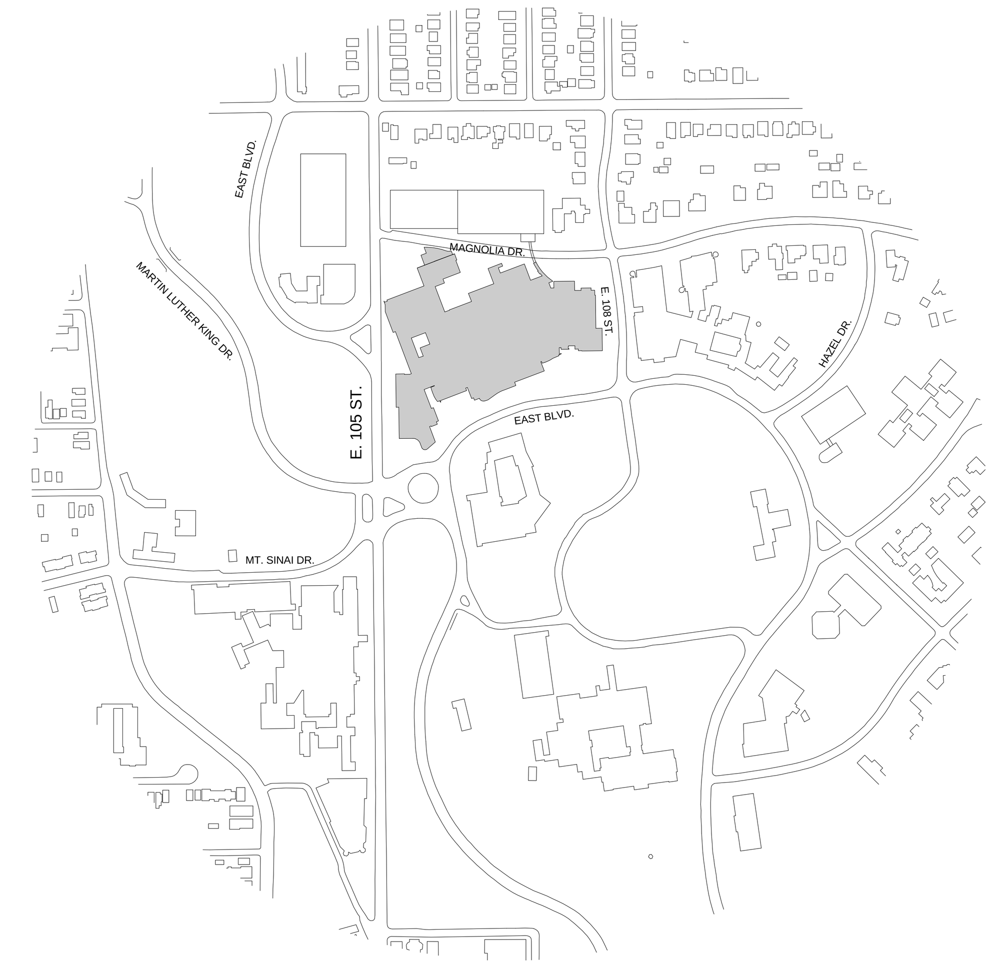
DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER - WADE PARK

10701 EAST BLVD. CLEVELAND, OH. 44106

ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

PROJECT NO. 541-16-104

Veterans Administration Medical Center



SITE PLAN
Scale = None

North

ARCH JOB NO.: 15-051

BID ISSUE
June 17, 2016

CODE INFORMATION

PROJECT DESCRIPTION:
Interior renovation of existing Basement and Fourth floor spaces
PROJECT AREA:
Basement: 4,940 sf
Fourth Floor: 3,258 sf
DESIGN CODES:
2015 Life Safety Code, 2015 IBC
OCCUPANCY,USE GROUP:
Health Care, I-2
OCCUPANT LOAD: (LSC 7.3.1.2)
Basement
Business 4,185 GSF/100 = 42
Fourth Floor
Assembly 519 NSF/15 = 35
Business 2,726 GSF/100 = 27
FIRE SUPPRESSION: Fully Sprinkled
TRAVEL DISTANCE: (LSC 18.2.6)
Room remote point to Exit: 200' (LSC 18.2.6.2.1)
Suite remote point to Exit Access Door: 200' (LSC 18.2.5.7.3.4)
Suite remote point to Exit: 200' (LSC 18.2.5.7.3.4)
TYPE OF CONSTRUCTION: (LSC A.8.2.1.2)
Type 1 - 332, 1B
EXTERIOR BEARING WALLS: (LSC A.8.2.1.2)
3 Hours
INTERIOR BEARING WALLS: (LSC A.8.2.1.2)
3 Hours
STRUCTURAL FRAME / COLUMNS: (LSC A.8.2.1.2)
3 Hours (Supporting more than 1 floor)
FLOOR - CEILING ASSEMBLIES: (LSC A.8.2.1.2)
2 Hours
ROOF - CEILING ASSEMBLIES: (LSC A.8.2.1.2)
1 1/2 Hours
INTERIOR NONBEARING WALLS: (LSC A.8.2.1.2)
0 Hour
EXTERIOR NONBEARING WALLS: (LSC A.8.2.1.2)
0 Hour
EXIT ENCLOSURES (LSC 7.1.3.2.1)
Existing: 1 Hour
New: 2 Hours
SHAFT ENCLOSURES (LSC 8.6.5)
4 Stories or more: 2 Hours
Less than 4 stories: 1 Hour
SMOKE BARRIERS: (LSC 18.3.7.3)
1 Hour
EXIT ACCESS CORRIDORS: (LSC 18.3.6.2)
0 Hour, Smoke Partitions
SUITE WALLS: (LSC 18.2.5.7.1.2)
0 Hour, Smoke Partitions
HAZARDOUS AREA PROTECTION (LSC 18.3.2.1)
Labs, non-severe hazard materials: 0 Hour
Labs, severe hazard materials: 1 Hour
Soiled linen rooms: 1 Hour
Storage room larger than 100 sf: 1 Hour

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Expiration Date 12/31/2017

FULLY SPRINKLERED

APPROVALS	DATE	APPROVALS	DATE	APPROVALS	DATE
DIRECTOR 00		CHIEF Planning and Construction		FACILITY MANAGER	
ASSOCIATE DIRECTOR 00A (B)		CHIEF, Occupational Health & Safety		SHOP FOREMAN 138	
CHIEF, ENGINEERING 138		CHIEF, IRM			

Drawing Title: **COVER SHEET**	Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**			Date: June 17, 2016 Project No.: 541-16-104
Approved: Division Chief	Building Number: 1	Checked: RPN	Drawn: DER	DRAWING NO.: **1-X1** Dwg. of
Approved: Service Director	Location: 10701 East Blvd. Cleveland, Ohio 44106			

Office of Facilities Management

Department of Veterans Affairs

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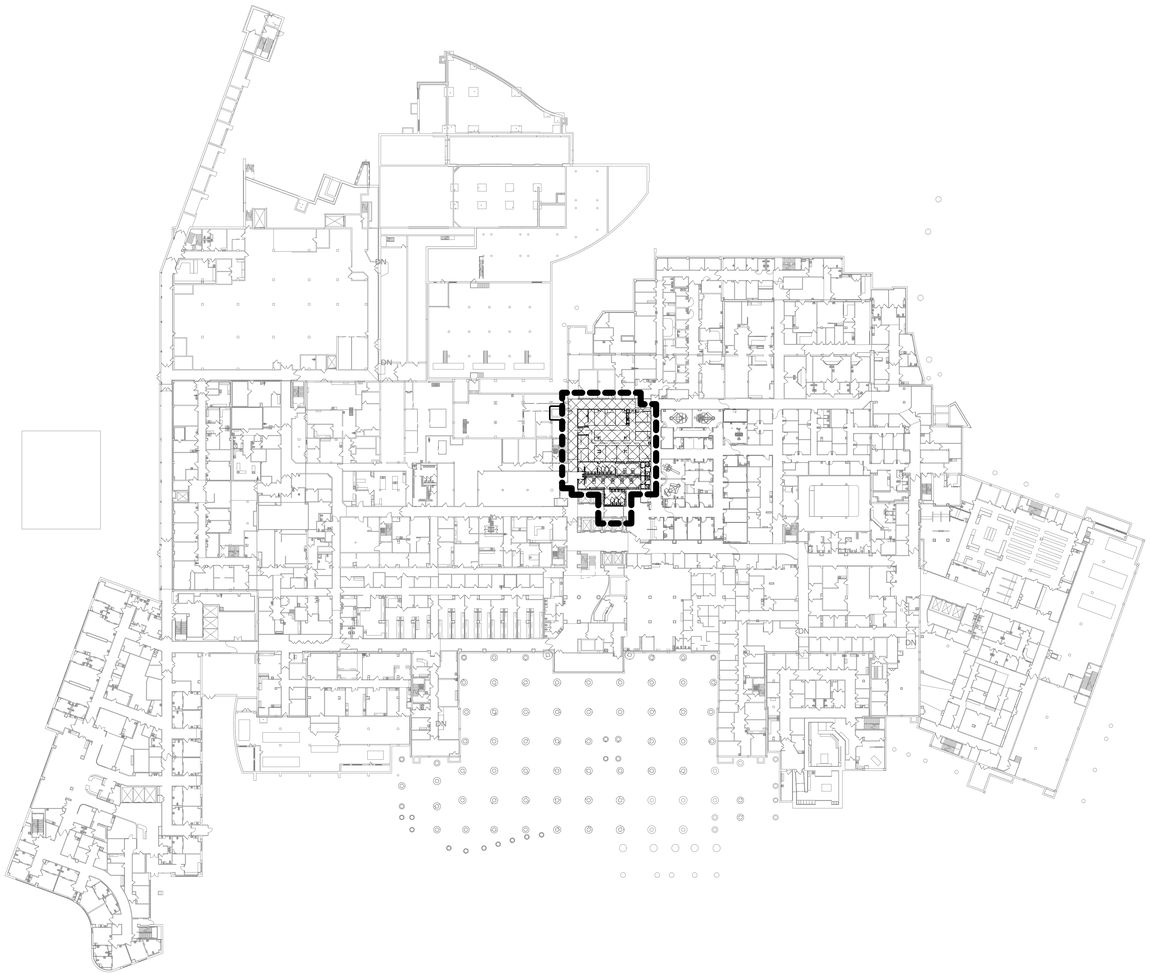
FOURTH FLOOR KEY PLAN



BASEMENT KEY PLAN

KEY PLAN GENERAL NOTES

1. Project Scope lines are intended to indicate the project work area and are schematic in nature. Additional work as required by these documents may occur outside the Project Scope lines. Contractor shall complete all work required by these documents.

2. See drawing 1-03 for phasing requirements.

KEY PLAN LEGEND

Phase 1

Phase 2

Project Scope

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title
BASEMENT & FOURTH FLOOR KEY PLANS

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	RPN	DER

Project Number
541-16-104

Building Number
1

Drawing Number
1-X2

Dwg. of

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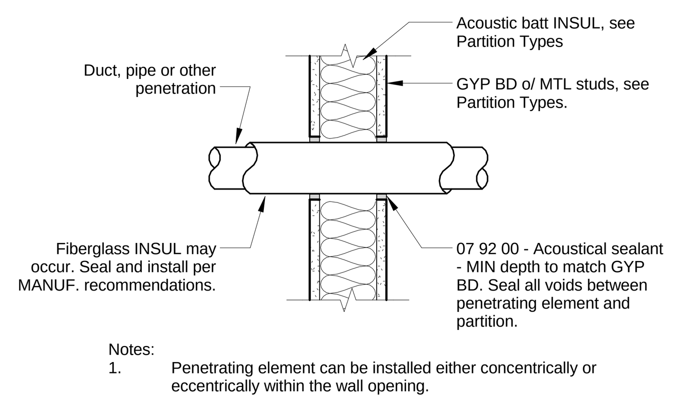
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

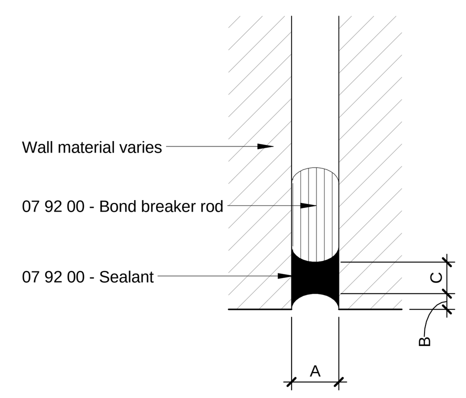


Notes:

1. Penetrating element can be installed either concentrically or eccentrically within the wall opening.

11 TYP Acoustical Sealant @ Penetration

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



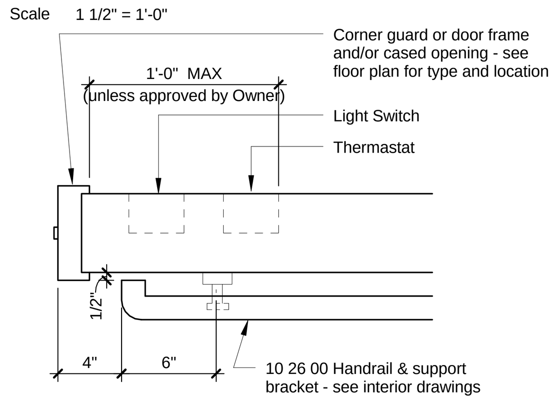
Notes:

1. See specifications for sealant type.
2. All joints 1" wide or more are to be laid up in beads and tooled to profile indicated.
3. All joints are to be primed before bond breaking rod is installed.
4. Install bond breaking rod with roller to proper depth. No sharp tools permitted.

Joint Schedule Dimensions		
A	B	C
3/8"	1/8"	1/4"
1/2"	1/8"	3/8"
5/8"	1/8"	3/8"
3/4"	1/8"	3/8"
7/8"	1/8"	3/8"
1"	1/8"	3/8"

9 TYP Sealant Detail

Scale 12" = 1'-0"



10 Typical Handrail Termination Detail

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

I. GENERAL NOTES

A. Do not scale drawings. Contractor(s) are to verify site dimensions and conditions prior to work.
B. Construction shall be in accordance with the requirements of the applicable codes including accessibility standards and the requirements of "Americans with Disabilities Act."
C. Contractor(s) shall visit the site and correlate the requirements of the documents with the existing conditions.
D. Drawings are diagrammatic and since existing conditions, including areas above accessible ceilings may affect new work, the Contractor shall coordinate and alter new work to properly fit the existing conditions. The work shall be performed at no extra cost. The Contractor shall verify all conditions and dimensions at the job site prior to the start of construction. If discrepancies are found, the Architect shall be notified for clarification before commencing with the work.
E. Details not shown are similar in character to those shown. When specific dimensions, details, or design intent cannot be determined, consult the Architect before proceeding with the work.
F. Some masonry and lumber dimensions shown on the drawings are nominal dimensions. Contractor(s) shall coordinate actual dimensions with the job conditions. Report all discrepancies to the Architect.
G. Existing conditions shown on these drawing are not guaranteed to be complete. The Contractor(s) shall field verify all existing conditions, dimensions, and materials required for the contracted work. Report all discrepancies to the COR.
H. The term 'patch to match' or 'cutting and patching' denotes that repair work is necessary to construct a floor, base, wainscot, wall or ceiling to match its adjacent surface in texture, material, finish and color.
I. If materials suspected of containing hazardous materials are encountered, DO NOT DISTURB the suspected materials. Contractor should immediately notify the COR of the discovery.
J. Where existing partitions or services have been removed, or new services penetrate existing surfaces, the openings shall be patched to match the existing surface finish, texture, and sheen.
K. Where new openings occur in structural bearing wall, the General Contractor is responsible for temporary supports and/or shoring as required for installation of lintels.
L. Where existing doorways are to be filled in, contractor is responsible for field verifying wall widths.
M. The General Contractor is responsible for installation of all access doors, access panels and frames, including, but not limited to those specified in the construction documents and furnished by other contractors. All access doors and panel locations to be coordinated and approved by the Architect prior to installation. The General Contractor is responsible for painting all access panels and access doors. The General Contractor is responsible for verifying all paint colors with the Architect prior to commencing with the work.

II. FIRE RESISTANCE RATING

A. Fire rating indicated on a wall shall mean the entire length and height of wall is to be fire rated.
B. All piping, ducts, cabinets, etc. that penetrate walls shall be installed in a manner that will preserve the fire resistance rating of that wall.
C. Preserve all fire resistant ratings of existing wall unless otherwise noted.

III. DIMENSIONING

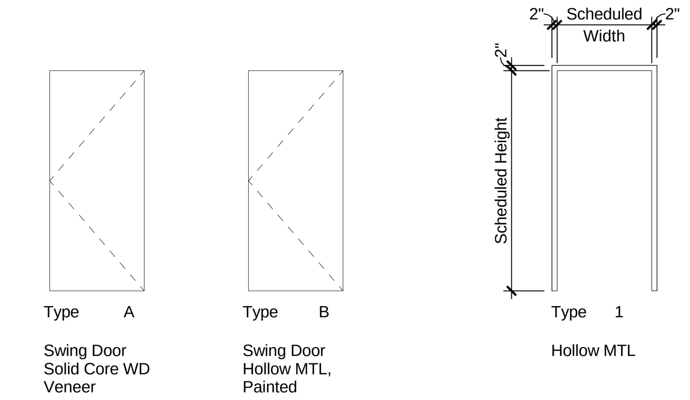
A. Interior partitions are dimensioned to face of gypsum board exclusive of finish material, such as ceramic tile or wood paneling. The General Contractor shall coordinate finish dimensions with finish schedule when critical to the installation of millwork or equipment.

DOOR & FRAME SCHEDULE

rl				FRAME					LABEL	NOTES
NUMBER	WIDTH	HEIGHT	TYPE	MATERIAL	TYPE	PARTITION	JAMB	HEAD		
4AC210A	4' - 0"	7' - 0"	EXIST	EXIST	EXIST	EXIST	-	-		A
4AC210B	3' - 6"	7' - 0"	A	HM	1	GWB	J-1	H-1		A
4AC211	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC212	3' - 6"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC213	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC214	3' - 6"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC215	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC216	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC217	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC218	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC219	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC220	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC221	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC222	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC223	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC223A	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC224	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
4AC230	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
BC481	3' - 0"	7' - 0"	B	HM	1	GWB	J-1	H-1		A
BC482	3' - 0"	7' - 0"	B	HM	1	GWB	J-1	H-1		A
BC490A	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
BC490B	4' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
BC491	3' - 0"	7' - 0"	A	HM	1	GWB	J-1	H-1		
BD470	3' - 0"+/-	7' - 0" +/-	A	EXIST	EXIST	EXIST	-	-		B

DOOR SCHEDULE NOTES

A. Provide automatic door operator, COORD with ELEC DWGS
B. Provide new door in existing frame, door size to match existing.



Door Types

Scale 1/4" = 1'-0"

Frame Types

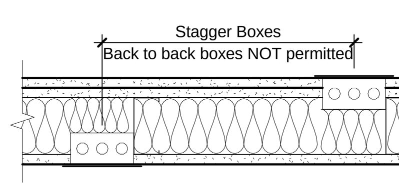
Scale 1/4" = 1'-0"

TOILET ACCESSORY SCHEDULE

Item	Description	Count
BIO MED		
BC490		
PTD-1	Surface-Mounted Paper Towel Dispenser	1
SD-1	Soap Dispenser	1
HUDDLE		
4AC224		
PTD-1	Surface-Mounted Paper Towel Dispenser	1
SD-1	Soap Dispenser	1
MENS RESTROOM		
BC481B		
FM-1	Framed Mirror	4
GB-18	Grab Bar	1
GB-36	Grab Bar	1
GB-42	Grab Bar	1
HHD-1	Hand Dryer, Surface Mounted	2
PTD-2	Surface-Mounted Electronic Paper Towel Dispenser	1
SD-1	Soap Dispenser	3
TSD-1	Seat Cover Dispenser	3
TTD-1	Toilet Tissue Dispenser	3
MENS SHOWERS		
BC481A		
RH-1	Robe Hook	6
SCR-1	Shower Curtain Rod	2
TB-1	Towel Bar	2
WOMENS LOCKER RM		
BC482		
FM-1	Framed Mirror	3
GB-18	Grab Bar	1
GB-36	Grab Bar	1
GB-42	Grab Bar	1
HHD-1	Hand Dryer, Surface Mounted	2
PTD-2	Surface-Mounted Electronic Paper Towel Dispenser	1
SD-1	Soap Dispenser	2
SND-1	Surface-Mounted Sanitary Napkin Disposal	4
TSD-1	Seat Cover Dispenser	4
TTD-1	Toilet Tissue Dispenser	4
WOMENS SHOWERS		
BC482A		
RH-1	Robe Hook	6
SCR-1	Shower Curtain Rod	2
TB-1	Towel Bar	2

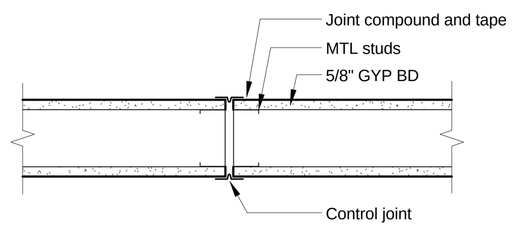
Toilet Accessory Notes

1. Refer to specifications for a description of toilet accessory items.
2. SD-1 provided and installed by Owner



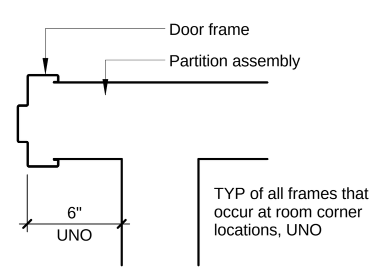
6 TYP Electrical / Junction Box

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



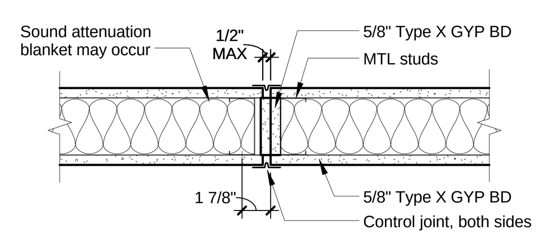
7 TYP GYP BD Control Joint

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



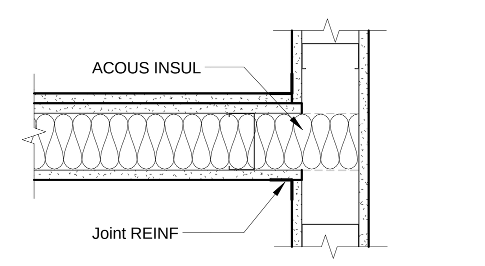
2 TYP Frame Location

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



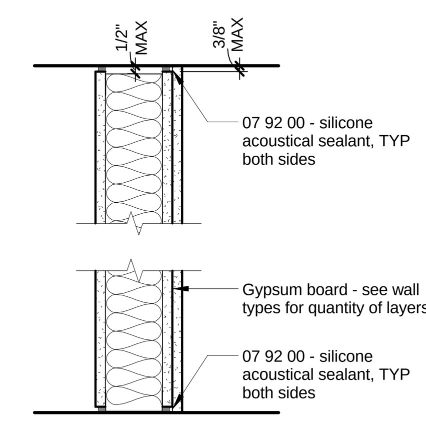
3 Fire Resistant Control Joint

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



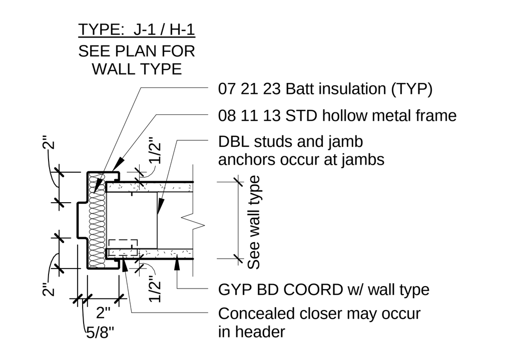
4 TYP Acoustical Part. Intersection

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



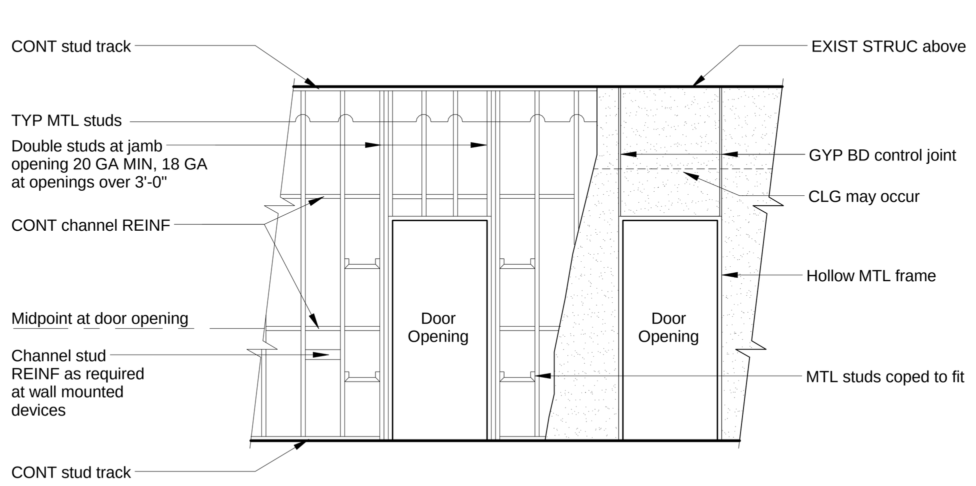
5 TYP Acoustical Partition

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



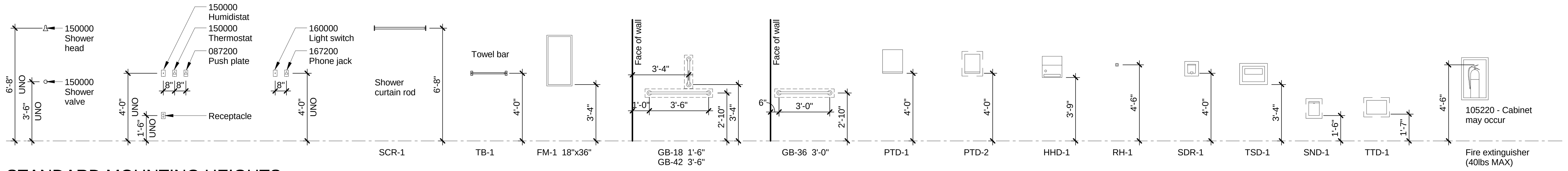
8 J-1 / H-1

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



1 TYP GYP BD Detail

Scale 1/4" = 1'-0"



STANDARD MOUNTING HEIGHTS

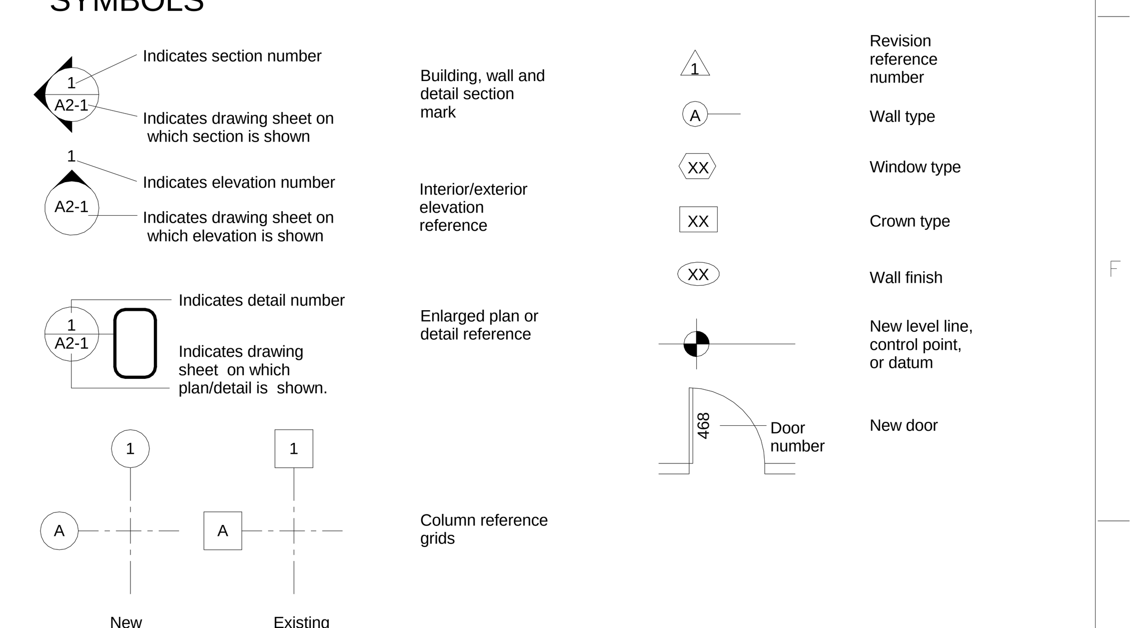
Scale 1/4" = 1'-0"

Typical accessory items, some items may not occur in project

ABBREVIATIONS

AB	anchor bolt
ABV	above
A/C	air conditioning
ACOUS	acoustic(al)
ACT	acoustical ceiling tile
ADJ	adjacent
AFF	above finish floor
ALT	alternate
ALUM	aluminum
ANOD	anodized
APPROX	approximate
ARCH	architect(ural)
AUTO	automatic
BD	board
BETW	between
BLDG	building
BLK	block(ing)
BLKHD	bulkhead
BM	beam
BOT	bottom
BRDG	bridging
BRG	bearing
BRK	brick
BSMT	basement
BUR	built-up roofing
C/C	center to center
CAB'T	cabinet
CAD	cadmium
CB	catch basin
CEM	cement
CL or ℄	center line
CFM	cubic feet per minute
CG	corner guard
CI	cast iron
CJ	control joint
CLG	ceiling
CL	closet
CLR	clear
CLL	contract limit line
CNTR	counter
CMU	concrete masonry unit
CO	cased opening/clean out
COL	column
CONC	concrete
CONN	connection
CONST	construction
CONT	continuous
COORD	coordinate
CORR	corridor
CS	course
CTR	center
D	depth
DBL	double
DEG	degrees
DEMO	demolition
DIA	diameter
DIM	dimension
DISP	dispenser
DN	down
DR	door
DS	down spout
DET	detail
DWG	drawing
DWR	drawer
DW	drywall
EA	each
EC	electrical contractor
EIFS	exterior insulation and finish system
EJ	expansion joint
ELEC	electric
ELEV	elevator/elevation
EMERG	emergency
EQ	equal
EQUIP	equipment
ES	exposed structure
ETR	existing to remain
EW	each way
EWC	electric water cooler
EXH	exhaust
EXIST	existing
EXP	expansion
EXP'D	exposed
EXT	exterior
FA	fire alarm
FB	face brick
FCU	fan coil unit
F/F	face to face
FD	floor drain
FDN	foundation
FE	fire extinguisher
FEC	fire extinguisher cabinet
FHC	fire hose cabinet
FIN	finish
FLR	floor
FLUOR	fluorescent
FR	fire resistant
FRT	fire-retardant treated
FRTWD	fire-retardant treated wood
FT	feet
FTG	footing
FURR	furring
FVC	fire valve cabinet
GA	gauge
GALV	galvanized
GC	general contractor
GL	glass
GR	grade
GYP BD	gypsum board
H	high
HB	hose bibb
HC	hollow core
HDBD	hardboard
HDCPD	handicapped
HDWR	hardware
HDWD	hardwood
HM	hollow metal
HORIZ	horizontal
HPDL	high pressure decorative laminate
HR	hour
HT	height
HTG	heating
HTR	heater
HVAC	heating, ventilation air conditioning
HW	hot water
HWH	hot water heater
ID	inside diameter
IN	inch
INCL	include (inclusive)
INSUL	insulation
INT	interior
JAN	janitor
JST	joist
KD	knock down
KO	knock out
L	length (long)
LAM	laminate(d)
LAV	lavatory
LB	pound
LF	linear feet (foot)
LIM	limited
LT	light
LTG	lighting
LVR	louver
MARB	marble
MAS	masonry
MAT	material
MAX	maximum
MECH	mechanical
MEMB	membrane
MFR	manufacturer
MH	manhole
MIN	minimum
MISC	miscellaneous
MO	masonry opening
MTD	mounted
MTG	mounting
MTL	metal
MULL	mullion
N/A	not applicable
NIC	not in contract
NO	number
NOM	nominal
NTS	not to scale
OA	overall
OC	on center
OCAFF	on center above finish floor
OD	outside diameter
OHDR	overhead door
OPH	opposite hand
OVRD	overflow roof drain
O/O	out to out
OP'G	opening
OPP	opposite
OPT	optional
PBD	particle board
PCF	pounds per cubic foot
PERIM	perimeter
PG BD	peg board
PL	plate
PLAS	plastic
PLAM	plastic laminate
PLBG	plumbing
PMLD	premoulded
PNL	panel
PLYWD	plywood
POL	polished
PP	push plate
PR	pair
PREFIN	prefinished
PREFAB	prefabricated
PROJ	projection
PSC	pre-stress concrete
PSF	pounds per square foot
PSI	pounds per square inch
PT	point
PTD	painted
PTN	partition
PVC	polyvinylchloride
PVMT	pavement
QTY	quantity
R	riser
RA	return air
RAD	radius
RAG	return air grille
RD	roof drain
REC	receptacle
REF	refrigerator
REG	register
REINF	reinforcement
REINF	reinforcement (reinforcing)
REQ'D	required
RES	resilient
RET	return
REV	revised (revision)
RM	room
RO	rough opening
RVS	reverse
SC	solid core
SCHED	schedule
SD	smoke detector
SDL	saddle
SECT	section
SHT	sheet
SIM	similar
SP	stand pipe
SPEC	specifications
SPKR	speaker
SPKLR	sprinkler
SPR	single ply roofing
SQ	square
SQ IN	square inch
SY	square yard
SS	stainless steel/ slop sink
STD	standard
STL	steel
STOR	storage
STRUC	structure(al)
SUCP	suspended
SYS	systems
T	thread
T/G or T&G	tongue and groove
TD	trench drain
TEL	telephose
TEMP	temporary
TEMP'D	tempered
TERR	terrazzo
THK	thick
THLD	threshold
TOC	top of concrete (top of curb)
TOS	top of steel
TOD	top of deck
TOM	top of masonry
TOJ	top of joist
TOP	top of parapet
TOW	top of wall
TYP	typical
UC	undercut
UG	underground
UNFIN	unfinished
UNLIM	unlimited
UNO	unless noted otherwise
UR	urinal
VERT	vertical
VEST	vestibule
VIF	verify in field
W	width
W/	with
W/O	without
W/W	wall to wall
WC	water closet
WD	wood
WH	water heater
WIN	window
WG	wire glass
WT	weight
WWF	welded wire fabric
YD	yard

SYMBOLS



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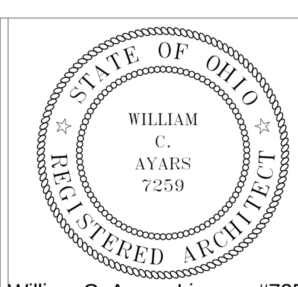

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BID ISSUE	06/17/16
Revisions:	Date

Drawing Title
SYMBOLS, ABBREVIATIONS, SCHEDULES & MISC DETAILS

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	RPN	DER

Project Number 541-16-104

Building Number 1

Drawing Number **1-01**

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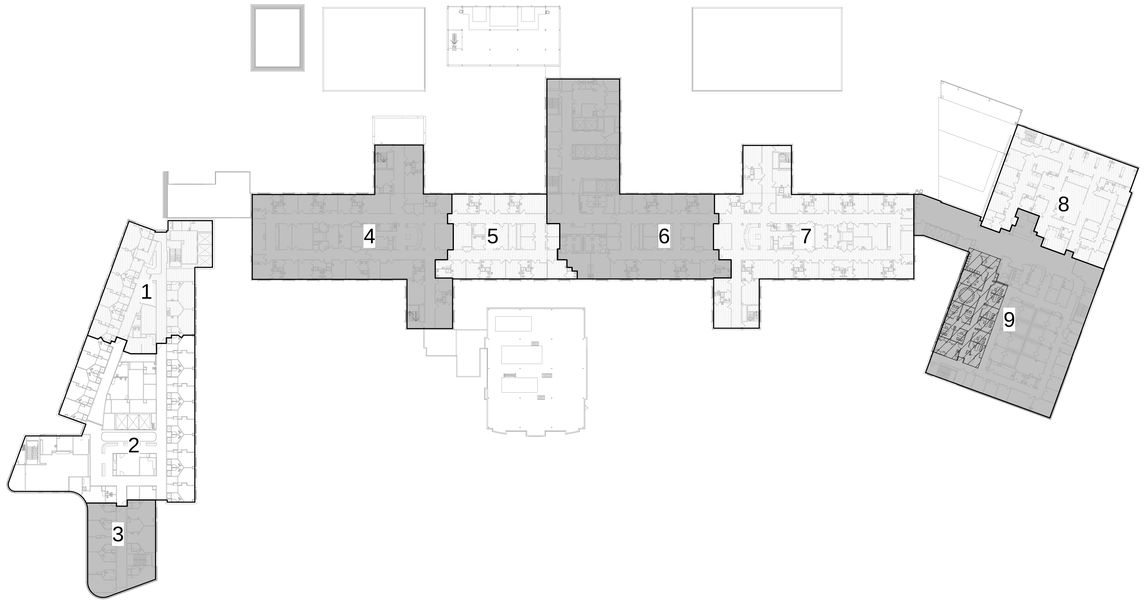
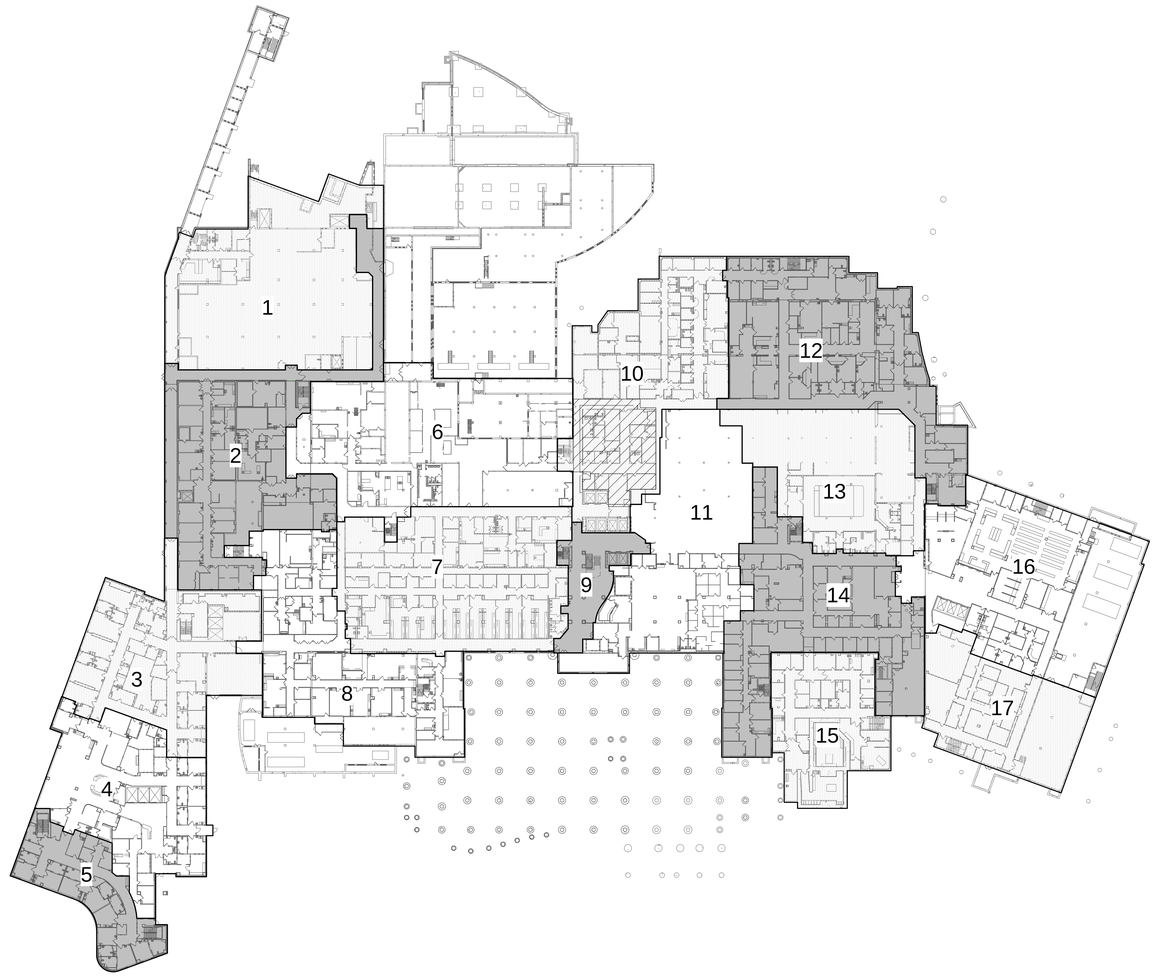


FOURTH FLOOR PLAN

04 SMOKE CMPRTMNTS	
Number	Area
1	7495 SF
2	14924 SF
3	3967 SF
4	14119 SF
5	6206 SF
6	14633 SF
7	14031 SF
8	8699 SF
9	16059 SF

Project Area



BASEMENT PLAN

0B SMOKE CMPRTMNTS	
Number	Area
1	22173 SF
2	22279 SF
3	16081 SF
4	14636 SF
5	7163 SF
6	21898 SF
7	20937 SF
8	18560 SF
9	3889 SF
10	19392 SF
11	18983 SF
12	21811 SF
13	14127 SF
14	19172 SF
15	10299 SF
16	22734 SF
17	11307 SF

Project Area

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BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title
BASEMENT & FOURTH FLOOR SMOKE COMPARTMENTS

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	RPN	DER

Project Number
541-16-104

Building Number
1

Drawing Number
1-02.0

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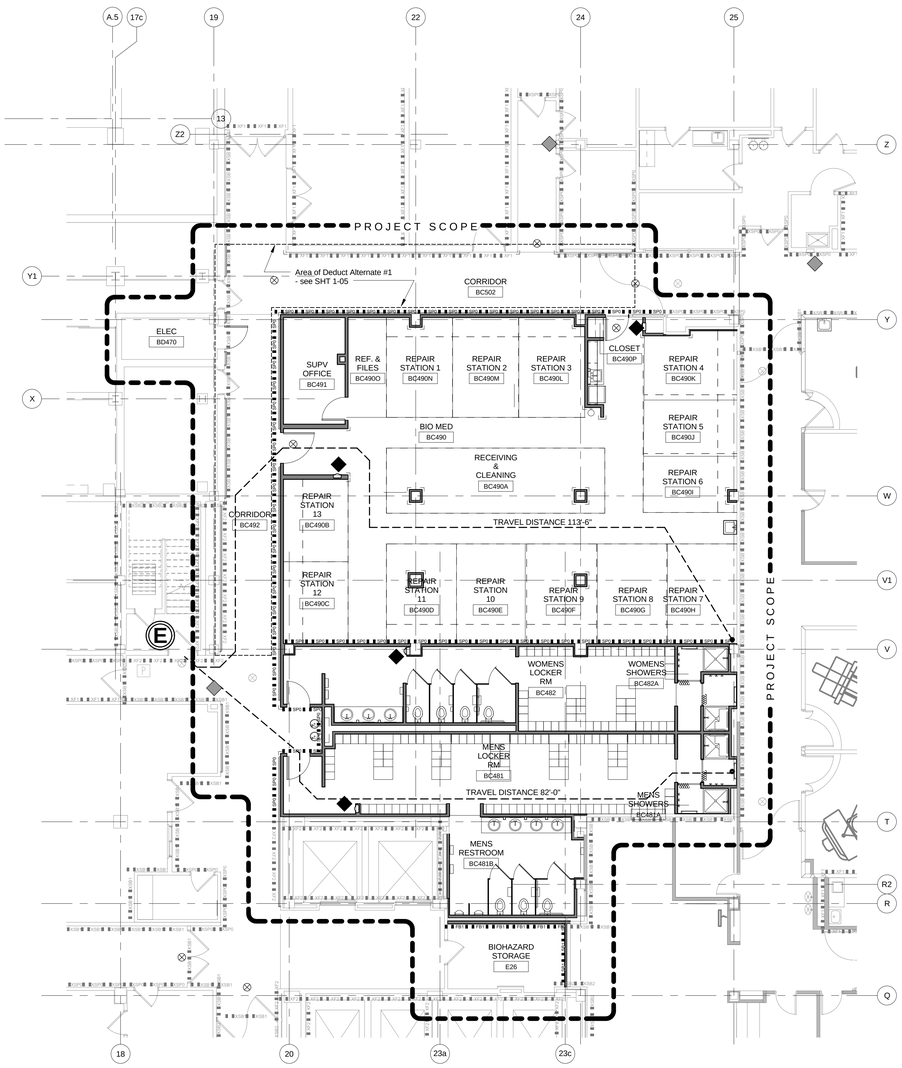
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

2 Partial Fourth Floor Life Safety Plan

0 4' 8' 16'

Scale 1/8" = 1'-0"



1 Partial Basement Life Safety Plan

0 4' 8' 16'

Scale 1/8" = 1'-0"

LIFE SAFETY LEGEND

- Existing 2 HR Fire Barrier
- Existing 1 HR Fire Barrier
- Existing 2 HR Fire & Smoke Barrier
- Existing 1 HR Fire & Smoke Barrier
- Existing 0 HR Smoke Partition
- New 2 HR Fire Barrier
- New 1 HR Fire Barrier
- New 1 HR Fire & Smoke Barrier
- New 0 HR Smoke Partition
- Existing Fire Extinguisher
- New Fire Extinguisher
- Existing Exit Sign
- New Exit Sign
- Existing Pull Station
- New Pull Station
- Exit

LIFE SAFETY GENERAL NOTES

1. See cover sheet for applicable code information.

2. Contractor shall inform Architect and Owner immediately of any discrepancies in the existing rated wall construction.

3. Project scope line is indicated for general intent only. Contractor will complete all work regardless if it is located outside of project scope area as indicated on any drawing.

4. Travel distances are from remote point to exit.

5. Provide firestopping at all penetrations through new and existing fire/smoke rated barriers (walls and floors) on first floor to comply with required rating associated with new work. Provide firestopping around 8 penetrations less than 6 square inches, 4 penetrations between 16 and 36 square inches, and 4 penetrations between 36 and 64 square inches through existing fire/smoke rated barriers (walls and floors) to comply with required rating not associated with new work. Larger openings, and unprotected penetrations in a quantity greater than indicated above,shall be brought to the immediate attention of the COR

6. Contractor shall provide Exit Signs and Fire Alarm Devices in accordance with the Electrical drawings.

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Drawing Title
PARTIAL BASEMENT AND FOURTH FLOOR LIFE SAFETY PLANS

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked RPN | Drawn DER

Project Number 541-16-104

Building Number 1

Drawing Number **1-02.1**

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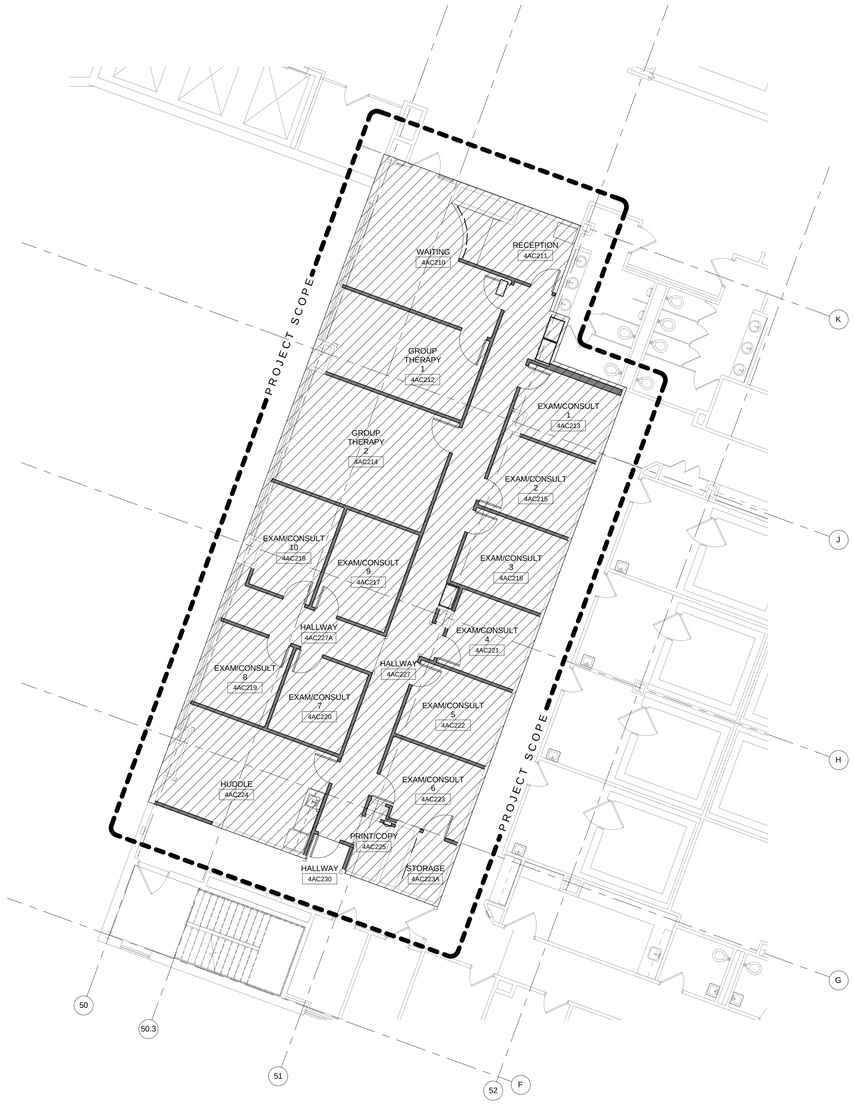
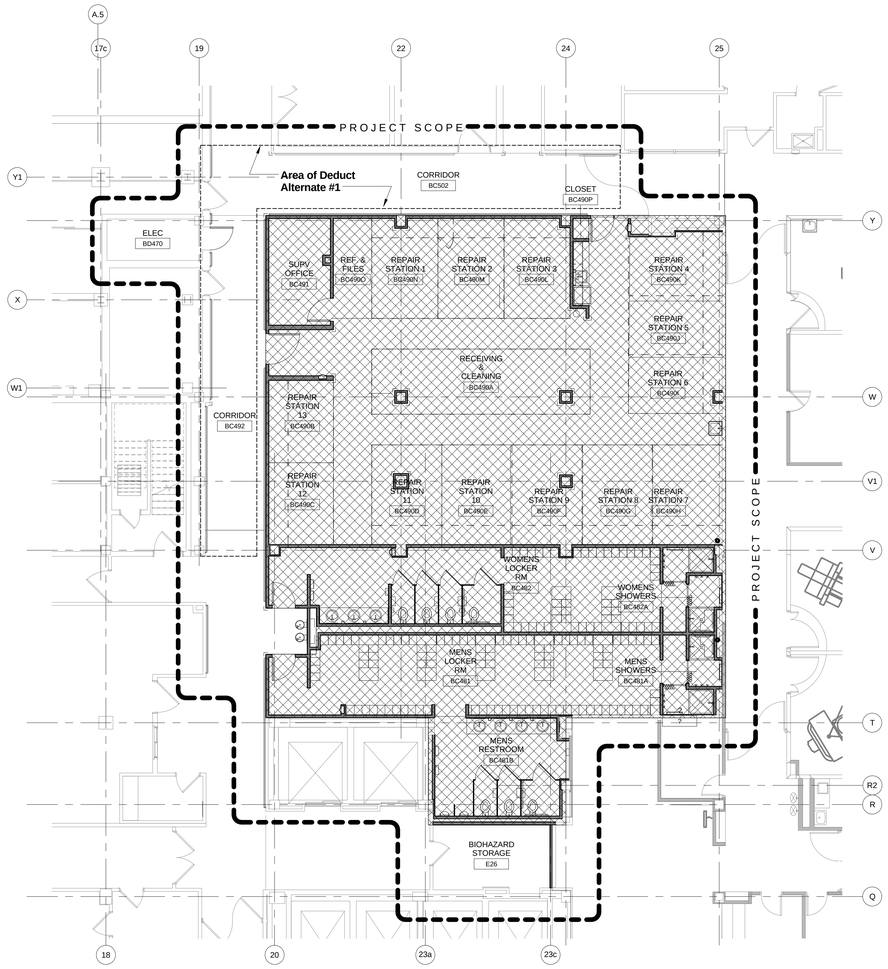


2 Partial Fourth Floor Phasing Plan - Phase 2

0 4' 8' 16'

Scale 1/8" = 1'-0"

Deduct Alternate #1 - delete removal of existing flooring and ceiling in Corridors BC492 and BC502. Patch flooring and ceiling to match existing construction.



1 Partial Basement Phasing Plan - Phase 1

0 4' 8' 16'

Scale 1/8" = 1'-0"

PHASING GENERAL NOTES

1. Coordinate all phasing work with the entire set of documents and with Owner's operation of facilities.

2. Where off-hour work occurs and work beyond the temporary construction partitions, ceilings shall be removed and replaced daily.

3. Temporary construction partitions and contractor access doors are to be constructed in their entirety prior to start of demolition.

PHASING LEGEND

Phase 1

Phase 2

Project Scope

PHASING DEMOLITION NOTES

Day 1-60	Preconstruction
Day 61-240	Phase 1 (Basement)
Day 241-300	Owner Activation
Day 301-420	Phase 2 (Fourth Floor)

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Revisions:	**Date**

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Drawing Title
PARTIAL BASEMENT AND FOURTH FLOOR PHASING PLANS

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked RPN | Drawn DER

Project Number 541-16-104

Building Number 1

Drawing Number **1-03**

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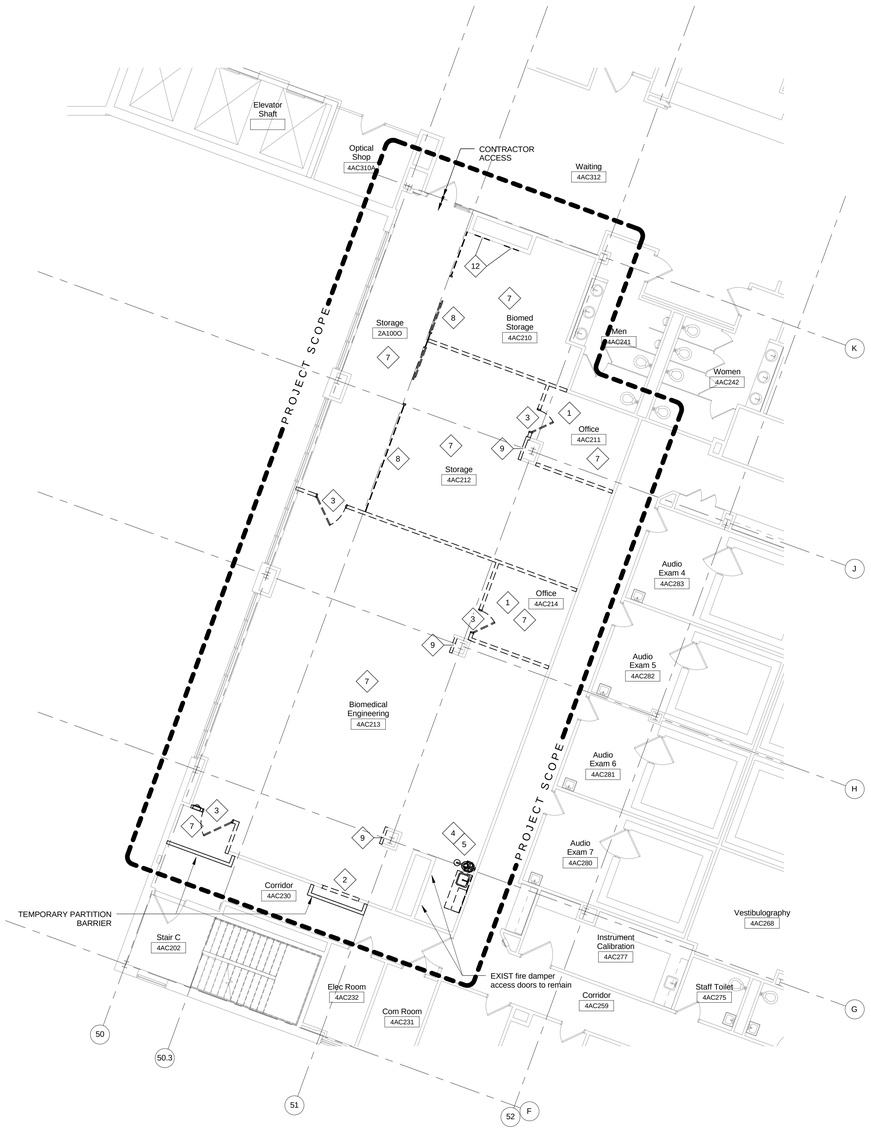
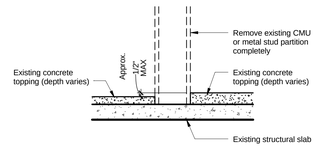


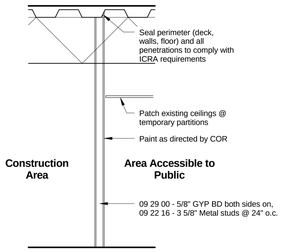
2 Partial Fourth Floor Demolition Plan

Scale 1/8" = 1'-0"



4 LEVELING DETAIL

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

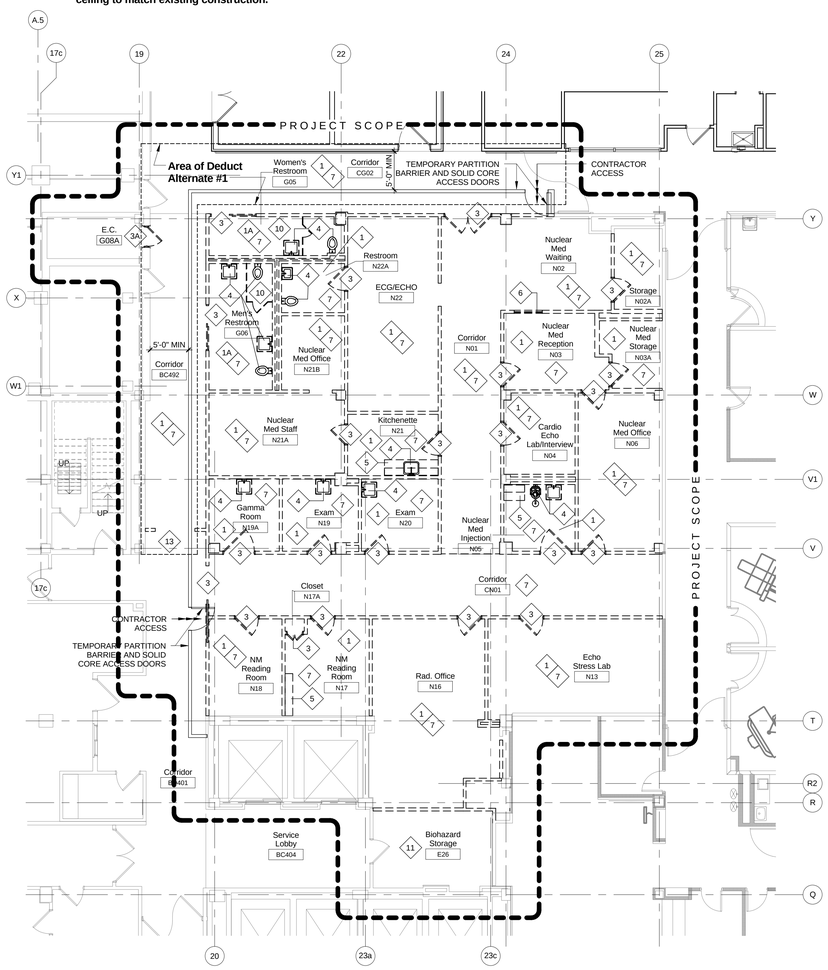


Notes:
1. See also 01 00 00 General Requirements.
2. Contractor to frame around existing duct work, pipes, etc. that interfere with temporary partition.

3 TEMPORARY PARTITION SECTION

Scale 3/8" = 1'-0"

Deduct Alternate #1 - delete removal of existing flooring and ceiling in Corridors BC492 and BC502. Patch flooring and ceiling to match existing construction.



1 Partial Basement Demolition Plan

Scale 1/8" = 1'-0"

DEMOLITION PLAN LEGEND

- Existing construction to remain
- Existing construction to be demolished
- Remove existing partitions indicated to the underside of the underside of existing deck above. Prepare all adjacent surfaces to receive new construction and scheduled finishes.
- # Number represents demolition coded note

DEMOLITION GENERAL NOTES

A. Refer to Specifications Section 024100 "Demolition" for additional requirements and information.
B. Project scope is indicated for general intent only. Additional demolition will be required inside and outside this line. Architectural demolition drawings are for schematic purposes.
C. Coordinate all new penetrations and/or openings with other associated trades.
D. The Owner shall remove, prior to construction, all items that the Owner desires to salvage. All remaining items indicated to be demolished shall be removed by the Contractor and legally disposed of in accordance with the project specifications.
E. Contractor shall coordinate all demolition with the entire set of contract documents for full scope of demolition work required for the project.
F. Existing conditions shown on the drawings are not guaranteed to be complete. The Contractor shall verify all existing conditions, dimensions, and materials required for the contracted work. Report all discrepancies to COR prior to fabrication, erection, and/or installation.
G. Contractor shall provide dust removing walk off mat (tacky mat) at construction entry points.
H. Contractor shall provide HEPA filtered negative air machine(s) to maintain negative pressure to scope of work area ensuring no dust will be transferred to occupied areas. Provide visual pressure monitoring device at dust proof barricade to confirm pressure. Dust monitoring shall be by Owner. See Infection Control Risk Assessment in specification section 01 35 26 "Safety Requirements".
I. All demolition work being done outside temporary partitions is to be appropriately sealed off to prevent the transmission of dust and debris. Work shall be done to minimize disruption to visitors, patients and staff. Coordinate location of barriers with the Owner.
J. The hospital's smoke and fire suppression system shall remain in operation within the scope of work during the entire construction phase.
K. Field verify locations of all existing walls. Report any discrepancies to COR.
L. Some items may be indicated in the demolition drawing and demolition notes which are not necessarily demolition work, but are included to describe the overall scope of the project and aid in the demolition coordination. The Contractor is responsible for all work required to complete the work of the overall project.
M. Flooring demolition includes the removal of existing floor finishes, including VCT, sheet vinyl, ceramic tile, quarry tile, carpet and other finishes, grouts, mastics, and setting beds complete to existing concrete floor slab or other substrate ready for new floor finishes. Concealed multiple floor finishes may be present in several locations. Floor preparation shall be by the installing Contractor.
N. Demolition of ceilings includes grid, tile, supports, soffits and related items as well as any ceiling mounted electrical and mechanical fixtures and supports contained within. Some areas in the project contain multiple ceilings. Contractor shall remove all ceilings in the project area, U.N.O.
O. Plug abandoned floor openings with new concrete. Plug shall match existing slab depth and shall be structurally sound to carry floor load of 100 LBS/SF U.N.O. Also see drawing 1-S1.
P. All fire rated assemblies (columns, shafts, walls, etc.) shall be maintained or be relocated/patched. Match existing fire rating U.N.O.
Q. Where new doors are indicated, cut openings in existing wall. Prepare openings for new door. Parch adjacent walls to match existing. Provide lintels as required for new openings (See 1-S1 for lose lintel schedule)
R. After removal of existing partitions, Contractor shall provide cementitious infill and floor leveler to prepare floor surface for new finishes. See Leveling Detail (4) on this sheet.
S. See mechanical drawings for plumbing, HVAC and fire protection demolition. See electrical drawings for all power and lighting demolition.
T. Debris removal shall not interfere with Owner's operations and shall occur during off hours as determined by Owner.
U. All noise generating operations, including cutting of ceilings, walls and floor, coring, drilling, etc. shall be scheduled in accordance with project specifications (Section 01 00 00).
V. See asbestos abatement drawings for asbestos related work.
W. Contractor to protect all existing walls, ceilings and floor finishes scheduled to remain. Any surface(s) damaged by contractor shall be replaced by contractor at no additional cost to the owner.

TEMPORARY PARTITION NOTES

A. Contractor shall at all times provide and/or maintain separation between Owner occupied areas and areas under construction or partially constructed.
B. Contractor shall construct and maintain at all times temporary partitions in accordance with detail 3. Temporary partitions shall be located to separate all Owner occupied areas from construction areas. Temporary partitions shall not interfere with Owner's operation of facilities.
C. Temporary partitions are to be constructed prior to any demolition work.
D. Coordinate exact locations of temporary partitions with existing items in corridor ceilings. Exit access corridors must remain adequately lit and ventilated throughout the construction process.
E. Additional or modifications to the temporary partitions may be required due to sequencing of work. Contractor shall determine location and quantity of all temporary partitions in accordance with ICRA and VA requirements prior to submittal of bid. Removal of temporary partitions to coincide with the enclosed space, U.N.O.
F. After removal of temporary partitions, contractor shall restore all adjacent finishes disturbed by temporary partitions and any other building system or component to their condition prior to erection of temporary partitions.

DEMOLITION PLAN CODED NOTES

1	Remove existing ceiling system in it's entirety. Contractor shall verify existing light fixtures to be salvaged and/or relocated prior to commencing demolition - See also General Note 'O'.
1A	Remove existing plaster ceiling in it's entirety.
2	Remove portion of metal stud and GWP partition as required for new opening.
3	Remove existing door, frame and associated hardware.
3A	Remove existing door, existing frame to remain
4	Remove existing plumbing fixture, services, etc back to mains - See plumbing drawings.
5	Remove existing millwork cabinetry.
6	Remove existing sliding glass window and PLAM sill.
7	Remove existing flooring, wall base and ceiling finishes. Prepare existing surfaces to receive new scheduled finishes.
8	Remove existing wire mesh partition.
9	Remove GYP BD column surrounds to the extent it interferes with new work
10	Remove existing toilet partitions and associated hardware.
11	Remove existing ceiling, as needed to facilitate new construction.
12	Remove existing fire damper access doors
13	Remove existing bumper rail, corner guards and wall protection affected by new construction. Rework components and reinstall.

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BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
PARTIAL BASEMENT AND FOURTH FLOOR DEMOLITION PLANS

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	RPN	DER

Project Number 541-16-104

Building Number 1

Drawing Number **1-04**

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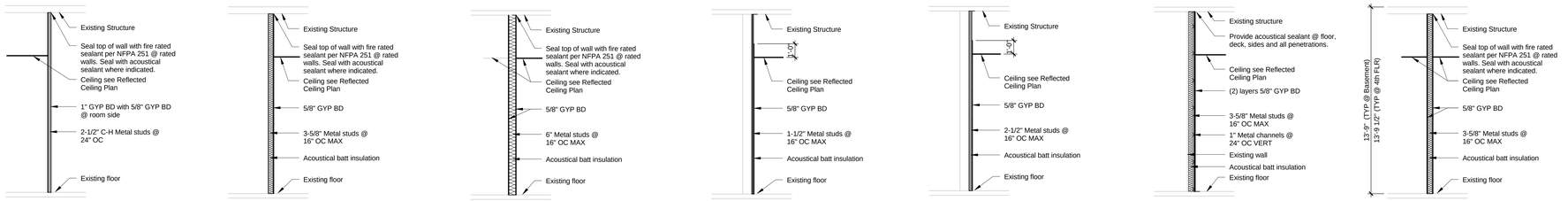
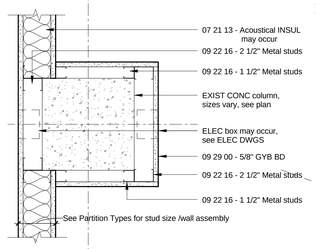
PARTITION TYPES

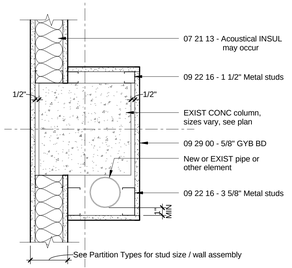
Notes: 1. All partitions with acoustical batt insulation are considered acoustical partitions. Provide acoustical sealant @ all penetrations. See Typical Acoustical Sealant @ Penetration Detail, 11/1-01
2. At rated partitions, comply with UL U419, U438 or U465.



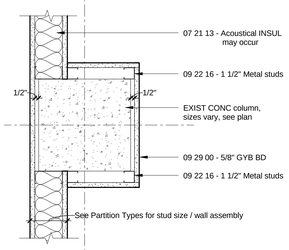
12 Type G — Scale 1/4" = 1'-0"
8 Type F — Scale 1/4" = 1'-0"
7 Type E — Scale 1/4" = 1'-0"
6 Type D — Scale 1/4" = 1'-0"
5 Type C — Scale 1/4" = 1'-0"
4 Type B — Scale 1/4" = 1'-0"
3 Type A — Scale 1/4" = 1'-0"



11 TYP COL Plan Detail C — Scale 1 1/2" = 1'-0"



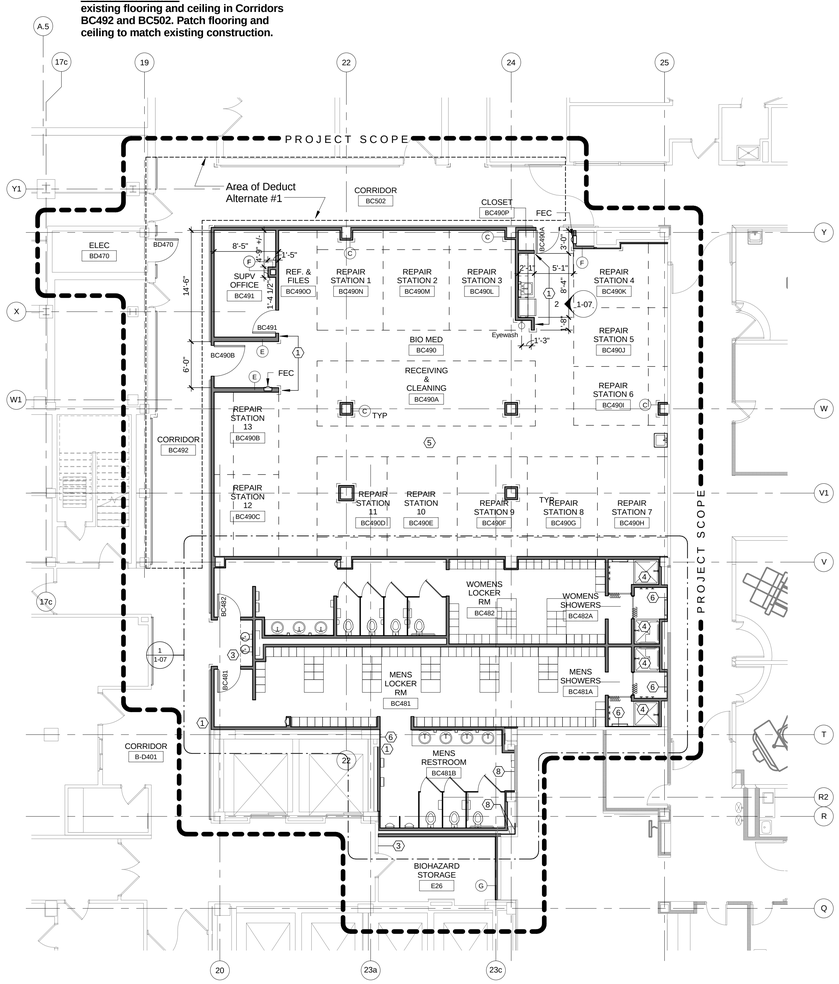
10 TYP COL Plan Detail B — Scale 1 1/2" = 1'-0"



9 TYP COL Plan Detail A — Scale 1 1/2" = 1'-0"

2 Partial Fourth Floor Plan — Scale 1/8" = 1'-0"

Deduct Alternate #1 - delete removal of existing flooring and ceiling in Corridors BC492 and BC502. Patch flooring and ceiling to match existing construction.



1 Partial Basement Floor Plan — Scale 1/8" = 1'-0"

FLOOR PLAN LEGEND

FEC Recessed fire extiguisher cabinet

(#) Number represents floor plan coded note

FLOOR PLAN GENERAL NOTES

A. All partitions shall be type A, unless noted otherwise.
B. All partitions (studs, GYP BD, batt INSUL) are to extend tight to underside of deck, unless noted otherwise.
C. All GYP BD to be type 'X', unless noted otherwise
D. All penetrations in rated partitions to be firestopped, see Life Safety Plans for locations of fire and smoke rated partitions.
E. Existing spray fire proofed steel on 4th floor disturbed by new construction shall be patched by Contractor, see specification section 07 81 00. Comply with requirements indicated on sheet 1-X1.
F. All permanent signage to be provided by Owner.
G. Water resistant GYP BD shall extend a minimum of 24" beyond edge of plumbing fixture.
H. Refer to demo drawings for locations of temporary partitions
I. Seal all perimeter joints and all penetrations in all partitions in Phase 2 (4th floor) with acoustic sealant, unless intumescent fireproofing is required per Life Safety Plan.
J. Refer to Phasing and Demolition drawings for additional work in various areas.
K. Refer to "IF" drawings for location and type of corner guards.
L. Provide tile backer board on all walls with tile.
M. Provide moisture resistant GYP BD at all walls in locker rooms, showers and restrooms, except where tile backer board is required.
N. Prior to erection of metal framing for new partitions, contractor to verify location of concrete joists below slab. Notify Architect of conflicts w/ MEP installations and existing structure.

FLOOR PLAN CODED NOTES

1 Align
2 Center wall on mullion.
3 Extend metal framing and GYP BD at west partition of Bio Hazard Storage E26 to underside of desk & seal penetrations for wall rating in accordance with Life Safety Plan.
4 Fiberglass shower stall - see Plumbing drawings (TYP of 4)
5 Dashed lines indicate extent of each Repair Station and Owner provided casework.
6 5/8" tile backer board laminated to existing substrate
7 Water cooler shall not infringe on clear door opening.
8 Provide GYP BD at exposed metal studs, as to maintain 1hr rated wall assembly

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BID ISSUE	06/17/16
Revisions:	**Date**

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STATE OF OHIO — WILLIAM C. AYARS 7259 — REGISTERED ARCHITECT
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Drawing Title: **PARTIAL BASEMENT AND FOURTH FLOOR PLANS AND PARTITION TYPES**

Approved: Project Director

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: RPN | Drawn: DER

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-05**

Dwg. of

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Department of Veterans Affairs

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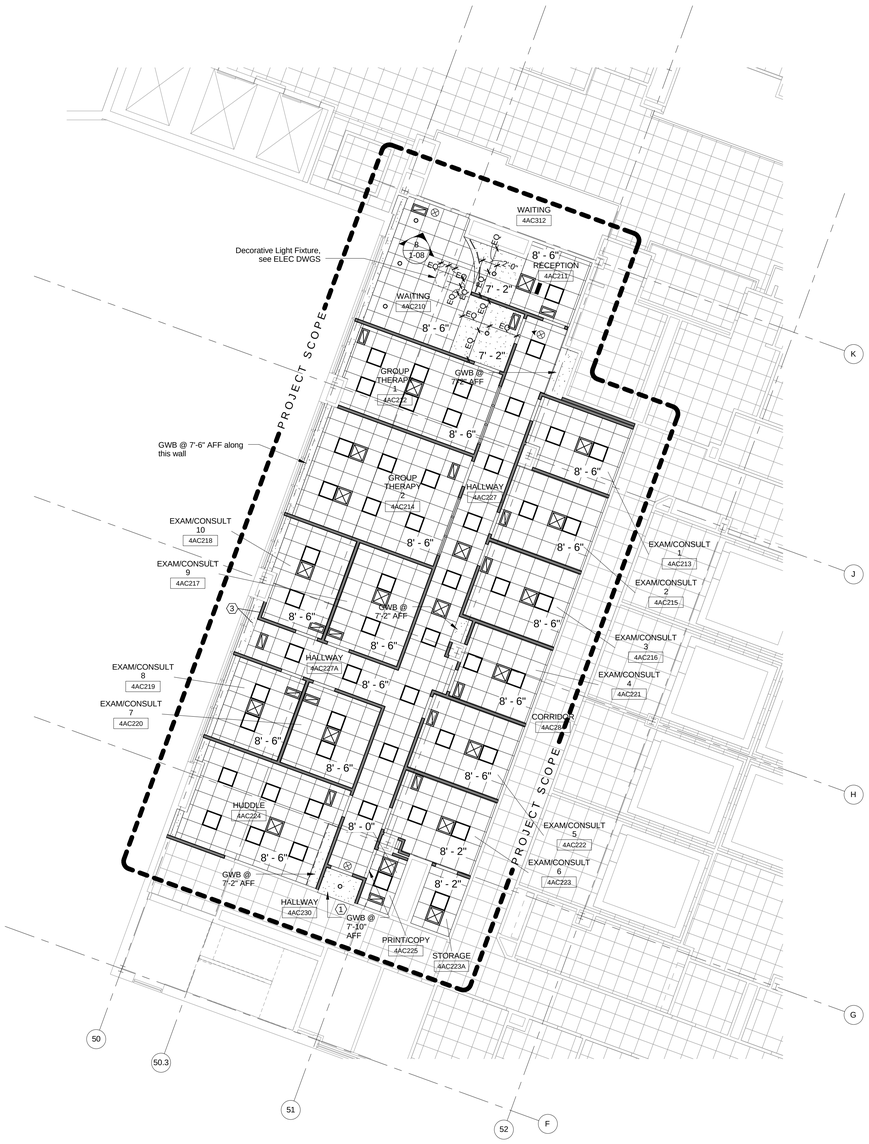
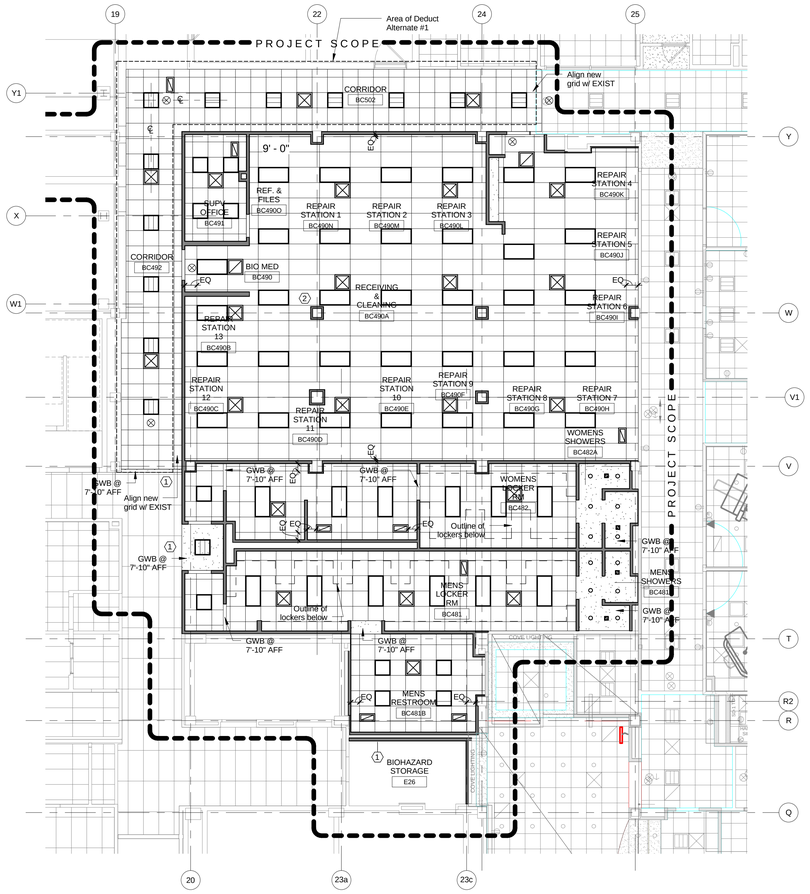


2 Partial Fourth Floor Reflected Ceiling Plan

0 4' 8' 16'

Scale 1/8" = 1'-0"

Deduct Alternate #1 - delete removal of existing flooring and ceiling in Corridors BC492 and BC502. Patch flooring and ceiling to match existing construction.



1 Partial Basement Floor Reflected Ceiling Plan

0 4' 8' 16'

Scale 1/8" = 1'-0"

REFLECTED CEILING PLAN LEGEND

- Gypsum Board Ceiling or Soffit (Painted)
- 2' x 4' Acoustical Ceiling Panel System @ 8'-0" AFF, Unless Otherwise Noted
- 2' X 2' Acoustical Ceiling Panel System @ 8'-0" AFF, Unless Otherwise Noted
- 2' X 4' Light Fixture
- 2' X 2' Light Fixture
- 2' X 2' Direct / Indirect Light Fixture
- Recessed Downlight
- Exit
- Supply Diffuser
- Return / Exhaust Grille
- (#) Number represents RCP coded note
- Novato Drum Interior Ceiling Fixture

REFLECTED CEILING PLAN GENERAL NOTES

A. See "Material Legend" on Sheet 1-IF-03 for Acoustical Ceiling Panel System types.
B. All ceilings to be 8'-0" AFF unless noted otherwise.
C. See Interior Elevations for soffit heights at millwork.
D. Ceiling heights on reflected ceiling plan are from finish floor to finish ceiling.
E. Unless noted otherwise, light fixtures shall be located as shown on the reflected ceiling plan.
F. Where the lights and accessories are shown to be recessed in ceiling tiles, they shall be centered in the ceiling tile unless noted otherwise.
G. Provide access panels in GYP BD ceilings as required by applicable codes and as required for access to mechanical, electrical and plumbing equipment. Access panels located in finished areas shall be painted to match adjacent surfaces.
H. No mechanical equipment requiring normal maintenance shall be installed above a gypsum board ceiling. Locate such items above acoustical tiles only. Notify architect if any such items are indicated above the gypsum board ceilings.
I. Exit signs and smoke detectors located shall be centered in corridors and located a distance of 1'-0" from wall to the center of the fixture unless noted otherwise. Locate exit signs as required by the authority having jurisdiction.
J. Soffits and bulkheads shall be laterally braced at 48" O.C. MAX.to resist horizontal movement.
K. Contractor shall coordinate all types of light fixtures with electrical drawings. Fixtures shown on architectural drawings are for reference only and are indicated for location only.
L. Sprinkler head covers in ACT shall be white. Sprinkler head covers in GYP BD to be painted to match GYP BD.
M. Ceiling grids to be centered in both directions, in each room as shown, unless noted otherwise.

REFLECTED CEILING PLAN CODED NOTES

1 Patch existing ceiling at new partition
2 Confirm grid layout w/ Architect prior to installation
3 Align soffit with partition

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BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
PARTIAL BASEMENT AND FOURTH FLOOR REFLECTED CEILING PLANS

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked RPN | Drawn DER

Project Number 541-16-104

Building Number 1

Drawing Number **1-06**

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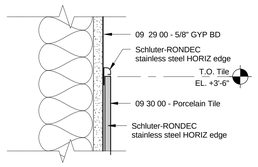
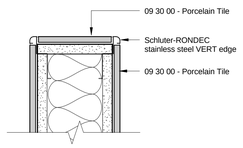


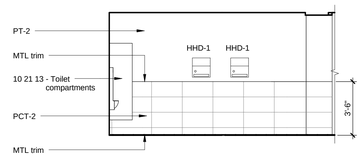
8 TYP HORIZ Tile JT/Transition Detal

Scale 3" = 1'-0"



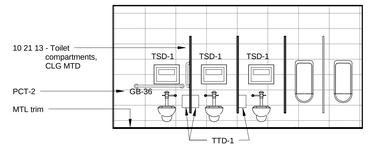
7 TYP Tile JT Corner Detal

Scale 3" = 1'-0"



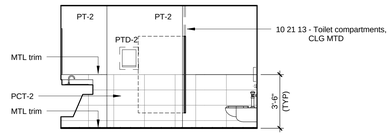
6D Mens Restroom - BC481B (West)

Scale 1/4" = 1'-0"



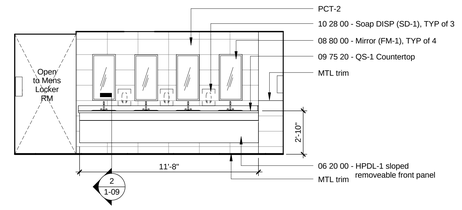
6C Mens Restroom - BC481B (South)

Scale 1/4" = 1'-0"



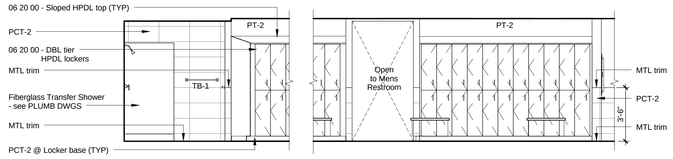
6B Mens Restroom - BC481B (East)

Scale 1/4" = 1'-0"



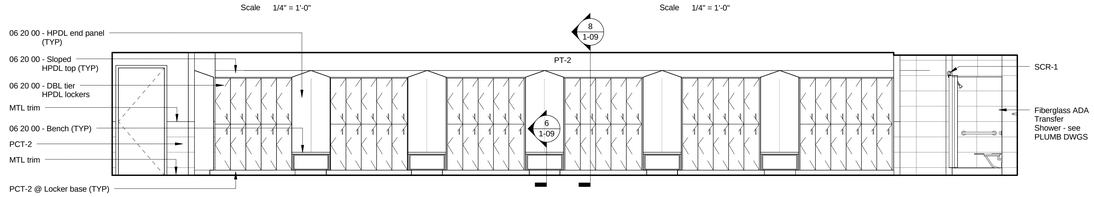
6A Mens Restroom - BC481B (North)

Scale 1/4" = 1'-0"



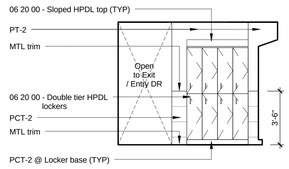
4D Mens Locker RM - BC481 (South)

Scale 1/4" = 1'-0"



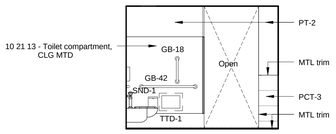
4C Mens Locker RM - BC481 (North)

Scale 1/4" = 1'-0"



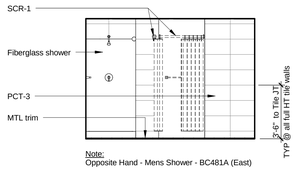
4A Mens Locker Room - BC481 (West)

Scale 1/4" = 1'-0"



3E Womens Locker Room - BC482

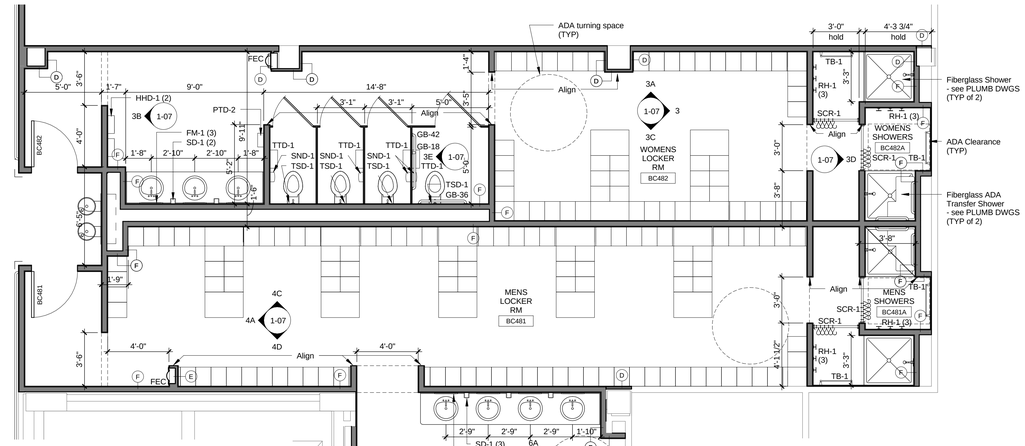
Scale 1/4" = 1'-0"



Note:
Opposite Hand - Mens Shower - BC481A (East)

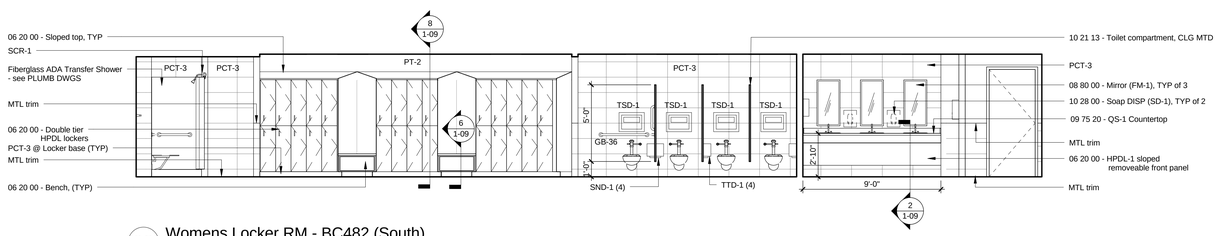
3D Womens Shower - BC482 (East)

Scale 1/4" = 1'-0"



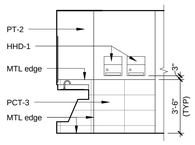
1 Enlarged Locker Room Floor Plan

Scale 1/4" = 1'-0"



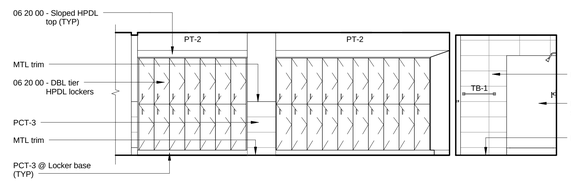
3C Womens Locker RM - BC482 (South)

Scale 1/4" = 1'-0"



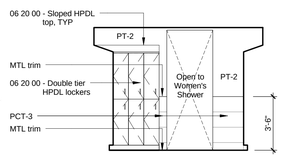
3B Womens Locker RM - BC482 (West)

Scale 1/4" = 1'-0"



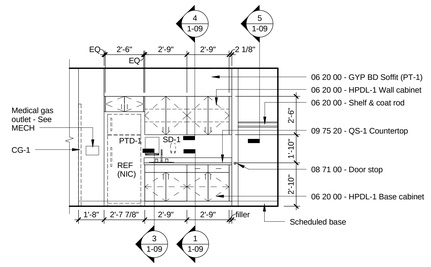
3A Womens Locker RM - BC482 (North)

Scale 1/4" = 1'-0"



3 Womens Locker RM - BC482 (East)

Scale 1/4" = 1'-0"



2 Bio Med - BC490

Scale 1/4" = 1'-0"

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Revisions:	Date

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Drawing Title
ENLARGED PLAN AND INTERIOR ELEVATIONS - BASEMENT

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	RPN	DER

Project Number
541-16-104

Building Number
1

Drawing Number
1-07

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Department of Veterans Affairs

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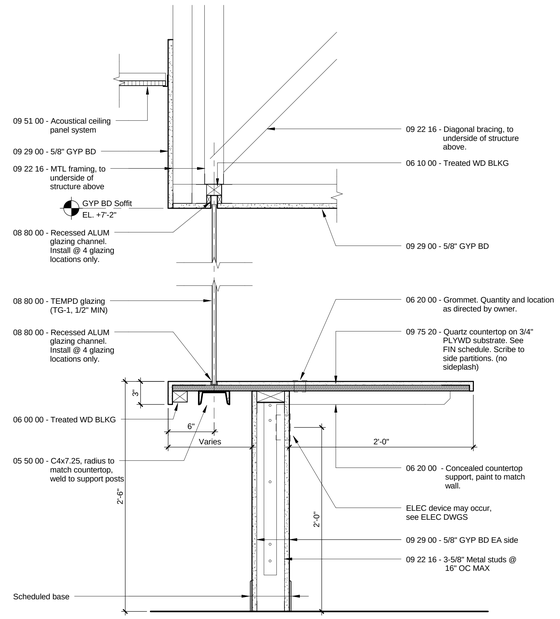
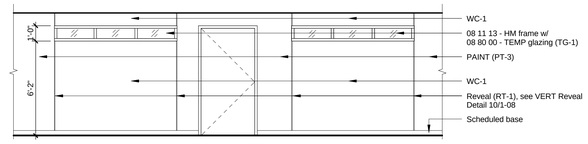


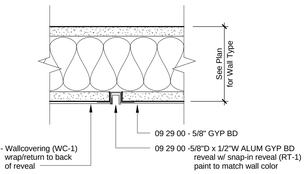
11 Reception Counter - Open w/ Glazing

0 4" 8" 16"
Scale 1 1/2" = 1'-0"



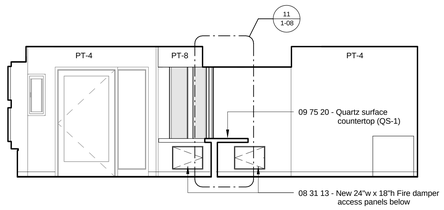
9 Hallway - 4AC227 (West)

0 2' 4' 8'
Scale 1/4" = 1'-0"



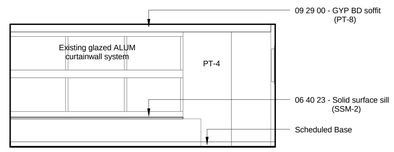
10 VERT Reveal Detail

0 2" 4" 8"
Scale 3" = 1'-0"



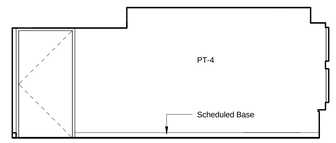
8 Reception - 4AC210

0 2' 4' 8'
Scale 1/4" = 1'-0"



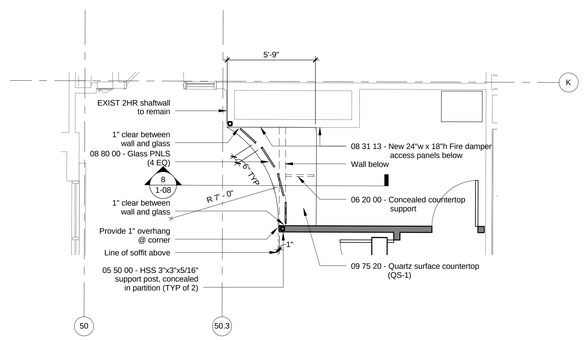
7 Waiting 4AC210 (West)

0 2' 4' 8'
Scale 1/4" = 1'-0"



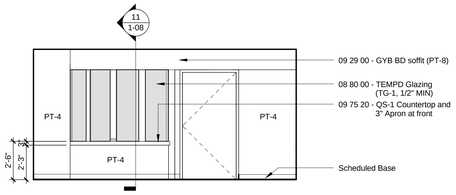
6 Waiting 4AC210 (South)

0 2' 4' 8'
Scale 1/4" = 1'-0"



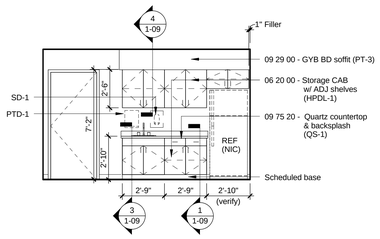
1 Enlarged Reception Plan - 4AC210

0 2' 4' 8'
Scale 1/4" = 1'-0"



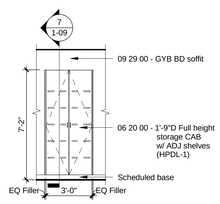
5 Waiting 4AC210 (East)

0 2' 4' 8'
Scale 1/4" = 1'-0"



4 Huddle - 4AC224 (East)

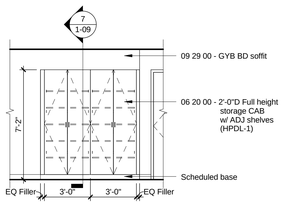
0 2' 4' 8'
Scale 1/4" = 1'-0"



Note: This cabinet to be lockable

3 Hallway - 4AC227 (East2)

0 2' 4' 8'
Scale 1/4" = 1'-0"



Note: These cabinets to be lockable

2 Hallway - 4AC227 (East1)

0 2' 4' 8'
Scale 1/4" = 1'-0"

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BID ISSUE	06/17/16
Revisions:	**Date**

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Expiration Date 12/31/2017

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Drawing Title
ENLARGED PLAN AND INTERIOR ELEVATIONS - FOURTH FLOOR

Approved: Project Director

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

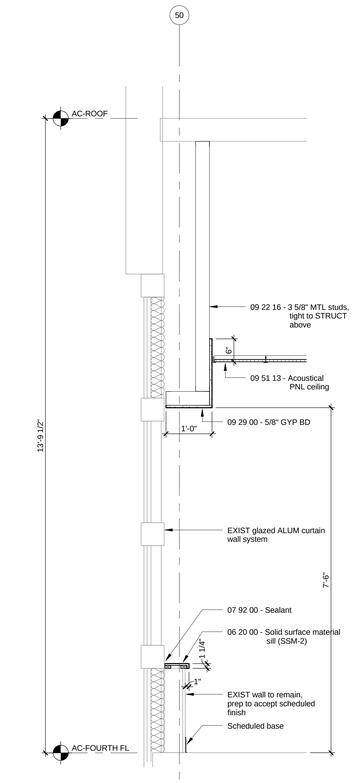
Location
VAMC - WADE PARK

Date 06/17/16 | Checked RPN | Drawn DER

Project Number 541-16-104
Building Number 1
Drawing Number **1-08**
Dwg. of

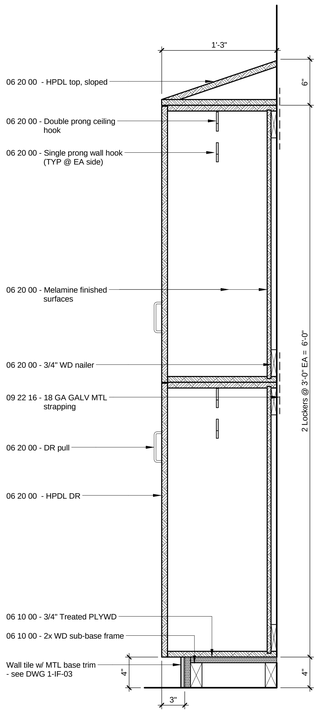
Office of Facilities Management
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



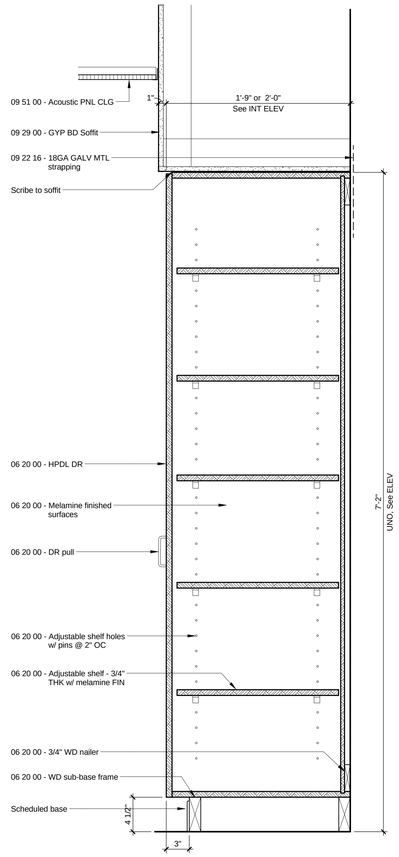
9 Wall Section @ EXIST Curtain Wall

Scale 3/4" = 1'-0"



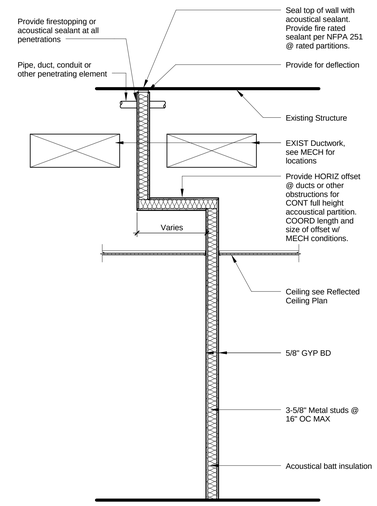
8 Detail

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



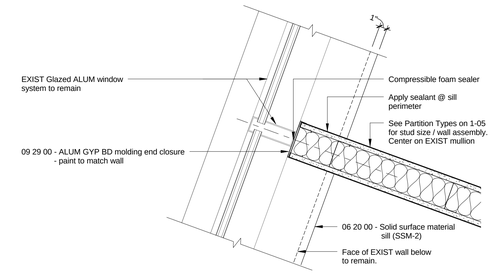
7 Detail

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



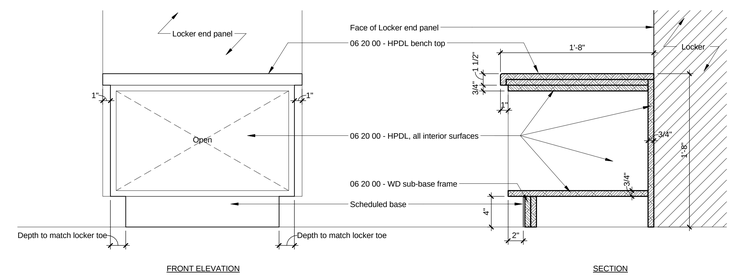
11 Detail

Scale 1/2" = 1'-0"



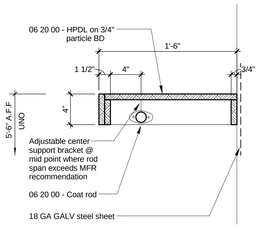
10 Plan Detail

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



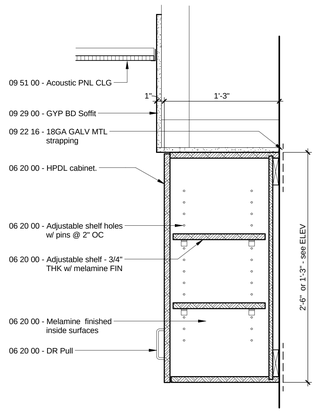
6 Locker Room Bench

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



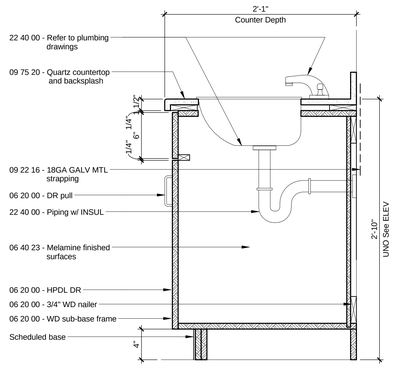
5 Detail

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



4 Detail

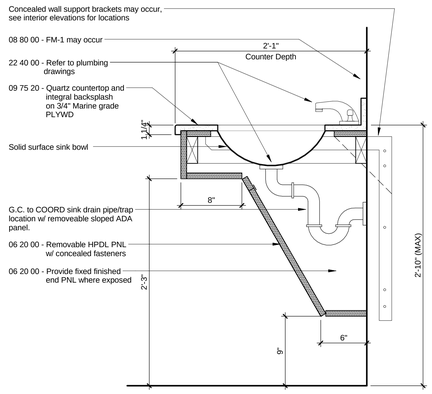
Scale 1 1/2" = 1'-0"



Note: Provide 4 1/2" high toe kick in Huddle RM - 4AC224

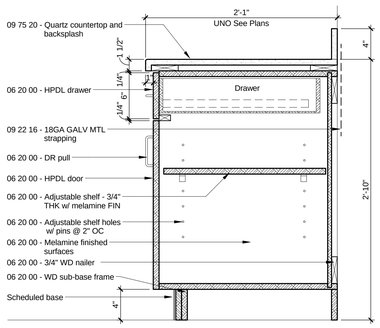
3 Detail

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



2 Detail

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



Note: Provide 4 1/2" high toe kick in Huddle RM - 4AC224

1 Detail

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

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **DETAILS**

Approved: Project Director

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: RPN | Drawn: DER

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-09**

Dwg. of

Office of Facilities Management

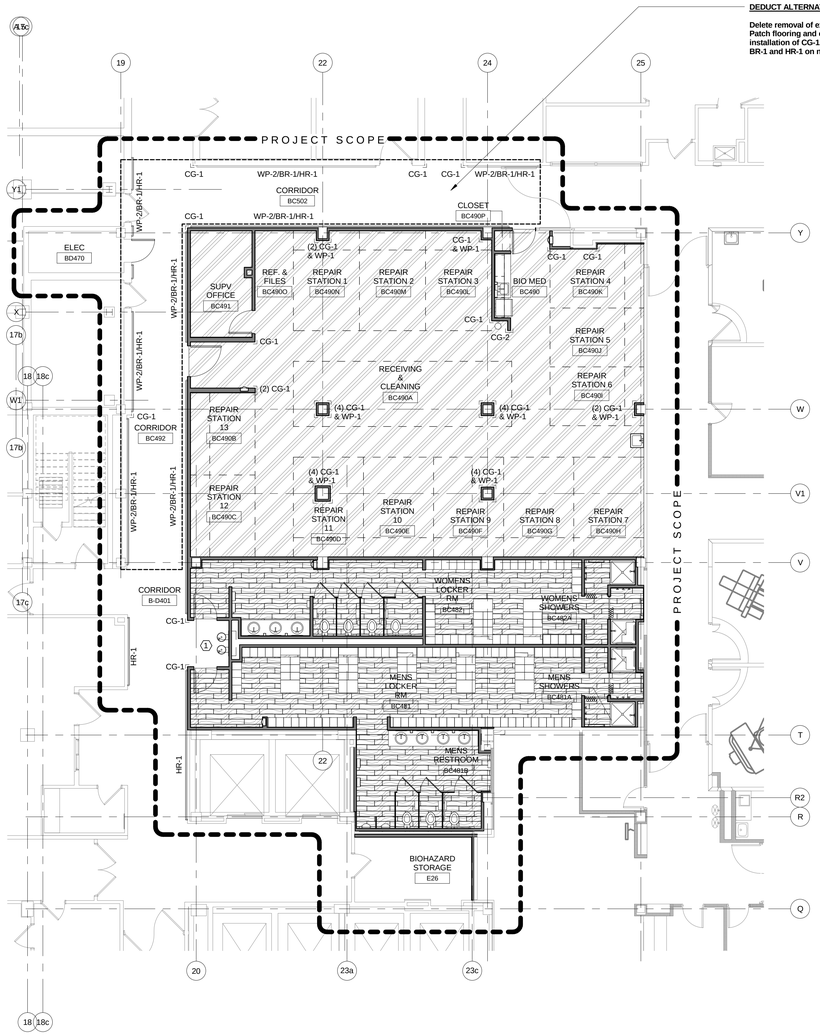
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

2 Partial Fourth Floor Finish Plan

0 4' 8' 16'

Scale 1/8" = 1'-0"



DEDUCT ALTERNATE #1

Delete removal of existing flooring and ceilings in corridors BC492 and BC502. Patch flooring and ceiling to match existing construction. Delete paint and installation of CG-1, WP-2, BR-1 and HR-1 on existing walls. Install CG-1, WP-2, BR-1 and HR-1 on new walls only. Paint new walls only.

1 Partial Basement Floor Finish Plan

0 4' 8' 16'

Scale 1/8" = 1'-0"

Finish Legend

- Accent Paint
- CG-1
- CPT-1
- RTF-1
- PCT-1
- (1) PROVIDE WP-2 IN NEW ALCOVE

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title: **PARTIAL BASEMENT AND FOURTH FLOOR FINISH PLANS**

Approved: Project Director

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: RPN | Drawn: CRL

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-IF-01**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

GENERAL FINISH SCHEDULE NOTES

1. MULTIPLE FLOOR FINISHES OCCUR, REFER TO PLANS FOR LOCATION.
2. MULTIPLE WALL FINISHES OCCUR, REFER TO PLANS AND/OR ELEVATIONS FOR LOCATIONS.
3. PORCELAIN TILE TO BE 42" A.F.F. ON ALL INDICATED WALLS. SEE INTERIOR ELEVATIONS ON 1-07.
4. REFER TO ELEVATIONS FOR FINISHES AT MILLWORK LOCATED ON DRAWING 1-07 AND 1-08.
5. PATCH ALL FINISHES TO MATCH EXISTING, REFER TO FINISH SCHEDULE FOR LOCATIONS.
6. ETR: EXISTING FINISHES TO REMAIN.
7. WALL PROTECTION TO BE INSTALLED ON COLUMNS AND WALLS NOTED.
8. ALL DOOR FRAMES TO BE PAINTED PT-5.
9. ALL HOLLOW METAL WINDOW TRIM TO BE PAINTED PT-6. DO NOT PAINT ALUMINUM WINDOWS.
10. ALL LOCKERS (12" x 15") AND BENCHES TO BE LAMINATE HPDL-1.

FLOORING NOTES

1. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY DESIGNER OF ANY DISCREPANCIES.
2. CONTRACTOR IS TO PREP WALLS AS NECESSARY FOR NEW BASE.
3. PROVIDE NEW RUBBER BASE AND FLOOR COVERING AS SPECIFIED THROUGHOUT, U.N.O. CONTRACTOR TO PREP FLOORS AS NECESSARY FOR NEW FINISHES.
4. CONTRACTOR TO PROVIDE TEMPORARY PROTECTION ON ALL NEW FLOORING.
5. CONTRACTOR TO CLEAR CAULK AT ALL DOOR FRAMES WHERE NEW RESILIENT FLOORING HAS BEEN INSTALLED WITHIN PROJECT LIMIT.
6. THE CONTRACTOR SHALL PREP FLOOR AS NECESSARY TO ENSURE THAT THE TOP SURFACE OF ALL ADJACENT CARPETS ARE TO BE FLUSH REGARDLESS OF PILE HEIGHT.
7. TRANSITION AND REDUCING STRIPS ARE TO BE INSTALLED AT ALL CHANGES IN FLOOR MATERIAL AND/OR ELEVATION THAT OCCURS IN AREAS TO BE NEWLY FINISHED. VERIFY WITH DESIGNER EACH CONDITION AND TYPE OF TRANSITION AND/OR REDUCING STRIP TO BE USED PRIOR TO INSTALLATION. FLOAT FLOOR AS REQUIRED FOR SMOOTH/FLUSH TRANSITION BETWEEN MATERIAL CHANGES. CONTRACTOR TO VERIFY IN FIELD EXACT LOCATION OF NEW TRANSITION STRIP. TRANSITION TO BE INSTALLED AT CENTER OF DOOR.

WALL NOTES

1. PREP WALLS FOR NEW FINISHES, PATCH AND REPAIR WALLS TO CREATE A SMOOTH UNIFORM FINISH.
2. CONTRACTOR TO APPLY AT LEAST TWO COATS OF PAINT. EACH COAT TO BE EQUAL TO 1.6 MIL. APPLY MORE IF NECESSARY TO COVER EXISTING COLOR.
3. CONTACTOR SHALL PAINT ALL MISC. METAL ITEMS SUCH AS ELECTRICAL PANEL COVERS, ELECTRICAL WIRE MOLD, ETC. TO MATCH ADJACENT WALL COLOR. SEE WALL FINISH SCHEDULE.

GENERAL NOTES

1. EXISTING CONDITIONS HAVE BEEN SHOWN FROM GENERAL SPACE OBSERVATION AND EXISTING DRAWINGS. RESPECTIVE TRADES SHALL CONDUCT A COMPLETE FIELD SURVEY OF EXISTING CONDITIONS PRIOR TO SUBMISSION OF BID PRICE. NO ADDITIONAL PAYMENT WILL BE MADE FOR CLAIMS THAT ARISE FROM LACK OF KNOWLEDGE OF EXISTING CONDITIONS.
2. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH DESIGN CODES AS INDICATED ON SHEET 1-X1.
3. ALL FINISHES SHALL COMPLY WITH THE IBC SECTIONS 803, 804 AND 805.
4. THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A MINIMUM OF TWELVE (12) MONTHS AFTER THE DATE OF FINAL COMPLETION TO CONTRACTOR UNDER THE CONTRACT. ANY ITEMS DEEMED TO BE DEFECTIVE SHALL BE REPLACED AT CONTRACTORS SOLE EXPENSE, BUT AT OWNER'S OPTION AND CONVENIENCE, BE REPAIRED, REPLACED OR RE-PERFORMED.
5. ALL GYPSUM BOARD SOFFITS AND HEADERS WITHIN THE PROJECT LIMIT LINE TO BE PAINTED.
6. ALL GYPSUM BOARD CEILINGS WITHIN THE PROJECT LIMIT LINE TO BE PAINTED.

FINISH SCHEDULE

Number	Name	Floor Finishes: Floor	Floor Finishes: Base	Wall Finishes: East	Wall Finishes: North	Wall Finishes: South	Wall Finishes: West	Ceiling	Millwork Finishes: Cabinet/Apron	Millwork Finishes: Countertop	Remarks
4AC210	WAITING	CPT-1	RB-2	PT-4	PT-4	PT-4	PT-4	ACT-1/GYP. BD.			Provide SSM-2 at window sill
4AC211	RECEPTION	CPT-1	RB-2	PT-4	PT-4	PT-4	PT-4	ACT-1/GYP. BD.		QS-1	
4AC212	GROUP THERAPY 1	CPT-1	RB-2	PT-3	PT-3	PT-3	PT-3	ACT-1			Provide SSM-2 at window sill
4AC213	EXAM/CONSULT 1	CPT-1	RB-2	PT-4	PT-3	PT-3	PT-3	ACT-1			
4AC214	GROUP THERAPY 2	CPT-1	RB-2	PT-3	PT-3	PT-3	PT-3	ACT-1			Provide SSM-2 at window sill
4AC215	EXAM/CONSULT 2	CPT-1	RB-2	PT-4	PT-3	PT-3	PT-3	ACT-1			
4AC216	EXAM/CONSULT 3	CPT-1	RB-2	PT-4	PT-3	PT-3	PT-3	ACT-1			
4AC217	EXAM/CONSULT 9	CPT-1	RB-2	PT-3	PT-4	PT-3	PT-3	ACT-1			
4AC218	EXAM/CONSULT 10	CPT-1	RB-2	PT-3	PT-4	PT-3	PT-3	ACT-1			Provide SSM-2 at window sill
4AC219	EXAM/CONSULT 8	CPT-1	RB-2	PT-3	PT-3	PT-4	PT-3	ACT-1			Provide SSM-2 at window sill
4AC220	EXAM/CONSULT 7	CPT-1	RB-2	PT-3	PT-3	PT-4	PT-3	ACT-1			
4AC221	EXAM/CONSULT 4	CPT-1	RB-2	PT-4	PT-3	PT-3	PT-3	ACT-1			
4AC222	EXAM/CONSULT 5	CPT-1	RB-2	PT-4	PT-3	PT-3	PT-3	ACT-1			
4AC223	EXAM/CONSULT 6	CPT-1	RB-2	PT-4	PT-3	PT-3	PT-3	ACT-1			
4AC223A	STORAGE	CPT-1	RB-2	PT-3	PT-3	PT-3	PT-3	ACT-1			
4AC224	HUDDLE	CPT-1/RTF-1	RB-2	PT-3	PT-3	PT-3	PT-3	ACT-1/GYP. BD.	HPDL-1	QS-1	Provide SSM-2 at window sill
4AC225	PRINT/COPY	CPT-1	RB-2	PT-3	PT-3	PT-3	PT-3	ACT-1			
4AC227	HALLWAY	CPT-1	RB-2	PT-3	PT-3	PT-3	PT-3/WC-1	ACT-1/GYP. BD.			
4AC227A	HALLWAY	CPT-1	RB-2	PT-3	PT-3	PT-3	PT-3	ACT-1			Provide SSM-2 at window sill
4AC230	HALLWAY	ETR	ETR	ETR	ETR	ETR	ETR	ACT-3/GYP. BD.			Patch floor, base and walls to match existing
4AC312	WAITING	ETR	ETR	ETR	ETR	ETR	ETR	ETR			
B-D401	CORRIDOR	EPX-1	INT	PT-7	--	--	Patch and match existing	Patch and match existing			Apply PT-7 to all walls of new alcove.
BC481	MENS LOCKER RM	PCT-1	--	PCT-2/PT-2	PCT-2/PT-2	PCT-2/PT-2	PCT-2/PT-2	ACT-1	HPDL-1	--	
BC481A	MENS SHOWERS	PCT-1	--	PCT-2	PCT-2	PCT-2	PCT-2	GYP. BD.			PCT to be full height on all walls
BC481B	MENS RESTROOM	PCT-1	--	PCT-2/PT-2	PCT-2	PCT-2	PCT-2/PT-2	ACT-1	HPDL-1	QS-1	HPDL-1 sink apron
BC482	WOMENS LOCKER RM	PCT-1	--	PCT-3/PT-2	PCT-3/PT-2	PCT-3/PT-2	PCT-3/PT-2	ACT-1	HPDL-1	QS-2	HPDL-1 sink apron
BC482A	WOMENS SHOWERS	PCT-1	--	PCT-3	PCT-3	PCT-3	PCT-3	GYP. BD.			PCT to be full height on all walls
BC490	BIO MED	RTF-1	RB-1	PT-1/WP-1	PT-1/WP-1	PT-1/WP-1	PT-1/WP-1	ACT-2	HPDL-1	QS-1	Provide WP-1 to all walls not otherwise indentified
BC490A	RECEIVING & CLEANING	RTF-1	RB-1	--	--	--	--	ACT-2			PT-1 above WP-1
BC490B	REPAIR STATION 13	RTF-1	RB-1	--	PT-1/WP-1	--	PT-1/WP-1	ACT-2			PT-1 above WP-1
BC490C	REPAIR STATION 12	RTF-1	RB-1	--	--	PT-1/WP-1	PT-1/WP-1	ACT-2			PT-1 above WP-1
BC490D	REPAIR STATION 11	RTF-1	RB-1	--	--	PT-1/WP-1	--	ACT-2			PT-1 above WP-1
BC490E	REPAIR STATION 10	RTF-1	RB-1	--	--	PT-1/WP-1	--	ACT-2			PT-1 above WP-1
BC490F	REPAIR STATION 9	RTF-1	RB-1	--	--	PT-1/WP-1	--	ACT-2			PT-1 above WP-1
BC490G	REPAIR STATION 8	RTF-1	RB-1	--	--	PT-1/WP-1	--	ACT-2			PT-1 above WP-1
BC490H	REPAIR STATION 7	RTF-1	RB-1	PT-1/WP-1	--	PT-1/WP-1	--	ACT-2			PT-1 above WP-1
BC490I	REPAIR STATION 6	RTF-1	RB-1	PT-1/WP-1	--	--	--	ACT-2			PT-1 above WP-1
BC490J	REPAIR STATION 5	RTF-1	RB-1	PT-1/WP-1	--	--	--	ACT-2			PT-1 above WP-1
BC490K	REPAIR STATION 4	RTF-1	RB-1	PT-1/WP-1	PT-1/WP-1	--	--	ACT-2			PT-1 above WP-1
BC490L	REPAIR STATION 3	RTF-1	RB-1	PT-1/WP-1	PT-1/WP-1	--	--	ACT-2			PT-1 above WP-1
BC490M	REPAIR STATION 2	RTF-1	RB-1	--	PT-1/WP-1	--	--	ACT-2			PT-1 above WP-1
BC490N	REPAIR STATION 1	RTF-1	RB-1	--	PT-1/WP-1	--	--	ACT-2			PT-1 above WP-1
BC490O	REF. & FILES	RTF-1	RB-1	--	PT-1/WP-1	--	PT-1/WP-1	ACT-2			PT-1 above WP-1
BC490P	CLOSET	RTF-1	RB-1	--	PT-1/WP-1	PT-1/WP-1	PT-1/WP-1	GYP. BD.			PT-1 above WP-1
BC491	SUPV OFFICE	RTF-1	RB-1	PT-2	PT-2	PT-2	PT-2	ACT-1			
BC492	CORRIDOR	EPX-1	INT	PT-7/WP-2	PT-7/WP-2	PT-7/WP-2	PT-7/WP-2	ACT-3			See Deduct Alternate #1 on 1-IF-01
BC502	CORRIDOR	EPX-1	INT	PT-7/WP-2	PT-7/WP-2	PT-7/WP-2	PT-7/WP-2	ACT-3			See Deduct Alternate #1 on 1-IF-01
BD470	ELEC	ETR	ETR	PT-7	PT-7	PT-7	PT-7	ETR			
E26	BIOHAZARD STORAGE	Patch and match existing	Patch and match existing	PT-1	PT-1	PT-1	PT-1	Patch and match existing			

Material Legend

06 20 23 INTERIOR FINISH CARPENTRY

HPDL-1 / HIGH PRESSURE DECORATIVE LAMINATE
MANUF.: WILSONART
COLOR: COLUMBIAN WALNUT 7943K-07
NOTE:
1. FINISH EDGES OF ALL DOORS AND DRAWERS WITH DOELLKEN WOODTAPE 5963

SSM-1 / NOT USED

SSM-2 / SOLID SURFACE WINDOW SILL MATERIAL
MANUF.: DUPONT, CORIAN
COLOR: BISQUE
FINISH: MATTE

09 30 00 TILING

PCT-1 / PORCELAIN TILE
DIST.: VIRGINIA TILE CO
MANUF.: CROSSVILLE, INC
STYLE: SPEAKEASY
COLOR: SWEET GEORGIA BROWN AV283
INSTALLATION METHOD: BRICK
SIZE: 8" x 36"
GROUT:
MANUF.: TEC, ACCUCOLOR
PRODUCT: POWER GROUT
COLOR: 982 SUMMER WHEAT
NOTE:
1. GROUT JOINTS TO BE 1/8" MAX

PCT-2 / PORCELAIN TILE
DIST.: VIRGINIA TILE CO
MANUF.: CROSSVILLE, INC
STYLE: READY TO WEAR
COLOR: SMARTY PANTS AV316
INSTALLATION METHOD: BRICK
SIZE: 12" x 24"
NOTE:
1. INSTALLED MONOLITHIC, HORIZONTAL
GROUT:
MANUF.: TEC, ACCUCOLOR
PRODUCT: POWER GROUT
COLOR: 933 STANDARD GRAY
NOTE:
1. GROUT JOINTS TO BE 1/8" MAX

PCT-3 / PORCELAIN TILE
DIST.: VIRGINIA TILE CO
MANUF.: CROSSVILLE, INC
STYLE: READY TO WEAR
COLOR: PERFECT FIT AV314
SIZE: 12" x 24"
NOTE:
1. INSTALLED MONOLITHIC, HORIZONTAL
GROUT:
MANUF.: TEC, ACCUCOLOR
PRODUCT: POWER GROUT
COLOR: 933 STANDARD GRAY
NOTE:
1. GROUT JOINTS TO BE 1/8" MAX

09 65 13 RESILIENT BASE AND ACCESSORIES

RB-1 / RUBBER BASE
MANUF.: JOHNSONITE
STYLE: TIGHTLOCK FOR RESILIENT FLOORING
MATERIAL: RUBBER (TYPE TP)
SIZE: 4.25" FACE, 75' COIL
COLOR: PEWTER 38

RB-2 / RUBBER BASE
MANUF.: JOHNSONITE
STYLE: TIGHTLOCK FOR CARPET
MATERIAL: RUBBER (TYPE TP)
SIZE: 4.5" FACE, 75' COIL
COLOR: PEWTER 38

09 65 19 RESILIENT TILE FLOORING

RTF-1 / RESILIENT TILE FLOORING
MANUF.: MANNINGTON, SPACIA
COLOR: LINEN WEAVE SS5A3800
INSTALLATION METHOD: BRICK (WEST TO EAST)
SIZE: 18" X 18"

09 67 23, 60 RESINOUS EPOXY FLOORING

EPX-1 / EPOXY FLOORING
MANUF.: STONHARD
STYLE: STONBLEND GSI
COLOR: STONE
NOTE:
1. WHERE INT IS NOTED FOR BASE, PROVIDE 4" INTEGRAL BASE FINISHED WITH A METAL CAP.

09 68 13 TILE CARPETING

CPT-1 / CARPET, TILE
MANUF.: ATLAS
STYLE: LIMBO TILE
COLOR: PARISIAN BREEZE 13LB
SIZE: 24" X 24"
INSTALL METHOD: BRICK- MONOLITHIC

09 72 00 WALL COVERINGS

WC-1 / WALLCOVERING, VINYL
MANUF.: PATTY MADDEN, LUXE SURFACES
STYLE: LUCA
COLOR: DOGWOOD LXB-LUC-06
SIZE: 52" WIDE HORIZONAL REPEAT

09 75 20 COUNTERTOPS

QS-1 / QUARTZ SURFACE
MANUF.: SILESTONE COLLECTION
COLOR: CYGNUS
FINISH: POLISHED
NOTE:
1. MENTAL HEALTH INFINITY EDGE

QS-2 / QUARTZ SURFACE
MANUF.: ETERNIA
COLOR: SAGE BRUSH
FINISH: POLISHED
NOTE:
1. MENTAL HEALTH INFINITY EDGE

09 91 00 PAINTING

PT-1 / PAINT, INTERIOR
MANUF.: PRATT & LAMBERTT
TOPCOAT: REDSEAL INTERIOR SELF-PRIMING WATERBORNE
COLOR: MOSS LAKE 19-30
SHEEN: EGGSHELL

PT-2 / PAINT, INTERIOR
MANUF.: PRATT & LAMBERTT
TOPCOAT: REDSEAL INTERIOR SELF-PRIMING WATERBORNE
COLOR: LAMBSWOOL 11-30
SHEEN: EGGSHELL

PT-3 / PAINT, INTERIOR
MANUF.: PRATT & LAMBERTT
TOPCOAT: REDSEAL INTERIOR SELF-PRIMING WATERBORNE
COLOR: RIVERSAND 11-29
SHEEN: EGGSHELL

PT-4 / PAINT, INTERIOR
MANUF.: PRATT & LAMBERTT
TOPCOAT: REDSEAL INTERIOR SELF-PRIMING WATERBORNE
COLOR: BAYOU 24-28
SHEEN: EGGSHELL

PT-5 / PAINT, INTERIOR
MANUF.: PRATT & LAMBERTT
TOPCOAT: REDSEAL INTERIOR SELF-PRIMING WATERBORNE
COLOR: BRIARWOOD 11-27
SHEEN: SEMI-GLOSS

PT-6 / PAINT, INTERIOR
MANUF.: PRATT & LAMBERTT
TOPCOAT: REDSEAL INTERIOR SELF-PRIMING WATERBORNE
COLOR: WINSLOW GREY 11-26
SHEEN: SEMI-GLOSS

PT-7/ PAINT, INTERIOR
MANUF.: BENJAMIN MOORE
COLOR: OAKWOOD MANOR 1095
SHEEN: SATIN

PT-8/ PAINT, SEE CEILINGS

10 26 00 WALL AND DOOR PROTECTION

BR-1/ BUMPER GUARD
MANUF.: CONSTRICTION SPECIALITES
MODEL: ECR-60A
COLOR: FINISH #4
NOTES:
1. INSTALL SO THAT BOTTOM OF BUMPER GUARD IS AT 6" AFF.

CG-1 / CORNER GUARD
MANUF.: KOROGARD
STYLE: GS30, 3" WING
COLOR: FINISH #4 STAINLESS STEEL
NOTE:
1. INSTALL FROM TOP OF BASE TO REVEAL. IF NO REVEAL EXISTS, EXTEND TO UNDERSIDE OF CEILING.
2. CORNER GUARDS TO BE INSTALLED WITH RECOMMENDED MASTIC ADHESIVE.

CG-2/ CORNER GUARD
MANUF.: C/S ACROVYN
STYLE: SCO-8 FOR END WALL CONDITIONS WITH 3" LEGS
COLOR: #4 STAINLESS STEEL
HEIGHT: INSTALL FULL HEIGHT FROM TOP OF BASE TO UNDERSIDE OF FINISHED CEILING.

HR-1 / HAND RAIL
MANUF: JULIUS BLUM & CO.
STYLE: 1 1/2" O.D. STAINLESS STEEL TUBE RAIL
COLOR: #4 CIRCULAR GRAIN
NOTE:
1. INSTALL @ 36" TO TOP OF HANDRAIL.
2. WALL BRACKETS TO BE PART NO. 275, STAINLESS FINISH.
3. INSTALL BRACKETS 4'-0" O.C. MAX HANDRAIL TO RETURN AT ALL ENDS.

WP-1 / IMPACT WALL PROTECTION
MANUF.: MDC WALLCOVERING
STYLE: HURLEY
COLOR: SILVER MIW4509/4791
HEIGHT: INSTALL FROM TOP OF BASE TO 48" ABV BASE.
NOTE:
1. INSTALL UTILIZING COORDINATING TRIM MOLDING TO FINISH EDGES WHERE REQUIRED.
2. HIGH IMPACK WALLCOVERING TO BE INSTALLED TO WALLS ONLY, NOT TO DOORS OR DOORFRAMES.

WP-2 / IMPACT WALL PROTECTION
MANUF.: KOROGARD
STYLE: TRAFFIC PATTERNS
GAUGE: .040"
COLOR: GRIDLOCK TURNPIKE G521-96
TOP TRIM: CS ACROVYN/BRUSHED NICKEL #378
NOTE:
1. INSTALL 4'-0" ABOVE BASE CONDITION
2. HIGH IMPACK WALLCOVERING TO BE INSTALLED TO WALLS ONLY, NOT TO DOORS OR DOORFRAMES.

CEILINGS

ACT-1ACOUSTIC CEILING TILE/ MFR: ARMSTRONG/ STYLE: CIRRUS ANGLED TEGULAR 584/ SIZE: 2' X 2'/ SUSPENSION SYSTEM: MFR: ARMSTRONG/ STYLE: PRELUDE/ SIZE: 15/16"

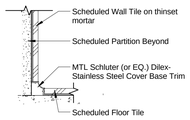
ACT-2ACOUSTIC CEILING TILE/ MFR: ARMSTRONG/ STYLE: CIRRUS ANGLED TEGULAR 581/ SIZE: 2' X 4'/ SUSPENSION SYSTEM: MFR: ARMSTRONG/ STYLE: PRELUDE/ SIZE: 15/16"

ACT-3ACOUSTIC CEILING TILE/ MFR: ARMSTRONG/ STYLE: ULTIMA BEVELED TEGULAR # 1912/ SIZE: 2' X 2'/ SUSPENSION SYSTEM: MFR: ARMSTRONG/ STYLE: SILHOUETTE XL, WHITE/ SIZE: 9/16" WITH 1/8" REVEAL

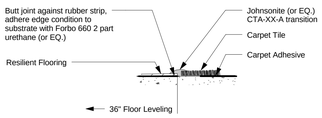
PT-8 CEILING PAINT/ MFR: SHERWIN WILLIAMS/ COLOR: CEILING WHITE/ FINISH: LATEX FLAT
NOTE: ALL NEW GYP. BD. CEILINGS AND SOFFITS TO BE PAINTED P-8. U.N.O.

TYPICAL FINISHED FLOORING TRANSITION DETAILS

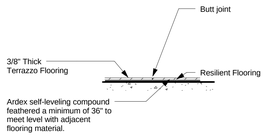
TRANSITION - WALL TILE TO FLOOR TILE



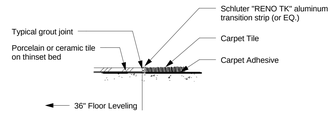
TRANSITION - RESILIENT FLOORING TO CARPET TILE



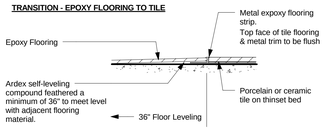
TRANSITION - TERRAZZO TO RESILIENT TILE



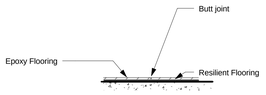
TRANSITION - PORCELAIN/CERAMIC TILE TO CARPET TILE



TRANSITION - EPOXY FLOORING TO TILE



TRANSITION - RESILIENT SHEET TO RESILIENT TILE



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Drawing Title: **ROOM FINISH SCHEDULE & MATERIAL LEGEND**

Approved: Project Director

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: RPN | Drawn: CRL

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-IF-03**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

GENERAL NOTES

CODES AND STANDARDS

1. Building has been designed to, and shall be constructed in accordance with the following building codes and standards:
   A. 2015 International Building Code (IBC 2015)
   B. ASCE 7-10, Minimum Design Loads for Buildings and Other Structures
2. Unless explicitly modified in the Contract Drawings and Specifications, the Contractor shall comply with provisions of:
   A. ACI 301-10, Specifications for Structural Concrete
   B. ACI 318-14, Building Code Requirements for Structural Concrete

DESIGN LOADS

Floor live load (unless otherwise noted)

Basement ---------- 80 psf (1)

(1) Per original construction documents

DESIGN STRESSES

Concrete minimum compressive strength in 28 days:
Structural lightweight concrete
(120 pcf max. air dried) ---------- f'_c = 4,000 psi
Reinforcing bars (ASTM A615, Grade 60) ---------- F_y = 60,000 psi
Welded wire reinforcement (ASTM A185) ---------- f_s = 30,000 psi

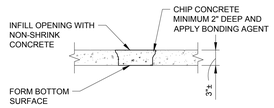
GENERAL

1. All new construction shall comply with the Contract Documents and the Building Code.
2. Typical details and general notes apply to all parts of the work except where specifically detailed or unless otherwise noted.
3. The structural drawings illustrate structural members. Refer to architectural, mechanical, and electrical drawings for non-structural items which require special provisions during the construction of the structural members.
4. Drawings are not to be scaled.
5. The Contractor shall verify and be responsible for all dimensions and conditions which impact the work. Field verify sizes, elevations, hole locations, etc., prior to fabrication.
6. The Contractor shall carefully review the drawings to identify the scope of work required, visit the site to relate the scope of work to existing conditions and determine the extent to which those conditions and physical surroundings will impact the work.
7. Existing conditions as shown on these plans are for reference only. The Contractor is required to field verify all existing conditions prior to construction.
8. The Contractor shall resolve any conflicts on the drawings or in the specifications with the Architect/Engineer before proceeding with the work.
9. Any deviation, modification, or substitution from the approved set of structural drawings shall be submitted to the Owner, Architect, and Engineer for review/approval prior to its use or inclusion on the shop drawings.
10. The Contractor shall provide means, method, techniques, sequence, and procedure of construction as required.
11. The Contractor shall protect all work, materials, and equipment from damage and shall provide proper storage facilities for materials and equipment during construction.
12. Site visits performed by the Architect/Engineer do not constitute inspections of means and methods of construction performed by the Contractor.
13. Structural observations performed by the Architect/Engineer during construction are not the continuous and special inspection services and do not waive the responsibility for the inspections required of the Building Department Inspector or the testing agency. Observations also do not guarantee the Contractor's performance and shall not be considered as supervision of construction.
14. The Contractor shall review shop drawings for completeness and compliance with contract documents. The Contractor shall stamp shop drawings prior to submission to the Architect and Engineer.
15. Review of the shop drawings by the Architect's Engineers shall not be construed as an authorization to deviate from the Contract Documents.
16. Shop drawings will not be processed if they are incomplete, lack coordination with relevant portion of contract documents, lack calculations if required, or if deviations, modifications, and substitutions are indicated without prior written approval from the Architect/Engineer.

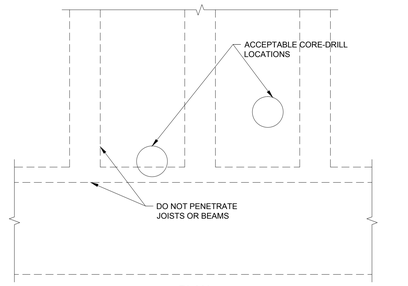
STRUCTURAL TESTING AND SPECIAL INSPECTIONS

Special structural testing and inspections are required. The Contractor shall hire an approved independent testing agency. The agency shall be designated as the special inspector and shall provide structural testing and special inspections as required by the building code and as noted in the Contract Documents. Reports of inspection and testing shall be sent to the Architect, Engineer, Owner, Contractor, and Building Department. Structural testing and special inspection shall include:

1. Concrete: mix data, daily pour reports, cylinder tests, slump, entrained air tests, and temperature.

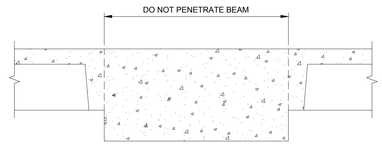


CONCRETE INFILL AT OPENINGS LESS THAN 12"
3/4"=1'-0"



PLAN

NOTE:
THIS DETAIL APPLIES TO CORE-DRILLED PENETRATIONS. NOTIFY ENGINEER OF ANY PENETRATIONS EXCEEDING 16"ø FOR REVIEW AND APPROVAL.



SECTION

CORE-DRILL PENETRATIONS THROUGH EXISTING CONCRETE FLOOR STRUCTURE
N.T.S.

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Revisions:	**Date**

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Drawing Title: **GENERAL NOTES AND TYPICAL DETAILS**	Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**		Project Number: 541-16-104
Approved:	Location: **VAMC - WADE PARK**		Building Number: 1
	Date: 06/17/16	Checked: **JAM** / Drawn: **PMG**	Drawing Number: **1-S1** Dwg. of

Office of Facilities Management
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

PROJECT COORDINATION NOTES:

A. THIS PROJECT CONSISTS OF MULTIPLE TRADES OF WORK PERFORMED WITHIN AN EXISTING BUILDING, ALL OF WHICH ALLOWS VERY LITTLE PERMISSIBLE RANGE OF VARIATION. THE CONTRACTOR SHALL TAKE CAREFUL CONSIDERATION WITH THE COORDINATION AND INSTALLATION OF THE MULTITUDE OF NEW SYSTEMS WHILE ALSO ACCOMMODATING ANY EXISTING SYSTEMS TO REMAIN.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TRADES ASSOCIATED WITH THIS PROJECT AND ISSUING COORDINATION PLANS PRIOR TO COMMENCEMENT OF EACH PHASE OF CONSTRUCTION.

C. CONTRACTOR SHALL FIELD MEASURE EXISTING TO REMAIN FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL ITEMS. THE COORDINATION DRAWINGS SHALL ILLUSTRATE ALL SYSTEMS IN PLACE. THE CONTRACTOR SHALL SHOW ALL NECESSARY OFFSETS, TRANSITIONS, ETC. AS REQUIRED IN ORDER TO ACCOMMODATE CONDITIONS IDENTIFIED IN THE FIELD.

D. IF CONFLICTS ARE IDENTIFIED DURING THE DEVELOPMENT OF COORDINATION PLANS, THE CONTRACTOR SHALL NOTIFY THE VA CONTRACTING OFFICER, ARCHITECT, AND ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THE PROJECT PLANS.

E. A COMPLETED SET OF COORDINATION PLANS ISSUED FOR REVIEW SHALL CONFIRM THAT THE CONTRACTOR FULLY UNDERSTANDS THE PROJECT CONSTRAINTS AND ALL KNOWN CONFLICTS HAVE BEEN ADDRESSED.

FIRE PROTECTION GENERAL NOTES:

A. COORDINATE ALL SHUT-DOWNS OF EXISTING FIRE PROTECTION SYSTEMS WITH OWNER A MINIMUM OF TEN WORKING DAYS IN ADVANCE.

B. PRIOR TO INSTALLATION, VERIFY PRECISE LOCATION OF NEW WALL MOUNTED DEVICES WITH OWNER AND ARCHITECT. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR PRECISE LOCATION OF CEILING MOUNTED DEVICES.

C. PROVIDE SERVICE CLEARANCE FOR ALL FIRE PROTECTION EQUIPMENT. REFER TO INSTRUCTIONS FROM THE EQUIPMENT MANUFACTURER.

D. NEW PIPING SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF PANELS.

E. THE CONTRACTOR SHALL PROVIDE DETAILED DESIGN OF THE SPRINKLER SYSTEM. REFER TO SPECIFICATIONS.

F. NEW SPRINKLERS SHALL BE QUICK RESPONSE, FULLY RECESSED CONCEALED STYLE UNLESS SPECIFIED OTHERWISE. COVER PLATES SHALL BE FURNISHED WITH COLOR TO MATCH ADJACENT CEILINGS. ALL SPRINKLERS FURNISHED AS PART OF THIS PROJECT SHALL HAVE COVER PLATES WITH THE SAME SHAPE AND SIZE.

G. THE FIRE PROTECTION SYSTEM IS PERFORMANCE SPECIFIED. ALL SPRINKLER PIPE SIZES SHALL BE DETERMINED BY FIRE PROTECTION CONTRACTOR, BASED ON HYDRAULIC CALCULATIONS.

H. THE CONTRACTOR IS RESPONSIBLE TO SUBMIT THEIR FIRE PROTECTION SHOP DRAWINGS TO OWNERS INSURANCE UNDERWRITER AND LOCAL FIRE MARSHAL AND OBTAIN APPROVAL PRIOR TO STARTING WORK.

I. PROVIDE SUPPLEMENTAL DRAINS AS NECESSARY TO PROVIDE 100% SYSTEM DRAINAGE. LOCATE DRAINS ABOVE ACCESSIBLE CEILINGS.

J. COORDINATE PHASING REQUIREMENTS WITH ARCHITECTURAL PLANS.

K. SPRINKLERS SHALL BE SPACED TO PROVIDE FULL COVERAGE TO ENTIRE PROJECT AREA. ARCHITECTURAL REFLECTIVE CEILING PLANS SHALL ILLUSTRATE PROPOSED LOCATIONS FOR HEADS. ARCHITECTURAL PLANS SHALL BE USED FOR REFERENCE ONLY. SPRINKLER LAYOUT SHALL BE COORDINATED WITH ALL TRADES.

L. WHERE SPRINKLER HEADS ARE INSTALLED IN 2X2 CEILING TILES, HEADS SHALL BE CENTERED IN BOTH DIRECTIONS. WHERE SPRINKLER HEADS ARE INSTALLED IN 2'x4' CEILING TILES. HEADS SHALL BE INSTALLED IN THE CENTER OF ONE HALF OF THE TILE.

FIRE PROTECTION LEGEND AND ABBREVIATIONS

NOTE: THIS LEGEND IS INTENDED TO AID IN THE UNDERSTANDING OF SHORTHAND, SYMBOLS AND ABBREVIATIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS. IT IS NOT THE INTENTION TO DESCRIBE THE PROJECT SCOPE OF WORK, FOR DETAILED SCOPE OF WORK PLEASE REFER TO THE SUBSEQUENT DRAWINGS.

CALL OUTS:

#	REFERENCE TO CODED NOTE
EQ-# (EQUIPMENT TYPE; UNIT NUMBER)	EQUIPMENT OR FIXTURE MARK
	REMOVE TO POINT INDICATED
	CONNECT TO EXISTING

ABBREVIATIONS:

RO	ROOF OPENING
PC	PLUMBING CONTRACTOR
FC	FIRE SUPPRESSION CONTRACTOR
HC	HVAC CONTRACTOR
TC	TEMPERATURE CONTROL CONTRACTOR
GC	GENERAL TRADES CONTRACTOR
EC	ELECTRICAL CONTRACTOR
AFF	ABOVE FINISHED FLOOR
AD	ACCESS DOOR
RD	ROOF DRAIN
FD	FLOOR DRAIN
VTR	VENT THROUGH ROOF
ETR	EXISTING TO REMAIN
CTE	CONNECT TO EXISTING
P.C.	PLUMBING CONTRACTOR
F.C.	FIRE SUPPRESSION CONTRACTOR
G.C.	GENERAL CONTRACTOR

DEMOLITION SYMBOLS:

X	EXISTING TO REMAIN
XR	EXISTING TO BE REMOVED
XRL	EXISTING TO BE RELOCATED
XNL	EXISTING NEW LOCATION

FIRE SUPPRESSION SYMBOLS:

A	REFERENCE TO CODED NOTE
V-1	EQUIPMENT OR FIXTURE MARK
— F —	FIRE SUPPRESSION PIPE

FIRE PROTECTION PIPING:

— F —	FIRE PROTECTION PIPING
TS	TAMPER SWITCH
FS	FLOW SWITCH

MISCELLANEOUS SYMBOLS

— B —	STRUCTURAL BEAMS

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Revisions:	**Date**

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Drawing Title
FIRE PROTECTION LEGEND AND GENERAL NOTES

Approved:

Project Title
ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked DAD | Drawn JTP

Project Number 541-16-104

Building Number 1

Drawing Number
1-FP0.1
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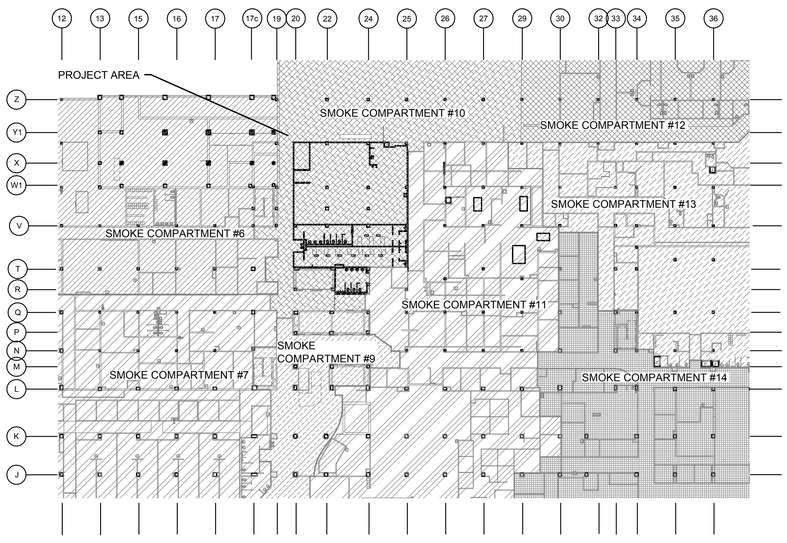
SMOKE COMPARTMENT LEGEND

- SMOKE COMPARTMENT # 6
- SMOKE COMPARTMENT #7
- SMOKE COMPARTMENT #9
- SMOKE COMPARTMENT #10
- SMOKE COMPARTMENT #11
- SMOKE COMPARTMENT #12
- SMOKE COMPARTMENT #13
- SMOKE COMPARTMENT #14



PARTIAL BASEMENT SMOKE COMPARTMENT PLAN (1)

SCALE: 1/32" = 1'0"

0' 16' 32' 64' 128'

DEDUCT ALTERNATE #1

(A1) UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT NEW SPRINKLER HEADS IN CORRIDOR B-C492 AND B-C502, EXISTING HEADS WILL REMAIN.

FIRE SUPPRESSION LEGEND

ALL OUTLINED AREAS SHALL BE 100% FULL SPRINKLERED WITH A WET-TYPE SPRINKLER SYSTEMS IN ACCORDANCE WITH NFPA 13 AND OWNER REQUIREMENTS SPRINKLER HEADS SHALL BE INSTALLED SO AS TO ACCOMMODATE ANY NEW CEILINGS AND PARTITION LAYOUT. COORDINATE SPRINKLER HEAD LAYOUT WITH ARCHITECTURAL REFLECTED CEILING PLAN. REFER TO MECHANICAL SPECIFICATIONS AND FIRE SUPPRESSION NOTES FOR ADDITIONAL INFORMATION. REMOVE ABANDONED PIPING AND EXISTING PIPE SERVING THE HATCHED AREA PROVIDE NEW SPRINKLER MAIN PIPING IN HATCHED AREA TO ACCOMMODATE RENOVATIONS AND INSTALLATION OF ALL NEW TRADES. PROVIDE ALL NEW PIPING. PROVIDE NEW RECESSED CONCEALED QUICK RESPONSE SPRINKLER HEADS WITH WHITE COVER PLATES IN ROOMS . SEE ARCHITECTURAL LIFE SAFETY PLAN FOR LOCATION OF SMOKE BARRIER. EACH SEPARATE SMOKE COMPARTMENT SHALL BE FED OFF OF SEPARATE SPRINKLER ZONES.

XF2 XF2 XF2 XF3	EXISTING 2 HR FIRE BARRIER
XF1 XF1 XF1 XF1	EXISTING 1 HR FIRE BARRIER
XSM XSM XSM XSM1	EXISTING 1 HR SMOKE BARRIER
XSP XSP XSP XSP	EXISTING 0 HR SMOKE PARTITION
F2 F2 F2 F2	NEW 2 HR FIRE BARRIER
F1 F1 F1 F1	NEW 1 HR FIRE BARRIER
SM SM SM SM1	NEW 1 HR SMOKE BARRIER
SP SP SP SP	NEW 0 HR SMOKE PARTITION

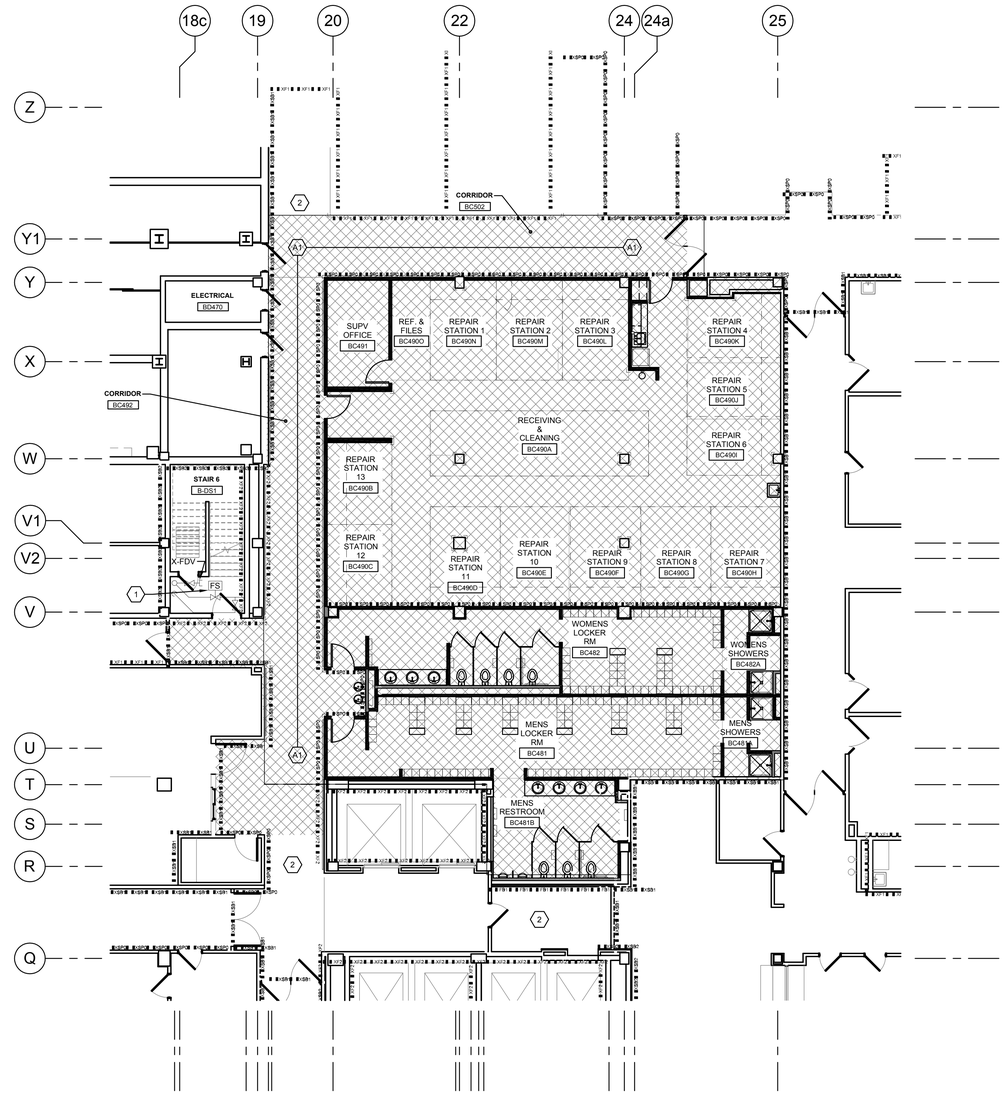
GENERAL NOTES:

1. THE INTENTION OF THIS CONTRACT IS THAT ALL EXISTING FIRE PROTECTION SYSTEMS BE REVISED TO PERMIT ANY AND ALL NEW CONSTRUCTION. THE CONTRACTOR SHALL ASSUME THAT DEMOLITION OF ALL EXISTING FIRE SUPPRESSION SYSTEM COMPONENTS WILL BE NECESSARY TO ELIMINATE ABOVE CEILING CONFLICTS. THE FIRE PROTECTION SYSTEM SHALL BE MAINTAINED AND OPERATIONAL THROUGHOUT CONSTRUCTION. THIS CAN BE ACCOMPLISHED ONE OF TWO WAYS:
   a. THE CONTRACTOR SHALL DEMOLISH ALL EXISTING FIRE SUPPRESSION SYSTEM COMPONENTS BACK TO THE SPRINKLER MAINS. THE CONTRACTOR SHALL INSTALL NEW BRANCH LINES AND PROVIDE NEW UPRIGHT HEADS TO REPLACE DEMOLISHED HEADS TO PROVIDE COMPLETE COVERAGE AND PROTECTION DURING CONSTRUCTION. AFTER NEW CEILINGS ARE INSTALLED AND NEW PENDANT HEADS INSTALLED, THE ABOVE CEILING UPRIGHT HEADS SHALL BE REMOVED AND PLUGGED.
   b. THE CONTRACTOR SHALL PROVIDE 24 HOUR MAN FIRE WATCH UNTIL ALL NEW CONSTRUCTION IS COMPLETE AND NEW SYSTEM IS FULLY FUNCTIONAL AND OPERATIONAL.
2. AS THE FIRE SUPPRESSION SYSTEMS ARE PERFORMANCE SPECIFIED, IT IS CONTRACTOR'S RESPONSIBILITY TO CONDUCT A FIELD WALK-THROUGH AND TO OBTAIN AS-BUILT DRAWINGS TO FAMILIARIZE THE CONTRACTOR WITH EXISTING CONDITIONS.

CODED NOTES:

(1) EXISTING VALVE WITH TAMPER SWITCH AND FLOW SWITCH FROM X-4" STANDPIPE SERVES PROJECT AREA.

(2) PROVIDE A BRANCH LINE FROM THE PROJECT AREA TO TIE INTO EXISTING BRANCH LINE FEEDING ADJACENT AREAS WITHIN SMOKE COMPARTMENT. THE RESULT BEING THAT THE ENTIRE SMOKE COMPARTMENT #10 WILL BE SERVED OFF OF THE TAMPER VALVE AND FLOW SWITCH LOCATED IN STAIRWELL #6



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Drawing Title: **PARTIAL BASEMENT FIRE PROTECTION PLAN**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-FP1.1**

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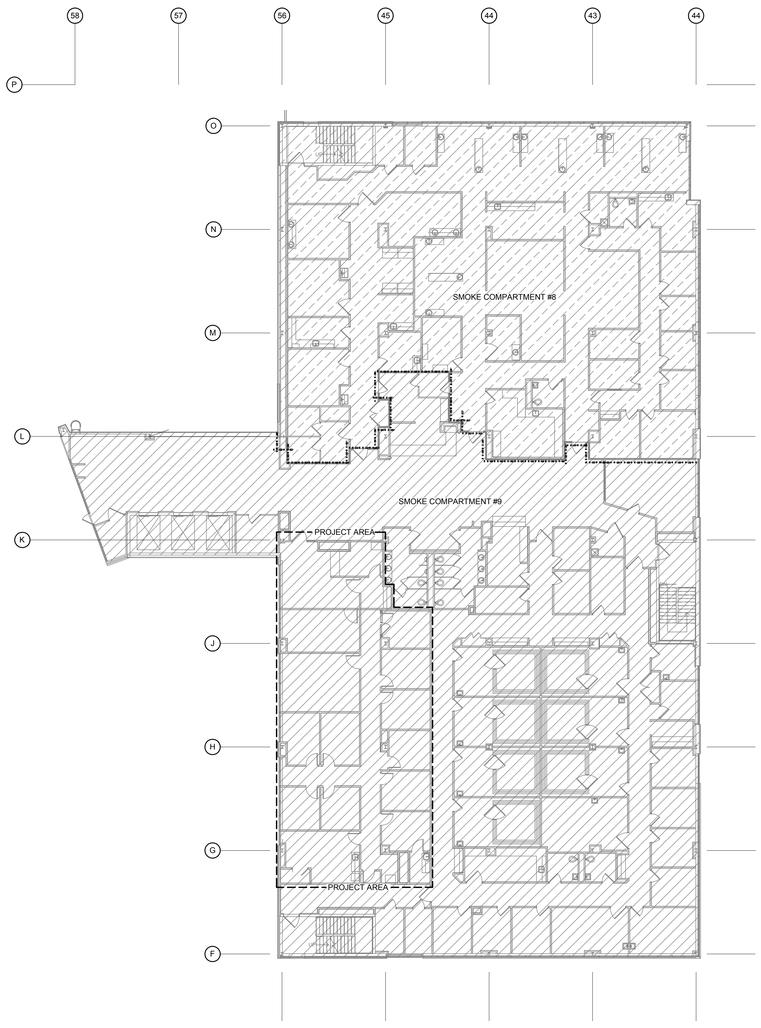
VA FORM 08-6231, OCT 1978

SMOKE COMPARTMENT LEGEND

SMOKE COMPARTMENT #8

SMOKE COMPARTMENT #9



PARTIAL FOURTH FLOOR SMOKE COMPARTMENT PLAN 1

SCALE: 1/16" = 1'0"

0' 8' 16' 32' 64'

FIRE SUPPRESSION LEGEND

ALL OUTLINED AREAS SHALL BE 100% FULL SPRINKLERED WITH A WET-TYPE SPRINKLER SYSTEMS IN ACCORDANCE WITH NFPA 13 AND OWNER REQUIREMENTS SPRINKLER HEADS SHALL BE INSTALLED SO AS TO ACCOMMODATE ANY NEW CEILINGS AND PARTITION LAYOUT. COORDINATE SPRINKLER HEAD LAYOUT WITH ARCHITECTURAL REFLECTED CEILING PLAN. REFER TO MECHANICAL SPECIFICATIONS AND FIRE SUPPRESSION NOTES FOR ADDITIONAL INFORMATION. DEMOLISH BRANCH PIPING AND REWORK SPRINKLER MAIN PIPING IN HATCHED AREA TO ACCOMMODATE RENOVATIONS AND INSTALLATION OF ALL NEW TRADES. PROVIDE ALL NEW PIPING. PROVIDE NEW RECESSED CONCEALED QUICK RESPONSE SPRINKLER HEADS WITH WHITE COVER PLATES IN ROOMS . SEE ARCHITECTURAL LIFE SAFETY PLAN FOR LOCATION OF SMOKE BARRIER. EACH SEPARATE SMOKE COMPARTMENT SHALL BE FED OFF OF SEPARATE SPRINKLER ZONES.

■ 3/2 ■ 3/2 ■ 3/2	EXISTING 2 HR FIRE BARRIER
■ 3/1 ■ 3/1 ■ 3/1	EXISTING 1 HR FIRE BARRIER
■ S3/S ■ S3/S ■ S3/S	EXISTING 1 HR SMOKE BARRIER
■ S/P ■ S/P ■ S/P	EXISTING 0 HR SMOKE PARTITION
■ F/2 ■ F/2 ■ F/2	NEW 2 HR FIRE BARRIER
■ F/1 ■ F/1 ■ F/1	NEW 1 HR FIRE BARRIER
■ S/1 ■ S/1 ■ S/1	NEW 1 HR SMOKE BARRIER
■ S/P ■ S/P ■ S/P	NEW 0 HR SMOKE PARTITION

GENERAL NOTES:

1. THE INTENTION OF THIS CONTRACT IS THAT ALL EXISTING FIRE PROTECTION SYSTEMS BE REVISED TO PERMIT ANY AND ALL NEW CONSTRUCTION. THE CONTRACTOR SHALL ASSUME THAT DEMOLITION OF ALL EXISTING FIRE SUPPRESSION SYSTEM COMPONENTS WILL BE NECESSARY TO ELIMINATE ABOVE CEILING CONFLICTS. THE FIRE PROTECTION SYSTEM SHALL BE MAINTAINED AND OPERATIONAL THROUGHOUT CONSTRUCTION. THIS CAN BE ACCOMPLISHED ONE OF TWO WAYS:

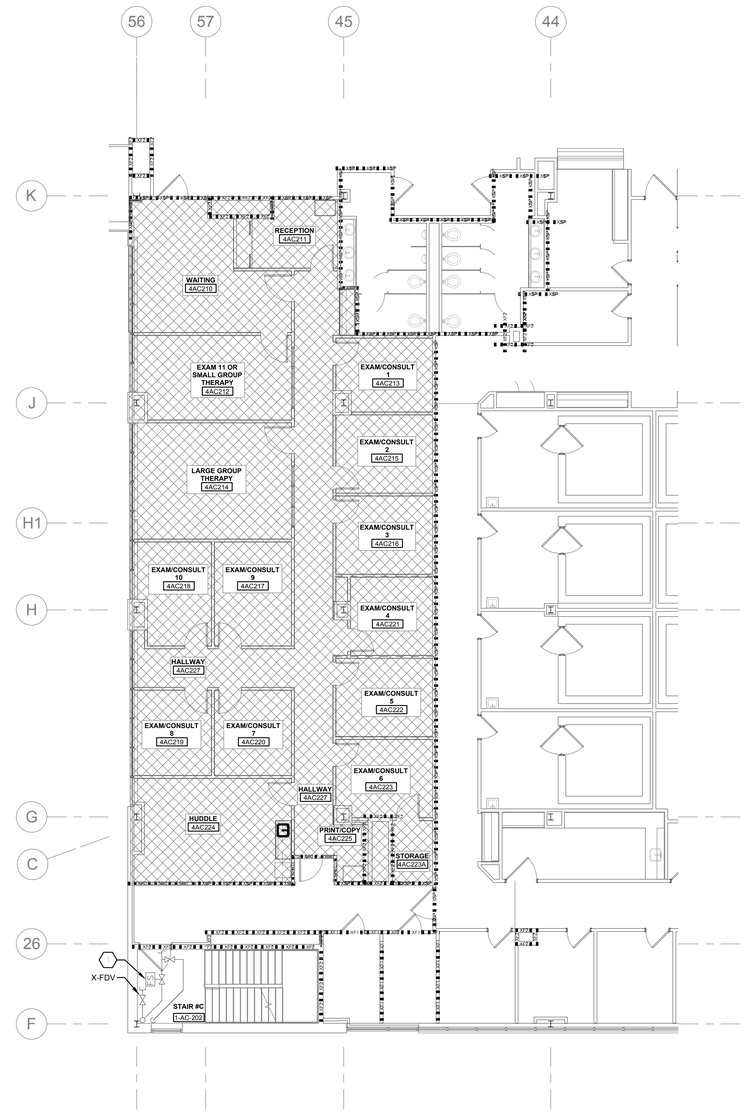
   a. THE CONTRACTOR SHALL DEMOLISH ALL EXISTING FIRE SUPPRESSION SYSTEM COMPONENTS BACK TO THE SPRINKLER MAINS. THE CONTRACTOR SHALL INSTALL NEW BRANCH LINES AND PROVIDE NEW UPRIGHT HEADS TO REPLACE DEMOLISHED HEADS TO PROVIDE COMPLETE COVERAGE AND PROTECTION DURING CONSTRUCTION. AFTER NEW CEILINGS ARE INSTALLED AND NEW PENDANT HEADS INSTALLED, THE ABOVE CEILING UPRIGHT HEADS SHALL BE REMOVED AND PLUGGED.

   b. THE CONTRACTOR SHALL PROVIDE 24 HOUR MAN FIRE WATCH UNTIL ALL NEW CONSTRUCTION IS COMPLETE AND NEW SYSTEM IS FULLY FUNCTIONAL AND OPERATIONAL.

2. AS THE FIRE SUPPRESSION SYSTEMS ARE PERFORMANCE SPECIFIED, IT IS CONTRACTOR'S RESPONSIBILITY TO CONDUCT A FIELD WALK-THROUGH AND TO OBTAIN AS-BUILT DRAWINGS TO FAMILIARIZE THE CONTRACTOR WITH EXISTING CONDITIONS.

CODED NOTES:

(1) EXISTING VALVE WITH TAMPER SWITCH AND FLOW SWITCH FROM X-4" STANDPIPE SERVES PROJECT AREA.



PARTIAL FOURTH FLOOR FIRE PROTECTION PLAN 2

SCALE: 1/8" = 1'0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

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Drawing Title
PARTIAL FOURTH FLOOR FIRE PROTECTION PLAN

Approved:

Project Title
ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	DAD	JXC

Project Number
541-16-104

Building Number
1

Drawing Number
1-FP1.2

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Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

PROJECT COORDINATION NOTES:

A. THIS PROJECT CONSISTS OF MULTIPLE TRADES OF WORK PERFORMED WITHIN AN EXISTING BUILDING, ALL OF WHICH ALLOWS VERY LITTLE PERMISSIBLE RANGE OF VARIATION. THE CONTRACTOR SHALL TAKE CAREFUL CONSIDERATION WITH THE COORDINATION AND INSTALLATION OF THE MULTITUDE OF NEW SYSTEMS WHILE ALSO ACCOMMODATING ANY EXISTING SYSTEMS TO REMAIN.

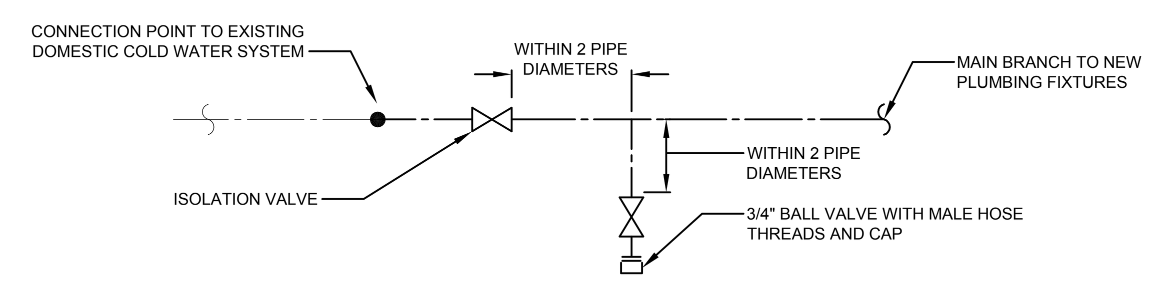
B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TRADES ASSOCIATED WITH THIS PROJECT AND ISSUING COORDINATION PLANS PRIOR TO COMMENCEMENT OF EACH PHASE OF CONSTRUCTION.

C. CONTRACTOR SHALL FIELD MEASURE EXISTING TO REMAIN FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL ITEMS. THE COORDINATION DRAWINGS SHALL ILLUSTRATE ALL SYSTEMS IN PLACE. THE CONTRACTOR SHALL SHOW ALL NECESSARY OFFSETS, TRANSITIONS, ETC. AS REQUIRED IN ORDER TO ACCOMMODATE CONDITIONS IDENTIFIED IN THE FIELD.

D. IF CONFLICTS ARE IDENTIFIED DURING THE DEVELOPMENT OF COORDINATION PLANS, THE CONTRACTOR SHALL NOTIFY THE VA CONTRACTING OFFICER, ARCHITECT, AND ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THE PROJECT PLANS.

E. A COMPLETED SET OF COORDINATION PLANS ISSUED FOR REVIEW SHALL CONFIRM THAT THE CONTRACTOR FULLY UNDERSTANDS THE PROJECT CONSTRAINTS AND ALL KNOWN CONFLICTS HAVE BEEN ADDRESSED.

DOMESTIC WATER FLUSHING TAP



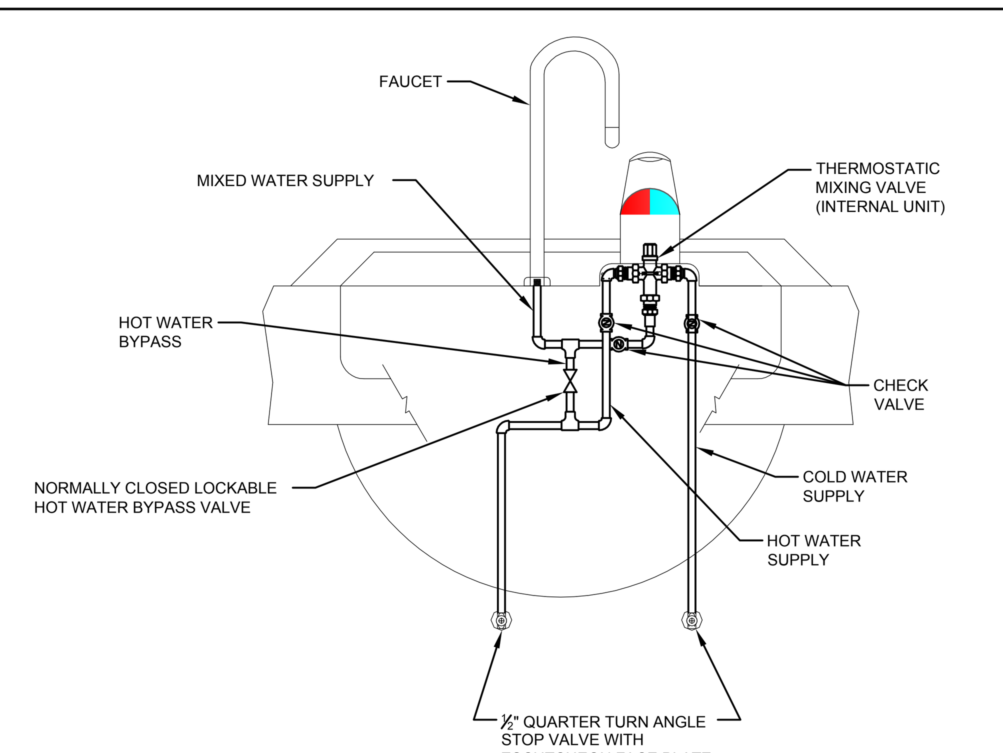
NOTE:
PROVIDE FLUSHING TAPS FOR EACH DOMESTIC WATER SYSTEM: DOMESTIC COLD WATER, DOMESTIC HOT WATER, DOMESTIC HOT WATER RETURN.

SEQUENCE OF OPERATIONS:

1. DOMESTIC WATER FLUSH AND DISINFECTION PRIOR TO CONNECT TO HOSPITAL SYSTEMS, AND BEFORE ACCEPTANCE BY THE VA. CONTRACTOR SHALL SCHEDULE TEST WITH VA AND DOCUMENT DISINFECTION WITH A WITNESSED REPORT.
   A. REMOVE ALL LAMINAR FLOW DEVICES AND OR SCREENS AND COMPLETELY FLUSH ALL FIXTURES AT FULL VOLUME FOR 10 MINUTES. SOURCE WATER SHALL HAVE A BACKFLOW PROTECTION DEVICE.
   B. INSTALL ISOLATION VALVES AND INJECTION TEES ON THE HOT, COLD AND HOT WATER RETURN LINES SO ALL FIXTURES INSTALLED IN THE SCOPE OF THE PROJECT CAN BE DISINFECTED (SHOCK CHLORINATED). INSURE ISOLATION VALVES ARE INSTALLED TO PROHIBIT DISINFECTION CHEMICALS FROM ENTERING BACK INTO THE MEDICAL CENTER DOMESTIC WATER LINES.
   C. DISINFECTION SHALL BE AT A LEVEL OF AT LEAST 200 PPM FREE CHLORINE FOR A MINIMUM OF 2 HOURS AND A MAXIMUM OF 24 HOURS. ALL FIXTURES SHOULD HAVE 200 PPM AT THE TAP. (STRONG SMELL OF CHLORINE AT THE FAUCET).
   D. AFTER DISINFECTION ALL FIXTURES MUST BE FLUSHED AND TESTED TO INSURE SAFE POTABLE WATER LEVELS ARE AVAILABLE. NO MORE THAN 3 PPM FREE CHLORINE.
   E. SUBMIT REPORT WHICH DOCUMENTS ABOVE TEST AND PROCEDURE. RESULT SHALL BE WITNESSED AND SIGNED OFF BY VA REPRESENTATIVE.

NOT TO SCALE

SENSOR OPERATED FAUCET CONTROL WITH INTEGRAL MIXING VALVE DETAIL



NOT TO SCALE

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	BRANCH PIPE SIZE			
		CW	HW	WASTE	VENT
P103	WALL HUNG WATER CLOSET WITH SENSOR	1-1/2"	-	4"	2"
P103A	WALL HUNG WATER CLOSET WITH SENSOR ADA	1-1/2"	-	4"	2"
P202	URINAL WALL HUNG	3/4"	-	2"	1-1/2"
P417	VITREOUS CHINA DROP IN LAVATORY WITH SENSOR (NOTE 1)	3/4"	3/4"	1-1/2"	1-1/2"
P516	STAINLESS STEEL WALL HUNG SINK (NOTE 1)	3/4"	3/4"	1-1/2"	1-1/2"
P528	STAINLESS STEEL UNDERMOUNT SINK (NOTE 1)	3/4"	3/4"	1-1/2"	1-1/2"
P609	ELECTRIC WATER COOLER WALL HUNG	3/4"	-	1-1/2"	1-1/2"
P702	SHOWER	3/4"	3/4"	3"	2"
P702A	ADA SHOWER	3/4"	3/4"	3"	2"
P708	WALL HUNG EMERGENCY EYE AND FACE WASH	3/4"	3/4"	1-1/2"	1-1/2"
FD-C	FLOOR DRAIN (NOTE 2)	-	-	4"	2"
TP-1	TRAP PRIMER	1/2"	-	-	-
WCO	WALL CLEANOUT	-	-	-	-

NOTES:
(1) PROVIDE THERMOSTATIC MIXING VALVE FOR EACH LAVATORY, SINK, AND EMERGENCY EYEWASH.
(2) PROVIDE TRAP PRIMER PIPED TO EACH FLOOR DRAIN.

PLUMBING GENERAL NOTES:

A. CONTRACTOR SHALL FIELD VERIFY CONDITIONS SHOWN ON DESIGN DOCUMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THESE DRAWINGS.

B. COORDINATE ALL SHUT-DOWNS OF EXISTING PLUMBING SYSTEMS WITH OWNER A MINIMUM OF TEN WORKING DAYS IN ADVANCE.

C. PRIOR TO INSTALLATION, VERIFY PRECISE LOCATION OF NEW WALL MOUNTED DEVICES WITH OWNER AND ARCHITECT.

D. PROVIDE SERVICE CLEARANCE FOR ALL PLUMBING EQUIPMENT. REFER TO INSTRUCTIONS FROM THE EQUIPMENT MANUFACTURER.

E. NEW PIPING SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF PANELS.

F. PROVIDE ISOLATION VALVES ON ALL BRANCH PIPING AND ON ALL SUPPLIES TO INDIVIDUAL FIXTURES AND EQUIPMENT. PROVIDE ISOLATION VALVES ON ALL WATER MAIN BRANCHES IN CORRIDORS AND WHERE INDICATED ON DRAWINGS.

G. DEMOLITION OF PLUMBING FIXTURES SHALL INCLUDE ASSOCIATED VALVES, PIPING, INSULATION, CARRIERS, ETC. BACK TO ACTIVE MAINS AND CAPPED. INCLUDE REMOVAL AND REPLACEMENT OF CEILINGS AND CUTTING AND PATCHING OF WALLS AND FLOORS. FILL AND PATCH ALL OPENINGS CREATED BY THE REMOVAL OF FIXTURES AND PIPING TO MATCH SURROUNDING SURFACES.

H. INSTALL WATER HAMMER ARRESTERS IN DOMESTIC HOT AND COLD WATER PIPING AT EACH GROUP OF PLUMBING FIXTURES. SIZE AND LOCATE WATER HAMMER ARRESTERS ACCORDING TO PDI-WH 201.

I. WHERE WORK IS SHOWN ABOVE EXISTING CEILINGS THE CONTRACTOR SHALL REMOVE AND REPLACE EXISTING CEILINGS AS REQUIRED TO PERFORM ALL WORK DESCRIBED.

J. DOMESTIC HOT WATER LINES SHALL BE MAINTAINED AT OR ABOVE 125 DEG F.

K. PROVIDE MIXING VALVES AT OR NEAR ALL FAUCETS, SHOWERS, TUBS, AND EMERGENCY FIXTURES. MOUNT IN ACCESSIBLE LOCATION. NOTE FIXTURES WITH INTEGRAL MIXING VALVES IN SPECIFICATION SECTION 22 40 00.

L. ALL NEW DOMESTIC WATER LINES (CW, HW, HWR) SHALL BE FLUSHED AND DISINFECTED BY THE CONTRACTOR PRIOR TO FINAL INSPECTION. REFER TO SPECIFICATION SECTION 22 11 00 FOR ADDITIONAL INFORMATION.

M. MINIMIZE LENGTH OF DEAD LEGS TO 10 FEET OR LESS. NOTIFY VA COR OF ANY CONFLICTS PRIOR TO INSTALLATION.

N. DO NOT USE AERATORS ON LAVATORIES OR SINKS.

O. REPLACE CEILING TILES AND/OR GRID WHEN DAMAGED WHILE PERFORMING WORK OR DUE TO SYSTEM LEAKS.

P. CONTRACTOR SHALL REMOVE AND REPLACE CEILING TILES AND GRID AS REQUIRED TO COMPLETE DEMOLITION AND NEW WORK IN AREAS OUTSIDE OF RENOVATION PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY TILES OR GRID DAMAGED DUE TO THIS WORK.

PLUMBING LEGEND AND ABBREVIATIONS

NOTE: THIS LEGEND IS INTENDED TO AID IN THE UNDERSTANDING OF SHORTHAND, SYMBOLS AND ABBREVIATIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS. IT IS NOT THE INTENTION TO DESCRIBE THE PROJECT SCOPE OF WORK, FOR DETAILED SCOPE OF WORK PLEASE REFER TO THE SUBSEQUENT DRAWINGS.

CALL OUTS:

#	REFERENCE TO CODED NOTE
EQ-# (EQUIPMENT TYPE / UNIT NUMBER)	EQUIPMENT OR FIXTURE MARK
	REMOVE TO POINT INDICATED
	CONNECT TO EXISTING

ABBREVIATIONS:

RO	ROOF OPENING
CTE	CONNECT TO EXISTING
LOD	LIMIT OF DEMOLITION
PC	PLUMBING CONTRACTOR
FC	FIRE SUPPRESSION CONTRACTOR
HC	HVAC CONTRACTOR
TC	TEMPERATURE CONTROL CONTRACTOR
GC	GENERAL TRADES CONTRACTOR
EC	ELECTRICAL CONTRACTOR
AFF	ABOVE FINISHED FLOOR
AD	ACCESS DOOR
RD	ROOF DRAIN
FD	FLOOR DRAIN
VTR	VENT THROUGH ROOF
SP	SUMP PUMP
NTS	NOT TO SCALE

DEMOLITION SYMBOLS:

X	EXISTING TO REMAIN
XR	EXISTING TO BE REMOVED
XRL	EXISTING TO BE RELOCATED
XNL	EXISTING NEW LOCATION

PLUMBING PIPING:

ST	STORM LEADER
EST	EMERGENCY STORM LEADER
SAN	SANITARY WASTE
USAN	SANITARY WASTE BELOW GRADE
V	PLUMBING VENT
CW	DOMESTIC COLD WATER SUPPLY
HW	DOMESTIC HOT WATER SUPPLY
HWR	DOMESTIC HOT WATER RETURN

PLUMBING SYMBOLS:

9'-2"	HEIGHT OF BOTTOM OF PIPE ABOVE FLOOR
	BRANCH PIPE CONNECTION
	ISOLATION VALVE
	CHECK VALVE
	UNION
	REDUCER
	STRAINER
	BALANCING VALVE
	TWO POSITION VALVE
	PRESSURE REDUCING VALVE
	FLEXIBLE PIPE CONNECTOR
	THERMOMETER IN PIPE WELL
	PIPE GUIDE
	PIPE EXPANSION ANCHOR
E.L.	FLEXIBLE METAL EXPANSION LOOP ASSEMBLY
	GAUGE PORT (PETE'S PLUG)
	DRAIN VALVE WITH HOSE FITTING
	PRESSURE GAUGE
	LOCAL DRAIN, VALVED WITH 3/4" THREADED CONNECTOR
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
TF	TANK FITTING
MAV	MANUAL AIR VENT
	PRESSURE RELIEF VALVE
	PIPE DOWN
	PIPE RISE UP
	PIPE CAP
	FLOOR DRAIN

FULLY SPRINKLERED

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

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-P0.1**

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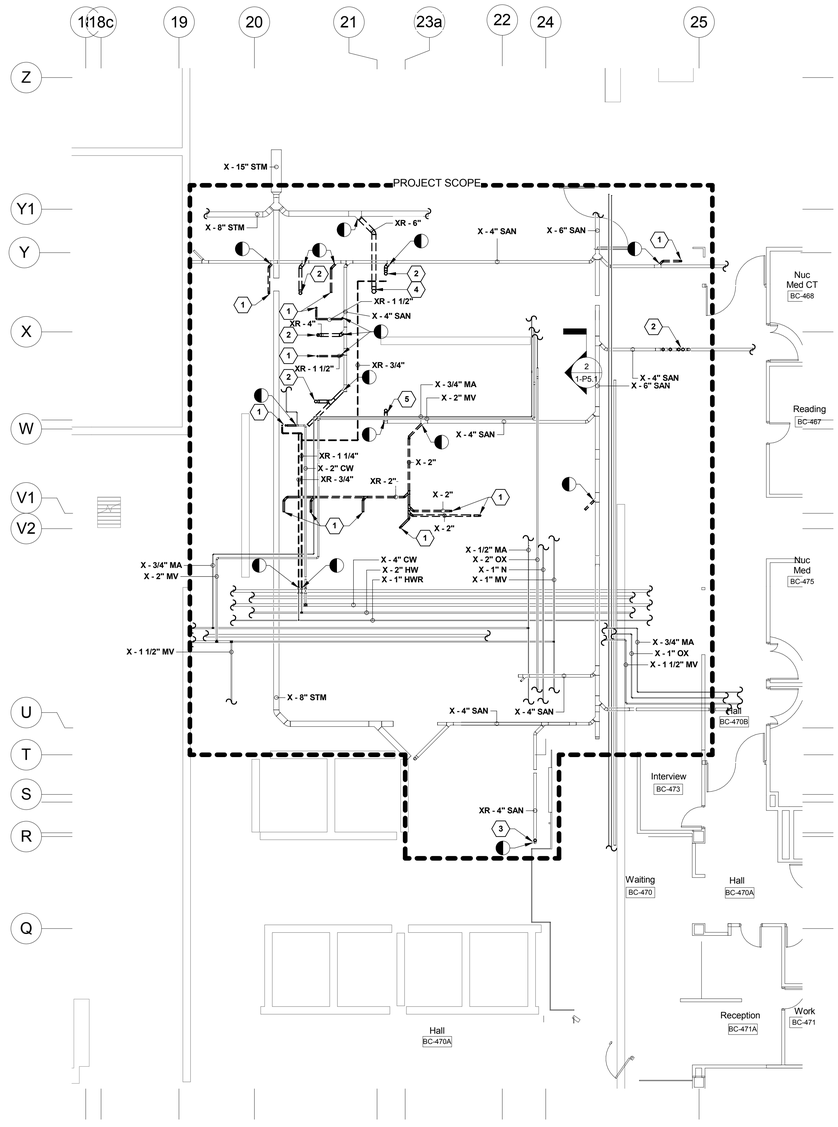
Department of Veterans Affairs



PARTIAL SUB BASEMENT PLUMBING DEMOLITION PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'

GENERAL NOTES

1. DEMO BRANCH LINES AS INDICATED AND PROVIDE CAPS AT MAINS.
2. TRACE OUT BRANCH LINES PRIOR TO DEMOLITION TO VERIFY THEY ARE NOT TIED TO LIVE BRANCHES OR FIXTURES
3. PATCH ALL OPENING CREATED AS A RESULT OF DEMOLITION. REPAIR TO MATCH MATERIAL TYPE.

DEMOLITION CODED NOTES

1. REMOVE 2" SANITARY UP THROUGH FLOOR SERVING FIXTURE ABOVE AND PATCH HOLE WITH CONCRETE.
2. REMOVE 4" SANITARY UP THROUGH FLOOR SERVING FIXTURE ABOVE AND PATCH HOLE WITH CONCRETE.
3. REMOVE EXISTING 4" SANITARY RISER UP IN EXISTING CHASE ABOVE AND PATCH HOLE WITH CONCRETE.
4. REMOVE EXISTING 6" STORM RISER UP IN EXISTING CHASE ABOVE AND PATCH HOLE WITH CONCRETE.
5. REMOVE EXISTING 4" SANITARY RISER UP IN EXISTING WALL ABOVE AND PATCH HOLE WITH CONCRETE.

FULLY SPRINKLERED

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CONSULTANTS:

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Drawing Title
PARTIAL SUB BASEMENT PLUMBING DEMOLITION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

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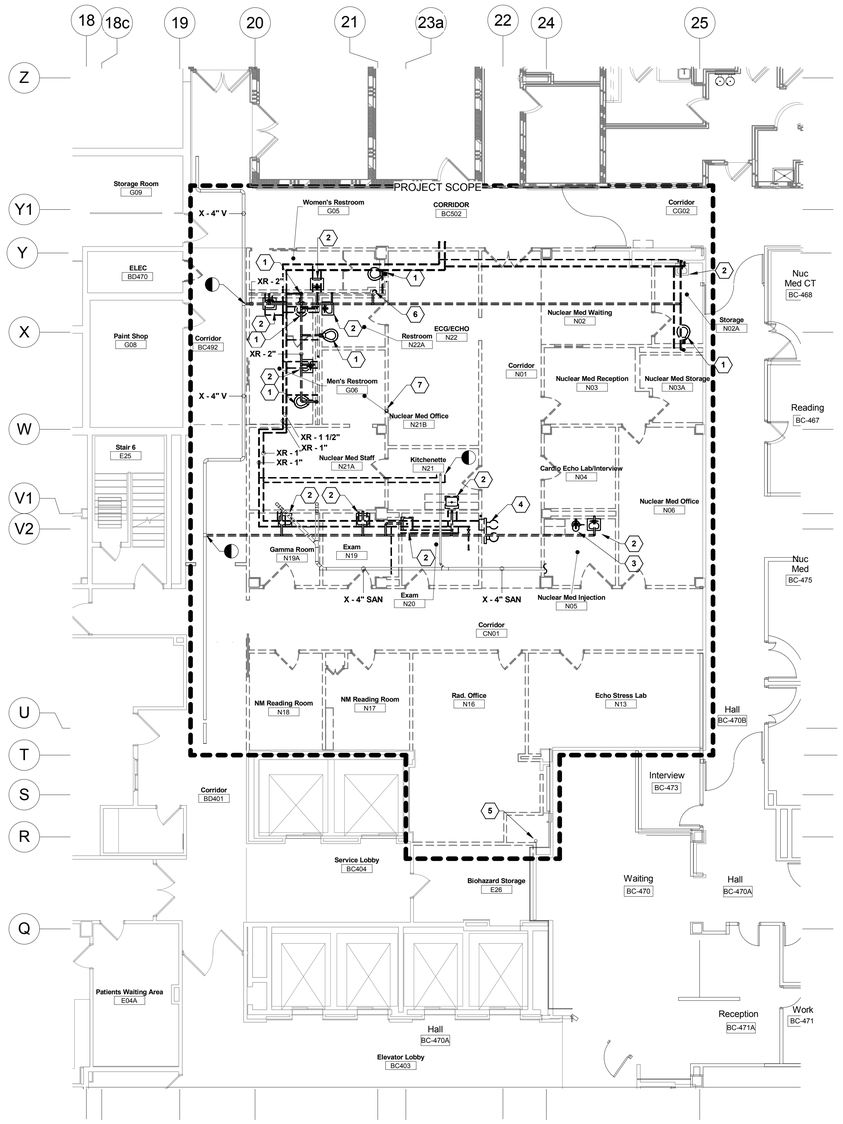
GENERAL NOTES

A. PATCH ALL OPENINGS IN FLOORS AND WALLS LEFT AFTER DEMOLITION. FLOORS SHALL BE PATCHED WITH CONCRETE, WALL PATCHES SHALL MATCH WALL MATERIAL.

DEMOLITION CODED NOTES

1. REMOVE EXISTING WATER CLOSET COMPLETE. REMOVE ALL COLD WATER, VENT, AND SANITARY PIPING BACK TO ACTIVE MAINS AND CAP.
2. REMOVE EXISTING LAVATORY COMPLETE. REMOVE ALL HOT WATER, COLD WATER, VENT, AND SANITARY PIPING BACK TO ACTIVE MAINS AND CAP.
3. REMOVE EXISTING EMERGENCY SHOWER COMPLETE. REMOVE ALL HOT WATER, COLD WATER, VENT, AND SANITARY PIPING BACK TO ACTIVE MAINS AND CAP.
4. REMOVE EXISTING ELECTRIC DRINKING FOUNTAIN COMPLETE. REMOVE COLD WATER, VENT, AND SANITARY PIPING BACK TO ACTIVE MAINS AND CAP.
5. REMOVE EXISTING 4" SANITARY RISER IN EXISTING CHASE AND CAP IN BASEMENT CEILING FOR RELOCATION TO NEW RESTROOM CHASE.
6. REMOVE EXISTING 6" STORM RISER IN EXISTING CHASE AND CAP IN BASEMENT CEILING FOR RELOCATION TO CHASE.
7. REMOVE EXISTING 4" SANITARY RISER IN EXISTING WALL AND CAP IN BASEMENT CEILING FOR RELOCATION TO CHASE.



PARTIAL BASEMENT PLUMBING DEMOLITION PLAN

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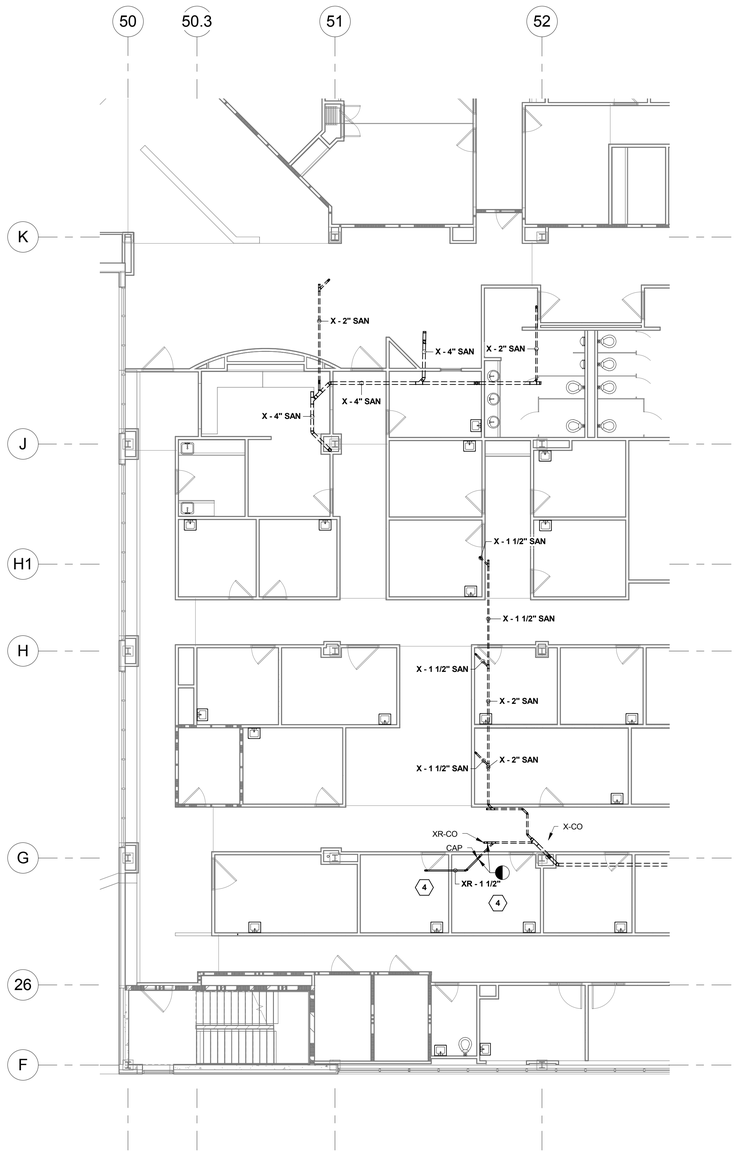


PARTIAL THIRD FLOOR PLUMBING DEMOLITION PLAN

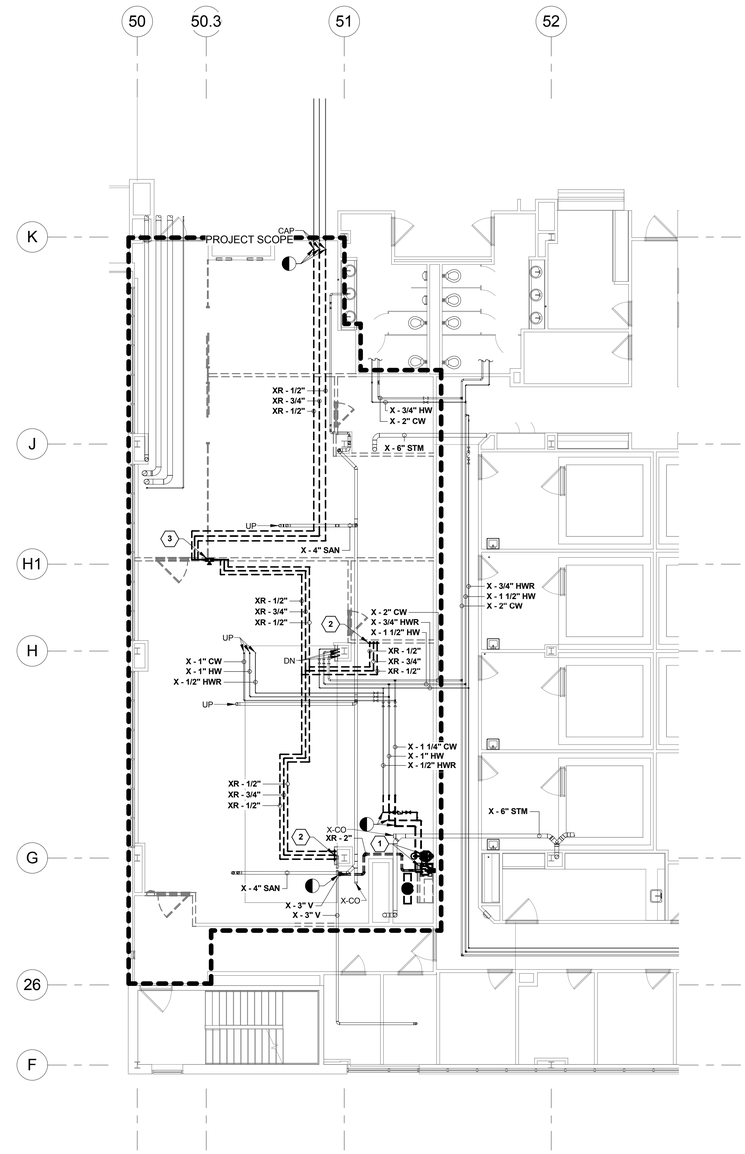
1

1/8" = 1'-0"

0' 4' 8' 16' 32'

DEMOLITION CODED NOTES

1. REMOVE EXISTING PLUMBING FIXTURE COMPLETE. REMOVE ASSOCIATED HOT WATER, COLD WATER, VENT AND SANITARY PIPING BACK TO ACTIVE MAIN AND CAP.
2. REMOVE EXISTING OXYGEN, MEDICAL AIR AND MEDICAL VACUUM OUTLETS COMPLETE.
3. REMOVE EXISTING MEDICAL ZONE VALVE BOX COMPLETE (1/2" MEDICAL AIR, 3/4" MEDICAL VACUUM AND 1/2" OXYGEN).
4. WORK SHALL BE COMPLETED DURING OFF HOURS AND COORDINATED WITH FACILITIES. REMOVE AND REPLACE CEILING TILES/ HARD CEILINGS IN ORDER TO COMPLETE WORK. CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT OF ANY DAMAGED FINISHES DURING INSTALLATION AND SHALL MATCH EXISTING. CLEAN WORK AREA AT THE END OF EACH SHIFT.



PARTIAL FOURTH FLOOR PLUMBING DEMOLITON PLAN

2

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title
PARTIAL THIRD AND FOURTH FLOOR PLUMBING DEMOLITION PLANS

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
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Project Number
541-16-104

Building Number
1

Drawing Number
1-P1.3

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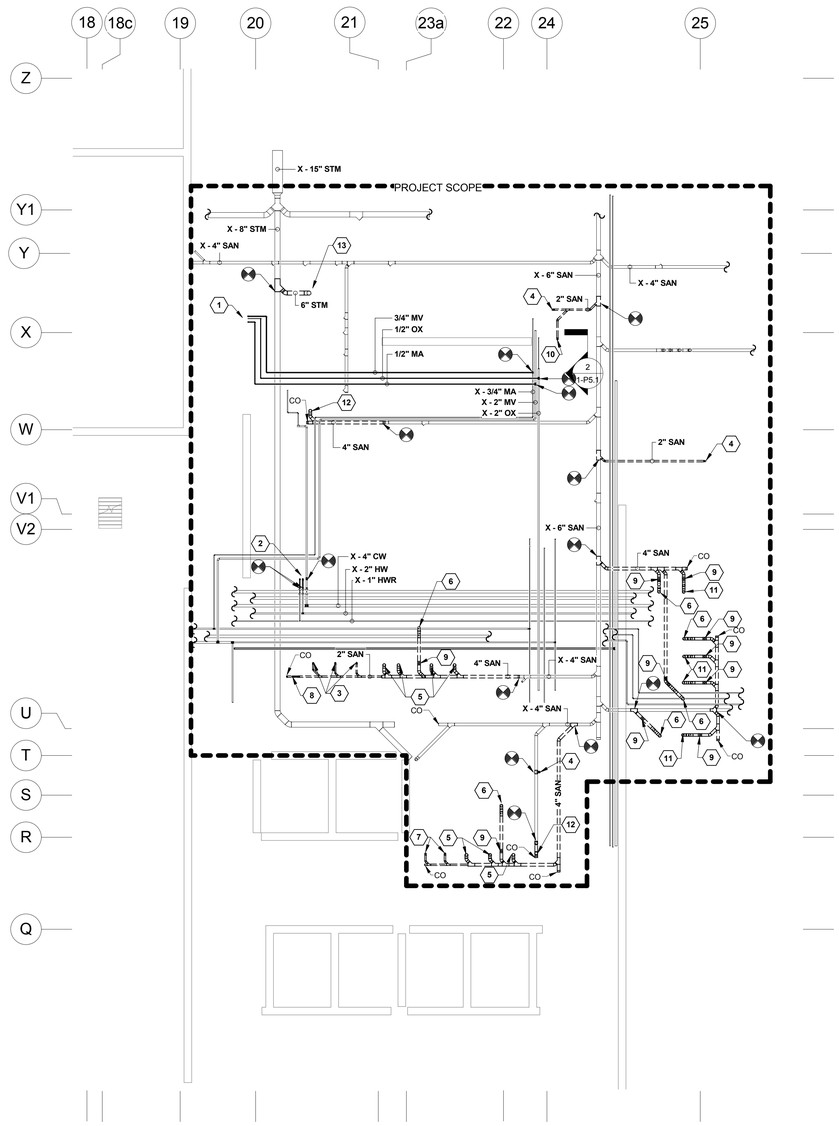

GENERAL NOTES

1. SEE ISOMETRIC FOR PIPE SIZES.
2. CORE DRILL AND FIRESTOP ALL FLOOR PENETRATIONS.

CODED NOTES

1. NEW 1/2" MEDICAL OXYGEN, 1/2" MEDICAL AIR AND 3/4" MEDICAL VACUUM UP IN NEW WALL TO NEW ZONE VALVE BOX LOCATED IN THE FIRST BASEMENT. CORE DRILL FLOOR AND FIRESTOP.
2. NEW 2" DOMESTIC COLD WATER, 1-1/4" DOMESTIC HOT WATER AND 3/4" DOMESTIC HOT WATER UP IN WALL.
3. NEW 1-1/2" SANITARY UP TO LAVATORY.
4. NEW 2" SANITARY UP TO SINK.
5. NEW 4" SANITARY UP TO WATER CLOSEST.
6. NEW 4" SANITARY UP TO FLOOR DRAIN.
7. NEW 2" SANITARY UP TO URINAL.
8. NEW 1-1/2" SANITARY UP TO ELECTRIC WATER COOLER
9. NEW 2" VENT UP IN WALL.
10. NEW 1-1/2" SANITARY UP TO EMERGENCY EYE WASH.
11. NEW 4" SANITARY UP TO FLOOR DRAIN IN SHOWER.
12. NEW 4" SANITARY UP THRU FLOOR.
13. NEW 6" STORM UP THRU FLOOR.

N

PARTIAL SUB BASEMENT PIPING PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title
PARTIAL SUB BASEMENT PLUMBING PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked DAD | Drawn JTP

Project Number 541-16-104

Building Number 1

Drawing Number **1-P2.1**

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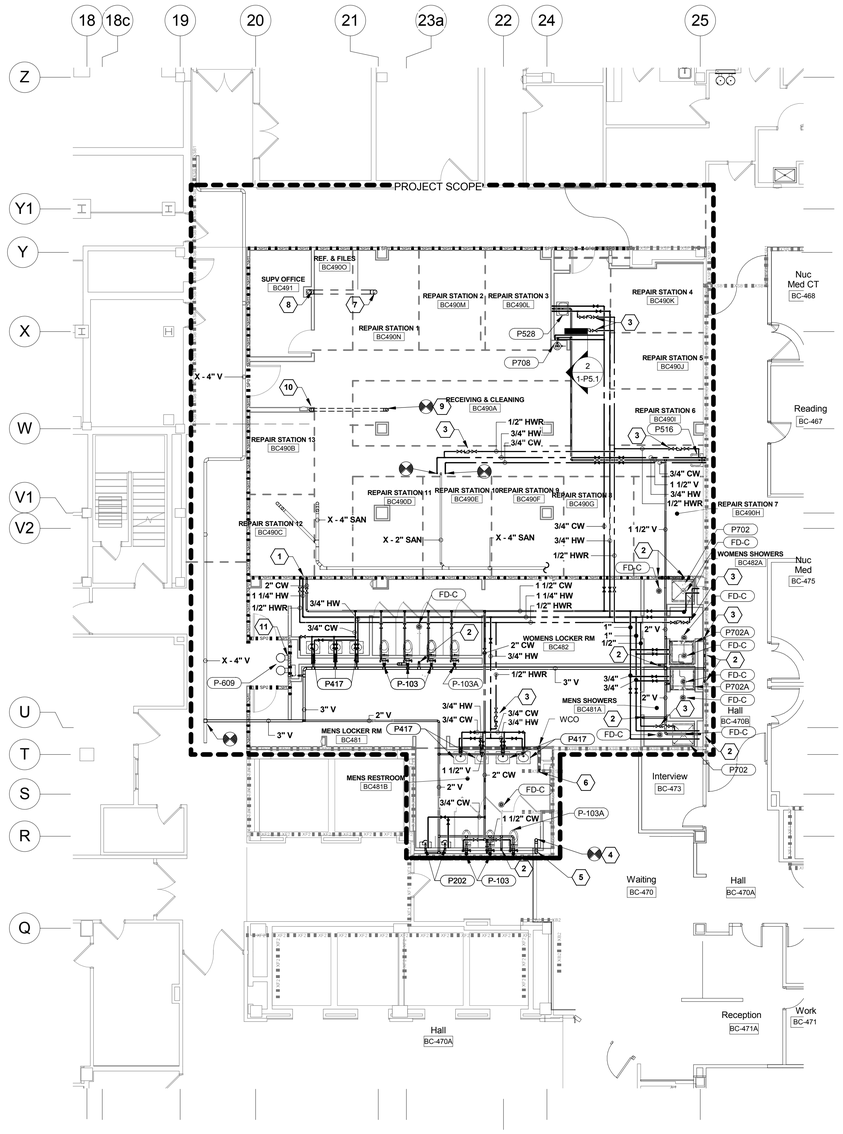

PARTIAL BASEMENT PLUMBING PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

GENERAL NOTES

A. SEE PLUMBING FIXTURE SCHEDULES FOR BRANCH PIPING SIZES.

CODED NOTES

1. NEW 2" DOMESTIC COLD WATER, 1-1/4" DOMESTIC HOT WATER AND 3/4" DOMESTIC HOT WATER RETURN DOWN IN WALL TO SUB-BASEMENT.
2. NEW 2" VENT UP FROM SUB-BASEMENT TO SERVE FLOOR DRAIN P-TRAPS.
3. PROVIDE DOMESTIC HOT WATER VALVE ASSEMBLY PER DETAIL. BALANCE TO 0.5 GPM.
4. CONNECT NEW 4" SANITARY RISER TO EXISTING 4" SANITARY CAPPED IN CEILING AND ROUTE DOWN IN NEW CHASE.
5. NEW 4" SANITARY DOWN THRU FLOOR IN CHASE.
6. 2" SANITARY DOWN IN WALL AND THRU FLOOR TO SUB-BASEMENT.
7. CONNECT NEW 6" STORM RISER TO EXISTING 6" STORM CAPPED IN CEILING AND ROUTE DOWN IN NEW CHASE.
8. NEW 6" STORM DOWN THRU FLOOR.
9. CONNECT NEW 4" SANITARY RISER TO EXISTING 4" SANITARY CAPPED IN CEILING AND ROUTE DOWN IN NEW WALL.
10. NEW 4" SANITARY DOWN THRU FLOOR IN WALL.
11. 3/4" DCW AND 1-1/2" VENT DOWN TO WATER COOLER. 1-1/2" SANITARY DOWN THRU FLOOR.

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Drawing Title: **PARTIAL BASEMENT PLUMBING PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-P2.2**

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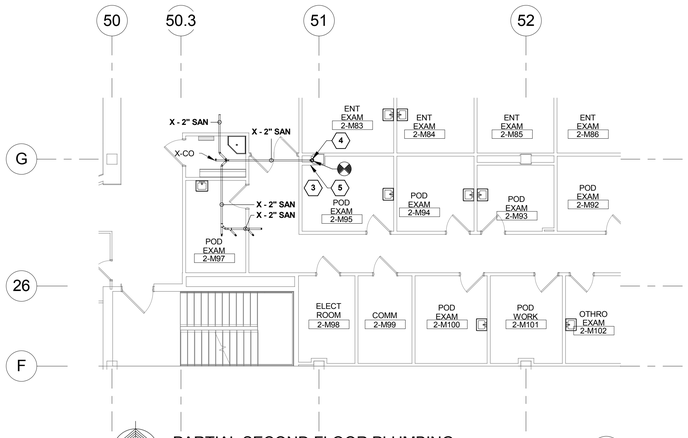


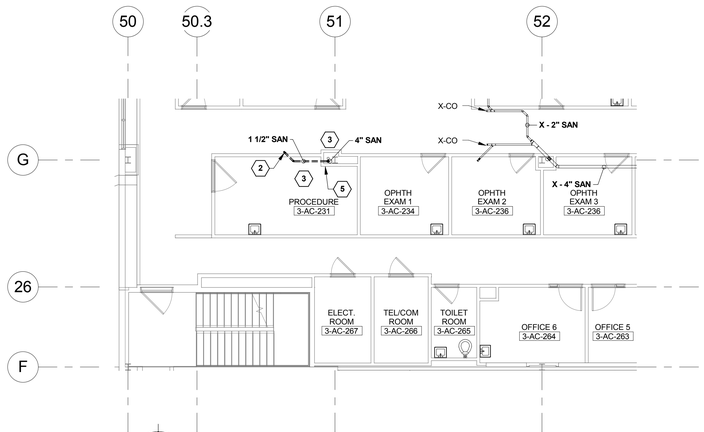
PARTIAL SECOND FLOOR PLUMBING 2

1/8" = 1'-0"

0' 4' 8' 16' 32'

CODED NOTES

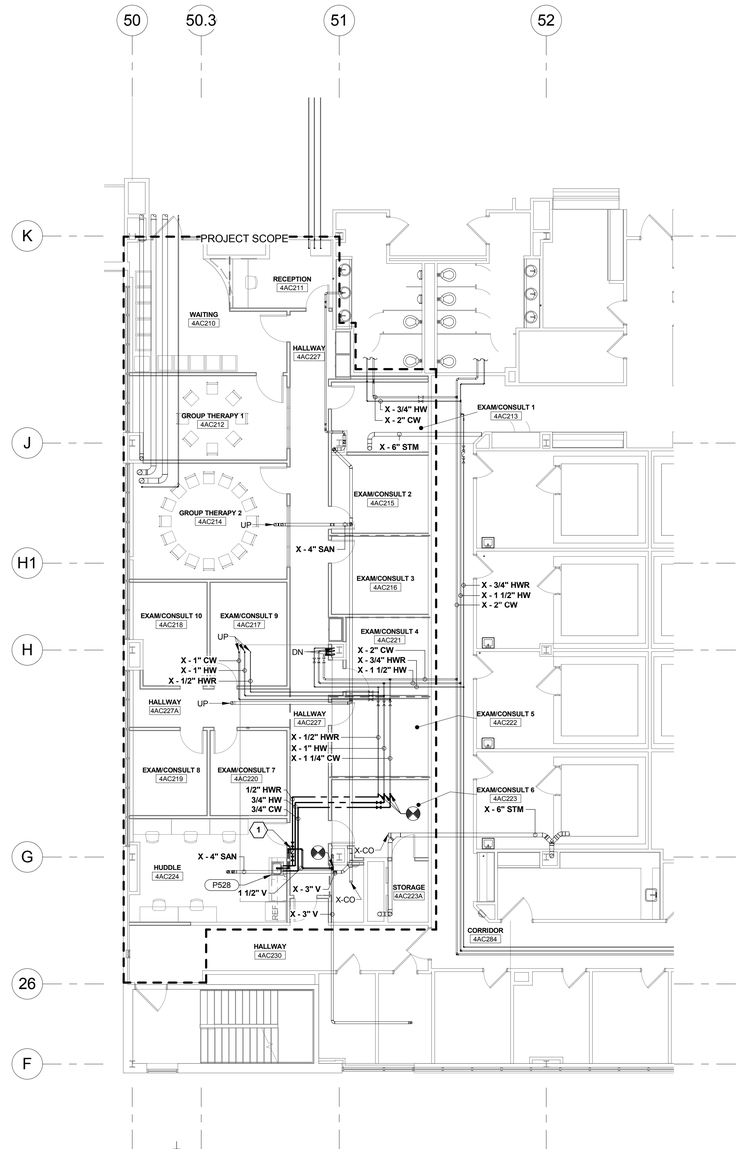
1. PROVIDE DOMESTIC HOT WATER VALVE ASSEMBLY PER DETAIL. BALANCE TO 0.5 GPM.
2. NEW 1-1/2" SANITARY PIPING UP THROUGH FLOOR TO FOURTH FLOOR PLUMBING FIXTURE.
3. WORK SHALL BE COMPLETED DURING OFF HOURS AND COORDINATED WITH FACILITIES. REMOVE AND REPLACE CEILING TILES/ HARD CEILINGS IN ORDER TO COMPLETE WORK. CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT OF ANY DAMAGED FINISHES DURING INSTALLATION AND SHALL MATCH EXISTING. CLEAN WORK AREA AT THE END OF EACH SHIFT.
4. CONNECT TO EXISTING 4" SANITARY IN CHASE. ROUTE NEW 4" SANITARY UP THROUGH FLOOR ABOVE 3RD FLOOR CEILING.
5. REMOVE AND REPLACE DRYWALL AND FINISHES, AS NECESSARY TO COMPLETE WORK. CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT OF ANY DAMAGED FINISHES DURING INSTALLATION AND SHALL MATCH EXISTING.



PARTIAL THIRD FLOOR PLUMBING PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'



PARTIAL FOURTH FLOOR PLUMBING PLAN 3

1/8" = 1'-0"

0' 4' 8' 16' 32'

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Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **PARTIAL THIRD AND FOURTH FLOOR PLUMBING PLANS**

Approved:

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Location: **VAMC - WADE PARK**

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Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-P2.3**

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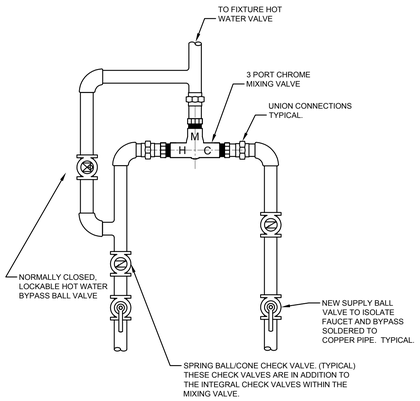
9 FAUCET MIXING VALVE



NOTES:

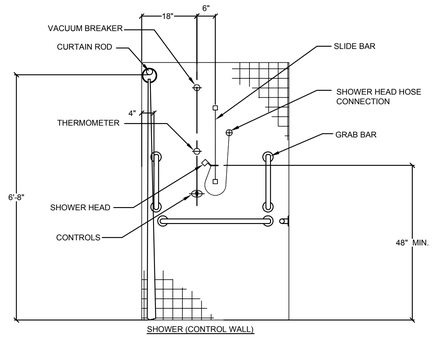
1. 3/8" BYPASS IN LOCKED CABINETS- USE A QUARTER TURN STOP. ALL PIPING SHALL BE RIGID AND SECURE.
2. 3/8" BYPASS EXPOSED- USE A LOOSE KEY CHROME STOP. ALL PIPING SHALL BE RIGID AND SECURE.
3. SPRING BALL/CONE TYPE CHECK VALVES SHALL BE USED, (NOT SWING TYPE).
4. MIXING VALVES ARE TO BE CHROME PLATED IN ALL APPLICATIONS.
5. REFER TO PLUMBING SYSTEMS MANUAL AND SCHEDULE TO COORDINATE SYSTEMS INSTALLATION WITH EACH LOCATION THAT REQUIRES A SPECIALIZED APPLICATION.

MIXING VALVE:

THERMOSTATIC MIXING VALVES MAINTAIN AND LIMIT HOT WATER TO DESIRED SELECTABLE TEMPERATURE BETWEEN 80°F AND 120°F (27°C AND 49°C) WITH FLOW RATES AS LOW AS 0.5 GPM (1.9 LPM) AND AS HIGH AS 2.5 GPM (9.5 LPM). THE MIXING VALVE IS LISTED TO ASSE STANDARDS 1070 FOR SINGLE FIXTURE APPLICATIONS. THE MIXING VALVE SHALL USE A DOUBLE THROTTLING DESIGN TO CONTROL BOTH THE HOT AND COLD WATER SUPPLY TO THE MIXED OUTLET. THE MIXING VALVE SHALL PROVIDE ACCURATE TEMPERATURE CONTROL (±3 DEGREES FAHRENHEIT) WITH LOW PRESSURE DROP. MIXING VALVE SHALL INCORPORATE DUAL CHECK VALVES TO PROTECT AGAINST CROSS-FLOW AND INTEGRAL SCREENS TO FILTER OUT DEBRIS. INSULATE ALL PLUMBING.

NOT TO SCALE

8 SHOWER CONTROL WALL

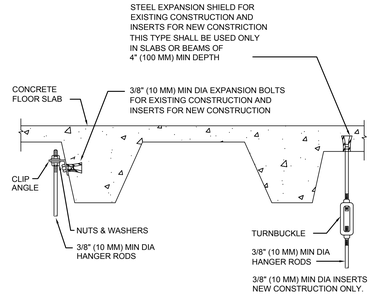


NOTES:

1. VERIFY EXACT DEVICE LOCATIONS WITH ARCHITECT.

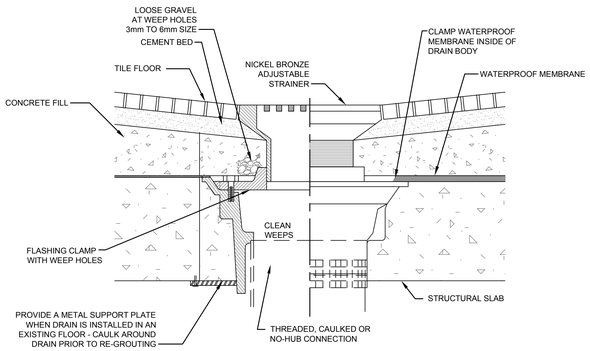
NOT TO SCALE

7 TYPICAL HANGER RODS SECURING METHOD



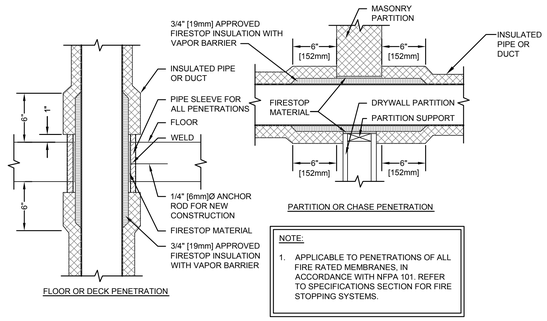
NOT TO SCALE

6 FLOOR DRAIN DETAIL



NOT TO SCALE

5 PIPE / DUCT PENETRATION OF FIRE / SMOKE BARRIERS

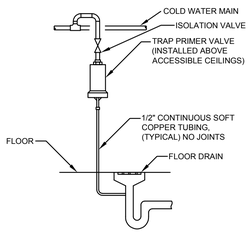


NOTE:

1. APPLICABLE TO PENETRATIONS OF ALL FIRE RATED MEMBRANES, IN ACCORDANCE WITH NFPA 101. REFER TO SPECIFICATIONS SECTION FOR FIRE STOPPING SYSTEMS.

NOT TO SCALE

4 TRAP PRIMER DETAIL

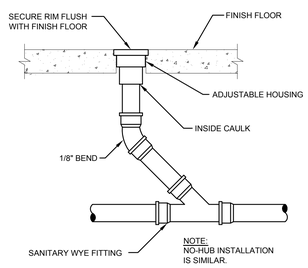


NOTES:

1. ALL FLOOR DRAINS SHALL BE PROVIDED WITH A TRAP PRIMER.
2. TRAP PRIMER PIPING SHALL BE CONCEALED IN WALL.
3. COORDINATE TRAP PRIMER LOCATIONS WITH THE COR PRIOR TO INSTALLATION.

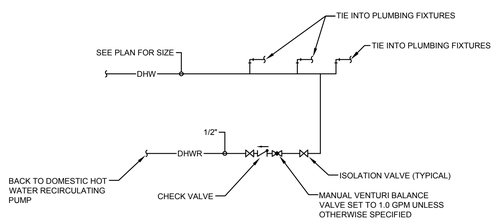
NOT TO SCALE

3 FLOOR CLEANOUT DETAIL



NOT TO SCALE

2 DOMESTIC HOT WATER RETURN VALVE ASSEMBLY DETAIL



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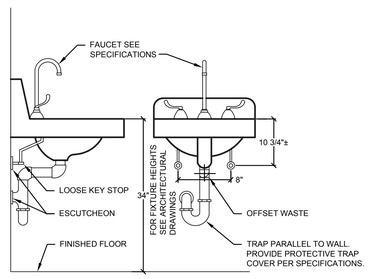
1 ADA LAVATORY DETAIL



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Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

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Drawing Number: **1-P3.1**

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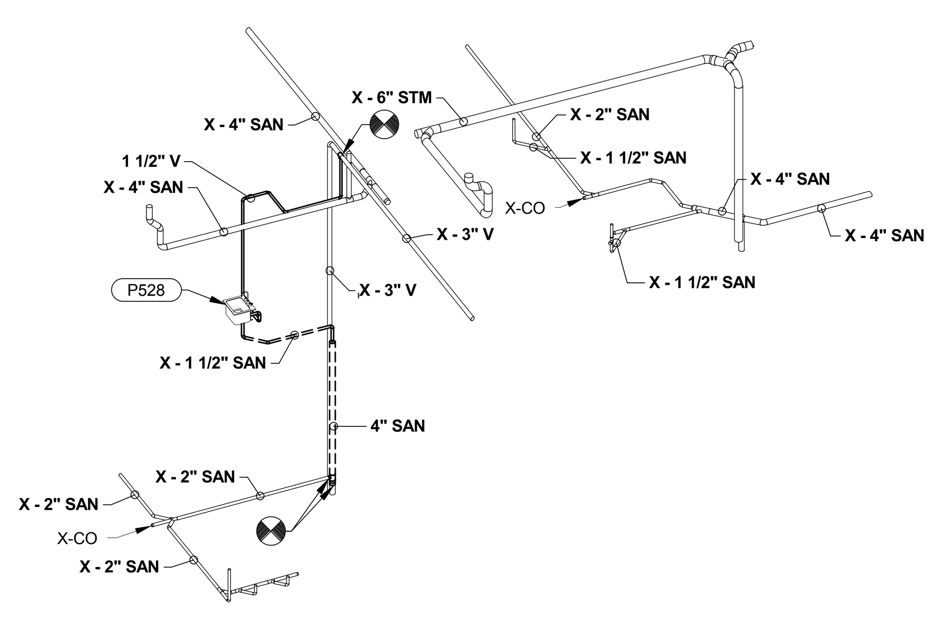
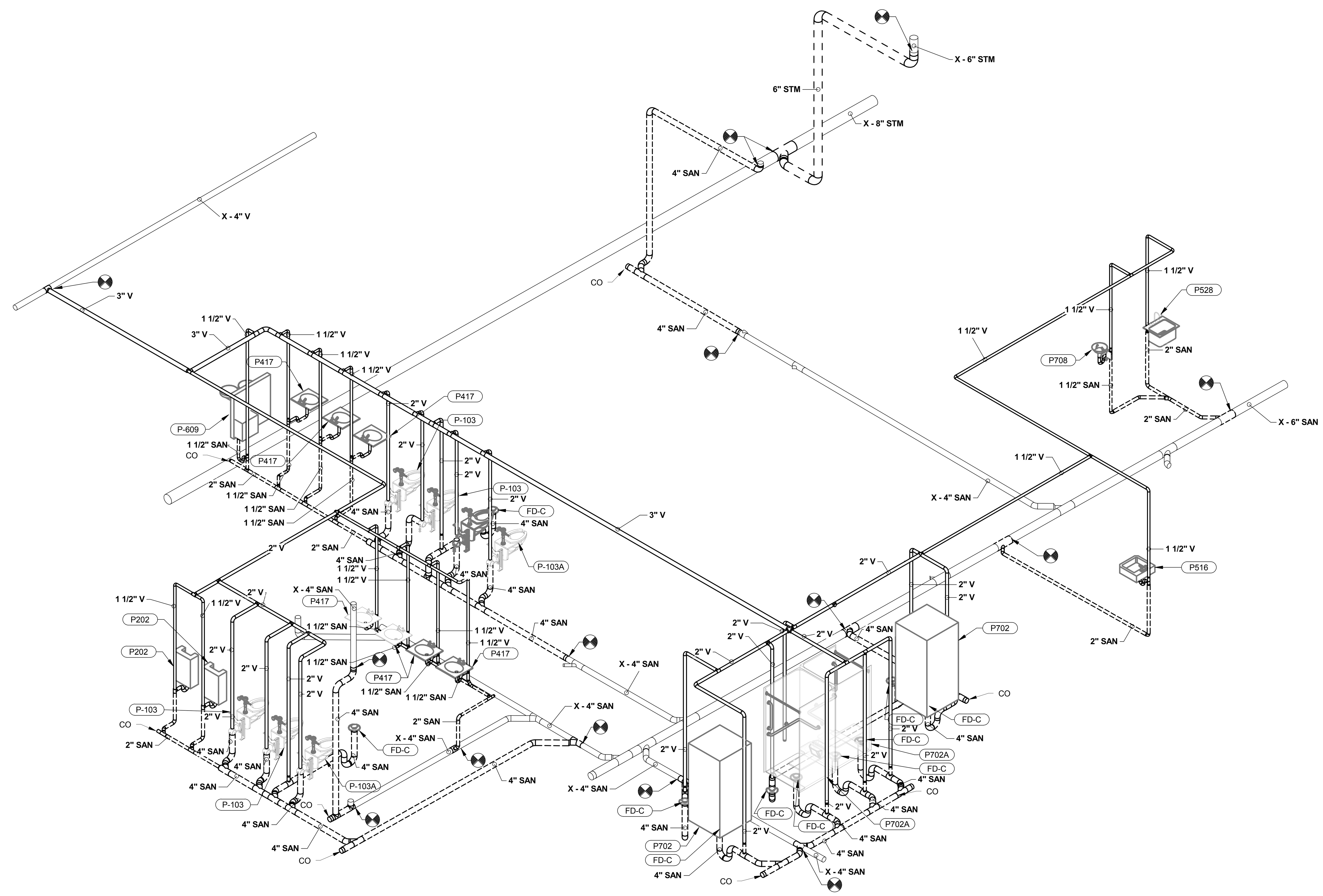


FOURTH FLOOR PLUMBING ISOMETERIC
NOT TO SCALE
1



BASEMENT PLUMBING ISOMETERIC
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Drawing Title
PARTIAL FOURTH FLOOR AND BASEMENT SANITARY ISOMETERICS

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
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Date	Checked	Drawn
06/17/16	DAD	JTP

Project Number
541-16-104

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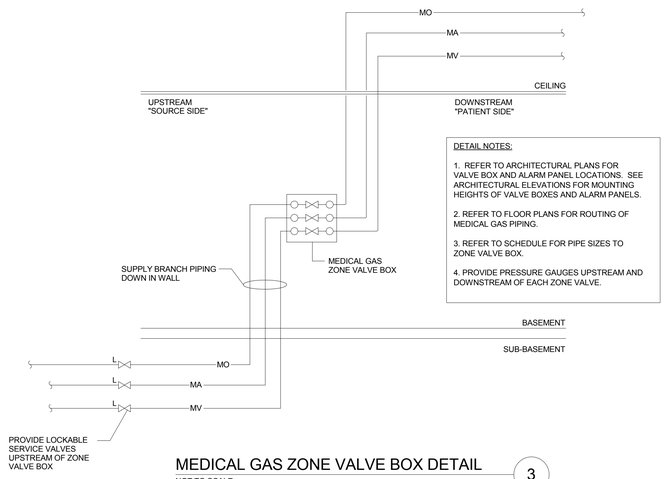


DETAIL NOTES:

1. REFER TO ARCHITECTURAL PLANS FOR VALVE BOX AND ALARM PANEL LOCATIONS. SEE ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS OF VALVE BOXES AND ALARM PANELS.

2. REFER TO FLOOR PLANS FOR ROUTING OF MEDICAL GAS PIPING.

3. REFER TO SCHEDULE FOR PIPE SIZES TO ZONE VALVE BOX.

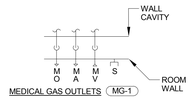
4. PROVIDE PRESSURE GAUGES UPSTREAM AND DOWNSTREAM OF EACH ZONE VALVE.

MEDICAL GAS ZONE VALVE BOX DETAIL (3)

NOT TO SCALE

MEDICAL GAS SYMBOLS:

XR	EXISTING TO BE REMOVED	N.O.	NORMALLY OPEN
X	EXISTING TO REMAIN	N.C.	NORMALLY CLOSED
MO	MEDICAL OXYGEN	ADJ.	ADJUSTABLE
MA	MEDICAL AIR		PRESSURE GAUGE
MV	MEDICAL VACUUM		FLEX CONNECTOR
N	NITROGEN		UNION
NO	NITROUS OXIDE		PRESSURE REGULATOR VALVE
WAGD	WASTE ANESTHESIA GAS DISPOSAL		LINE PRESSURE SENSOR
CO2	CARBON DIOXIDE	S	
IA	INSTRUMENT AIR		LIMIT OF DEMOLITION
	PIPE DOWN		CONNECT TO EXISTING
	PIPE RISE UP	MVB 1	MEDICAL GAS ZONE VALVE BOX
	PIPE CAP	LPA 1	LINE PRESSURE ALARM PANEL
	BRANCH CONNECTION	MAP 1	MEDICAL GAS ALARM PANEL
	ISOLATION VALVE	MG-1	MEDICAL GAS OUTLET/INLET GROUP
L	LOCKABLE SERVICE/INLINE VALVE		
	MEDICAL GAS PRESSURE SENSOR		
1 2	MEDICAL GAS CONNECTION WITH OUTLET/INLET		
	MEDICAL GAS VACUUM SLIDE		
	MEDICAL GAS ALARM PANEL		
	MEDICAL GAS VALVE BOX		
	INDICATES ACCESS SIDE OF MEDICAL GAS VALVE BOX OR ALARM PANEL		



MEDICAL GAS OUTLET/INLET SCHEDULE (MG-1)

MARK	MEDICAL GAS OUTLET/ INLET QUANTITIES				BRANCH PIPE SIZES TO EACH OUTLET		
	MO	MA	MV	S	MO	MA	MV
MG-1	1	1	1	1	1/2"	1/2"	3/4"

NOTES:

1. PROVIDE (1) VACUUM SLIDE FOR EACH VACUUM INLET.

MEDICAL GAS ZONE VALVE BOX SCHEDULE

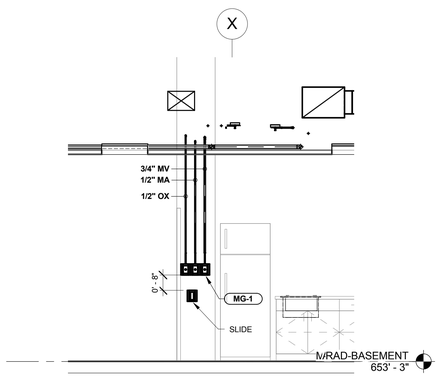
MARK	MO	MA	MV	WALL SPACE
MVB-1	1/2"	1/2"	3/4"	48"

NOTES:

1. LABEL PER VA STANDARDS. AS MINIMUM LIST ROOM NUMBERS OF ROOMS SERVED.

CODED NOTES

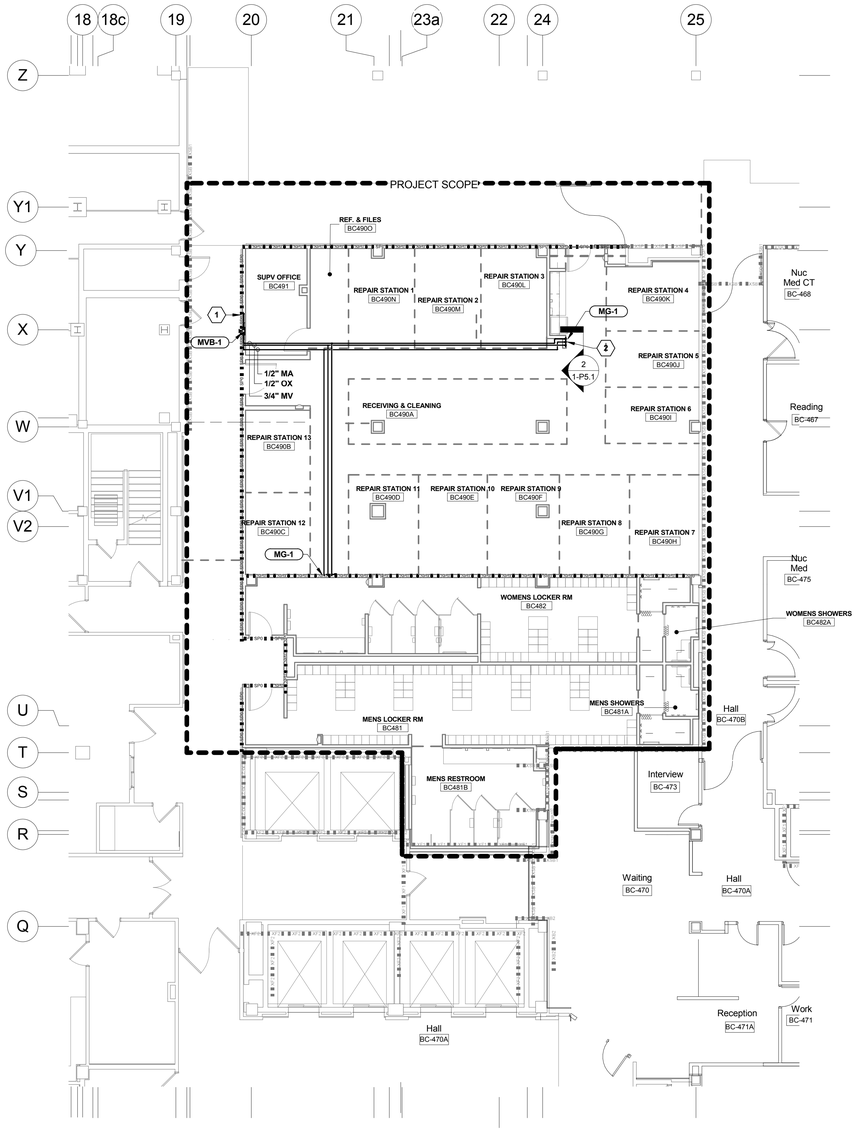
1. MEDICAL GASES DOWN IN WALL THRU FLOOR TO SUB-BASEMENT. (1/2" MEDICAL OXYGEN, 1/2" MEDICAL AIR AND 3/4" MEDICAL VACUUM. SEE SUB BASEMENT PLAN FOR COORDINATION.
2. INSTALL VACUUM SLIDE 8" BELOW MEDICAL GAS OUTLETS.



Medical Gas Outlet Mounting Heights (2)

3/8" = 1'-0"

0' 2' 4' 8' 16'



PARTIAL BASEMENT MEDICAL GAS PLAN (1)

1/8" = 1'-0"

0' 4' 8' 16' 32'

PROJECT COORDINATION NOTES:

A. THIS PROJECT CONSISTS OF MULTIPLE TRADES OF WORK PERFORMED WITHIN AN EXISTING BUILDING AND A BUILDING ADDITION, ALL OF WHICH ALLOWS VERY LITTLE PERMISSIBLE RANGE OF VARIATION. THE CONTRACTOR SHALL TAKE CAREFUL CONSIDERATION WITH THE COORDINATION AND INSTALLATION OF THE MULTITUDE OF NEW SYSTEMS WHILE ALSO ACCOMMODATING ANY EXISTING SYSTEMS TO REMAIN.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TRADES ASSOCIATED WITH THIS PROJECT AND ISSUING COORDINATION PLANS PRIOR TO COMMENCEMENT OF EACH PHASE OF CONSTRUCTION.

C. THE COORDINATION DRAWINGS SHALL ILLUSTRATE ALL SYSTEMS IN PLACE. THE CONTRACTOR SHALL SHOW ALL NECESSARY OFFSETS, TRANSITIONS, ETC. AS REQUIRED IN ORDER TO ACCOMMODATE CONDITIONS IDENTIFIED IN THE FIELD.

D. IF CONFLICTS ARE IDENTIFIED DURING THE DEVELOPMENT OF COORDINATION PLANS, THE CONTRACTOR SHALL NOTIFY THE VA CONTRACTING OFFICER, ARCHITECT, AND/OR ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THE PROJECT PLANS.

E. A COMPLETED SET OF COORDINATION PLANS ISSUED FOR REVIEW SHALL CONFIRM THAT THE CONTRACTOR FULLY UNDERSTANDS THE PROJECT CONSTRAINTS AND ALL KNOWN CONFLICTS HAVE BEEN ADDRESSED.

MEDICAL GAS GENERAL NOTES:

A. PROVIDE MEDICAL GAS PIPING SYSTEMS AND PIPE LABELS COMPLYING WITH REQUIREMENTS OF NFPA 99 "STANDARD FOR HEALTH CARE FACILITIES", LATEST EDITION.
B. INSTALLATION AND CERTIFICATION SHALL COMPLY WITH ASSE/ANSI SERIES 6000, "PROFESSIONAL QUALIFICATIONS STANDARDS FOR MEDICAL GAS SYSTEMS INSTALLERS, INSPECTORS AND VERIFIERS".
C. PROVIDE COMPATIBLE ACCESSORIES, TUBE, FITTING, AND VALVES FOR EACH SYSTEM.
   1. OUTLET / INLET STYLE: DISS
   2. MEDICAL GAS TUBE, FITTINGS AND JOINTS: PRE-CLEANED AND SEALED COPPER TUBE: ASTM B 88, TYPE K OR TYPE L, WATER TUBE, SEAMLESS, DRAWN TEMPER, CLEANED FOR MEDICAL GAS USE, PURGED, AND WITH ENDS SEALED.
   3. MEDICAL SYSTEM ACCESSORIES: PROVIDE THE MEDICAL GAS SYSTEM ACCESSORIES FROM MANUFACTURER OF EXISTING ACCESSORIES, COMPATIBLE WITH EXISTING SYSTEMS.
   4. SERVICE OUTLETS: INCLUDE BRASS VALVE AND BODY BLOCK WITH SEALS IN ROUGH-IN AND FINISHING ASSEMBLIES, STEEL OUTLET BOX AND COVER PLATE; 3/8 INCH TYPE K OR L COPPER TUBE BRAZED TO VALVE; AND PRESSURE OUTLETS WITH AUTOMATIC SECONDARY SERVICE VALVE TO PREVENT GAS FLOW WHEN PRIMARY VALVE IS REMOVED. DISS COUPLING SHALL BE INDEXED TO PREVENT INTERCHANGE BETWEEN SERVICES, CONSTRUCTED TO PERMIT ONE HANDED CONNECTION AND REMOVAL OF EQUIPMENT WITH POSITIVE LOCKING RING WHICH RETAINS EQUIPMENT STEM IN VALVE DURING USE. OUTLET/INLET TYPE OF CONNECTION SHALL BE COORDINATED WITH THE OWNER PRIOR TO ORDERING EQUIPMENT.
D. INSTALL LABELING ON VALVES, VALVE BOX COVERS, AND ALARM PANELS IN ACCORDANCE WITH REQUIREMENTS OF NFPA 99 AND VA STANDARDS. CAPTIONS AND COLOR CODING: PER THE REQUIREMENTS OF NFPA 99 AND VA STANDARDS.
E. LOCATIONS AND ROUTING OF EXISTING PIPING, DUCTWORK AND EQUIPMENT IS PRESUMED FROM EXISTING DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THESE DRAWINGS.
F. COORDINATE ALL EXISTING MEDICAL GAS AND VACUUM SYSTEM SHUT-DOWNS WITH OWNER A MINIMUM OF TEN WORKING DAYS IN ADVANCE.
G. PRIOR TO INSTALLATION, VERIFY PRECISE LOCATION OF NEW WALL MOUNTED DEVICES WITH OWNER AND ARCHITECT.
H. PROVIDE MANUFACTURES RECOMMENDED SERVICE CLEARANCE FOR ALL EQUIPMENT. REFER TO INSTRUCTIONS FROM THE EQUIPMENT MANUFACTURER.
I. NEW PIPING SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF PANELS.
J. WHERE EXISTING FIXTURES ARE TO BE REMOVED, REMOVE ALL ASSOCIATED BRANCH PIPING WHICH IS NOT TO BE REUSED. REMOVE PIPING TO MAINS AND CAP REMAINING PIPES.
K. REFER TO ARCHITECTURAL PLANS FOR PROJECT PHASING REQUIREMENTS.
L. CONTRACTOR SHALL REMOVE AND REPLACE CEILING TILES AND GRID AS REQUIRED TO COMPLETE DEMOLITION AND NEW WORK IN AREAS OUTSIDE OF RENOVATION PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY TILES OR GRID DAMAGED DUE TO THIS WORK.
M. CONTRACTOR SHALL COMPLETE CERTIFICATION OF SYSTEMS FOR EACH PHASE OF CONSTRUCTION. CERTIFICATION OF PHASE SHALL BE COMPLETED PRIOR TO SUBSEQUENT CONSTRUCTION PHASE.

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **PARTIAL BASEMENT MEDICAL GAS PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-P5.1**

Dwg. of

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Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

COMMISSIONING NOTES:

A. ALL WORK ASSOCIATED WITH THE CONSOLIDATE MENTAL HEALTH PROJECT SHALL BE COMMISSIONED. THE MECHANICAL CONTRACTOR, CONTROLS CONTRACTOR, TAB CONTRACTOR, AND COMMISSIONING AGENT SHALL WORK TOGETHER TO FULLY COMMISSION ALL OF THE MODIFIED AND NEW EQUIPMENT AS OUTLINED IN THE PLANS.

B. THE VA COR AND A REPRESENTATIVE FROM FACILITIES SHALL BE NOTIFIED SO THAT THEY MAY WITNESS COMMISSIONING FOR EACH MODIFIED SYSTEM AND NEW EQUIPMENT. LACK OF NOTIFICATION WILL RESULT IN RE-COMMISSIONING AT THE CONTRACTORS EXPENSE.

C. CONTRACTORS SHALL REFERENCE THE COMMISSIONING SPECIFICATIONS FOR A DETAILED DESCRIPTION OF THE SCOPE OF WORK.

D. CONTRACTORS SHALL BE RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES AND RE-COMMISSIONING ANY CORRECTED WORK.

E. THE SCOPE OF THIS PROJECT INCLUDES COMMISSIONING BY AN INDEPENDENT COMMISSIONING AGENT OUTLINED IN THE SPECIFICATIONS. THE WORK, EQUIPMENT, AND SYSTEMS TO BE COMMISSIONED SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
1. NEW HEATING EQUIPMENT, REHEAT COILS
2. TEMPERATURE CONTROLS
3. SEQUENCE OF OPERATIONS
4. MIXING VALVE TEMPERATURES
5. PLUMBING CHLORINATION AND TESTING
6. VAV BOXES

PROJECT COORDINATION NOTES:

A. THIS PROJECT CONSISTS OF MULTIPLE TRADES OF WORK PERFORMED WITHIN AN EXISTING BUILDING, ALL OF WHICH ALLOWS VERY LITTLE PERMISSIBLE RANGE OF VARIATION. THE CONTRACTOR SHALL TAKE CAREFUL CONSIDERATION WITH THE COORDINATION AND INSTALLATION OF THE MULTITUDE OF NEW SYSTEMS WHILE ALSO ACCOMMODATING ANY EXISTING SYSTEMS TO REMAIN.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TRADES ASSOCIATED WITH THIS PROJECT AND ISSUING COORDINATION PLANS PRIOR TO COMMENCEMENT OF EACH PHASE OF CONSTRUCTION.

C. CONTRACTOR SHALL FIELD MEASURE EXISTING TO REMAIN FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL ITEMS. THE COORDINATION DRAWINGS SHALL ILLUSTRATE ALL SYSTEMS IN PLACE. THE CONTRACTOR SHALL SHOW ALL NECESSARY OFFSETS, TRANSITIONS, ETC. AS REQUIRED IN ORDER TO ACCOMMODATE CONDITIONS IDENTIFIED IN THE FIELD.

D. IF CONFLICTS ARE IDENTIFIED DURING THE DEVELOPMENT OF COORDINATION PLANS, THE CONTRACTOR SHALL NOTIFY THE VA CONTRACTING OFFICER, ARCHITECT, AND ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THE PROJECT PLANS.

E. A COMPLETED SET OF COORDINATION PLANS ISSUED FOR REVIEW SHALL CONFIRM THAT THE CONTRACTOR FULLY UNDERSTANDS THE PROJECT CONSTRAINTS AND ALL KNOWN CONFLICTS HAVE BEEN ADDRESSED.

HVAC GENERAL NOTES:

A. CONTRACTOR SHALL FIELD VERIFY CONDITIONS SHOWN ON DESIGN DOCUMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THESE DRAWINGS.

B. COORDINATE ALL SHUT-DOWNS OF EXISTING MECHANICAL SYSTEMS WITH OWNER A MINIMUM OF TEN WORKING DAYS IN ADVANCE.

C. PRIOR TO INSTALLATION, VERIFY PRECISE LOCATION OF NEW WALL MOUNTED DEVICES WITH OWNER AND ARCHITECT. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR PRECISE LOCATION OF CEILING MOUNTED DEVICES. COORDINATE ROOF MOUNTED EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION.

D. PROVIDE SERVICE CLEARANCE FOR ALL MECHANICAL EQUIPMENT. REFER TO INSTRUCTIONS FROM THE EQUIPMENT MANUFACTURER. MAINTAIN A MINIMUM OF 18 INCH CLEARANCE AT CONTROLS FOR VARIABLE AIR VOLUME TERMINALS AND FAN POWERED TERMINALS ABOVE CEILINGS.

E. NEW DUCTS OR PIPING SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF PANELS.

F. CONTRACTOR SHALL INSTALL MANUAL BALANCING DAMPERS ON ALL SUPPLY AND RETURN DUCTWORK BRANCHES SERVING DIFFUSERS OR GRILLES. DAMPERS SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION AS CLOSE TO MAIN AS POSSIBLE.

G. REFER TO TERMINAL CONNECTIONS SCHEDULE FOR SIZE OF DUCT CONNECTIONS TO TERMINAL UNITS.

H. UNLESS NOTED OTHERWISE, BRANCH DUCTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK OF THE DIFFUSER.

I. NO TEMPERATURE SENSING CONTROL DEVICES SHALL BE LOCATED OVER HEAT PRODUCING DEVICES.

J. INSTALL ALL EQUIPMENT TO BE DEAD LEVEL.

K. FIRE DAMPERS ARE SHOWN AT THE LOCATION TO BE ACCESSED/SERVICED. PROVIDE DUCT ACCESS DOOR AND AS NOTED. PROVIDE FLUSH ACCESS PANEL WITH TAMPER RESISTANT ENTRY PER NFPA.

L. TIGHT CLEARANCES MAY OCCUR IN THE EXISTING BUILDING. CONTRACTOR SHALL PREPARE SHEET METAL SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATING SHEET METAL. COORDINATE WITH ALL OTHER TRADES.

M. MECHANICAL DRAWINGS ARE DIAGRAMMATICAL WHERE DUCT SIZE SHOWN IS IN CONFLICT WITH STRUCTURE OR OTHER BUILDING SYSTEM, CONTRACTOR MAY MODIFY DUCT SIZE AND PROVIDE EQUIVALENT FREE AREA DUCT.

N. WHERE EQUIPMENT IS TO BE REMOVED, REMOVE ALL ASSOCIATED PIPING, DUCTWORK, CONTROLS, CONCRETE PADS, SUPPORTS, ETC. PATCH WALL AND FLOOR OPENINGS TO MATCH ADJACENT SURFACES.

O. CONTRACTOR SHALL REMOVE AND REPLACE CEILING TILES AND GRID AS REQUIRED TO COMPLETE DEMOLITION AND NEW WORK IN AREAS OUTSIDE OF RENOVATION PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY TILES OR GRID DAMAGED DUE TO THIS WORK.

MECHANICAL LEGEND AND ABBREVIATIONS

NOTE: THIS LEGEND IS INTENDED TO AID IN THE UNDERSTANDING OF SHORTHAND, SYMBOLS AND ABBREVIATIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS. IT IS NOT THE INTENTION TO DESCRIBE THE PROJECT SCOPE OF WORK, FOR DETAILED SCOPE OF WORK PLEASE REFER TO THE SUBSEQUENT DRAWINGS.

CALL OUTS:

#	REFERENCE TO CODED NOTE
EQUIPMENT TYPE — EQ-# — UNIT NUMBER	EQUIPMENT OR FIXTURE MARK
TYPE — A CFM NECK — CONNECTION SIZE AT DEVICE	AIR DISTRIBUTION DEVICE
	REMOVE TO POINT INDICATED
	CONNECT TO EXISTING

ABBREVIATIONS:

RO	ROOF OPENING
CTE	CONNECT TO EXISTING
LOD	LIMIT OF DEMOLITION
PC	PLUMBING CONTRACTOR
FC	FIRE SUPPRESSION CONTRACTOR
HC	HVAC CONTRACTOR
TC	TEMPERATURE CONTROL CONTRACTOR
GC	GENERAL TRADES CONTRACTOR
EC	ELECTRICAL CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
SA	SUPPLY AIR
RA	RETURN AIR
EA	EXHAUST AIR
AFF	ABOVE FINISHED FLOOR
AD	ACCESS DOOR
TO	OPENING IN TOP OF DUCT. SHALL BE A MINIMUM 1.5 TIMES GREATER THAN THE CROSS-SECTIONAL AREA OF DUCT.
MOD	MOTORIZED 2-WAY CONTROL VALVE
FDD	FIRE DAMPER IN DUCT
FSD	COMBINATION FIRE/SMOKE DAMPER IN DUCT
KHE	KITCHEN HOOD EXHAUST

DEMOLITION SYMBOLS:

X	EXISTING TO REMAIN
XR	EXISTING TO BE REMOVED
XRL	EXISTING TO BE RELOCATED
XNL	EXISTING NEW LOCATION

DUCTWORK SYMBOLS:

24x18	RECTANGULAR DUCT SIZE
12"Ø	ROUND DUCT SIZE
	MANUAL BALANCING DAMPER ON DUCT TO BE MOUNTED OVER ACCESSIBLE CEILING
	RETURN AIR DUCT
	EXHAUST AIR DUCT
	SUPPLY AIR DUCT
UC	INDICATES UNDERCUT DOOR - UNDERCUT 3/4" SEE ARCHITECTURAL PLANS.
	INDICATES TRANSITION (SINGLE LINE)
*	INDICATED DUCT TO BE ROUTED WITHIN BEAM/JOIST SPACE (EX. 12x12")
	SUPPLY AIR DIFFUSER
	SHADING INDICATES TO PROVIDE QUADRANT BLANK-OFF IN NECK OF DIFFUSER. TO BE FURNISHED WITH DIFFUSER.
x'-x"	INDICATES BOTTOM OF DUCT DIMENSION ABOVE FINISHED FLOOR
	INDICATES DIRECTION OF AIRFLOW

HVAC CONTROLS:

@	MANUAL OVERRIDE
T	THERMOSTAT
H	HUMIDITY SENSOR
H	HUMIDITY SENSOR WITH SETPOINT ADJUSTMENT
S	STATIC PRESSURE SENSOR
	CURRENT TRANSFORMER ON MOTOR WIRING WITH TRANSDUCER
L	LOW LIMIT THERMOSTAT
VFD	VARIABLE FREQUENCY DRIVE FOR MOTOR
EM	ELECTRIC MOTOR
	MOTOR STARTER

HVAC PIPING:

9'-2"	HEIGHT OF BOTTOM OF PIPE ABOVE FLOOR
—HHWS—	HEATING HOT WATER SUPPLY
—HHWR—	HEATING HOT WATER RETURN
—PHWS—	PERIMETER HEATING WATER SUPPLY
—PHWR—	PERIMETER HEATING WATER RETURN
—CHWS—	CHILLED WATER SUPPLY
—CHWR—	CHILLED WATER RETURN
—ACC—	AIR CONDITIONING CONDENSATE
	BRANCH PIPE CONNECTION
	ISOLATION VALVE
	CHECK VALVE
	UNION
	REDUCER
	STRAINER
	BALANCING VALVE
	TWO POSITION VALVE
	PRESSURE REDUCING VALVE
	FLEXIBLE PIPE CONNECTOR
	THERMOMETER IN PIPE WELL
	PIPE GUIDE
	PIPE EXPANSION ANCHOR
E.L.	FLEXIBLE METAL EXPANSION LOOP ASSEMBLY
	GAUGE PORT (PETE'S PLUG)
	DRAIN VALVE WITH HOSE FITTING
	PRESSURE GAUGE
	LOCAL DRAIN, VALVED WITH 3/4" THREADED CONNECTOR
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
TF	TANK FITTING
MAV	MANUAL AIR VENT
	PRESSURE RELIEF VALVE
	RADIANT CEILING PANEL (SEE SCHEDULES)

FULLY SPRINKLERED

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Revisions:	**Date**

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Drawing Title: **MECHANICAL LEGEND AND GENERAL NOTES**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-M0.1**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

DEMOLITION GENERAL NOTES

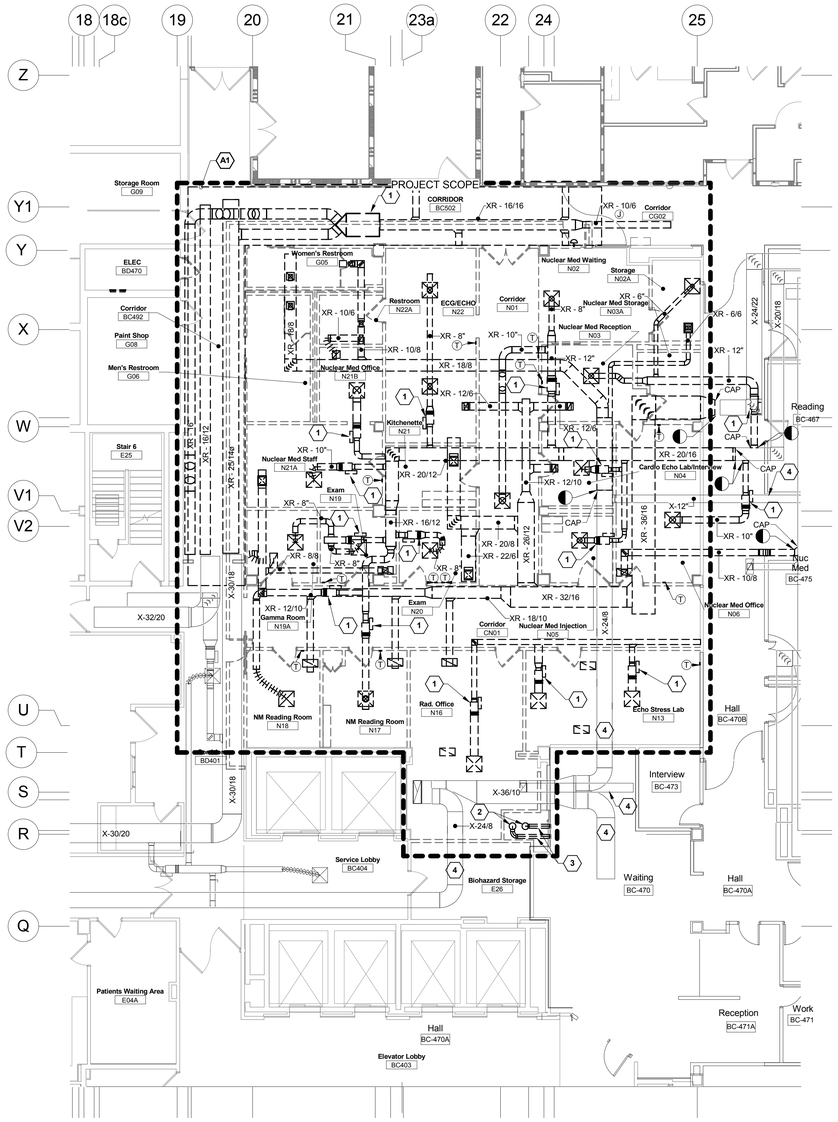
1. DEMOLITION SHALL INCLUDE ALL ASSOCIATED APPURTENANCES SUCH AS HANGERS, BRACKETS, WIRING, INSULATION, ETC.
2. THE INTENT IS TO REMOVE ALL DUCTWORK AND PIPING WITHIN SCOPE BOUNDARY WHICH SERVES THE EXISTING ROOMS TO BE RENOVATED.
3. PATCH WALL AND FLOOR OPENINGS CREATED AS A RESULT OF MECHANICAL DEMOLITION. PATCHES TO MATCH EXISTING MATERIAL AND FINISHES.

DEMOLITION CODED NOTES

1. REMOVE EXISTING VAV BOX COMPLETE. REMOVE ALL ASSOCIATED CONTROLS, THERMOSTAT AND DUCTWORK. REMOVE ALL HEATING HOT WATER SUPPLY AND RETURN PIPING BACK TO ACTIVE MAINS AND CAP.
2. REMOVE EXISTING 10" DIAMETER CHWS AND CHWR RISERS IN CHASE FROM BELOW FLOOR TO UNDER SIDE OF DECK. PATCH FLOOR OPENING PER STRUCTURAL DETAIL.
3. REMOVE EXISTING 6" DIAMETER CHWS AND CHWR PIPING.
4. MEASURE AND DOCUMENT EXHAUST DUCT AIR FLOW PRIOR TO DEMOLITION OF DUCTWORK. IN ADDITION TO THESE FOUR DUCTS ALSO MEASURE THE TOTAL EXHAUST FAN AIRFLOW AT THE ROOF.

DEDUCT ALTERNATE #1:

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT DEMOLITION OF EXISTING DUCTWORK AND DUAL DUCT BOX IN OUTLINED AREA OF CORRIDOR BC492 AND CORRIDOR BC502.



PARTIAL BASEMENT MECHANICAL DEMOLITION PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-M1.1**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

DEDUCT ALTERNATE #1

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE # 1, OMIT NEW DUCTWORK SERVING CORRIDOR BC492 AND CORRIDOR BC502. VAV BOX SB3.06 AND DUCT WORK TO ELECTRICAL ROOM BD470 SHALL REMAINING SCOPE.

LIFE SAFETY LEGEND

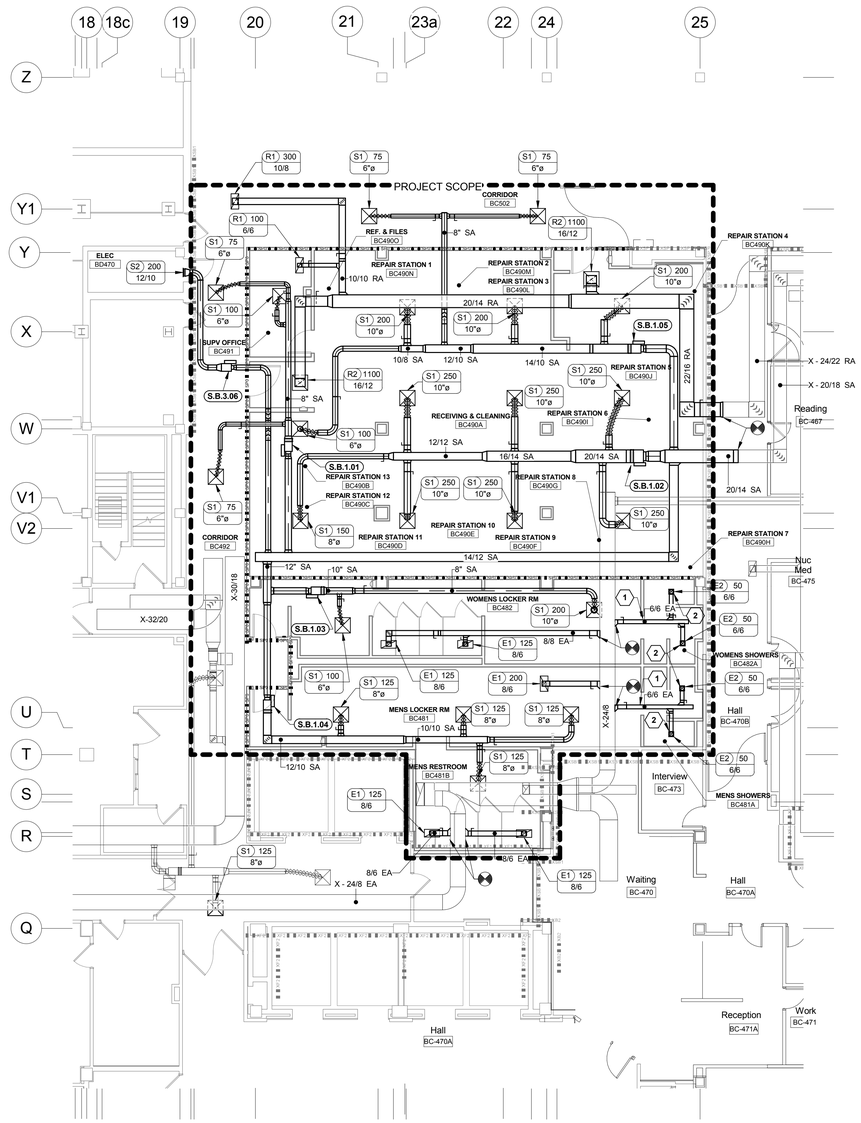
XF2 XF2 XF2	EXISTING 2 HR FIRE BARRIER
XF1 XF1 XF1	EXISTING 1 HR FIRE BARRIER
XSB1 XSB1 XSB1	EXISTING 1 HR SMOKE BARRIER
XSP XSP XSP	EXISTING 0 HR SMOKE PARTITION
FB2 FB2 FB2	NEW 2 HR FIRE BARRIER
FB1 FB1 FB1	NEW 1 HR FIRE BARRIER
SB1 SB1 SB1	NEW 1 HR SMOKE BARRIER
SP0 SP0 SP0	NEW 0 HR SMOKE BARRIER

GENERAL NOTES

1. SHOWER EXHAUST BRANCH DUCT SHALL BE ALUMINUM.

CODED NOTES

1. BRANCH DUCT FROM MAIN TO GRILLE SHALL BE ALUMINUM AND PITCHED DOWN TO GRILLE.
2. PROVIDE PLASTER FRAMES FOR EXHAUST GRILLES.



PARTIAL BASEMENT DUCTWORK PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title: **PARTIAL BASEMENT DUCTWORK PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date	Checked	Drawn
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Project Number: 541-16-104

Building Number: 1

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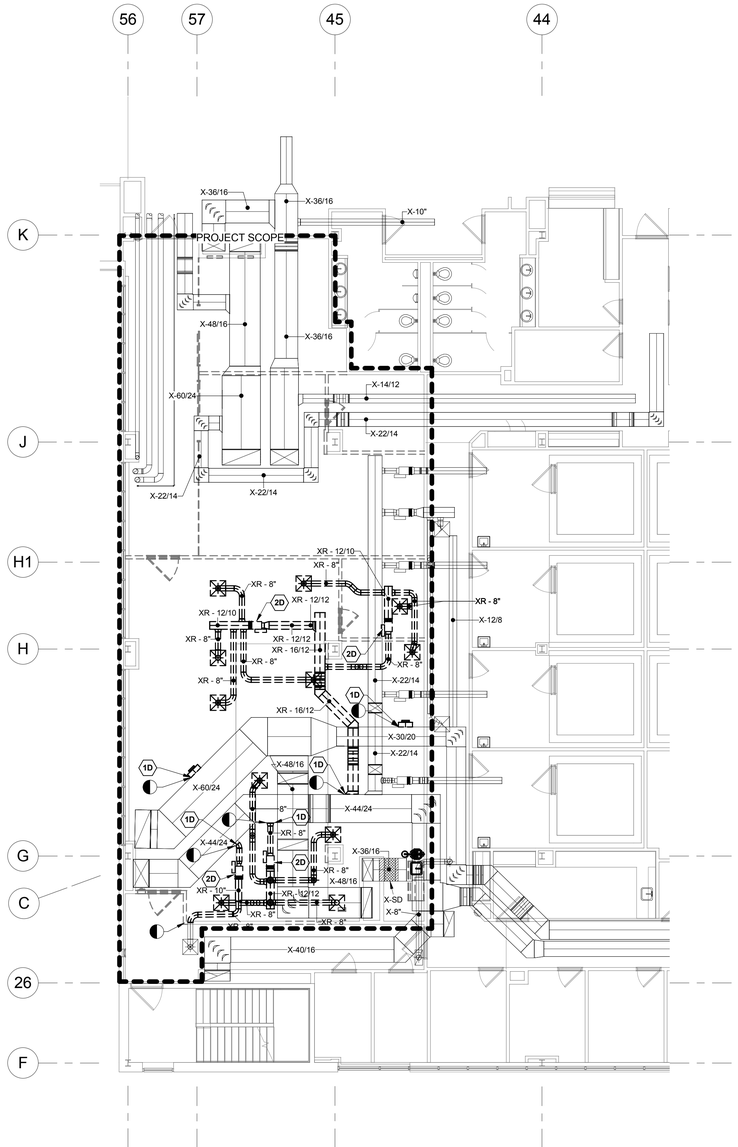


PARTIAL FOURTH FLOOR HVAC DUCTWORK DEMOLITION PLAN

1/8" = 1'-0"

0' 4' 8' 16' 32'

1

GENERAL NOTES

1. SEE VAV BOX SCHEDULE FOR DUCT SIZES UPSTREAM AND DOWNSTREAM OF VAV BOXES.
2. SUPPLY AIR DUCT SIZE FOR EACH DIFFUSER BRANCH TO MATCH DIFFUSER NECK SIZE UNLESS OTHERWISE NOTED.

LIFE SAFETY LEGEND

XF2 XF2 XF2	EXISTING 2 HR FIRE BARRIER
XF1 XF1 XF1	EXISTING 1 HR FIRE BARRIER
XSB1 XSB1 XSB1	EXISTING 1 HR SMOKE BARRIER
XSP XSP XSP	EXISTING 0 HR SMOKE PARTITION
FB2 FB2 FB2	NEW 2 HR FIRE BARRIER
FB1 FB1 FB1	NEW 1 HR FIRE BARRIER
SB1 SB1 SB1	NEW 1 HR SMOKE BARRIER
SP0 SP0 SP0	NEW 0 HR SMOKE BARRIER

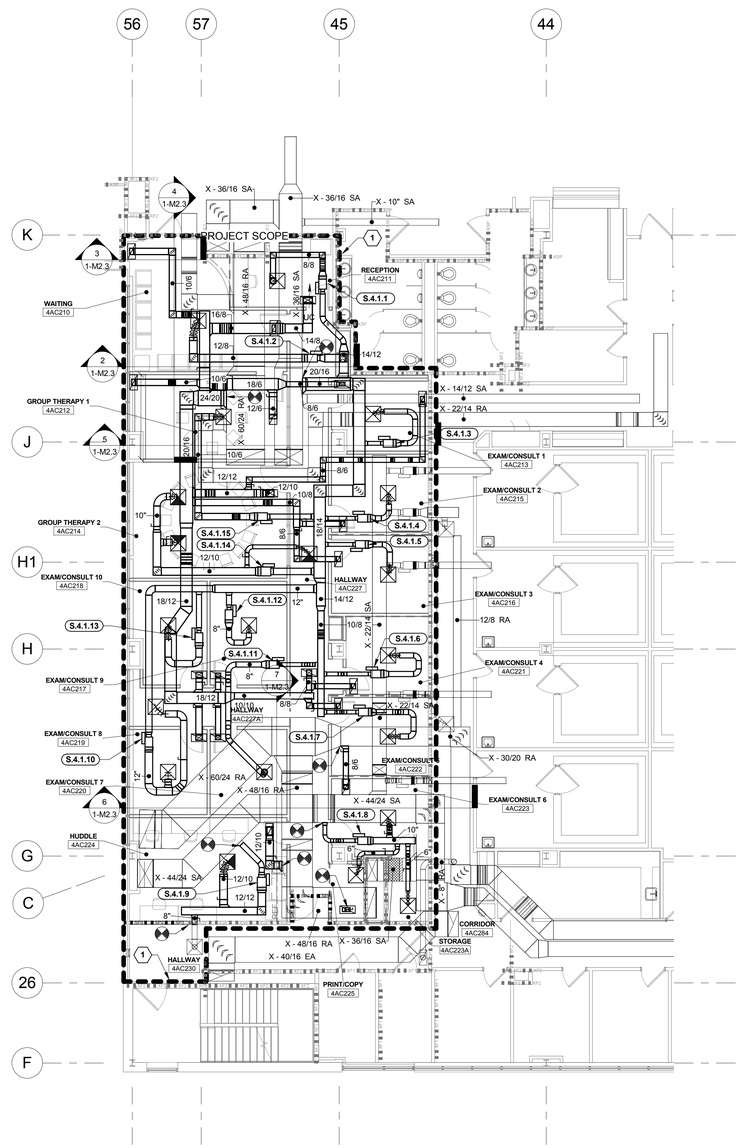
DEMOLITION CODED NOTES

1D CAP/PATCH DUCTWORK AND PATCH INSULATION TO MATCH EXISTING.

2D REMOVE EXISTING VAV BOX COMPLETE, REMOVE ASSOCIATED REHEAT PIPING BACK TO MAIN AND CAP. REMOVE ALL ASSOCIATED CONTROLS, THERMOSTATS AND DUCTWORK.

CODED NOTES

1 REFER TO SHEET 1-M2.3 FOR MECHANICAL SECTIONS FOR THIS PROJECT AREA.



PARTIAL FOURTH FLOOR HVAC DUCTWORK PLAN

1/8" = 1'-0"

0' 4' 8' 16' 32'

2

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	Date

CONSULTANTS:

FREDRICK, FREDRICK & HELLER ENGINEERS, INC.
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42042
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Drawing Title
PARTIAL FOURTH FLOOR DUCTWORK PLANS

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	DAD	JXC

Project Number
541-16-104

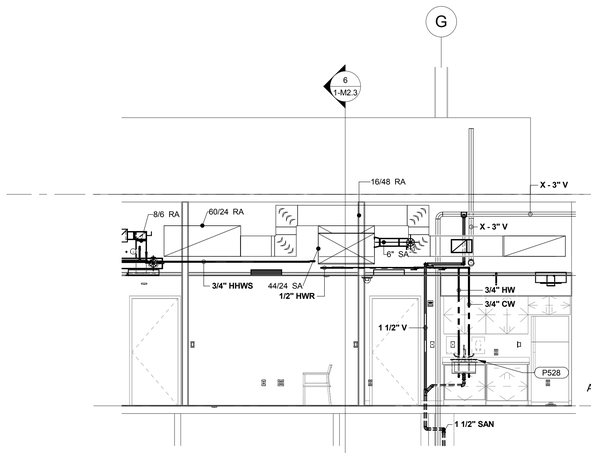
Building Number
1

Drawing Number
1-M2.2

Dwg. of

Office of Facilities Management

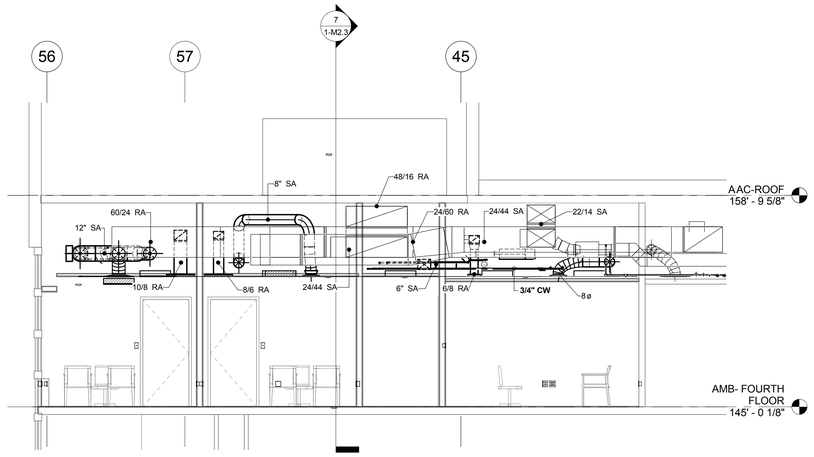
Department of Veterans Affairs



EAST SECTION 7

1/4" = 1'-0"

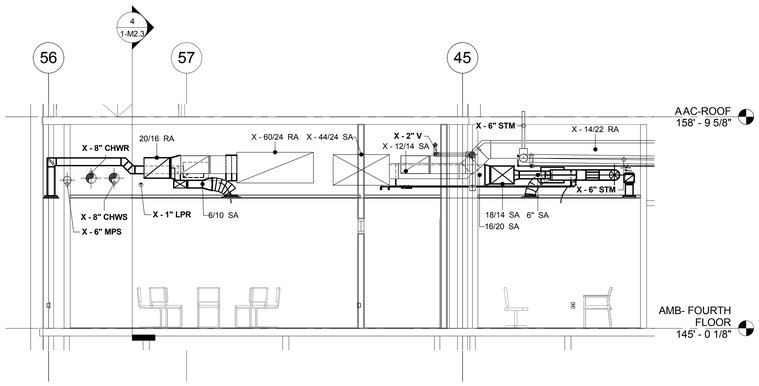
0' 2' 4' 8' 16'



SOUTH SECTION 6

1/4" = 1'-0"

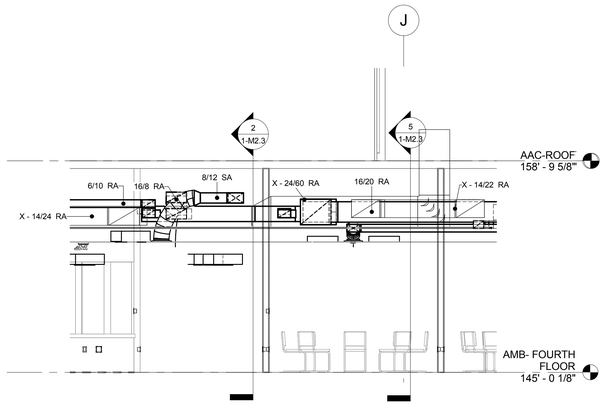
0' 2' 4' 8' 16'



NORTH SECTION 5

1/4" = 1'-0"

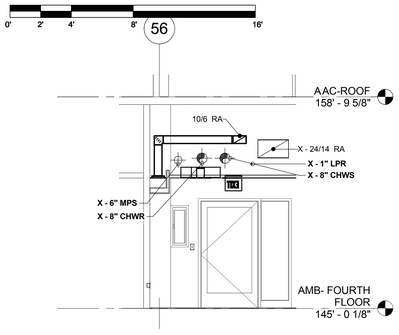
0' 2' 4' 8' 16'



EAST SECTION 4

1/4" = 1'-0"

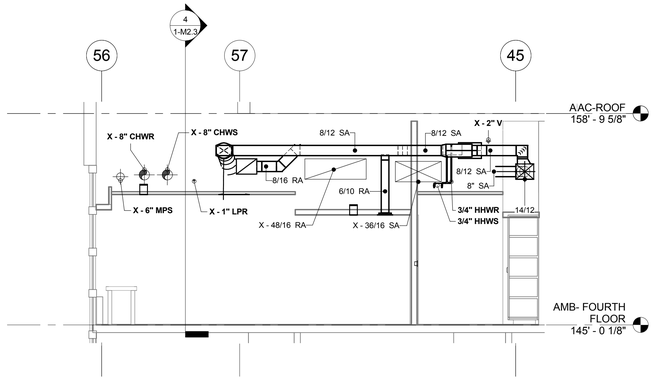
0' 2' 4' 8' 16'



NORTH SECTION 3

1/4" = 1'-0"

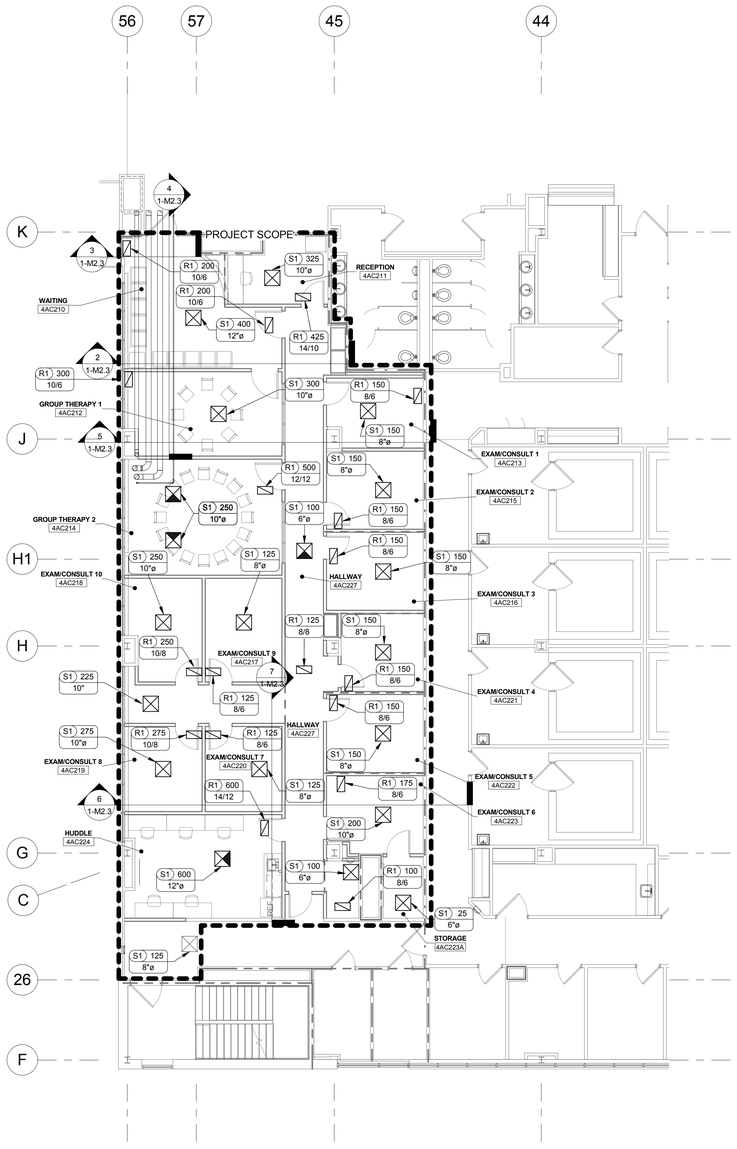
0' 2' 4' 8' 16'



NORTH SECTION 2

1/4" = 1'-0"

0' 2' 4' 8' 16'



PARTIAL FOURTH FLOOR AIR DISTRIBUTION PLAN

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

CONSULTANTS:

FREDRICK, FREDRICK & HELLER ENGINEERS, INC.
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Drawing Title
PARTIAL FOURTH FLOOR MECHANICAL SECTIONS AND AIR DISTRIBUTION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked DAD | Drawn JXC

Project Number 541-16-104

Building Number 1

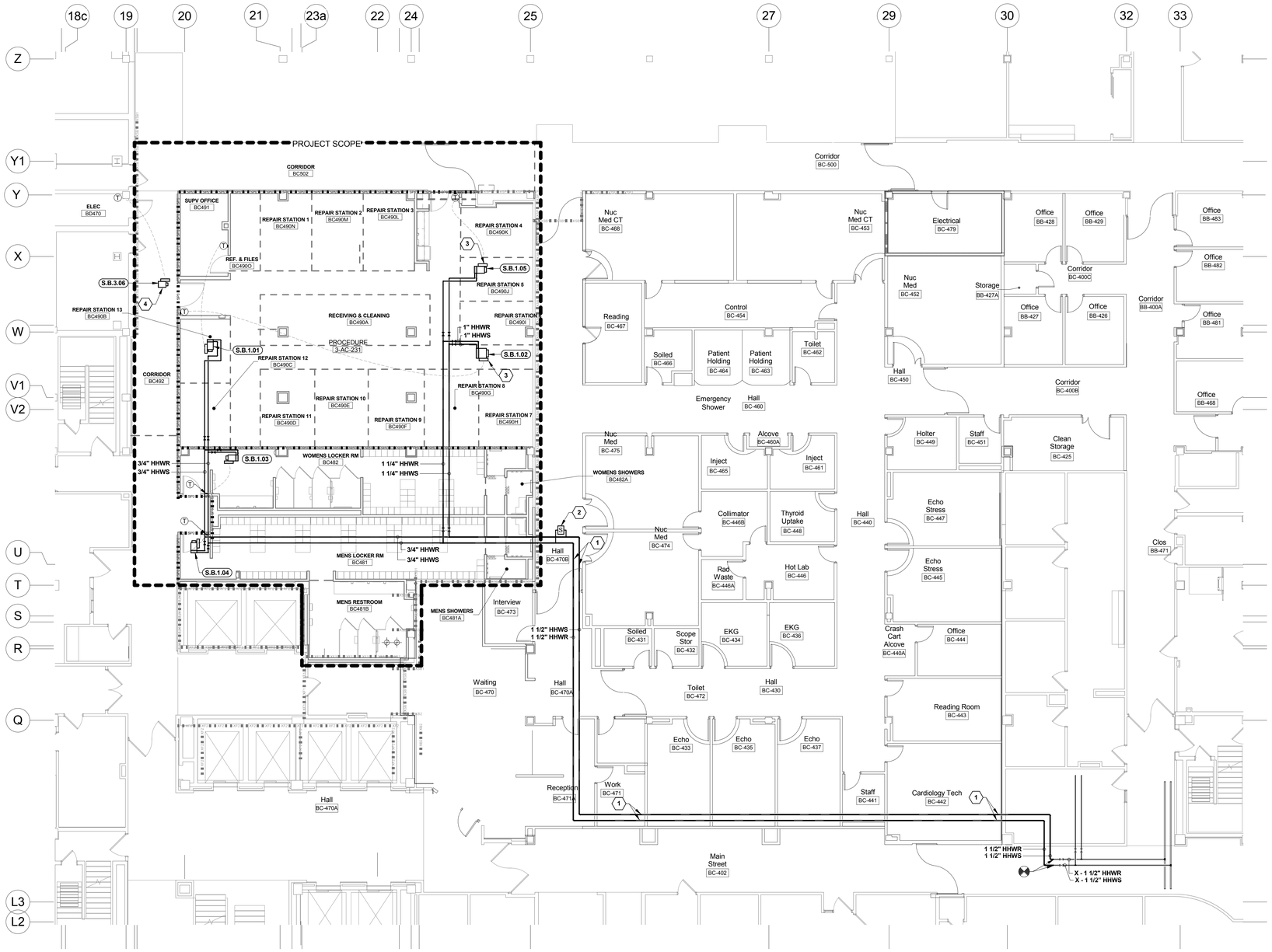
Drawing Number **1-M2.3**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



GENERAL NOTES

A. ALL HEATING HOT WATER BRANCH PIPING SHALL BE 3/4" UNLESS OTHERWISE NOTED.

B. PROVIDE MANUAL AIR VENTS IN ALL HIGH SPOTS OF HHW PIPE.

C. MAINTAIN MINIMUM OF 18" X 18" CLEARANCE FOR EACH VAV BOX CONTROL PANEL.

CODED NOTES

1. REQUIRED WORK OUTSIDE OF PROJECT BOUNDARY. ALL WORK SHOWN OUTSIDE OF PROJECT SCOPE BOUNDARY SHALL BE INSTALLED AFTER HOURS. CONTRACTOR SHALL BE RESPONSIBLE FOR; PROTECTING EXISTING FINISHES, REMOVING AND REPLACING CEILING TILES OR HARD CEILINGS AS REQUIRED TO COMPLETE WORK AND CLEAN UP PRIOR TO 7 A.M EACH MORNING. ROUTING THROUGH OCCUPIED AREA WILL REQUIRE FIELD SURVEY AND MULTIPLE OFFSETS TO AVOID EXISTING CONDITIONS.
2. PROVIDE DIFFERENTIAL PRESSURE SENSOR. PROVIDE WIRING AND PROGRAMING TO UTILIZE NEW SENSOR TO CONTROL HEATING HOT WATER PUMPS LOCATED IN EAST PENTHOUSE. LOCATE SENSOR IN ACCESSIBLE LOCATION.
3. PROVIDE 3-WAY CONTROL VALVES FOR VAV BOXES
4. COOLING ONLY VAV BOX; NO REHEAT PIPING

N

PARTIAL BASEMENT HVAC PIPING PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
PARTIAL BASEMENT HVAC PIPING PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	DAD	JTP

Project Number 541-16-104

Building Number 1

Drawing Number **1-M3.1**

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Department of Veterans Affairs

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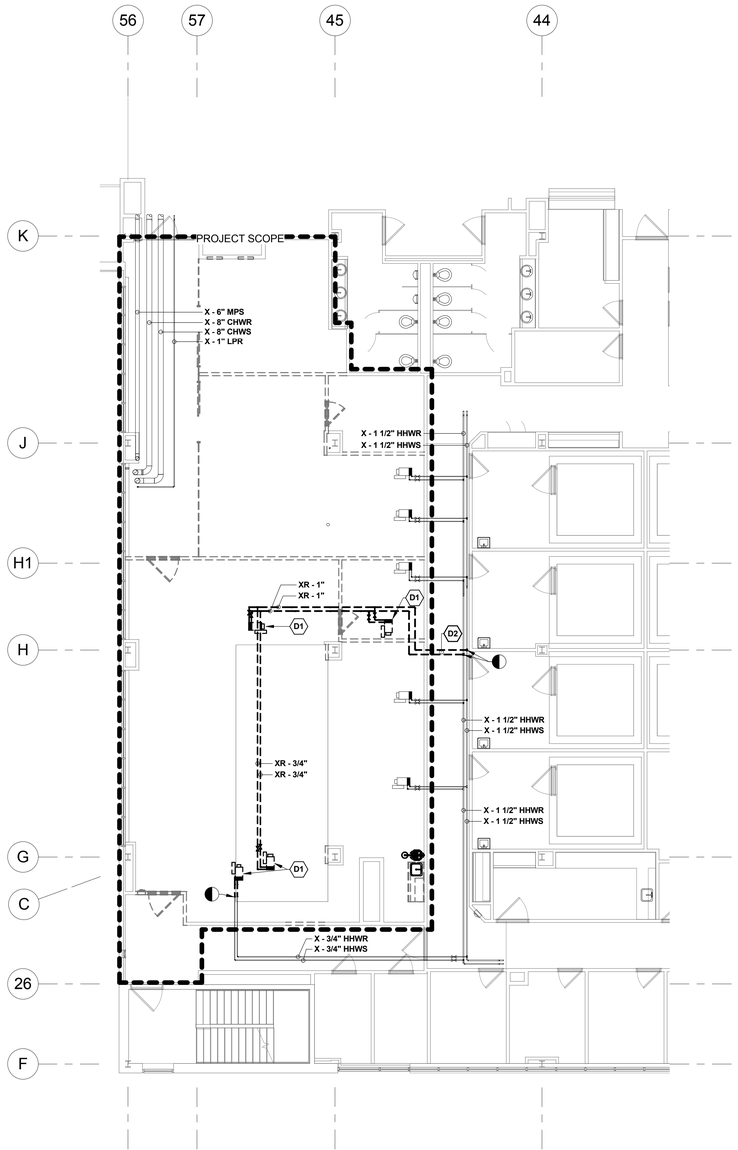


PARTIAL FOURTH FLOOR HVAC PIPING DEMOLITION PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

GENERAL NOTES

A. ALL HEATING HOT WATER BRANCH PIPING SHALL BE 3/4" UNLESS OTHERWISE NOTED.

B. PROVIDE MANUAL AIR VENTS IN ALL HIGH SPOTS OF HHW PIPE.

C. MAINTAIN MINIMUM OF 18" X 18" CLEARANCE FOR EACH VAV BOX CONTROL PANEL.

D. PROVID EISOLATION VALVE AT EACH BRACH TAKE OFF IN TO ADDITION TO VALVE AT BOX PER DETAIL.

DEMOLITION CODED NOTES

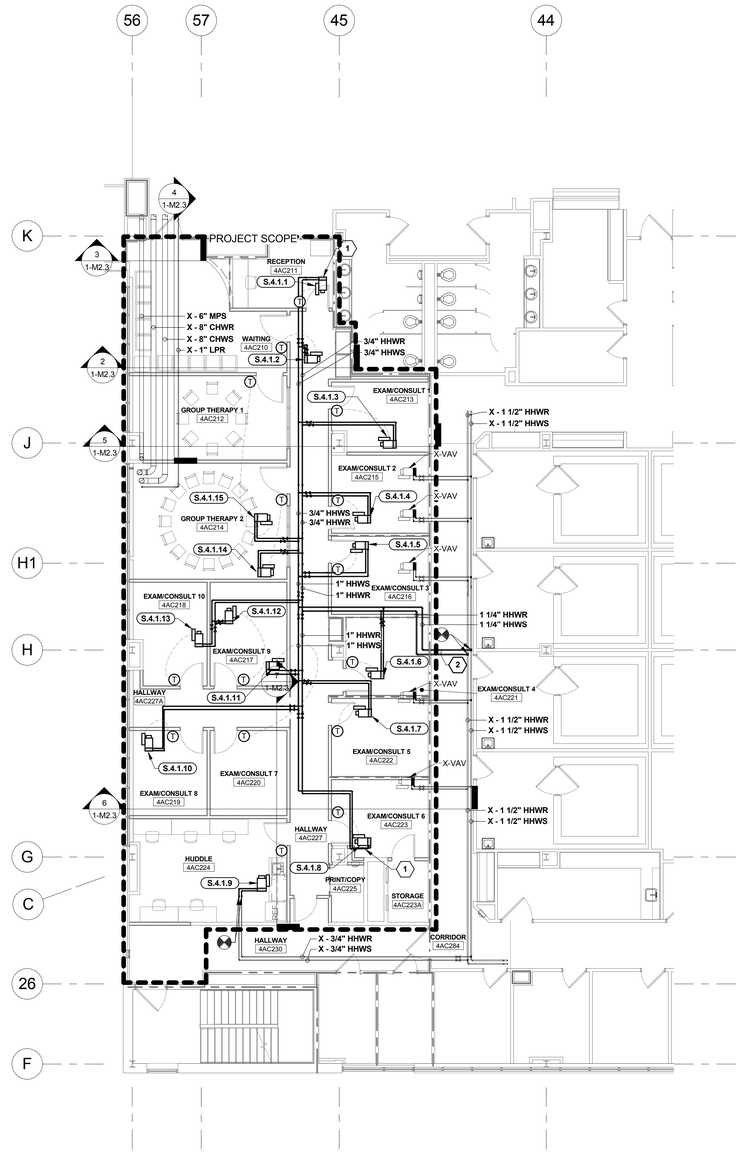
D1 REMOVE EXISTING VAV BOX AND ASSOCIATED PIPING BACK TO POINT INDICATED AND CAP. TURN VAV BOX OVER TO OWNER.

D2 DEMOLITION WORK OUTSIDE OF WORK AREA SHALL BE DONE ON AFTER HOURS. CONTRACTOR SHALL PROTECT FINISHES, REMOVE AND REPLACE CEILING TILES AND CLEAN UP AT THE END OF EACH SHIFT.

CODED NOTES

1 PROVIDE 3-WAY CONTROL VALVE FOR VAV BOX.

2 NEW WORK OUTSIDE OF WORK AREA SHALL BE DONE ON AFTER HOURS. CONTRACTOR SHALL PROTECT FINISHES, REMOVE AND REPLACE CEILING TILES AND CLEAN UP AT THE END OF EACH SHIFT.



PARTIAL FOURTH FLOOR HVAC PIPING PLAN 2

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

CONSULTANTS:

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Drawing Title
PARTIAL FOURTH FLOOR HVAC PIPING PLANS

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked DAD | Drawn JXC

Project Number 541-16-104

Building Number 1

Drawing Number **1-M3.2**

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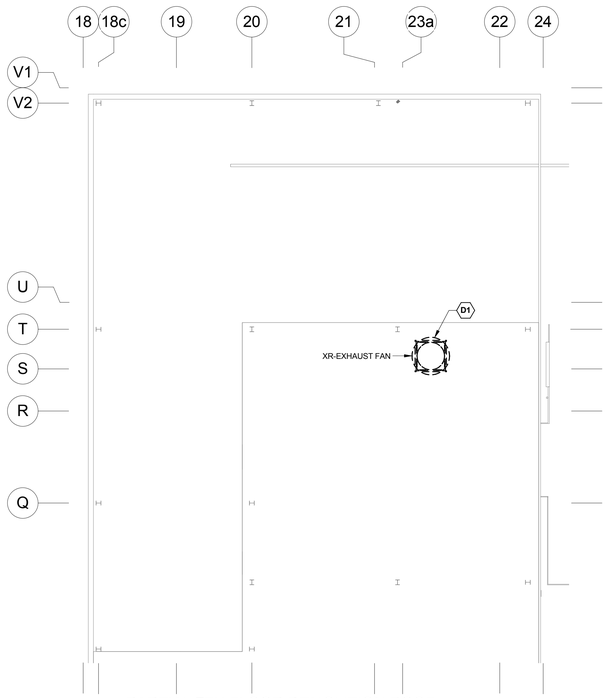
Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



PARTIAL 7TH FLOOR DEMOLITION ROOF HVAC PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

DEDUCT ALTERNATE 2:

1. UPON ACCEPTANCE OF DEDUCT ALTERNATE #2, OMIT REPLACEMENT OF EXISTING EXHAUST FAN.
2. IN LIEU OF REPLACING THE EXISTING EXHAUST FAN PROVIDE NEW BELTS, SHEAVES AND REBALANCE FAN TO ACCOMMODATE NEW AIRFLOW.

GENERAL NOTES

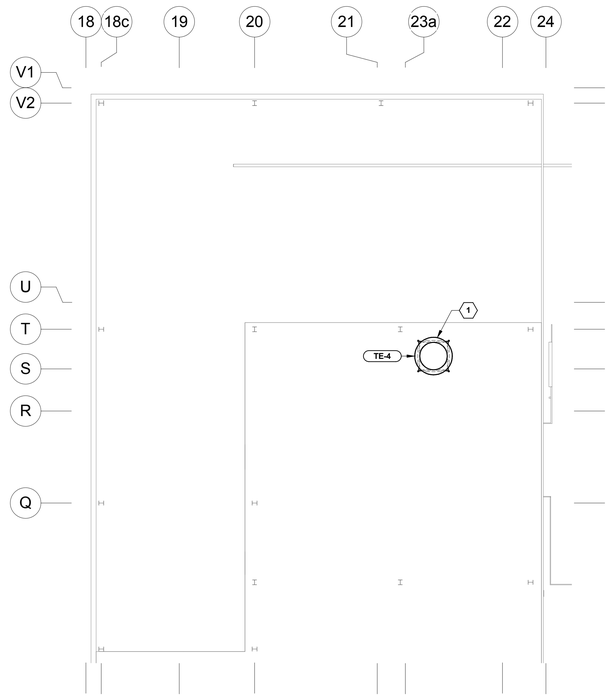
1. ACCESS TO ROOF IS THROUGH ELEVATOR MACHINE ROOM AND WILL REQUIRE AN ESCORT.
2. CONTRACTOR MUST BE TIED-OFF WHEN WORKING ON THE ROOF.
3. THERE IS NO ELEVATOR ACCESS TO THE SEVENTH FLOOR. CONTRACTOR MUST RIG DEMOED AND NEW FAN UP STAIRS AND UP TO ROOF ABOVE SEVENTH FLOOR PENTHOUSE.

DEMOLITION CODED NOTES

D1 REMOVE EXISTING EXHAUST FAN FROM PENTHOUSE ROOF. PRESERVE ROOF CURB FOR REUSE.

CODED NOTES

1 PROVIDE NEW EXHAUST FAN TE-4 ON PENTHOUSE ROOF. REUSE EXISTING ROOF CURB FROM EXISTING FAN. PROVIDE CURB ADAPTER IF NECESSARY. PROVIDE VFD FOR FAN. LOCATED VFD IN 7TH FLOOR PENTHOUSE, COORDINATE SPECIFIC LOCATION OF VFD WITH FACILITIES.



PARTIAL 7TH FLOOR ROOF HVAC PLAN 2

1/8" = 1'-0"

0' 4' 8' 16' 32'

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title: **PARTIAL 7TH FLOOR ROOF HVAC PLANS**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JMC

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-M4.1**

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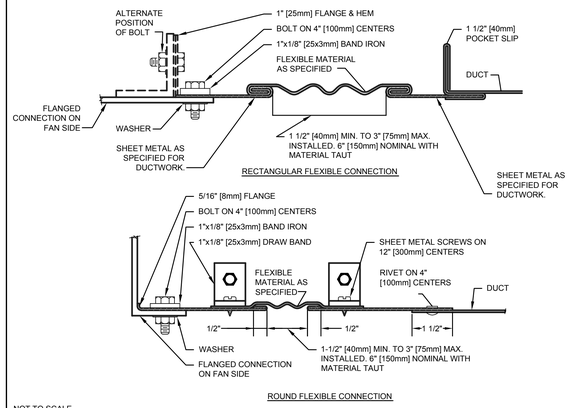
Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

FLEXIBLE DUCT CONNECTION DETAILS

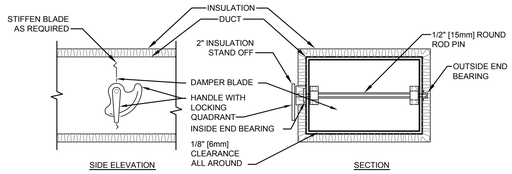


RECTANGULAR FLEXIBLE CONNECTION

ROUND FLEXIBLE CONNECTION

NOT TO SCALE

VOLUME DAMPER DETAIL



SIDE ELEVATION

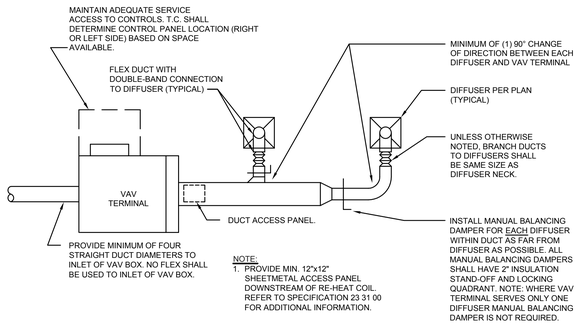
SECTION

NOTE:

1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

NOT TO SCALE

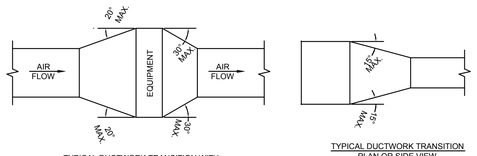
VAV AIR TERMINAL DETAIL



NOTE:
1. PROVIDE MIN. 12"x12" SHEETMETAL ACCESS PANEL DOWNSTREAM OF RE-HEAT COIL. REFER TO SPECIFICATION 23 31 00 FOR ADDITIONAL INFORMATION.

NOT TO SCALE

DUCTWORK TRANSITION WITH EQUIPMENT MOUNTED IN DUCT DETAIL



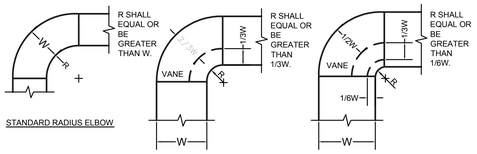
TYPICAL DUCTWORK TRANSITION WITH EQUIPMENT MOUNTED IN DUCT PLAN OR SIDE VIEW

TYPICAL DUCTWORK TRANSITION PLAN OR SIDE VIEW

NOTE:
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

NOT TO SCALE

DUCTWORK RADIUS ELBOW DETAIL



STANDARD RADIUS ELBOW

SHORT RADIUS ELBOW WITH ONE VANE

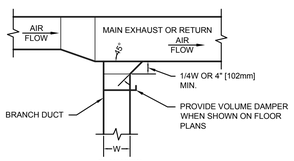
SHORT RADIUS ELBOW WITH TWO VANES

NOTE:

1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS SHOWN ON FLOOR PLANS MAY BE MADE SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

NOT TO SCALE

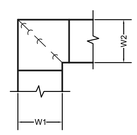
EXH./RETURN BRANCH DUCTWORK DETAIL



PLAN VIEW

NOT TO SCALE

DUCTWORK SQUARE VANED ELBOW DETAIL

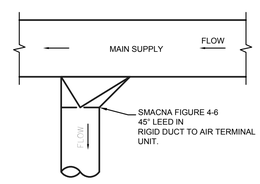


NOTE:

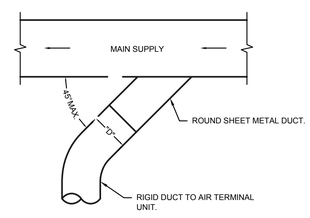
1. ALL VANED ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE VANES SHALL HAVE A 2" [50mm] RADIUS, 1 1/2" [40mm] MAXIMUM SPACE BETWEEN VANES AND A 3/4" [20mm] TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" [500mm] VANES SHALL BE DOUBLE VANE TYPE.
5. PROVIDE ACCESS DOORS UPSTREAM AND DOWNSTREAM OF ALL TURNING VANES. REFER TO SPECIFICATION 23 31 00 FOR ADDITIONAL INFORMATION.

NOT TO SCALE

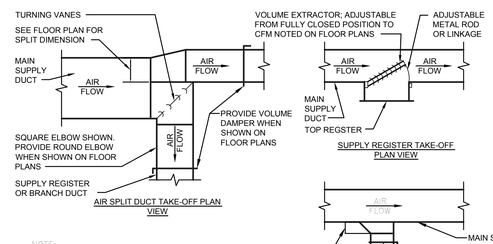
TYPICAL SUPPLY DUCTWORK TAKE-OFFS



AIR TERMINAL UNIT TAKE-OFF PLAN VIEW



ALTERNATE AIR TERMINAL UNIT TAKE-OFF PLAN VIEW



AIR SPLIT DUCT TAKE-OFF PLAN VIEW

SUPPLY REGISTER TAKE-OFF PLAN VIEW

BRANCH DUCT TAKE-OFF PLAN VIEW

NOTE:

1. PROVIDE ACCESS DOORS UPSTREAM AND DOWNSTREAM OF ALL TURNING VANES.

NOT TO SCALE

FULLY SPRINKLERED

BID ISSUE	06/17/16
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Drawing Title
MECHANICAL DETAILS

Approved:

Project Title
ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked DAD | Drawn JTP

Project Number 541-16-104

Building Number 1

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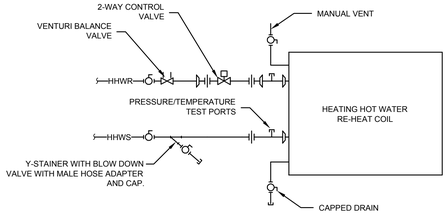
1-M5.1
Dwg. of

Office of Facilities Management

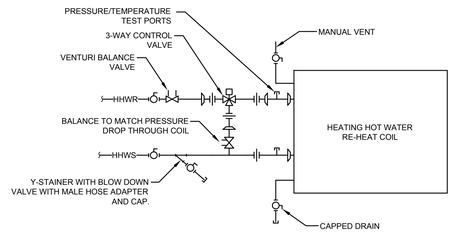
Department of Veterans Affairs

2 WAY VAV RE-HEAT COIL PIPING SCHEMATIC



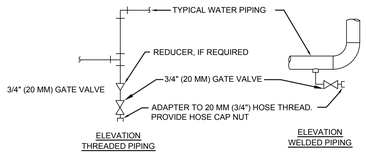
NOT TO SCALE

3 WAY VAV RE-HEAT COIL PIPING SCHEMATIC



NOT TO SCALE

PIPING DRAIN VALVE CONNECTIONS DETAIL

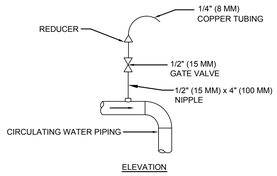


NOTES:

1. DRAIN ALL LOW POINTS AS INDICATED ABOVE.
2. WHERE SCALE POCKETS ARE SHOWN ON PIPE RISER DIAGRAMS AND/OR PLANS LOCATE DRAIN AT BOTTOM OF SCALE POCKET.

NOT TO SCALE

AIR VENT DETAIL

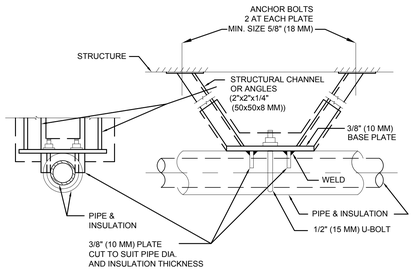


NOTES:

1. VENT ALL HIGH POINTS INDICATED ABOVE.
2. IF AUTOMATIC AIR VENTS ARE USED, PIPE DISCHARGE TO DRAIN

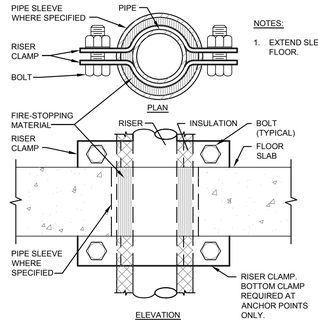
NOT TO SCALE

HORIZONTAL PIPE ANCHOR DETAIL



NOT TO SCALE

SUPPORT FOR PIPE RISERS DETAIL

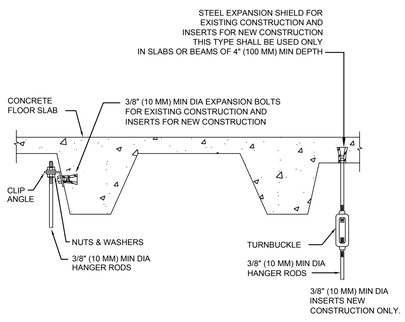


NOTES:

1. EXTEND SLEEVE ABOVE FLOOR.

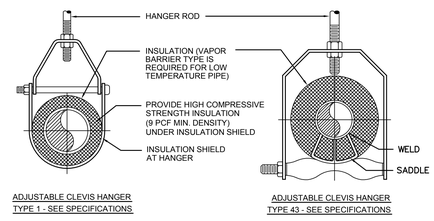
NOT TO SCALE

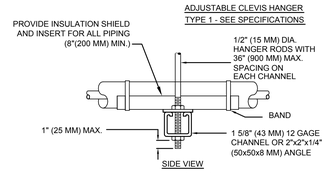
HANGER RODS IN CONCRETE SLABS AND BEAMS DETAILS



NOT TO SCALE

TYPICAL PIPE HANGERS DETAILS



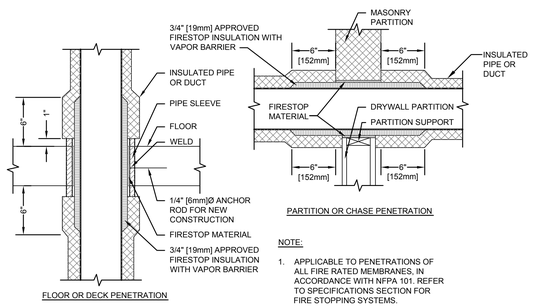


TRAPEZE HANGER FOR UP TO 1000 LB. (453 KG) UNIFORM LOAD

MAXIMUM PIPE/TUBING SUPPORT SPACING												
NOM. SIZE	IN. (MM)	THRU 3/4 THRU (20)	1 (25)	1 1/4 (32)	1 1/2 (40)	2 (50)	2 1/2 (65)	3 (75)	4 (100)	5 (125)	6 (150)	8 (200)
PIPE	FT. (M)	7 (2.1)	7 (2.1)	7 (2.1)	9 (2.7)	10 (3.0)	11 (3.4)	12 (3.7)	14 (4.1)	16 (4.9)	17 (5.2)	19 (5.8)
TUBING	FT. (M)	5 FT 5 FT	6 (1.8)	7 (2.1)	8 (2.4)	8 (2.4)	9 (2.7)	10 (3.0)	12 (3.7)	13 (4.0)	14 (4.1)	16 (4.9)
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.												

NOT TO SCALE

PIPE/DUCT PENETRATION OF FIRE/SMOKE BARRIERS DETAILS



NOTE:

1. APPLICABLE TO PENETRATIONS OF ALL FIRE RATED MEMBRANES, IN ACCORDANCE WITH NFPA 101. REFER TO SPECIFICATIONS SECTION FOR FIRE STOPPING SYSTEMS.

NOT TO SCALE

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
MECHANICAL DETAILS

Approved:

Project Title
ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked DAD | Drawn JTP

Project Number 541-16-104

Building Number 1

Drawing Number
1-M5.2
Dwg. of

Office of Facilities Management

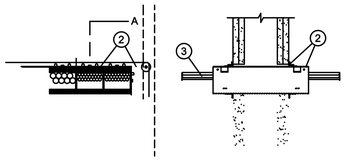
Department of Veterans Affairs

FIRE STOPPING GENERAL NOTES:

1. THE DETAILS SHOWN ARE MANUFACTURE SPECIFIC HOWEVER OTHER MANUFACTURE ARE ACCEPTABLE.
2. CONTRACTOR SHALL PROVIDE A FIRE STOPPING PRODUCT BY A SINGLE MANUFACTURE WHICH COMPLIES WITH THE SPECIFICATIONS.
3. CONTRACTOR SHALL SUBMIT ALL APPLICABLE FIRESTOP PENETRATION DETAILS REQUIRED TO MAINTAIN THE RATING OF FIRE RATED ASSEMBLIES (ALL DETAILS SHALL BE UL LISTED.)
4. SEE LIFE SAFETY PLAN FOR RATED WALLS AND FLOORS.

System No. W-L-3218

F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



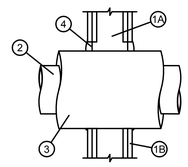
1. **Wall Assembly -** The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
   A. **Studs -** Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board* -** Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).
   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.
2. **Firestop Device* -** One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (.0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.
   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).
   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. **Firestop Device* - Extension Module -** (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.
   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. **Cables -** Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:
   A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   I. **Optical Fiber Raceway+ -** Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).
   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.
   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.
4. **Fill, Void or Cavity Material* - Sealant or Putty -** (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.
   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty
   *Bearing the UL Classification Mark

System No. W-L-5014

CAN/ULC S115
F Ratings - 1 and 2 Hr (See Item 1)
FT Rating - 1 Hr
FH Ratings - 1 and 2 Hr (See Item 1)
FTH Rating - 1 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft
L Rating At 400 F - Less Than 1 CFM/sq ft



Section A-A

1. **Wall Assembly -** The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs -** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board* -** 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 18 in. (457 mm).
   The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

1A. **Metallic Sleeve -** (Optional, Not Shown) - Cylindrical sleeve fabricated from min 0.016 in. (0.41 mm) to max 0.105 in. (2.7 mm) thick sheet steel. Length of steel sleeve to be equal to the thickness of wall. Longitudinal seam of sleeve welded or overlapped min 1 in. (25 mm). The ends of the steel sleeve shall be flush or recessed max 1/4 in. (6 mm) from wall surfaces.

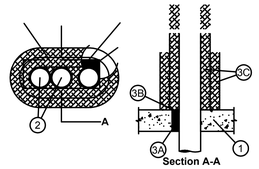
2. **Through Penetrants -** One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:
   A. **Steel Pipe -** Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe -** Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.
   C. **Copper Tubing -** Nom 4 in. (102 mm) diam (or smaller) Type M (or heavier) copper tube.
   D. **Copper Pipe -** Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. **Pipe Coverings* -** One of the following types of pipe coverings shall be used:
   A. **Pipe and Equipment Covering Materials* -** Max 2 in. (51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between insulated penetrating item and the edge of the through opening shall be min 0 in. (point contact) to max 1-1/4 in. (32 mm).
   See **Pipe and Equipment Covering-Materials*** - (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   B. **Pipe Covering Materials* -** Max 2 in. (51 mm) thick unfaced mineral fiber pipe insulation sized to the outside diam of pipe or tube. Pipe insulation secured with min 18 SWG steel wire spaced max 12 in. (305 mm) OC. The annular space between insulated penetrating item and the edge of the through opening shall be min 0 in. (point contact) to max 1-1/4 in. (32 mm).
   IIG MINWOOL L L C - High Temperature Pipe Insulation 1200, High Temperature Pipe Insulation BWT or High Temperature Pipe Insulation Thermaloc.
   C. **Sheathing Material* -** Used in conjunction with Item 3B. Foil-scrim-kraft or all service jacket material shall be wrapped around the outer circumference of the pipe insulation (Item 3B) with the kraft side exposed. Longitudinal joints and transverse joints sealed with metal fasteners or butt tape.
   See **Sheathing Materials** (BVDV) category in the Building Materials Directory for names of manufacturers. Any sheathing material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

4. **Fill, Void or Cavity Material* - Sealant -** Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. At point contact location between insulated through penetrant and gypsum board, a min 3/8 in. (10 mm) bead of fill material shall be applied to the insulated through penetrant/gypsum board interface on both sides of the wall.
   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant
   *Bearing the UL Classification Mark

System No. F-A-1094

F Ratings - 2 and 3 Hr (See Item 1)
T Ratings - 2 and 3 Hr (See Item 1)
L Rating at Ambient - 1 CFM/sq ft
L Rating at 400°F - Less than 1 CFM/sq ft
W Rating - Class 1 (See Item 3B)

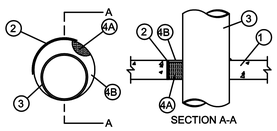


Section A-A

1. **Floor Assembly -** Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. As an alternate, any min 2 hr fire rated D700, D800 or D900 Series Floor-Ceiling Design in the UL Fire Resistance Directory having a min 2-1/2 in. (64 mm) thickness of lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete topping over the steel deck may be used. Floor may also be constructed of any min 6 in. (152 mm) thick hollow core UL Classified **Precast Concrete Units***. Max area of opening is 96 sq in. with a max dim of 16 in. Max diam of opening in floor constructed of hollow-core precast concrete units is 7 in. (178 mm).
   See **Precast Concrete Units** (CFTV) category in Fire Resistance Directory for names of manufacturers.
   The F and T Ratings are 2 hr when the min thickness of the concrete floor is less than 4-1/2 in. (114 mm).
2. **Through-Penetrant -** One or more metallic pipes, conduits or tubing installed concentrically or eccentrically within opening. Pipes, conduits, or tubing spaced min 0 in. (0 mm, point contact) to max 1-1/2 in. (38 mm) apart. Annular space between penetrant and periphery of opening shall be min of 0 in. (0 mm, point contact) to max 2 in. (51 mm). Penetrant to be rigidly supported on both sides of floor assembly. The following types and sizes of penetrants may be used:
   A. **Steel Pipe -** Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe -** Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
   C. **Conduit -** Nom 4 in. (152 mm) diam (or smaller) steel conduit or steel electrical metallic tubing (EMT) or nom 1 in. (25 mm) diam (or smaller) flexible steel conduit.
3. **Firestop System -** The details of the firestop system shall be as follows:
   A. **Packing Material -** Min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to extend through entire thickness of concrete floor except for recess at top surface of floor to accommodate the required thickness of fill material.
   B. **Fill, Void or Cavity Materials* - Sealant or Putty -** Min 1/2 in. (13 mm) thickness of caulk or putty applied within the annulus, flush with top surface of floor. At point contact, apply min 1/4 in. (6 mm) bead at penetrant/concrete interface on top surface of floor.
   SPECIFIED TECHNOLOGIES INC - SpecSeal 100, 101, 102, 105, 120 or 129 Sealant, SpecSeal LCI Sealant, SpecSeal Putty, Pensil 300 Sealant or SpecSeal Series SIL300 Sealant for floors or walls and Pensil 300 SL Sealant or SpecSeal Series SIL300SL Sealant for floors only.
   W Rating applies only when Pensil 300, SpecSeal Series SIL300, Pensil 300 SL or SpecSeal Series SIL300SL Sealants are used with solid penetrant (not flexible steel conduit).
   C. **Duct Wrap Material* -** Min 1-1/2 in. (38 mm) thick duct wrap tightly wrapped around penetrants to extend 36 in. (914 mm) above floor. An additional layer of min 1-1/2 in. (38 mm) thick duct wrap tightly wrapped around the first layer of duct wrap to extend 12 in. (305 mm) above floor. The spaces between penetrants at the top of the duct wrap is to be tightly-packed with a nominal 2 in. (51 mm) depth of duct wrap material. All longitudinal seams of both layers of duct wrap are sealed with foil tape.
   THERMAL CERAMICS INC - FireMaster® Duct Wrap 2x2, FireMaster Duct Wrap 2x2+, FireMaster FastWrap XL, or Pyroscat Duct Wrap XL.
   *Bearing the UL Classification Mark

System No. C-AJ-1240

F Ratings - 2 and 3 Hr (See Item 4)
T Rating - 0 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft
L Rating at 400 F - Less Than 1 CFM/sq ft



SECTION A-A

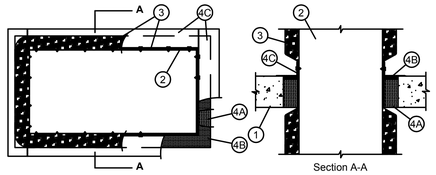
1. **Floor or Wall Assembly -** Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete floor or 2-3/4 in. (70 mm) lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified **Concrete Blocks***. Floor may also be constructed of any UL Classified **Precast Concrete Units***. Max diam of opening is 32 in. (813 mm). Max diam of opening in floors constructed of hollow-core precast concrete units is 7 in. (178 mm).
   See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.
2. **Steel Sleeve -** (Optional) - Nom 32 in. (813 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve or No. 26 ga (0.022 in. or 0.56 mm thick) sheet steel sleeve with square anchor flange spot welded to the sleeve at approx mid-height. Sleeve cast or grouted in place flush with floor ar wall surfaces. Steel pipe sleeve may project max 3 in. (76 mm) from floor or wall surfaces.
3. **Through Penetrant -** One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min 0 in. (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. **Steel Pipe -** Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe -** Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
   C. **Conduit -** Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or nom 6 in. (152 mm) diam steel conduit.
   D. **Copper Tubing -** Nom 6 in. (152 mm) diam (or smaller) Type M (or heavier) copper tubing.
   E. **Copper Pipe -** Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

3A. **Through Penetrating Product* Flexible Metal Piping -** As an alternate to Item 3, one nom 2 in. (51 mm) diam (or smaller) flexible steel pipe to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe and the periphery of the opening shall be min 0 in. (point contact) to max 2 in. (51 mm). Pipe to be rigidly supported on both sides of floor or wall assembly.
   OMEGA FLEX INC
   GASTITE, DIV OF TITEFLEX
   WARD MFG L L C

4. **Firestop System -** The firestop system shall consist of the following:
   A. **Packing Material -** Min 2-1/4 in. (57 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
   B. **Fill, Void or Cavity Material* - Sealant -** Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with top surface of floor or top of sleeve or with both surfaces of wall assembly or both ends of sleeve. At the point contact location between through penetrant and concrete, a min 1/4 in. (6 mm) diam bead of fill material shall be applied at the concrete/through penetrant interface on the top surface of floor and on both surfaces of wall. Fill material installed symmetrically in floors constructed of hollow-core precast concrete units.
   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant. SpecSeal LC 150 Sealant or SpecSeal LE600 Sealant may be used for 2 hr F Rating only.
   *Bearing the UL Classification Mark

System No. C-AJ-7143

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 2 Hr	F Rating - 2 Hr
T Rating - 3/4 Hr	FT Rating - 3/4 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Rating - 2 Hr
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Rating - 3/4 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - Less Than 1 CFM/sq ft

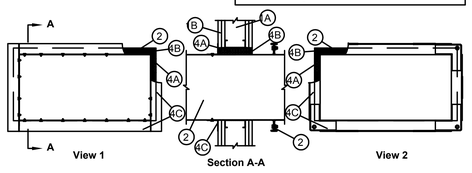


Section A-A

1. **Floor or Wall Assembly -** Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max area of opening is 17.8 ft2 (1.65 m2) with max dimension of 64 in. (1.6 m).
   See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. **Steel Duct -** Max 60 by 36 in. (1524 by 914 mm) steel duct. Steel gauge of duct shall conform with SMACNA requirements. One duct to be centered within the firestop system. The annular space between steel duct and edges of opening shall be min 2 in. (51 mm) to max 2-1/2 in. (64 mm) Steel duct to be rigidly supported on both sides of floor or wall assembly.
3. **Batts and Blankets* -** Nom 2 in. (51 mm) thick light density (min 3/4 pcf or 12 kg/m3) glass fiber blanket insulation jacketed on the outside with a foil-scrim-kraft facing. Longitudinal and transverse joints sealed with foil-scrim-kraft tape. Nom annular space between insulated steel duct and periphery of opening to be point contact to max 1/2 in. (13 mm) prior to installation of packing material (Item 4A).
   See **Batts and Blankets** (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread value of 25 or less and a Smoke Developed value of 50 or less may be used.
4. **Firestop System -** The firestop system shall consist of the following:
   A. **Packing Material -** Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into annular space such that glass fiber blanket insulation on steel duct is compressed to a maximum overall thickness of 1/2 in. (13 mm). Packing material to be recessed from top surface of floor and from both surfaces of wall to accommodate the required thickness of fill material.
   B. **Fill, Void or Cavity Material* - Sealant -** Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor and both surfaces of wall.
   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, Pensil 300 Sealant or SpecSeal Series SIL300 Sealant for floors or walls and Pensil 300SL Sealant or SpecSeal Series SIL300SL Sealant for floors only.
   C. **Retaining Angles -** Min 16 ga galv steel angles sized to lap duct a min of 2 in. (51 mm) and lap periphery of opening a min of 1 in. (25 mm). Angles attached to all four sides of steel duct, through glass fiber blanket insulation, on top surface of floor or on both surfaces of wall with No. 10 (or larger) steel sheet metal screws spaced 1 in. (25 mm) from each end and max 4 in. (102 mm) OC.
   *Bearing the UL Classification Mark

System No. W-L-7202

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings - 1 and 2 Hr	F Ratings - 1 and 2 Hr
T Rating - 0 Hr	FT Rating - 0 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Ratings - 1 and 2 Hr
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Rating - 0 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - Less Than 1 CFM/sq ft



Section A-A

1. **Wall Assembly -** The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U400 or V400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
   A. **Studs -** Wall framing shall consist of steel channel studs. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. Additional studs shall be installed horizontally to form a rectangular box around the through penetrant.
   B. **Gypsum Board* -** Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Min separation between penetrants to be 1 in. (25 mm). Max area of opening 17.8 sq ft (1.65 m2) with one dimension of opening being 64 in. (1.6 m) or less.
   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.
2. **Steel Duct -** One max 60 by 36 in. (1524 by 914 mm) steel duct passing through opening. Steel gauge of duct shall conform with SMACNA requirements. The annular space between steel duct and edges of opening shall be min 0 in. (point contact) to max 2-1/2 in. (64 mm). Two sections of duct may be connected together on one side of the wall. Duct connection to be located max 4 in. (102 mm) from one surface of the wall. Nom 2 in. (51 mm) flanges formed on the end of both duct sections. Min 6 in. (152 mm) long by 2 in. (51 mm) wide by 16 gauge (min 0.056 in. or 1.42 mm thick) "L" shaped steel corner pieces installed at each corner of the flanges on both sides of the connection. Corner pieces attached together with 3/8 in. (10 mm) steel nuts and bolts at each corner. Min 22 gauge (min 0.029 in. or 0.74 mm thick) by 6 in. (152 mm) long steel clips attached to duct flanges at connection max 15 in. (381 mm) OC. Steel duct to be rigidly supported on both sides of wall assembly.
3. **Batts and Blankets* -** (Optional, Not shown) - Nom 2 in. (51 mm) thick light density (min 3/4 pcf or 12 kg/m3) glass fiber blanket insulation jacketed on the outside with a foil-scrim-kraft facing. Longitudinal and transverse joints sealed with foil-scrim-kraft tape. Nom annular space between insulated steel duct and periphery of opening to be point contact to max 1/2 in. (13 mm) prior to installation of packing material (Item 4A).
   See Batts and Blankets (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread value of 25 or less and a Smoke Developed value of 50 or less may be used.
4. **Firestop System -** The firestop system shall consist of the following:
   A. **Packing Material -** Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into annular space such that glass fiber blanket insulation on steel duct is compressed to a maximum overall thickness of 1/2 in. (13 mm). Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.
   B. **Fill, Void or Cavity Material* - Sealant -** Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.
   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant
   C. **Retaining Angles -** Min 16 gauge (min 0.056 in. or 1.42 mm thick) galv steel angles sized to lap duct a min of 2 in. (51 mm) and to lap periphery of opening a min of 1 in. (25 mm). Angles attached to all four sides of steel duct on both sides of wall with No. 10 (or larger) steel sheet metal screws spaced 1 in. (25 mm) from each end and max 4 in. (102 mm) OC. When steel duct connection (Item 2) is located within 4 in. (102 mm) of wall surface, steel retaining angle only required on side of wall opposite steel duct connection. When optional insulation is present, angles attached to all four sides through glass fiber blanket insulation
   *Bearing the UL Classification Mark

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title: **FIRE STOPPING DETAILS**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-M5.3**

Dwg. of

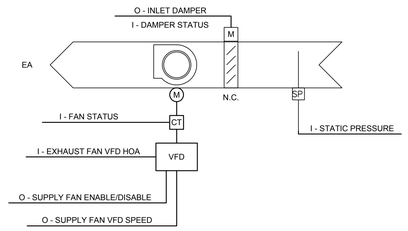
Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

EQUIPMENT TO BE REMOVED FROM SCOPE UNDER BID ALTERNATE #2

SEQUENCE OF OPERATION FOR TE-4



FAN OPERATION
1. FAN SHALL OPERATE CONTINUOUSLY.
2. ON A RUN COMMAND THE TWO POSITION DAMPER SHALL OPEN, AND THE DAMPER END SWITCH SHALL ALLOW THE FAN TO START. UPON FAN FAILURE OR SHUTDOWN DAMPER SHALL CLOSE.
3. THE BUILDING CONTROL SYSTEM SHALL MONITOR THE FAN STATUS. UPON FAILURE OF THE FAN, AN ALARM SHALL BE GENERATED.
4. THE BALANCER SHALL ADJUST AND SET THE VFD TO THE SCHEDULED AIR FLOW SETPOINT.

NOT TO SCALE

TRIDIUM CONTROLS SYSTEM NOTES

A. ALL INPUT AND OUTPUT POINTS INDICATED ON THIS DRAWING SHALL BE PROGRAMMED INTO THE EXISTING ANDOVER BAS.

B. ADDITIONALLY, ALL INPUT AND OUTPUT POINTS AND ALARMS SHALL BE MAPPED TO EXISTING TRIDIUM CONTROLS SYSTEM FRONT END WORKSTATIONS ON CAMPUS.

C. FULL TRIDIUM SYSTEM GRAPHICS SHALL BE DEVELOPED (THIS IS IN ADDITION TO THE ANDOVER SYSTEM GRAPHICS).

SUPPLEMENTARY CONTROL NOTES

EXTEND THE EXISTING ANDOVER CONTROL SYSTEM. TO PROVIDE A FULLY AUTOMATED DIRECT DIGITAL CONTROL SYSTEM, INCLUDE CONTROL DEVICES, ACTUATORS, WIRING, PANELS, CONTROLLERS, PROGRAMMING, AS SHOWN AND AS REQUIRED TO EXECUTE THE SEQUENCE OF OPERATION. PROVIDE FIELD LABOR AS REQUIRED TO COMPLETE BALANCING AND COMMISSIONING. CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE VA COTR AND ENGINEER EACH SYSTEM'S SEQUENCES.

A. DAMPER OPERATORS TO BE PROVIDED BY TEMPERATURE CONTROLS CONTRACTOR.

B. TEMPERATURE CONTROL TEST SHALL INCLUDE, BUT NOT BE LIMITED TO:
- DAMPER OPERATION
- VALVE ACTUATION RESPONSE AND VALIDATION OF CORRECT OPERATION
- VERIFIED ENTIRE CONTROL SEQUENCE OPERATES PER DESIGN
- ACCOUNT FOR ALL CONTROL POINTS LISTED
- DEVELOP AND IMPLEMENT SEQUENCE OF OPERATIONS FOR EACH CONTROL COMPONENT BASED ON DESCRIBED SEQUENCE.

C. ALL SYSTEMS SHALL BE COMMISSIONED. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

D. TEMPERATURE CONTROLS SHALL BE ANDOVER. ALL CONTROLS WORK SHALL INTERFACE WITH EXISTING ANDOVER BUILDING CONTROL SYSTEM.

GENERAL NOTES:

A. OCCUPANCY SENSORS WILL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. SEE ELECTRICAL PLANS FOR ACTUAL LOCATIONS.

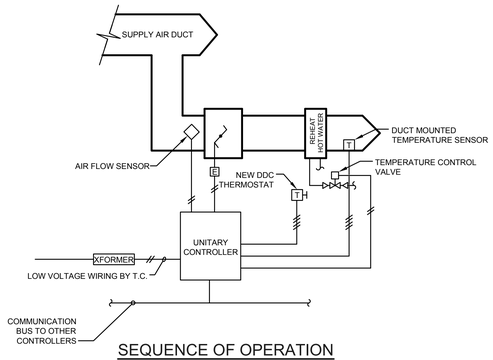
B. BALANCER SHALL VERIFY ROOM PRESSURIZATION IS MAINTAINED DURING BOTH OCCUPIED AND UNOCCUPIED MODES FOR THE CRITICAL ROOMS.

CONTROL NOTES:

A. MODIFY EXISTING HEATING HOT WATER PUMP CONTROLS TO USE NEW DIFFERENTIAL PRESSURE SENSOR TO CONTROL PUMPS.

B. TEMPERATURE CONTROL CONTRACTOR TO TIE INTO OCCUPANCY SENSORS, WHICH DETERMINE THE OCCUPANCY MODE AND SEQUENCE. IN ADDITION PROVIDE A MANUAL OVERRIDE BUTTON, WHICH WILL TEMPORARILY SWITCH THE SEQUENCE FROM UN-OCCUPIED TO OCCUPIED.

VAV BOX CONTROLS (S.X.1.Z)



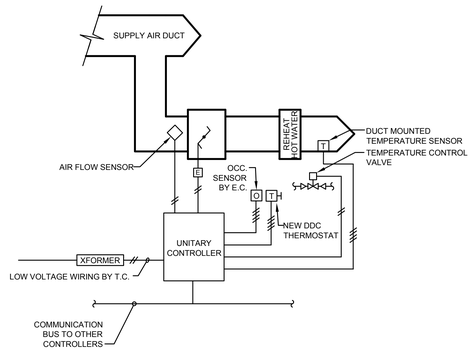
SEQUENCE OF OPERATION

VAV BOX RUN CONDITIONS:
A. COOLING/HEATING MODE:
1. AIR FLOW MONITOR TO MODULATE VAV BOX DAMPER TO MAINTAIN MINIMUM AIRFLOW.
B. COOLING MODE:
1. MODULATE DAMPER TO MAINTAIN ROOM COOLING SET POINT.
C. HEATING MODE:
1. DAMPER SHALL MODULATE TO MAINTAIN HEATING AIR FLOW SET POINTS.
2. ON CALL FOR HEATING REHEAT COIL CONTROL VALVE SHALL MODULATE TO MAINTAIN ROOM TEMPERATURE SET POINT.

REHEAT COIL RUN CONDITIONS:
A. COOLING MODE:
1. REHEAT COIL VALVE SHALL BE CLOSED.
B. HEATING MODE:
1. SPACE THERMOSTAT SHALL MODULATE REHEAT HOT WATER VALVE TO MAINTAIN SETPOINT.
C. DUCT MOUNTED TEMPERATURE SENSOR SHALL REPORT REHEAT COIL LEAVING AIR TEMPERATURE TO BUILDING AUTOMATION SYSTEM.

NOT TO SCALE

OCCUPANCY CONTROLLED VAV BOX (S.X.2.Z)



SEQUENCE OF OPERATION

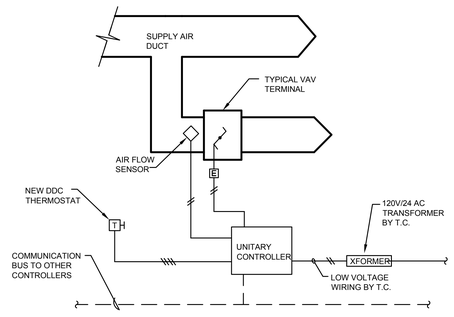
VAV BOX RUN CONDITIONS:
A. COOLING/HEATING MODE:
1. AIR FLOW MONITOR TO MODULATE VAV BOX DAMPER TO MAINTAIN MINIMUM AIRFLOW.
B. COOLING MODE:
1. MODULATE DAMPER TO MAINTAIN COOLING SETPOINT.
C. HEATING MODE:
1. DAMPER SHALL MODULATE MAINTAIN MINIMUM HEATING AIRFLOW SETPOINT.
2. REHEAT COIL CONTROL VALVE SHALL MODULATE TO MAINTAIN ROOM TEMPERATURE SETPOINT.

REHEAT COIL RUN CONDITIONS:
A. COOLING MODE:
1. REHEAT COIL VALVE SHALL BE CLOSED.
B. HEATING MODE:
1. SPACE THERMOSTAT SHALL MODULATE REHEAT HOT WATER VALVE TO MAINTAIN SETPOINT.
C. DUCT MOUNTED TEMPERATURE SENSOR SHALL REPORT REHEAT COIL LEAVING AIR TEMPERATURE TO BUILDING AUTOMATION SYSTEM.

OCCUPANCY CONTROL
A. OCCUPANCY SENSOR SHALL DETERMINE SPACE AS OCCUPIED. ROOM OVERRIDE SHALL BE POSSIBLE FROM MANUAL SENSOR BUTTON.
B. OCCUPIED:
1. RUN BOX SUPPLY TO AIR FLOW STATED IN SCHEDULES.
2. CONTROL SPACE TO ROOM SETPOINT.
3. OPERATE TO VAV BOX RUN CONDITIONS.
C. UNOCCUPIED:
1. RUN BOX SUPPLY TO 50% OF MINIMUM AIR FLOW (STATED IN SCHEDULES).
2. OVERRIDE ROOM THERMOSTAT SETTING.
2.a. HEATING: 68°F
2.b. COOLING: 78°F

NOT TO SCALE

SUPPLY VAV BOX (NO REHEAT) CONTROLS (S.X.3.Z)



RUN CONDITIONS:
A. COOLING MODE:
1. SPACE THERMOSTAT SHALL MODULATE VAV BOX DAMPER TO MAINTAIN SETPOINT.

NOT TO SCALE

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BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title: **TEMPERATURE CONTROLS**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: JTP

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-M6.1**

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Department of Veterans Affairs

EXISTING SEQUENCE OF OPERATION FOR AIR HANDLING UNIT (AHU-AC-54)

1. RUN CONDITIONS - SCHEDULED

1.1 THE UNIT SHALL RUN BASED UPON AN OPERATOR ADJUSTABLE SCHEDULE.

2. FREEZE PROTECTION

2.1 THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS.

3. HIGH STATIC SHUTDOWN

3.1 THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A HIGH STATIC SHUTDOWN SIGNAL.

4. SMOKE DETECTION

4.1 THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A RETURN AIR OR SUPPLY AIR SMOKE DETECTOR STATUS. DISCHARGE AND RETURN SMOKE DAMPERS SHALL CLOSE IN THIS EVENT.

5. SUPPLY FAN

5.1 THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

5.2 ALARMS:
SUPPLY FAN FAILURE
SUPPLY FAN RUNTIME EXCEEDED

6. SUPPLY AIR DUCT STATIC PRESSURE CONTROL

6.1 THE CONTROLLER SHALL MEASURE DUCT STATIC PRESSURE AND SHALL MODULATE THE SUPPLY FAN VFD SPEED TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT OF 1.5 INCHES (ADJ.). THE SUPPLY FAN VFD SPEED SHALL NOT DROP BELOW 30%(ADJ.).

6.2 ALARMS:
HIGH SUPPLY FAN STATIC PRESSURE
LOW SUPPLY FAN STATIC PRESSURE
SUPPLY FAN VFD FAULT

7. RETURN FAN

7.1 THE RETURN FAN SHALL RUN WHENEVER THE SUPPLY FAN RUNS.

7.2 ALARMS
RETURN FAN FAILURE
RETURN FAN RUNTIME EXCEEDED
RETURN FAN VFD FAULT

8. RETURN AIRFLOW

8.1 THE RETURN FAN VFD SHALL MODULATE IN UNISON WITH THE SUPPLY FAN VFD, RETURN AIRFLOW SETPOINT SHALL BE 100% (ADJ.) OF THE SUPPLY AIRFLOW MINUS 10% (ADJ.). THE RETURN FAN VFD SPEED SHALL NOT DROP BELOW 20%(ADJ.)

8.2 ALARMS
HIGH RETURN AIRFLOW
LOW RETURN AIRFLOW

9. PREHEAT COIL

9.1 THE CONTROLLER SHALL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE PREHEAT COIL VALVE TO MAINTAIN ITS SETPOINT 5 DEG F(ADJ.) LESS THAN THE SUPPLY AIR TEMPERATURE SETPOINT

9.2 PREHEAT COIL SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS LESS THAN 60 DEG(ADJ),
AND THE ECONOMIZER IS DISABLED
AND THE SUPPLY FAN STATUS IS ON

9.3 THE PREHEAT COIL SHALL OPEN FOR FREEZE PROTECTION WHENEVER:
MIXED AIR TEMPERATURE DROPS FROM 40 DEG F TO 35 DEG F (ADJ.)
OR THE FREEZESTAT IS ON.

9.4 IF OUTDOOR TEMPERATURE IS BELOW 30 DEG F (ADJ) AND HEAT IS REQUIRED, THEN THE STEAM VALVE FOR HEATING SHALL BE FULLY OPEN AND TEMPERATURE CONTROL SHALL BE BY MODULATION OF THE FACE/BYPASS DAMPER.

10. SUPPLY AIR TEMPERATURE SETPOINT

10.1 THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE AND SHALL MAINTAIN A SUPPLY AIR TEMPERATURE SETPOINT RESET BASED ON ZONE COOLING AND HEATING REQUIREMENTS.

10.2 THE SUPPLY AIR TEMPERATURE SETPOINT SHALL BE RESET FOR COOLING BASED ON ZONE COOLING REQUIREMENTS AS FOLLOWS:
THE INITIAL SUPPLY AIR TEMPERATURE SETPOINT SHALL BE 55 DEG F(ADJ.)
AS COOLING DEMAND INCREASES, THE SETPOINT SHALL INCREMENTALLY RESET DOWN TO A MINIMUM OF 53 DEG F(ADJ.)
AS COOLING DEMAND DECREASES, THE SETPOINT SHALL INCREMENTALLY RESET UP TO A MAXIMUM OF 72 DEG F(ADJ.).

11. COOLING COIL

11.1 THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND MODULATE THE COOLING COIL VALVE TO MAINTAIN COOLING SETPOINT.

11.2 THE COOLING SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS GREATER THAN 60 DEG F(ADJ.)
AND THE ECONOMIZER IS DISABLED AND FULLY OPEN
AND THE SUPPLY FAN STATUS IS ON
AND THE HEATING IS NOT ACTIVE

THE COOLING COIL VALVE SHALL OPEN TO 50%(ADJ.) WHENEVER THE FREEZESTAT IS ON.

11.3 ALARMS
HIGH SUPPLY AIR TEMP
LOW SUPPLY AIR TEMPERATURE ALARM
THE CONTROLLER SHALL ALARM IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45 DEG F(ADJ.).

12. ECONOMIZER

12.1 THE CONTROLLER SHALL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE ECONOMIZER DAMPERS IN SEQUENCE TO MAINTAIN A SETPOINT 2 DEG F(ADJ.) LESS THAN THE SUPPLY AIR TEMPERATURE SETPOINT. THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM ADJUSTABLE POSITION TO MAINTAIN MINIMUM OUTSIDE AIR REQUIRED.

12.2 THE ECONOMIZER SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS LESS THAN 60 DEG F(ADJ)
AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE
AND THE SUPPLY FAN STATUS IS ON

12.3 THE ECONOMIZER SHALL CLOSE WHENEVER:
MIXED AIR TEMPERATURE DROPS FROM 40 DEG F TO 35 DEG F(ADJ.)
OR THE FREEZESTAT IS ON
OR THE SUPPLY FAN STATUS IS OFF

12.4 THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF.

13. HUMIDIFIER CONTROL

13.1 THE CONTROLLER SHALL MEASURE THE RETURN AIR HUMIDITY AND MODULATE THE HUMIDIFIER TO MAINTAIN A SETPOINT OF 35% RH(ADJ.). THE HUMIDIFIER SHALL BE ENABLED WHENEVER THE SUPPLY FAN STATUS IS ON.

13.2 THE HUMIDIFIER SHALL TURN OFF WHENEVER:
SUPPLY FAN HUMIDITY RISES FROM 90% TO 95%
OR ON A LOSS OF SUPPLY FAN STATUS.

13.3 ALARMS
HIGH SUPPLY AIR HUMIDITY
LOW SUPPLY AIR HUMIDITY

14. AIRFLOW CONTROL

THE CONTROL SYSTEM SHALL MONITOR SUPPLY AIR FLOW, RETURN AIR FLOW, AND MIXED AIR FLOW IN CFM. IT WILL CALCULATE OUTDOOR AIR FLOW FROM THE MEASURED VALUES.

15. FILTERS

15.1 ALARMS
PREFILTER DIFFERENTIAL PRESSURE
FINAL FILTER DIFFERENTIAL PRESSURE

AHU-AC-54 POINTS LIST

INPUT NUMBER	INPUT TYPE	DEVICE	OUTPUT NUMBER	OUTPUT TYPE	DEVICE
1	DIGITAL	SF1 VFD HAND OFF AUTO	1	DIGITAL	SF1 VFD ENABLE/DISABLE
2	DIGITAL	RF1 VFD HAND OFF AUTO	2	DIGITAL	SF2 VFD ENDABLE/DISABLE
3	DIGITAL	SF1 STATUS CS	3	DIGITAL	RF1 VFD ENABLE/DISABLE
4	DIGITAL	RF1 STATUS CS	4	DIGITAL	RF2 VFD ENABLE/DISABLE
5	DIGITAL	PRE-FILTER STATUS DP	5	DIGITAL	DISCHARGE SMOKE DAMPER
6	DIGITAL	FINAL FILTER STATUS DP	6	DIGITAL	RETURN SMOKE DAMPER
7	DIGITAL	FREEZESTAT	7	DIGITAL	HUMIDIFIER ENABLE/DISABLE
8	DIGITAL	HIGH DISCHARGE DUCT STATIC DP	8	DIGITAL	SPARE
9	DIGITAL	DISCHARGE DUCT SMOKE DETECTOR STATUS			
10	DIGITAL	RETURN DUCT SMOKE DETECTOR STATUS			
11	DIGITAL	DISCHARGE SMOKE DAMPER STATUS			
12	DIGITAL	RETURN SMOKE DAMPER STATUS			
13	DIGITAL	SF1 VFD FAULT			
14	DIGITAL	RF1 VFD FAULT			
15	DIGITAL	SF2 VFD HAND OFF AUTO			
16	DIGITAL	RF2 VFD HAND OFF AUTO			
17	DIGITAL	SF2 STATUS CS			
18	DIGITAL	RF2 STATUS CS			
19	DIGITAL	SF2 VFD FAULT			
20	DIGITAL	RF2 VFD FAULT			

INPUT NUMBER	INPUT TYPE	DEVICE	OUTPUT NUMBER	OUTPUT TYPE	DEVICE
1	ANALOG	DISCHARGE AIR TEMPERATURE	1	ANALOG	SF1 VFD SPEED REFERENCE
2	ANALOG	RETURN AIR TEMPERATURE	2	ANALOG	RF1 VFD SPEED REFERENCE
3	ANALOG	MIXED AIR TEMPERATURE	3	ANALOG	OUTSIDE AIR DAMPER
4	ANALOG	RETURN AIR HUMIDITY	4	ANALOG	MIXED AIR DAMPER
5	ANALOG	DISCHARGE DUCT STATIC PRESSURE	5	ANALOG	EXHAUST AIR DAMPER
6	ANALOG	SUPPLY AIR FLOW MEASURING STATION	6	ANALOG	PRE-HEAT FACE AND BYPASS DAMPER
7	ANALOG	RETURN AIR FLOW MEASURING STATION	7	ANALOG	NORMALLY CLOSED CHILLED WATER VALVE
8	ANALOG	OUTDOOR AIR TEMPERATURE	8	ANALOG	NORMALLY OPEN STEAM PRE-HEAT VALVE
9	ANALOG	LEAVING PRE-HEAT COIL AIR TEMPERATURE	9	ANALOG	SF2 VFD SPEED REFERENCE
10	ANALOG	LEAVING COOLING COIL AIR TEMPERATURE	10	ANALOG	RF2 VFD SPEED REFERENCE
11	ANALOG	MIXED AIRFLOW STATION	11	ANALOG	HUMIDIFIER VALVE
12	ANALOG	SUPPLY AIR HUMIDITY	12	ANALOG	SPARE
13	ANALOG	SPARE			
14	ANALOG	SPARE			
15	ANALOG	SPARE			
16	ANALOG	SPARE			

THIS EXISTING SEQUENCE OF OPERATION FOR AHU-AC-54 IS INCLUDED FOR REFERENCE ONLY. THERE IS NO CONTROLS WORK ASSOCIATED WITH AHU-AC-54 ON THIS PROJECT.

AC-54 PROVIDES ALL OF THE CONDITIONED AIR FOR THE 4TH FLOOR MENTAL HEALTH AREA WHICH IS BEING RENOVATED UNDER THIS PROJECT

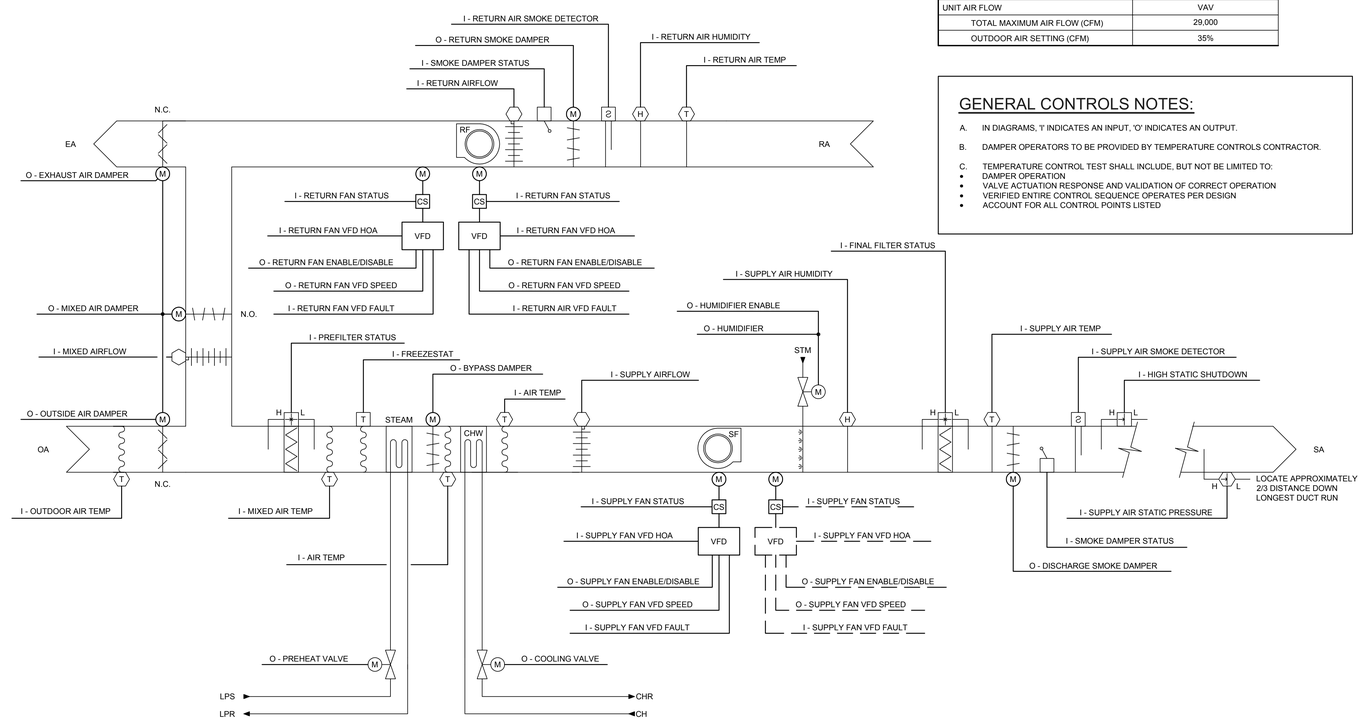
AIR HANDLER	AC-54
SERVICE AREA	ACC - SOUTH HALF OF 3RD & 4TH FLOORS
LOCATION	ACC SOUTH PENTHOUSE
UNIT AIR FLOW	VAV
TOTAL MAXIMUM AIR FLOW (CFM)	29,000
OUTDOOR AIR SETTING (CFM)	35%

GENERAL CONTROLS NOTES:

A. IN DIAGRAMS, 'I' INDICATES AN INPUT, 'O' INDICATES AN OUTPUT.

B. DAMPER OPERATORS TO BE PROVIDED BY TEMPERATURE CONTROLS CONTRACTOR.

C. TEMPERATURE CONTROL TEST SHALL INCLUDE, BUT NOT BE LIMITED TO:
- DAMPER OPERATION
- VALVE ACTUATION RESPONSE AND VALIDATION OF CORRECT OPERATION
- VERIFIED ENTIRE CONTROL SEQUENCE OPERATES PER DESIGN
- ACCOUNT FOR ALL CONTROL POINTS LISTED



EXISTING AHU-AC-54 CONTROL DIAGRAM
NOT TO SCALE

FULLY SPRINKLERED

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BID ISSUE	06/17/16
Revisions:	**Date**

15027

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Drawing Title
AHU AC-54 SEQUENCE OF OPERATIONS (REFERENCE)

Approved:

Project Title
ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	DAD	DAD

Project Number 541-16-104

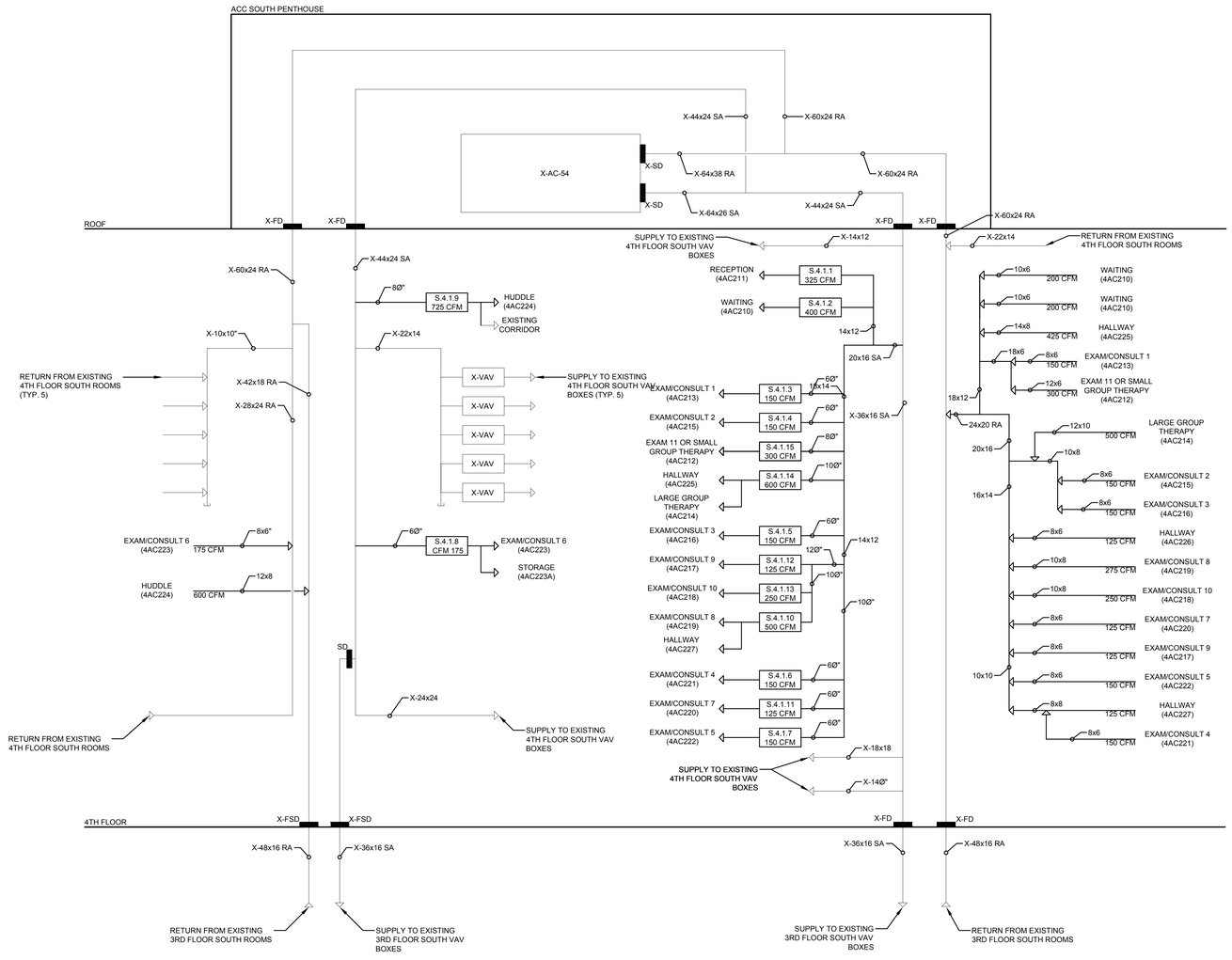
Building Number 1

Drawing Number **1-M6.2**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs



X-AC-54 AIR FLOW DIAGRAM

NOT TO SCALE

1

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
AHU AC-54 AIR FLOW DIAGRAM

Approved:

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ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked DAD | Drawn JXC

Project Number 541-16-104

Building Number 1

Drawing Number **1-M6.3**

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Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

SEQUENCE OF OPERATION FOR (EAST PENTHOUSE AHU-E-0-1)

1. RUN CONDITIONS - SCHEDULED

1.1 THE UNIT SHALL RUN BASED UPON AN OPERATOR ADJUSTABLE SCHEDULE.

2. FREEZE PROTECTION

2.1 THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS.

3. HIGH STATIC SHUTDOWN

3.1 THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A HIGH STATIC SHUTDOWN SIGNAL.

4. SMOKE DETECTION

4.1 THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A RETURN AIR OR SUPPLY AIR SMOKE DETECTOR STATUS. DISCHARGE AND RETURN SMOKE DAMPERS SHALL CLOSE IN THIS EVENT.

5. SUPPLY FAN

5.1 THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

5.2 ALARMS:
SUPPLY FAN FAILURE
SUPPLY FAN RUNTIME EXCEEDED

6. SUPPLY AIR DUCT STATIC PRESSURE CONTROL

6.1 THE CONTROLLER SHALL MEASURE DUCT STATIC PRESSURE AND SHALL MODULATE THE SUPPLY FAN VFD SPEED TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT OF 1.5 INCHES (ADJ.). THE SUPPLY FAN VFD SPEED SHALL NOT DROP BELOW 30%(ADJ.).

6.2 ALARMS:
HIGH SUPPLY FAN STATIC PRESSURE
LOW SUPPLY FAN STATIC PRESSURE
SUPPLY FAN VFD FAULT

7. RETURN FAN

7.1 THE RETURN FAN SHALL RUN WHENEVER THE SUPPLY FAN RUNS.

7.2 ALARMS
RETURN FAN FAILURE
RETURN FAN RUNTIME EXCEEDED
RETURN FAN VFD FAULT

8. RETURN AIRFLOW

8.1 THE RETURN FAN VFD SHALL MODULATE IN UNISON WITH THE SUPPLY FAN VFD. RETURN AIRFLOW SETPOINT SHALL BE 100% (ADJ.) OF THE SUPPLY AIRFLOW MINUS 10% (ADJ.). THE RETURN FAN VFD SPEED SHALL NOT DROP BELOW 20%(ADJ.)

8.2 ALARMS
HIGH RETURN AIRFLOW
LOW RETURN AIRFLOW

9. PREHEAT COIL

9.1 THE CONTROLLER SHALL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE PREHEAT COIL VALVE TO MAINTAIN ITS SETPOINT 5 DEG F(ADJ.) LESS THAN THE SUPPLY AIR TEMPERATURE SETPOINT

9.2 PREHEAT COIL SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS LESS THAN 60 DEG(ADJ),
AND THE ECONOMIZER IS DISABLED
AND THE SUPPLY FAN STATUS IS ON

9.3 THE PREHEAT COIL SHALL OPEN FOR FREEZE PROTECTION WHENEVER:
MIXED AIR TEMPERATURE DROPS FROM 40 DEG F TO 35 DEG F (ADJ.)
OR THE FREEZESTAT IS ON.

9.4 IF OUTDOOR TEMPERATURE IS BELOW 30 DEG F (ADJ) AND HEAT IS REQUIRED, THEN THE STEAM VALVE FOR HEATING SHALL BE FULLY OPEN AND TEMPERATURE CONTROL SHALL BE BY MODULATION OF THE FACE/BYPASS DAMPER.

10. SUPPLY AIR TEMPERATURE SETPOINT

10.1 THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE AND SHALL MAINTAIN A SUPPLY AIR TEMPERATURE SETPOINT RESET BASED ON ZONE COOLING AND HEATING REQUIREMENTS.

10.2 THE SUPPLY AIR TEMPERATURE SETPOINT SHALL BE RESET FOR COOLING BASED ON ZONE COOLING REQUIREMENTS AS FOLLOWS:
THE INITIAL SUPPLY AIR TEMPERATURE SETPOINT SHALL BE 55 DEG F(ADJ.)
AS COOLING DEMAND INCREASES, THE SETPOINT SHALL INCREMENTALLY RESET DOWN TO A MINIMUM OF 53 DEG F(ADJ.)
AS COOLING DEMAND DECREASES, THE SETPOINT SHALL INCREMENTALLY RESET UP TO A MAXIMUM OF 72 DEG F(ADJ.).

11. COOLING COIL

11.1 THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND MODULATE THE COOLING COIL VALVE TO MAINTAIN COOLING SETPOINT.

11.2 THE COOLING SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS GREATER THAN 60 DEG F(ADJ.)
AND THE ECONOMIZER IS DISABLED AND FULLY OPEN
AND THE SUPPLY FAN STATUS IS ON
AND THE HEATING IS NOT ACTIVE

THE COOLING COIL VALVE SHALL OPEN TO 50%(ADJ.) WHENEVER THE FREEZESTAT IS ON.

11.3 ALARMS
HIGH SUPPLY AIR TEMP
LOW SUPPLY AIR TEMPERATURE ALARM
THE CONTROLLER SHALL ALARM IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45 DEG F(ADJ.).

12. ECONOMIZER

12.1 THE CONTROLLER SHALL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE ECONOMIZER DAMPERS IN SEQUENCE TO MAINTAIN A SETPOINT 2 DEG F(ADJ.) LESS THAN THE SUPPLY AIR TEMPERATURE SETPOINT. THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM ADJUSTABLE POSITION TO MAINTAIN MINIMUM OUTSIDE AIR REQUIRED.

12.2 THE ECONOMIZER SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS LESS THAN 60 DEG F(ADJ)
AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE
AND THE SUPPLY FAN STATUS IS ON

12.3 THE ECONOMIZER SHALL CLOSE WHENEVER:
MIXED AIR TEMPERATURE DROPS FROM 40 DEG F TO 35 DEG F(ADJ.)
OR THE FREEZESTAT IS ON
OR THE SUPPLY FAN STATUS IS OFF

12.4 THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF.

13. HUMIDIFIER CONTROL

13.1 THE CONTROLLER SHALL MEASURE THE RETURN AIR HUMIDITY AND MONITOR MULTIPLE ROOM HUMIDITY SENSORS AND MODULATE THE HUMIDIFIER TO MAINTAIN A SETPOINT OF 35% RH(ADJ.). THE HUMIDIFIER SHALL BE ENABLED WHENEVER THE SUPPLY FAN STATUS IS ON.

13.2 THE HUMIDIFIER SHALL TURN OFF WHENEVER:
SUPPLY FAN HUMIDITY RISES FROM 90% TO 95% (ADJ.)
OR ON LOSS OF SUPPLY FAN STATUS

13.3 ALARMS
HIGH SUPPLY AIR HUMIDITY
LOW SUPPLY AIR HUMIDITY

14. AIRFLOW CONTROL

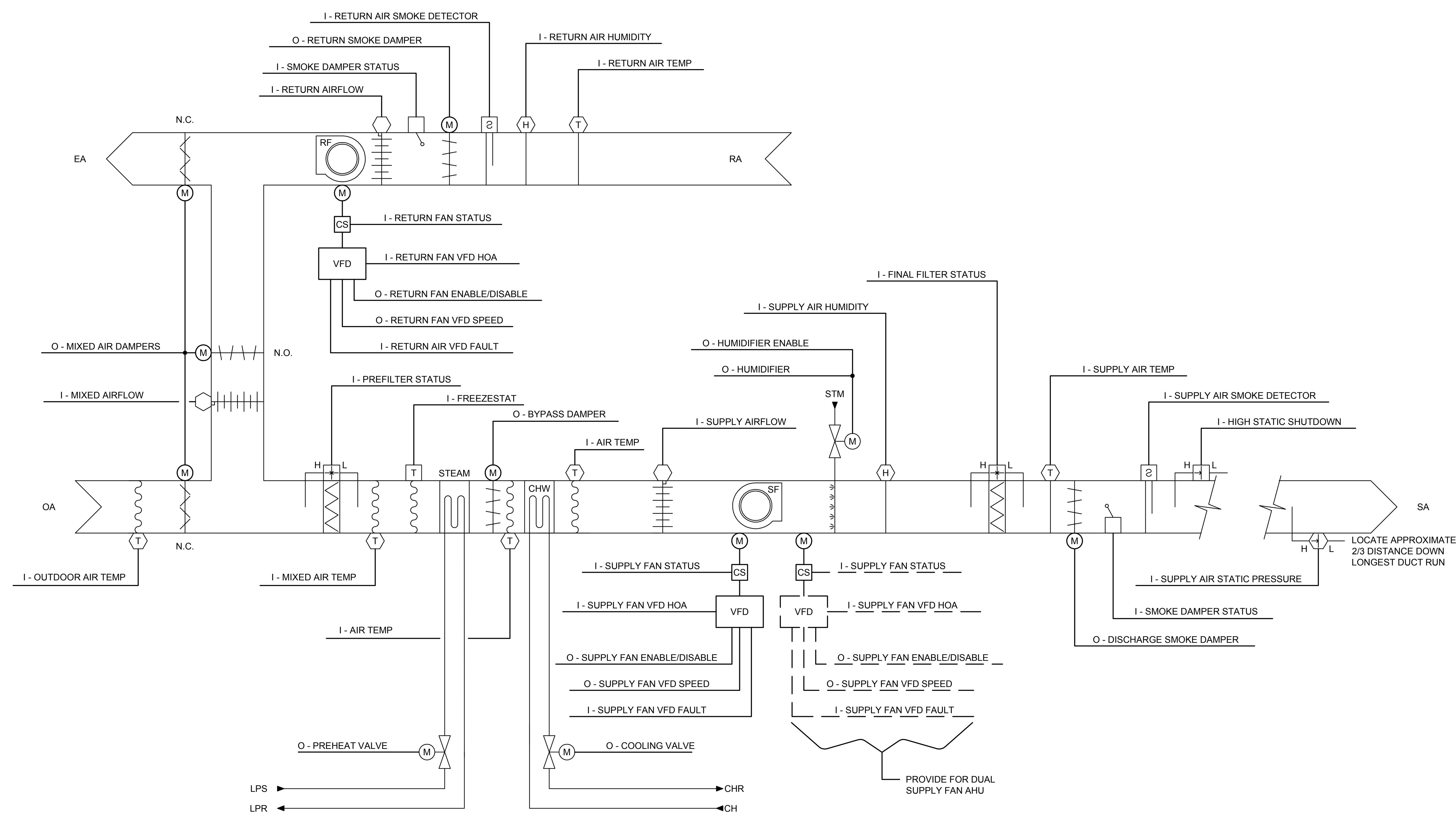
THE CONTROL SYSTEM SHALL MONITOR SUPPLY AIR FLOW, RETURN AIR FLOW, AND MIXED AIR FLOW IN CFM. IT WILL CALCULATE OUTDOOR AIR FLOW FROM THE MEASURED VALUES.

15. FILTERS

15.1 ALARMS
PREFILTER DIFFERENTIAL PRESSURE
FINAL FILTER DIFFERENTIAL PRESSURE

THIS EXISTING SEQUENCE OF OPERATION FOR AHU-E-0-1 IS INCLUDED FOR REFERENCE ONLY. THERE IS NO CONTROLS WORK ASSOCIATED WITH AHU-E-0-1 ON THIS PROJECT.

AHU-E-0-1 PROVIDES ALL OF THE CONDITIONED AIR FOR THE BASEMENT BIOMED AREA WHICH IS BEING RENOVATED UNDER THIS PROJECT



AHU-E-0-1, AHU-E-0-2, AHU-E-0-3, AHU-E-1-1, AHU-E-1-2 POINTS LIST

INPUT NUMBER	INPUT TYPE	DEVICE	OUTPUT NUMBER	OUTPUT TYPE	DEVICE
1	DIGITAL	SF1 VFD HAND OFF AUTO	1	DIGITAL	SF1 VFD ENABLE/DISABLE
2	DIGITAL	SF2 VFD HAND OFF AUTO	2	DIGITAL	SF2 VFD ENABLE/DISABLE
3	DIGITAL	RF VFD HAND OFF AUTO	3	DIGITAL	RF VFD ENABLE/DISABLE
4	DIGITAL	SF1 STATUS CS	4	DIGITAL	HUMIDIFIER ISOLATION VALVE
5	DIGITAL	SF2 STATUS CS	5	DIGITAL	DISCHARGE SMOKE DAMPER
6	DIGITAL	RF STATUS CS	6	DIGITAL	RETURN SMOKE DAMPER
7	DIGITAL	PRE-FILTER STATUS DP	7	DIGITAL	SPARE
8	DIGITAL	FINAL FILTER STATUS DP	8	DIGITAL	SPARE
9	DIGITAL	FREEZESTAT			
10	DIGITAL	HIGH DISCHARGE DUCT STATIC DP			
11	DIGITAL	DISCHARGE DUCT SMOKE DETECTOR STATUS			
12	DIGITAL	RETURN DUCT SMOKE DETECTOR STATUS			
13	DIGITAL	DISCHARGE SMOKE DAMPER STATUS			
14	DIGITAL	RETURN SMOKE DAMPER STATUS			
15	DIGITAL	SF VFD FAULT			
16	DIGITAL	SF VFD FAULT			
17	DIGITAL	RF VFD FAULT			
18-24	DIGITAL	SPARE			

INPUT NUMBER	INPUT TYPE	DEVICE	OUTPUT NUMBER	OUTPUT TYPE	DEVICE
1	ANALOG	SPARE	1	ANALOG	SF1 VFD SPEED REFERENCE
2	ANALOG	SPARE	2	ANALOG	SF2 VFD SPEED REFERENCE
3	ANALOG	SPARE	3	ANALOG	RF VFD SPEED REFERENCE
4	ANALOG	DISCHARGE AIR TEMPERATURE	4	ANALOG	OUTDOOR AIR DAMPER
5	ANALOG	RETURN AIR TEMPERATURE	5	ANALOG	RETURN AIR DAMPER
6	ANALOG	MIXED AIR TEMPERATURE	6	ANALOG	EXHAUST AIR DAMPER
7	ANALOG	DISCHARGE AIR HUMIDITY	7	ANALOG	PRE-HEAT FACE AND BYPASS DAMPER
8	ANALOG	RETURN AIR HUMIDITY	8	ANALOG	CHILLED WATER VALVE
9	ANALOG	DISCHARGE DUCT STATIC PRESSURE	9	ANALOG	STEAM PRE-HEAT VALVE
10	ANALOG	DISCHARGE AIR FLOW MEASURING STATION	10	ANALOG	HUMIDIFIER VALVE
11	ANALOG	RETURN AIR FLOW MEASURING STATION	11	ANALOG	SPARE
12	ANALOG	OUTDOOR AIR TEMPERATURE	12	ANALOG	SPARE
13	ANALOG	LEAVING PRE-HEAT COIL AIR TEMPERATURE			
14	ANALOG	LEAVING COOLING COIL AIR TEMPERATURE			
15	ANALOG	MIXED AIRFLOW STATION			
16	ANALOG	SPARE			
17-24	ANALOG	HUMIDITY SENSORS			

EXISTING AHU

AIR HANDLER	AHU-E-0-1
SERVICE AREA	Radiology, Cardiology, Nuc Med
LOCATION	East Penthouse
UNIT AIR FLOW	VAV
TOTAL MAXIMUM AIR FLOW (CFM)	65,000
OUTDOOR AIR SETTING (CFM)	40%

GENERAL CONTROLS NOTES:

A. IN DIAGRAMS, 'I' INDICATES AN INPUT, 'O' INDICATES AN OUTPUT.

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title: **AHU-E-0-1 SEQUENCE OF OPERATIONS (REFERENCE)**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: DAD | Drawn: DAD

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-M6.4**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

DEDUCT ALTERNATE #2

1. ALL EQUIPMENT ON THIS SHEET SHALL BE PROVIDED UNDER BASE BID.
2. EQUIPMENT WITHIN THIS OUTLINED BOX TO BE REMOVED FROM SCOPE UNDER DEDUCT ALTERNATE #2.

VARIABLE FREQUENCY DRIVES (VSD-X)

MARK	VSD-1
PERFORMANCE	
EQUIPMENT TAG	TE-4
MOTOR SERVICE	EXHAUST FAN
QUANTITY OF MOTORS SERVED	1
MOTOR HP (EACH)	5
VOLTAGE-PHASE-FREQUENCY	480-3-60
DESCRIPTION	
CIRCUIT BREAKER INPUT DISCONNECT	YES
MANUAL BYPASS	YES
TEMPERATURE CONTROLS COMMUNICATION CARD	YES
UL NEMA TYPE 1 ENCLOSURE	YES
DIGITAL DISPLAY WITH KEYPAD INTERFACE	YES
HAND-OFF-AUTO SELECTOR	YES
3-YEAR WARRANTY	YES
FACTORY START-UP	YES
EMERGENCY SHUTDOWN CONTACT	YES
BASIS OF SPECIFICATION	
MANUFACTURER	-
TYPE	PWM

NOTES:

1. PROVIDE DRIVE WITH COMMUNICATION CARD COMPATIBLE WITH THE TEMPERATURE CONTROLS COMMUNICATION PROTOCOL WHICH SHALL ENABLE READING ALL POINTS, CHANGING PARAMETERS AND SETPOINTS, AND CONTROLLING SPEEDS.
2. DRIVE TYPE SHALL BE PULSE WIDTH MODULATING.

EXHAUST FANS (EF X)

MARK	TE-4
SPACE SERVED	GENERAL TOILET EXHAUST
STYLE	DOWNBLAST CENTRIFUGAL
WHEEL	BACKWARD INCLINE
PERFORMANCE	
AIR FLOW (CFM)	10,000
STATIC PRESSURE (IN W.G.)	1.50
FAN SPEED (RPM)	1400
NOISE LEVEL (SONES)	24.0
MOTOR	
TYPE OF DRIVE	BELT
MOTOR SIZE (HP)	5
VOLTS-PHASE-HERTZ	480-3-60
ACCESSORIES	
BIRDSCREEN	YES
UNIT MOUNTED DISCONNECT	YES
ROOF CURB	YES
MOTORIZED BACKDRAFT DAMPER	YES
GRAVITY BACKDRAFT DAMPER	YES
ALUMINUM WHEEL	YES
INTEGRAL DRAIN	NO
ALUMINUM FAN CONSTRUCTION	YES
MOTORS SHALL HAVE GROUNDED RINGS	NO
SPARK PROOF MOTOR	NO
SPRING ISOLATION	NO
VARIABLE FREQUENCY DRIVE	YES
SHAFT GROUNDING RINGS	YES

VAV TERMINAL CONNECTION SCHEDULE

TERMINAL TYPE	INLET: TERMINAL NECK SIZE (IN)	INLET: SUPPLY DUCT (IN)	MAX AIRFLOW (CFM)	TERMINAL AIR PRESSURE DROP (IN W.G.)	MAXIMUM RADIATED NOISE (NC)	DISCHARGE: TERMINAL CONN. SIZE (IN)	DISCHARGE: DISCHARGE DUCT (IN)	SOUND ATTENUATOR
A	6"Ø	8"Ø	350	1.0"	25	12x8	10x10	"
B	8"Ø	10"Ø	700	1.0"	27	12x10	12x12	"
C	10"Ø	12"Ø	1200	1.0"	28	14x12.5	20x10	"
D	12"Ø	14"Ø OR 16x10	1600	1.0"	30	16x15	22x12	"
E	14"Ø	18x12	2400	1.0"	30	20x18	30x12	"
F	16"Ø	24x12	3200	1.0"	25	24x18	30x14	"

NOTES:

1. UNLESS OTHERWISE NOTED ON PLANS, PROVIDE DUCT SIZES AS INDICATED . CONTRACTOR IS PERMITTED TO UTILIZE AN EQUIVALENT FREE AREA AS NECESSARY.
2. CONTRACTOR SHALL PROVIDE ALL TRANSITIONS FROM TERMINAL CONNECTIONS/SOUND ATTENUATORS TO DUCT SIZES AS INDICATED.

AIR DISTRIBUTION DEVICE (DIFFUSERS, REGISTERS AND GRILLES)

(A) CFM / NECK

MARK	TYPE	FACE SIZE (INCHES)	NECK SIZE (INCHES)	STYLE	COLOR	MATERIAL	DAMPER	NOTES
S1	DIFFUSER	24x24	SEE PLANS	PLAQUE FACE LAY-IN	WHITE	STAMPED STEEL	NO	1,3
R1	RETURN CEILING	24x12	NOTE 2	PERFORATED FACE LAY-IN	WHITE	STAMPED STEEL	NO	2,3
R2	RETURN CEILING	24x24	NOTE 2	PERFORATED FACE LAY-IN	WHITE	STAMPED STEEL	NO	2,3
E1	EXHAUST GENERAL	24x12	NOTE 2	PERFORATED FACE LAY-IN	WHITE	ALUMINUM	NO	2,3
E2	EXHAUST GENERAL	8x8	6x6	SURFACE	WHITE	ALUMINUM	NO	2,3

NOTES:

MAXIMUM SOUND LEVEL SHALL BE NC=22, SUBMITTAL SHALL INDICATE SPACE SERVED. ALL CEILING MOUNTED DEVICES SHALL BE COORDINATED AND COMPATIBLE WITH THE ARCHITECTURAL CEILING SYSTEM.

NOTE 1: PROVIDE FULL FACE DIFFUSER , SEE PLANS FOR NECK SIZE. WHERE INDICATED ON PLANS PROVIDE BLANK-OFF QUADRANT IN THE NECK OF THE DIFFUSER.

NOTE 2: TAG NECK SIZE INDICATES NOMINAL DUCT CONNECTION OF GRILLE. PROVIDE FULL SIZE PLENUM OFF TOP OF GRILLE AND TRANSITION TO DUCT SIZE SHOWN ON PLANS. PAINT INSIDE OF PLENUM BOX FLAT BLACK.

NOTE 3: REFER TO SPECIFICATIONS FOR SPECIFIC MATERIAL, TYPE AND QUALITY REQUIREMENTS..

VAV TERMINAL SCHEDULE

(S.X.Y.Z) "S" - SUPPLY TERMINAL UNIT "X" - BUILDING FLOOR NUMBER "Y" - CONTROL TYPE "Z" - SEQUENTIAL NUMBER

MARK	TERMINAL SIZE (NOTE 1)	MAX AIRFLOW (CFM)	MIN AIRFLOW (CFM)	HEATING AIRFLOW (CFM)	HEATING COIL PERFORMANCE: CAPACITY (MBH)	COIL FLOW (GPM)	MINIMUM LEAVING AIR TEMP. (°F) NOTE 7	TERMINAL AIR PRESSURE DROP (IN-W.G.)	WATER PRESS. DROP (FT)	NUMBER OF ROWS	AHU SERVED
S.B.1.1	A	250	125	100	6.5	0.6	94.9	0.01	0.19	1	AHU-E-0-1
S.B.1.2	E	1650	1000	1000	39.8	3.9	91.7	0.16	1.61	1	AHU-E-0-1
S.B.1.3	B	300	250	250	8.9	0.9	96.2	0.01	0.44	1	AHU-E-0-1
S.B.1.4	B	500	375	375	14.3	1.4	90.1	0.19	1.23	1	AHU-E-0-1
S.B.1.5	B	850	600	600	29.2	2.9	99.8	0.22	1.10	2	AHU-E-0-1
S.B.3.6	A	200	0				COOLING ONLY				AHU-E-0-1
S.4.1.1	B	325	100	175	8.3	0.8	98.7	0.01	0.38	1	AC-54
S.4.1.2	B	400	250	300	12.8	1.3	94.2	0.09	0.99	1	AC-54
S.4.1.3	A	150	135	135	6.1	0.6	96.8	0.01	0.17	1	AC-54
S.4.1.4	A	150	135	135	6.1	0.6	96.8	0.01	0.17	1	AC-54
S.4.1.5	A	150	135	135	6.1	0.6	96.8	0.01	0.17	1	AC-54
S.4.1.6	A	150	125	125	5.9	0.6	98.3	0.01	0.15	1	AC-54
S.4.1.7	A	150	135	135	6.1	0.6	96.8	0.01	0.17	1	AC-54
S.4.1.8	A	275	150	150	6.5	0.6	94.9	0.01	0.19	1	AC-54
S.4.1.9	C	725	410	410	17.3	1.7	94.0	0.13	0.30	1	AC-54
S.4.1.10	B	500	300	300	12.8	1.3	94.2	0.09	0.88	1	AC-54
S.4.1.11	A	125	110	125	5.9	0.6	98.3	0.01	0.15	1	AC-54
S.4.1.12	A	125	125	125	5.8	0.6	98.3	0.01	0.15	1	AC-54
S.4.1.13	A	250	175	175	8.1	0.8	97.8	0.07	0.31	1	AC-54
S.4.1.14	C	600	485	485	18.9	1.8	90.9	0.10	0.35	1	AC-54
S.4.1.15	B	300	175	250	11.6	1.1	97.8	0.06	0.83	1	AC-54

NOTES:

NOTE 1: TERMINALS SHALL BE CAPABLE OF OPERATING WITH A MINIMUM INLET PRESSURE OF 0.5" W.G. FURNISH WITH AIR FLOW SWITCH, AND ACTUATOR. PROVIDE WITH SCREW ACCESS (UN-HINGED) WHERE TERMINALS ARE INSTALLED IN THE BEAM/JOIST SPACE. BOXES SHALL BE INSULATED PER SPECIFICATIONS.

NOTE 2: REFER TO "VARIABLE AIR VOLUME TERMINALS: CONNECTION SCHEDULE" FOR TERMINAL SIZE, DUCT CONNECTIONS AND DUCT SIZES.

NOTE 3: MAXIMUM AIR BOX PRESSURE DROP SHALL BE 0.3" W.G.

NOTE 4: MAXIMUM COIL WATER PRESSURE DROP SHALL BE 5 FEET.

NOTE 5: MINIMUM PIPE SIZE SHALL BE 3/4". SEE RE-HEAT COIL PIPING DETAIL FOR COIL PIPING.

NOTE 6: TEMPERATURE CONTROL CONTRACTOR TO PROVIDE DEVICES AS INDICATED FOR TERMINAL.

NOTE 7: IN HEATING MODE LEAVING AIR TEMP LIMITS MINIMUM 90°F MAXIMUM 100°F

FULLY SPRINKLERED

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Drawing Title: **MECHANICAL SCHEDULE**

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Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

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VA FORM 08-6231, OCT 1978

LIGHTING FIXTURES

3,a — LIGHTING FIXTURE CONNECTED TO NORMAL CIRCUIT AS INDICATED - TYPE AS SPECIFIED IN SCHEDULE. "A" INDICATES TYPE, "3" INDICATES CIRCUIT NUMBER ASSIGNMENT, "a" INDICATES LOCAL SWITCHING CONTROL. CONNECT FIXTURES SO THAT ALL LAMPS ARE CONTROLLED BY $a

3 a,b — LIGHTING FIXTURE CONNECTED TO NORMAL CIRCUIT - TYPE AS SPECIFIED IN SCHEDULE, "A" INDICATES TYPE, "3" INDICATES CIRCUIT NUMBER ASSIGNMENT. CONNECT FIXTURES SO THAT MIDDLE LAMP(S) IS CONTROLLED BY $a AND OUTER LAMPS ARE CONTROLLED BY $b AS INDICATED BY "a,b"

NL 3 — LIGHTING FIXTURE CONNECTED TO EMERGENCY LIFE SAFETY AHEAD OF LOCAL SWITCHING - TYPE AS SPECIFIED IN SCHEDULE, "A" INDICATES TYPE, "3" INDICATES EMERGENCY LIFE SAFETY CIRCUIT NUMBER ASSIGNMENT.

C 3 2,a — LIGHTING FIXTURE CONNECTED TO EMERGENCY LIFE SAFETY - TYPE AS SPECIFIED IN SCHEDULE, "A" INDICATES TYPE, "3" INDICATES EMERGENCY LIFE SAFETY CIRCUIT NUMBER ASSIGNMENT. PROVIDE GENERATOR TRANSFER DEVICE TO CONTROL ALL EMERGENCY DEVICES DESIGNATED WITH "G". 2,a INDICATES NORMAL CIRCUIT AND SWITCH TO CONTROL FIXTURE DURING TYPICAL POWER CONDITIONS. SEE "GENERATOR TRANSFER DETAIL" ON SHEET 1-E4.1 FOR ADDITIONAL WORK REQUIREMENTS.

3,a — LIGHTING FIXTURE CONNECTED TO EMERGENCY CRITICAL CIRCUIT - TYPE AS SPECIFIED IN SCHEDULE, "A" INDICATES TYPE, "3" INDICATES CIRCUIT NUMBER ASSIGNMENT. CONNECT FIXTURES SO THAT ALL LAMPS ARE CONTROLLED BY $a

3,a — LIGHTING FIXTURE CONNECTED TO NORMAL CIRCUIT AS INDICATED - TYPE AS SPECIFIED IN SCHEDULE. "A" INDICATES TYPE, "3" INDICATES CIRCUIT NUMBER ASSIGNMENT, "a" INDICATES LOCAL SWITCHING CONTROL. CONNECT FIXTURES SO THAT ALL LAMPS ARE CONTROLLED BY $a

3 — LIGHTING FIXTURE CONNECTED TO EMERGENCY LIFE SAFETY AHEAD OF LOCAL SWITCHING - TYPE AS SPECIFIED IN SCHEDULE, "A" INDICATES TYPE, "3" INDICATES EMERGENCY LIFE SAFETY CIRCUIT NUMBER ASSIGNMENT.

LED LIGHTING FIXTURE, CONNECTED TO NORMAL CIRCUIT - TYPE AS SPECIFIED IN SCHEDULE.

LED LIGHTING FIXTURE, CONNECT TO EMERGENCY CRITICAL CIRCUIT - TYPE AS SPECIFIED IN SCHEDULE.

LS NL — LED LIGHTING FIXTURE, CONNECT TO EMERGENCY LIFE SAFETY CIRCUIT AHEAD OF LOCAL SWITCHING - TYPE AS SPECIFIED IN SCHEDULE.

LS G — LED LIGHTING FIXTURE, CONNECT TO EMERGENCY LIFE SAFETY CIRCUIT. PROVIDE GENERATOR TRANSFER DEVICE TO CONTROL ALL EMERGENCY DEVICES DESIGNATED WITH "G". SEE "TYPICAL GENERATOR TRANSFER DETAIL" ON SHEET 1-E4.1 FOR ADDITIONAL WORK REQUIREMENTS.

EXIT SIGN - CONNECT TO EMERGENCY LIFE SAFETY CIRCUIT AHEAD OF LOCAL SWITCHING. TYPE AS SPECIFIED IN SCHEDULE.

WIRING TERMINATIONS

JUNCTION BOX, CEILING OR WALL MOUNTED, 4" SQ. WITH GROUND LUG, UNLESS OTHERWISE NOTED. COORDINATE MOUNTING LOCATION WITH EQUIPMENT AND MOUNTING HEIGHT WITH ARCHITECT. CONNECT PER MANUFACTURER'S WIRING DIAGRAMS.
- SC - SINK STATION CONTROLS. COORDINATE WITH MC.
- VAV - VARIABLE AIR VOLUME TERMINALS. SEE PLANS FOR ADDITIONAL WORK INFORMATION AND WORK REQUIREMENTS.
- TCP - TEMPERATURE CONTROL PANEL. FURNISHED AND INSTALLED BY MC. EC SHALL PROVIDE 120V CONNECTION (HARDWIRED OR RECEPTACLE, AS REQUIRED)
- HD - ELECTRIC HAND DRYER.
- TC - TOILET FLUSH CONTROL. COORDINATE WITH MC.
- PP - POWER POLE.
- AD - AUTOMATIC DOOR. JUNCTION BOX ABOVE CEILING. EC SHALL CONNECT AUTOMATIC DOOR INCLUDING PUSH PAD OPERATORS PER MANUFACTURER'S INSTRUCTIONS TO 120V CIRCUIT. GC SHALL FURNISH AND INSTALL AUTOMATIC DOOR.
- EWC - ELECTRIC WATER COOLER. CONNECT TO 120V, 20A-1P CIRCUIT, WALL MOUNTED, COORDINATE HEIGHT WITH MC.

JUNCTION BOX MOUNTED AT 48" AFF FOR CONNECTION TO AUTOMATIC DOOR PUSH PAD DEVICE. PROVIDE 3/4"C TO DOOR CONTROLLER WITH WIRING PER MANUFACTURER'S REQUIREMENTS.

MOTOR - NUMBER DENOTES HORSEPOWER

WIRING DEVICES

20A-125V, HOSPITAL GRADE, GROUNDED SINGLE RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE NOTED.

20A-125V, HOSPITAL GRADE, GROUNDED DUPLEX RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE NOTED.

TV — 20A-125V, HOSPITAL GRADE, GROUNDED DUPLEX RECEPTACLE, MOUNT AT 68" AFF FOR TELEVISION UNLESS OTHERWISE NOTED. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS.

TR — 20A-125V, HOSPITAL GRADE, GROUNDED TAMPER RESISTANT RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE NOTED.

DOUBLE 20A-125V, HOSPITAL GRADE, GROUNDED DUPLEX RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE NOTED.

20A-125V, HOSPITAL GRADE, GROUND FAULT INTERRUPTER RECEPTACLE, MOUNT AT 18" AFF UNLESS OTHERWISE NOTED.

SAME DEVICE TYPES AS INDICATED ABOVE EXCEPT CONNECTED TO EMERGENCY CRITICAL CIRCUIT.

LIGHTING CONTROLS

$ — 20A-1P-120/277V WALL SWITCH MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED.

$3 — 20A-3WAY-120/277V WALL SWITCH MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED.

$D — 277V SINGLE POLE 0-10VDC LOW-VOLTAGE LARGE PADDLE SWITCH WITH SMALL DIMMER SLIDER, AUTOMATICALLY RETURNS TO PRESET LEVEL - ENGRAVING LABEL - MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED. VERIFY ALL SWITCHES ARE COMPATIBLE WITH FIXTURE TYPE.

$3D — 277V SINGLE POLE, 3-WAY, 0-10VDC LOW-VOLTAGE LARGE PADDLE SWITCH WITH SMALL DIMMER SLIDER, AUTOMATICALLY RETURNS TO PRESET LEVEL - ENGRAVING LABEL - MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED. VERIFY ALL SWITCHES ARE COMPATIBLE WITH FIXTURE TYPE.

$O — 120/277V, 1200W SINGLE POLE WALL SWITCH WITH INTEGRAL ON/OFF OCCUPANCY SENSOR - PASSIVE INFRARED TYPE, MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED.

OS — OCCUPANCY/VACANCY SENSOR - PROVIDE COMPLETE OCCUPANCY SENSOR SYSTEM INCLUDING SENSOR, POWER SUPPLY AND RELAY UNIT. REFER TO "OCCUPANCY SENSOR PROGRAM SCHEDULE" AND "OCCUPANCY SENSOR SYSTEM SPECIFICATIONS" FOR ADDITIONAL INFORMATION. PROVIDE FORM C RELAY IN RELAY UNIT IN ALL OCCUPANCY SENSORS FOR HVAC SWITCHING.

SENSOR DESIGNATIONS
- U - ULTRASONIC TYPE SENSOR
- R - INFRARED TYPE SENSOR
- D - DUAL TECHNOLOGY TYPE SENSOR

RELAY DESIGNATIONS
- # - PROVIDE RELAY WITH NORMALLY OPEN (N.O.) CONTACT(S), # DENOTES THE QUANTITY OF N.O. RELAYS. IF BLANK, PROVIDE (1) N.O. RELAY.

OTHER DESIGNATIONS
- L - "LINEAR COVERAGE", TWO SIDED, 90 LINEAR FT. COVERAGE

EXAMPLES:

OS_{U2} — ULTRASONIC SENSOR WITH (2) N.O. CONTACTS AND (1) FORM C RELAY

OS_{D} — DUAL TECHNOLOGY SENSOR WITH (1) N.O. CONTACT AND (1) FORM C RELAY

D — DAYLIGHT HARVESTING - PROVIDE AUTOMATIC DIMMING CONTROL PHOTOCELL CAPABLE OF AUTOMATICALLY DIMMING (10-100% LIGHTING LEVEL MINIMUM) LOW-VOLTAGE BALLASTS/DRIVER FOR LIGHTING FIXTURES ON PLANS MARKED "D". PROVIDE PROGRAMMING OF SENSOR SUCH THAT FIXTURES AUTOMATICALLY DIM DOWN TO MAXIMUM THRESHOLD AT WORK SURFACE. FIXTURES SHALL TURN OFF WHEN OUTSIDE LIGHT CONTRIBUTION (SUNLIGHT, OTHER FIXTURES, ETC.) EXCEEDS MAXIMUM THRESHOLD AT WORK SURFACE.

MAXIMUM THRESHOLDS FOR DAYLIGHT HARVESTING
- OFFICES - 40FC
- STAIRWELLS - 20FC

LIGHTING CONTROLS SYSTEM GENERAL NOTES:

1. ALL COMPONENTS FOR OCCUPANCY AND DAYLIGHT HARVESTING SYSTEM SHALL BE FROM A SINGLE MANUFACTURER AND UL LABELED.
2. SENSORS (OCCUPANCY/VACANCY, DAYLIGHT HARVESTING, ETC.) MAY BE STAND ALONE, COMBINATION OR PART OF ADDRESSABLE CONTROL SYSTEM.
3. PROVIDE ALL ADDITIONAL COMPONENTS NECESSARY FOR COMPLETE SYSTEM PER MANUFACTURER'S REQUIREMENTS.
4. SUBMIT WIRING DIAGRAMS SHOWING COMPLETE LIGHTING CONTROLS CONNECTIONS TO ENGINEER FOR REVIEW WITH SHOP DRAWINGS.

POWER DISTRIBUTION EQUIPMENT (FLOOR PLAN VIEW)

208/120V-3Ø-4W PANELBOARD UNLESS OTHERWISE NOTED. MOUNT AT 78" AFF TO TOP OF PANEL.

480/277V-3Ø-4W PANELBOARD UNLESS OTHERWISE NOTED. MOUNT AT 78" AFF TO TOP OF PANEL.

GENERAL PURPOSE, 3 PHASE DRY-TYPE TRANSFORMER - TYPE AS NOTED ON PLANS.

FUSED DISCONNECT SWITCH - SIZE AND TYPE AS NOTED. PROVIDE CLASS RK1 FUSES UNLESS OTHERWISE NOTED. NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED.

GB — GROUNDING BUSBAR

GENERAL ELECTRICAL EQUIPMENT. REFER TO PLANS FOR ADDITIONAL INFORMATION.

MOTOR AND MOTOR CONTROLLERS (FLOOR PLAN VIEW)

COMBINATION FUSED MAGNETIC MOTOR STARTER COMPLETE WITH "HAND-OFF-AUTO" SELECTOR SWITCH AND RED "RUN" PILOT LIGHT IN COVER. NEMA SIZE 0 CONTACTS AND NEMA 1 ENCLOSURE MINIMUM UNLESS OTHERWISE NOTED.

VSD — VARIABLE SPEED DRIVE MOTOR CONTROLLER - (REFER TO SPECIFICATIONS SECTION 262911).

$T — 120V-1Ø OR 277V-1Ø (AS REQUIRED) MANUAL MOTOR STARTER WITH INTEGRAL OVERLOAD PROTECTION

$T_{HOA} — 120V-1Ø OR 277V-1Ø (AS REQUIRED) MOTOR STARTER COMPLETE WITH INTEGRAL OVERLOAD PROTECTION AND "HAND-OFF-AUTO" SELECTOR SWITCH.

$ML — 120V-1Ø OR 277V-1Ø (AS REQUIRED) LOCKABLE MANUAL SWITCH (NO THERMAL OVERLOADS).

CONTROLLER FURNISHED WITH EQUIPMENT.

BRANCH CIRCUIT WIRING

NO. OF CCTS IN CONDUIT — WIRE SIZE (MIN. #12AWG) — XX'S — PHASE CONDUCTORS — NEUTRALS — GROUND

BRANCH CIRCUIT HOME RUN TO PANEL - ARROWHEADS INDICATE CIRCUITS. WIRE INDICATED ARE GREEN GROUND, SEPARATE NEUTRALS (SHARED NEUTRALS ARE NOT PERMITTED FOR BRANCH CIRCUITS) AND THREE HOT LEGS (A DIFFERENT PHASE FOR EACH CIRCUIT) MAXIMUM THREE CIRCUITS PER CONDUIT. 3/4" MINIMUM CONDUIT WITH WIRE SIZE INDICATED ON DRAWING ("XX" INDICATES AWG SIZE). ALL POWER WIRING SHALL BE STRANDED COPPER CONDUCTORS WITH THHN/THWN INSULATION. PROVIDE SEPARATE EQUIPMENT GROUNDING CONDUCTOR (SAME SIZE AS PHASE AND NEUTRAL, UNLESS OTHERWISE NOTED) FOR EACH CONDUIT. CONDUIT WIRE FILLS SHALL BE IN ACCORDANCE WITH LATEST NATIONAL ELECTRIC CODE.

CONDUIT UP

CONDUIT DOWN

ABBREVIATIONS

AC	ABOVE COUNTER AT 9" UNLESS OTHERWISE NOTED	AFC	ABOVE FINISHED CEILING
AF	AMP FRAME	AT	AMP TRIP
AFF	ABOVE FINISHED FLOOR	ATS	AUTOMATIC TRANSFER SWITCH
CM	CEILING MOUNTED	COR	CONTRACTING OFFICER'S REPRESENTATIVE
EC	ELECTRICAL CONTRACTOR	EG	EQUIPMENT GROUND
EOL	END OF LINE	EWC/WC	ELECTRIC WATER COOLER / WATER COOLER
GC	GENERAL CONTRACTOR	GFCI	GROUND FAULT CIRCUIT INTERRUPTER
IG	ISOLATED GROUND	IRM	INFORMATION RESOURCES MANAGEMENT
MC	MECHANICAL CONTRACTOR	MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY	NEC	NATIONAL ELECTRICAL CODE
NF	NOT FUSED	SM	SURFACE MOUNTED
TC	TELECOMMUNICATIONS CONTRACTOR	TCC	TEMPERATURE CONTROLS CONTRACTOR
TR	TELECOMMUNICATIONS ROOM	UON	UNLESS OTHERWISE NOTED
TV	TELEVISION	UNV	UNVERSAL (120 - 277V)
VSD	VARIABLE SPEED DRIVE MOTOR CONTROLLER	WP	WEATHERPROOF ENCLOSURE - NEMA 4 TYPE

X	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, CONDUIT, ETC. - TO REMAIN
XB	INDICATES EXISTING OUTLET, LIGHTING FIXTURE, CONDUIT, ETC - TO BE REMOVED. PROVIDE BLANK COVER FOR OUTLET AND MAINTAIN CIRCUIT CONTINUITY.
XC	REINSTALL EXISTING CEILING MOUNTED DEVICE IN NEW CEILING AND RECONNECT COMPLETE.
XL	NEW LOCATION OF EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC.
XN	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC. - TO BE REPLACED WITH NEW OF SPECIFIED TYPE
XR	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, CONDUIT, ETC. - TO BE REMOVED COMPLETE- MAINTAIN CIRCUIT CONTINUITY TO ADJACENT OUTLETS, EXTEND CONDUIT AND WIRING AS REQUIRED.
XRR	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC. - TO BE REMOVED AND REINSTALLED AT NEW LOCATION - EXTEND CONDUIT AND WIRING AS REQUIRED.
VAMC	VETERANS AFFAIRS MEDICAL CENTER

GENERAL LEGEND

CODED NOTE - "1" INDICATES NOTE NUMBER.

1-SF — MECHANICAL EQUIPMENT IDENTIFIER

1 / 1-E01 — DETAIL REFERENCE - "1" INDICATES DETAIL NUMBER, "1-E01" INDICATED DRAWINGS NUMBER.

RR / 9A — COLUMN GRID

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Date: 06/17/16 | Checked: MPL | Drawn: TWM

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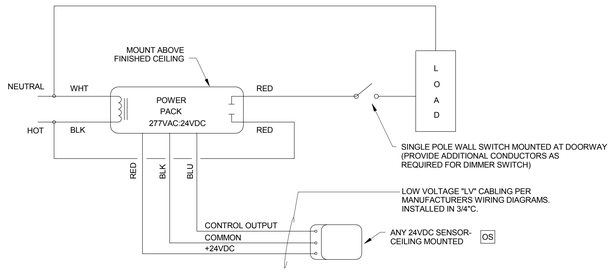

OCCUPANCY SENSOR WITH SINGLE SWITCHING TYPICAL WIRING DIAGRAM

NOT TO SCALE

1

OCCUPANCY SENSOR SYSTEM SPECIFICATIONS

A. GENERAL SYSTEM SPECIFICATIONS

1. POWER SUPPLY, RELAY UNITS AND OCCUPANCY SENSOR SHALL BE FROM A SINGLE MANUFACTURER.
2. CONTRACTOR MUST SUBMIT THE FOLLOWING AT A MINIMUM FOR SHOP DRAWING REVIEW.
   a. COMPONENTS
      POWER SUPPLY
      RELAY UNITS
      OCCUPANCY SENSOR
   b. POWER SUPPLY CALCULATIONS
   c. WIRING DIAGRAM
3. POWER SUPPLY, RELAY UNITS AND OCCUPANCY SENSOR SHALL ALL HAVE A FIVE YEAR WARRANTY.
4. REFER TO SPECIFICATIONS SECTION 260923 FOR ADDITIONAL WORK REQUIREMENTS.

B. SENSOR

a. MINIMUM COVERAGE AREA OF 500SQFT WITH ADJUSTABLE SENSITIVITY
b. PROGRAMMABLE AUTO-ON/MANUAL-ON
c. 360 DEGREE COVERAGE OR 180 DEGREE COVERAGE AS NECESSARY SUCH THAT THE ENTIRE ROOM IS COVERED WITHOUT NUISANCE TRIPS (AWAY FROM GLASS WALLS, DOORS TO HALLWAYS, ETC.)
d. ADJUSTABLE TIME DELAY

C. POWER SUPPLY SPECIFICATIONS

1. INPUT
   a. VOLTAGE: 277/120V-1ϕ
2. OUTPUT
   a. VOLTAGE: 24VDC
   b. PROVIDE POWER SUPPLY OR SUPPLIES AS NECESSARY FOR ALL CONNECTED ACCESSORIES (SENSORS, RELAYS, ETC.)
3. SHALL BE UL LISTED

D. RELAY UNIT SPECIFICATIONS

1. INPUT
   a. VOLTAGE: 24VDC
2. FORM C RELAY (ONE NORMALLY CLOSED, ONE NORMALLY OPEN CONTACT)

MINIMUM RATINGS		
BALLAST	INCANDESCENT	MOTOR
5A @ 120VAC 3A @ 277VAC	3A @ 120VAC 2.5A @ 277VAC	.25HP @ 120VAC .5HP @ 277VAC

3. NORMALLY OPEN (N.O.) OR NORMALLY CLOSED (N.C.) SINGLE CONTACT RELAY

MINIMUM RATINGS		
BALLAST	INCANDESCENT	MOTOR
20A @ 120VAC 20A @ 277VAC	13A @ 120VAC -	1HP @ 120VAC -

4. SHALL BE UL LISTED

OCCUPANCY SENSOR PROGRAM SCHEDULE:

SENSOR TYPE	ON CONTROL	OFF CONTROL	TYPICAL ROOM TYPES	MOUNTING	AUTO OFF TIME DELAY
DUAL TECHNOLOGY	MANUAL/SENSOR	MANUAL/SENSOR	PUBLIC RESTROOMS	CEILING	5 MINUTES
			PRIVATE RESTROOMS	WALL	5 MINUTES
			EXAM ROOMS	CEILING	30 MINUTES
INFRARED	MANUAL/SENSOR	MANUAL/SENSOR	OFFICES	CEILING	5 MINUTES
			SMALL STORAGE	WALL	5 MINUTES
			LARGE STORAGE	CEILING	5 MINUTES

LIGHTING FIXTURE SCHEDULE

TYPE	FIXTURE DESCRIPTION	MOUNTING	MAX FIXTURE HEIGHT	LAMP(S)						DRIVER/BALLAST(S)		FIXTURE		
				TYPE	WATTS	QUANTITY	COLOR TEMP	LUMEN MAINTANCE RATING	MINIMUM EFFICACY	TYPE	QUANTITY	LUMEN	WATTAGE	VOLTAGE
A	2' X 2', DIRECT/INDIRECT, RIBBED FROSTED ARCYLIC CENTER LENS, HIGH REFLECTANCE WHITE POWDER COATED REFLECTORS, STEEL HOUSING WITH HINGED DOOR, FUSING.	LAY-IN GRID	0' - 4"	LED	34.5W	1	4000 K	L80@ 60,000 hrs	95 LPW	0-10V Dimming	1	3400	34 W	277 V
B	2' X 2', DIRECT/INDIRECT, RIBBED FROSTED ARCYLIC CENTER LENS, HIGH REFLECTANCE WHITE POWDER COATED REFLECTORS, STEEL HOUSING WITH HINGED DOOR, FUSING.	LAY-IN GRID	0' - 4"	LED	22.6W	1	4000 K	L80@60,000 hrs	100 LPW	0-10V Dimming	1	2400	23 W	277 V
C	2' X 4', DIRECT/INDIRECT, RIBBED FROSTED ARCYLIC CENTER LENS, HIGH REFLECTANCE WHITE POWDER COATED REFLECTORS, STEEL HOUSING WITH HINGED DOOR, FUSING.	LAY-IN GRID	0' - 4"	LED	33.4W	1	4000 K	L90@60,000 hrs	110 LPW	0-10V Dimming	1	4000	33 W	277 V
D	2' X 2' FULLY LUMIOUS DEEP RECESSED TROFFER, PRISMATIC ACRYLIC LENS, HEAVY GAUGE STEEL HOUSING AND DOOR FRAME, FUSING	LAY-IN GRID	0' - 4"	LED	33W	1	4000 K	L70@60,000hrs	96 LPW	0-10V Dimming	1	3200	33 W	277 V
E	2' X 4' FULLY LUMIOUS DEEP RECESSED TROFFER, PRISMATIC ACRYLIC LENS, HEAVY GAUGE STEEL HOUSING AND DOOR FRAME, FUSING	LAY-IN GRID	0' - 4"	LED	43W	1	4000 K	L70@60,000hrs	103 LPW	0-10V Dimming	1	4800	43 W	277 V
EXIT	LED TYPE, AC ONLY, WALL OR CEILING MOUNT AS INDICATED ON DRAWINGS, ALUMINUM CANOPY WITH WHITE FINISH, HIGH IMPACT CLEAR POLYCARBONATE HOUSING, RED LETTERS WITH WHITE FACE. REFER TO LIGHTING PLAN FOR CUSTOM CONFIGURATION OF CHEVRON DIRECTION ARROWS. UL 924 LISTED. CONNECT TO UNSWITCHE EMERGENCY LIFE SAFEY CIRCUIT.	CEILING OR WALL	0' - 0"	LED	4W	1	4000 K	-	-	-	1	-	4 W	277V
G	6" DIA RECESSED DOWNLIGHT, SEMI-SPECULAR CLEAR REFLECTOR AND WHITE POLYMER TRIM, LED BOARD AND DRIVER ACCESSIBLE FROM BELOW, WET LISTED, IP66 RATED WITH GASKETED LENS, CONVEX TRANSITIONAL LENS.	LAY-IN GRID	0' - 7"	LED	22.4W	1	4000 K	L70@50,000hrs	66.7 LPW	0-10V Dimming	1	1500	22 W	277 V
H	6" DIA RECESSED DOWNLIGHT, SEMI-SPECULAR CLEAR REFLECTOR AND WHITE POLYMER TRIM, LED BOARD AND DRIVER ACCESSIBLE FROM BELOW, CONVEX TRANSITIONAL LENS.	LAY-IN GRID	0' - 7"	LED	22.6W	1	4000 K	L70@50,000hrs	66.7 LPW	0-10V Dimming	1	1500	23 W	277 V
K	ARCHITECTURAL SEMI FLUSH LED DRUM LIGHT, MFR: ADVENT #AIC11865-L41.6WDML-PT22-277V-4000K-H10-FB04 OR APPROVED EQUAL	LAY-IN GRID	0' - 10"	LED	41.6W	1	4000 K	L70@50,000hrs	-	0-10V Dimming	1	3577	47 W	277 V
L	VAPORLUME FIXTURE, FUSING, WHITE MOLDED FIBERGLASS REINFORCED POLYESTER BODY, HIGH IMPACT ACRYLIC MOLDED LENS, GASKET, LISTED FOR WET LOCATION, STAINLESS STEEL MOUNTING BRACKETS, PAINT AFTER FABRICATION. MOUNT ON UNISTRUT SUPPORT SUSPENDED FROM CEILING AT 8'6" TO BOTTOM OF FIXTURE	UNISTRUT MOUNTED	0' - 5 1/4"	LED	38W	1	4000 K	L70@50,000hrs	105 LPW	0-10V Dimming	1	4000	38 W	277 V

LIGHTING FIXTURE GENERAL NOTES

L1 REFER TO ELECTRICAL SPECIFICATIONS FOR LED COLOR TEMPERATURE AND DRIVER TYPE.

L2 CONTRACTOR SHALL COORDINATE LIGHTING FIXTURE TYPE (GRID OR FLANGE) WITH ACTUAL CEILING TYPE PRIOR TO ORDERING FIXTURES. CONTACT ENGINEER IF QUESTIONS SHOULD ARISE CONCERNING CEILING TYPES.

L3 CONTRACTOR SHALL VERIFY ALL DRIVER QUANTITIES WITH SWITCHING SHOWN ON PLANS PRIOR TO ORDERING FIXTURES. ADJUST DRIVER QUANTITIES AS REQUIRED TO MATCH SWITCHING.

L4 VERIFY LIGHTING CIRCUIT VOLTAGE (277V-1Ø OR 120V-1Ø) PRIOR TO ORDERING LIGHTING FIXTURES OR STARTING ROUGH-IN OF BRANCH CIRCUITS. IMMEDIATELY CONTACT ENGINEER WITH ANY DISCREPANCIES. CONTRACTOR IS RESPONSIBLE FOR ORDERING THE PROPER VOLTAGE FOR LIGHTING FIXTURES, REGARDLESS OF VOLTAGE SHOWN ON LIGHTING FIXTURE SCHEDULE.

L5 CONTRACTOR SHALL VERIFY ALL FIXTURES TO BE CONTROLLED BY DIMMER SWITCHES AS SHOWN ON PLANS PRIOR TO ORDERING FIXTURES. PROVIDE ARCHITECTURAL DIMMING DRIVER (LED) WITH DIMMING RANGE FROM 100% DOWN TO 1% ON ALL DIMMED FIXTURES AND COMPATIBLE DIMMER CONTROLS WHERE DIMMING IS INDICATED ON PLANS.

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title: **LIGHTING FIXTURE SCHEDULE**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-E0.2**

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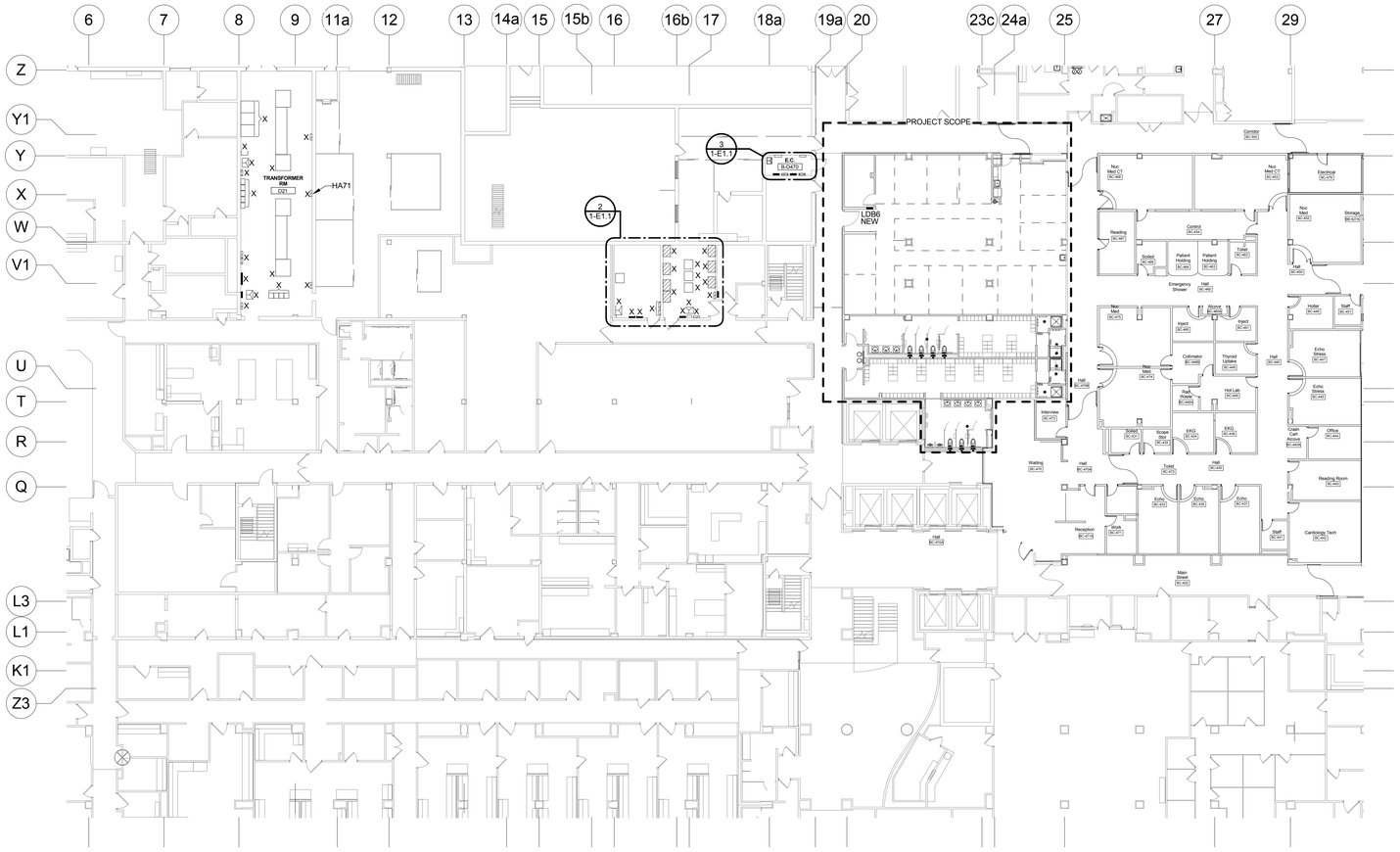
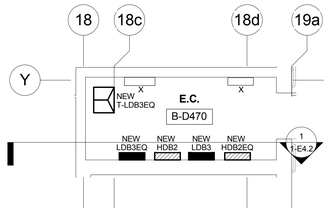
VA FORM 08-6231, OCT 1978



BASEMENT ELECTRICAL KEY PLAN 1

1/16" = 1'-0"

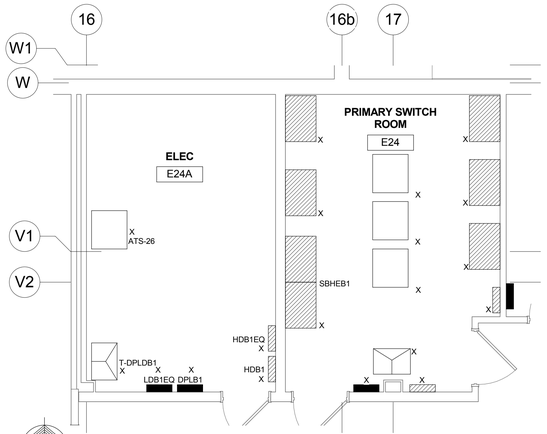
0' 4' 8' 16' 32'



BASEMENT ELECTRICAL ROOM B-D470 3

1/4" = 1'-0"

0' 2' 4' 8' 16'



BASEMENT ELECTRICAL ROOMS E24A, E24 2

1/4" = 1'-0"

0' 2' 4' 8' 16'

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BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
BASEMENT ELECTRICAL KEY PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	MPL	TWM

Project Number
541-16-104

Building Number
1

Drawing Number
1-E1.1

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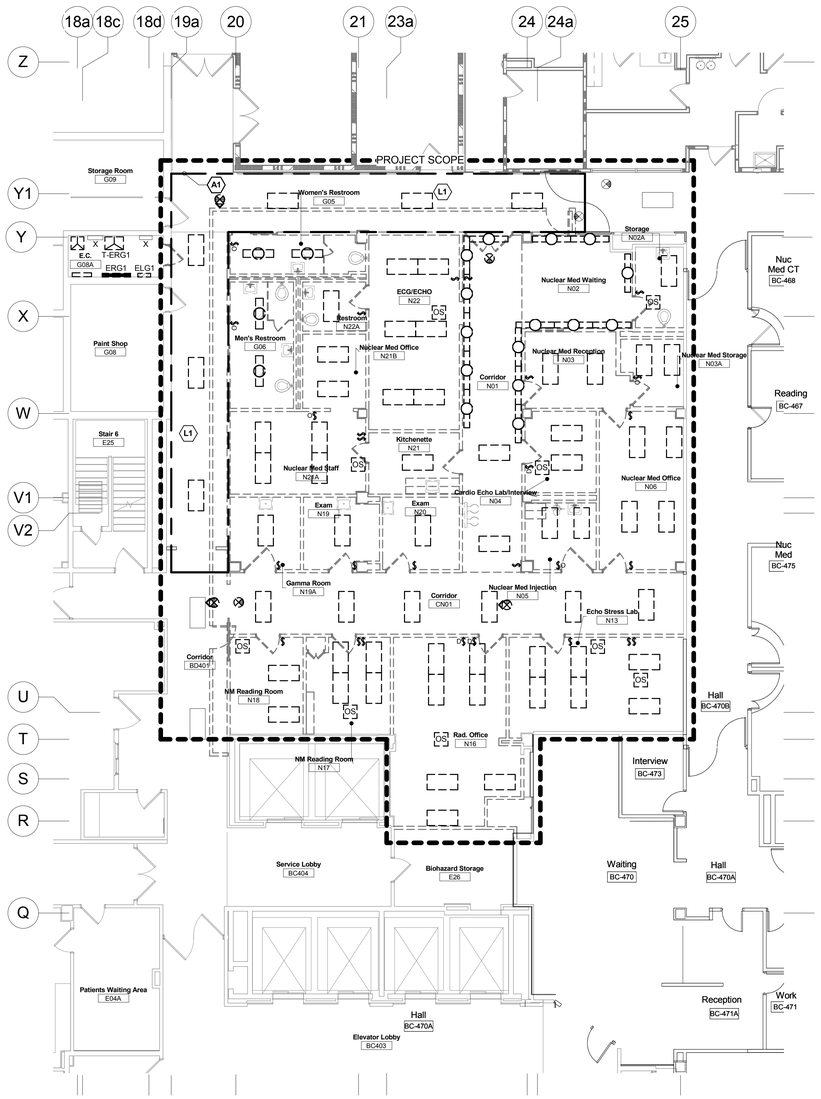
VA FORM 08-6231, OCT 1978

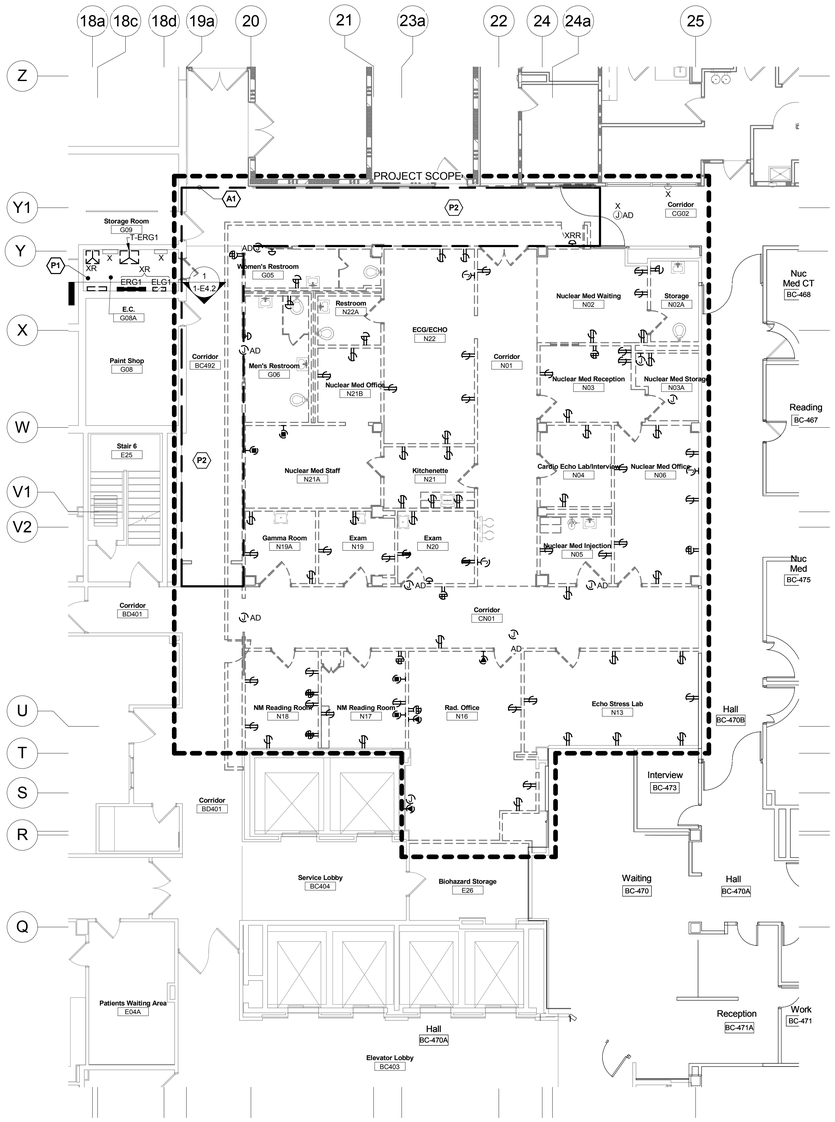


PARTIAL BASEMENT LIGHTING DEMOLITION PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'



PARTIAL BASEMENT POWER DEMOLITION PLAN

2

1/8" = 1'-0"

0' 4' 8' 16' 32'

DEDUCT ALTERNATE #1:

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT DEMOLITION OF EXISTING CEILING MOUNTED FIXTURES, DEVICES, ETC. IN OUTLINED AREA OF CORRIDOR B-C492

ELECTRICAL DEMOLITION NOTES

D1 ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, SPECIAL SYSTEMS OUTLETS, CONDUIT, WIRING ETC. THAT WILL NOT BE REUSED IN THE REMODELED INSTALLATION SHALL BE REMOVED UNLESS OTHERWISE NOTED. THIS DEMOLITION SHALL INCLUDE ALL ELECTRICAL ITEMS SHOWN ON THIS PLAN THAT ARE NOT DESIGNATED BY "X", "XN" OR "XRR" AND ALL OTHER ADDITIONAL ITEMS THAT ARE NOT SHOWN BUT THAT MUST BE REMOVED IN ORDER TO PRODUCE A NEAT, FINISHED, PROPERLY FUNCTIONING ELECTRICAL INSTALLATION. MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING REUSED ELECTRICAL SYSTEMS COMPONENTS - PROVIDE ALL CONDUIT AND WIRING NECESSARY TO ACHIEVE THE SAME. THE CONTRACTOR SHALL FIELD VERIFY THE NATURE AND EXTENT OF ALL DEMOLITION WORK AND SHALL INCLUDE COST FOR THE SAME IN THE BID SUBMITTAL.

D2 ALL EXISTING REMOVED ELECTRICAL EQUIPMENT, DEVICES, ETC. THAT ARE NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR.

D3 DASHED WALLS ON PLAN INDICATE EXISTING CONSTRUCTION TO BE REMOVED.

D4 REFER TO ELECTRICAL LEGEND FOR ALL SYMBOL DESIGNATIONS. NOTE SPECIAL ATTENTION TO SELECTED EXISTING DEVICES, WIREWAYS, ETC. MARKED XB, XRR OR XN, AND REMOVE/BLANK OFF, RELOCATE OR REPLACE THESE COMPONENTS AS REQUIRED.

D5 MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING ELECTRICAL SYSTEM COMPONENTS IN AREAS NOT BEING REMODELED UNLESS OTHERWISE NOTED. PROVIDE ALL CONDUIT AND WIRING EXTENSIONS NECESSARY TO ACHIEVE SAME.

D6 THE ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL ELECTRICAL DEMOLITION WORK WITH THE GENERAL AND MECHANICAL CONTRACTORS, AND SHALL DISCONNECT ALL REQUIRED CIRCUITS IN A TIMELY MANNER.

LIGHTING CODED NOTES:

L1 WORK IN CORRIDORS TO TAKE PLACE OFF HOURS. COORDINATE WORK WITH VA COR.

POWER CODED NOTES:

P1 REFER TO ELECTRICAL DETAILS AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.

P2 WORK IN CORRIDORS TO TAKE PLACE OFF HOURS. COORDINATE WITH VA COR BEFORE WORK IS PERFORMED.

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **PARTIAL BASEMENT LIGHTING AND POWER DEMOLITION PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-E2.1**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

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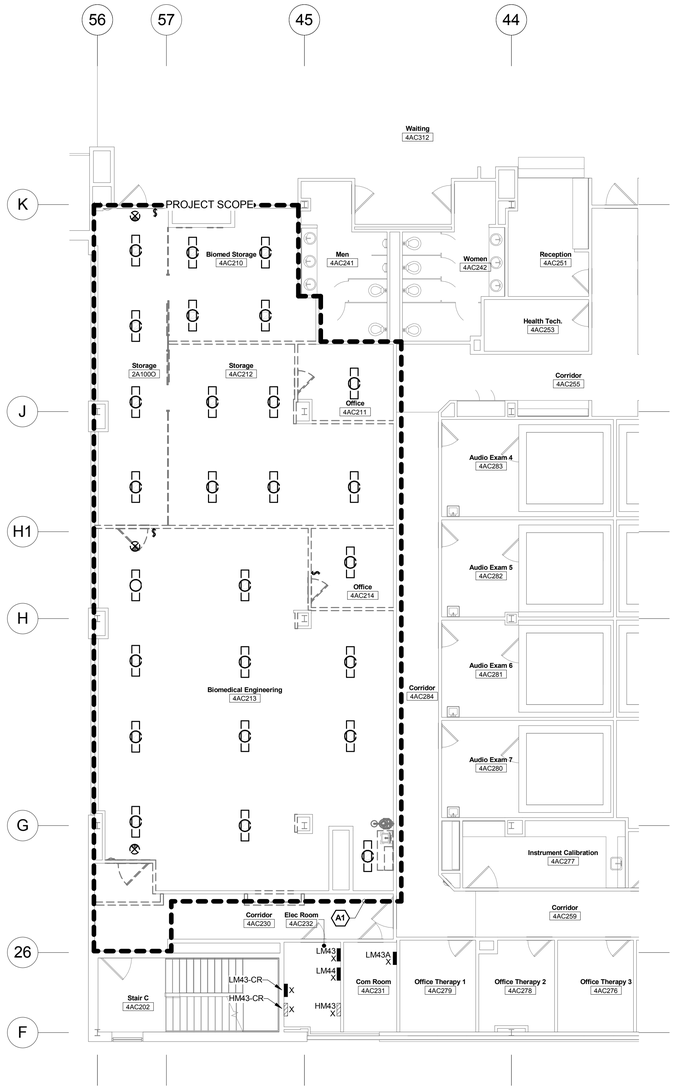
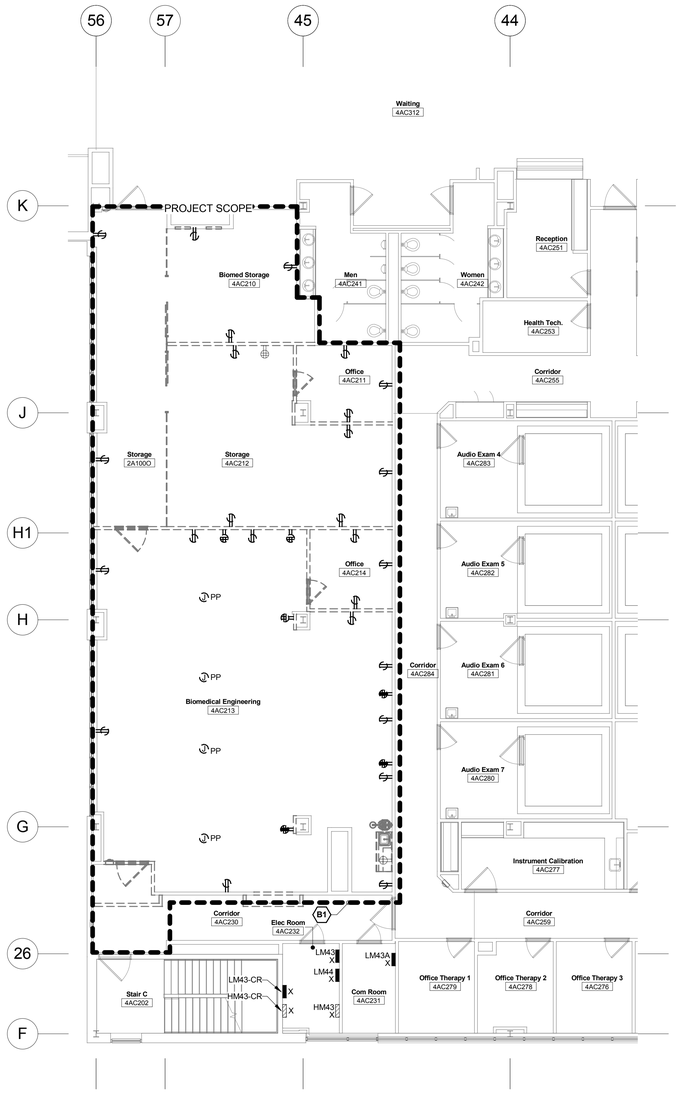


PARTIAL FOURTH FLOOR LIGHTING DEMOLITION PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'



PARTIAL FOURTH FLOOR POWER DEMOLITION PLAN

2

1/8" = 1'-0"

0' 4' 8' 16' 32'

CODED NOTES:

A1 REMOVE ALL ELECTRICAL DEVICES, RECEPTACLES, JUNCTION BOXES, CONDUIT WIRING ETC FROM PROJECT SCOPE AREA.

ELECTRICAL DEMOLITION NOTES

D1 ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, SPECIAL SYSTEMS OUTLETS, CONDUIT, WIRING ETC. THAT WILL NOT BE REUSED IN THE REMODELED INSTALLATION SHALL BE REMOVED UNLESS OTHERWISE NOTED. THIS DEMOLITION SHALL INCLUDE ALL ELECTRICAL ITEMS SHOWN ON THIS PLAN THAT ARE NOT DESIGNATED BY "X", "XN" OR "XRR" AND ALL OTHER ADDITIONAL ITEMS THAT ARE NOT SHOWN BUT THAT MUST BE REMOVED IN ORDER TO PRODUCE A NEAT, FINISHED, PROPERLY FUNCTIONING ELECTRICAL INSTALLATION. MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING REUSED ELECTRICAL SYSTEMS COMPONENTS - PROVIDE ALL CONDUIT AND WIRING NECESSARY TO ACHIEVE THE SAME. THE CONTRACTOR SHALL FIELD VERIFY THE NATURE AND EXTENT OF ALL DEMOLITION WORK AND SHALL INCLUDE COST FOR THE SAME IN THE BID SUBMITTAL.

D2 ALL EXISTING REMOVED ELECTRICAL EQUIPMENT, DEVICES, ETC. THAT ARE NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR.

D3 DASHED WALLS ON PLAN INDICATE EXISTING CONSTRUCTION TO BE REMOVED.

D4 REFER TO ELECTRICAL LEGEND FOR ALL SYMBOL DESIGNATIONS. NOTE SPECIAL ATTENTION TO SELECTED EXISTING DEVICES, WIREWAYS, ETC. MARKED XB, XRR OR XN, AND REMOVE/BLANK OFF, RELOCATE OR REPLACE THESE COMPONENTS AS REQUIRED.

D5 MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING ELECTRICAL SYSTEM COMPONENTS IN AREAS NOT BEING REMODELED UNLESS OTHERWISE NOTED. PROVIDE ALL CONDUIT AND WIRING EXTENSIONS NECESSARY TO ACHIEVE SAME.

D6 THE ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL ELECTRICAL DEMOLITION WORK WITH THE GENERAL AND MECHANICAL CONTRACTORS, AND SHALL DISCONNECT ALL REQUIRED CIRCUITS IN A TIMELY MANNER.

CODED NOTES:

B1 REMOVE ALL ELECTRICAL DEVICES, RECEPTACLES, JUNCTION BOXES, CONDUIT WIRING ETC FROM PROJECT SCOPE AREA.

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
PARTIAL FOURTH FLOOR LIGHTING AND POWER DEMOLITION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	MPL	TWM

Project Number
541-16-104

Building Number
1

Drawing Number
1-E2.2

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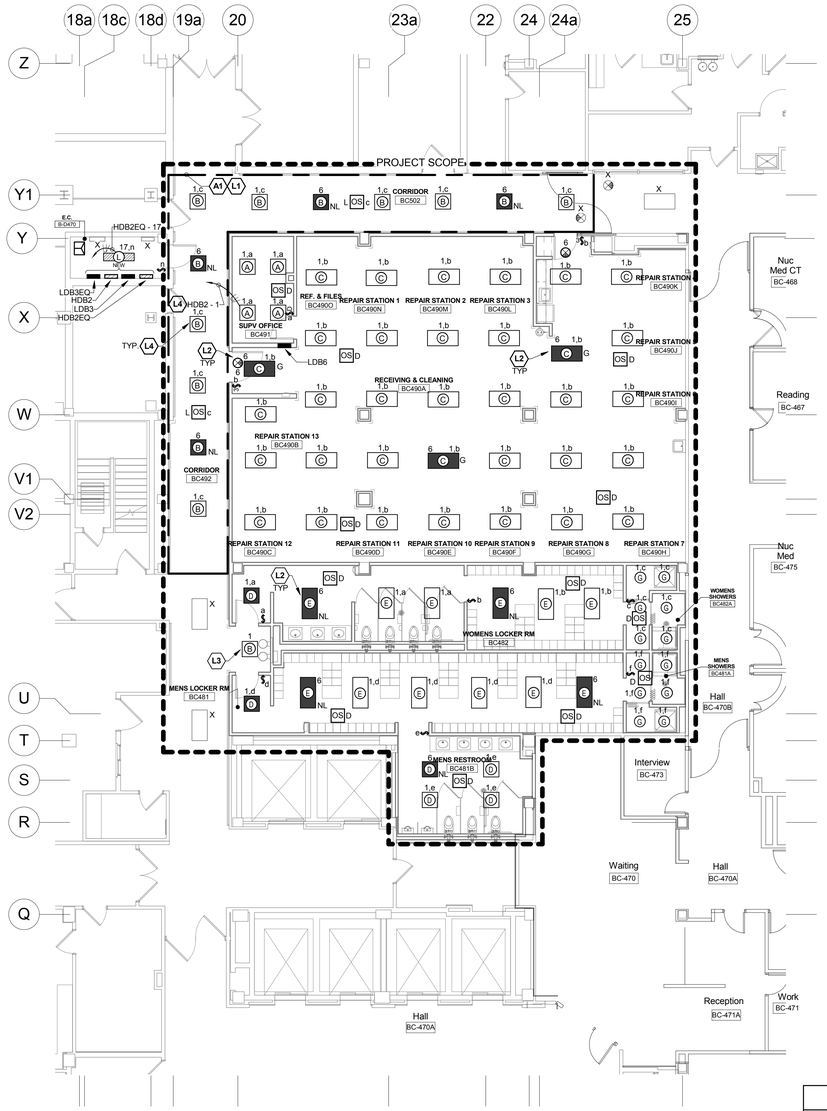
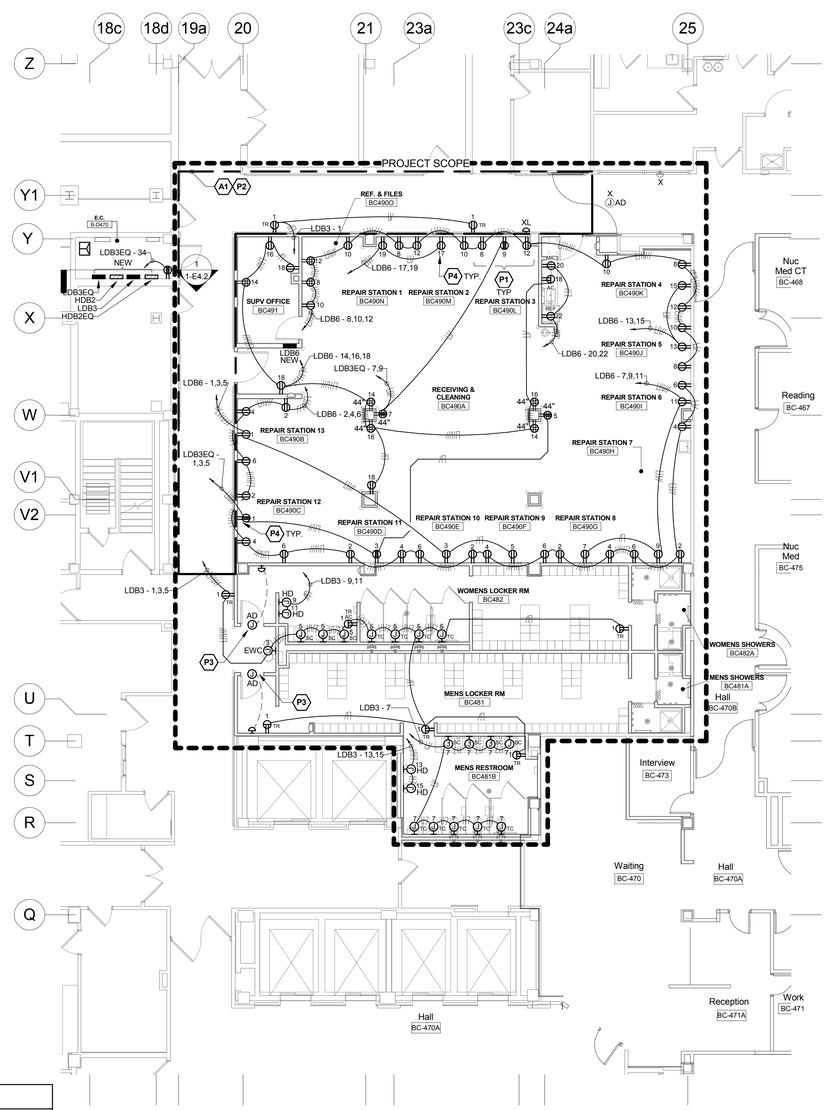


PARTIAL BASEMENT LIGHTING PLAN — 1

1/8" = 1'-0"

0' 4' 8' 16' 32'



PARTIAL BASEMENT POWER PLAN — 2

1/8" = 1'-0"

0' 4' 8' 16' 32'

DEDUCT ALTERNATE #1:

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT NEW CEILING MOUNTED FIXTURES, DEVICES, ETC. IN OUTLINED AREA OF CORRIDOR B-C492

LIGHTING GENERAL NOTES

- L1 REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR FINAL LOCATION OF ALL NEW CEILING MOUNTED LIGHTING FIXTURES. CLOSELY COORDINATE LOCATION OF LIGHTING FIXTURES AND SMOKE DETECTORS WITH HVAC DUCTS, DIFFUSERS, SPRINKLERS, PLUMBING, ETC. AND ADJUST LOCATIONS OF SELECTED ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ENGINEER'S INSTRUCTIONS.
- L2 REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT LAYOUT. CLOSELY COORDINATE THE EXACT LOCATION OF ALL OUTLETS AND DEVICES WITH ARCHITECTURAL ELEVATIONS. ADJUST LOCATIONS AND MOUNTING HEIGHTS WHERE NECESSARY TO PREVENT INTERFERENCE WITH FURNITURE, FIXED CASEWORK, EQUIPMENT, ETC. VERIFY ALL CHANGES PRIOR TO ROUGH-IN.
- L3 REFER TO ELECTRICAL DETAILS PLANS FOR OCCUPANCY SENSOR WIRING DIAGRAMS AND PROGRAM SCHEDULE FOR ADDITIONAL INFORMATION.
- L4 A DEDICATED NEUTRAL SHALL BE PROVIDED FOR EACH AND EVERY 120V AND 277V BRANCH CIRCUIT. MULTIWIRE BRANCH CIRCUITS WITH SHARED NEUTRALS ARE NOT PERMITTED.
- L5 NO MORE THAN (3) SINGLE-PHASE BRANCH CIRCUITS SHALL BE INSTALLED IN ANY ONE CONDUIT. DIFFERENT POWER SYSTEMS (NORMAL, CRITICAL, LIFE SAFETY) SHALL NOT BE INSTALLED IN THE SAME CONDUIT.
- L6 FLEXIBLE METAL CONDUIT, ARMORED CABLE (AC), OR METAL-CLAD CABLE (MC) MAY BE USED FOR FINAL CONNECTION TO FIXTURE FROM JUNCTION BOX BUT SHALL NOT EXCEED 6FT IN LENGTH. FLEXIBLE METAL CONDUIT MAY NOT BE "DAISY CHAINED" FIXTURE TO FIXTURE.

POWER GENERAL NOTES

- P1 REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT LAYOUT. CLOSELY COORDINATE THE EXACT LOCATION OF ALL OUTLETS AND DEVICES WITH ARCHITECTURAL ELEVATIONS. ADJUST LOCATIONS AND MOUNTING HEIGHTS WHERE NECESSARY TO PREVENT INTERFERENCE WITH FURNITURE, FIXED CASEWORK, EQUIPMENT, ETC. VERIFY ALL CHANGES PRIOR TO ROUGH-IN.
- P2 ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS, MOUNTING HEIGHTS, AND CONNECTION REQUIREMENTS (RECEPTACLES, SWITCHES, DISCONNECTS) WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN.
- P3 A DEDICATED NEUTRAL SHALL BE PROVIDED FOR EACH AND EVERY 120V AND 277V BRANCH CIRCUIT. MULTIWIRE BRANCH CIRCUITS WITH SHARED NEUTRALS ARE NOT PERMITTED.
- P4 PROVIDE #10 SIZE CONDUCTORS FOR 20A-120V CIRCUITS WITH DISTANCE LENGTHS THAT EXCEED 100 FT.

LIGHTING CODED NOTES:

- **L1** WORK IN CORRIDORS TO TAKE PLACE OFF HOURS. COORDINATE WORK WITH VA COR.
- **L2** CONNECT ALL LIFE SAFETY LIGHTING FIXTURES AND EXIT SIGNS TO PANEL HEB1LS CIRCUIT 6 IN ELECTRICAL ROOM BC-479 VIA 3/4"C - 3#12 AND 1#12EG.
- **L3** EXTEND EXISTING SWITCH CONTROL IN CORRIDOR TO NEW LIGHTING FIXTURES.
- **L4** CONNECT ALL NORMAL LIGHTING COMPLETE TO CIRCUIT INDICATED AND TO LOCAL LIGHTING CONTROLS (SWITCHES AND/OR OCCUPANCY SENSORS) VIA 3/4" EMT CONDUIT - 2 #12 & 1 #12 EG. FLEXIBLE METAL CONDUIT MAY BE USED FOR FINAL CONNECTION TO FIXTURE FROM JUNCTION BOX BUT SHALL NOT EXCEED 6FT IN LENGTH. FLEXIBLE METAL CONDUIT MAY NOT BE "DAISY CHAINED" FIXTURE TO FIXTURE.

POWER CODED NOTES:

- **P1** MOUNT RECEPTACLES AT 40"AFF AT ALL REPAIR STATIONS.
- **P2** WORK IN CORRIDORS TO TAKE PLACE OFF HOURS. COORDINATE WITH VA COR BEFORE WORK IS PERFORMED.
- **P3** PROVIDE 120V CIRCUIT AS INDICATED AND CONNECT COMPLETE TO PANEL HEB1LS CIRCUIT 8 IN ELECTRICAL ROOM BC-479 TO AUTOMATIC DOOR OPERATOR PER MANUFACTURER'S WIRING DIAGRAMS. INTERFACE OPERATOR WITH ACCESS CONTROL HARDWARE AT DOOR LOCATION SUCH THAT OPERATOR ACTIVATES UPON CARD SWIPE AUTHORIZATION FROM THE NON-SECURED SIDE AND THE PUSH PLATE FORM THE SECURED SIDE.
- **P4** PROVIDE ADDITIONAL ENGRAVING TO DESIGNATE RECEPTACLES WITH DEDICATED CIRCUITS FOR LAB BENCHES. LABEL SHALL READ "BENCH" - TYPICAL.

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **PARTIAL BASEMENT LIGHTING AND POWER PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-E3.1**

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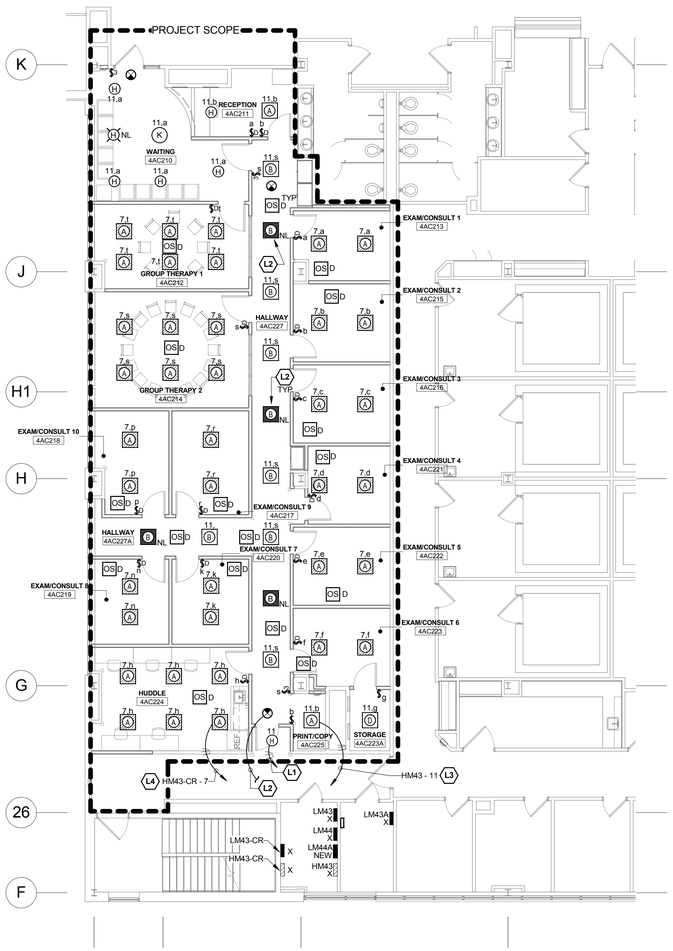
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



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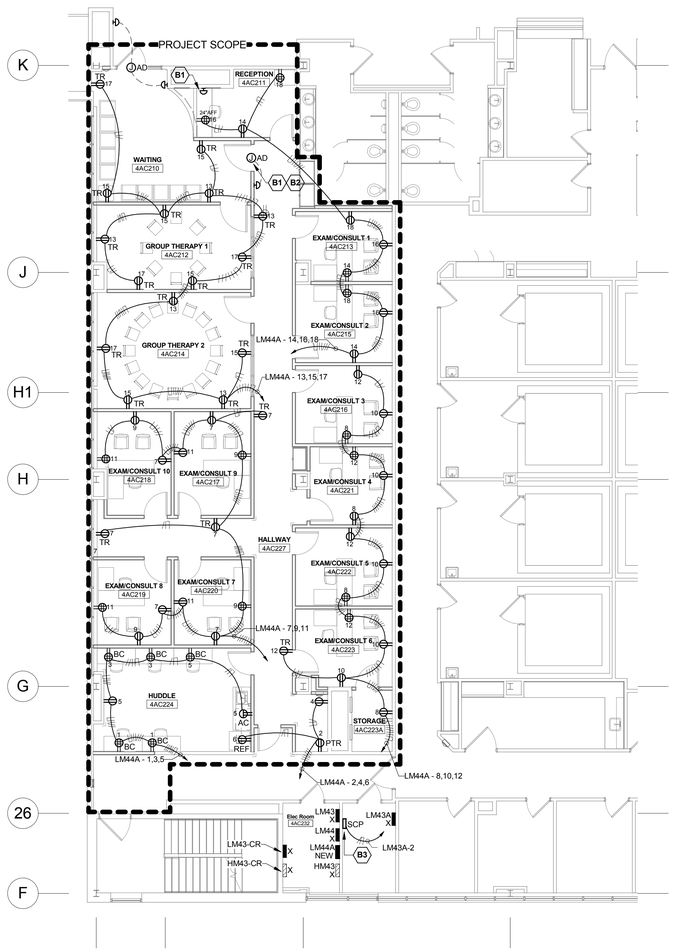
PARTIAL FOURTH FLOOR LIGHTING PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'



N

PARTIAL FOURTH FLOOR POWER PLAN 2

1/8" = 1'-0"

0' 4' 8' 16' 32'

LIGHTING GENERAL NOTES

L1	REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR FINAL LOCATION OF ALL NEW CEILING MOUNTED LIGHTING FIXTURES. CLOSELY COORDINATE LOCATION OF LIGHTING FIXTURES AND SMOKE DETECTORS WITH HVAC DUCTS, DIFFUSERS, SPRINKLERS, PLUMBING, ETC. AND ADJUST LOCATIONS OF SELECTED ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ENGINEER'S INSTRUCTIONS.
L2	REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT LAYOUT. CLOSELY COORDINATE THE EXACT LOCATION OF ALL OUTLETS AND DEVICES WITH ARCHITECTURAL ELEVATIONS. ADJUST LOCATIONS AND MOUNTING HEIGHTS WHERE NECESSARY TO PREVENT INTERFERENCE WITH FURNITURE, FIXED CASEWORK, EQUIPMENT, ETC. VERIFY ALL CHANGES PRIOR TO ROUGH-IN.
L3	REFER TO ELECTRICAL DETAILS PLANS FOR OCCUPANCY SENSOR WIRING DIAGRAMS AND PROGRAM SCHEDULE FOR ADDITIONAL INFORMATION.
L4	A DEDICATED NEUTRAL SHALL BE PROVIDED FOR EACH AND EVERY 120V AND 277V BRANCH CIRCUIT. MULTIWIRE BRANCH CIRCUITS WITH SHARED NEUTRALS ARE NOT PERMITTED.
L5	NO MORE THAN (3) SINGLE-PHASE BRANCH CIRCUITS SHALL BE INSTALLED IN ANY ONE CONDUIT. DIFFERENT POWER SYSTEMS (NORMAL, CRITICAL, LIFE SAFETY) SHALL NOT BE INSTALLED IN THE SAME CONDUIT.
L6	FLEXIBLE METAL CONDUIT, ARMORED CABLE (AC), OR METAL-CLAD CABLE (MC) MAY BE USED FOR FINAL CONNECTION TO FIXTURE FROM JUNCTION BOX BUT SHALL NOT EXCEED 6FT IN LENGTH. FLEXIBLE METAL CONDUIT MAY NOT BE "DAISY CHAINED" FIXTURE TO FIXTURE.

POWER GENERAL NOTES

P1	REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT LAYOUT. CLOSELY COORDINATE THE EXACT LOCATION OF ALL OUTLETS AND DEVICES WITH ARCHITECTURAL ELEVATIONS. ADJUST LOCATIONS AND MOUNTING HEIGHTS WHERE NECESSARY TO PREVENT INTERFERENCE WITH FURNITURE, FIXED CASEWORK, EQUIPMENT, ETC. VERIFY ALL CHANGES PRIOR TO ROUGH-IN.
P2	ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS, MOUNTING HEIGHTS, AND CONNECTION REQUIREMENTS (RECEPTACLES, SWITCHES, DISCONNECTS) WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN.
P3	A DEDICATED NEUTRAL SHALL BE PROVIDED FOR EACH AND EVERY 120V AND 277V BRANCH CIRCUIT. MULTIWIRE BRANCH CIRCUITS WITH SHARED NEUTRALS ARE NOT PERMITTED.
P4	PROVIDE #10 SIZE CONDUCTORS FOR 20A-120V CIRCUITS WITH DISTANCE LENGTHS THAT EXCEED 100 FT.

LIGHTING CODED NOTES:

- L1 CONNECT NEW LIGHTING FIXTURE TO EXISTING CORRIDOR LIGHTING CIRCUIT AND SWITCH CONTROL.
- L2 CONNECT ALL LIFE SAFETY FIXTURES AND EXIT SIGNS TO EXISTING LIFE SAFETY CIRCUIT EXTENDED FROM NEAREST FIXTURE IN CORRIDOR. CONNECT COMPLETE VIA 3/4" EMT CONDUIT - 2 #12 & 1 #12 EG.
- L3 CONNECT ALL NORMAL LIGHTING TO CIRCUIT INDICATED AND CONNECT COMPLETE TO LOCAL LIGHTING CONTROLS (SWITCHES AND/OR OCCUPANCY SENSORS) VIA 3/4" EMT CONDUIT - 2 #12 & 1 #12 EG.
- L4 CONNECT ALL CRITICAL LIGHTING TO CIRCUIT INDICATED AND CONNECT COMPLETE TO LOCAL LIGHTING CONTROLS (SWITCHES AND/OR OCCUPANCY SENSORS) VIA 3/4" EMT CONDUIT - 2 #12 & 1 #12 EG.

POWER CODED NOTES:

- B1 PROVIDE REMOTE BUTTON AT RECEPTION DESK TO INTERFACE WITH LENEL SYSTEM AND AUTODOOR CONTROLLER AND RELEASE/OPEN DOOR UPON PRESSING. FIELD COORDINATE EXACT MOUNTING LOCATION WITH COR PRIOR TO ROUGH-IN.
- B2 PROVIDE INTERFACE OF LENEL SYSTEM WITH AUTODOOR CONTROLLER TO RELEASE/OPEN DOOR UPON CARD READ SCAN.
- B3 PROVIDE 120V-1ø CIRCUIT INDICATED FOR LENEL ACCESS CONTROLS SYSTEM POWER SUPPLY. FIELD COORDINATE LOCATION OF ACCESS CONTROL PANEL WITH COR/IRM PRIOR TO ROUGH-IN.

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **PARTIAL FOURTH FLOOR LIGHTING AND POWER PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

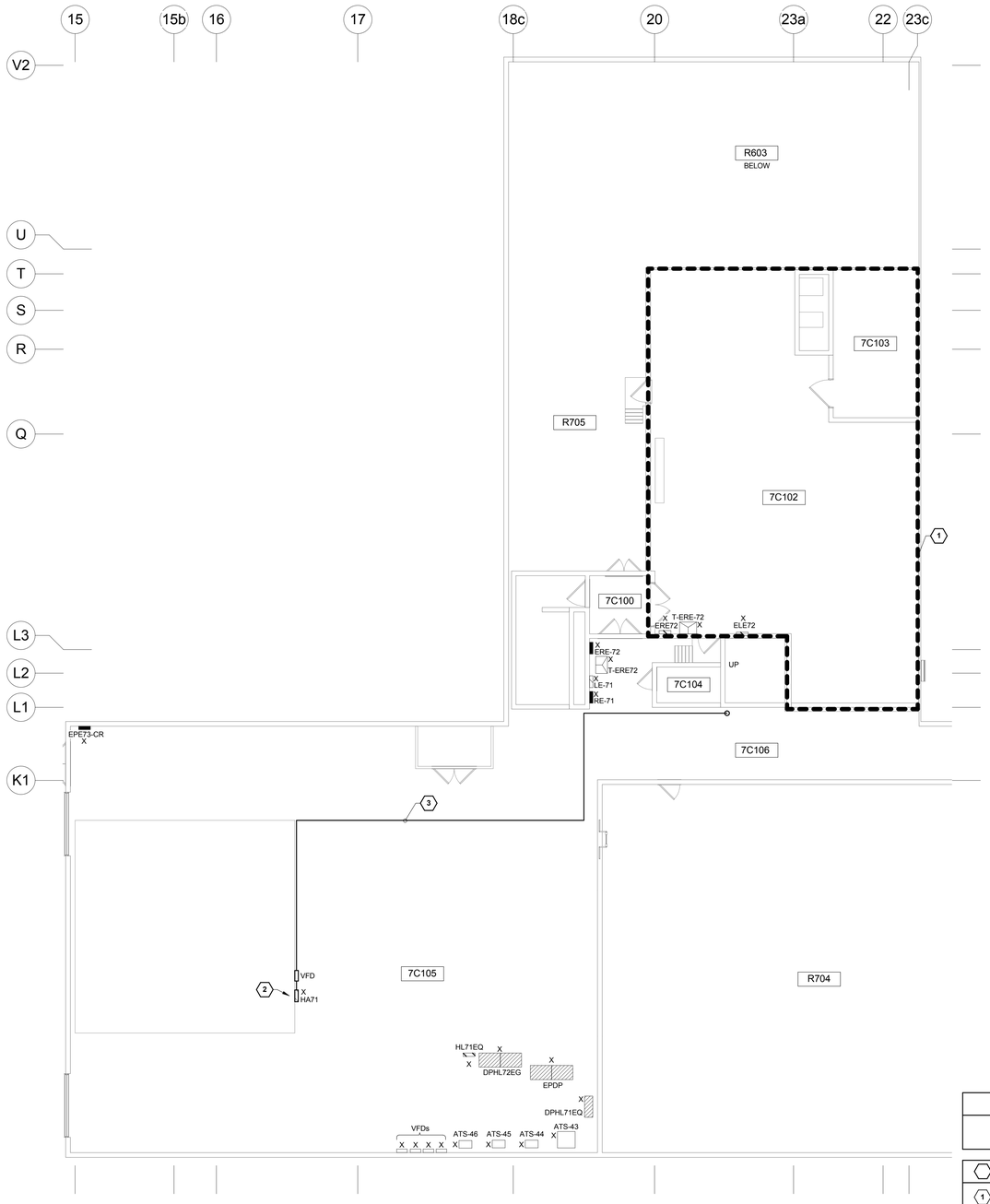
Drawing Number: **1-E3.2**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

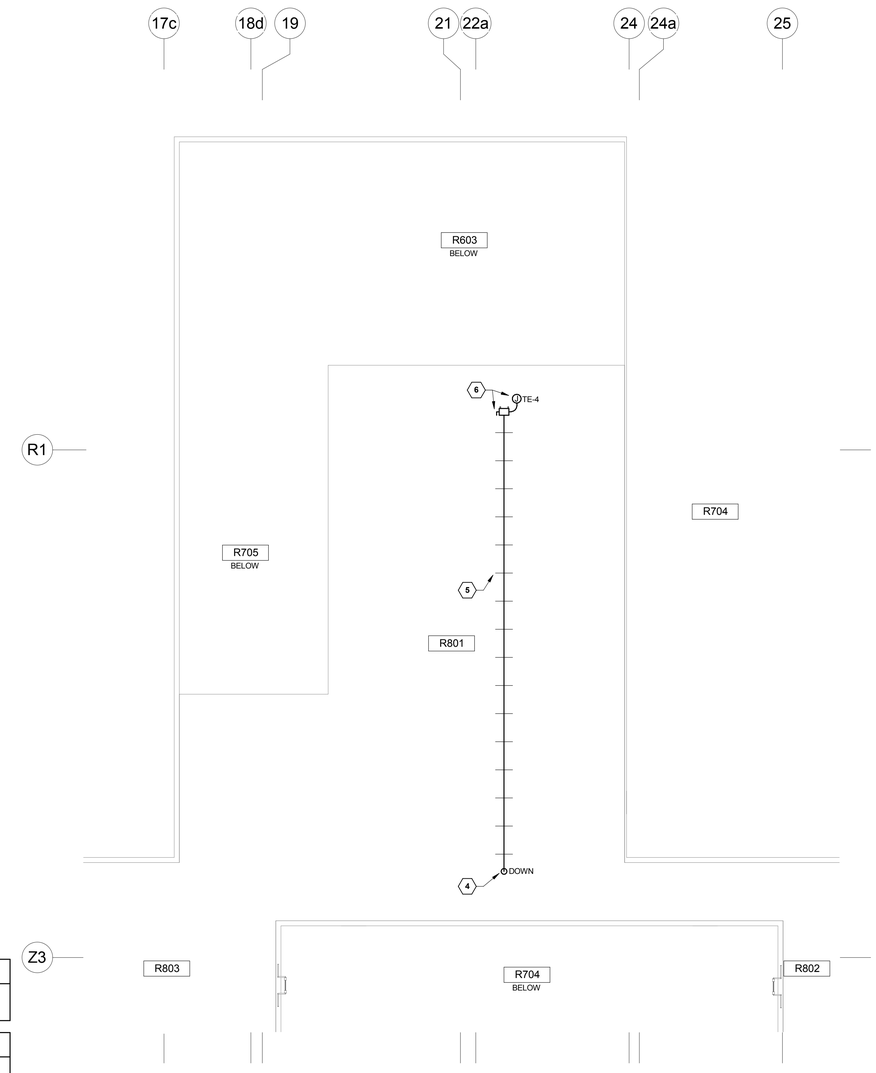
VA FORM 08-6231, OCT 1978



PARTIAL SIXTH FLOOR
MECHANICAL CONNECTIONS PLAN 2

1/8" = 1'-0"

0' 4' 8' 16' 32'



PARTIAL SEVENTH FLOOR ROOF
MECHANICAL CONNECTIONS PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

DEDUCT ALTERNATE 2:

UPON THE ACCEPTANCE OF DEDUCT ALTERNATE 2, DELETE THE WORK ASSOCIATED WITH THIS SHEET.

CODED NOTES:

1. PER NEC 620.37, NO BRANCH CIRCUITS AND/OR FEEDERS SHALL ENTER ELEVATOR MACHINE ROOM.
2. PROVIDE NEW 15A-3P BREAKER IN PANEL HA71 FOR NEW EXHAUST FAN (TE-1).
3. ROUTE CONDUIT FOR TOILET EXHAUST FAN ABOVE 6TH FLOOR FINISHED CEILING AND 7TH FLOOR ROOF. PROVIDE ROOF CURB FOR PENETRATION.
4. PROVIDE ROOF PENETRATION CURB. MAINTAIN WARRANTY. REFER TO ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION ON DRAWING 1-E4.2 DETAIL 5.
5. PROVIDE NEW ROOF CURBS. REFER TO ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION ON DRAWING 1-E4.2 DETAIL 6.
6. TOILET EXHAUST FAN "TE-1" - 5HP, 15 MOCP, 480V-3ø. APPROXIMATE LOCATION OF EXHAUST FAN ON ROOF. COORDINATE EXACT LOCATION WITH MC. EC SHALL PROVIDE DISCONNECT SWITCH MOUNTED ON UNISTRUT SUPPORT AT UNIT LOCATION. CONNECT FAN COMPLETE TO CIRCUIT INDICATED THROUGH VFD AND DISCONNECT SWITCH VIA 1"C - 3#10 AND 1#10 EG PER MANUFACTURER'S WIRING DIAGRAMS.

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BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
PARTIAL 6TH AND 7TH FLOOR MECHANICAL CONNECTION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked MPL | Drawn TWM

Project Number 541-16-104

Building Number 1

Drawing Number **1-E3.3**

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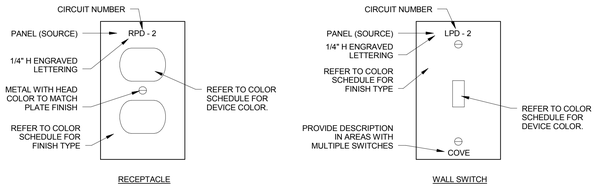
VA FORM 08-6231, OCT 1978



WALL PLATE DETAIL NOTES:

1. EACH EMERGENCY AND NORMAL WALL PLATE SHALL BE MACHINE ENGRAVED WITH THE PANEL NAME AND CIRCUIT NUMBER OF THE POWER SOURCE THAT SUPPLIES EACH DEVICE.
2. "STICK-ON" LABELS ARE NOT ACCEPTABLE.
3. DO NOT BACKFILL ENGRAVED LETTERING WITH COLOR.
4. REFER TO ELECTRICAL MATERIALS AND METHODS SPECIFICATIONS SECTION FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.

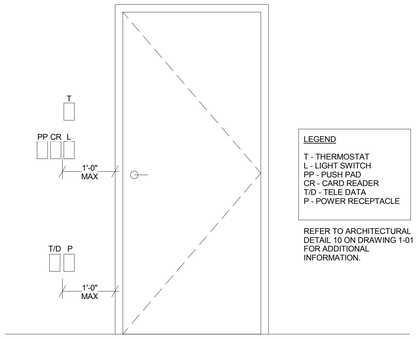
DEVICE COLOR SCHEDULE FOR RECEPTACLES AND WALL SWITCHES:

NORMAL POWER
WHITE DEVICE/WHITE THERMOPLASTIC PLATE - OFFICES & ADMINISTRATIVE ROOMS
GRAY DEVICE/STAINLESS STEEL PLATE - PUBLIC AREAS

EMERGENCY POWER
RED DEVICE/RED THERMOPLASTIC PLATE - OFFICES & ADMINISTRATIVE ROOMS
RED DEVICE/STAINLESS STEEL PLATE - PUBLIC AREAS

NOTES:
1. COORDINATE DESIGNATION BETWEEN PUBLIC AND OFFICE/ADMINISTRATIVE AREAS WITH ARCHITECT PRIOR TO PURCHASE OF WALL PLATES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR EXACT QUANTITY OF DEVICES AND FACEPLATES REQUIRED IN EACH COLOR.
3. REFER TO SPECIFICATIONS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.

DEVICE AND WALL PLATE DETAIL 6
NOT TO SCALE

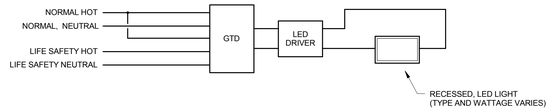


LEGEND

T - THERMOSTAT
L - LIGHT SWITCH
PP - PUSH PAD
CR - CARD READER
T/D - TELE DATA
P - POWER RECEPTACLE

REFER TO ARCHITECTURAL DETAIL 10 ON DRAWING 1-01 FOR ADDITIONAL INFORMATION.

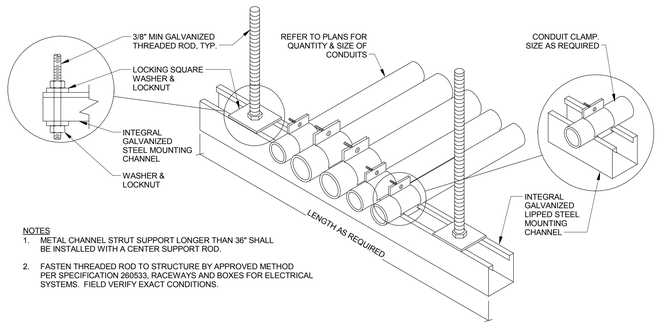
TYPICAL DEVICE MOUNTING LOCATIONS 5
NOT TO SCALE



NOTES:
1. EQUIPMENT GROUND IS REQUIRED BUT IS NOT SHOWN ON THIS WIRING DIAGRAM FOR CLARITY.
2. DIMMED AND SWITCHED HOT WIRES ARE SHOWN AS A SINGLE LINE ON THIS WIRING DIAGRAM FOR CLARITY. REFER TO MANUFACTURE'S DIAGRAMS FOR DETAILED WIRING REQUIREMENTS.
3. GENERATOR TRANSFER DEVICE SHALL BE RATED FOR ALL FIXTURES DESIGNATED "G" ON SWITCHED CIRCUIT.

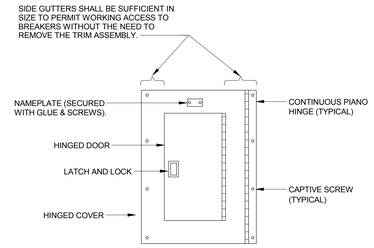
GENERATOR TRANSFER DEVICE (GTD) SPECIFICATIONS:
1. DEVICE SHALL BE CAPABLE OF BYPASSING LOCAL SWITCHING WHEN THE AUXILIARY GENERATOR POWERS ON.
2. DEVICE SHALL BE RATED FOR 120 THROUGH 277 VAC, 60 HZ AT UP TO 20 AMPS OF LIGHTING LOAD.
3. DEVICE SHALL BE UL 924 LISTED FOR "EMERGENCY LIGHTING AND POWER EQUIPMENT" AND UL LISTED FOR FIELD INSTALLATION.
4. DEVICE SHALL HAVE (5) YEAR MINIMUM WARRANTY FROM DATE OF PURCHASE.
5. DEVICE SHALL BE COMPATIBLE WITH LED AND FLUORESCENT LOADS.

TYPICAL GTD WIRING DIAGRAM 4
NOT TO SCALE



NOTES
1. METAL CHANNEL STRUT SUPPORT LONGER THAN 36" SHALL BE INSTALLED WITH A CENTER SUPPORT ROD.
2. FASTEN THREADED ROD TO STRUCTURE BY APPROVED METHOD PER SPECIFICATION 260533, RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS. FIELD VERIFY EXACT CONDITIONS.

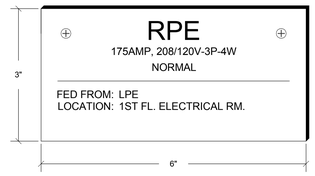
CONDUIT TRAPEZE MOUNTING DETAIL 3
NOT TO SCALE



NOTES:
1. ALL NEW PANELBOARDS SHALL BE PROVIDED WITH SUB-FEED LUGS AND SUFFICIENT SIZE WIRING GUTTERS TO ACCOMMODATE ALL FEEDERS (INCLUDING FUTURE) IN A CODE COMPLYING MANNER. FEED THROUGH LUGS ARE NOT ACCEPTABLE.
2. ALL NAMEPLATES SHALL BE ENGRAVED PHENOLIC WITH WHITE LETTERS AND BLACK (RED FOR EMERGENCY) BACKGROUND. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. REFER TO SPECIFICATIONS FOR PANELBOARD CONSTRUCTION REQUIREMENTS REGARDING BUS, DIRECTORIES, FINISHES, ETC.
4. ONE MONTH AFTER OCCUPANCY BY THE OWNER, THE ELECTRICAL CONTRACTOR SHALL MEASURE AND RECORD THE FEEDER PHASE CURRENTS FOR ALL NEW AND EXISTING PANELBOARDS ASSOCIATED WITH THIS PROJECT, AND SHALL SUBMIT DATA TO ENGINEER.
5. PROVIDE UPDATED TYPED SCHEDULES IN EXISTING PANELS, AND NEW SCHEDULES IN NEW PANELS. SCHEDULE DESCRIPTIONS SHALL INCLUDE TYPE OF LOAD (RECEPTACLES, LIGHTING, EWC, ETC.) AND ROOM NUMBER WHERE LOAD IS LOCATED.
6. CIRCUIT ASSIGNMENTS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY AVAILABILITY PRIOR TO ROUGH-IN AND ORDERING ENGRAVED COVERPLATES. REPORT ANY DEVIATIONS TO ENGINEER FOR APPROVAL.
7. PROVIDE AN ARCH FLASH LABEL PER SPECIFICATIONS 26 05 73

PANELBOARD CONSTRUCTION DETAIL 2
NOT TO SCALE

TYPICAL
PANELBOARD NAMEPLATE



NAMEPLATE REQUIREMENTS:

1. PROVIDE AN IDENTIFICATION SIGN WHICH CLEARLY INDICATES ELECTRICAL SYSTEM INFORMATION FOR PANELBOARDS, DISTRIBUTION PANELS, SWITCHBOARDS, MOTOR CONTROL CENTERS, AUTOMATIC TRANSFER SWITCHES.
2. PROVIDE ENGRAVED 1/2"H (MIN.) LETTERING ON PHENOLIC NAMEPLATE WITH THE FOLLOWING COLOR FORMAT:
   A. 208/120 VOLTS (NORMAL) - GREEN BACKGROUND, WHITE LETTERS
   B. 480/277 VOLTS (NORMAL) - BLACK BACKGROUND, WHITE LETTERS
   C. 208/120 VOLTS (EMERG.) - WHITE BACKGROUND, RED LETTERS
   D. 480/277 VOLTS (EMERG.) - RED BACKGROUND, WHITE LETTERS
3. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.

DISTRIBUTION EQUIPMENT NAMEPLATE DETAIL 1
NOT TO SCALE

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **ELECTRICAL DETAILS**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-E4.1**

Dwg. of

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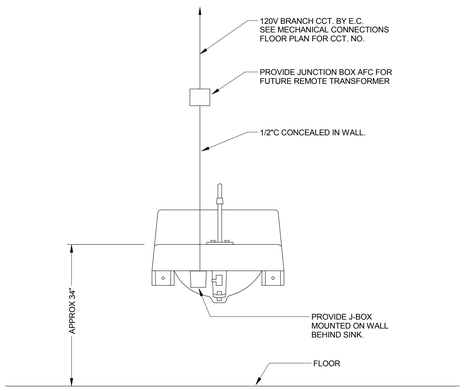
Department of Veterans Affairs

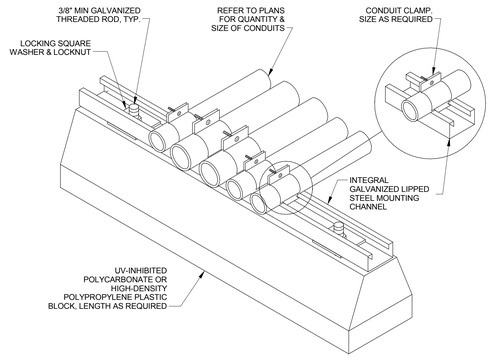
VA FORM 08-6231, OCT 1978



ELECTRONIC SINK CONTROL ROUGH-IN WIRING DETAIL

NOT TO SCALE

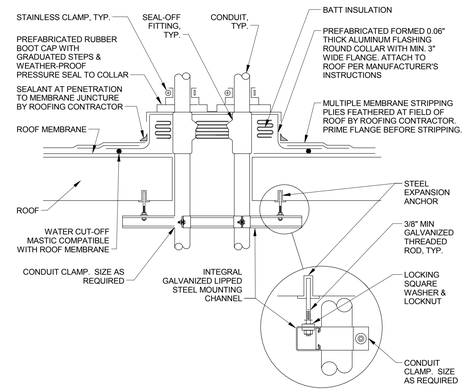
7



ROOF CONDUIT SUPPORT DETAIL

NOT TO SCALE

6



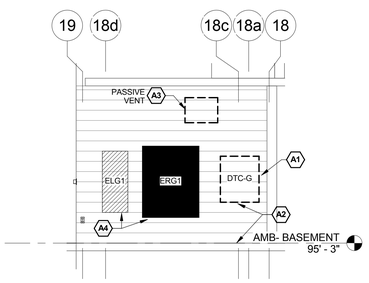
GENERAL NOTES

1. MAINTAIN A MINIMUM CLEARANCE OF 12" [308mm] ON ALL SIDES OF ROOF PENETRATION FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.
2. FLANGES OF ADJACENT FLASHINGS SHALL NOT BE CUT OR OVERLAPPED.
3. VERIFY ROOF AND STRUCTURAL SYSTEM WITH ARCHITECT.
4. COORDINATE FLASHING INSTALLATION WITH ROOFING CONTRACTOR TO ENSURE PROPER METHODS AND MATERIALS ARE USED TO MAINTAIN ROOF WARRANTY.

ROOF PENETRATION DETAIL

NOT TO SCALE

5



ELEC RM B-D470 CONSTRUCTION SEQUENCE A

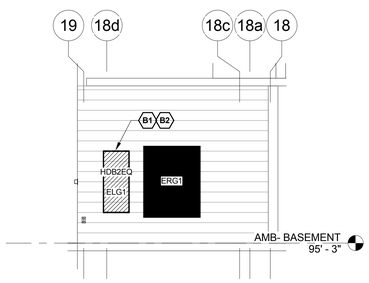
1/4" = 1'-0"

0' 2' 4' 8' 16'

1

CODED NOTES

- A1 REMOVE EXISTING ABANDONED DICTATION CABINET AND ALL ASSOCIATED CONDUITS TO 10 FEET PAST PROJECT BOUNDARY AND REMOVE EXISTING WIRING COMPLETE.
- A2 PATCH FLOORING TO MAINTAIN 2-HOUR FIRE STOP RATING.
- A3 EXISTING PASSIVE WALL EXHAUST VENT TO BE REMOVED AND WALL PATCHED PRIOR TO INSTALLATION OF NEW PANELS.
- A4 CONTRACTOR SHALL TRACE REMAINING LOADS FED BY ELG1 AND ERG1 USING AN ADVANCED WIRE TRACER CAPABLE OF INJECTING TRACE SIGNAL WITH CLAMP-ON ATTACHMENT FOR NON-CONTACT OPERATION. PROVIDE LOAD IDENTIFICATION REPORT IDENTIFYING THESE LOADS TO COR ALONG WITH SHUT DOWN REQUEST. THE REPORT SHALL INDICATE; SOURCE EQUIPMENT NAME, CIRCUIT NUMBER, CIRCUIT RATING, LOAD DESCRIPTION, LOAD LOCATION, DATE OF TRACE AND INITIAL OF PERSON COMPLETING TRACE.



ELEC RM B-D470 CONSTRUCTION SEQUENCE B

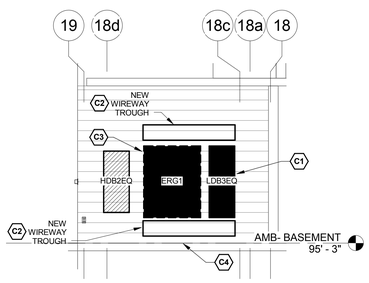
1/4" = 1'-0"

0' 2' 4' 8' 16'

2

CODED NOTES

- B1 REPLACE EXISTING PANEL ELG1 WITH NEW PANEL HDB2EQ. RECONNECT ANY REMAINING BRANCH CIRCUITS. PERFORM WORK IN A SINGLE OFF-HOURS SHIFT.
- B2 REMOVE ANY REMAINING ABANDONED EMPTY CONDUITS AND WIRING COMPLETE. PATCH ANY FLOORS AND WALLS TO MAINTAIN FIRE RATINGS.



ELEC RM B-D470 CONSTRUCTION SEQUENCE C

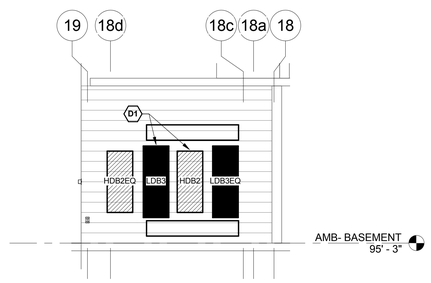
1/4" = 1'-0"

0' 2' 4' 8' 16'

3

CODED NOTES

- C1 INSTALL NEW PANEL AND FEEDERS.
- C2 REFEED REMAINING PANEL ERG1 CIRCUITS TO NEW PANEL LDB3EQ. SPLICE AND EXTEND CIRCUITS WITHIN NEW WIREWAY TROUGHS PROVIDED ABOVE AND BELOW PANELS. COMPLETE CUTOVER TO NEW SOURCE SHALL TAKE PLACE DURING OFF HOURS IN A SINGLE SHIFT. PROVIDE TEMPORARY POWER FOR EXISTING ANDOVER PANELS WITHIN ROOM DURING OUTAGE.
- C3 REMOVE PANEL AND ANY REMAINING EMPTY CONDUITS COMPLETE AFTER CUTOVER IS COMPLETE.
- C4 PATCH FLOORING TO MAINTAIN 2-HOUR FIRE RATING.



ELEC RM B-D470 CONSTRUCTION SEQUENCE D

1/4" = 1'-0"

0' 2' 4' 8' 16'

4

CODED NOTES

- D1 INSTALL NEW PANELS AND FEEDERS.

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Drawing Title: **ELECTRICAL DETAILS**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-E4.2**

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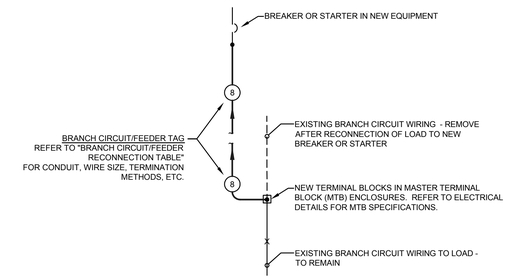
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

LEGEND POWER DISTRIBUTION ONE LINE

- EXISTING EQUIPMENT, FEEDER/CIRCUIT - TO BE DEMOLISHED
- EXISTING EQUIPMENT, FEEDER/CIRCUIT - TO REMAIN
- 3"C 4 #250, 1#4EG — NEW FEEDER/CIRCUIT AND FEEDER TAG, PROVIDE WIRE CONDUIT SIZED AS INDICATED.
- FUTURE EQUIPMENT, FEEDER/CIRCUIT - N.I.C.
- EQUIPMENT OUTLINE
- SPLICE JOINT FOR RECONNECTION OF EXISTING CIRCUITS TO NEW SOURCE
- 225A — BOLTED STATIONARY CIRCUIT BREAKER - 3-POLE UNLESS OTHERWISE NOTED
  - GF - EQUIP BREAKER W/ GROUND FAULT TRIP
  - GFA - EQUIP BREAKER W/ GROUND FAULT ALARM
  - LSI - EQUIP BREAKER W/ ADJUSTABLE LONG, SHORT AND INSTANT. SETTINGS
- GROUNDING TERMINATION POINT FOR AN EQUIPMENT GROUNDING CONDUCTOR. CONNECTION SHALL BE MADE BY BONDING THE EQUIPMENT GROUNDING CONDUCTOR TO THE GROUNDED SERVICE CONDUCTOR AND THE GROUNDING ELECTRODE CONDUCTOR.

BRANCH CIRCUIT RECONNECTION DETAIL – TYPICAL



BRANCH CIRCUIT AND FEEDER RECONNECTION TABLE

TAG	LOAD DESCRIPTION	POWER CLASS.	VOLTAGE	O.C.P. OR STARTER SIZE	EXIST. SOURCE	NEW SOURCE	CONDUIT SIZES	CONDUCTORS	ADJ. FACTOR NEC 310-15(B)(2)(a)	ALLOW AMP 90°C NEC 310-16	ADJUSTED AMPACITY
				BRANCH CIRCUIT INFORMATION							
01	(15) REMAINING 20A-277V CIRCUITS	EQ	277V	(10) 20A-1P	ELG1	HDB2EQ	1-1/4"C	10 #10H,10 #10N & 1#10EG	50%	40	20
				(5) 20A-1P	ELG1	HDB2EQ	1"C	5 #10H,5 #10N & 1#10EG	80%	40	32
02	(18) REMAINING 20A-120V CIRCUITS	EQ	120V	(10) 20A-1P	ERG1A	LDB3EQ	1-1/4"C	10 #10H,10 #10N & 1#10EG	50%	40	20
				(8) 20A-1P	ERG1A	LDB3EQ	1-1/4"C	8 #10H,8 #10N & 1#10EG	70%	40	28
03	(11) REMAINING 20A-120V CIRCUITS	EQ	120V	(5) 20A-1P	ERG1B	LDB3EQ	1-1/4"C	5 #10H,5 #10N & 1#10EG	80%	40	32
				(6) 20A-1P	ERG1B	LDB3EQ		6 #10H,6 #10N & 1#10EG		40	32

NOTES:

1. ELECTRICAL CONTRACTOR SHALL IDENTIFY ALL EXISTING CIRCUITS FED OUT OF EXISTING ELECTRICAL ROOM G08A PRIOR TO DISCONNECTING. TRACE EXISTING CIRCUITS WITH AN ADVANCED WIRE TRACER THAT WORKS WITH ENERGIZED OR DE-ENERGIZED AND IS CAPABLE OF INJECTING TRACE SIGNAL WITH CLAMP-ON ATTACHMENTS FOR NON-CONTACT OPERATION. IN GENERAL, CIRCUITS MUST BE TRACED WHILE ENERGIZED.

   A WRITTEN "LOAD IDENTIFICATION: REPORT OF ALL EXISTING CIRCUITS FED FROM THIS ROOM SHALL BE SUBMITTED TO THE C.O.R. FOR REVIEW WITH THE FACILITIES MAINTENANCE DEPARTMENT. THE REPORT SHALL INDICATE; SOURCE EQUIPMENT NAME, CIRCUIT NUMBER, CIRCUIT RATING, LOAD DESCRIPTION, LOAD LOCATION, DATE OF TRACE AND INITIAL OF PERSON COMPLETING TRACE.
2. PERFORM ALL CUT-OVER WORK OF RECONNECTED BRANCH CIRCUIT/FEEDERS DURING VAMC "OFF-HOURS"/ THIS WORK SHALL BE SCHEDULED WITH THE C.O.R. AT LEAST 14 DAYS IN ADVANCE. ALL PREMIUM COST (LABOR, EQUIPMENT RETALS,ETC) ASSOCIATED WITH PERFORMING THIS WORK DURING SECOND SHIFTS, THIRD SHIFTS OR WEEKENDS SHALL BE INCLUDED IN THE CONTRACTORS BID PRICE.
3. QUANTITY OF BREAKERS AND LENGTH OF CONDUCTOR RUNS IN FLOOR SLAB ARE AN A APPROXIMATION. CONTRACTOR SHALL FIELD VERIFY EXACT QUANTITY OF BREAKERS AND LENGTH OF CONDUCTORS PRIOR TO DEMOLITION OF EXISTING PANELBOARDS, REPORT AN DISCREPANCIES TO ENGINEERS.
4. FOR EXISTING MULTIWIRE BRANCH CIRCUIT LOADS ROUTED IN THE FLOOR SLAB, THE CONTRACTOR SHALL CONNECT THE NEW BRANCH CIRCUIT CONDUCTOR TO THE FIRST OUTLET,JUNCTION BOX IN THE CIRCUIT IN ORDER TO MAINTAIN ALL EXISTING CIRCUITING.

JOINT AND SPLICE SPECIFICATION

1. RECONNECTIONS FOR 20AMP AND 30AMP CIRCUITS SHALL BE COMPLETED ON TERMINAL BLOCK STRIPS TO ORGANIZE RECONNECTED CIRCUITS. REFER TO "MTB DETAIL" ON ELECTRICAL DETAIL SHEETS.
2. JOINT AND SPLICE IN #8 AWG AND LARGER WIRES SHALL BE MADE WITH COMPRESSION TYPE MECHANICAL CONNECTORS AND INSULATED WITH 3M HEAT SHRINK TUBING TO A 600V INSULATION LEVEL.
3. LABEL THE J-BOX COVER WITH A BLACK PERMANENT MARKER INDICATING SOURCE, CIRCUIT AND LOAD INFORMATION:
   "GHNAA" "40A-3P BREAKER #2"
   "AHU S-7"
4. VERIFY PHASE ROTATION PRIOR TO STARTING ANY RECONNECTED LOADS. MAINTAIN LOG OF PHASE ROTATION FOR EACH LOAD INDICATING 1)EXISTING PHASE ROTATION, 2)RECONNECTED PHASE ROTATION 3)TIME AND DATE OF PHASE ROTATION TEST, 4) INITIALS OF PERSON VERIFYING TEST.

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **POWER DISTRIBUTION LEGEND AND DETAILS**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-E5.1**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

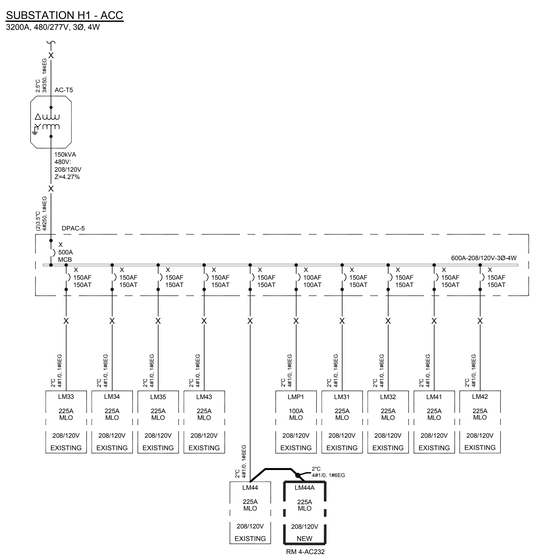
VA FORM 08-6231, OCT 1978

LEGEND: POWER DISTRIBUTION ONE-LINE

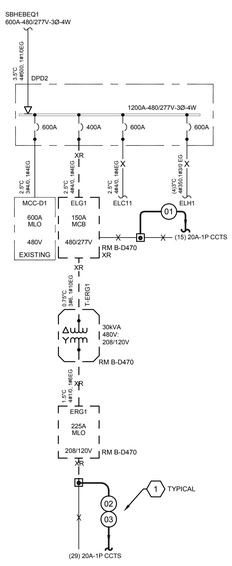
— — —XR— — —	EXISTING EQUIPMENT, FEEDER/CIRCUIT - TO BE REMOVED
———x———	EXISTING EQUIPMENT, FEEDER/CIRCUIT - TO REMAIN
1-1/2"C - 4#1 & 1#8 EG	NEW FEEDER/CIRCUIT AND FEEDER TAG
1-1/2"C - 4#1 & 1#8 EG	FUTURE FEEDER/CIRCUIT AND FEEDER TAG
	EXISTING EQUIPMENT OUTLINE
	NEW EQUIPMENT OUTLINE

CODED NOTES:

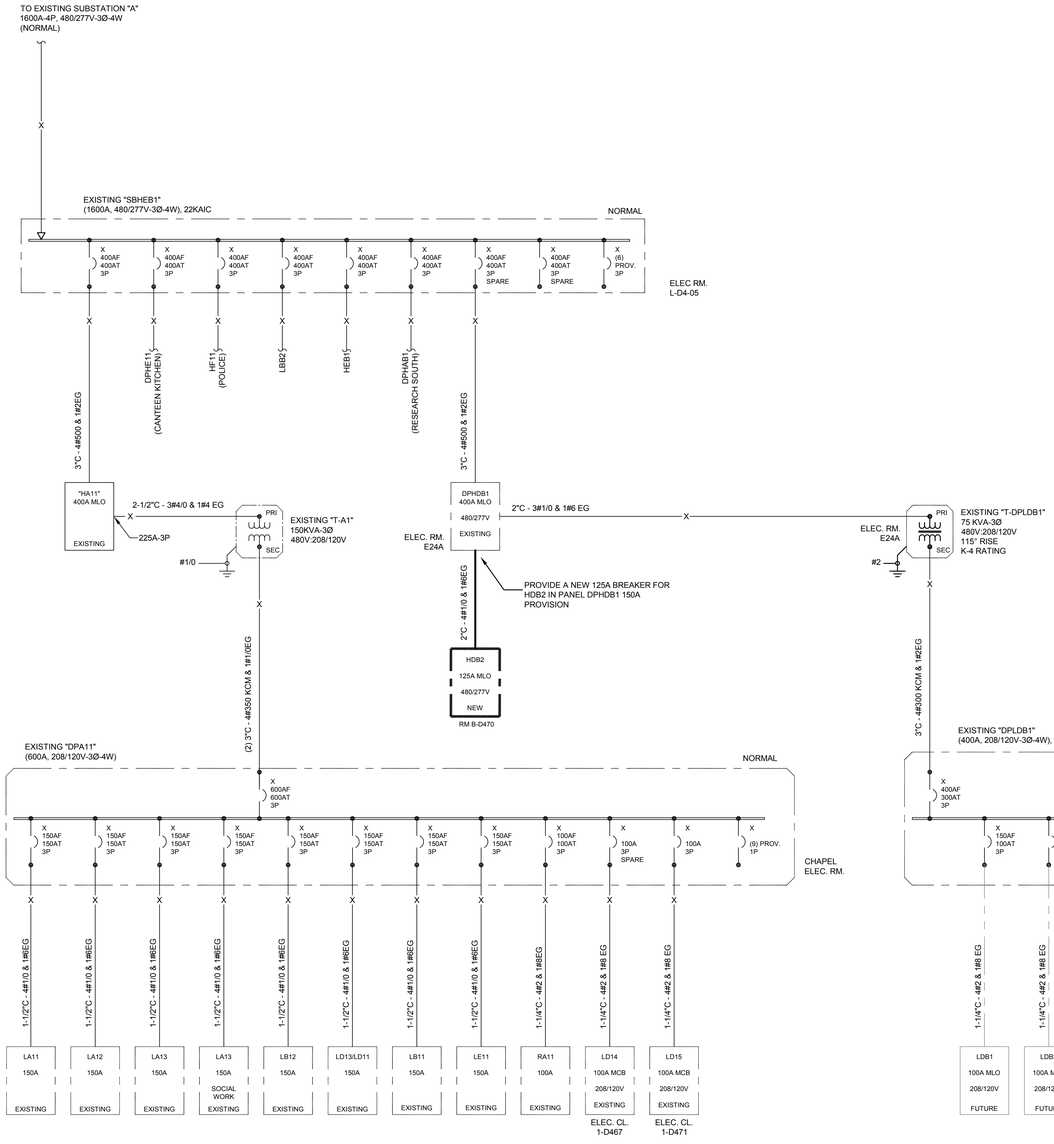
1. EXISTING LOADS TO BE RECONNECTED TO NEW SOURCE. REFER TO "BRANCH CIRCUIT AND FEEDER RECONNECTION TABLE" ON DRAWING 1-E5.1 FOR ADDITIONAL REQUIREMENTS.



ACC BUILDING NEW ONE-LINE DIAGRAM (1)
NOT TO SCALE



ORIGINAL BUILDING NEW ONE-LINE DIAGRAM (2)
NOT TO SCALE



ORIGINAL BUILDING NEW ONE-LINE DIAGRAM (1)
NOT TO SCALE

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BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title: **POWER DISTRIBUTION ONE LINE DIAGRAM**	Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**		Project Number: 541-16-104
			Building Number: 1
Approved:	Location: **VAMC - WADE PARK**		Drawing Number: **1-E5.2**
	Date: 06/17/16	Checked: MPL / Drawn: TWM	Dwg. of

Office of Facilities Management
Department of Veterans Affairs

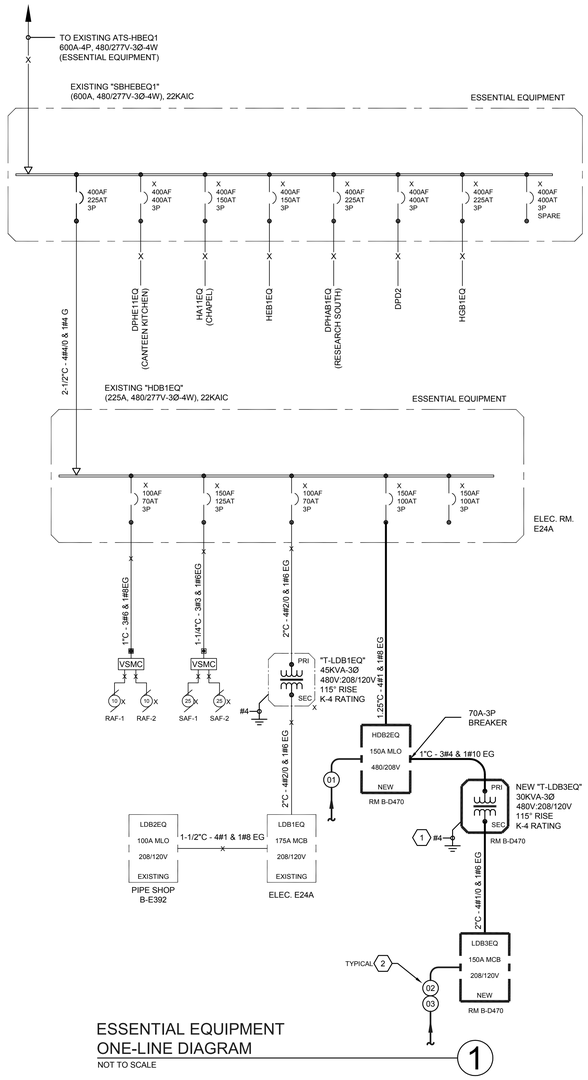
VA FORM 08-6231, OCT 1978

LEGEND: POWER DISTRIBUTION ONE-LINE

— — —XR— — —	EXISTING EQUIPMENT, FEEDER/CIRCUIT - TO BE REMOVED
———x———	EXISTING EQUIPMENT, FEEDER/CIRCUIT - TO REMAIN
1-1/2"C - 4#1 & 1#8 EG	NEW FEEDER/CIRCUIT AND FEEDER TAG
1-1/2"C - 4#1 & 1#8 EG	FUTURE FEEDER/CIRCUIT AND FEEDER TAG
	EXISTING EQUIPMENT OUTLINE
	NEW EQUIPMENT OUTLINE

CODED NOTES:

1. CONNECT TO GROUNDING ELECTRODE (BUILDING STEEL) PER NEC 250. PROVIDE SAME SIZE BONDING JUMPER FROM GROUNDING CONDUCTOR TO NEUTRAL.
2. EXISTING LOADS TO BE RECONNECTED TO NEW SOURCE. REFER TO "BRANCH CIRCUIT AND FEEDER RECONNECTION TABLE" ON DRAWING 1-E5.1 FOR ADDITIONAL REQUIREMENTS.



ESSENTIAL EQUIPMENT
ONE-LINE DIAGRAM
NOT TO SCALE

1

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	Date

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Drawing Title: **POWER DISTRIBUTION ONE LINE DIAGRAM**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date	Checked	Drawn
06/17/16	MPL	TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-E5.3**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

HDB2-480/277 Wye-3Φ-4W — NORMAL

Location: E.C. B-D470 **OCP:** 125 A
Mounting: Surface **Main:** MLO
Comments: New Panelboard **A.I.C Rating:** 22kAIC

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	LTG BIOMEDICAL	20 A	1	2.3	0.0					1	20 A	SPARE	2
3	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	4
5	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	6
7	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	8
9	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	10
11	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	12
13	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	14
15	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	16
17	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	18
19	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	20
21	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	22
23	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	24
25	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	26
27	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	28
29	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	30
			Total New Load:	2.3 kVA		0 kVA		0 kVA					
			Total New Amps:	8 A		0 A		0 A					
			Total New Demand Amps:	3 A									

LDB3-120/208 Wye-3Φ-4W — NORMAL

Location: E.C. B-D470 **OCP:** 100 A
Mounting: Surface **Main:** MCB
Comments: New Panelboard **A.I.C Rating:** 10kAIC

CKT	Circuit Description	Trip	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Trip	Circuit Description	CKT
1	REC HALL, RESTRM	20 A	1	1.4	0.0					1	20 A	SPARE	2
1 3	EWC	20 A	1			1.0	0.0			1	20 A	SPARE	4
5	SC,TC WOMAN...	20 A	1					1.3	0.0	1	20 A	SPARE	6
7	POWER	20 A	1	1.6	0.0					1	20 A	SPARE	8
9	POWER	20 A	1			0.2	0.0			1	20 A	SPARE	10
11	POWER	20 A	1					0.2	0.0	1	20 A	SPARE	12
13	POWER	20 A	1	0.2	0.0					1	20 A	SPARE	14
15	POWER	20 A	1			0.2	0.0			1	20 A	SPARE	16
17	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	18
19	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	20
21	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	22
23	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	24
25	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	26
27	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	28
29	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	30
31	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	32
33	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	34
35	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	36
37	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	38
39	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	40
41	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	42
			Total New Load:	3.2 kVA		1.4 kVA		1.4 kVA					
			Total New Amps:	27 A		11 A		12 A					
			Total New Demand Amps:	17 A									

LDB6-120/208 Wye-3Φ-4W — NORMAL

Location: BIO MED BC490 **OCP:** 150 A
Mounting: Recessed **Main:** MLO
Comments: New Panelboard **A.I.C Rating:** 10kAIC

CKT	Circuit Description	Trip	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Trip	Circuit Description	CKT
1	REC BENCH STAT	20 A	1	0.2	1.1					1	20 A	REC REPAIR STAT	2
3	REC BENCH STAT	20 A	1			0.2	1.1			1	20 A	REC REPAIR STAT	4
5	REC BENCH STAT	20 A	1					0.2	1.1	1	20 A	REC REPAIR STAT	6
7	REC BENCH STAT	20 A	1	0.2	1.1					1	20 A	REC REPAIR STAT	8
9	REC BENCH STAT	20 A	1			0.2	0.9			1	20 A	REC REPAIR STAT	10
11	REC BENCH STAT	20 A	1					0.2	0.9	1	20 A	REC REPAIR STAT	12
13	REC BENCH STAT	20 A	1	0.2	1.1					1	20 A	REC OFFICE, RECV	14
15	REC BENCH STAT	20 A	1			0.2	0.9			1	20 A	REC OFFICE, RECV	16
17	REC BENCH STAT	20 A	1					0.2	0.7	1	20 A	REC OFFICE, RECV	18
19	REC BENCH STAT	20 A	1	0.2	1.0					1	20 A	MICROWAVE	20
21	SPARE	20 A	1			0.0	1.0			1	20 A	REFRIGERATOR	22
23	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	24
25	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	26
27	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	28
29	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	30
31	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	32
33	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	34
35	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	36
37	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	38
39	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	40
41	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	42
			Total New Load:	5 kVA		4.4 kVA		3.2 kVA					
			Total New Amps:	43 A		38 A		27 A					
			Total New Demand Amps:	35 A									

HDB2EQ-480/277 Wye-3Φ-4W — EQUIPMENT

Location: E.C. B-D470 **OCP:** 150 A
Mounting: Surface **Main:** MLO
Comments: New Panelboard **A.I.C Rating:** 22kAIC

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1				0.5	0.0					1	20 A	EXISTING LOAD	2
3	T-LDB3EQ	70 A	3			0.5	0.0			1	20 A	EXISTING LOAD	4
5								0.4	0.0	1	20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	8
9	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	10
11	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	14
15	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	16
17	LTG ELEC CLOSET	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	18
19	SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	20
21	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	22
23	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	24
25	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	26
27	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	28
29	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	30
31	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	32
33	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	34
35	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	36
37	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	38
39	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	40
41	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	42
			Total New Load:	0.5 kVA		0.5 kVA		0.4 kVA					
			Total New Amps:	2 A		2 A		1 A					
			Total New Demand Amps:	2 A									

LDB3EQ-120/208 Wye-3Φ-4W — EQUIPMENT

Location: E.C. B-D470 **OCP:** 150 A
Mounting: Surface **Main:** MCB
Comments: New Panelboard **A.I.C Rating:** 10kAIC

CKT	Circuit Description	Trip	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Trip	Circuit Description	CKT
1	REC REPAIR STAT	20 A	1	0.2	0.0					1	20 A	EXISTING LOAD	2
3	REC REPAIR STAT	20 A	1			0.2	0.0			1	20 A	EXISTING LOAD	4
5	REC REPAIR STAT	20 A	1					0.4	0.0	1	20 A	EXISTING LOAD	6
7	REC REPAIR STAT	20 A	1	0.4	0.0					1	20 A	EXISTING LOAD	8
9	REC REPAIR STAT	20 A	1			0.2	0.0			1	20 A	EXISTING LOAD	10
11	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	14
15	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	16
17	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	18
19	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	20
21	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	22
23	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	24
25	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	26
27	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	28
29	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	30
31	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	32
33	EXISTING LOAD	20 A	1			0.0	0.2			1	20 A	REC ELEC CLOSET	34
35	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	SPARE	36
37	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	38
39	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	40
41	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	42
			Total New Load:	0.5 kVA		0.5 kVA		0.4 kVA					
			Total New Amps:	5 A		5 A		3 A					
			Total New Demand Amps:	4 A									

CODED NOTES:

1. PROVIDE NEW 20A-1P GFCI BREAKER FOR ELECTRIC WATER COOLER.

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **BASEMENT PANELBOARD SCHEDULES**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104
Building Number: 1
Drawing Number: **1-E6.1**
Dwg. of

Office of Facilities Management
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

HM43-480/277 Wye-3Φ-4W — NORMAL

Location: Elec Room 4AC232 **OCP:** 225 A
Mounting: Surface **Main:** MLO
Comments: Existing Panel **A.I.C Rating:**

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	8
9	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	10
(1) 11	LTG EXAM	20 A	1					0.4	0.0	1	20 A	EXISTING LOAD	12
13	PROVISION	--	--	0.0	0.0					--	--	PROVISION	14
15	PROVISION	--	--			0.0	0.0			--	--	PROVISION	16
17	PROVISION	--	--					0.0	0.0	--	--	PROVISION	18
19	PROVISION	--	--	0.0	0.0					--	--	PROVISION	20
21	PROVISION	--	--			0.0	0.0			--	--	PROVISION	22
23	PROVISION	--	--					0.0	0.0	--	--	PROVISION	24
25	PROVISION	--	--	0.0	0.0					--	--	PROVISION	26
27	PROVISION	--	--			0.0	0.0			--	--	PROVISION	28
29	PROVISION	--	--					0.0	0.0	--	--	PROVISION	30
			Total New Load:	0 kVA		0 kVA		0.4 kVA					
			Total New Amps:	0 A		0 A		2 A					
			Total New Demand Amps:	1 A									

HM43-CR-480/277 Wye-3Φ-4W

Location: Elec Room 4AC232 **OCP:** 100 A
Mounting: Surface **Main:** MLO
Comments: Existing Panelboard **A.I.C Rating:**

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EXISTING LOAD	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING LOAD	6
(1) 7	LTG HUDDLE	20 A	1	1.3	0.0					--	--	PROVISION	8
9	PROVISION	--	--			0.0	0.0			--	--	PROVISION	10
11	PROVISION	--	--					0.0	0.0	--	--	PROVISION	12
13	PROVISION	--	--	0.0	0.0					--	--	PROVISION	14
15	PROVISION	--	--			0.0	0.0			--	--	PROVISION	16
17	PROVISION	--	--					0.0	0.0	--	--	PROVISION	18
19	PROVISION	--	--	0.0	0.0					--	--	PROVISION	20
21	PROVISION	--	--			0.0	0.0			--	--	PROVISION	22
23	PROVISION	--	--					0.0	0.0	--	--	PROVISION	24
25	PROVISION	--	--	0.0	0.0					--	--	PROVISION	26
27	PROVISION	--	--			0.0	0.0			--	--	PROVISION	28
29	PROVISION	--	--					0.0	0.0	--	--	PROVISION	30
			Total New Load:	1.3 kVA		0 kVA		0 kVA					
			Total New Amps:	5 A		0 A		0 A					
			Total New Demand Amps:	2 A									

LM44A-120/208 Wye-3Φ-4W

Location: Elec Room 4AC232 **OCP:** 225 A
Mounting: Surface **Main:** MCB
Comments: New Panelboard **A.I.C Rating:** 10kAIC

CKT	Circuit Description	Trip	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Trip	Circuit Description	CKT
1	REC RM 4AC224	20 A	1	0.7	0.5					1	20 A	REC PRINTER	2
3	REC RM 4AC224	20 A	1			0.7	0.2			1	20 A	REC PRINTER	4
5	REC RM 4AC224	20 A	1					0.7	1.0	1	20 A	REC REFRIG	6
7	REC RM 4AC220	20 A	1	1.3	1.1					1	20 A	REC RM 4AC223A	8
9	REC RM 4AC220	20 A	1			1.1	0.9			1	20 A	REC RM 4AC223	10
11	REC 4AC220	20 A	1					1.1	1.3	1	20 A	REC RM 4AC223	12
13	REC RM 4AC214	20 A	1	0.9	0.7					1	20 A	REC RM 4AC215	14
15	REC RM 4AC214	20 A	1			1.1	0.7			1	20 A	REC RM 4AC215	16
17	REC RM 4AC214	20 A	1					0.7	0.9	1	20 A	REC RM 4AC215	18
19	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	20
21	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	22
23	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	24
25	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	26
27	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	28
29	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	30
31	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	32
33	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	34
35	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	36
37	SPARE	20 A	1	0.0	0.0					1	20 A	SPARE	38
39	SPARE	20 A	1			0.0	0.0			1	20 A	SPARE	40
41	SPARE	20 A	1					0.0	0.0	1	20 A	SPARE	42
			Total New Load:	5.2 kVA		4.7 kVA		5.7 kVA					
			Total New Amps:	44 A		39 A		48 A					
			Total New Demand Amps:	43 A									

LM43A-120/208 Wye-3Φ-4W

Location: Com Room 4AC231 **OCP:** 100 A
Mounting: Surface **Main:** MCB
Comments: Existing Panel **A.I.C Rating:**

CKT	Circuit Description	Trip	Poles	A (KVA)		B (KVA)		C (KVA)		Poles	Trip	Circuit Description	CKT
1	EXISTING LOAD	20 A	1	0.0	1.0					1	20 A	SECURITY PANEL	2
3	EXISTING LOAD	20 A	1			0.0	0.0			1	20 A	SPARE	4
5	EXISTING LOAD	20 A	1					0.0	0.0	1	20 A	SPARE	6
7	SPARE	20 A	1	0.0	0.0					--	--	PROVISION	8
9	PROVISION	--	--			0.0	0.0			--	--	PROVISION	10
11	PROVISION	--	--					0.0	0.0	--	--	PROVISION	12
13	PROVISION	--	--	0.0	0.0					--	--	PROVISION	14
15	PROVISION	--	--			0.0	0.0			--	--	PROVISION	16
17	PROVISION	--	--					0.0	0.0	--	--	PROVISION	18
			Total New Load:	1 kVA		0 kVA		0 kVA					
			Total New Amps:	8 A		0 A		0 A					
			Total New Demand Amps:	3 A									

CODED NOTES:

(1) PROVIDE NEW 20A-1P BREAKER IN EXISTING PROVISIONS TO FEED NEW LOADS.

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Drawing Title: **FOURTH FLOOR PANELBOARD SCHEDULES**
Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**
Location: **VAMC - WADE PARK**
Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104
Building Number: 1
Drawing Number: **1-E6.2**
Dwg. of

Office of Facilities Management
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

FIRE ALARM SYSTEM LEGEND

FACP	FIRE ALARM CONTROL PANEL (TYPE AS INDICATED ON PLANS).
FARA	FIRE ALARM REMOTE ANNUNCIATOR - FLUSH MOUNT AT 5'-0" AFF TO TOP OF DEVICE.
FPS	FIRE ALARM POWER SUPPLY EXTENDER - CONNECT TO 120V CIRCUIT. SURFACE MOUNT AT 5'-0" AFF TO TOP OF DEVICE.
FATC	FIRE ALARM TERMINAL CABINET.
NACX	NOTIFICATION APPLIANCE CIRCUIT EXTENDER
F	MANUAL FIRE ALARM PULL STATION - MOUNT AT 48" AFF TO CENTERLINE OF DEVICE.
F	FIRE ALARM VISUAL SIGNAL DEVICE (ADA TYPE) MOUNTED 80" AFF UNLESS NOTED. RED HOUSING WITH WHITE "FIRE" LETTERING.
F	FIRE ALARM AUDIBLE VISUAL (SPEAKER/STROBE) SIGNAL DEVICE (ADA TYPE) MOUNTED 80" AFF UNLESS NOTED. RED HOUSING WITH WHITE "FIRE" LETTERING. EXISTING LEARNING EXCHANGE DEVICES ARE HORN/STROBE IN LIEU OF AUDIO SPEAKER.
	SMOKE DETECTOR - ADDRESSABLE INTELLIGENT PHOTOELECTRIC TYPE - CEILING MOUNTED. EL - ELEVATOR RECALL
	DUCT DETECTOR - ADDRESSABLE INTELLIGENT PHOTOELECTRIC DETECTOR, SAMPLING TUBES AND PROGRAMMABLE RELAY BASE. PROVIDE DUCT DETECTOR TEST/RESET SWITCH RS WITH REMOTE INDICATOR LAMP FOR EACH DUCT DETECTOR. (TEST SWITCH MAY NOT BE SHOWN ON PLANS)
	MAGNETIC TYPE DOOR HOLDER OUTLET. 24VDC
	PNEUMATICALLY ACTUATED COMBINATION SMOKE/FIRE DAMPER - FURNISHED AND INSTALLED BY THE MC. EC SHALL PROVIDE (1) CONTROL MODULE AND (1) MONITOR MODULE
CM	CONTROL MODULE - ADDRESSABLE RELAY FOR CONTROL OF SMOKE DAMPERS, ELEVATOR RECALL, MAGNETIC DOOR HOLDERS, AUTOMATIC DOORS, ETC.
MM	MONITOR MODULE - ADDRESSABLE SUPERVISED FOR MONITORING TAMPER SWITCH, FLOW SWITCH, DAMPER POSITION ETC.
TS	TAMPER SWITCH - MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL TAMPER SWITCH. ELECTRICAL CONTRACTOR SHALL PROVIDE MONITOR MODULE AND TEST SWITCH.
FS	FLOW SWITCH - MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL FLOW SWITCH. ELECTRICAL CONTRACTOR SHALL PROVIDE MONITOR MODULE AND TEST SWITCH.

FIRE ALARM SYSTEM NOTES:

F1: ALL FIRE ALARM SYSTEM DEVICES SHALL BE CONNECTED COMPLETE TO THE MAIN FIRE ALARM SYSTEM CONTROL PANEL IN ACCORDANCE WITH ENGINEER APPROVED MANUFACTURER'S SHOP DRAWING WIRING DIAGRAMS AND DETAILS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FULLY CODE COMPLIANT FIRE ALARM SYSTEM. DEVICES SHOWN ON PLAN ARE FOR REFERENCE ONLY.

F2: PROVIDE A 2-GANG MINIMUM SIZE BACKBOX FOR ALL OF THE ABOVE FIRE ALARM DEVICES.

F3: ALL FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN 3/4" MINIMUM SIZE COMPLETE CONDUIT SYSTEM WITH COLOR CODED WIRING AS INDICATED ON SHOP DRAWINGS - MAINTAIN FACILITY COLOR CODING.

F4: ALL NETWORK AND NETWORK CABLES SHALL BE "COMMUNICATION GRADE" TYPE CABLE.

F5: FURNISH, INSTALL AND CONNECT ALL FIRE ALARM DEVICES IN ACCORDANCE WITH WIRING DIAGRAMS PREPARED BY SYSTEM VENDOR.

F6: EXISTING FIRE ALARM SYSTEM BY NOTIFIER. REFER TO SPECIFICATIONS SECTION 283100 FOR ELECTRICAL REQUIREMENTS.

SECURITY SYSTEM LEGEND

SCP	LENEL SECURITY ACCESS CONTROL PANELS.
C	SECURITY CAMERA - FIXED DOME CAMERA - CEILING MOUNTED, VARIFOCAL, 80° - 22° VIEWING ANGLE RANGE, NETWORK-ENABLED, 1280 X 800 (1MP) RESOLUTION, H.264 VIDEO COMPRESSION, 30 FRAMES PER SECOND, TAMPERING ALARM, POWER OVER ETHERNET, PROGRESSIVE SCAN, TAMPER RESISTANT CASING. PROVIDE DROP CEILING MOUNTING ACCESSORIES TO MOUNT DOME FLUSH WITH CEILING. DIRECTIONAL ARROW(S) INDICATE GENERAL DIRECTION OF CAMERA'S FIELD OF VIEW.
C 90°	SECURITY CAMERA - FIXED DOME CAMERA - CEILING MOUNTED, WIDE ANGLE FIELD OF VIEW AT LEAST 90° BUT NO MORE THAN120°, NETWORK-ENABLED, 1920 X 1080 (1MP) RESOLUTION, H.264 VIDEO COMPRESSION, 20 FRAMES PER SECOND, TAMPERING ALARM, POWER OVER ETHERNET, PROGRESSIVE SCAN, TAMPER RESISTANT CASING. PROVIDE DROP CEILING MOUNTING ACCESSORIES TO MOUNT DOME FLUSH WITH CEILING. DIRECTION ARROW(S) INDICATE GENERAL DIRECTION OF CAMERA'S FIELD OF VIEW.
D1	ACCESS CONTROLLED DOOR TYPE 1 - SINGLE DOOR WITH ELECTRIFIED LOCKSET AND HARD-WIRED CARD READER. REFER TO "ACCESS CONTROLLED DOOR TYPE 1 DETAIL".
D2	ACCESS CONTROLLED DOOR TYPE 2 - SINGLE DOOR WITH AUTOMATIC DOOR OPERATOR, HARD-WIRED CARD READER, PUSH PLATES, AND REQUEST-TO-EXIT MOTION SENSOR. REFER TO "ACCESS CONTROLLED DOOR TYPE 2 DETAIL".
D3	ACCESS CONTROLLED DOOR TYPE 3 - SINGLE DOOR WITH AUTOMATIC DOOR OPERATOR, HARD-WIRED CARD READER, PUSH PLATES, AND REQUEST-TO-EXIT MOTION SENSOR. REFER TO "ACCESS CONTROLLED DOOR TYPE 2 DETAIL".
PB	SECURITY SYSTEM - POTTER HUB - T HOLD BUTTON (PL-HUBT) MFG: #5400997 OR EQUAL - MOUNTED TO UNDERSIDE OF DESK/COUNTER, VERIFY EXACT LOCATION WITH VA POLICE PRIOR TO ROUGH-IN. FURNISHED AND CONNECTED BY CONTRACTOR.
CR	CARD READER - PROVIDE CARD READER AT ALL ACCESS CONTROLLED DOORS. REFER TO DETAILS FOR TYPICAL INSTALLATION REQUIREMENTS. INSTALL CARD READER AT CR LOCATION IN LIEU OF TYPICAL DETAILS WHEN SHOWN.

SECURITY SYSTEM NOTES:

S1. PROVIDE MINIMUM SIZE BACKBOX AS REQUIRED FOR ALL OF THE ABOVE SECURITY DEVICES AND INSTALL IN 3/4"C MINIMUM COMPLETE CONDUIT SYSTEM TO JUNCTION BOX ABOVE FINISHED CEILING.

S2. REFER TO SPECIFICATIONS DIVISION 28 FOR FURTHER DETAILS REGARDING THE SECURITY SYSTEM.

S3. MOUNT DEVICES AT MOUNTING HEIGHTS LISTED ABOVE UNLESS OTHERWISE NOTED ON THE FLOOR PLANS. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECTURAL ELEVATIONS.

S4. ALL SECURITY SYSTEM ROUGH-INS, CONDUIT, WIRING AND EQUIPMENT/DEVICES SHALL BE PROVIDED BY CONTRACTOR.

S5. CONTRACTOR SHALL VERIFY ALL BACKBOX SIZES WITH VA COR AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN.

S6. FURNISH, INSTALL AND CONNECT ALL SECURITY DEVICES IN ACCORDANCE WITH LENEL SYSTEM PROVIDER. PROVIDE ALL ADDITIONAL LENEL COMPONENTS AS NECESSARY FOR A COMPLETE SYSTEM. SUBMIT ALL LENEL DEVICES WITH SHOP DRAWINGS SUBMITTAL.

ABBREVIATIONS

AC	ABOVE COUNTER AT 9" UNLESS OTHERWISE NOTED	AFC	ABOVE FINISHED CEILING
AF	AMP FRAME	AT	AMP TRIP
AFF	ABOVE FINISHED FLOOR	ATS	AUTOMATIC TRANSFER SWITCH
CM	CEILING MOUNTED	COR	CONTRACTING OFFICER'S REPRESENTATIVE
EC	ELECTRICAL CONTRACTOR	EG	EQUIPMENT GROUND
EOL	END OF LINE	EWC/WC	ELECTRIC WATER COOLER / WATER COOLER
GC	GENERAL CONTRACTOR	GFCI	GROUND FAULT CIRCUIT INTERRUPTER
IG	ISOLATED GROUND	IRM	INFORMATION RESOURCES MANAGEMENT
MC	MECHANICAL CONTRACTOR	MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY	NEC	NATIONAL ELECTRICAL CODE
NF	NOT FUSED	SM	SURFACE MOUNTED
TC	TELECOMMUNICATIONS CONTRACTOR	TCC	TEMPERATURE CONTROLS CONTRACTOR
TR	TELECOMMUNICATIONS ROOM	UON	UNLESS OTHERWISE NOTED
TV	TELEVISION	UNV	UNVERSAL (120 - 277V)
VSD	VARIABLE SPEED DRIVE MOTOR CONTROLLER	WP	WEATHERPROOF ENCLOSURE - NEMA 4 TYPE

X	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, CONDUIT, ETC. - TO REMAIN
XB	INDICATES EXISTING OUTLET, LIGHTING FIXTURE, CONDUIT, ETC - TO BE REMOVED. PROVIDE BLANK COVER FOR OUTLET AND MAINTAIN CIRCUIT CONTINUITY.
XC	REINSTALL EXISTING CEILING MOUNTED DEVICE IN NEW CEILING AND RECONNECT COMPLETE.
XL	NEW LOCATION OF EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC.
XN	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC. - TO BE REPLACED WITH NEW OF SPECIFIED TYPE
XR	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, CONDUIT, ETC. - TO BE REMOVED COMPLETE- MAINTAIN CIRCUIT CONTINUITY TO ADJACENT OUTLETS, EXTEND CONDUIT AND WIRING AS REQUIRED.
XRR	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC. - TO BE REMOVED AND REINSTALLED AT NEW LOCATION - EXTEND CONDUIT AND WIRING AS REQUIRED.
VAMC	VETERANS AFFAIRS MEDICAL CENTER

GENERAL LEGEND

1	CODED NOTE - "1" INDICATES NOTE NUMBER.
1-SF	MECHANICAL EQUIPMENT IDENTIFIER
1 / 1-E01	DETAIL REFERENCE - "1" INDICATES DETAIL NUMBER, "1-E01" INDICATED DRAWINGS NUMBER.
RR / 9A	COLUMN GRID
1	REVISION REFERENCE NUMBER

FULLY SPRINKLERED

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Drawing Title: **SECURITY AND FIRE ALARM LEGEND**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

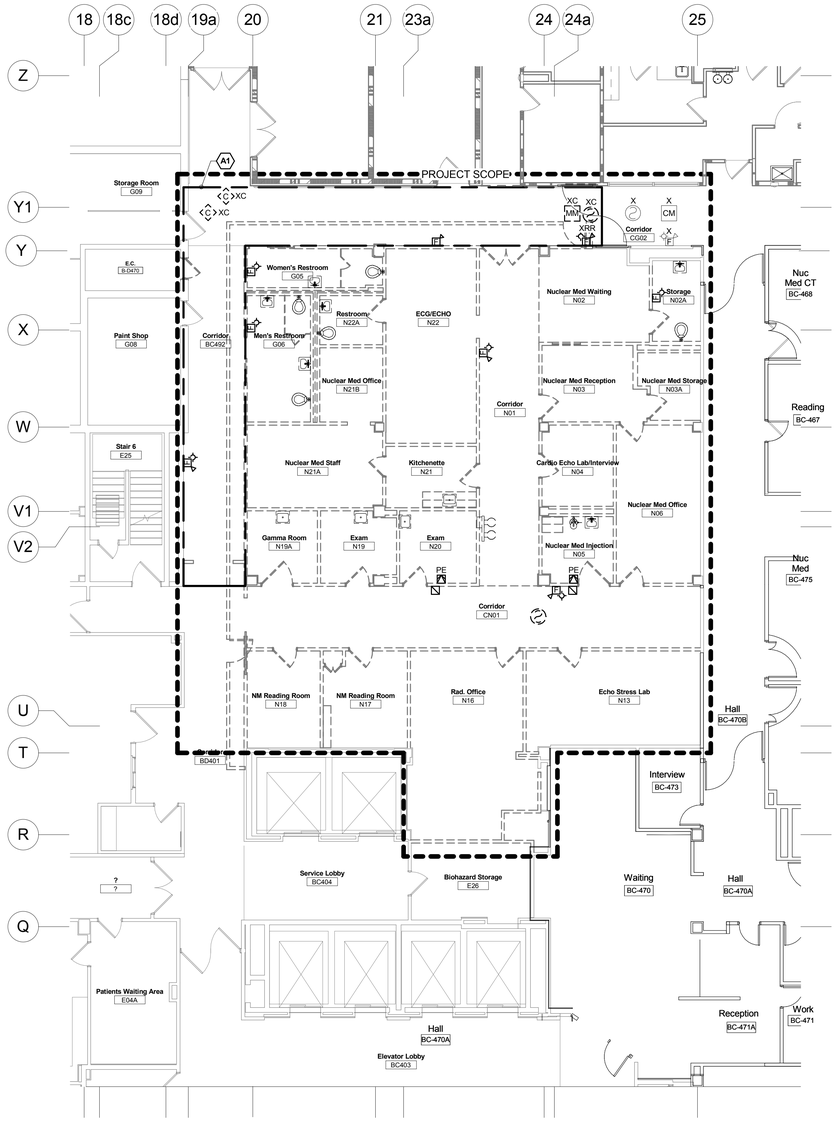
Drawing Number: **1-ES0.1**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



PARTIAL BASEMENT FIRE ALARM AND SECURITY DEMOLITION PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'

ELECTRICAL DEMOLITION NOTES

D1 ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, SPECIAL SYSTEMS OUTLETS, CONDUIT, WIRING ETC. THAT WILL NOT BE REUSED IN THE REMODELED INSTALLATION SHALL BE REMOVED UNLESS OTHERWISE NOTED. THIS DEMOLITION SHALL INCLUDE ALL ELECTRICAL ITEMS SHOWN ON THIS PLAN THAT ARE NOT DESIGNATED BY "X", "XN" OR "XRR" AND ALL OTHER ADDITIONAL ITEMS THAT ARE NOT SHOWN BUT THAT MUST BE REMOVED IN ORDER TO PRODUCE A NEAT, FINISHED, PROPERLY FUNCTIONING ELECTRICAL INSTALLATION. MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING REUSED ELECTRICAL SYSTEMS COMPONENTS - PROVIDE ALL CONDUIT AND WIRING NECESSARY TO ACHIEVE THE SAME. THE CONTRACTOR SHALL FIELD VERIFY THE NATURE AND EXTENT OF ALL DEMOLITION WORK AND SHALL INCLUDE COST FOR THE SAME IN THE BID SUBMITTAL.

D2 ALL EXISTING REMOVED ELECTRICAL EQUIPMENT, DEVICES, ETC. THAT ARE NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR.

D3 DASHED WALLS ON PLAN INDICATE EXISTING CONSTRUCTION TO BE REMOVED.

D4 REFER TO ELECTRICAL LEGEND FOR ALL SYMBOL DESIGNATIONS. NOTE SPECIAL ATTENTION TO SELECTED EXISTING DEVICES, WIREWAYS, ETC. MARKED XB, XRR OR XN, AND REMOVE/BLANK OFF, RELOCATE OR REPLACE THESE COMPONENTS AS REQUIRED.

D5 MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING ELECTRICAL SYSTEM COMPONENTS IN AREAS NOT BEING REMODELED UNLESS OTHERWISE NOTED. PROVIDE ALL CONDUIT AND WIRING EXTENSIONS NECESSARY TO ACHIEVE SAME.

D6 THE ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL ELECTRICAL DEMOLITION WORK WITH THE GENERAL AND MECHANICAL CONTRACTORS, AND SHALL DISCONNECT ALL REQUIRED CIRCUITS IN A TIMELY MANNER.

DEDUCT ALTERNATE #1:

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT DEMOLITION OF EXISTING CEILING MOUNTED FIXTURES, DEVICES, ETC IN OUTLINED AREA OF CORRIDOR B-C492

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Drawing Title
PARTIAL BASEMENT SECURITY AND FIRE ALARM DEMOLITION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
06/17/16	MPL	TWM

Project Number
541-16-104

Building Number
1

Drawing Number
1-ES2.1

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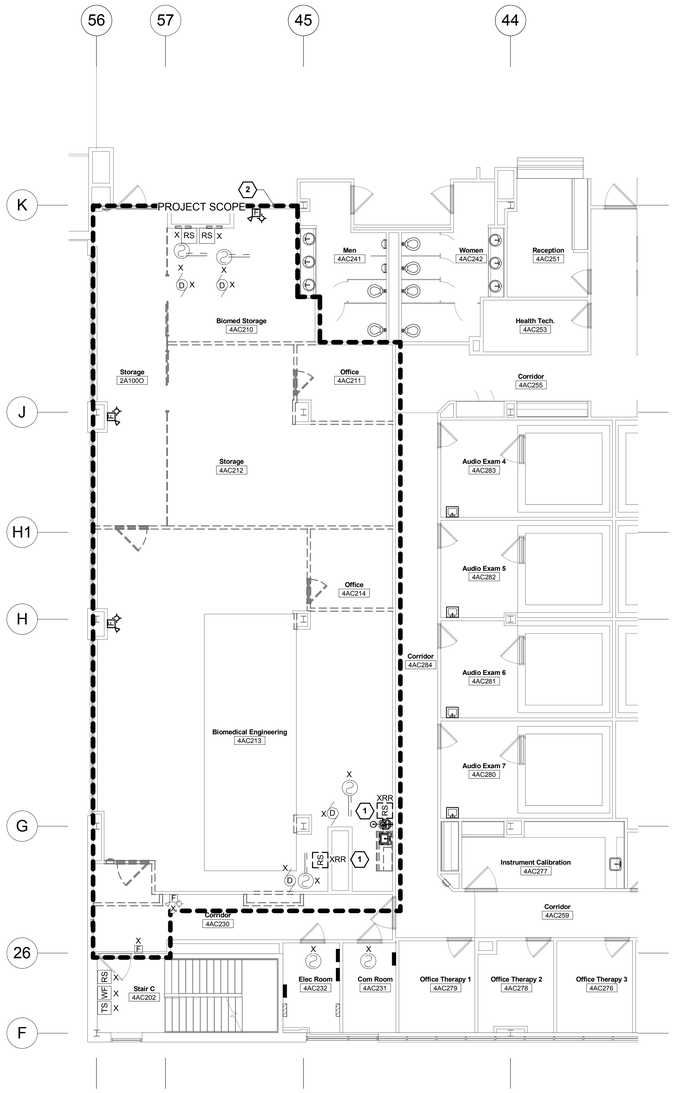
Office of Facilities Management

Department of Veterans Affairs



PARTIAL FOURTH FLOOR FIRE ALARM AND SECURITY DEMOLITION PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

ELECTRICAL DEMOLITION NOTES

D1 ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, SPECIAL SYSTEMS OUTLETS, CONDUIT, WIRING ETC. THAT WILL NOT BE REUSED IN THE REMODELED INSTALLATION SHALL BE REMOVED UNLESS OTHERWISE NOTED. THIS DEMOLITION SHALL INCLUDE ALL ELECTRICAL ITEMS SHOWN ON THIS PLAN THAT ARE NOT DESIGNATED BY "X", "XN" OR "XRR" AND ALL OTHER ADDITIONAL ITEMS THAT ARE NOT SHOWN BUT THAT MUST BE REMOVED IN ORDER TO PRODUCE A NEAT, FINISHED, PROPERLY FUNCTIONING ELECTRICAL INSTALLATION. MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING REUSED ELECTRICAL SYSTEMS COMPONENTS - PROVIDE ALL CONDUIT AND WIRING NECESSARY TO ACHIEVE THE SAME. THE CONTRACTOR SHALL FIELD VERIFY THE NATURE AND EXTENT OF ALL DEMOLITION WORK AND SHALL INCLUDE COST FOR THE SAME IN THE BID SUBMITTAL.

D2 ALL EXISTING REMOVED ELECTRICAL EQUIPMENT, DEVICES, ETC. THAT ARE NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR.

D3 DASHED WALLS ON PLAN INDICATE EXISTING CONSTRUCTION TO BE REMOVED.

D4 REFER TO ELECTRICAL LEGEND FOR ALL SYMBOL DESIGNATIONS. NOTE SPECIAL ATTENTION TO SELECTED EXISTING DEVICES, WIREWAYS, ETC. MARKED XB, XRR OR XN, AND REMOVE/BLANK OFF, RELOCATE OR REPLACE THESE COMPONENTS AS REQUIRED.

D5 MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING ELECTRICAL SYSTEM COMPONENTS IN AREAS NOT BEING REMODELED UNLESS OTHERWISE NOTED. PROVIDE ALL CONDUIT AND WIRING EXTENSIONS NECESSARY TO ACHIEVE SAME.

D6 THE ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL ELECTRICAL DEMOLITION WORK WITH THE GENERAL AND MECHANICAL CONTRACTORS, AND SHALL DISCONNECT ALL REQUIRED CIRCUITS IN A TIMELY MANNER.

DEMOLITION CODED NOTES

1 REMOVE EXISTING REMOTE TEST SWITCHES AND REINSTALL AT NEW LOCATION INDICATED ON NEW PLANS 1-ES3.2. PROVIDE ALL REQUIRED CONDUIT AND WIRING EXTENSIONS.

2 REMOVE ALL EXISTING FIRE ALARM DEVICES, SECURITY DEVICES, CONDUIT, WIRING, ETC. WITHIN PROJECT SCOPE AREA.

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Drawing Title
PARTIAL FOURTH FLOOR SECURITY AND FIRE ALARM DEMOLITION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked MPL | Drawn TWM

Project Number 541-16-104

Building Number 1

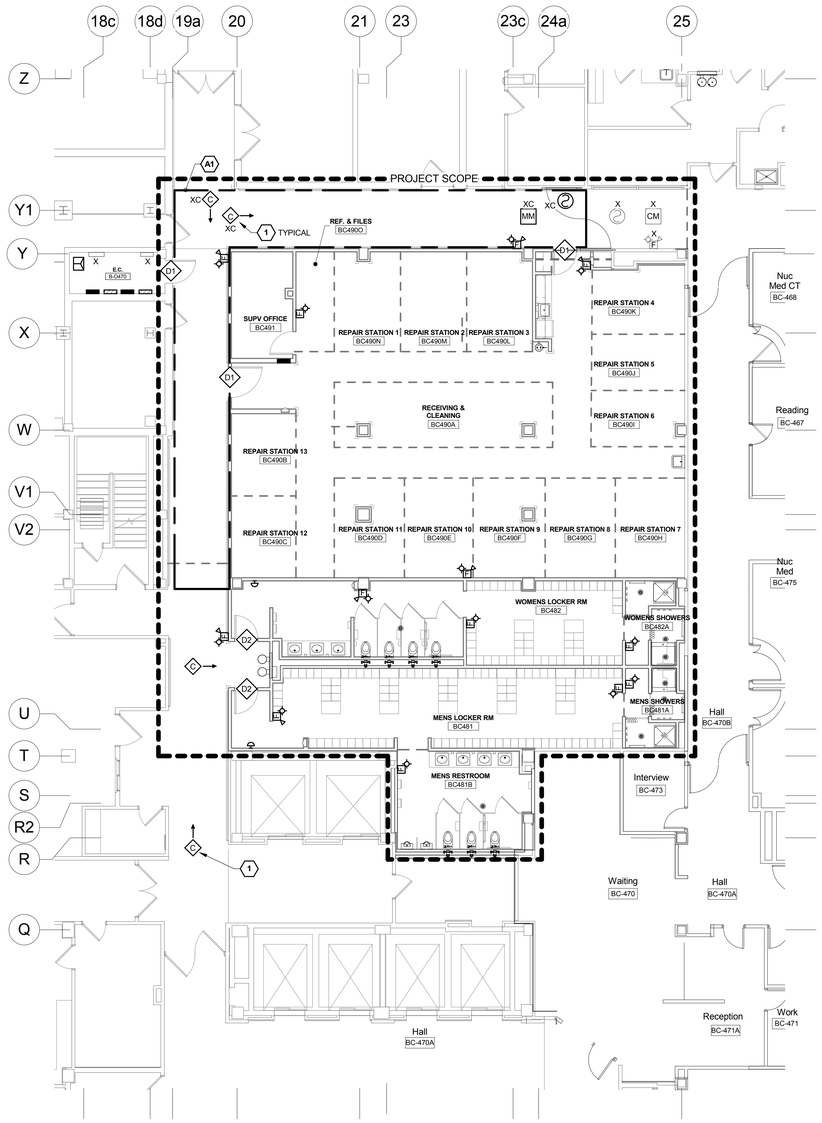
Drawing Number **1-ES2.2**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



N

PARTIAL BASEMENT SECURITY AND FIRE ALARM PLAN — 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

FIRE ALARM GENERAL NOTES

F1. ALL FIRE ALARM SYSTEM DEVICES SHALL BE CONNECTED COMPLETE TO THE MAIN FIRE ALARM SYSTEM CONTROL PANEL IN ACCORDANCE WITH ENGINEER APPROVED MANUFACTURER'S SHOP DRAWING WIRING DIAGRAMS AND DETAILS.

F2. ALL FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN 3/4" MINIMUM SIZE CONDUIT SYSTEM.

F3. IN GENERAL ALL MANUAL PULL STATIONS SHALL BE INSTALLED AT 48" ABOVE FINISHED FLOOR. MANUAL PULL STATIONS SHALL BE INSTALLED WITHIN 5'-0" OF ALL EXIT DOORWAY OPENINGS AT EACH EXIT ON EACH FLOOR. ADDITIONAL MANUAL PULL STATIONS SHALL BE PROVIDED SO THAT THE TRAVEL DISTANCE TO THE NEAREST PULL STATION WILL NOT EXCEED 200' MEASURED HORIZONTALLY ON THE SAME FLOOR.

F4. ALL AUDIO/VISUAL AND VISUAL ONLY FIRE ALARM SYSTEM DEVICES SHALL BE ADA TYPE. IN ALL CASES VISUAL DEVICES SHALL BE WALL MOUNTED AT 80" ABOVE FINISHED FLOOR. VISUAL DEVICES SHALL BE LOCATED NOT MORE THAN 15' FROM THE END OF ALL CORRIDORS WITH A SEPARATION NOT GREATER THAN 100' BETWEEN DEVICES. AUDIO DEVICES SHALL BE INSTALLED THROUGHOUT THE BUILDING TO ATTAIN MINIMUM DECIBEL LEVELS REQUIRED BY CODE. COMBINATION AUDIO/VISUAL DEVICES AND ADDITIONAL VISUAL ONLY DEVICES SHALL BE INSTALLED AT LOCATIONS AS INDICATED ON FLOOR PLANS.

F5. IN GENERAL SMOKE DETECTORS SHALL BE INSTALLED ON CEILINGS WITH SPACING NOT TO EXCEED MANUFACTURER'S RECOMMENDATION.

F6. SPRINKLER SYSTEM WATERFLOW ALARM INITIATING DEVICES SHALL BE CONNECTED COMPLETE TO THE FIRE ALARM SYSTEM.

F7. DUCT TYPE SMOKE DETECTORS SHALL BE PROVIDED FOR ALL HVAC RETURN AIR SYSTEMS WITH DESIGN CAPACITY GREATER THAN 2,000 CFM. WHERE RETURN AIR RISERS SERVE TWO OR MORE STORIES, AND ARE PART OF A RETURN AIR SYSTEM HAVING A DESIGN CAPACITY GREATER THAN 15,000 CFM, DUCT DETECTORS SHALL BE PROVIDED AT EACH STORY. COORDINATE EXACT DETECTOR LOCATIONS AND PROVISION OF ADEQUATE DUCT LENGTHS WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

F8. PROVIDE ALL FIRE ALARM SYSTEM COMPONENTS NECESSARY FOR SHUT DOWN OF HVAC EQUIPMENT BY THE FIRE ALARM SYSTEM WHERE SAME IS REQUIRED.

F9. PROVIDE ALL FIRE ALARM SYSTEM COMPONENTS NECESSARY FOR ELEVATOR CAPTURE BY THE FIRE ALARM SYSTEM WHERE SAME IS REQUIRED.

F10. SMOKE DETECTORS SHALL BE INSTALLED WITHIN 5'-0" OF CENTERLINE OF SMOKE DOORS ON HOLD-OPEN.

F11. SMOKE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 3'-0" FROM AN AIR SUPPLY DIFFUSER.

F12. AUTOMATIC DOORS LOCATED ON A 2-HOUR FIRE RATED WALL SHALL HAVE A FIRE ALARM INTERFACE THAT INTERRUPTS 120V POWER FOR THE AUTOMATIC DOOR OPENER UNDER A FIRE ALARM CONDITION. PROVIDE (1) CONTROL MODULE FROM EACH BUILDING FIRE ALARM SYSTEM IF LOCATED ALONG ALONG THE BORDER OF TWO BUILDINGS.

F13. REFER TO DRAWING 1-T1.1 FOR LOCATIONS OF FIRE ALARM AND SECURITY TERMINATIONS.

DEDUCT ALTERNATE #1:

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT NEW CEILING MOUNTED FIXTURES, DEVICES, ETC. IN OUTLINED AREA OF CORRIDOR B-C492

FIRE ALARM CODED NOTES:

1 CORRIDOR WORK AND ALL WORK OUTSIDE MAIN PROJECT SCOPE AREA SHALL BE COMPLETED DURING OFF HOURS.

FULLY SPRINKLERED

Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **PARTIAL BASEMENT SECURITY AND FIRE ALARM PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

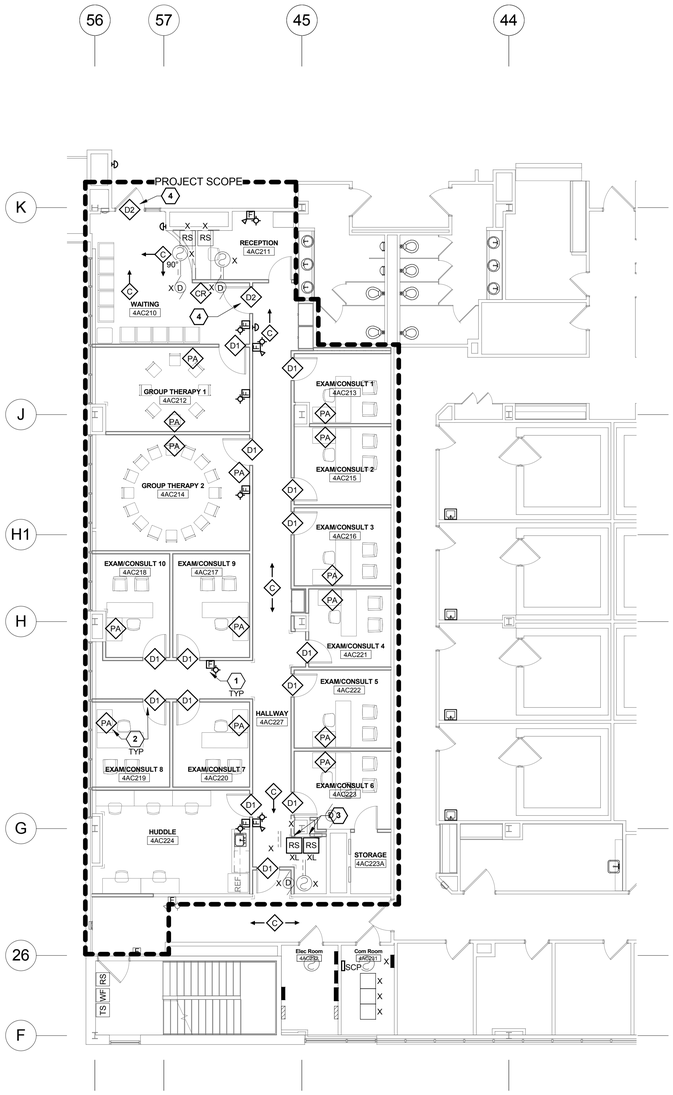
Drawing Number: **1-ES3.1**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



PARTIAL FOURTH FLOOR SECURITY AND FIRE ALARM PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'

FIRE ALARM GENERAL NOTES

F1. ALL FIRE ALARM SYSTEM DEVICES SHALL BE CONNECTED COMPLETE TO THE MAIN FIRE ALARM SYSTEM CONTROL PANEL IN ACCORDANCE WITH ENGINEER APPROVED MANUFACTURER'S SHOP DRAWING WIRING DIAGRAMS AND DETAILS.

F2. ALL FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN 3/4" MINIMUM SIZE CONDUIT SYSTEM.

F3. IN GENERAL ALL MANUAL PULL STATIONS SHALL BE INSTALLED AT 48" ABOVE FINISHED FLOOR. MANUAL PULL STATIONS SHALL BE INSTALLED WITHIN 5'-0" OF ALL EXIT DOORWAY OPENINGS AT EACH EXIT ON EACH FLOOR. ADDITIONAL MANUAL PULL STATIONS SHALL BE PROVIDED SO THAT THE TRAVEL DISTANCE TO THE NEAREST PULL STATION WILL NOT EXCEED 200' MEASURED HORIZONTALLY ON THE SAME FLOOR.

F4. ALL AUDIO/VISUAL AND VISUAL ONLY FIRE ALARM SYSTEM DEVICES SHALL BE ADA TYPE. IN ALL CASES VISUAL DEVICES SHALL BE WALL MOUNTED AT 80" ABOVE FINISHED FLOOR. VISUAL DEVICES SHALL BE LOCATED NOT MORE THAN 15' FROM THE END OF ALL CORRIDORS WITH A SEPARATION NOT GREATER THAN 100' BETWEEN DEVICES. AUDIO DEVICES SHALL BE INSTALLED THROUGHOUT THE BUILDING TO ATTAIN MINIMUM DECIBEL LEVELS REQUIRED BY CODE. COMBINATION AUDIO/VISUAL DEVICES AND ADDITIONAL VISUAL ONLY DEVICES SHALL BE INSTALLED AT LOCATIONS AS INDICATED ON FLOOR PLANS.

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F8. PROVIDE ALL FIRE ALARM SYSTEM COMPONENTS NECESSARY FOR SHUT DOWN OF HVAC EQUIPMENT BY THE FIRE ALARM SYSTEM WHERE SAME IS REQUIRED.

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F10. SMOKE DETECTORS SHALL BE INSTALLED WITHIN 5'-0" OF CENTERLINE OF SMOKE DOORS ON HOLD-OPEN.

F11. SMOKE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 3'-0" FROM AN AIR SUPPLY DIFFUSER.

F12. AUTOMATIC DOORS LOCATED ON A 2-HOUR FIRE RATED WALL SHALL HAVE A FIRE ALARM INTERFACE THAT INTERRUPTS 120V POWER FOR THE AUTOMATIC DOOR OPENER UNDER A FIRE ALARM CONDITION. PROVIDE (1) CONTROL MODULE FROM EACH BUILDING FIRE ALARM SYSTEM IF LOCATED ALONG ALONG THE BORDER OF TWO BUILDINGS.

F13. REFER TO DRAWING 1-T1.1 FOR LOCATIONS OF FIRE ALARM AND SECURITY TERMINATIONS.

SECURITY AND FIRE ALARM CODED NOTES:

1. TERMINATE ALL NEW FIRE ALARM DEVICES TO EXISTING FIRE ALARM TERMINAL CABINET IN 4AC-352.
2. TERMINATE ALL PANIC ALARMS, CAMERAS AND CARD READERS TO NEW LENEL 2020, 1320 AND 110 BOARDS. REFER TO SECURITY SYSTEM RISER FOR ADDITIONAL INFORMATION.
3. REINSTALL EXISTING REMOTE TEST SWITCHES AT LOCATIONS INDICATED AND RECONNECT COMPLETE.
4. PROVIDE INTERFACE OF ACCESS CONTROLS WITH AUTODOOR CONTROLLER. REFER TO POWER PLANS FOR ADDITIONAL INFORMATION.

FULLY SPRINKLERED

Revisions:	Date
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Drawing Title: **PARTIAL FOURTH FLOOR SECURITY AND FIRE ALARM PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-ES3.2**

Dwg. of

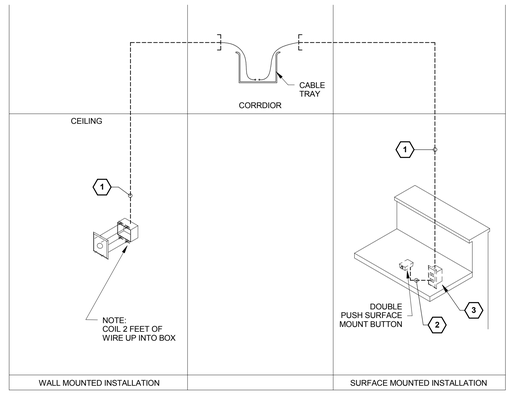
Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

ACCESS CONTROL GENERAL NOTES

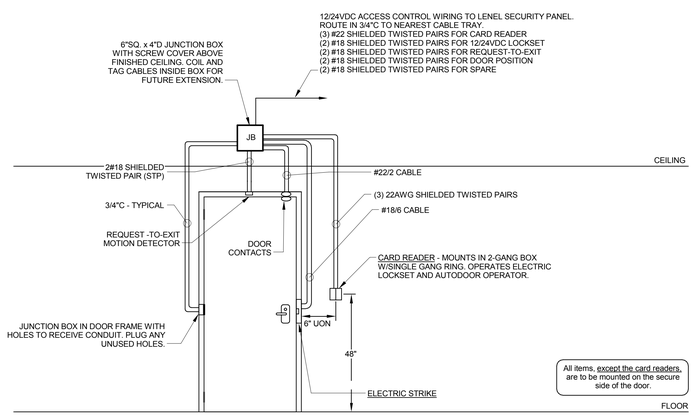
1	VERIFY ACCESS CONTROLLED DOOR REQUIREMENTS AND EXACT CABLING REQUIREMENTS WITH SECURITY SYSTEM AND DOOR HARDWARE VENDOR PRIOR TO ROUGH-IN. CABLING INDICATED IS FOR REFERENCE ONLY. CONTRACTOR SHALL PROVIDE SINGLE, PLENUM-RATED COMPOSITE CABLE DESIGNED FOR ACCESS CONTROL SYSTEMS FROM ACCESS CONTROL PANEL TO DOOR LOCATION AND ROUTE CABLING TO INDIVIDUAL DEVICES AS REQUIRED. DO NOT PROVIDE SEPARATE ACCESS CONTROL CABLING FOR EACH DEVICE FROM CONTROL PANEL TO DOOR LOCATIONS.
2	CONTRACTOR IS RESPONSIBLE FOR ALL ROUGH-INS, DEVICES, AND CABLING NECESSARY FOR A COMPLETE INSTALLATION. COORDINATE REQUIREMENTS FOR ALL DOORS WITH DOOR HARDWARE VENDOR.
3	CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND DOOR HARDWARE SCHEDULE FOR EXACT QUANTITY AND LOCATION OF ACCESS CONTROL DEVICES. CONTACT ENGINEER SHOULD A DISCREPANCY ARISE BETWEEN ACCESS CONTROL DETAILS AND ARCHITECTURAL DRAWINGS.
4	ACCESS CONTROLLED DOORS MAY OCCUR IN CURTAIN WALL SYSTEMS. PROVIDE POST MOUNTED PUSH BUTTONS/CARD READERS WHERE NECESSARY. COORDINATE EXACT REQUIREMENTS WITH DOOR HARWARE VENDOR.
5	ALL ACCESS CONTROL CABLING SHALL BE INSTALLED IN 3/4" MINIMUM CONDUIT. WHERE 3/4" CONDUIT IS NOT FEASIBLE, CONTRACTOR SHALL RECEIVE WRITTEN APPROVAL FROM VAMC COR TO PROVIDE 1/2"C OR SMALLER. ACCESS CONTROL CABLING SHALL BE ROUTED IN CONDUIT TO NEAREST CABLE TRAY AND IS PERMITTED TO BE RUN IN CABLE TRAY BACK TO ACCESS CONTROL PANEL.
6	PROVIDE VA STANDARD LABELING ON ALL ACCESS CONTROL CABLING (ROOM NAME, DEVICE AND DOOR NUMBER). LABEL RELAYS ON LENEL SYSTEM BOARDS WITH DEVICE BEING SERVED AND ROOM NUMBER.
7	VAMC COR SHALL WITNESS COMPLETE FUNCTIONALITY TESTING OF ACCESS CONTROL, VIDEO SURVEILLANCE, AND PANIC ALARM SYSTEMS PRIOR TO FINAL ACCEPTANCE. TESTING SHALL INCLUDE REPRESENTATIVE FROM POLICE SERVICE. COORDINATE SCHEDULE OF TESTING WITH VAMC COR.
8	ACCESS CONTROL INSTALLER IS REQUIRED TO BE LENEL CERTIFIED. PROGRAMMING MUST BE COMPLETED BY LENEL "MASTER" CERTIFIED PROGRAMMER. DELL EQUIPMENT MUST BE INSTALLED BY A DELL CERTIFIED TECHNICIAN. CISCO EQUIPMENT MUST BE INSTALLED BY A CISCO CERTIFIED TECHNICIAN.
9	REFER TO ARCHITECTURAL PLANS FOR QUANTITY AND LOCATION OF AUTODOOR PUSH PLATES.
10	LOCATE ALL POWER SUPPLIES (ACCESS CONTROL, ELECTRIC STRIKE, LATCH RETRACTION, MAGLOCKS, ETC) AT A CENTRAL LOCATION, ADJACENT TO ACCESS CONTROL PANEL IN IRM ROOM. CONTRACTOR SHALL RECEIVE WRITTEN APPROVAL BY VAMC COR FOR ALL EXCEPTIONS.



1. PROVIDE EMT CONDUIT FOR TELECOMMUNICATIONS OUTLET CONTAINING RED CAT6 CABLE FOR PANIC ALARM. CABLING TO BE INSTALLED IN CONDUIT UP TO CABLE TRAY WHERE IT CAN THEN BE TRANSITIONED TO CABLE TRAY AND CONTINUE TO LENEL ACCESS CONTROL PANEL.
2. PROVIDE RED CAT6 JUMPER CABLE TO PANIC ALARM DEVICE.
3. TELECOMMUNICATIONS OUTLET NEAREST TO SURFACE MOUNTED PANIC ALARM.
4. PROVIDE 4" X 4" X 2 1/8 " DEEP OUTLET BOX WITH SINGLE GANG PLASTIC RING "FLUSH" WITH OUTSIDE WALL SURFACE.

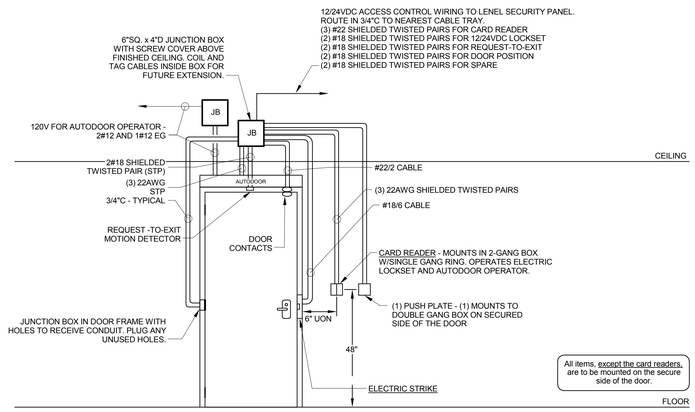
PANIC ALARM INSTALLATION DETAIL 4

NOT TO SCALE



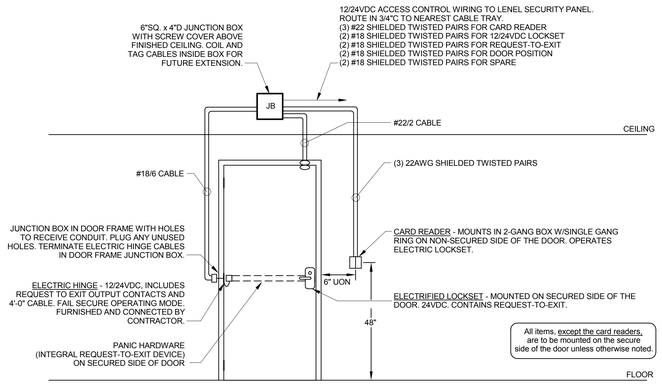
ACCESS CONTROLLED DOOR TYPE 3 DETAIL 3

NOT TO SCALE



ACCESS CONTROLLED DOOR TYPE 2 DETAIL 2

NOT TO SCALE



ACCESS CONTROLLED DOOR TYPE 1 DETAIL 1

NOT TO SCALE

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Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **SECURITY DETAILS**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-ES4.1**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978

GENERAL FIRE ALARM SYSTEM NOTES

F1.	ALL FIRE ALARM SYSTEM DEVICES SHALL BE CONNECTED COMPLETE TO THE MAIN FIRE ALARM SYSTEM CONTROL PANEL IN ACCORDANCE WITH ENGINEER APPROVED MANUFACTURER'S SHOP DRAWING WIRING DIAGRAMS AND DETAILS.
F2.	ALL FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN 3/4" MINIMUM SIZE CONDUIT SYSTEM.
F3.	COORDINATE FIRE ALARM ZONES WITH SMOKE COMPARTMENTS AND SPRINKLER ZONES. STROBES SHALL ACTIVATE ONLY IN THE ZONES OF ALARM ORIGIN. PROVIDE ONE SPEAKER CIRCUIT PER SMOKE ZONE.
F4.	CONTRACTOR SHALL CONNECT ALL NEW FIRE ALARM DEVICES IN THIS PROJECT TO (1) ADDRESSABLE POWER EXTENDER OUTPUT CIRCUIT OR (1) DIGITAL AUDIO AMPLIFIER OUTPUT CIRCUIT.

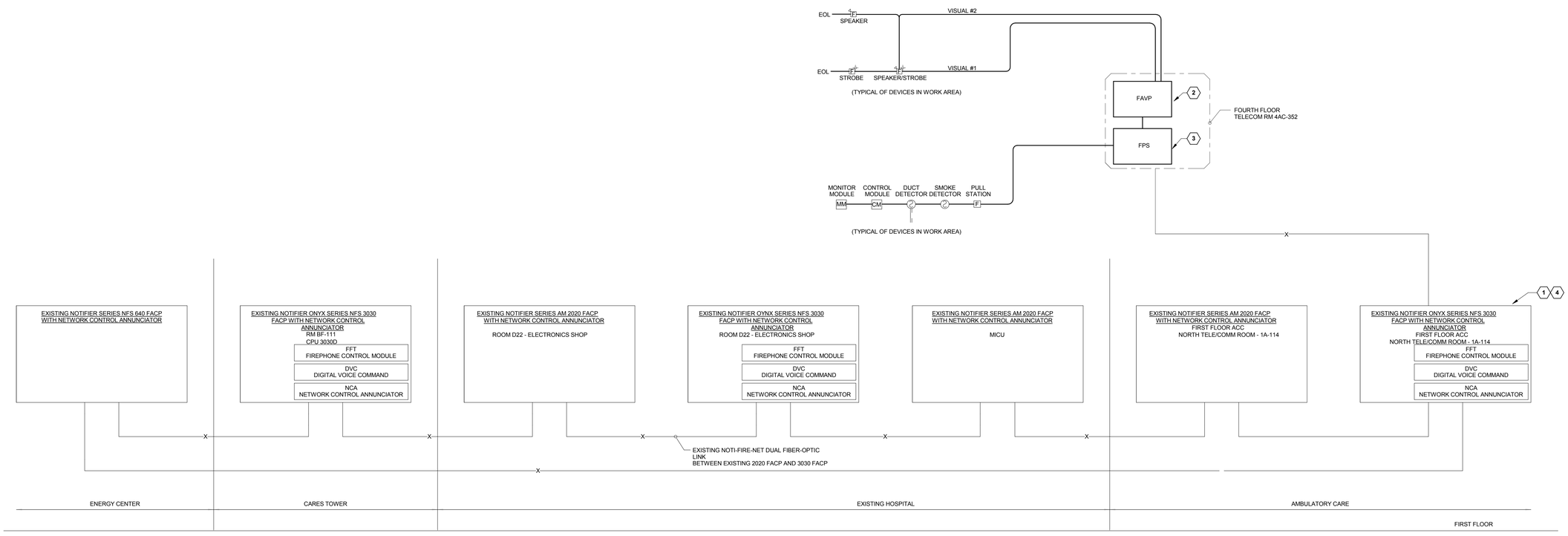
FIRE ALARM RISER CODED NOTES:

1. FIRE ALARM CONTROL PANEL:
   EXISTING NOTIFIER ONYX SERIES NFS-3030 IN FIRST FLOOR ACC NORTH TELECOM RM 1AC-114.

2. FIRE ALARM VOICE PANEL:
   EXISTING FIRE ALARM VOICE PANEL IN FOURTH FLOOR TELECOM RM 4AC-352.

3. FIRE ALARM POWER SUPPLY (FPS)
   EXISTING FIRE ALARM POWER SUPPLY IN FOURTH FLOOR TELECOM RM 4AC-352.

4. NOTIFIER SYSTEM VENDOR SHALL PROVIDE ALL ADDITIONAL COMPONENTS, SOFTWARE, ETC NECESSARY TO EXTEND THE EXISTING NOTIFIER FIRE ALARM SYSTEM AND SATISFY THE GENERAL SCOPE OF THIS PROJECT WHICH IS TO:
   1. MAINTAIN EXISTING FIRE ALARM DEVICES OUTSIDE OF PROJECT AREA. REMOVE EXISTING DEVICES IN THE PROJECT AREA AS INDICATED FROM THE EXISTING NOTIFIER SERIES 2020 FACP.
   2. PROVIDE NEW FIRE ALARM DEVICES AT PROJECT AREA AND CONNECT TO EXISTING NOTIFIER SERIES NFS 3030 FACP VIA NEW FIRE ALARM TERMINAL CABINET. FIELD VERIFY EXACT ROUTING OF CONDUITS AND WIRING.



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Drawing Title: **FIRE ALARM SYSTEM RISER AND DETAILS**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

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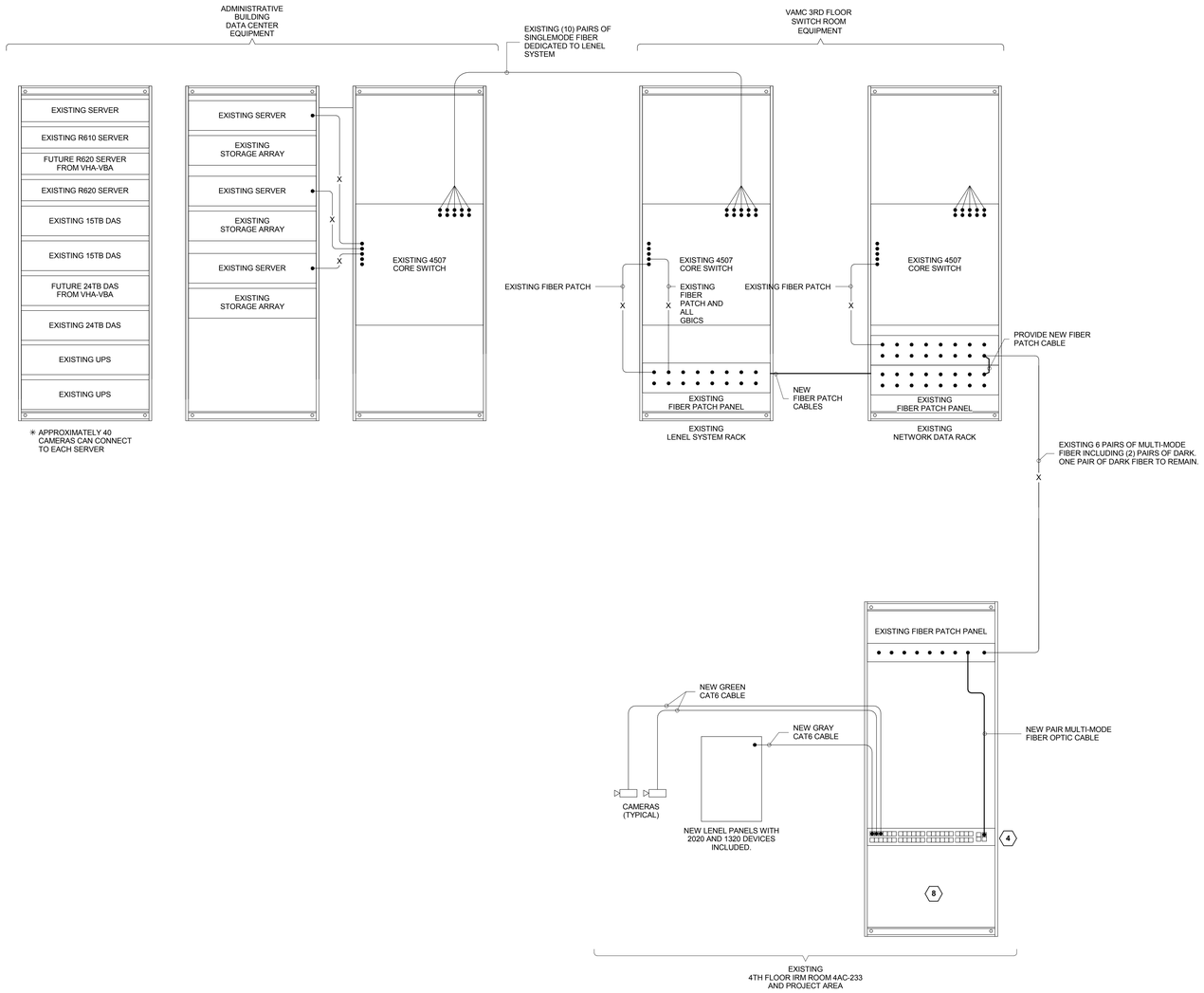

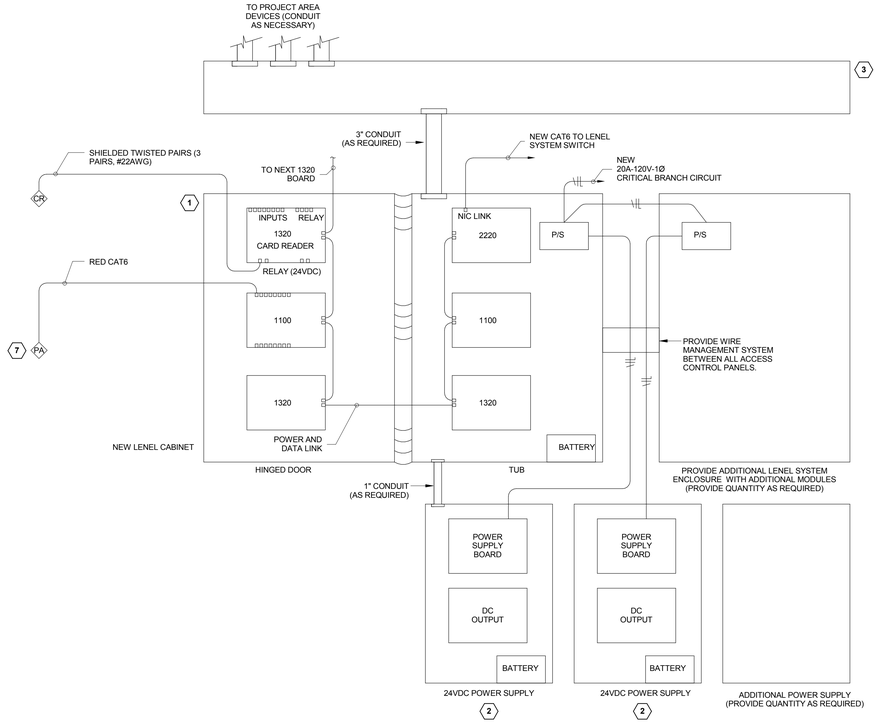

9 5 6 SECURITY ROOM - WALLFIELD DETAIL - 4TH FLOOR 2

SECURITY SYSTEM RISER 1

SECURITY SYSTEM CABLING NOTE:

1. CONTRACTOR SHALL PROVIDE SINGLE, PLENUM-RATED COMPOSITE CABLE DESIGNED FOR ACCESS CONTROL SYSTEMS FROM ACCESS CONTROL PANEL TO DOOR LOCATION AND ROUTE CABLING TO INDIVIDUAL DEVICES AS REQUIRED. DO NOT PROVIDE SEPARATE ACCESS CONTROL CABLING FOR EACH DEVICE FROM CONTROL PANEL TO DOOR LOCATIONS. COMBINE CABLING FROM ADJACENT DOORS WHERE POSSIBLE TO UTILIZE CONDUCTORS WITHIN BUNDLE. REFER TO SECURITY DETAILS FOR ADDITIONAL INFORMATION.

GENERAL SECURITY SYSTEM NOTES:

S1. ALL SECURITY SYSTEM DEVICES SHALL BE CONNECTED COMPLETE TO THE LENEL SYSTEM IN ACCORDANCE WITH ENGINEER APPROVED MANUFACTURER'S SHOP DRAWING WIRING DIAGRAMS AND DETAILS.

S2. ALL SECURITY SYSTEM CONDUCTORS SHALL BE INSTALLED IN 3/4" MINIMUM SIZE CONDUIT STUBBED TO ABOVE FINISHED CEILING. ROUTE SECURITY SYSTEM CONDUCTORS IN J-HOOKS SPACED AT 5'-0" ON CENTER ABOVE FINISHED CEILING. SECURITY SYSTEM CABLING SHALL BE INSTALLED IN 3/4" MINIMUM CONDUIT COMPLETE TO NEAREST CABLE TRAY AND IS PERMITTED TO BE RUN IN CABLE TRAY BACK TO ACCESS CONTROL PANEL OR SWITCH.

S3. ACCESS CONTROL INSTALLER IS REQUIRED TO BE LENEL CERTIFIED. PROGRAMMING MUST BE COMPLETED BY A LENEL "MASTER" CERTIFIED PROGRAMMER. DELL EQUIPMENT MUST BE INSTALLED BY A DELL CERTIFIED TECHNICIAN. CISCO EQUIPMENT MUST BE INSTALLED BY A CISCO CERTIFIED TECHNICIAN.

S4. VAMC COR SHALL WITNESS COMPLETE FUNCTIONALITY TESTING OF ACCESS CONTROL, VIDEO SURVEILLANCE, AND PANIC ALARM SYSTEMS PRIOR TO FINAL ACCEPTANCE. TESTING SHALL INCLUDE REPRESENTATIVE FROM POLICE SERVICE. COORDINATE SCHEDULE OF TESTING WITH VAMC COR.

S5. REFER TO SPECIFICATIONS SECTIONS IN DIVISION 28 FOR ADDITIONAL REQUIREMENTS.

SECURITY SYSTEM RISER CODED NOTES:

LENEL SYSTEM ENCLOSURE

1. PROVIDE COMPONENTS AS NECESSARY IN NEW LENEL SYSTEM CABINET TO PROVIDE CONNECTION FOR LOCAL DEVICES IN THE AREAS OUTLINED ON THE COMMUNICATION PLANS. PROVIDE ADDITIONAL ENCLOSURE(S) ADJACENT TO MAIN LENEL ENCLOSURE TO HOUSE ADDITIONAL LENEL MODULES.
   - A. 18"W x 24"H BOX AND HINGED COVER [MAXIMUM (6) 2020 OR 1320 BOARDS PER BOX]
   - B. 12VDC POWER SUPPLY
   - C. 7.0 Ah BATTERIES
   - D. PROVIDE 2-WIRE RS-485 DATA LINK BETWEEN 2020 AND 1320/1100 SUB-PANELS.
   - E. PROVIDE 2-WIRE POWER LINK BETWEEN 2020 AND 1320/1100 SUB-PANELS.
   - F. 2020 MAIN BOARD [(1) 2020 MAIN BOARD IS REQUIRED FOR EVERY (30) SUB-BOARDS]
     1. NIC LINK TO LENEL NETWORK
     2. (2) CARD ACCESS READER INPUTS
     3. (8) INPUTS
     4. (2) DOOR RELEASE RELAYS
     5. (4) RELAYS
   - G. 1320 SUB-BOARD
     1. (2) CARD ACCESS READER INPUTS
     2. (8) INPUTS
     3. (2) DOOR RELEASE RELAYS
     4. (4) RELAYS
   - H. 1100 SUB-BOARD
     1. (16) INPUTS
     2. (2) OUTPUTS

2. DOOR HARDWARE POWER SUPPLY

   PROVIDE 24VDC POWER SUPPLY IN A SYSTEM CABINET TO PROVIDE POWER TO LOCAL DEVICES IN THE AREAS OUTLINED ON THE COMMUNICATION PLANS.
   1. 12"W x 16"H BOX AND HINGED COVER
   2. (8) FUSED OUTPUTS
   3. 6A TOTAL OUTPUT CURRENT
   4. 40 Ah BATTERY

3. PROVIDE 6"H x 4"D SOLID WALL PVC RACEWAY WITH NON-SLIP FLUSH COVER. RACEWAY SHALL BE LENGTH OF LENEL SYSTEM EQUIPMENT. ROUTE LENEL SYSTEM WIRING THROUGH RACEWAY AND PROVIDE A ORGANIZED ROUTING OF WIRING. PROVIDE ADDITIONAL CONDUITS AND RACEWAY AS REQUIRED.

4. LENEL SYSTEM SWITCH

   PROVIDE NEW 48-PORT SWITCH IN NEW IRM ROOM DATA RACKS. PROVIDE FIBER PATCH BETWEEN NEW FIBER PATCH PANEL AND NEW SWITCH. MATCH EXISTING VA SWITCHES (10/100/1000, POWER-OVER-ETHERNET MODEL AND SERIES). COORDINATE ADDITIONAL REQUIREMENTS WITH VA IRM DEPARTMENT AND SPECIFICATIONS.

5. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL COMPONENTS, SOFTWARE, ETC NECESSARY TO EXTEND THE EXISTING LENEL SECURITY SYSTEM AND SATISFY THE GENERAL SCOPE OF THIS PROJECT WHICH IS TO:
   1. MAINTAIN EXISTING SECURITY DEVICES OUTSIDE OF PROJECT AREA. REMOVE EXISTING DEVICES IN THE PROJECT AREA COMPLETE AS INDICATED ON PLANS.
   2. PROVIDE NEW SECURITY DEVICES IN THE PROJECT AREA AND CONNECT COMPLETE TO NEW LENEL 2020 OR 1320 PANELS.
   3. PROVIDE QUANTITY OF PANELS AS REQUIRED TO SUPPORT THE NUMBER OF DEVICES SHOWN ON THE FLOOR PLANS.
   4. PROVIDE GROUP OF SOFTWARE LICENSES FOR ALL CARD READER/CAMERA LICENSES FOR THIS PROJECT PLUS 10% SPARE CAPACITY FOR FUTURE EXPANSION. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL QUANTITY OF REQUIRED LICENSES.

6. ADDITIONAL CONDUITS ARE NOT SHOWN FOR CLARITY PURPOSES. CONTRACTOR SHALL ROUTE ALL POWER, SECURITY AND DATA WIRING IN APPROPRIATE CONDUITS.

7. DURESS PANIC ALARM BUTTONS LOCATED AT A DESK SHALL BE CONNECTED THROUGH AN ADJACENT TELECOMMUNICATIONS OUTLET WITH A RED CAT6 CABLE AND NOT A HARD WIRED CONNECTION. PATCH OVER EQUIPMENT TO THE LENEL SYSTEM AT THE TELECOMMUNICATION ROOM PATCH PANELS. PROVIDE HARD WIRED CONNECTION FOR WALL MOUNTED PANIC ALARM BUTTONS NOT LOCATED ADJACENT TO AN OFFICE DESK OR NURSE STATION. VERIFY EXACT LOCATION OF ALL DURESS PANIC ALARM BUTTONS WITH VAMC POLICE.

8. TELECOMMUNICATIONS RACK SHALL ALSO HOUSE NEW SWITCHES AND PATCH PANELS FOR DATA AND TELEPHONE CONNECTIONS. THESE DEVICES ARE NOT SHOWN FOR CLARITY.

9. NEW BASEMENT SECURITY ACCESS CONTROLS AND CAMERAS SHALL BE CONNECTED TO EXISTING LENEL SWITCHES AND ACCESS CONTROL PANELS PER TYPICAL CONNECTION REQUIREMENTS SHOWN ON THIS SHEET. REFER TO TELECOMMUNICATIONS KEY PLAN FOR LOCATION OF EXISTING SECURITY EQUIPMENT.

FULLY SPRINKLERED

Revisions:	Date
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Drawing Title: **SECURITY SYSTEM RISER AND DETAILS**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-ES4.3**

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VA FORM 08-6231, OCT 1978

TELECOMMUNICATIONS LEGEND

	TELECOMMUNICATIONS OUTLET "TCO" - MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED. REFER TO TELECOMMUNICATIONS OUTLET DETAILS ON SUBSEQUENT DRAWING FOR REQUIREMENTS.
	PATIENT MONITORING OUTLET - WALL MOUNTED, COORDINATE WITH MONITOR MOUNTING BRACKET. REFER TO PATIENT MONITORING OUTLET DETAILS ON SUBSEQUENT DRAWING FOR REQUIREMENTS.
BC	TELECOMMUNICATIONS OUTLET "TCO" - MOUNTED BELOW COUNTER AT 18" AFF UNLESS OTHERWISE NOTED. REFER TO TELECOMMUNICATIONS OUTLET DETAILS ON SUBSEQUENT DRAWING FOR REQUIREMENTS.
	TELECOMMUNICATIONS OUTLET "TCO" - CEILING MOUNTED. REFER TO TELECOMMUNICATIONS OUTLET DETAILS ON SUBSEQUENT DRAWING FOR REQUIREMENTS.
W	TELEPHONE OUTLET- MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED.
	TELECOMMUNICATIONS OUTLET "TCO" - ROUGH-IN ONLY (BACKBOX AND CONDUIT STUBBED TO ABOVE FINISHED CEILING).
	WIRELESS ACCESS OUTLET - 2-PORT SURFACE MOUNTED DATA BOX MOUNTED ABOVE FINISHED CEILING. WIRELESS ACCESS POINTS ARE PROVIDED BY OWNER.
	12"W x 4"D (MINIMUM SIZE) CABLE TRAY WIRE MANAGEMENT SYSTEM. MOUNTED ABOVE ACCESSIBLE CEILING. COORDINATE LOCATION WITH OTHER TRADES. MAINTAIN 6" WORKING CLEARANCE ABOVE AND BELOW CABLE TRAY AT ALL LOCATIONS.
F	TELECOMMUNICATION CONNECTION WALL BOX FOR PRE-WIRED FURNITURE - 4" SQ. JUNCTION BOX MOUNTED AT 18" AFF FOR TELECOMMUNICATIONS CONNECTION TO TCO'S IN FURNITURE. VERIFY THE QUANTITY OF TCO CABLES REQUIRED FOR FURNITURE. OWNER SHALL TERMINATE ALL TCO CABLES.

TELECOMMUNICATIONS SYSTEM NOTES:

T1. REFER TO TECHNOLOGY DETAILS FOR ADDITIONAL INFORMATION.

T2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

T3. CONTRACTOR SHALL PROVIDE DEVICES, CABLING, TESTING, AND TERMINATIONS. TEST COMPLETE INSTALLATION IN ACCORDANCE WITH VA STANDARDS AND SPECIFICATIONS.

NURSE CALL SYSTEM LEGEND

NCS	POWER OVER ETHERNET SWITCH - HILL-ROM AUDIO/VISUAL, RACK MOUNTED ENCLOSURE 1U (HILL-ROM #P2519NNC1A24). REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
NC	EXISTING NURSE CALL DEVICE.
	EXISTING NURSE CALL DOME LIGHT.

NURSE CALL SYSTEM NOTES:

N1. SEE TECHNOLOGY DETAILS FOR NURSE CALL SYSTEM RISER DIAGRAMS.

N2. MOUNT DEVICES AT MOUNTING HEIGHTS LISTED ABOVE UNLESS OTHERWISE NOTED ON THE FLOOR PLANS. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECTURAL ELEVATIONS.

N3. CONTRACTOR SHALL VERIFY ALL BACKBOX SIZES WITH VA COR AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN.

N4. NURSE CALL SYSTEM ROUGH-INS, CONDUIT, EQUIPMENT, CABLING AND PULLWIRE SHALL BE PROVIDED BY CONTRACTOR.

N5. ALL NURSE CALL SYSTEM CONDUCTORS SHALL BE INSTALLED IN 3/4" MINIMUM SIZE COMPLETE CONDUIT SYSTEM TO ROOM CONTROLLER BOARD ABOVE CEILING AND THEN IN CABLE TRAY AND J-HOOKS TO NURSE CALL SWITCH AS INDICATED ON SHOP DRAWINGS PREPARED BY MANUFACTURER. PROVIDE ALL CONDUIT NECESSARY FOR NURSE CALL DEVICES SHOWN ON PLANS IN ACCORDANCE WITH WIRING DIAGRAMS AS PREPARED BY MANUFACTURER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

LOW VOLTAGE SYSTEM LEGEND

TV TV	MASTER ANTENNA TELEVISION OUTLET (MATV) - CEILING MOUNTED OR WALL MOUNTED AT 12" BFC UNLESS OTHERWISE NOTED. PROVIDE 2 GANG FLUSH BOX WITH 1 GANG RAISED COVER WITH 1" CONDUIT TO ABOVE FINISHED CEILING - STUB AND BUSH. PROVIDE NEW MATV OUTLET TO MATCH EXISTING TYPE AND INSTALL (1) RG-6 COAX CABLE PER OUTLET TO EXISTING NETWORK CABLE TAP. CONNECT EACH CABLE AT OUTLET AND AT NETWORK CABLE TAP. SUPPORT CABLES USING 'J'-HOOKS 3'-0" ON CENTER OR EXISTING CABLE TRAY, WHERE AVAILABLE. TEST COMPLETE INSTALLATION IN ACCORDANCE WITH VA STANDARDS. COORDINATE WORK WITH VA ENGINEERING DEPARTMENT.
CATV	CABLE TV DISTRIBUTION AMPLIFIER (MATCH EXISTING FACILITY TYPE) - WALL MOUNTED, CONNECT TO 120V-1Ø DUPLEX RECEPTACLE.
P	PUBLIC ADDRESS SPEAKER - CEILING MOUNTED.
$VCa	PUBLIC ADDRESS SYSTEM VOLUME CONTROL WITH BYPASS RELAY. "a" INDICATES LOCAL PAGING SYSTEM SPEAKER VOLUME CONTROL.

LOW VOLTAGE SYSTEM NOTES:

L1. REFER TO TECHNOLOGY DETAILS FOR ADDITIONAL INFORMATION.

L2. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

L3. INTERCOM STATIONS SYSTEM EQUIPMENT AND WIRING SHALL BE PROVIDED BY CONTRACTOR. CONTRACTOR SHALL VERIFY ALL BACKBOX SIZES WITH VA COR AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN.

L4. MOUNT DEVICES AT MOUNTING HEIGHTS LISTED ABOVE UNLESS OTHERWISE NOTED ON THE FLOOR PLANS. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECTURAL ELEVATIONS.

SECURITY SYSTEM LEGEND

SCP	LENEL SECURITY CONTROL PANEL. REFER TO SECURITY SYSTEM RISER AND DETAILS FOR ADDITIONAL INFORMATION AND WORK REQUIREMENTS

SECURITY SYSTEM NOTES:

S1. PROVIDE MINIMUM SIZE BACKBOX AS REQUIRED FOR ALL OF THE ABOVE SECURITY DEVICES AND INSTALL IN 1/2"C MINIMUM COMPLETE CONDUIT SYSTEM TO JUNCTION BOX ABOVE FINISHED CEILING. REFER TO THE "ACCESS-CONTROLLED DOOR DETAIL" ON THE TECHNOLOGY DETAILS DRAWING FOR ADDITIONAL INFORMATION.

S2. REFER TO SPECIFICATIONS DIVISION 28 FOR FURTHER DETAILS REGARDING THE SECURITY SYSTEM.

S3. MOUNT DEVICES AT MOUNTING HEIGHTS LISTED ABOVE UNLESS OTHERWISE NOTED ON THE FLOOR PLANS. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECTURAL ELEVATIONS.

S4. SECURITY SYSTEM CONDUIT AND NECESSARY SYSTEM WIRING SHALL BE PROVIDED BY CONTRACTOR. SECURITY SYSTEM EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY OWNER.

S5. CONTRACTOR SHALL VERIFY ALL BACKBOX SIZES WITH VA COTR AND MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-IN.

S6. FURNISH, INSTALL AND CONNECT ALL SECURITY DEVICES IN ACCORDANCE WITH LENEL SYSTEM PROVIDER. PROVIDE ALL ADDITIONAL LENEL COMPONENTS AS NECESSARY FOR A COMPLETE SYSTEM. SUBMIT ALL LENEL DEVICES WITH SHOP DRAWINGS SUBMITTAL.

GENERAL LEGEND

1	CODED NOTE - "1" INDICATES NOTE NUMBER.
1-SF	MECHANICAL EQUIPMENT IDENTIFIER
1 / 1-E01	DETAIL REFERENCE - "1" INDICATES DETAIL NUMBER, "1-E01" INDICATED DRAWINGS NUMBER.
RR / 9A	COLUMN GRID
1	REVISION REFERENCE NUMBER

GENERAL TECHNOLOGY INSTALLATION NOTES:

1. ALL MOUNTING HEIGHTS ARE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.
2. ALL NEW WALL MOUNTED TECHNOLOGY DEVICES ARE TO BE INSTALLED FLUSH IN WALL UNLESS OTHERWISE NOTED. ALL CONDUIT SHALL BE CONCEALED BEHIND FINISHED WALLS AND ABOVE FINISHED CEILING UNLESS OTHERWISE NOTED. THE COST TO CUT AND PATCH WALLS SHALL BE THE RESPONSIBILITY OF THE TRADE REQUIRING THE CUTTING.
3. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF CEILINGS REQUIRED FOR ELECTRICAL WORK. CONTRACTOR SHALL REPLACE ANY DAMAGED CEILING TILES.
4. PRIOR TO INSTALLATION, VERIFY PRECISE LOCATION OF NEW OR RELOCATED WALL OR CEILING MOUNTED DEVICES WITH ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS.
5. COORDINATE ALL SHUT-DOWNS OF EXISTING ELECTRICAL SYSTEMS WITH OWNER A MINIMUM OF FOURTEEN (14) WORKING DAYS IN ADVANCE. ALL SHUT-DOWNS SHALL OCCUR DURING WEEKENDS OR BETWEEN 8:00PM AND 7:00AM ON WEEKDAYS ("OFF-HOURS"). INCLUDE ALL PREMIUM TIME CHARGES IN BID.
6. ALL NOISE GENERATING OPERATIONS, INCLUDING CUTTING OF CEILINGS, WALLS AND FLOORS, CORING, DRILLING, ETC. SHALL BE SCHEDULED DURING WEEKENDS OR BETWEEN 8:00PM AND 7:00AM ON WEEKDAYS ("OFF-HOURS"). INCLUDE ALL PREMIUM TIME CHARGES IN BID.
7. CONTRACTOR SHALL CONNECT ALL MECHANICAL EQUIPMENT COMPLETE PER MANUFACTURER'S WIRING DIAGRAMS AND INSTRUCTIONS. COORDINATE WITH MECHANICAL CONTRACTOR AND VERIFY LOCATION, VOLTAGE, AMPS, NO. OF WIRES, AND PROTECTION REQUIREMENTS PRIOR TO ROUGH-IN. CONTACT ENGINEER WITH ANY DISCREPANCIES FROM DESIGN DRAWINGS.
8. PROVIDE LIQUID-TIGHT FLEXIBLE METAL CONDUIT FOR FINAL CONNECTION TO MECHANICAL EQUIPMENT OR OTHER EQUIPMENT WHICH MAY PROPAGATE VIBRATION.
9. ALL FLUORESCENT LAMPS THAT WILL NOT BE REUSED SHALL BE DISPOSED OF IN ACCORDANCE WITH EPA STANDARDS, AND WRITTEN EVIDENCE OF PROPER DISPOSAL SHALL BE FURNISHED TO THE OWNER.
10. ALL WORK SHALL BE PERFORMED IN STRICT CONFORMANCE WITH THE PHASING REQUIREMENTS OF THE PROJECT. ALL COSTS ASSOCIATED WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE BID SUBMITTAL.
11. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING TO ADEQUATELY LIGHT ALL CONSTRUCTION AREAS, TEMPORARILY PARTITIONED AREAS, AND EXIT CORRIDORS MAINTAINED DURING CONSTRUCTION.
12. DEFINITION: "PROVIDE" - FURNISH, INSTALL AND CONNECT COMPLETE.
13. PROJECT AND PHASING SCOPE LINES INDICATE WHERE GENERAL CONSTRUCTION BOUNDERIES OCCUR. ELECTRICAL WORK AND UTILITY TIE-INS MAY OCCUR OUTSIDE OF SCOPE LINES.

ABBREVIATIONS

AC	ABOVE COUNTER AT 9" UNLESS OTHERWISE NOTED	AFC	ABOVE FINISHED CEILING
AF	AMP FRAME	AT	AMP TRIP
AFF	ABOVE FINISHED FLOOR	ATS	AUTOMATIC TRANSFER SWITCH
CM	CEILING MOUNTED	COR	CONTRACTING OFFICER'S REPRESENTATIVE
EC	ELECTRICAL CONTRACTOR	EG	EQUIPMENT GROUND
EOL	END OF LINE	EWC	ELECTRIC WATER COOLER
GC	GENERAL CONTRACTOR	GFCI	GROUND FAULT CIRCUIT INTERRUPTER
IG	ISOLATED GROUND	IRM	INFORMATION RESOURCES MANAGEMENT
MC	MECHANICAL CONTRACTOR	MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY	NEC	NATIONAL ELECTRICAL CODE
NF	NOT FUSED	SM	SURFACE MOUNTED
TC	TELECOMMUNICATIONS CONTRACTOR	TCC	TEMPERATURE CONTROLS CONTRACTOR
TV	TELEVISION	VSC	VARIABLE SPEED MOTOR CONTROLLER
WP	WEATHERPROOF ENCLOSURE - NEMA 4 TYPE		
X	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, CONDUIT, ETC. - TO REMAIN		
XB	INDICATES EXISTING OUTLET, LIGHTING FIXTURE, CONDUIT, ETC - TO BE REMOVED. PROVIDE BLANK COVER FOR OUTLET AND MAINTAIN CIRCUIT CONTINUITY.		
XL	NEW LOCATION OF EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC.		
XN	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC. - TO BE REPLACED WITH NEW OF SPECIFIED TYPE		
XR	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, CONDUIT, ETC. - TO BE REMOVED COMPLETE- MAINTAIN CIRCUIT CONTINUITY TO ADJACENT OUTLETS, EXTEND CONDUIT AND WIRING AS REQUIRED.		
XRR	EXISTING OUTLET, DEVICE, LIGHTING FIXTURE, ETC. - TO BE REMOVED AND REINSTALLED AT NEW LOCATION - EXTEND CONDUIT AND WIRING AS REQUIRED		
XC	EXISTING CEILING DEVICE, LIGHTING FIXTURE, ETC. - TO BE REMOVED AND REINSTALLED AT SAME LOCATION		
VAMC	VETERANS AFFAIRS MEDICAL CENTER		

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Drawing Title: **TECHNOLOGY LEGEND**

Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-T0.1**

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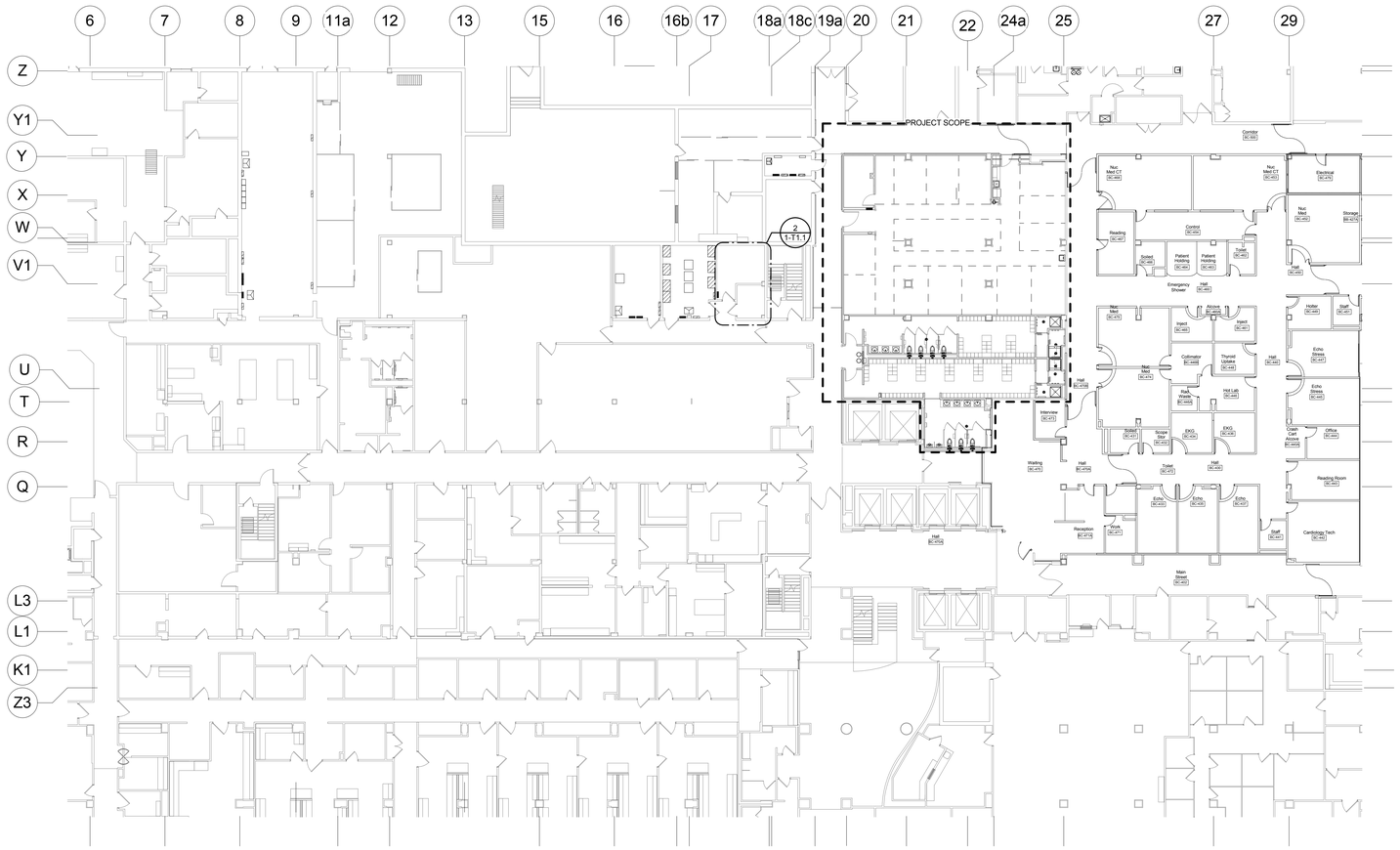
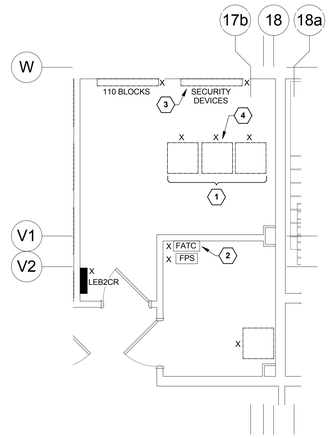
Office of Facilities Management

Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



BASEMENT
TELECOMMUNICATION KEY PLAN
1/16" = 1'-0"
0' 4' 8' 16' 32'
1



EXISTING IRM ROOM E24B
1/4" = 1'-0"
0' 2' 4' 8' 16'
2

TELECOMMUNICATION KEY PLAN CODED NOTES:

1. TERMINATE NEW TELECOMMUNICATION OUTLETS CABLING TO EXISTING TELECOMMUNICATION ROOM E24B
2. TERMINATE ALL FIRE ALARM DEVICES TO EXISTING FIRE ALARM TERMINAL CABINET IN SECURITY ROOM L-D4-03.
3. TERMINATE NEW LENEL ACCESS CONTROL DEVICES TO EXISTING PANELS. PROVIDE (2) NEW CARD READER MODULES FOR NEW ACCESS CONTROLS.
4. TERMINATE NEW SECURITY CAMERAS TO EXISTING LENEL SWITCH.

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Drawing Title
BASEMENT TELECOMMUNICATIONS KEY PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date	Checked	Drawn
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1

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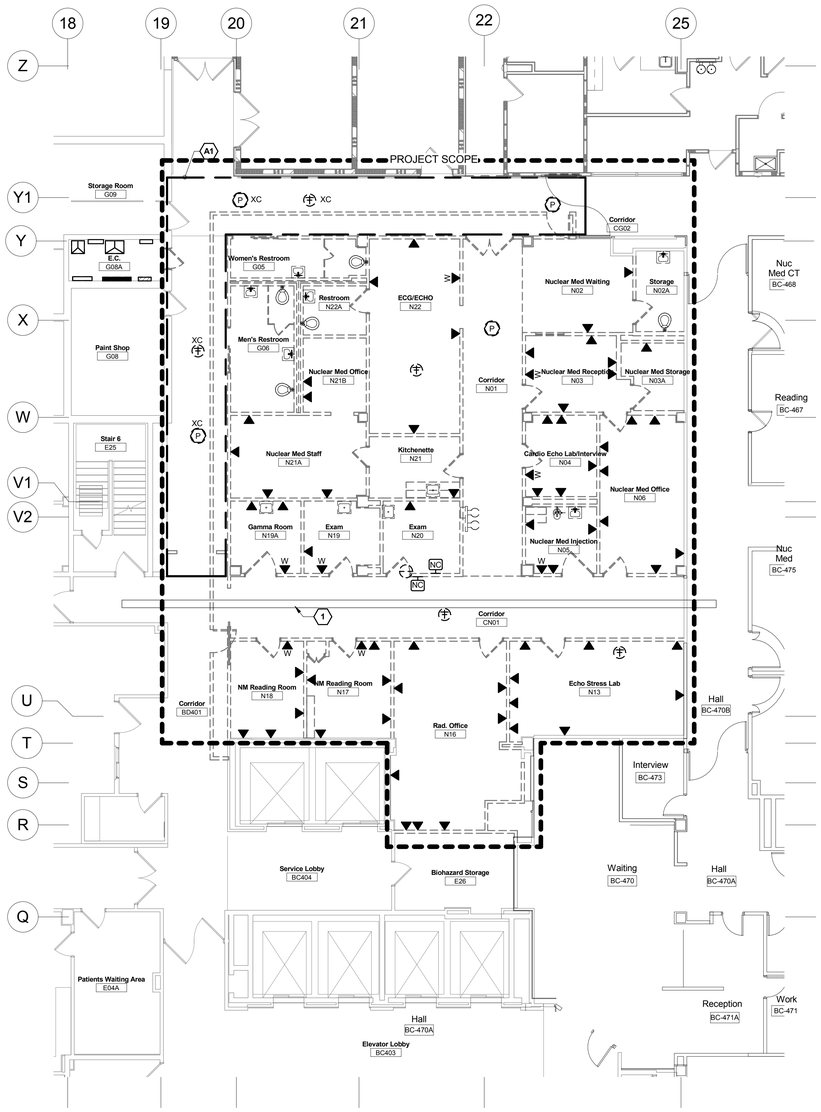

PARTIAL BASEMENT TELECOMMUNICATIONS DEMOLITION PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'

TELECOMMUNICATIONS DEMOLITION NOTES

D1 ALL EXISTING SPECIAL SYSTEMS OUTLETS, CONDUIT, WIRING ETC. THAT WILL NOT BE REUSED IN THE REMODELED INSTALLATION SHALL BE REMOVED UNLESS OTHERWISE NOTED. THIS DEMOLITION SHALL INCLUDE ALL ELECTRICAL ITEMS SHOWN ON THIS PLAN THAT ARE NOT DESIGNATED BY "X", "XN" OR "XRR" AND ALL OTHER ADDITIONAL ITEMS THAT ARE NOT SHOWN BUT THAT MUST BE REMOVED IN ORDER TO PRODUCE A NEAT, FINISHED, PROPERLY FUNCTIONING ELECTRICAL INSTALLATION. MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING REUSED ELECTRICAL SYSTEMS COMPONENTS - PROVIDE ALL CONDUIT AND WIRING NECESSARY TO ACHIEVE THE SAME. THE CONTRACTOR SHALL FIELD VERIFY THE NATURE AND EXTENT OF ALL DEMOLITION WORK AND SHALL INCLUDE COST FOR THE SAME IN THE BID SUBMITTAL.

D2 ALL EXISTING REMOVED ELECTRICAL EQUIPMENT, DEVICES, ETC. THAT ARE NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR.

D3 DASHED WALLS ON PLAN INDICATE EXISTING CONSTRUCTION TO BE REMOVED.

D4 REFER TO ELECTRICAL LEGEND FOR ALL SYMBOL DESIGNATIONS. NOTE SPECIAL ATTENTION TO SELECTED EXISTING DEVICES, WIREWAYS, ETC. MARKED XB, XRR OR XN, AND REMOVE/BLANK OFF, RELOCATE OR REPLACE THESE COMPONENTS AS REQUIRED.

D5 MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING ELECTRICAL SYSTEM COMPONENTS IN AREAS NOT BEING REMODELED UNLESS OTHERWISE NOTED. PROVIDE ALL CONDUIT AND WIRING EXTENSIONS NECESSARY TO ACHIEVE SAME.

D6 THE ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL ELECTRICAL DEMOLITION WORK WITH THE GENERAL AND MECHANICAL CONTRACTORS, AND SHALL DISCONNECT ALL REQUIRED CIRCUITS IN A TIMELY MANNER.

DEDUCT ALTERNATE #1:

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT DEMOLITION OF EXISTING CEILING MOUNTED FIXTURES, DEVICES, ETC IN OUTLINED AREA OF CORRIDOR B-C492.

TELECOMMUNICATIONS DEMOLITION CODED NOTES:

1 MAINTAIN EXISTING CABLE TRAY RUNNING THROUGH PROJECT AREA.

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Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title
PARTIAL BASEMENT TELECOMMUNICATIONS DEMOLITION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked MPL | Drawn TWM

Project Number 541-16-104

Building Number 1

Drawing Number **1-T2.1**

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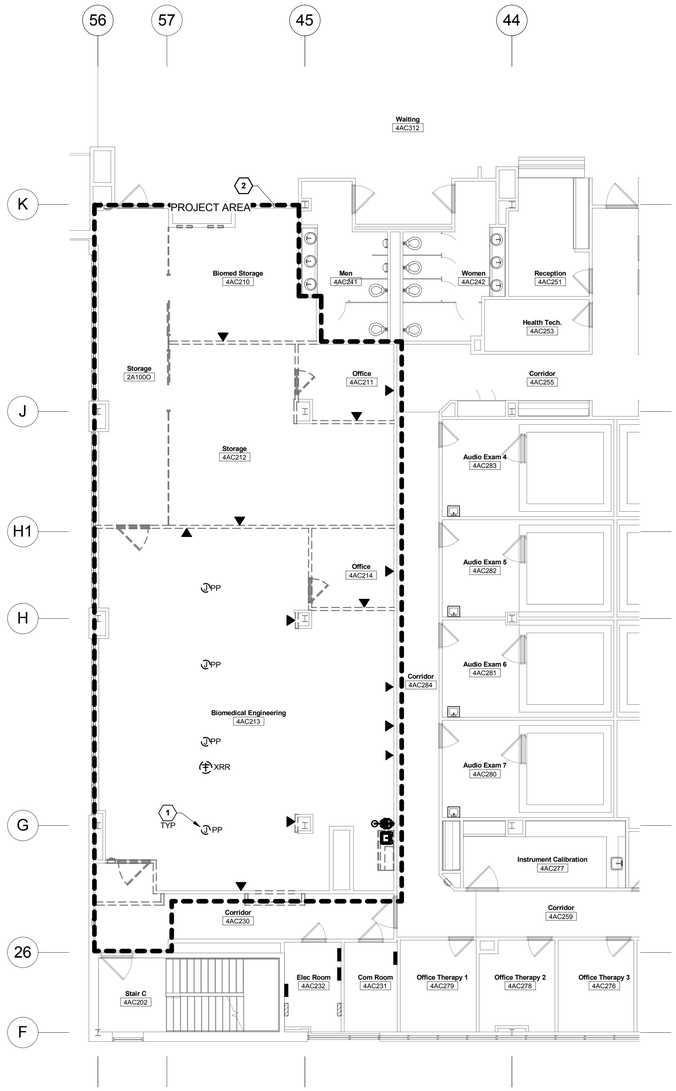
Department of Veterans Affairs

VA FORM 08-6231, OCT 1978



N

PARTIAL FOURTH FLOOR
TELECOMMUNICATIONS DEMOLITION PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'

TELECOMMUNICATIONS DEMOLITION NOTES

D1 ALL EXISTING SPECIAL SYSTEMS OUTLETS, CONDUIT, WIRING ETC. THAT WILL NOT BE REUSED IN THE REMODELED INSTALLATION SHALL BE REMOVED UNLESS OTHERWISE NOTED. THIS DEMOLITION SHALL INCLUDE ALL ELECTRICAL ITEMS SHOWN ON THIS PLAN THAT ARE NOT DESIGNATED BY "X", "XN" OR "XRR" AND ALL OTHER ADDITIONAL ITEMS THAT ARE NOT SHOWN BUT THAT MUST BE REMOVED IN ORDER TO PRODUCE A NEAT, FINISHED, PROPERLY FUNCTIONING ELECTRICAL INSTALLATION. MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING REUSED ELECTRICAL SYSTEMS COMPONENTS - PROVIDE ALL CONDUIT AND WIRING NECESSARY TO ACHIEVE THE SAME. THE CONTRACTOR SHALL FIELD VERIFY THE NATURE AND EXTENT OF ALL DEMOLITION WORK AND SHALL INCLUDE COST FOR THE SAME IN THE BID SUBMITTAL.

D2 ALL EXISTING REMOVED ELECTRICAL EQUIPMENT, DEVICES, ETC. THAT ARE NOT RETAINED BY THE OWNER SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR.

D3 DASHED WALLS ON PLAN INDICATE EXISTING CONSTRUCTION TO BE REMOVED.

D4 REFER TO ELECTRICAL LEGEND FOR ALL SYMBOL DESIGNATIONS. NOTE SPECIAL ATTENTION TO SELECTED EXISTING DEVICES, WIREWAYS, ETC. MARKED XB, XRR OR XN, AND REMOVE/BLANK OFF, RELOCATE OR REPLACE THESE COMPONENTS AS REQUIRED.

D5 MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING ELECTRICAL SYSTEM COMPONENTS IN AREAS NOT BEING REMODELED UNLESS OTHERWISE NOTED. PROVIDE ALL CONDUIT AND WIRING EXTENSIONS NECESSARY TO ACHIEVE SAME.

D6 THE ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL ELECTRICAL DEMOLITION WORK WITH THE GENERAL AND MECHANICAL CONTRACTORS, AND SHALL DISCONNECT ALL REQUIRED CIRCUITS IN A TIMELY MANNER.

TELECOMMUNICATIONS CODED NOTES:

1 REMOVE ALL CABLING FROM EXISTING "POWER POLES" RACEWAY COMPLETE.

2 REMOVE ALL EXISTING TELECOMMUNICATIONS, NURSE CALL DEVICES, CONDUIT, WIRING, ETC. WITHIN PROJECT SCOPE AREA.

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BID ISSUE	06/17/16
Revisions:	**Date**

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Drawing Title
PARTIAL FOURTH FLOOR TELECOMMUNICATIONS DEMOLITION PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked MPL | Drawn TWM

Project Number 541-16-104

Building Number 1

Drawing Number **1-T2.2**

Dwg. of

Office of Facilities Management

Department of Veterans Affairs

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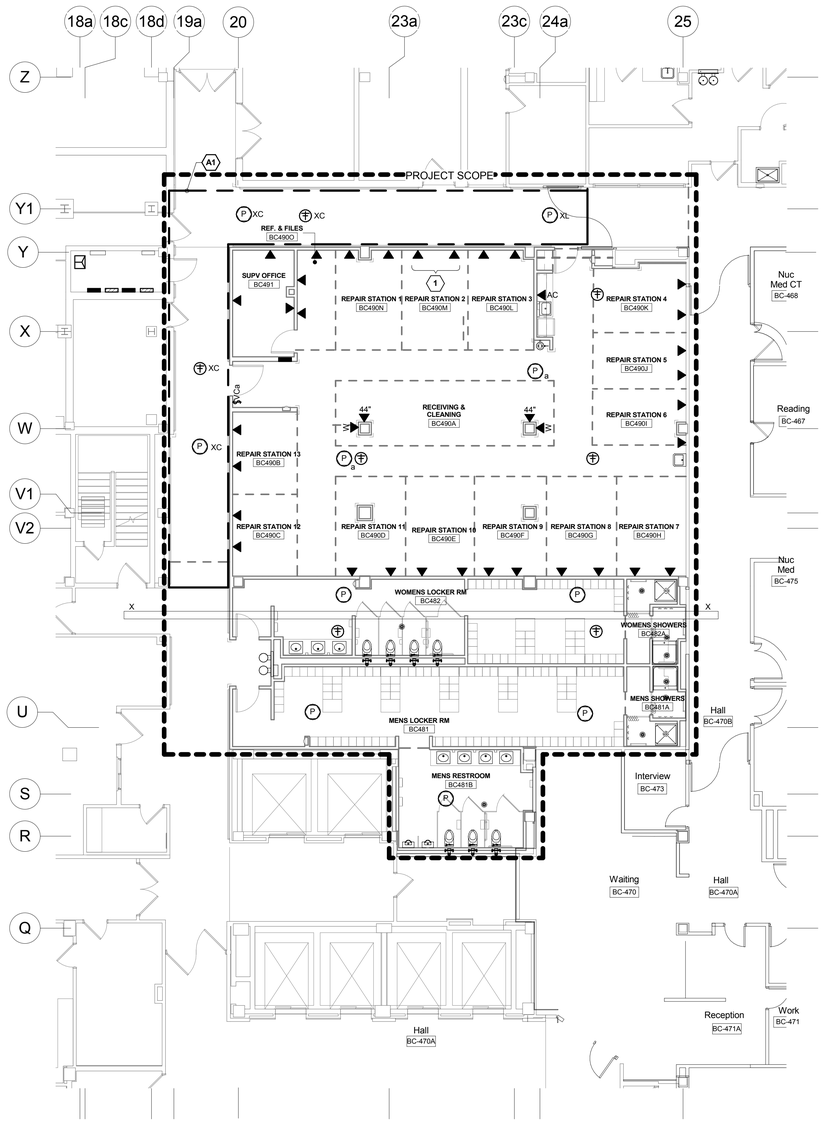

PARTIAL BASEMENT TELECOMMUNICATIONS PLAN

1

1/8" = 1'-0"

0' 4' 8' 16' 32'

TELECOMMUNICATIONS GENERAL NOTES

T1 REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT LAYOUT. CLOSELY COORDINATE THE EXACT LOCATION OF ALL OUTLETS AND DEVICES WITH ARCHITECTURAL ELEVATIONS. ADJUST LOCATIONS AND MOUNTING HEIGHTS WHERE NECESSARY TO PREVENT INTERFERENCE WITH FURNITURE, FIXED CASEWORK, EQUIPMENT, ETC. VERIFY ALL CHANGES PRIOR TO ROUGH-IN.

T2 CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS, MOUNTING HEIGHTS, AND CONNECTION REQUIREMENTS (DATA OUTLETS, ETC) WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN.

T3 ALL NEW TECHNOLOGY UNTILITIES IN CORRIDORS SHALL BE ROUTED AS HIGH AS POSSIBLE.

T4 REFER TO ARCHITECTURAL PLANS FOR EXACT PHASING AND ALTERNATE REQUIREMENTS.

DEDUCT ALTERNATE #1:

A1 UPON ACCEPTANCE OF DEDUCT ALTERNATE #1, OMIT NEW CEILING MOUNTED FIXTURES, DEVICES, ETC. IN OUTLINED AREA OF CORRIDOR B-C492.

TELECOMMUNICATIONS CODED NOTES:

1 MOUNT RECEPTACLES AT 40"AFF AT ALL REPAIR STATIONS.

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Revisions:	Date
BID ISSUE	06/17/16

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Drawing Title: **PARTIAL BASEMENT TELECOMMUNICATIONS PLAN**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-T3.1**

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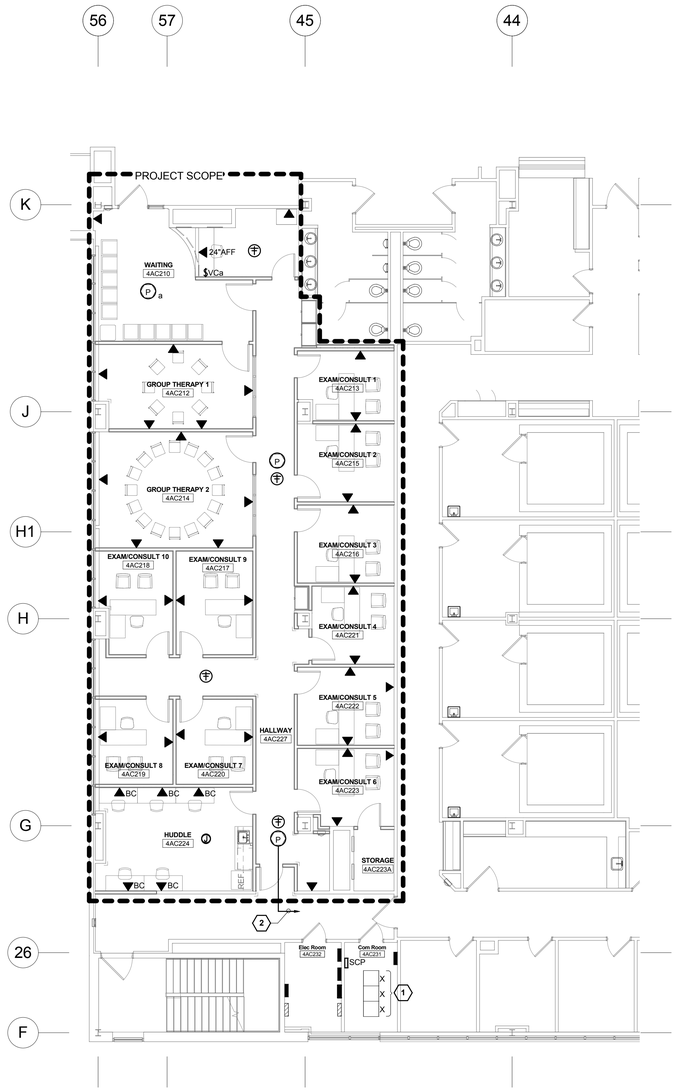

PARTIAL FOURTH FLOOR
TELECOMMUNICATIONS PLAN

1/8" = 1'-0"

0' 4' 8' 16' 32'

1

TELECOMMUNICATIONS GENERAL NOTES

T1	REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT LAYOUT. CLOSELY COORDINATE THE EXACT LOCATION OF ALL OUTLETS AND DEVICES WITH ARCHITECTURAL ELEVATIONS. ADJUST LOCATIONS AND MOUNTING HEIGHTS WHERE NECESSARY TO PREVENT INTERFERENCE WITH FURNITURE, FIXED CASEWORK, EQUIPMENT, ETC. VERIFY ALL CHANGES PRIOR TO ROUGH-IN.
T2	CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS, MOUNTING HEIGHTS, AND CONNECTION REQUIREMENTS (DATA OUTLETS, ETC) WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN.
T3	ALL NEW TECHNOLOGY UNTILITIES IN CORRIDORS SHALL BE ROUTED AS HIGH AS POSSIBLE.
T4	REFER TO ARCHITECTURAL PLANS FOR EXACT PHASING AND ALTERNATE REQUIREMENTS.

TELECOMMUNICATIONS CODED NOTES:

1. PROVIDE AND TERMINATE ALL TELECOMMUNICATIONS OUTLETS TO NEW PATCH PANELS IN EXISTING RACKS AND IN TELECOMMUNICATIONS ROOM 4AC231.
2. CONNECT ALL PAGING SPEAKERS TO EXISTING PAGING SYSTEM/ CIRCUIT GENERAL HOSPITAL PAGING CIRCUIT - FIELD VERIFY LOCATION.

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Drawing Title
PARTIAL FOURTH FLOOR TELECOMMUNICATIONS PLAN

Approved:

Project Title
ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES

Location
VAMC - WADE PARK

Date 06/17/16 | Checked MPL | Drawn TWM

Project Number 541-16-104

Building Number 1

Drawing Number **1-T3.2**

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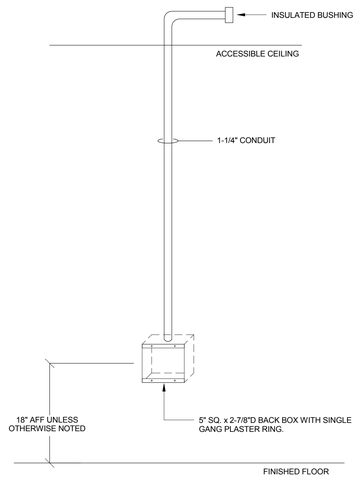
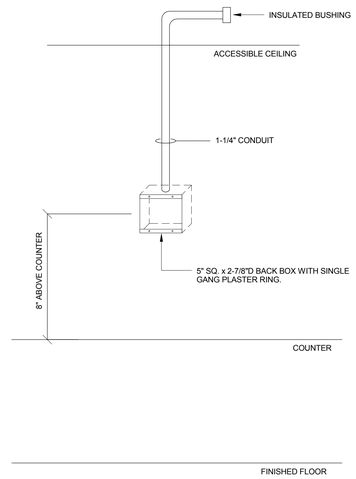


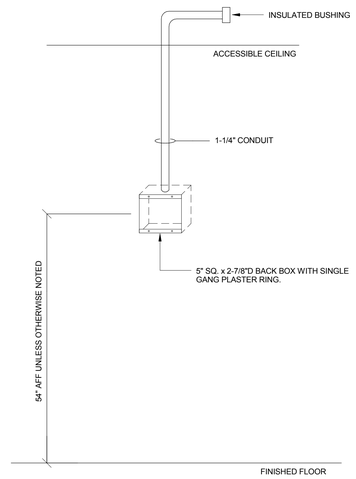
TYPICAL TELECOM ROUGH-IN (7)

NOT TO SCALE



TYPICAL TELECOM AC ROUGH-IN (6)

NOT TO SCALE



TYPICAL WALL PHONE ROUGH-IN (5)

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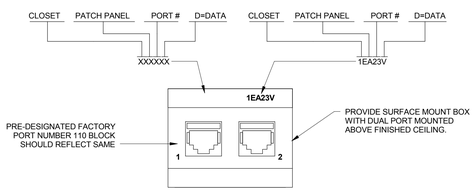
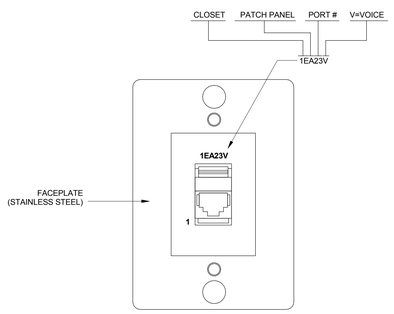


POSITION	JACK TYPE	JACK COLOR	CABLE TYPE	CABLE COLOR
1	CAT 6 RJ 45	YELLOW	CAT 6	YELLOW
2	BLANK	N/A	N/A	N/A

NOTE: VERIFY CABLE COLOR, JACK COLOR, AND FACEPLATE ID STANDARDS WITH VA COR AND IT DEPARTMENT.

WIRELESS ACCESS POINT FACEPLATE (4)

NOT TO SCALE

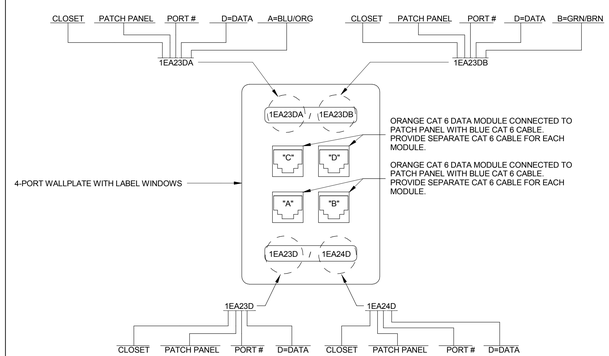


POSITION	JACK TYPE	JACK COLOR	CABLE TYPE	CABLE COLOR
1	CAT 6 RJ 45	BLUE	CAT 6	BLUE

NOTE: VERIFY CABLE COLOR, JACK COLOR, AND FACEPLATE ID STANDARDS WITH VA COR AND IT DEPARTMENT.

TYPE "W" FACEPLATE DETAIL (WALL PHONE VOICE OUTLET) (3)

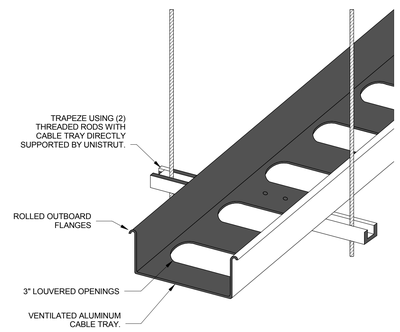
NOT TO SCALE



GENERAL NOTES:
1. PROVIDE 1-PORT WALLPLATE FOR WALL TELEPHONE OUTLET "W" AND ROLL BACK UNTERMINATED DATA CABLES IN JUNCTION BOX.
2. COORDINATE LABELING SEQUENCE AND FORMAT WITH VA IRM.

TELECOMMUNICATION OUTLET (TCO) DETAIL (2)

NOT TO SCALE



GENERAL NOTES:
1. PROVIDE SUPPORT SPACING FOR THE FULL CABLE CAPACITY OF THE CABLE TRAY.

TELECOMMUNICATION CABLE TRAY DETAIL (1)

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Revisions:	Date
BID ISSUE	06/17/16

CONSULTANTS:

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Drawing Title: **TELECOMMUNICATION DETAILS**

Approved:

Project Title: **ENHANCE / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: MPL | Drawn: TWM

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-T4.1**

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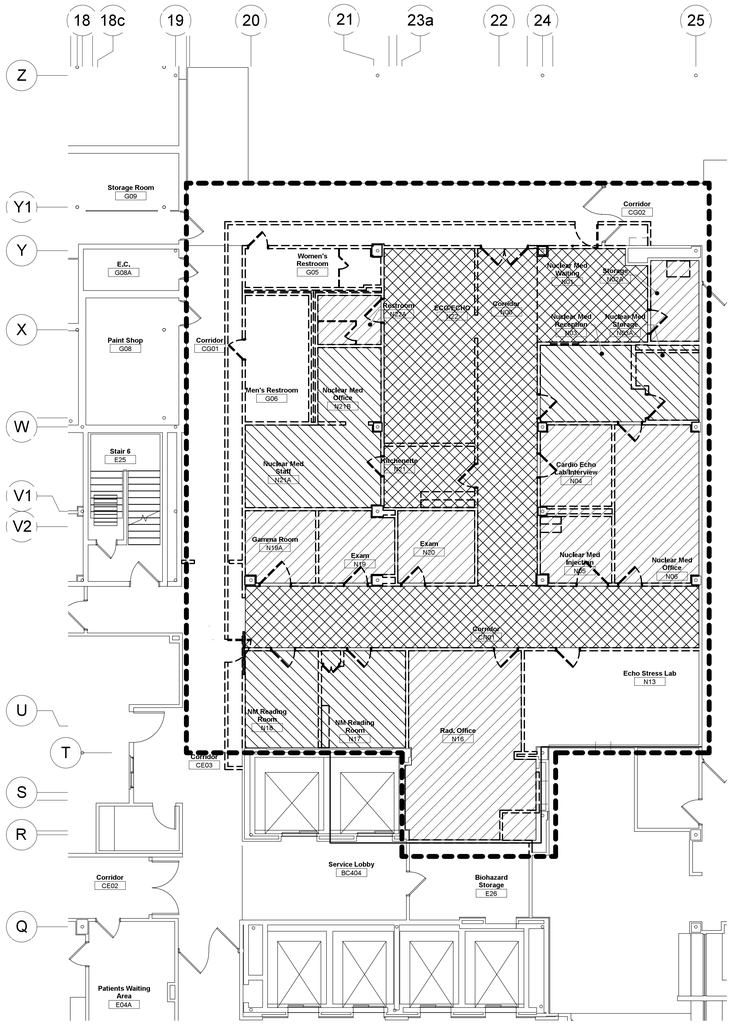

N

PARTIAL BASEMENT ASBESTOS ABATEMENT PLAN 1

1/8" = 1'-0"

0' 4' 8' 16' 32'

NOTES

1. INSTALL CRITICAL BARRIERS AND WARNING SIGNS AT ENTRANCES TO EACH WORK AREA WITHIN THE CONSTRUCTION BARRIER ENTRANCES (SEE DETAIL SHEET 1-AA2.1)

2. INSTALL 6 MIL POLYETHYLENE DROP CLOTH BELOW PIPE INSULATION JOINTS TO AT LEAST 6 FOOT HORIZONTAL DISTANCE FROM EACH PIPE INSULATION JOINT TO BE REMOVED

3. INSTALL NEGATIVE AIR MACHINES FOR LOCAL EXHAUST VENTILATION SUFFICIENT TO MAINTAIN A PRESSURE DIFFERENTIAL OF AT LEAST 0.02 INCHES OF WATER ACROSS EVERY BARRIER SEPARATING THE WORK AREA FROM THE BALANCE OF THE BUILDING OR THE OUTSIDE AND ROUTE EXHAUST TO OUTSIDE OF BUILDING THROUGH SECURED OUTSIDE DOOR (SEE DETAIL SHEET 1-AA2.1)

4. CONTRACTOR SHALL REFERENCE DRAWING 1-01.1 FOR SEQUENCING OF WORK

5. REMOVE AND DISPOSE OF APPROXIMATELY 120 EACH ASBESTOS-CONTAINING PIPE INSULATION JOINTS, 1,400 SQ FT OF ASBESTOS-CONTAINING MASTIC BELOW 12"x12" FLOOR TILES, 1,200 SQ FT OF ASBESTOS-CONTAINING MASTIC BELOW NON-ACM LINOLEUM AND 740 SQ FT OF MASTIC BELOW CARPETING

6. REMOVE AND DISPOSE OF APPROXIMATELY 600 SQ FT OF LEAD LINING PRESUMED INSIDE WALLS AS INDICATED

LEGEND

ACM MASTIC BELOW LINOLEUM

ACM MASTIC BELOW 12"x12" FLOOR TILE

ACM MASTIC BELOW NON-ACM CARPET

FULLY SPRINKLERED

BID ISSUE	06/17/16
Revisions:	**Date**

CONSULTANTS:

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Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date: 06/17/16 | Checked: EMO | Drawn: CAJ

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-AA1**

Dwg. 1 of 2

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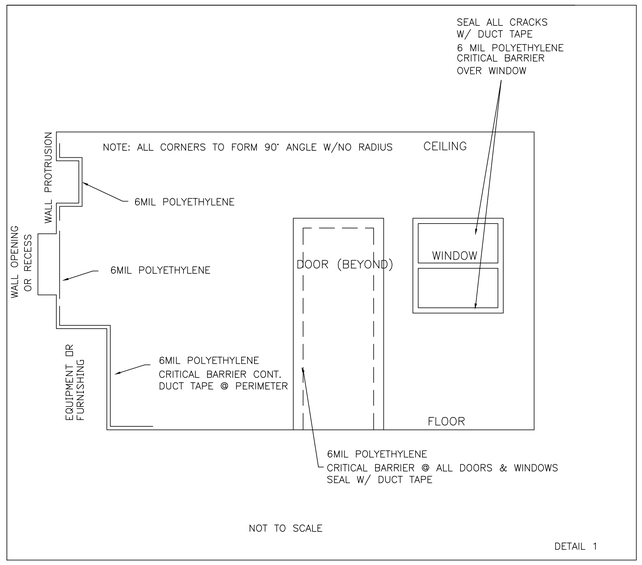
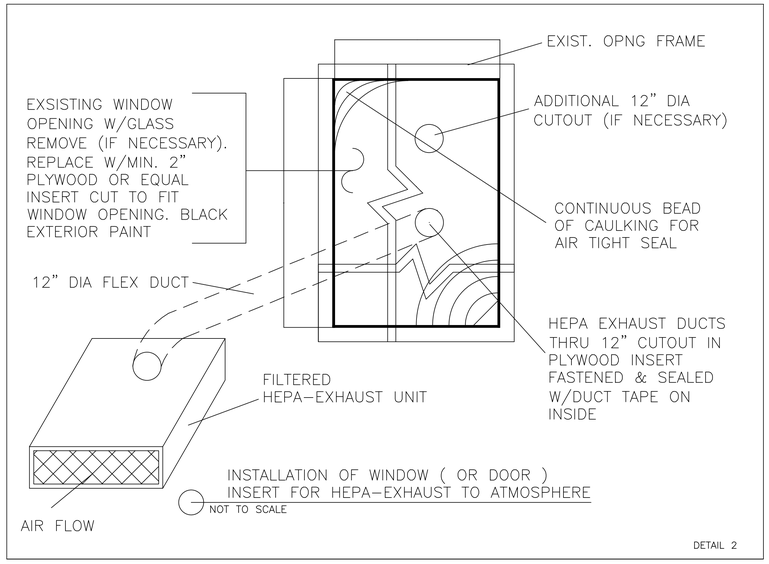
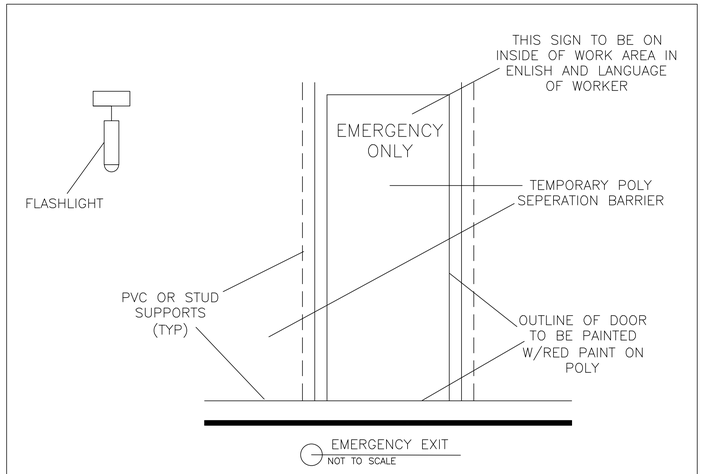


DETAIL 1



DETAIL 2



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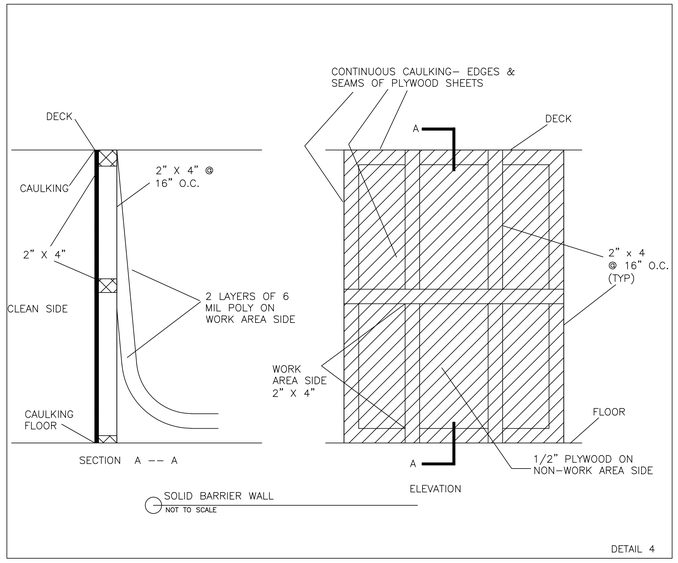

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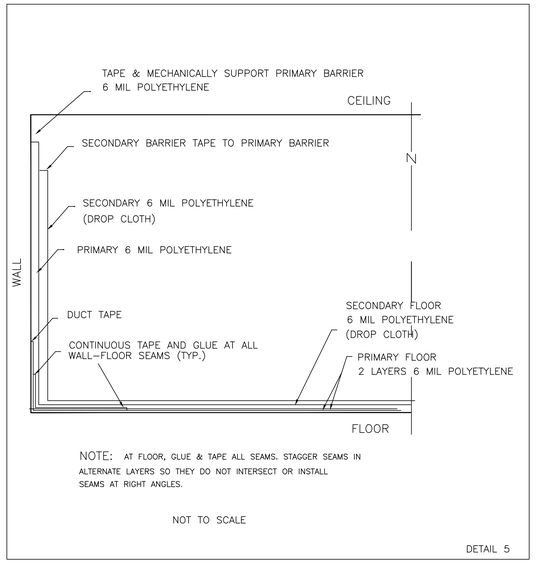

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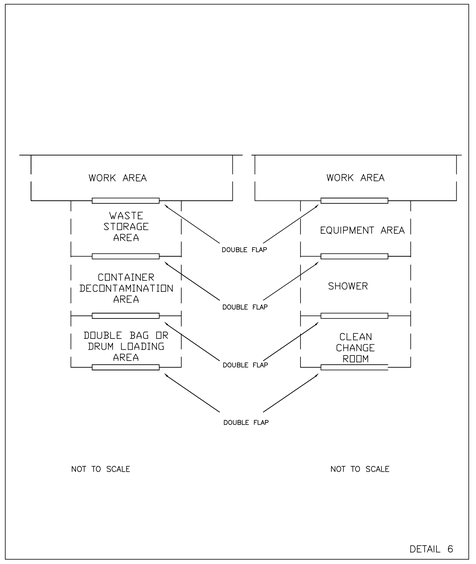
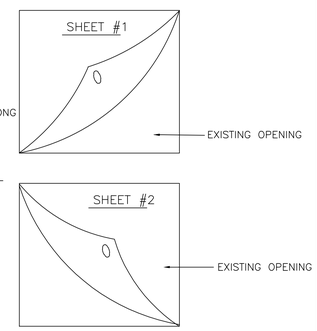


DETAIL 6

1. ALL SHEETING TO BE 6 MIL POLYETHYLENE
2. SECURE TOP EDGE OF SHEET #1 ALONG TOP EDGE OF OPENING
3. SECURE SHEET #1 ALONG ONE VERTICAL SIDE OF OPENING
4. SECURE TOP EDGE OF SHEET #2 ALONG TOP–EDGE OF OPENING
5. SECURE SHEET #2 ALONG SIDE OF OPENING, OPPOSITE OPENING SIDE OF SHEET #1.



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DETAIL 7

STANDARD ASBESTOS ABATEMENT DETAILS

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Approved:

Project Title: **ENHANCED / CONSOLIDATE MENTAL HEALTH SERVICES**

Location: **VAMC - WADE PARK**

Date	Checked	Drawn
06/17/16	EMO	CAJ

Project Number: 541-16-104

Building Number: 1

Drawing Number: **1-AA2.1**

Dwg. 2 of 2

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