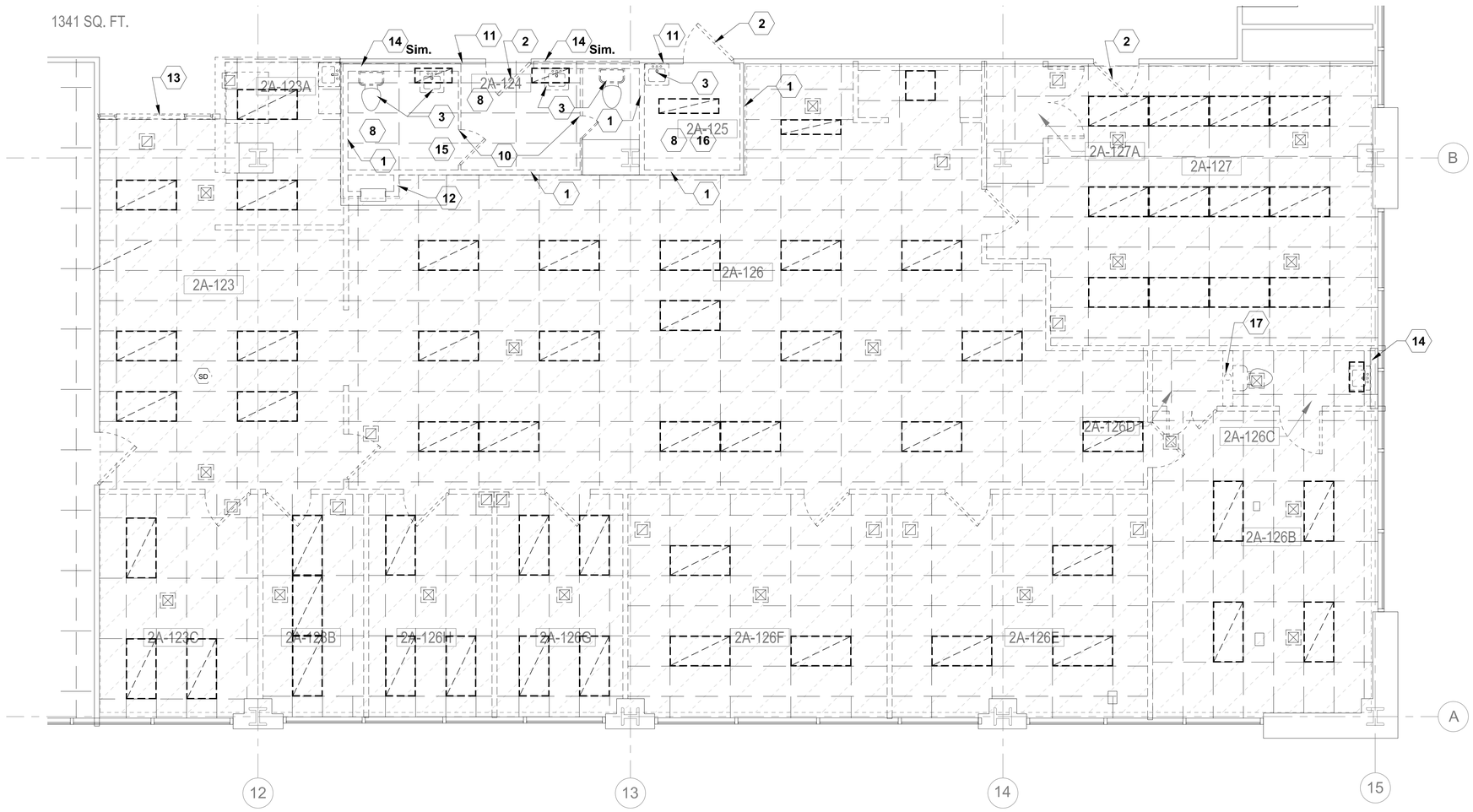
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: GI-101

Department of Veterans Affairs



1 Demolition Plan Level 2 OEF/OIF Clinic

Scale: 1/4"=1"-0"

N

PHASING NOTE:

THIS PHASE INCLUDES DEMOLITION OF REMAINING PORTION OF PARTITIONS ABOVE CEILING, CEILING GRID, CEILING TILES, AND CEILING MOUNTED DEVICES IN HATCHED AREA. OTHER COMPONENTS (I.E. PARTITIONS BELOW CEILINGS, DOORS, BUILT-IN CASEWORK AND FLOORING ARE TO BE REMOVED PER THE DEMOLITION PACKAGE. COORDINATE REMOVAL OF HAZARDOUS MATERIAL WITH THE VA COTR PRIOR TO COMMENCING ANY WORK.

DEMOLITION KEY NOTES

1. REMOVE EXISTING PARTITION.
2. REMOVE EXISTING DOOR, FRAME & HARDWARE.
3. REMOVE PLUMBING FIXTURE. SEE PLUMBING DRAWINGS.
8. REMOVE CERAMIC TILE FLOOR AND ADHESIVE.
10. REMOVE TOILET PARTITION.
11. REMOVE CERAMIC WAINSCOT AT WALLS.
12. REMOVE PNEUMATIC TUBE STATION. FIRESTOP PENETRATION. SALVAGE FOR RELOCATION. SEE NEW WORK PLAN FOR NEW LOCATION.
13. REMOVE STOREFRONT ENTRANCE.
14. REMOVE PLUMBING CHASE. PATCH WALL AND WINDOW FRAME. INFILL AND FIRESTOP PENETRATIONS.
15. REMOVE CEILING GRID & TILES
16. REMOVE DRYWALL CEILING
17. OFFSET EXISTING SANITARY PIPE. COORDINATE SCHEDULING OF WORK W/VA COTR. SEE PLUMBING DRAWINGS.

DEMOLITION NOTES

1. CONTRACTOR SHALL CONTACT VA COTR PRIOR TO COMMENCING ANY WORK TO DISCUSS AND COORDINATE SITE RELATED ABATEMENT (SEE SPECIFICATIONS PROVIDED BY VA.)

2. ALL ROOMS ARE REPORTED TO CONTAIN ASBESTOS IN DUCT MASTIC CONTRACTOR SHALL CONTACT VA COTR PRIOR TO COMMENCING ANY WORK TO DISCUSS & COORDINATE SITE RELATED ABATEMENT. (SEE SPECIFICATIONS PROVIDED BY VA.)

3. PROVIDE FLASH PATCHING FOR LEVEL FLOOR FINISH. PREPARE FLOOR FOR NEW FINISH.

4. FIRESTOP ALL SLAB & CHASE PENETRATIONS ASSOCIATED WITH REMOVAL & CONNECTION OF RISERS, DEVICES, ETC. COORDINATE W/ENGINEERING DRAWINGS.

5. PATCH WALLS AND COLUMNS WHERE DEVICES, CONDUITS AND RISERS HAVE BEEN REMOVED. SEE ELECTRICAL DRAWINGS FOR LOCATION OF DEVICES TO BE REMOVED.

6. CONTRACTOR TO REFER TO ELECTRICAL DRAWINGS FOR COORDINATION AND VERIFICATION OF REMOVAL OF ALL ELECTRICAL DEVICES, FIXTURES AND ASSOCIATED WIRING AND CONDUIT.

7. CONTRACTOR TO REFER TO MECHANICAL DRAWINGS FOR COORDINATION AND VERIFICATION OF ALL MECHANICAL DEVICES AND ASSOCIATED DISTRIBUTION SYSTEMS AND CONTROLS.

11. CONTRACTOR TO PROVIDE TRASH CHUTE AT WINDOW AND TRASH DUMPSTER FOR DISPOSAL. COORDINATE LOCATION WITH COTR.

12. PATCH WALLS WHERE PLUMBING CHASES WERE REMOVED.

13. PROVIDE TEMPORARY CONSTRUCTION BARRIER AT SUITE ENTRANCES.

14. COTR IS TO COORDINATE MAINTAIN A MEANS OF EGRESS FROM 2A-123D THROUGH FISCAL 2A-121 AND OFFICE 02A-121G TO CORRIDOR 2A-C5.

15. PATCH WALLS WHERE PERIMETER BASE BOARD UNITS WERE REMOVED, IF NOT REPLACED IN EXACT LOCATION.

LEGEND

- WALL TO BE REMOVED
- EXISTING WALL TO REMAIN
- EXISTING DOOR TO REMAIN
- DOOR TO BE REMOVED
- AREA NOTED TO HAVE DEMOLITION WORK PERFORMED IN FIRST PHASE. SEE PHASING NOTE.
- CEILING TILE & GRID TO BE REMOVED
- CEILING LIGHT FIXTURE TO BE REMOVED
- HVAC GRILLE TO BE REMOVED. SEE MECH. DWGS.

BLDG. 500-2

KEY PLAN

100% Submission

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FREDERICK, MARYLAND 21702

ARCHITECTURAL REGISTRATION BOARD 8005-A — ERNEST BLAND — STATE OF MARYLAND

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Drawing Title: **Demolition Plan**

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

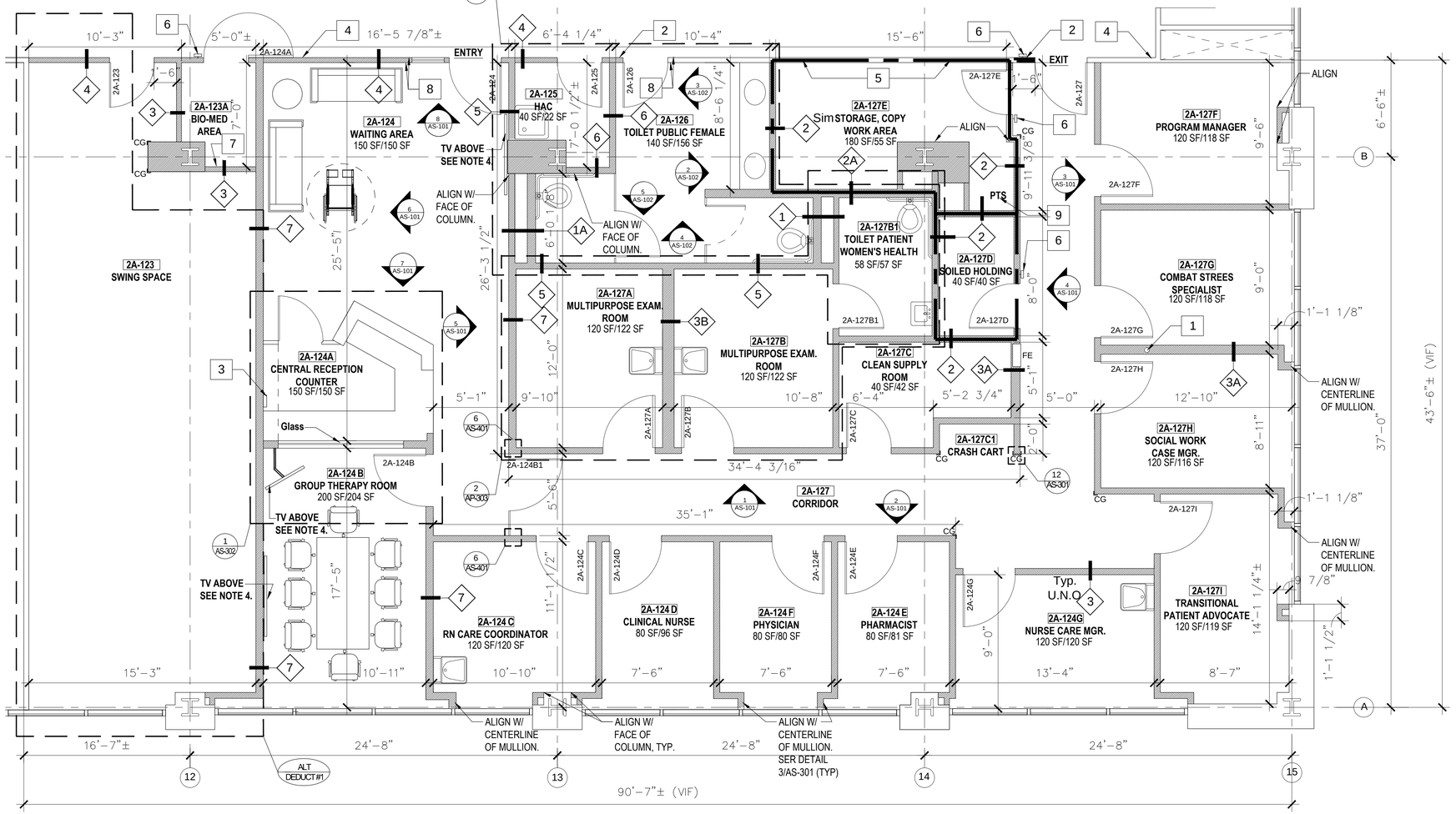
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: AD-101

Department of Veterans Affairs



1 New Work Floor Plan Level 2 OEF/OIF Clinic

Scale: 1/4"=1"-0"

NEW WORK NOTES

1. FIRESTOP AT AND AROUND ALL NEW AND EXISTING FLOOR & CEILING PENETRATIONS.
2. PATCH ALL VERTICAL SURFACES TO MATCH EXISTING WHERE DEVICES, PARTITIONS PIPING, PLUMBING FIXTURES, ETC. HAVE BEEN REMOVED.
3. ALL PARTITIONS ARE TYPE 3 U.N.O.
4. PROVIDE WOOD BLOCKING FOR WALL MOUNTED TV.

NEW WORK KEY NOTES

1. FRAME AROUND RELOCATED SANITARY PIPE. SEE PLUMBING DRAWINGS.
2. INFILL WALL AT REMOVED DOOR OPENING MATCH EXISTING.
3. WHITE NOISE CONTROL MODULE W/BACKGROUND MUSIC INTERFACE INSTALLED INSIDE WALL CABINET. COORDINATE WITH ELECTRICAL OUTLET LOCATION.
4. PATCH AND FINISH WALL ALONG CORRIDOR IN AREA OF WORK. PAINT TO MATCH EXISTING FROM NORTHWEST CORNER OF RM. 2A-121A TO CORNER OF MECHANICAL SHAFT 10. RUBBER BASE TO MATCH EXISTING WHERE REMOVED.
5. PROVIDE & INSTALL ONE LAYER OF 5/8" TYPE X GYPSUM BOARD ON ROOM SIDE.
6. PROVIDE AND INSTALL CARD READER.
7. PROVIDE AND INSTALL PLYWOOD BACKING.
8. PROVIDE AND INSTALL PUSH PLATE FOR HANDICAP ACCESS CONTROLLER. SEE ELECTRICAL DRAWINGS. (ALT. DEDUCT #4).
9. REINSTALLATION OF PNEUMATIC TUBE SYSTEM STATION. -ALT DEDUCT #2.

LEGEND

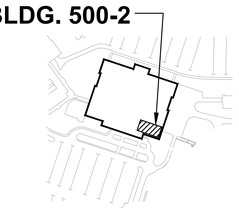
NEW DOOR

1 HR. FIRE RATED PARTITION

NEW RECESSED FIRE EXTINGUISHER CABINET (FE)

NEW PARTITION

BLDG. 500-2



KEY PLAN

100% Submission

Revisions	Date

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ARCHITECTURAL REGISTRATION BOARD 8006-A — ERNEST BLAND — STATE OF MARYLAND

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Drawing Title: New Work Floor Plan

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

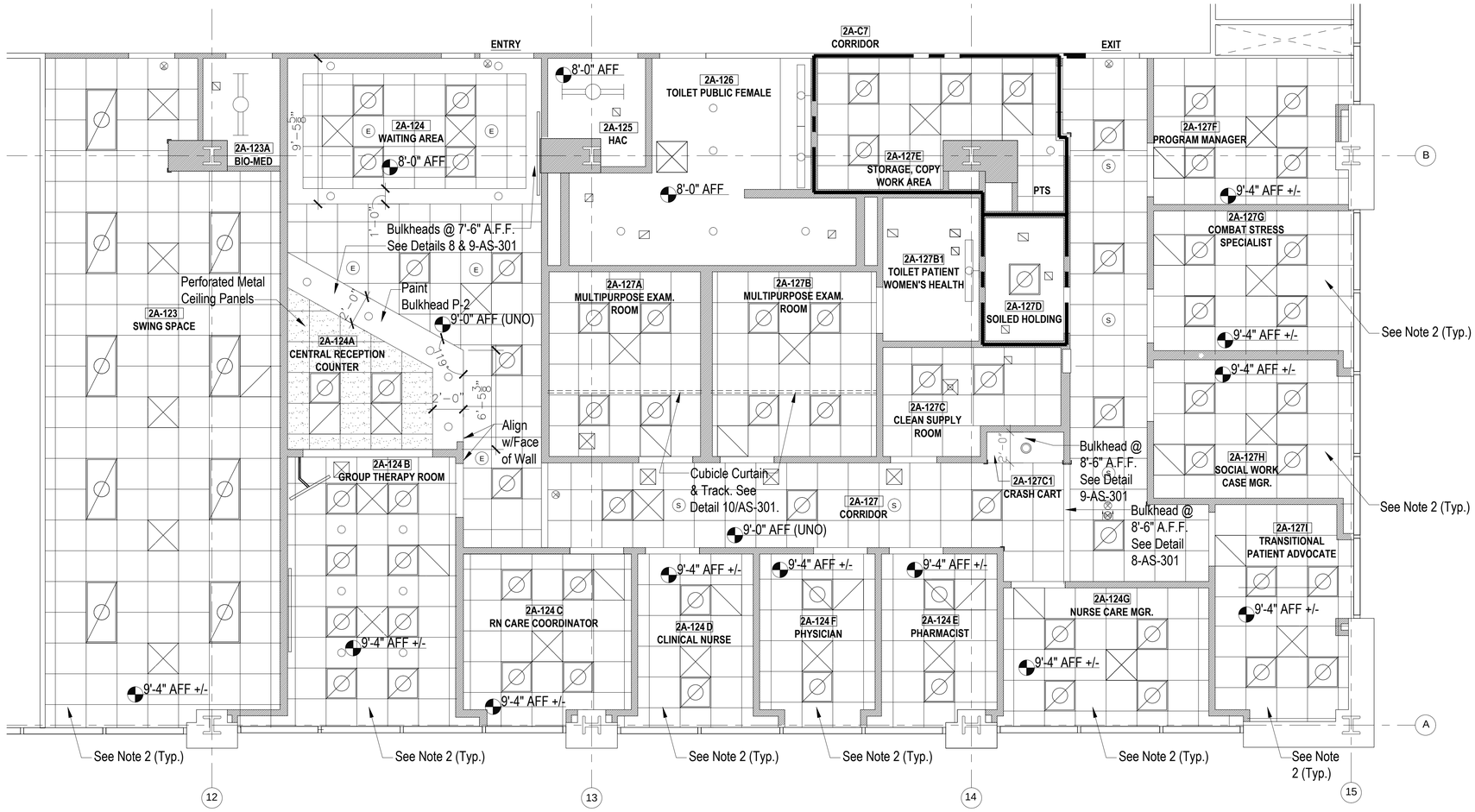
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: AP-101

Department of Veterans Affairs



1 New RCP Level 2 OIF/OEF Clinic

Scale: 1/4"=1"-0"

N

RCP LEGEND

- 2X4 LED LIGHT FIXTURE
- ACOUSTIC CEILING TILE & GRID SYSTEM.
- DOWN LIGHT
- 2X2 LED LIGHT FIXTURE
- WALL MOUNTED LIGHT
- (E) WHITE NOISE SOUND EMITTER
- HVAC RETURN
- HVAC SUPPLY
- SURFACE CEILING MOUNTED LIGHT FIXTURE
- (S) CEILING MOUNTED SPEAKER

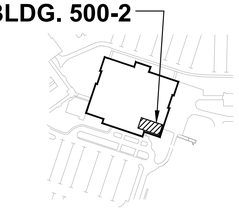
RCP NOTES.

1 THE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR ENSURING \ THAT THE FINAL SPRINKLER LAYOUT IN ALL RENOVATED AREAS IS CODE COMPLIANT. THE SPRINKLER CONTRACTOR IS TO PROVIDE SPRINKLER SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF ANY SPRINKLER HEADS.

2 CEILING HEIGHTS IN PERIMETER ROOMS ARE TO ALIGN W/TOP OF WINDOW FRAME.

3 ALL CEILING HEIGHTS SHALL BE 9'-0"AFF U.N.O.

BLDG. 500-2



KEY PLAN

100% Submission

Revisions	Date

CONSULTANTS

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Drawing Title: **New Work RCP**

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

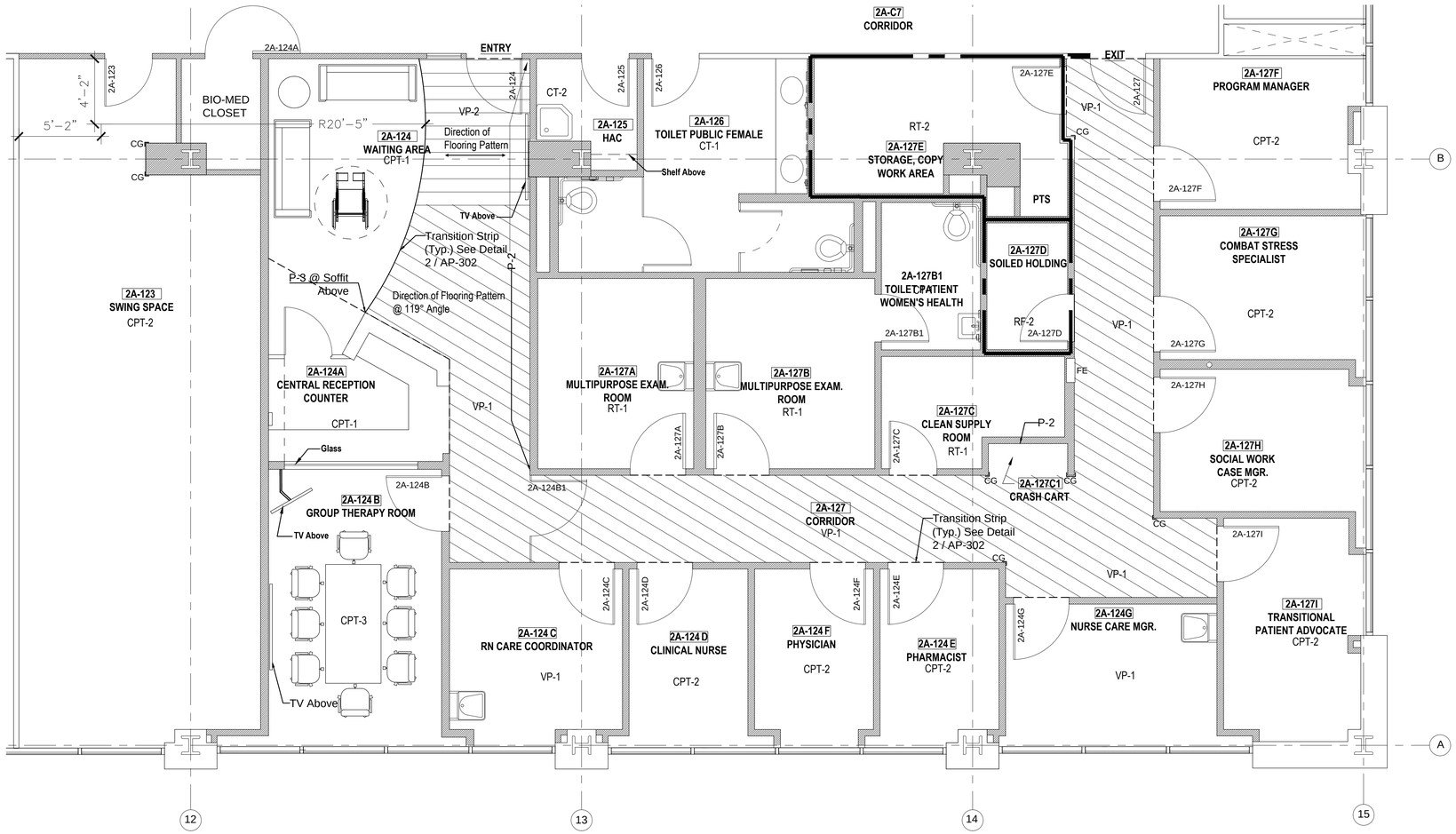
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: AP-201

Department of Veterans Affairs



LEGEND

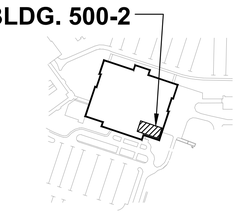
CPT	CARPET TILE
RT	RUBBER TILE FLOOR
CT	CERAMIC TILE
VP	VINYL PLANK
P	PAINT

1 New Work Finish Floor Plan

Scale: 1/4"=1"-0"

N

BLDG. 500-2



KEY PLAN

100% Submission

Revisions	Date

CONSULTANTS

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8006-A
ERNEST BLAND
STATE OF MARYLAND

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Drawing Title: New Work Finish Floor Plan

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013

Checked: CB & MS

Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

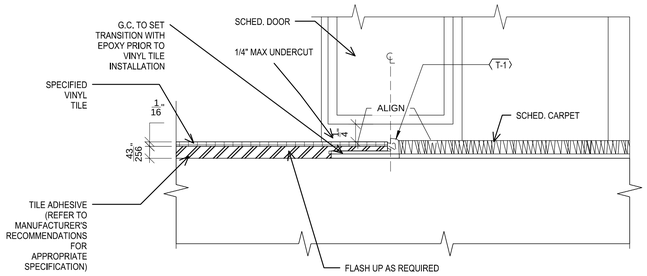
Drawing Number: AP-301

Department of Veterans Affairs

FINISH SCHEDULE

NO.	ROOM NAME	FLOORS									BASE		WALLS			CLG		REMARKS
		CARPET (CPT-1)	CARPET (CPT-2)	CARPET (CPT-3)	RUBBER TILE (RT-1)	RUBBER TILE (RT-2)	CERAMIC TILE (CT-1)	CERAMIC TILE (CT-2)	VINYL PLANK (VP-1)	VINYL PLANK (VP-2)	RUBBER BASE (RB-1)	CERAMIC BASE	PAINT (P-1)	PAINT (P-2)	CERAMIC WAINSCOT	PAINTED GYP. BD.	SUSPENDED ACOUSTICAL TILE	
2A-124	WAITING AREA	●							●	●	●		●	●			●	
2A-124A	CENTRAL RECEPTION	●									●		●				●	
2A-124B	GROUP THERAPY ROOM			●							●		●				●	
2A-124C	RN CARE COORDINATOR								●		●		●				●	
2A-124D	CLINICAL NURSE		●								●		●				●	
2A-124F	PHYSICIAN		●								●		●				●	
2A-124E	PHARMACIST		●								●		●				●	
2A-124G	NURSE CARE MGR.								●		●		●				●	
2A-125	HAC							●				●			●	●		
2A-126	TOILET PUBLIC FEMALE						●					●			●	●		
2A-127	CORRIDOR								●		●		●				●	
2A-127A	MULTIPURPOSE EXAM ROOM				●						●		●				●	
2A-127B	MULTIPURPOSE EXAM ROOM				●						●		●				●	
2A-127B1	TOI. PATIENT WOMEN'S HEALTH						●					●			●	●		
2A-127C	CLEAN SUPPLY ROOM					●					●		●				●	
2A-127C1	CRASH CART								●		●			●			●	
2A-127D	SOILED HOLDING					●					●		●				●	
2A-127E	STORAGE, COPY WORK AREA					●					●		●				●	
2A-127F	PROGRAM MANAGER		●								●		●				●	
2A-127G	COMBAT STRESS SPECIALIST		●								●		●				●	
2A-127H	SOCIAL WORK CASE MGR.		●								●		●				●	
2A-127 I	TRANSITIONAL PATIENT ADVOCATE		●								●		●				●	

1 **Finish Schedule**



CARPET / VINYL TILE TRANSITION

2 **Transition Strip Detail**

100% Submission

Revisions | Date

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Drawing Title: Finish Schedule
Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC
Location
Date: SEPTEMBER 20, 2013
Checked: CB & MS
Drawn: EBR

Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: AP-302

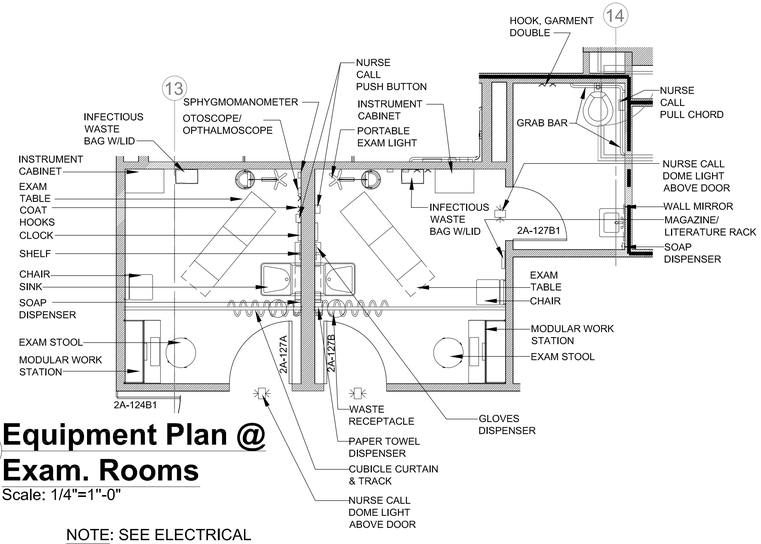
Department of Veterans Affairs

EQUIPMENT & ACCESSORIES RESPONSIBILITY TABLE

CC - Contract Purchase/Contractor Install
VC - VA Purchase/Contractor Install
VV - VA Purchase/VA Provide

ID #	JSN	JSN DESCRIPTION	SIZE h x w x d	ELECTRIC	SPEC. SECTION	NOTES
CC - EQUIPMENT						
101	A5210	Bracket, Television, Wall Mounted, w/ Adjust Arm		-	PER MANF	
102	A5220	Bracket, Television, Wall Backing		-	PER MANF	
103	A1010	Telecommunication Outlet		x	27 05 11	
104	A1066	Mirror, Float Glass, With SS Frame		-	10 28 00	
105	A5145	Hook, Garment, Double, SS, Surface Mounted		-	10 28 00	
106	A5165	Shelf, 5" Depth, SS, Surface Mounted		-	10 28 00	
107	U0100	Nurse Call, Emergency Station w/Corridor Domelight		x	27 52 23	Hill-Rom Navicare
108	A5135	Shelf, Utility W/Mop/Broom Holders, SS Surf Mntd.			10 28 00	
109	A5090	Disposal, Sanitary Napkin, SS, Surface Mounted			PER MANF	
110	A5109	Grab Bar, 1-1/4" Dia., SS, 2 Wall, W/C Accessible		-	10 28 00	
111	A5200	Dispenser, Toilet Tissue, SS, 2-Roll, Surface Mntd.		-	10 28 00	
112	A5180	Track, Cubicle, Surface Mounted, With Curtain		-	10 21 23	
113	A5202	Dispenser, Toilet Paper w/Utility Shelf, SS, 2-Roll		-	10 28 00	
114		Speech Privacy System w/Background Music Interpage		x	27 51 19	
115	U0110	Nurse call, master station		x	27 52 23	Hill-Rom Navicare
116		Baby Changing Station		-	PER MANF	
117		CardReader		x	28 xx xx	
VC EQUIPMENT						
201	U5075	Dispenser, Soap, Disposable			PER MANF	
202	A5080	Dispenser, Paper Towel, SS, Surface Mounted		-	10 28 00	
203	U0300	Pneumatic Tube Station, existing relocated		x	14 50 00	
204		Duress System		x	PER MANF	

1 Equipment & Accessories List



2 Equipment Plan @ Exam. Rooms

Scale: 1/4"=1"-0"

NOTE: SEE ELECTRICAL DRAWINGS FOR LOCATIONS OF ELEC/DATA OUTLETS.

EQUIPMENT & ACCESSORIES RESPONSIBILITY TABLE

CC - Contract Purchase/Contractor Install
VC - VA Purchase/Contractor Install
VV - VA Purchase/VA Provide

ID #	JSN	JSN DESCRIPTION	SIZE h x w x d	ELECTRIC	SPEC. SECTION	NOTES
VV EQUIPMENT						
304	K1552	Brewer, Coffee, Auto, Elect, 3 Burner, Front/Back		x		
305	K4665	Oven, Microwave, Consumer		x		
306	M1825	Printer, Computer		x		
307	M1840	Printer/Copier/Fax Combination		x		
308	F3010	Board, Bulletin	48" x 48"			
309	M1620	Holder, Chart, Patient, Wall or Door Mounted				
310	A1012	Telephone, Wall Mounted, 1 Line				
311	A5077	Dispenser, Hand Sanitizer, Hands-Free				
312	A6046	Artwork, Decorative, With Frame				
313	F0115	Bookcase, Open, 5 Shelf				
314	F0255	Chair, Easy				
315	F0275	Chair, Swivel, High Back				
316	F0420	Cabinet, Filing, Lateral, half height				
317	F2000	Basket, Wastepaper, Round, Metal				
318	F3200	Clock, Battery, 12" Diameter				
319	M1801	Computer, Microprocessing, W/Flat Panel Monitor		x		
320	U0200	Alarm, Device, Security/Duress				
321	F0305	Chair, Waiting Room, Single				
322	F0740	Table, Occasional, Lamp		x		
323	F2300	Rack, Magazine, Wall Mounted				
324	F2310	Rack, Pamphlet, Wall Mounted				
325	F2420	Lamp, table, With Shade		x		
326	M0510	TV/DVD Combination		x		
327	M2070	Shelving, Storage,	77"H x 36"W x 18"D			
328	R6200	Refrigerator, U/C or F/S, 5 Cu Ft.		x		
329	A1132	Rail, Accessory Mounting, Length As Required				
330	A5106	Waste Disposal Unit, Sharps W/Glove Dispenser			N/A	
331	E0210	Worksurface, w/Overhead Cab, Wall Mtd, 48" W		x		
332	E0948	Cart, General Storage, Mobile,	42"H x 32" W 22" D			
333	F0210	Chair, Side, Without Arms				
334	F0340	Stool, self Adjusting				
335	F2010	Basket, Wastepaper, Step-On				
336	M1620	Holder, Chart, Patient, Wall or Door Mounted				
337	M3072	Frame, Infectious Waste Bag W/Lid				
338	M3085	Cabinet, Instrument				
339	M4100	Sphygmomanometer, Aneroid, Wall Mounted				
340	M4200	Otoscope/Ophthalmoscope, Wall Mountded		x		
341	M7401	Light, Exam, Mobile, Spotlight, Mobile Stand		x		
342	M9025	Table, Examination/Treatment, With Cabinet		x		
343	F2020	Can, Trash, 44 Gallon				
344	F2026	Container, Recycling, Large				
345	F0420	Cabinet, Filing, Lateral, Half Height				
346	F2540	Shredder, paper, Security		x		
347	E0954	Cart, Emergency, Mobili,	66"H x 52"W x 22" D	x		
348	M1100	Resuscitator, Bag-Mask, Hand Operated		x		
349	M7660	Defibrillator/Monitor/Recorder, Portable		x		
350	M7905	Oximeter, Pulse		x		
351	M8770	Aspirator/Pressure Unit, General Purpose		x		
352	F0500	Cart, Janitor's				
353	F0110	Bookcase, 3 Shelf				

100% Submission

Revisions | Date

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Drawing Title: Equipment Plan and Schedule

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

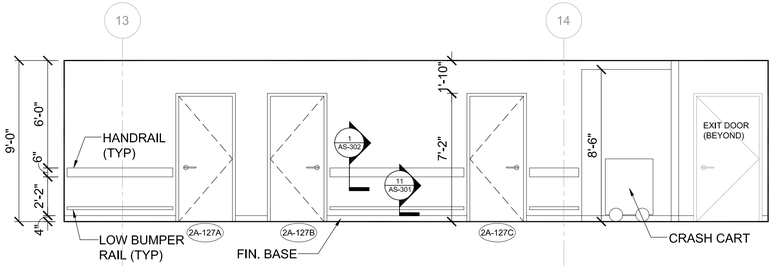
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

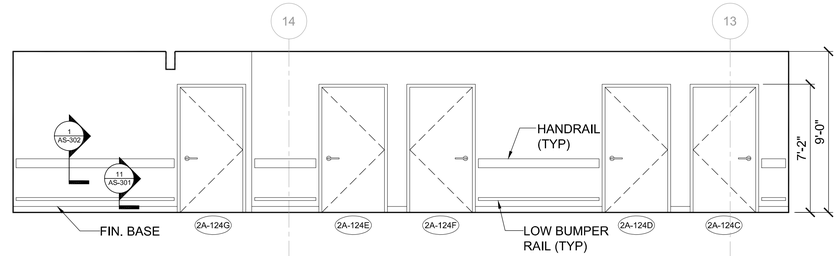
Building Number: 500

Drawing Number: AP-303

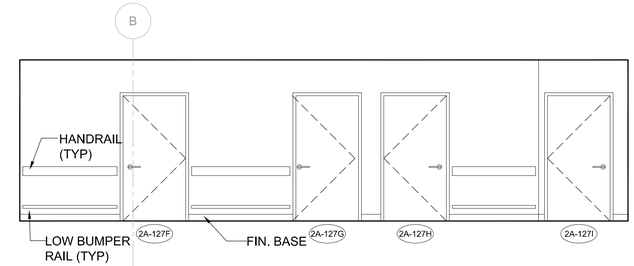
Department of Veterans Affairs



1 Elevation Corridor 2A-127 (Facing North)
Scale: 1/4"=1"-0"



2 Elevation Corridor 2A-127 (Facing South)
Scale: 1/4"=1"-0"



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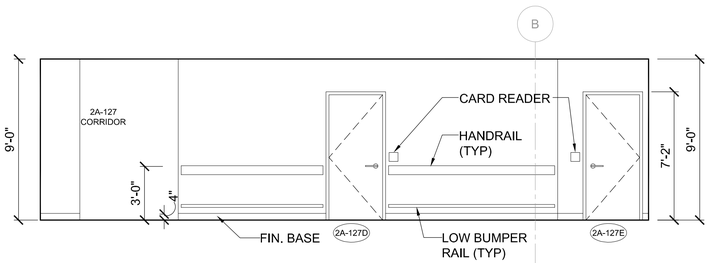
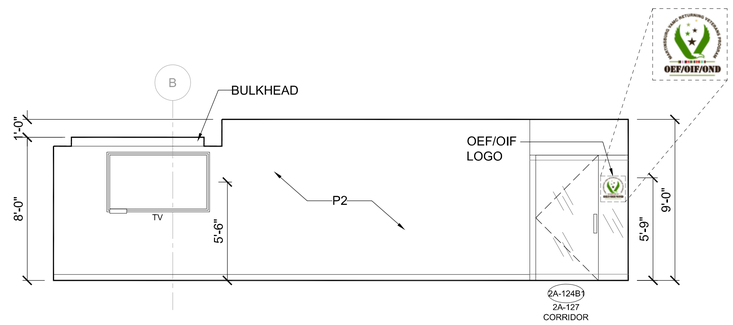
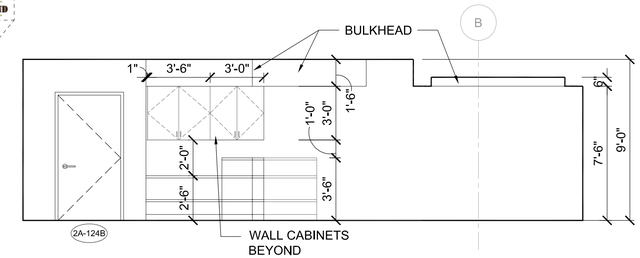
Scale: 1/4"=1"-0"



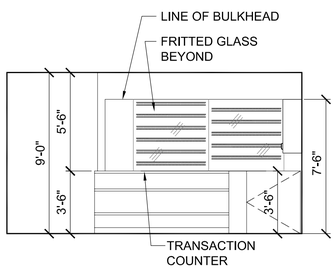
4 Elevation Corridor 2A-127 (Facing West)
Scale: 1/4"=1"-0"



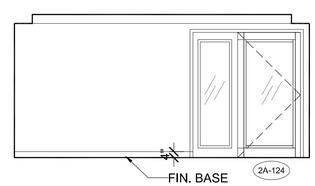
5 Waiting Area (Facing East)
Scale: 1/4"=1"-0"



6 Waiting Area/Reception Desk (Facing West)
Scale: 1/4"=1"-0"



7 Reception (Facing South)
Scale: 1/4"=1"-0"



8 Waiting Area (Facing North)
Scale: 1/4"=1"-0"

100% Submission

Revisions	Date

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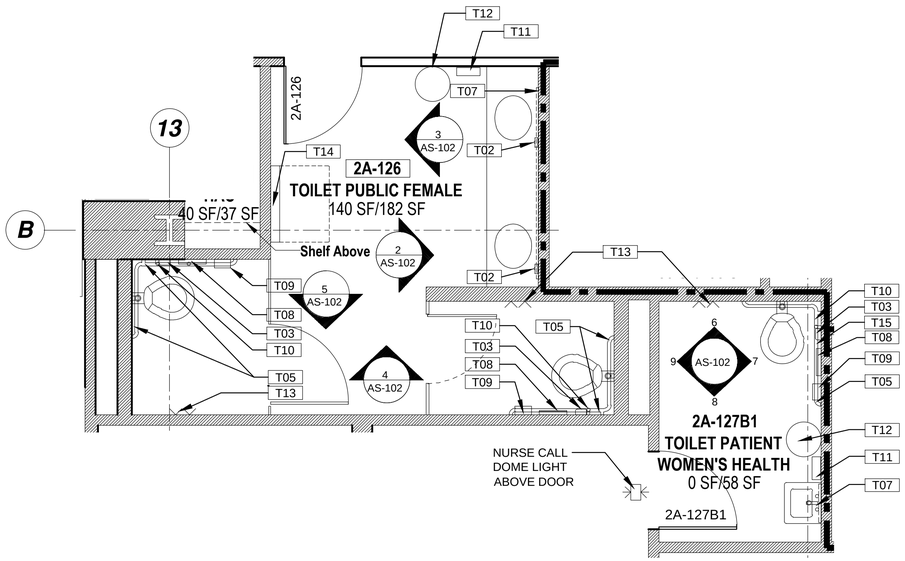
Drawing Title: **Interior Elevations**
Approved: Project Director

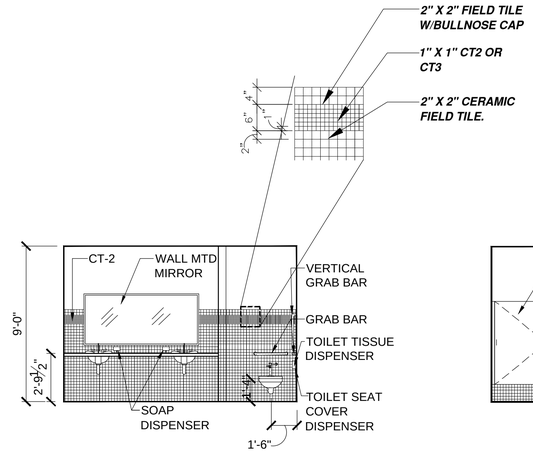
Project Title: **2A WING OEF / OIF CLINIC**
Location
Date: SEPTEMBER 20, 2013
Checked: CB & MS
Drawn: EBR

Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: AS-101

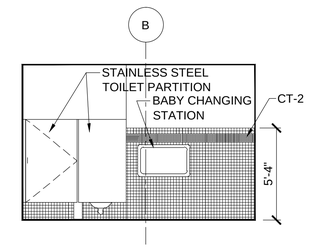
Department of Veterans Affairs



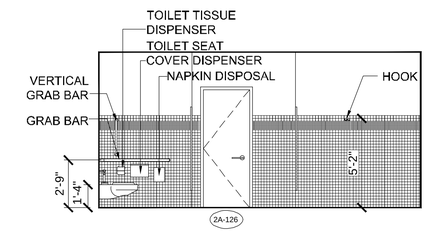
1 Enlarged Bathroom 2A-126
Scale: 3/8"=1"-0"



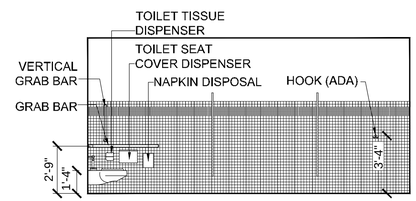
2 Public Toilet (Facing East)
Scale: 1/4"=1"-0"



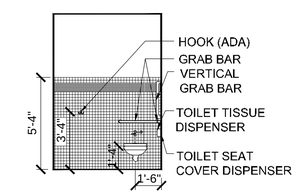
3 Public Toilet (Facing West)
Scale: 1/4"=1"-0"



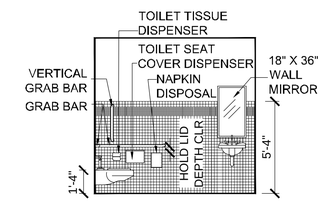
4 Public Toilet (Facing North)
Scale: 1/4"=1"-0"



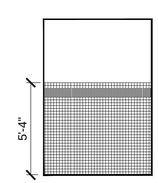
5 Public Toilet (Facing South)
Scale: 1/4"=1"-0"



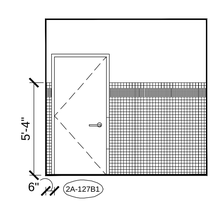
6 Toilet (Facing North)
Scale: 1/4"=1"-0"



7 Toilet (Facing East)
Scale: 1/4"=1"-0"



8 Toilet (Facing South)
Scale: 1/4"=1"-0"



9 Toilet (Facing West)
Scale: 1/4"=1"-0"

TOILET ACCESSORIES SCHEDULE

*	ITEM	FURN.	INST.	MTD. TOLERANCES
T02	SOAP DISPENSER	V	V	40" MAX (C.O. MECHANISM)
T03	TOILET TISSUE DISPENSER	C	C	19" MIN. (C.O.)
T05	GRAB BAR	C	C	33" - 36" (C.O.)
T07	WALL MIRROR	C	C	40" MAX, (B.O. REFLECTANT SURFACE)
T08	TOILET SEAT COVER DISPENSER	C	C	30" (T.O.)
T09	SANITARY NAPKIN DISPOSAL	C	C	25"-30" (T.O.)
T10	VERTICAL GRAB BAR	C	C	39-41" (B.O.)
T11	PAPER TOWEL DISPENSER	V	C	52" (B.O.) (MAX 54")
T12	ROUND METAL WASTE BASKET	V	V	N/A
T13	HOOK, GARMENT, DOUBLE	C	C	62" HIGH, 40" LOW (ADAAG)
T14	BABY CHANGING STATION	C	C	PER MANUF.
T15	NURSE CALL PULL CHORD	C	C	PER MANUF.

T.O. = TOP OF, C.O.= CENTER OF, B.O.= BOTTOM OF (ACCSESORY)

100% Submission

Revisions	Date

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Drawing Title: **Bathroom Details**

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

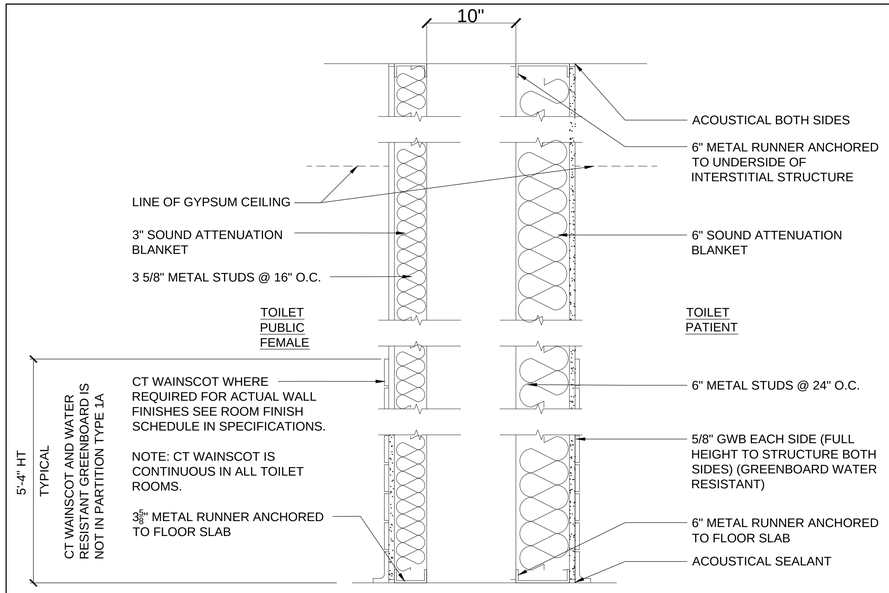
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

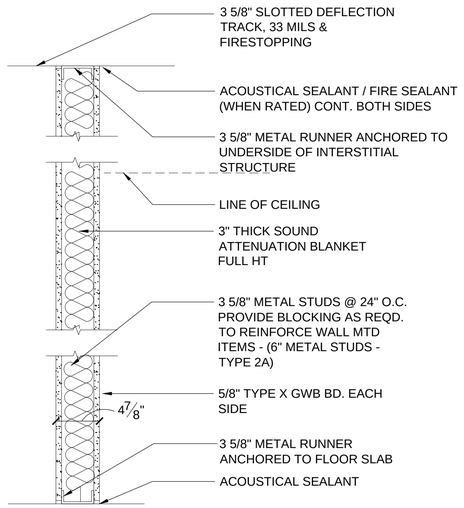
Drawing Number: AS-102

Department of Veterans Affairs



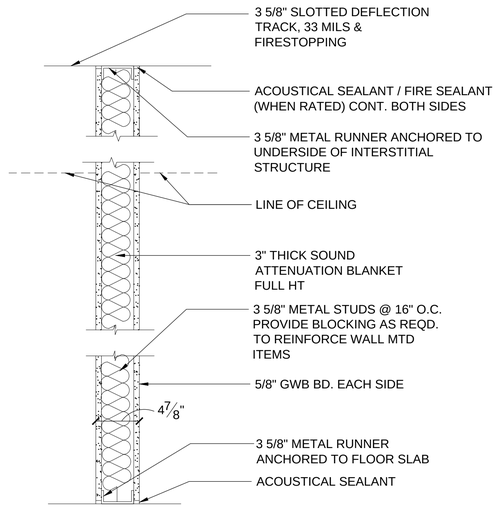
1 Partition @ Adj. Toilet Rooms
Scale: 1 1/2"=1'-0"

1A Partition @ Toilet Rm. & Waiting Area



2 One Hour Partition (UL-U465)
Scale: 1 1/2"=1'-0"

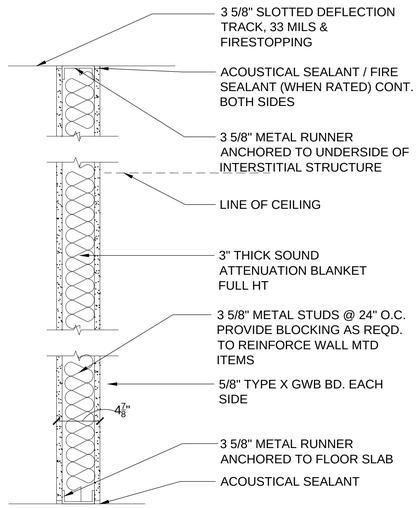
2A One Hour Partition (UL-U465)
Scale: 1 1/2"=1'-0"



3 Non-Rated Partition
Scale: 1 1/2"=1'-0"

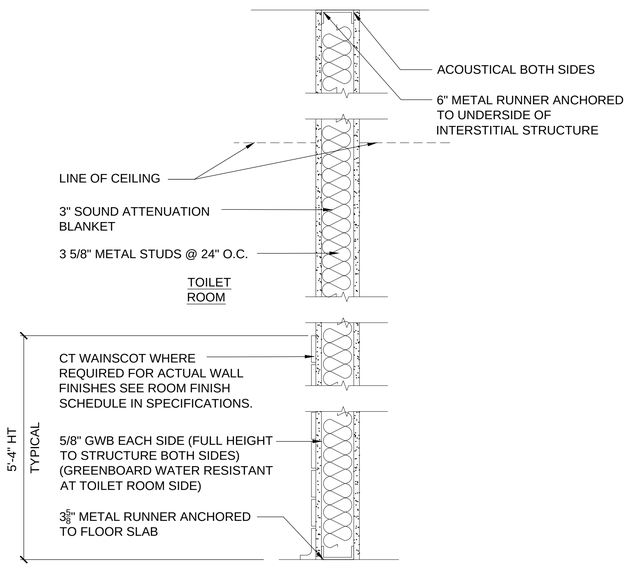
3A Non-Rated Partition w/ 6" Mtl Studs
Scale: 1 1/2"=1'-0"

3B Non-Rated Partition w/ 8" Mtl Studs
Scale: 1 1/2"=1'-0"

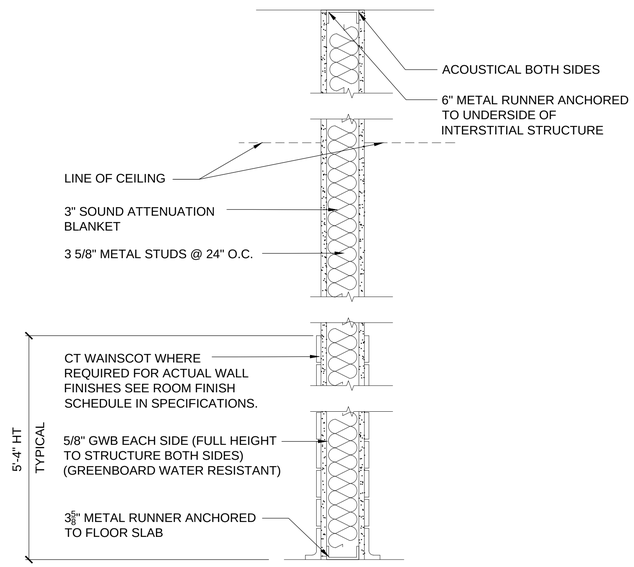


4 Smoke Resistant Partition
Scale: 1 1/2"=1'-0"

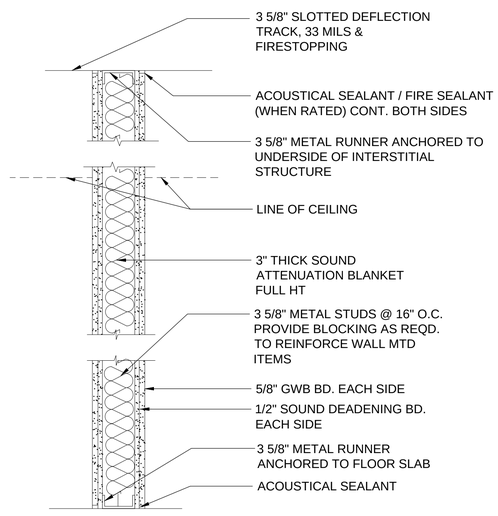
FIRESTOP & CAULK @ ALL PENETRATIONS - UL1479



5 Partition Adjacent to Toilet Rooms
Scale: 1 1/2"=1'-0"



6 Partition Between HAC and Toilet Rm.
Scale: 1 1/2"=1'-0"



7 Sound Rated Partition - STC 49
Scale: 1 1/2"=1'-0"

100% Submission

Revisions	Date

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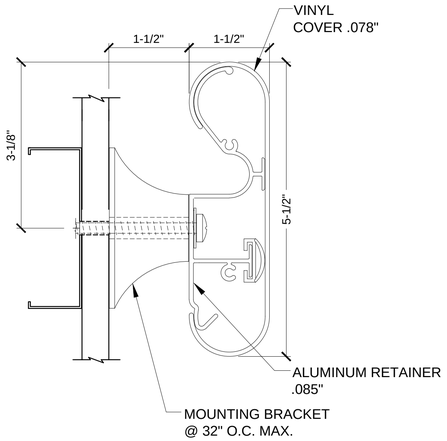
Drawing Title: Partition Types
Approved: Project Director

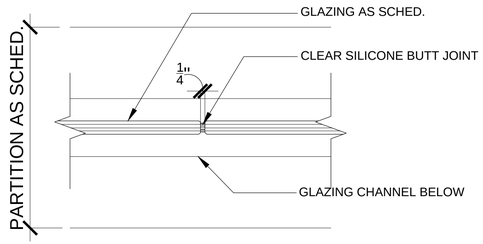
Project Title: 2A WING OEF / OIF CLINIC
Location
Date: SEPTEMBER 20, 2013
Checked: CB & MS
Drawn: EBR

Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: AS-201

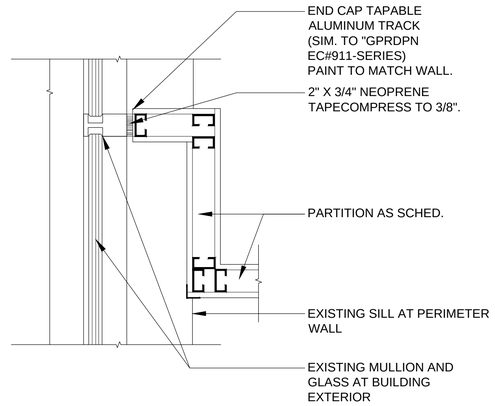
Department of Veterans Affairs



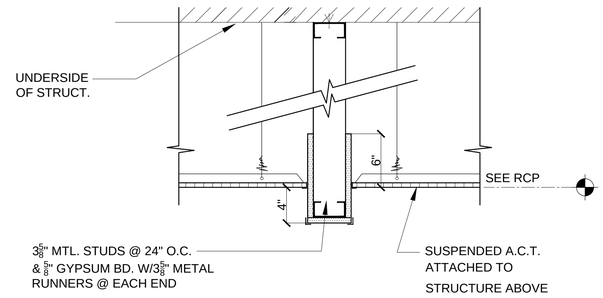
1 Vinyl Handrail
Not to Scale



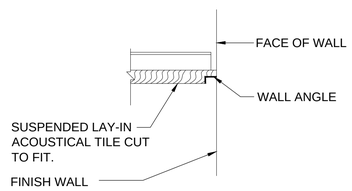
2 Glazed Wall Clerestory Detail @ Butt Joint
Scale: 1 1/2"=1'-0"



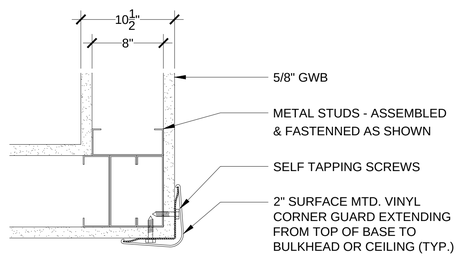
3 Window Mullion Closure Plan Detail
Scale: 3"=1'-0"



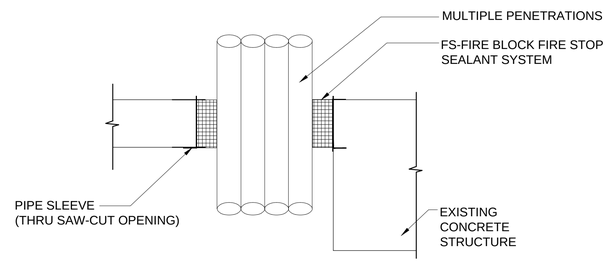
4 Bulkhead Detail @ Corridor
Scale: 1 1/2"=1'-0"



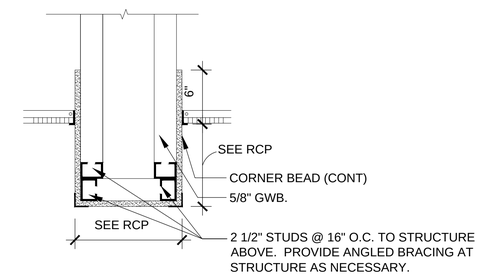
5 Acousical Tile Clg. @ Wall
Scale: 3"=1'-0"



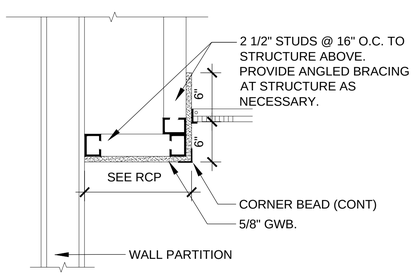
6 Surface Mtd., Vinyl Wall Corner Guard
Scale: 1 1/2"=1'-0"



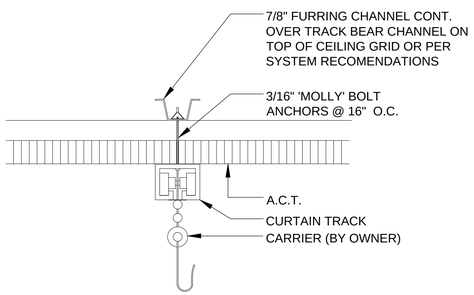
7 Detail @ Piping Penetrations
Scale: 1"=1'-0"



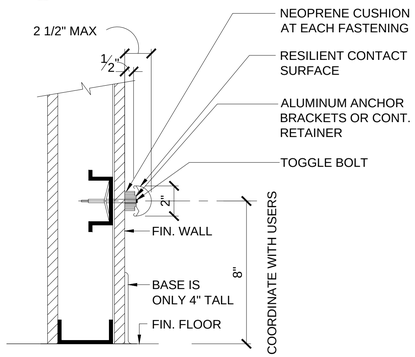
8 Bulkhead Detail
Scale: 1 1/2"=1'-0"



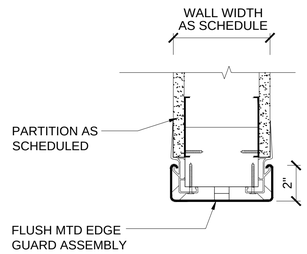
9 Bulkhead Detail
Scale: 1 1/2"=1'-0"



10 Curtain Track @ Acoustical Ceiling Tile
Scale: 1 1/2"=1'-0"



11 Bumper Rail Section
Scale: 3"=1'-0"



12 Edge Guard Detail
Scale: 3"=1'-0"

100% Submission

Revisions	Date

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Drawing Title: **Details**

Approved: Project Director

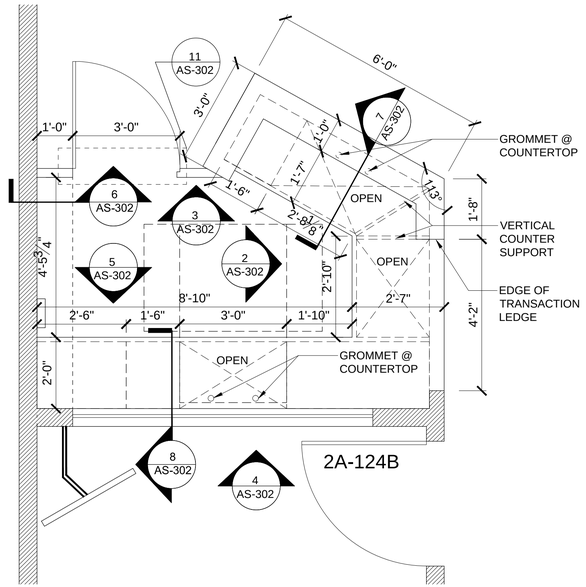
Project Title: **2A WING OEF / OIF CLINIC**

Location

Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

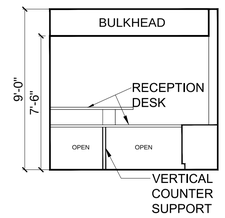
Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: AS-301

Department of Veterans Affairs



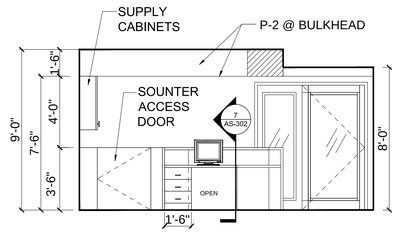
1 Central Reception Counter (2a-124a)

Scale: 1/2"=1'-0"



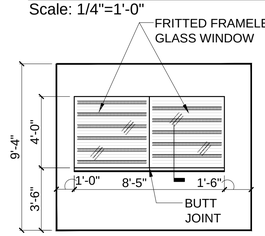
2 Elevation Facing East @ Reception Counter

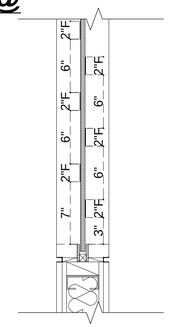
Scale: 1/4"=1'-0"



3 Elevation Facing North @ Reception Counter

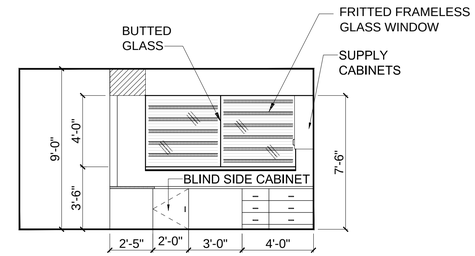
Scale: 1/4"=1'-0"





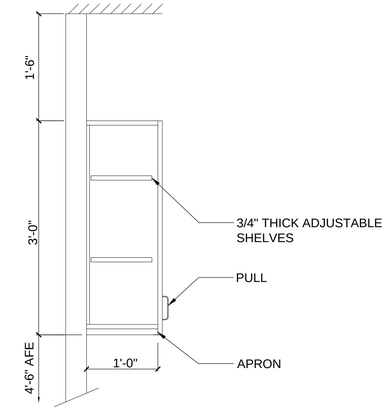
4 Elevation (Room 2A-124B)

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



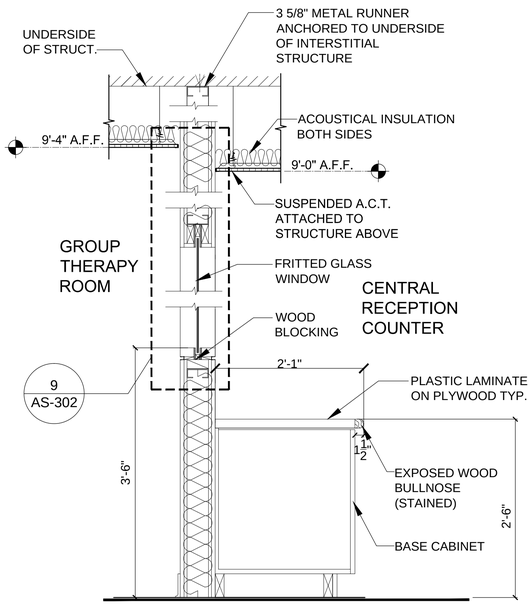
5 Elevation Facing South @ Reception Counter

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



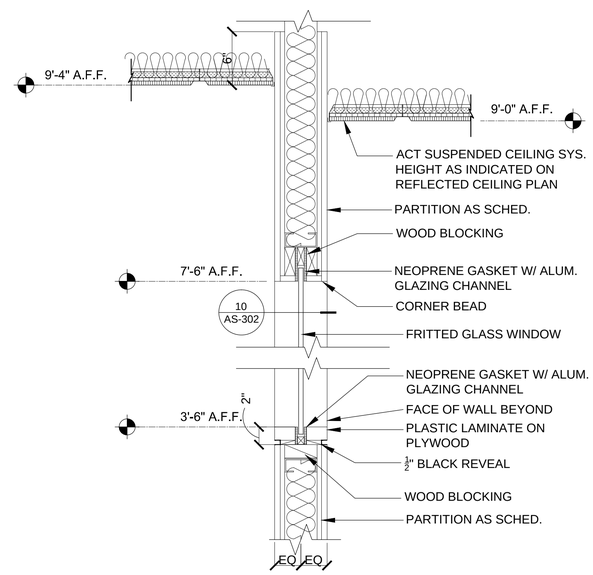
6 Central Reception Overhead Cabinet Section

Scale: 1"=1'-0"



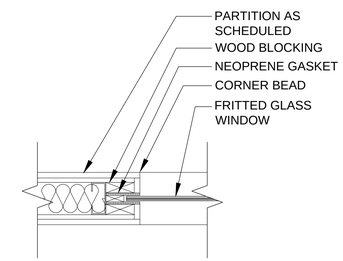
8 Section thru Window (Room 2A-124B)

Scale: 1"=1'-0"



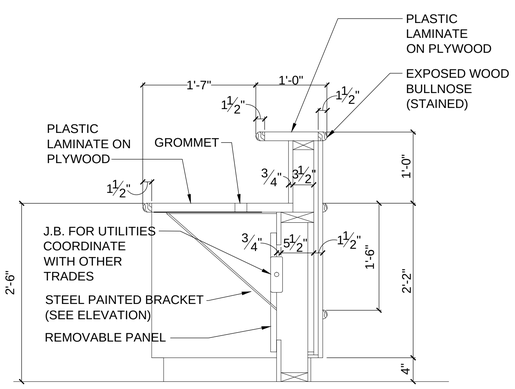
9 Clerestory Section @ Head/Sill

Scale: 1 1/2"=1'-0"



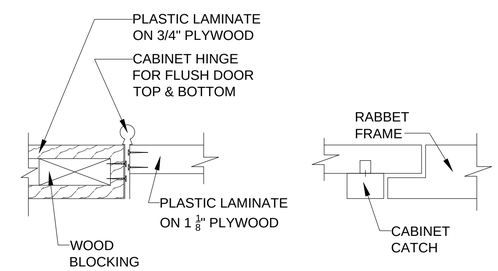
10 Clerestory Detail @ Jamb

Scale: 1 1/2"=1'-0"



7 Section @ Reception Counter

Scale: 1"=1'-0"



11 Cabinet Hinge and Catch Magnet

Scale: 3"=1'-0"

100% Submission

Revisions	Date

CONSULTANTS

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Drawing Title: **Details**

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

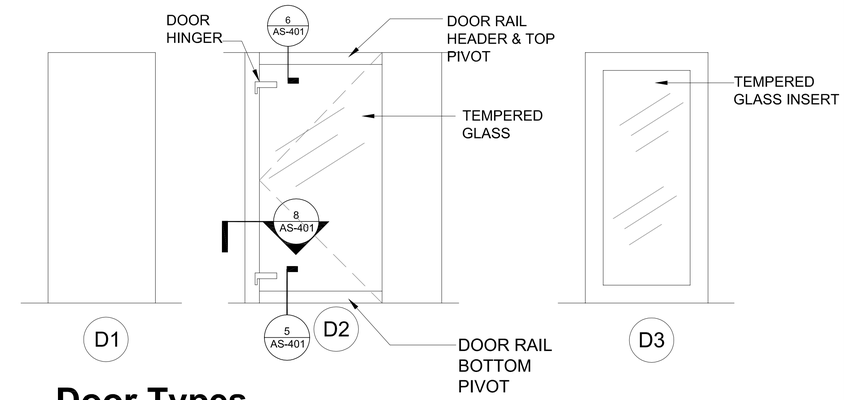
Drawing Number: AS-302

Department of Veterans Affairs

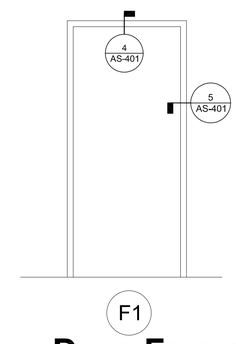
DOOR SCHEDULE BLDG. 500 2A WING OEF/OIF CLINIC

ROOM	DOOR NUMBER	DOOR SIZE	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	DOOR RATING	FRAME HEAD	FRAME JAMB	FRAME TYPE	HDW	REMARKS
SWING SPACE	2A-123	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	4G	
BIO-MED CLOSET	2A-123B	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	SH-3	CARD READER. PROVIDE ELECTRIC STRIKE. COORDINATE W/ELECTRICAL. PROVIDE FREE EGRESS FROM WITHIN ROOM.
WAITING	2A-124	3'-6" x 7'-0"	D3	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	4K	GLASS INSERT. (PUSH PLATE ACCESS. ALT. DEDUCT #4)
GROUP THERAPY ROOM	2A-124B	3'-6" x 7'-0"	D1	ALUMINUM/GLASS	STAINED	N/A	4	5	MET.	4N	
CORRIDOR	2A-124B1	3'-6" x 7'-0"	D2	ALUMINUM/GLASS	GLASS	N/A	6	7	MET.	HW-1A	TEMPERED FROSTED GLASS WITH NEGATIVE IMAGE OF OEF/OIF LOGO. SEE ELEVATION 5/AS-101. SEE 8/AS-401 FOR HINGE DETAIL. ALUMINUM THRESHOLD, DOOR & SIDELIGHT IS ALT. DEDUCT #3
RN CARE COORDINATOR	2A-124C	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
CLINICAL NURSE	2A-124D	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
PHARMACIST	2A-124E	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
PHYSICIAN	2A-124F	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
NURSE CARE MGR.	2A-124G	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
HAC	2A-125	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	5D	
TOILET PUBLIC FEMALE	2A-126	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	$2G_{10}4B_{11}$	PUSH PLATE ACCESS
CORRIDOR	2A-127	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	1	
MULTIPURPOSE EXAM. ROOM	2A-127A	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	4N	
MULTIPURPOSE EXAM. ROOM	2A-127B	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	4N	
TOILET PATIENT WOMEN'S HEALTH	2A-127B1	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	$2C_3$	
CLEAN SUPPLY ROOM	2A-127C	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	SH-3C	
SOILED HOLDING	2A-127D	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	45 MIN.	4	5	MET.	SH-3E	CARD READER. PROVIDE ELECTRIC STRIKE. COORDINATE W/ELECTRICAL. PROVIDE FREE EGRESS FROM WITHIN ROOM.
STORAGE, COPY WORK AREA	2A-127E	3'-0" x 7'-0"	D1	SOLID CORE WOOD	STAINED	45 MIN.	4	5	MET.	SH-3E	
PROGRAM MANAGER	2A-127F	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
COMBAT STRESS SPECIALIST	2A-127G	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
SOCIAL WORK CASE MGR.	2A-127H	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	
TRANSITIONAL PATIENT ADVOCATE	2A-127I	3'-6" x 7'-0"	D1	SOLID CORE WOOD	STAINED	N/A	4	5	MET.	3G	

1 Door Schedule
N.T.S.

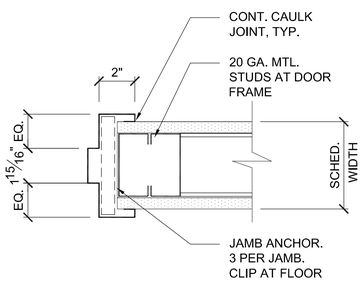


2 Door Types
SCALE: 1/2" = 1'-0"

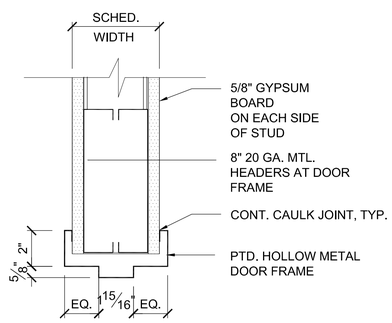


3 Door Frame
SCALE: 1/2" = 1'-0"

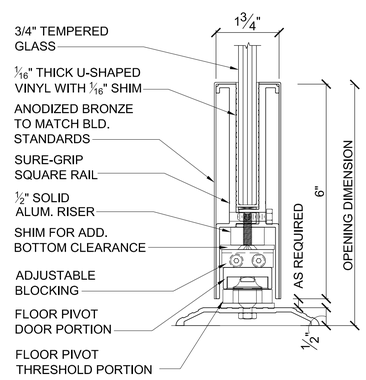
NOTE:
1. ALL DOOR FRAMES TO BE HOLLOW METAL.



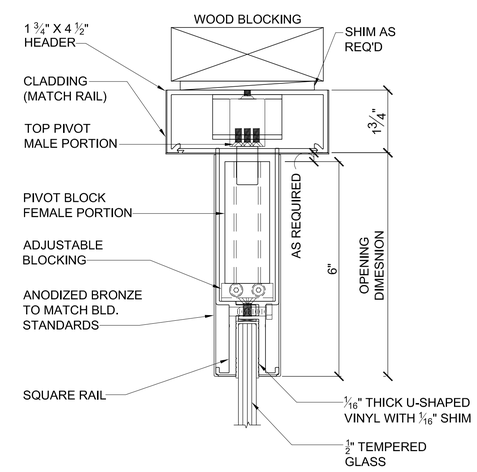
4 Head, Typ.
Scale: 3"=1'-0"



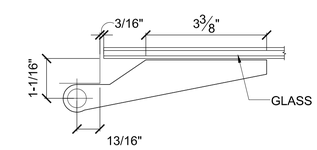
5 Jamb, Typ.
Scale: 3"=1'-0"



6 Rail Bottom Pivot
Scale: 6"=1'-0"



7 Rail Header & Top Pivot
Scale: 6"=1'-0"



8 Door Hinge (Top View)
Scale: 6"=1'-0"

100% Submission

Revisions	Date

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Drawing Title: **Door Schedule and Details**
Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**
Location
Date: SEPTEMBER 20, 2013
Checked: CB & MS
Drawn: EBR

Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: AS-401

Department of Veterans Affairs

SPRINKLER SYSTEM GENERAL NOTES:

1. MODIFY THE EXISTING BUILDING 500 FLOOR 2, WET-PIPE SPRINKLER SYSTEM TO ACCOMMODATE THE NEW 2A OEF/OIF CLINIC RENOVATION PROJECT.

2. PROVIDE ALL NECESSARY MATERIALS AND LABOR TO FURNISH AND INSTALL THE SYSTEM AS DESCRIBED IN THE CONTRACT DOCUMENTS.

3. ALL REFERENCE TO THE AUTHORITY HAVING JURISDICTION (AHJ) SHALL MEAN THE DEPARTMENT OF VETERAN AFFAIRS (VA) REGIONAL FIRE PROTECTION ENGINEER. ALL REFERENCE TO THE ENGINEER SHALL MEAN KOFFEL ASSOCIATES, INC. ALL REFERENCE TO THE OWNER SHALL MEAN THE VA.

4. SPRINKLER SYSTEM AND ASSOCIATED COMPONENTS SHALL BE IN ACCORDANCE WITH:

   - NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2013 EDITION
   - NFPA 101®, *Life Safety Code®*, 2012 EDITION
   - VA FIRE PROTECTION DESIGN MANUAL (VAFPDM) 6TH EDITION, SEPTEMBER 2011
   - THE MANUFACTURER'S REQUIREMENTS
   - APPLICABLE LOCAL CODES AND REGULATIONS

5. THE FOLLOWING DESIGN CRITERIA APPLIES:

   - UNLESS NOTED OTHERWISE, ALL AREAS SHALL BE LIGHT HAZARD: 0.10 GPM/SQ.FT OVER 1,500 SQ.FT

   - STORAGE, CLEAN SUPPLY AND SOILED HOLDING - ORDINARY HAZARD GROUP I: 0.15 GPM/SQ.FT OVER 1,500 SQ.FT

   PER SECTION 11.2.3.2.3.1 OF NFPA 13, A REDUCTION IN THE DESIGN AREA UP TO 40% IS PERMITTED WHERE LISTED QUICK-RESPONSE SPRINKLERS ARE UTILIZED.

6. MUNICIPAL WATER SUPPLY TO THE BUILDING 500 SPRINKLER SYSTEM IS SUPPLEMENTED BY AN ELECTRIC DRIVE HORIZONTAL SPLIT CASE FIRE PUMP LOCATED IN THE BASEMENT MECHANICAL ROOM. RESULTS FROM THE MOST RECENT FIRE PUMP TEST ARE:

STATIC :	-	152 PSI
100%:	-	142 PSI @ 500 GPM
150%	-	106 PSI @ 750 GPM
LOCATION:	-	PUMP DISCHARGE FLANGE
DATE OF TEST:	-	MAY 22, 2012
SOURCE:	-	HUB CITY SPRINKLERS, INC.

   CONTRACTOR SHALL PROVIDE PUMP TEST DATA NO MORE THAN ONE YEAR OLD FOR ALL HYDRAULIC CALCULATIONS. IF TEST RESULTS SHOW DEGRADATION IN EXCESS OF 5 PERCENT OF MANUFACTURER'S PUMP CURVE, NOTIFY THE OWNER IMMEDIATELY.

7. AS PART OF GENERATING SHOP DRAWINGS CONTRACTOR SHALL FIELD SURVEY AND REFLECT PIPING ARRANGEMENT FROM FIRE PUMP DISCHARGE FLANGE TO POINT OF CONNECTION TO SPRINKLER SYSTEM ZONE CONTROL ASSEMBLY ON INTERMEDIATE FLOOR BETWEEN FLOORS 2 & 3, OFF STAIR 1.

8. ALL HYDRAULIC CALCULATIONS SHALL YIELD AT LEAST A 10 PERCENT SAFETY FACTOR FOR EACH SPRINKLER DESIGN AREA, INCLUDING REQUIRED HOSE STREAMS, PER VAFPDM §6.1D.

9. SPRINKLER TYPES SHALL BE AS DESCRIBED IN THE PROJECT SPECIFICATIONS.

10. SPRINKLERS SHALL BE LOCATED IN SUSPENDED CEILING TILES AS INDICATED ON DETAIL 2/ FX501. ARMOVERS AND DROPS TO INDIVIDUAL SPRINKLERS SHALL BE FIELD CUT TO ENSURE PROPER SPRINKLER PLACEMENT.

11. SPRINKLER PIPE AND FITTINGS SHALL MEET THE FOLLOWING CRITERIA:

    - PIPE SIZES 2" AND SMALLER: SCHEDULE 40, BLACK STEEL, MEETING ASTM A53 (TYPE E GRADE B) OR A795 (TYPE E GRADE A) SPECIFICATIONS, CONNECTED WITH THREADED FITTINGS.

    - PIPE SIZES 2-1/2" AND LARGER: SCHEDULE 10, BLACK STEEL, MEETING ASTM A135 OR A795 TYPE E GRADE A SPECIFICATIONS, CONNECTED WITH LISTED GROOVED COUPLINGS.

11. PIPE FITTINGS SHALL INCLUDE:

    - THREADED FITTINGS FOR SCHEDULE 40 PIPE SHALL CONFORM TO SECTION 6.4 OF NFPA 13.

    - ROLL GROOVED FITTINGS FOR SCHEDULE 10 PIPE SHALL BE UL LISTED. COUPLINGS SHALL COMPLY WITH ASTM A536, AND A183 SPECIFICATIONS WITH GRADE E, TYPE A GASKETS. ALL COMPONENTS SHALL BE FROM A SINGLE MANUFACTURER.

12. ALL MATERIALS SHALL BE LISTED BY UNDERWRITERS LABORATORIES, INC. (U.L.) FOR USE ON COMMERCIAL FIRE PROTECTION SYSTEMS. NOTE THAT SPRINKLERS SHALL ALSO BE FACTORY MUTUAL (FM) APPROVED FOR QUICK RESPONSE, PER VAFPDM §6.1K.

13. ANY NECESSARY CONNECTIONS TO THE FIRE ALARM SYSTEM SHALL BE MADE BY AND COORDINATED WITH THE FIRE ALARM CONTRACTOR. SYSTEM ACCEPTANCE TESTS SHALL BE CONDUCTED BY THE FIRE ALARM CONTRACTOR AND WITNESSED BY THE VA.

14. ALL HANGERS SHALL BE U.L. LISTED FOR USE WITH SPRINKLER SYSTEMS. HANGER INSTALLATION AND SPACING SHALL BE IN ACCORDANCE WITH NFPA 13.

15. ALL SPRINKLER SYSTEM PIPING AND HANGERS SHALL BE CONCEALED WHEREVER POSSIBLE. PROVIDE ACCESS PANELS FOR ALL VALVES, WHERE REQUIRED.

16. PENETRATION OF FIRE-RATED ASSEMBLIES SHALL BE SEALED WITH A U.L. CERTIFIED THROUGH-PENETRATION SYSTEM APPROPRIATE FOR THE RATING OF THE WALL PENETRATED.

17. COORDINATE THE LOCATION OF SPRINKLER PIPING SHOWN WITH EXISTING MECHANICAL, STRUCTURAL, AND CEILING SYSTEMS. COORDINATE FINAL LOCATIONS OF ALL SPRINKLERS, PIPING, PIPE SIZES, HANGER LOCATIONS, ETC.

18. CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPMENT OF SHOP DRAWINGS, HYDRAULIC CALCULATIONS, PERMIT FEES, APPROVAL OF SHOP DRAWINGS, AND ACCEPTANCE OF THE SYSTEM BY THE AHJ.

OWNER'S INFORMATION CERTIFICATE

NAME OF OWNER:

U.S. DEPARTMENT OF VETERAN'S AFFAIRS
510 BUTLER AVE.
MARTINSBURG, WV 25405

PHONE: 304-263-0811

EXISTING OR PLANNED CONSTRUCTION IS:

- ■ FIRE RESISTIVE OR NONCOMBUSTIBLE
- ☐ WOOD FRAME OR ORDINARY (MASONRY WALLS WITH WOOD BEAMS)
- ☐ UNKNOWN

IS THE SYSTEM INSTALLATION INTENDED FOR ONE OF THE FOLLOWING SPECIAL OCCUPANCIES:

YES NO
- ☐ ■ AIRCRAFT HANGAR
- ☐ ■ FIXED GUIDEWAY TRANSIT SYSTEM
- ☐ ■ RACE TRACK STABLE
- ☐ ■ MARINE TERMINAL, PIER, OR WHARF
- ☐ ■ AIRPORT TERMINAL
- ☐ ■ AIRCRAFT ENGINE TEST FACILITY
- ☐ ■ POWER PLANT
- ☐ ■ WATER-COOLING TOWER

INDICATE WHETHER ANY OF THE FOLLOWING SPECIAL MATERIALS ARE INTENDED TO BE PRESENT:

YES NO
- ☐ ■ FLAMMABLE OR COMBUSTIBLE LIQUIDS
- ☐ ■ AEROSOL PRODUCTS
- ☐ ■ NITRATE FILM
- ☐ ■ PYROXYLIN PLASTIC
- ☐ ■ COMPRESSED OR LIQUEFIED GAS CYLINDERS
- ☐ ■ LIQUID OR SOLID OXIDIZERS
- ☐ ■ ORGANIC PEROXIDE FORMULATIONS
- ☐ ■ IDLE PALLETS

INDICATE WHETHER THE PROTECTION IS INTENDED FOR ONE OF THE FOLLOWING SPECIALIZED OCCUPANCIES OR AREAS:

YES NO
- ☐ ■ SPRAY AREA OR MIXING ROOM
- ☐ ■ SOLVENT EXTRACTION
- ☐ ■ LABORATORY USING CHEMICALS
- ☐ ■ OXYGEN-FUEL GAS SYSTEM FOR WELDING OR CUTTING
- ☐ ■ ACETYLENE CYLINDER CHARGING
- ☐ ■ PRODUCTION OR USE OF COMPRESSED OR LIQUEFIED GASES
- ☐ ■ COMMERCIAL COOKING OPERATION
- ☐ ■ CLASS A HYPERBARIC CHAMBER
- ☐ ■ CLEANROOM
- ☐ ■ INCINERATOR WASTE HANDLING SYSTEM
- ☐ ■ LINEN HANDLING SYSTEM
- ☐ ■ WATER-COOLING TOWER

YES NO
- ☐ ■ WILL THERE BE ANY STORAGE OR PRODUCTS OVER 12 FT (3.5 M) IN HEIGHT?

YES NO
- ☐ ■ WILL THERE BE ANY STORAGE OF PLASTIC, RUBBER, OR SIMILAR PRODUCTS OVER 5 FT (1.3 M) HIGH EXCEPT AS DESCRIBED ABOVE?

THIS FORM HAS BEEN COMPLETED BY KOFFEL ASSOCIATES ON BEHALF OF THE OWNER BASED ON INFORMATION PROVIDED BY THE OWNER AND HIS AGENTS.

I CERTIFY THAT I HAVE KNOWLEDGE OF THE INTENDED USE OF THE PROPERTY AND THAT THE ABOVE INFORMATION IS CORRECT.

SIGNATURE OF OWNER'S REPRESENTATIVE OR AGENT
DATE: SEPTEMBER 20, 2013

KOFFEL ASSOCIATES, INC
NAME OF OWNER'S REPRESENTATIVE OR AGENT COMPLETING CERTIFICATE

CONSULTING ENGINEER
RELATIONSHIP AND FIRM OF AGENT

FIRE SUPPRESSION SYSTEM SYMBOLS

- NEW SYSTEM PIPING
- EXISTING PIPING TO REMAIN
- DEMO EXISTING PIPING
- POINT OF CONNECTION
- SYSTEM RISER
- DRAIN RISER
- HOSE VALVE
- PIPE ELBOW DOWN
- PIPE TEE DOWN
- CONTROL VALVE
- CHECK VALVE
- OS&Y GATE VALVE
- BUTTERFLY VALVE
- ZCA — ZONE CONTROL ASSEMBLY
- SIDEWALL SPRINKLER
- UPRIGHT SPRINKLER
- PENDENT SPRINKLER
- UPRIGHT SPRINKLER; ON SPRIG
- PENDENT SPRINKLER; ON DROP NIPPLE
- SPRINKLER GUARD; SHOWN ON UPRIGHT SPRINKLER
- AREA NOT IN CONTRACT
- SPRINKLER ZONE BOUNDARY
- NS — NON-SPRINKLERED

FIRE SUPPRESSION ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE	ITC	INSPECTORS TEST CONNECTION
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
BFP	BACKFLOW PREVENTER	MIN	MINIMUM
COL	COLUMN	MT	METAL TILE
CONC	CONCRETE	NIC	NOT IN CONTRACT
DN	DOWN	NS	NON-SPRINKLERED
EC	EXTENDED COVERAGE (SPRINKLER)	NTS	NOT TO SCALE
ETR	EXISTING TO REMAIN	POC	POINT OF CONNECTION
EXP	EXPOSED (NO CEILING)	QR	QUICK RESPONSE (SPRINKLER)
FDC	FIRE DEPARTMENT CONNECTION	STL	STEEL
FHV	FIRE HOSE VALVE	TYP	TYPICAL
GYP	GYPSUM WALL BOARD (SHEETROCK)	UNO	UNLESS NOTED OTHERWISE
HT	HIGH TEMPERATURE (SPRINKLER)		

100% Submission

Revisions | Date

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STATE OF MARYLAND — TODD WALTER FALLER — PROFESSIONAL ENGINEER — 9120173

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Drawing Title: Sprinkler System Notes And Symbols

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

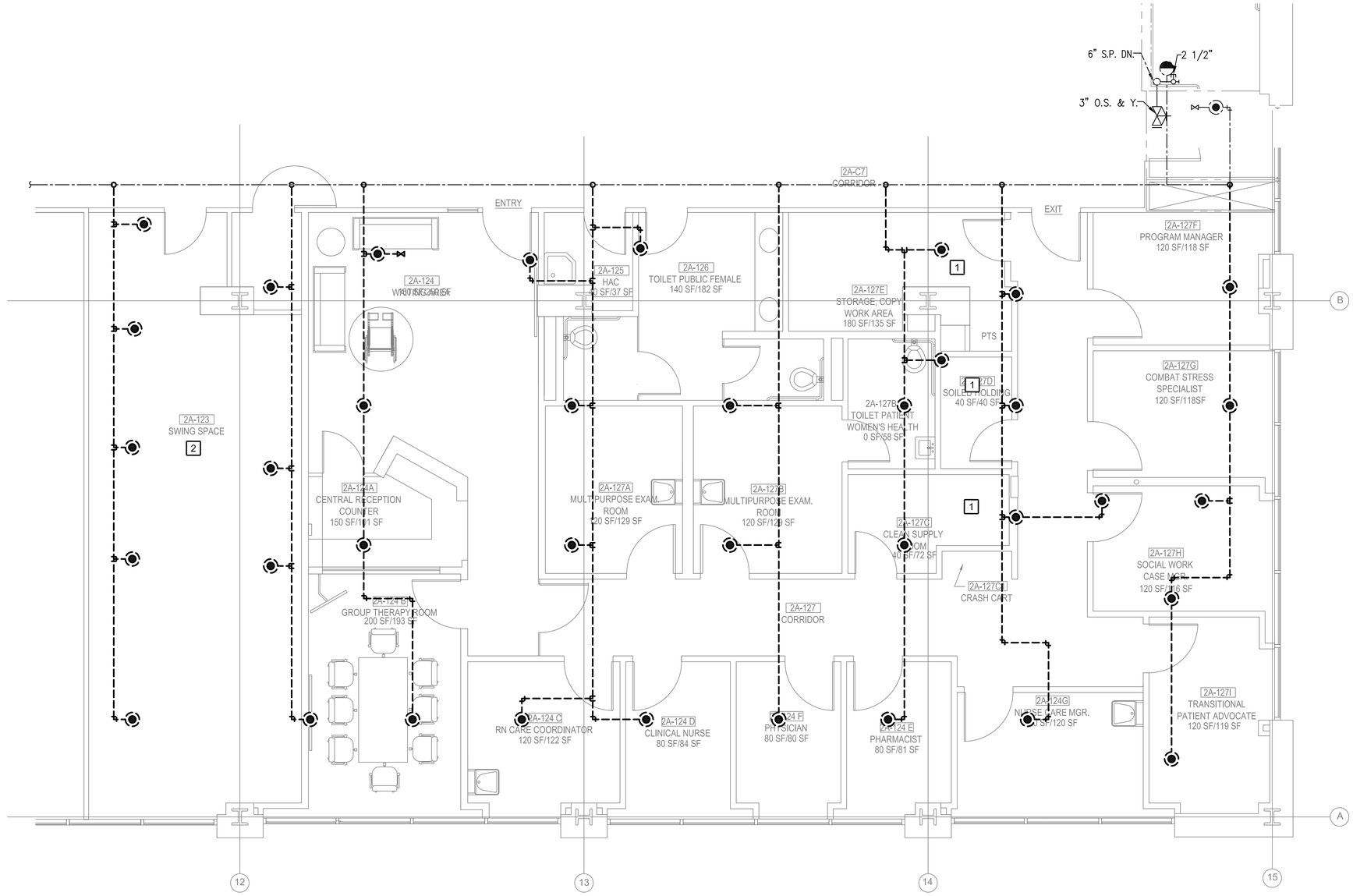
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: FX-001

Department of Veterans Affairs



GENERAL NOTES:

1. DEMO EXISTNG BRANCHLINES AND SPRINKLERS AND REPLACE WITH NEW FM APPROVED QUICK RESPONSE SPRINKLERS. SPRINKLERS TO BE SPACED IN ACCORDANCE WITH NFPA 13 FOR THE HAZARD PROTECTED.
2. ZONE CONTROL ASSEMBLY FOR THIS AREA IS LOCATED IN THE INTERSTITIAL LEVEL BETWEEN FLOORS 2 AND 3, ADJACENT TO STAIR 1.

DRAWING NOTES:

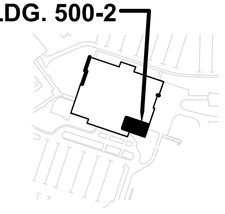
1 THIS AREA TO BE PROTECTED IN ACCORDANCE WITH ORDINARY HAZARD DESIGN CRITERIA.

2 SPRINKLERS IN THIS SWING SPACE SHALL BE UPRIGHT IF ALT/DEDUCT #1 IS CHOSEN.

1 SPRINKLER SYSTEM - SECOND FLOOR - NEW WORK PLAN

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

BLDG. 500-2



KEY PLAN

100% Submission

Revisions | Date

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Drawing Title: Sprinkler System - Second Floor - New Work Plan

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

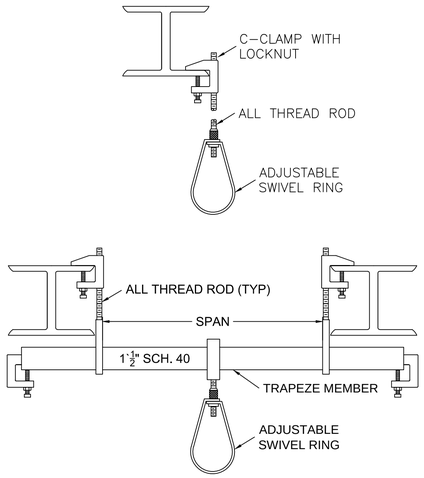
Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: FX-101

Department of Veterans Affairs



HANGER NOTES:

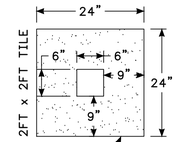
1. MAXIMUM UNSUPPORTED ARMOVER LENGTH SHALL NOT BE GREATER THAN 12"
2. MIN 3/8" ALL THREAD ROD FOR PIPE DIAMETERS 4" AND SMALLER

	MAXIMUM SPAN OF TRAPEZE MEMBER			
DIAMETER	1"	5'-0"	2"	5'-0"
	1 1/4"	5'-0"	2 1/2"	4'-0"
	1 1/2"	5'-0"	3"& 4"	4'-0"

	MAXIMUM DISTANCE BETWEEN HANGERS			
DIAMETER	1"	12'-0"	2"	15'-0"
	1 1/4"	12'-0"	2 1/2"	15'-0"
	1 1/2"	15'-0"	3"& 4"	15'-0"

1 TYPICAL HANGER DETAIL

Scale: NTS



TYPICAL ACOUSTIC CEILING PANEL. LOCATE SPRINKLER WITHIN AREA INDICATED.

2 SPRINKLER PLACEMENT DETAIL

Scale: NTS

100% Submission

Revisions	Date

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Drawing Title: Sprinkler System Details

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: FX-501

Department of Veterans Affairs

FIRE ALARM GENERAL NOTES

1. MODIFY THE EXISTING BUILDING 500 ADDRESSABLE EDWARDS EST3 FIRE ALARM SYSTEM TO ACCOMMODATE NEW NOTIFICATION DEVICES FOR THE OEF/OIF CLINIC RENOVATION PROJECT. NEW DEVICES ARE TO BE CONNECTED TO AND BE COMPATIBLE WITH THE EXISTING EDWARDS EST3 CAMPUS WIDE FIRE ALARM NETWORK.

2. PROVIDE ALL NECESSARY MATERIALS AND LABOR TO DESIGN AND INSTALL A COMPLETE AND OPERATIONAL SYSTEM AS DESCRIBED IN THE PROJECT SPECIFICATIONS AND CONTRACT DRAWINGS.

3. FIRE ALARM AND DETECTION SYSTEM AND ASSOCIATED COMPONENTS SHALL BE IN ACCORDANCE WITH:

   - NFPA 70, NATIONAL ELECTRICAL CODE, 2011 EDITION
   - NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE, 2013 EDITION
   - NFPA 101®, *Life Safety Code®*, 2012 EDITION
   - VA FIRE PROTECTION DESIGN MANUAL (VAFPDM) 6TH EDITION, SEPTEMBER 2011
   - THE MANUFACTURER'S REQUIREMENTS
   - APPLICABLE LOCAL CODES AND REGULATIONS

5. ALL NEW FIRE ALARM SYSTEM WIRING SHALL BE IN CONDUIT. SIZE OF CONDUIT AND PERCENT FILL SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH NFPA 70.

   SYSTEM CIRCUITS SHALL CONFORM TO THE FOLLOWING:

   NOTIFICATION APPLIANCE CIRCUITS (NAC): CLASS B

6. ALL DETECTION AND CONTROL CONDUIT AND JUNCTION BOXES SHALL BE INSTALLED AS HIGH AS POSSIBLE. IN NO CASE SHALL ANY PORTION OF THE SYSTEM WIRING BE INSTALLED BELOW THE BOTTOM HORIZONTAL PLANE OF LIGHTING FIXTURES, WITH THE EXCEPTION OF DROPS TO INDIVIDUAL DEVICES AND PANELS. IN AREAS WITH SUSPENDED CEILINGS ALL CONDUIT SHALL BE CONCEALED. PROVIDE ACCESS PANELS FOR CONCEALED DEVICES AND JUNCTION BOXES, WHERE REQUIRED.

7. ALL WALL MOUNTED AUDIBLE AND VISUAL NOTIFICATION DEVICES SHALL BE MOUNTED A MINIMUM OF 80 INCHES AND A MAXIMUM OF 96 INCHES ABOVE THE FINISHED FLOOR, PER NFPA 72.

8. A FULL ACCEPTANCE TEST OF ALL NEW FIRE ALARM COMPONENTS IS REQUIRED AS PART OF THIS PROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND TECHNICAL SUPPORT TO PERFORM ACCEPTANCE TEST IN ACCORDANCE WITH NFPA 72. THE ACCEPTANCE TESTING PERFORMED BY THE CONTRACTOR SHALL BE WITNESSED BY THE DEPARTMENT OF VETERANS AFFAIRS OR THEIR CHOSEN REPRESENTATIVE.

9. ALL EQUIPMENT SHALL BE UL LISTED AND FM APPROVED FOR USE ON COMMERCIAL FIRE ALARM SYSTEMS.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF EXISTING NAC IN AREA OF RENOVATION CAN SUPPORT THE NEW NOTIFICATION DEVICES. CONTRACTOR SHALL PROVIDE NEW NAC PANEL IF NEEDED.

FIRE ALARM SYSTEM SYMBOLS

- FACP — FIRE ALARM CONTROL PANEL
- FAA — FIRE ALARM ANNUNCIATOR PANEL (SUBSCRIPT DENOTES TYPE)
- AIM — ADDRESSABLE INPUT MODULE (MONITOR MODULE)
- AOM — ADDRESSABLE OUTPUT MODULE (CONTROL MODULE)
- ISO — ISOLATOR MODULE
- NAC — NAC POWER EXTENDER PANEL
- FATC — FIRE ALARM TERMINAL CABINET
- FLOW SWITCH
- TAMPER SWITCH
- VALVE WITH TAMPER SWITCH
- F — FIRE ALARM MANUAL PULL STATION
- FIRE SERVICE TELEPHONE
- J — FIRE SERVICE TELEPHONE JACK
- HEAT DETECTOR
- R/C — RATE COMPENSATION HEAT DETECTOR
- PHOTOELECTRIC SMOKE DETECTOR
- EL — ELEVATOR RECALL PHOTOELECTRIC SMOKE DETECTOR
- XX C — VISUAL NOTIFICATION APPLIANCE (SUBSCRIPT DENOTES CANDELA RATING) (SUBSCRIPT "C" DENOTES CEILING MOUNTED)
- XX C — COMBINATION SPEAKER/STROBE APPLIANCE (SUBSCRIPT DENOTES CANDELA RATING) (SUBSCRIPT "C" DENOTES CEILING MOUNTED)
- FIRE ALARM SYSTEM ZONE BOUNDARY
- NOT INCLUDED IN SCOPE

FIRE ALARM LINETYPES:

- NEW DEVICE
- EXISTING DEVICE TO REMAIN
- EXISTING DEVICES TO BE REMOVED

FIRE ALARM SYSTEM ABBREVIATIONS

A	ALHPA–NUMERIC
ACT	ACOUSTICAL CEILING TILE
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ASC	AGENT STORAGE CONTAINER
ASFP	AIR SAMPLING DETECTOR PANEL
CA	CLEAN AGENT
CO2	CARBON DIOXIDE
CONC	CONCRETE
CRAC	COMPUTER ROOM AIR CONDITIONER
CRAH	COMPUTER ROOM AIR HANDLER
DCH	DRY CHEMICAL
DL	DELUGE
DMC	DISCONNECTING MEANS CONTROL
EOL	END OF LINE DEVICE
EPO	EMERGENCY POWER OFF
ETR	EXISTING TO REMAIN
EWFD	EARLY WARNING FIRE DETECTION
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR PANEL
FAC	FIRE ALARM COMMUNICATOR
FACP	FIRE ALARM CONTROL PANEL
FO	FOAM
FP	FIRE PUMP
FSA	FIRE SYSTEM ANNUNCIATOR
FSCP	FIRE SYSTEM CONTROL PANEL
FTR	FIRE ALARM TRANSMITTER
G	GRAPHIC
HL	HALON
HVAC	**HEATING, VENTILATION AND AIR CONDITIONING**
MAX	MAXIMUM
MIN	MINIMUM
MT	METAL TILE
N.C.	NORMALLY CLOSED (CONTACT)
N.O.	NORMALLY OPEN (CONTACT)
NAC	NOTIFICATION APPLIANCE CIRCUIT
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PA	PRE–ACTION SYSTEM
PF	FIRE PUMP POWER FAIL
PH	FIRE PUMP PHASE REVERSAL
PL	PLASTER
PMO	FIRE PUMP CONTROLLER – MANUAL OFF
POC	POINT OF CONNECTION
PR	FIRE PUMP RUN
PRV	PRESSURE REGULATING/RELIEF VALVE
RA	RETURN AIR (HVAC)
RF	RADIO FREQUENCY
RTU	ROOF TOP UNIT
RX	REMOVE EXISTING DEVICE
SA	SUPPLY AIR (HVAC)
SLC	SIGNALING LINE CIRCUIT
SPL	HIDDEN SPLINE (CEILING)
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VEWFD	VERY EARLY WARNING FIRE DETECTION
WCH	WET CHEMICAL
WM	WATER MIST
WP	WEATHER PROOF

100% Submission

Revisions	Date

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Approved: Project Director

Drawing Title	Fire Alarm & Detection Notes & Symbols
Project Title	2A WING OEF / OIF CLINIC
Location	
Date	SEPTEMBER 20, 2013
Checked	CB & MS
Drawn	EBR
Project Number	613 - 13 - 112
Building Number	500
Drawing Number	FA-001

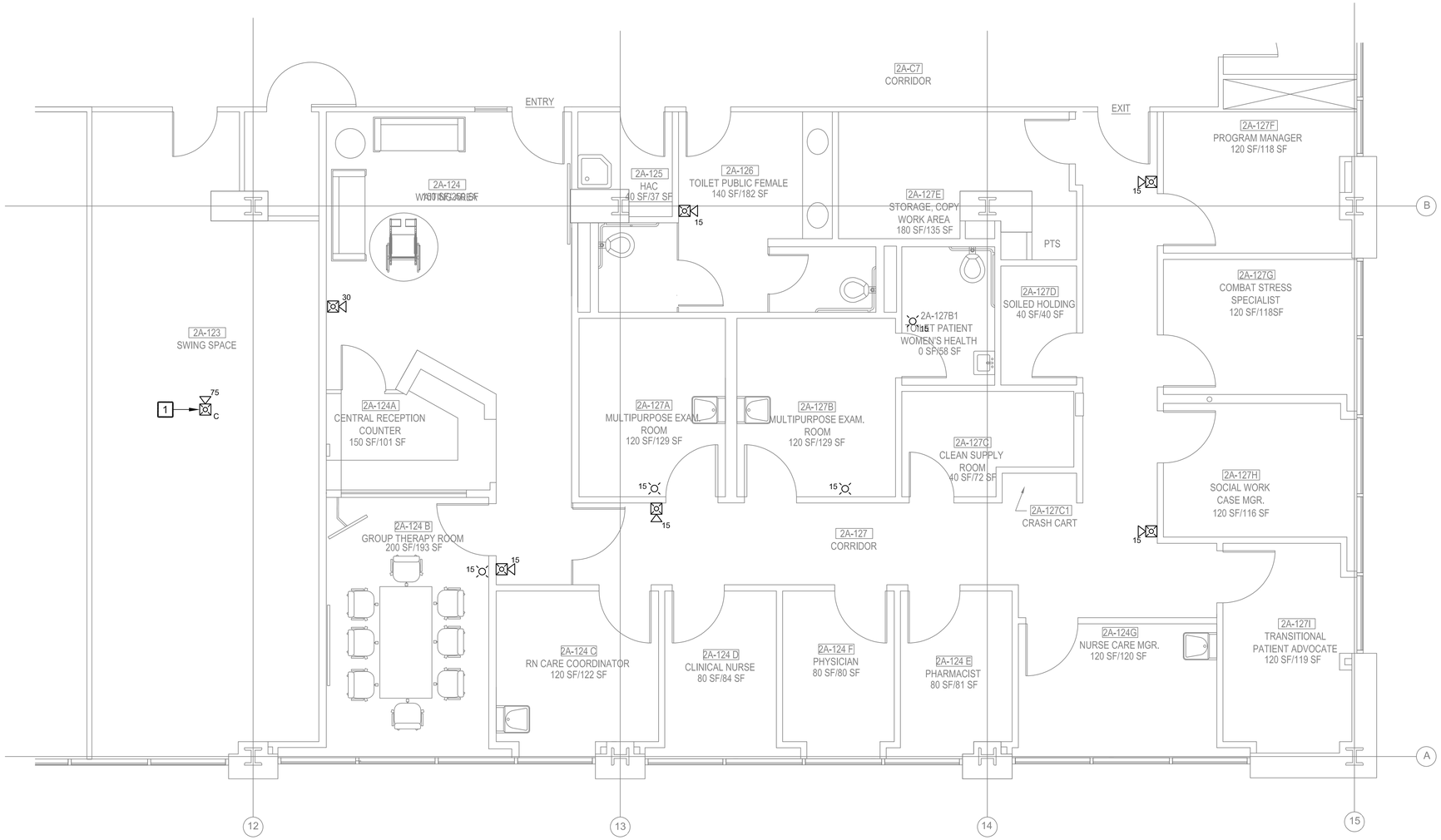
Department of Veterans Affairs

GENERAL NOTES:

1. REMOVE EXISTING VISUAL NOTIFICATION APPLIANCE WITHIN EXISTING SPACE.
2. EXISTING EST3 FACP FOR THE FLOOR IS LOCATED IN ROOM GA–104.

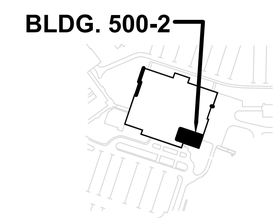
DRAWING NOTES:

1 NOTIFICATION APPLIANCE TO BE WALL MOUNTED IF ALT/DEDUCT #1 IS CHOSEN.



1 FIRE ALARM - SECOND FLOOR - NEW WORK PLAN

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



KEY PLAN

100% Submission

Revisions	Date

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Drawing Title: Fire Alarm - Second Floor - New Work Plan

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: FA-101

Department of Veterans Affairs

MECHANICAL ABBREVIATIONS

AD	ACCESS DOOR
ADJ	ADJACENT/ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
B	BOTTOM
BLDG	BUILDING
BM	BEAM
CO	CLEANOUT/ CONTRACTING OFFICER
COL	COLUMN
CONC	CONCRETE
COTR	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CV	CHECK VALVE
CW	COLD WATER
CX	CONNECT TO EXISTING
D	DEEP/DEPTH/DRAIN/DROP
DEG	DEGREES
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DRN	DRAIN
DSCH	DISCHARGE
DWG	DRAWING
DWGS	DRAWINGS
E	EAST/ELECTRICAL
EA	EACH
EL	ELEVATION
ELEC	ELECTRIC/ELECTRICAL
ELEV	ELEVATION/ELEVATOR
ETR	EXISTING TO REMAIN
EX	EXISTING
EXP	EXPANSION/EXPOSED
EXT	EXTERIOR/EXTERNAL
F	FAHRENHEIT/FIRE/FIRE LINE
FF	FINISHED FLOOR/FLOOR-TO-FLOOR
FIG	FIGURE
FIN	FINISH
FLR	FLOOR
FT	FEET/FOOT
GA	GAUGE
GAL	GALLON
GPM	GALLONS PER MINUTE
H	HEIGHT/HIGH
HW	HOT WATER
HWR	HOT WATER RETURN
HZ	HERTZ
IN	INCH/INCHES
IW	INDIRECT WASTE
L	LENGTH
LBS	POUNDS
LAV	LAVATORY
M	MECHANICAL
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MISC	MISCELLANEOUS
MTD	MOUNTED
MTG	MOUNTING
N	NORTH
NTS	NOT TO SCALE
P	PIPE/PLUMBING FIXTURE TYPE/PRESSURE/PUMP
PD	PLUMBING DEMOLITION/PUMP DISCHARGE
PL	PLATE
PREL	PRELIMINARY
PRESS	PRESSURE
PSI	PRESSURE – POUNDS PER SQUARE INCH
PSIG	PRESSURE – POUNDS PER SQUARE INCH, GAGE
PVC	POLYVINYL CHLORIDE
R	RADIUS/RISE/RISER
RM	ROOM
RECIRC	RECALCULATING
RX	REMOVE EXISTING
S	SANITARY/SECONDS/SOIL/SOUTH
SAN	SANITARY
SF	SQUARE FEET/SQUARE FOOT
SPEC	SPECIFICATION
SW	STORM WATER
SYS	SYSTEM
TYP	TYPICAL
URN	URINAL
V	VENT
W	WASTE/WATER/WEST
WC	WATER CLOSET/WATER COLUMN/WHEELCHAIR ACCESSIBLE
WG	WATER GAGE

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	SOIL OR WASTE
	VENT
	COLD WATER
	HOT WATER
	HOT WATER RETURN
	SHUTOFF VALVE
	BALANCING VALVE
	CHECK VALVE
	UNION
	CAP (PIPE)
	CONNECT TO EXISTING
	END POINT OF REMOVAL OF EXISTING
A / M-1	SECTION/ PLAN DESIGNATION TOP – SECTION/ PLAN REFERENCE, BOTTOM – REFERENCED DRAWING

GENERAL NOTES: (APPLICABLE TO ALL PLUMBING DRAWINGS)

1. THE LOCATION OF EXISTING UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. REPAIR ALL DAMAGES OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. RUN ALL SOIL, WASTE AND DRAIN PIPING WITH 2 PERCENT MINIMUM GRADE UNLESS OTHERWISE NOTED. HORIZONTAL VENT PIPING SHALL BE GRADED TO DRIP BACK TO THE SOIL OR WASTE PIPE BY GRAVITY.
3. ELEVATIONS NOTED ARE TO CENTERLINES OF PIPES FOR ALL PRESSURE LINES AND TO INVERT FOR ALL GRAVITY FLOW LINES.
4. ADJUST SEWER INVERTS TO KEEP TOPS OF PIPE IN LINE WHERE PIPE SIZE CHANGES.
5. PROVIDE SHUTOFF VALVES IN DOMESTIC WATER SYSTEMS IN BRANCH LINES SERVING TWO OR MORE FIXTURES.
6. UNLESS OTHERWISE NOTED, ALL PIPING AND IS OVERHEAD, TIGHT TO UNDERSIDE OF SLAB, WITH SPACE FOR INSULATION IF REQUIRED.
7. INSTALL PIPING SO THAT ALL VALVES ARE ACCESSIBLE.
8. COORDINATE ALL PLUMBING WORK WITH MECHANICAL, ELECTRICAL WORK, ETC., SHOWN ON OTHER DRAWINGS.
9. MAINTAIN MINIMUM 6'-8" CLEARANCE TO UNDERSIDE OF PIPES. SUSPEND EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL AND ELECTRICAL ROOMS.
10. UNLESS OTHERWISE NOTED, WHERE HOT AND COLD WATER PIPING DROPS INTO PIPE CHASE, THE SIZE SHOWN FOR THE PIPE DROPS SHALL BE USED TO THE LAST FIXTURE.
11. CERTAIN ITEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN DUCTWORK AND PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.
12. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRE CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK FOR THE PRESENCE OF EXISTING MECHANICAL AND/OR ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION AND EXERCISE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE SERVICES OR INJURY TO HIS PERSONNEL DUE TO CONTACT WITH SAME. WHERE PRACTICAL, SUCH EXISTING SERVICES SHALL BE TEMPORARILY DISCONNECTED DURING THE CUTTING OPERATION. SUCH OUTAGES IN SERVICE SHALL BE SCHEDULED IN ADVANCE WITH THE OWNER.
13. FLOW SCHEMATIC AND RISER DIAGRAMS INDICATE FLOW AND OPERATION CONCEPTS AS WELL AS GENERAL ARRANGEMENT OF EQUIPMENT. VALVES, PRESSURE GAUGES, ETC. ARE INDICATED FOR THIS PURPOSE. ADDITIONAL VALVES, PRESSURE GAUGES, ETC. SHALL BE PROVIDED AS SHOWN ON VARIOUS EQUIPMENT DETAILS. SEE PLANS AND DETAILS FOR PIPE SIZES NOT INDICATED ON FLOW SCHEDULES AND RISER DIAGRAMS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR RESEARCHING ALL SYSTEMS THAT A PARTICULAR OUTAGE WILL AFFECT AS WELL AS LOCATING ALL SHUTOFF POINTS. THIS INFORMATION SHALL BE INCLUDED IN THE OUTAGE PLAN TO BE SUBMITTED.
15. USE OF COMBINATION WYE FITTINGS OR CROSS TEES IN THE PLUMBING SANITARY SYATEM ARE NOT ALLOWED.

PLUMBING FIXTURES

UNIT NO (1)	NAME	CW (2)	HW (2)	S/W (2)	VENT (3)	NOTES
P-103	WATER CLOSET (WALL MTD)	1	–	4	2	ADA
P-402	LAVATORY (WALL HUNG)	1/2	1/2	1-1/2	1-1/2	ADA
P-414	LAVATORY (WALL HUNG)	1/2	1/2	1-1/2	1-1/2	
P-417	LAVATORY (COUNTER MTD)	1/2	1/2	1-1/2	1-1/2	
P-502	MOP SINK	3/4	3/4	3	2	

NOTES FOR PLUMBING FIXTURES:

(1) PLAN DESIGNATION MAY INCLUDE LETTER(S) FOR DIFFERENT FEATURES OR "WC" TO DESIGNATE MOUNTING HEIGHT FOR WHEELCHAIR ACCESSIBILITY USE. PIPING CONNECTION SIZES ARE THE SAME FOR ALL FIXTURES WITH THE SAME NUMBER DESIGNATION.

(2) PIPING CONNECTION SIZES ARE BRANCH SIZES WHICH SHALL BE TO FIXTURE ROUGH-IN LOCATION. PROVIDE ADAPTER WHERE PIPE CONNECTION SIZE AT FIXTURE IS DIFFERENT THAN ROUGH-IN PIPE SIZE.

(3) INDIVIDUAL VENT PIPE SIZE SHALL BE FROM FIXTURE DRAIN OR DRAINAGE FITTING TO BRANCH VENT OR VENT STACK, EXCEPT WHERE INDICATED OTHERWISE.

GENERAL NOTES FOR PLUMBING SCHEDULES:

1. UNIT NUMBERS ARE INDICATED WHERE ALL UNITS ARE LISTED AND NUMBERED INDIVIDUALLY.
2. PIPE SIZES ARE LISTED IN SINGLE-NUMBER INCHES OF NOMINAL DIAMETER OR MULTIPLE NUMBER INCHES OF INDICATED PARAMETER. CONNECTION SIZES ARE BRANCH SIZES FROM MAINS TO UNIT INLETS.

100% Submission

Revisions	Date

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Drawing Title: PLUMBING LEGEND, ABBREVIATIONS, SCHEDULE AND GENERAL NOTES

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013

Checked: DFS

Drawn: DFF/RDV

Project Number: 613 - 13 - 112

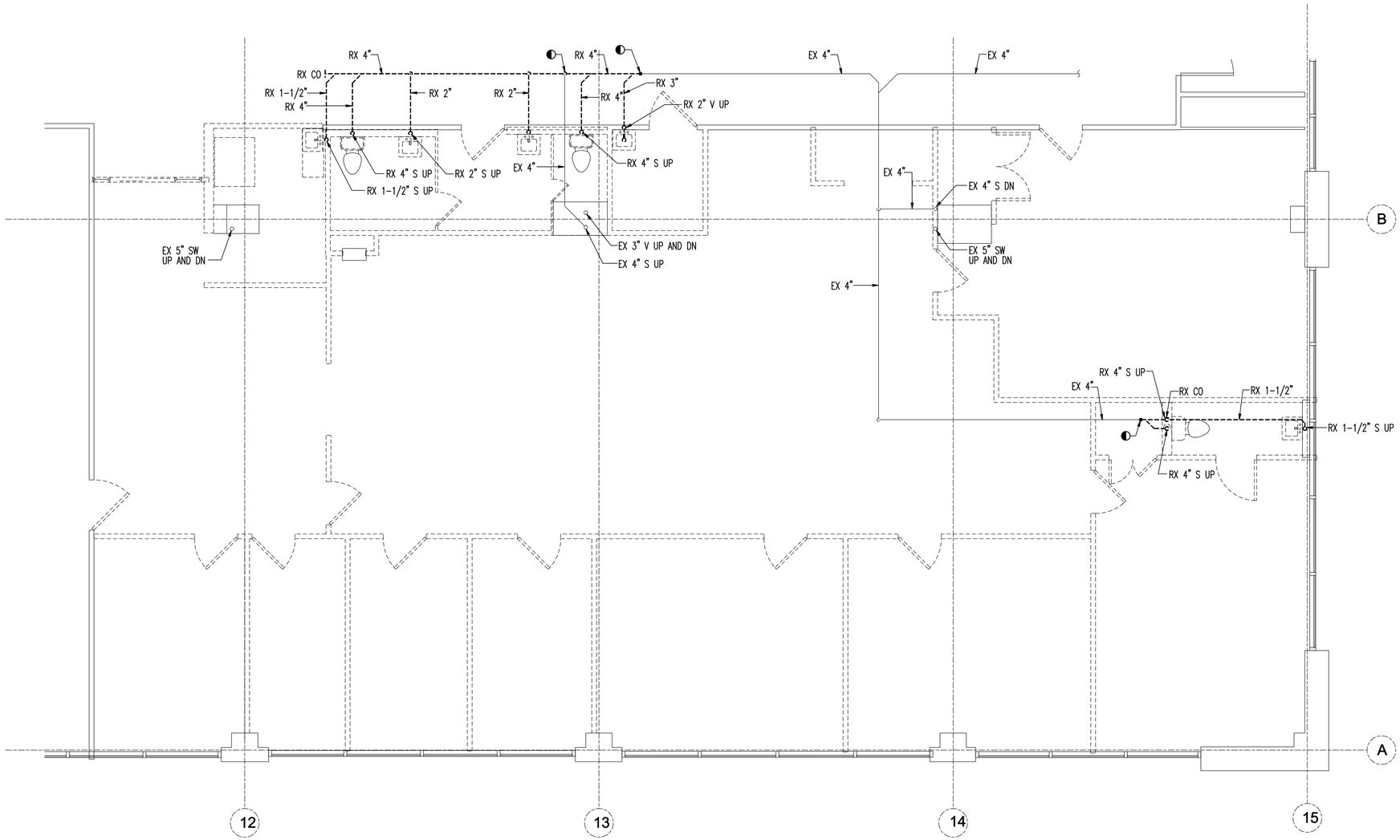
Building Number: 500

Drawing Number: PG-001

Department of Veterans Affairs

DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. DRAWING IS DIAGRAMMATIC INTENDED TO CONVEY SCOPE OF WORK. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. WHERE THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, ADVISE COTR AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, DEMOLITION INDICATED IN DARK DASHED LINE WEIGHT (– – – –).

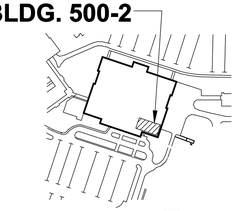


1 PD-101 BLDG 500 FIRST FLOOR INTERSTITIAL SPACE – PLUMBING – DEMOLITION

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

1/4" = 1' – 0" 0 2 4 8 12 FT

BLDG. 500-2



KEY PLAN
NOT TO SCALE

100% Submission

Revisions	Date

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Approved: Project Director

Drawing Title
BLDG 500 FIRST FLOOR INTERSTITIAL SPACE - PLUMBING - DEMOLITION

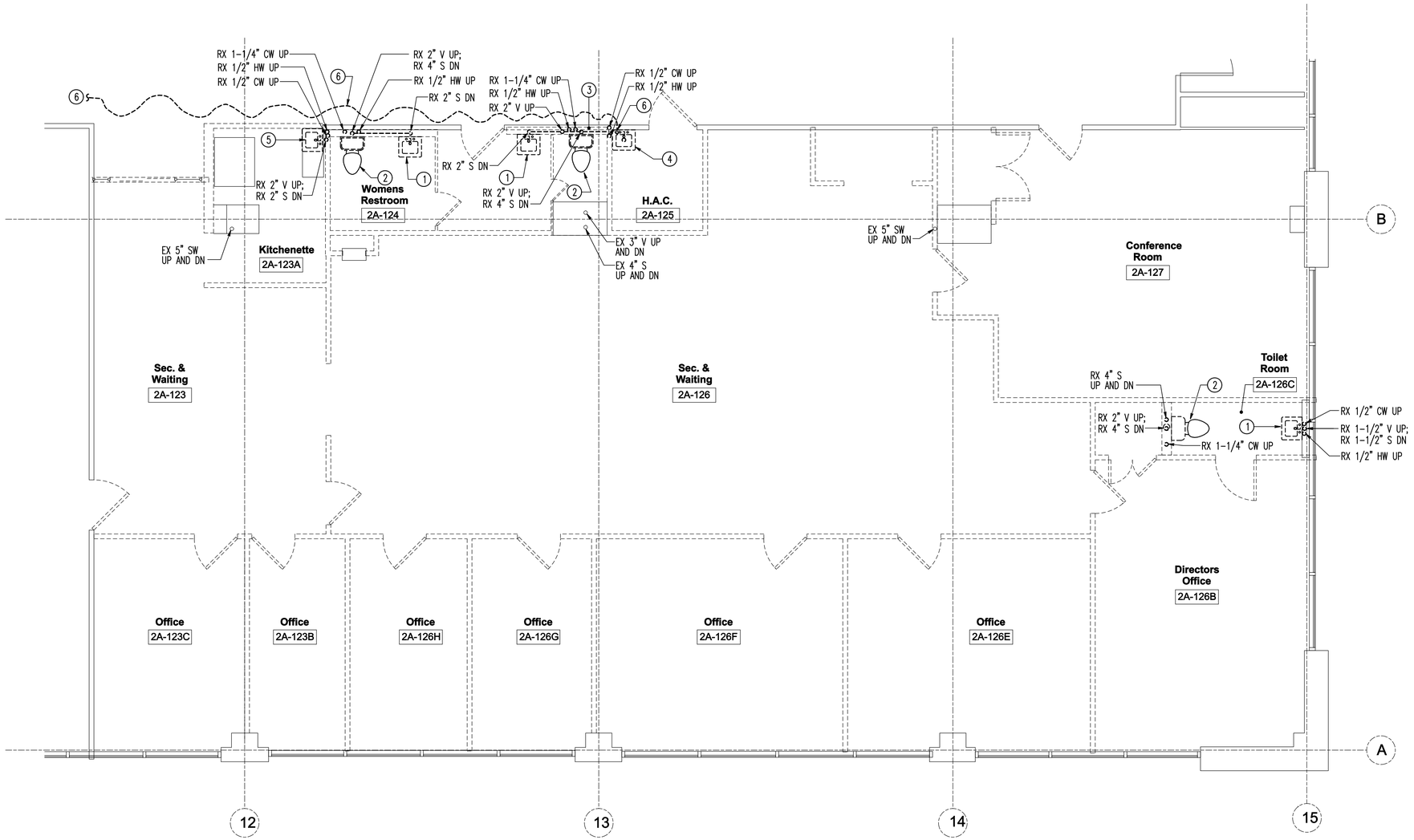
Project Title
2A WING OEF / OIF CLINIC

Location

Date	Checked	Drawn
SEPTEMBER 20, 2013	DFS	DFF/RDV

Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: PD-101

Department of Veterans Affairs



1 PD-101 BLDG 500 SECOND FLOOR – PLUMBING – DEMOLITION

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

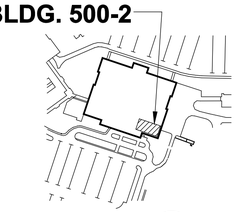
DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. DRAWING IS DIAGRAMMATIC INTENDED TO CONVEY SCOPE OF WORK. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. WHERE THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, ADVISE COTR AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, DEMOLITION INDICATED IN DARK DASHED LINE WEIGHT (– – – –).

SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. RX LAVATORY, FAUCET AND ALL ASSOCIATED PLUMBING BACK TO THE FIRST AND SECOND FLOOR INTERSTITIAL SPACES.
2. RX WATERCLOSET AND ASSOCIATED PLUMBING BACK TO THE FIRST AND SECOND FLOOR INTERSTITIAL SPACES.
3. RX CW, HW, SANITARY AND VENT PIPING WITHIN WET WALL.
4. RX MOP SINK, WALL MOUNTED FAUCET, CHEMICAL DISPENSING UNIT, MOP HOLDER AND ALL ASSOCIATED PLUMBING BACK TO THE FRST AND SECOND FLOOR INTERSTITIAL SPACES.
5. RX KITCHEN SINK, FAUCET AND ALL ASSOCIATED PIPING BACK TO THE FIRST AND SECOND FLOOR INTERSTITIAL SPACES.
6. RX CONDENSATE PUMP PLASTIC TUBING IN IT'S ENTIRITY, BACK TO EXISTING WALL MOUNTED CONDENSATE PUMP, LOCATED ABOVE THE CORRIDOR CEILING/ DOUBLE DOORS. (APPROX 100 FT.)

BLDG. 500-2



KEY PLAN
NOT TO SCALE

100% Submission

1/4" = 1' – 0" (0, 2, 4, 8, 12 FT)

Revisions	Date

CONSULTANTS

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Approved: Project Director

Drawing Title: BLDG 500 SECOND FLOOR - PLUMBING- DEMOLITION

Project Title: 2A WING OEF / OIF CLINIC

Location

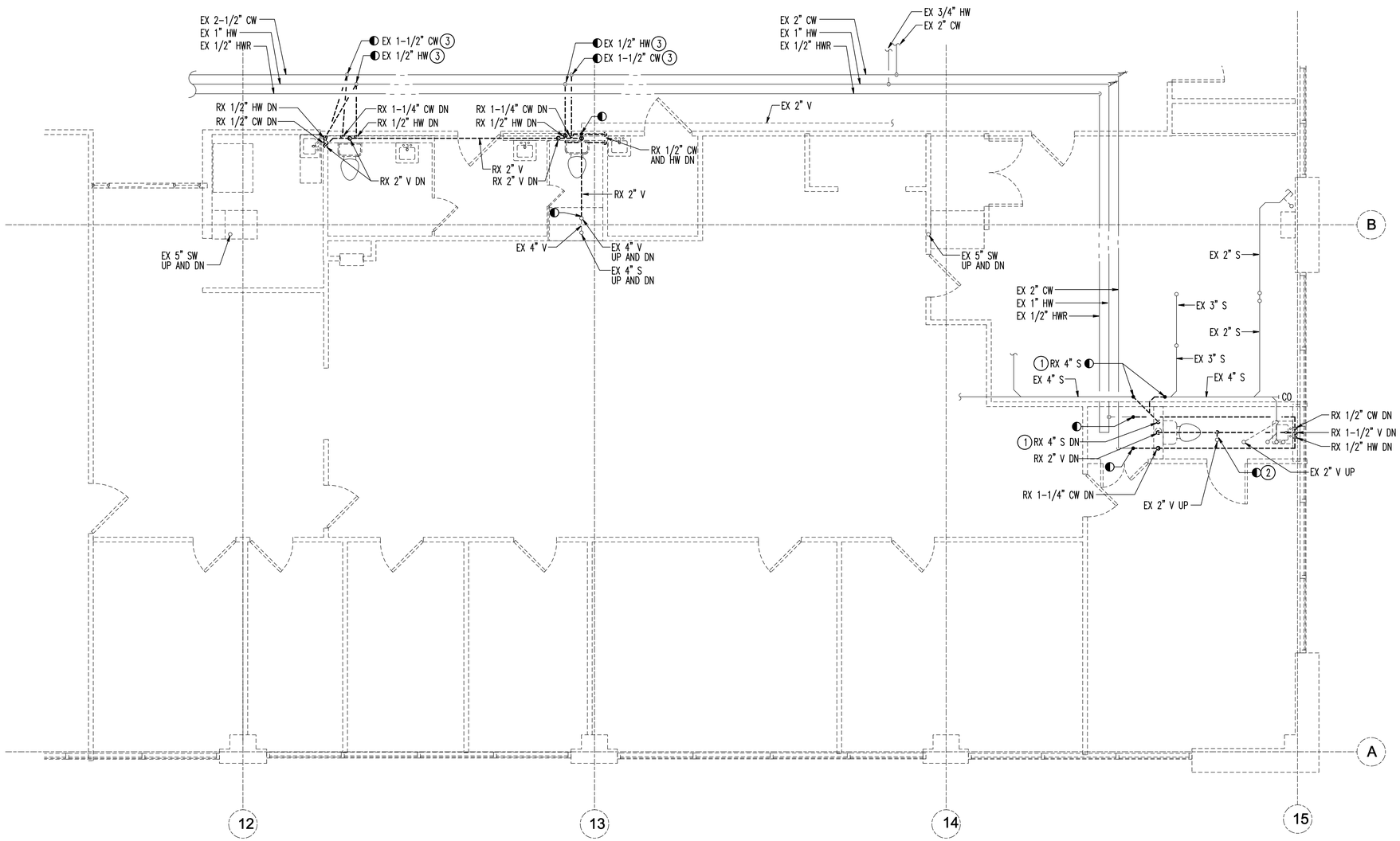
Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: PD-102

Department of Veterans Affairs



(1) PD-103 BLDG 500 SECOND FLOOR INTERSTITIAL SPACE– PLUMBING – DEMOLITION

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

DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. DRAWING IS DIAGRAMMATIC INTENDED TO CONVEY SCOPE OF WORK. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. WHERE THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, ADVISE COTR AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, DEMOLITION INDICATED IN DARK DASHED LINE WEIGHT (– – – –).

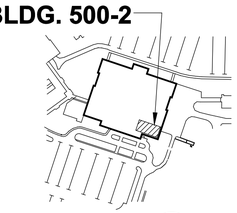
SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

(1) RX 4" SANITARY AND 4" SANITARY STACK. CONTRACTOR SHALL NOT DEMO EX 4" SANITARY STACK, UNTIL NEW 4" SANITARY STACK IS INSTALLED AND READY FOR A QUICK TIE–IN DURING OFF HOURS. CONTRACTOR SHALL COORDINATE DEMOLITION WITH THE VA COTR FOR A SCHEDULED SHUTDOWN OF THE FIXTURE(S) LOCATED ON THE FLOORS ABOVE.

(2) RX 2" VENT AS INDICATED. CONTRACTOR SHALL COORDINATE DEMOLITION WITH THE VA COTR FOR A SCHEDULED SHUTDOWN OF THE FIXTURE LOCATED ON THE THIRD FLOOR.

(3) RX PIPING BACK TO JUST PRIOR TO SHUT–OFF VALVE AND CAP PIPE.

BLDG. 500-2



KEY PLAN
NOT TO SCALE

1/4" = 1' – 0" (0 2 4 8 12 FT)

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR INTERSTITIAL SPACE - PLUMBING - DEMOLITION

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

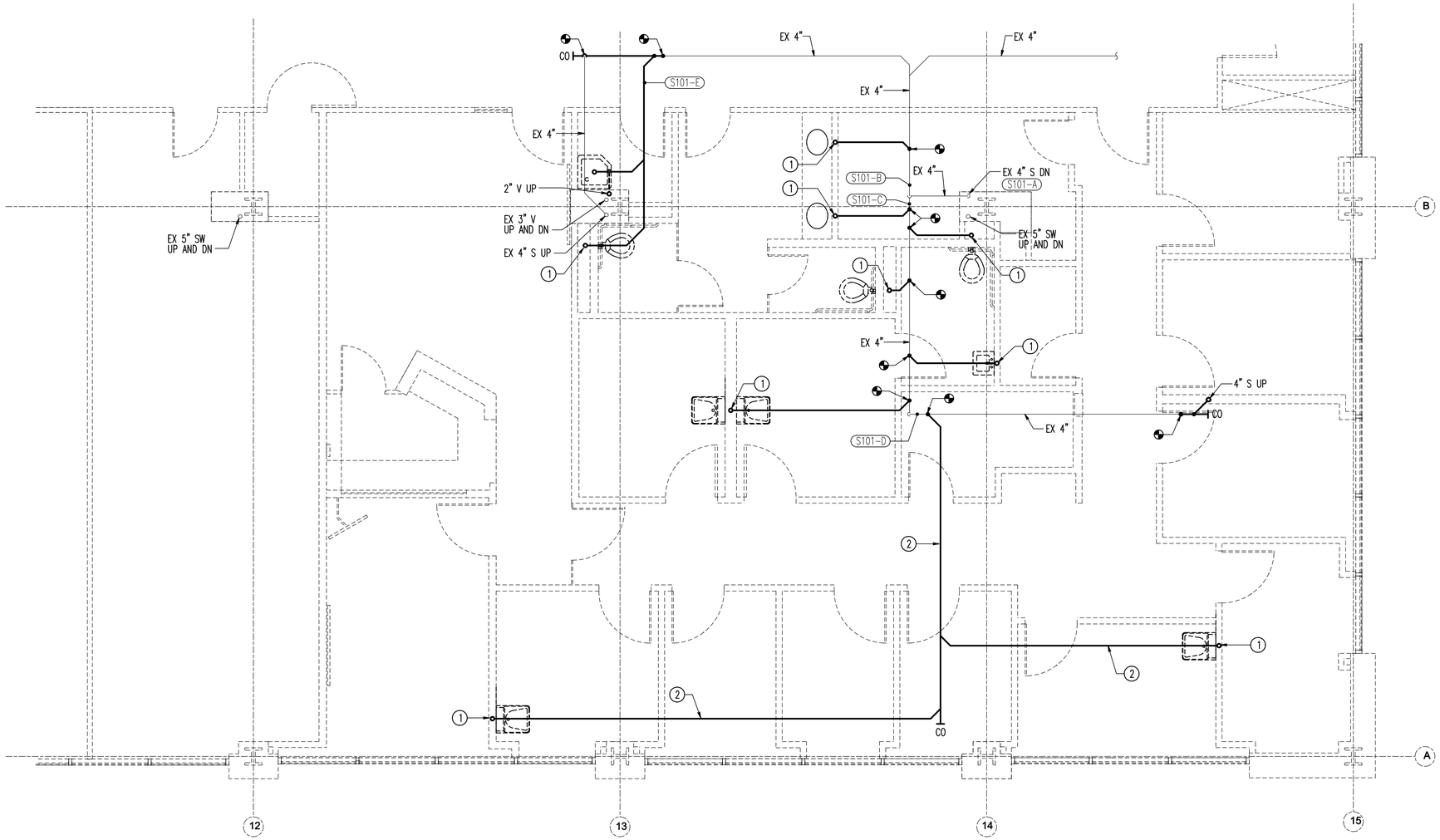
Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: PD-103

Department of Veterans Affairs



1 PL-101 BLDG 500 FIRST FLOOR INTERSTITIAL SPACE– PLUMBING – NEW WORK

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

DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

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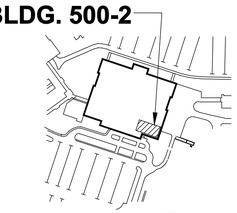
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, NEW WORK INDICATED IN DARK LINE WEIGHT (———).

SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. S UP TO SECOND FLOOR.
2. SANITARY SHALL BE INSTALLED AS HIGH AS POSSIBLE AND SLOPED PER THE CODE. CONNECT TO EXISTING 4" SANITARY MAIN AS INDICATED.

BLDG. 500-2



KEY PLAN
NOT TO SCALE

1/4" = 1' – 0" 0 2 4 8 12 FT

100% Submission

Revisions	Date

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Drawing Title
BLDG 500 FIRST FLOOR INTERSTITIAL SPACE - PLUMBING - NEW WORK

Approved: Project Director

Project Title
2A WING
OEF / OIF CLINIC

Location

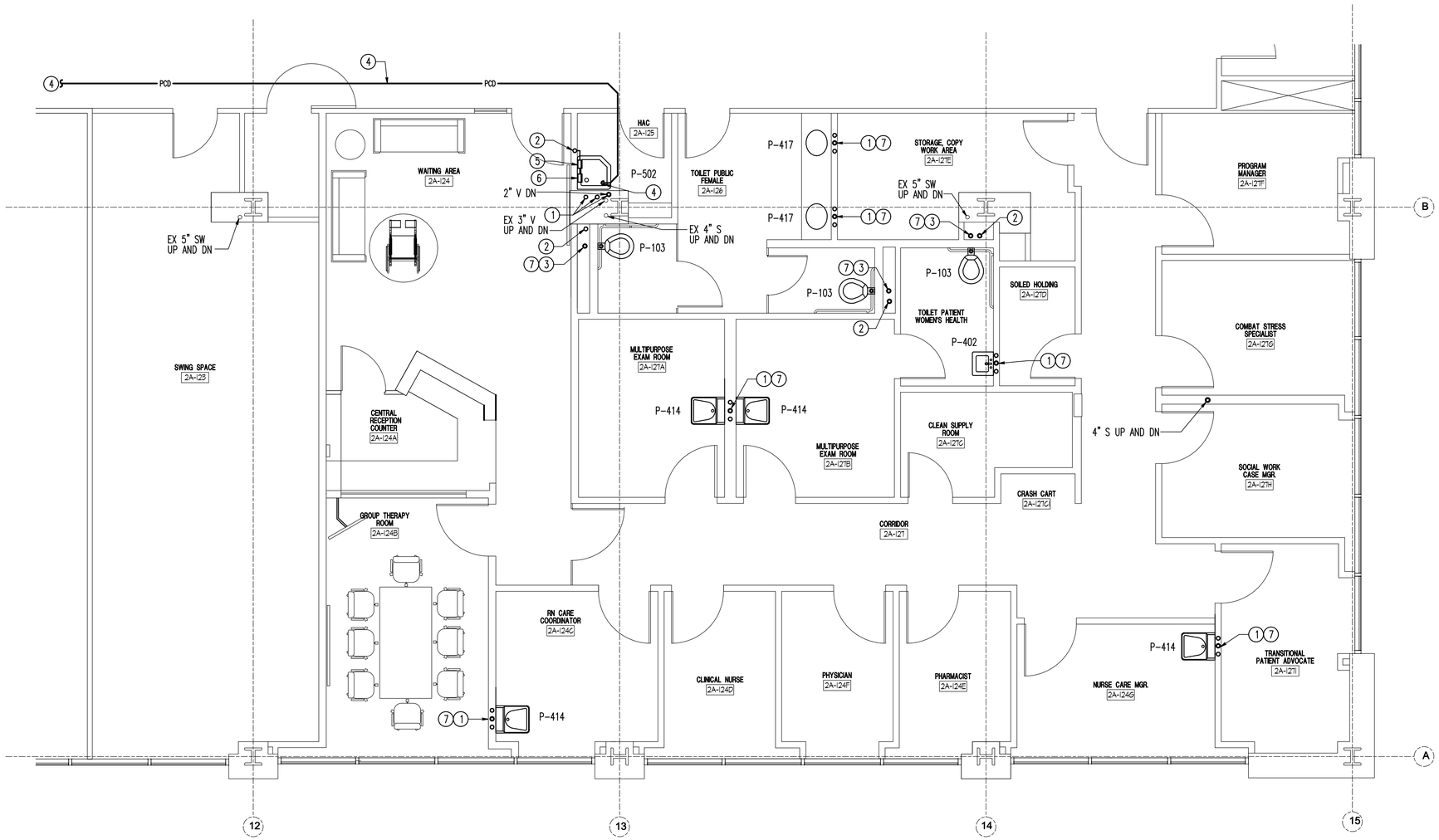
Date	Checked	Drawn
SEPTEMBER 20, 2013	DFS	DFF/RDV

Project Number
613 - 13 - 112

Building Number
500

Drawing Number
PL-101

Department of Veterans Affairs



1 / PL-102 BLDG 500 SECOND FLOOR – PLUMBING – NEW WORK

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

DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

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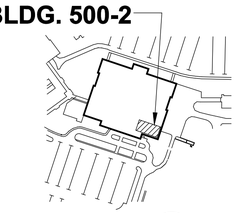
3. UNLESS OTHERWISE INDICATED, NEW WORK INDICATED IN DARK LINE WEIGHT (——).

SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. CW, HW AND VENT UP TO SECOND FLOOR INTERSTITIAL SPACE.
2. CW UP TO SECOND FLOOR INTERSTITIAL SPACE.
3. V UP TO SECOND FLOOR INTERSTITIAL SPACE.
4. EXTEND 1/2" PUMPED CONDESATE PIPE ABOVE CORRIDOR CEILING FROM EXISTING CONDENSATE PUMP TO DISCHARGE INDIRECTLY INTO MOP SINK.
5. REDUCED PRESSURE BACKFLOW PREVENTER MOUNTED TO WALL. REFER TO DETAIL ON DRAWING PL-601.
6. RELOCATE EX CHEMICAL DISPENSING UNIT TO THIS LOCATION. CONTRACTOR SHALL INSTALL PER THE MANUFACTURERS RECOMMENDATIONS.
7. S DN TO FIRST FLOOR INTERSTITIAL SPACE.

BLDG. 500-2



KEY PLAN
NOT TO SCALE

1/4" = 1' – 0" (0 2 4 8 12 FT)

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - PLUMBING - NEW WORK

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

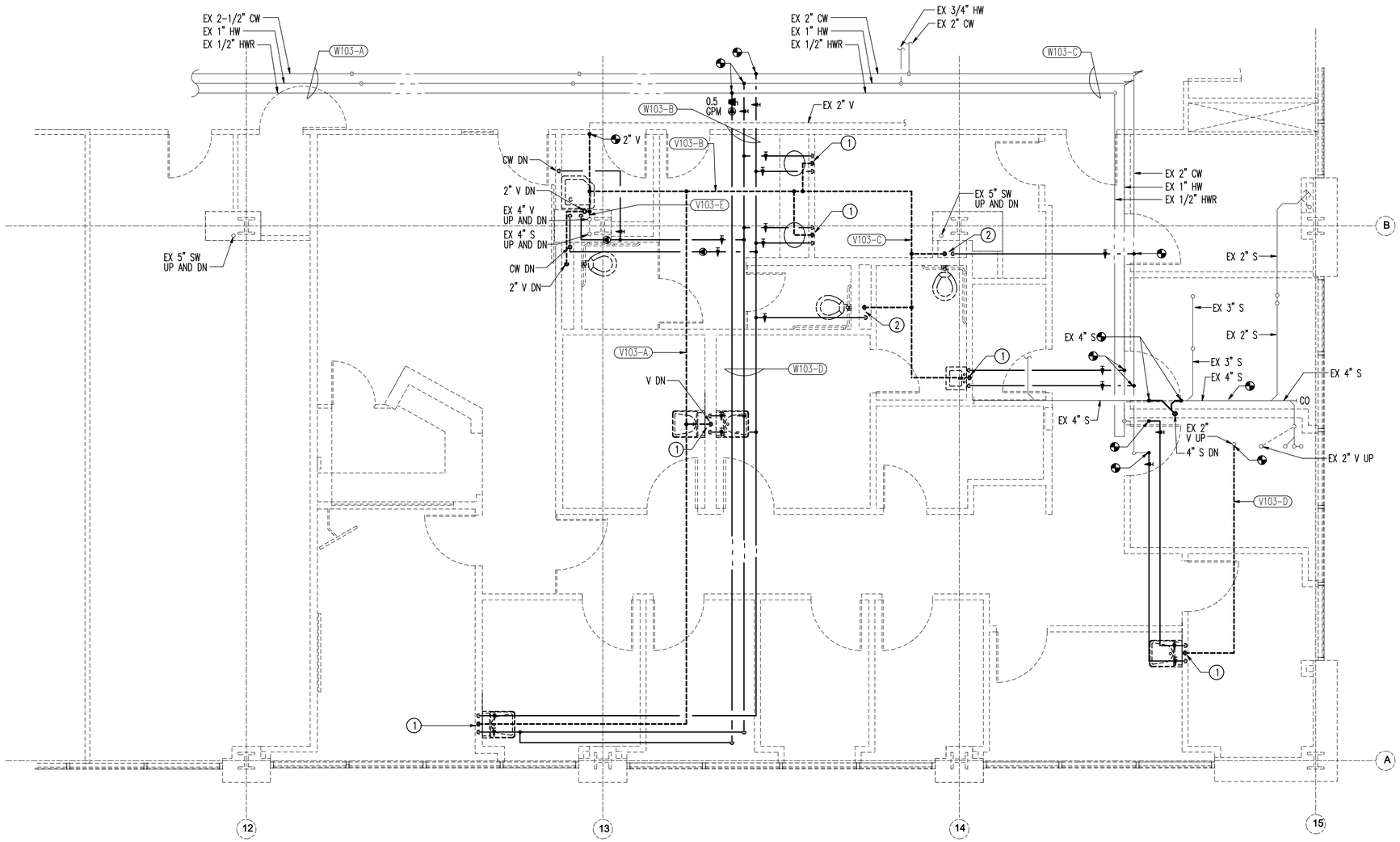
Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: PL-102

Department of Veterans Affairs



1 PL-103 BLDG 500 SECOND FLOOR INTERSTITIAL SPACE– PLUMBING – NEW WORK

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

DRAWING NOTES
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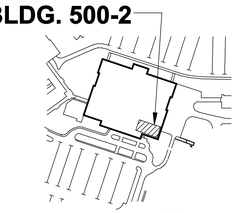
SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. CW, HW AND V DN.
2. CW AND V DN.

BLDG. 500-2



KEY PLAN
NOT TO SCALE

1/4" = 1' – 0" 0 2 4 8 12 FT

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR INTERSTITIAL SPACE - PLUMBING - NEW WORK

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

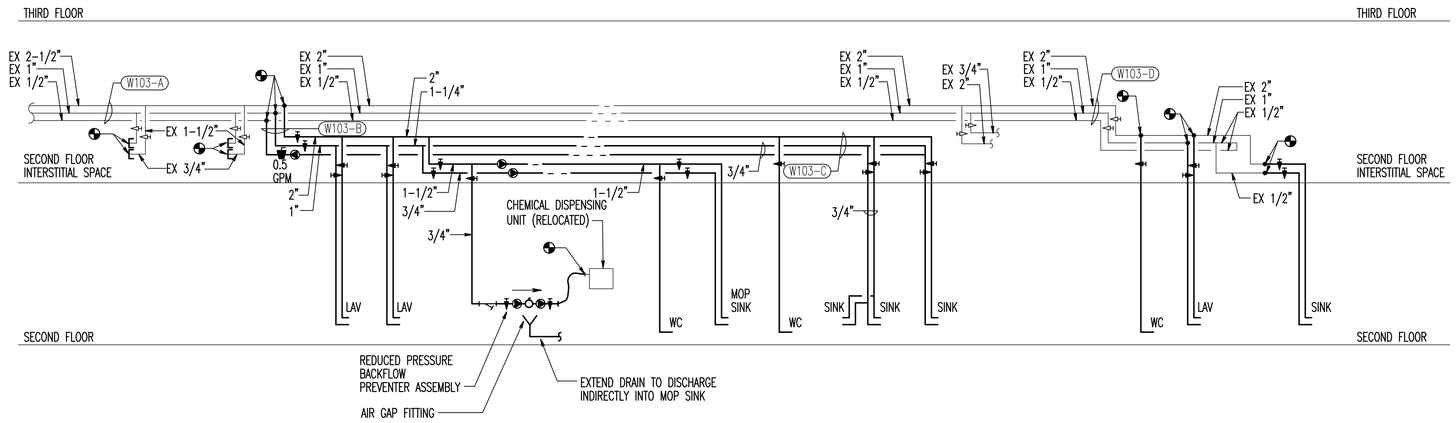
Date	Checked	Drawn
SEPTEMBER 20, 2013	DFS	DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

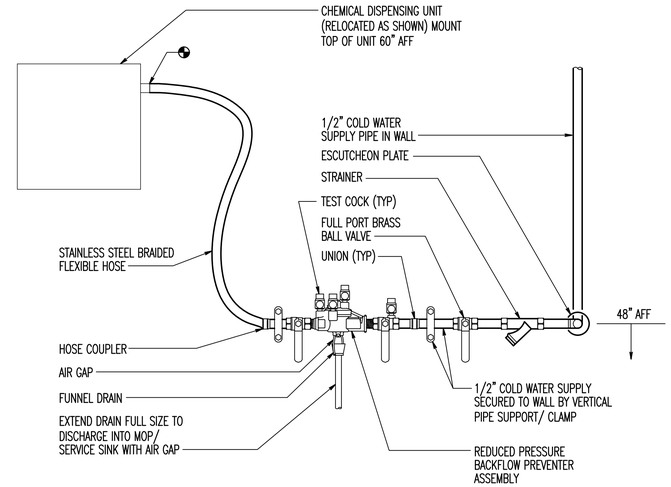
Drawing Number: PL-103

Department of Veterans Affairs

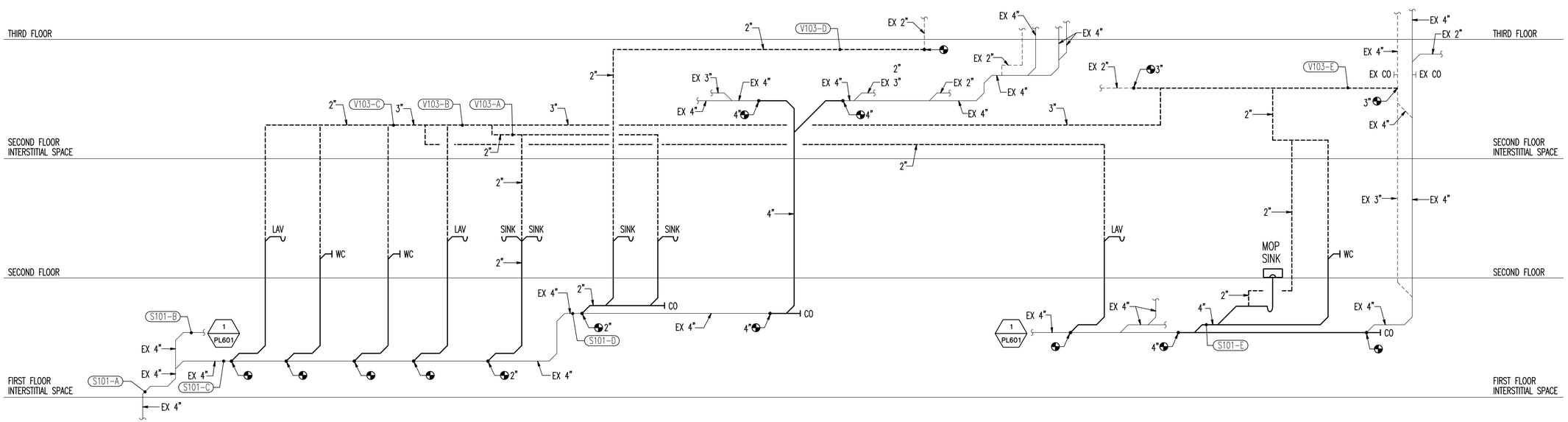


DOMESTIC WATER RISER DIAGRAM

NOT TO SCALE



CHEMICAL DISPENSING WATER SUPPLY DETAIL



SANITARY AND VENT RISER DIAGRAM

NOT TO SCALE

100% Submission

Revisions	Date

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Drawing Title: RISER DIAGRAMS AND DETAIL

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: PL-601

Department of Veterans Affairs

MECHANICAL ABBREVIATIONS

ALUM	ALUMINUM
APPROX	APPROXIMATE
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
COTR	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE
CU	COPPER
D	DAMPER/DEEP/DEPTH/DIAMETER/DIFFUSER/DRAIN/DROP
DB	DECIBEL/DRY BULB
DD	DUAL DUCT
DEG	DEGREES
DIA	DIAMETER
DN	DOWN
DTP	DUCT TRAVERSE POINT
DWG	DRAWING
DWGS	DRAWINGS
EA	EACH/EXHAUST AIR
ENCL	ENCLOSURE
ETR	EXISTING TO REMAIN
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
EX	EXISTING
F	FAHRENHEIT/FAN/FIRE/FIRE LINE/FREEZESTAT
FT	FEET/FOOT
FTR	FINNED TUBE REDIATION
GPM	GALLONS PER MINUTE
HGT	HEIGHT
HR	HOT WATER HEATING RETURN/HOUR
HS	HOT WATER HEATING SUPPLY
L	LENGTH/LOUVER
LWT	LEAVING WATER TEMPERATURE
M	MECHANICAL
MATL	MATERIAL
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NO	NORMALLY OPEN/NUMBER
P	PIPE/PLUMBING FIXTURE TYPE/PRESSURE/PUMP
PD	PRESSURE DROP/PUMP DISCHARGE
R	RADIUS/REFRIGERANT/REGISTER/RISE/RISER
RA	RETURN AIR
RX	REMOVE EXISTING
S	SECONDS/SOUTH/SWITCH
SA	SOUND ATTENUATOR/SUPPLY AIR
T	TEMPERATURE SENSOR/THERMOSTAT
TYP	TYPICAL
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VR	VOLUME REGULATOR
VS	VELOCITY SENSOR
WG	WATER GAGE
WPD	WATER PRESSURE DROP

MECHANICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
D-(-)	DRAIN (ALL TYPES)	2.0	FLOW INDICATOR FOR PORTABLE METER (GPM)
HS	HOT WATER HEATING SUPPLY		CAP (PIPE OR DUCT)
HR	HOT WATER HEATING RETURN		CONNECT TO EXISTING
CHS	CHILLED WATER SUPPLY		END POINT OF REMOVAL OF EXISTING
CHR	CHILLED WATER RETURN		OUTDOOR AIR OR SUPPLY AIR DUCT
CD	CONDENSATE DRAIN		RETURN AIR DUCT
MPS	MEDIUM PRESSURE STEAM		EXHAUST AIR DUCT
MPR	MEDIUM PRESSURE RETURN		OUTDOOR AIR OR SUPPLY AIR DUCT
PD	PUMP DISCHARGE		FIRE DAMPER
RL	REFRIGERANT LIQUID		SMOKE DAMPER
RS	REFRIGERANT SUCTION		COMBINATION FIRE AND SMOKE DAMPER
			DUCT MOUNTED SMOKE DETECTOR
D	DROP IN DUCTWORK	2 3	DUCT SYSTEM PRESSURE RATING CHANGE
R	RISE IN DUCTWORK		
	VOLUME DAMPER		
	MOTOR OPERATED DAMPER		FLEXIBLE CONNECTION
	SHUTOFF VALVE		DUAL DUCT AIR CONDITIONING TERMINAL UNIT
	BALANCING VALVE		
	CHECK VALVE	T	THERMOSTAT/TEMPERATURE SENSOR
	RELIEF VALVE	A M-1	SECTION DESIGNATION TOP – SECTION REFERENCE, BOTTOM – REFERENCED DRAWING
	THROTTLING VALVE		
	TWO WAY AUTOMATIC CONTROL VALVE	DTP #	PRE-DEMOLITION DUCT TRAVERSE POINT
	UNION		
	STRAINER		
	ANCHOR		
	PIPE GUIDE		
	AIR VENT		
	THERMOMETER		
	PRESSURE GAUGE		
	THREE-WAY AUTOMATIC CONTROL VALVE		

GENERAL NOTES: (APPLICABLE TO ALL MECHANICAL DRAWINGS)

1. ELEVATIONS NOTED ARE TO CENTERLINES OF PIPES FOR ALL PRESSURE LINES AND TO INVERT FOR ALL GRAVITY FLOW LINES.
2. PROVIDE AN AIR VENT AT THE TOP OF ALL RISERS AND AT THE HIGH POINT OF EACH DROP IN THE HEATING AND CHILLED WATER SYSTEM.
3. UNLESS OTHERWISE NOTED, ALL PIPING AND DUCTWORK IS LOCATED IN INTERSTITIAL SPACE AND ROUTED ACCORDING TO VA STANDARDS.
4. INSTALL PIPING AND DUCTWORK SO THAT ALL VALVES AND DAMPERS ARE ACCESSIBLE.
5. COORDINATE ALL MECHANICAL WORK WITH PLUMBING WORK, ELECTRICAL WORK, ETC., SHOWN ON OTHER DRAWINGS.
6. EXCEPT AS OTHERWISE NOTED, LOCATE ALL ROOM THERMOSTATS/TEMPERATURE SENSORS 48 INCHES ABOVE FINISHED FLOOR ON SAME HORIZONTAL CENTERLINE AS LIGHT SWITCH. WHERE LIGHT SWITCH AND THERMOSTATS/TEMPERATURE SENSORS ARE NEXT TO EACH OTHER, LIGHT SWITCH SHALL BE CLOSEST TO THE DOOR. COORDINATE WITH ELECTRICAL CONTRACTOR. NOTIFY THE COTR OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.
7. IN CORRIDORS WHERE CEILING SPEAKERS AND AIR DIFFUSERS ARE INDICATED BETWEEN THE SAME LIGHTING FIXTURES, RELOCATE BOTH DEVICES TO QUARTER POINTS BETWEEN THE SAME FIXTURE.
8. CERTAIN ITEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN DUCTWORK AND PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.
9. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRE CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK FOR THE PRESENCE OF EXISTING MECHANICAL AND/OR ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION AND EXERCISE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE SERVICES OR INJURY TO HIS PERSONNEL DUE TO CONTACT WITH SAME. WHERE PRACTICAL, SUCH EXISTING SERVICES SHALL BE TEMPORARILY DISCONNECTED DURING THE CUTTING OPERATION. SUCH OUTAGES IN SERVICE SHALL BE SCHEDULED IN ADVANCE WITH THE COTR.
10. FLOW SCHEMATIC AND RISER DIAGRAMS INDICATE FLOW AND OPERATION CONCEPTS AS WELL AS GENERAL ARRANGEMENT OF EQUIPMENT. VALVES, PRESSURE GAUGES, ETC. ARE INDICATED FOR THIS PURPOSE. ADDITIONAL VALVES, PRESSURE GAUGES, ETC. SHALL BE PROVIDED AS SHOWN ON VARIOUS EQUIPMENT DETAILS. SEE PLANS AND DETAILS FOR PIPE SIZES NOT INDICATED ON FLOW SCHEDULES AND RISER DIAGRAMS.
11. CONTRACTOR SHALL RECYCLE ALL MERCURY SWITCH THERMOSTATS THAT ARE REMOVED. RECYCLED THERMOSTATS SHALL BE DELIVERED TO PARTICIPATING WHOLESALERS.
12. PROVIDE DUCT ACCESS DOOR AT ALL VOLUME DAMPERS, MOTOR OPERATED DAMPERS, AND UPSTREAM AND DOWNSTREAM OF ALL DUCT MOUNTED EQUIPMENT.
13. ADJUST GRAVITY LINE INVERTS TO KEEP TOPS OF PIPE IN LINE WHERE PIPE SIZE CHANGES.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR RESEARCHING ALL SYSTEMS THAT A PARTICULAR OUTAGE WILL AFFECT, AS WELL AS LOCATING ALL SHUT OFF POINTS. THIS INFORMATION SHALL BE INCLUDED IN THE OUTAGE PLAN TO BE SUBMITTED TO THE COTR.

MECHANICAL DRAWING LIST

DRAWING NUMBER	DESCRIPTION
MG-001	COVER SHEET – MECHANICAL
MD-101	BLDG 500 SECOND FLOOR – MECHANICAL – DEMOLITION
MD-102	BLDG 500 SECOND FLOOR– MECHANICAL PIPING – DEMOLITION
MH-101	BLDG 500 SECOND FLOOR – MECHANICAL – NEW WORK
MH-102	BLDG 500 SECOND FLOOR – MECHANICAL PIPING – NEW WORK
MH-501	MECHANICAL DETAILS
MH-701	MECHANICAL SCHEDULES

100% Submission

Revisions | Date

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Drawing Title: COVER SHEET - MECHANICAL

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

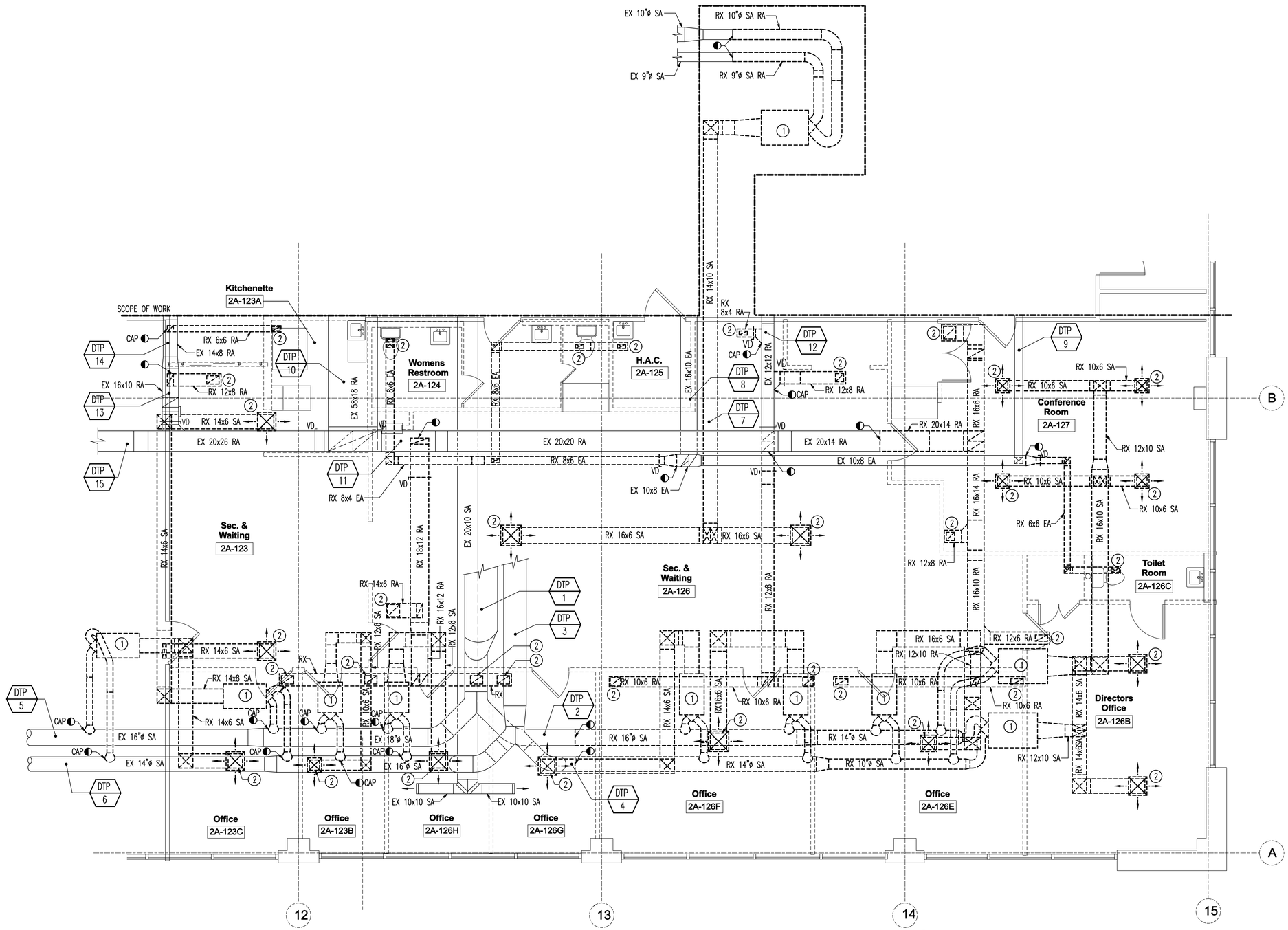
Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: MG-001

Department of Veterans Affairs



1 MD-101 BLDG 500 SECOND FLOOR – MECHANICAL – DEMOLITION

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

1/4" = 1' – 0" 0 2 4 8 12 FT

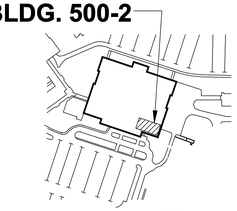
DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. DRAWING IS DIAGRAMMATIC INTENDED TO CONVEY SCOPE OF WORK. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. WHERE THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, ADVISE COTR AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, DEMOLITION INDICATED IN DARK DASHED LINE WEIGHT (– – – –).
4. ALL WORK SHOWN IS IN INTERSTITIAL SPACE UNLESS OTHERWISE NOTED.

SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. RX TERMINAL UNIT AND ALL ASSOCIATED RUNOUTS TO MIXING BOX.
2. RX DUCT DOWN THRU INTERSTITIAL SPACE FLOOR TO AIR DEVICE. REMOVE EXISTING AIR DEVICE.

BLDG. 500-2



KEY PLAN
NOT TO SCALE

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - MECHANICAL - DEMOLITION

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: MD-101

Department of Veterans Affairs

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(APPLICABLE TO THIS DRAWING ONLY)

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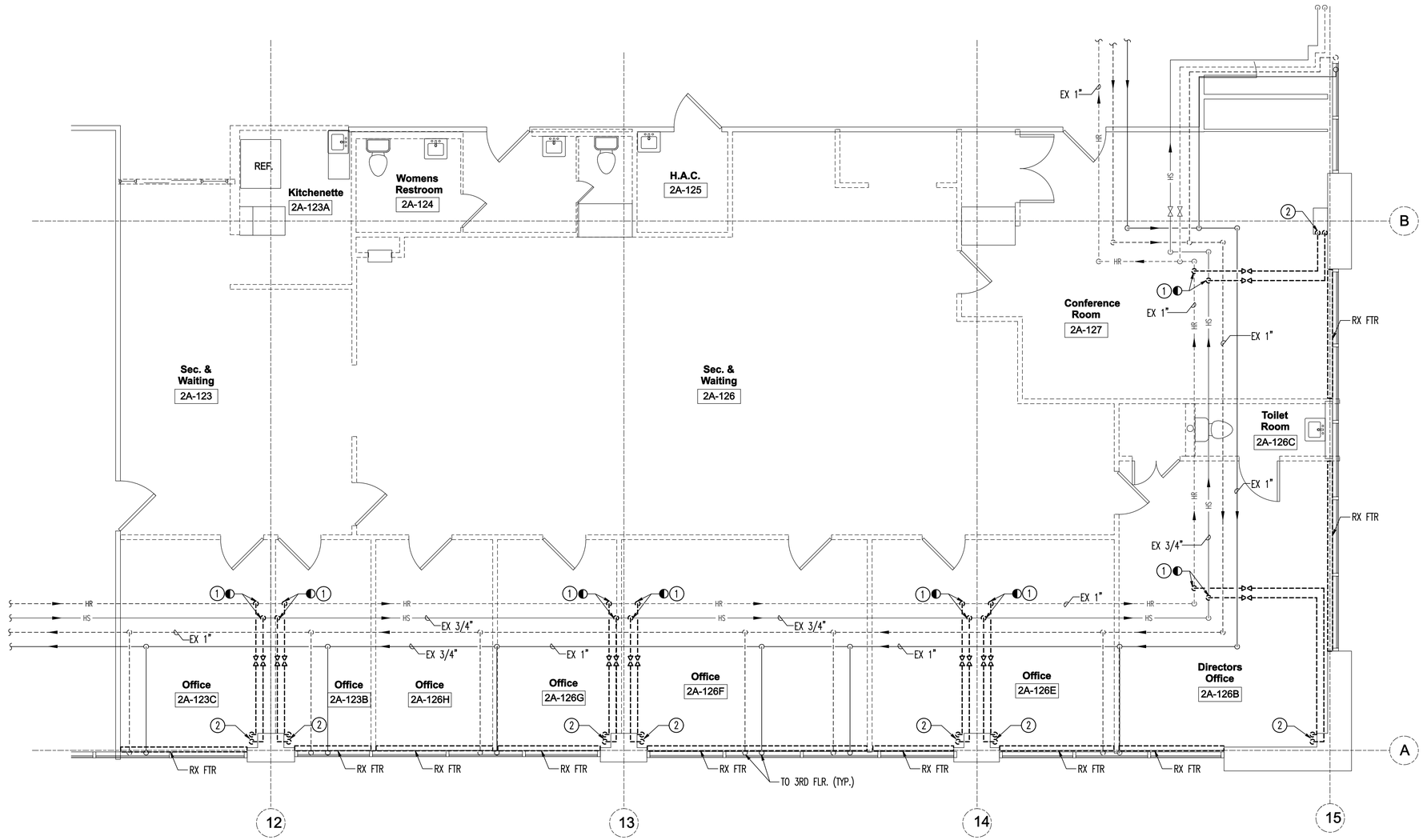
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, DEMOLITION INDICATED IN DARK DASHED LINE WEIGHT (– – – –).

SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. REMOVE EXISTING VALVE AND PIPING. CAP AT MAIN.
2. REMOVE EXISTING HR/HS RUNOUTS TO FTR.

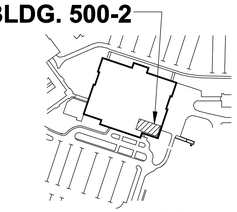


1 / MD-102 BLDG 500 SECOND FLOOR – MECHANICAL PIPING – DEMOLITION

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

1/4" = 1' - 0" 0 2 4 8 12 FT

BLDG. 500-2



KEY PLAN
NOT TO SCALE

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - MECHANICAL PIPING - DEMOLITION

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013

Checked: DFS

Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: MD-102

Department of Veterans Affairs

DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

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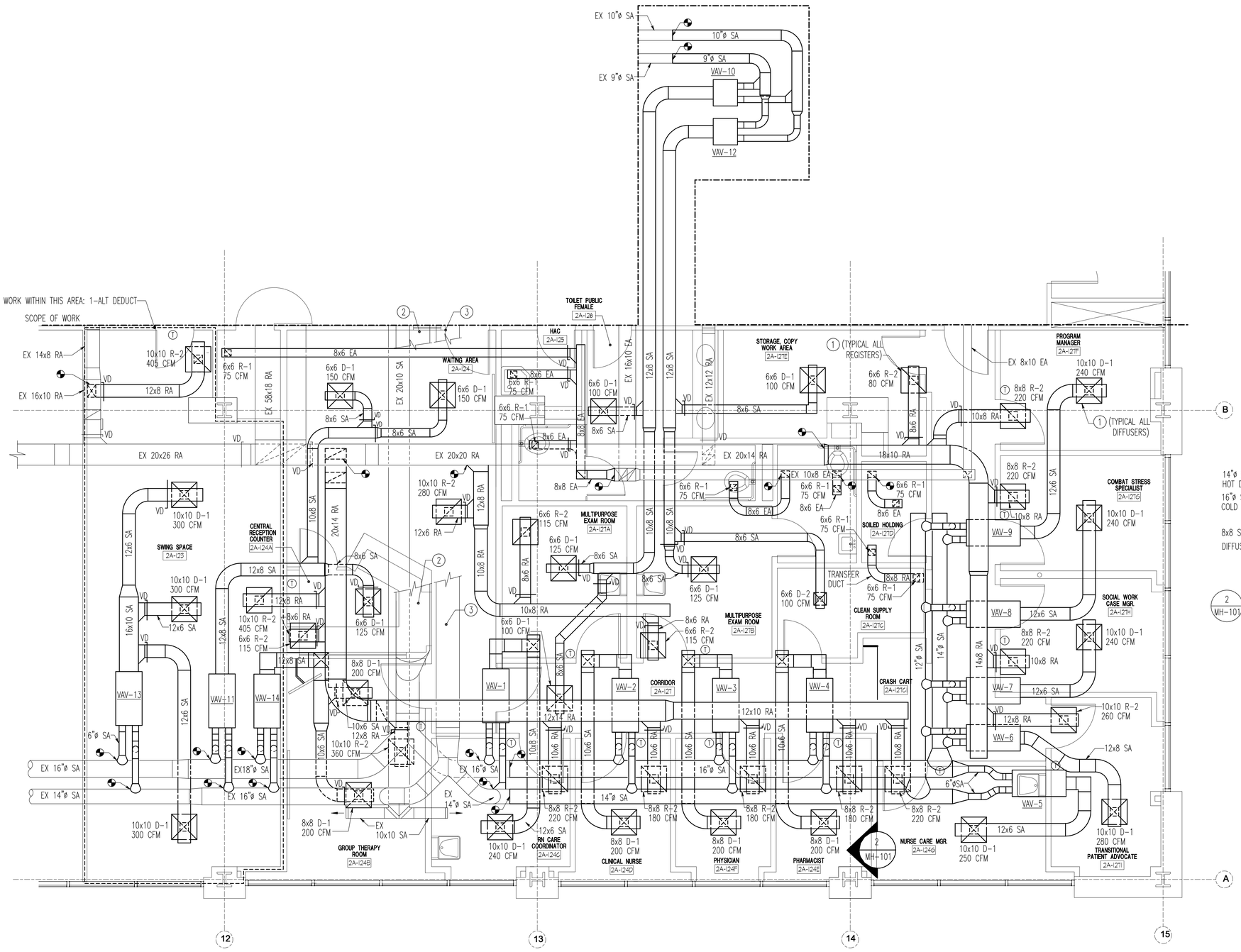
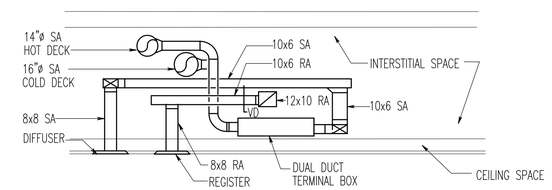
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, NEW WORK INDICATED IN DARK SOLID LINE WEIGHT (———).
4. ALL DUCT SHOWN IS LOCATED IN THE SECOND FLOOR INTERSTITIAL SPACE UNLESS OTHERWISE NOTED.
5. LOCATE ALL ROOM TEMPERATURE SENSORS WITHIN ROOM BELOW.
6. SEAL AROUND ALL DUCT PENETRATIONS TO MAINTAIN REQUIRED FIRE AND SMOKE RATING.

SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

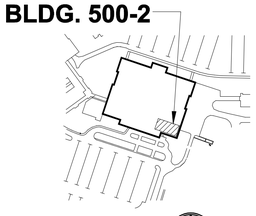
1. EXTEND RIGID ROUND DUCT DOWN FROM INTERSTITIAL SPACE INTO CEILING SPACE BELOW AND OUT TO AIR DEVICE. CUT INTERSTITIAL FLOOR DECK FOR NEW DUCT SERVING AIR DEVICE IN ROOM. REUSE EXISTING PENETRATIONS WHERE APPLICABLE.
2. EXISTING 32x14 OVAL COLD DECK SUPPLY.
3. EXISTING 22x16 OVAL HOT DECK SUPPLY.



1 MH-101 BLDG 500 SECOND FLOOR – MECHANICAL – NEW WORK
SCALE: 1/4" = 1'-0"



2 MH-101 SECTION AT INTERSTITIAL SPACE – NEW WORK
SCALE: 1/4" = 1'-0"



KEY PLAN
NOT TO SCALE

BLDG. 500-2

100% Submission

1/4" = 1' – 0" (0, 2, 4, 8, 12 FT)

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - MECHANICAL - NEW WORK

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

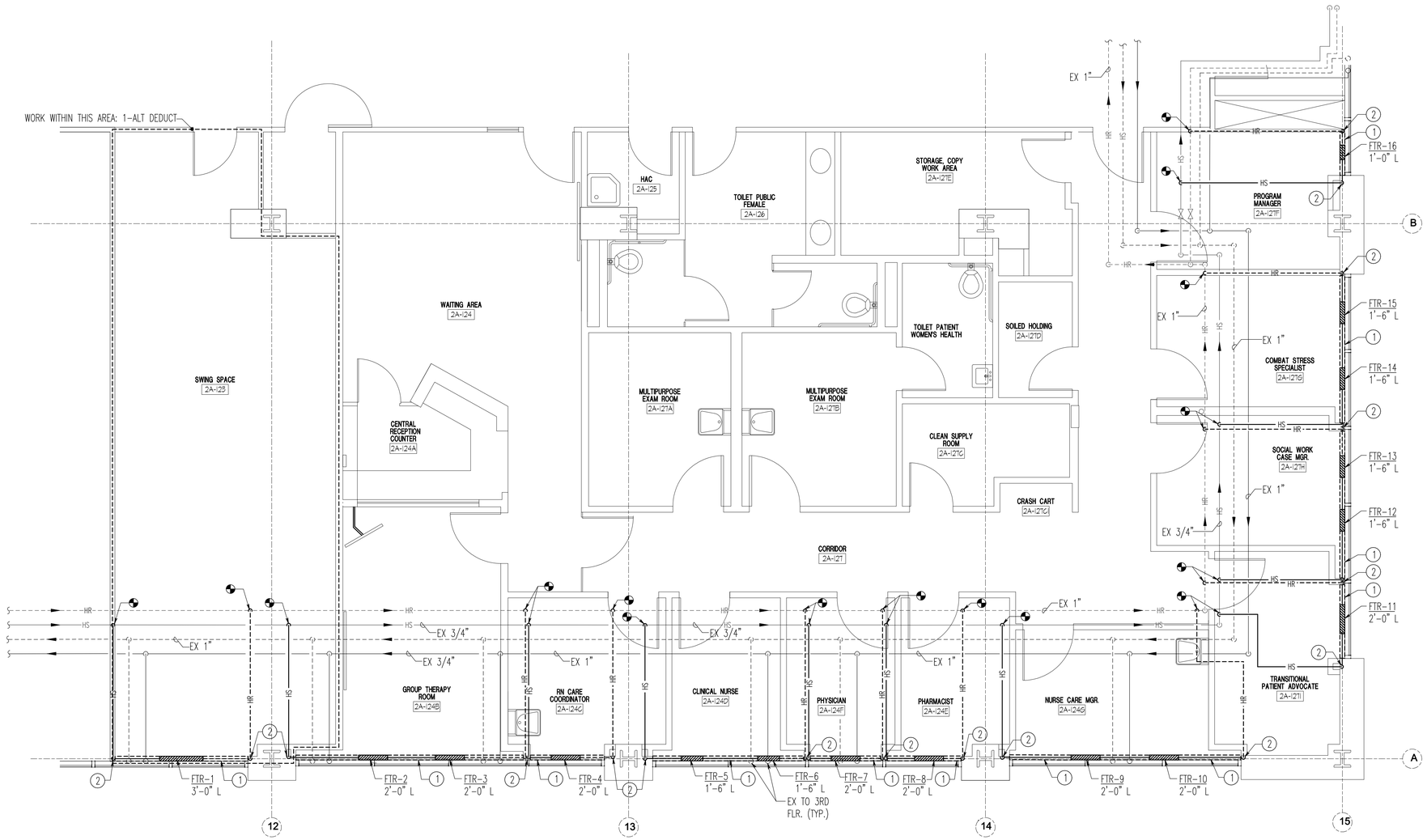
Date	Checked	Drawn
SEPTEMBER 20, 2013	DFS	DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: MH-101

Department of Veterans Affairs



1 / MH-102 BLDG 500 SECOND FLOOR – MECHANICAL PIPING – NEW WORK

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

DRAWING NOTES
(APPLICABLE TO THIS DRAWING ONLY)

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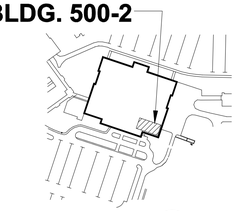
2. UNLESS OTHERWISE INDICATED, EXISTING INDICATED IN LIGHT LINE WEIGHT (———).
3. UNLESS OTHERWISE INDICATED, NEW WORK INDICATED IN DARK SOLID LINE WEIGHT (———).
4. ALL PIPING SHOWN IS LOCATED IN THE SECOND FLOOR INTERSTIAL SPACE UNLESS OTHERWISE NOTED.
5. ALL FTR SHOWN IS LOCATED IN SECOND FLOOR SPACE.

SPECIAL NOTES
(APPLICABLE TO THIS DRAWING ONLY)

1. FINTUBE RADIATION ENCLOSURE SHALL EXTEND FROM WALL – TO–WALL; COLUMN–TO–COLUMN; OR WALL–TO–COLUMN PROVIDING A CONTINUOUS ENCLOSURE ALONG PERIMETER WALL.
2. HOT WATER SUPPLY AND RETURN PIPING DOWN TO FINNED TUBE RADIATION.

BLDG. 500-2



KEY PLAN
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1/4" = 1' – 0" (0 2 4 8 12 FT)

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - MECHANICAL PIPING - NEW WORK

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

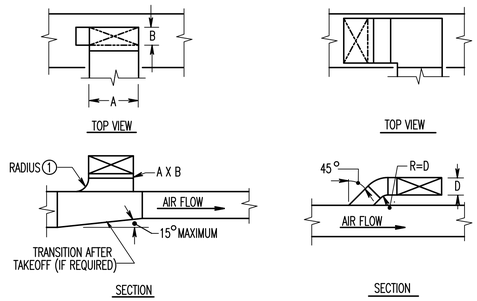
Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: MH-102

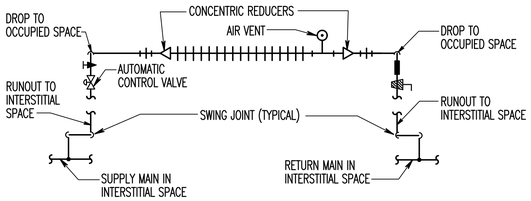
Department of Veterans Affairs



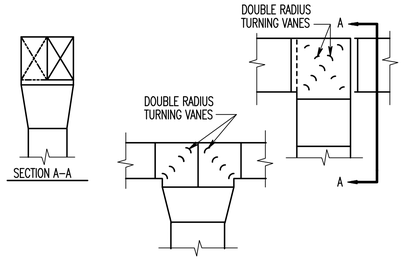
NOTES:
1. BOTTOM TAKEOFFS SIMILAR.
2. SAME FOR RETURN AND EXHAUST DUCTS EXCEPT AIR FLOW IS REVERSED.

SPECIAL NOTES:
1 45° TAP PERMITTED FOR DUCTWORK RATED 2" W.G. OR LESS.

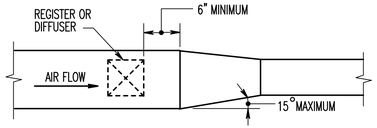
TAKEOFFS FROM TOP OF RECTANGULAR DUCTS



HOT WATER HEATING FINNED TUBE RADIATION PIPING

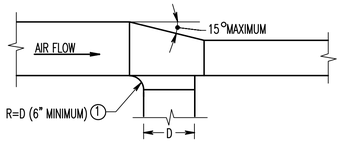


DUCT SPLITS



NOTES:
1. SAME FOR RETURN AND EXHAUST DUCTS EXCEPT AIR FLOW IS REVERSED.

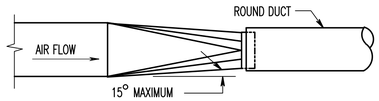
DIFFUSER OR REGISTER TAPOFF AND TRANSITION



NOTES:
1. SEE SMACNA MANUAL FOR METHODS OF SECURING TAP-OFF CONNECTION TO MAIN.
2. SAME FOR RETURN AND EXHAUST DUCTS EXCEPT AIR FLOW IS REVERSED.

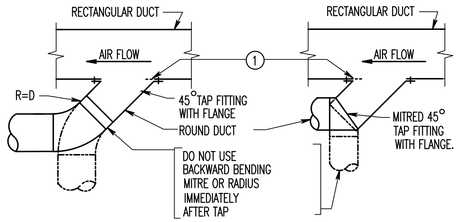
SPECIAL NOTES:
1 45° TAP PERMITTED FOR DUCTWORK RATED 2" W.G. OR LESS.

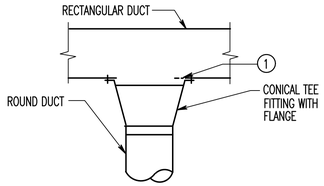
TAPOFF AND TRANSITION FROM SIDE OF DUCT



NOTES:
1. FOR AIR FLOW IN OPPOSITE DIRECTION, TRANSITION COLLAR SHALL OVERLAP EXTERIOR OR ROUND DUCT.

RECTANGULAR TO ROUND DUCT TRANSITION

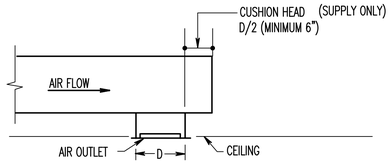




NOTES:
1. DO NOT USE 45° TAP FITTINGS EXCEPT WHERE TIGHT CONDITION PREVENTS USE OF OTHER FITTINGS INDICATED.

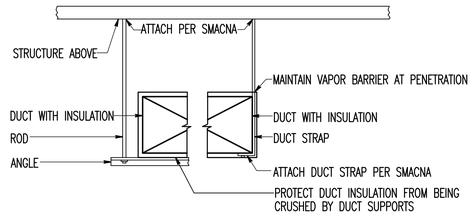
SPECIAL NOTES:
1 CUT HOLE IN RECTANGULAR DUCT LARGE ENOUGH SO THAT ROUGH METAL EDGE DOES NOT PROJECT INTO AIR STREAM.

TAPOFF FROM RECTANGULAR DUCT TO ROUND DUCT



NOTES:
1. AIR FLOW IS REVERSE FOR RETURN AND EXHAUST.

OUTLET LOCATED AT END OF RUN



NOTES:
1. REFER TO SMACNA FOR ADDITIONAL HANGERS AND SUPPORTS

DUCT INSULATION SUPPORT DETAIL

100% Submission

Revisions	Date

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MECHANICAL DETAILS

Approved: Project Director

Project Title
2A WING
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Date: SEPTEMBER 20, 2013
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Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: MH-501

Department of Veterans Affairs

FINNED TUBE RADIATION (1)(2)(3)

UNIT NO	LOCATION	EWT	LWT	OUTPUT BTU/FT	APPROX ENCL HGT	NO OF TIER	TUBE SIZE	TUBE MATL	FINS SIZE	FINS MATL	FINS PER FT	NOTES
FTR-1	2A-123	180	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-2	2A-124B	180	170	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-3	2A-124B	170	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-4	2A-124C	180	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-5	2A-124D	180	170	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-6	2A-124D	170	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-7	2A-124F	180	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-8	2A-124E	180	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-9	2A-124G	180	170	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-10	2A-124G	170	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-11	2A-1271	180	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-12	2A-127H	180	170	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-13	2A-127H	170	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-14	2A-127G	180	170	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-15	2A-127G	170	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	
FTR-16	2A-127F	180	160	1460	18	1	3/4	CU	4 1/4-3 5/8	ALUM	40	

NOTES FOR FINNED TUBE RADIATION:

(1) PROVIDE STANDARD COLOR CHART FOR COLOR SELECTION BY COTR.

(2) PROVIDE ALL INSIDE CORNERS, OUTSIDE CORNERS, COLUMN ENCLOSURES, ACCESS DOORS, SPOOL PIECES, END CAPS, AND OTHER FITTINGS REQUIRED FOR A CONTINUOUS AND COMPLETE INSTALLATION.

(3) REFER TO FLOOR PLANS FOR ELEMENT AND ACCESS LENGTH.

PRE-DEMOLITION AIR MEASUREMENTS (1)

NO	ORIGINAL DESIGN CFM (2)	LATEST AIR READINGS	MEASURED CFM (3)	DIFFERENCE
DTP-1	(4)	1844	–	–
DTP-2	(4)	271	–	–
DTP-3	(4)	4841	–	–
DTP-4	(4)	1553	–	–
DTP-5	(4)	935	–	–
DTP-6	(4)	1444	–	–
DTP-7	840	567	–	–
DTP-8	700	573	–	–
DTP-9	310	191	–	–
DTP-10	7481	7671	–	–
DTP-11	3691	2967	–	–
DTP-12	490	438	–	–
DTP-13	860	567	–	–
DTP-14	440	324	–	–
DTP-15	2930	2546	–	–
DTP-16	(4)	1298	–	–
DTP-17	(4)	4500	–	–
DTP-18	(4)	7834	–	–
DTP-19	(4)	7268	–	–
DTP-20	11411	11323	–	–
DTP-21	5680	4745	–	–

NOTES FOR DTP AIRFLOW MEASUREMENTS:

(1) MEASURE AND RECORD RESULTS PRIOR TO ANY DEMOLITION OR NEW WORK. REPORT FINDINGS TO ENGINEER WITHIN 5 DAYS OF READINGS.

(2) QUANTITIES ARE BASED ON BEST AVAILABLE DATA TO DATE AND MAY VARY FROM ACTUAL AIRFLOWS DUE TO SYSTEM MODIFICATIONS.

(3) CONTRACTOR SHALL INSERT MEASURED VALUES.

(4) UNAVAILABLE

DUAL DUCT AIR TERMINAL UNITS

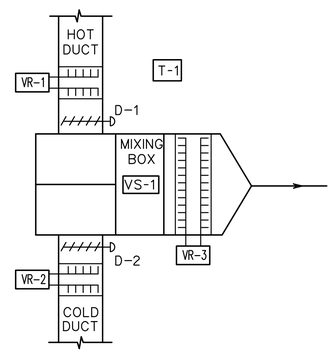
UNIT NO.	TYPE	MAX. CFM COLD DECK	MAX. CFM HOT DECK	MIN. CFM COLD DECK	MIN. CFM HOT DECK	BRANCH DUCT SIZE (1) COLD DECK	BRANCH DUCT SIZE (1) HOT DECK	CONTROL SEQUENCE DD NO.
VAV-1	DD	240	115	0	0	6	6	2
VAV-2	DD	200	105	0	0	6	6	2
VAV-3	DD	200	105	0	0	6	6	2
VAV-4	DD	200	105	0	0	6	6	2
VAV-5	DD	250	115	0	0	6	6	2
VAV-6	DD	280	115	0	0	6	6	2
VAV-7	DD	240	115	0	0	6	6	2
VAV-8	DD	240	115	0	0	6	6	2
VAV-9	DD	240	115	0	0	6	6	1
VAV-10	DD	325	185	0	0	6	6	1
VAV-11	DD	425	335	0	0	7	6	1
VAV-12	DD	325	185	0	0	6	6	2
VAV-13	DD	900	650	0	0	10	9	2
VAV-14	DD	400	335	0	0	7	6	2

NOTES FOR DUAL DUCT AIR TERMINAL UNITS:

(1) BRANCH DUCT SIZE IS RUNOUT SIZE AND NOT NECESSARILY THE BOX INLET SIZE. PROVIDE 1 FT. OF STRAIGHT DUCT ON BOX INLET, SAME SIZE AS BOX INLET. PROVIDE INSULATED TRANSITION IF REQUIRED FOR CONNECTION.

GENERAL NOTES FOR MECHANICAL SCHEDULES:

1. UNIT NUMBERS ARE INDICATED WHERE ALL UNITS ARE LISTED AND NUMBERED INDIVIDUALLY.
2. UNIT TYPES ARE DESCRIBED IN THE SPECIFICATIONS.
3. TEMPERATURE VALUES ARE LISTED IN DEGREES FAHRENHEIT.
4. FLUID PRESSURE VALUES ARE LISTED IN FEET OF WATER GAGE.
5. DUCT AND PIPE SIZES ARE LISTED IN SINGLE-NUMBER INCHES OF NOMINAL DIAMETER OR MULTIPLE NUMBER INCHES OF INDICATED PARAMETER. CONNECTION SIZES ARE BRANCH SIZES FROM MAINS TO UNIT INLETS. SINGLE PIPE SIZE IS TYPICAL FOR SUPPLY AND RETURN.



CONTROL SEQUENCE DD-1 DUAL DUCT MIXING BOX
(INTERIOR ROOMS)

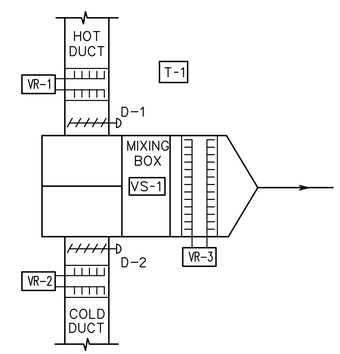
NOTES FOR CONTROL SEQUENCE DD-1 DUAL DUCT MIXING BOX:

OCCUPIED (0700 TO 2100, ADJUSTABLE)

1. ROOMSTAT T-1 SHALL MODULATE DAMPER D-2 FROM MAX CFM TO MIN CFM SETTING TO MAINTAIN 75° F SPACE TEMPERATURE.
2. VELOCITY SENSOR VS-1 SHALL MODULATE DAMPER D-1 FROM MIN CFM TO MAX CFM SETTING TO MAINTAIN TOTAL ROOM SUPPLY CFM.
3. ON A DROP IN ROOM TEMPERATURE, D-2 MODULATES CLOSE WHILE ROOMSTAT MODULATES D-1 OPEN FROM CLOSED TO MAX AIR FLOW SETING.
4. ON A CONTINUED FALL IN TEMPERATURE, D-2 IS CLOSE. D-1 OPENS TO MAX AIRFLOW TO MAINTAIN 75° F SPACE TEMPERATURE.
5. D-1 & D-2 FURNISHED BY TERMINAL UNIT MANUFACTURER.

UNOCCUPIED (2100 TO 0700, ADJUSTABLE)

1. WINTER NIGHT SETBACK TEMPERATURE 65° F (ADJUSTABLE) SHALL BE MAINTAINED BY MODULATING D-1 OPEN TO MAX FLOW. D-2 SHALL BE CLOSED.
2. SUMMER NIGHT SETBACK TEMPERATURE 85° F (ADJUSTABLE) SHALL BE MAINTAINED BY MODULATING D-2 OPEN TO MAX FLOW. D-1 SHALL BE CLOSED.



CONTROL SEQUENCE DD-2 DUAL DUCT MIXING BOX
(EXTERIOR ROOMS)

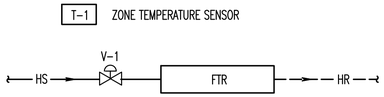
NOTES FOR CONTROL SEQUENCE DD-2 DUAL DUCT MIXING BOX:

OCCUPIED (0700 TO 2100, ADJUSTABLE)

1. ROOMSTAT T-1 SHALL MODULATE DAMPER D-2 FROM MAX CFM TO MIN CFM SETTING TO MAINTAIN 75° F SPACE TEMPERATURE.
2. VELOCITY SENSOR VS-1 SHALL MODULATE DAMPER D-1 FROM MIN CFM TO MAX CFM SETTING TO MAINTAIN TOTAL ROOM SUPPLY CFM.
3. ON A FALL IN SPACE TEMPERATURE, T-1 SHALL MODULATE D-2 CLOSE AND V-1 SHALL MODULATE OPEN TO MAINTAIN SET POINT TEMPERATURE 75° F (ADJUSTABLE). D-1 SHALL BE CLOSED.
4. UPON CONTINUED FALL IN SPACE TEMPERATURE, V-1 SHALL BE FULLY OPEN & T-1 SHALL MODULATE D-1 OPEN TO MAX AIRFLOW SETTING TO MAINTAIN SPACE SET POINT TEMPERATURE. D-2 SHALL BE CLOSED.
5. D-1 AND D-2 FURNISHED BY TERMINAL UNIT MANUFACTURER.

UNOCCUPIED (2100 TO 0700, ADJUSTABLE)

1. WINTER NIGHT SETBACK TEMPERATURE 65° F (ADJUSTABLE) SHALL BE MAINTAINED BY T-1 MODULATING V-1 OPEN TO MAX FLOW. D-1 & D-2 SHALL BE CLOSED.
2. UPON FURTHER FALL IN SPACE TEMPERATURE, T-1 SHALL MODULATE D-1 OPEN TO MAX AIR FLOW SETTING TO MAINTAIN 65° F (ADJUSTABLE), V-1 SHALL BE FULLY OPEN. D-2 SHALL BE CLOSED.
3. SUMMER NIGHT SETBACK TEMPERATURE 85° F (ADJUSTABLE) SHALL BE MAINTAINED BY T-1 MODULATING D-2 OPEN TO MAX AIR FLOW SETTING. D-1 SHALL BE CLOSED.



FINNED TUBE SYSTEM CONTROL DIAGRAM
(EXTERIOR ROOMS)

100% Submission

Revisions	Date

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Drawing Title: MECHANICAL SCHEDULES

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: DFS | Drawn: DFF/RDV

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: MH-701

Department of Veterans Affairs

ELECTRICAL ABBREVIATIONS

A	AMPERE
ACH	ABOVE CABINET HEIGHT
ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
ASYM	ASYMMETRICAL
ATS	AUTOMATIC TRANSFER SWITCH
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CX	CONNECT TO EXISTING
DP	DISTRIBUTION PANEL
DT	DOUBLE THROW
DWC	DRINKING WATER COOLER
DWG	DRAWING
E	EMERGENCY
EBH	ELECTRIC BASEBOARD HEATER
ECB	ENCLOSED CIRCUIT BREAKER
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EWH	ELECTRIC WATER HEATER
EX	EXISTING
F	FUSED OR FUSIBLE
FA	FIRE ALARM
FCP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FDR	FEEDER
GFI	GROUND FAULT INTERRUPTER
GW	GROUND WIRE
HOA	HAND-OFF-AUTOMATIC
HP	HORSE POWER
HPU	HEAT PUMP UNIT
HV	HIGH VOLTAGE
HZ	HERTZ
ICEC	INTERCOM EQUIPMENT CABINET
IG	ISOLATED GROUND
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KV	KILO-VOLTS
KVA	KILO-VOLT-AMPERE
KW	KILOWATTS
LAD	LOCATE AS DIRECTED
LC	LOAD CENTER
LP	LIGHTING PANEL
LV	LOW VOLTAGE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MH	MANHOLE
M/L	MAIN LUGS
MOA	MULTI OUTLET ASSEMBLY
MSP	MOTOR STARTER PANEL
MTD	MOUNTED
MV	MEDIUM VOLTAGE
NC	NORMALLY CLOSED
NCEC	NURSE CALL EQUIP. CABINET
NF	NON-FUSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OCP	OVERCURRENT PROTECTION
OH	OVERHEAD
P	POLE(1P., 2P., 3P.)
PB	PUSH BUTTON
PH	PHASE
PL	PILOT LIGHT
PP	POWER PANEL
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
R	RACEWAY
RCS	REMOTE CONTROL SWITCH
RP	RECEPTACLE PANEL
RX	REMOVE EXISTING
SN	SOLID NEUTRAL
SS	SAFETY SWITCH
ST	SINGLE-THROW
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
TS	TIE SWITCH
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VOLTS
W	WIRE
WP	WEATHER PROOF
XFMR	TRANSFORMER

ELECTRICAL CONVENTIONS

LIGHTING

- A — LUMINAIRE TYPE – SEE LUMINAIRE SCHEDULE
- 1b — CIRCUIT NUMBER; CONTROL POINT DESIGNATION (IF MORE THAN ONE)
- A, 1 — INDICATES LUMINAIRE WITH STEP-DIM BALLASTS TO PROVIDE MULTIPLE ILLUMINATION LEVELS
- A, 1 — ALL LAMPS ON EMERGENCY CIRCUIT
- 2s, ab — NUMBER OF CONTROL POINTS; TYPE OF CONTROL; CONTROL ZONE REFERENCE

REFERENCE

- 1, E-1 — SECTION DESIGNATION; NUMBER DENOTES SECTION IDENTIFICATION; DRAWING NUMBER WHERE DETAIL IS LOCATED
- 1, E-1 — DETAIL DESIGNATION; NUMBER DENOTES DETAIL IDENTIFICATION; DRAWING NUMBER WHERE DETAIL IS LOCATED
- 1 — SPECIAL NOTE (APPLIES WHERE INDICATED ON THE DRAWING)
- D.1 — DRAWING NOTE (APPLIES TO ENTIRE DRAWING)
- G.1 — GENERAL NOTE – APPLIES TO ENTIRE DRAWING SET

WIRING

- 5 — INDICATES PANELBOARD CIRCUIT DESIGNATION; DEVICE TYPE
- 1,3,5(LP-1) — BRANCH CIRCUIT HOMERUN TO PANEL "LP-1", CIRCUITS #1,3,5 (VIA 1P-20A CBS). PROVIDE ISOLATED GROUND CONDUCTOR IN ACCORDANCE WITH SPECIFICATIONS, NUMBER OF CIRCUITS INDICATED BY QUANTITY OF ARROW HEADS.
- CONCEALED CONDUIT IN CEILING OR WALLS

MOUNTING HEIGHTS

- 8" — INDICATES DEVICE TO BE MOUNTED 8" ABOVE COUNTERTOP BACKSPLASH; DEVICE TYPE
- 24" — INDICATES DEVICE MOUNTING HEIGHT ABOVE FINISHED FLOOR OR ABOVE FINISHED GRADE (AS APPROPRIATE); DEVICE TYPE

PRESENTATION

- ELECTRICAL EQUIPMENT DESIGNATED BY SOLID HEAVY LINEWEIGHT INDICATES NEW WORK TO BE PROVIDED.
- ELECTRICAL EQUIPMENT DESIGNATED BY SOLID LIGHT LINEWEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN, UNLESS OTHERWISE INDICATED.
- ELECTRICAL EQUIPMENT DESIGNATED BY DASHED HEAVY LINEWEIGHT REPRESENTS EXISTING EQUIPMENT TO BE REMOVED AND DISPOSED, UNLESS INDICATED TO BE REMOUNTED, RELOCATED, OR TURNED OVER TO OWNER.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
S_M	FRACTIONAL HORSEPOWER MANUAL MOTOR SWITCH WITH HOA SWITCH	46"
	MOTOR	– –
	SAFETY SWITCH	60" TO TOP
	COMBINATION MAGNETIC MOTOR STARTER AND SAFETY SWITCH	60" TO TOP
	ENCLOSED CIRCUIT BREAKER	60" TO TOP
	PANELBOARD	78" TO TOP
	DRY TYPE TRANSFORMER – SIZE AS INDICATED (FLOOR MOUNTED)	– –
#/#	COMBINATION TELEPHONE/DATA OUTLET, WALL MOUNTED X/Y = X=QUANTITY OF DATA JACKS, Y=QUANTITY OF PHONE JACKS	18"
#/# W	TELEPHONE OUTLET, WALL MOUNTED, WITH PULL TELEPHONE MOUNTING LUGS. X/Y = X=QUANTITY OF DATA JACKS, Y=QUANTITY OF PHONE JACKS	52"
TV	AUDIO/VISUAL SYSTEM – TELEVISION OUTLET WITH COAX CABLE JACK, AND DUPLEX RECEPTACLE REFER TO DETAIL ON 6/ES501.	COORDINATE WITH TV
	TELEPHONE TERMINAL BACKBOARD	– –
NCS	NURSE'S CALL MASTER STATION, MTD ON NURSE'S COUNTERTOP, UNLESS OTHERWISE NOTED	– –
N P	NURSE'S CALL PATIENT STATION, PUSH BUTTON	60"
N E	NURSE'S CALL EMERGENCY STATION, PULL CORD	36"
N	NURSE'S CALL DOME LIGHT	6" ABOVE DOOR
CR	SECURITY SYSTEM – CARD READER. SEE DETAIL 4/ES-502.	SEE DETAIL
D ES	SECURITY SYSTEM – ELECTRIC STRIKE WITH ELECTRICALLY MONITORED STRIKE LIP AND SEPARATELY MONITORED LATCH BOLT TRIPPER	DOOR FRAME
S P	PUBLIC ADDRESS SPEAKER. SEE DETAIL 10/ES-502.	– –
	SOUND MASKING SYSTEM EMITTER. SEE DETAIL 11/ES-502.	– –
	CCTV CAMERA (PROVIDED BY VA)	– –
DB	DURESS BUTTON (PROVIDED BY VA)	– –
PP	AUTOMATIC HANDICAP DOOR OPERATOR PUSH PLATE	46"
	MOLDED CASE CIRCUIT BREAKER (600V AND BELOW)	– –
	GROUNDING SYSTEM – GROUND CONNECTION	– –
	TRANSFORMER	– –

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	LUMINAIRE – SEE SCHEDULE FOR TYPE (NOMINAL 2X2) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (NOMINAL 2X4) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (NOMINAL 1X4) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (DUAL LIGHT LEVEL 2X2) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (DUAL LIGHT LEVEL 2X4) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (DUAL LIGHT LEVEL 1X4) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (NOMINAL 1X4 WALL MOUNTED) (SHADED = ON EMERGENCY CIRCUIT)	AS NOTED
	LUMINAIRE – SEE SCHEDULE FOR TYPE (DUAL LIGHT LEVEL 1X4 WALL MOUNTED) (SHADED = ON EMERGENCY CIRCUIT)	AS NOTED
	LUMINAIRE – SEE SCHEDULE FOR TYPE (NOMINAL 2' UNDERCOUNTER) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (NOMINAL 4' UNDERCOUNTER) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (INDUSTRIAL) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (STRIP) (SHADED = ON EMERGENCY CIRCUIT)	– –
	LUMINAIRE – SEE SCHEDULE FOR TYPE (DOWNLIGHT) (SHADED = ON EMERGENCY CIRCUIT)	– –
1 1	ILLUMINATED EXIT SIGN, SINGLE FACE – SEE SCHEDULE FOR TYPE (ARROW INDICATED DIRECTIONAL CHEVRON) (CEILING AND WALL MOUNTED)	– – / 90"
	ILLUMINATED EXIT SIGN, DOUBLE FACE – SEE SCHEDULE FOR TYPE (CEILING AND WALL MOUNTED)	– – / 90"
$	SINGLE POLE TOGGLE SWITCH	46"
$3	THREE-WAY TOGGLE SWITCH	46"
$4	FOUR-WAY TOGGLE SWITCH	46"
$D	DIMMER SWITCH	46"
$OS	OCCUPANCY SENSOR SWITCH, DUAL TECHNOLOGY. SEE DETAIL 1/ES-501	46"
	OCCUPANCY SENSOR – DUAL TECHNOLOGY (CEILING MOUNTED)	– –
R	COMMONLY CONTROLLED LIGHTING RELAY	MOUNT IN CEILING TILE
	RECEPTACLE – NEMA CONFIGURATION 5-20R DUPLEX. HOSPITAL GRADE.	18"
	RECEPTACLE – NEMA CONFIGURATION 5-20R DUPLEX. HOSPITAL GRADE. ON EMERGENCY CIRCUIT	18"
	RECEPTACLE – NEMA CONFIGURATION 5-20R SINGLE. HOSPITAL GRADE.	18"
	RECEPTACLE – NEMA CONFIGURATION 5-20R QUAD. HOSPITAL GRADE.	18"
GFI	RECEPTACLE – NEMA 5-20R DUPLEX WITH 5mA GROUND FAULT INTERRUPTER. HOSPITAL GRADE.	18"
	RECEPTACLE – NEMA CONFIGURATION 5-20R DUPLEX SAFETY TYPE (TAMPER RESISTANT) HOSPITAL GRADE	18"
J	JUNCTION BOX IN CEILING	– –
J	JUNCTION BOX – WALL MOUNTED	AS NOTED

NOTES: (APPLICABLE TO ELECTRICAL LEGEND ONLY)

1. THE MOUNTING HEIGHTS GIVEN ON THIS SHEET IN THE ELECTRICAL LEGEND ARE GENERAL AND SHALL BE USED ONLY WHEN MOUNTING HEIGHTS CANNOT BE ESTABLISHED BY REFERENCE TO DETAILS, ELEVATIONS, AND NOTES ON THE DRAWINGS.
2. ALL MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE OUTLET OR DEVICE.
3. HEIGHTS OF ALL ITEMS NOT COVERED BY THE ELECTRICAL LEGEND AND NOT SHOWN ON THE DRAWINGS SHALL BE AS DIRECTED BY THE COTR.
4. WHERE PLACING ANY ITEM AT THE HEIGHTS LISTED OR NOTED WILL CAUSE INTERFERENCE WITH THE WORK OF OTHER TRADES, OR IS NOT PHYSICALLY POSSIBLE OR DESIRABLE FOR ONE REASON OR ANOTHER, THE ITEM SHALL BE INSTALLED AT A LOCATION APPROVED BY THE COTR.

100% Submission

Revisions	Date

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Drawing Title: ELECTRICAL LEGEND, CONVENTIONS, AND ABBREVIATIONS

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: ADP | Drawn: ADP

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: EG-001

Department of Veterans Affairs

GENERAL ELECTRICAL NOTES

G.1 PROVIDE LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, DELEGATED DESIGN AND INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.

G.2 PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION.

G.3 MATERIAL AND EQUIPMENT SHALL BE LISTED AND LABELED BY NATIONALLY RECOGNIZED TESTING LABORATORIES FOR INTENDED SERVICE.

G.4 GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION.

G.5 MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET SHALL BE COMPLETE, CURRENT, AND AVAILABLE UPON REQUEST.

G.6 SUBMIT FOR APPROVAL, SHOP DRAWINGS FOR EQUIPMENT AND MATERIALS USED ON PROJECT. OBTAIN APPROVAL BY COTR PRIOR TO PURCHASE OF EQUIPMENT AND MATERIALS.

G.7 REPAIR OR REPLACE DAMAGE TO FACILITIES AND EQUIPMENT AT NO ADDITIONAL EXPENSE TO OWNER.

G.8 PATCH AND REPAIR DISTURBED AREAS TO MATCH ADJACENT SURFACES AND FINISHES.

G.9 PROVIDE TEMPORARY POWER AND LIGHTING FOR OTHER TRADES AS REQUIRED TO COMPLETE PROJECT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.

G.10 DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. PROVIDE COMPONENTS INDICATED ON RISER DIAGRAMS WHETHER OR NOT INDICATED ON PLANS, AND VICE VERSA.

G.11 LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH OTHER TRADES. ROUTING OF CONDUIT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW REQUIRED OFFSETS AND DETAILS. OBTAIN DRAWINGS AND SPECIFICATIONS FROM OTHER TRADES AND COORDINATE WITH OTHER TRADES.

G.12 COORDINATE ELECTRICAL INSTALLATION WITH FIELD CONDITIONS. LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY REQUIRE ADJUSTMENT IN FIELD.

G.13 COORDINATE LOCATIONS OF ELECTRICAL DEVICES WITH ARCHITECTURAL ELEVATIONS, CASEWORK DETAILS, AND KITCHEN EQUIPMENT DRAWINGS PRIOR TO INSTALLATION.

G.14 REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.

G.15 REFER TO ARCHITECTURAL DRAWINGS FOR FIRE AND SOUND RATED WALLS REQUIRING SPECIAL CONSTRUCTION.

G.16 PERMANENTLY LABEL NEW ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, DEVICE DESIGNATION AND SUPPLY CIRCUIT DESIGNATION.

G.17 CORE DRILL CONCRETE WALLS AND FLOORS TO PROVIDE OPENINGS FOR CONDUIT INSTALLATION. MAXIMUM CORE DRILL SIZE SHALL BE 5-INCH DIAMETER. SPACE CORE DRILL LOCATIONS A MINIMUM OF 6" FROM EACH OTHER, MEASURED FROM CORE DRILL OPENINGS. PROPERLY SEAL OPENINGS ACCORDING TO LOCATION AND APPLICATION.

G.18 PROVIDE EACH CIRCUIT WITH A DEDICATED NEUTRAL UNLESS NOTED OTHERWISE.

G.19 CONDUIT HOMERUNS SHOWN ON DRAWINGS WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMATICALLY. DO NOT INSTALL MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY UNLESS INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.

G.20 PROVIDE FIREPROOFING FOR ELECTRICAL PENETRATIONS.

G.21 INSTALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE. INSTALL RACEWAYS TIGHT TO STRUCTURAL CEILING AND AS HIGH AS POSSIBLE WITHIN CEILING SPACES TO MAINTAIN MAXIMUM AMOUNT OF CLEAR SPACE BELOW RACEWAY.

G.22 INSTALL RACEWAYS CONCEALED IN BUILDING FINISHES FOR ALL EXTERIOR MOUNTED DEVICES. DO NOT ROUTE EXPOSED ON BUILDING EXTERIOR.

G.23 INSTALL RACEWAYS CONCEALED IN WALLS, UNDER FLOORS, ABOVE CEILINGS, ETC., EXCEPT AS FOLLOWS:
- WHERE SUSPENDED CEILINGS ARE NOT PROVIDED
- IN VERTICAL SHAFTS, ELECTRICAL CLOSETS, ETC., MECHANICAL AND ELECTRICAL EQUIPMENT SPACES WHERE CONCEALMENT IS NOT PRACTICAL.
- AT SURFACE-MOUNT PANELBOARDS IN OTHERWISE FINISHED SPACES LIMITED TO VERTICAL RUNS ABOVE AND BELOW PANEL
- WHERE REQUIRED FOR EQUIPMENT CONNECTIONS
- WHERE SPECIFICALLY INDICATED ON DRAWINGS

G.24 OWNER-FURNISHED EQUIPMENT: VERIFY AND COORDINATE ELECTRICAL ROUGH-IN REQUIREMENTS FOR OWNER-FURNISHED EQUIPMENT WITH OWNER PRIOR TO PULLING CONDUCTORS AND MAKING FINAL CONNECTIONS. LACK OF COORDINATION SHALL NOT JUSTIFY CHANGE ORDERS.

G.25 WHERE SUBMITTED EQUIPMENT REQUIRES REVISION TO OVERCURRENT PROTECTION, CONDUIT, AND WIRING, COORDINATE AND MAKE CHANGE TO PROVIDE A COMPLETE INSTALLATION IN ACCORDANCE WITH APPLICABLE CODES.

GENERAL ELECTRICAL DEMOLITION/RENOVATION NOTES

GD.1 MINIMIZE OUTAGES. COORDINATE OUTAGES WITH OWNER. PERFORM WORK REQUIRING SUSTAINED EQUIPMENT OUTAGE CONTINUOUSLY AROUND THE CLOCK UNTIL WORK IS COMPLETE, UNLESS NOTED OTHERWISE.

GD.2 PRIOR TO DEMOLITION, FIELD VERIFY CONDUITS, CONDUCTORS, AND CABLES THAT PASS THROUGH AND SERVE AREAS OUTSIDE THE SCOPE OF WORK. MAINTAIN CONTINUITY OF SYSTEMS. PROTECT OR RELOCATE SYSTEMS TO PREVENT DAMAGE. RESTORE SYSTEMS TO NORMAL OPERATION. COORDINATE SYSTEM OUTAGES WITH OWNER.

GD.3 IDENTIFY NONFUNCTIONING EQUIPMENT AND DEVICES TO REMAIN AFTER DEMOLITION. NOTIFY OWNER IN WRITING PRIOR TO DEMOLITION. UPON COMPLETION OF WORK, ENSURE THAT EXISTING EQUIPMENT AND DEVICES OPERATE PROPERLY.

GD.4 IN AREAS REQUIRING THE PERFORMANCE OF WORK OF OTHER TRADES, CAREFULLY DISCONNECT, MAKE SAFE, REMOVE AND STORE ELECTRICAL ITEMS IN PATH OF WORK. REINSTALL AND RECONNECT SAME AFTER COMPLETION OF OTHER TRADE'S WORK. COORDINATE REMOVAL OF EQUIPMENT WITH OTHER TRADES PRIOR TO DEMOLITION.

GD.5 AFTER DEMOLITION VERIFY AND SUPPORT REMAINING CABLES, WIRES, AND CONDUIT IN ACCORDANCE WITH THE APPLICABLE VERSION OF THE NEC. DISCONNECT, MAKE SAFE AND REMOVE ABANDONED AND TEMPORARY WIRE WITHIN SPACE.

GD.6 EXISTING CONDITIONS REFLECT GENERAL OBSERVATIONS AND ARE NOT INTENDED TO INDICATE DETAILS OR DIMENSIONS. NO ATTEMPT HAS BEEN MADE TO SHOW ALL ELECTRICAL EQUIPMENT. VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK. NOTIFY COTR IN WRITING IF CONDITIONS ARE DISCOVERED THAT PREVENT EXECUTION OF WORK.

GD.7 PROTECT REMAINING ELECTRICAL SYSTEMS AND COMPONENTS FROM DAMAGE. REMOVE PROTECTIVE MATERIALS UPON COMPLETION OF WORK.

GD.8 IN AREAS NOTED TO REMOVE ELECTRICAL WORK, REMOVE CONDUITS AND ASSOCIATED SUPPORTS BACK TO POINT OF CONCEALMENT AND REMOVE WIRING BACK TO SOURCE.

GD.9 DISPOSE OF LIGHTING BALLASTS AND CAPACITORS CONTAINING PCB'S, AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA), IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, FEDERAL AND EPA REGULATIONS.

GD.10 PROVIDE UPDATED TYPEWRITTEN PANELBOARD DIRECTORIES FOR PANELBOARDS MODIFIED BY THIS PROJECT. VERIFY REMAINING LOADS AFTER DEMOLITION. TRACE CIRCUITS TO IDENTIFY UNKNOWN LOADS. INDICATE NEW AND EXISTING LOADS ON DIRECTORIES.

GD.11 REPAIR AND PATCH ANY DISTURBED AREAS TO MATCH EXISTING CONDITIONS. IN BLOCK OR CONCRETE WALLS TO REMAIN, PROVIDE BLANK COVER PLATES FOR DEVICES REMOVED WHEN A REPLACEMENT DEVICE IS NOT INDICATED.

100% Submission

Revisions	Date

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Drawing Title
ELECTRICAL GENERAL NOTES

Approved: Project Director

Project Title
2A WING
OEF / OIF CLINIC

Location

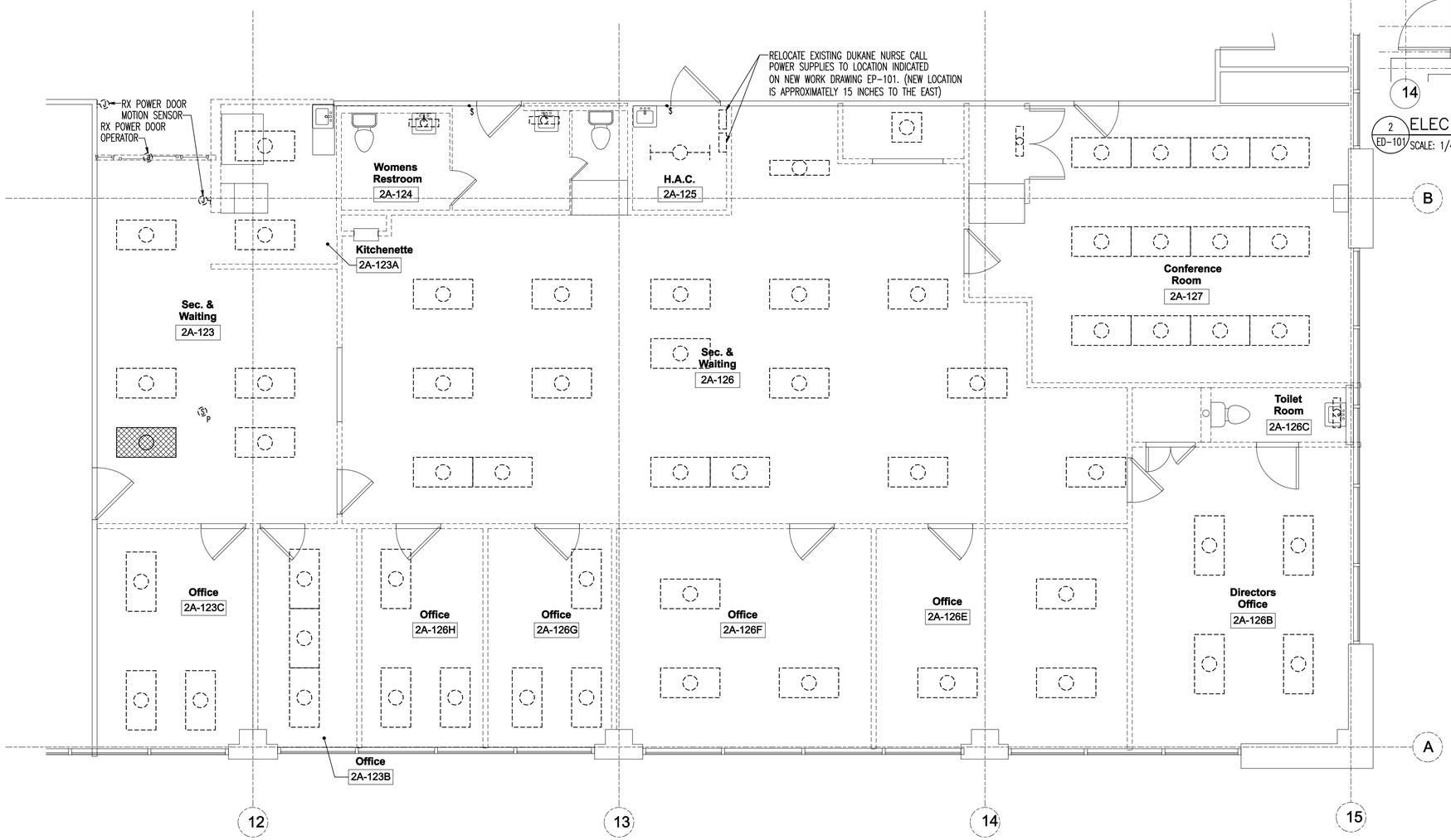
Date	Checked	Drawn
SEPTEMBER 20, 2013	ADP	ADP

Project Number: 613 - 13 - 112

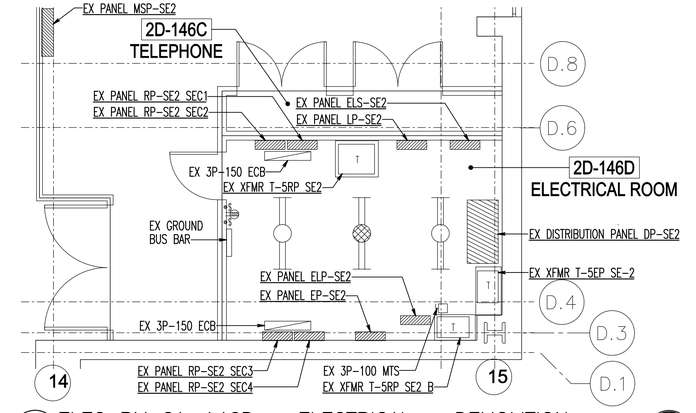
Building Number: 500

Drawing Number: EG-002

Department of Veterans Affairs



1 ED-101 BLDG 500 SECOND FLOOR – ELECTRICAL – DEMOLITION
SCALE: 1/4" = 1'-0"



2 ED-101 ELEC RM 2A-146D – ELECTRICAL – DEMOLITION
SCALE: 1/4" = 1'-0"

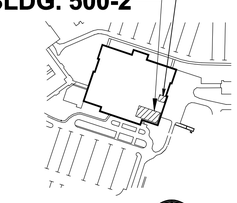
DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

D.1 UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (-----) SHALL BE REMOVED, AND ELECTRICAL ITEMS SHOWN LIGHT SOLID (———) SHALL BE EXISTING TO REMAIN.

D.2 EXISTING DRAWINGS INDICATE THE LIGHTING CIRCUITS SERVING THIS PROJECT AREA ARE:
NORMAL LIGHTING: PANEL LP-SE2: CIRCUITS #9,10,11,12
EMERGENCY LIGHTING + EXIT SIGNS: PANEL ELP-SE2: CIRCUIT #

1/4" = 1' - 0" 0 2 4 8 12 FT

ELEC 2D-146D
TELEPHONE 2D-146C
BLDG. 500-2



KEY PLAN
NOT TO SCALE

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - ELECTRICAL- DEMOLITION

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: ADP | Drawn: ADP

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: ED-101

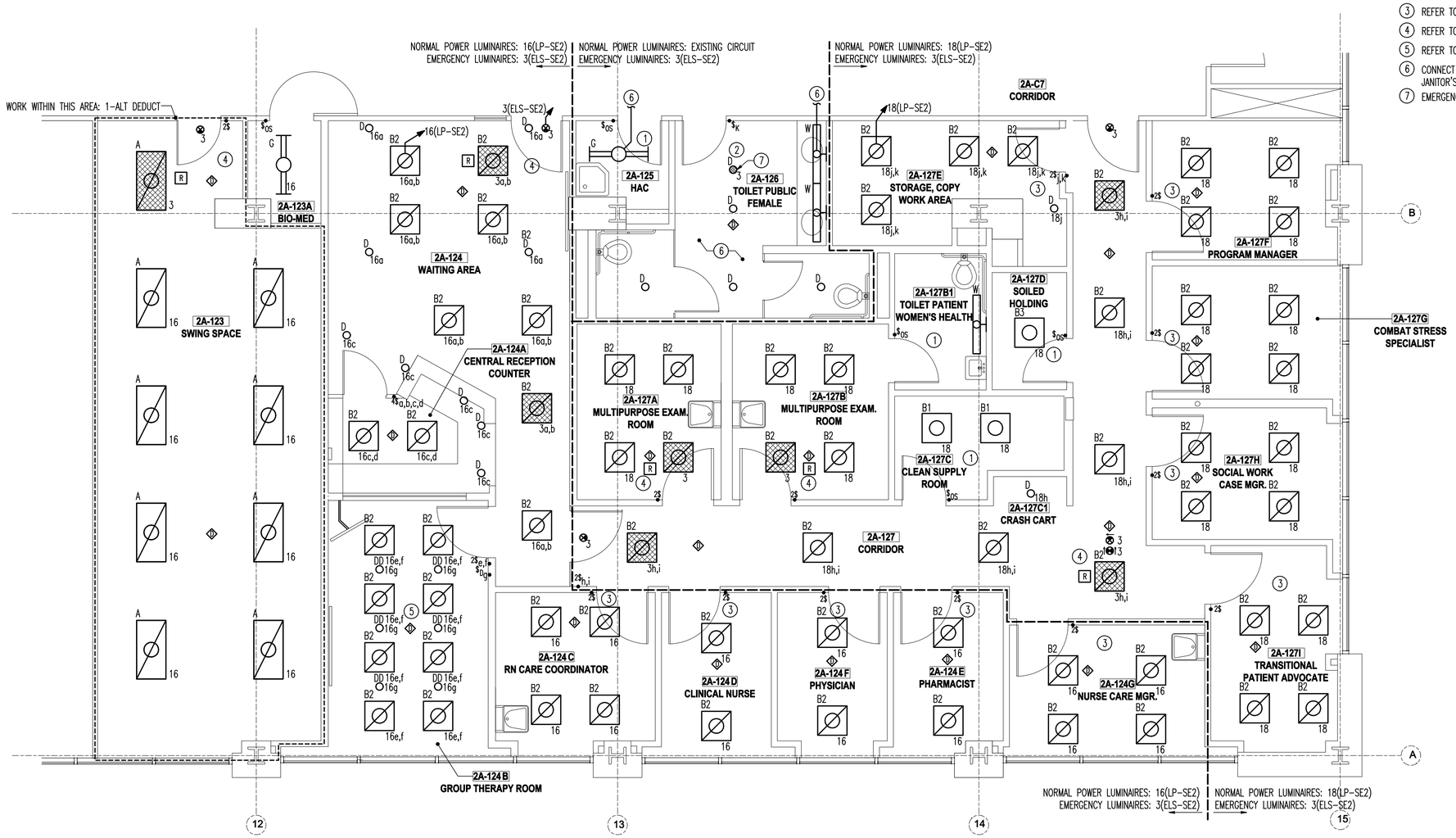
Department of Veterans Affairs

DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

D.1 REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF SOUND RATED WALLS REQUIRING SPECIAL CONSTRUCTION. REFER TO DETAILS ON DRAWING E502 FOR SPECIAL CONSTRUCTION REQUIREMENTS OF ELECTRICAL DEVICES MOUNTED IN THE SOUND RATED WALLS.

SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

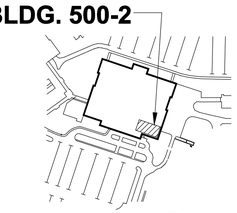
1. REFER TO DETAIL 1/E501 FOR LIGHTING CONTROL WIRING DIAGRAM FOR THIS ROOM.
2. REFER TO DETAIL 2/E501 FOR LIGHTING CONTROL WIRING DIAGRAM FOR THIS ROOM.
3. REFER TO DETAIL 3/E501 FOR LIGHTING CONTROL WIRING DIAGRAM FOR THIS ROOM.
4. REFER TO DETAIL 4/E501 FOR LIGHTING CONTROL WIRING DIAGRAM FOR THIS ROOM.
5. REFER TO DETAIL 5/E501 FOR LIGHTING CONTROL WIRING DIAGRAM FOR THIS ROOM.
6. CONNECT TO EXISTING NORMAL POWER 277V LIGHTING CIRCUIT FROM PANEL LP-SE2 PREVIOUSLY SERVING EXISTING JANITOR'S CLOSET AND PUBLIC FEMALE RESTROOM WHICH WAS DEMOLISHED IN DEMO PHASE.
7. EMERGENCY LIGHT SHALL REMAIN ON 24/7.



1 / EL-101 BLDG 500 SECOND FLOOR – LIGHTING – NEW WORK

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

BLDG. 500-2



KEY PLAN

NOT TO SCALE

1/4" = 1' - 0" (0, 2, 4, 8, 12 FT)

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - LIGHTING

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013

Checked: ADP

Drawn: ADP

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: EL-101

Department of Veterans Affairs

DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

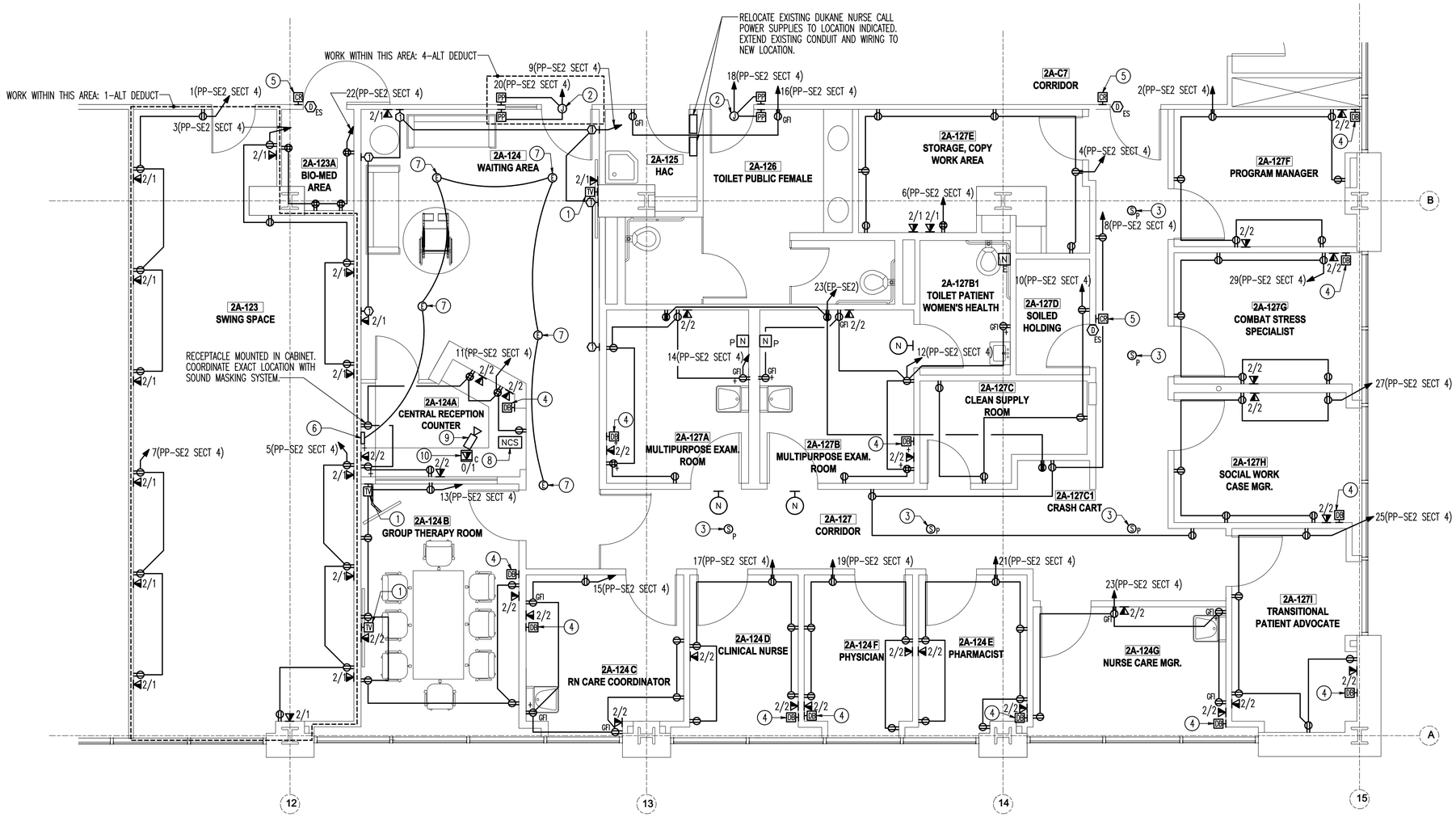
D.1 COMMUNICATIONS CABLING SHALL HOMERUN TO TELEPHONE ROOM 2D-146C UTILIZING J-HOOKS ROUTED EXPOSED ABOVE ACCESSIBLE CEILING. ALL CABLING SHALL BE TERMINATED ON PATCH PANELS IN GD-109. ALL WORK DOWNSTREAM OF THE PATCH PANEL IS OUTSIDE OF THIS PROJECT SCOPE AND SHALL BE PERFORMED BY OTHERS.

D.2 REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF SOUND RATED WALLS REQUIRING SPECIAL CONSTRUCTION. REFER TO DETAILS ON DRAWING E502 FOR SPECIAL CONSTRUCTION REQUIREMENTS OF ELECTRICAL DEVICES MOUNTED IN THE SOUND RATED WALLS.

D.3 REFER TO DRAWING QH101 FOR PNEUMATIC TUBE SYSTEM DRAWINGS FOR ELECTRICAL WORK RELATED TO RELOCATION OF PNEUMATIC TUBE SYSTEM. 2-ALT. DEDUCT WORK.

SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

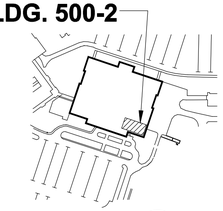
1. FLAT PANEL TV WALL BOX WITH RECEPTACLE AND CABLE OUTLET. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH TV INSTALLATION. REFER TO DETAIL 6/ES-501.
2. PROVIDE JUNCTION BOX FOR HANDICAP DOOR CONTROLLER. PROVIDE NECESSARY WIRING IN CONDUIT BETWEEN THE DOOR CONTROLLER AND PUSH PLATES AS RECOMMENDED BY THE MANUFACTURER. PROVIDE NECESSARY JUNCTION BOXES FOR THE VARIOUS DOOR CONTROL DEVICES AS RECOMMENDED BY THE MANUFACTURER.
3. PA SPEAKER. CONNECT TO MAIN PA SYSTEM. REFER TO DETAIL 10/ES-502.
4. DURESS BUTTON PROVIDED BY VA. EXACT LOCATION TO BE DETERMINED WITH COTR. DURESS BUTTON CONNECTS VIA A PHONE OUTLET.
5. REFER TO DETAIL 4/ES-502 FOR CARD READER INSTALLATION.
6. SOUND MASKING SYSTEM CONTROL MODULE WITH BACKGROUND MUSIC INTERFACE. LOCATE IN CABINETS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION. REFER TO DETAIL 11/ES-502.
7. SOUND MASKING SYSTEM/WHITE NOISE SOUND EMITTER. REFER TO DETAIL 11/ES-502.
8. COORDINATE EXACT LOCATION OF NURSE CALL STATION WITH COTR.
9. POE CCTV CAMERA TO BE PROVIDED BY VA POLICE.
10. FLUSH CEILING MOUNTED DATA OUTLET WITH (1) RJ45 JACK FOR CCTV CAMERA. PROVIDE CAT6 CABLE WITH YELLOW SHEATH BACK TO IT ROOM AND TERMINATE ON EXISTING DATA PATCH PANEL.



1 EP-101 BLDG 500 SECOND FLOOR – POWER AND SPECIALTY SYSTEMS – NEW WORK
SCALE: 1/4" = 1'-0"

1/4" = 1' - 0" 0 2 4 8 12 FT

BLDG. 500-2



KEY PLAN
NOT TO SCALE

100% Submission

Revisions	Date

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Drawing Title: BLDG 500 SECOND FLOOR - POWER AND SPECIALTY SYSTEMS

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

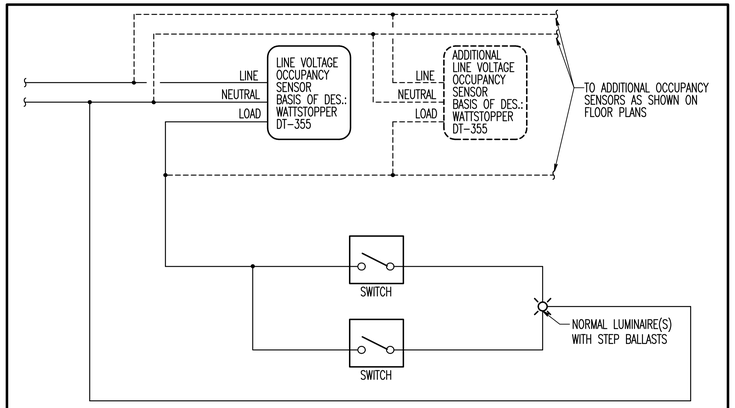
Date: SEPTEMBER 20, 2013 | Checked: ADP | Drawn: ADP

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: EP-101

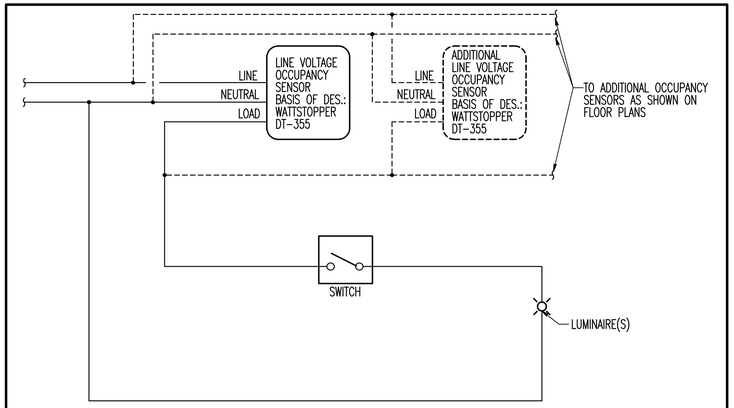
Department of Veterans Affairs



NOTE: GROUND WIRE NOT SHOWN. PROVIDE GROUND WIRE AND GROUND ALL DEVICES.

3 CEILING MOUNTED OCCUPANCY SENSOR(S) WITH SWITCHING AND STEP BALLASTS WIRING

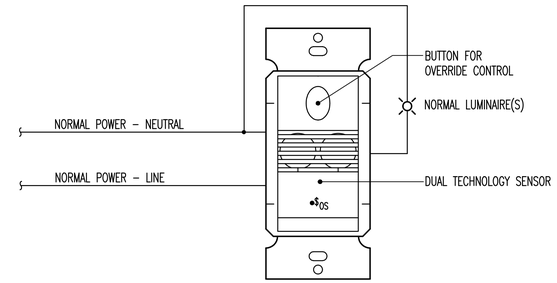
NO SCALE



NOTE: GROUND WIRE NOT SHOWN. PROVIDE GROUND WIRE AND GROUND ALL DEVICES.

2 CEILING MOUNTED OCCUPANCY SENSOR(S) WITH WALL SWITCH WIRING

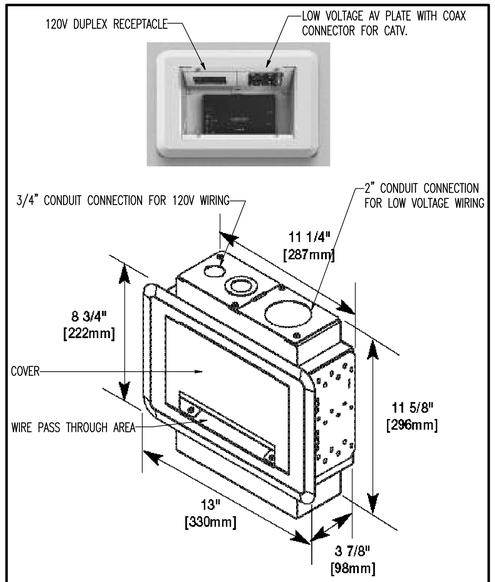
NO SCALE



OPERATION: AUTOMATIC ON 100% LIGHT LEVEL
AUTOMATIC OFF AFTER 15 MINUTES.

1 OCCUPANCY SENSOR WALL SWITCH WIRING

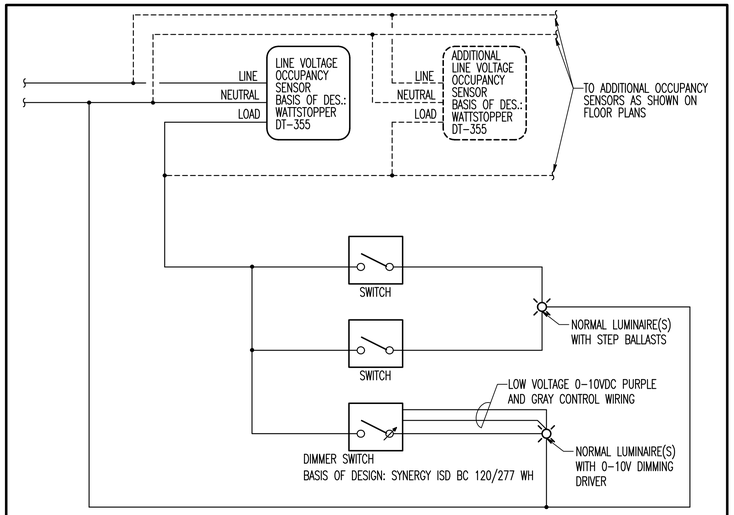
NO SCALE



BASIS OF DESIGN: WIREMOLD EVOLUTION SERIES BOX, EFSB2.
2-GANG BOX: 1 GANG SHALL BE PROVIDED WITH DUPLEX RECEPTACLE
1 GANG SHALL BE PROVIDED WITH LOW VOLTAGE PLATE WITH COAX
RG6 TERMINATION FOR CABLE TV. CONNECT COAX TO BUILDING CATV
SYSTEM WITH RG-11. PROVIDE 2" CONDUIT FROM LOW VOLTAGE
COMPARTMENT UP TO ACCESSIBLE CEILING SPACE FOR LOW VOLTAGE
WIRING, AND OTHER FUTURE WIRING BY OWNER

6 FLAT PANEL TV WALL BOX

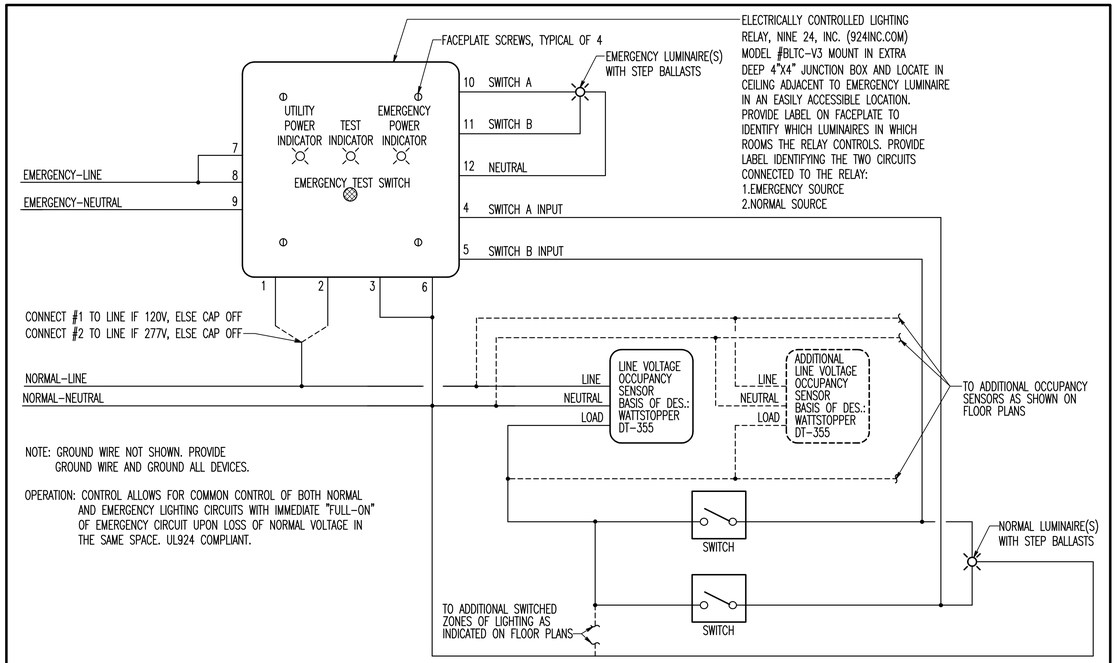
NO SCALE



NOTE: GROUND WIRE NOT SHOWN. PROVIDE GROUND WIRE AND GROUND ALL DEVICES.

5 CEILING MOUNTED OCCUPANCY SENSOR(S) WITH DIMMING, SWITCHING AND STEP BALLASTS WIRING

NO SCALE



NOTE: GROUND WIRE NOT SHOWN. PROVIDE GROUND WIRE AND GROUND ALL DEVICES.

OPERATION: CONTROL ALLOWS FOR COMMON CONTROL OF BOTH NORMAL AND EMERGENCY LIGHTING CIRCUITS WITH IMMEDIATE "FULL-ON" OF EMERGENCY CIRCUIT UPON LOSS OF NORMAL VOLTAGE IN THE SAME SPACE. UL924 COMPLIANT.

4 CEILING MOUNTED OCCUPANCY SENSOR(S) WITH SWITCHING AND STEP BALLASTS AND COMMON CONTROL WITH EMERGENCY LIGHTING RELAY

NO SCALE

100% Submission

Revisions	Date

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JOHN DOUGLAS EBERT REGISTERED No. 18226 STATE OF VIRGINIA PROFESSIONAL ENGINEER
9/18/2013

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TELEPHONE (301) 589-4811 FAX (301) 589-3810

Drawing Title: ELECTRICAL DETAILS

Approved: Project Director

Project Title: **2A WING OEF / OIF CLINIC**

Location

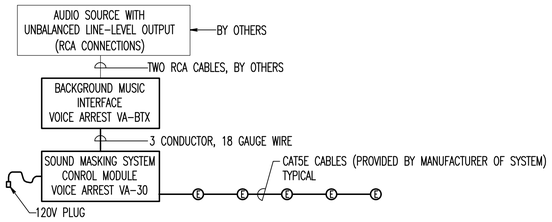
Date	Checked	Drawn
SEPTEMBER 20, 2013	ADP	ADP

Project Number: 613 - 13 - 112

Building Number: 500

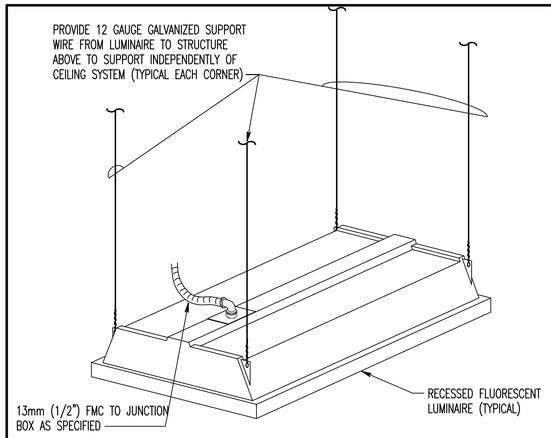
Drawing Number: ES-501

Department of Veterans Affairs



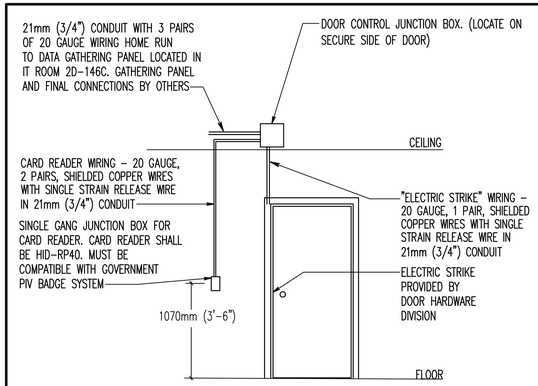
11 SOUND MASKING SYSTEM DIAGRAM

NOT TO SCALE



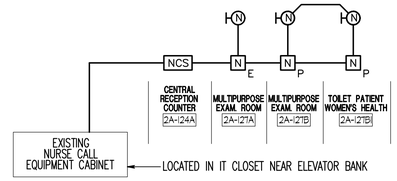
5 LUMINAIRE SUPPORT

NOT TO SCALE



4 CARD READER CONNECTION DETAIL

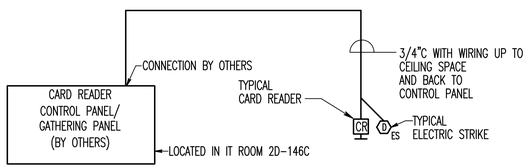
NOT TO SCALE



SECOND FLOOR

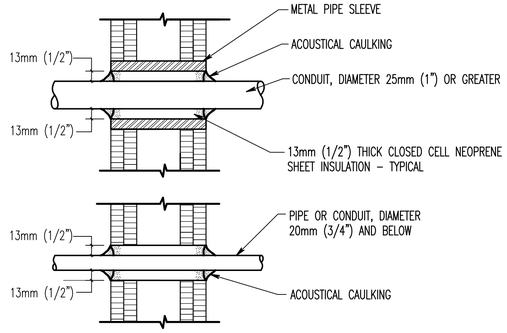
8 NURSE CALL RISER DIAGRAM

NOT TO SCALE



6 CARD READER SCHEMATIC

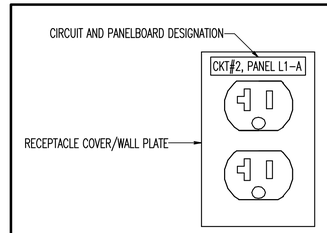
NOT TO SCALE



NOTE: THESE DETAILS APPLY TO PENETRATIONS BY CONDUITS OF SOUND CRITICAL WALLS, FLOORS, AND CEILINGS AS INDICATED BY THE ARCHITECT.

3 RACEWAY PENETRATION DETAIL FOR DRYWALL PARTITIONS IN SOUND RATED WALLS

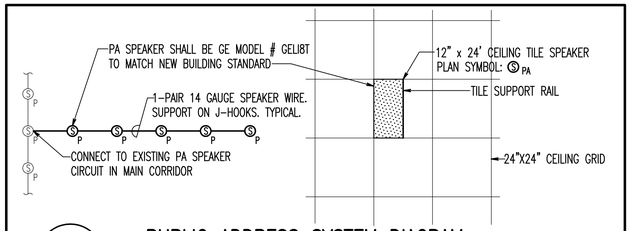
NOT TO SCALE



NOTE: ALL RECEPTACLES SHALL BE LABELED.

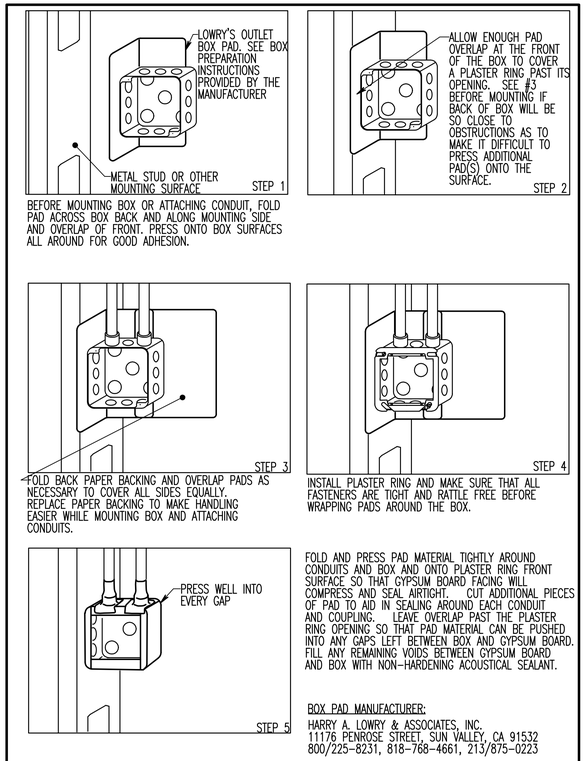
7 RECEPTACLE LABEL

NOT TO SCALE



10 PUBLIC ADDRESS SYSTEM DIAGRAM

NOT TO SCALE

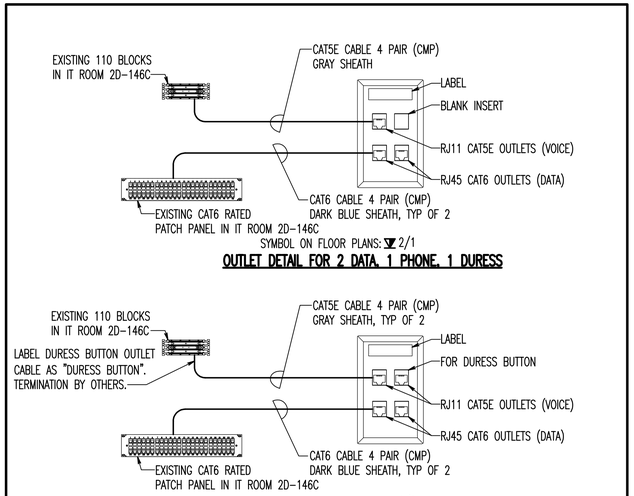


FOLD AND PRESS PAD MATERIAL TIGHTLY AROUND CONDUITS AND BOX AND ONTO PLASTER RING FRONT SURFACE SO THAT GYPSUM BOARD FACING WILL COMPRESS AND SEAL AIRTIGHT. CUT ADDITIONAL PIECES OF PAD TO AID IN SEALING AROUND EACH CONDUIT AND COUPLING. LEAVE OVERLAP PAST THE PLASTER RING OPENING SO THAT PAD MATERIAL CAN BE PUSHED INTO ANY GAPS LEFT BETWEEN BOX AND GYPSUM BOARD. FILL ANY REMAINING VOIDS BETWEEN GYPSUM BOARD AND BOX WITH NON-HARDENING ACOUSTICAL SEALANT.

BOX PAD MANUFACTURER:
HARRY A. LOWRY & ASSOCIATES, INC.
11176 PENROSE STREET, SUN VALLEY, CA 91532
800/225-8231, 818-768-4661, 213/875-0223

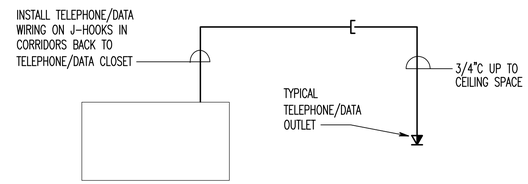
2 BOX PAD ACOUSTICAL WRAPPING DETAIL FOR SOUND RATED WALLS

(FOR USE IN ALL ROOMS WITH AN ACOUSTICAL RC OF 29 OR BELOW.)



9 DATA/PHONE/DURESS OUTLETS

NOT TO SCALE



1 TELEPHONE/DATA SCHEMATIC RISER

NOT TO SCALE

100% Submission

Revisions	Date

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Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013

Checked: ADP

Drawn: ADP

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: ES-502

Department of Veterans Affairs

BRANCH CIRCUIT SCHEDULE

120 OR 277 VOLT, 1PH, 2W CIRCUITS

CIRCUIT BREAKER	CONDUCTOR & CONDUIT SIZE
15A–1P	2#12 + #12GW IN 3/4"C
20A–1P	2#12 + #12GW IN 3/4"C
25A–1P	2#10 + #10GW IN 3/4"C
30A–1P	2#10 + #10GW IN 3/4"C
35A–1P	2#8 + #10GW IN 3/4"C
40A–1P	2#8 + #10GW IN 3/4"C
45A–1P	2#6 + #10GW IN 3/4"C
50A–1P	2#6 + #10GW IN 3/4"C
60A–1P	2#4 + #10GW IN 1"C

208 VOLT, 1PH, 2W CIRCUITS

CIRCUIT BREAKER	CONDUCTOR & CONDUIT SIZE
15A–2P	2#12 + #12GW IN 3/4"C
20A–2P	2#12 + #12GW IN 3/4"C
25A–2P	2#10 + #10GW IN 3/4"C
30A–2P	2#10 + #10GW IN 3/4"C
35A–2P	2#8 + #10GW IN 3/4"C
40A–2P	2#8 + #10GW IN 3/4"C
45A–2P	2#6 + #10GW IN 3/4"C
50A–2P	2#6 + #10GW IN 3/4"C
60A–2P	2#4 + #10GW IN 1"C

120/208 VOLT, 1PH, 3W CIRCUITS

CIRCUIT BREAKER	CONDUCTOR & CONDUIT SIZE
15A–2P	3#12 + #12GW IN 3/4"C
20A–2P	3#12 + #12GW IN 3/4"C
25A–2P	3#10 + #10GW IN 3/4"C
30A–2P	3#10 + #10GW IN 3/4"C
35A–2P	3#8 + #10GW IN 3/4"C
40A–2P	3#8 + #10GW IN 3/4"C
45A–2P	3#6 + #10GW IN 1"C
50A–2P	3#6 + #10GW IN 1"C
60A–2P	3#4 + #10GW IN 1-1/4"C

208 OR 480 VOLT, 3PH, 3W CIRCUITS

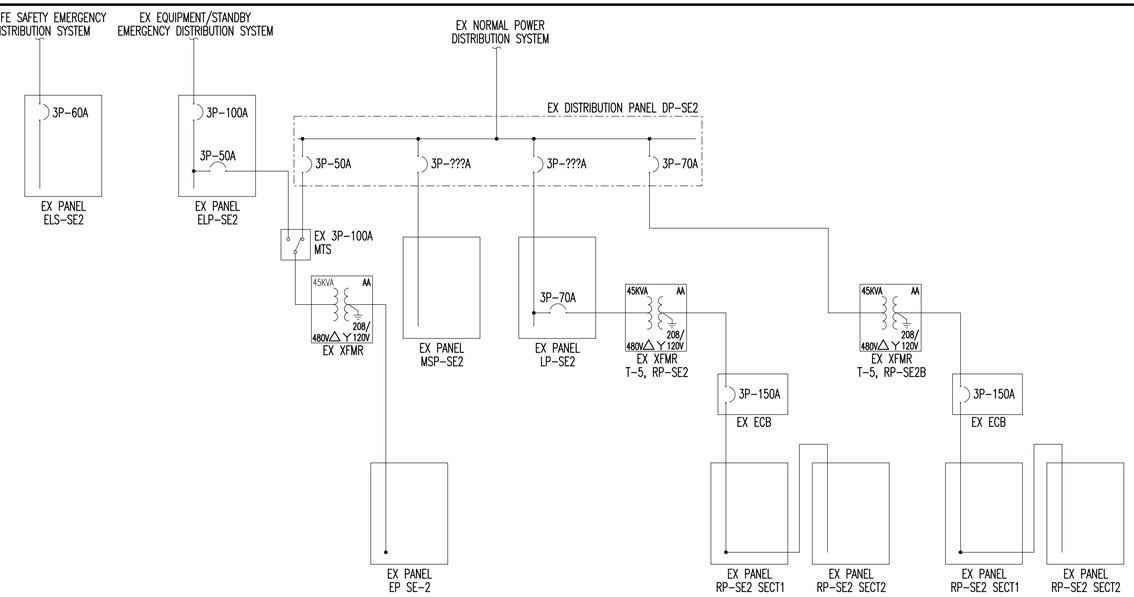
CIRCUIT BREAKER	CONDUCTOR & CONDUIT SIZE
15A–3P	3#12 + #12GW IN 3/4"C
20A–3P	3#12 + #12GW IN 3/4"C
25A–3P	3#10 + #10GW IN 3/4"C
30A–3P	3#10 + #10GW IN 3/4"C
35A–3P	3#8 + #10GW IN 3/4"C
40A–3P	3#8 + #10GW IN 3/4"C
45A–3P	3#6 + #10GW IN 1"C
50A–3P	3#6 + #10GW IN 1"C
60A–3P	3#4 + #10GW IN 1-1/4"C

120/208 & 277/480 VOLT, 3PH, 4W CIRCUITS

CIRCUIT BREAKER	CONDUCTOR & CONDUIT SIZE
15A–3P	4#12 + #12GW IN 3/4"C
20A–3P	4#12 + #12GW IN 3/4"C
25A–3P	4#10 + #10GW IN 3/4"C
30A–3P	4#10 + #10GW IN 3/4"C
35A–3P	4#8 + #10GW IN 3/4"C
40A–3P	4#8 + #10GW IN 3/4"C
45A–3P	4#6 + #10GW IN 1"C
50A–3P	4#6 + #10GW IN 1"C
60A–3P	4#4 + #10GW IN 1-1/4"C

CONTRACTOR INSTRUCTIONS FOR USING THIS SCHEDULE:

1. THIS SCHEDULE IS INTENDED TO PROVIDE BRANCH CIRCUIT CONDUIT AND WIRE SIZE IF NOT SPECIFICALLY CALLED OUT IN PANELBOARD SCHEDULE, SHEET KEYNOTE, OR FOLLOWING PRESENTATION CONVENTIONS SHOWN ON THE ELECTRICAL LEGEND SHEET.
2. HOW TO USE: SELECT BRANCH CIRCUIT CONDUIT AND WIRE SIZE BY FIRST DETERMINING SYSTEM VOLTAGE, POLE AND WIRE CONFIGURATION AND SECOND BY CIRCUIT BREAKER SIZE.
3. CONTRACTOR SHALL INCREASE WIRE AND CONDUIT SIZE AS REQUIRED BY SPECIFICATIONS FOR MAXIMUM VOLTAGE DROP OF 3% FROM BRANCH CIRCUIT PANEL TO LAST DEVICE ON CIRCUIT BASED ON ACTUAL CONDUIT ROUTE.
4. COMPLETE CIRCUITING OF INDIVIDUAL ELECTRICAL DEVICES TO HOMERUN USING WIRE AND RACEWAY SIZES INDICATED ON SCHEDULE.
5. CONDUIT SIZES SHOWN ABOVE ARE THE MINIMUM SIZE TO BE USED. CONDUITS WITH CONDUCTORS FOR MULTIPLE BRANCH CIRCUIT RUNS SHALL CONFORM TO BOTH THE ABOVE MINIMUM SIZE LISTED AND TO CONDUIT FILL REQUIREMENTS OF ANNEX C OF THE NEC.



1 ES-601 ELECTRICAL RM 2A–146D PARTIAL ONE–LINE DIAGRAM
SCALE: NONE

LUMINAIRE SCHEDULE

TYPE	MOUNTING	LUMINAIRE DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMP TYPE	LAMP CRI	LAMP CCT	LAMP QTY	LAMP WATTS/ LAMP	LAMP LUMENS/ LAMP	DRIVER/BALLAST TYPE	DRIVER/BALLAST QTY	DRIVER/BALLAST BALLAST FACTOR	SYSTEM VOLTAGE	INPUT WATTS	NOTES
A1	CEILING RECESSED	2X4' RECESSED LAY–IN TROFFER, ARCHITECTURAL/VOLUMETRIC DESIGN WITH LUMINOUS PANELS.	LITHONIA	2ALL4–49L–(BLANK)–D50–LP840–BLD	LED	82	4000	1	50	5074	LED DRIVER W/ STEP DIM	1	N/A	277	50	DLC CERTIFIED
B1	CEILING RECESSED	SAME AS TYPE 'A1' EXCEPT 2X2' SIZE.	LITHONIA	2ALL2–37L–(BLANK)–D37–LP840–NX	LED	82	4000	1	37	3793	LED DRIVER	1	N/A	277	37	DLC CERTIFIED
B2	CEILING RECESSED	SAME AS TYPE 'B1' EXCEPT WITH STEP DIMMING	LITHONIA	2ALL2–37L–(BLANK)–D37–LP840–BLD	LED	82	4000	1	37	3793	LED DRIVER W/ STEP DIM	1	N/A	277	37	DLC CERTIFIED
B3	CEILING RECESSED	SAME AS TYPE 'B1' EXCEPT WITH DRYWALL CEILING ADAPTER ACCESSORY	LITHONIA	2ALL2–37L–(BLANK)–D37–LP840–NX WITH DGA22 (ACCESSORY)	LED	82	4000	1	37	3793	LED DRIVER	1	N/A	277	37	DLC CERTIFIED
D	CEILING RECESSED	4" APERATURE OPEN DOWNLIGHT WITH CLEAR MATT DIFFUSE FINISH	GOTHAM	ALED–41/–10–4AR–LD–277	LED	83	4100	1	20.6	1039	LED DRIVER	1	N/A	277	20.6	ENERGY STAR CERTIFIED (DLC DOES NOT HAVE CATEGORY FOR DOWNLIGHTS)
DD	CEILING RECESSED	SAME AS TYPE 'D' EXCEPT FULL RANGE DIMMING	GOTHAM	ALED–41/–10–4AR–LD–277	LED	83	4100	1	20.6	1039	LED DRIVER WITH DIMMING	1	N/A	277	20.6	ENERGY STAR CERTIFIED (DLC DOES NOT HAVE CATEGORY FOR DOWNLIGHTS)
G	CEILING SUSPENDED	4' LINEAR SURFACE MOUNT WITH LINEAR–FACETED REFRACTOR.	LITHONIA	WL4–41L–(BLANK)–D43–LP840–NX	LED	82	4000	1	43	4100	LED DRIVER	1	N/A	277	43	DLC CERTIFIED. CONTRACTOR PROVIDE NECESSARY SUPPORT SYSTEM TO SUSPEND THIS LUMINAIRE.
W	WALL SURFACE	4' LINEAR DIRECT/INDIRECT WALL BRACKET WITH EXTRUDED ALUMINUM BODY WITH DIE–CAST ENDCAPS. ADA COMPLIANT.	FINELITE	HP–4–WM–ID–4'–HO–SO–4000K–TG–277V–SC–MB	LED	83	4000	1	55	4690	LED DRIVER	1	N/A	277	36	(DLC DOES NOT HAVE CATEGORY FOR WALL MOUNTS)
EXIT SIGN	AS SHOWN	LED LIT EXIT SIGN, TO MATCH EXISTING BUILDING STANDARD	LITHONIA	LQM–S–W–3–R–120/277	LED	N/A	N/A	N/A	N/A	N/A	LED DRIVER	1	N/A	277	~1	(DLC DOES NOT HAVE CATEGORY FOR EXIT SIGNS)

NOTES: (APPLICABLE TO LUMINAIRE SCHEDULE ONLY)

1. LAMP TYPES ARE INDICATED BY INDUSTRY GENERIC DESIGNATIONS; SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
2. CATALOG NUMBERS FOR LUMINAIRES INDICATE THE TYPE AND QUALITY OF THE LUMINAIRE TO BE PROVIDED BY THE CONTRACTOR AND ARE GENERAL IN NATURE. THE CATALOG NUMBERS ARE NOT INTENDED TO INDICATE AN ACTUAL ORDER MODEL NUMBER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE LUMINAIRES WITH THE TYPE OF LAMP, BALLAST, LENS OR DIFFUSER, AND CONSTRUCTION FEATURES AS INDICATED IN THE SPECIFICATIONS.
3. UNLESS OTHERWISE NOTED, EQUIVALENT LUMINAIRES WILL BE ACCEPTED PROVIDED THEY ARE PROVEN TO BE EQUAL TO OR BETTER THAN THE LUMINAIRE SPECIFIED, IN ALL RESPECTS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, CONSTRUCTION FEATURES. APPEARANCE AND PERFORMANCE. WHERE A LUMINAIRE IS NOTED AS "NO EQUAL," SUBSTITUTIONS WILL NOT BE ACCEPTED.
4. COORDINATE CONTROL COMPATABILITY BETWEEN BALLAST/DRIVER TYPES FOR ALL DIMMED LUMINAIRES WITH MANUFACTURER AND MODEL OF DIMMING CONTROL DEVICES.
5. PROVIDE EXIT SIGNS WITH SINGLE FACE OR DOUBLE FACE AND WITH OR WITHOUT CHEVRONS AS INDICATED ON THE DRAWINGS. PROVIDE RED OR GREEN LETTERING AS REQUIRED BY AHJ.
6. ALL MOUNTING HEIGHTS SHALL BE AS INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE ARCHITECT OR ENGINEER. MOUNTING HEIGHTS OF WALL MOUNTED LUMINAIRES SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE LUMINAIRE. MOUNTING HEIGHTS OF CEILING SUSPENDED LUMINAIRES SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE LUMINAIRE.

100% Submission

Revisions | Date

CONSULTANTS

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9/18/2013

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TELEPHONE (301) 589-4811 FAX (301) 589-3810

Drawing Title: ELECTRICAL ONE-LINE DIAGRAM AND SCHEDULES

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: ADP | Drawn: ADP

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: ES-601

Department of Veterans Affairs

EX. PANELBOARD RP-SE2 SECT1

SERVICE TYPE: NORMAL POWER
MANUFACTURER: GOULD ITE TYPE: CDP-7

MAIN AMPACITY: 225A
MAIN TYPE: MLO
SERVICE: 3 PHASE, 4 WIRE, 208Y/120 VOLTS
FULLY RATED MIN. RATING: 10K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
1	1	EX LOAD-REC-121-121B-123D	–	1	20	–	–	–					1	20	–	–	EX LOAD-REC-121-121B-123D	2	2
3	3	EX LOAD-REC 121A-123D	–	1	20	–			–	–			1	20	–	–	EX LOAD-REC-123B-126G-H	4	4
5	5	EX LOAD-REC-123-123D	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC-126-126F-G	6	6
7	7	EX LOAD-REC C7	–	1	20	–	–	–					1	20	–	–	EX LOAD-REC-127	8	8
9	9	EX LOAD-REC-123-126 P.T. STA 19	–	1	20	–			–	–			1	20	–	–	EX LOAD-REC-126B-126E	10	10
11	11	EX LOAD-REC-126-126E-126F	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC-S1	12	12
13	13	EX LOAD-REC-109A-135-136	–	1	20	–	–	–					1	20	–	–	EX LOAD-REC C11	14	14
15	15	EX LOAD-LAB RECS	–	1	20	–			–	–			1	20	–	–	EX LOAD-EWC-C11	16	16
17	17	EX LOAD-REC C7	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC-122A-134	18	18
19	19	EX LOAD-REC INTERST. "A" ADT DIRECTOR SUITE WIRELESS	–	1	20	–	–	–					1	20	–	–	EX LOAD-REC-122-122B	20	20
21	21	EX LOAD-REC-INTERST. "A"	–	1	20	–			–	–			1	20	–	–	EX LOAD-REFRIG-129	22	22
23	23	EX LOAD-REC-INTEREST. "A"	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC-129	24	24
25	25	EX LOAD-REC 130-131	–	1	20	–	–	–					1	20	–	–	EX LOAD-FREEZER-133	26	26
27	27	EX LOAD-REC 128-129-130	–	1	20	–			–	–			1	20	–	–	EX LOAD-RACEWAY-133	28	28
29	29	EX LOAD-REC-C10	–	1	20	–					–	–	1	20	–	–	EX LOAD-RACEWAY-133	30	30
31	31	EX LOAD-REC C12	–	1	20	–	–	–					1	20	–	–	EX LOAD-FUME HOOD-133	32	32
33	33	EX LOAD-REC-139-140-141	–	1	20	–			–	–			1	20	–	–	EX LOAD-RACEWAY-133	34	34
35	35	EX LOAD-REC-141-142-143-144	–	1	20	–					–	–	1	20	–	–	EX LOAD-RACEWAY-133	36	36
							–	–	–	–	–	–							
							–		–		–								

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

PHASE A: –A PHASE B: –A PHASE C: –A

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☑ GROUND BUS
☐ SPLIT BUS
☐ FEED THRU LUGS
☐ SUB FEED LUGS
☐ INTEGRAL SPD/TVSS
☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS

EX. PANELBOARD RP-SE2 SECT2

SERVICE TYPE: NORMAL POWER
MANUFACTURER: ITE TYPE: CDP-7

MAIN AMPACITY: 225A
MAIN TYPE: MLO
SERVICE: 3 PHASE, 4 WIRE, 208Y/120 VOLTS
FULLY RATED MIN. RATING: 10K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
1	1	EX LOAD-OVEN 147A	–	2	20	–	–	–					1	20	–	–	EX LOAD-REC-147	2	2
3	3	{ }	–	–	–	–			–	–			1	20	–	–	EX LOAD-REC-147-148	4	4
5	5	EX LOAD-RACEWAY-133	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC C10	6	6
7	7	EX LOAD-FUME HOOD-148	–	1	20	–	–	–					1	20	–	–	EX LOAD-REC 133	8	8
9	9	EX LOAD-REC-133	–	1	20	–			–	–			1	20	–	–	EX LOAD-REC 133	10	10
11	11	EX LOAD-REC-133	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC 133	12	12
13	13	EX LOAD-REC-148-149	–	1	20	–	–	–					1	20	–	–	EX LOAD-REC 133	14	14
15	15	EX LOAD-GLASS WASHER-147	–	3	20	–			–	–			1	20	–	–	EX LOAD-REC 133	16	16
17	17	{ }	–	–	–	–					–	–	1	20	–	–	EX LOAD-REC 133 TDX ANALYSER	18	18
19	19	{ }	–	–	–	–	–	–					1	20	–	–	EX LOAD-REC 122C-P.T. STA 18	20	20
21	21	EX LOAD-STERILIZER 147 GEN PURPOSE 258	–	1	20	–			–	–			1	20	–	–	EX LOAD-REC 122C	22	22
23	23	EX LOAD-REC-MECH RM	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC 122C	24	24
25	25	EX LOAD-BECHMAN 6630-5438	–	1	20	–	–	–					1	20	–	–	EX LOAD-BECKMAN 133 REC	26	26
27	27	EX LOAD-2A-131 MICROWAVE	–	1	20	–			–	–			1	20	–	–	EX LOAD-BECKMAN 133 REC	28	28
29	29	EX LOAD-REC SOUTH WALL	–	1	20	–					–	–	1	20	–	–	EX LOAD-RM 126 FLOOR REC	30	30
31	31	EX LOAD-CENTRIFUGE 2A-130	–	1	20	–	–	–					1	20	–	–	EX LOAD-FLOOR REC 30AMP	32	32
33	33	EX LOAD-NOT LABELED	–	1	20	–			–	–			1	20	–	–	EX LOAD-REC SOUTH WALL RM 125	34	34
35	35	EX LOAD-NOT LABELED	–	1	20	–					–	–	1	20	–	–	EX LOAD-RM 126	36	36
37	37	EX LOAD-NOT LABELED	–	1	20	–	–	–					1	20	–	–	EX LOAD-RM REC COAT RM	38	38
39	39	EX LOAD-NOT LABELED	–	1	20	–			–	–			1	20	–	–	EX LOAD-REC RM COAT RM	40	40
41	41	SPACE	–	1	–	–					–	–	1	20	–	–	EX LOAD-RM 126	42	42
							–	–	–	–	–	–							
							–		–		–								

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

PHASE A: –A PHASE B: –A PHASE C: –A

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☑ GROUND BUS
☐ SPLIT BUS
☐ FEED THRU LUGS
☐ SUB FEED LUGS
☐ INTEGRAL SPD/TVSS
☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS

EX. PANELBOARD RP-SE2 SECT3

SERVICE TYPE: NORMAL POWER
MANUFACTURER: ITE TYPE: CDP-7

MAIN AMPACITY: 225A
MAIN TYPE: MLO
SERVICE: 3 PHASE, 4 WIRE, 480Y/277, 208Y/120 VOLTS
FULLY RATED MIN. RATING: 10K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
1	1	EX LOAD-REC 2D-145	–	1	20	–	–	–					2	20	–	–	EX LOAD-TWO-DOOR REFRIG. 2A133	2	2
3	3	EX LOAD-REC 2D-144	–	1	20	–			–	–			–	–	–	–	EX LOAD-UPRIGHT FREEZER 2A133	4	4
5	5	EX LOAD-REC 2D-144	–	1	20	–					–	–	1	20	–	–	EX LOAD-REFRIG. REC 2A133	6	6
7	7	EX LOAD-ACA REFRIG.	–	1	20	–	–	–					1	20	–	–	EX LOAD-FILLER PRINTER 2D143	8	8
9	9	EX LOAD-REFRIG. REC	–	1	20	–			–	–			1	20	–	–	EX LOAD-COMPUTER CONTROL 2D143	10	10
11	11	EX LOAD-CENTRIFUGE REC.	–	1	20	–					–	–	1	20	–	–	EX LOAD-CENTER BENCH REC 2D143	12	12
13	13	EX LOAD-REC 2D143F	–	1	20	–	–	–					1	20	–	–	EX LOAD-INCUBATOR REC 2A147A	14	14
15	15	EX LOAD-REC 2D143F	–	1	20	–			–	–			1	20	–	–	EX LOAD-BENCH REC 2A147A	16	16
17	17	EX LOAD-REC 2D143F	–	1	20	–					–	–	1	20	–	–	EX LOAD-BENCH REC 2A147A	18	18
19	19	EX LOAD-REC BENCH 2A133	–	1	20	–	–	–					1	20	–	–	EX LOAD-BENCH REC 2A133	20	20
21	21	EX LOAD-REC BENCH 2A133	–	1	20	–			–	–			1	20	–	–	EX LOAD-BENCH REC 2A133	22	22
23	23	EX LOAD-REC BENCH 2A133	–	1	20	–					–	–	1	20	–	–	SPARE	24	24
25	25	EX LOAD-FLOOR REC 2A126	–	1	20	–	–	–					1	20	–	–	EX LOAD-RECEPTACLE 2A-123D	26	26
27	27	EX LOAD-CHEM LAB REC	–	1	20	–			–	–			1	20	–	–	EX LOAD-RECEPTACLE 2A-123D	28	28
29	29	EX LOAD-DIRECTOR OFFICE FAX	–	1	20	–					–	–	1	20	–	–	EX LOAD-RECEPTACLE 2A-123D	30	30
31	31	EX LOAD-CHEM LAB CENTRIFUGE	–	1	20	–	–	–					1	20	–	–	SPARE	32	32
33	33	EX LOAD-NEW REF LAB	–	2	20	–			–	–			1	20	–	–	EX LOAD-POWER POLE 2A122E	34	34
35	35	{ }	–	–	–	–					–	–	1	20	–	–	EX LOAD-REC 2A-123D	36	36
37	37	EX LOAD-TDX ANALYZER 2A133	–	1	20	–	–	–					1	20	–	–	EX LOAD-DEDICATED QUAD	38	38
39	39	EX LOAD-TDX ANALYZER 2A133	–	1	20	–			–	–			1	20	–	–	EX LOAD-2A-148	40	40
41	41	EX LOAD-TDX ANALYZER	–	1	20	–					–	–	1	20	–	–	EX LOAD-REC 2A-148	42	42
							–	–	–	–	–	–							
							–		–		–								

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

PHASE A: –A PHASE B: –A PHASE C: –A

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☑ GROUND BUS
☐ SPLIT BUS
☐ FEED THRU LUGS
☐ SUB FEED LUGS
☐ INTEGRAL SPD/TVSS
☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS

EX. PANELBOARD PP-SE2 SECT4

SERVICE TYPE: NORMAL POWER
MANUFACTURER: SIEMENS TYPE: CDP-7

MAIN AMPACITY: 225A
MAIN TYPE: MLO
SERVICE: 3 PHASE, 4 WIRE, 208Y/120 VOLTS
FULLY RATED MIN. RATING: 10K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
1	1	REC: SWING SPACE 2A-123	1	1	20	–	0.72	1.08					1	20	–	1	REC: PROGRAM MGR 2A-127F	2	2
3	3	REC: SWING SPACE 2A-123	1	1	20	–			0.72	1.08			1	20	–	1	REC: STORAGE/COPY/WORK 2A-127E	4	4
5	5	REC: SWING SPACE 2A-123	1	1	20	–					0.72	0.36	1	20	–	1	REC: STORAGE/COPY/WORK 2A-127E	6	6
7	7	REC: SWING SPACE 2A-123	1	1	20	–	0.54	0.72					1	20	–	1	REC: CORRIDOR 2A-127	8	8
9	9	REC: WAITING AREA 2A-124	1	1	20	–			1.26	0.72			1	20	–	1	REC: STORAGE RMS 2A-127C+D	10	10
11	11	REC: RECEPTION COUNTER 2A-124A	1	1	20	–					1.44	1.26	1	20	–	1	REC: MULTIPURPOSE EXAM 2A-127B	12	12
13	13	REC: GROUP THERAPY 2A-124B	1	1	20	–	1.44	1.08					1	20	–	1	REC: MULTIPURPOSE EXAM 2A-127A	14	14
15	15	REC: RN CARE COORD. 2A-124C	1	1	20	–			1.08	0.36			1	20	–	1	REC: PUBLIC TOILET+JANITOR 2A-125+126	16	16
17	17	REC: CLINICAL NURSE 2A-124D	1	1	20	–					0.90	0.50	1	20	–	1	HANDICAP DOOR FEMALE TOILET 2A-126	18	18
19	19	REC: PHYSICIAN 2A-124F	1	1	20	–	0.90	0.50					1	20	–	1	HANDICAP DOOR WAITING AREA 2A-124	20	20
21	21	REC: PHARMACIST 2A-124E	1	1	20	–			1.08	1.08			1	20	–	1	REC: BIO-MED AREA 2A-123A	22	22
23	23	REC: NURSE CARE MGR 2A-124G	1	1	20	–					0.72	–	1	–	–	–	SPACE	24	24
25	25	REC: TRANS. PATIENT ADVOC. 2A-127I	1	1	20	–	0.90	–					1	–	–	–	SPACE	26	26
27	27	REC: SOCIAL WORK CASE MGR 2A-127H	1	1	20	–			0.90	–			1	–	–	–	SPACE	28	28
29	29	REC: COMBAT STRESS 2A-127G	1	1	20	–					0.90	–	1	–	–	–	SPACE	30	30
31	31	EX LOAD-REC RO	–	1	20	–	–	–					2	20	–	–	EXISTING LOAD	32	32
33	33	EX LOAD-RO SKID	–	2	20	–			–	–			–	–	–	–	{ }	34	34
35	35	{ }	–	–	–	–					–	–	1	20	–	–	EXISTING LOAD	36	36
37	37	EX LOAD-NOT LABELED	–	1	20	–	–	–					1	20	–	–	EXISTING LOAD	38	38
39	39	EX LOAD-RO PUMP	–	2	20	–			–	–			2	20	–	–	EXISTING LOAD	40	40
41	41	{ }	–	–	–	–					–	–	–	–	–	–	{ }	42	42
							–	–	–	–	–	–							
							–		–		–								

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

PHASE A: –A PHASE B: –A PHASE C: –A

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☑ GROUND BUS
☐ SPLIT BUS
☐ FEED THRU LUGS
☐ SUB FEED LUGS
☐ INTEGRAL SPD/TVSS
☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS

DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

D.1 REFER TO DRAWING ES-601 FOR BRANCH CIRCUIT SCHEDULE.
D.2 AFTER DEMOLITION, CONTRACTOR SHALL VERIFY ALL REMAINING LOADS CONNECTED TO PANELBOARDS. INDICATE ALL BREAKERS THAT BECOMES SPARES AS SPARE. PROVIDE NEW TYPED PANELBOARD DIRECTORIES.

NOTES: (APPLICABLE TO PANELBOARD SCHEDULE'S NOTE COLUMN)

1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING AVAILABLE SPACE. MATCH PANELBOARD MANUFACTURER, TYPE AND AIC RATING.

100% Submission

Revisions	Date

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Drawing Title: ELECTRICAL SCHEDULES

Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013
Checked: ADP
Drawn: ADP

Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: ES-602

Department of Veterans Affairs

EX. PANELBOARD ELS-SE2

SERVICE TYPE: LIFE SAFETY EMERGENCY
MANUFACTURER: CUTLER-HAMMER/EATON TYPE: PRL2A

MAIN AMPACITY: 100A
MAIN TYPE: 60A MCB (POLES 1,3,5)
SERVICE: 3 PHASE, 4 WIRE, 480Y/277 VOLTS
FULLY RATED MIN. RATING: 14K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
	1	MAIN CIRCUIT BREAKER	–	3	60	–	–	–											2
	3	{ }	–	–	–	–			–	–									4
	5	{ }	–	–	–	–					–	–							6
1	7	EX LOAD-EXIT LITES INTERSTITIAL	–	1	20	–	–	–					1	20	–	–	EX LOAD-EXIT LITES	2	8
3	9	EMERGENCY/EXIT LIGHTS-123,124,127	1	1	20	–			0.3	–			1	–	–	–	SPACE	4	10
5	11	EX LOAD-EM LITES INTERSTITIAL	–	1	20	–					–	–	1	20	–	–	EX LOAD-EM CORRIDOR LITES	6	12
7	13	SPACE	–	1	–	–	–	–					1	–	–	–	SPACE	8	14
9	15	SPACE	–	1	–	–			–	–			1	–	–	–	SPACE	10	16
11	17	SPACE	–	1	–	–					–	–	1	–	–	–	SPACE	12	18
13	19	SPACE	–	1	–	–	–	–					1	–	–	–	SPACE	14	20
15	21	SPACE	–	1	–	–			–	–			1	–	–	–	SPACE	16	22
17	23	SPACE	–	1	–	–					–	–	1	–	–	–	SPACE	18	24
19	25	SPACE	–	1	–	–	–	–					1	–	–	–	SPACE	20	26
21	27	SPACE	–	1	–	–			–	–			1	–	–	–	SPACE	22	28
23	29	SPACE	–	1	–	–					–	–	1	–	–	–	SPACE	24	30
25	31	SPACE	–	1	–	–	–	–					1	–	–	–	SPACE	26	32
27	33	SPACE	–	1	–	–			–	–			1	–	–	–	SPACE	28	34
29	35	SPACE	–	1	–	–					–	–	1	–	–	–	SPACE	30	36
31	37	SPACE	–	1	–	–	–	–					1	–	–	–	SPACE	32	38
33	39	SPACE	–	1	–	–			–	–			1	–	–	–	SPACE	34	40
35	41	SPACE	–	1	–	–					–	–	1	–	–	–	SPACE	36	42
							–	–	–	–	–	–							
							–		–		–								

PHASE A: –A PHASE B: –A PHASE C: –A

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS
☑ GROUND BUS
☐ SPLIT BUS
☐ FEED THRU LUGS
☐ SUB FEED LUGS
☐ INTEGRAL SPD/TVSS

EX. PANELBOARD LP-SE2

SERVICE TYPE: NORMAL LIGHTING
MANUFACTURER: GOULD ITE TYPE: CDP-7

MAIN AMPACITY: 225A
MAIN TYPE: MLO
SERVICE: 3 PHASE, 4 WIRE, 480Y/277 VOLTS
MIN. RATING: 14K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
1	1	EX LOAD-LTS 109A-B-C-136-141-142-144	–	1	20	–	–	–					1	20	–	–	EX LOAD-LTS-139	2	2
3	3	EX LOAD-LTS-122A-134-135-137	–	1	20	–			–	–			1	20	–	–	EX LOAD-LTS-133	4	4
5	5	EX LOAD-LTS-C7-C12-C11-109	–	1	20	–					–	–	1	20	–	–	EX LOAD-LTS-133-138-139	6	6
7	7	EX LOAD-LTS-121A-B-C-D-E-F-G-H	–	1	20	–	–	–					1	20	–	–	EX LOAD-LTS-122-122C	8	8
9	9	EX LOAD-LTS-123D	–	1	20	–			–	–			1	20	–	–	EX LOAD-LTS-126-126B-126E	10	10
11	11	EX LOAD-LTS-C7-C10-123-123C-128-129	–	1	20	–					–	–	1	20	–	–	EX LOAD-LTS-122B-126F-G-H	12	12
13	13	EX LOAD-LTS-143E-147-148	–	1	20	–	–	–					1	20	–	–	EX LOAD-LTS INTERST. "A"	14	14
15	15	EX LOAD-LTS-130-131-149	–	1	20	–			–	1.9			1	20	–	1	LIGHTS-2A-123, 2A-124A-G	16	16
17	17	EX LOAD-LTS MECH RM	–	1	20	–					–	1.5	1	20	–	1	LIGHTS-2A-127A-H	18	18
19	19	EX LOAD T-5 TRANSFORMER	–	3	70	–	–	–					1	–	–	–	SPACE	20	20
21	21	{ }	–	–	–	–			–	–			1	–	–	–	SPACE	22	22
23	23	{ }	–	–	–	–					–	–	1	–	–	–	SPACE	24	24
25	25	EX LOAD-LTS-ELEC+TELE	–	1	20	–	–	–					1	20	–	–	SPARE	26	26
27	27	EX LOAD-TA-SE2	–	1	20	–			–	–			1	20	–	–	SPARE	28	28
29	29	SPARE	–	1	20	–					–	–	1	20	–	–	SPARE	30	30
							–	–	–	–	–	–							
							–		–		–								

PHASE A: –A PHASE B: –A PHASE C: –A

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS
☑ GROUND BUS
☐ SPLIT BUS
☐ FEED THRU LUGS
☐ SUB FEED LUGS
☐ INTEGRAL SPD/TVSS

NOTES: (APPLICABLE TO PANELBOARD SCHEDULE'S NOTE COLUMN)

1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING AVAILABLE SPACE. MATCH PANELBOARD MANUFACTURER, TYPE AND AIC RATING.

EX. DISTRIBUTION PANEL DP-SE2

SERVICE TYPE: NORMAL POWER
MANUFACTURER: GOULD ITE TYPE: CDP-6

MAIN AMPACITY: 225A
MAIN TYPE: MLO
SERVICE: 3 PHASE, 4 WIRE, 480Y/277V
FULLY RATED MIN. RATING: ??K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	LOAD DESCRIPTION	KVA	HP	OVERCURRENT PROTECTION TYPE	P	FRAME	TA	AUX	FEEDER	NOTES
1	EX LOAD-PANEL LP-SE2	–	–	MCCB	3	?	?	–	–	–
2	EX LOAD-PANEL MSP-SE2	–	–	MCCB	3	?	?	–	–	–
3	SPACE	–	–	MCCB	3	?	–	–	–	–
4	EX LOAD-TRANSFORMER T5 RP-SE2	–	–	MCCB	3	?	70	–	–	–
5	SPACE	–	–	MCCB	3	?	–	–	–	–
6	EX LOAD-EMERGENCY POWER MANUAL TRANSFER SWITCH SE2	–	–	MCCB	3	?	50	–	–	–

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e HACR BREAKER
f AUXILIARY SWITCH
g SWITCHING DUTY (SWD)
h SWITCHING DUTY (HID)
i ISOLATED GROUND
j HANDLE LOCK

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☑ GROUND BUS
☐ INTEGRAL SPD/TVSS
☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS
☐ SPLIT BUS

EX. PANELBOARD ELP-SE2

SERVICE TYPE: STANDBY/EQUIPMENT EMERGENCY
MANUFACTURER: GOULD ITE TYPE: CDP-7

MAIN AMPACITY: 100A
MAIN TYPE: 100A MCB
SERVICE: 3 PHASE, 4 WIRE, 480Y/277 VOLTS
MIN. RATING: 14K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
1	1	SPARE	–	1	20	–	–	–					1	20	–	–	SPARE	2	2
3	3	SPARE	–	1	20	–			–	–			1	20	–	–	EX LOAD-LTS MECH RM	4	4
5	5	EX LOAD-LTS LAB SUC.	–	1	20	–					–	–	1	20	–	–	EX LOAD-LTS LAB	6	6
7	7	EX LOAD-ATC PANELS	–	1	20	–	–	–					3	40	–	–	EX LOAD-45KVA XFMR FEEDING EP-SE2	8	8
9	9	SPACE	–	1	–	–			–	–			–	–	–	–	{ }	10	10
11	11	EX LOAD-LTS ELEC+TELE ROOMS	–	1	20	–					–	–	–	–	–	–	{ }	12	12
13	13	EX LOAD-EM POWER MANUAL TRANSFER SW.	–	3	50	–	–	–					1	–	–	–	SPACE	14	14
15	15	{ }	–	–	–	–			–	–			1	–	–	–	SPACE	16	16
17	17	{ }	–	–	–	–					–	–	1	20	–	–	EX LOAD-NOT LABELED	18	18
							–	–	–	–	–	–							
							–		–		–								

PHASE A: –A PHASE B: –A PHASE C: –A

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
c GFI BREAKER (30mA)
d SHUNT TRIP BREAKER
e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

☐ 200% NEUTRAL BUS & LUGS
☐ ISOLATED GROUND BUS
☑ GROUND BUS
☐ SPLIT BUS
☐ FEED THRU LUGS
☐ SUB FEED LUGS
☐ INTEGRAL SPD/TVSS

EX. PANELBOARD EP-SE2

SERVICE TYPE: STANDBY/EQUIPMENT EMERGENCY OR NORMAL SELECTABLE BY MTS
MANUFACTURER: ITE TYPE: CDP-7

MAIN AMPACITY: 100A
MAIN TYPE: MLO
SERVICE: 3 PHASE, 4 WIRE, 208Y/120 VOLTS
MIN. RATING: 10K AIC RMS SYMMETRICAL AMPS

MOUNTING: SURFACE
SECTION: 1 OF 1
ENCLOSURE: NEMA 1
LOCATION: ELECTRICAL RM 2A-146D

CKT	POLE	LOAD DESCRIPTION	NOTE	CKT BREAKER P	TA	AUX	KVA PER PHASE PHASE A		PHASE B		PHASE C		CKT BREAKER P	TA	AUX	NOTE	LOAD DESCRIPTION	CKT	POLE
1	1	EX LOAD-NOT LABELED	–	1	20	–	–	–					2	20	–	–	EX LOAD-NOT LABELED	2	2
3	3	EX LOAD-NOT LABELED	–	1	20	–			–	–			–	–	–	–	{ }	4	4
5	5	EX LOAD-NOT LABELED	–	1	20	–					–	–	1	20	–	–	EX LOAD-NOT LABELED	6	6
7	7	EX LOAD-NOT LABELED	–	1	20	–	–	–					1	20	–	–	EX LOAD-NOT LABELED	8	8
9	9	EX LOAD-NOT LABELED	–	1	20	–			–	–			2	20	–	–	EX LOAD-NOT LABELED	10	10
11	11	EX LOAD-NOT LABELED	–	1	20	–					–	–	–	–	–	–	{ }	12	12
13	13	EX LOAD-NOT LABELED	–	1	20	–	–	–					1	20	–	–	EX LOAD-OUTLET	14	14
15	15	EX LOAD-NOT LABELED	–	1	20	–			–	–			1	20	–	–	EX LOAD-NOT LABELED	16	16
17	17	EX LOAD-NOT LABELED	–	1	20	–					–	–	1	20	–	–	EX LOAD-NOT LABELED	18	18
19	19	EX LOAD-NOT LABELED	–	1	20	–	–	–					1	20	–	–	EX LOAD-NOT LABELED	20	20
21	21	EX LOAD-NOT LABELED	–	1	20	–			–	–			1	20	–	–	EX LOAD-NOT LABELED	22	22
23	23	REC: EXAM 2A-127A+B + CRASH CART	1	1	20	–					0.54	–	1	20	–	–	EX LOAD-FAN COIL UNIT DATA CLOSET 2A-146C	24	24
							–	–	–	–	–	–							
							–		–		–								

PHASE A: –A PHASE B: –A PHASE C: –A

AUXILIARIES:
a AFCI BREAKER
b GFI BREAKER (5mA)
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e AUXILIARY SWITCH
f SWITCH NEUTRAL
g HANDLE PADLOCK
h HANDLE CLAMP

CONNECTED LOAD: –KVA
DEMAND LOAD: –KVA
DEMAND AMPS: –A

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DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

D.1 REFER TO DRAWING ES-601 FOR BRANCH CIRCUIT SCHEDULE.
D.2 AFTER DEMOLITION, CONTRACTOR SHALL VERIFY ALL REMAINING LOADS CONNECTED TO PANELBOARDS. INDICATE ALL BREAKERS THAT BECOMES SPARES AS SPARE. PROVIDE NEW TYPED PANELBOARD DIRECTORIES.

100% Submission

Revisions | Date

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Drawing Title: ELECTRICAL SCHEDULES

Approved: Project Director

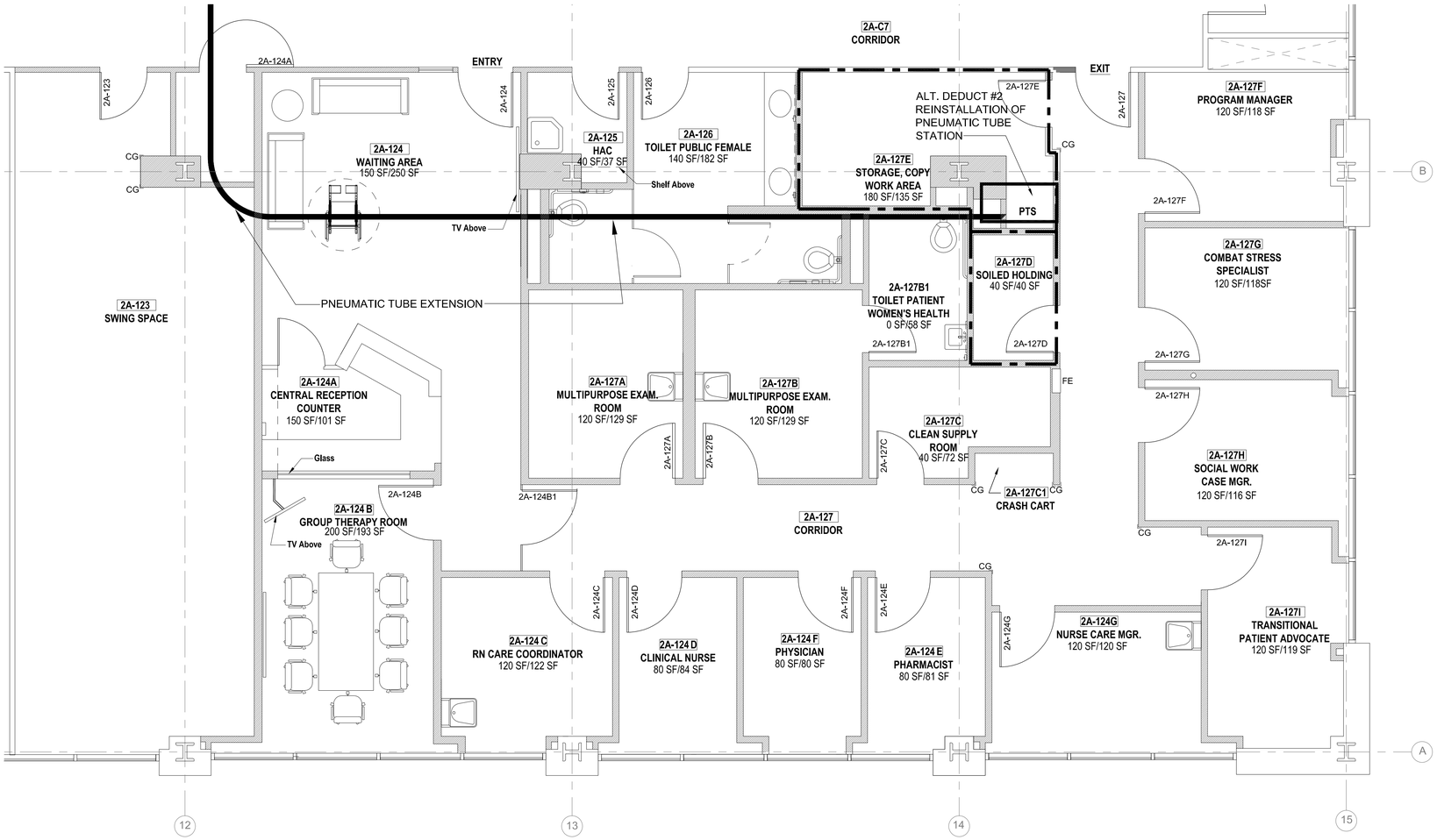
Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013
Checked: ADP
Drawn: ADP

Project Number: 613 - 13 - 112
Building Number: 500
Drawing Number: ES-603

Department of Veterans Affairs

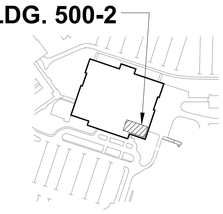


1 Pneumatic Tube Single-Line Diagram

Scale: 1/4"=1"-0"

N

BLDG. 500-2



KEY PLAN

100% Submission

Revisions	Date

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Approved: Project Director

Project Title: 2A WING OEF / OIF CLINIC

Location

Date: SEPTEMBER 20, 2013 | Checked: CB & MS | Drawn: EBR

Project Number: 613 - 13 - 112

Building Number: 500

Drawing Number: QH-101

Department of Veterans Affairs